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FISH AND AQUATIC INVERTEBRATE COMMUNITIES OF THE WEKIVA AND
LITTLE WEKIVA RIVERS: A BASELINE EVALUATION IN THE CONTEXT OF
FLORIDA'S MINIMUM FLOWS AND LEVELS STATUTES

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EXECUTIVE SUMMARY

Pursuant to minimum flows and levels statutes enacted by the Florida Legislature (373.042FS, 373.415FS), the St. Johns River Water Management District (SJRWMD) was required to establish minimum flows and levels for surface and ground waters within the District's boundaries. Establishment of these minima was intended to ensure preservation of the integrity of natural, native, aquatic ecosystems by preventing ecologically harmful surface and ground water withdrawals.

The Wekiva River system (Orange, Lake, and Seminole counties) was the initial system for which minimum spring flows were established within the SJRWMD. The Wekiva basin is one of the most rapidly developing areas in Florida, but also supports high quality, environmentally sensitive, natural ecosystems. Preservation of these ecosystems is critical in order to ensure the continued recreational resource value of the Wekiva, and, also, to provide a sanctuary for fish and wildlife communities in central Florida, where high quality habitat is rapidly disappearing at the expense of development. Much of the Wekiva River and portions of its tributaries have been designated as Outstanding Florida Waters and an Aquatic Preserve.

SJRWMD hydrologists have set minimum average, minimum frequent low, and minimum infrequent low flows for the Wekiva River (at the SR 46 bridge) at 240, 200, and 120 cfs, respectively. Based upon projected water demand increases, the spring discharge component of the total discharge at the SR 46 bridge would be reduced from 179.96 cfs to 138.83 cfs by the year 2010. This

41.13 cfs decrease would account for a 20 percent decline in total discharge during the lowest flow month of an average water year (May), and would put the river in violation of minimum frequent low flows for four months (April through July) of an average year. Sanlando, Palm, and Starbuck springs, which were found to contribute approximately 36 percent of the total Little Wekiva River discharge during 1985-86, would experience average discharge reductions of 42.6, 40.4, and 49.0 percents, respectively. By 2010 all six springs discharging to the Wekiva and Little Wekiva rivers are projected to produce less than the established minimum flows. These reduced flows would present a substantial threat to the integrity of biotic communities inhabiting the Wekiva River ecosystem.

In anticipation of discharge reductions to levels below the minima established by the SJRWMD, the present study was implemented with the following general objectives:

1. Determine the taxonomic compositions and structures of Wekiva River study area fish and aquatic invertebrate communities.
2. Evaluate the current biological health of the Wekiva and Little Wekiva rivers using results compiled from objective one.
3. Predict the effects of projected 10 to 20 percent discharge reductions upon the target communities, using results from objectives one and two.
4. Construct standard format databases designed to provide future investigators with a baseline reference useful for ecological comparisons of the compositions and structures of past and present fish and aquatic invertebrate communities.

Aquatic invertebrate assemblages inhabiting the study area were sampled at twelve fixed locations during spring and autumn 1997. The sampling schedule was designed to encompass both low (spring) and high (fall) water periods during an annual cycle, however, flows and water levels varied little between the spring and fall sampling events. Quantitative sampling was conducted in five dominant habitat types (bare sediments, snags, floating mats, Vallisneria and Nuphar) using habitat-specific methods. Triplicate samples were obtained from each dominant habitat present at each sampling location. Qualitative collections were obtained from all dominant habitats and from selected minor habitats at each site.

Results of aquatic invertebrate sampling indicated that assemblages within the study area were species rich and evenly distributed within individual habitats. The taxonomic and functional compositions of the invertebrate fauna in most habitats were indicative of a high degree of habitat complexity, adequate and diverse food resources, abundant nutrients, good water quality, and, overall, a healthy, but at least moderately eutrophic, aquatic ecosystem.

A total of 268 individual invertebrate taxa, representing 39 major taxonomic groups, were collected during the study. Similar numbers of taxa were collected from bare sediments, snags, and floating mats (166, 163, and 157, respectively). Fewer total taxa were collected from the Vallisneria and Nuphar habitats (127 and 76, respectively). Bare sediments, snags, floating mats, and Vallisneria supported statistically equivalent means of total taxa per sample (32, 34, 35, and 34, respectively; ANOVA, $p = 0.05$). Nuphar, supported significantly fewer taxa per sample (21). This pattern was repeated

in the comparison of total numbers of organisms per square meter, where bare sediments, snags, floating mats, and Vallisneria supported statistically equivalent (ANOVA, $p = 0.05$) densities (33,486, 31,151, 25,501, and 20,614 organisms m^{-2} , respectively), and Nuphar supported significantly fewer (3,774 m^{-2}). Per sample diversity was statistically equivalent in communities associated with bare sediments, snags, and floating mats (3.62, 3.66, and 3.82, respectively), and was significantly less in Vallisneria and Nuphar-associated assemblages (3.26 and 3.07, respectively).

Non-biting midge larvae (Diptera:Chironomidae) were the numerically predominant invertebrates associated with the bare sediment, snag, Vallisneria, and Nuphar habitats. The assemblage of the floating mat habitat was predominated by scuds (Crustacea:Amphipoda). Other important dominant major taxonomic groups included segmented worms (Oligochaeta), snails (Gastropoda), clams and mussels (Pelecypoda), freshwater shrimp (Palaemonidae), water mites (aquatic Acari), mayflies (Ephemeroptera), damselflies and dragonflies (Odonata), and caddisflies (Trichoptera).

Trophic guild analysis showed that detritivores of the gathering and filter-feeding functional groups (fine particle size detritus consumers) numerically predominated bare sediments and snags, while algae grazers predominated vegetative habitats (floating mats, Vallisneria, and Nuphar). Coarse detritus shredders, usually typical dominants of riparian streams, were present only in low abundances. The large relative and absolute abundances of fine particle size consuming detritivores, even in the macrophyte habitats where algae grazers predominated, is indicative of the presence of large amounts of fine

particle size detritus in the study area, and, overall, a moderately eutrophic ecosystem.

Within individual habitats, taxonomic and functional group analyses revealed few longitudinal patterns of community distribution; within-habitat communities were fairly homogenous in composition and relative abundance throughout the study area. An exception was the Vallisneria-associated community, where grazing and filtering species predominated. Absolute and relative abundances of the grazing and filtering community component were elevated in the lower Wekiva River study segment. These increased densities were attributed to lower water depths and more rapid current velocities at two of the three sampling sites in the lower river study area.

Canonical correspondence analysis (CCA) was used to ascertain the importance of current velocity and water depth in influencing the distribution, densities, and relative abundances of dominant invertebrate species. Results of CCA indicated a wide range of responses to the two variables among invertebrate taxa. current velocity and water depth, and indicated that current and depth contributed substantially to the determination of the distributions of individual taxa and entire communities. Two environmental variables not measured, food resource availability (patch dynamics) and habitat complexity, were also judged to be primary distribution determinants.

Results of the study indicate that the projected spring discharge reductions will cause large-scale shifts in the relative abundance of species within invertebrate communities associated with most of the habitats sampled. These

shifts may result in substantial alteration of the functional nature of communities at some locations and within certain habitats. Water level reductions associated with reduced flows could exacerbate these community structure shifts by effecting changes in the relative coverage of vegetative habitats. Habitat and invertebrate community structure shifts will probably be most profound in the lower Wekiva River study segment where reduced water levels will certainly encourage displacement of Vallisneria by less desirable Typha (cattails). This displacement will result in dramatic changes in invertebrate community structure; the grazing and filtering community associated with Vallisneria will be replaced by a less desirable, detritus gathering assemblage tolerant of lower dissolved oxygen concentrations, higher nutrient levels, and accumulation of particulate organic matter. Similar changes would be expected in broad, shallow areas of the Little Wekiva River if reductions in discharges from headwater springs are of the magnitude predicted (40.4 to 49.0 percent). The transformation to marsh-like habitat would be especially devastating to native mussel populations, which were abundant at Little Wekiva River invertebrate sampling locations.

Flow and water level reduction-related effects in the upper and middle river study segments may not be as pronounced due to stream channel morphometry differences. The stream channel in the upper and middle segments is narrow and U-shaped relative to the broader and flatter channel of the lower river segment. However, shifts in the relative abundance of some upper and middle segment taxa should be expected. Suspension filtering and algae grazing species may be replaced by detritus gatherers (usually more tolerant of adverse environmental conditions) if flow reduction results in increased

sedimentation. Some important and sensitive sediment-inhabiting taxa, such as the burrowing mayfly Hexagenia limbata, and filter-feeding unionid mussels of the genera Elliptio, Toxolasma, and Villosa could be eliminated by increased sedimentation.

Based upon the composition and relative abundance of the invertebrate fauna documented in this study, and documented determinations of the environmental requirements of many of the identified species, the authors compiled a list of taxa which are designated as "keystone" indicators of the ecological health of the Wekiva River system. These keystone taxa were chosen because they have documented sensitivities to environmental disturbance, they are to some degree flow-dependent (dependence varies with species), and/or are integral functional components of the Wekiva ecosystem.

These keystone taxa should serve as the focus of a monitoring program recommended by the authors. This program should have as its goal detection of flow or water level-reduction induced disturbance of invertebrate community composition (taxonomic and functional) and relative abundance. Sampling associated with the monitoring program should occur at regular intervals (four to six times per calendar year), and should employ the detailed, habitat specific, methods used in the present study. Monitoring should be implemented at, minimally, one site in each of the four major study segments sampled in this study.

The interrelationship between fish community composition and abundance, aquatic macrophytes, and stream flow (water depth and velocity) were examined.

Fish in four habitats (Vallisneria americana, Nuphar luteum, Hydrocotyle sp. and bare bottom) on the Wekiva River and Little Wekiva River were sampled using two quantitative methods: 1-m² throw traps for small (<100 mm total length) fish and blocknet-electrofishing for large (>10 mm body depth) fish. A total of 270 throw trap and 42 blocknet samples were collected. Sampling was conducted during the spring (May-July) and fall (Oct-Nov) of 1997 in the hope that these periods would correspond to historical low and high water levels, respectively. Stream discharge did not follow previous patterns and discharges during spring and fall were not significantly different.

A total of 40 species of fish were collected by throw traps and blocknets. Fish communities differed among the four sampled habitats. These differences can be attributed to the associated physical (water velocity) and biological (plant coverage and biomass) characteristics of each habitat, along with the general biology/ecology of each of the fish species occurring in this system, in particular, their habitat preference.

Overall, Hydrocotyle had the highest density of fish (40-78 fish/m²), followed by Vallisneria, Nuphar, and bare bottom. Hydrocotyle and Vallisneria were dominated (up to 85%) by small livebearers (Poeciliidae) and sunfish, respectively, while Nuphar and bare bottom were dominated (up to 90%) numerically by minnows (Cyprinidae) and killifishes (Fundulidae). Hydrocotyle had the highest mean species richness (4.4 - 6.6 species/m²), while Vallisneria had the highest mean biomass (up to 51 g/m²) because of the presence of larger fish, such as sunfish (Centrarchidae).

Among the four habitats sampled by throw traps, there was generally an increase in mean density from spring to fall, due to an abundance of young-of-year fish. The lack of difference in stream flow between the spring and fall sampling periods was beneficial to data analysis and interpretation, as observed seasonal differences in fish communities (density and species composition) were due to the population dynamics of the fish species (reproduction and growth of spring and summer spawning species) rather than a response to change in stream flow (water level).

Blocknet samples in the lower Wekiva River exhibited similar fish community patterns as did the throw traps, although only bare bottom and Vallisneria habitats were sampled via blocknets. Vallisneria, a structurally more complex habitat, had higher mean density (up to 1.2 fish/m²), mean biomass (up to 25 g/m²), and mean species richness (more than 12 species/net) than bare bottom in both seasons. Vallisneria was dominated (>66%) by sunfish in both seasons, while bare was dominated (>60%) numerically by sunfish, killifish, and mullet (Mugilidae). Fish abundance (density and biomass) estimates of the upper Wekiva River and Little Wekiva River were similar to those observed for the lower Wekiva River. These two river segments maintained diverse fish communities, similar in species richness to Vallisneria in the lower Wekiva River. Sunfish dominated the fish communities, both by number and weight.

Neither dissolved oxygen nor water temperature are probable factors influencing distribution of fish among the dominant habitats sampled within each river segment as dissolved oxygen and water temperature measured at throw trap sampling sites were not significantly different among the four habitats

within each river segment. In addition, dissolved oxygen and water temperature measurements within Hydrocotyle, Vallisneria, and bare bottom habitats fluctuated similarly during a diurnal sampling period. Dissolved oxygen, water temperature and depth, and surface velocity measured at blocknet sampling sites in the lower Wekiva River were also not significantly different among Vallisneria and bare bottom habitats.

Comparison of data collected during this study to those of Canfield and Hoyer (1988) indicate that both the Wekiva River and the Little Wekiva River still support a large/comparable number of fish species. Fish community compositions, based on number and biomass, are also similar for these two blocknet studies. Total fish densities in 1997 are as high as those observed during 1985-1987, and comparable to or higher than those of 15 other Florida streams examined during 1985-1987. The Wekiva River and Little Wekiva River maintained standing crops of total fish as high or higher than 17 Florida streams sampled in 1985-1987, which includes the Little Wekiva and Wekiva Rivers. Thus, fish communities of the Wekiva River and Little Wekiva River have not changed from historical records.

Biologically, as shallow areas of the stream become dry, several changes will likely occur to the fish community. Dry areas obviously have no water, and thus fish will not be able to inhabit these areas except during periods of high water. Cattails, will likely become established in these dry/shallow areas as has occurred downstream of the State Highway 46 bridge. These areas will support fewer fish and a reduced number of species. Once established, the cattails will also likely spread to deeper portions of the stream, further

channeling and narrowing the water flow of the river as they have done below the State Highway 46 bridge near Katie's Landing.

Changes in the hydrology of the Wekiva River system will cause changes in the absolute and relative abundances of the various plant species present in the system. If the areal coverage of the aquatic plants uniformly decreases in relation to each other due to the loss of wetted area, then the overall abundance of fish will likely decline, as the availability of fish habitat is reduced. If there is a shift in aquatic plant abundance, the resulting fish community abundance and composition can be variable. This study found large differences to occur in the fish communities inhabiting the four dominant plant habitats present in the Wekiva River system. If Hydrocotyle becomes more abundant in the Little Wekiva River and upper and middle Wekiva River, the resulting fish communities may actually increase in density (total number of individuals), but decrease in biomass and average body size. Species composition will favor small livebearers rather than minnows, sunfishes, and catfishes. In the lower Wekiva River, where Vallisneria and bare habitats are dominant, a reduction in stream flow and a shift from Vallisneria to bare habitat would result in a decrease in the number and biomass of sunfish and catfish. The number of fish species would also likely be reduced.

If, however, the stream becomes more channeled and deeper than its current state, the end result would be unknown as this study did not sample the deeper habitats, but rather keyed in on the shallow Vallisneria beds and sand flats which dominated the lower Wekiva River. Qualitative observation of these deep holes during months of sampling indicated large numbers of sunfish, catfish,

and shiners used these areas. Mullet seemed to school, moving from deep pools to both vegetated and bare shallow areas.

As part of this study, a series of multiple regression equations for fish density, biomass, and species richness were developed based upon spring and fall throw trap (small fish) and blocknet (large fish) data. These models were developed within each of the four study segments of the Wekiva River system as the streams varied greatly in their physical and biological attributes among the four segments. Models were also developed within habitat type (Hydrocotyle, Nuphar, Vallisneria, and bare bottom) as the fish communities varied greatly among these four habitats. Most of these regression equations have extremely high coefficients of variation, thus should be good predictors of fish population parameters if the physical and biological characteristics within a particular habitat and stream segment changes with reduced stream flow. Water depth, water velocity, and plant biomass were included in many of these models, indicating the importance of these habitat characteristics to fish communities. Thus, if hydrologists could predict what water levels and velocities will be present under reduced flow conditions and we knew what plant species will be present, the future fish communities within portions of the Wekiva River system could be predicted based on these models.

This current study provides crucial baseline information for future research to measure long-term trends in abundance and species composition of these fish communities. These data are needed to assess the possible impact of groundwater withdrawal-related stream flow reductions on habitats used by fish

in the Wekiva River system and other spring-fed aquatic environments. Care must be taken in comparing these data to future data, however, as changes in aquatic macrophyte abundance could be due to aquatic weed control programs and not due to stream flow reduction. This study was conducted during a single year with relatively stable water levels. Future sampling would elucidate the effects of varying water levels on the aquatic habitats and their associated fish communities of the Wekiva and Little Wekiva Rivers.

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**FISH AND AQUATIC INVERTEBRATE COMMUNITIES OF THE WEKIVA AND
LITTLE WEKIVA RIVERS: A BASELINE EVALUATION IN THE CONTEXT OF
FLORIDA'S MINIMUM FLOWS AND LEVELS STATUTES**

I. GENERAL INTRODUCTION

Background and Purpose

Pursuant to minimum flows and levels statutes enacted by the Florida Legislature (373.042FS, 373.415FS), the St. Johns River Water Management District (SJRWMD) is required to establish minimum flows and levels for surface and ground waters within its boundaries. Among other considerations, establishment of these minima is intended to ensure preservation of the integrity of natural, native, aquatic ecosystems by preventing ecologically harmful surface and ground water withdrawals.

The Wekiva River system (Orange, Lake, and Seminole counties) was the initial system for which minimum spring flows were established within the SJRWMD. The Wekiva basin is one of the most rapidly developing areas within the SJRWMD, and also supports high quality, environmentally sensitive, natural ecosystems. Preservation of these ecosystems is critical to ensure the continued recreational resource value of the Wekiva, and also to provide sanctuary for fish and wildlife communities in central Florida, where high quality habitat is rapidly disappearing at the expense of development. Much of the Wekiva River and portions of its associated tributaries have been designated as Outstanding Florida Waters and an Aquatic Preserve, hence, the relative importance of Wekiva River water as a fish and wildlife resource, rather than

a product for consumptive use by humans, has been demonstrated and recognized by government and private entities.

The Wekiva system is characterized by good water quality and clarity, fairly constant spring flow, and a high degree of habitat complexity; these characteristics combine to support diverse fish and wildlife communities (Canfield and Hoyer 1988, Hupalo et al. 1994). The outstanding qualities of the Wekiva ecosystem and its resident biotic communities have endured to the present despite nearby rapid urban development associated with expansion of the Orlando metropolitan area.

The primary water source for the Wekiva and most of its tributaries is the Floridan aquifer, which feeds streams via springs at or near their headwaters and along stream reaches. The Floridan aquifer is also the primary water supply source for residential, agricultural, and industrial uses in the basin. As urbanization of the region continues, increased groundwater withdrawals have the potential to lower the elevation of the potentiometric surface of the Floridan aquifer, resulting in reduced discharge volumes from springs in the Wekiva basin. Discharges reduced beyond established minimum flows (Table 1.1) (Hupalo et al. 1994) would present a substantial threat to the integrity of Wekiva River biotic communities.

Rao and Clapp (1996) determined that, based upon projected development-related water demand increases, spring discharge to the Wekiva River at the SR 46 bridge near Sanford would be reduced from 179.96 cfs to 138.83 cfs by the year 2010. This 41.13 cfs decrease would represent a 20 percent discharge decline

TABLE 1.1. Minimum flows and levels established by the SJRWMD for the Wekiva River at the SR 46 bridge.

<u>Minimum Flow Regime</u>	<u>Level (ft. NGVD)</u>	<u>Flow (days)</u>	<u>Duration (days)</u>	<u>Acceptable Return Period^t (years)</u>	<u>Actual Return Period[*] (years)</u>	<u>Water Depth^o (ft.)</u>
Minimum Infrequent High	9.0	880	≥7	≤5	4	3.9
Minimum Frequent High	8.0	410	≥30	≤2	1.7	2.9
Minimum Average	7.6	240	≤180	≥1.7	2	2.5
Minimum Frequent Low	7.2	200	≤90	≥3	5	2.1
Minimum Infrequent Low	6.1	120	≤7	≥100	≥500	1.0

Note: cfs = cubic feet per second

ft NGVD = feet, National Geodetic Vertical Datum

^t Withdrawals should not cause the Minimum Average, Minimum Frequent Low, or Minimum Infrequent Low levels to occur more frequently or for longer durations than stated. Withdrawals or surface water works should not cause the Minimum Infrequent High or Minimum Frequent High Levels or flows to occur less frequently or for shorter durations than stated.

^{*} Based on high-stage (Minimum Average, Minimum Frequent High levels) or low-stage (other minimum levels) frequent analysis of the historic stage record.

^o The water depth is no less than this amount over 25 percent of the channel width at the shallowest cross sections of the study stream reach.

during the lowest flow month of an average year (May). Sanlando, Palm, and Starbuck springs, which were found by Canfield and Hoyer (1988) to contribute approximately 36 percent of the total Little Wekiva River discharge during 1985-86, would experience average discharge reductions of 42.6, 40.4, and 49.0 percents, respectively (Table 1.2). Furthermore, Rao and Clapp concluded that, by 2010, all six springs discharging to the Wekiva and Little Wekiva rivers would produce less than the minimum flows (Table 1.1) established by Hupalo et al. 1994 (Table 1.2).

The studies presented herein were implemented by the SJRWMD through the Florida Fish and Wildlife Conservation Commission (FWC) and University of Florida Department of Fisheries and Aquatic Sciences (UF) with the following objectives:

1. Determine the taxonomic compositions and structures of Wekiva River study area fish and aquatic invertebrate communities.
2. Evaluate the current biological health of the Wekiva and Little Wekiva rivers using results compiled from objective one.
3. Predict the effects of projected 10 to 20 percent discharge reductions upon the target communities, using results from objectives one and two.
4. Construct standard format databases designed to provide future investigators with a baseline reference useful for ecological comparisons of the compositions and structures of past and present fish and aquatic invertebrate communities.

TABLE 1.2. Summary of flow statistics for springs with receiving water bodies within the Wekiva River study area (from Rao and Clapp 1996). Mean 1988 flows represent an "average" water year; percent reductions computed as $((1988 - 2010 \text{ prediction})/1988) * 100$. Minimum flows are those established by Chapt. 40C-8, F.A.C.

<u>Spring</u>	<u>1988 Mean Flow (cfs)</u>	<u>Predicted 2010 Flow (cfs)</u>	<u>Designated Minimum Flow (cfs)</u>	<u>Percent Reduction By 2010</u>	<u>2010 Percent Below Min.</u>
<u>Wekiva River</u>					
Rock Springs	57.77	49.09	53.00	19.35	7.38
Wekiva Springs	68.07	58.78	62.00	13.35	5.19
Miami Springs	5.14	3.89	4.00	16.85	2.75
<u>Little Wekiva River</u>					
Sanlando Springs	19.70	11.31	15.00	42.60	24.60
Palm Springs	6.23	4.61	7.00	40.40	34.14
Starbuck Springs	14.55	7.37	13.00	49.00	43.31

Study Area Description

The Wekiva River basin encompasses approximately 1,020 square kilometers in portions of Lake, Orange, and Seminole counties. The basin is traversed by both blackwater and spring-fed tributaries to the mainstem of the Wekiva; these tributaries include: Rock Springs Run, the Little Wekiva River, Sulphur Run, Seminole Creek, and Black Water Creek (Hupalo et al. 1994). The study area encompassed the Wekiva River from the Wekiva River Marina northward (downstream) to approximately 1.3 km north of the SR 46 bridge, and the Little Wekiva River from approximately 4.0 km north of the SR 434 bridge downstream to the confluence with the mainstem of the Wekiva River (Figure 1.1).

The primary water source for the Wekiva River system within the study area is the Floridan aquifer, via the following springs: Rock Springs, Wekiva Springs, Miami Springs, Sanlando Springs, Palm Springs, and Starbuck Spring. During 1988, a "normal" climatic year (Rao and Clapp 1996, p.9), contributions from these springs ranged from 44.54 percent (September) to 88.22 percent (May) of the total Wekiva River discharge at the SR 46 bridge near the downstream boundary of the study area (Rao and Clapp 1996). Runoff and direct rainfall contributed most of the remaining discharge percentage. Water sources for the Little Wekiva River at its headwaters include effluents from wastewater treatment plants (Altamonte Springs Regional Wastewater Treatment Facility and the Weatherfield Sewage Treatment Plant) and storm water runoff. Downstream from the headwaters, The Little Wekiva is supplied by Sanlando, Palm, and Starbuck springs.

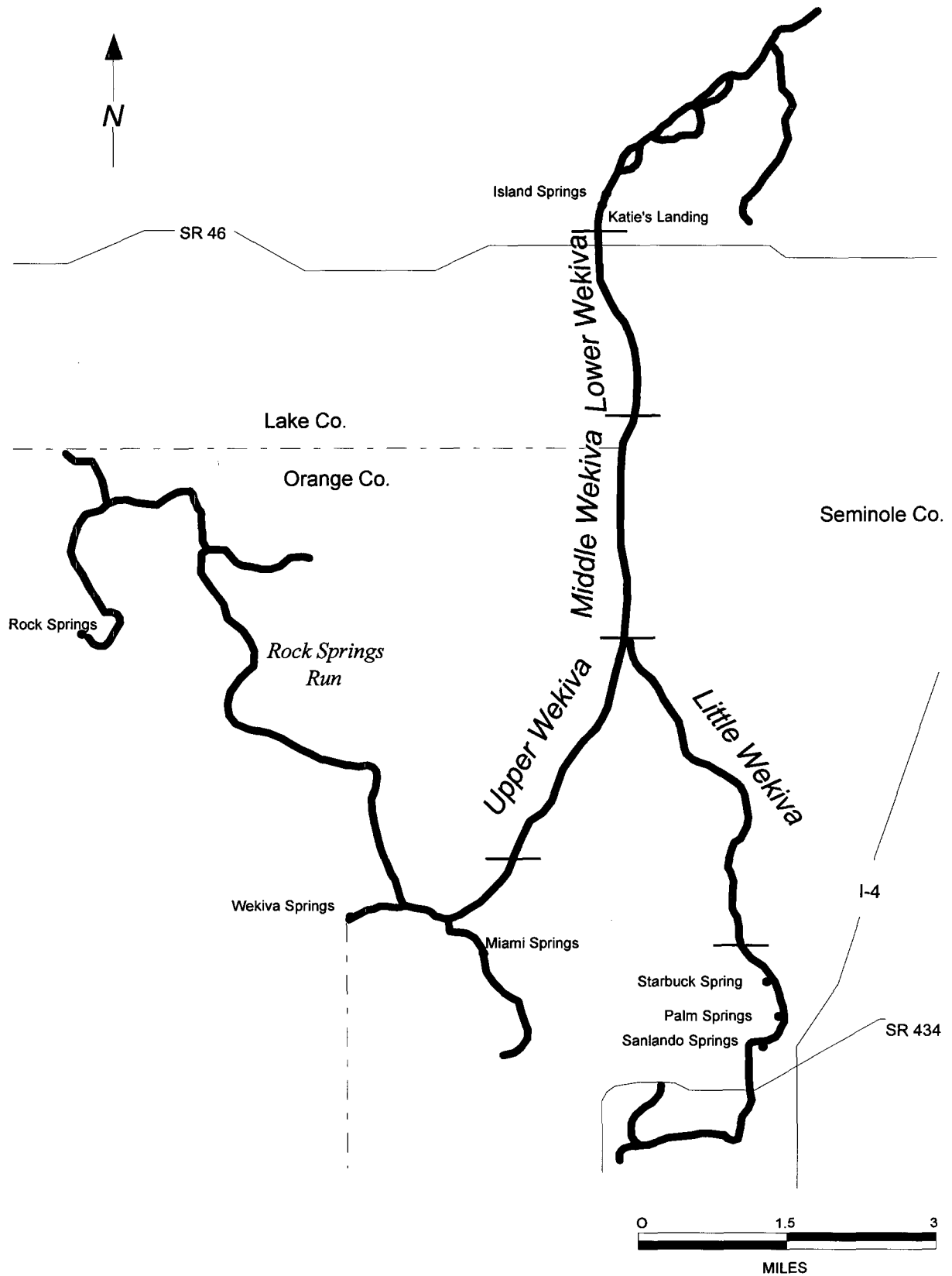


Figure 1.1. Map of the Wekiva River study area (Lake, Orange, and Seminole Counties, FL.) with the Upper Middle, Lower, and Little Wekiva stream segments denoted.

Because springs contribute substantially to the total water volume of the Wekiva and Little Wekiva rivers within the study area, both streams are generally clear, alkaline, and exhibit little variation in flow or temperature. Both are completely unregulated by water control structures. A large portion of the study area lies within the Wekiva River Aquatic Preserve (managed by the Florida Department of Environmental Protection, FDEP). Hence, development in the immediate vicinities of study area stream segments is limited to a few residential dwellings within approximately 500 meters of the Little Wekiva River near the city of Lake Mary and streamside residences along both banks of the Wekiva River in the northernmost 4 kilometers of the study area.

The Florida Department of Environmental Protection (FDEP) collects water quality information from several Wekiva River and Little Wekiva River locations to fulfill Federal Clean Water Act Section 305(b) requirements. FDEP rates Wekiva River water quality as good, but analysis of long-term trends shows it to be deteriorating (FDEP 1996). Water quality in the Little Wekiva River was poor prior to construction of the Altamonte Springs Regional Wastewater Treatment Facility in the mid-1970s. Since that plant became operational, dissolved oxygen levels have improved, but levels of nutrients and coliform bacteria remain high (FDEP 1996).

Canfield and Hoyer (1988) reported the May 1985 to January 1987 mean current velocity in the Wekiva River to be 21 cm/s with a 95% confidence interval of 19 to 23 cm/s. In general, streams with slow to moderate current velocities (>20 cm/s but <50 cm/s) typically have bottom substrates dominated by sand.

Streams with current velocities <20 cm/s generally have silty-sand, silt, mud, and alluvial bottom deposits (Butcher 1933). The Wekiva and Little Wekiva rivers, within the study area, generally conformed to this model.

Vallisneria americana (tapegrass or eelgrass) is the most abundant aquatic vascular plant in the Wekiva River study area (Hupalo et al. 1994). V. americana becomes most abundant in areas with relatively rapid current velocity (> 20 cm/s). The rooted macrophyte community in areas with slower current velocities (< 20 cm/s) is dominated by Hydrocotyle umbellata (water pennywort) and Nuphar luteum (spatterdock or cow lily). Other macrophytes present in low-flow areas include Panicum spp. (grasses) and Typha spp. (cattails). The floating plants Eichhornia crassipes (water hyacinth) and Pistia stratiotes (water lettuce) are present within the study area, but are controlled by a nuisance aquatic plant control program administered by SJRWMD.

Study Area Stream Segment Delineation

The study area was divided into four main river segments: the upper Wekiva, middle Wekiva, lower Wekiva, and Little Wekiva River (Figure 1.1). These segments were not necessarily considered to be physiographically discrete for the analyses presented herein.

The upper Wekiva segment extended from the Wekiva Marina northward to the confluence with the Little Wekiva River and was generally characterized by U-shaped or flat channel configurations and alternating canopied and uncanopied stream reaches. Sediment types included mud, fine and coarse detritus, and sand. In uncanopied areas the stream segment was margined by emergent aquatic

macrophytes and mats of floating vegetation (primarily Hydrocotyle sp.). Beds of Vallisneria americana and Nuphar luteum were present in the stream channel. Canopied areas in the upper Wekiva had little or no aquatic vegetation, but greater densities of snags (wood in the water) than uncanopied areas. Midstream surface current velocities measured in the upper Wekiva during the field collections associated with this study ranged from 24 cm/sec. to 36 cm/sec.

The middle Wekiva stream segment extended from the confluence with the Little Wekiva River northward to an abandoned railroad grade approximately 3.2 km south of the SR 46 bridge (Figure 1.1). The middle Wekiva was similar to the upper in that it was characterized by U-shaped or flat channels, a variety of bottom types, and alternating canopied and uncanopied areas; however, the middle Wekiva was more canopied and flowed more slowly than the upper. Midstream surface water velocity measurements in the middle Wekiva ranged from 10 cm/sec. to 24 cm/sec. during the two sampling periods.

The lower Wekiva segment extended from the abandoned railroad grade to the northern boundary of the study area (near Katie's Landing) (Figure 1.1). Except at the extreme southern end of the segment where a narrow, winding, shifting-sand channel predominated, the lower Wekiva was characterized by a relatively wide (~150 m), shallow (depths < 60 cm), channel and expansive beds of Vallisneria americana. The segment was entirely uncanopied and the few snags present were confined to the stream margins. Floating aquatic vegetation "islands" were anchored mid-channel in several locations within the segment; deeper holes (~2 m) were scattered throughout open-water areas.

Typha beds were located on the east stream bank immediately south of the SR 46 bridge and along the west stream bank from the SR 46 bridge north to the boundary of the study area. Midstream surface current velocities in the lower segment were, overall, the fastest measured within the study area, ranging from 8 cm/sec. to 39 cm/sec. during the two sampling events. Lower segment sediments were sand or fine mud in the few open-water areas within the reach, and fine to coarse detritus beneath Vallisneria beds.

The Little Wekiva River was considered a discrete segment primarily because its water chemistry differs from the Wekiva River. Wastewater treatment plants and storm water runoff contribute substantial water quantities and nutrients in the urbanized area of the Little Wekiva headwaters (FDEP 1996, Hupalo et al. 1994). Canfield and Hoyer (1988) found no relationship between nutrient concentrations and aquatic plant densities in the Little Wekiva, and hypothesized that canopy, poor light penetration, and rapid water evacuation time may have limited macrophyte production. The nutrient-laden Little Wekiva headwaters are diluted by Sanlando, Palm, and Starbuck springs downstream from the SR 434 bridge. Should projected average spring discharge reductions of 40 to 49 percent for these three springs become reality, substantially less dilution of nutrients would result. Higher nutrient concentrations and allochthonous materials originating at the headwaters could then possibly influence the structure of biotic communities within the Little Wekiva River segment of the study area.

Within the study area, the Little Wekiva was mostly canopied, except for a few, short, uncanopied or partially canopied reaches. Floating vegetation

mats and Vallisneria americana beds were present in the few uncanopied reaches. Bottom types consisted of shifting sand (upper Little Wekiva only), deep coarse detritus (beneath macrophyte beds), or deep mud. Surface current velocities measured in the Little Wekiva during the two sampling events ranged from 18 cm/sec. to 26 cm/sec.

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II. AQUATIC INVERTEBRATE COMMUNITIES

Introduction

Diverse invertebrate communities are vital components of healthily functioning aquatic ecosystems. As secondary producers, invertebrates consume products of primary production (living and detrital algae and macrophytes), convert these products to concentrated carbohydrates and protein, and transport them to higher trophic levels. In addition, the feeding and digestive activities of invertebrates are critical to normal decomposition and nutrient-cycling processes in aquatic systems. As a consequence of this importance to ecosystem function, any alteration of invertebrate community structure, induced either naturally or by man, can have ecosystem-wide ramifications.

Invertebrate community structure is considered by many ecologists as a primary, if not the best, indicator of aquatic ecosystem health (Hynes 1970, Downing and Rigler 1984, Rosenberg and Resh 1993, Allan 1995). Invertebrate communities are relatively sessile and are sensitive to pollutants and changes in water chemistry, hence, they are sculpted by, and are products of, the environmental conditions in which they develop. Unlike chemical analysis of water samples, which yields a "picture" of a system only at the time the samples were obtained, invertebrate community evaluation gives researchers information on both past and present environmental conditions.

Use of invertebrate species and communities as sentinels of ecosystem health had its genesis in the development of the "saprobial system" in the early 1900s (Kolkwitz and Marsson 1908 and 1909, Thienemann 1922). With continual

advancements in taxonomy, knowledge of ecological requirements, and analytical methodology, invertebrate community evaluation evolved into a powerful ecological tool (Brundin 1949 and 1958, Cummins 1973, Brinkhurst 1974, Saether 1979, Wiederholm 1980, Hellawell 1986, Cairns and Pratt 1993, Rosenberg and Resh 1993, Cummins and Merritt 1996). Using current analytical techniques, specific community configurations can be linked to specific habitat, water quality, and biotic conditions.

In stream systems, the health and diversity of invertebrate communities, and, hence, the viability of the food chain, is directly related to, and dependent upon, flow. Flowing water transports food and nutrients, supplies oxygen to gill breathers, and provides an avenue for population dispersal. Current velocity requirements are often species-specific. Some invertebrates require rapid velocities (> 80 cm/sec.), while other species require low velocities, but are dependent upon current to transport a food resource or diffuse oxygen (Hynes 1970).

Flowing water also affects invertebrate distribution by structuring habitat (Hynes 1970). Rapid current velocities produce larger particle sized (cobble, gravel), erosional, habitats colonized by invertebrate species that are strong swimmers, tube builders, or are specially adapted for clinging. Low flow habitats are depositional in nature, may support rooted macrophytes, and are generally inhabited by sprawling and burrowing species more tolerant of adverse environmental conditions (e.g. low dissolved oxygen levels). Moderate current velocities support the greatest diversity and complexity of habitat, and, therefore, support the most diverse invertebrate communities.

Given the wide range of environmental requirements of aquatic invertebrates, it is logical to surmise that discharge reductions of the magnitude projected for the Wekiva and Little Wekiva rivers (13 - 49 percent for individual springs; 10 - 20 percent at the SR 46 bridge) will in some way influence the composition and distribution of invertebrate communities. Discharge is of less importance as a determinant of invertebrate community composition than the related variable of current velocity (Hynes 1970). The relationship between current velocity and discharge in many reaches of the Wekiva and Little Wekiva rivers is unmeasured and undoubtedly varies as a function of distance from spring heads and gradient. However, it is reasonable to assume that discharge reductions will equate to overall reductions in current velocity and water levels throughout the Wekiva basin. It is also plausible that, in Wekiva River stream reaches far downstream from large springs (such as the lower Wekiva study segment), projected discharge reductions may not equate to substantial current velocity reductions, and reduced water levels may have a stronger influence upon invertebrate community distribution.

Objectives

In consideration of the array of possible biotic responses to the 10 to 20 percent flow reductions projected by 2010, this investigation of aquatic invertebrate communities of the Wekiva and Little Wekiva rivers was undertaken with the following objectives:

1. Determine the current (baseline) structure of invertebrate communities inhabiting dominant habitat types of the Wekiva River study area during the typical high and low water periods within a calendar year. The elements of invertebrate community structure

to be characterized included: taxonomic composition, functional composition (as per Cummins 1973), absolute abundance (density), relative abundance (percent composition), diversity (as per Shannon-Weaver 1949), and evenness of distribution of numbers among taxa (as per Pielou 1966).

2. Evaluate the current ecological status of the Wekiva River study area based upon the structures of the identified resident aquatic invertebrate communities.
3. Assemble a database suitable for facilitating comparisons of future data collections with the established baseline.
4. Predict invertebrate community response to projected 10 to 20 percent discharge reductions.

Methods

Sample Site and Habitat Selection

Aquatic invertebrate communities were sampled at twelve discrete sites within the study area (Figure 2.1, Table 2.1). Three sites were located in each of the four designated river segments (upper, middle, and lower Wekiva; Little Wekiva River). Sampling sites were chosen in representative stream reaches near established SJRWMD study transects (Clapp et al. 1996), when possible (Table 2.1). Each site incorporated the dominant habitat types in a stream reach approximately 100 - 200 m in length.

Prior to the initial sampling event, project personnel from SJRWMD, Florida Fish and Wildlife Conservation Commission (FWC), and the University of Florida (UF) together prioritized and selected habitat types to be sampled. Bare

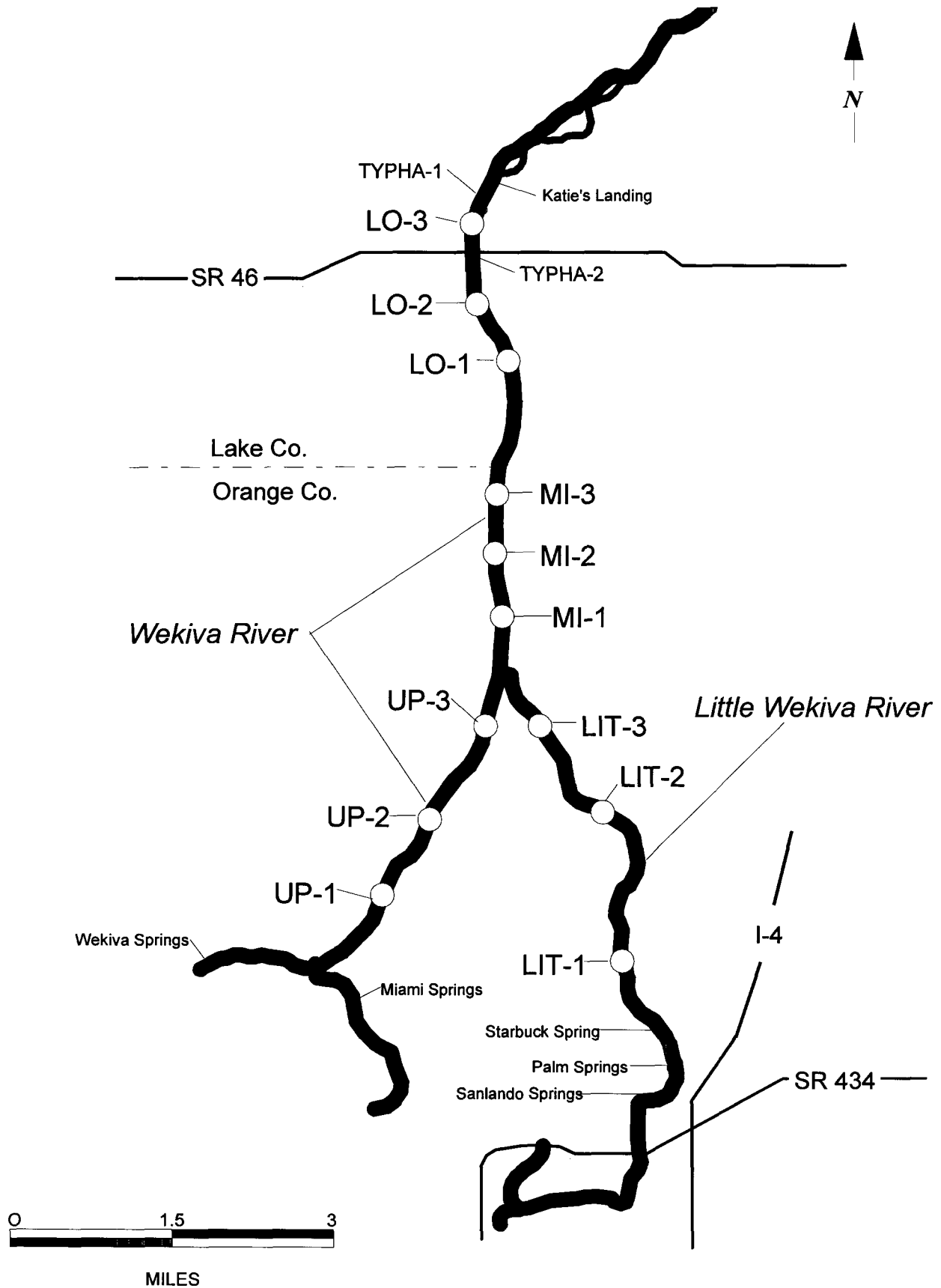


FIGURE 2.1. Relative location of aquatic invertebrate sampling sites in the Wekiva River study area.

TABLE 2.1. Wekiva River study area aquatic invertebrate sampling site designations, percent canopy covers, latitude/longitudes, and corresponding SJRWMD discharge measurement transects.

<u>Site Designation</u>	<u>Study Code</u>	<u>Percent Canopy</u>	<u>Latitude/Longitude</u>	<u>SJRWMD Transect*</u>
Upper Wekiva 1	UP-1	<5	28 ^E 43.606N 81 ^E 25.874W	---
Upper Wekiva 2	UP-2	<5	28 ^E 44.225N 81 ^E 25.371W	WEK 11
Upper Wekiva 3	UP-3	20	28 ^E 44.885N 81 ^E 25.134W	WEK 10
Middle Wekiva 1	MI-1	70	28 ^E 45.913N 81 ^E 24.974W	WEK 9
Middle Wekiva 2	MI-2	<5 - 80	28 ^E 46.394N 81 ^E 24.936W	---
Middle Wekiva 3	MI-3	<5 - 95	28 ^E 47.043N 81 ^E 24.923W	WEK 8
Lower Wekiva 1	LO-1	<5	28 ^E 48.248N 81 ^E 25.000W	WEK 6
Lower Wekiva 2	LO-2	<5	28 ^E 48.661N 81 ^E 25.077W	VT 8
Lower Wekiva 3	LO-3	<5	28 ^E 49.395N 81 ^E 25.059W	---
Lower Wekiva <u>Typha</u> Site 1	TYPHA-1	0	28 ^E 48.804N 81 ^E 25.131W	---
Lower Wekiva <u>Typha</u> Site 2	TYPHA-2	0	28 ^E 49.666N 81 ^E 24.856W	---
Little Wekiva 1	LIT-1	30	28 ^E 43.408N 81 ^E 23.996W	LWR 2
Little Wekiva 2	LIT-2	50	28 ^E 44.665N 81 ^E 24.479W	LWR 1
Little Wekiva 3	LIT-3	90	28 ^E 45.060N 81 ^E 24.864W	---

* = transects as described in Clapp et al. 1996.

(unvegetated) sediments, Vallisneria americana (tapegrass, eelgrass) beds, floating mats containing primarily Hydrocotyle sp. (water pennywort), and beds of Nuphar luteum (spatterdock) were determined to be the areally dominant habitats within the study area (Hupalo, personal communication). Snags (wood in the water), although not areally dominant at most sampling locations, were also considered because they typically support a more species rich community than most other stream habitats (Hynes 1970). In consideration of the large amount of time required to process aquatic invertebrate samples, it was decided that the three most areally abundant habitats at each sampling site, and snags (regardless of their relative abundance), would be sampled for aquatic invertebrates during the two sampling events. At the request of SJRWMD, an additional habitat, sediments beneath Typha (cattails) in the lower Wekiva stream segment, was added during the autumn sampling period. Sediments beneath Vallisneria and immature Najas (naiad) in the lower stream segment were also sampled during the autumn sampling period for comparative purposes.

Timing of Sampling Events

Sampling events were scheduled to occur during typical high and low flow periods within a calendar year. Although the Wekiva and Little Wekiva rivers are not characterized by substantial seasonal flow differences, lower flows usually occur during the spring at the end of the "dry" season, and higher flows occur during the autumn near the end of the "wet" season. Accordingly, the two aquatic invertebrate sampling events took place May 11 - June 13, 1997 and October 6 - 29, 1997.

Field Methods

Gear types used for collection of quantitative samples were habitat-specific and are summarized in Table 2.2. Habitat-specific methods were used in order to obtain the most accurate density estimates possible, but with the realization that use of different sampling devices reduces the comparability of density estimates among different habitats. Regardless of habitat and gear type, three quantitative samples and one qualitative sample were obtained from each selected habitat type at each sampling location during each collection.

Communities inhabiting bare (open) sediments were quantitatively sampled using a petite ponar dredge (area sampled = 225 cm²). The bare sediment habitat ranged from fine-sized particulate organic matter (FPOM) to medium-sized sand.

Snags (wood in the water) were sampled by sealing a heavy-duty three gallon plastic zip-lock bag over the selected limb (underwater), then sawing or cutting the limb immediately to the outside of the seal. The bag was then re-sealed and brought to the surface, where it was opened and the contents rinsed into a 300 micron mesh sieve bucket. In order to express data on an areal basis, surface areas of snags were determined in the laboratory after associated organisms were removed.

Floating mats (primarily Hydrocotyle umbellata) were sampled by raising a D-framed 300 micron mesh dip net (area sampled = 689 cm²) from beneath the selected sampling area until the net frame was brought into firm contact with the underside of the mat. The mat was then carefully and closely cut around

TABLE 2.2. Gear types utilized for obtaining quantitative samples of aquatic invertebrate communities from selected habitats within the Wekiva River study area during spring and autumn 1997.

<u>Habitat</u>	<u>Gear Type</u>	<u>Surface Area Sampled (cm²)</u>	<u>Mesh Size (microns)</u>
Bare Sediments (mud, sand, detritus)	Petite Ponar Dredge	224.96	300
Snags (wood in the water)	Sealed Bag and Saw	Variable (100-400 cm ²)	300
Floating Mats (primarily <u>Hydrocotyle</u>)	Quant. Dip Net	688.61	300
<u>Vallisneria americana</u>	Modified Hess Stream Sampler	889.59	300
<u>Nuphar luteum</u>	Acrylic Tube (single stem)	Variable	300
Sediments Beneath <u>Typha</u> sp.	Corer	20.26	300
Sediments Beneath <u>Vallisneria americana</u>	Corer	20.26	300
Sediments Beneath Immature <u>Najas</u> sp.	Corer	20.26	300

the entire outside edge of the D-frame, enabling the sample to fall into the net.

Quantitative samples of communities inhabiting Vallisneria americana were sampled using a modified Hess stream sampler with removable net (Figure 2.2; area sampled = 890 cm²) (Warren and Vogel 1991). The sampler was deployed with side zipper perpendicular to flow. The zipper was opened and all stems within the sampler clipped one inch from the bottom using scissors. The zipper was then closed, attachments to the frame unsnapped, and the bag was sealed and removed from the water. Contents of the bag were then rinsed into a 300 micron mesh sieve bucket, placed in a sample container, and preserved.

Nuphar luteum was sampled using an acrylic tube (diameter = 5 cm). One sample consisted of three stems from a single plant. Samples were obtained by placing the tube over a single stem (without contacting the stem), sealing the top of the tube with a rubber stopper, cutting the stem at the bottom of the tube, and stoppering the bottom of the tube to seal the sample. The contents of each tube was then rinsed into a 300 micron mesh sieve bucket. Density estimates for Nuphar samples were computed by counting number of stems per m² in the immediate area of sampling, then extrapolating counts from the three stems sampled to the observed per m² stem densities.

All qualitative samples were obtained using a 900 micron mesh D-frame dip net or by hand-picking.

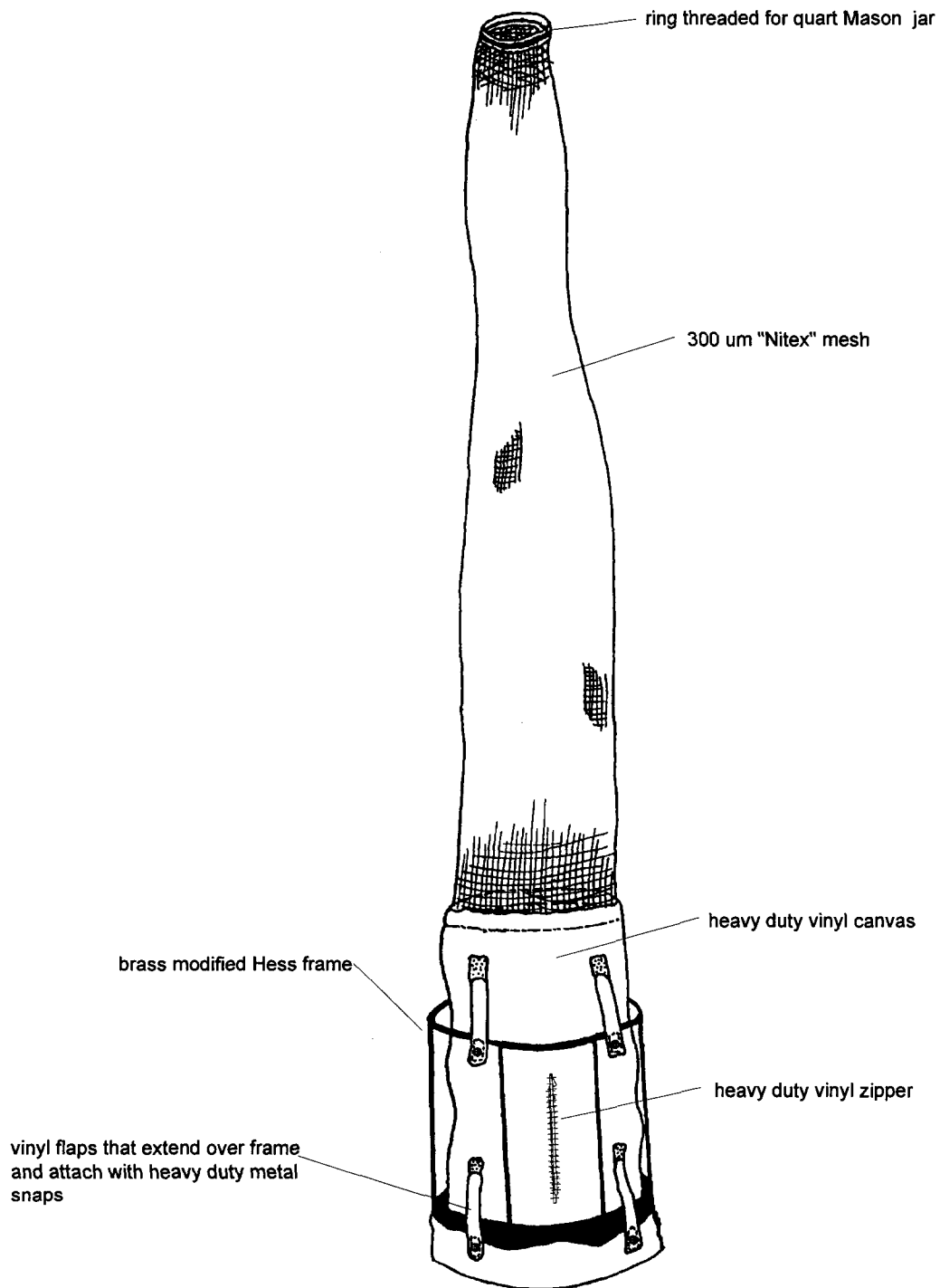


FIGURE 2.2. Modification of Hess stream sampler (Hess 1941, Waters & Knapp 1961, Canton & Chadwick 1984) used for sampling invertebrate communities associated with *Vallisneria americana* in the Wekiva River study area. Sampler frame diameter = 34 cm; frame height = 36 cm; total height = 185 cm; mesh size = 300 microns.

All quantitative sampling devices and associated sample processing gear were fitted with 300 micron mesh Nitex to facilitate collection of smaller organisms. Immediately after obtaining a sample, it was sieved to remove excess water, then placed into a separate container. Each sample was then labeled, preserved with 95 percent ethanol, sealed, and transported to the FWC Aquatic Invertebrate Laboratory for processing.

Physico-chemical parameter measurements recorded concurrently with sampling at each site included surface, mid-column, and bottom profiles of current velocity, temperature, and dissolved oxygen at midstream. Additional measurements of current velocity and water depth were made at the exact location of most individual samples. Current velocity measurements were made using a Marsh-McBirney model 2000-11 portable digital flowmeter. Dissolved oxygen and temperature were measured using a YSI Model 57 dissolved oxygen/temperature meter.

Laboratory Methods

In the laboratory, each sample was processed separately (none were composited). Sediment-associated samples with large volumes of inorganic material (e.g. sand) were subjected to sucrose floatation (Anderson 1959) to decrease processing time. Subsampling prior to sample processing was used only if warranted by the occurrence of large numbers of organisms in individual samples; subsample proportions examined were no less than one-quarter of the original sample.

Samples were processed with the aid of stereo-dissecting microscopes having magnifications to 40X (to ensure detection of smaller specimens). Technicians placed small sample portions in petri dishes, then systematically and repeatedly scanned each plate under a stereoscope until all organisms were removed. Organisms were removed using forceps and rough-sorted to major taxonomic groups.

A taxonomist identified each retained organism to species level, whenever possible, using literature listed in Appendix 2.1. Immature or damaged specimens were identified to the level at which project taxonomists were absolutely certain of a definitive determination, usually Family or Order. Some identifications were limited to genus, family, or higher levels due to lack of systematic characterization to lower levels in the peer-reviewed literature. To facilitate identifications of Oligochaeta and Chironomidae, specimens were slide-mounted in CMC-10, then identified using phase-contrast microscopy at magnifications to 1000X.

Voucher specimens of invertebrate taxa will be archived at the Florida Fish and Wildlife Conservation Commission office in Gainesville. Rare specimens, or specimens that constitute new records for the Wekiva River system will also be archived at the Florida State Museum in Gainesville or the Florida Collection of Arthropods at the Division of Plant Industry in Gainesville.

Analytical Methods

Counts and identifications of sampled organisms were recorded on coded laboratory sheets; a separate sheet was generated for each sample. On the lab

sheets, raw counts were converted to number of organisms per square meter to facilitate rough comparisons among communities from the different habitats. Data were entered into databases constructed using dBase version 5.0.

Statistical analyses were conducted using Systat version 7.0 (SPSS, Inc. 1997), PC_ORD version 4.0 (McCune and Mefford 1999), or with analytical programs written by the authors. Prior to certain parametric statistical procedures, invertebrate density estimates were $\log(x + 1)$ transformed when such transformation was required for approximation of the normal distribution or to validate assumptions for specific tests. Invertebrate density data were not transformed prior to non-parametric procedures or computation of diversity and evenness indices.

Multivariate procedures such as cluster analysis (Romesburg 1984) and canonical correspondence analysis (ter Braak 1986) were employed to identify species associations, to group sampling sites having similarly structured invertebrate communities, and to elucidate relationships among taxa and sampling sites along environmental gradients. As a precursor to these analyses, the data set was reduced, to lessen the influence of rarely occurring taxa, by selecting for only those taxa that accounted for at least 5.0 percent of the total organisms collected at any one site/date combination within each major habitat type. These taxa were designated as the dominant community constituents within their respective habitats. The number of taxa designated as dominants ranged from 8.3 percent (floating mats) to 18.1 percent (bare sediments) of the total taxa collected per habitat type.

Hierarchical cluster analysis (Romesburg 1984, Ludwig and Reynolds 1988) and nonmetric multiple dimensional scaling (Anderson 1971, Kenkel and Orloci 1986) were performed on several different permutations of each separate habitat data matrix to objectively identify and group samples and sampling sites having invertebrate communities of similar taxonomic compositions and densities. The purpose of employing iterations of different statistical tests on multiple data set permutations was to search for distributional patterns that were repeated regardless of the method or permutation used. Consistency of results through iterations of different tests and permutations confirms that identified distributional patterns are real (Ludwig and Reynolds 1988, Jackson 1993). Permutations employed in our analyses included raw data, standardized data (mean=0, sd=1), $\log(x+1)$ transformed data, and correlation and Bray-Curtis (1957) similarity index matrices (by sample site) on summed and meaned dominant taxa rectangular data sets. All permutations were performed on single season data (spring or autumn) and on combined seasonal data (spring and autumn). Results of multivariate tests presented herein were chosen for presentation because they were representative of all tests performed on each particular data permutation. Most are dendrograms resulting from cluster analysis of the selected data matrix using Euclidean distance as the distance measure and Ward's minimum variance clustering (Orloci 1967, Everitt 1974) as the linkage method; these methods produce definitive clusters and accurately represent large data sets.

Canonical correspondence analysis (CCA; Ter Braak 1987, Johnson et al. 1993, Jongman et al. 1995) was used to evaluate influences of current velocity and water depth upon abundances and distributions of dominant invertebrate species

in each major habitat sampled. CCA is a multivariate direct gradient analysis that is not restrained by multicollinearity in species abundances and is more appropriate than simple regression or correlation techniques (for analysis of ecological data) because it assumes a unimodal (rather than linear), nonmonotonic, response to changes in environmental variables (Ter Braak 1986). CCA produces an ordination diagram (biplot) very useful in the visualization of relationships among multiple taxa, between sampling sites and taxa, and between taxa and measured environmental parameters.

Results

Overall Community Characterization

A total of 268 individual invertebrate taxa representing 39 major taxonomic groups were collected during the study (Table 2.3, Appendix 2.2). Per sample taxa richness for all quantitative samples collected ranged from 2 to 57. Of the habitats quantitatively sampled throughout the entire study area, bare sediments, snags, and floating mats supported approximately the same numbers of taxa (166, 163, and 157, respectively). Vallisneria was intermediate, supporting 127 taxa, while Nuphar supported only 76 taxa (Figure 2.3, Table 2.3, Appendix 2.2). The lower number of taxa in Nuphar may be interpreted as an artifact of the smaller number of Nuphar samples collected (21 versus 63, 72, 54, and 45 for bare sediments, snags, floating mats, and Vallisneria, respectively).

Means of taxa richness among bare sediments, snags, floating mats, and Vallisneria were statistically equivalent when both seasons were combined (32, 34, 35, and 34, per sample, respectively; Table 2.3); Nuphar supported

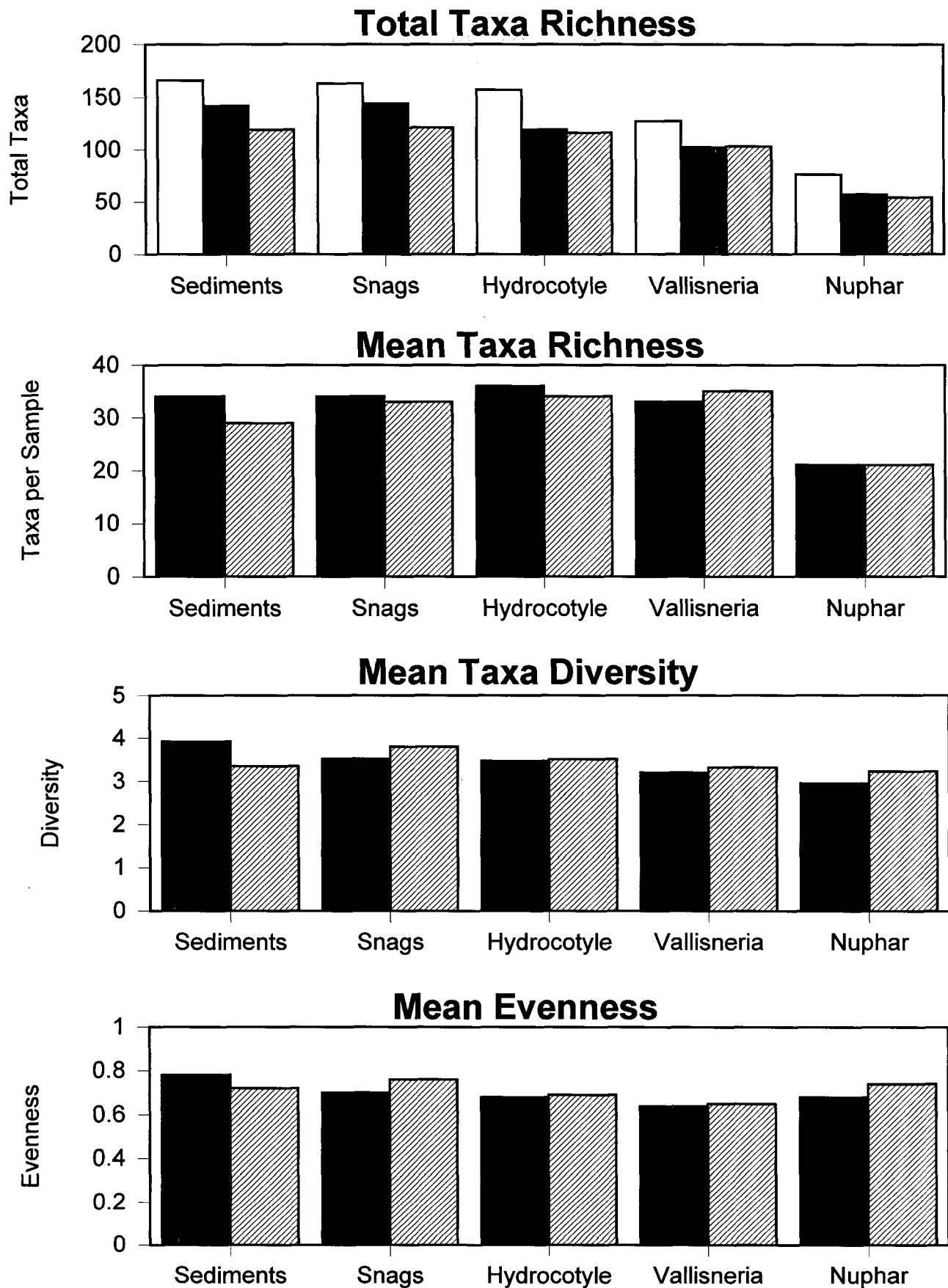


FIGURE 2.3. Seasonal variation in descriptors of Wekiva River study area aquatic invertebrate communities (Spring = ■ Fall = ▨ Total = □). Comparison of seasonal means showed no significant differences (t-test; $p=0.05$).

TABLE 2.3. Means and coefficients of variation (in parentheses) of selected descriptors of aquatic invertebrate community quality within the five quantitatively sampled habitat types of the Wekiva River study area, spring and autumn (combined), 1997. Means with the same letter superscript are not significantly different (ANOVA followed by Scheffe's multiple comparison; $p=0.05$). Mean total organisms were $\log(x+1)$ transformed prior to ANOVA; all other data nontransformed.

Descriptor	Habitat				
	Bare Sediments n=63	Snags n=72	Floating Mats n=54	Vallisneria n=45	Nuphar n=21
Mean Total Organisms m^{-2}	33,486 ^A (0.78)	31,151 ^A (0.80)	25,501 ^A (0.66)	20,614 ^A (0.67)	3,774 ^B (0.96)
Total Taxa Richness	166	163	157	127	76
Mean Taxa Richness	32 ^A (0.38)	34 ^A (0.24)	35 ^A (0.17)	34 ^A (0.19)	21 ^B (0.22)
Mean Diversity	3.62 ^A (0.22)	3.66 ^A (0.15)	3.82 ^A (0.64)	3.26 ^B (0.15)	3.07 ^B (0.11)
Mean Evenness	0.75 ^A (0.19)	0.73 ^{AB} (0.12)	0.68 ^{BC} (0.16)	0.65 ^C (0.14)	0.71 ^{ABC} (0.13)

significantly fewer numbers of taxa per sample (21) than the other habitats that were quantitatively sampled (ANOVA, $p = 0.05$; Table 2.3). This pattern remained constant when spring samples alone were analyzed (Table 2.4), but differed slightly with autumn samples, where taxa richness in both sediment and Nuphar samples was significantly less than in snags, floating mats, and Vallisneria (ANOVA, $p = 0.05$; Table 2.5). Statistical comparison of seasonal means of taxa richness within each habitat (Figure 2.3) revealed no significant differences between the spring and autumn sampling events in any habitat (t-test; $p = 0.05$).

Of all habitats quantitatively sampled, bare sediments supported the largest number of total organisms per square meter of stream bottom (Table 2.3). Analysis of variance of habitat means of $\log(x+1)$ transformed total organism values from all quantitative samples revealed that, despite some apparent large numerical differences, bare sediments, snags, floating mats, and Vallisneria supported statistically equivalent numbers of total organisms (33,486, 31,151, 25,501, and 20,614 organisms m^{-2} , respectively, Table 2.3). With a mean of 3,773 m^{-2} , Nuphar supported obviously and statistically fewer numbers of total organisms (Table 2.3). This pattern was repeated when habitat means were analyzed by each season separately (Tables 2.4 and 2.5).

Diversity (Shannon and Weaver 1949) and evenness (Pielou 1966) were computed for each quantitative sample collected. Diversity is a combined measure of taxa richness (the number of individual taxa present) and the distribution of numbers (densities) among those taxa. Diversity values usually range from 0.0 to approximately 5.0, with lower values (<2.0) indicating the presence of very

TABLE 2.4. Comparison of spring 1997 Wekiva River study area habitat means of selected aquatic invertebrate community descriptors. Means with the same letter superscript are not significantly different (ANOVA followed by Scheffe's multiple comparison; $p=0.05$). Mean total organisms were $\log(x + 1)$ transformed prior to ANOVA, all other data nontransformed).

Descriptor	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments n=30	n=36	Mats n=27	n=24	n=12
Mean Total Organisms m ⁻²	30,150 ^A (0.84)	29,175 ^A (0.88)	26,642 ^A (0.72)	19,543 ^A (0.52)	4,839 ^B (0.87)
Mean Taxa Richness	34 ^A (0.34)	34 ^A (0.28)	36 ^A (0.20)	33 ^A (0.19)	21 ^B (0.23)
Mean Diversity	3.92 ^A (0.16)	3.52 ^{AB} (0.18)	3.47 ^{AB} (0.16)	3.20 ^B (0.13)	2.95 ^B (0.71)
Mean Evenness	0.78 ^A (0.14)	0.70 ^B (0.14)	0.68 ^B (0.15)	0.64 ^B (0.12)	0.68 ^B (0.13)

TABLE 2.5. Comparison of autumn 1997 Wekiva River study area habitat means of selected aquatic invertebrate community descriptors. Means with the same letter superscript are not significantly different (ANOVA followed by Scheffes's multiple comparison; $p=0.05$). Mean total organisms were $\log(x + 1)$ transformed prior to ANOVA, all other data nontransformed).

<u>Descriptor</u>	<u>Habitat</u>				
	<u>Bare Sediments</u> n=33	<u>Snags</u> n=36	<u>Floating Mats</u> n=27	<u>Vallisneria</u> n=21	<u>Nuphar</u> n=9
Mean Total Organisms m ⁻²	36,532 ^A (0.73)	32,586 ^A (0.73)	24,361 ^A (0.59)	21,837 ^A (0.79)	2,355 ^B (0.87)
Mean Taxa Richness	29 ^{AB} (0.40)	33 ^A (0.19)	34 ^A (0.13)	34 ^A (0.18)	21 ^B (0.23)
Mean Diversity	3.35 ^A (0.25)	3.80 ^A (0.10)	3.51 ^A (0.17)	3.32 ^A (0.16)	3.23 ^A (0.12)
Mean Evenness	0.72 ^A (0.22)	0.76 ^B (0.09)	0.69 ^A (0.16)	0.65 ^A (0.16)	0.74 ^A (0.12)

few taxa or dominance by large numbers of a few taxa. Higher diversity values (>3.0) indicate the presence of a relatively large number of taxa with abundances roughly equivalent - no one species is overwhelmingly dominant.

Evenness is simply a measure of the distribution of numbers (densities) among the taxa present in a sample. Evenness values range from 0.0 to 1.0, with numbers closer to 0.0 indicating large densities of just a few taxa and numbers nearer to 1.0 indicating more equal distribution of numbers among the taxa collected. An evenness value of 1.0 would indicate that all species within a sample are equally abundant.

Aquatic invertebrate communities in systems characterized by poor environmental conditions (e.g. low dissolved oxygen, organic or toxic pollution) are often low in diversity and evenness, and are oftentimes dominated by large numbers of a few segmented worm species (Hynes 1970). However, diversity and evenness values must be interpreted with caution and awareness of specific conditions of systems under study. For example, healthy invertebrate communities in oligotrophic systems can exhibit low diversity and evenness due to lack of habitat complexity, rather than poor environmental or water quality conditions (Hurlburt 1971).

Diversity (as an index) has been criticized as a "nonconcept" because of conceptual and technical questions generated by its use as a pollution indicator (Hurlburt 1971). In the context of the current study, we used diversity and evenness only as comparative measures of species richness and

evenness of distribution among habitat types and sampling sites, and not as a measure of degree of environmental perturbation or pollution.

Diversity values computed for Wekiva River quantitative samples ranged from 0.38 to 4.74; evenness values ranged from 0.33 to 0.95. Means of diversity and evenness for the individual habitat types across all sites and dates were moderately high and indicative of species rich communities not overwhelmingly dominated (numerically) by a few taxa (Table 2.3). Results of statistical comparison of mean diversity values among habitat types closely resembled results from the corresponding comparison of mean species richness. Combined season diversity means of bare sediments, snags, and floating mats (3.62, 3.66, and 3.82, respectively) were significantly greater than means of Vallisneria and Nuphar (3.26 and 3.07, respectively; ANOVA, untransformed data, $p = 0.05$; Table 2.3). Separate seasonal analyses showed spring sediment communities to be significantly more diverse than Vallisneria and Nuphar communities (Figure 2.3, Table 2.4), while autumn diversity means were statistically equivalent (Figure 2.3, Table 2.5). It should be noted that statistical comparison of diversity means must be interpreted with caution because diversity has not been demonstrated to be a linear measure (Hurlburt 1971).

Habitat means of evenness also exhibited statistical differences (Figure 2.3, Tables 2.3, 2.4, and 2.5), but all values were within a relatively small range (0.64 to 0.78), and were, overall, indicative of reasonably equitable distribution of numbers among taxa.

Despite general similarities in total organism densities, species richness, diversity, and evenness (Figure 2.3, Tables 2.3, 2.4, and 2.5), each of the quantitatively sampled habitats supported a distinct community in terms of species composition and relative abundance.

Overall, the community inhabiting bare sediments was dominated numerically by larval Chironomidae (blind midges, nonbiting midges), Pelecypoda (clams and mussels), Amphipods (crustacean scuds), and tubificid Oligochaeta (segmented worms) (Appendix 2.2). These groups together accounted for 81.2 percent of the total organisms collected from sediments; the Chironomidae alone accounted for 57.0 percent of all sediment organisms. The two most abundant individual taxa inhabiting bare sediments were chironomid larvae: the tubicolous, multivoltine Cladotanytarsus sp. (7,315 m⁻², 21.8 percent of total organisms) and Polypedilum scalaenum (2,718 m⁻², 8.1 percent; Table 2.6). No other taxon accounted for more than five percent of the total sediment inhabiting organisms, however, others among the five most abundant taxa included the nonindigenous asian clam Corbicula fluminea (4.6 percent), the amphipod Gammarus sp. (4.5 percent), and unidentifiable oligochaetes with capilliiform setae (4.3 percent; Table 2.6, Appendix 2.2).

A trophically diverse group of Chironomidae, Trichoptera (caddisflies), Coleoptera (beetles), amphipods, and Ephemeroptera (mayflies) dominated the fallen tree (snag) habitat. These major groups constituted 42.9, 14.5, 12.1, 7.5, and 6.7 percents, respectively, of the total organisms collected from snags (Appendix 2.2). The midge larva Polypedilum scalaenum was the most abundant individual taxon (2,951 m⁻², 9.5 percent), followed by riffle beetle

TABLE 2.6. Rank, mean density, and percent composition of numerically dominant invertebrate taxa collected within each of the major habitat types sampled in the Wekiva River study area during 1997.

Rank	Habitat									
	Bare		Snags		Floating		Vallisneria		Nuphar	
	Sediments				Mats					
	Taxon		Taxon		Taxon		Taxon		Taxon	
	# m ⁻²	%	# m ⁻²	%	# m ⁻²	%	# m ⁻²	%	# m ⁻²	%
	n = 63		n = 72		n = 54		n = 45		n = 21	
1	<u>Cladotanytarsus</u>		<u>P. scalaenum</u>		<u>Hyalella azteca</u>		<u>Rheotanytarsus</u>		<u>C. bicinctus</u>	
	7,315	21.8%	2,951	9.5%	6,479	25.4%	4,414	21.4%	584	15.5%
2	<u>P. scalaenum</u>		<u>Stenelmis</u> sp.		Amphipoda imm		<u>Hydroptila</u>		<u>Thienemanniella</u> sp.	
	2,719	8.1%	2,351	7.5%	2,992	11.7%	2,770	13.4%	539	14.3%
3	<u>C. fluminea</u>		<u>Hydroptila</u>		<u>Gammarus</u>		Hydracarina		<u>Hydroptila</u>	
	1,538	4.6%	1,756	5.6%	1,672	6.6%	1,817	8.8%	510	13.5%
4	<u>Gammarus</u>		<u>Hyalella azteca</u>		<u>P. illinoense</u>		<u>Cricotopus/Ortho.</u>		<u>Tanytarsus</u> sp.	
	1,495	4.5%	1,444	4.6%	1,535	6.0%	1,144	5.6%	431	11.4%
5	UIWOCS		<u>T. albilineatus</u>		<u>T. albilineatus</u>		<u>Tanytarsus</u> sp.		<u>Cricotopus/Ortho.</u>	
	1,431	4.3%	1,427	4.6%	1,395	5.5%	1,128	5.5%	341	9.0%
6	<u>Pseudochironomus</u>		<u>Stenochironomus</u>		Coenagrionidae ei		<u>T. albilineatus</u>		<u>Tanytarsus</u> sp. E	
	1,196	3.6%	1,373	4.4%	1,101	4.3%	893	4.3%	314	8.3%
7	Pelecypoda imm		<u>C. bicinctus</u>		<u>P. paludosus</u>		<u>Tanytarsus</u> sp. E		Hydroptilidae	
	1,165	3.5%	1,325	4.2%	677	2.7%	850	4.1%	108	2.9%
8	Nematoda		<u>Cricotopus/Ortho.</u>		<u>Polypedilum</u> sp.		Hydroptilidae ei		<u>Thienemanniella</u> sp.	
	1,090	3.3%	1,221	3.9%	626	2.5%	748	3.6%	106	2.8%
9	<u>C. bicinctus</u>		<u>Tanytarsus</u> sp.		<u>Tanytarsus</u> sp.		<u>C. bicinctus</u>		<u>Rheotanytarsus</u>	
	880	2.6%	1,195	3.8%	540	2.1%	716	3.5%	99	2.6%
10	Ceratopogonidae ei		Hydracarina		<u>Pristina leidyi</u>		Baetidae ei		<u>P. illinoense</u>	
	864	2.6%	1,162	3.7%	502	2.0%	519	2.5%	48	1.3%

larvae of the genus Stenelmis (2,352 m⁻², 7.5 percent), microcaddisfly larvae of the genus Hydroptila (1,756 m⁻², 5.6 percent), the amphipod Hyaella azteca (1,444 m⁻², 4.6 percent) and the mayfly Tricorythodes albilineatus (1,427 m⁻², 4.6 percent; Table 2.6).

Amphipods were by far the most abundant taxon inhabiting the roots of stream-margin floating mats (composed primarily of Hydrocotyle sp.), accounting for 43.7 percent of all organisms collected. Other dominant major groups included Chironomidae (25.0 percent), and Ephemeroptera (8.2 percent; Appendix 2.2). The amphipods Hyaella azteca and Gammarus sp., and unidentifiable immature amphipods, were the most abundant individual taxa collected, occurring in densities of 6,479, 1,672, and 2,992 m⁻², respectively, and accounting for 25.4, 6.6, and 11.7 percents, respectively, of the total organisms (Table 2.6). Other important inhabitants of floating mats included the chironomid Polypedilum illinoense (1,535 m⁻², 6.0 percent) and the mayfly Tricorythodes albilineatus (1,395 m⁻², 5.5 percent; Table 2.6). No other individual taxon accounted for more than 4.3 percent of the total organisms in floating mats (Table 2.6).

Most abundant of the invertebrate major taxonomic groups inhabiting Vallisneria were Chironomidae (48.2 percent), Trichoptera (17.2 percent), aquatic Acari (water mites; 9.5 percent), Ephemeroptera (8.1 percent), and Gastropoda (snails; 4.0 percent; Appendix 2.2). The single most abundant Vallisneria inhabitant was the tube dwelling, filter feeding, chironomid Rheotanytarsus sp. (mean density = 4,414 individuals m⁻²), which accounted for 21.4 percent of all Vallisneria organisms (Table 2.6). The case building

microcaddisfly Hydroptila sp. was second-most abundant (2,770 m⁻², 13.4 percent). Also among the dominants were Hydracarina (water mites; 1,817 m⁻², 8.8 percent), larval midges of the unidentifiable Cricotopus/Orthocladius complex (1,144 m⁻²; 5.6 percent), and larval midges of the genus Tanytarsus (1,128 m⁻²; 5.5 percent) (Table 2.6).

Densities of taxa dominating invertebrate communities associated with Nuphar were an order of magnitude lower than corresponding densities of the other four habitat types quantitatively sampled (Tables 2.3 through 2.6; Appendix 2.2). Of the eight individual taxa accounting for 5.0 percent or more of the total Nuphar organisms, seven were Chironomidae. These seven chironomid taxa together accounted for 71.0 percent of the total Nuphar organisms. Most abundant was the tube dwelling algal grazer Cricotopus bicinctus (584 m⁻², 15.5 percent), followed by Thienemanniella undescribed species A (539 m⁻², 14.3 percent; Table 2.6). The single non-chironomid Nuphar dominant, Hydroptila sp., was third-most abundant (510 m⁻², 13.5 percent; Table 2.6). Other numerically important Nuphar inhabitants included Tanytarsus sp. (431 m⁻², 11.4 percent), Cricotopus/Orthocladius complex (341 m⁻², 9.0 percent), and Tanytarsus sp. E (314 m⁻², 8.3 percent; Table 2.6).

Patterns of Distribution

Currently accepted stream ecosystem function theories (the stream continuum concept as per Vannote et al. 1980 and Minshall 1988; patch dynamics as per Pringle et al. 1988), rationalize aquatic invertebrate distribution as a function of magnitude and type of allochthonous energy input. We used cluster analysis (Romesburg 1984) as a method to examine the relationships among

sample sites and to determine if the clustered site distributions conformed to a continuum. If Wekiva River invertebrate communities strongly conformed to the continuum concept, contiguous sample sites within the study area would be adjacently positioned on the dendrograms resulting from the analyses (e.g.: UP-1 next to UP-2 next to UP-3, etc.). Additionally, a longitudinal progression from upstream (UP) study area sites, through middle (MI) study area sites, to the downstream, lower (LO) study area sites (reflecting increasing importance of fine particulate organic matter detritivores) would be evident from the top to the bottom of the dendrogram. Finally, the designated upper, middle, lower, and Little Wekiva River stream segments, which at the outset of the study were considered to be somewhat ecologically discrete, would cluster separately. A simplified dendrogram model of this approach is depicted in Figure 2.4. Invertebrate communities of the Wekiva and Little Wekiva rivers would not be expected to conform completely to this model because of the relatively small geographical scale of the study area.

In contrast to the model illustrated in Figure 2.4, the dendrograms resulting from cluster analysis of individual samples from Wekiva River study area bare sediments, snags, floating mats, and Nuphar luteum (Figures 2.5 through 2.8) produced few longitudinal patterns. The most severe case of nonconformity was produced by analysis of bare sediment data (Figure 2.5). In this dendrogram, pseudoreplicate samples from single sampling sites, and samples from physically contiguous sample sites, occur adjacently within each of the four clusters, but, as exemplified in the large Cluster 3, samples from all study segments are closely related, and, overall, there is no pattern representative of longitudinal succession. Lack of a discernable longitudinal pattern also

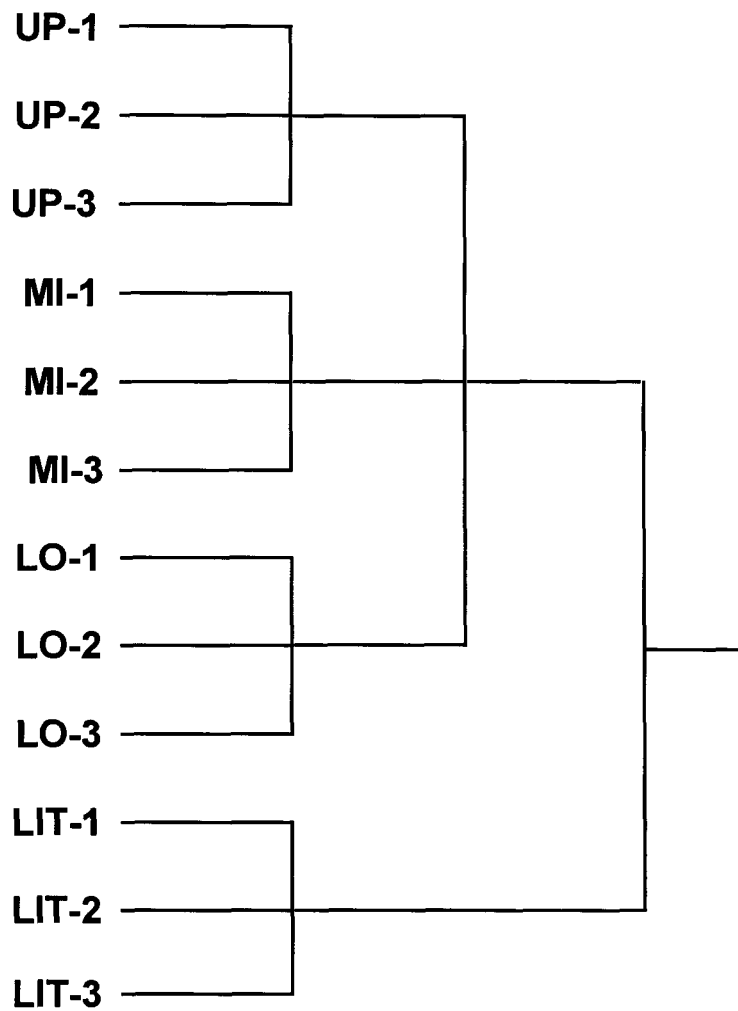


FIGURE 2.4. Dendrogram depicting model clustering of Wekiva River study area aquatic invertebrate community sampling sites.

Bare Sediment Samples

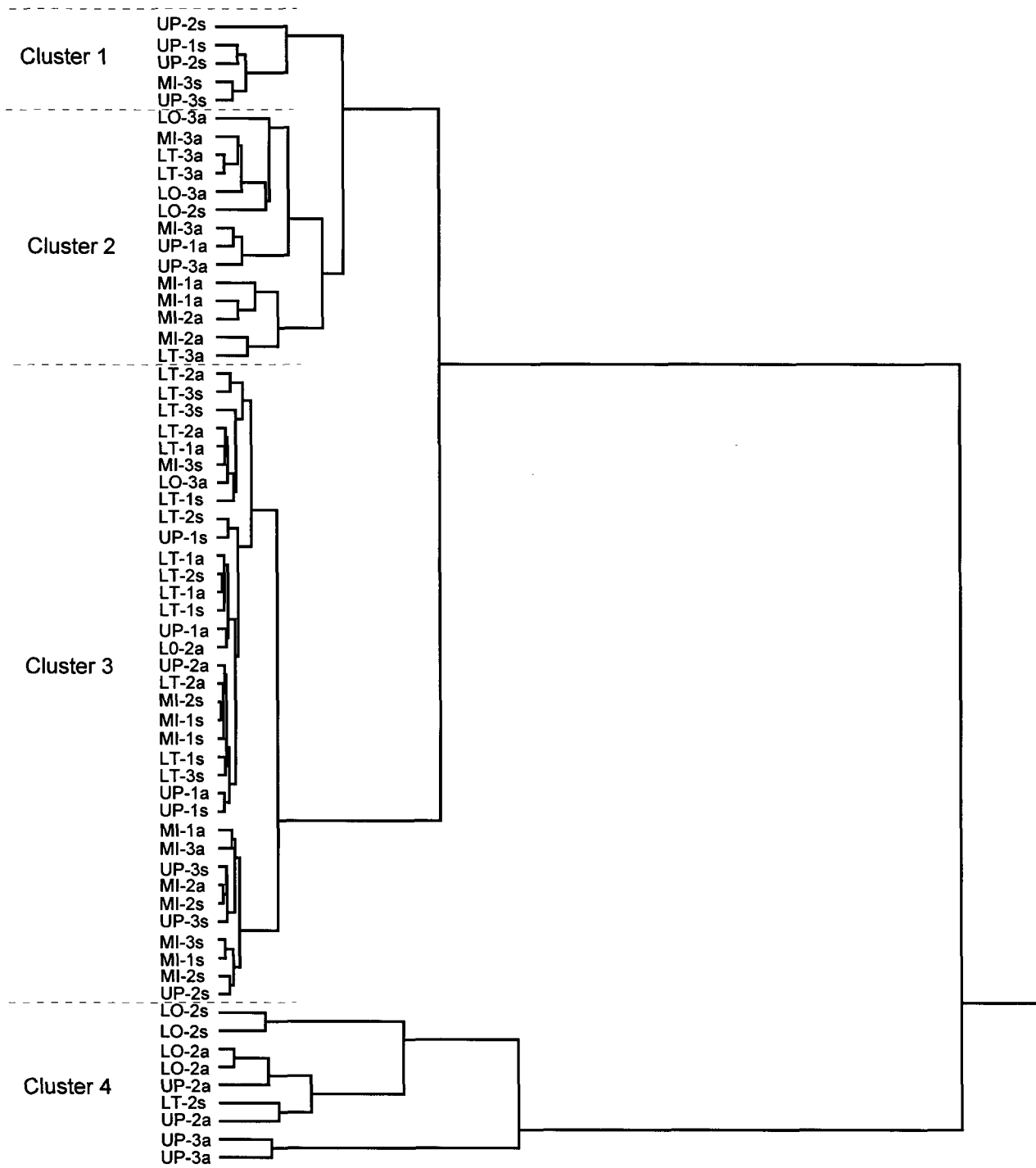


FIGURE 2.5 . Dendrogram produced by cluster analysis of the dominant taxa by individual sample data matrix compiled from aquatic invertebrate community samples obtained from Wekiva River study area bare sediment sites during spring and autumn 1997. Upper case letters and numbers denote sample site location (see Table 2.1); lower case letters denote season (s = spring, a = autumn).

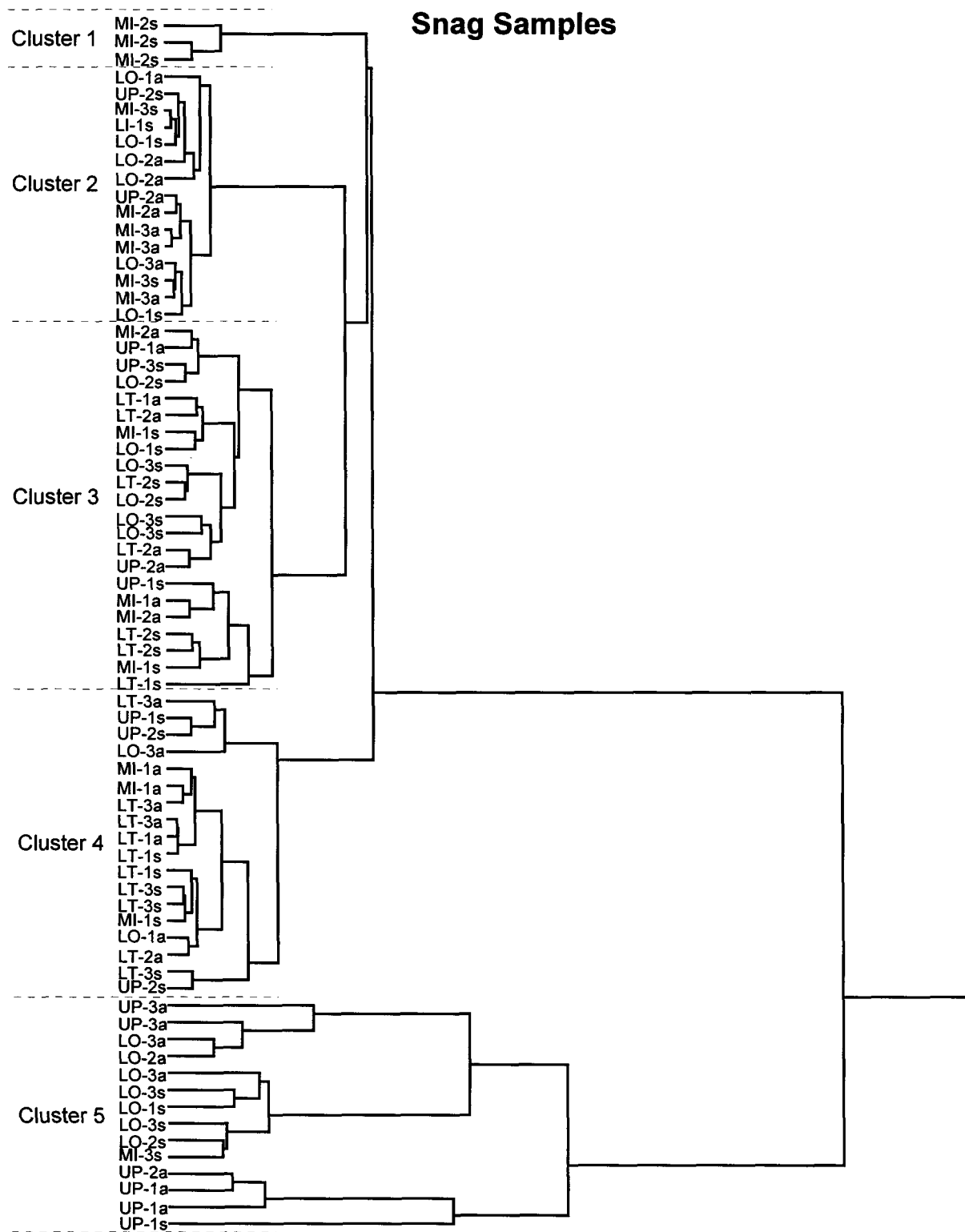


FIGURE 2.6. Dendrogram produced by cluster analysis of the dominant taxa by individual sample data matrix compiled from aquatic invertebrate community samples obtained from Wekiva River study area snag sites during spring and autumn 1997. Upper case letters and numbers denote sample site location (see Table 2.1); lower case letters denote season (s = spring, a = autumn).

Floating MatSamples

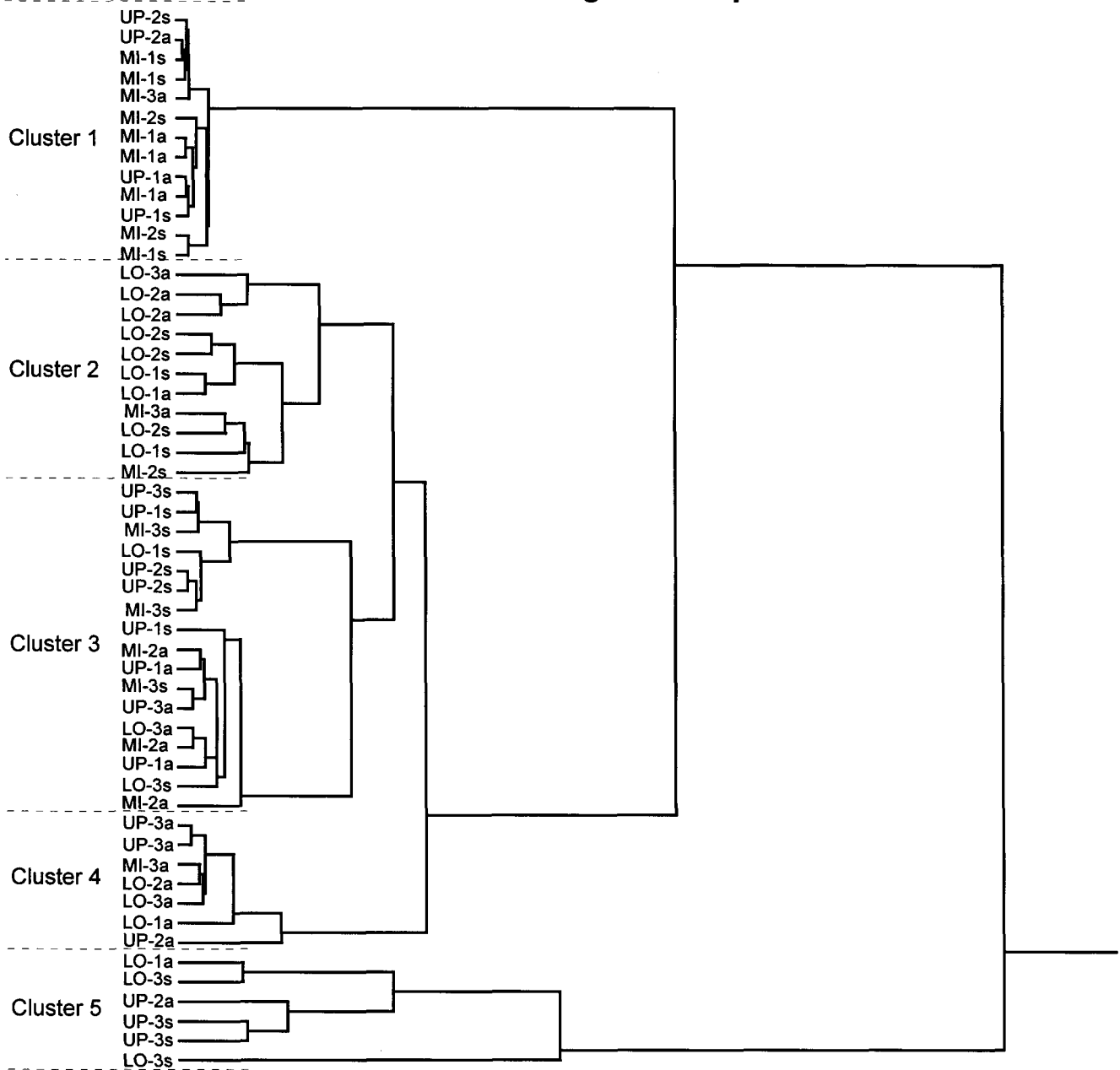


FIGURE 2.7. Dendrogram produced by cluster analysis of the dominant taxa by individual sample data matrix compiled from aquatic invertebrate community samples obtained from Wekiva River study area floating vegetation mat (primarily *Hydrocotyle* sp.) sites during spring and autumn 1997. Upper case letters and numbers denote sample site location (see Table 2.1); lower case letters denote season (s = spring, a = autumn).

Nuphar Samples

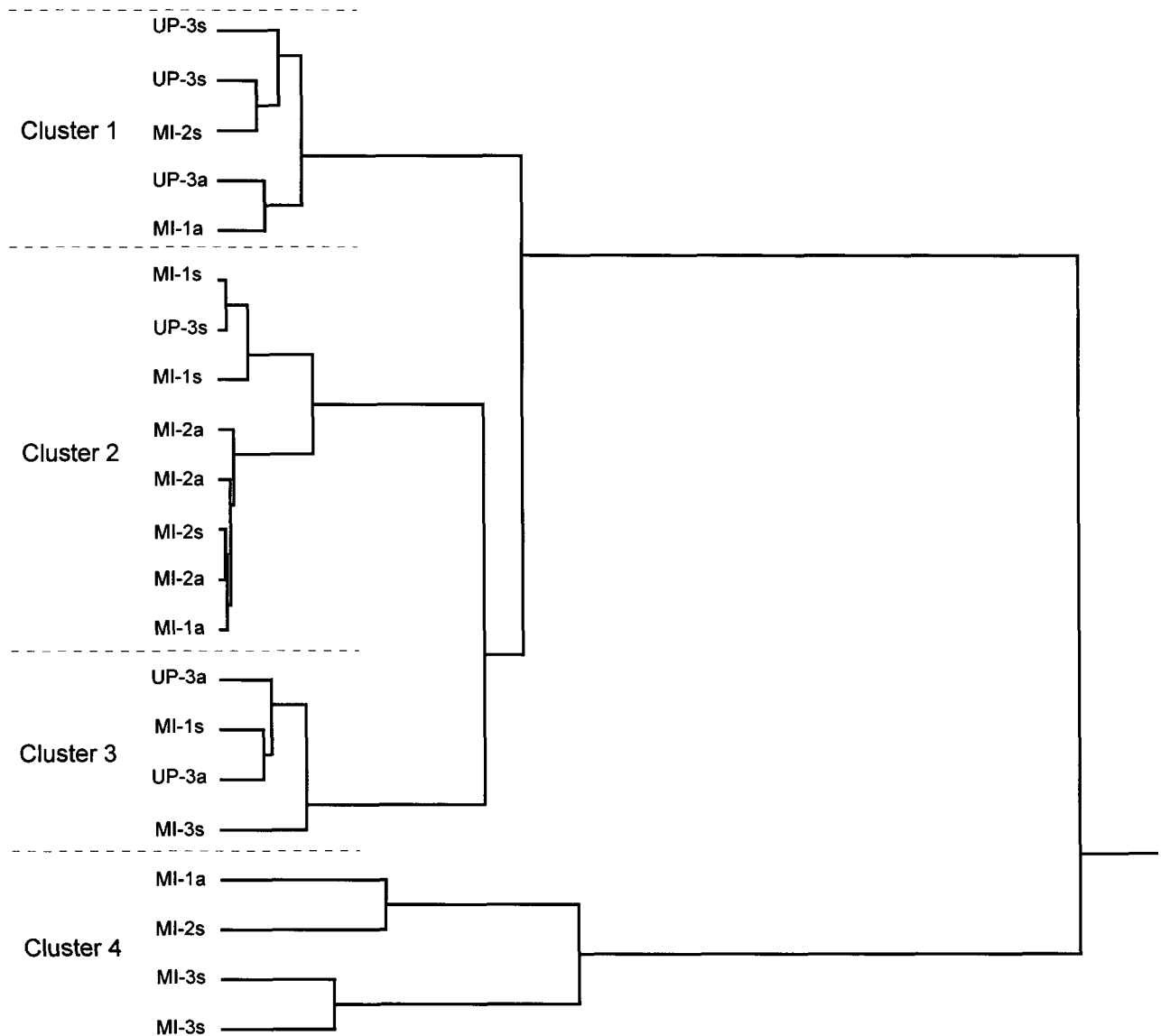


FIGURE 2.8. Dendrogram produced by cluster analysis of the dominant taxa by individual sample data matrix compiled from aquatic invertebrate community samples obtained from Wekiva River study area *Nuphar luteum* sites during spring and autumn 1997. Upper case letters and numbers denote sample site locations (see Table 2.1); lower case letters denote season (s = spring, a = autumn).

characterized dendrograms produced by cluster analysis of samples from the snag, floating mat and Nuphar habitats (Figures 2.6 through 2.8). Further cluster analyses of summed data matrices, correlation matrices (Pearson and Spearman), and Bray-Curtis similarity index matrices confirmed the absence of longitudinal distributional patterns within the above-listed habitats (Figures 2.9 through 2.11).

Results of cluster analysis of the Vallisneria americana-associated community were more indicative of longitudinal influences (Figures 2.12 and 2.13). Although there is no strong pattern of upstream to downstream succession in the dendrogram produced by clustering of individual Vallisneria samples (Figure 2.12), samples from the same site/date, and samples from contiguous sites, cluster together. Most importantly, 14 of the 18 samples from the lower Wekiva River study segment clustered adjacently, with spring and autumn samples clustering at opposite ends of the dendrogram. This pattern is reinforced in the cluster analysis of the Vallisneria sampling site by dominant taxa data matrix, where a distinct longitudinal pattern is evident (Figure 2.13).

Functional Feeding Group Analysis

The concept of functional feeding group analysis was developed by stream ecologists as a tool to elucidate aquatic ecosystem processes (Cummins 1973, Cummins and Merritt 1996). We conducted an evaluation of longitudinal and seasonal patterns of functional feeding group distribution to gain a trophic (versus taxonomic) perspective on aquatic invertebrate community structure within the study area.

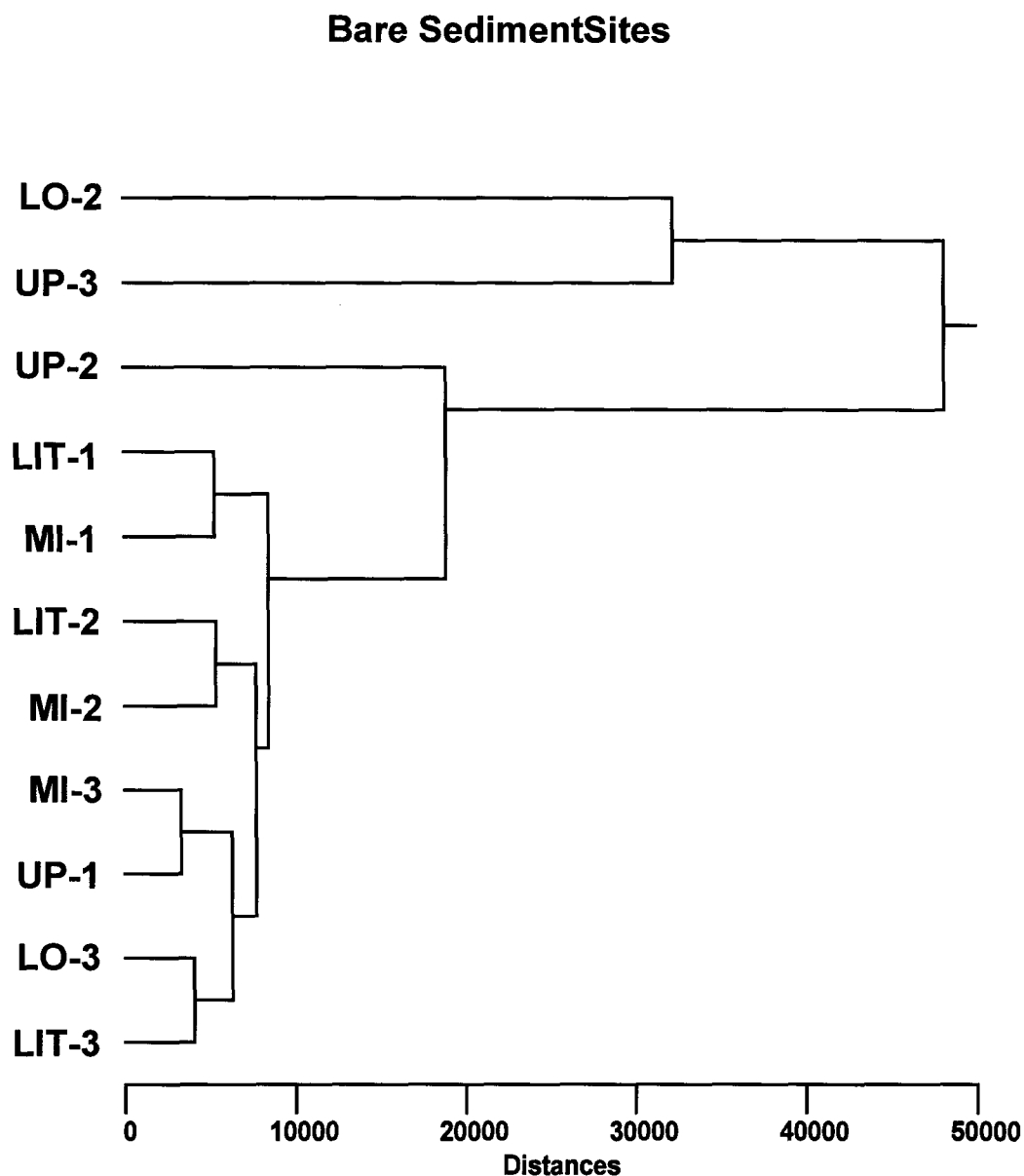


FIGURE 2.9. Dendrogram produced by cluster analysis of the bare sediment sample site/dominant invertebrate taxa data matrix (distance measure = Euclidean; linkage = Ward's).

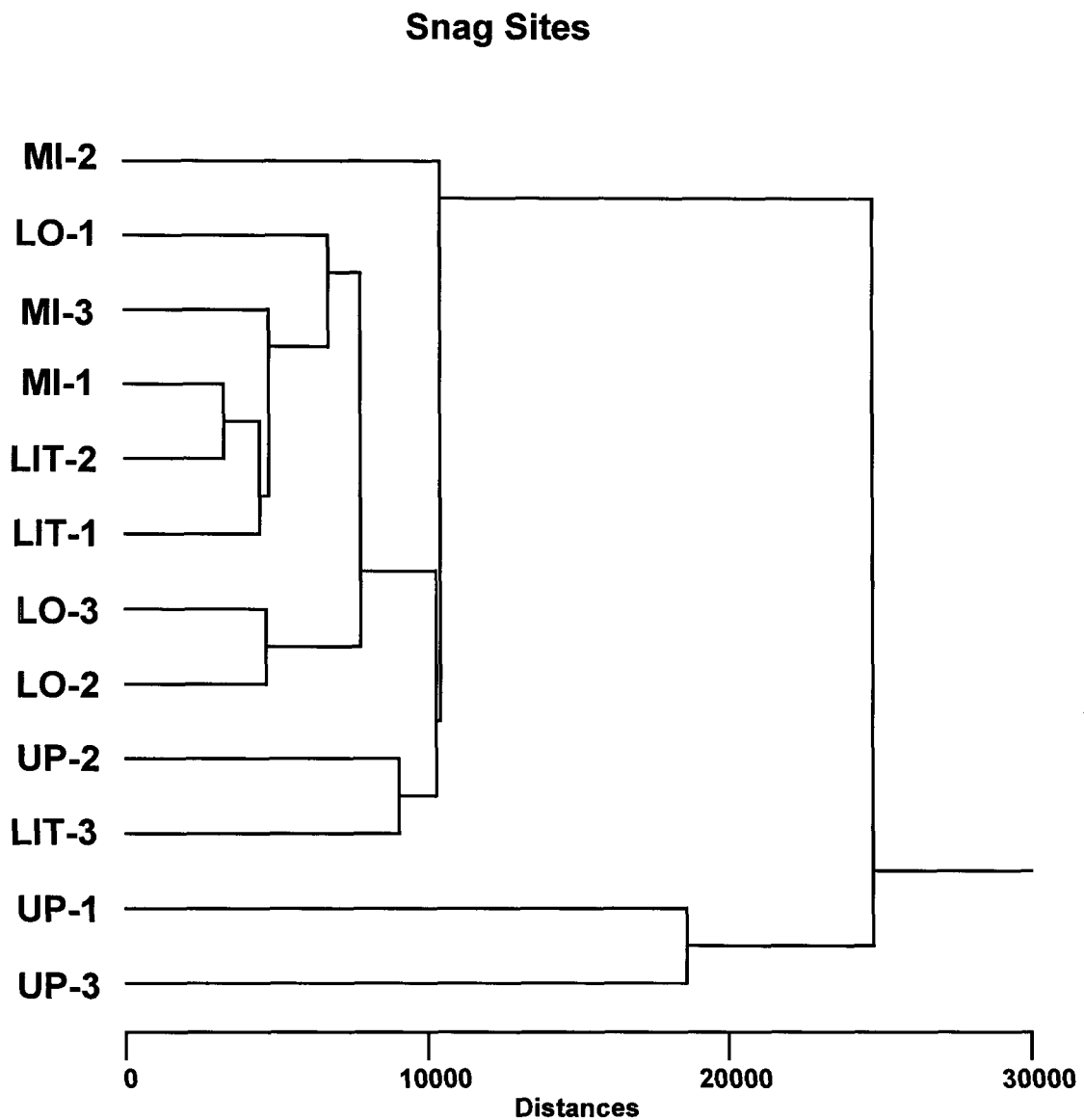


FIGURE 2.10. Dendrogram produced by cluster analysis of the snag sample site/dominant invertebrate taxa data matrix (distance measure = Euclidean; linkage = Ward's).

Floating Mat Sites

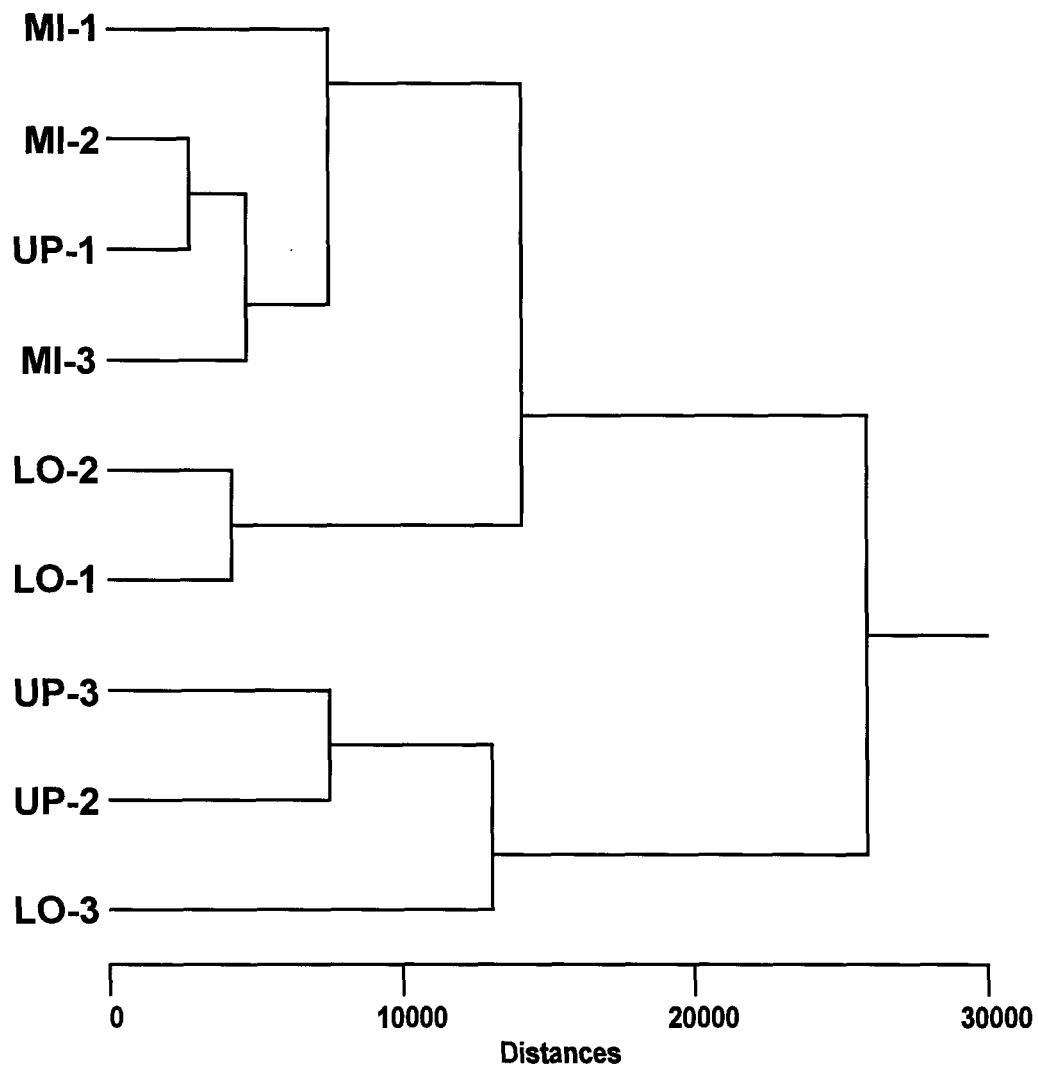


Figure 2.11. Dendrogram produced by cluster analysis of the floating mat sample site/dominant invertebrate taxa data matrix (distance measure = Euclidean; linkage = Ward's).

Vallisneria Samples

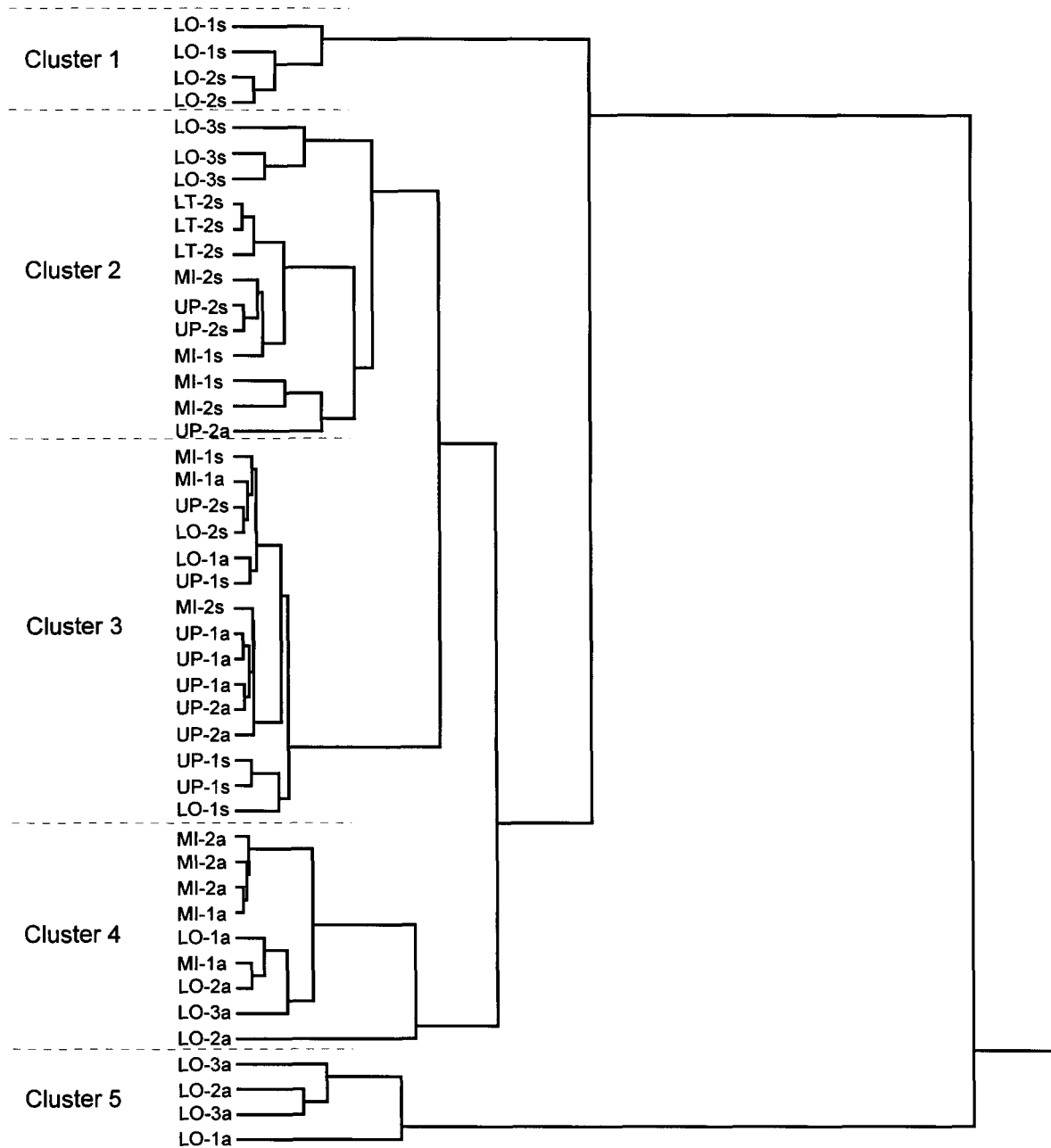


FIGURE 2.12. Dendrogram produced by cluster analysis of the dominant taxa by individual sample data matrix compiled from aquatic invertebrate community samples obtained from Wekiva River study area *Vallisneria americana* sites during spring and autumn 1997. Upper case letters and numbers denote sample location (see Table 2.1); lower case letters denote season (s = spring, a = autumn).

Vallisneria Sites

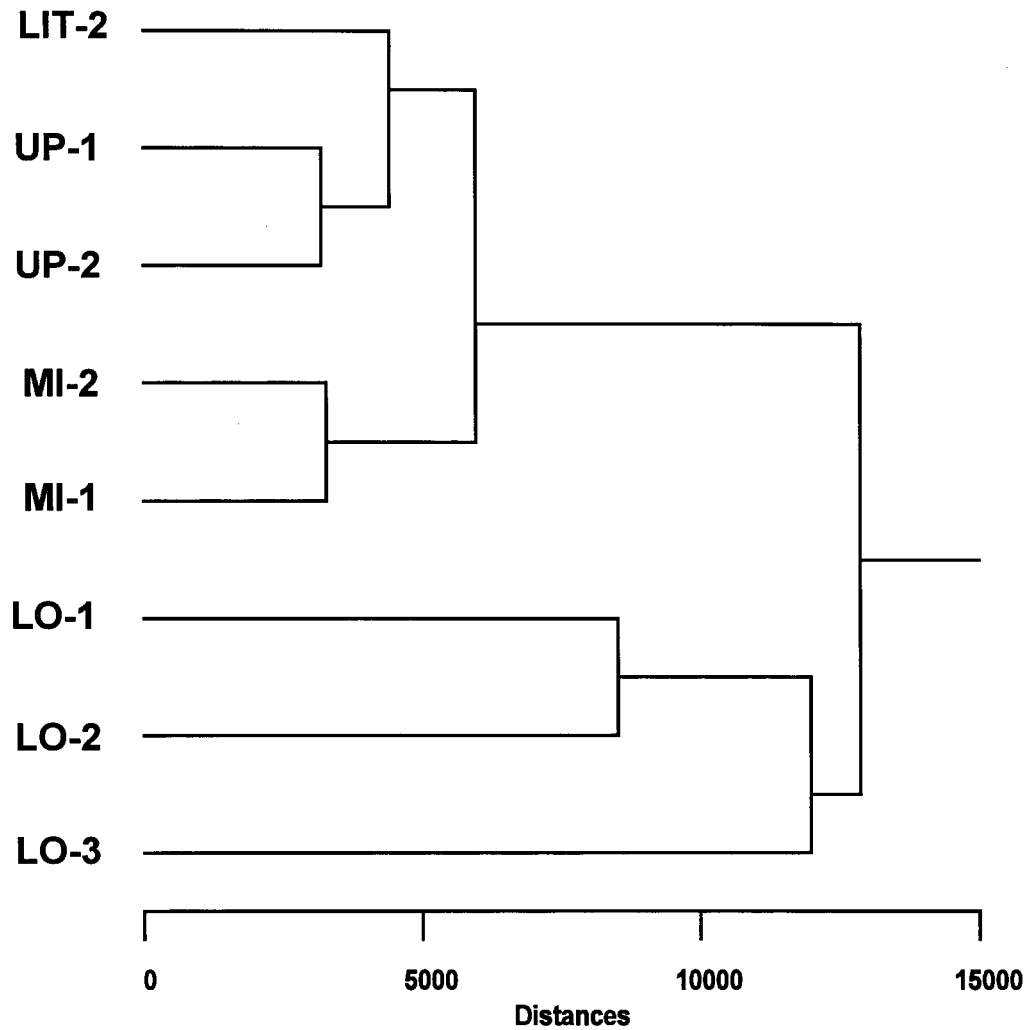


FIGURE 2.13. Dendrogram produced by cluster analysis of the *Vallisneria americana* sample site/dominant invertebrate taxa data matrix (distance measure = Euclidean; linkage = Ward's).

To facilitate analysis, each individual taxon was assigned to one of five functional groups: grazers (attached algae/microbiota consumers), shredders (consumers of living or dead coarse plant material), gatherers (collectors of fine particulate organic detritus), filterers (filterers of suspended particulate organic matter), or predators (consumers of live animal prey). Functional feeding group assignments generally followed those of Merritt and Cummins (1996) and are presented in Appendix 2.3.

Functional group relative abundance has been shown to shift in response to environmental variables and food availability (Hawkins and Sedell 1991). A primary intent of functional group analysis in this study was to use it as a device to gauge the importance of detritus versus algae as an invertebrate food source, and then evaluate these findings in the context of projected flow reductions. A high proportion of gatherers would be indicative of extensive accumulations of fine-sized particulate organic matter (FPOM); a high proportion of filterers would infer large amounts of suspended organic matter, and high percentages of grazers would be indicative of clear water conditions and moderate to high levels of available nutrients dissolved in the water column (Cummins 1973, Cummins and Merritt 1996).

Results of functional feeding group analyses within four of the five habitats quantitatively sampled in all study area stream segments are illustrated in Figures 2.14 through 2.16. Results from all habitats and collecting sites are presented in Tables 2.7 through 2.9.

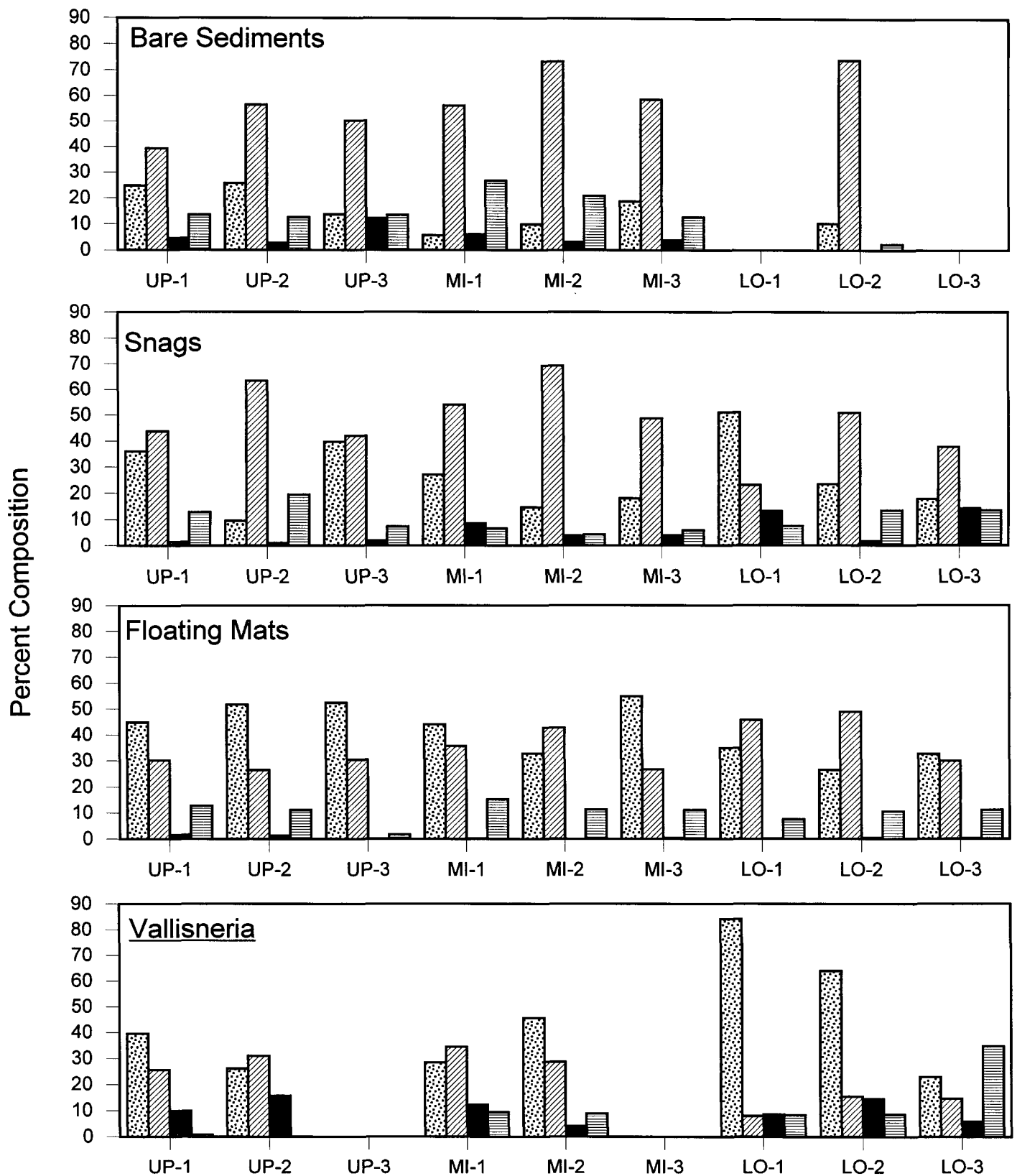


FIGURE 2.14. Percent composition of aquatic invertebrate functional feeding groups within major habitat types at the nine Wekiva River sampling sites during May/June 1997 (▨ = Grazers; ▧ = Gatherers; ■ = Filterers; ▤ = Predators).

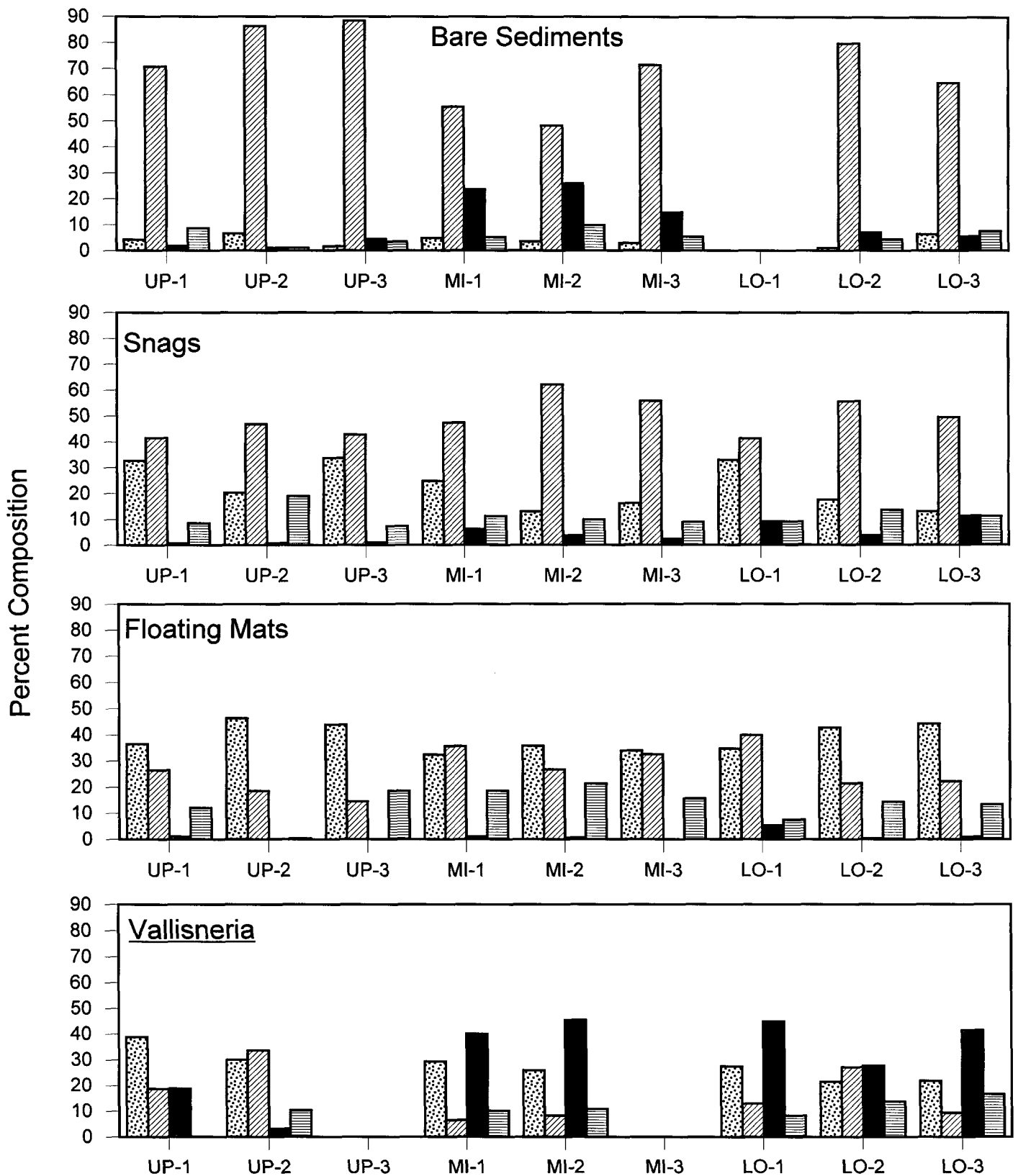


FIGURE 2.15. Percent composition of aquatic invertebrate functional feeding groups within major habitat types at the nine Wekiva River sampling sites during October 1997 (▤ = Grazers; ▨ = Gatherers; ■ = Filterers; ▧ = Predators).

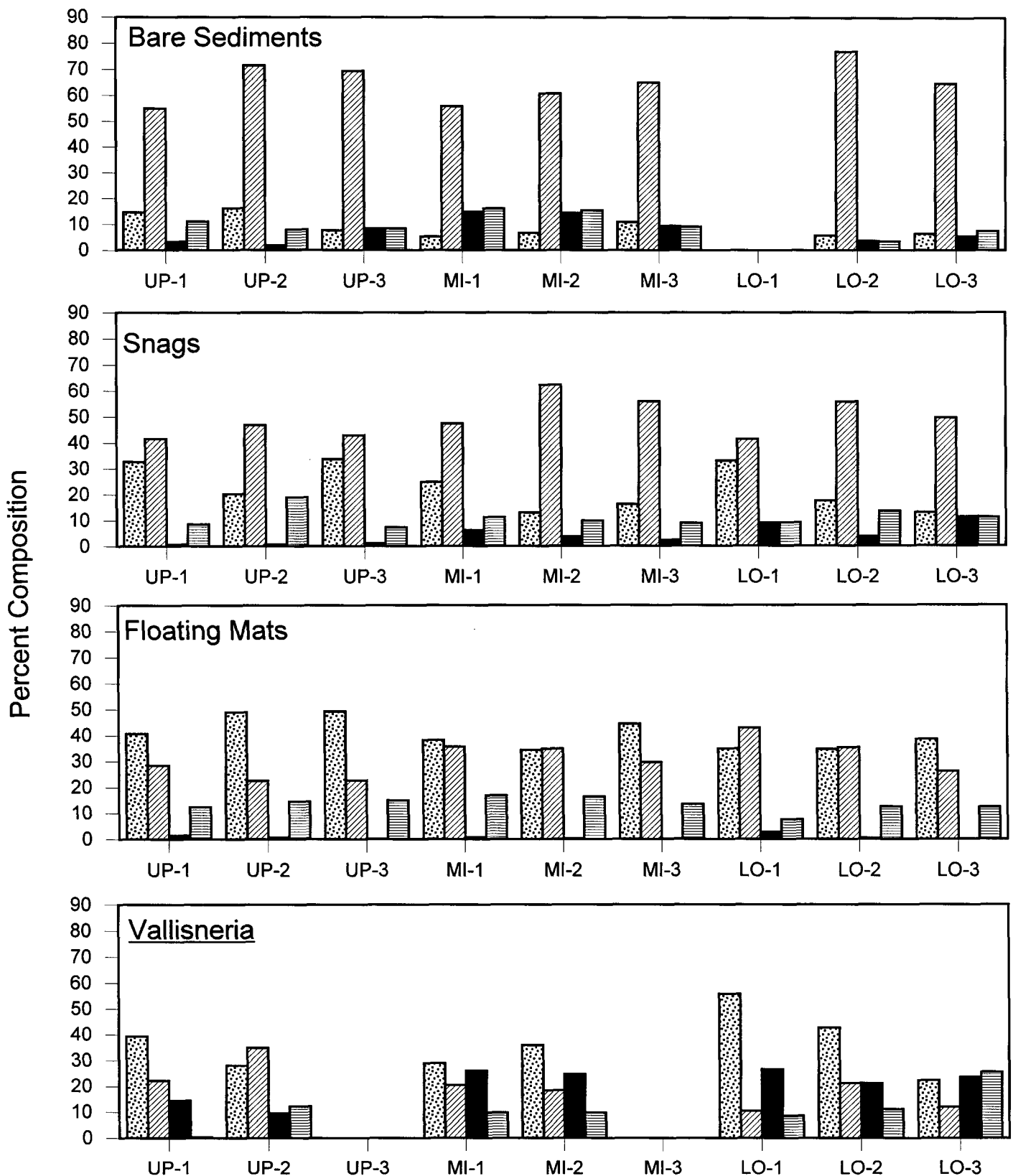


FIGURE 2.16. Percent composition of aquatic invertebrate functional feeding groups within major habitat types at the nine Wekiva River sampling sites during the two 1997 sampling periods (▤ = Grazers; ▨ = Gatherers; ■ = Filterers; ▩ = Predators).

TABLE 2.7. Percent composition of aquatic invertebrate functional feeding groups within major habitat types at the twelve Wekiva River study area sampling locations during the May/June, 1997, sampling period.

<u>Site/Group</u>	<u>Habitat Type</u>				
	<u>Bare Sediments</u>	<u>Snags</u>	<u>Floating Mats</u>	<u>Vallisneria</u>	<u>Nuphar</u>
<u>UP-1</u>					
grazers	24.8	36.1	44.9	39.6	---
gatherers	39.3	43.7	30.2	25.7	---
filterers	4.7	1.4	1.7	10.0	---
shredders	0.0	0.4	0.1	0.4	---
predators	13.6	7.6	12.8	0.7	---
<u>UP-2</u>					
grazers	25.8	9.5	51.7	26.2	---
gatherers	56.5	63.4	26.5	31.1	---
filterers	2.9	1.0	1.3	15.7	---
shredders	0.0	0.0	1.6	0.2	---
predators	12.6	19.5	11.1	0.1	---
<u>UP-3</u>					
grazers	13.7	39.7	52.4	C--	69.0
gatherers	50.2	42.0	30.5	C--	19.1
filterers	12.2	1.9	0.1	C--	2.3
shredders	0.0	0.0	0.2	C--	0.0
predators	13.5	7.3	1.7	C--	5.0
<u>MI-1</u>					
grazers	5.7	27.1	44.1	28.6	58.2
gatherers	56.2	54.0	35.6	34.6	28.2
filterers	6.2	8.6	0.3	12.4	1.6
shredders	0.0	0.1	0.2	0.0	0.0
predators	26.9	6.5	15.3	9.4	4.3
<u>MI-2</u>					
grazers	10.0	14.7	32.8	45.8	57.6
gatherers	73.4	69.2	42.8	28.8	21.0
filterers	3.2	3.7	0.0	4.1	1.1
shredders	0.0	0.0	0.0	0.5	0.0
predators	21.0	4.2	11.3	8.9	5.9
<u>MI-3</u>					
grazers	18.9	18.1	54.9	---	53.2
gatherers	58.7	48.8	26.7	---	38.1
filterers	4.0	4.0	0.4	---	0.3
shredders	0.0	0.0	0.3	---	---
predators	12.8	5.8	11.2	---	1.9

TABLE 2.7. continued

<u>Site/Group</u>	<u>Habitat Type</u>				
	<u>Bare Sediments</u>	<u>Snags</u>	<u>Floating Mats</u>	<u>Vallisneria</u>	<u>Nuphar</u>
<u>LO-1</u>					
grazers	C--	51.2	34.9	84.2	---
gatherers	C--	23.2	45.8	8.0	---
filterers	C--	13.3	0.2	8.5	---
shredders	C--	0.0	0.1	0.1	---
predators	C--	7.5	7.5	8.3	---
<u>LO-2</u>					
grazers	10.4	23.6	26.5	64.0	---
gatherers	74.1	51.0	49.0	15.5	---
filterers	0.3	1.6	0.5	14.6	---
shredders	0.0	0.0	0.3	0.5	---
predators	2.4	13.5	10.5	8.6	---
<u>LO-3</u>					
grazers	---	17.9	32.6	23.0	---
gatherers	---	37.9	29.9	14.7	---
filterers	---	14.2	0.3	5.8	---
shredders	---	0.0	0.1	0.3	---
predators	---	13.5	11.1	34.9	---
<u>LIT-1</u>					
grazers	11.3	19.8	C--	C--	---
gatherers	53.3	56.9	C--	---	---
filterers	9.2	1.7	C--	C--	---
shredders	0.0	0.0	C--	C--	---
predators	0.3	8.9	C--	C--	---
<u>LIT-2</u>					
grazers	7.2	21.6	C--	41.5	---
gatherers	64.3	55.2	C--	40.3	---
filterers	7.4	6.0	C--	1.6	---
shredders	0.0	0.0	C--	0.3	---
predators	9.7	6.7	C--	5.3	---
<u>LIT-3</u>					
grazers	4.0	3.7	C--	C--	---
gatherers	59.5	79.7	C--	C--	---
filterers	2.5	3.5	C--	C--	---
shredders	0.0	0.0	C--	C--	---
predators	13.8	5.5	C--	C--	---

TABLE 2.8. Percent composition of aquatic invertebrate functional feeding groups within major habitat types at the twelve Wekiva River study area sampling locations during the October, 1997, sampling period.

<u>Site/Group</u>	<u>Habitat Type</u>				
	<u>Bare Sediments</u>	<u>Snags</u>	<u>Floating Mats</u>	<u>Vallisneria</u>	<u>Nuphar</u>
<u>UP-1</u>					
grazers	4.3	29.3	36.5	38.9	---
gatherers	70.7	39.6	26.5	18.7	---
filterers	1.8	0.1	1.1	18.8	---
shredders	0.0	0.0	0.0	1.8	---
predators	8.7	9.6	12.1	0.2	---
<u>UP-2</u>					
grazers	6.6	31.1	46.4	30.1	---
gatherers	86.3	30.1	18.6	33.6	---
filterers	1.1	0.5	0.1	3.2	---
shredders	0.0	0.0	0.0	0.9	---
predators	1.0	18.3	0.4	10.3	---
<u>UP-3</u>					
grazers	1.7	27.7	43.9	C--	57.1
gatherers	88.4	43.6	14.6	C--	15.9
filterers	4.5	0.3	0.1	C--	3.6
shredders	0.0	0.0	0.2	C--	0.0
predators	3.4	7.2	18.6	C--	2.7
<u>MI-1</u>					
grazers	4.9	22.5	32.4	29.4	55.6
gatherers	55.4	40.9	35.6	6.5	6.2
filterers	23.6	3.8	1.2	40.0	21.4
shredders	0.0	0.0	0.1	0.3	0.1
predators	5.2	16.0	18.6	10.1	3.7
<u>MI-2</u>					
grazers	3.5	11.3	35.7	25.9	56.7
gatherers	48.2	55.2	26.8	8.2	19.8
filterers	25.9	3.7	0.7	45.4	7.8
shredders	0.0	0.0	0.2	0.7	0.0
predators	9.8	15.6	21.4	10.8	8.0
<u>MI-3</u>					
grazers	2.9	14.3	33.9	---	---
gatherers	71.4	62.8	32.5	---	---
filterers	14.7	0.6	0.0	---	---
shredders	0.0	0.0	0.2	---	---
predators	5.3	12.0	15.6	---	---

TABLE 2.8. continued

<u>Site/Group</u>	<u>Habitat Type</u>				
	<u>Bare Sediments</u>	<u>Snags</u>	<u>Floating Mats</u>	<u>Vallisneria</u>	<u>Nuphar</u>
<u>LO-1</u>					
grazers	C--	14.7	34.7	27.4	---
gatherers	C--	59.4	39.9	12.8	---
filterers	C--	4.9	5.4	44.9	---
shredders	C--	0.0	0.1	0.5	---
predators	C--	10.6	7.5	8.2	---
<u>LO-2</u>					
grazers	1.0	11.5	42.7	21.4	---
gatherers	79.8	60.3	21.5	27.1	---
filterers	7.1	5.8	0.4	27.7	---
shredders	0.0	0.0	0.1	0.1	---
predators	4.4	13.6	14.4	13.6	---
<u>LO-3</u>					
grazers	6.4	8.1	44.2	21.8	---
gatherers	64.6	61.1	22.2	9.3	---
filterers	5.5	8.4	1.0	41.3	---
shredders	0.0	0.1	0.1	0.3	---
predators	7.4	8.7	13.4	16.5	---
<u>LIT-1</u>					
grazers	4.0	14.6	C--	C--	---
gatherers	64.5	49.4	C--	---	---
filterers	9.1	14.3	C--	C--	---
shredders	0.0	0.0	C--	C--	---
predators	11.9	12.6	C--	C--	---
<u>LIT-2</u>					
grazers	6.7	20.2	C--	---	---
gatherers	60.4	47.8	C--	---	---
filterers	12.0	3.7	C--	---	---
shredders	0.0	0.2	C--	---	---
predators	10.6	21.9	C--	---	---
<u>LIT-3</u>					
grazers	4.2	9.7	C--	C--	---
gatherers	50.9	61.1	C--	C--	---
filterers	16.7	3.1	C--	C--	---
shredders	0.0	1.2	C--	C--	---
predators	9.4	12.2	C--	C--	---

TABLE 2.9. Percent composition of aquatic invertebrate functional feeding groups within major habitat types at the twelve Wekiva River study area sampling locations during the May/June and October, 1997, sampling periods.

<u>Site/Group</u>	<u>Habitat Type</u>				
	<u>Bare Sediments</u>	<u>Snags</u>	<u>Floating Mats</u>	<u>Vallisneria</u>	<u>Nuphar</u>
<u>UP-1</u>					
grazers	14.6	32.7	40.7	39.3	---
gatherers	55.0	41.6	28.4	22.2	---
filterers	3.2	0.7	1.4	14.4	---
shredders	0.0	0.2	0.1	1.1	---
predators	11.1	8.6	12.4	0.4	---
<u>UP-2</u>					
grazers	16.2	20.3	49.0	28.1	---
gatherers	71.4	46.8	22.5	34.9	---
filterers	2.0	0.7	0.7	9.5	---
shredders	0.0	0.0	0.8	0.5	---
predators	8.1	18.9	14.5	12.2	---
<u>UP-3</u>					
grazers	7.7	33.7	49.2	C--	63.0
gatherers	69.3	42.8	22.6	C--	17.5
filterers	8.4	1.1	0.1	C--	3.2
shredders	0.0	0.0	0.2	C--	0.0
predators	8.4	7.3	14.9	C--	3.8
<u>MI-1</u>					
grazers	5.3	24.8	38.2	29.0	56.9
gatherers	55.8	47.4	35.6	20.5	17.2
filterers	14.9	6.2	0.8	26.2	11.5
shredders	0.0	0.1	0.2	0.2	0.1
predators	16.1	11.2	16.9	9.8	4.0
<u>MI-2</u>					
grazers	6.7	13.0	34.3	35.9	57.2
gatherers	60.8	62.2	34.8	18.5	20.4
filterers	14.5	3.7	0.3	24.8	4.5
shredders	0.0	0.0	0.1	0.6	0.0
predators	15.4	9.9	16.3	9.8	6.9
<u>MI-3</u>					
grazers	10.9	16.2	44.4	---	53.2
gatherers	65.0	55.8	29.6	---	38.1
filterers	9.4	2.3	0.2	---	0.3
shredders	0.0	0.0	0.2	---	0.0
predators	9.1	8.9	13.4	---	1.9

TABLE 2.9. continued

<u>Site/Group</u>	<u>Habitat Type</u>				
	<u>Bare Sediments</u>	<u>Snags</u>	<u>Floating Mats</u>	<u>Vallisneria</u>	<u>Nuphar</u>
<u>LO-1</u>					
grazers	C--	33.0	34.8	55.8	---
gatherers	C--	41.3	42.8	10.4	---
filterers	C--	9.1	2.8	26.7	---
shredders	C--	0.0	0.1	0.3	---
predators	C--	9.1	7.5	8.5	---
<u>LO-2</u>					
grazers	5.7	17.5	34.6	42.7	---
gatherers	77.0	55.6	35.2	21.3	---
filterers	3.7	3.7	0.5	21.2	---
shredders	0.0	0.0	0.2	0.3	---
predators	3.4	13.5	12.5	11.1	---
<u>LO-3</u>					
grazers	6.4	13.0	38.4	22.4	---
gatherers	64.6	49.5	26.0	12.0	---
filterers	5.5	11.3	0.1	23.6	---
shredders	0.0	0.1	0.1	0.3	---
predators	7.4	11.1	12.3	25.7	---
<u>LIT-1</u>					
grazers	7.6	17.2	C--	C--	---
gatherers	58.9	53.2	C--	---	---
filterers	9.1	8.0	C--	C--	---
shredders	0.0	0.0	C--	C--	---
predators	2.8	10.8	C--	C--	---
<u>LIT-2</u>					
grazers	6.9	20.9	C--	41.5	---
gatherers	62.3	51.5	C--	40.3	---
filterers	9.7	4.8	C--	1.6	---
shredders	0.0	0.1	C--	0.3	---
predators	10.2	14.3	C--	5.3	---
<u>LIT-3</u>					
grazers	4.1	6.7	C--	C--	---
gatherers	55.2	70.4	C--	C--	---
filterers	9.6	3.3	C--	C--	---
shredders	0.0	0.6	C--	C--	---
predators	3.9	8.8	C--	C--	---

Gathering detritivores were the numerically predominant functional group inhabiting the bare sediment habitat at all sampling locations during both the spring and autumn collections (Figures 2.14 through 2.16). Other functional groups only rarely accounted for more than 20 percent of the total organisms in sediments at any one site/date (Tables 2.7 through 2.9). Gatherers also predominated the snag habitat, but other functional groups, most notably grazers, were important community components of the snag community at most locations (Figures 2.14 through 2.16).

The periphyton/microbiota grazer functional group numerically predominated the invertebrate communities of all macrophyte habitats that were quantitatively sampled (floating mats, Vallisneria, and Nuphar; Figures 2.14 through 2.16; Tables 2.7 through 2.9). Although predominated by grazers, floating mat-associated communities were the most trophically balanced of all the habitats sampled. Gatherers and filterers were less important in Vallisneria and Nuphar-associated communities, with the exception that filterers were a major constituent of the Vallisneria-associated assemblage in the lower Wekiva study segment during the autumn collection. Shredders, which are often the predominant functional group in low order temperate latitude streams, were present in very low relative abundances (less than one percent) in the Wekiva River study area (Tables 2.7 through 2.9).

Influences of Current Velocity and Depth upon Abundance and Distribution

Canonical correspondence analysis (CCA; Ter Braak 1987, Johnson et al. 1993, Jongman et al. 1995) was used to evaluate influences of current velocity and water depth upon abundances and distributions of dominant invertebrate species

in each major habitat sampled. Results of CCA on communities inhabiting five habitat types (bare sediments, snags, floating mats, Nuphar, and Vallisneria) are presented in Figures 2.17 through 2.21. Species codes utilized in these figures are defined in Appendix 2.4. Descriptive statistics for each habitat CCA are presented in Table 2.10.

In the ordination biplots, the independent environmental variables depth and current velocity are axes represented by arrows passing through the origin of the biplot. The length of these independent variable arrows is a measure of the relative strength of the influence of the particular environmental variable upon the distributions and densities of the dominant taxa included in the CCA - the longer the arrow, the stronger the relationship and the more important the environmental variable is in explaining the distributions and densities of the associated taxa. Points representing the optimum abundances of individual invertebrate taxa are plotted in relation to the measured environmental parameters and in relation to other dominant taxa. Taxa ordinating near one another generally occur at the same sampling sites in similar densities. Taxa ordinating on opposite sides of the diagram occur together rarely and in dissimilar abundances. Most importantly in the context of our analyses aimed at elucidating flow and water level effects, a taxon's relationship to a physico-chemical variable (current velocity or flow) is measured by the distance between the taxon's perpendicular relationship with the shaft of the arrow and the arrow head. The distance between the two is directly related to the taxon's tolerance of the variable; therefore, a taxon located near the arrow head of an environmental variable axis is likely to be found in its greatest densities at locations where the particular variable

Bare Sediment

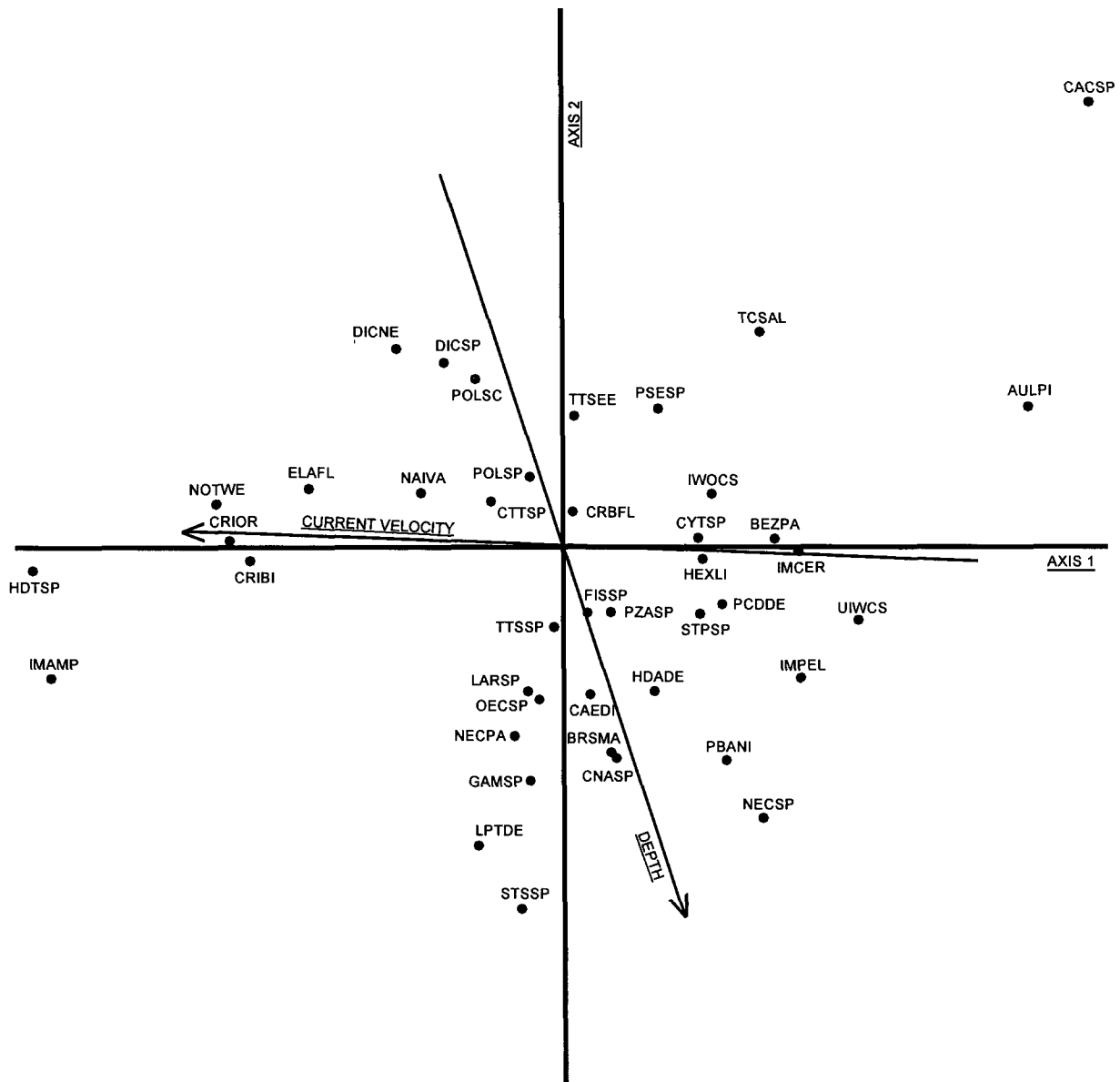


FIGURE 2.17. Biplot produced by canonical correspondence analysis of dominant (>5% relative abundance) aquatic invertebrates inhabiting the bare sediment habitat in the Wekiva River study area. Constraining environmental variables are current velocity and water depth. Species codes are defined in Appendix 2.4.

Snags

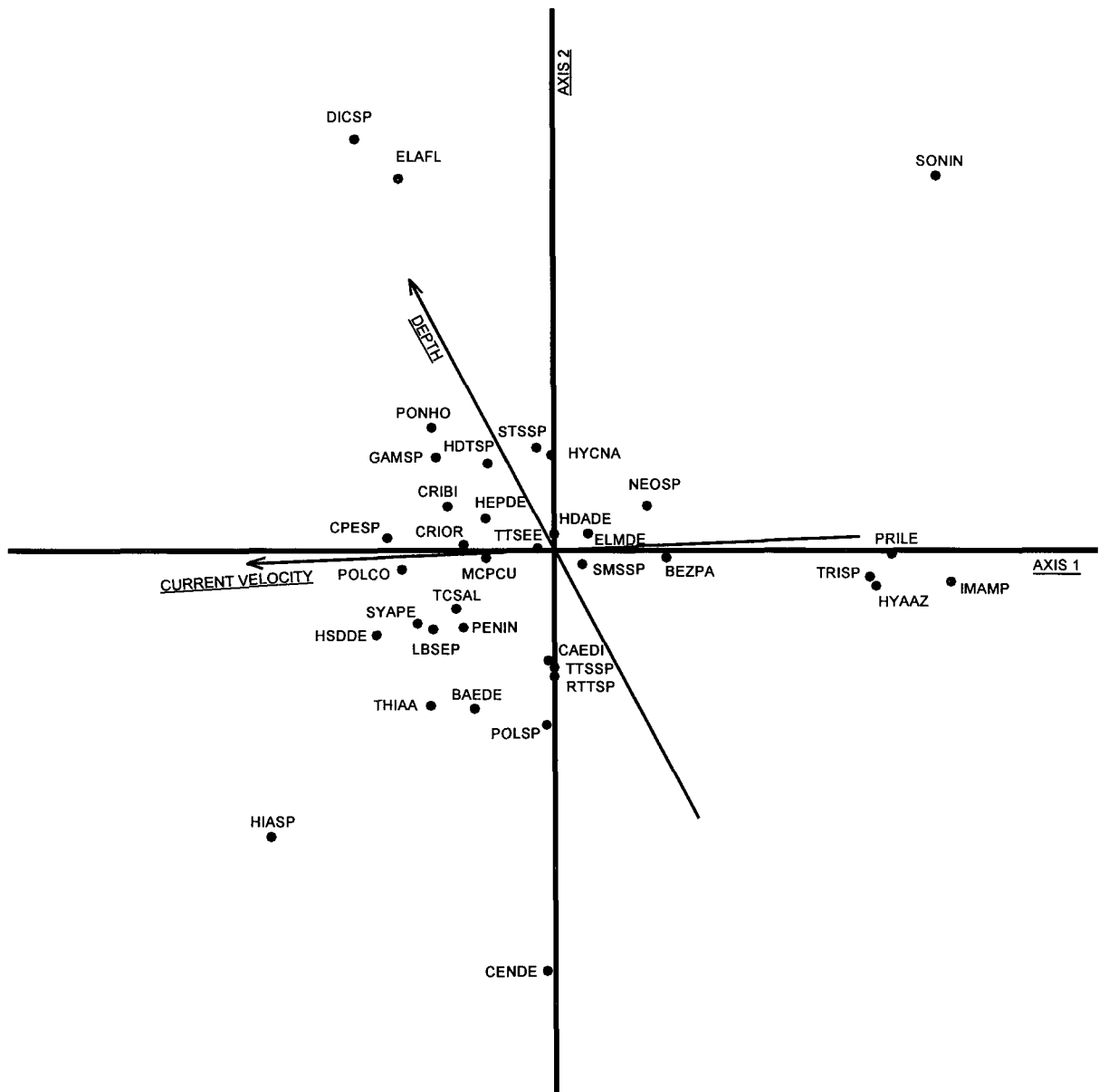


FIGURE 2.18. Biplot produced by canonical correspondence analysis of dominant (>5% relative abundance) aquatic invertebrates inhabiting the snag habitat in the Wekiva River study area. Constraining environmental variables are current velocity and water depth. Species codes are defined in Appendix 2.4.

Floating Mat

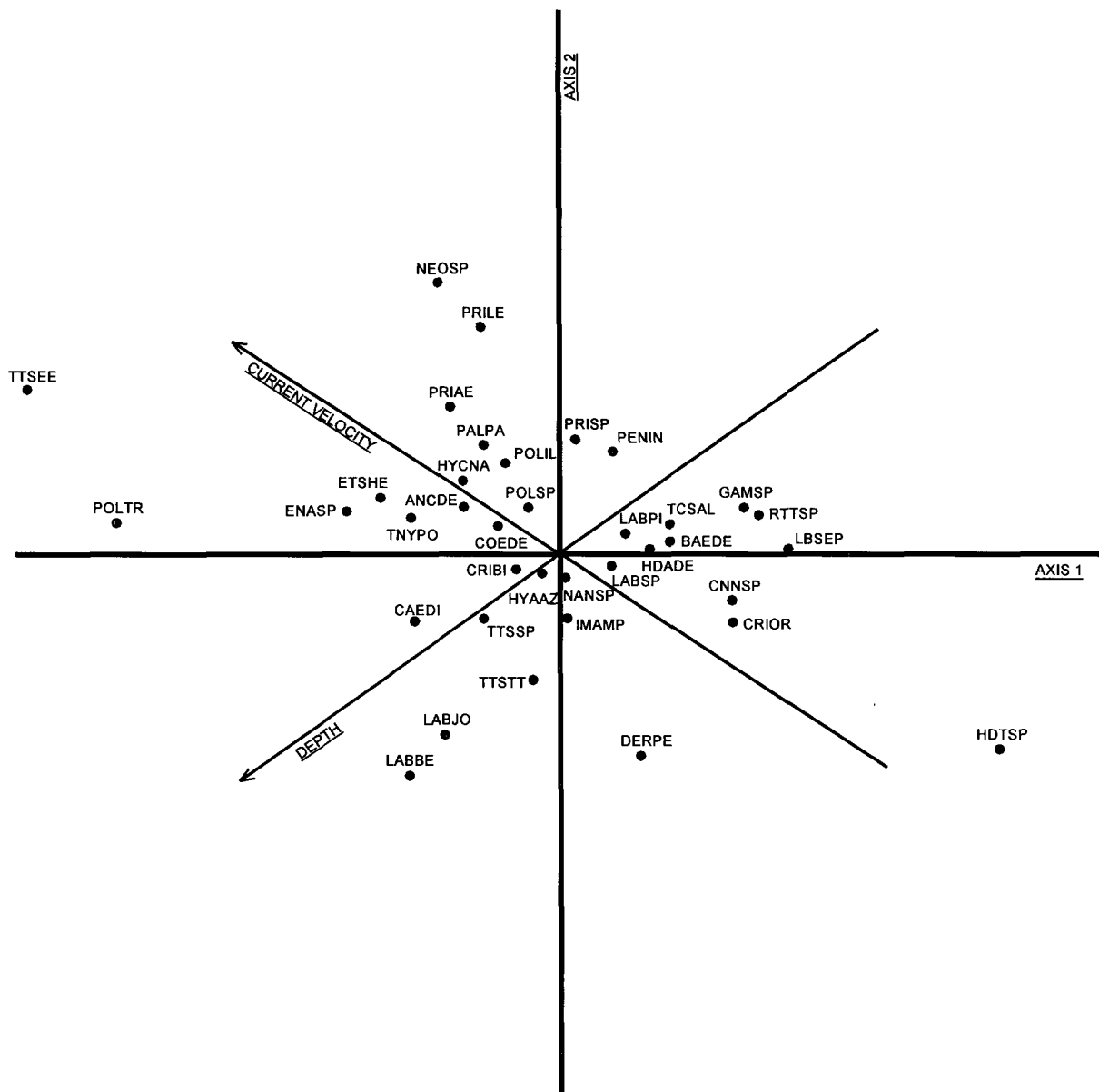


FIGURE 2.19. Biplot produced by canonical correspondence analysis of dominant (>5% relative abundance) aquatic invertebrates inhabiting the floating mat habitat in the Wekiva River study area. Constraining environmental variables are current velocity and water depth. Species codes are defined in Appendix 2.4.

Nuphar

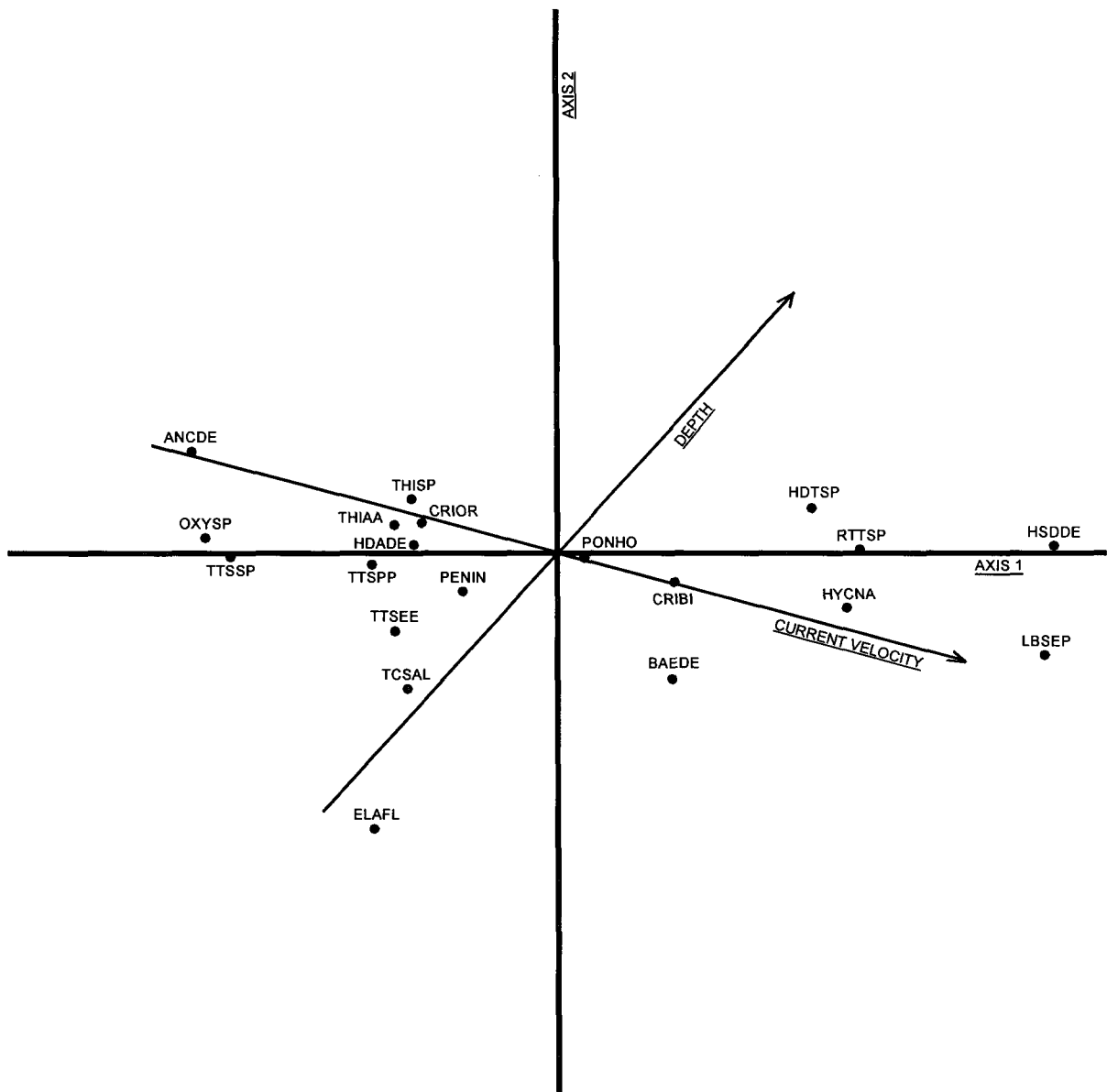


FIGURE 2.20. Biplot produced by canonical correspondence analysis of dominant (>5% relative abundance) aquatic invertebrates inhabiting the Nuphar luteum habitat in the Wekiva River study area. Constraining environmental variables are current velocity and water depth. Species codes are defined in Appendix 2.4.

Vallisneria

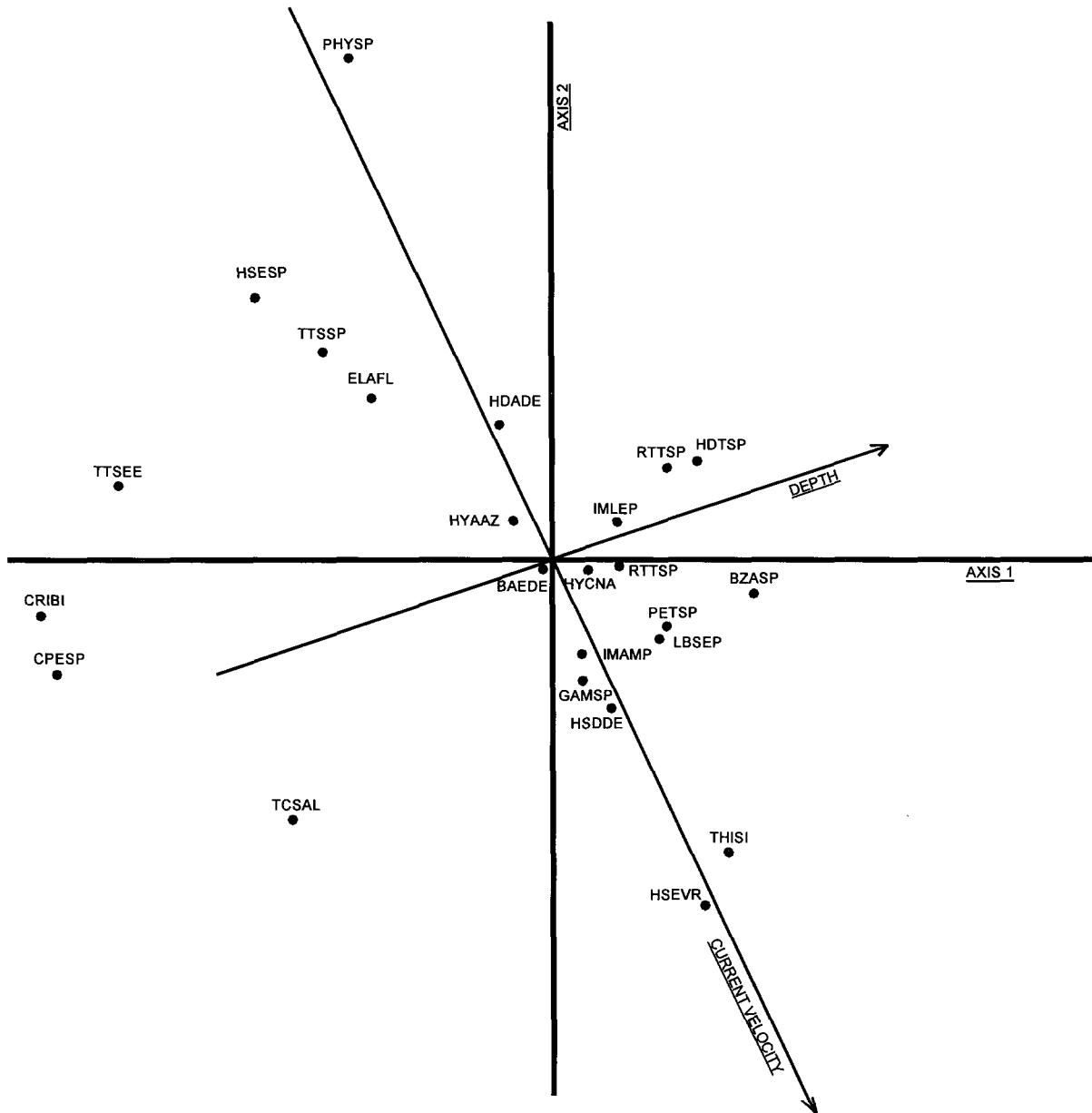


FIGURE 2.21. Biplot produced by canonical correspondence analysis of dominant (>5% relative abundance) aquatic invertebrates inhabiting the *Vallisneria americana* habitat in the Wekiva River study area. Constraining environmental variables are current velocity and water depth. Species codes are defined in Appendix 2.4.

TABLE 2.10. Descriptive statistics resulting from canonical correspondence analysis of invertebrate communities associated with the five dominant habitats sampled in the Wekiva River study area during spring and autumn 1997.

<u>Parameter</u>	<u>Axis 1</u>	<u>Axis 2</u>
<u>Bare Sediments</u> - Total variance in species data = 2.72		
Eigenvalue	0.177	0.091
% of variance explained	6.5	3.3
Cumulative % explained	6.5	9.9
Pearson Correlation, Spp.-Envt.	0.752	0.606
Kendall (Rank) Corr., Spp.-Envt.	0.559	0.434
<u>Snags</u> - Total variance in species data = 2.32		
Eigenvalue	0.264	0.123
% of variance explained	11.4	5.3
Cumulative % explained	11.4	16.7
Pearson Correlation, Spp.-Envt.	0.801	0.772
Kendall (Rank) Corr., Spp.-Envt.	0.490	0.584
<u>Floating Mats</u> - Total variance in species data = 1.05		
Eigenvalue	0.066	0.036
% of variance explained	6.3	3.4
Cumulative % explained	6.3	9.8
Pearson Correlation, Spp.-Envt.	0.677	0.637
Kendall (Rank) Corr., Spp.-Envt.	0.463	0.490
<u>Nuphar</u> - Total variance in species data = 0.84		
Eigenvalue	0.240	0.025
% of variance explained	28.4	3.0
Cumulative % explained	28.4	31.4
Pearson Correlation, Spp.-Envt.	0.847	0.619
Kendall (Rank) Corr., Spp.-Envt.	0.636	0.576
<u>Vallisneria</u> - Total variance in species data = 1.22		
Eigenvalue	0.075	0.036
% of variance explained	6.2	3.0
Cumulative % explained	6.2	9.2
Pearson Correlation, Spp.-Envt.	0.541	0.389
Kendall (Rank) Corr., Spp.-Envt.	0.433	0.207

reaches its highest levels. A taxon whose perpendicular relationship with an environmental variable axis is relatively far from the arrow head is likely to attain its highest densities in locations where the environmental variable is at its lowest levels. A taxon located near the origin of the plot (which represents the average values of the environmental parameters) reaches its greatest abundance at moderate levels of the variable. In our CCAs, the taxa that ordinate close to an arrow head reach their greatest densities in the highest current velocities and/or greatest depths, and are most likely to be affected by flow or water level reductions.

CCA of the bare sediment-associated invertebrate community (Figure 2.17) produced a widely dispersed array of points, with most taxa reaching their highest densities in conditions of deeper depths and/or lower current velocity. Larvae of the microcaddisfly Hydroptila sp. (coded as HDTSP in the biplot), the snails Elimia floridensis (ELAFI) and Notogillia wetherbyi (NOTWE), and several of the more abundant Chironomidae (Cricotopus bicinctus, Cricotopus/Orthocladius, Dicrotendipes neomodestus, and Polypedilum scalaenum) were most abundant in higher current velocity, shallower depth locations. Other ecologically important species, including the amphipod Gammarus sp. (GAMSP), and the mayflies Hexagenia limbata (HEXLI), Caenis diminuta (CAEDI), and Brachycercus maculata (BRSMA) were most abundant in lower velocity, deeper depth situations.

Results of the snag-associated community CCA (Figure 2.18) were radically different from the bare sediment CCA. Most taxa clustered fairly closely to the biplot origin and most attained their greatest densities in higher current

velocities. Ecologically important taxa most likely to be affected by reduced flow/current velocity conditions include the net-spinning caddisflies Cheumatopsyche sp. (CPESP) and immature Hydropsychidae (HSDDE), the mayflies Labiobaetis ephippiatus (LBSEP), Procloeon hobbsi (PONHO), immature Baetidae (BAEDE), and immature Heptageniidae (HEPDE), and the river snail Elimia floridensis (ELAFL).

The wide dispersal of taxa in the floating mat assemblage CCA (Figure 2.19), especially along the current velocity gradient, is deceptive because of the low and narrow range of current velocities measured (2 to 9 cm/sec, most below 4 cm/sec.; measured beneath mats at root level). These low velocities make the floating mat CCA the least meaningful of all those conducted. Most of the dominant taxa in floating mats (Table 2.6), including the amphipods (Hyaella azteca, Gammarus sp., and immature Amphipoda) attained their greatest densities in moderate depth and current velocity conditions.

Nuphar luteum was a dominant habitat at only a few sampling locations, and most of these were characterized by lower current velocities. The Nuphar CCA (Figure 2.20) reflected the low number of taxa that accounted for five percent or more of the total organisms at any one site/date. Most of these taxa attained their highest densities in lower velocity, shallower depth conditions; however, important indicator species, including Labiobaetis ephippiatus (LBSEP), Procloeon hobbsi (PONHO), Rheotanytarsus sp. (RTTSP), and Hydroptila sp. (HDTSP) were most abundant in higher current velocity locations in the Nuphar habitat.

Results of the Vallisneria americana-associated community CCA (Figure 2.21) showed a wide dispersal of taxa along both the current velocity and depth gradient. Most important indicator species, including Hydropsyche rossi or venularis (HSEVR), immature Hydropsychidae (HSDDE), Gammarus sp. (GAMSP), Labiobaetis ephippiatus (LBSEP), immature Baetidae (BAEDE), and Rheotanytarsus sp. (RTTSP), reached their greatest abundance in moderate or high current velocities. However, a few ecologically important taxa including Elimia floridensis (ELAFL) and Cheumatopsyche sp. (CPESP) attained their greatest densities in below average (for the Vallisneria habitat) current velocities.

Sediment Associated Communities Beneath Macrophytes in the Lower Study Segment

Benthic communities inhabiting sediments beneath beds of Typha sp., Vallisneria americana, and immature Najas sp. were sampled in the lower Wekiva River study segment during the autumn 1997 sampling period. These collections were made to supplement the phytomacrofaunal collections obtained from the lower river segment (where bare sediments were not sampled because they accounted for only a small percentage of total habitat), and, primarily, to document the invertebrate assemblage associated with Typha sp. (cattails). In southern latitudes, Typha is generally considered an invasive and undesirable aquatic vegetation type; it has been found to support low diversity fish and invertebrate communities that are indicative of poor quality habitat conditions (Warren & Hohlt 1994). Although Typha was not an areally dominant habitat within the study area, fairly expansive beds were present in the lower Wekiva River segment, mostly along the west stream bank from the SR 46 bridge northward to the boundary of the study area near Katie's Landing. Extended periods of low flow and low water level, which could possibly result from the

spring discharge reductions projected by the St. Johns River Water Management District, would probably encourage expansion of Typha in the lower study segment, at the expense of more desirable Vallisneria americana habitat. The shallow stream reach located just south of the SR 46 bridge would be most vulnerable to Typha encroachment. Sampling of invertebrate communities associated with sediments beneath both Vallisneria americana and Typha in this area was initiated as a vehicle to evaluate possible invertebrate community responses to anticipated changes in the relative percent coverages of the Vallisneria americana and Typha habitats.

Sampling of the community associated with above-bottom Typha stems was not undertaken because shallow water depths precluded the collection of acceptable samples.

Results showed the Typha-associated community to be the poorest in quality of the three lower river segment sediment communities sampled (Table 2.11, Appendix 2.5). Values for all community quality indicators, including total organisms per square meter (23,033), total species richness (34), mean (per sample) species richness (10), diversity (2.32), and evenness (0.70), were all lowest in Typha (Table 2.11). Values computed for these same descriptors in the V. americana associated community were considerably higher (31,918; 38; 19; 3.33; and 0.79, respectively; Table 2.11).

The species compositions of the Typha and V. americana communities also differed substantially. The V. americana assemblage was characterized by more taxa with low tolerances of adverse environmental conditions. These taxa

TABLE 2.11. Means and coefficients of variation (in parentheses) of selected aquatic invertebrate community descriptors within three quantitatively sampled habitats in the lower Wekiva River study area, October 1997.

<u>Descriptor</u>	<u>Habitat</u>		
	<u>Vallisneria</u> n=3	<u>Typha</u> n=6	<u>Najas</u> n=3
Mean Total Organisms m ⁻²	31,918 (0.28)	23,033 (0.54)	43,270 (0.23)
Total Species Richness	38	34	41
Mean Species Richness	19 (0.38)	10 (0.62)	22 (0.03)
Mean Diversity	3.33 (0.21)	2.32 (0.59)	3.88 (0.06)
Mean Evenness	0.79 (0.06)	0.70 (0.33)	0.86 (0.06)

included the snail Elimia floridensis, baetid mayflies (Labiobaetis ephippiatus), and microcaddisflies (Neotrichia sp.) (Appendix 2.5). The Typha community was more characteristic of marsh habitats and contained no riverine snail, mayfly, or caddisfly taxa. Several Chironomidae (midge) taxa known for tolerance of conditions associated with low dissolved oxygen, eutrophication, and/or dense aquatic vegetation (Chironomus sp., Polypedilum halterale, and Zavreliella marmorata) (Hudson et al. 1990, Epler 1995) were abundant in Typha (Appendix 2.5).

Nearly one-half of the total number of organisms collected from Typha were of the insect Order Collembola (springtails) (Appendix 2.5), which are mostly terrestrial (although sometimes associated with water surface-tension), and not dependent upon oxygen dissolved in water for respiration. The presence of large numbers of Collembola was undoubtedly an artifact of the dense canopy of cattail stems above the water's surface, nearness to terrestrial vegetation, and shallow water depth within the Typha habitat. Predominance of the Typha habitat by Collembola was at least partially responsible for the low diversity and evenness values computed for the invertebrate community associated with this habitat.

Discussion

Baseline Conditions as Indicated by Invertebrate Community Structure

The composition and structure of invertebrate communities inhabiting the major habitat types sampled within the Wekiva River study were indicative of a high degree of habitat complexity, adequate and diverse food resources, abundant

nutrients, and, overall, a healthy, but at least moderately eutrophic, aquatic ecosystem. The high quality of study area communities is exemplified by the bare sediment assemblage. Invertebrate communities associated with sand, mud, and organic bottom sediments that typify peninsular Florida streams are typically lower in species richness, diversity, and evenness than communities supported by vegetative habitats (Hynes 1970). However, the total number of species collected from sediments within the Wekiva River study area (166) was greater than the corresponding totals from all other habitats quantitatively sampled (Table 2.3, Appendix 2.2). Additionally, per sample means of species richness, evenness, and total organisms from sediments were statistically equivalent to, if not significantly greater than, the analogous means from other habitats (Table 2.3). The good quality of the Wekiva River study area sediment-associated community can be attributed to the high degree of structural heterogeneity within sediments, the presence of adequate levels of dissolved oxygen within the habitat, and the presence of an abundant FPOM food source for the dominant detrital gathering functional group (Figures 2.14, 2.15, and 2.16; Tables 2.9, 2.10, and 2.11).

Despite the overall high quality of study area communities, the assemblages inhabiting some sites exhibited characteristics indicative of poor habitat quality. This was most apparent at site LIT-1, the most upstream site in the Little Wekiva River, where the bare sediment community was composed primarily of sexually immature segmented worms and larvae of the true midge Cladotanytarsus sp., which, because of its multi-voltinism, can be a pioneer colonizer of shifting and recently disturbed sediments (Berg and Hellenthal 1992). Although the LIT-1 sediment community was composed of taxa indicative

of some disturbance, species richness, diversity, and evenness at the site were within the range of the corresponding values computed from sediment communities at all other sites and dates.

Many of the invertebrate taxa inhabiting the study area were distributed ubiquitously across habitats and sampling sites. However, each major habitat type harbored an assemblage distinct in structure. Although taxonomic composition was similar among habitats (Tables 2.6 and Appendix 2.2), taxa relative abundances varied quite substantially among habitats.

Based upon results from cluster analyses (Figures 2.5 through 2.13), invertebrate community distribution within most habitat types was judged to be primarily a function of food resource patch dynamics (Pringle et al. 1988), which is, in turn, controlled by sunlight penetration, volume of stored organic material, and flow. Sunlight penetration patterns resulting from alternating canopied and uncanopied stream reaches undoubtedly play a large role in determining the mosaic-like distribution of vegetated habitats and food types within the study area, and, therefore, to a large extent influence the distribution of invertebrate communities (Pringle 1988). The predominance of gathering and filter-feeding detritivores at many habitat/site combinations (Figures 2.14 through 2.16; Tables 2.7 through 2.9) reflects an abundance of particulate organic matter (POM) stored in the Wekiva River system.

The small geographical scale of the study area precludes the relevance of stream continuum dynamics (as per Vannote et al. 1980) as a major influence upon invertebrate distribution. Results of cluster analysis showed that

continuum dynamics may play a role in structuring only the invertebrate community associated with Vallisneria (Figures 2.12 and 2.13).

Consequences of Flow Reductions: Effects on the Invertebrate Biota and Habitat

Discharge from springs strongly affects current velocity in spring fed stream systems, and current velocity, along with food availability and habitat complexity, has been identified as a critical factor affecting the distribution of invertebrates in streams (Hynes 1970, Ward 1992). The consequences of reduced flow to water level are obvious reductions in water depth and habitat coverage area. Therefore, permanent or long-term changes in baseline flow and water level regimes, such as those that could result from increased groundwater withdrawals in the Wekiva River basin, can be expected to influence resident biotic communities in some manner. Since riverine invertebrate communities are relatively sessile and flow-dependent, impacts of the projected flow and water level regime reductions could be substantial, but may not necessarily be injurious to all community components. The magnitude of any impact would logically be expected to be a function of the magnitude of the flow and water level reductions.

A summary of the principal influences of flow and water level reductions upon freshwater invertebrate communities is presented in Table 2.12. Results of our canonical correspondence analyses (Figures 2.17 through 2.21) showed that, within all habitats, some taxa attain their greatest densities under conditions of higher current velocities and/or deeper depths, while other taxa were most abundant under the opposite conditions. It must be noted that the multiple regression results generated by our CCAs explained, at most, 31.4

TABLE 2.12. Summary of possible influences of discharge and water level reductions upon stream-inhabiting invertebrate communities.

<u>Effect</u>	<u>Consequence to Invertebrates</u>
<u>Flow Reduction</u>	
1. Reduced current velocity.	1. Loss or density reduction of rheobiontic (rapid current-dependent) species; increases in low-flow or lentic taxa. Reduction of suspended food resources for filter feeders.
2. Reduced dissolved oxygen concentration.	2. Loss or reduction of taxa intolerant of low D.O. Increases in low D.O. tolerant taxa. Overall loss of species richness, diversity, and evenness.
3. Increased sedimentation/accumulation of organic matter; corresponding increase in biochemical and chemical oxygen demands.	3. Loss or reduction of algivores and taxa intolerant of lower D.O. and depositional conditions; increase in detritivore numbers and taxa tolerant of lower D.O. and depositional conditions. Overall losses of species richness, diversity, and evenness.
4. Increased residence time of nutrients; corresponding increases in primary production and D.O. in erosional areas. Eventual POM and BOD increases in depositional areas.	4. Increase in algivore taxa numbers and densities in erosional areas. Eventual increases of detritivores in depositional areas. Eventual overall declines in species richness, diversity, and evenness of distribution.
<u>Water Level Reduction</u>	
1. Reduced inundated surface area.	1. Decrease in absolute abundance and aquatic species.
2. Shifted in areal coverage of habitat types; less desirables (eg. <u>Typha</u>) replace desirables (eg. <u>Vallisneria</u>).	2. Shifts in taxa relative abundances from flow-dependent community to lentic-type community. Overall declines in species richness, diversity, and evenness of distribution.

percent of the variation in our species data (in Nuphar), and, at the least, 9.2 percent (in Vallisneria) (Table 2.10). However, given the CCA results in light of the consequences summarized in Table 2.12, it is likely that the effect of the projected flow reductions will be to cause shifts in the relative abundance of species within communities, and, either directly or via habitat modification, to change the functional nature of some communities altogether. The 10 to 20 percent discharge reductions projected for the study area (which does not encompass the immediate area of major springs) are unlikely to result in the complete extirpation of any aquatic invertebrate species. However, as discussed in the species of concern section below, the substantial flow reductions projected for some springs (up to 49 percent) could result in localized extirpation of some species and extinction of some endemics.

The assemblages associated with bare sediments, snags, and Vallisneria will likely be most affected by discharge reductions. CCA results showed that at least half of the dominant invertebrate taxa inhabiting these habitats were most abundant at above average current velocities (Figure 2.21). Many of these taxa are filter-feeding detritivores (e.g. Hydropsyche rossi/venularis, Rheotanytarsus sp.) or algae grazers (e.g. Elimia floridensis, Hyaella azteca, Pseudocloeon ephippiatum, Procloeon hobbsi). The filter-feeding component of this community could be substantially affected (via reduction of suspended food resource) by a 20 percent reduction in discharge, and, in fact, the filter-feeding community component was absent from Vallisneria beds located in areas of low current velocity. If loss of the filtering component were to be correspondent with water level reduction-induced changes in areal

habitat coverage, such as Typha (cattail) displacement of Vallisneria, then dramatic and adverse alterations to invertebrate community composition and structure could occur over a large area.

The scenario of Typha displacing Vallisneria is most likely to develop over a large area in the lower Wekiva River study segment (in the vicinity of the SR 46 bridge). At this location, the stream channel broadens, current velocities are most rapid, and water depths are shallowest. Typha beds already exist along the stream margin in this area. Expansion of Typha into the stream channel would substantially reduce current velocities and produce poor quality habitat conditions characterized by accumulation of decaying organic matter, low dissolved oxygen concentrations, and high nutrient levels. As a consequence, the species rich and diverse invertebrate community associated with Vallisneria in the lower river segment would be replaced by a poor quality marsh invertebrate assemblage similar to the community associated with Typha during autumn 1997 (Table 2.11; Appendix 2.5). The sensitive algae grazing and suspension filtering Vallisneria-associated assemblage, dominated by Rheotanytarsus sp., Elimia floridensis, Hyaella azteca, and several species of baetid mayflies, would be replaced by a community of predominantly collecting detritivores tolerant of the low dissolved oxygen concentrations and poor habitat conditions created by accumulation of nutrients and organic matter.

In the upper and middle Wekiva River stream segments, invertebrate community changes related to reduced spring discharges will probably be less profound than the changes occurring in the lower study segment. Lower water levels

will promote cattail expansion, and associated invertebrate community degradation. Suspension filtering communities associated with snags and vegetated habitats will be most affected as the FPOM food resource passing through individual niches will be reduced in volume. Populations of species that live only at deeper water depths, such as the rare mayfly Cercobrachys etowah, would be compromised by permanently lowered water levels.

In the Little Wekiva River, spring discharge reductions of up to 49 percent (Table 1.2), along with increased sediment and nutrient loads resulting from continued urban development, will almost certainly alter the structure of existing invertebrate communities. The communities of the springs not sampled during this study (Sanlando, Palm, and Starbuck) may contain endemic species (Thompson 1984) and will be especially vulnerable. At the several locations in the upper Little Wekiva River where the channel broadens and water depths decrease, water level reductions resulting from reduced spring flows could promote invasion by Typha, which would, in turn, effectively transform these broader stream channel areas into marshes. As a consequence, the relatively high quality resident invertebrate communities would be replaced by lower quality marsh-associated assemblages. Sedimentation and transformation to marsh-like habitat would be especially devastating to native mussel populations, which were found to be abundant at Little Wekiva River invertebrate sampling locations LIT-1 AND LIT-2 (Figure 2.1, Table 2.1).

Species and Communities of Concern, Their Habitats, and Flow

As increased amounts of water are withdrawn from the Floridan aquifer, the Wekiva and Little Wekiva rivers should be monitored to ensure that ecosystem

integrity is maintained. Invertebrate community structure is one of the best tools for monitoring aquatic systems. One of the primary goals of the present study was to ascertain those invertebrate species, communities, and habitats which are most vulnerable to flow and water level declines, and whose populations would best serve as keystone indicators of Wekiva River ecosystem health.

Few Florida aquatic invertebrate species have been studied thoroughly enough to allow determinations regarding their conservation status (abundant, rare, threatened, or endangered). There are, however, some exceptions, including mussel, snail, crustacean, and insect taxa. The Florida Committee on Rare and Endangered Plants and Animals (FCREPA), which is the authority on rare biota in Florida, last published an invertebrate volume in 1994 (Deyrup and Franz 1994). FCREPA lists species using status categories that include: Species of Special Concern, Rare, Threatened, and Endangered.

FCREPA-listed aquatic invertebrate species which have been collected or observed in the Wekiva River basin prior to the present study are cataloged in Table 2.13. Of these species, the Wekiwa hydrobe snail (Aphaostracon monas) and the Orlando cave crayfish (Procambarus acherontis), both listed by FCREPA as threatened, occur in very specific habitats that were not sampled during this study (spring heads and underwater caves, respectively). Any monitoring program conducted to periodically assess Wekiva River biota in the context of groundwater withdrawal impacts should include provisions for these species.

TABLE 2.13. Aquatic invertebrate species that occur within the Wekiva River basin and are designated as Threatened, Rare, or Species of Special Concern by the Florida Committee on Rare and Endangered Plants and Animals (Deyrup and Franz 1994).

<u>Taxon</u>	<u>Location</u>	<u>Status</u>
<u>Aphaostracon monas</u> (Wekiwa hydrobe)	Wekiwa Springs	Threatened
<u>Procambarus acherontis</u> (Orlando cave crayfish)	well & caves along Wekiva R.	Threatened
<u>Dromogomphus armatus</u> (southeastern spinyleg dragonfly)	Orange Co.	Rare
<u>Nehalennia pallidula</u> (Everglades sprite)	Seminole Co.	SSP
<u>Orthotrichia instabilis</u> (orthotrichian microcaddisfly)	Orange Co.	Threatened
<u>Triaenodes furcella</u> (little-fork trianode caddisfly)	Orange Co.	Threatened
SSP = species of special concern.		

No method for speciating the aquatic (larval) forms of the trichopteran genus Orthotrichia has been developed, consequently, if specimens of the FCREPA-listed orthotrichian microcaddisfly Orthotrichia instabilis were collected during our field samplings, they would have been identified as Orthotrichia sp. only. Orthotrichia sp. were collected from all habitats we sampled (Appendix 2.2). Unless taxonomy of larval forms of Orthotrichia is clarified, the O. instabilis population should be monitored by utilizing light traps to collect flying adults.

Of the three remaining FCREPA-listed species, only the little-fork trianode caddisfly Triaenodes furcellus (larvae), listed as Threatened by FCREPA, was collected during the present study. Little is known of the flow and depth requirements of T. furcellus, and the species has been collected only rarely from streams and lakes in peninsular Florida (Pescador et al. 1995). We documented the species from the roots of floating mats in the lower river study segment north of the SR 46 bridge. Morse (1994) noted that the ecological requirements for T. furcellus (as T. furcella) are probably very strict and that its microhabitat should be determined and protected.

Florida aquatic gastropods (snails) have received relatively detailed study due to the efforts of Dr. Fred Thompson of the Florida State Museum. One Family of snails, the Hydrobiidae, contains several species which are spring endemics (Thompson 1984). Hydrobiidae endemic to springs located in the Wekiva River basin are listed, along with their associated springs, in Table 2.14. The spring-head habitat was not sampled in the present study, but the endemic Hydrobiidae are addressed herein because of their dependence upon the

TABLE 2.14. Hydrobiid snails (Gastropoda:Hydrobiidae) endemic to the Wekiva River basin (as per Thompson 1984), and flow statistics from the spring with which each species is associated (from Rao and Clapp 1996).

<u>Taxon</u>	<u>Location</u>	<u>Designated Minimum Flow (cfs)</u>	<u>1988 (Mean) Flow (cfs)</u>	<u>Predicted Year 2010 Flow (cfs)</u>	<u>Percent Reduction From Mean</u>
<u>Aphaostracon monas</u> (Wekiwa hydrobe)	Wekiva Springs	62.00	68.07	58.78	13.35
<u>Cincinnatia petrifons</u> (Rock Springs siltsnail)	Rock Springs	53.00	57.77	49.09	19.35
<u>Cincinnatia ponderosa</u> (ponderous siltsnail)	Sanlando Springs	15.00	19.70	11.31	42.60
<u>Cincinnatia vanhyningi</u> (Seminole siltsnail)	Seminole Springs	34.00	38.90	31.79	11.20
<u>Cincinnatia wekiwae</u> (Wekiwa siltsnail)	Wekiva Springs	62.00	68.07	58.78	13.35

- All the above snails are listed as C2 by USFWS (C2 = candidate for federal listing with evidence of vulnerability; data acquisition required to support listing).
- None of the above snails are listed by the state of Florida.
- Minimum flows listed are those established in 40C-8, F.A.C.

existence of specific microhabitat conditions present at spring heads (including flow), and because alteration of these conditions could lead to extinction. Several of the endemic Hydrobiidae listed in Table 2.14 have not been seen for quite some time (in excess of 20 years). As soon as possible, those springs known to, at least at one time, harbor endemics should be sampled to confirm the continued existence of the species. Any endemic species confirmed to be extant, and environmental conditions at its associated spring, should be carefully monitored at regular intervals to ensure protection of the species.

Freshwater mussels of the Family Unionidae are the most threatened group of freshwater species in North America (Williams et al. 1992, Neves et al. 1997). Unionids are also among the most valuable of freshwater indicator groups because they are sessile, long-lived, are bioaccumulators, and are sensitive to sedimentation and toxins. The mussel fauna of peninsular Florida, and the St. Johns River watershed in particular, is not well known and has not been comprehensively sampled by malacologists since the early 1970s (Johnson 1972). Due to the fragility of the unionid fauna on a continental basis, and because undescribed mussel species may reside in the St. Johns River watershed, a thorough survey of the Wekiva and Little Wekiva rivers should be undertaken by expert malacologists using mussel-specific methods in order to thoroughly document the composition of the unionid fauna of the basin, and the location of major mussel beds. Once located, large mussel beds should be monitored for flow, water level, sedimentation, and eutrophication effects on a regular basis.

From the fauna list generated by the present study (Appendix 2.2), and lists of FCREPA-listed species and endemic hydrobiid snails (Tables 2.13 and 2.14, respectively), we compiled a list of aquatic invertebrate taxa that we consider to be integral functional components of the Wekiva River ecosystem and whose populations would be suitable for use as keystone indicators of ecosystem health (Table 2.15). These taxa either occupy pivotal positions in the food web and/or decomposition process, or their environmental requirements include flowing water of good quality. Adverse impacts to populations of the taxa listed in Table 2.15 would serve as warning signals for environmental deterioration; therefore, populations of these taxa, and their habitats, should be regularly monitored in an effort to preserve the natural values of the Wekiva River ecosystem.

Conclusions

1. The taxonomic and functional structures of most freshwater invertebrate communities inhabiting the Wekiva River study area are indicative of a high degree of habitat complexity, adequate and diverse food resources, abundant nutrients, good water quality, and, overall, a healthy, but moderately eutrophic, ecosystem. Most communities are species rich, diverse, and exhibit moderate levels of evenness of distribution of numbers among species.
2. Invertebrate community distribution within the study area was primarily a function of habitat type, current velocity and food resource patch dynamics. These factors are controlled, to a large extent, by the riparian nature of the study streams (allochthonous energy sources), and sunlight

TABLE 2.15. Wekiva River basin aquatic invertebrates designated as keystone indicator taxa by the Florida Fish and Wildlife Conservation Commission.

<u>Taxon</u>	<u>Major Group</u>	<u>Primary Habitat</u>	<u>Justification</u>
<u>Aphaostracon monas</u>	Gastropoda	Veg./Sediments	spring endemic
<u>Baetis intercalaris</u>	Ephemeroptera	<u>Vallisneria</u>	swift current dependent
<u>Cercobrachys etowah</u>	Ephemeroptera	Sediments	deep water only
<u>Cincinnatia petrifons</u>	Gastropoda	Veg./Sediments	spring endemic
<u>Cincinnatia ponderosa</u>	Gastropoda	Veg./Sediments	spring endemic
<u>Cincinnatia vanhyningi</u>	Gastropoda	Veg./Sediments	spring endemic
<u>Cincinnatia wekiwae</u>	Gastropoda	Veg./Sediments	spring endemic
<u>Elimia floridensis</u>	Gastropoda	<u>Vallisneria</u>	indicator of good habitat condition
<u>Elliptio</u> spp.	Pelecypoda	Sediments	long-term environmental indicator
<u>Hagenius brevistylus</u>	Anisoptera	Floating Mats	indicator of good habitat condition
<u>Hexagenia limbata</u>	Ephemeroptera	Sediments	eutrophication sensitive
<u>Hydropsyche rossi/venularis</u>	Trichoptera	Snags/ <u>Vallisneria</u>	flow dependent
<u>Neotrichia</u> spp.	Trichoptera	Snags	flow dependent
<u>Plauditus alachua</u>	Ephemeroptera	<u>Vallisneria/Nuphar</u>	swift current dependent

TABLE 2.15 continued.

<u>Taxon</u>	<u>Major Group</u>	<u>Primary Habitat</u>	<u>Justification</u>
<u>Procloeon hobbsi</u>	Ephemeroptera	<u>Vallisneria</u>	swift current dependent
<u>Procloeon viridoculare</u>	Ephemeroptera	Sediments	swift current dependent
<u>Rheotanytarsus</u> spp.	Chironomidae	<u>Vallisneria</u>	current dependent
<u>Toxolasma paulus</u>	Pelecypoda	Sediments	long-term environmental indicator
<u>Triaenodes furcellus</u>	Trichoptera	Floating Mats	FCREPA threatened species
<u>Villosa</u> spp.	Pelecypoda	Sediments	long-term environmental indicator

penetration patterns resulting from the alternating canopied/uncanopied character of most stream reaches. Lack of distinct longitudinal patterns of invertebrate community distribution within most habitats indicated that stream continuum dynamics did not play a large role in determining the distribution of invertebrate communities.

3. Invertebrate functional groups dependent upon fine particulate organic matter as a food source (gatherers and suspension filterers) numerically predominated the communities inhabiting bare sediments and snags. Predominance by the gathering and filtering functional groups is indicative of the presence of large amounts of organic matter (both benthic and in suspension), and, overall, a very productive ecosystem.
4. Grazers of attached algae and microbiota numerically predominated all quantitatively sampled macrophyte habitats (floating mats, Vallisneria, and Nuphar). The abundance of grazers in these habitats was indicative of good water quality, abundant nutrients, and an abundant attached algae food resource. Suspension filterers were a major component of the fauna associated with Vallisneria in the lower Wekiva River study segment. The success of filterers in this specific location was attributed to rapid current velocities (relative to other sampling sites).
5. Projected 10 to 20 percent flow reductions by 2010 will probably result in reductions in current velocity, water level, and dissolved oxygen concentration throughout the study area. Nutrient residence time is likely to increase. These conditions will result in overall declines in the

species richness, diversity, and evenness of distribution of aquatic invertebrate communities. The suspension filtering community component will be most affected by flow reductions. However, overall shifts in the relative abundance of major taxonomic and functional community components are likely. The magnitude of these shifts is dependent upon the magnitude of flow and water level reductions.

6. The lower Wekiva River study segment will be most affected by discharge reductions. Lower water levels resulting from reduced flow will encourage displacement of the desirable Vallisneria habitat, and its associated filtering/grazing invertebrate community, by Typha. The invertebrate community associated with Typha was the lowest in species richness and diversity of all communities sampled in this study. The Typha-associated invertebrate community is dominated by taxa tolerant of low current velocities, low dissolved oxygen concentrations, high levels of nutrients, and overall poor habitat conditions. Some locations in the Little Wekiva River will likely evolve to Typha dominated marsh due to lower water levels.
7. In the upper and middle Wekiva River study segments, and in the Little Wekiva River, reductions in flow and water level could result in deterioration of filter-feeding community components due to the reduction of POM food resources traveling through individual niches. Increased sedimentation and organic matter accumulation could result in declines of unionid mussel populations and burrowers, such as the mayfly Hexagenia limbata. Species dependent upon deep water conditions, such as the mayfly

Cercobrachys etowah could be affected by lower water levels.

8. Aquatic invertebrate species listed by the Florida Committee on Rare and Endangered Plants and Animals, hydrobiid snails endemic to springs within the study area, all unionid mussels within the study area, and selected taxa considered to be critical food web components and/or integral to decomposition and nutrient recycling were identified as keystone indicator species. Regular monitoring of these taxa is recommended to provide an early warning of environmental deterioration of the Wekiva and Little Wekiva Rivers.

Recommendations

1. Promptly document invertebrate communities in the immediate areas of the springs and in the portions of springbrooks not sampled for the present study. Some species of endemic hydrobiid snails have not been observed for approximately 20 years. The presence or absence of these species should be verified prior to anticipated groundwater withdrawals, especially in the Little Wekiva River, where up to 49 percent flow reductions are projected in springs inhabited by endemic snails.
2. Implement a survey of the native mussel fauna of the Wekiva and Little Wekiva rivers. The unionid mussel fauna is threatened on a continental basis, and a thorough survey of the Wekiva basin should be undertaken prior to further discharge reductions. Undescribed, endangered, or threatened unionid species may reside within the Wekiva basin.

3. Implement an aquatic invertebrate community monitoring program utilizing the habitat specific, detailed sampling methods employed in the present study. Sampling should occur four to six times per calendar year at, minimally, one sampling site in each of the upper, middle, lower, and Little Wekiva River stream segments. The goal of the monitoring program would be to detect changes or shifts in invertebrate community structure that would be indicative of adverse environmental conditions (flow, water level, habitat related). Focus would be on the dynamics of the keystone indicator taxa listed in Table 2.15, herein, and also upon relative abundance of major functional components of invertebrate communities.
4. Monitor the relative areal coverages of major vegetative habitat types (especially Vallisneria, floating mats, Nuphar, and Typha). Consider Typha expansion as a major threat to healthy invertebrate communities and to the health of the Wekiva River ecosystem as a whole.
5. Integrate the results of the present study into hydrological models operated by the SJRWMD in order to enhance the ability to predict biological impacts of discharge and water level reductions. Include consideration of impacts to in-stream biotic communities and processes in the procedures for establishing minimum flows and levels.

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APPENDIX 2.1.

Literature used by the Freshwater Invertebrate Resources Unit of
the Florida Fish and Wildlife Conservation Commission for taxonomic
identification of freshwater invertebrates

APPENDIX 2.1. Literature used by the Freshwater Invertebrate Resources Unit of the Florida Fish and Wildlife Conservation Commission for taxonomic identification of freshwater invertebrates.

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APPENDIX 2.2

Mean densities (no. m⁻²), coefficients of variation (cv), and percent compositions of invertebrate taxa collected from major habitat types within the Wekiva River study area during spring and autumn 1997.

APPENDIX 2.2. Mean densities (no. m⁻²), coefficients of variation (cv), and percent compositions of invertebrate taxa collected from major habitat types within the Wekiva River study area during spring and autumn 1997.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv)	\bar{x} # m ⁻² (cv)	\bar{x} # m ⁻² (cv)	\bar{x} # m ⁻² (cv)	\bar{x} # m ⁻² (cv)
	%	%	%	%	%
	n = 63	n = 72	n = 54	n = 45	n = 21
Porifera	C	C	C	C	---
Cnidaria					
Hydrozoa					
<u>Cordylophora lacustris</u>	---	C	C	C	C
<u>Hydra</u> sp.	1 (5.57) <0.1	26 (3.05) 0.1	164 (1.55) 0.6	28 (1.80) 0.1	3 (3.18) <0.1
Turbellaria	6 (3.96) <0.1	701 (1.55) 2.2	283 (1.35) 1.1	270 (1.59) 1.3	23 (1.67) 0.6
Nemertea	17 (4.31) 0.1	23 (2.51) 0.1	16 (3.38) 0.1	75 (3.27) 0.4	---
Nematoda	1090 (2.45) 3.3	154 (2.58) 0.5	103 (2.15) 0.4	71 (1.46) 0.3	5 (2.67) 0.1
Ectoprocta	---	C	---	---	---
Annelida					
Aphanoneura					
Aelosomatidae	---	2 (8.48) <0.1	11 (3.64) <0.1	150 (5.05) 0.7	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare		Floating		
	Sediments	Snags	Mats	Vallisneria	Nuphar
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
Branchiobdellida	---	---	3 (4.33) <0.1	---	---
Hirudinea	41 (4.75) 0.1	12 (4.28) <0.1	10 (2.72) <0.1	34 (2.07) 0.2	---
Oligochaeta (total)	3627 (0.75) 10.8	1279 (4.53) 4.1	1118 (1.35) 4.4	518 (2.42) 2.5	37 (2.80) 1.0
Enchytraeidae (total)	6 (7.94) <0.1	---	---	2 (4.05) <0.1	---
Naididae (total)	1001 (1.70) 3.0	1268 (4.58) 4.1	1102 (1.37) 4.3	428 (2.88) 2.1	31 (2.73) 0.8
<u>Allonais</u> sp.	---	5 (8.48) <0.1	---	---	---
<u>A. inaequalis</u>	---	9 (4.89) <0.1	10 (3.95) <0.1	1 (4.03) <0.1	---
<u>A. pectinata</u>	3 (7.94) <0.1	---	---	---	---
<u>Amphichaeta leydigii</u>	6 (6.24) <0.1	---	---	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare		Floating		
	Sediments	Snags	Mats	Vallisneria	Nuphar
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Bratislavia unidentata</u>	16 (3.63) <0.1	27 (2.64) 0.1	---	1 (3.78) <0.1	---
<u>Chaetogaster</u> sp.	1 (7.94) <0.1	---	3 (4.16) <0.1	2 (4.69) <0.1	---
<u>C. diaphanus</u>	---	1 (8.48) <0.1	12 (5.51) <0.1	4 (3.96) <0.1	---
<u>C. diastrophus</u>	1 (7.94) <0.1	3 (8.48) <0.1	16 (3.33) 0.1	1 (6.71) <0.1	3 (3.37) 0.1
<u>C. limnaei</u>	1 (7.94) <0.1	---	---	---	---
<u>Dero</u> sp.	9 (7.35) <0.1	39 (5.96) 0.1	42 (2.17) 0.2	10 (2.38) <0.1	1 (4.58) <0.1
<u>D. flabelliger</u>	30 (4.58) 0.1	1 (6.04) <0.1	---	---	---
<u>D. furcata</u>	---	2 (8.48) <0.1	16 (3.56) 0.1	1 (6.71) <0.1	---
<u>D. lodeni</u>	---	1 (6.14) <0.1	---	---	---

APPENDIX 2.2 continued.

<u>Taxon</u>	<u>Habitat</u>				
	<u>Bare</u>	<u>Snags</u>	<u>Floating</u>	<u>Vallisneria</u>	<u>Nuphar</u>
	<u>Sediments</u>		<u>Mats</u>		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>D. nivea</u>	13 (3.56) <0.1	13 (6.98) <0.1	54 (1.74) 0.2	1 (6.71) <0.1	1 (4.58) <0.1
<u>D. obtusa</u>	1 (7.94) <0.1	---	---	---	---
<u>D. nivea</u> or <u>obtusa</u>	20 (7.38) 0.1	---	20 (3.59) 0.1	---	---
<u>D. pectinata</u>	11 (3.24) <0.1	11 (4.01) <0.1	96 (2.05) 0.4	3 (4.95) <0.1	2 (4.31) 0.1
<u>D. trifida</u>	29 (5.62) 0.1	9 (7.57) <0.1	2 (7.35) <0.1	16 (4.03) 0.1	---
<u>Haemonais waldvogeli</u>	3 (4.80) <0.1	1 (8.48) <0.1	---	---	---
<u>Nais</u> sp.	4 (4.70) <0.1	42 (3.71) 0.1	---	3 (4.28) <0.1	---
<u>N. communis</u>	1 (7.94) <0.1	200 (5.94) 0.6	2 (7.35) <0.1	12 (5.40) 0.1	---
<u>N. elinguis</u>	---	34 (6.31) 0.1	---	167 (6.58) 0.8	---

APPENDIX 2.2 continued.

<u>Taxon</u>	<u>Habitat</u>				
	<u>Bare</u>	<u>Snags</u>	<u>Floating</u>	<u>Vallisneria</u>	<u>Nuphar</u>
	<u>Sediments</u>		<u>Mats</u>		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>N. variabilis</u>	232 (4.80) 0.7	37 (3.65) 0.1	8 (4.22) <0.1	87 (2.78) 0.4	5 (1.92) 0.1
<u>Paranais littoralis</u>	214 (4.97) 0.6	---	---	---	---
<u>Pristina</u> sp.	4 (6.53) <0.1	27 (3.10) 0.1	130 (2.37) 0.5	11 (2.44) 0.1	---
<u>P. aequiseta</u>	42 (2.04) 0.1	85 (3.36) 0.3	111 (1.80) 0.4	45 (1.29) 0.2	4 (4.28) 0.1
<u>P. leidy</u>	2 (5.89) <0.1	614 (6.47) 2.0	502 (1.88) 2.0	39 (1.33) 0.2	16 (2.80) 0.4
<u>P. synclites</u>	241 (2.51) 0.7	1 (6.10) <0.1	---	3 (3.35) <0.1	---
<u>Pristinella osborni</u>	3 (7.94) <0.1	1 (8.48) <0.1	---	4 (4.21) <0.1	---
<u>P. sima</u>	8 (4.31) <0.1	1 (4.94) <0.1	---	---	---
<u>Slavina appendiculata</u>	14 (4.55) <0.1	37 (2.72) 0.1	10 (3.19) <0.1	9 (3.85) <0.1	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Stephensoniana</u> <u>trivandrana</u>	3 (7.94) <0.1	---	---	1 (6.71) <0.1	---
<u>Stylaria lacustris</u>	---	---	1 (7.35) <0.1	---	---
Unknown Naididae	30 (4.51) 0.1	64 (5.59) 0.2	39 (2.14) 0.2	5 (3.60) <0.1	---
Tubificidae (total)	2439 (0.87) 7.3	5 (4.15) <0.1	---	61 (2.93) 0.3	---
<u>Aulodrilus piqueti</u>	329 (2.59) 1.0	1 (8.48) <0.1	---	1 (6.71) <0.1	---
<u>Haber speciosus</u>	59 (5.23) 0.2	---	---	---	---
<u>Ilyodrilus templetoni</u>	25 (3.83) 0.1	---	---	---	---
<u>Limnodrilus</u> <u>hoffmeisteri</u>	122 (1.56) 0.4	---	---	---	---
<u>Psammoryctides</u> <u>convolutus</u>	---	---	---	---	---

APPENDIX 2.2 continued.

Taxon	Habitat									
	Bare		Snags		Floating		Vallisneria		Nuphar	
	Sediments				Mats					
	\bar{x}	# m ⁻² (cv)	\bar{x}	# m ⁻² (cv)	\bar{x}	# m ⁻² (cv)	\bar{x}	# m ⁻² (cv)	\bar{x}	# m ⁻² (cv)
	%		%		%		%		%	
<u>Varichaetadrilus angustipenis</u>	---		---		---		11 (6.71)		---	
	0.1									
UIWCS	535 (1.25)		1 (7.56)		---		32 (3.89)		---	
	1.6		<0.1				0.2			
UIWOCs	1431 (1.10)		3 (4.40)		---		28 (2.12)		---	
	4.3		<0.1				0.1			
Lumbriculidae (total)	154 (1.67)		5 (6.02)		---		17 (1.91)		---	
	0.5		<0.1				0.1			
<u>Eclipidrilus palustris</u>	143 (1.80)		5 (6.25)		---		4 (2.70)		---	
	0.4		<0.1				<0.1			
<u>Lumbriculus</u> sp.	2 (7.94)		---		---		6 (4.50)		---	
	<0.1						<0.1			
<u>L. variegatus</u>	---		---		---		4 (2.90)		---	
							<0.1			
Mollusca										
Gastropoda (total)	505 (1.77)		151 (1.36)		684 (1.13)		835 (0.90)		91 (1.30)	
	1.5		0.5		2.7		4.0		2.4	

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare		Floating		
	Sediments	Snags	Mats	Vallisneria	Nuphar
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
Ancylidae (imm.)	19 (4.96) 0.1	36 (2.44) 0.1	299 (1.16) 1.2	219 (1.72) 1.1	23 (2.10) 0.6
<u>Hebetancylus excentricus</u>	3 (7.94) <0.1	3 (4.18) <0.1	20 (2.87) 0.1	42 (2.37) 0.2	4 (3.48) 0.1
<u>Laevapex</u> sp.	---	---	3 (7.35) <0.1	---	---
<u>L. fuscus</u>	---	1 (8.48) <0.1	1 (7.35) <0.1	1 (6.71) <0.1	---
<u>L. peninsulae</u>	---	1 (8.48) <0.1	13 (7.20) 0.1	---	---
Hydrobiidae (imm./unk.)	11 (3.24) <0.1	1 (5.46) <0.1	P	5 (4.89) <0.1	2 (4.58) 0.1
<u>Amnicola dalli</u> ssp.	55 (2.97) 0.2	8 (2.81) <0.1	63 (3.94) 0.2	65 (1.73) 0.3	13 (1.88) 0.3
<u>Amnicola d. dalli</u>	35 (7.15) 0.1	---	4 (6.48) <0.1	1 (6.71) <0.1	---
<u>Aphaostracon pachynotus</u>	1 (7.94) <0.1	---	---	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Cincinnatia</u> sp. or <u>Spilochlamys</u> sp.	---	---	---	---	1 (4.58) <0.1
<u>Littoridinops</u> sp.*	---	---	---	---	---
<u>Notoqillia</u> <u>wetherbyi</u>	39 (3.17) 0.1	P	---	P	P
unk. nr. <u>N. wetherbyi</u>	16 (3.52) <0.1	---	P	---	---
<u>Spilochlamys</u> <u>gravis</u>	1 (5.57) <0.1	---	---	---	---
Lymnaeidae (imm.)	---	1 (8.48) <0.1	---	---	---
<u>Pseudosuccinea</u> <u>columella</u>	---	1 (8.48) <0.1	1 (7.35) <0.1	---	---
Physidae					
<u>Physella</u> sp.	1 (5.57) <0.1	18 (2.79) 0.1	85 (1.95) 0.3	42 (1.87) 0.2	8 (3.10) 0.2

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>P. cubensis</u> ssp.	8 (7.30) <0.1	---	3 (4.20) <0.1	2 (3.87) <0.1	---
<u>P. cubensis cubensis</u>	---	---	---	P	1 (4.58) <0.1
<u>P. heterostropha pomila</u>	1 (7.94) <0.1	---	---	2 (6.71) <0.1	---
<u>P. cubensis</u> or <u>P. h. pomila</u>	---	---	2 (5.15) <0.1	---	---
Pilidae					
<u>Pomacea paludosa</u>	1 (7.94) <0.1	1 (5.17) <0.1	3 (3.38) <0.1	P	P
Planorbidae	---	5 (5.03) <0.1	4 (5.78) <0.1	3 (5.82) <0.1	---
<u>Gyraulus parvus</u>	P	2 (7.60) <0.1	11 (4.23) <0.1	14 (3.55) 0.1	---
<u>Micromenetus</u> <u>dilatatus avus</u>	---	2 (8.48) <0.1	11 (4.70) <0.1	---	---
<u>M. floridensis</u>	---	P	---	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Planorbella duryi</u>	---	P	1 (5.15) <0.1	P	---
<u>P. scalaris</u>	1 (5.57) <0.1	2 (7.60) <0.1	11 (2.77) <0.1	13 (2.01) 0.1	1 (2.75) <0.1
Pleuroceridae					
<u>Elimia</u> sp. (imm.)	---	1 (8.48) <0.1	---	---	---
<u>E. floridensis</u> group	197 (2.64) 0.6	45 (1.99) 0.1	65 (2.55) 0.3	194 (1.53) 0.9	21 (1.78) 0.6
<u>E. vanhyningiana</u> ?	1 (7.94) <0.1	---	---	---	---
Thiaridae					
<u>Melanoides turricula</u>	30 (4.19) 0.1	1 (6.43) <0.1	1 (5.46) <0.1	1 (6.71) <0.1	---
Viviparidae					
<u>Campeloma floridense</u>	P	---	---	P	---
<u>Viviparus georgianus</u>	10 (3.57) <0.1	3 (4.02) <0.1	1 (3.57) <0.1	2 (3.87) <0.1	1 (4.58) <0.1

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
imm. Gastropoda	69 (4.23) 0.2	18 (2.99) 0.1	71 (3.14) 0.3	212 (1.08) 1.0	14 (2.64) 0.4
Pelecypoda (total)	2866 (1.82) 8.6	9 (2.96) <0.1	---	2 (3.65) <0.1	1 (4.58) <0.1
Corbiculidae					
<u>Corbicula fluminea</u>	1538 (1.86) 4.6	3 (4.64) <0.1	---	1 (4.69) <0.1	---
Sphaeriidae (imm.)	87 (5.06) 0.3	2 (8.48) <0.1	---	P	---
<u>Pisidium</u> sp.	23 (2.60) 0.1	---	---	---	---
<u>P. compressum</u>	4 (6.53) <0.1	---	---	---	---
Unionidae (imm.)	6 (4.55) <0.1	---	---	P	---
<u>Elliptio</u> sp.	2 (5.89) <0.1	---	---	P	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>E. buckleyi</u>	1 (7.94) <0.1	---	---	---	---
<u>E. icterina</u>	12 (3.54) <0.1	---	---	P	---
<u>Toxolasma</u> sp.	9 (5.41) <0.1	---	P	P	---
<u>Villosa</u> sp.	12 (7.48) <0.1	---	---	P	---
<u>V. vibex</u>	P	---	---	---	---
imm. Pelecypoda	1165 (2.74) 3.5	4 (4.35) <0.1	---	1 (5.52) <0.1	1 (4.58) <0.1
Tardigrada	---	---	1 (7.35) <0.1	---	---
Arthropoda					
Crustacea					
Amphipoda (total)	1644 (1.22) 4.9	2338 (2.92) 7.5	11110 (0.94) 43.6	726 (1.99) 3.5	10 (1.60) 0.3

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare		Floating		
	Sediments	Snags	Mats	Vallisneria	Nuphar
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
Gammaridae					
<u>Gammarus</u> sp.	1495 (1.21) 4.5	344 (2.31) 1.1	1672 (1.51) 6.6	455 (2.20) 2.2	4 (1.85) 0.1
Hyalellidae					
<u>Hyalella azteca</u>	59 (2.04) 0.2	1444 (3.07) 4.6	6479 (0.90) 25.4	168 (1.96) 0.8	4 (1.95) 0.1
imm. Amphipoda	160 (3.23) 0.5	546 (4.06) 1.8	2992 (1.61) 11.7	100 (2.02) 0.5	2 (3.09) 0.1
Isopoda (total)	251 (2.46) 0.8	184 (3.20) 0.6	39 (3.37) 0.2	15 (1.87) 0.1	6 (2.55) 0.2
Anthuridae					
<u>Cyathura polita</u>	28 (4.23) 0.1	1 (4.92) <0.1	---	---	---
Asellidae					
<u>Caecidotea</u> sp.	92 (5.80) 0.3	5 (5.43) <0.1	---	---	---
Sphaeromidae					
<u>Cassidinidea ovalis</u>	131 (2.58) 0.4	174 (3.40) 0.6	39 (3.37) 0.2	15 (1.87) 0.1	6 (2.55) 0.2

APPENDIX 2.2 continued.

Taxon	Habitat									
	Bare		Snags		Floating		Vallisneria		Nuphar	
	Sediments				Mats					
	\bar{x}	# m ⁻² (cv)	\bar{x}	# m ⁻² (cv)	\bar{x}	# m ⁻² (cv)	\bar{x}	# m ⁻² (cv)	\bar{x}	# m ⁻² (cv)
	%		%		%		%		%	
Mysidacea (total)	15	(5.50)	---		---		1	(6.71)	---	
	<0.1						<0.1			
Mysidae										
<u>Taphromysis bowmani</u>	14	(5.77)	---		---		1	(6.71)	---	
	<0.1						<0.1			
Decapoda										
Cambaridae (imm.)	8	(4.19)	1	(8.48)	65	(1.35)	5	(4.92)	P	
	<0.1		<0.1		0.3		<0.1			
Palaemonidae										
<u>Palaemonetes paludosus</u>	4	(4.52)	2	(5.07)	677	(0.59)	30	(2.53)	1	(3.73)
	<0.1		<0.1		2.7		0.1		<0.1	
Aquaric Acari (total)	566	(1.70)	1372	(1.12)	290	(1.43)	1951	(0.95)	47	(1.29)
	1.7		4.4		1.1		9.5		1.3	
Hydracarina	516	(1.75)	1162	(1.16)	200	(1.53)	1817	(0.94)	47	(1.29)
	1.5		3.7		0.8		8.8		1.3	
Oribatidae	6	(3.96)	243	(3.13)	88	(2.65)	106	(2.55)	---	
	<0.1		0.8		0.3		0.5			
Insecta										
Collembola (total)	2	(7.94)	9	(4.32)	171	(1.65)	1	(4.97)	---	
	<0.1		<0.1		0.7		<0.1			

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
Sminthuridae	---	1 (8.48) <0.1	7 (5.16) <0.1	---	---
Ephemeroptera (total)	914 (1.03) 2.7	2076 (2.19) 6.7	2086 (1.31) 8.2	1660 (189) 8.1	138 (0.83) 3.7
Baetidae (e.i.)	57 (2.31) 0.2	288 (2.03) 0.9	415 (1.72) 1.6	519 (1.88) 2.5	43 (1.16) 1.1
<u>Baetis</u> sp.	---	3 (7.97) <0.1	---	4 (3.89) <0.1	---
<u>B. intercalaris</u>	---	3 (7.47) <0.1	---	10 (5.17) 0.1	---
<u>B. punctiventris</u>	---	---	2 (5.44) <0.1	---	---
<u>Callibaetis</u> sp.	---	---	4 (4.75) <0.1	---	---
<u>C. floridanus</u>	---	4 (6.63) <0.1	30 (4.83) 0.1	P	---
<u>Plauditus alachua</u>	---	1 (8.48) <0.1	1 (7.35) <0.1	4 (3.68) <0.1	5 (2.09) 0.1

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Procloeon</u> sp.	3 (4.80) <0.1	4 (5.89) <0.1	---	3 (3.35) <0.1	2 (2.41) <0.1
<u>P. hobbsi</u>	17 (3.70) 0.1	21 (2.38) 0.1	2 (5.44) <0.1	10 (2.06) <0.1	30 (1.54) 0.8
<u>P. viridoculare</u>	11 (3.27) <0.1	2 (4.32) <0.1	1 (7.35) <0.1	5 (4.02) <0.1	1 (4.58) <0.1
<u>Pseudocloeon</u> sp.	---	1 (8.48) <0.1	1 (7.35) <0.1	1 (6.71) <0.1	3 (3.00) 0.1
<u>P. ehippiatum</u>	---	92 (2.95) 0.3	97 (2.28) 0.4	175 (2.69) 0.9	19 (2.10) 0.5
Caenidae (e.i.)	7 (4.69) <0.1	57 (8.48) <0.1	---	---	---
<u>Brachycercus maculatus</u>	98 (1.60) 0.3	---	---	1 (4.95) <0.1	---
<u>Caenis diminuta</u>	296 (1.48) 0.9	50 (3.91) 0.2	115 (1.56) 0.4	12 (2.03) 0.1	P
<u>Cercobrachys etowah</u>	1 (5.57) <0.1	---	---	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare		Floating		
	<u>Sediments</u>	<u>Snags</u>	<u>Mats</u>	<u>Vallisneria</u>	<u>Nuphar</u>
	\bar{X} # m ⁻² (cv) %	\bar{X} # m ⁻² (cv) %	\bar{X} # m ⁻² (cv) %	\bar{X} # m ⁻² (cv) %	\bar{X} # m ⁻² (cv) %
Ephemeridae					
<u>Hexagenia limbata</u>	188 (1.60) 0.6	2 (8.48) <0.1	---	2 (6.71) <0.1	---
Heptageniidae (e.i.)	3 (6.15) <0.1	78 (1.82) 0.3	11 (2.47) <0.1	2 (4.34) <0.1	---
<u>Stenacron interpunctatum</u>	3 (7.94) <0.1	36 (2.92) 0.1	12 (4.11) <0.1	---	---
<u>Stenonema</u> sp (e.i.)	---	38 (2.62) 0.1	---	---	---
<u>S. exiguum</u>	---	26 (2.66) 0.1	P	---	---
Tricorythidae					
<u>Tricorythodes</u> <u>albilineatus</u>	212 (2.86) 0.6	1427 (2.88) 4.6	1395 (1.52) 5.5	893 (2.81) 4.3	39 (1.31) 1.0
unk. e.i. Ephemeroptera	3 (7.94) <0.1	---	---	---	---
Odonata					
Zygoptera (total)	5 (3.66) <0.1	45 (2.37) 0.1	1287 (0.80) 5.0	43 (2.36) 0.2	15 (2.57) 0.4

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %		\bar{x} # m ⁻² (cv) %		
Calopterygidae (e.i.)	---	2 (4.96) <0.1	1 (7.35) <0.1	---	---
<u>Calopteryx maculata</u> *	---	---	---	---	---
<u>Hetaerina</u> sp.	---	P	4 (2.93) <0.1	---	1 (4.58) <0.1
<u>H. titia</u>	---	1 (6.47) <0.1	1 (5.15) <0.1	1 (6.71) <0.1	---
Coenagrionidae (e.i.)	4 (4.12) <0.1	34 (2.78) 0.1	1101 (0.83) 4.3	32 (2.71) 0.2	15 (2.61) 0.4
<u>Argia</u> sp. (e.i.)	---	2 (5.54) <0.1	46 (1.50) 0.2	---	---
<u>A. sedula</u>	---	---	9 (3.01) <0.1	---	---
<u>Enallagma</u> sp. (e.i.)	---	5 (6.06) <0.1	76 (1.29) 0.3	5 (3.52) <0.1	P
<u>E. coecum</u>	---	1 (6.40) <0.1	2 (4.77) <0.1	4 (2.96) <0.1	P

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>E. pallidum</u> *	---	---	---	---	---
<u>E. pollutum</u>	---	---	3 (4.23) <0.1	---	---
<u>E. weewa</u>	---	---	P	---	---
<u>Ischnura</u> sp.	---	1 (8.48) <0.1	2 (4.64) <0.1	P	P
<u>I. hastata</u>	---	---	1 (7.35) <0.1	---	---
<u>I. posita</u>	---	---	1 (7.35) <0.1	---	---
<u>Telebasis byersi</u>	---	---	P	---	---
Anisoptera (total)	55 (2.11) 0.2	2 (7.13) <0.1	2 (5.19) <0.1	1 (6.71) <0.1	---
Aeshnidae					
<u>Boyeria vinosa</u>	---	P	---	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare		Floating		
	Sediments	Snags	Mats	Vallisneria	Nuphar
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Nasiaeschna pentacantha</u> *	---	---	---	---	---
Corduliidae (e.i.)	---	1 (8.48) <0.1	---	---	---
<u>Epitheca</u> sp.	---	1 (8.48) <0.1	1 (5.15) <0.1	P	---
Gomphidae e.i.	37 (2.88) 0.1	1 (8.48) <0.1	---	---	---
<u>Aphylla williamsoni</u>	1 (5.57) <0.1	---	---	---	---
<u>Dromogomphus</u> sp.	P	---	---	---	---
<u>D. spinosus</u> *	---	---	---	---	---
<u>Gomphus</u> sp.	P	---	---	---	---
<u>Hagenius brevistylus</u>	---	---	P	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Stylurus</u> sp.	3 (4.80) <0.1	---	---	---	---
<u>S. plagiatus</u>	1 (7.94) <0.1	---	---	---	---
Macromiidae (e.i.)	P	---	---	---	---
<u>Macromia</u> i. <u>georgina</u> *	---	---	---	---	---
<u>M. taeniolata</u> *	---	---	---	---	---
unk. e.i. Anisoptera	12 (3.00) <0.1	---	1 (7.35) <0.1	1 (6.71) <0.1	---
Hemiptera (total)	1 (7.94) <0.1	1 (8.48) <0.1	100 (1.78) 0.4	---	---
Belostomatidae (e.i.)	---	---	1 (7.35) <0.1	---	---
<u>Belostoma</u> sp.	---	---	P	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>B. lutarium</u>	---	---	P	---	---
<u>Abedus</u> sp. or <u>Belostoma</u> sp.	---	---	2 (5.19) <0.1	---	---
Corixidae <u>Trichocorixa sexcinta</u>	---	---	2 (7.35) <0.1	---	---
Gerridae (e.i.) *	---	---	---	---	---
<u>Aquarius</u> sp. *	---	---	---	---	---
<u>Metrobates</u> sp. *	---	---	---	---	---
<u>Trepobates</u> sp. *	---	---	---	---	---
Hebridae <u>Merragata</u> sp.	---	---	11 (4.70) <0.1	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>M. brunnea</u>	---	---	22 (2.82) 0.1	---	---
Mesoveliidae (e.i.)	---	---	13 (5.07) 0.1	---	---
<u>Mesovelis</u> sp.	---	---	9 (3.32) <0.1	---	---
<u>M. amoena</u>	---	---	1 (7.35) <0.1	---	---
<u>M. mulsanti</u>	---	---	13 (2.46) 0.1	P	---
Naucoridae					
<u>Pelocoris</u> sp.	---	---	14 (2.51) 0.1	---	P
<u>P. femoratus</u>	---	---	5 (3.79) <0.1	---	---
Nepidae					
<u>Ranatra bueni</u> *	---	---	---	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare		Floating		
	Sediments	Snags	Mats	Vallisneria	Nuphar
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>R. nigra</u>	---	---	1 (7.35) <0.1	---	---
Saldidae					
<u>Microcanthia floridana</u>	---	1 (8.48) <0.1	---	---	---
Veliidae					
<u>Microvelia</u> sp.	---	---	2 (7.35) <0.1	---	---
Megaloptera (total)	4 (6.53) <0.1	9 (3.00) <0.1	---	---	---
Corydalidae					
<u>Chauliodes rasticornis</u>	---	P	---	---	---
<u>Corydalis cornutus</u>	---	9 (3.00) <0.1	---	---	---
Sialidae					
<u>Sialis</u> sp.	4 (6.53) <0.1	1 (8.48) <0.1	---	---	---
Trichoptera (total)	998 (1.21) 3.0	4508 (1.11) 14.5	531 (1.12) 2.1	3547 (1.06) 17.2	686 (0.78) 18.2

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
Hydropsychidae e.i.	1 (7.94) <0.1	561 (1.79) 1.8	10 (3.08) <0.1	112 (2.79) 0.5	10 (1.56) 0.3
<u>Cheumatopsyche</u> sp.	5 (5.15) <0.1	341 (1.90) 1.1	4 (4.94) <0.1	12 (2.76) 0.1	2 (2.55) <0.1
<u>Hydropsyche</u> sp.	---	15 (4.25) <0.1	---	11 (3.56) 0.1	---
<u>H. rossi</u> or <u>venularis</u>	P	68 (2.49) 0.2	7 (5.76) <0.1	63 (2.01) 0.3	1 (4.58) <0.1
Hydroptilidae e.i.	76 (2.11) 0.2	672 (2.01) 2.2	172 (1.57) 0.7	748 (1.43) 3.6	108 (0.81) 2.9
<u>Hydroptila</u> sp.	182 (4.48) 0.5	1756 (2.22) 5.6	92 (3.10) 0.4	2770 (1.36) 13.4	510 (0.92) 13.5
<u>Mayatrichia ayama</u>	---	---	---	3 (4.71) <0.1	1 (2.73) <0.1
<u>Neotrichia</u> sp.	39 (2.18) 0.1	382 (2.05) 1.2	142 (1.53) 0.6	46 (1.62) 0.2	18 (1.78) 0.5
<u>Orthotrichia</u> sp.	1 (7.94) <0.1	2 (6.57) <0.1	5 (4.90) <0.1	2 (3.05) <0.1	1 (2.24) <0.1

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare		Floating		
	Sediments	Snags	Mats	Vallisneria	Nuphar
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Oxyethira</u> sp.	1 (7.94) <0.1	43 (2.65) 0.1	12 (4.76) <0.1	32 (1.93) 0.2	24 (1.29) 0.6
Leptoceridae e.i.	127 (1.61) 0.4	10 (2.92) <0.1	17 (2.27) 0.1	1 (4.41) <0.1	---
<u>Nectopsyche</u> spp.	160 (1.94) 0.5	1 (6.89) <0.1	11 (4.48) <0.1	2 (3.05) <0.1	---
<u>N. candida</u>	3 (7.94) <0.1	P	---	---	---
<u>N. exquisita</u>	8 (4.89) <0.1	3 (5.40) <0.1	4 (4.51) <0.1	---	---
<u>N. pavidia</u>	62 (2.16) 0.2	2 (5.67) <0.1	---	1 (4.95) <0.1	1 (3.18) <0.1
<u>Oecetis</u> sp.	90 (1.57) 0.3	21 (2.13) 0.1	1 (7.35) <0.1	P	---
<u>O. inconspicua</u> complex	18 (3.94) 0.1	---	---	---	---
<u>O. nocturna</u>	1 (7.94) <0.1	---	---	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{X} # m ⁻² (cv) %	\bar{X} # m ⁻² (cv) %	\bar{X} # m ⁻² (cv) %	\bar{X} # m ⁻² (cv) %	\bar{X} # m ⁻² (cv) %
<u>O. persimilis</u>	1 (7.94) <0.1	2 (4.37) <0.1	1 (5.15) <0.1	---	---
<u>Triaenodes ignitus</u>	---	P	---	---	---
<u>Triaenodes furcellus</u>	---	---	2 (7.35) <0.1	---	---
Polycentropodidae (e.i.)	87 (1.67) 0.3	244 (1.44) 0.8	28 (2.39) 0.1	12 (1.65) 0.1	7 (1.60) 0.2
<u>Cernotina</u> sp.	97 (1.77) 0.3	22 (1.93) 0.1	1 (7.35) <0.1	4 (2.96) <0.1	---
<u>Neureclipsis</u> sp.	---	1 (8.48) <0.1	---	---	---
<u>N. crepuscularis</u>	---	5 (5.46) <0.1	---	---	---
<u>Nyctiophylax</u> sp.	1 (7.94) <0.1	123 (1.63) 0.4	---	2 (3.87) <0.1	2 (2.73) 0.1
<u>Polycentropus</u> sp.	11 (7.94) <0.1	---	---	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>P. cinereus</u>	8 (5.88) <0.1	---	---	---	---
Psychomyiidae (e.i.)	---	1 (8.48) <0.1	---	---	---
<u>Lype diversa</u>	---	9 (4.65) <0.1	---	---	---
Lepidoptera (total)	8 (7.94) <0.1	14 (2.26) <0.1	61 (1.24) 0.2	389 (0.78) 1.9	10 (1.88) 0.3
Pyralidae (e.i.)	---	---	1 (7.35) <0.1	---	---
<u>Eoparargyractis</u> sp.	---	---	1 (7.35) <0.1	36 (1.26) 0.2	---
<u>Neargyractis slossonalis</u>	---	---	21 (2.66) 0.1	P	---
<u>Parapoynx</u> sp.	---	---	5 (4.41) <0.1	26 (1.52) 0.1	1 (4.58) <0.1
<u>Petrophila</u> sp.	---	10 (2.32) <0.1	5 (3.85) <0.1	197 (0.96) 1.0	7 (2.31) 0.2

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>P. drumalis</u>	---	---	---	P	---
<u>Synclita</u> sp.	---	---	4 (5.15) <0.1	---	---
unk. e.i. Lepidoptera	8 (7.94) <0.1	1 (6.03) <0.1	13 (2.44) 0.1	116 (1.31) 0.6	2 (2.29) <0.1
Coleoptera (total)	179 (1.92) 0.5	3762 (1.19) 12.1	76 (1.40) 0.3	27 (1.52) 0.1	1 (4.00) <0.1
Dytiscidae					
<u>Cybister</u> sp.	---	---	1 (7.35) <0.1	---	---
<u>Hydrovatus pustulatus</u>	---	---	1 (7.35) <0.1	---	---
Elmidae (e.i.)	12 (4.38) <0.1	942 (2.62) 3.0	21 (2.90) 0.1	3 (4.33) <0.1	---
<u>Dubiraphia vittata</u>	62 (4.72) 0.2	1 (7.37) <0.1	---	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare		Floating		
	Sediments	Snags	Mats	Vallisneria	Nuphar
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Microcylloepus pusillus</u>	6 (5.01) <0.1	344 (2.45) 1.1	8 (2.26) <0.1	1 (3.94) <0.1	---
<u>Stenelmis</u> sp.	102 (2.16) 0.3	2351 (1.15) 7.5	37 (1.73) 0.1	14 (2.20) 0.1	1 (4.00) <0.1
<u>S. crenata</u>	---	26 (2.89) 0.1	---	---	---
<u>S. hungerfordi</u>	---	2 (8.48) <0.1	---	---	---
<u>S. hungerfordi</u> or <u>lignicola</u>	1 (7.94) <0.1	67 (2.00) 0.2	---	---	P
<u>S. musgravei</u>	---	2 (5.13) <0.1	---	---	---
Gyrinidae (e.i.)	---	1 (8.48) <0.1	---	1 (6.71) <0.1	---
<u>Dineutus</u> sp.	1 (5.57) <0.1	20 (2.06) 0.1	4 (3.67) <0.1	7 (2.81) <0.1	---
<u>D. angustus</u>	---	---	---	---	P

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare		Floating		
	Sediments	Snags	Mats	Vallisneria	Nuphar
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>D. discolor</u> *	---	---	---	---	---
<u>D. serrulatus</u>	---	---	P	---	---
<u>D. assimilus</u> or <u>nigrior</u> *	---	---	---	---	---
<u>Gyrinus</u> sp.	---	P	1 (7.35) <0.1	1 (6.71) <0.1	---
<u>G. elevatus</u>	---	---	1 (7.35) <0.1	---	---
Haliplidae					
<u>Haliphus</u> sp.	---	---	1 (7.35) <0.1	---	---
<u>Peltodytes</u> sp.	---	---	3 (3.50) <0.1	---	---
<u>P. dietrichi</u>	---	---	P	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>P. floridensis</u>	---	---	2 (4.25) <0.1	---	---
<u>P. oppositus</u>	---	---	P	---	---
Hydrophilidae					
<u>Hydrochus</u> sp. 3 (Epler)	---	---	1 (7.35) <0.1	---	---
<u>Tropisternus</u> sp.	---	---	1 (7.35) <0.1	---	---
Scirtidae (e.i.)	---	1 (8.48) <0.1	---	---	---
<u>Cyphon</u> sp.	---	2 (5.63) <0.1	---	---	---
Hymenoptera					
Braconidae	---	---	P	---	---
Scelionidae	---	---	---	1 (6.71) <0.1	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare		Floating		
	Sediments	Snags	Mats	Vallisneria	Nuphar
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
Diptera					
Ceratopogonidae (total)	1632 (1.27) 4.9	915 (1.81) 2.9	164 (2.78) 0.6	325 (4.77) 1.6	13 (1.69) 0.3
<u>Alluaudomyia</u> sp.	---	14 (5.60) <0.1	1 (7.35) <0.1	---	---
<u>Atrichopogon</u> sp.	---	159 (5.53) 0.5	---	1 (6.71) <0.1	---
<u>Atrichopogon</u> or <u>Forcipomyia</u>	---	28 (4.48) 0.1	---	1 (6.71) <0.1	---
<u>Bezzia</u> sp. or <u>Palpomyia</u> sp.	155 (2.04) 0.5	658 (1.46) 2.1	52 (1.89) 0.2	80 (1.86) 0.4	12 (1.84) 0.3
<u>Ceratopogon</u> sp.	---	---	---	1 (6.71) <0.1	---
<u>Clinohelia</u> sp.	8 (3.35) <0.1	5 (8.48) <0.1	---	---	---
<u>Dasyhelea</u> sp.	---	2 (6.23) <0.1	72 (4.59) 0.3	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %		\bar{x} # m ⁻² (cv) %		
<u>Forcipomyia</u> sp.	---	31 (5.75) 0.1	1 (7.35) <0.1	---	---
<u>Mallochohelia</u> sp.	187 (1.93) 0.6	2 (8.48) <0.1	---	---	---
<u>Palpomyia</u> complex	---	---	---	---	1 (4.58) <0.1
<u>Probezzia</u> sp.	253 (1.38) 0.8	---	---	1 (6.71) <0.1	---
<u>Sphaeromyia</u> sp.	9 (7.94) <0.1	---	---	---	---
unk. e.i. Ceratopogonidae	864 (1.89) 2.6	17 (2.55) 0.1	31 (2.66) 0.1	10 (2.56) 0.1	---
Chironomidae (total)	19,076 (1.09) 57.0	13354 (0.71) 42.9	6386 (0.76) 25.0	9932 (1.00) 48.2	2680 (1.18) 71.0
Tanypodinae (e.i.)	227 (1.28) 0.7	103 (3.38) 0.3	74 (1.84) 0.3	43 (2.56) 0.2	1 (4.58) <0.1
<u>Ablabesmyia</u> sp.	49 (2.19) 0.1	63 (3.24) 0.2	57 (2.28) 0.2	13 (4.59) 0.1	1 (4.58) <0.1

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>A. (Karelia) sp.</u>	---	6 (4.89) <0.1	6 (5.51) <0.1	4 (6.71) <0.1	---
<u>A. annulata</u>	11 (4.58) <0.1	1 (8.48) <0.1	---	---	---
<u>A. mallochi</u>	19 (3.21) 0.1	7 (6.13) <0.1	4 (7.35) <0.1	12 (3.43) 0.1	---
<u>A. rhamphe</u> group	10 (5.14) <0.1	29 (3.15) 0.1	35 (2.57) 0.1	---	---
<u>Clinotanypus</u> sp.	116 (1.64) 0.3	1 (8.48) <0.1	1 (7.35) <0.1	4 (6.71) <0.1	P
<u>Djalmabatista pulchra</u>	141 (2.77) 0.4	---	---	---	---
<u>Fittkauimyia sorta</u>	----	3 (8.48) <0.1	---	---	---
<u>Labrundinia</u> sp.	33 (6.95) 0.1	9 (6.56) <0.1	92 (1.39) 0.4	16 (6.29) 0.1	1 (4.58) <0.1
<u>L. becki</u>	----	5 (4.87) <0.1	239 (1.73) 0.9	8 (4.03) <0.1	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>L. johannseni</u>	1 (7.94) <0.1	47 (5.47) 0.1	254 (1.64) 1.0	---	---
<u>L. pilosella</u>	----	30 (4.00) 0.1	370 (1.52) 1.4	94 (2.56) 0.5	---
<u>Larsia</u> sp.	523 (1.33) 1.6	12 (4.38) <0.1	43 (3.25) 0.2	2 (4.05) <0.1	5 (4.58) 0.1
<u>L. decolorata</u>	68 (3.05) 0.2	1 (4.48) <0.1	---	2 (6.71) <0.1	---
<u>L. indistincta</u>	---	---	---	1 (6.71) <0.1	---
<u>Monopelopia boliekae</u>	3 (7.94) <0.1	---	27 (3.42) 0.1	---	---
<u>Nilotanypus fimbriatus</u>	---	49 (3.95) 0.2	1 (7.35) <0.1	---	---
<u>Paramerina</u> sp.	4 (5.58) <0.1	---	---	---	---
<u>Pentaneura inconspicua</u>	95 (2.50) 0.3	915 (1.36) 2.9	282 (1.58) 1.1	253 (1.59) 1.2	37 (1.26) 1.0

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Procladius</u> sp.	25 (2.81) 0.1	---	---	---	---
Orthocladiinae (e.i.)	6 (4.37) <0.1	65 (5.57) 0.2	13 (2.96) 0.1	58 (2.30) 0.3	22 (2.21) 0.6
<u>Corynoneura</u> sp.	15 (4.68) <0.1	50 (3.96) 0.2	233 (1.92) 0.9	5 (5.50) <0.1	---
<u>C. taris</u>	3 (7.94) <0.1	16 (4.01) <0.1	80 (2.06) 0.3	---	1 (4.58) <0.1
<u>Corynoneura</u> sp. C (Epler)	---	---	1 (5.15) <0.1	---	--
<u>Cricotopus bicinctus</u>	880 (2.97) 2.6	1325 (1.75) 4.2	107 (1.89) 0.4	716 (1.38) 3.5	584 (1.35) 15.5
<u>Cricotopus/Orthocladius</u>	200 (2.91) 0.6	1221 (2.10) 3.9	54 (1.84) 0.2	1144 (1.52) 5.6	341 (1.65) 9.0
<u>Epoicocladius flavens</u>	59 (3.26) 0.2	---	---	---	---
<u>Nanocladius</u> sp.	1 (7.94) <0.1	19 (2.90) 0.1	495 (1.48) 1.9	6 (4.69) <0.1	13 (2.46) 0.3

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare		Floating		
	Sediments	Snags	Mats	Vallisneria	Nuphar
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>N. balticus</u>	---	1 (8.48) <0.1	---	---	---
<u>Rheocricotopus robacki</u>	---	36 (3.06) 0.1	---	---	2 (3.65) 0.1
<u>Stilocladius</u> sp.	1 (7.94) <0.1	---	---	---	---
<u>Thienemanniella</u> sp.	35 (2.95) 0.1	80 (2.39) 0.3	15 (2.82) 0.1	189 (2.50) 0.9	106 (1.17) 2.8
<u>T. cf. similis</u>	---	50 (3.76) 0.2	5 (6.93) <0.1	450 (2.07) 2.2	47 (1.89) 1.3
<u>Thienemaniella</u> sp. A	25 (2.74) 0.1	403 (1.39) 1.3	34 (2.11) 0.1	199 (2.57) 1.0	539 (1.58) 14.3
Chironominae					
Chironmini (e.i.)	225 (1.80) 0.7	153 (2.14) 0.5	180 (1.87) 0.7	12 (3.36) 0.1	8 (2.95) 0.2
<u>Apedilum</u> sp.	1 (7.87) <0.1	---	---	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Beardius truncatus</u>	---	1 (8.48) <0.1	3 (4.33) <0.1	1 (6.71) <0.1	1 (4.58) <0.1
<u>Chironomus</u> sp.	16 (6.63) <0.1	---	---	---	---
<u>Chironomus</u> sp. or <u>Einfeldia</u> sp.	3 (7.94) <0.1	---	---	---	---
<u>Cladopelma</u> sp.	12 (5.89) <0.1	---	---	---	---
<u>Cryptochironomus</u> sp.	267 (1.41) 0.8	5 (4.22) <0.1	---	1 (6.71) <0.1	---
<u>Cryptotendipes</u> sp.	833 (1.37) 2.5	40 (3.53) 0.1	---	1 (6.71) <0.1	1 (4.58) <0.1
<u>Demicryptochironomus</u> sp.	15 (4.85) <0.1	---	---	---	---
<u>Dicrotendipes</u> sp. (e.i.)	483 (3.57) 1.4	113 (3.83) 0.4	5 (6.57) <0.1	33 (2.80) 0.2	1 (4.58) <0.1
<u>D. modestus</u>	4 (5.88) <0.1	---	---	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>D. neomodestus</u>	317 (5.62) 0.9	107 (4.06) 0.3	4 (7.35) <0.1	40 (2.64) 0.2	4 (4.58) 0.1
<u>D. tritonus</u> or <u>modestus</u>	---	---	---	1 (6.71) <0.1	---
<u>Dicrotendipes</u> sp. A (Epler)	1 (7.94) <0.1	3 (8.48) <0.1	---	---	---
<u>Endotribelos hesperium</u>	---	7 (5.62) <0.1	96 (2.02) 0.4	5 (6.71) <0.1	---
<u>Fissimentum</u> sp.	353 (2.86) 1.1	---	---	---	---
<u>Glyptotendipes</u> sp.	1 (7.94) <0.1	---	---	---	---
<u>Goeldichironomus</u> sp.	---	---	1 (7.35) <0.1	---	---
<u>G. amazonicus</u>	---	---	1 (7.35) <0.1	---	---
<u>Harnischia</u> complex	47 (2.50) 0.1	---	---	----	---

APPENDIX 2.2 continued.

<u>Taxon</u>	<u>Habitat</u>				
	<u>Bare</u>	<u>Snags</u>	<u>Floating</u>	<u>Vallisneria</u>	<u>Nuphar</u>
	<u>Sediments</u>		<u>Mats</u>		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Microtendipes pedellus</u>	---	1 (8.48) <0.1	1 (7.35) <0.1	---	---
<u>Nilothauma</u> sp.	45 (3.54) 0.1	---	1 (7.35) <0.1	---	---
<u>Paqastiella</u> sp.	115 (2.27) 0.3	---	---	1 (6.71) <0.1	---
<u>Parachironomus</u> sp.	---	---	3 (4.33) <0.1	---	---
<u>Paracladopelma</u> sp.	21 (5.04) 0.1	---	---	---	---
<u>Paralauterborniella</u> <u>nigrohalterale</u>	265 (1.67) 0.8	8 (6.43) <0.1	---	---	---
<u>Paratendipes</u> <u>subaequalis</u>	3 (7.94) <0.1	---	---	---	---
<u>Phaenopsectra</u> sp.	3 (7.94) <0.1	---	1 (7.35) <0.1	---	---
<u>Phaenopsectra</u> sp. or <u>Tribelos</u> sp.	---	2 (8.48) <0.1	---	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare		Floating		
	Sediments	Snags	Mats	Vallisneria	Nuphar
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Polypedilum</u> sp. e.i.	253 (3.63) 0.8	131 (2.51) 0.4	626 (1.76) 2.5	45 (2.07) 0.2	21 (2.27) 0.5
<u>P. flavum</u>	---	175 (4.52) 0.6	---	103 (2.69) 0.5	1 (4.58) <0.1
<u>P. fallax</u> group	---	83 (2.13) 0.3	---	P	---
<u>P. halterale</u>	350 (1.73) 1.0	7 (4.48) <0.1	---	11 (3.16) 0.1	---
<u>P. illinoense</u>	9 (7.31) <0.1	103 (4.14) 0.3	1535 (1.32) 6.0	161 (2.42) 0.8	48 (2.32) 1.3
<u>P. scalaenum</u>	2719 (3.04) 8.1	2951 (0.97) 9.5	15 (3.17) 0.1	14 (2.50) 0.1	1 (4.58) <0.1
<u>P. trigonus</u>	---	1 (8.48) <0.1	103 (5.49) 0.4	---	---
<u>P. tritum</u>	11 (4.79) <0.1	---	1 (7.35) <0.1	3 (6.71) <0.1	---
<u>Polypedilum</u> sp. A (Epler)	---	25 (7.62) 0.1	---	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Stenochironomus</u> sp.	29 (2.49) 0.1	1373 (1.10) 4.4	1 (7.35) <0.1	---	---
<u>Stelechomyia</u> <u>perpulchra</u>	3 (7.94) <0.1	659 (1.39) 2.1	---	---	---
<u>Tribelos</u> sp.	1 (7.94) <0.1	493 (2.35) 1.6	---	---	---
<u>T. fuscicorne</u>	8 (5.88) <0.1	228 (2.04) 0.7	4 (7.35) <0.1	---	---
<u>Xestochironomus</u> sp.	6 (7.94) <0.1	35 (2.73) 0.1	---	---	---
<u>Zavreliella</u> <u>marmorata</u>	1 (7.94) <0.1	1 (8.48) <0.1	---	---	---
Pseudochironomini					
<u>Pseudochironomus</u> sp.	1196 (1.62) 3.6	84 (2.91) 0.3	1 (7.35) <0.1	1 (6.71) <0.1	---
Tanytarsini (e.i.)	16 (3.61) <0.1	18 (3.31) 0.1	1 (7.35) <0.1	16 (2.99) 0.1	1 (4.58) <0.1

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Cladotanytarsus</u> sp.	7315 (1.97) 21.8	81 (2.56) 0.3	1 (7.35) <0.1	P	---
<u>Paratanytarsus</u> sp.	16 (7.94) <0.1	---	---	---	---
<u>Rheotanytarsus</u> sp.	8 (7.94) <0.1	138 (2.55) 0.4	170 (2.38) 0.7	4414 (1.62) 21.4	99 (2.12) 2.6
<u>Stempellina</u> sp.	460 (1.71) 1.4	4 (5.66) <0.1	---	---	---
<u>Stempellinella</u> sp.	42 (2.18) 0.1	10 (6.84) <0.1	11 (4.10) <0.1	18 (4.32) 0.1	---
<u>Tanytarsus</u> sp. (e.i.)	681 (1.62) 2.0	1195 (1.18) 3.8	540 (1.06) 2.1	1128 (1.53) 5.5	431 (1.23) 11.4
<u>Tanytarsus limneticus</u>	---	---	---	---	---
<u>Tanytarsus</u> sp. A (Epler)	4 (4.10) <0.1	---	5 (6.03) <0.1	---	4 (4.58) 0.1
<u>Tanytarsus</u> sp. E (Epler)	262 (5.25) 0.8	464 (1.81) 1.5	253 (2.53) 1.0	850 (1.64) 4.1	314 (2.08) 8.3

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Tanytarsus</u> sp. F (Epler)	1 (7.94) <0.1	---	42 (3.15) 0.2	---	2 (4.43) <0.1
<u>Tanytarsus</u> sp. G (Epler)	3 (7.94) <0.1	---	---	---	---
<u>Tanytarsus</u> sp. L (Epler)	11 (3.12) <0.1	14 (6.10) <0.1	32 (2.37) 0.1	6 (4.63) <0.1	1 (4.58) <0.1
<u>Tanytarsus</u> sp. M (Epler)	---	2 (8.48) <0.1	---	---	---
<u>Tanytarsus</u> sp. P (Epler)	9 (4.43) <0.1	27 (6.60) 0.1	6 (5.50) <0.1	41 (4.98) 0.2	35 (2.68) 0.9
<u>Tanytarsus</u> sp. R (Epler)	1 (7.94) <0.1	1 (8.48) <0.1	1 (7.35) <0.1	---	---
<u>Tanytarsus</u> sp. T (Epler)	4 (7.68) <0.1	77 (2.48) 0.2	260 (1.07) 1.0	9 (3.70) <0.1	4 (4.58) 0.1
<u>Tanytarsus</u> sp. V (Epler)	1 (7.94) <0.1	---	1 (7.35) <0.1	---	---
Culicidae (total)	---	---	13 (7.06) 0.1	---	---

APPENDIX 2.2 continued.

<u>Taxon</u>	<u>Habitat</u>				
	<u>Bare</u>	<u>Snags</u>	<u>Floating</u>	<u>Vallisneria</u>	<u>Nuphar</u>
	<u>Sediments</u>		<u>Mats</u>		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Anopheles</u> sp.	---	---	1 (7.35) <0.1	---	---
<u>A. quadrimaculatus</u>	---	---	2 (7.35) <0.1	---	---
<u>Uranotaenia</u> sp.	---	---	4 (7.35) <0.1	---	---
Empididae (total)	6 (4.33) <0.1	98 (1.39) 0.3	4 (3.57) <0.1	74 (1.62) 0.4	5 (2.48) 0.1
<u>Hemerodromia</u> sp.	5 (5.15) <0.1	91 (1.43) 0.3	4 (3.57) <0.1	74 (1.63) 0.4	5 (2.48) 0.1
Ephydriidae (total)	---	---	4 (4.43) <0.1	21 (2.32) 0.1	---
<u>Notiphila</u> sp.	---	---	---	2 (4.69) <0.1	---
Muscidae (total)	3 (7.94) <0.1	1 (5.97) <0.1	---	1 (6.71) <0.1	---
Stratiomyidae (total)	4 (6.53) <0.1	3 (8.48) <0.1	28 (2.47) 0.1	---	---

APPENDIX 2.2 continued.

Taxon	Habitat				
	Bare	Snags	Floating	Vallisneria	Nuphar
	Sediments		Mats		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
<u>Myxosargus</u> sp. *	---	---	---	---	---
<u>Odontomyia</u> sp.	---	3 (8.48) <0.1	P	---	---
<u>Odontomyia</u> sp. or <u>Hedriodiscus</u> sp.	1 (7.94) <0.1	---	28 (2.42) 0.1	---	---
Tabanidae (total)	---	---	---	1 (5.29) <0.1	---
Tipulidae (total)	---	46 (5.48) 0.1	---	---	---
<u>Helius</u> sp. *	---	---	---	---	---
<u>Limonia</u> sp.	---	40 (6.15) 0.1	---	---	---

APPENDIX 2.2 continued.

<u>Parameter</u>	<u>Habitat</u>				
	<u>Bare</u>	<u>Snags</u>	<u>Floating</u>	<u>Vallisneria</u>	<u>Nuphar</u>
	<u>Sediments</u>		<u>Mats</u>		
	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %	\bar{x} # m ⁻² (cv) %
Mean Total Organisms m ⁻²	33,486 ^A (0.78) 100.0	31,151 ^A (0.80) 100.0	25,501 ^A (0.66) 100.0	20,614 ^A (0.67) 100.0	3,774 ^B (0.96) 100.0
Total Taxa Richness	166	163	157	127	76
Mean Taxa Richness	32 ^A (0.38)	34 ^A (0.24)	35 ^A (0.17)	34 ^A (0.19)	21 ^B (0.22)
Mean Diversity	3.62 ^A (0.22)	3.66 ^A (0.15)	3.82 ^A (0.64)	3.26 ^B (0.15)	3.07 ^B (0.11)
Mean Evenness	0.75 ^A (0.19)	0.73 ^{AB} (0.12)	0.68 ^{BC} (0.16)	0.65 ^C (0.14)	0.71 ^{ABC} (0.13)

Means with the same letter superscript are not significantly different (page 2.60 only; p=0.05; Mean Total Organisms log(x + 1) transformed).

--- = taxon not present.

C = colonial taxon not enumerated.

P = taxon present in qualitative samples only.

imm. = unidentifiable immature non-insect.

e.i. = unidentifiable early instar insect.

UIWCS = unidentifiable immature Oligochaeta with capilliform setae.

UIWOCs = unidentifiable immature Oligochaeta without capilliform setae.

* = taxon collected qualitatively or quantitatively from habitats other than those listed.

APPENDIX 2.3

Functional group designations used for aquatic invertebrate taxa collected from the Wekiva River study area during spring and autumn 1997 (* denotes taxon occurs in two or more functional groups).

APPENDIX 2.3. Functional group designations used for aquatic invertebrate taxa collected from the Wekiva River study area during spring and autumn 1997 (* denotes taxon occurs in two or more functional groups).

<u>Taxon</u>	<u>Functional Group</u>
Porifera	Filterer
Cnidaria	
Hydrozoa	
<u>Cordylophora lacustris</u>	Predator
<u>Hydra</u> sp.	Predator
Turbellaria	Gatherer
Nemertea	Predator
Nematoda	*
Ectoprocta	Filterer
Annelida	
Aphanoneura	Gatherer
Aeolosomatidae	Gatherer
Branchiobdellida	Gatherer
Hirudinia	*
Oligochaeta	
Enchytraeidae	Gatherer
Naididae	
<u>Allonais</u> sp.	Grazer
<u>A. inequalis</u>	Grazer
<u>A. pectinata</u>	Grazer
<u>Amphichaeta leydigi</u>	Grazer
<u>Bratislavia unidentata</u>	Grazer
<u>Chaetogaster</u> sp.	Predator
<u>C. diaphanus</u>	Predator
<u>C. diastrophus</u>	Predator
<u>C. limnaei</u>	Predator
<u>Dero</u> sp.	Grazer
<u>D. flabelliger</u>	Grazer
<u>D. furcata</u>	Grazer
<u>D. lodeni</u>	Grazer
<u>D. nivea</u>	Grazer
<u>D. obtusa</u>	Grazer
<u>D. nivea</u> or <u>obtusa</u>	Grazer
<u>D. pectinata</u>	Grazer
<u>D. trifida</u>	Grazer
<u>Haemonais waldvogeli</u>	Grazer
<u>Nais</u> sp.	Grazer
<u>N. communis</u>	Grazer
<u>N. elinguis</u>	Grazer
<u>N. variabilis</u>	Grazer
<u>Paronais littoralis</u>	Grazer
<u>Pristina</u> sp.	Grazer
<u>P. aequiseta</u>	Grazer

APPENDIX 2.3 continued.

<u>Taxon</u>	<u>Functional Group</u>
<u>P. leidyi</u>	Grazer
<u>P. synclites</u>	Grazer
<u>Pristinella osborni</u>	Grazer
<u>P. sima</u>	Grazer
<u>Slavina appendiculata</u>	Grazer
<u>Stephensoniana trivandana</u>	Grazer
<u>Stylaria lacustris</u>	Grazer
Unknown Naididae	
Tubificidae	
<u>Aulodrilus piqueti</u>	Gatherer
<u>Haber speciosus</u>	Gatherer
<u>Ilyodrilus templetoni</u>	Gatherer
<u>Limnodrilus hoffmeisteri</u>	Gatherer
<u>Psammoryctides convolutus</u>	Gatherer
<u>Varichaetadrilus angustipenis</u>	Gatherer
UIWCS	Gatherer
UIWCS	Gatherer
Lumbriculidae	
<u>Eclipidrilus palustris</u>	Gatherer
<u>Lumbriculus</u> sp.	Gatherer
<u>L. variegatus</u>	Gatherer
Mollusca	
Gastropoda	
Ancylidae (imm.)	Scraper
<u>Hebetancylus excentricus</u>	Scraper
<u>Laevapex</u> sp.	Scraper
<u>L. fuscus</u>	Scraper
<u>L. peninsulae</u>	Scraper
Hydrobiidae (imm./unk.)	Gatherer
<u>Amnicola dalli</u> ssp.	Gatherer
<u>Amnicola d. dalli</u>	Gatherer
<u>Aphaostracon pachynotus</u>	Gatherer
<u>Cincinnatia</u> sp. or	
<u>Spilochlamys</u> sp.	Gatherer
<u>Littoridinops</u> sp.	Gatherer
<u>Notogillia wetherbyi</u>	Gatherer
unk. nr. <u>N. wetherbyi</u>	Gatherer
<u>Spilochlamys gravis</u>	Gatherer
Lymnaeidae (imm.)	Scraper
<u>Pseudosuccinea columella</u>	Scraper
<u>Physella</u> sp.	Scraper
<u>P. cubensis</u> ssp.	Scraper
<u>P. cubensis cubensis</u>	Scraper
<u>P. heterostropha pomila</u>	Scraper
<u>P. cubensis</u> or <u>P. h. pomila</u>	Scraper

APPENDIX 2.3 continued.

<u>Taxon</u>	<u>Functional Group</u>
Pilidae	
<u>Pomacea paludosa</u>	Scraper
Planorbidae	
<u>Gyraulus parvus</u>	Scraper
<u>Micomenetus dilatatus avus</u>	Scraper
<u>M. floridensis</u>	Scraper
<u>Planorbella duryi</u>	Scraper
<u>P. scalaris</u>	Scraper
Pleuroceridae	
<u>Elimia</u> sp. (imm.)	Scraper
<u>E. floridensis</u> complex	Scraper
<u>E. vanhynningiana</u> ?	Scraper
Thiaridae	
<u>Melanoides turricula</u> ?	Scraper
Viviparidae	
<u>Campeloma floridense</u> ?	Scraper
<u>Viviparus georgianus</u>	Scraper
imm. Gastropoda	
Pelecypoda	
Corbiculidae	
<u>Corbicula fluminea</u>	Filterer
Sphaeriidae (imm.)	Filterer
<u>Pisidium</u> sp.	Filterer
<u>P. compressum</u>	Filterer
Unionidae (imm.)	Filterer
<u>Elliptio</u> sp.	Filterer
<u>Toxolasma</u> sp.	Filterer
<u>Uniomorus caroliniana</u>	Filterer
<u>Villosa</u> sp.	Filterer
imm. Pelecypoda	
Tardigrada	Plant Piercer
Arthropoda	
Crustacea	
Amphipoda	
Gammaridae	
<u>Gammarus</u> sp.	Gatherer
Hyalellidae	
<u>Hyalella azteca</u>	Grazer
imm. Amphipoda	
Isopoda	
Anthuridae	
<u>Cyathura polita</u>	Grazer
Asellidae	
<u>Caecidotea</u> sp.	Gatherer
Sphaeromidae	
<u>Cassidinidea ovalis</u>	Gatherer

APPENDIX 2.3 continued.

<u>Taxon</u>	<u>Functional Group</u>
Mysidacea	
Mysidae	
<u>Taphromysis bowmani</u>	Filterer
Decapoda	
Cambaridae (imm.)	Gatherer
Palaemonidae	
<u>Palaemonetes paludosus</u>	Grazer
Aquaric Acari	
Hydracarina	Predator
Oribatidae	Gatherer
Insecta	
Collembola	
Sminthuridae	Gatherer
Ephemeroptera	
Baetidae (e.i.)	Grazer
<u>Baetis</u> sp.	Grazer
<u>B. alachua</u>	Grazer
<u>B. intercalaris</u>	Grazer
<u>B. punctiventris</u>	Grazer
<u>Callibaetis</u> sp.	Grazer
<u>C. floridanus</u>	Grazer
<u>Labiobaetis</u> sp.	Grazer
<u>L. ephippiatus</u>	Grazer
<u>Procloeon</u> sp.	Grazer
<u>P. hobbsi</u>	Grazer
<u>P. viridoculare</u>	Grazer
Caenidae (e.i.)	Gatherer
<u>Brachycercus maculatus</u>	Gatherer
<u>Caenis diminuta</u>	Gatherer
<u>Cercobrachys etowah</u>	Gatherer
Ephemeridae	
<u>Hexagenia limbata</u>	Gatherer
Heptageniidae (e.i.)	Scraper
<u>Stenacron interpunctatum</u>	Scraper
<u>Stenonema</u> sp (e.i.)	Scraper
<u>S. exiguum</u>	Scraper
Tricorythidae	
<u>Tricorythodes albilineatus</u>	Gatherer
unk. e.i. Ephemeroptera	
Odonata	
Zygoptera	
Calopterygidae (e.i)	Predator
<u>Calopteryx maculata</u>	Predator
<u>Hetaerina</u> sp.	Predator
<u>H. titia</u>	Predator
Coenagrionidae (e.i.)	Predator-

APPENDIX 2.3 continued.

<u>Taxon</u>	<u>Functional Group</u>
<u>Argia</u> sp. (e.i.)	Predator
<u>A. sedula</u>	Predator
<u>Enallagma</u> sp. (e.i.)	Predator
<u>E. coecum</u>	Predator
<u>E. pallidum</u> *	Predator
<u>E. pollutum</u>	Predator
<u>E. weewa</u>	Predator
<u>Ischnura</u> sp.	Predator
<u>I. hastada</u>	Predator
<u>I. polita</u>	Predator
<u>Telebasis byersi</u>	Predator
Anisoptera	
Aesnidae	
<u>Boyeria vinosa</u>	Predator
<u>Nasiaeschna pentacantha</u>	Predator
Corduliidae (e.i.)	Predator
<u>Epithea</u> sp.	Predator
Gomphidae e.i.	Predator
<u>Aphylla williamsoni</u>	Predator
<u>Dromogomphus</u> sp.	Predator
<u>Gomphus</u> sp.	Predator
<u>Stylurus</u> sp.	Predator
<u>S. plagiatus</u>	Predator
Libellulidae (e.i.)	Predator
Macromiidae (e.i.)	Predator
unk. e.i. Anisoptera	Predator
Hemiptera	
Belostomatidae (e.i.)	Predator
<u>Belostoma</u> sp.	Predator
<u>B. lutarium</u>	Predator
<u>Abedus</u> sp. or <u>Belostoma</u> sp.	Predator
Corixidae	
<u>Trichocorixa sexcinta</u>	Predator
Gerridae (e.i.)	Predator
<u>Aquarius</u> sp.	Predator
<u>Metrobates</u> sp.	Predator
<u>Trepobates</u> sp.	Predator
Hebridae	
<u>Merragata</u> sp.	Predator
<u>M. brunnea</u>	Predator
Mesoveliidae (e.i.)	Predator
<u>Mesovelia</u> sp.	Predator
<u>M. amoena</u>	Predator
<u>M. mulsanti</u>	Predator
Naucoridae	
<u>Pelocoris</u> sp.	Predator —

APPENDIX 2.3 continued.

<u>Taxon</u>	<u>Functional Group</u>
<u>P. femoratus</u>	Predator
Nepidae	
<u>Ranatra buen</u>	Predator
<u>R. nigra</u>	Predator
Saldidae	
<u>Microcanthia floridana</u>	Predator
Veliidae	
<u>Microvelia</u> sp.	Predator
Megaloptera	
Corydalidae	
<u>Chauliodes rasticornis</u>	Predator
<u>Corydalis cornutus</u>	Predator
Sialidae	
<u>Sialis</u> sp.	Predator
Trichoptera	
Hydropsychidae e.i.	Filterer
<u>Cheumatopsyche</u> sp.	Filterer
<u>Hydropsyche</u> sp.	Filterer
<u>H. rossi</u> or <u>venularis</u>	Filterer
Hydroptilidae e.i.	
<u>Hydroptila</u> sp.	Scraper/Plant Piercer
<u>Mayatrichia ayama</u>	Scraper
<u>Neotrichia</u> sp.	Scraper
<u>Orthotrichia</u> sp.	Plant Piercer
<u>Oxyethira</u> sp.	Scraper/Plant piercer
Leptoceridae e.i.	
<u>Nectopsyche</u> sp.	Gatherer
<u>N. candida</u>	Gatherer
<u>N. exquisita</u>	Gatherer
<u>N. pavid</u>	Gatherer
<u>Oecetis</u> sp.	Predator
<u>O. inconspicua</u> complex	Predator
<u>O. nocturna</u>	Predator
<u>O. persimilis</u>	Predator
<u>Triaenodes ignitus</u>	Shredder
<u>T. furcellus</u>	Shredder
Polycentropodidae (e.i.)	
<u>Cernotina</u> sp.	Predator
<u>Neureclipsis</u> sp.	Filterer
<u>N. crepuscularis</u>	Filterer
<u>Paranyctiophylax</u> sp.	Filterer
<u>Polycentropus</u> sp.	Filterer
<u>P. cinereus</u>	Filterer
Psychomyiidae (e.i.)	
<u>Lype diversa</u>	Scraper
Lepidoptera	

APPENDIX 2.3 continued.

<u>Taxon</u>	<u>Functional Group</u>
Pyralidae (e.i.)	
<u>Eoparargyractis</u> sp.	Shredder
<u>Neargyractis slossonalis</u>	Shredder
<u>Parapoynx</u> sp.	Shredder
<u>Petrophila</u> sp.	Scraper
<u>P. drumalis</u>	
<u>Synclita</u> sp.	Shredder
unk. e.i. Lepidoptera	
Coleoptera	
Dytiscidae	
<u>Cybister</u> sp.	Predator
<u>Hydrovatus pustulatus</u>	Predator
Elmidae (e.i.)	Gatherer, Scraper
<u>Dubiraphia vittata</u>	Gatherer, Scraper
<u>Microcylloepus pusillus</u>	Gatherer, Scraper
<u>Stenelmis</u> sp.	Gatherer, Scraper
<u>S. crenata</u>	Gatherer, Scraper
<u>S. hungerfordi</u>	Gatherer, Scraper
<u>S. hungerfordi</u> or <u>lignicola</u>	Gatherer, Scraper
<u>S. musgravei</u>	Gatherer, Scraper
Gyrinidae (e.i.)	Predator
<u>Dineutus</u> sp.	Predator
<u>D. angustus</u>	Predator
<u>D. discolor</u>	Predator
<u>D. serrulatus</u>	Predator
<u>D. assimilus</u> or <u>nigrior</u>	Predator
<u>Gyrinus</u> sp.	Predator
<u>G. elevatus</u>	Predator
Halipilidae	
<u>Halipilus</u> sp.	Shredder
<u>Peltodytes</u> sp.	Shredder/Predator
<u>P. dietrichi</u>	Shredder/Predator
<u>P. floridensis</u>	Shredder/Predator
<u>P. oppositus</u>	Shredder/Predator
Hydrophilidae	
<u>Hydrochus</u> sp. 3 (Epler)	Shredder
<u>Tropisternis</u> sp.	Predator (larvae)
	Shredder (adults)
Scirtidae (e.i.)	
<u>Cyphon</u> sp.	
Hymenoptera	
Braconidae	Parasite
Scelionidae	Parasite
Diptera	
Ceratopogonidae	
<u>Alluaudomyia</u> sp.	Predator —

APPENDIX 2.3 continued.

<u>Taxon</u>	<u>Functional Group</u>
<u>Atrichopogon</u> sp.	Gatherer
<u>Atrichopogon</u> or <u>Forcipimyia</u>	Gatherer
<u>Bezzia</u> sp. or <u>Palpomyia</u> sp.	Predator
<u>Ceratopogon</u> sp.	Predator
<u>Clinohelia</u> sp.	Predator
<u>Daseyhelina</u> sp.	Gatherer
<u>Forcipimyia</u> sp.	Gatherer
<u>Mallochohelina</u> sp.	Predator
<u>Palpomyia</u> complex	Predator, Gatherer
<u>Probezzia</u> sp.	Predator
<u>Sphaeromyia</u> sp.	Predator, Gatherer
unk. e.i. Ceratopogonidae	
Chironomidae	
Tanyptorinae (e.i.)	
<u>Ablabesmyia</u> sp.	Predator
<u>A. (Karelia)</u> sp.	Predator
<u>A. annulata</u>	Predator
<u>A. mallochii</u>	Predator
<u>A. ramphe</u> group	Predator
<u>Clinotanyptus</u> sp.	Predator
<u>Dialmabatista pulchra</u>	Predator
<u>Fittkauimyia serti</u>	Predator
<u>Labrundinia</u> sp.	Predator
<u>L. becki</u>	Predator
<u>L. johannseni</u>	Predator
<u>L. pilosella</u>	Predator
<u>Larsia</u> sp.	Predator
<u>L. decolorata</u>	Predator
<u>L. indistincta</u>	Predator
<u>Monopelopia boliekae</u>	Predator
<u>Nilotanyptus fimbriatus</u>	Predator
<u>Paramerina</u> sp.	Predator
<u>Pentaneura inconspicua</u>	Predator
<u>Procladius</u> sp.	Predator
Orthoclaadiinae (e.i.)	
<u>Corynoneura</u> sp.	Gatherer
<u>C. taris</u>	Gatherer
<u>Corynoneura</u> sp. C (Epler)	Gatherer
<u>Cricotopus bicinctus</u>	Grazer
<u>Cricotopus</u> or <u>Orthocladus</u>	
<u>Epoicocladus flavens</u>	Gatherer
<u>Nanocladus</u> sp.	Gatherer
<u>N. balticus</u>	Gatherer
<u>Rheocricotopus robacki</u>	Gatherer
<u>Stilocladus</u> sp.	
<u>Thiennemaniella</u> sp.	Grazer

APPENDIX 2.3 continued.

<u>Taxon</u>	<u>Functional Group</u>
<u>T. cf. similis</u>	Grazer
<u>Thienemaniella</u> sp. A	Grazer
Chironominae	
Chironomini (e.i.)	
<u>Apedilum</u> sp.	Gatherer
<u>Beardius truncatus</u>	Gatherer
<u>Chironomus</u> sp.	Gatherer
<u>Chironomus</u> sp. or <u>Einfeldia</u> sp.	Gatherer
<u>Cladopelma</u> sp.	Gatherer
<u>Cryptochironomus</u> sp.	Gatherer
<u>Cryptotendipes</u> sp.	Gatherer
<u>Demicryptochironomus</u> sp.	Gatherer
<u>Dicrotendipes</u> sp. (e.i.)	Gatherer
<u>D. modestus</u>	Gatherer
<u>D. neomodestus</u>	Gatherer
<u>D. tritonus</u> or <u>modestus</u>	Gatherer
<u>Dicrotendipes</u> sp. A (Epler)	Gatherer
<u>Endotribelos hesperium</u>	Gatherer
<u>Fissimentum</u> sp.	Gatherer
<u>Glyptotendipes</u> sp.	Gatherer
<u>Goeldichironomus</u> sp.	Gatherer
<u>G. amazonicus</u>	Gatherer
<u>Harnischia</u> complex	Gatherer
<u>Microtendipes pedellus</u>	Gatherer
<u>Nilothauma</u> sp.	
<u>Pagastiella</u> sp.	
<u>Parachironomus</u> sp.	Predator
<u>Paracladopelma</u> sp.	
<u>Paralauterborniella</u>	Gatherer
<u>nigrohalterale</u>	
<u>Paratendipes subequalis</u>	Gatherer
<u>Phaenopsectra</u> sp.	Gatherer
<u>Phaenopsectra</u> sp. or <u>Tribelos</u> sp.	Gatherer
<u>Polypedilum</u> sp. e.i.	Gatherer
<u>P. convictum</u> group	Gatherer
<u>P. fallax</u> group	Gatherer
<u>P. halterale</u>	Gatherer
<u>P. illinoense</u>	Gatherer
<u>P. scalaenum</u>	Gatherer
<u>P. trigonus</u>	Gatherer
<u>P. tritum</u>	Gatherer
<u>Polypedilum</u> sp. A (Epler)	Gatherer
<u>Stenochironomus</u> sp.	Shredder
<u>Stelechomyia perpulchra</u>	?
<u>Tribelos</u> sp.	Gatherer
<u>T. fuscicorne</u>	

APPENDIX 2.3 continued.

<u>Taxon</u>	<u>Functional Group</u>
<u>Xestochironomus xenolabis</u>	Shredder
<u>Zavreliella marmorata</u>	Gatherer
Pseudochironomini	
<u>Pseudochironomus</u> sp.	Gatherer
Tanytarsini (e.i.)	
<u>Cladotanytarsus</u> sp.	Gatherer
<u>Paratanytarsus</u> sp.	Gatherer
<u>Rheotanytarsus</u> sp.	Filterer
<u>Stempellina</u> sp.	Gatherer
<u>Stempellinella</u> sp.	Gatherer
<u>Tanytarsus</u> sp. (e.i.)	Gatherer
<u>Tanytarsus limnetica</u>	Gatherer
<u>Tanytarsus</u> sp. A (Epler)	Gatherer
<u>Tanytarsus</u> sp. E (Epler)	Gatherer
<u>Tanytarsus</u> sp. F (Epler)	Gatherer
<u>Tanytarsus</u> sp. G (Epler)	Gatherer
<u>Tanytarsus</u> sp. L (Epler)	Gatherer
<u>Tanytarsus</u> sp. M (Epler)	Gatherer
<u>Tanytarsus</u> sp. P (Epler)	Gatherer
<u>Tanytarsus</u> sp. R (Epler)	Gatherer
<u>Tanytarsus</u> sp. T (Epler)	Gatherer
<u>Tanytarsus</u> sp. V (Epler)	Gatherer
Culicidae	
<u>Anopheles</u> sp.	Filterer
<u>A. quadrimaculatus</u>	
<u>Uranotaenia</u> sp.	Filterer
Empididae	
<u>Hemerodromia</u> sp.	
Ephydriidae	
<u>Notiphila</u> sp.	Gatherer
Muscidae	Predator
Stratiomyidae	Gatherer
<u>Myxosargus</u> sp.	
<u>Odontomyia</u> sp.	
<u>Odontomyia</u> sp. or	
<u>Hedriodiscus</u> sp.	
Tabanidae	Predator
Tipulidae	
<u>Helius</u> sp.	
<u>Limonia</u> sp.	Shredder

APPENDIX 2.4

Alphabetical listing of dominant invertebrate taxa codes and corresponding scientific names. Codes appear in canonical correspondence analysis biplots, Figures 2.17 through 2.21.

APPENDIX 2.4. Alphabetical listing of dominant invertebrate taxa codes and corresponding scientific names. Codes appear in canonical correspondence analysis biplots, Figures 2.17 through 2.21.

<u>Taxon Code</u>	<u>Scientific Name</u>	<u>Major Group</u>
ANCDE	Ancylidae imm.	Gastropoda
AULPI	<u>Aulodrilus piqueti</u>	Oligochaeta
BAEDE	Baetidae e.i.	Ephemeroptera
BEZPA	<u>Bezzia</u> or <u>Palpomyia</u> sp.	Ceratopogonidae
BR SMA	<u>Brachycercus maculatus</u>	Ephemeroptera
CACSP	<u>Caecidotia</u> sp.	Isopoda
CAEDI	<u>Caenis diminuta</u>	Ephemeroptera
CASOV	<u>Cassidinidea ovalis</u>	Isopoda
CNASP	<u>Cernotina</u> sp.	Trichoptera
CNNSP	<u>Corynoneura</u> sp.	Chironomidae
COEDE	Coenagrionidae e.i.	Odonata
CPESP	<u>Cheumatopsyche</u> sp.	Trichoptera
CRBFL	<u>Corbicula fluminea</u>	Pelecypoda
CRIBI	<u>Cricotopus bicinctus</u>	Chironomidae
CRIOR	<u>Cricotopus</u> or <u>Orthocladius</u>	Chironomidae
CRISP	<u>Cricotopus</u> sp.	Chironomidae
CTTSP	<u>Cladotanytarsus</u> sp.	Chironomidae
CYTSP	<u>Cryptotendipes</u> sp.	Chironomidae
DERPE	<u>Dero pectinata</u>	Oligochaeta
DICNE	<u>Dicrotendipes neomodestus</u>	Chironomidae
DICSP	<u>Dicrotendipes</u> sp.	Chironomidae
DUBVI	<u>Dubiraphia vittata</u>	Coleoptera
ELAFL	<u>Elimia floridensis</u>	Gastropoda
ELMDE	Elmidae e.i.	Coleoptera
ENASP	<u>Enallagma</u> sp.	Odonata
ETSHE	<u>Endotribelos hesperium</u>	Chironomidae
FISSP	<u>Fissimentum</u> sp.	Chironomidae
GAMSP	<u>Gammarus</u> sp.	Amphipoda
HDADE	Hydroptilidae e.i.	Trichoptera
HDTSP	<u>Hydroptila</u> sp.	Trichoptera
HEPDE	Heptageniidae e.i.	Ephemeroptera
HEXLI	<u>Hexagenia limbata</u>	Ephemeroptera
HIASP	<u>Hemerodromia</u> sp.	Empididae
HSDDE	Hydropsychidae e.i.	Trichoptera
HSEVR	<u>Hydropsyche venularis</u> or <u>rossi</u>	Trichoptera
HYAAZ	<u>Hyaella azteca</u>	Amphipoda
HYCNA	Hydracarina	Aquatic Acari
IMAMP	immature Amphipoda	Amphipoda
IMCER	early instar Ceratopogonidae	Ceratopogonidae
IMLEP	early instar Lepidoptera	Lepidoptera
IMPEL	immature Pelecypoda	Pelecypoda
LABBE	<u>Labrundinia becki</u>	Chironomidae
LABJO	<u>Labrundinia johannseni</u>	Chironomidae

APPENDIX 2.4. continued.

<u>Taxon Code</u>	<u>Scientific Name</u>	<u>Major Group</u>
LABPI	<u>Labrundinia pilosella</u>	Chironomidae
LABSP	<u>Labrundinia</u> sp.	Chironomidae
LARSP	<u>Larsia</u> sp.	Chironomidae
LBSEP	<u>Labiobaetis ephippiatus</u>	Ephemeroptera
LPTDE	Leptoceridae e.i.	Trichoptera
MCPCU	<u>Microcylloepus pusillus</u>	Coleoptera
NANSP	<u>Nanocladius</u> sp.	Chironomidae
NAIVA	<u>Nais variabilis</u>	Oligochaeta
NECPA	<u>Nectopsyche pavida</u>	Trichoptera
NECSP	<u>Nectopsyche</u> sp.	Trichoptera
NEOSP	<u>Neotrichia</u> sp.	Trichoptera
NOTWE	<u>Notoyllia wetherbyi</u>	Gastropoda
OECSP	<u>Oecetis</u> sp.	Trichoptera
OXYSP	<u>Oxyethira</u> sp.	Trichoptera
PALPA	<u>Palaemonetes paludosus</u>	Decapoda
PCDDE	Polycentropodidae e.i.	Trichoptera
PBANI	<u>Paralauterborniella nigrohalteralis</u>	Chironomidae
PENIN	<u>Pentaneura inconspicua</u>	Chironomidae
PETSP	<u>Petrophila</u> sp.	Lepidoptera
PHYSP	<u>Physella</u> sp.	Lepidoptera
PNALI	<u>Paranais litoralis</u>	Oligochaeta
POLCO	<u>Polypedilum convictum</u> gr.	Chironomidae
POLIL	<u>Polypedilum illinoense</u>	Chironomidae
POLSC	<u>Polypedilum scalaenum</u>	Chironomidae
POLSP	<u>Polypedilum</u> sp.	Chironomidae
POLTR	<u>Polypedilum trigonus</u>	Chironomidae
PONHO	<u>Procleon hobbsi</u>	Ephemeroptera
PRIAE	<u>Pristina aequiseta</u>	Oligochaeta
PRILE	<u>Pristina leidyi</u>	Oligochaeta
PRISP	<u>Pristina</u> sp.	Oligochaeta
PSESP	<u>Pseudochironomus</u> sp.	Chironomidae
PZASP	<u>Probezzia</u> sp.	Ceratopogonidae
RTTSP	<u>Rheotanytarsus</u> sp.	Chironomidae
SMSSP	<u>Stenochironomus</u> sp.	Chironomidae
SONIN	<u>Stenacron interpunctatum</u>	Ephemeroptera
SPHDE	Sphaeriidae imm.	Pelecypoda
STPSP	<u>Stempellina</u> sp.	Chironomidae
STSSP	<u>Stenelmis</u> sp.	Coleoptera
SYAPE	<u>Stelechomyia perpulchra</u>	Chironomidae
TCSAL	<u>Tricorythodes albilineatus</u>	Ephemeroptera
THIAA	<u>Thienemanniella</u> sp. A (Epler)	Chironomidae
THISP	<u>Thienemanniella</u> sp.	Chironomidae
TNYPO	Tanypodinae e.i.	Chironomidae
TRISP	<u>Tribelos</u> sp.	Chironomidae
TTSEE	<u>Tanytarsus</u> sp. E (Epler)	Chironomidae
TTSSP	<u>Tanytarsus</u> sp.	Chironomidae

APPENDIX 2.4. continued.

<u>Taxon Code</u>	<u>Scientific Name</u>	<u>Major Group</u>
TTSTT	<u>Tanytarsus</u> sp. T (Epler)	Chironomidae
UIWCS	unid. imm. w/ capilliiform setae	Oligochaeta
VIVGE	<u>Viviparus georgianus</u>	Gastropoda

e.i. = early instar insect not identifiable to species level.
 imm. = immature noninsect not identifiable to species level.

APPENDIX 2.5

Mean densities (no. m⁻²), coefficients of variation (cv), and percent compositions of invertebrate taxa collected from sediments beneath three vegetated habitats in the lower segment of the Wekiva River study area during autumn 1997.

APPENDIX 2.5. Mean densities (no. m⁻²), coefficients of variation (cv), and percent compositions of invertebrate taxa collected from sediments beneath three vegetated habitats in the lower segment of the Wekiva River study area during autumn 1997.

<u>Taxon</u>	<u>Habitat</u>		
	<u>Vallisneria</u>	<u>Typha</u>	<u>Najas</u>
	\bar{x} # m ⁻² (cv)	\bar{x} # m ⁻² (cv)	\bar{x} # m ⁻² (cv)
	% n=3	% n=6	% n=3
Nematoda	5,594 (0.49) 17.5	576 (1.14) 2.5	4,113 (0.25) 9.5
Annelida			
Hirudinia	494 (1.00) 1.5	---	---
Oligochaeta (total)	11,846 (0.75) 37.1	1,481 (1.33) 6.4	12,833 (0.17) 29.7
Enchytraeidae (total)	494 (1.73) 1.5	---	---
Naididae (total)	1,645 (0.46) 5.1	1,481 (1.33) 6.4	4,278 (0.44) 9.9
<u>Allonais inequalis</u>	---	82 (2.45) 0.4	---
<u>Bratislavia unidentata</u>	165 (1.73) 0.5	---	---
<u>Dero</u> sp.	165 (1.73) 0.5	82 (2.45) 0.4	---
<u>D. flabelliger</u>	---	---	329 (1.73) 0.8
<u>D. nivea</u> or <u>obtusa</u>	---	82 (2.45) 0.4	---
<u>D. pectinata</u>	165 (1.73) 0.5	---	494 (1.00) 1.1
<u>Nais variabilis</u>	165 (1.73) 0.5	---	---
<u>Pristina</u> sp.	329 (1.73) 1.0	494 (1.26) 2.1	494 (1.00) 1.1

APPENDIX 2.5 continued.

Taxon	Habitat		
	Vallisneria	Typha	Najas
	\bar{X} # m ⁻² (cv)	\bar{X} # m ⁻² (cv)	\bar{X} # m ⁻² (cv)
	% n=3	% n=6	% n=3
<u>P. aequisetata</u>	---	329 (1.22) 1.4	---
<u>P. leidyi</u>	---	329 (2.45) 1.4	329 (1.73) 0.8
<u>P. synclites</u>	658 (0.87) 2.1	---	1,316 (1.08) 3.0
<u>Pristinella osborni</u>	---	---	494 (1.73) 1.1
<u>Slavina appendiculata</u>	---	---	165 (1.73) 0.4
Unknown Naididae	---	82 (2.45) 0.4	823 (0.35) 1.9
Tubificidae (total)	9,213 (0.75) 28.8	---	8,226 (0.28) 19.0
<u>Aulodrilus piqueti</u>	---	---	1,152 (1.38) 2.7
<u>Haber speciosus</u>	494 (1.73) 1.5	---	---
<u>Ilyodrilus templetoni</u>	329 (1.73) 1.0	---	---
<u>Limnodrilus hoffmeisteri</u>	165 (1.73) 0.5	---	165 (1.73) 0.4
<u>Psammoryctides convolutus</u>	987 (1.73) 3.1	---	---
UIWCS	2,139 (1.54) 6.7	---	3,126 (1.73) 7.2
UIWCS	3,620 (0.70) 11.3	---	3,784 (0.85) 8.7

APPENDIX 2.5 continued.

<u>Taxon</u>	<u>Habitat</u>		
	<u>Vallisneria</u>	<u>Typha</u>	<u>Najas</u>
	\bar{x} # m ⁻² (cv)	\bar{x} # m ⁻² (cv)	\bar{x} # m ⁻² (cv)
	% n=3	% n=6	% n=3
Lumbriculidae (total)	329 (0.86) 1.0	---	---
<u>Eclipidrilus palustris</u>	165 (1.73) 0.5	---	---
<u>Lumbriculus variegatus</u>	165 (1.73) 0.5	---	---
Mollusca			
Gastropoda (total)	493 (1.00) 1.5	329 (1.22) 1.4	658 (1.14) 1.5
Ancylidae (imm.)	---	247 (1.67) 1.1	---
Hydrobiidae			
<u>Amnicola dalli</u> ssp.	165 (1.73) 0.5	---	---
<u>Littoridinops</u> sp.	---	82 (2.45) 0.4	---
<u>Notoqillia wetherbyi</u>	---	---	165 (1.73) 0.4
Planorbidae			
<u>Gyraulus parvus</u>	---	---	165 (1.73) 0.4
Pleuroceridae			
<u>Elimia floridensis</u>	329 (1.73) 1.0	---	658 (0.87) 1.5
Viviparidae			
<u>Viviparus georgianus</u>	---	---	165 (1.73) 0.4
Pelecypoda (total)	494 (1.00) 1.5	---	2,139 (1.14) 4.9

APPENDIX 2.5 continued.

Taxon	Habitat		
	<u>Vallisneria</u>	<u>Typha</u>	<u>Najas</u>
	\bar{x} # m ⁻² (cv)	\bar{x} # m ⁻² (cv)	\bar{x} # m ⁻² (cv)
	% n=3	% n=6	% n=3
Corbiculidae			
<u>Corbicula fluminea</u>	329 (0.87) 1.0	---	1,810 (1.50) 4.2
Sphaeriidae			
<u>Pisidium</u> sp.	---	---	165 (1.73) 0.4
Unionidae			
<u>Villosa</u> sp.	165 (1.73) 0.5	---	---
imm. Pelecypoda	---	---	165 (1.73) 0.4
Arthropoda			
Crustacea			
Amphipoda (total)	987 (1.73) 3.1	905 (1.40) 4.3	2,304 (0.75) 5.3
Gammaridae			
<u>Gammarus</u> sp.	987 (1.73) 3.1	---	1,645 (0.87) 3.8
Hyalellidae			
<u>Hyalella azteca</u>	---	823 (1.35) 3.6	658 (1.14) 1.5
imm. Amphipoda	---	82 (2.45) 0.4	---
Isopoda (total)	494 (1.00) 1.5	---	---
Sphaeromidae			
<u>Cassidinidea ovalis</u>	494 (1.00) 1.5	---	---
Decapoda			
Palaemonidae			
<u>Palaemonetes paludosus</u>	---	82 (2.45) 0.4	---
Aquaric Acari (total)	3,455 (0.94) 10.8	1,810 (0.99) 7.9	494 (1.00) 1.1

APPENDIX 2.5 continued.

Taxon	Habitat		
	Vallisneria	Typha	Najas
	\bar{X} # m ⁻² (cv)	\bar{X} # m ⁻² (cv)	\bar{X} # m ⁻² (cv)
	% n=3	% n=6	% n=3
Hydracarina	1,316 (1.73) 4.1	164 (2.45) 0.7	494 (1.00) 1.1
Oribatidae	---	1,645 (1.16) 7.1	---
Insecta			
Collembola (total)	165 (1.73) 0.5	12,751 (1.25) 55.4	---
Ephemeroptera (total)	3,455 (1.24) 10.8	576 (1.75) 2.5	1,316 (0.94) 3.0
Baetidae (e.i.)	1,974 (1.73) 6.2	---	---
<u>Labiobaetis ehippiatus</u>	823 (1.73) 2.6	---	---
Caenidae			
<u>Brachycercus maculatus</u>	165 (1.73) 0.5	---	---
<u>Caenis diminuta</u>	165 (1.73) 0.5	576 (1.75) 2.5	---
Tricorythidae			
<u>Tricorythodes</u> <u>albilineatus</u>	329 (1.73) 1.0	---	1,316 (0.94) 3.0
Odonata			
Zygoptera (total)	---	82 (2.45) 0.4	---
Coenagrionidae (e.i.)	---	82 (2.45) 0.4	---
Anisoptera (total)	---	82 (2.45) 0.4	---

APPENDIX 2.5 continued.

Taxon	Habitat		
	Vallisneria	Typha	Najas
	\bar{x} # m ⁻² (cv)	\bar{x} # m ⁻² (cv)	\bar{x} # m ⁻² (cv)
	% n=3	% n=6	% n=3
Libellulidae (e.i.)	---	82 (2.45) 0.4	---
Hemiptera (e.i.;total)	---	82 (2.45) 0.4	---
Trichoptera (total)	165 (1.73) 0.5	---	494 (1.00) 1.1
Hydroptilidae e.i.	---	---	329 (1.73) 0.8
<u>Neotrichia</u> sp.	165 (1.73) 0.5	---	---
Leptoceridae			
<u>Oecetis</u> sp.	---	---	165 (1.73) 0.4
Diptera			
Ceratopogonidae (total)	1,152 (0.49) 3.6	494 (0.89) 2.1	2,303 (0.69) 5.3
<u>Bezzia</u> sp. or <u>Palpomyia</u> sp.	165 (1.73) 0.5	---	823 (0.35) 1.9
<u>Clinohelia</u> sp.	---	164 (2.45) 0.7	---
<u>Mallochohelia</u> sp.	---	---	329 (1.73) 0.8
<u>Probezzia</u> sp.	---	---	165 (1.73) 0.4
unk. e.i. Ceratopogonidae	987 (0.50) 3.1	329 (1.22) 1.4	987 (1.00) 2.3

APPENDIX 2.5 continued.

Taxon	Habitat		
	Vallisneria	Typha	Najas
	\bar{X} # m ⁻² (cv)	\bar{X} # m ⁻² (cv)	\bar{X} # m ⁻² (cv)
	% n=3	% n=6	% n=3
Chironomidae (total)	3,126 (0.51) 9.8	2,961 (1.13) 12.9	16,123 (0.52) 37.3
Tanypodinae			
<u>Ablabesmyia</u> sp.	---	---	165 (1.73) 0.4
<u>A. ramphe</u> group	---	164 (2.45) 0.7	---
<u>Clinotanypus</u> sp.	---	---	329 (0.87) 0.8
<u>Labrundinia</u> sp.	---	82 (2.45) 0.4	---
<u>L. pilosella</u>	165 (1.73) 0.5	---	165 (1.73) 0.4
<u>Larsia</u> sp.	---	164 (2.45) 0.7	165 (1.73) 0.4
<u>Monopelopia boliekae</u>	---	247 (1.67) 1.1	---
<u>Procladius</u> sp.	165 (1.73) 0.5	---	---
Orthocladiinae			
<u>Corynoneura</u> sp.	---	82 (2.45) 0.4	---
<u>Corynoneura</u> sp. C (Epler)	---	82 (2.45) 0.4	---
<u>Cricotopus bicinctus</u>	165 (1.73) 0.5	---	---
<u>Nanocladius</u> sp.	---	---	165 (1.73) 0.4

APPENDIX 2.5 continued.

Taxon	Habitat		
	Vallisneria	Typha	Najas
	\bar{X} # m ⁻² (cv)	\bar{X} # m ⁻² (cv)	\bar{X} # m ⁻² (cv)
	% n=3	% n=6	% n=3
<u>Thienemanniella</u> sp.	---	82 (2.45) 0.4	---
Chironominae			
Chironmini (e.i.)	---	82 (2.45) 0.4	329 (0.87) 0.8
<u>Chironomus</u> sp.	---	82 (2.45) 0.4	823 (1.73) 1.9
<u>Cladopelma</u> sp.	---	---	165 (1.73) 0.4
<u>Cryptochironomus</u> sp.	494 (0.00) 1.5	---	329 (0.87) 0.8
<u>Cryptotendipes</u> sp.	---	---	1,645 (0.46) 3.8
<u>Dicrotendipes</u> sp. (e.i.)	165 (1.73) 0.5	---	2,468 (1.22) 5.7
<u>D. modestus</u>	---	---	329 (1.73) 0.8
<u>D. neomodestus</u>	---	---	165 (1.73) 0.4
<u>Fissimentum</u> sp.	329 (1.73) 1.0	---	---
<u>Paralauterborniella</u> <u>nigrohalteralis</u>	329 (0.87) 1.0	82 (2.45) 0.4	---
<u>Polypedilum</u> sp. e.i.	---	247 (1.67) 1.1	---
<u>P. halterale</u>	658 (0.43) 2.1	822 (1.59) 3.6	5,758 (0.88) 13.3
<u>P. illinoense</u>	---	247 (1.67) 1.1	---
	2.179		

APPENDIX 2.5 continued.

Taxon	Habitat		
	Vallisneria	Typha	Najas
	\bar{X} # m ⁻² (cv)	\bar{X} # m ⁻² (cv)	\bar{X} # m ⁻² (cv)
	% n=3	% n=6	% n=3
<u>P. scalaenum</u>	---	---	658 (0.87) 1.5
<u>P. trigonus</u>	165 (1.73) 0.5	---	---
<u>Zavreliella marmorata</u>	---	165 (1.55) 0.7	---
Pseudochironomini			
<u>Pseudochironomus</u> sp.	---	---	2,138 (0.87) 4.9
Tanytarsini			
<u>Paratanytarsus</u> sp.	329 (0.87) 1.0	---	165 (1.73) 0.4
<u>Rheotanytarsus</u> sp.	---	82 (2.45) 0.4	---
<u>Tanytarsus</u> sp. (e.i.)	165 (1.73) 0.5	---	165 (1.73) 0.4
<u>Tanytarsus limnetica</u>	---	82 (2.45) 0.4	---
<u>Tanytarsus</u> sp. T (Epler)	---	82 (2.45) 0.4	---
Culicidae (total)	---	82 (2.45) 0.4	---
Ephydridae (total)	---	576 (2.06) 2.5	---
Stratiomyidae (total)	---	82 (2.45) 0.4	---
<u>Odontomyia</u> sp. or <u>Hedriodiscus</u> sp.	---	82 (2.45) 0.4	---

APPENDIX 2.5 continued.

<u>Parameters</u>	<u>Habitat</u>		
	<u>Vallisneria</u>	<u>Typha</u>	<u>Najas</u>
	\bar{X} # m ⁻² (cv)	\bar{X} # m ⁻² (cv)	\bar{X} # m ⁻² (cv)
	%	%	%
	n=3	n=6	n=3
Mean Total Organisms m ⁻²	31,918 (0.28)	23,033 (0.54)	43,270 (0.23)
Total Species Richness	38	34	41
Mean Species Richness	19 (0.38)	10 (0.62)	22 (0.03)
Mean Diversity	3.33 (0.21)	2.32 (0.59)	3.88 (0.06)
Mean Evenness	0.79 (0.06)	0.70 (0.33)	0.86 (0.06)

--- = taxon not present.

C = colonial taxon not enumerated.

imm. = unidentifiable immature non-insect.

e.i. = unidentifiable early instar insect.

UIWCS = unidentifiable immature Oligochaeta with capilliform setae.

UIWOCS = unidentifiable immature Oligochaeta without capilliform setae.

III. FISH COMMUNITIES

1. Effects of Habitat and Season on Fish Communities of the Wekiva River System, Florida

Introduction

Rapid human population growth has caused extensive development-related disturbances of many of Florida's natural areas. Preservation of these areas despite continuing urban expansion is a primary goal of government and private entities concerned with maintaining Florida's natural heritage. One of the remaining pristine stream ecosystems in the central region of the state is the Wekiva River. The Wekiva River system has been designated an Outstanding Florida Water and is characterized by good water quality (low Florida Stream Water Quality Index value), constant spring flow, and a high degree of habitat complexity; these characteristics combine to support diverse fish and wildlife communities (Hupalo et al. 1994). The Wekiva River has good water quality despite surrounding development from the expansion of the Orlando metropolitan area. As urbanization continues, groundwater withdrawal-related stream flow reductions could adversely influence stream-dwelling fish communities and their habitats (Rao and Clapp 1996).

Evaluation of the current status of the Wekiva River system using fish communities and habitat assessments would provide baseline information for future comparisons.

Canfield and Hoyer (1988) examined the fish communities and water chemistry of the Wekiva and Little Wekiva Rivers to assess the nutrient assimilation capacity of the Little Wekiva River. Their study was completed in response to a growing concern that the addition of nutrients from treated municipal effluent was causing excessive plant growth which hindered canoe and boat traffic. They compared fish communities of the Little Wekiva River with those of 16 other Florida streams, including the Wekiva River and several other spring-fed streams. Habitats sampled were limited to areas of the river with open and closed forest canopy, and their sampling effort via blocknet-electrofishing was biased towards larger (>100 mm total length [TL]) fish.

With the exception of Canfield and Hoyer (1988), there have been few studies of riverine fish and plant community interactions in Florida spring-fed streams. Odum (1957) examined the trophic structure and productivity of Silver Springs, Florida, but was not habitat or fish specific.

Other studies have been focused on the relationship between fish communities and aquatic macrophytes in lakes (Colle et al. 1987, Maceina et al. 1991). A 1983 lake study by Schramm et al. concluded that only 8 of 22 species of fish collected exhibited habitat preferences. The remaining fish species showed no preference for specific habitats but preferred habitats with abundant macrophytes. Epiphytic macroinvertebrate abundance also affected fish

distribution. Canfield and Hoyer (1992) examined 60 Florida lakes for the effect of water chemistry and aquatic macrophyte abundance on largemouth bass, harvestable sport fish, and total fish abundance. Their study examined the gross abundance of aquatic plants (percent areal coverage and percent volume infested) and not specific aquatic plant species.

There are 289 fishes recorded from rivers in Florida, about 113 of these are native North American freshwater fish species, and 16 of these are fishes endemic to Florida, or Florida and adjacent portions of Alabama and Georgia (Bass 1991). Because of limited current data available on the fish of the Wekiva River system, the objectives of this fish community study were to:

1. Document the presence of fish species (Chapter 3, Sections 1 and 2),
2. Quantitatively describe fish communities of specific aquatic habitats (Chapter 3, Sections 1 and 2),
3. Determine the influence of low and high water levels on habitat selection by fish (Chapter 3, Sections 1 and 2),
4. Compare the fish community of the Wekiva River system to fish communities of similar spring-fed stream in Florida (Chapter 3, Section 3),
5. Predict the probable response of the fish community to reduced flow (discharge) based upon the baseline data/models developed in the study (Chapter 4).

By the year 2000, between 15 and 16 million people will be living in Florida. This rapid urbanization, especially around the Orlando area, will adversely affect spring-fed aquatic environments, such as the Wekiva River system, unless growth is controlled (Bass 1991). Some measure of long-term trends in abundance and species composition of these fish communities is needed. This information is crucial to understand the potential impacts of future water level reductions on the fish and aquatic plant communities and to implement preventative strategies to preserve these valuable resources.

Methods

Study Site Description

In the Wekiva River and Little Wekiva River, the dominant aquatic vascular plant species is Vallisneria americana Michx. (American eelgrass) (Hupalo et al. 1994). Other dominant habitats in the Wekiva River were Hydrocotyle umbellata L. (water pennywort), Nuphar luteum (L.) Sibth & Sm. (spatterdock or yellow cow lily), and bare bottom (little to no macrophytes) (W.S.S.A. 1989, Hupalo 1997). Aquatic plant maintenance control by spraying (Cichra and VanGenechten, personal observation while on the river) has likely reduced the dominance of Eichhornia crassipes and Pistia stratiotes. Aquatic macrophytes will be further referred to in this chapter by genus.

Fish communities in four morphometrically distinct river segments were studied (Figure 3.1.1). Two of these segments, the Little Wekiva River and the upper Wekiva River (the Wekiva River from Wekiva Springs to its confluence with the Little Wekiva River), contain springs and are relatively narrow, meandering, and canopied for a large percentage of their length. The dominant habitats in the Little Wekiva River and upper Wekiva were Vallisneria, Hydrocotyle, and Nuphar. The substrates were sand to silty-sand in the Vallisneria and fine organic and woody debris to flocculent muck in the Nuphar and Hydrocotyle. These two stream reaches were considered separate study segments because the Little Wekiva River receives effluents

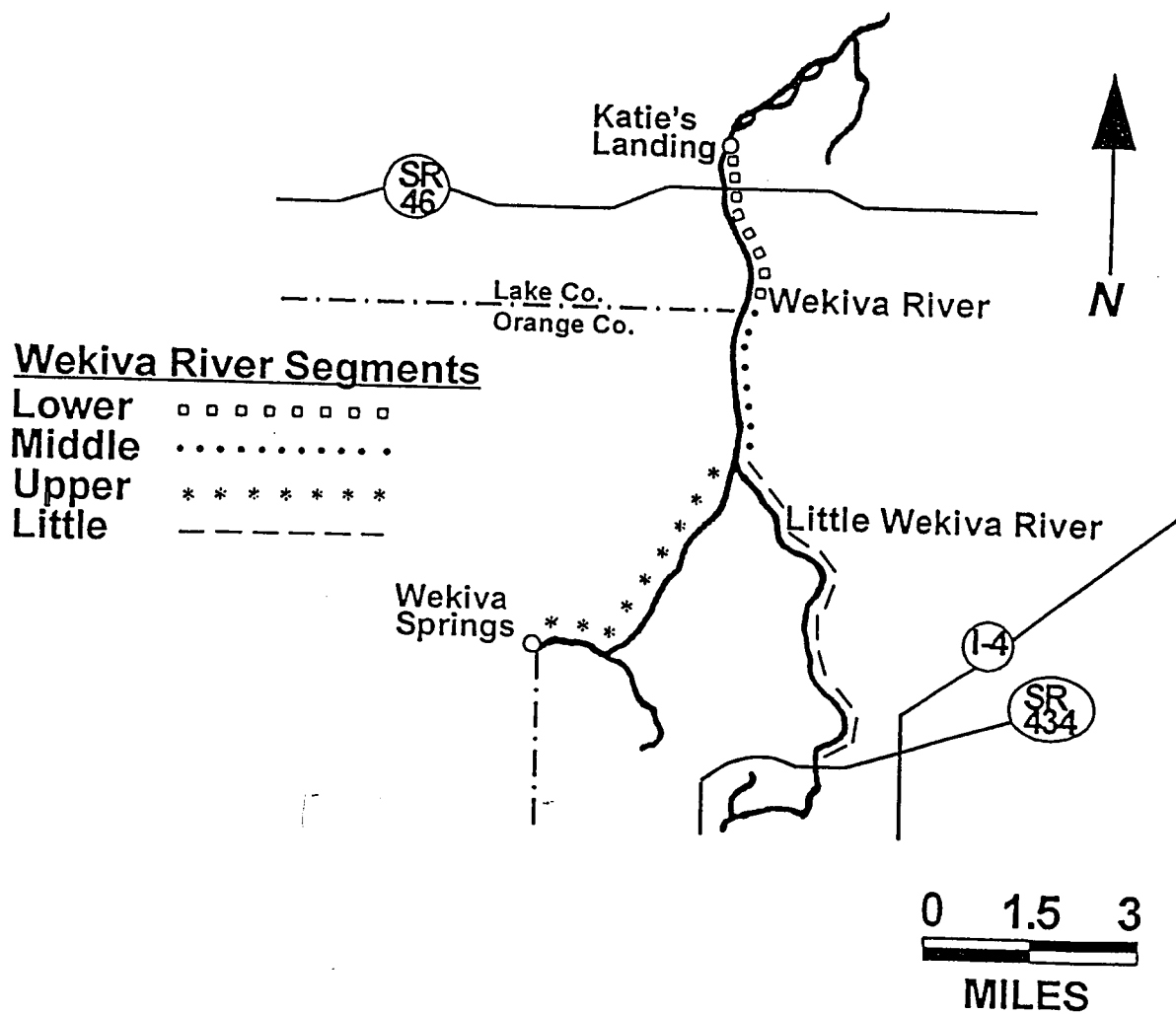


FIGURE 3.1.1. Map of Wekiva and Little Wekiva River study area, Florida, 1997.

from the Altamonte Springs regional wastewater treatment facility. The third study segment was the stream reach from the confluence of the Wekiva River and Little Wekiva River downstream to the railroad bridge (near the Lake County/Orange County line, Figure 3.1.1). This middle Wekiva River segment was characterized by a wider stream channel and alternating canopied and exposed areas. The dominant habitats within this stream reach were Vallisneria, Hydrocotyle, Nuphar, and bare sediments (no aquatic macrophytes). The substrates occurring within these habitats were the same as the upper Wekiva River and Little Wekiva River with the exception being the bare habitat which was generally sand or silty-sand. The fourth study segment, the lower Wekiva River from the railroad bridge downstream to Katie's Wekiva River Landing (Figure 3.1.1), was the widest and most rapidly flowing of the four study segments. This segment of the Wekiva River was shallow with limited riparian canopy. Large expanses of the submersed macrophyte Vallisneria were present. The dominant habitats were Vallisneria and bare bottom. Nearly all of the substrate occurring within this region was hard sand to silty-sand.

Plant and Fish Sampling

Sample Design

The Wekiva River and Little Wekiva River fish communities were sampled using two quantitative methods in

specific habitats: one-meter square throw traps targeting small (<100 mm total length [TL]) fish and blocknets for large (>10 mm body depth) fish. Fish communities in each of the four river segments (Figure 3.1.1) were sampled during the spring (May through July) and fall (October through November) of 1997, corresponding to historical low water levels and high water levels, respectively (Hupalo et al. 1994). Stream discharge in 1997 (Figure 3.1.2), however, did not follow previous seasonal patterns based on the USGS SR 46 gauging station data (David Clapp, SJRWMD, personal communication). Mean monthly discharge during spring and fall were not significantly different ($p=0.844$).

During each of the two seasons, fish of the upper Wekiva River and lower Little Wekiva River were sampled in three habitats (Vallisneria, Hydrocotyle, and Nuphar) using five throw traps per habitat (total of 15 throw traps per river segment). Fish in the middle Wekiva River were sampled using 10 throw traps in Vallisneria, 10 in bare bottom, 5 in Nuphar, and 5 in Hydrocotyle (total of 30 throw traps). The major habitats sampled in the lower Wekiva River consisted of bare bottom and Vallisneria. Fish were sampled using 25 throw traps in bare bottom and 50 throw traps in Vallisneria, along with five and 10 blocknet-electrofishing sets, respectively.

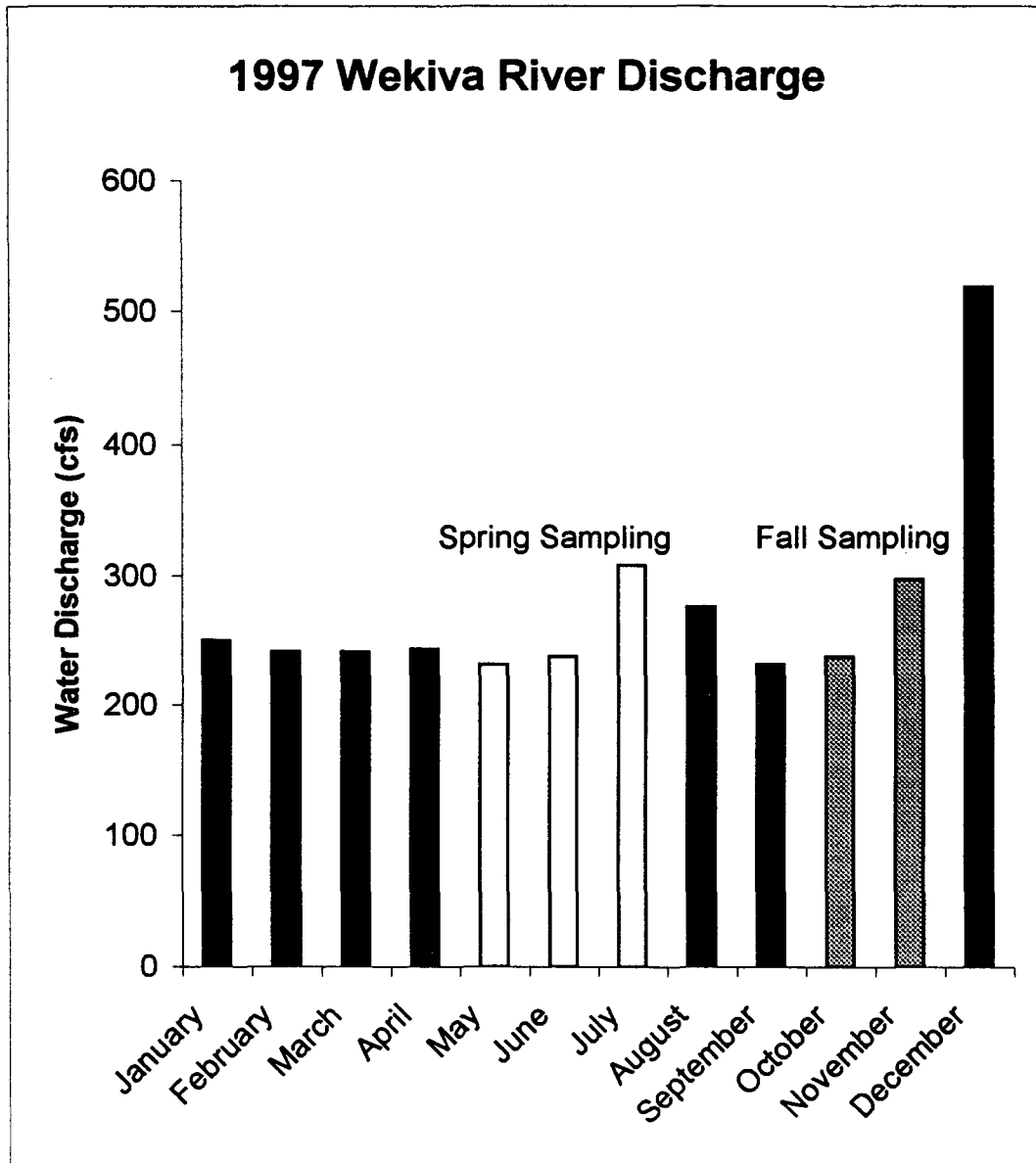


FIGURE 3.1.2. Mean monthly discharge data from USGS SR 46 gauging station, Wekiva River, Florida, 1997 (David Clapp, SJRWMD, personal communication). Discharges for spring sampling period (May-July, white bars) not significantly different from fall sampling period (October-November, stippled bars) ($p=0.844$).

Throw Traps

One-meter square throw traps were randomly thrown into each habitat throughout each river segment. Plant composition and percent areal coverage, along with substrate type, were recorded within each throw trap. Visual estimations of plant areal coverage were performed in accordance to methods described in Gordon et al. (1992). Plants were cleared from each throw trap, placed into a net bag, spun overhead to remove excess water, and weighed on site to estimate plant biomass. Fish contained within each throw trap were removed by repeated netting using a 1-m x 1-m bar net with 5-mm bar mesh. Netting ceased after five consecutive attempts failed to produce any additional fish. Rozas (1987) reported fish clearing efficiencies ranging from 93-100% for one-meter square throw traps in submersed aquatic vegetation. Small fish were bagged, euthanized with MS-222, and placed on ice for later identification, sorting, measuring total length (mm TL), weighing (grams, g), and counting. Larger fish were identified, sorted, measured for total length (mm TL), weighed (g), counted on site, and released alive. Small fish were identified using several taxonomic keys and field guides including Eddy (1969), Burgess (undated), Gilbert (undated), and Page and Burr (1991). Time of day, weather conditions, and Global Positioning System (GPS) coordinates were recorded for each throw trap.

Blocknets

At sites where blocknets were used, a portion of the river was enclosed with a 70-m long x 2.4-m deep, 10-mm delta mesh block net, extending from the river bottom to the water surface. The standard procedure that was followed, after a specific sampling site was selected, is as follows. A steel fence post was driven into the stream bottom. A 50-mm diameter PVC pipe was placed over the fence post. A tape measure was stretched across the stream, perpendicular to the stream flow, and a second steel fence post was then driven into the stream bottom 15.25 m from the first and covered with a PVC pipe. A third steel post/pipe was then placed 15.25 m directly upstream from the second post/pipe. A fourth post/pipe was then placed 15.25 m upstream from the first and 15.25 m across stream from the third. The site was then left undisturbed while a second site was located and posts/pipes placed into the stream as indicated above. After returning to the first site, the net was tied to one of the upstream posts/pipes. A boat, which held the net, was pushed by hand downstream along one side of the square, across the downstream side, upstream along the third side, across the top side, and then back downstream along the first side. The entire time that the boat was moving, the net was removed from the boat, dropped into the water, and the lead line anchored to the bottom with concrete blocks and steel stakes. A rope was tied to the top of each of the two

upstream posts/pipes and anchored to the bottom with a concrete block placed 2 to 3 m upstream from the post. The net along the upstream and downstream sides of the enclosure was further braced with 1.5-m sections of L-shaped steel rebar to prevent the strong stream current and abundant drifting debris (mostly aquatic plants) from collapsing the net. Whenever possible, the final enclosure measured 15.25 m x 15.25 m. The actual final dimensions of each set were measured to calculate the area of the net.

Aquatic plant species composition and percent areal coverage were recorded. Visual estimations of plant areal coverage were performed according to methods described by Gordon et al. (1992). Five 0.0625-m² quadrats were randomly thrown into each blocknet, cleared of plants, and each quadrat's fresh plant wet weight recorded along with the substrate type. Time of day, weather conditions, and GPS coordinates were recorded for each blocknet.

A two to five-removal catch-depletion method was employed to estimate fish abundance (number and weight) within each netted area (Zippin 1958, Armour et al. 1983). The number of removals depended on the reduction in the number of fish in successive removals. Fish were collected during each depletion by a standard effort (15 minutes) of electrofishing using either a hand-held probe/dipnet operated from a small (3.25-m) aluminum jon boat or by biologists standing in the water covered in appropriate rubberized safety apparel. Fish were processed using the

same methods described above for throw traps. Fish abundance and blocknet area were used to estimate density (number/m² and number/ha) and biomass (g/m² and kg/ha).

The primary use of blocknet sampling was to capture large fish. Due to the observed entry and escape of small fish through the 10-mm openings in the net, Centrarchids less than 32 mm TL and Cyprinids less than 55 mm TL were excluded from analyses of blocknet data. These total lengths were selected based on the size of the net openings (10-mm) and published body depth/total length relationships (Lawrence 1958, Hill 1998). Poeciliids and Fundulids were assumed to have similar body depths as Cyprinids, thus the same length fish (55 mm TL) were excluded from analyses.

Physicochemical Parameters

Throw Traps

Water depth (m), water temperature (°C), water velocity (cm/s), and dissolved oxygen (mg/l) were recorded for each throw trap. These measurements were made prior to or immediately after the throw trap was cleared of plants. Depth within the trap was measured using a 2-m section of PVC pipe marked in 0.1-m increments. Water velocity was measured upstream of the trap, 0.1 m below the surface and 0.1 m above the sediment, using a Marsh-McBirney model 201M or model 201 flowmeter. Water velocity was measured only at the surface for shallow (≤ 0.30 m) samples. On several occasions the flowmeter was not functional.

Dissolved oxygen and temperature were measured upstream of the trap in the middle of the water column using a YSI model 58 dissolved oxygen meter.

Blocknets

Water depth (m), water temperature ($^{\circ}\text{C}$), water velocity (cm/s), and dissolved oxygen (mg/l) were measured at a minimum of four locations within each blocknet area. Depths were measured prior to sampling fish and plants. Temperature, velocity, and dissolved oxygen were measured after net removal to maintain maximum water clarity and minimum disturbance of fish to maximize capture efficiency during electrofishing. Water depth, velocity, dissolved oxygen, and temperature were measured using the same methods as for throw traps.

System-wide Sampling

Water samples were taken in December 1997 to compare water chemistry with previous studies. Samples were collected in triplicate at nine stations along the river; three stations in the lower Wekiva River and two stations in each of the remaining three river segments (Figure 3.1.3). Time of day and GPS coordinates were recorded at each station. Water temperature and dissolved oxygen were measured as described above for throw traps. Water samples were collected from 0.1 m below the surface in 1-liter, acid-washed Nalgene bottles. Water samples were placed on

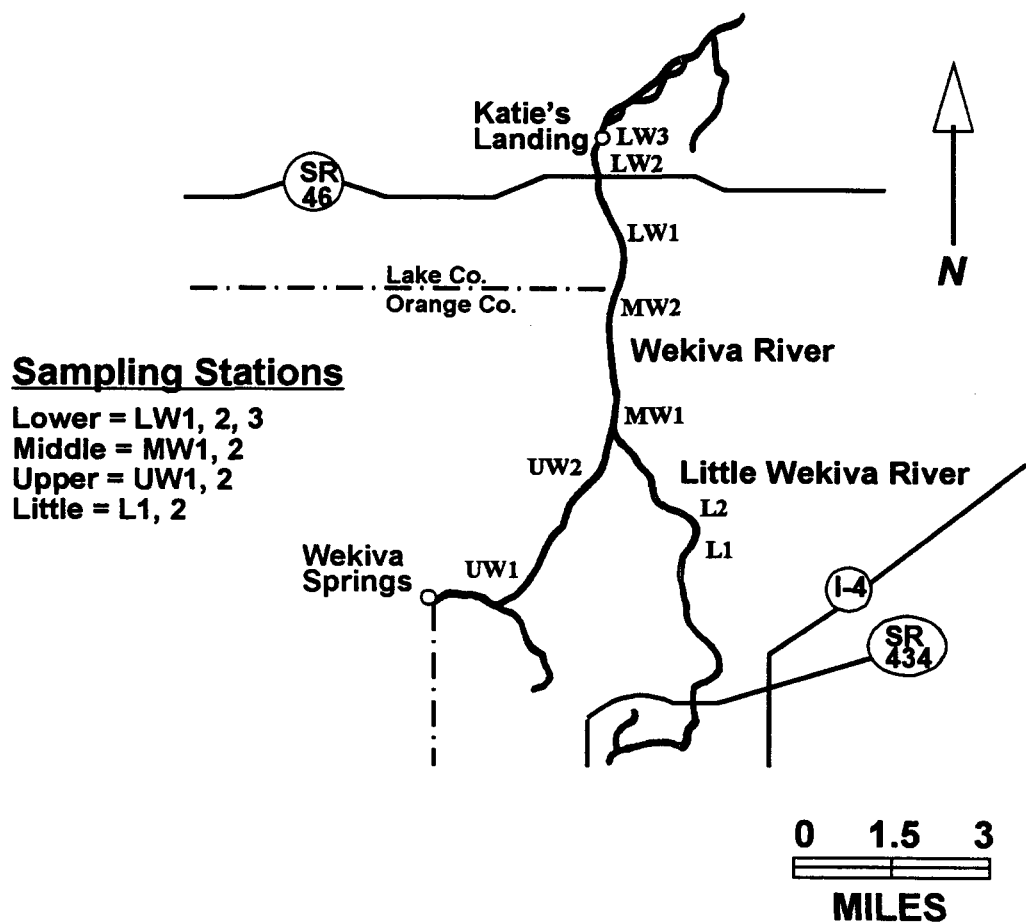


FIGURE 3.1.3. Location of system-wide water sampling stations, Wekiva and Little Wekiva River, Florida, 1997.

ice and returned to the Department of Fisheries and Aquatic Sciences, University of Florida for processing.

Water was analyzed for pH using an Accumet Model 10 pH meter. Total alkalinity (mg/l) was determined by titrating pH down to an end point of 4.5 with the use of 0.02 N H₂SO₄ and bromcresol green-methyl red indicator. Conductivity at 25°C was determined using a YSI 35 conductance meter. Total phosphorus concentrations (mg/l) were determined using methods of Murphy and Riley (1962) with a persulfate digestion (Menzel and Corwin 1965), and total nitrogen concentration (mg/l) by oxidizing water samples with persulfate and determining nitrate-nitrogen with second derivative spectroscopy (Wollin 1987, Bachmann and Canfield 1996). Color units were determined by filtering samples through 47-mm Gelman glass fiber filters, then comparing with standard solutions of platinum-cobalt (Method 2120C, APHA 1989). Chlorophyll (mg/m³) samples were filtered through a 47-mm Gelman glass fiber filter, stored over silica gel desiccant and frozen. Chlorophyll concentrations were determined spectrophotometrically (Method 10200 H, APHA 1989) following pigment extraction with ethanol (Sartory and Grobbelaar 1984). Total suspended solids were determined by filtering water through precombusted (550°C), preweighed, glass fiber filters, then allowed to dry for a hour at 103°C. Inorganic solids were weighed after one hour at 550°C and organic solids were determined by the difference between the total and

inorganic suspended solids (mg/l) (Methods 2540 D and E APHA 1992).

Diurnal Sampling

Because all throw trap, blocknet, and system-wide physicochemical sampling was performed during daylight hours, on 10-11 November 1998, a diurnal sample was conducted in the upper Wekiva River to determine how nighttime values of selected parameters varied from daytime values. The system-wide water sampling station UW2 (Figure 3.1.3) was chosen because three of the four habitats intensively studied in this project (Hydrocotyle, Vallisneria, and bare bottom) were present side by side at this station. This reduced possible variation among habitats due to location along the river and made sampling safer and more efficient. Depths (m) were recorded for each habitat, and dissolved oxygen and temperature were measured 0.1 m below the surface and 0.1 m above the sediment. Sampling commenced at 1700 hrs on 10 November and concluded at 1500 hrs on 11 November 1998. The boat was anchored off the bow, pointing upstream, over a Vallisneria bed with an extensive mat of Hydrocotyle on the port side (east side of the river) and bare sediments 5 to 7 m off the starboard side of the boat (closer to the west side of river). Measurements were taken every two hours starting in the Hydrocotyle and working towards the middle of the river (westward) and finishing in the bare

habitat. Each sampling period lasted approximately 15-20 minutes.

Data Analysis

Data from field and laboratory data sheets were entered into Excel spreadsheets (Microsoft Corporation), printed, verified against original data sheets, and corrected. The spreadsheets were then converted to ASCII files for importation and analyses using Statistical Analysis Software (SAS 1985). Statistical comparisons with P-values less than or equal to 0.05 were considered to be significant.

Throw Trap Data

One-way analysis of variance (ANOVA) was used to test for statistical differences in the mean physicochemical values (dissolved oxygen, temperature, surface velocity, bottom velocity, depth, plant cover, and plant biomass) measured among habitats in each of the four river segments for each sampling season (spring and fall).

One-way analysis of variance (ANOVA) was used to test for statistical differences in the mean fish species richness (number of taxa/m²) and abundance (mean density [number/m²] and mean biomass [grams/m²]) among habitats in each of the four river segments for each sampling season (spring and fall). Biomass estimates in throw traps targeted fish of 100mm TL or less. Four fish greater than

200mm TL were captured. These were not used in the analyses because they were greater than three to five times the weight of the smallest fish sampled by throw trap. This prevented skewing of the data and inflation of the mean biomass. Abundances were transformed prior to analysis using a $[\log_{10} (\text{count} + 1)]$ transformation. When a significant effect of habitat was detected, pairwise comparisons among habitat means (species richness and abundance [density and biomass]) were made using Scheffe's procedure (Ott 1993).

Blocknet Data

T-tests were used to test for statistical differences in the mean physicochemical values (dissolved oxygen, temperature, surface velocity, bottom velocity, depth, plant cover, and plant biomass) measured for the bare and Vallisneria habitats within season (spring and fall).

T-tests were also used to test for statistical differences in the mean fish species richness and abundance [mean density and mean biomass] between the bare and Vallisneria habitats within season. Estimates of fish abundance were excluded from statistical analyses if the calculated capture probability values were less than 0.10, as suggested by Armour et al. (1983), due to their inaccuracy. Abundances were transformed prior to analysis using a $[\log_{10} (\text{count} + 1)]$ transformation.

Relationship Between Fish and Physicochemical Factors

Using stepwise variable selection procedures (Steel and Torrie 1960), fish population variables (density, biomass, species richness) were independently regressed against all physicochemical variables (dissolved oxygen, temperature, surface velocity, bottom velocity, depth, plant cover, and plant biomass) to produce a physicochemical model for each population variable. Only those physicochemical variables with significant ($P \leq 0.15$) partial correlation coefficients were included by the stepwise selection procedure (SAS 1985). The $\alpha = 0.05$ level of probability was accepted in tests of significance for the multiple correlation coefficient. Separate models were developed for the spring and fall throw trap and blocknet data by habitat within each river segment.

Results and Discussion

Physicochemical Parameters

Throw Trap Sampling

Differences among habitats may explain distributions of fish in each river segment. Dissolved oxygen and water temperature were not significantly different among the four habitats within each of the river segments during both seasons (Tables 3.1.1, 3.1.2, and 3.1.3; Appendices 3.1.1 and 3.1.2). Based on these data, dissolved oxygen and water temperature probably do not influence habitat selection by fish. Water velocities (surface and bottom), water depth, plant percent areal coverage (PAC), and plant biomass were significantly different among some habitats within river segments in both seasons. These differences were expected due to sampling design (different selected habitat types and plant densities). Aquatic macrophytes growing on or near the water's surface (Hydrocotyle and Nuphar) decreased surface velocity, while Vallisneria growing along the bottom decreased bottom velocity. Water velocities (both top and bottom) in bare bottom areas remained relatively constant among river segments within both seasons (Tables 3.1.1, 3.1.2, and 3.1.3).

TABLE 3.1.1. Mean physicochemical values by individual habitat and river segment sampled by throw trap during the spring of 1997, Wekiva River system, Florida. Same letters indicate mean habitat values for parameter are not significantly different within river segment (1-way ANOVA with Scheffe test).

Parameter Segment	Bare Bottom	Hydrocotyle	Nuphar	Vallisneria	p value
Dissolved Oxygen (mg/l)					
Upper	.	5.54 a	6.29 a	5.74 a	0.215
Little	.	3.54 a	3.04 a	3.66 a	0.487
Middle	5.31 a	5.36 a	5.20 a	5.69 a	0.381
Lower	7.73 a	.	.	7.51 a	0.615
Temperature (°C)					
Upper	.	23.9 a	24.4 a	24.0 a	0.794
Little	.	27.8 a	28.0 a	27.7 a	0.684
Middle	25.1 a	25.5 a	25.2 a	25.2 a	0.274
Lower	26.7 a	.	.	26.1 a	0.091
Surface Velocity (cm/sec)					
Upper	.	5.9 b	9.1 b	15.8 a	0.001
Little	.	3.8 b	10.2 b	22.2 a	0.001
Middle	10.7 ab	3.3 c	7.4 bc	15.5 a	0.002
Lower	11.2 b	.	.	15.6 a	0.021
Bottom Velocity (cm/sec)					
Upper	.	1.5 a	6.0 a	.	0.234
Little	.	8.2 a	7.0 a	9.4 a	0.659
Middle	9.0 a	3.5 a	6.8 a	5.1 a	0.115
Lower	8.5 a	.	.	7.0 a	0.386
Water Depth (m)					
Upper	.	0.55 a	0.50 a	0.61 a	0.546
Little	.	0.50 a	0.47 a	0.50 a	0.831
Middle	0.47 a	0.51 a	0.50 a	0.42 a	0.602
Lower	0.45 a	.	.	0.45 a	0.969
Plant Cover (%)					
Upper	.	82 a	29 b	84 a	0.002
Little	.	99 a	31 b	100 a	0.001
Middle	0 c	88 a	35 b	97 a	0.001
Lower	0 b	.	.	74 a	0.001
Plant Biomass (g)					
Upper	.	2909 a	1077 a	3363 a	0.061
Little	.	3852 a	733 b	2522 ab	0.005
Middle	0 c	3948 a	967 c	2123 b	0.001
Lower	0 b	.	.	1948 a	0.001

Table 3.1.2. Mean physicochemical values by individual habitat and river segment sampled by throw trap during the fall of 1997, Wekiva River system, Florida. Same letters indicate mean habitat values for parameter are not significantly different within river segment (1-way ANOVA with Scheffe test).

Parameter Segment	Bare Bottom	Hydrocotyle	Nuphar	Vallisneria	P value
Dissolved Oxygen (mg/l)					
Upper	.	6.08 a	5.76 a	5.94 a	0.385
Little	.	6.80 a	7.04 a	6.76 a	0.602
Middle	5.98 a	5.28 a	5.90 a	5.92 a	0.224
Lower	8.14 a	.	.	7.83 a	0.463
Temperature (°C)					
Upper	.	21.8 a	21.6 a	21.6 a	0.869
Little	.	22.5 a	22.5 a	21.9 a	0.347
Middle	24.1 a	24.3 a	24.1 a	24.2 a	0.913
Lower	25.3 a	.	.	25.2 a	0.423
Surface Velocity (cm/sec)					
Upper	.	1.0 b	4.8 b	17.0 a	0.001
Little	.	3.0 a	9.8 a	16.2 a	0.198
Middle	12.9 ab	1.8 c	5.4 bc	16.4 a	0.001
Lower	12.2 a	.	.	12.1 a	0.981
Bottom Velocity (cm/sec)					
Upper	.	6.2 a	3.2 a	4.4 a	0.124
Little	.	2.8 a	13.0 a	6.0 a	0.214
Middle	4.5 a	4.6 a	1.8 a	2.4 a	0.063
Lower	6.0 a	.	.	2.9 b	0.001
Water Depth (m)					
Upper	.	0.55 a	0.51 a	0.60 a	0.151
Little	.	0.25 a	0.27 a	0.32 a	0.605
Middle	0.49 a	0.45 a	0.44 a	0.51 a	0.423
Lower	0.54 a	.	.	0.49 b	0.038
Plant Cover (%)					
Upper	.	91 a	28 b	85 a	0.001
Little	.	67 a	59 a	94 a	0.055
Middle	0 c	81 a	28 b	70 a	0.001
Lower	0 b	.	.	75 a	0.001
Plant Biomass (g)					
Upper	.	3393 a	720 b	2240 ab	0.002
Little	.	2036 a	1226 a	3271 a	0.075
Middle	0 c	4881 a	678 bc	1779 b	0.001
Lower	0 b	.	.	2855 a	0.001

TABLE 3.1.3. Sample sizes (N) for mean physicochemical values by individual habitat and river segment sampled by throw trap during 1997, Wekiva River system, Florida (Spring N/Fall N). A "." indicates that no samples were taken.

Parameter Segment	Bare Bottom	Hydrocotyle	Nuphar	Vallisneria
Dissolved Oxygen (mg/l)				
Upper	.	4/5	5/5	5/5
Little	.	5/5	5/5	5/5
Middle	10/10	5/5	5/5	10/10
Lower	25/25	.	.	50/50
Temperature (°C)				
Upper	.	4/5	5/5	5/5
Little	.	5/5	5/5	5/5
Middle	10/10	5/5	5/5	10/10
Lower	25/25	.	.	50/50
Surface Velocity (cm/sec)				
Upper	.	4/5	5/5	4/5
Little	.	5/5	5/5	5/5
Middle	10/10	5/5	5/5	10/10
Lower	21/25	.	.	48/48
Bottom Velocity (cm/sec)				
Upper	.	1/5	2/5	0/5
Little	.	5/5	5/2	5/4
Middle	10/10	2/5	4/5	9/10
Lower	19/25	.	.	41/48
Water Depth (m)				
Upper	.	5/5	5/5	5/5
Little	.	5/5	5/5	5/5
Middle	10/10	5/5	5/5	10/10
Lower	25/25	.	.	50/49
Plant Cover (%)				
Upper	.	5/5	5/5	5/5
Little	.	5/5	5/5	5/5
Middle	10/10	5/5	5/5	10/10
Lower	25/25	.	.	50/50
Plant Biomass (g)				
Upper	.	5/5	5/5	5/5
Little	.	5/5	5/5	5/5
Middle	10/10	5/5	5/5	10/10
Lower	25/25	.	.	49/50

Blocknet Sampling

Sampling with blocknets was only conducted on the lower section of the Wekiva River in bare bottom and Vallisneria habitat (Appendices 3.1.3, 3.1.4, 3.1.5, and 3.1.6). Mean dissolved oxygen, temperature, surface velocity, and water depth did not differ significantly between the two habitats within season (Table 3.1.4). Surface velocity did not differ by habitat because flow was not impeded by vegetation. Vallisneria grew submerged near the bottom and the bare bottom was devoid of vegetation. Mean bottom velocity was lower within the Vallisneria. However, bottom velocity was found to be significantly different between habitats only in the spring. This was due to the small sample size (N=5) for the bare bottom and because one blocknet in the bare bottom had high velocity measurements that caused high variability about the mean. Mean plant cover and biomass were significantly different between habitats as expected because of the sampling design of bare bottom and dense Vallisneria.

System-wide Sampling

Water temperatures measured at the nine water chemistry stations on 8 December 1997 ranged from 14.3 to 20.1°C (Appendix 3.1.7). The mean water temperature for all nine stations combined was 16.7°C (Table 3.1.5). Temperatures increased throughout the day with stations sampled later in the day having higher temperatures, as

TABLE 3.1.4. Mean physicochemical values by individual habitat from Lower Wekiva segment sampled by blocknet during the spring and fall of 1997, Wekiva River system, Florida. Same letters indicate mean habitat values for parameter are not significantly different within season (T-test). Sample sizes for bare bottom and Vallisneria were 5 and 10, respectively, except for fall bottom velocity (N=7 for Vallisneria) and spring plant biomass (N=8 for Vallisneria).

Parameter Segment	Bare Bottom	Vallisneria	p value
Dissolved Oxygen (mg/l)			
Spring	8.40 a	7.77 a	0.444
Fall	8.80 a	8.94 a	0.857
Temperature (°C)			
Spring	28.8 a	28.1 a	0.215
Fall	21.2 a	20.6 a	0.459
Surface Velocity (cm/sec)			
Spring	15.7 a	19.2 a	0.330
Fall	12.5 a	14.8 a	0.330
Bottom Velocity (cm/sec)			
Spring	8.05 a	4.23 b	0.011
Fall	7.45 a	2.87 a	0.104
Water Depth (m)			
Spring	0.58 a	0.47 a	0.077
Fall	0.63 a	0.59 a	0.331
Plant Cover (%)			
Spring	0 b	79 a	0.001
Fall	0 b	97 a	0.001
Plant Biomass (g)			
Spring	0 b	238 a	0.001
Fall	0 b	399 a	0.001

TABLE 3.1.5. Mean water chemistry values (N=3) by river station from system-wide sampling, 8 Dec 97 collection. (Stations: L1-2 = Little Wekiva River, LW1-3 = Lower Wekiva River, MW1-2 = Middle Wekiva River, and UW1-3 = Upper Wekiva River).

	Water Temp. (°C)	Diss. Oxy. (mg/l)	pH	Total Alk (mg/l)	Conduct. @ 25°C	Total Phos. (mg/l)	Total Nitr. (mg/l)	Color	Chlor. (mg/m ³)	Organic Susp. Solids (mg/l)	Inorganic Susp. Solids (mg/l)
L1	20.0	6.21	7.83	109.67	340.33	0.170	0.95	13.00	3.50	2.47	2.41
L2	19.6	6.40	7.77	109.67	350.00	0.168	1.06	14.67	2.30	1.61	1.42
LW1	15.2	8.36	7.80	104.67	453.33	0.102	0.94	20.00	1.00	0.83	0.77
LW2	14.5	7.86	7.80	105.33	529.00	0.095	0.89	19.67	1.37	0.56	0.73
LW3	14.6	7.77	7.83	108.00	898.67	0.089	0.75	18.33	1.03	0.13	0.46
MW1	15.9	6.67	7.70	106.00	346.00	0.096	1.08	16.33	1.43	2.64	0.68
MW2	15.0	7.27	7.77	106.00	362.67	0.107	1.00	19.00	-	0.80	0.51
UW1	19.4	5.96	7.80	107.33	303.33	0.098	1.18	7.33	0.60	0.68	0.48
UW2	16.4	6.75	7.73	105.67	340.67	0.094	1.13	14.67	1.17	2.52	1.15
Overall Mean	16.7	7.02	7.78	106.93	436.00	0.113	1.00	15.89	1.55	1.36	0.96

expected, due to solar heating of the water. Dissolved oxygen ranged from 5.89 to 7.96 mg/l, with a mean of 7.02 mg/l. The Wekiva River system had a mean pH of 7.78, with individual values ranging from 7.7 to 7.9, classifying it as a circum-neutral or basic stream. This spring-fed system is alkaline and highly buffered, with a mean total alkalinity of 106.9 mg/l. Water in the system is slightly colored with a mean of 15.89 color units. According to the classification system of Forsberg and Ryding (1980), the combined data from the Wekiva and Little Wekiva rivers define this system as hypereutrophic with an overall mean total phosphorus of 0.113 mg/l, eutrophic with an overall mean total nitrogen of 1.00 mg/l, and oligotrophic with an overall mean chlorophyll of 1.55 mg/m³.

The high overall mean total phosphorus concentration for the system is primarily due to the two high station (L1 and L2) values in the Little Wekiva River (Tables 3.1.5). The Little Wekiva River receives discharges from the Altamonte Springs Regional Wastewater Treatment Plant and the Weathersfield Sewage Treatment Plant, which have historically contributed 40% of the phosphorus load exported from the Little Wekiva River compared to 14% from the inflowing springs (Canfield and Hoyer 1988).

Even though total phosphorus and total nitrogen concentrations were high, water column chlorophyll concentrations were low, resulting from low water residence

time and shading of the stream by an overhanging tree canopy (Canfield and Hoyer 1988). Most suspended solids were organic, with an overall mean of 1.36 mg/l, compared to inorganic suspended solids with a mean of 0.96 mg/l, a similar pattern to that found by Canfield and Hoyer (1988). Overall, the 1997 water chemistry data are similar to those of Canfield and Hoyer (1988).

Diurnal Sampling

The dissolved oxygen and water temperature measurements within each of the three habitats (Hydrocotyle, Vallisneria, and bare bottom) were nearly identical at any given time and fluctuated similarly during the diurnal period (Figure 3.1.4). Dissolved oxygen within any habitat varied by 3.6 mg/l or less throughout the sampling period, while water temperature varied by 2.3°C or less. Nighttime values were lower than daytime values. Dissolved oxygen concentrations equal to or less than 5 mg/l are usually considered detrimental to fish and may directly or indirectly cause death (Francis-Floyd 1992). No recorded dissolved oxygen concentrations, both surface and bottom, were below 5 mg/l during the diurnal period. These results indicate that nighttime dissolved oxygen or water temperature probably do not influence the distribution of fish among these three habitats.

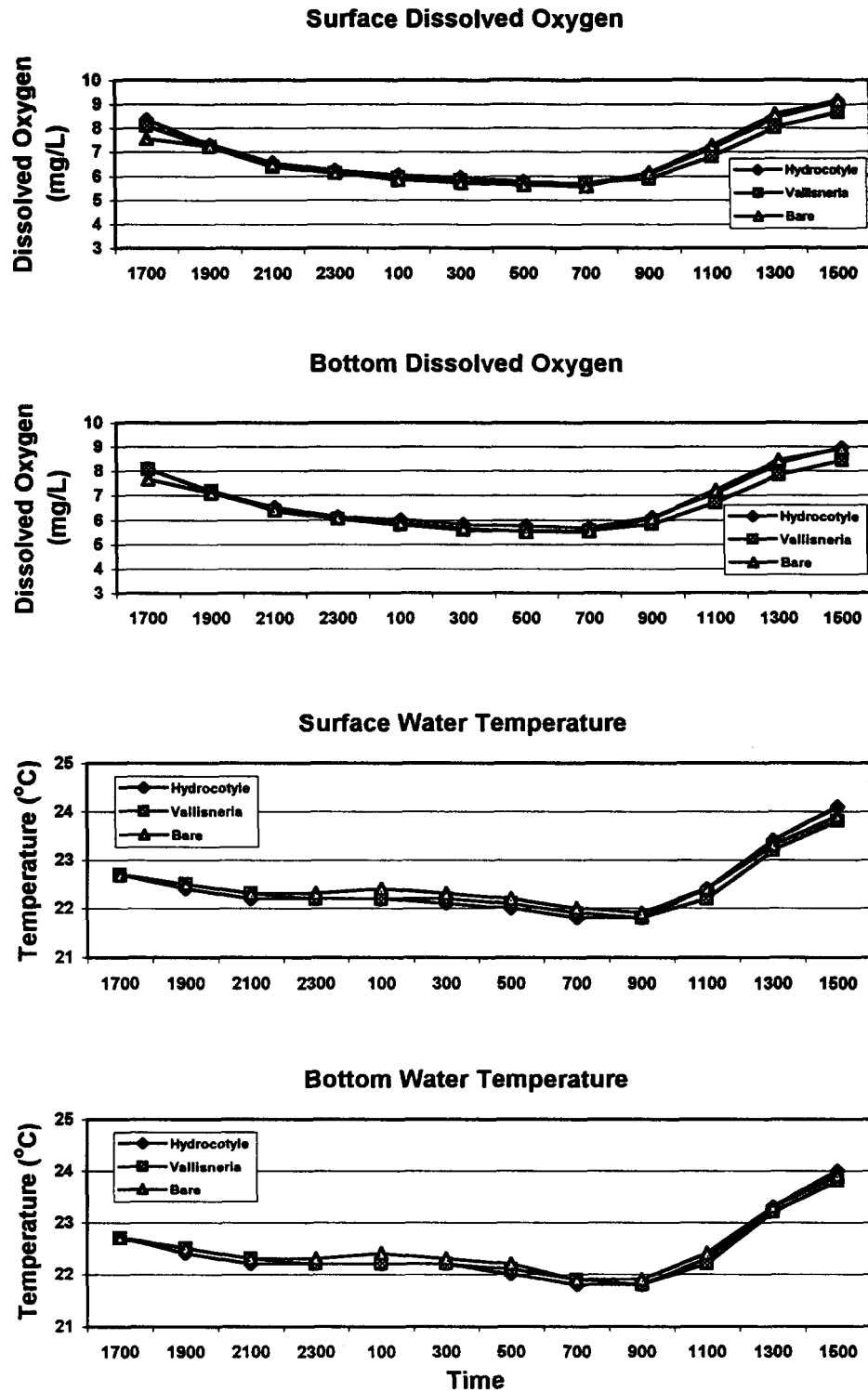


FIGURE 3.1.4. Diurnal sampling of surface and bottom dissolved oxygen (mg/l) and water temperature (°C), Upper Wekiva River, Florida, 10-11 November 1998.

Fish Populations

A total of 40 fish species were captured during sampling of the Wekiva River with throw traps and blocknets (Table 3.1.6). Canfield and Hoyer (1988) collected 33 fish species in the Little Wekiva River and 19 fish species in the Wekiva River, a total of 34 species overall.

Throw Traps

Twenty-eight of the 40 fish species sampled in this study were captured by throw trap (Appendices 3.1.8 and 3.1.9). Atlantic stingray (Dasyatis sabina), Florida gar (Lepisosteus platyrhincus), bowfin (Amia calva), American eel (Anguilla rostrata), golden shiner (Notemigonus crysoleucas), brown bullhead (Ameiurus nebulosus), chain pickerel (Esox niger), striped mullet (Mugil cephalus), Atlantic needlefish (Strongylura marina), golden topminnow (Fundulus chrysotus), blue tilapia (Oreochromis aureus), and hogchoker (Trinectes maculatus) were not captured by throw trap. Numbers of fish sampled in individual traps in all river segments and habitats ranged from zero in Nuphar and bare bottom to 167 in Hydrocotyle.

Mean density (number of fish per m²) was calculated for each habitat sampled in each river segment by season (Figure 3.1.5). Hydrocotyle consistently had higher densities of fish when compared to other habitats, within both seasons. The one exception occurred in the fall, when

TABLE 3.1.6. Scientific (family with genus and species) and common names of fish species collected by throw trap and blocknet during sampling of Wekiva and Little Wekiva Rivers, Florida, 1997.

Scientific Name	Common Name
Family Dasyatidae- Stingrays <u>Dasyatis sabina</u>	Atlantic Stingray
Family Lepisosteidae- Gars <u>Lepisosteus platyrhincus</u>	Florida Gar
Family Amiidae- Bowfins <u>Amia calva</u>	Bowfin
Family Anguillidae- Eels <u>Anguilla rostrata</u>	American Eel
Family Cyprinidae- Minnows <u>Notemigonus crysoleucas</u> <u>Notropis chalybaeus</u> <u>Notropis petersoni</u> <u>Pternotropis hypselopterus</u> <u>Pternotropis welaka</u> <u>Opsopoeodus emiliae</u>	Golden Shiner Ironcolor Shiner Coastal Shiner Sailfin Shiner Bluenose Shiner Pugnose Minnow
Family Catostomidae- Suckers <u>Erimyzon sucetta</u>	Lake Chubsucker
Family Ictaluridae- Catfish <u>Ameiurus catus</u> <u>Ameiurus natalis</u> <u>Ameiurus nebulosus</u> <u>Noturus gyrinus</u> <u>Noturus leptacanthus</u>	White Catfish Yellow Bullhead Brown Bullhead Tadpole Madtom Speckled Madtom
Family Esocidae- Pikes <u>Esox niger</u>	Chain Pickerel
Family Aphredoderidae- Pirate Perch <u>Aphredoderus sayanus</u>	Pirate Perch
Family Mugilidae- Mulletts <u>Mugil cephalus</u>	Striped Mullet
Family Atherinidae- Silversides <u>Labidesthes sicculus</u>	Brook Silverside
Family Belonidae- Needlefish <u>Strongylura marina</u>	Atlantic Needlefish

TABLE 3.1.6. Continued.

Scientific Name	Common Name
Family Fundulidae- Topminnows and Killifish	
<u>Fundulus chrysotus</u>	Golden Topminnow
<u>Fundulus seminolis</u>	Seminole Killifish
<u>Lucania goodei</u>	Bluefin Killifish
Family Poeciliidae- Livebearers	
<u>Gambusia holbrooki</u>	Eastern Mosquitofish
<u>Heterandria formosa</u>	Least Killifish
<u>Poecilia latipinna</u>	Sailfin Molly
Family Centrarchidae- Sunfish and Bass	
<u>Lepomis auritus</u>	Redbreast Sunfish
<u>Lepomis chaenobryttus</u>	Warmouth
<u>Lepomis macrochirus</u>	Bluegill
<u>Lepomis marginatus</u>	Dollar Sunfish
<u>Lepomis microlophus</u>	Redear Sunfish
<u>Lepomis punctatus</u>	Spotted Sunfish
<u>Micropterus salmoides</u>	Largemouth Bass
Family Percidae- Darters	
<u>Etheostoma edwini</u>	Brown Darter
<u>Etheostoma fusiforme</u>	Swamp Darter
<u>Percina nigrofasciata</u>	Blackbanded Darter
Family Elasmomatidae- Pygmy Sunfish	
<u>Elassoma okefenokee</u>	Okefenokee Pygmy Sunfish
Family Cichlidae- Cichlids	
<u>Oreochromis aureus</u>	Blue Tilapia
Family Soleidae- Soles	
<u>Trinectes maculatus</u>	Hogchoker

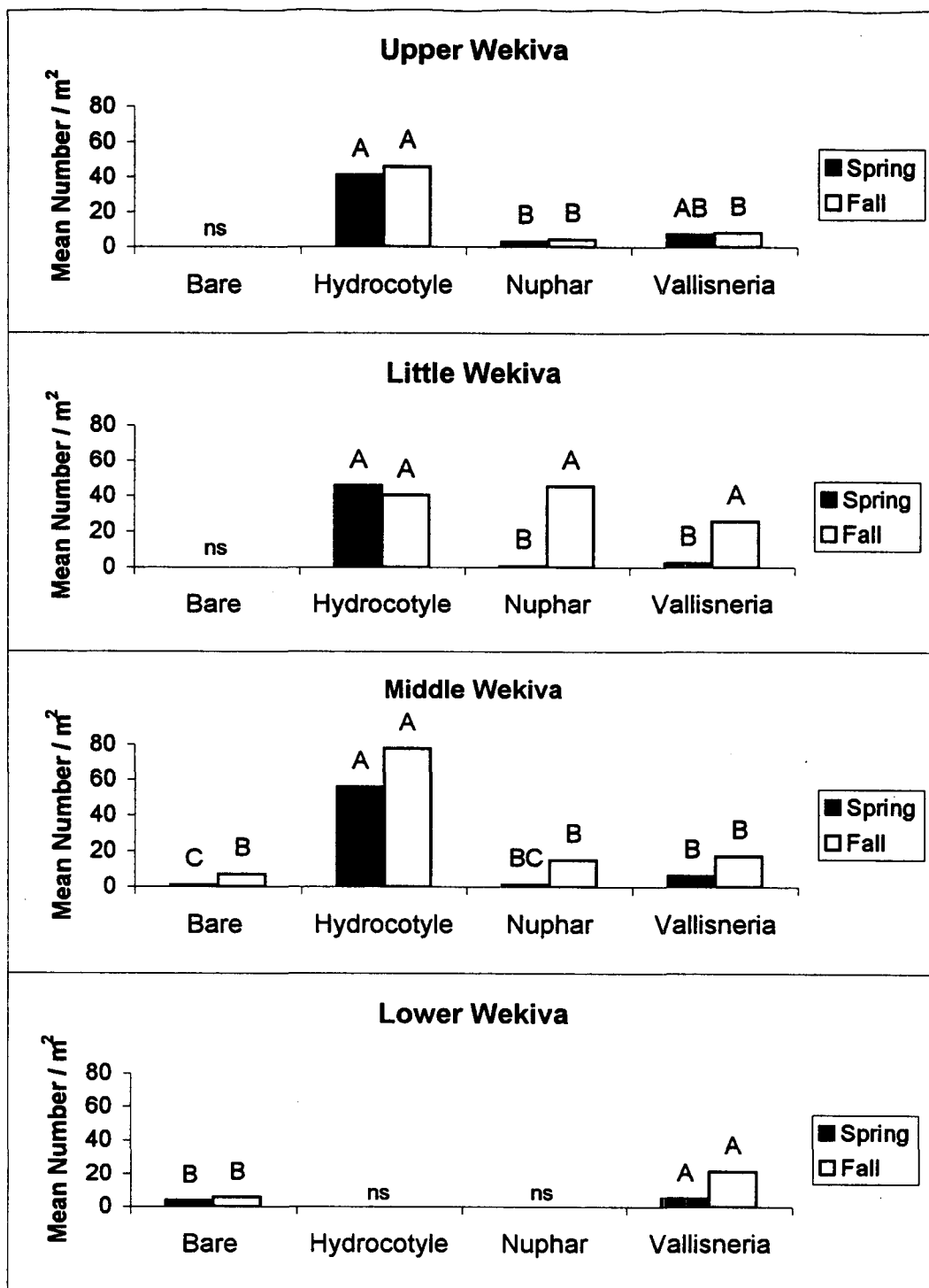


FIGURE 3.1.5. Mean density (number/m²) of fish collected by throw trap for individual habitats, Wekiva River system, Florida, 1997. Same letters indicate habitat mean densities are not significantly different within season (spring and fall). ns indicates not sampled.

sampling on the Little Wekiva River, Nuphar supported the highest mean density. Of the five throw traps collected in this habitat, one throw trap contained 143 fish. The dominant species in this trap was the sailfin shiner (Pternotropis hyselopterus), which is a small schooling minnow. The high fall mean density, observed for Nuphar in the Little Wekiva River, resulted from randomly capturing a large school of fish in this single trap. This greatly exaggerated the mean to 45.4 fish/m² compared to the spring mean of 0.6 fish/m². Without this sample, the mean would be 21 fish/m², comparable to the mean observed during this season in the middle Wekiva River. Vallisneria had the second highest mean density within both seasons, with the exception mentioned above. Nuphar and bare bottom supported the lowest mean densities of fish. Among the four habitats sampled, there was generally an increase in mean density from spring to fall. This was due to an increase in abundance of small young-of-year fish, because a majority of the species sampled are spring and summer spawners and mean length of fish generally decreased from spring to fall.

Biomass (grams per m²) of fish was analyzed for each habitat within each river segment and season (Figure 3.1.6). In general, Vallisneria and Hydrocotyle were similar and had the highest mean biomass compared to bare bottom and Nuphar that had similar mean biomass. Although Hydrocotyle generally had higher numbers of fish for both

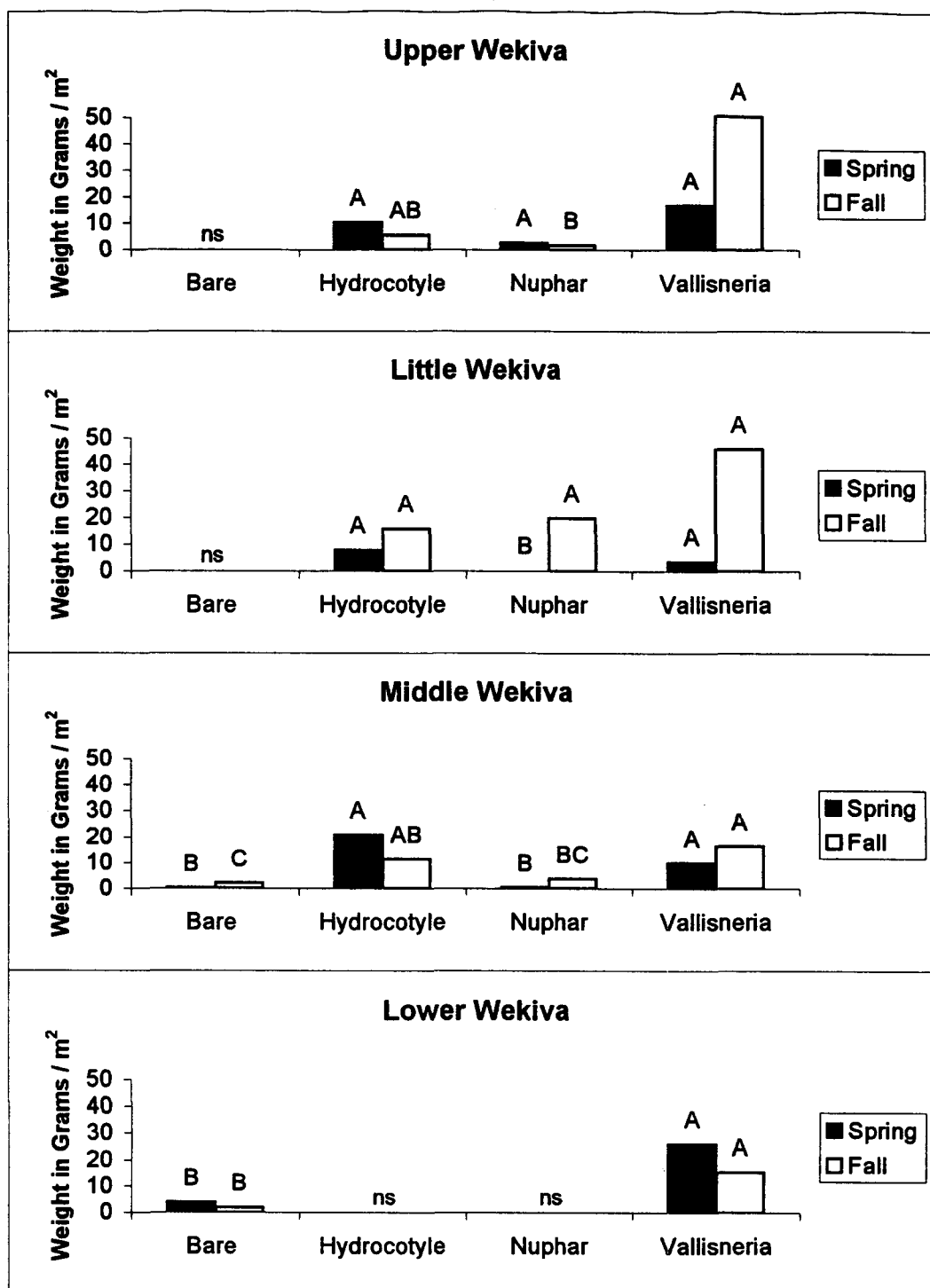


FIGURE 3.1.6. Mean biomass (grams/m²) of fish collected by throw trap for individual habitats, Wekiva River system, Florida. Same letters indicate habitat mean biomass are not significantly different within season (spring and fall 1997). ns indicates not sampled.

seasons, Vallisneria had higher mean biomass because of larger fish, such as sunfish (Centrarchidae) being present.

Overall species richness (total number of species found in each habitat) was calculated for each habitat within each river segment and season (Figure 3.1.7). The number of different fish species ranged from three in Nuphar to 22 in Vallisneria. Bare bottom and Nuphar had fewer species compared to Hydrocotyle and Vallisneria. This is likely due to the structural complexity of the habitat (Killgore et al. 1989, Dibble et al. 1997). Hydrocotyle and Vallisneria are more complex than bare bottom and Nuphar. A more structurally complex habitat offers refuge from predators, nurseries for young, shade, food, and breaks in water current.

One species sampled of particular interest is the bluenose shiner (Pternotropis welaka), which is listed as a Species of Special Concern by the Florida Game and Fresh Water Fish Commission (Hupalo et al. 1994). This shiner is found throughout the Florida panhandle but is considered a disjunct population and a rare species in the St. Johns River drainage (Gilbert 1978). It has been collected from the Ocklawaha and Wekiva Rivers, Alexander Spring Run, and the St. Johns River proper (Gilbert 1978). The bluenose shiner has not been formally sampled from the Wekiva River since 1956 (Gilbert 1992). The preferred habitat of the shiner is quiet, weedy water found within deeper pools and holes of streams and rivers (Gilbert 1978). One specimen,

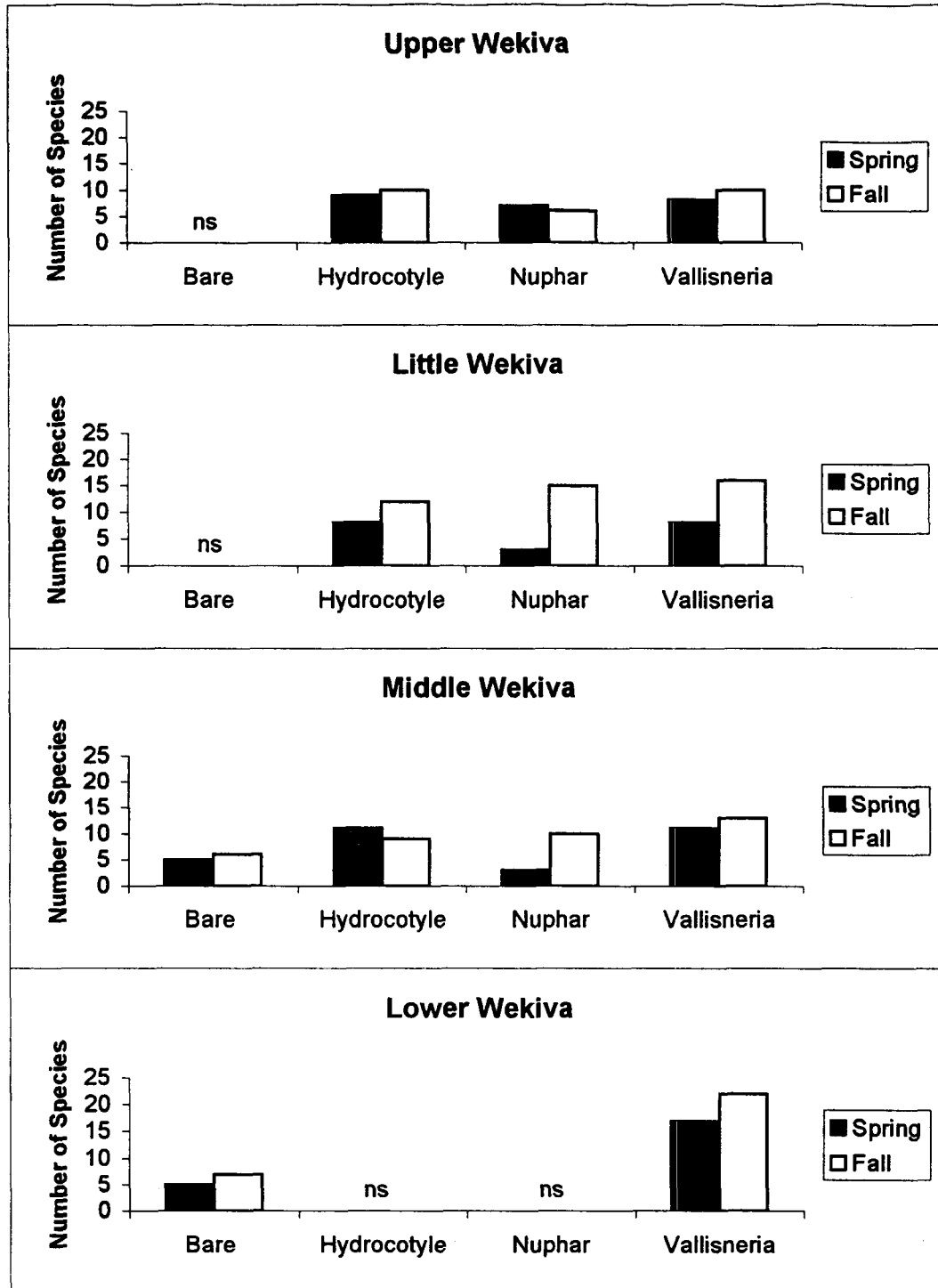


FIGURE 3.1.7. Overall species richness of fish collected by throw trap for individual habitats and seasons (spring and fall 1997), Wekiva River, Florida. ns indicates not sampled.

a male, was collected by throw trap on the lower Wekiva River in early June. The habitat sampled was Vallisneria with a water depth of approximately one half meter. This specimen is now part of the fish collection at the Florida Museum of Natural History, University of Florida.

The difference in the overall species richness between habitats was likely due to differences in the number of throw trap samples taken in each habitat. As a result, mean species richness (number of species per m²) was analyzed for each habitat within each river segment and season (Figure 3.1.8). The number of fish species collected in individual throw traps ranged from zero to 11. Hydrocotyle and Vallisneria generally supported the greatest mean species richness.

Seasonal fish community composition was analyzed for each habitat based upon percent number of fish collected grouped by family (Figures 3.1.9 - 3.1.12). On average, 4.8 fish families were represented in each habitat for spring and 6.4 families in the fall. Bare bottom and Nuphar were dominated numerically by minnows (Cyprinidae) and killifish (Fundulidae) in both seasons. The dominant species for both seasons in bare bottom were the coastal shiner (Notropis petersoni) and the bluefin killifish (Lucania goodei). Coastal shiners generally inhabit small to large streams and lakes with sandy substrate and are usually present on or near bottom in flowing water (Lee et al. 1980, Page and Burr 1991). Although high numbers were

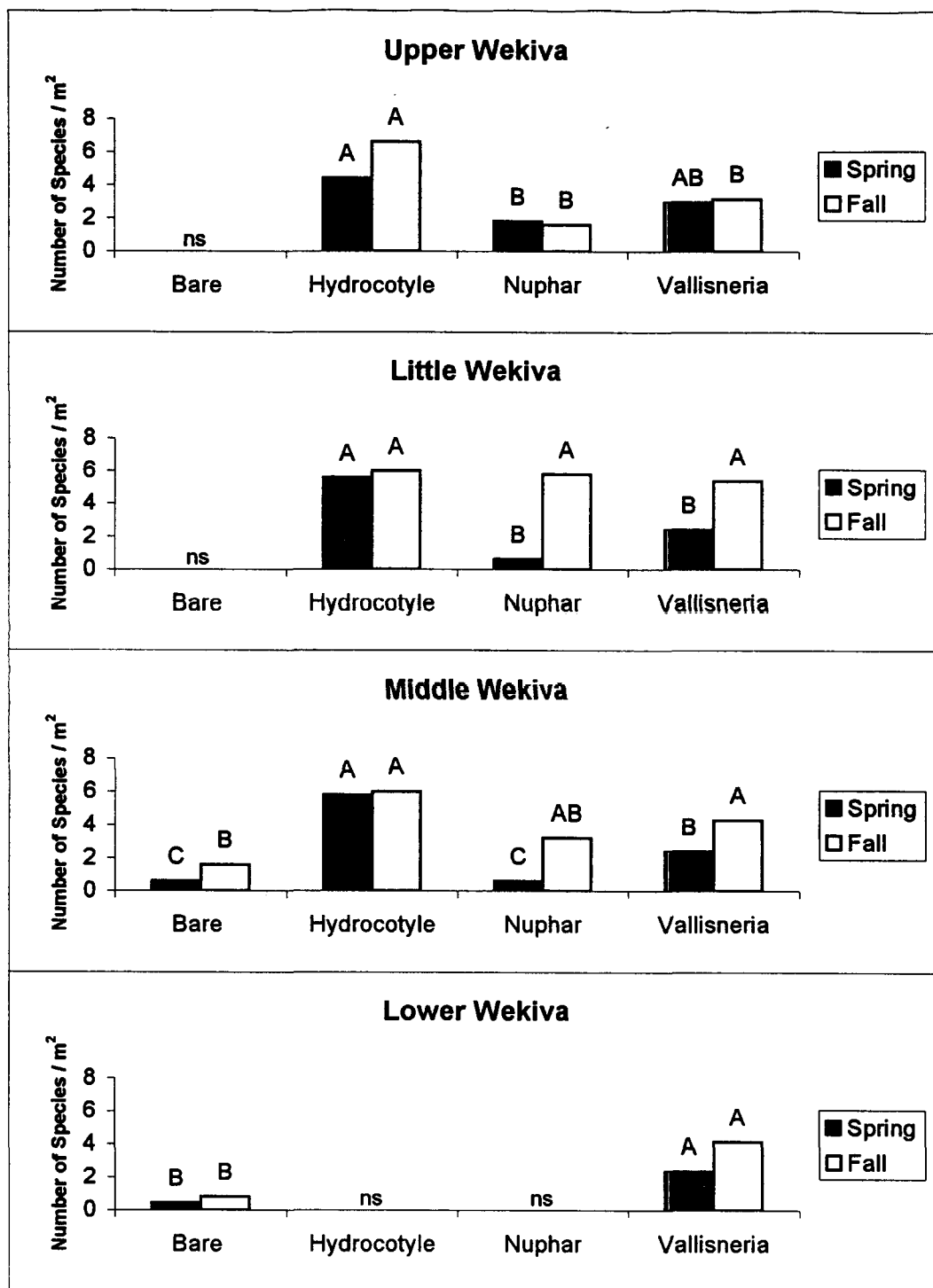


FIGURE 3.1.8. Mean species richness (number of species/m²) of fish collected by throw trap for individual habitats, Wekiva River system, Florida. Same letters indicate habitat species richness values are not significantly different within season (spring and fall 1997). ns indicates not sampled.

Upper Wekiva River

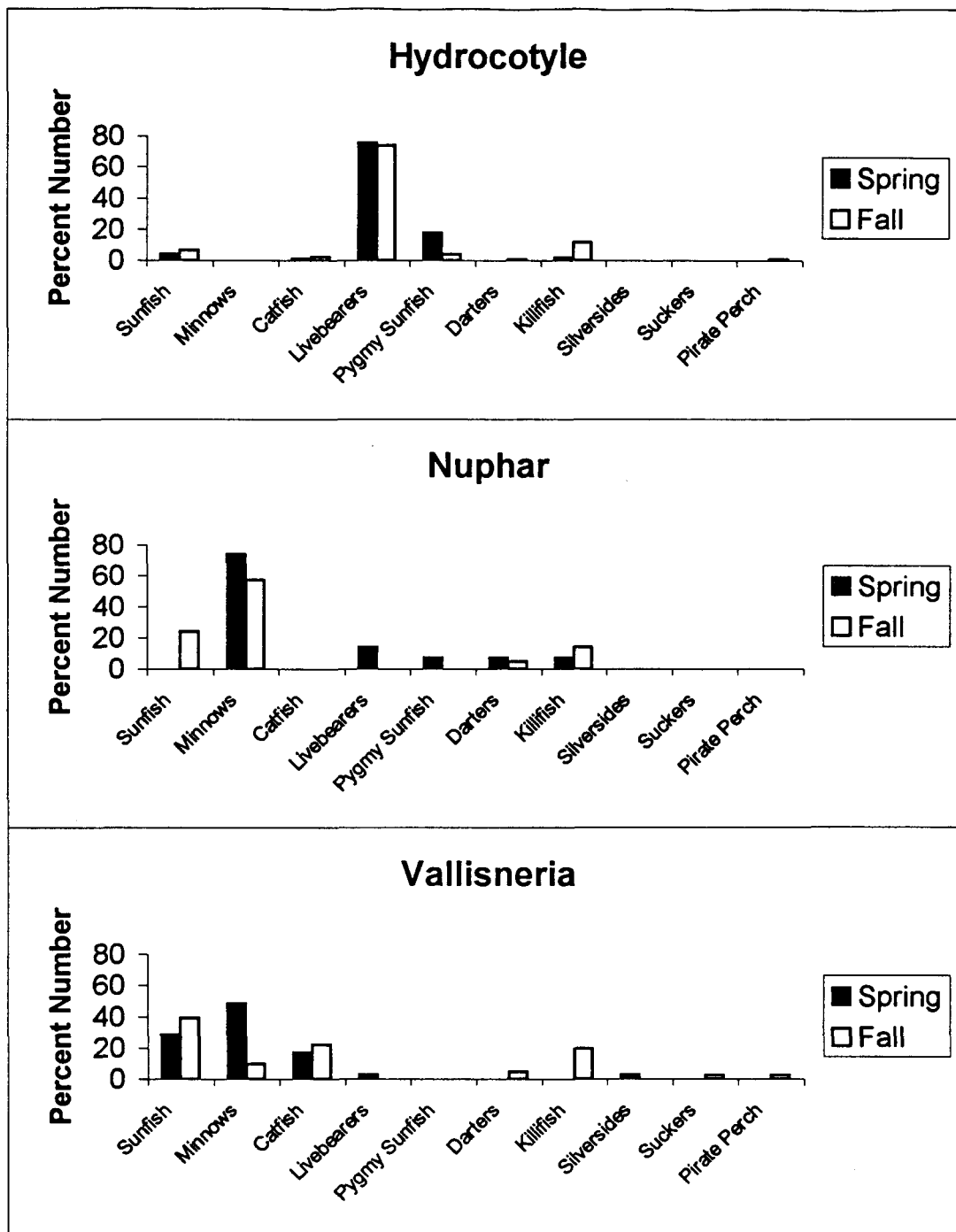


FIGURE 3.1.9. Seasonal (spring and fall) fish community composition within each habitat based upon percent number of fish (grouped by family) collected by throw trap in the upper Wekiva River, Florida, 1997.

Little Wekiva River

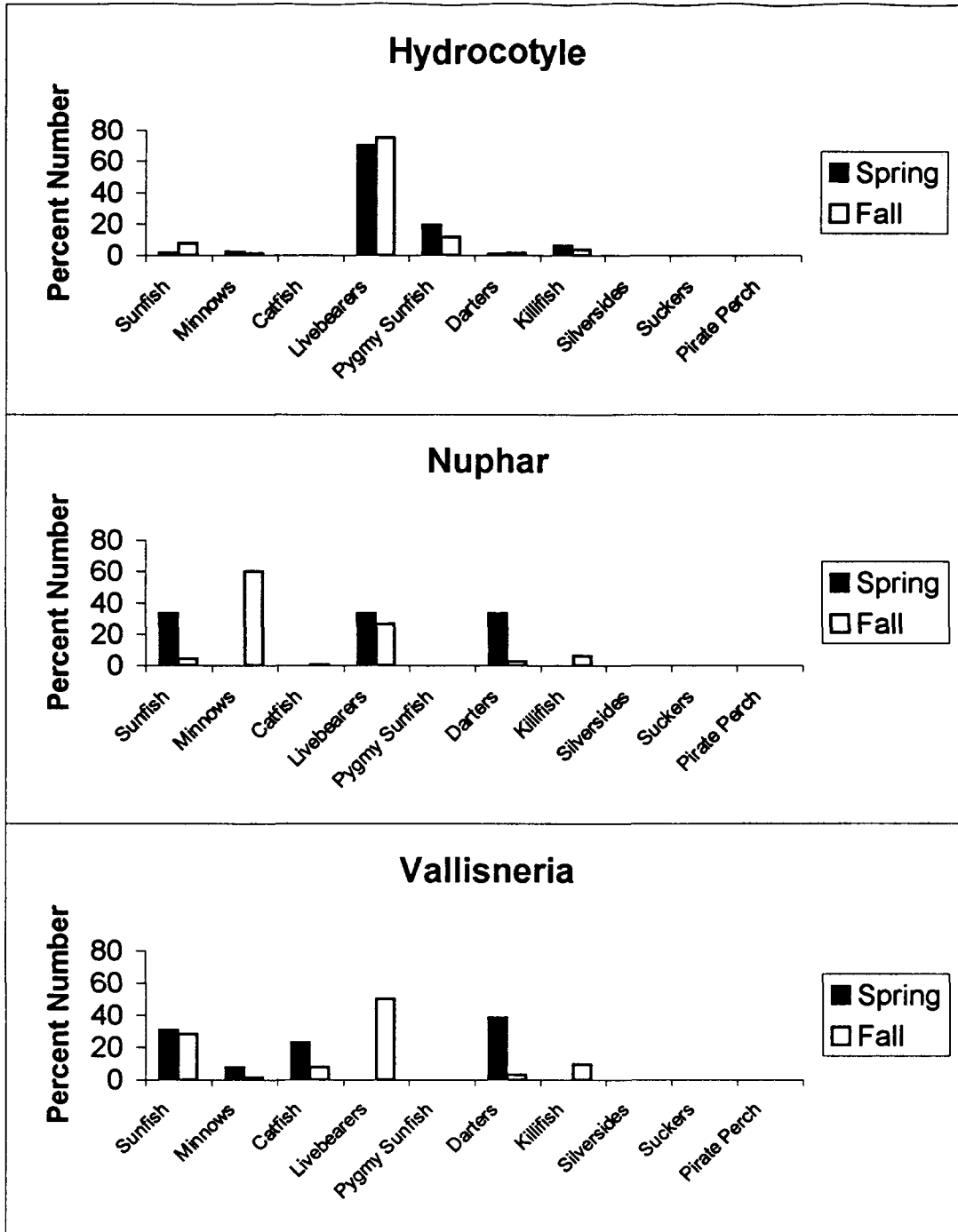


FIGURE 3.1.10. Seasonal (spring and fall) fish community composition within each habitat based upon percent number of fish (grouped by family) collected by throw trap in the Little Wekiva River, Florida, 1997.

Middle Wekiva River

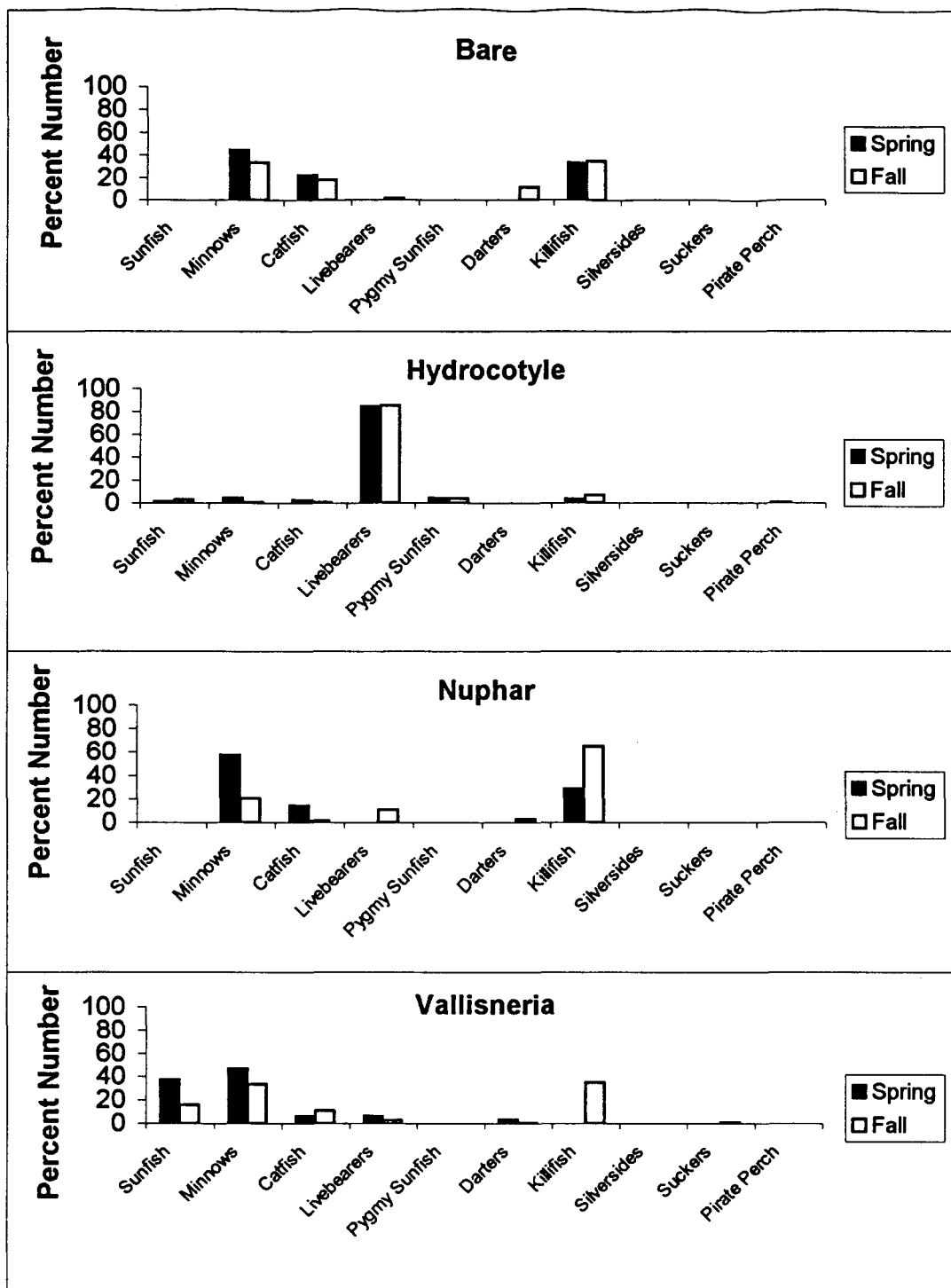


FIGURE 3.1.11. Seasonal (spring and fall) fish community composition within each habitat based upon percent number of fish (grouped by family) collected by throw trap in the middle Wekiva River, Florida, 1997.

Lower Wekiva River

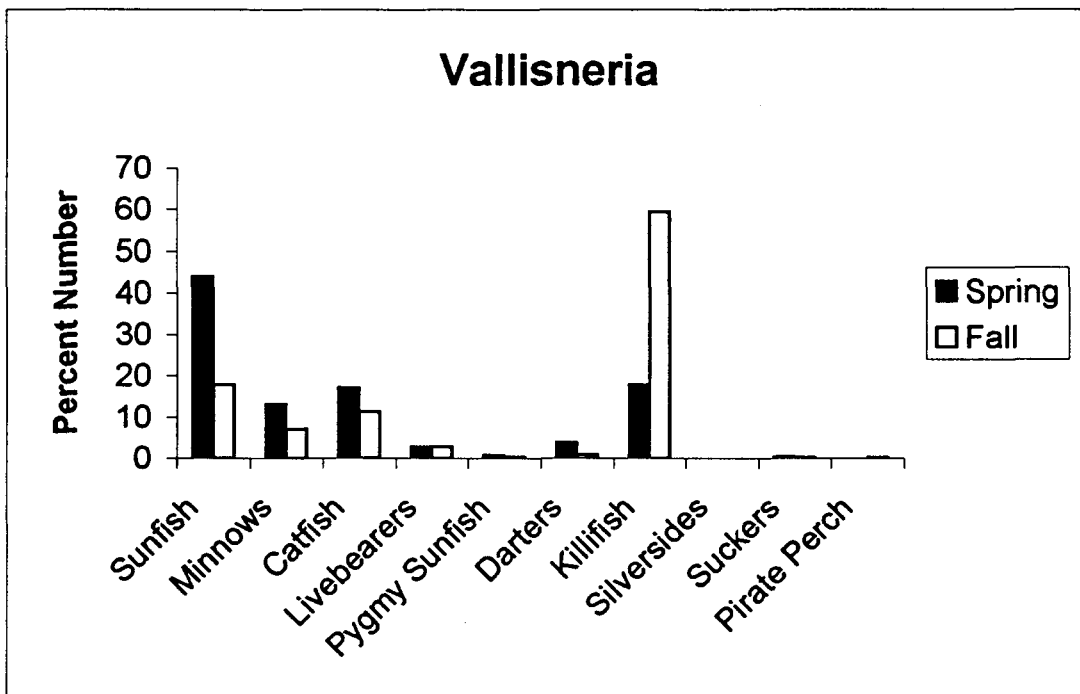
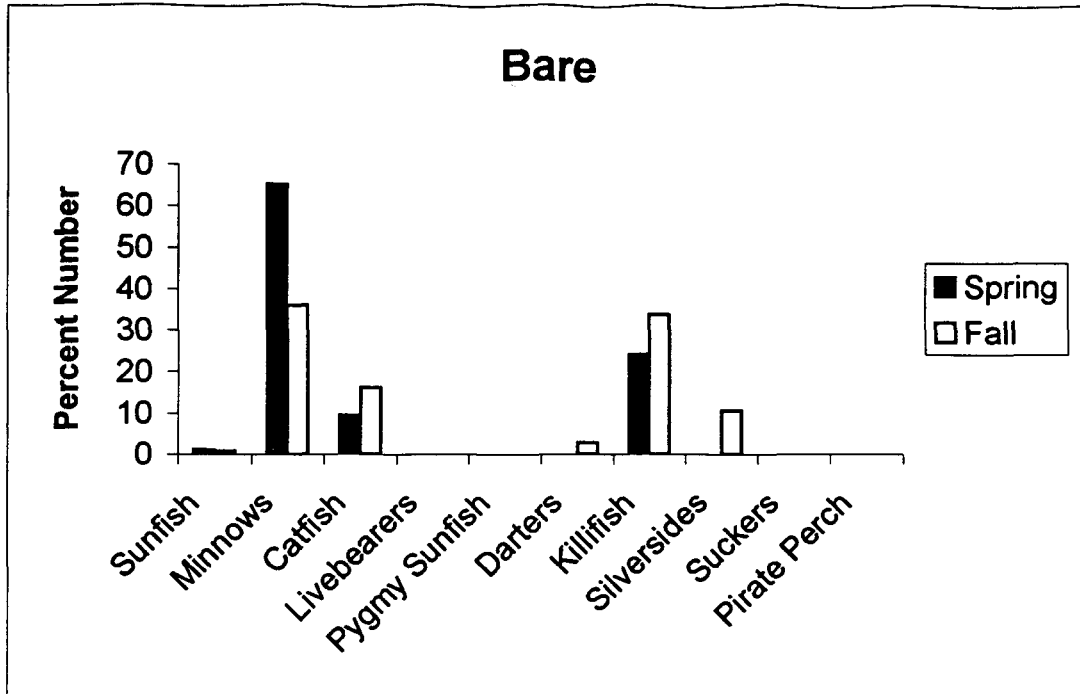


FIGURE 3.1.12. Seasonal (spring and fall) fish community composition within each habitat based upon percent number of fish (grouped by family) collected by throw trap in the lower Wekiva River, Florida, 1997.

found in bare bottom, bluefin killifish are usually associated with heavy vegetation in ponds and streams, in areas of little or no current. They are frequently found in spring habitats and in waters of moderate salinities (Lee et al. 1980, Page and Burr 1991).

Dominant species found in Nuphar were the coastal shiner (in both seasons in the Upper Wekiva), bluefin killifish, and sailfin shiner. Sailfin shiners inhabit small to moderate sized, shallow flowing streams. The preferred substrate usually consists of sand and detritus, with some aquatic vegetation or debris present (Lee et al. 1980, Page and Burr 1991).

Hydrocotyle was dominated by livebearers (Poeciliidae) in both seasons. The dominant species found in Hydrocotyle in all river segments was the least killifish (Heterandria formosa). Least killifish are found in heavily vegetated pond and stream margins, from fresh to brackish water (Lee et al. 1980, Page and Burr 1991).

Vallisneria was the most diverse habitat with the highest number (9) of families present. Dominant families were sunfish (Centrarchidae), minnows, livebearers, darters (Percidae), and killifish. Spotted sunfish (Lepomis punctatus) was the dominant member of the sunfish family. Spotted sunfish are common in quiet to moderately flowing waters with heavy vegetation or other forms of cover, over a mud or sandy substrate (Lee et al. 1980, Page and Burr 1991). Sailfin shiners (minnows), bluefin killifish,

mosquitofish and sailfin mollies (livebearers), and blackbanded darters were the dominant species representing their respective families. Eastern mosquitofish (Gambusia holbrooki) are common in vegetated backwater areas of sluggish streams. They are less common in moderate gradient streams and can be found in brackish or marine environments (Page and Burr 1991). Sailfin mollies are found in fresh, brackish, or saltwater, in quiet, often vegetated backwaters and pools of streams and rivers (Lee et al. 1980, Page and Burr 1991). The dominant member of the darter (Percidae) family, the blackbanded darter, typically inhabits areas over gravel and sandy bottom, near vegetation or debris (Lee et al. 1980, Page and Burr 1991).

Seasonal fish community composition was also analyzed for each habitat based upon percent weight of fish collected grouped by family (Figures 3.1.13 - 3.1.16). The sunfish family, as a whole, tended to dominate by weight due to their generally larger size, in spite of fewer numbers being present in some habitats.

The sunfish family was the dominant family by weight in Vallisneria. The spotted sunfish was the dominant sunfish species. Although the seasonal fish family community composition for Hydrocotyle was dominated numerically by livebearers, sunfish generally dominated by weight. Hydrocotyle in the Middle Wekiva River was the exception, where livebearers were the dominant family by percent number and weight in both seasons, however, the

Upper Wekiva River

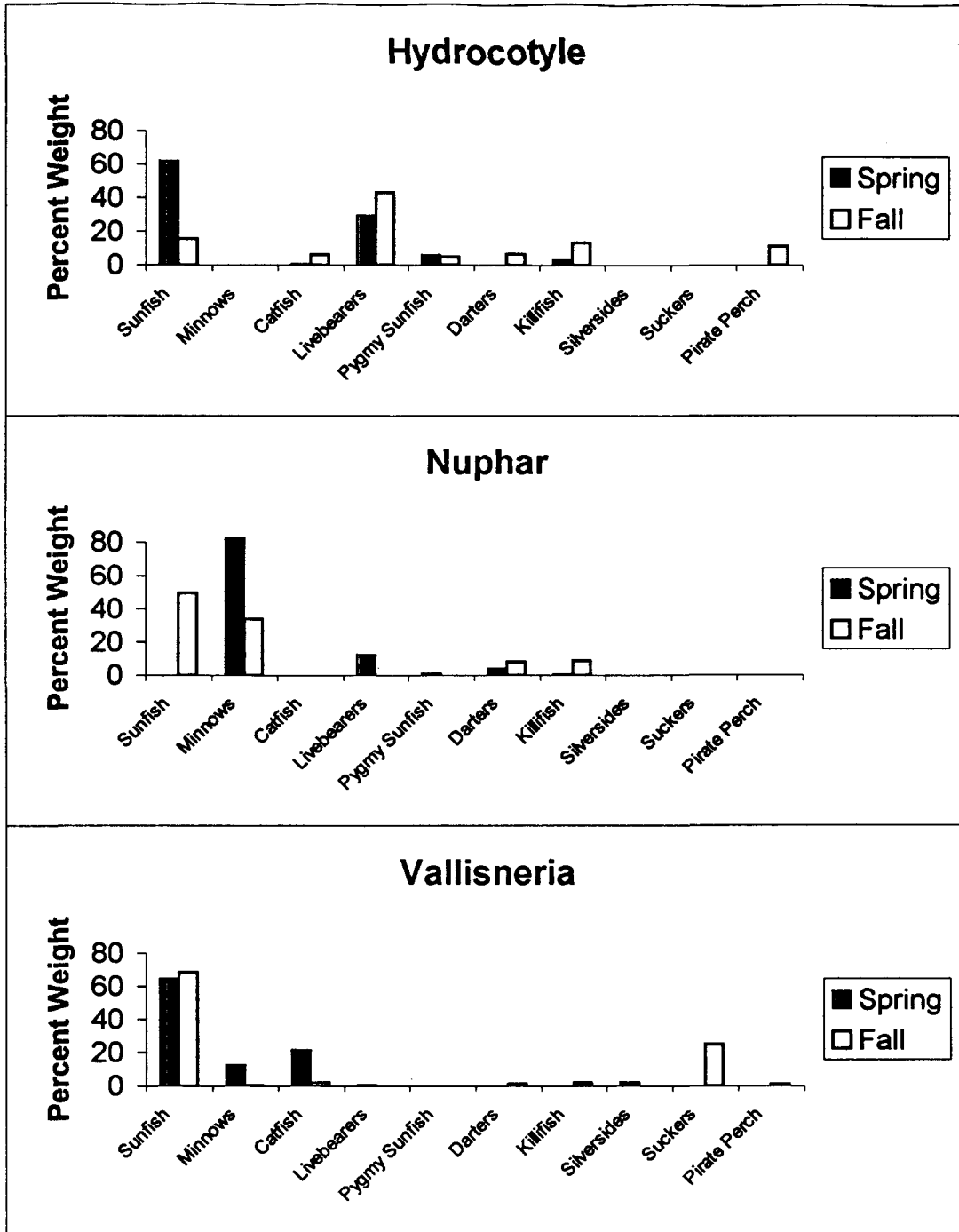


FIGURE 3.1.13. Seasonal (spring and fall) fish community composition within each habitat based upon percent weight of fish (grouped by family) collected by throw trap in the upper Wekiva River, Florida, 1997.

Little Wekiva River

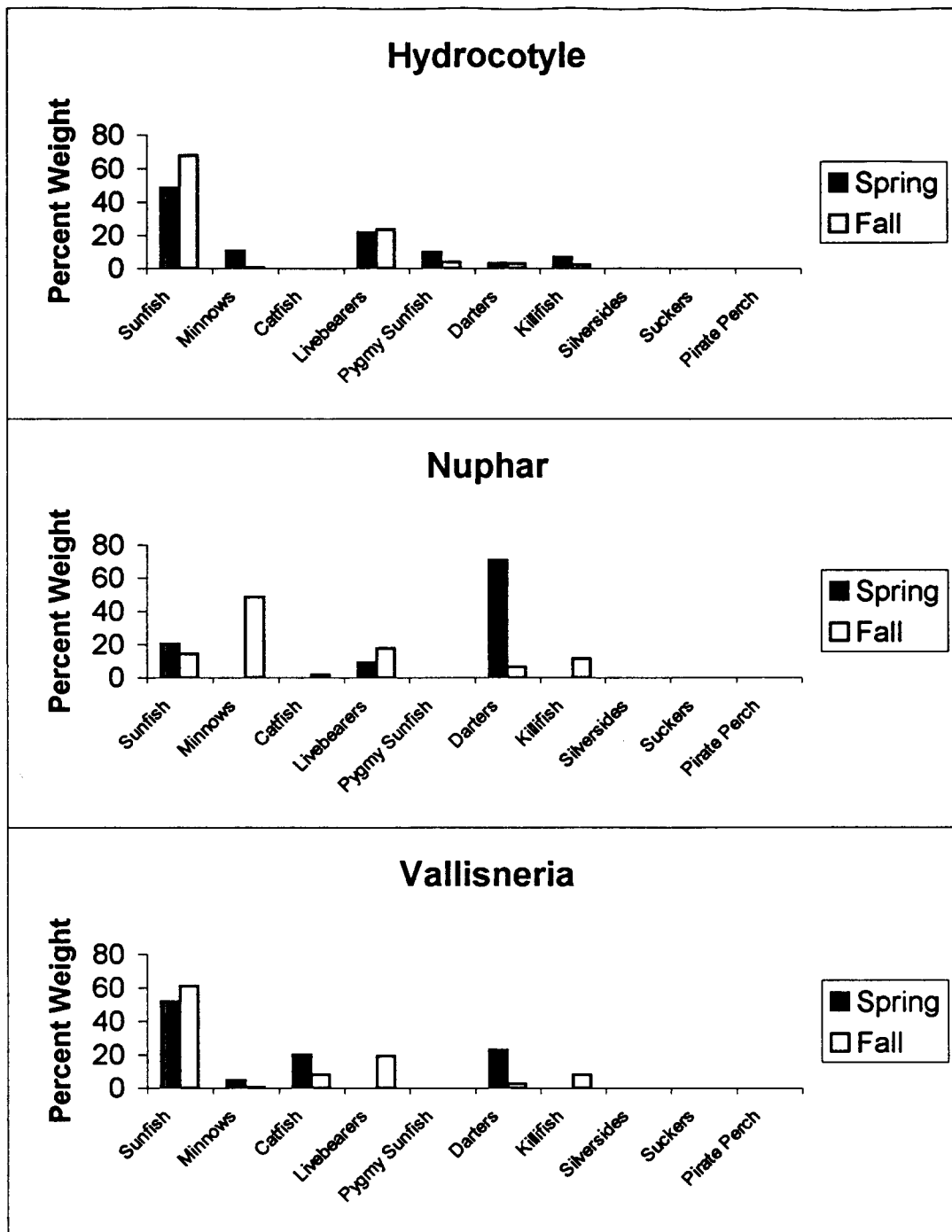


FIGURE 3.1.14. Seasonal (spring and fall) fish community composition within each habitat based upon percent weight of fish (grouped by family) collected by throw trap in the Little Wekiva River, Florida, 1997.

Middle Wekiva River

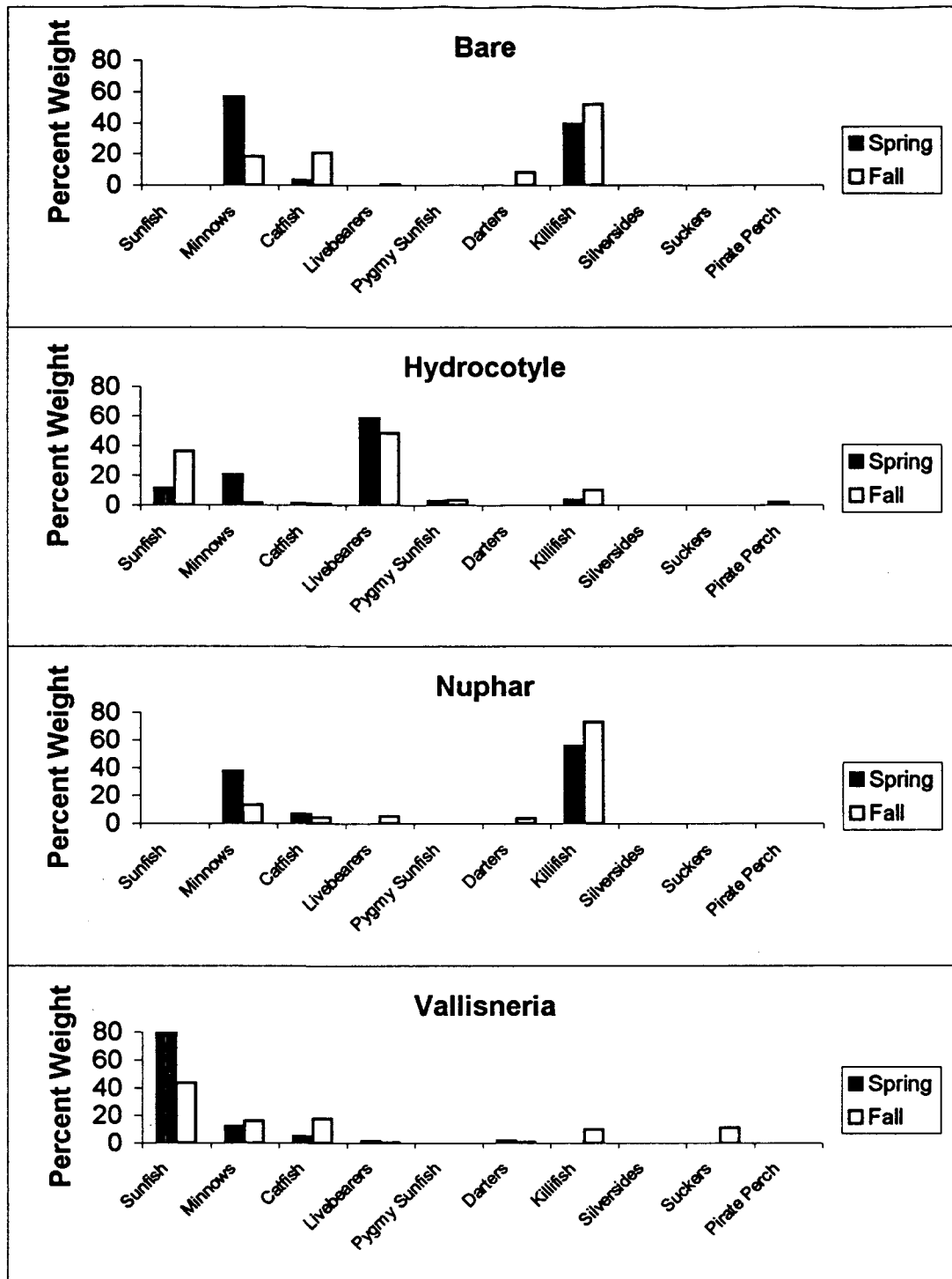


FIGURE 3.1.15. Seasonal (spring and fall) fish community composition within each habitat based upon percent weight of fish (grouped by family) collected by throw trap in the middle Wekiva River, Florida, 1997.

Lower Wekiva River

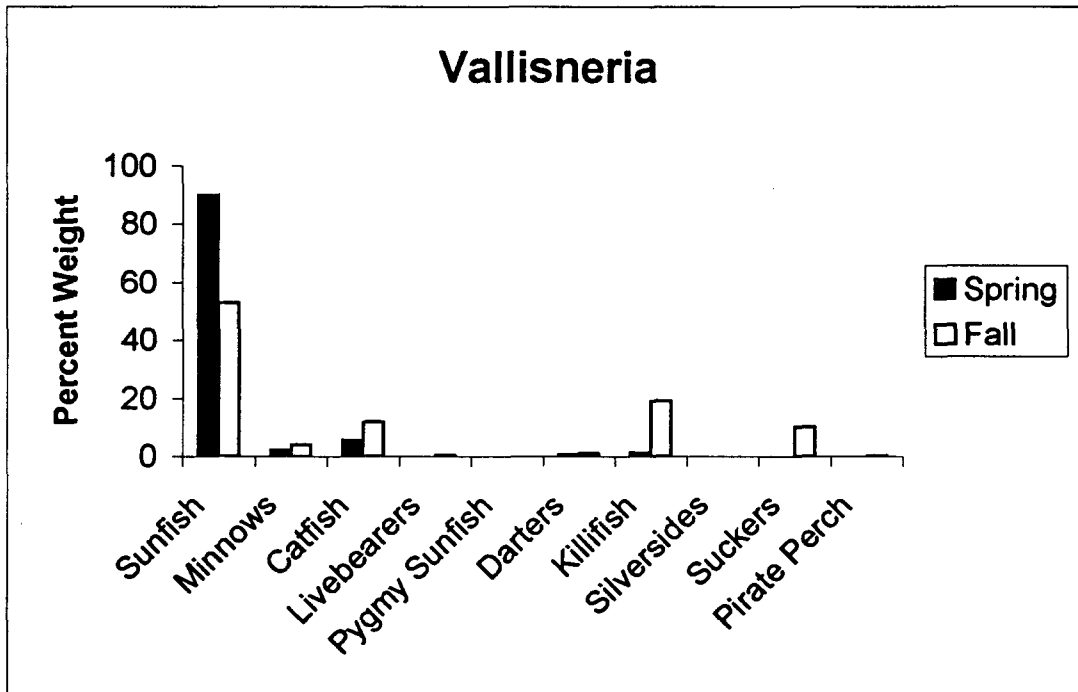
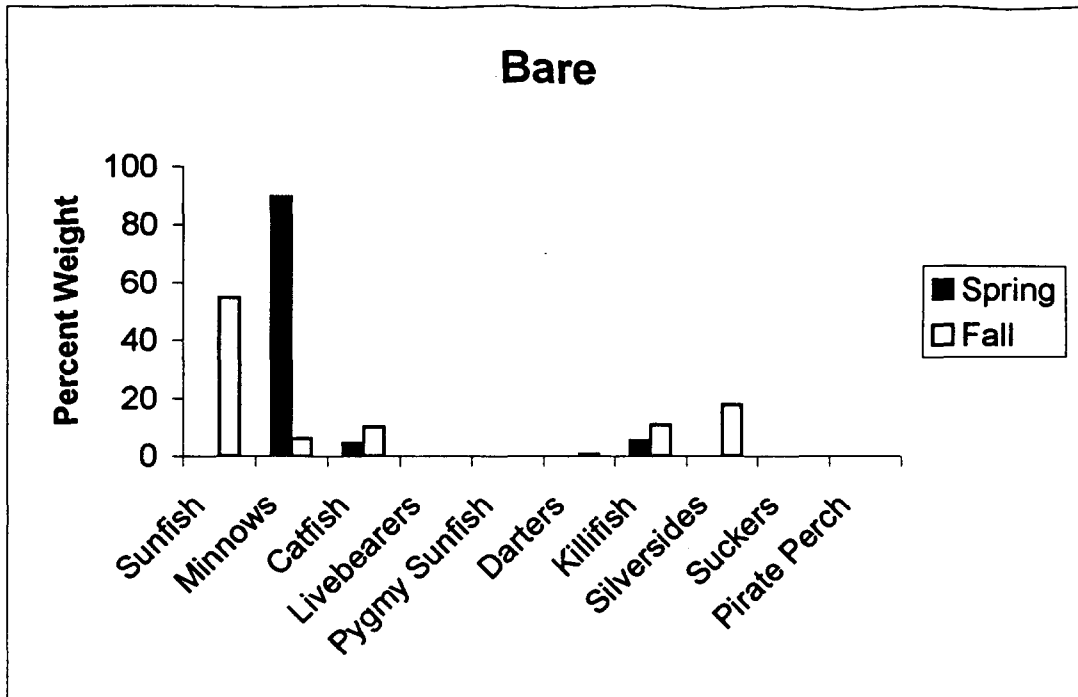


FIGURE 3.1.16. Seasonal (spring and fall) fish community composition within each habitat based upon percent weight of fish (grouped by family) collected by throw trap in the lower Wekiva River, Florida, 1997.

redbreast and spotted sunfish were the dominant species by weight in spring and fall, respectively. The dominant families by weight in Nuphar varied from sunfish and minnows to darters and killifish, depending on river segment and season. The dominant species by weight in both seasons were coastal shiners in the Upper Wekiva and bluefin killifish in the Middle Wekiva. Nuphar in the Little Wekiva was dominated by blackbanded darters in spring and coastal shiners in fall. Bare bottom was dominated by the killifish, minnow, and sunfish families by percent weight. Coastal shiners were dominant in spring in the Middle and Lower Wekiva. In fall, the Middle and Lower Wekiva were dominated by seminole killifish and redbreast sunfish, respectively.

Blocknets

The Lower Wekiva River was sampled using blocknets in Vallisneria and bare bottom. Thirty-nine of the 40 fish species, collected during this study, were captured by blocknet (Appendices 3.1.10 and 3.1.11). Only the swamp darter (Etheostoma fusiforme) was not collected via blocknet. Numbers of fish sampled in individual blocknets ranged from three in bare bottom to 510 in Vallisneria.

Mean density (number of fish per m²) was calculated for both habitats sampled within the Lower Wekiva River for spring and fall (Figure 3.1.17). As expected, Vallisneria had higher mean densities (1.16 and 0.79 fish/m²,

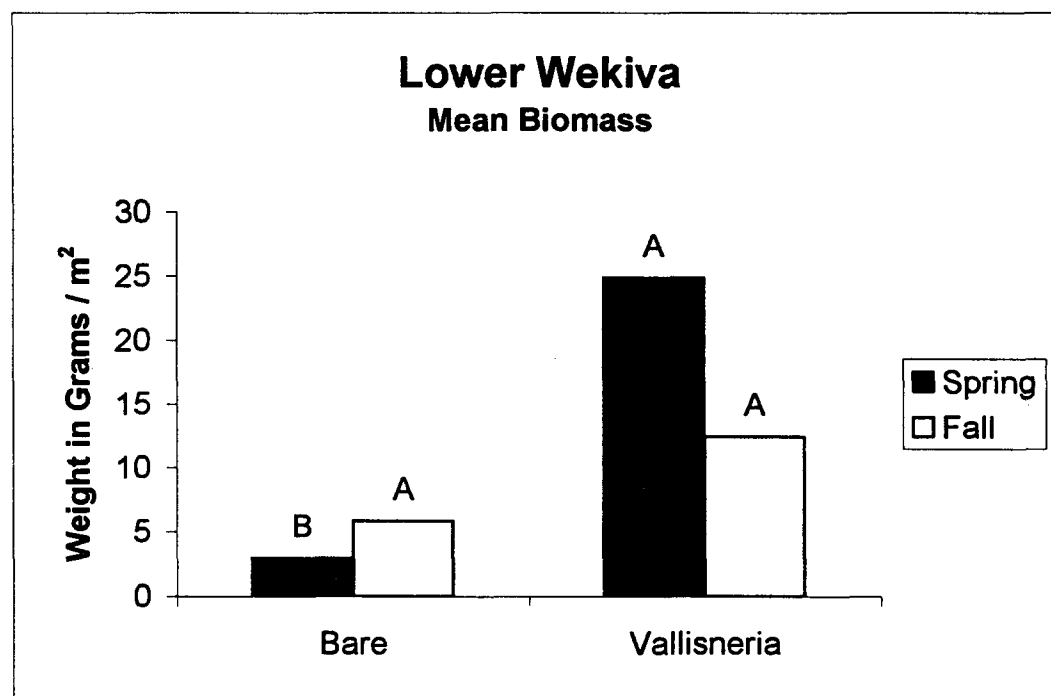
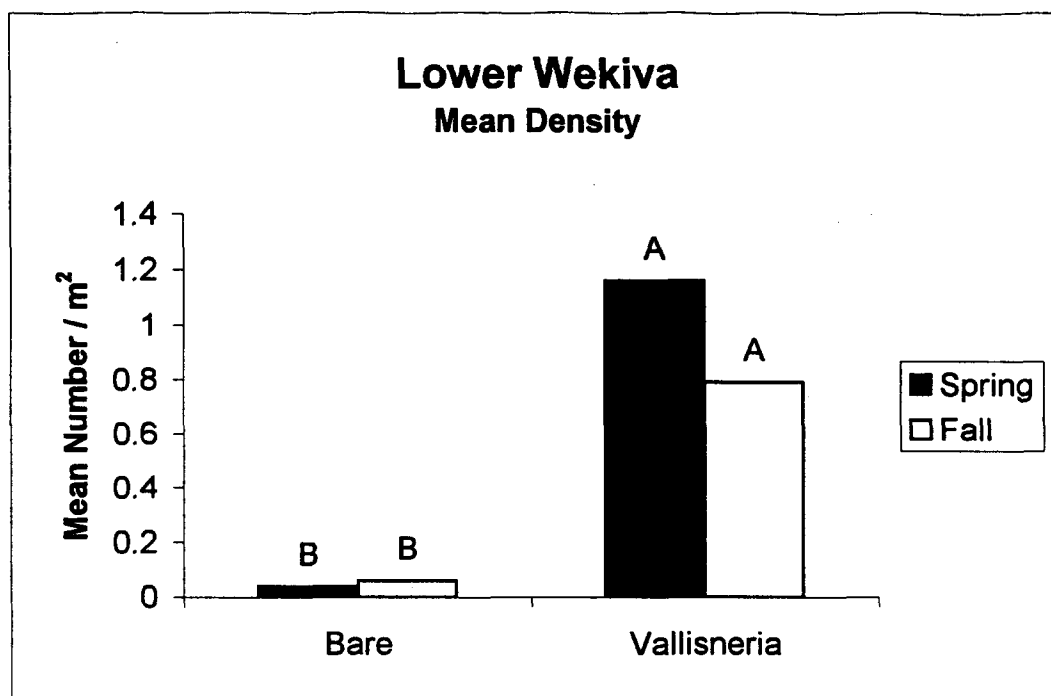


FIGURE 3.1.17. Mean density (number/m²) and mean biomass (grams/m²) of fish collected by blocknet for individual habitats, Lower Wekiva River, Florida, 1997. Same letters indicate habitat mean density or biomass are not significantly different within season (spring and fall).

respectively) for both seasons compared to bare bottom (0.04 and 0.06 fish/m², respectively), although not as high as those found by throw traps, due to larger fish being targeted by blocknets. Fewer larger fish can occupy a known area compared to higher numbers of smaller (<100 mm TL) fish. The only other quantitative fish study on the Wekiva River, Canfield and Hoyer (1988), was based on data collected from two to six stream sections on two to three dates between May 1985 and February 1987. Sampling sites consisted of both open and closed forest canopy sections within the Wekiva River system and were not aquatic plant species specific. They reported mean densities of 1,400 and 1,600 fish/ha for the Wekiva and Little Wekiva rivers, respectively. This present study found 420 fish/ha in bare bottom and 11,600 in Vallisneria during 1997 in the lower Wekiva River.

Mean biomass (grams per m²) of fish collected for both habitats within the Lower Wekiva River for spring and fall is presented in Figure 3.1.17. Canfield and Hoyer (1988) reported mean biomass of 150 and 55 kg/ha for the Wekiva and Little Wekiva rivers, respectively. This present study found 30 kg/ha in bare bottom and 248 kg/ha in Vallisneria during 1997 in the lower Wekiva River. As expected, Vallisneria had higher mean biomass compared to bare bottom due to the presence of larger fish, such as Centrarchids. Although Vallisneria and bare bottom were significantly different in the spring, this was not the case in the fall.

One net set in bare bottom had unusually high numbers of redbreast sunfish (16 fish) that made up 2,125 grams of the total biomass in net. This net was not typical of bare bottom. The location of the net was just upstream of the SR 46 bridge in which several redbreast sunfish spawning beds were observed. Excluding this sample from statistical analysis, results in a significant difference between these two habitats and the mean biomass in bare bottom is reduced by half.

Overall species richness (total number of species found in each habitat) was calculated for both habitats within the Lower Wekiva River for spring and fall (Figure 3.1.18). The number of different fish species ranged from seven in bare bottom to 25 in Vallisneria. This is the same pattern shown by throw traps, likely due to the greater structural complexity of the Vallisneria habitat.

Overall species richness was likely biased due to differences in the number of blocknet samples taken in bare bottom and Vallisneria. As a result, mean species richness (number of species per net) was analyzed for each habitat within the Lower Wekiva River for spring and fall (Figure 3.1.18). The mean number of fish species collected per blocknet ranged from 2.2 in bare bottom to 12.5 in Vallisneria.

Seasonal fish community composition was analyzed for each habitat based upon percent number of fish collected grouped by family (Figure 3.1.19). The Lower Wekiva River

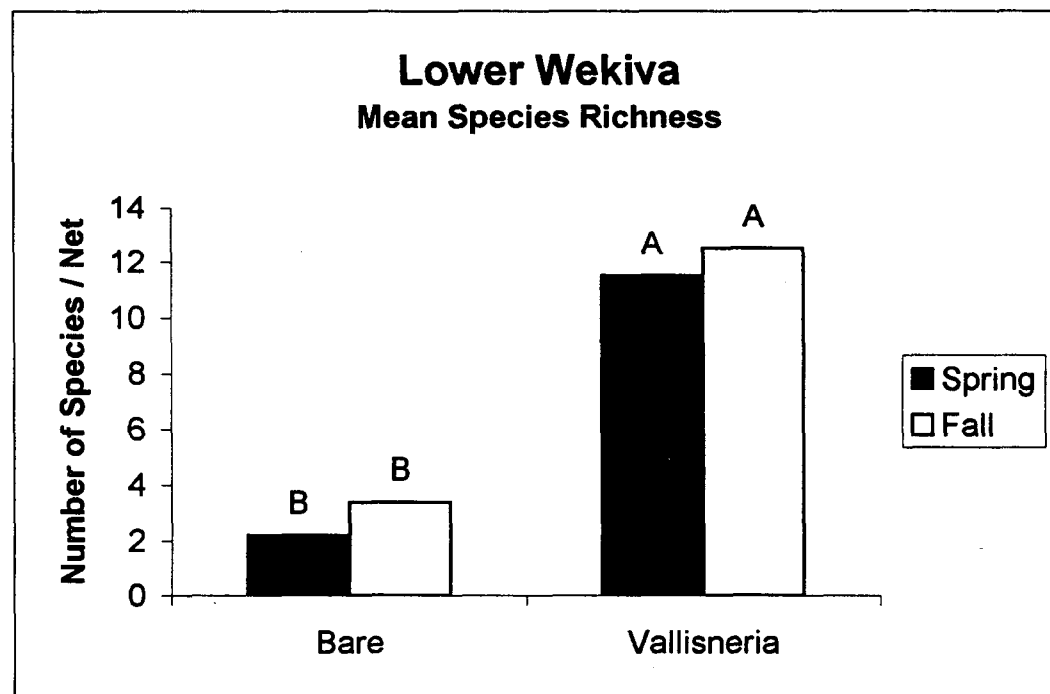
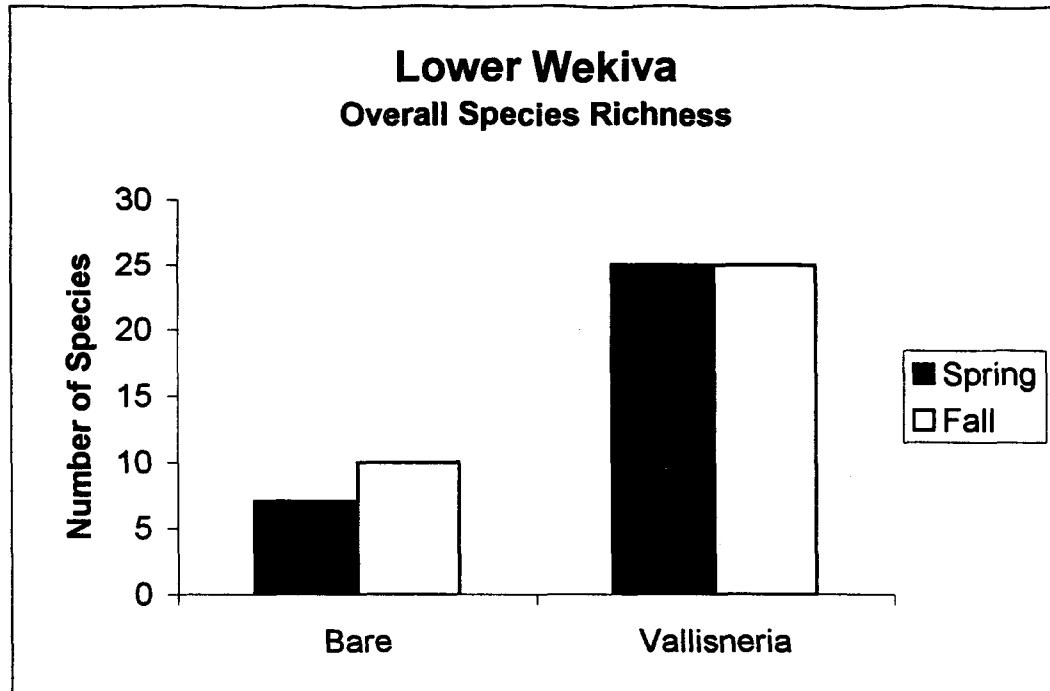


FIGURE 3.1.18. Overall species richness and mean species richness (number of species/net) of fish collected by blocknet for individual habitats, Lower Wekiva River, Florida, 1997. Same letters indicate habitat species richness values are not significantly different within season (spring and fall).

Lower Wekiva River

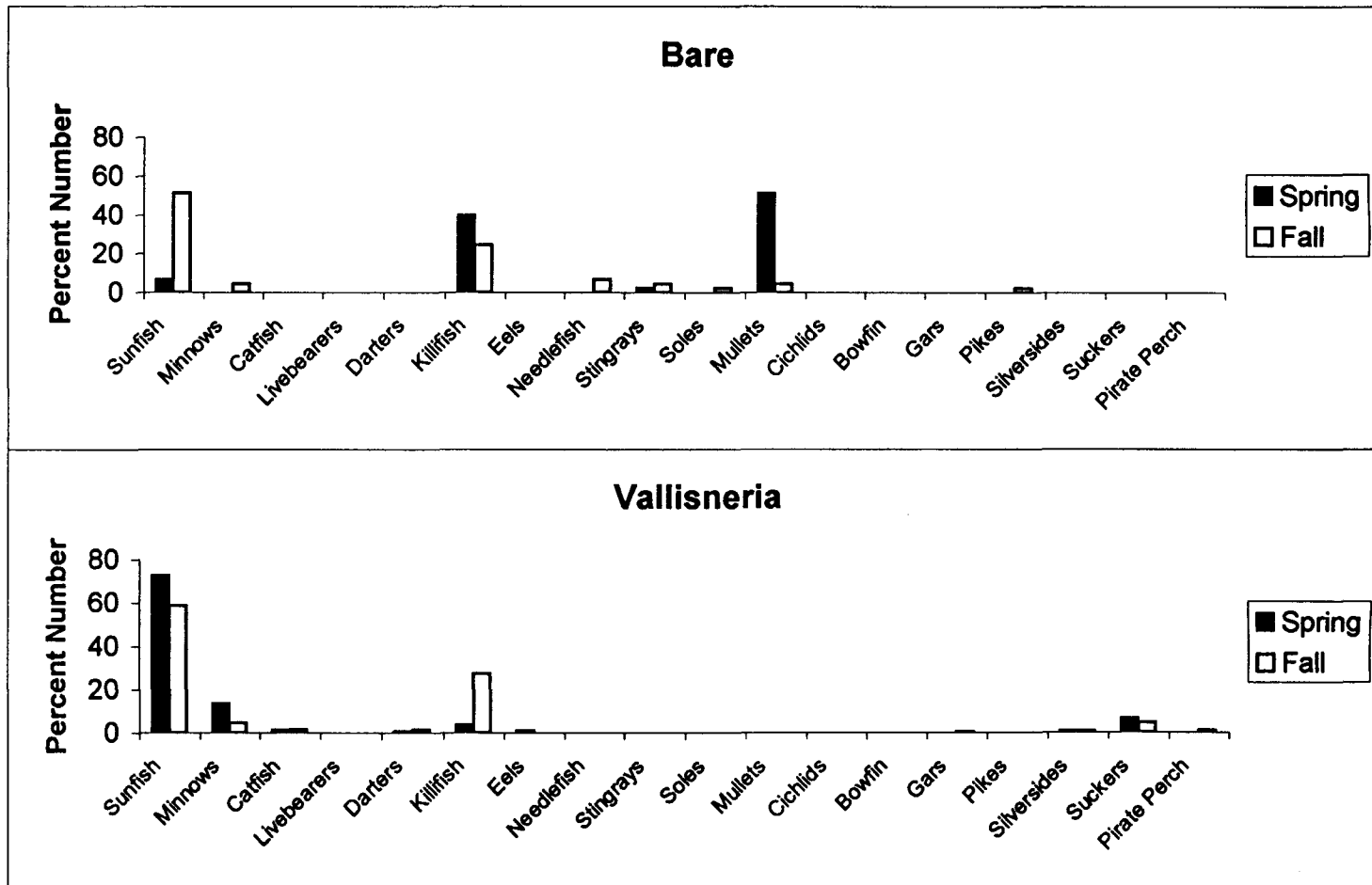


FIGURE 3.1.19. Seasonal (spring and fall) fish community composition within each habitat based upon percent number of fish (grouped by family) collected by blocknet in the lower Wekiva River, Florida, 1997.

had an average of eight fish families represented in each habitat for spring and ten families in the fall.

Bare bottom was dominated numerically by mullet (Mugilidae) and killifish in the spring. The dominant species from the killifish family was the seminole killifish (Fundulus seminolis), which swims in schools over sandy bottom and prefers open areas of lakes and streams (Lee et al. 1980, Page and Burr 1991). Twenty-three striped mullet (Mugil cephalus) captured in one blocknet constituted more than half of all (45) fish captured in bare bottom. Striped mullet enter freshwater and feed on detritus and plant material in large schools and are distributed nearly worldwide in warm waters (Robins et al. 1986). Sunfish and killifish were the dominant families in the fall. The dominant sunfish species was the redbreast sunfish (Lepomis auritus). Redbreast sunfish tend to be more of a riverine species, inhabiting vegetated and sandy pools of creeks and small to medium size streams and rivers (Lee et al. 1980, Page and Burr 1991). The dominant killifish species was the seminole killifish.

Vallisneria was again the most diverse habitat with the highest number of families present (Figure 3.1.19). Sunfish was the dominant family in both spring and fall, represented primarily by spotted sunfish. The seminole killifish was the second most numerically abundant species in the fall. Seasonal fish community composition was also analyzed for each habitat based upon percent weight of fish

collected (Figure 3.1.20). Sunfish and mullet dominated by weight due to their generally larger size.

Bare bottom was dominated by stingrays and mullet in both seasons, along with sunfish in the fall. The dominant species by weight representing each family was the Atlantic stingray (Dasyatis sabina), striped mullet, and the redbreast sunfish, respectively. Atlantic stingrays inhabit coastal waters feeding on bottom organisms and are the only North American stingray commonly entering shallow freshwater (Lee et al. 1980, Robins et al. 1986).

The sunfish family was the dominant family by weight in Vallisneria for both seasons. The spotted sunfish was the dominant species. The second most dominant family by weight in spring and fall was the sucker family (Catostomidae) represented by the lake chubsucker (Erimyzon sucetta). Lake chubsuckers occupy ponds, oxbows, sloughs, impoundments, and similar waters of little to no flow (not common in streams) that are clear and have silty-sand bottoms. They usually prefer areas of aquatic vegetation (Lee et al. 1980, Page and Burr 1991).

Relationship Between Fish and Physicochemical Factors

Multivariate regression equations were developed for throw trap and blocknet fish density, biomass, and species richness (Tables 3.1.7, 3.1.8, and 3.1.9). Forty-three significant models were developed for the 84 possible combinations of fish population characteristics, habitat,

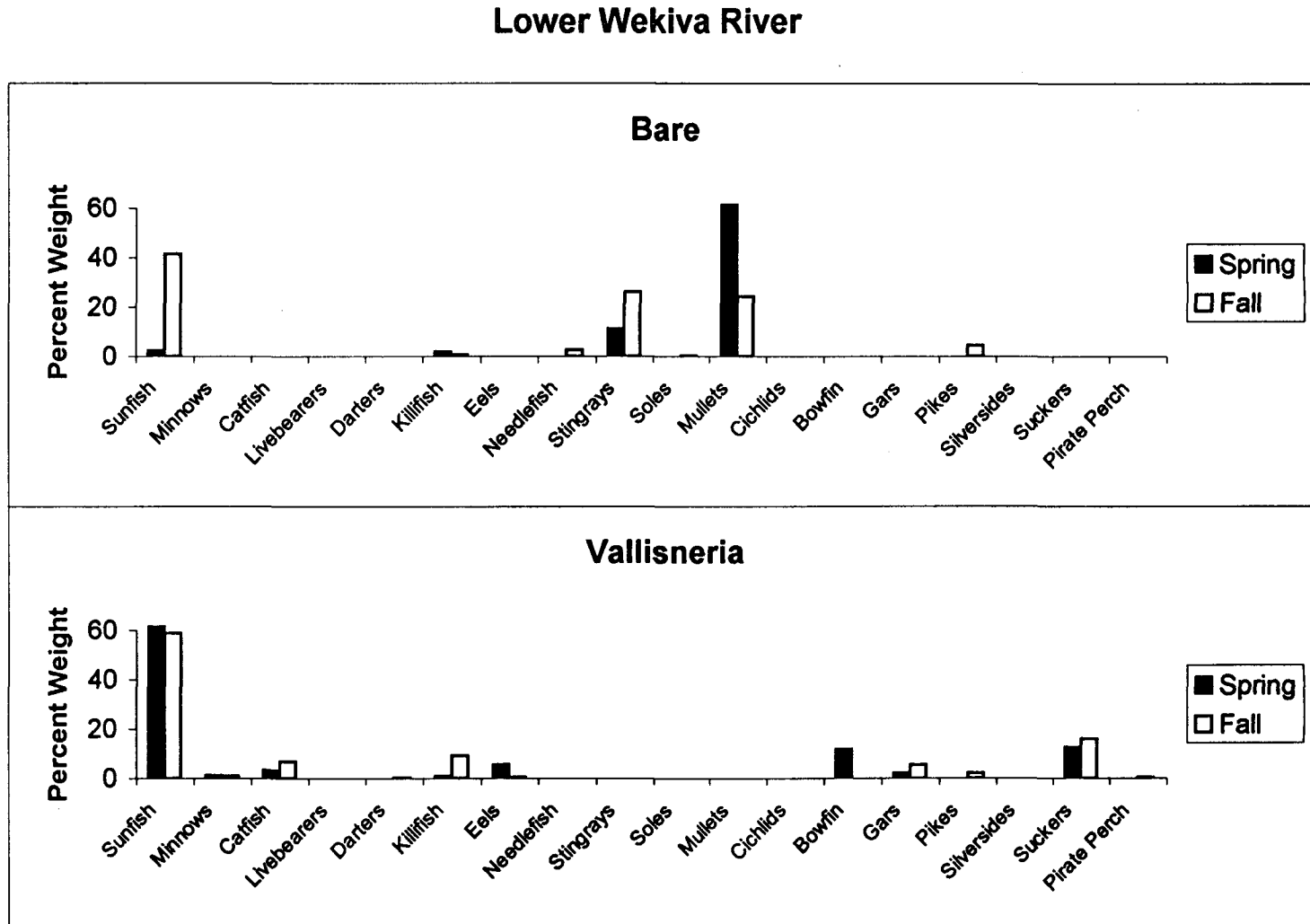


FIGURE 3.1.20. Seasonal (spring and fall) fish community composition within each habitat based upon percent weight of fish (grouped by family) collected by blocknet in the lower Wekiva River, Florida, 1997.

TABLE 3.1.7. Regression equations for predicting spring and fall throw trap and blocknet fish density (numbers/m²) from physicochemical parameters [depth (D) in meters, temperature (T) in C, velocity (surface=SVL and bottom=BVL) in cm/sec, dissolved oxygen (DO) in mg/l, plant biomass (PBIO) in kg/m², plant cover (C) in percent] within each habitat and river segment of the Wekiva River system, Florida. Models significant at p≤0.05 are listed. nsm=no significant model.

		Spring		Fall	
		Model	R ²	Model	R ²
Throw Trap					
Upper Wekiva					
	Hydrocotyle	-874.25+38.11(T)	0.99	-5.07+12.30(DO)-5.09(BVL)+2.30(PBIO)	1.00
	Nuphar	nsm		37.49-11.49(D)-3.29(BVL)-0.60(C)	1.00
	Vallisneria	nsm		98.23-130.04(D)-0.15(SVL)-2.05(BVL)	1.00
Little Wekiva					
	Hydrocotyle	nsm		nsm	
	Nuphar	nsm		-52.47+5.62(SVL)+34.88(PBIO)	1.00
	Vallisneria	-20.59+55.88(D)-0.21(SVL)	0.97	182.81-0.36(SVL)-1.68(C)+2.00(PBIO)	1.00
Middle Wekiva					
	Bare Bottom	nsm		nsm	
	Hydrocotyle	nsm		149.36-133.02(SVL)+6.46(BVL)+28.30(PBIO)	1.00
	Nuphar	-0.62+2.80(D)-0.73(PBIO)	1.00	-131.85+2.97(T)+13.39(DO)-0.74(SVL)	1.00
	Vallisneria	nsm		nsm	
Lower Wekiva					
	Bare Bottom	nsm		nsm	
	Vallisneria	10.28-11.92(D)-0.14(BVL)+0.84(PBIO)	0.27	-134.92+7.38(T)-2.99(DO)-1.80(PBIO)	0.17
Blocknet					
Lower Wekiva					
	Bare Bottom	nsm		-0.52+1.30(D)-0.03(DO)	0.99
	Vallisneria	3.19-3.61(D)-0.01(SVL)	0.95	4.40-5.11(D)-1.23(PBIO)	0.92

TABLE 3.1.8. Regression equations for predicting spring and fall throw trap and blocknet fish biomass (grams/m²) from physicochemical parameters [depth (D) in meters, temperature (T) in C°, velocity (surface=SVL and bottom=BVL) in cm/sec, dissolved oxygen (DO) in mg/l, plant biomass (PBIO) in kg/m², plant cover (C) in percent] within each habitat and river segment of the Wekiva River system, Florida. Models significant at $p \leq 0.05$ are listed. nsm=no significant model.

		Spring		Fall	
		Model	R ²	Model	R ²
Throw Trap					
Upper Wekiva					
	Hydrocotyle	-91.74+18.40(DO)	1.00	nsm	
	Nuphar	nsm		52.48-2.47(T)+0.15(BVL)+2.99(PBIO)	1.00
	Vallisneria	nsm		nsm	
Little Wekiva					
	Hydrocotyle	nsm		nsm	
	Nuphar	0.38-0.10(DO)-0.004(SVL)+0.002(C)	1.00	-20.63+2.24(SVL)+14.96(PBIO)	0.99
	Vallisneria	-0.21+0.001(PBIO)	0.81	nsm	
Middle Wekiva					
	Bare Bottom	nsm		nsm	
	Hydrocotyle	1.27+5.87(BVL)	0.95	116.00-19.81(DO)	0.92
	Nuphar	-0.07+0.34(D)-0.09(PBIO)	0.87	-10.85+2.65(DO)-0.52(SVL)+0.07(C)	1.00
	Vallisneria	nsm		221.59-34.62(DO)	0.41
Lower Wekiva					
	Bare Bottom	nsm		-6.91+1.07(DO)	0.17
	Vallisneria	nsm		nsm	
Blocknet					
Lower Wekiva					
	Bare Bottom	nsm		-48.43+86.86(D)	0.94
	Vallisneria	55.92-1.36(SVL)	0.58	21.78-0.81(C)+3.16(T)+2.00(BVL)	0.95

TABLE 3.1.9. Regression equations for predicting spring and fall throw trap and blocknet fish species richness (number of species/trap or net) from physicochemical parameters [depth (D) in meters, velocity (surface=SVL and bottom=BVL) in cm/sec, dissolved oxygen (DO) in mg/l, plant biomass (PBIO) in kg/m², plant cover (C) in percent] within each habitat and river segment of the Wekiva River system, Florida. Models significant at $p \leq 0.05$ are listed. nsm=no significant model.

		Spring		Fall	
		Model	R ²	Model	R ²
Throw Trap					
Upper Wekiva					
	Hydrocotyle	15.90-6.72(D)-2.55(PBIO)	1.00	nsm	
	Nuphar	-1.83+0.01(C)+3.02(PBIO)	1.00	3.50-0.59(BVL)	0.87
	Vallisneria	nsm		nsm	
Little Wekiva					
	Hydrocotyle	11.46-9.73(D)-0.25(SVL)	0.99	nsm	
	Nuphar	nsm		nsm	
	Vallisneria	-17.24+47.07(D)-0.17(SVL)	0.99	nsm	
Middle Wekiva					
	Bare Bottom	nsm		nsm	
	Hydrocotyle	15.06-0.14(SVL)-2.59(PBIO)	1.00	18.04-2.98(DO)+0.02(C)+0.37(PBIO)	1.00
	Nuphar	-0.62+2.80(D)-0.73(PBIO)	1.00	-0.05+0.12(C)	0.80
	Vallisneria	18.42-1.97(DO)-0.19(SVL)-0.33(BVL)	0.88	6.44-0.16(SVL)-0.33(BVL)+0.72(PBIO)	0.82
Lower Wekiva					
	Bare Bottom	nsm		nsm	
	Vallisneria	4.42-2.75(D)-0.05(SVL)	0.27	2.38+4.00(D)-0.14(SVL)+0.02(C)	0.44
Blocknet					
Lower Wekiva					
	Bare Bottom	nsm		nsm	
	Vallisneria	-1.79+0.84(T)-0.29(SVL)-0.02(PBIO)	0.93	nsm	

river segment, season, and gear type. Each of the seven physicochemical factors (dissolved oxygen, temperature, surface velocity, bottom velocity, depth, plant cover, and plant biomass) were included in at least one of the models developed for each of the three fish population variables. Water depth, water velocity, and plant biomass were most frequently selected for inclusion into the models (16, 28, and 18 models, respectively).

The models have high R^2 values (>0.90) for each of the habitats except for Vallisneria. In the lower Wekiva River, regression models for small fish in Vallisneria (throw trap data) had R^2 values of 0.44 or less, while models for large fish (blocknet data) in the Vallisneria had R^2 values of 0.58 or more. Most of the models can thus predict a high percentage of the observed variability in the fish population characteristics within individual habitat, river segment, and season.

Conclusions

A total of 40 species of fish were collected by throw traps and blocknets from the Wekiva and Little Wekiva Rivers during this study. There were differences in the fish communities among the four habitats that were sampled. These differences can be attributed to the associated physical (water velocity) and biological (plant coverage and biomass) characteristics and influences of each habitat, along with the general biology/ecology of each of the fish species occurring in this system, in particular habitat preference.

Overall, Hydrocotyle had the highest density of fish, followed by Vallisneria, Nuphar, and bare bottom. Hydrocotyle and Vallisneria were dominated by small livebearers (Poeciliidae) and sunfish, respectively, while Nuphar and bare bottom were dominated numerically by minnows (Cyprinidae) and killifishes (Fundulidae). Hydrocotyle had the highest mean species richness, while Vallisneria had the highest mean biomass because of the presence of larger fish, such as sunfish (Centrarchidae).

Among the four habitats sampled by throw traps, there was generally an increase in mean density from spring to fall, due to an abundance of young-of-year fish. The lack of difference in stream flow between the spring and fall sampling periods was beneficial to data analysis and interpretation, as observed seasonal differences in fish

communities (density and species composition) were due to the population dynamics of the fish species (reproduction and growth of spring and summer spawning species) rather than a response to change in stream flow (water level).

Blocknet samples exhibited similar fish community patterns as did the throw traps, although only bare bottom and Vallisneria habitats were sampled via blocknets.

Vallisneria, a structurally more complex habitat, had higher mean density, biomass, and species richness than bare bottom in both seasons. Vallisneria was dominated by sunfish in both seasons, while bare was dominated numerically by sunfish, killifish, and mullet (Mugilidae).

Neither dissolved oxygen nor water temperature are probable factors influencing distribution of fish among the dominant habitats sampled within each river segment as dissolved oxygen and water temperature measured at throw trap sampling sites were not significantly different among the four habitats within each river segment. In addition, dissolved oxygen and water temperature measurements within Hydrocotyle, Vallisneria, and bare bottom habitats fluctuated similarly during a diurnal sampling period. Dissolved oxygen, water temperature and depth, and surface velocity measured at blocknet sampling sites were also not significantly different among Vallisneria and bare bottom habitats.

Regression models developed for throw trap (small) and blocknet (larger) fish density, biomass, and species

richness explained a large amount of the variability of the data. Water depth, water velocity, and plant biomass were included in many of these models, indicating the importance of these habitat characteristics to fish communities.

Physical factors such as water depth and velocity, and biological factors such as plant type and abundance, will likely change with reduction in stream flow (discharge). These models can be used to predict possible changes in the fish communities. Response of fish to stream flow reductions and use of these models will be presented in chapter 4 of this report.

This study provides crucial baseline information for future research to measure long-term trends in abundance and species composition of these fish communities. These data are needed to assess the possible impact of groundwater withdrawal-related stream flow reductions on habitats used by fish in the Wekiva River system and other spring-fed aquatic environments. Care must be taken in comparing these data to future data, however, as changes in aquatic macrophyte abundance could be due to aquatic weed control programs and not due to stream flow reduction. This study was conducted during a single year with relatively stable water levels. Future sampling would elucidate the effects of varying water levels on the aquatic habitats and their associated fish communities of the Wekiva and Little Wekiva Rivers.

III. FISH COMMUNITIES

2. Blocknet Sampling of the Fish Communities of the Upper Wekiva River and Little Wekiva River

Introduction

In designing this study, several exploratory trips were made to the Wekiva and Little Wekiva Rivers by staff of the University of Florida, St. Johns River Water Management District, and Florida Game and Fresh Water Fish Commission (currently, the Florida Fish and Wildlife Conservation Commission). Allocation of sampling effort was discussed on several occasions. It was decided by all involved that limited blocknet electrofishing sampling be conducted in the upper Wekiva River and the Little Wekiva River to provide data that could be compared to data from the lower Wekiva River (Section 3.1 of this report) and to the findings of Canfield and Hoyer (1988) (Section 3.3 of this report). Most of the blocknet electrofishing samples were taken in the lower Wekiva River, which is shallow in comparison to these two river segments, and more likely to be impacted by reduction in stream flow. In the upper Wekiva River and the Little Wekiva River, single samples were taken in each of three habitats during each season.

Methods

Blocknet sampling was conducted during both the spring and fall seasons in the upper Wekiva and Little Wekiva

Rivers. Hydrocotyle, Nuphar, and Vallisneria were sampled in the upper Wekiva River, whereas, bare bottom, Nuphar, and Vallisneria were sampled in the Little Wekiva River.

Methodologies used in sampling the fish and associated physicochemical and aquatic plant habitats were identical to those used in the lower Wekiva River as described in section 3.1 of this report. Subsequent analysis and graphical presentation of the data also follows the same format as used in section 3.1. Sample site details are given in Appendices 3.1.3, 3.1.5, and 3.2.1.

Results and Discussion

Density

Density (number/m²) of fish collected in each of the 12 blocknets (Figure 3.2.1) ranged from 0.09 to 0.88 fish/m². Observed densities were higher in the Little Wekiva River than in the upper Wekiva River. Values were intermediate between mean densities observed for bare bottom and Vallisneria in the lower Wekiva River (Figure 3.1.17). Four of the six river segment by habitat combinations had higher density in the fall. The highest density was observed in Vallisneria in the Little Wekiva River in the fall.

Biomass

Biomass (grams/m²) of fish collected in each of the 12 blocknets (Figure 3.2.2) ranged from 0.9 to 35.3 grams/m². Biomass values were similar in the upper Wekiva and Little Wekiva Rivers. Nine of the blocknets produced biomasses

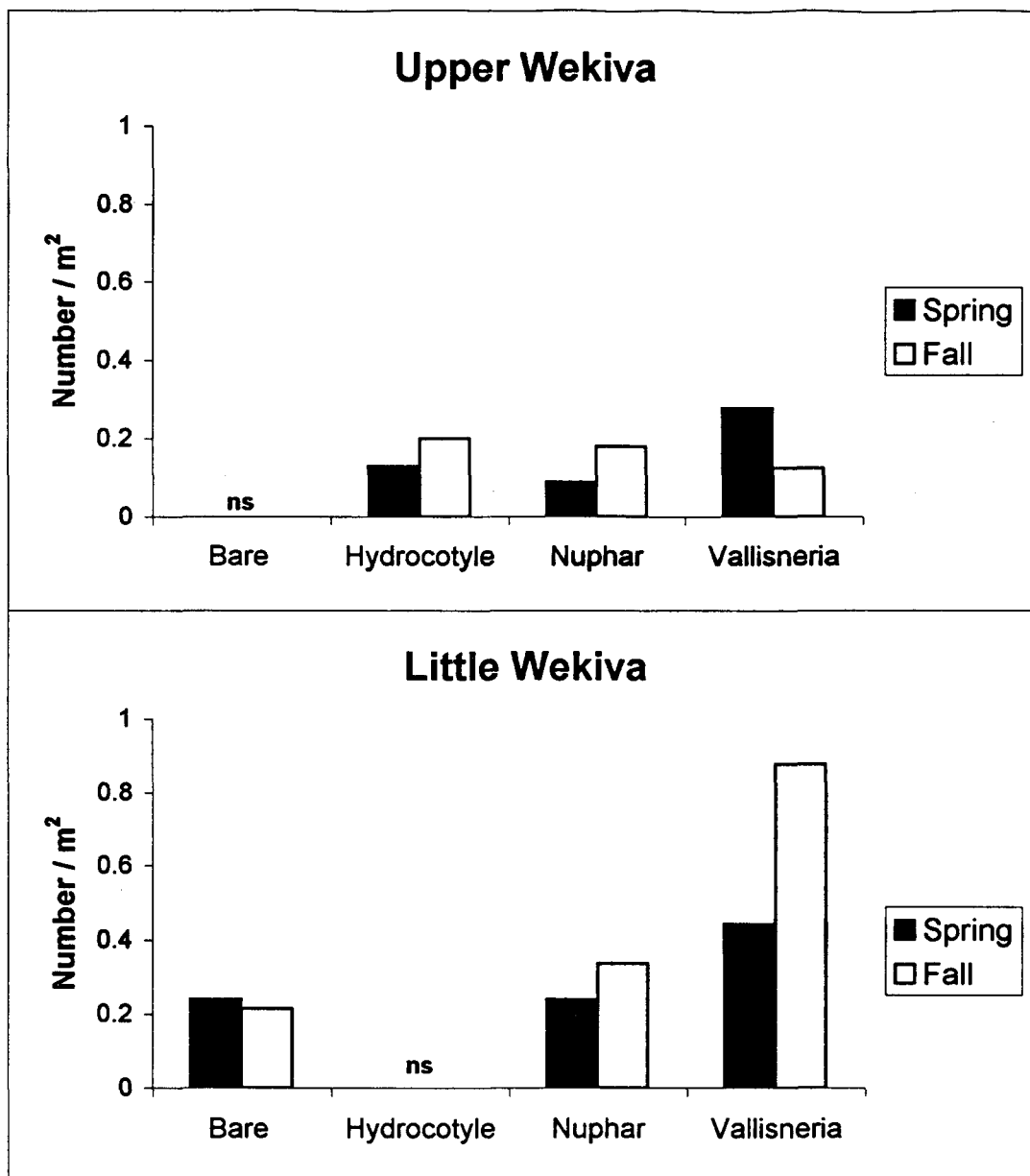


FIGURE 3.2.1. Density (number/m²) of fish collected by blocknet for individual habitats, upper Wekiva and Little Wekiva Rivers, Florida, spring and fall 1997.

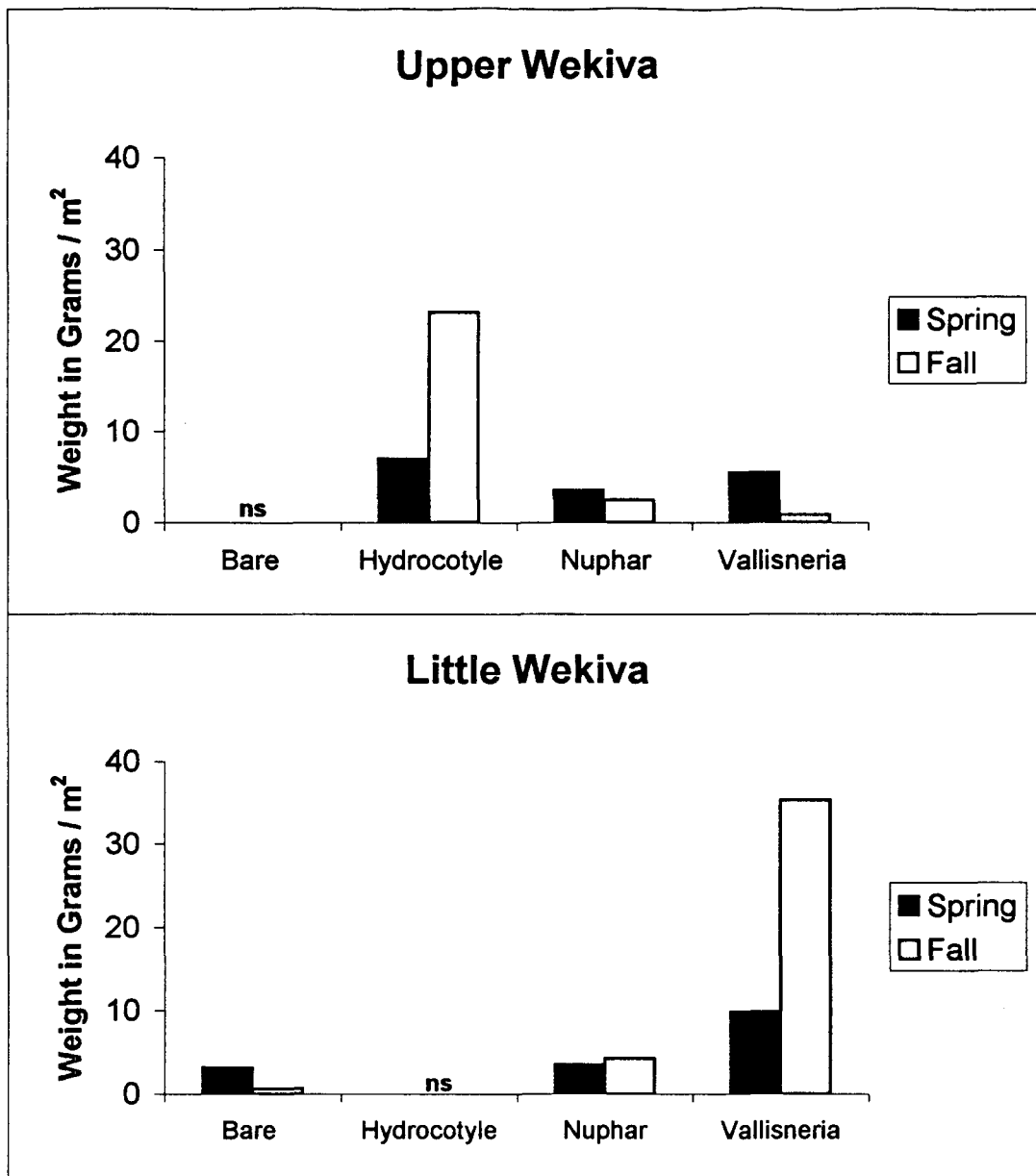


FIGURE 3.2.2. Biomass (grams/m²) of fish collected by blocknet for individual habitats, upper Wekiva and Little Wekiva Rivers, Florida, spring and fall 1997.

comparable to those of bare bottom in the lower Wekiva River, while three were similar to those recorded for Vallisneria in the lower Wekiva River (Figure 3.1.17). Hydrocotyle in the upper Wekiva River and Vallisneria in the Little Wekiva River had a 2 to 3-fold increase in biomass in the fall.

Species Richness

Species richness for 10 of the 12 blocknet samples (Figure 3.2.3) were comparable to the mean species richness (number of species/net) observed for Vallisneria in the lower Wekiva River (Figure 3.1.18). All 12 blocknets, even those taken in bare bottom, had higher species richness than the mean species richness and overall species richness observed for bare bottom in the lower Wekiva River. Of the 12 blocknets, highest species richness (20 species) was found in Vallisneria in the fall in the Little Wekiva River.

Community Composition

Three to eight families of fish were represented in each habitat during each season in each river segment (Figures 3.2.4 and 3.2.5). The bare bottom sample in the Little Wekiva River supported the fewest families (3 families in the spring), while Vallisneria supported the greatest number of families in both the spring and fall (7 and 8 families, respectively). Based on the number of fish collected, sunfish dominated the fish communities in all habitats sampled in both the upper Wekiva and Little Wekiva

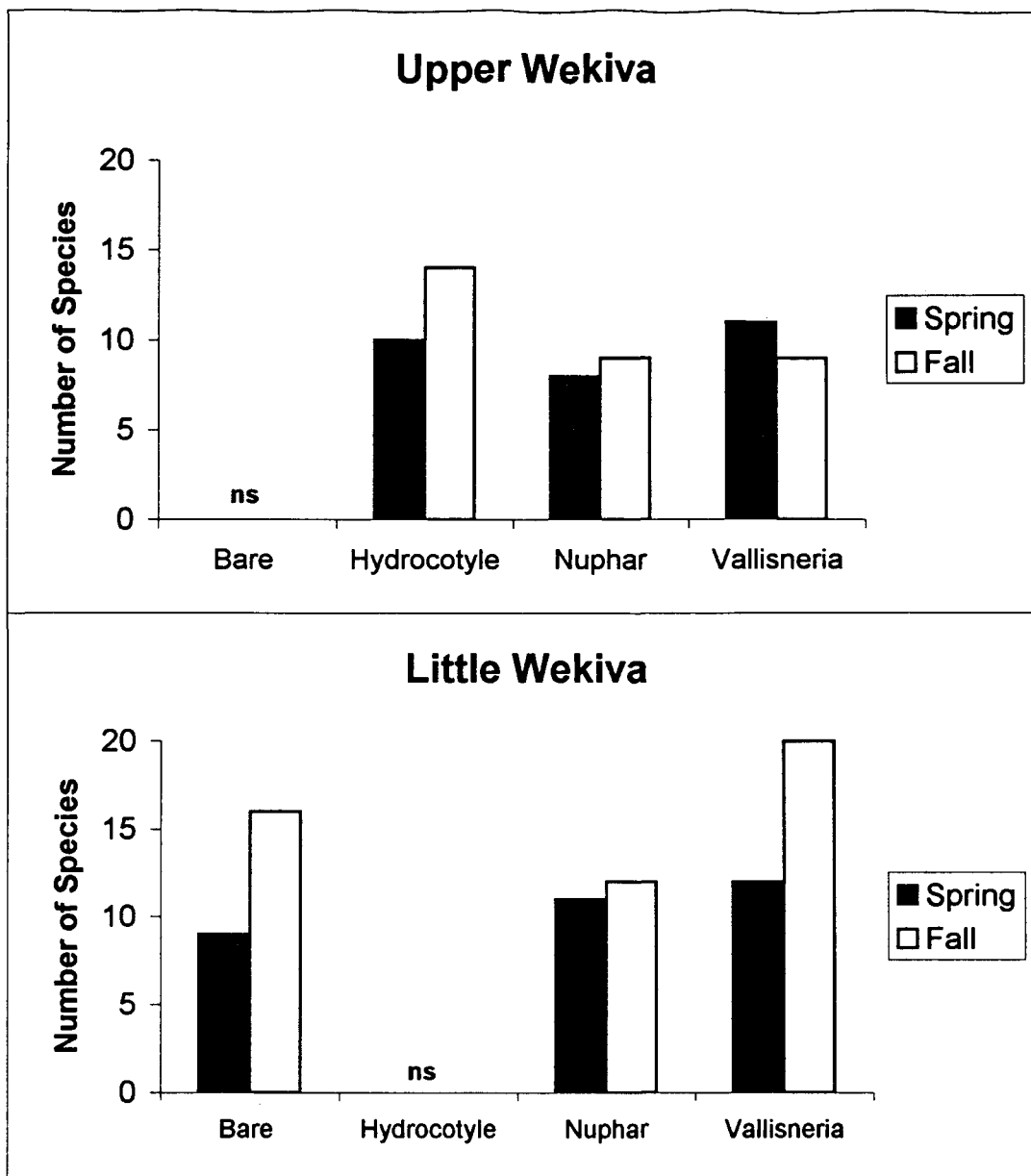


FIGURE 3.2.3. Overall species richness of fish collected by blocknet for individual habitats, upper Wekiva and Little Wekiva Rivers, Florida, spring and fall 1997.

Upper Wekiva River

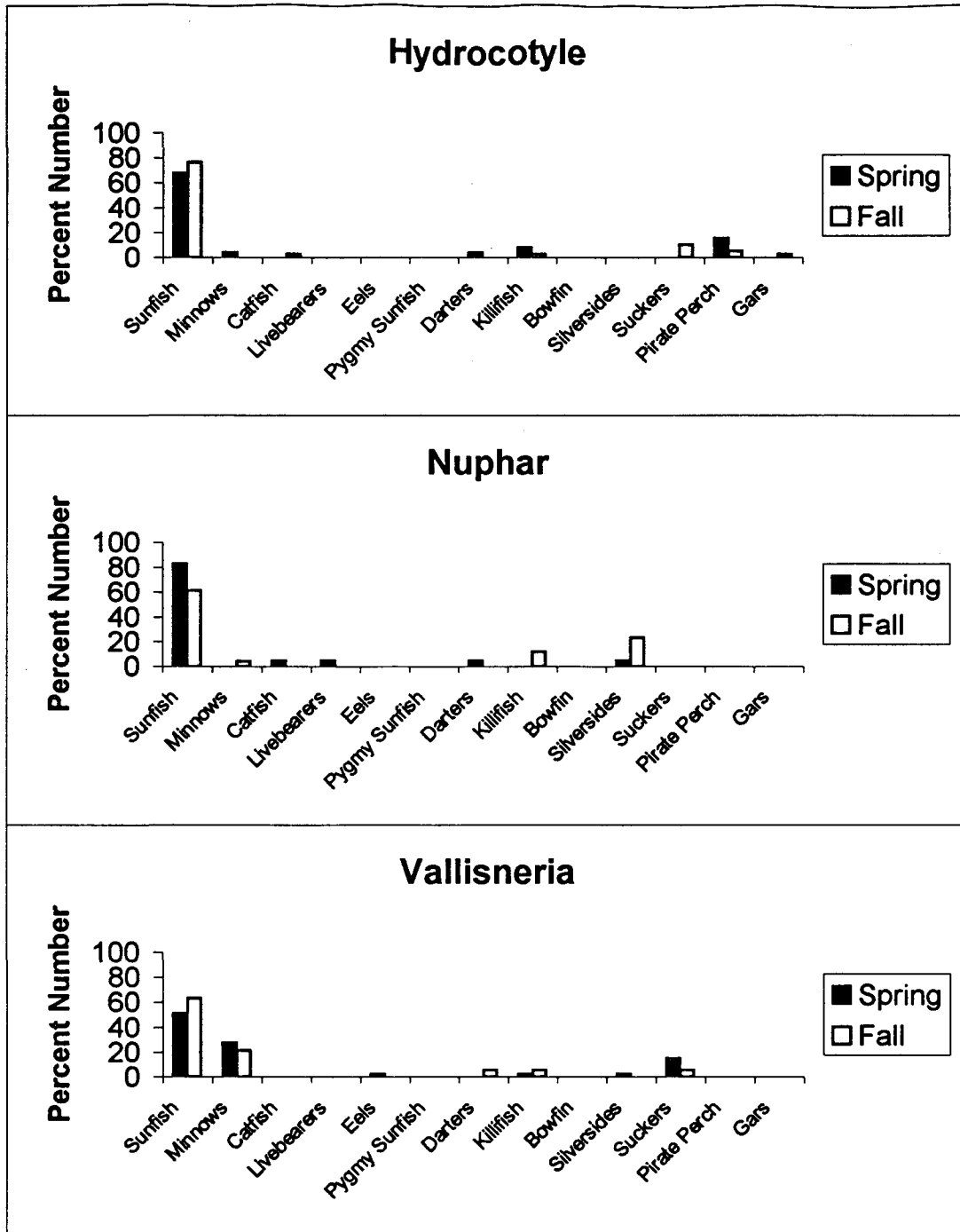


FIGURE 3.2.4. Seasonal (spring and fall) fish community composition within each habitat based upon percent number of fish (grouped by family) collected by blocknet in the Upper Wekiva River, Florida, 1997.

Little Wekiva River

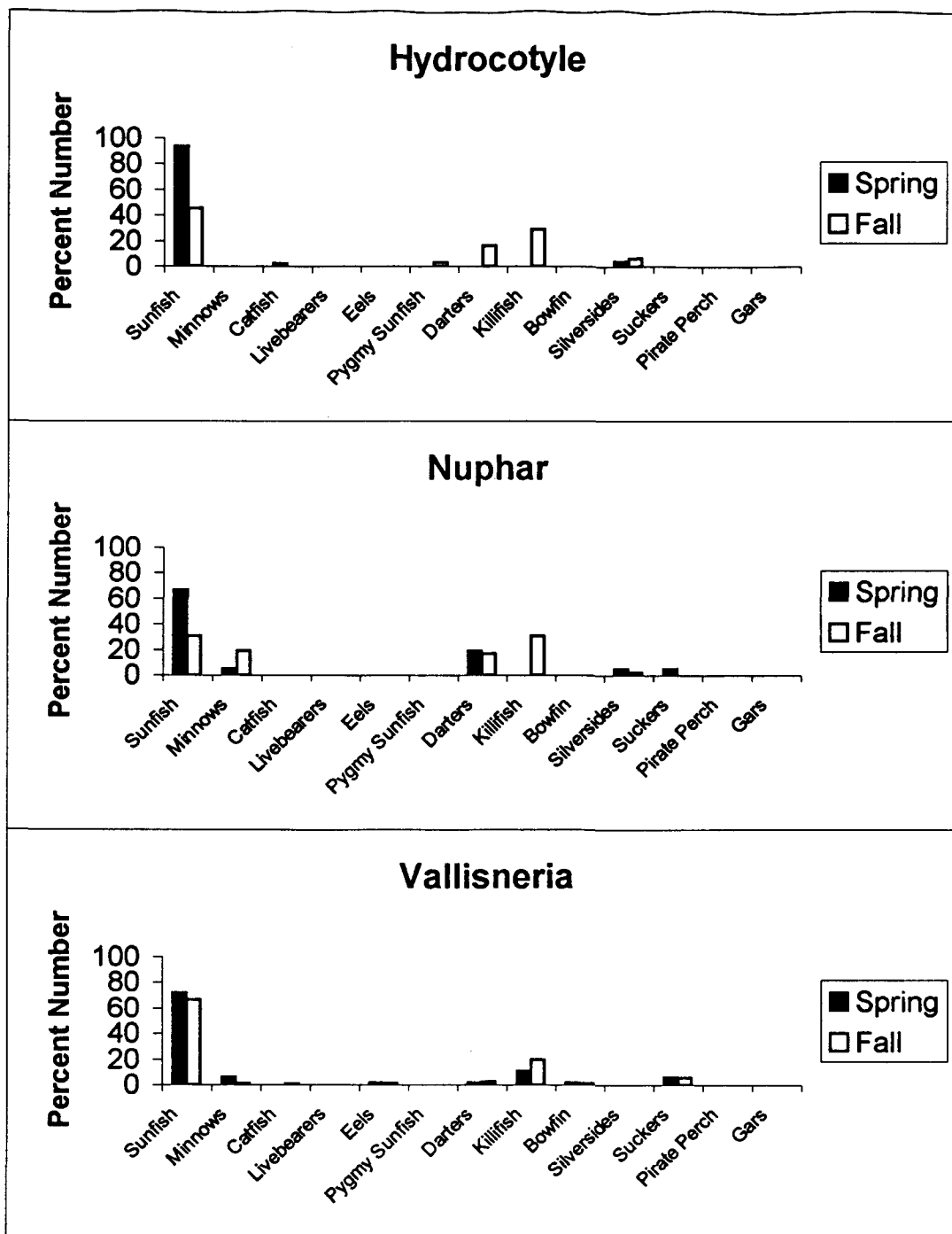


FIGURE 3.2.5. Seasonal (spring and fall) fish community composition within each habitat based upon percent number of fish (grouped by family) collected by blocknet in the Little Wekiva River, Florida, 1997.

Rivers (Figures 3.2.4 and 3.2.5). Likewise, sunfish dominated the fish communities based upon weight of fish collected, with the exception of suckers in Vallisneria in the spring in the upper Wekiva River and bowfin in both the spring and fall in the Little Wekiva River (Figures 3.2.6 and 3.2.7).

Conclusions

Fish abundance (density and biomass) estimates of the upper Wekiva River and Little Wekiva River were similar to those observed for the lower Wekiva River. These two river segments maintained diverse fish communities, similar in species richness to Vallisneria in the lower Wekiva River. Sunfish dominated the fish communities, both by number and weight.

Upper Wekiva River

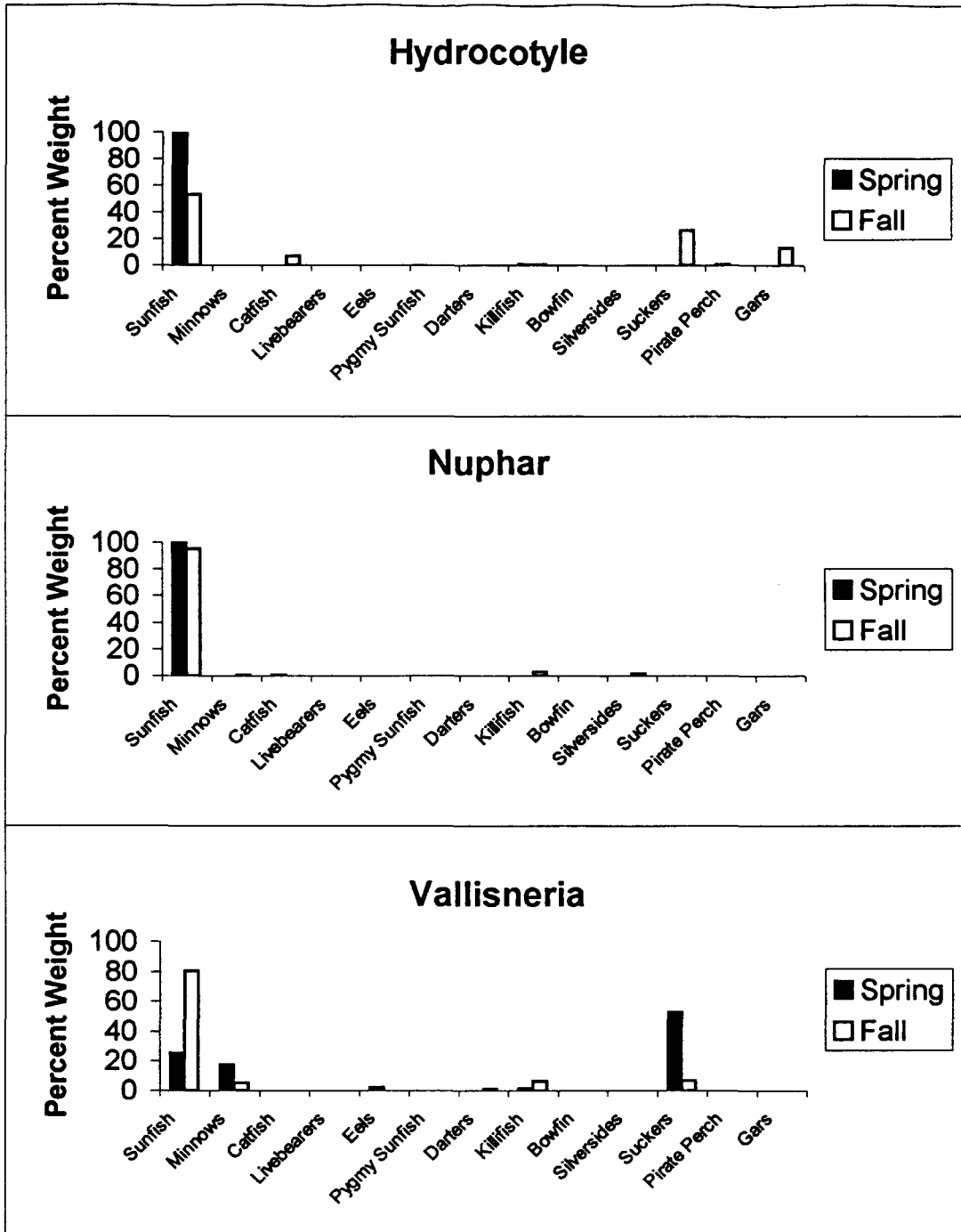


FIGURE 3.2.6. Seasonal (spring and fall) fish community composition within each habitat based upon percent weight of fish (grouped by family) collected by blocknet in the Upper Wekiva River, Florida, 1997.

Little Wekiva River

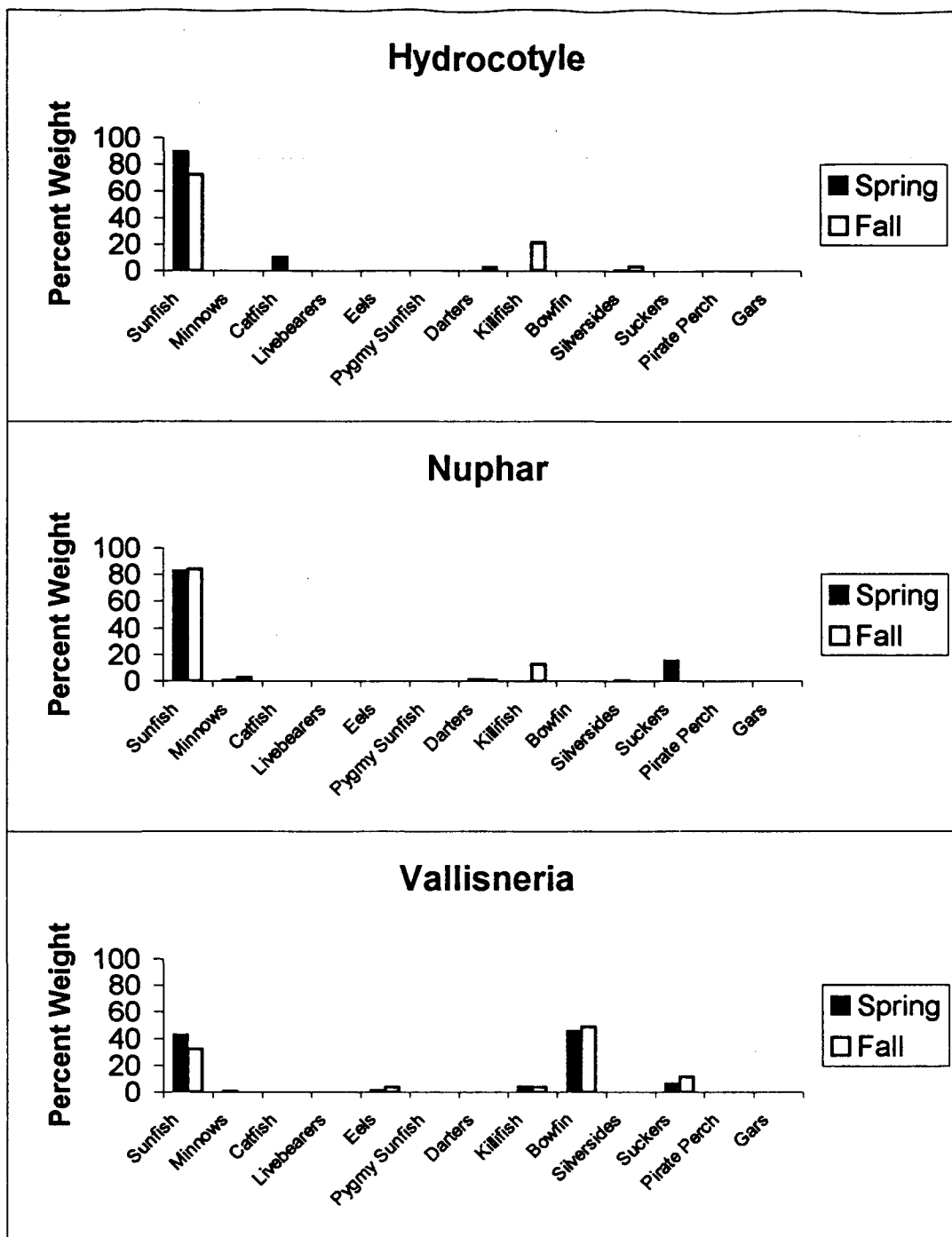


FIGURE 3.2.7. Seasonal (spring and fall) fish community composition within each habitat based upon percent weight of fish (grouped by family) collected by blocknet in the Little Wekiva River, Florida, 1997.

III. FISH COMMUNITIES

3. Comparison of the Current Status (1997 data) of the Wekiva River System Fish Community to Fish Communities of Similar Spring-Fed Streams in Florida

Introduction

Sections 3.1 and 3.2 of this chapter describe the current status of the fish community of the Wekiva River system, Florida. It gives a detailed quantitative and qualitative description of the fish communities as they relate to the major habitats available in this system, and if and how these communities differ between the spring and fall sampling seasons. These data can also be used to compare the fish community of the Wekiva River system to those of other similar spring-fed streams in Florida to determine whether the fish community of the Wekiva River system is typical of Florida spring-fed streams.

Methods

A review of available data for Florida rivers found two major studies of stream fish communities, Bass and Cox (1985) and Canfield and Hoyer (1988). Bass and Cox (1985) surveyed stream fish communities throughout Florida. However, the data presented are not comparable to those collected in the current study of the Wekiva River system. The fish data are presented as relative abundances among

streams expressed as number and weight (of all fish species and sport fish) collected per hour of electrofishing. Most of the streams studied were much larger than the Wekiva River system, and most were located in the Florida panhandle.

The most comparable data base that exists is that of Canfield and Hoyer (1988). Fish data were collected from 17 Florida streams by blocknet electrofishing, similar to that used in this study. Of more importance, the Little Wekiva River and Wekiva River were included in their study. In their extensive report, they present total fish species for sample streams and percentage importance by weight and number (Table 3.3.1), fish stock estimates (numbers/ha) for all rivers (Table 3.3.2), fish standing crop estimates (kg/ha) for streams (Table 3.3.3), and mean growth of age I-IV redbreasted sunfish (Table 3.3.4) and largemouth bass (Table 3.4.5). These tables, from Canfield and Hoyer (1988), are included in this report for ease of reference.

Results and Discussion

Of the 17 stream sampled by Canfield and Hoyer (1988), the Little Wekiva River produced the highest number of taxa (33), while the Wekiva River produced one of the lowest numbers of taxa (19) (Table 3.3.1). During this study (1997), 25 species of fish were collected from the Little Wekiva River, while 35 species were collected from the

TABLE 3.3.1. Total fish species for sample streams and percentage importance by weight and number (Canfield and Hoyer 1988). The number under stream name is the total number of species collected.

Stream	Name	Percentage of all fish collected over time	
		Number	Weight
Little Wekiva ¹ (33)	Florida spotted gar	0.6	6.4
	Longnose gar	0.3	4.7
	Bowfin	0.6	19.4
	Gizzard shad	0.1	1.0
	Redfin pickerel	0.2	0.1
	Chain pickerel	0.1	1.0
	Golden shiner	1.2	1.3
	Taillight shiner	<0.1	<0.1
	Lake chubsucker	2.5	8.7
	Yellow bullhead	0.7	2.7
	Brown bullhead	0.1	0.5
	White catfish	0.1	0.4
	Tadpol madtom	<0.1	<0.1
	Speckled madtom	<0.1	<0.1
	American eel	0.4	3.5
	Seminole killifish	0.5	0.1
	Bluefin killifish	0.2	<0.1
	Mosquito fish	49.2	0.4
	Least killifish	1.5	<0.1
	Sailfin molly	1.0	0.1
	Brook silverside	<0.1	<0.1
	Pirate perch	0.1	<0.1
	Bluespotted sunfish	<0.1	<0.1
	Redbreast sunfish	17.8	16.8
	Warmouth	1.2	2.2
	Bluegill	2.6	1.9
	Dollar sunfish	0.2	0.1
	Redear	1.0	3.1
	Spotted sunfish	9.5	6.6
	Largemouth bass	3.4	18.6
	Black crappie	0.1	0.3
	Blackbanded darter	0.2	<0.1
	Unidentified shiner	4.6	0.1
Alexander Springs (23)	Florida spotted gar	1.0	3.6
	Longnose gar	0.2	0.4
	Bowfin	2.8	20.0
	Redfin pickerel	0.4	0.2
	Chain pickerel	0.2	0.8
	Golden shiner	5.4	1.2
	Lake chubsucker	14.9	29.5
	Brown bullhead	0.2	0.1
	White catfish	0.6	2.0
	American eel	0.6	0.5

TABLE 3.1.1. Continued.

Stream	Name	Percentage of all fish collected over time	
		Number	Weight
Alexander Springs (continued)	Seminole killifish	4.8	0.4
	Mosquito fish	0.6	<0.1
	Sailfin molly	0.6	<0.1
	Bluespotted sunfish	0.8	<0.1
	Redbreast sunfish	18.5	3.4
	Warmouth	1.2	0.8
	Bluegill	9.5	2.3
	Redear	6.3	2.6
	Spotted sunfish	14.9	2.8
	Largemouth bass	10.1	16.1
	Blackbanded darter	0.2	<0.1
	Unidentified shiner	3.0	<0.1
	Striped mullet	3.0	13.5
Itchetucknee (26)	Bowfin	0.3	9.2
	Redfin pickerel	4.4	4.0
	Golden shiner	0.2	<0.1
	Lake chubsucker	4.9	4.1
	Spotted sucker	0.3	2.2
	Yellow bullhead	1.9	3.7
	Tadpol madtom	0.1	<0.1
	American eel	2.5	12.5
	Seminole killifish	0.2	0.1
	Starhead topminnow	0.4	<0.1
	Bluefin killifish	0.6	<0.1
	Mosquito fish	1.2	<0.1
	Sailfin molly	1.5	<0.1
	Pirate perch	2.6	0.3
	Everglades pygmy sunfish	0.1	<0.1
	Redbreast sunfish	2.2	1.8
	Warmouth	0.2	0.3
	Bluegill	0.4	0.4
	Redear	1.4	2.5
	Spotted sunfish	19.6	11.7
	Largemouth bass	4.0	14.9
	Suwannee Bass	11.7	25.2
	Black crappie	0.3	0.8
	Unidentified shiner	36.6	0.6
	Hogchoker	0.9	0.3
	Needlefish	0.1	0.2
Alligator Creek ¹ (28)	Florida spotted gar	0.1	0.5
	Longnose gar	<0.1	1.7
	Bowfin	0.6	14.8
	Gizzard shad	0.2	0.3
	Threadfin shad	2.3	0.4

TABLE 3.1.1. Continued.

Stream	Name	Percentage of all fish collected over time	
		Number	Weight
Alligator Creek (continued)	Redfin pickerel	<0.1	<0.1
	Chain pickerel	0.9	5.5
	Golden shiner	5.4	5.5
	Lake chubsucker	1.5	3.7
	Brown bullhead	<0.1	0.5
	American eel	<0.1	0.3
	Golden topminnow	0.2	<0.1
	Seminole killifish	3.6	0.9
	Bluefin killifish	0.7	<0.1
	Mosquito fish	0.5	<0.1
	Least killifish	<0.1	<0.1
	Sailfin molly	0.1	<0.1
	Brook silverside	0.4	<0.1
	Everglades pygmy sunfish	<0.1	<0.1
	Redbreast sunfish	12.7	8.8
	Warmouth	2.0	1.6
	Bluegill	19.3	10.5
	Dollar sunfish	0.3	<0.1
	Redear	32.8	11.1
	Spotted sunfish	4.5	1.7
	Largemouth bass	9.3	31.7
	Black crappie	<0.1	<0.1
	Unidentified shiner	2.5	0.1
Rock Springs (22)	Bowfin	0.3	16.5
	Lake chubsucker	1.6	5.4
	Yellow bullhead	1.5	2.0
	Brown bullhead	0.6	1.9
	Tadpol madtom	0.4	<0.1
	American eel	0.2	2.0
	Seminole killifish	6.3	2.2
	Mosquito fish	0.8	<0.1
	Least killifish	0.1	<0.1
	Sailfin molly	2.5	0.1
	Brook silverside	0.2	<0.1
	Pirate perch	0.6	<0.1
	Redbreast sunfish	22.0	22.2
	Warmouth	0.8	0.5
	Bluegill	0.3	0.3
	Redear	0.6	1.5
	Spotted sunfish	20.0	14.8
	Largemouth bass	5.9	28.1
	Blackbanded darter	1.9	0.1
	Unidentified shiner	30.0	0.8
	Striped mullet	0.1	1.1
	Needlefish	0.2	0.1

TABLE 3.1.1. Continued.

Stream	Name	Percentage of all fish collected over time	
		Number	Weight
Little Econlockhatchee ¹ (21)	Florida spotted gar	0.3	0.3
	Longnose gar	2.1	4.4
	Bowfin	1.1	6.0
	Gizzard shad	1.6	3.5
	Chain pickerel	0.3	0.7
	Lake chubsucker	2.4	4.8
	Yellow bullhead	0.3	0.5
	Channel catfish	0.3	2.7
	White catfish	20.1	44.6
	American eel	0.5	0.3
	Mosquito fish	0.3	<0.1
	Redbreast sunfish	16.4	5.0
	Warmouth	1.9	0.5
	Bluegill	9.9	2.9
	Redear	8.0	6.8
	Spotted sunfish	9.7	1.4
	Largemouth bass	8.8	11.4
	Striped bass	0.3	3.1
	Black crappie	1.6	1.0
	Unidentified shiner	13.9	0.1
	Needlefish	0.3	0.1
Wacissa (30)	Florida spotted gar	0.6	3.3
	Longnose gar	0.3	0.3
	Bowfin	3.5	49.0
	Gizzard shad	0.1	<0.1
	Redfin pickerel	2.4	2.2
	Lake chubsucker	2.5	4.0
	Sharpfin chubsucker	7.1	3.8
	Spotted sucker	6.6	15.8
	Yellow bullhead	0.3	0.6
	Tadpole madtom	0.1	<0.1
	American eel	0.8	2.1
	Seminole killifish	1.3	0.2
	Starhead topminnow	1.3	<0.1
	Bluefin killifish	0.1	<0.1
	Mosquito fish	2.4	<0.1
	Sailfin molly	0.6	<0.1
	Brook silverside	0.6	<0.1
	Pirate perch	2.3	0.1
	Everglades pygmy sunfish	0.3	<0.1
	Bluespotted sunfish	0.1	<0.1
	Redbreast sunfish	3.3	1.3
	Warmouth	0.3	0.1
	Bluegill	0.6	0.2

TABLE 3.1.1. Continued.

Stream	Name	Percentage of all fish collected over time	
		Number	Weight
Wacissa (continued)	Redear	0.4	0.2
	Spotted sunfish	17.3	4.6
	Largemouth bass	8.2	7.9
	Unidentified shiner	35.3	0.4
	Striped mullet	0.6	3.8
	Hogchoker	0.4	0.1
	Spotfin mojarra	0.3	<0.1
Wekiva ¹ (19)	Florida spotted gar	0.1	0.5
	Bowfin	0.1	<0.1
	Golden shiner	0.8	2.5
	Lake chubsucker	1.8	7.9
	Yellow bullhead	0.2	<0.1
	Tadpol madtom	0.2	<0.1
	Seminole killifish	16.6	4.8
	Mosquito fish	0.8	<0.1
	Sailfin molly	0.9	<0.1
	Brook silverside	0.6	<0.1
	Redbreast sunfish	39.0	33.0
	Warmouth	0.6	0.7
	Bluegill	1.4	1.7
	Redear	1.2	5.1
	Spotted sunfish	9.4	7.1
	Largemouth bass	8.6	33.8
	Blackbanded darter	0.4	<0.1
	Unidentified shiner	17.1	0.5
	Striped mullet	0.2	2.3
Alafia (24)	Florida spotted gar	0.2	5.0
	Longnose gar	0.5	8.5
	Yellow bullhead	0.2	<0.1
	White catfish	0.4	<0.1
	American eel	0.5	2.6
	Seminole killifish	10.8	1.3
	Mosquito fish	4.1	<0.1
	Sailfin molly	1.8	0.1
	Brook silverside	2.6	0.1
	Pirate perch	1.4	0.1
	Redbreast sunfish	0.2	<0.1
	Warmouth	0.4	<0.1
	Bluegill	5.6	1.8
	Dollar sunfish	0.2	<0.1
	Redear	0.5	1.3
	Spotted sunfish	37.0	8.9
	Largemouth bass	1.8	20.6
	Unidentified shiner	19.2	0.7

TABLE 3.1.1. Continued.

Stream	Name	Percentage of all fish collected over time	
		Number	Weight
Alafia (continued)	Striped mullet	2.8	37.8
	Hogchoker	0.9	0.1
	Spotfin mojarra	2.8	0.6
	Blue tilapia	5.5	6.9
	Blackchin tilapia	0.2	2.1
	Sheephead	0.5	1.5
Reedy ¹ (19)	Florida spotted gar	0.5	2.2
	Bowfin	10.6	65.4
	Redfin pickerel	0.5	0.1
	Golden shiner	1.0	0.3
	Lake chubsucker	3.5	2.8
	Yellow bullhead	0.5	0.1
	Brown bullhead	1.5	0.5
	Walking catfish	0.5	0.2
	Sailfin molly	0.5	<0.1
	Pirate perch	0.5	<0.1
	Bluespotted sunfish	0.5	<0.1
	Warmouth	17.6	3.1
	Bluegill	33.2	4.2
	Dollar sunfish	1.5	<0.1
	Redear	6.0	4.9
	Spotted sunfish	15.6	4.1
	Largemouth bass	4.0	10.9
	Black crappie	1.5	1.0
	Unidentified shiner	0.5	<0.1
Pottsburg ¹ (17)	Longnose gar	2.0	12.7
	Gizzard shad	5.2	0.9
	Threadfin shad	0.9	0.1
	Golden shiner	0.7	0.3
	White catfish	0.7	2.5
	Seminole killifish	0.9	0.2
	Bluefin killifish	0.5	<0.1
	Mosquito fish	0.2	<0.1
	Redbreast	30.2	17.2
	Warmouth	11.9	5.8
	Bluegill	24.8	20.2
	Redear	4.0	6.8
	Spotted sunfish	4.7	1.6
	Largemouth bass	8.9	18.2
	Black crappie	0.7	0.1
	Swamp darter	0.2	<0.1
	Striped mullet	3.4	13.5

TABLE 3.1.1. Continued.

Stream	Name	Percentage of all fish collected over time	
		Number	Weight
Mills ¹	Florida spotted Gar	4.7	7.9
(19)	Bowfin	0.5	4.8
	Gizzard shad	3.6	3.8
	Golden shiner	10.9	1.3
	Yellow bullhead	1.0	0.9
	Brown bullhead	3.1	4.7
	Channel catfish	0.5	0.7
	White catfish	7.3	7.1
	Mosquito fish	0.5	<0.1
	Brook silverside	0.5	<0.1
	Pirate perch	0.5	<0.1
	Redbreast	0.5	0.1
	Warmouth	5.2	4.7
	Bluegill	11.4	4.4
	Redear	6.2	5.1
	Spotted sunfish	5.2	0.9
	Largemouth bass	7.3	11.5
	Black crappie	1.0	1.6
	Striped mullet	29.7	40.2
St. Marks	Florida spotted gar	0.2	1.4
(27)	Longnose gar	0.2	0.5
	Bowfin	0.7	27.4
	Redfin pickerel	0.1	<0.1
	Chain pickerel	0.1	<0.1
	Taillight shiner	0.1	0.1
	Lake chubsucker	6.5	10.2
	Spotted sucker	6.1	8.4
	Tadpol madtom	0.1	<0.1
	American eel	1.2	8.1
	Starhead topminnow	0.6	0.1
	Mosquito fish	1.4	<0.1
	Least killifish	0.1	<0.1
	Brook silverside	4.4	0.1
	Pirate perch	0.2	<0.1
	Everglades pygmy sunfish	0.3	<0.1
	Redbreast sunfish	1.0	0.9
	Warmouth	2.4	1.6
	Bluegill	0.3	0.4
	Dollar sunfish	0.5	<0.1
	Redear	0.1	0.5
	Spotted sunfish	27.3	17.0
	Largemouth bass	5.9	20.1
	Blackbanded darter	0.2	<0.1
	Unidentified shiner	39.0	0.7
	Striped mullet	0.1	1.9

TABLE 3.1.1. Continued.

Stream	Name	Percentage of all fish collected over time	
		Number	Weight
St. Marks (continued)	Hogchoker	0.3	0.0
Econlockhatchee (15)	Florida spotted gar	0.5	0.5
	Bowfin	1.9	36.1
	Yellow bullhead	0.5	3.2
	American eel	1.9	3.4
	Mosquito fish	3.4	<0.1
	Least killifish	0.5	<0.1
	Brook silverside	1.4	<0.1
	Redbreast	53.9	22.6
	Warmouth	1.9	0.7
	Bluegill	3.4	1.2
	Spotted sunfish	20.4	7.9
	Largemouth bass	6.3	16.5
	Black crappie	0.5	<0.1
	Unidentified shiner	2.4	<0.1
	Striped mullet	1.0	7.6
Hillsborough (18)	Florida spotted gar	3.5	28.0
	Longnose gar	2.7	13.0
	Bowfin	0.3	8.1
	Golden shiner	0.1	<0.1
	Lake chubsucker	0.5	0.4
	Yellow bullhead	0.3	0.4
	Starhead topminnow	0.1	<0.1
	Mosquito fish	0.6	<0.1
	Brook silverside	1.4	<0.1
	Pirate perch	0.8	0.1
	Redbreast sunfish	14.5	5.3
	Warmouth	6.0	2.2
	Bluegill	6.3	1.8
	Dollar sunfish	0.1	<0.1
	Redear	3.3	3.7
	Spotted sunfish	46.0	16.0
	Largemouth bass	7.0	20.4
	Unidentified shiner	5.8	0.1
Hogtown (17)	Golden shiner	0.2	1.2
	Lake chubsucker	0.2	1.7
	Yellow bullhead	0.3	2.7
	Tadpol madtom	0.1	0.2
	Golden topminnow	1.1	2.2
	Flagfish	0.5	0.5
	Mosquito fish	70.0	30.2
	Least killifish	0.1	<0.1

TABLE 3.1.1. Continued.

Stream	Name	Percentage of all fish collected over time	
		Number	Weight
Hogtown (continued)	Sailfin molly	13.0	12.1
	Pirate perch	<0.1	<0.1
	Redbreast sunfish	<0.1	0.1
	Warmouth	0.6	4.4
	Bluegill	1.2	5.7
	Redear	1.4	8.9
	Spotted sunfish	9.8	28.7
	Largemouth bass	<0.1	0.1
	Unidentified shiner	1.5	1.1
Upper Santa Fe (27)	Florida spotted gar	0.2	0.1
	Longnose gar	3.0	19.6
	Bowfin	1.5	14.0
	Redfin pickerel	0.3	<0.1
	Chain pickerel	0.2	0.6
	Taillight shiner	1.0	<0.1
	Spotted sucker	8.2	35.1
	Brown bullhead	0.2	<0.1
	White catfish	0.2	<0.1
	Tadpol madtom	1.0	<0.1
	American eel	0.7	1.6
	Mosquito fish	1.9	<0.1
	Brooks silverside	3.7	<0.1
	Pirate perch	2.0	0.1
	Bluespotted sunfish	0.2	<0.1
	Redbreast sunfish	18.4	7.5
	Warmouth	6.5	1.5
	Bluegill	2.4	0.3
	Dollar sunfish	0.2	<0.1
	Redear	0.7	<0.1
	Spotted sunfish	3.9	0.4
	Largemouth bass	5.8	15.5
	Suwannee bass	0.2	1.5
	Black crappie	1.9	1.6
	Swamp darter	0.2	<0.1
	Blackbanded darter	0.2	<0.1
	Unidentified shiner	35.4	0.3

¹ Streams with known sewage inputs.

Wekiva River. At first glance, it appears that there are currently fewer species in the Little Wekiva River and more in the Wekiva River than what was present in 1985-1987. Species richness comparisons are difficult to make as the location, size, and number of stations sampled, along with the frequency and duration of sampling differs between these two studies. During Canfield and Hoyer's study, each of the 17 streams was sampled at 2 to 6 locations on 2 or 3 dates between May 1985 and February 1987. During this study (1997), the Little Wekiva River was sampled at 3 stations on 2 occasions during the same year. Canfield and Hoyer sampled at more stations, with larger nets, and over a longer period of time than in this study. This could account for the smaller number of taxa observed in 1997. Contrary to this, the Wekiva River was sampled in the upper river with 3 blocknets, while the lower river was sampled with 15 blocknets. This sampling was conducted twice during 1997 for a total of 36 blocknets. More fish species were collected from the Wekiva River in 1997 than during 1985-1987. This may be due to the larger number of blocknet sets, although each net was of smaller area. All in all, both of these rivers support a large number of fish species. Fish community compositions, based on number and biomass, were similar during these blocknet studies (Table 3.3.1 and Figures 3.1.19, 3.1.20, 3.2.4, 3.2.5, 3.2.6, and 3.2.7).

Mean total fish density (number of fish per area) was calculated within the Lower Wekiva River for spring and fall

1997. As expected, Vallisneria had higher mean densities (11,600 and 7900 fish/ha, respectively) compared to bare bottom (400 and 600 fish/ha, respectively). Density of fish in the 12 blocknets sampled in the Little Wekiva River and upper Wekiva River ranged from 900 to 8,800 fish/ha (Appendix 3.2.1). The only other quantitative fish study on the Wekiva River is that of Canfield and Hoyer (1988). Their sampling sites consisted of both open and closed forest canopy sections within the Wekiva River system and were not aquatic plant species specific. They reported whole-stream mean densities of 1,400 and 1,600 fish/ha for the Wekiva River and Little Wekiva River, respectively (Table 3.3.2). Mean total fish densities estimated in 1997 for the Wekiva River and Little Wekiva River are thus as high as those observed during 1985-1987 and comparable to or higher than those of other Florida streams (Table 3.3.2).

Canfield and Hoyer (1988) reported mean biomasses of 150 ± 87 and 55 ± 18 kg/ha for the Wekiva and Little Wekiva rivers, respectively (Table 3.3.3). The present study estimated total fish biomass to be 30 kg/ha in bare bottom and 248 kg/ha in Vallisneria during 1997 in the lower Wekiva River. Biomass of total fish in the 12 blocknets sampled in the Little Wekiva River and upper Wekiva River during 1997 ranged from 9 to 353 kg/ha (Appendix 3.2.1). Alligator Creek was estimated to have the highest mean total fish biomass of 180 ± 120 kg/ha (Canfield and Hoyer (1988)). Thus, in 1997, the Little Wekiva River and Wekiva River maintained

TABLE 3.3.2. Fish stock estimates for rivers (Canfield and Hoyer 1988). Mean is listed \pm 95% confidence limits.

Stream	Date	Canopy Cover	Fish Population (numbers/ha)	
			Total Fish	Harvestable Fish
Little Wekiva ¹	May '85	Closed	1100	280
		Closed	720	210
		Open	1200	320
		Open	3000	150
	March '86	Closed	1000	210
		Open	1000	200
	Feb. '87	Closed	1800	310
		Open	3300	320
	Mean		1600 \pm 820	250 \pm 55
Alexander Springs	Aug. '85	Closed	130	28
		Closed	58	8
		Open	360	51
		Open	590	110
	Feb. '86	Closed	520	30
		Open	670	56
	Nov. '86	Closed	380	39
		Open	260	21
	Mean		370 \pm 180	43 \pm 26
Ichetucknee Springs	Oct. '85	Closed	1000	21
		Open	1100	46
	May '86	Closed	970	27
		Open	720	42
	Mean		960 \pm 280	34 \pm 19
Alligator Creek ¹	July '85	Closed	5400	610
		Open	11000	850
		Open	2300	110
		Open	4700	230
	Feb. '86	Closed	2100	310
		Open	2000	640
	Nov. '86	Open	1500	160
		Open	2200	330
	Mean		3800 \pm 2600	410 \pm 220
Rock Springs	Aug. '85	Closed	1300	350
		Closed	700	82
		Open	4500	230
	March '86	Closed	1100	53
		Open	3300	150
	Jan. '87	Closed	880	41
		Open	3000	180
	Mean		2100 \pm 1400	160 \pm 100
			3.3.14	

TABLE 3.3.2. Continued.

Stream	Date	Canopy Cover	Fish Population (numbers/ha)	
			Total Fish	Harvestable Fish
Little Econlockhatchee ¹	July '85	Closed	650	290
		Closed	310	150
		Closed	570	470
	Feb. '86	Closed	720	160
		Closed	440	79
	Jan. '87	Closed	1000	420
		Closed	330	140
	Mean		570 \pm 230	240 \pm 140
	Oct. '85	Open	1500	3
		Open	1700	18
Wacissa River	March '86	Open	1000	75
		Open	820	44
	Nov. '86	Closed	930	28
		Open	2300	100
	Mean		1400 \pm 610	45 \pm 39
Wekiva ¹	Sept. '85	Closed	500	97
		Open	590	100
	March '86	Closed	2000	290
		Open	1200	140
	Jan. '87	Closed	2700	120
		Closed	1200	250
	Mean		1400 \pm 820	170 \pm 87
Alafia River	April '86	Open	150	0
		Open	170	11
	Jan. '87	Closed	170	12
		Open	500	15
	Mean		250 \pm 250	10 \pm 10
Reedy Creek ¹	March '86	Closed	650	52
		Closed	550	83
	Jan. '87	Closed	250	25
		Closed	490	67
	Mean		490 \pm 270	57 \pm 39
Pottsburg Creek ¹	March '86	Closed	1200	470
		Open	1100	480
	Feb. '87	Closed	1200	350
		Open	1300	430
	Mean		1200 \pm 160	430 \pm 94

TABLE 3.3.2. Continued.

Stream	Date	Canopy Cover	Fish Population (numbers/ha)	
			Total Fish	Harvestable Fish
Mills Creek ¹	March '86	Open	450	89
		Open	300	110
	Nov. '86	Closed	160	36
		Open	110	34
	Mean		260 ± 240	66 ± 59
St. Marks River	May '86	Open	2200	170
		Open	1400	57
	Jan. '87	Open	5900	88
		Open	1400	30
	Mean		2700 ± 3400	86 ± 94
Econlockhatchee	Feb. '86	Closed	710	72
		Closed	270	50
	Jan. '87	Closed	250	55
		Closed	610	52
		Closed	280	40
	Mean		420 ± 270	54 ± 16
Hillsborough	April '86	Closed	620	80
		Open	560	19
	Jan. '87	Closed	3400	210
		Closed	1200	120
	Mean		1400 ± 2200	110 ± 130
Hogtown	April '86	Closed	15000	0
		Open	56000	0
	Nov. '86	Closed	11000	0
		Open	1100	0
	Mean		21000 ± 38000	0
Upper Santa Fe	April '86	Closed	2200	67
		Open	820	59
	Nov. '86	Closed	1000	320
		Open	710	140
	Mean		1200 ± 1100	150 ± 195

¹Streams with known sewage inputs.

TABLE 3.3.3. Fish standing crop estimates for streams
(Canfield and Hoyer 1988). Mean is listed \pm 95% confidence
interval.

Stream	Date	Canopy Cover	Fish Population (kg/ha)	
			Total Fish	Harvestable Fish
Little Wekiva ¹	May '85	Closed	67	34
		Closed	54	32
		Open	250	83
	March '86	Open	220	18
		Closed	91	34
		Open	100	25
	Feb. '87	Closed	78	37
		Open	340	62
	Mean		150 \pm 87	41 \pm 18
Alexander Springs	Aug. '85	Closed	9	2.5
		Closed	11	2.9
		Open	57	22
	Feb. '86	Open	62	18
		Closed	48	5.5
		Open	75	6.9
	Nov. '86	Closed	43	6.9
		Open	52	4.9
	Mean		45 \pm 20	8.7 \pm 6.1
Ichetucknee Springs	Oct. '85	Closed	44	10
		Open	49	14
	May '86	Closed	55	5.2
		Open	43	6.1
	Mean		48 \pm 9	8.9 \pm 6.7
Alligator Creek ¹	July '85	Closed	200	65
		Closed	500	190
		Open	170	73
	Feb. '86	Open	98	21
		Closed	190	46
		Open	160	82
	Nov. '86	Open	34	20
		Open	77	36
	Mean		180 \pm 120	67 \pm 47
Rock Springs	Aug. '85	Closed	130	51
		Closed	32	13
		Open	100	40
	March '86	Closed	31	6.5
		Open	75	14
		Closed	21	4.2
	Jan. '87	Open	72	31
		3.3.17		
	Mean		66 \pm 38	23 \pm 16

TABLE 3.3.3. Continued.

Stream	Date	Canopy Cover	Fish Population (kg/ha)		
			Total Fish	Harvestable Fish	
Little Econlockhatchee ¹	July '85	Closed	120	100	
		Closed	65	50	
		Closed	240	230	
	Feb. '86	Closed	93	54	
		Closed	130	80	
	Jan. '87	Closed	110	61	
		Closed	57	20	
	Mean		120 ± 57	85 ± 63	
	Wacissa River	Oct. '85	Open	150	0.6
			Open	200	4.6
March '86		Open	100	18	
		Open	49	6.0	
Nov. '86		Closed	45	2.0	
		Open	200	31	
Mean		120 ± 72	10 ± 12		
Wekiva ¹		Sept. '85	Closed	53	15
	Open		38	22	
	March '86	Closed	86	53	
		Open	38	14	
	Jan. '87	Closed	54	19	
		Closed	60	38	
	Mean		55 ± 18	27 ± 16	
	Alafia River	April '86	Open	18	0
Open			48	3.6	
Jan. '87		Closed	18	11	
		Open	28	16	
Mean		28 ± 18	7.6 ± 12		
Reedy Creek ¹	March '86	Closed	170	15	
		Closed	120	27	
	Jan. '87	Closed	8	2.1	
		Closed	23	7.7	
	Mean		80 ± 123	13 ± 17	
Pottsburg Creek ¹	March '86	Closed	120	84	
		Open	190	79	
	Feb. '87	Closed	70	49	
		Open	100	65	
	Mean		120 ± 82	69 ± 24	

TABLE 3.3.3. Continued.

Stream	Date	Canopy Cover	Fish Population (kg/ha)	
			Total Fish	Harvestable Fish
Mills Creek ¹	March '86	Open	83	30
		Open	73	31
	Nov. '86	Closed	54	21
		Open	29	9.4
	Mean		60 ± 38	23 ± 16
St. Marks River	May '86	Open	200	28
		Open	130	13
	Jan. '87	Open	110	45
		Open	35	2.7
	Mean		120 ± 110	22 ± 29
Econlockhatchee	Feb. '86	Closed	42	11
		Closed	26	9.0
	Jan. '87	Closed	81	38
		Closed	14	5.7
		Closed	21	6.4
	Mean		37 ± 29	14 ± 20
Hillsborough	April '86	Closed	40	13
		Open	98	5.2
	Jan. '87	Closed	120	58
		Closed	47	19
	Mean		75 ± 63	24 ± 37
Hogtown	April '86	Closed	12	0
		Open	68	0
	Nov. '86	Closed	7	0
		Open	9	0
	Mean		24 ± 47	0
Upper Santa Fe	April '86	Closed	15	8.8
		Open	110	19
	Nov. '86	Closed	190	110
		Open	280	29
	Mean		150 ± 180	41 ± 72

¹Streams with known sewage inputs.

standing crops of total fish as high or higher than the 17 Florida streams sampled by Canfield and Hoyer in 1985-1987, which includes the Little Wekiva and Wekiva Rivers.

Canfield and Hoyer (1988) collected data on the age and growth of redbreasted sunfish and largemouth bass (Tables 3.3.4 and 3.3.5). They indicated that growth rates of these species seemed to be more rapid in stream that receive treated wastewater as does the Little Wekiva River. No age and growth data were collected in 1997 to compare to these data.

Conclusions

Comparison of data collected during this study to those of Canfield and Hoyer (1988) indicate that both the Wekiva River and the Little Wekiva River still support a large/comparable number of fish species. Fish community compositions, based on number and biomass, are also similar for these two blocknet studies. Total fish densities in 1997 are as high as those observed during 1985-1987, and comparable to or higher than those of 15 other Florida streams examined during 1985-1987. The Wekiva River and Little Wekiva River maintained standing crops of total fish as high or higher than 17 Florida streams sampled in 1985-1987, which includes the Little Wekiva and Wekiva Rivers. Thus, fish communities of the Wekiva River and Little Wekiva River have not changed from historical records.

TABLE 3.3.4. Mean growth of redbreasted sunfish for age classes I-IV, back-calculated from examinations of otolith annuli in whole view (Canfield and Hoyer 1988). Growth is recorded in mm total length (TL) and N is the total number of fish examined.

Stream	N	Mean Size (mm) for Age Classes			
		I	II	III	IV
Little Wekiva ¹	280	67	100	134	165
Alexander Springs	117	64	101	129	162
Ichetucknee	10	51	91	135	-
Alligator Creek ¹	184	73	136	167	184
Rock Springs	154	66	108	143	168
Little Econlockhatchee ¹	19	82	-	-	-
Wacissa	21	44	86	137	-
Wekiva	132	64	107	139	181
Pottsburg ¹	68	89	137	141	-
St. Marks	7	53	90	105	141
Econlockhatchee	51	68	116	168	-
Hillsborough	20	60	93	119	149
Upper Santa Fe	34	57	109	146	170
Means of Means (Range)		64 (44-89)	106 (86-137)	139 (105-168)	164 (141-184)

¹Streams receiving known sewage effluents.

TABLE 3.3.5. Mean growth of largemouth bass for age classes I-IV, back-calculated from examinations of otolith annuli in whole view (Canfield and Hoyer 1988). Growth is recorded in mm total length (TL) and N is the total number of fish examined.

Stream	N	Mean Size (mm) for Age Classes			
		I	II	III	IV
Little Wekiva ¹	138	126	199	248	274
Alexander Springs	23	120	189	224	266
Ichetucknee	24	125	196	249	341
Alligator Creek ¹	201	128	242	305	350
Rock Springs	33	113	187	239	285
Little Econlockhatchee ¹	13	145	226	249	310
Wacissa	86	87	181	241	-
Wekiva	47	115	182	225	269
Pottsburg ¹	30	117	222	276	332
Mills ¹	6	108	188	266	283
St. Marks	76	116	174	239	271
Econlockhatchee	5	83	115	136	167
Hillsborough	27	132	194	248	-
Upper Santa Fe	11	112	173	226	264
Mean of Means (Range)		116 (83-145)	191 (115-242)	241 (136-305)	284 (167-350)

¹Streams receiving known sewage effluents.

III. FISH COMMUNITIES

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Appendixes 3.1.1–3.2.1
Under Separate Cover

**IV. Predictions of Probable Responses of Wekiva River
Invertebrate and Fish Communities to Projected Flow Reductions**

Introduction

Hydrologically, if the flow (volume of water discharged) of the Wekiva River system is reduced, several possible changes may occur to the physical attributes of the river. Shallow areas may become dry as they are dewatered. In many locations, shallow areas located away from the deeper channel will likely become shallower and the water velocity in these areas become slower. The main channel of the river may respond by becoming narrower, meandering among the shallow areas. This would be a likely scenario in the lower portions of the Wekiva River, for example, upstream and downstream from the State Highway 46 bridge, where the river is currently shallow and wide. The channel may, however, become deeper as it narrows and water flow is restricted to the channel. In reaches of the upper Wekiva River and in the Little Wekiva River, the stream may simply become shallower while nearly maintaining its current width. Differences in soil types and the presence/absence of vegetation along the channel will play a role in determining possible outcomes.

The intent of this research was not to determine how the Wekiva River System would physically change in regards to water depth and velocity. This research rather focused on the relationship of benthic macroinvertebrate and fish communities and the major aquatic habitats (e.g. aquatic plants) present in this system. Changes in the water depth and velocity, brought about by

reduction in stream flow, may be predicted by SJRWMD hydrologists involved in the much larger overall project of which this study is but a small part.

Freshwater Invertebrate Communities

The overall ten to twenty percent flow reductions projected for the Wekiva River basin by 2010 will undoubtedly have some effect on the structure of resident fish and freshwater invertebrate communities. The magnitude of these effects will be dependent upon the actual magnitude of the discharge and water level reductions.

As a consequence to flow reductions, declines in current velocity, water level, and dissolved oxygen concentrations can be expected throughout the study area. Nutrient residence time is likely to increase. These conditions will result in overall declines in the species richness, diversity, and evenness of distribution of aquatic invertebrate communities. The suspension filtering community component will be most affected by flow reductions. However, overall shifts in the relative abundance of major invertebrate taxonomic and functional community components are likely.

The lower Wekiva River study segment will be most affected by discharge reductions. Lower water levels resulting from reduced flow will encourage displacement of the desirable Vallisneria habitat, and its associated filtering/grazing invertebrate community, by Typha. In the present study, the invertebrate community associated with Typha was the lowest in species richness and diversity of all communities sampled in this study. The Typha-

associated invertebrate community was dominated by taxa tolerant of low current velocities, low dissolved oxygen concentrations, high levels of nutrients, and overall poor habitat conditions. Some locations in the Little Wekiva River will also likely evolve to Typha dominated marsh due to lower water levels.

In the upper and middle Wekiva River study segments, and in the Little Wekiva River, reductions in flow and water level could result in deterioration of filter-feeding community components due to the reduction of particulate organic matter food resources traveling through individual niches. Increased sedimentation and organic matter accumulation could result in declines of unionid mussel populations and burrowers, such as the mayfly Hexagenia limbata. Species dependent upon deep water conditions, such as the mayfly Cercobrachys etowah could be affected by lower water levels.

Fish Communities

Biologically, as shallow areas of the stream become dry, several changes will likely occur. Dry areas obviously have no water, and thus fish will not be able to inhabit these areas except during periods of high water. Cattails, an aggressive invader of disturbed moist soil habitats (Sharma and Gopal 1979, Urban et al. 1993, Hoyer et al. 1996), will likely become established in these dry/shallow areas as has occurred downstream of the State Highway 46 bridge. Qualitative sampling within and along the cattail bed in this area in 1997 produced only one mosquitofish and a small warmouth. The bottom sediments were highly organic in nature consisting of partially decayed cattail fragments. Dissolved oxygen was near 0 mg/l, the lowest observed during this

study. If cattails invade dewatered areas of the Wekiva River system as has occurred downstream of the State Highway 46 bridge, these areas will support fewer fish and a reduced number of species. Once established, the cattails will also likely spread to deeper portions of the stream, further channeling and narrowing the water flow of the river as they have done below the State Highway 46 bridge near Katie's Landing.

Changes in the hydrology of the Wekiva River system will cause changes in the absolute and relative abundances of the various plant species present in the system. If the areal coverage of the aquatic plants uniformly decreases in relation to each other due to the loss of wetted area, then the overall abundance of fish will likely decline, as the availability of fish habitat is reduced. If there is a shift in aquatic plant abundance, the resulting fish community abundance and composition can be variable. This study found distinct differences among the fish communities inhabiting the four dominant plant habitats present in the Wekiva River system. If Hydrocotyle becomes more abundant in the Little Wekiva River and upper and middle Wekiva River, the resulting fish communities may actually increase in size (total number of individuals), but decrease in biomass (total grams of fish) and average size (Figures 3.1.5 and 3.1.6). Species composition will favor small livebearers rather than minnows, sunfishes, and catfishes (Figures 3.1.9, 3.1.10, 3.1.11, 3.1.13, 3.1.14, and 3.1.15). In the lower Wekiva River, where Vallisneria and bare habitats are dominant, a reduction in stream flow and a shift from Vallisneria to bare habitat would result in a decrease in the number and biomass of sunfish and catfish (Figures 3.1.5, 3.1.6, 3.1.12, 3.1.16, 3.1.17, 3.1.19, and 3.1.20). The number of fish species would also likely be reduced

(Figures 3.1.8 and 3.1.18). If, however, the stream becomes more channeled and deeper than its current state, the end result would be unknown as this study did not sample the deeper habitats, but rather targeted the shallow Vallisneria beds and sand flats which dominated the lower Wekiva River. Qualitative observation of these deep holes during months of sampling indicated large numbers of sunfish, catfish, and shiners used these areas. Mullet seemed to school, moving from deep pools to both vegetated and bare shallow areas.

As part of this study, a series of multiple regression equations for fish density, biomass, and species richness were developed based upon spring and fall throw trap and blocknet data (Tables 3.1.7, 3.1.8, and 3.1.9). These models were developed within each of the four study segments of the Wekiva River system as the streams varied greatly in their physical and biological attributes among the four segments. Models were also developed within habitat type (Hydrocotyle, Nuphar, Vallisneria, and bare bottom) as the fish communities varied greatly among these four habitats. Most of these regression equations have extremely high coefficients of variation (R^2), thus should be good predictors of fish population parameters if the physical and biological characteristics within a particular habitat and stream segment changes with reduced stream flow.

For example, the equation for predicting fall fish density (number/m²) in Vallisneria for the upper Wekiva River is:

$$\text{Density} = 98.23 - 130.04(D) - 0.15(SVL) - 2.05(BVL),$$

where D refers to water depth in meters, SVL to surface water velocity in cm/sec, and BVL to bottom water velocity in cm/sec. (Table 3.1.7).

Given the mean throw trap physicochemical data for Vallisneria in the upper Wekiva River in the fall of 1997 (Table 3.1.2), we see that mean depth was 0.60 m, mean surface velocity was 17.0 cm/sec, and mean bottom velocity was 4.4 cm/sec. With the equation listed above and these data, the mean density of fish per m² can be calculated by substitution:

$$\begin{aligned}\text{Density} &= 98.23 - 130.04(0.6) - 0.15(17.0) - 2.05(4.4) \\ &= 98.23 - 78.02 - 2.55 - 9.02 \\ &= 8.6 \text{ fish/m}^2\end{aligned}$$

So, as depth and water velocity decreases, fish density would increase. Thus, shallower Vallisneria beds with slower-flowing water tended to have more fish, albeit smaller fish. In this example, a decrease in water depth to 0.5 m, would result in fish density increasing to 21.7 fish/m². If water depth decreases to 0.5 m and both surface and bottom velocities decrease by 10% (surface velocity = 15.3 cm/sec and bottom velocity = 3.96 cm/sec), then fish density would increase to 22.8 fish/m². For this particular example, water depth influences fish density more than water velocity.

These equations are for total fish density, biomass, and species richness. Some fish species will increase in abundance in response to changing the physicochemical environment, while others will decrease. These models (Tables 3.1.7, 3.1.8, and 3.1.9) thus integrate the life history and ecology of many

species into singular models. If one was interested in predicting the response of individual species, data presented in Appendices 3.1.1, 3.1.2, 3.1.4, and 3.1.6 of Chapter 3 and Appendices 3.1.8, 3.1.9, 3.1.10, and 3.1.11 of this report could be used to develop such equations. Thus, if hydrologists could predict what water levels and velocities will be present under reduced flow conditions and we knew what plant species will be present, the future fish communities within portions of the Wekiva River system could be predicted based on these models.

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3.1.5

Special Publication SJ2000-SP4

FISH AND AQUATIC INVERTEBRATE COMMUNITIES OF THE WEKIVA AND
LITTLE WEKIVA RIVERS: A BASELINE EVALUATION IN THE CONTEXT OF
FLORIDA'S MINIMUM FLOWS AND LEVELS STATUTES

Appendixes 3.1.1–3.2.1

March 2000

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Appendix 3.1.1

Throw Trap Data Summary for Spring 1997

Wekiva River System

Throw Trap Number	River Segment	Habitat	Date	GPS North	GPS West	Water Temperature (C)	Depth (m)
21	Lower Wekiva	Bare Bottom	52997	2848.36	8125.04	24.5	0.50
22	Lower Wekiva	Bare Bottom	52997	2848.24	8124.96	25.3	0.50
23	Lower Wekiva	Bare Bottom	52997	2847.98	8124.93	25.1	0.35
24	Lower Wekiva	Bare Bottom	52997	2847.96	8124.97	25.0	0.50
25	Lower Wekiva	Bare Bottom	52997	2847.68	8124.83	25.9	0.55
26	Lower Wekiva	Bare Bottom	52797	2849.15	8125.19	25.6	0.45
27	Lower Wekiva	Bare Bottom	52797	2849.15	8125.12	25.5	0.32
28	Lower Wekiva	Bare Bottom	52797	2848.97	8125.16	25.7	0.68
29	Lower Wekiva	Bare Bottom	52797	2848.83	8125.16	27.3	0.37
30	Lower Wekiva	Bare Bottom	52797	2848.79	8125.16	26.9	0.31
31	Lower Wekiva	Bare Bottom	52797	2848.67	8125.12	28.9	0.55
32	Lower Wekiva	Bare Bottom	52797	2848.62	8125.14	28.8	0.43
33	Lower Wekiva	Bare Bottom	52797	2848.54	8125.04	29.7	0.49
46	Lower Wekiva	Bare Bottom	52397	2849.72	8124.81	25.7	0.50
47	Lower Wekiva	Bare Bottom	52397	2849.72	8125.03	27.2	0.25
48	Lower Wekiva	Bare Bottom	52397	2849.41	8124.99	27.7	0.65
72	Lower Wekiva	Bare Bottom	60397	2849.54	8124.92	24.1	0.30
73	Lower Wekiva	Bare Bottom	60397	2849.52	8125.03	25.2	0.50
74	Lower Wekiva	Bare Bottom	60397	2849.32	8125.09	28.1	0.60
75	Lower Wekiva	Bare Bottom	60397	2849.30	8125.16	28.7	0.25
76	Lower Wekiva	Bare Bottom	60397	2849.23	8125.10	28.0	0.41
77	Lower Wekiva	Bare Bottom	60397	2849.24	8125.11	27.9	0.45
78	Lower Wekiva	Bare Bottom	60397	2849.38	8125.02	28.1	0.40
83	Lower Wekiva	Bare Bottom	60597	2848.01	8124.89	25.4	0.45
84	Lower Wekiva	Bare Bottom	60597	2848.38	8125.02	27.8	0.48
16	Lower Wekiva	Vallisneria	52997	2848.48	8125.07	24.2	0.57
17	Lower Wekiva	Vallisneria	52997	2848.47	8125.07	24.3	0.69

Dissolved Oxygen (mg/l)	Surface Velocity (cm/sec)	Bottom Velocity (cm/sec)	Plant Cover (%)	Plant Biomass (g)	Fish Density (Number/m2)	Fish Biomass (g/m2)	Number of Fish Species
8.92	15.00	13.0	0	0	2	1.05	1
6.80	5.00	3.0	0	0	1	1.68	1
6.80	.	.	0	0	1	1.24	1
6.30	.	.	0	0	0	0.00	0
2.95	.	.	0	0	0	0.00	0
5.30	25.00	17.0	0	0	0	0.00	0
5.50	24.00	21.0	0	0	0	0.00	0
6.70	11.00	9.0	0	0	0	0.00	0
8.40	15.00	15.0	0	0	4	2.85	2
6.50	3.00	3.0	0	0	1	0.09	1
9.30	4.00	4.0	0	0	0	0.00	0
8.50	4.00	4.0	0	0	17	3.01	1
9.50	10.00	10.0	0	0	0	0.00	0
8.50	13.00	.	0	0	0	0.00	0
9.32	4.00	.	0	0	0	0.00	0
9.79	18.00	12.0	0	0	0	0.00	0
6.66	11.00	.	0	0	0	0.00	0
8.65	.	8.0	0	0	61	86.28	1
9.78	6.00	4.0	0	0	3	0.65	2
7.40	0.00	0.0	0	0	0	0.00	0
10.08	12.00	7.0	0	0	0	0.00	0
9.40	14.00	11.0	0	0	0	0.00	0
9.12	8.00	3.0	0	0	5	0.62	1
5.20	20.00	15.0	0	0	0	0.00	0
7.80	13.00	2.0	0	0	0	0.00	0
8.45	17.00	23.0	80	1980	3	16.62	3
8.61	16.00	18.0	75	2743	2	8.73	2

Throw Trap Number	River Segment	Habitat	Date	GPS North	GPS West	Water Temperature (C)	Depth (m)
18	Lower Wekiva	Vallisneria	52997	2848.47	8125.07	24.3	0.50
19	Lower Wekiva	Vallisneria	52997	2848.32	8125.05	24.7	0.49
20	Lower Wekiva	Vallisneria	52997	2848.06	8124.96	24.7	0.55
34	Lower Wekiva	Vallisneria	52797	2848.97	8125.16	25.7	0.35
35	Lower Wekiva	Vallisneria	52797	2848.78	8125.17	27.5	0.20
36	Lower Wekiva	Vallisneria	52797	2848.72	8125.13	28.0	0.50
37	Lower Wekiva	Vallisneria	52797	2848.77	8125.09	28.8	0.49
38	Lower Wekiva	Vallisneria	52797	2848.73	8125.18	29.0	0.35
39	Lower Wekiva	Vallisneria	52797	2848.62	8125.11	29.0	0.45
40	Lower Wekiva	Vallisneria	52797	2848.50	8125.05	28.9	0.40
41	Lower Wekiva	Vallisneria	60997	2848.48	8125.05	24.7	0.51
42	Lower Wekiva	Vallisneria	60997	2848.44	8125.03	24.9	0.51
43	Lower Wekiva	Vallisneria	60997	2848.30	8124.99	24.8	0.52
44	Lower Wekiva	Vallisneria	60997	2848.16	8124.97	24.8	0.55
45	Lower Wekiva	Vallisneria	60997	2848.55	8125.06	24.6	0.24
49	Lower Wekiva	Vallisneria	52397	2849.65	8124.91	26.7	0.70
50	Lower Wekiva	Vallisneria	52397	2849.71	8124.70	26.9	0.50
51	Lower Wekiva	Vallisneria	52397	2849.61	8124.78	27.1	0.65
52	Lower Wekiva	Vallisneria	52397	2849.42	8124.99	27.5	0.50
53	Lower Wekiva	Vallisneria	52397	2849.76	8124.80	24.8	0.20
54	Lower Wekiva	Vallisneria	52397	2849.74	8124.80	25.1	0.25
55	Lower Wekiva	Vallisneria	52397	2849.73	8124.78	24.8	0.25
56	Lower Wekiva	Vallisneria	52397	2849.68	8124.85	25.5	0.50
57	Lower Wekiva	Vallisneria	52397	2849.62	8124.89	26.7	0.45
58	Lower Wekiva	Vallisneria	52397	2849.69	8124.91	26.3	0.60
59	Lower Wekiva	Vallisneria	52397	2849.71	8124.78	25.5	0.65
60	Lower Wekiva	Vallisneria	52397	2849.63	8124.78	27.0	0.25

Dissolved Oxygen (mg/l)	Surface Velocity (cm/sec)	Bottom Velocity (cm/sec)	Plant Cover (%)	Plant Biomass (g)	Fish Density (Number/m2)	Fish Biomass (g/m2)	Number of Fish Species
8.60	24.00	9.0	90	1961	6	79.20	3
8.65	27.00	17.0	80	2528	3	0.86	2
6.90	.	.	100	6529	8	33.05	3
6.70	9.00	9.0	35	305	3	1.04	2
7.20	9.00	6.0	80	1244	8	27.47	4
9.50	9.00	2.0	95	1550	7	284.91	5
9.70	2.00	0.0	90	1919	16	20.30	4
9.40	4.00	4.0	70	1636	4	1.76	2
7.80	3.00	3.0	20	363	3	0.41	2
8.20	.	.	100	2103	11	33.85	3
5.00	16.00	3.0	90	2993	5	68.86	2
6.80	13.00	2.0	90	1167	5	11.96	4
5.80	19.00	5.0	85	2664	2	13.36	1
5.70	15.00	4.0	90	2503	1	1.66	1
5.20	14.00	4.0	90	2390	12	38.52	3
8.83	28.00	5.0	90	1669	0	0.00	0
9.62	14.00	2.0	75	2735	6	18.28	3
9.52	19.00	8.0	100	2799	1	0.85	1
10.09	21.00	14.0	100	2515	2	4.26	2
6.07	10.00	.	60	840	2	0.41	1
6.73	22.00	.	75	991	1	21.11	1
6.20	17.00	.	75	1681	5	31.34	4
7.91	11.00	6.0	75	1157	2	1.84	2
9.50	38.00	28.0	30	501	2	2.72	1
8.69	25.00	15.0	80	1750	3	15.05	2
7.89	24.00	10.0	90	2560	10	679.90	3
9.17	13.00	.	85	1119	4	5.23	2

Throw Trap Number	River Segment	Habitat	Date	GPS North	GPS West	Water Temperature (C)	Depth (m)
61	Lower Wekiva	Vallisneria	60397	2849.54	8124.97	24.1	0.50
62	Lower Wekiva	Vallisneria	60397	2849.50	8124.97	24.4	0.58
63	Lower Wekiva	Vallisneria	60397	2849.34	8125.08	27.9	0.51
64	Lower Wekiva	Vallisneria	60397	2849.26	8125.11	28.1	0.45
65	Lower Wekiva	Vallisneria	60397	2849.68	8124.97	23.7	0.30
66	Lower Wekiva	Vallisneria	60397	2849.59	8124.96	24.0	0.29
67	Lower Wekiva	Vallisneria	60397	2849.46	8125.05	26.0	0.32
68	Lower Wekiva	Vallisneria	60397	2849.46	8125.02	26.2	0.28
69	Lower Wekiva	Vallisneria	60397	2849.42	8125.08	26.5	0.40
70	Lower Wekiva	Vallisneria	60397	2849.31	8125.10	28.3	0.29
71	Lower Wekiva	Vallisneria	60397	2849.26	8125.13	27.8	0.40
79	Lower Wekiva	Vallisneria	60597	2847.98	8124.91	25.2	0.30
80	Lower Wekiva	Vallisneria	60597	2848.01	8124.87	25.3	0.31
81	Lower Wekiva	Vallisneria	60597	2848.03	8124.89	25.6	0.45
82	Lower Wekiva	Vallisneria	60597	2848.58	8125.07	27.7	0.47
85	Lower Wekiva	Vallisneria	60597	2848.02	8124.89	25.4	0.48
86	Lower Wekiva	Vallisneria	60597	2848.03	8124.80	25.8	0.58
87	Lower Wekiva	Vallisneria	60597	2848.11	8124.80	26.1	0.53
88	Lower Wekiva	Vallisneria	60597	2848.12	8124.86	26.2	0.60
89	Lower Wekiva	Vallisneria	60597	2848.07	8124.88	26.6	0.51
90	Lower Wekiva	Vallisneria	60597	2848.22	8124.93	26.6	0.50
95	Middle Wekiva	Bare Bottom	52297	2846.02	8125.54	25.6	0.58
96	Middle Wekiva	Bare Bottom	60997	2847.42	8124.80	24.9	0.48
106	Middle Wekiva	Bare Bottom	61897	2845.88	8124.98	25.5	0.60
107	Middle Wekiva	Bare Bottom	61897	2846.30	8124.97	25.8	0.50
108	Middle Wekiva	Bare Bottom	61197	2847.29	8124.73	24.8	0.48
109	Middle Wekiva	Bare Bottom	61197	2847.29	8124.73	24.8	0.58

Dissolved Oxygen (mg/l)	Surface Velocity (cm/sec)	Bottom Velocity (cm/sec)	Plant Cover (%)	Plant Biomass (g)	Fish Density (Number/m2)	Fish Biomass (g/m2)	Number of Fish Species
6.69	12.00	2.0	85	886	2	21.05	2
7.49	24.00	3.0	100	3655	8	40.87	1
10.09	9.00	6.0	10	200	3	22.79	2
9.40	15.00	10.0	80	1333	7	14.86	2
6.26	10.00	.	75	1329	7	27.83	3
6.87	10.00	.	30	667	2	20.72	1
9.44	15.00	5.0	40	762	4	4.84	3
9.50	19.00	.	30	1045	2	285.49	2
9.28	21.00	5.0	40	1554	8	36.23	4
9.40	14.00	6.0	60	887	8	40.98	3
9.83	17.00	9.0	20	866	11	4.51	2
4.40	20.00	4.0	100	4387	6	23.93	3
5.00	22.00	16.0	100	2166	4	1.69	2
4.70	8.00	2.0	90	2548	8	14.92	3
6.90	12.00	4.0	90	3394	10	61.26	2
4.70	3.00	1.0	10	978	4	0.44	3
5.00	6.00	4.0	50	.	4	8.02	3
5.30	21.00	2.0	95	3239	7	124.04	2
5.40	19.00	4.0	100	2274	1	0.41	1
5.70	15.00	0.5	100	3177	7	21.82	3
5.50	17.00	6.0	90	3205	7	6.38	3
5.50	5.50	4.0	0	0	3	0.06	1
6.10	20.00	19.0	0	0	1	0.08	1
5.00	5.00	5.0	0	0	0	0.00	0
5.40	4.00	4.0	0	0	0	0.00	0
4.50	12.00	9.0	0	0	0	0.00	0
5.00	11.00	11.0	0	0	0	0.00	0

Throw Trap Number	River Segment	Habitat	Date	GPS North	GPS West	Water Temperature (C)	Depth (m)
110	Middle Wekiva	Bare Bottom	61197	2847.33	8124.84	24.9	0.45
111	Middle Wekiva	Bare Bottom	61197	2847.35	8124.84	24.9	0.60
112	Middle Wekiva	Bare Bottom	61197	2847.58	8124.66	25.0	0.15
113	Middle Wekiva	Bare Bottom	61197	2847.25	8124.89	25.1	0.28
94	Middle Wekiva	Hydrocotyle	52297	2845.73	8124.93	25.6	0.61
99	Middle Wekiva	Hydrocotyle	60997	2847.45	8124.74	25.1	0.45
100	Middle Wekiva	Hydrocotyle	60997	2847.45	8124.82	24.9	0.31
102	Middle Wekiva	Hydrocotyle	61897	2846.60	8124.92	26.4	0.72
103	Middle Wekiva	Hydrocotyle	61897	2845.75	8124.94	25.6	0.48
93	Middle Wekiva	Nuphar	52297	2845.92	8125.54	25.6	0.45
104	Middle Wekiva	Nuphar	61897	2845.75	8124.88	25.0	0.55
105	Middle Wekiva	Nuphar	61897	2845.87	8124.95	25.5	0.72
119	Middle Wekiva	Nuphar	61197	2847.45	8125.53	24.9	0.52
120	Middle Wekiva	Nuphar	61197	2847.36	8124.83	24.8	0.25
91	Middle Wekiva	Vallisneria	52297	2845.72	8124.90	25.4	0.60
92	Middle Wekiva	Vallisneria	52297	2845.88	8124.94	25.7	0.45
97	Middle Wekiva	Vallisneria	60997	2847.41	8124.75	25.3	0.47
98	Middle Wekiva	Vallisneria	60997	2847.49	8124.80	25.1	0.40
101	Middle Wekiva	Vallisneria	61897	2847.26	8124.91	25.1	0.50
114	Middle Wekiva	Vallisneria	61197	2847.45	8124.74	24.8	0.35
115	Middle Wekiva	Vallisneria	61197	2847.34	8124.91	24.9	0.35
116	Middle Wekiva	Vallisneria	61197	2847.27	8124.97	25.1	0.55
117	Middle Wekiva	Vallisneria	61197	2847.30	8124.91	25.0	0.35
118	Middle Wekiva	Vallisneria	61197	2847.16	8124.88	25.2	0.15
11	Little Wekiva	Hydrocotyle	70197	2843.20	8123.93	27.0	0.50
12	Little Wekiva	Hydrocotyle	70197	2843.20	8123.91	27.2	0.35
13	Little Wekiva	Hydrocotyle	70197	2843.23	8123.96	27.3	0.50

Dissolved Oxygen (mg/l)	Surface Velocity (cm/sec)	Bottom Velocity (cm/sec)	Plant Cover (%)	Plant Biomass (g)	Fish Density (Number/m2)	Fish Biomass (g/m2)	Number of Fish Species
5.10	13.00	10.0	0	0	1	0.05	1
5.30	16.00	10.0	0	0	1	1.12	1
5.50	12.00	.	0	0	1	0.02	1
5.71	8.00	.	0	0	2	0.75	1
5.50	5.50	.	100	5184	45	16.99	8
6.20	3.00	3.0	100	3337	107	24.34	6
6.00	4.00	8.0	40	3658	29	47.36	5
5.60	4.00	2.0	100	3679	42	8.33	5
3.50	0.00	1.0	100	3884	56	7.25	5
5.60	12.00	12.0	35	876	0	0.00	0
4.80	4.00	1.0	10	1262	0	0.00	0
5.00	3.00	3.0	40	542	1	0.12	1
5.30	11.00	11.0	50	1130	0	0.00	0
5.30	7.00	.	40	1024	6	1.61	2
5.60	13.00	4.0	100	3745	10	22.56	4
5.90	18.50	7.0	90	1153	1	1.85	1
6.30	13.00	4.0	100	1424	6	3.30	2
6.50	18.00	3.0	90	1380	1	0.46	1
4.90	15.00	5.0	95	2391	5	7.06	4
5.20	15.00	9.0	100	3440	4	10.68	2
5.62	21.00	5.0	100	1690	7	25.99	2
5.78	20.00	3.0	100	2810	12	10.95	2
5.66	16.00	6.0	90	1310	12	8.96	3
5.40	5.00	.	100	1882	6	8.18	3
3.10	3.00	8.0	100	3947	27	20.36	6
3.30	4.00	4.0	100	4078	83	6.23	7
3.40	2.00	6.0	100	3946	48	3.26	6

Throw Trap Number	River Segment	Habitat	Date	GPS North	GPS West	Water Temperature (C)	Depth (m)
14	Little Wekiva	Hydrocotyle	70197	2843.26	8124.03	28.7	0.54
15	Little Wekiva	Hydrocotyle	70197	2843.25	8123.95	28.7	0.63
6	Little Wekiva	Nuphar	70197	2843.33	8123.94	27.9	0.60
7	Little Wekiva	Nuphar	70197	2843.56	8123.99	28.3	0.35
8	Little Wekiva	Nuphar	70197	2843.66	8123.83	28.7	0.48
9	Little Wekiva	Nuphar	70197	2843.24	8123.95	27.4	0.55
10	Little Wekiva	Nuphar	70197	2843.39	8123.96	27.9	0.38
1	Little Wekiva	Vallisneria	70197	2843.22	8123.95	27.1	0.48
2	Little Wekiva	Vallisneria	70197	2843.35	8123.88	27.6	0.54
3	Little Wekiva	Vallisneria	70197	2843.27	8123.96	27.6	0.49
4	Little Wekiva	Vallisneria	70197	2843.38	8123.99	27.7	0.53
5	Little Wekiva	Vallisneria	70197	2843.41	8123.95	28.5	0.45
124	Upper Wekiva	Hydrocotyle	52297	2844.50	8125.25	25.8	0.45
125	Upper Wekiva	Hydrocotyle	52297	2844.55	8125.23	.	0.23
130	Upper Wekiva	Hydrocotyle	51697	2842.98	8126.42	23.2	0.60
131	Upper Wekiva	Hydrocotyle	51697	2842.98	8126.42	23.2	0.75
132	Upper Wekiva	Hydrocotyle	51697	2842.98	8126.42	23.3	0.70
122	Upper Wekiva	Nuphar	52297	2843.97	8125.50	25.6	0.65
123	Upper Wekiva	Nuphar	52297	2844.42	8125.23	26.2	0.52
133	Upper Wekiva	Nuphar	51697	2843.30	8126.08	23.3	0.30
134	Upper Wekiva	Nuphar	51697	2843.30	8126.08	23.4	0.50
135	Upper Wekiva	Nuphar	51697	2843.30	8126.08	23.7	0.55
121	Upper Wekiva	Vallisneria	52297	2844.46	8125.23	26.2	0.52
126	Upper Wekiva	Vallisneria	51697	2843.30	8126.08	23.5	0.50
127	Upper Wekiva	Vallisneria	51697	2843.30	8126.08	23.4	0.60
128	Upper Wekiva	Vallisneria	51697	2842.98	8126.42	23.6	0.70
129	Upper Wekiva	Vallisneria	51697	2842.98	8126.42	23.5	0.75

Dissolved Oxygen (mg/l)	Surface Velocity (cm/sec)	Bottom Velocity (cm/sec)	Plant Cover (%)	Plant Biomass (g)	Fish Density (Number/m2)	Fish Biomass (g/m2)	Number of Fish Species
3.90	5.00	11.0	100	2559	25	4.45	5
4.00	5.00	12.0	95	4731	45	3.82	4
3.40	17.00	5.0	20	760	0	0.00	0
3.90	9.00	9.0	30	558	0	0.00	0
0.60	12.00	12.0	20	892	1	0.31	1
3.50	3.00	3.0	40	556	1	0.09	1
3.80	10.00	6.0	45	900	1	0.04	1
3.30	15.00	12.0	100	547	3	2.27	3
3.60	31.00	15.0	100	3016	3	2.97	3
3.80	21.00	3.0	100	3175	2	3.53	2
3.60	21.00	12.0	100	5099	5	8.20	4
4.00	23.00	5.0	100	773	0	0.00	0
7.00	2.50	1.5	95	2683	109	37.08	6
.	.	.	95	2462	62	10.19	6
5.03	8.00	.	80	3114	15	2.05	4
5.03	8.00	.	100	3460	2	0.22	2
5.10	5.12	.	40	2825	17	1.42	4
6.20	9.00	7.0	25	1830	4	0.21	4
6.90	6.50	5.0	25	507	0	0.00	0
6.06	10.00	.	50	1050	2	2.62	2
6.07	10.00	.	25	825	2	2.52	1
6.20	10.00	.	20	1173	6	7.27	2
5.70	.	.	100	5845	7	46.37	3
6.18	15.00	.	45	1054	5	9.98	4
6.28	15.00	.	75	630	3	4.41	2
5.15	17.00	.	100	5322	4	5.94	3
5.40	16.00	.	100	3965	16	17.51	3

Appendix 3.1.2

Throw Trap Data Summary for Fall 1997

Wekiva River System

Throw Trap Number	River Segment	Habitat	Date	GPS North	GPS West	Water Temperature (C)	Depth (m)
10	Lower Wekiva	Bare Bottom	100897	2848.04	8125.04	25.1	0.40
11	Lower Wekiva	Bare Bottom	100897	2848.24	8124.98	24.8	0.60
12	Lower Wekiva	Bare Bottom	100897	2848.26	8125.01	25.0	0.67
13	Lower Wekiva	Bare Bottom	100897	2848.68	8125.26	25.3	0.62
14	Lower Wekiva	Bare Bottom	100897	2848.17	8124.97	25.3	0.61
15	Lower Wekiva	Bare Bottom	100897	2848.58	8125.06	25.4	0.57
16	Lower Wekiva	Bare Bottom	100897	2848.65	8125.06	25.7	0.58
17	Lower Wekiva	Bare Bottom	100897	2848.82	8125.14	23.5	0.68
31	Lower Wekiva	Bare Bottom	100997	2848.57	8125.07	25.7	0.38
32	Lower Wekiva	Bare Bottom	100997	2847.97	8124.91	24.2	0.42
33	Lower Wekiva	Bare Bottom	100997	2847.96	8124.89	24.2	0.52
34	Lower Wekiva	Bare Bottom	100997	2848.12	8124.95	24.2	0.49
35	Lower Wekiva	Bare Bottom	100997	2848.11	8125.01	24.1	0.42
51	Lower Wekiva	Bare Bottom	101397	2848.84	8125.17	25.9	0.62
52	Lower Wekiva	Bare Bottom	101397	2848.80	8125.15	26.1	0.52
53	Lower Wekiva	Bare Bottom	101397	2848.80	8125.12	26.2	0.59
54	Lower Wekiva	Bare Bottom	101397	2848.79	8125.15	26.1	0.61
55	Lower Wekiva	Bare Bottom	101397	2848.52	8125.13	25.7	0.53
69	Lower Wekiva	Bare Bottom	100797	2849.24	8125.12	27.0	0.51
70	Lower Wekiva	Bare Bottom	100797	2849.23	8125.12	27.2	0.51
71	Lower Wekiva	Bare Bottom	100797	2849.40	8125.08	26.2	0.62
72	Lower Wekiva	Bare Bottom	100797	2848.55	8124.97	25.7	0.47
73	Lower Wekiva	Bare Bottom	100797	2849.58	8124.97	25.8	0.54
74	Lower Wekiva	Bare Bottom	100797	2849.64	8124.86	24.6	0.54
75	Lower Wekiva	Bare Bottom	100797	2849.64	8124.89	24.5	0.52
1	Lower Wekiva	Vallisneria	100897	2848.08	8124.90	25.0	0.60
2	Lower Wekiva	Vallisneria	100897	2848.32	8124.98	25.3	0.62

Dissolved Oxygen (mg/l)	Surface Velocity (cm/sec)	Bottom Velocity (cm/sec)	Plant Cover (%)	Plant Biomass (g)	Fish Density (Number/m2)	Fish Biomass (g/m2)	Number of Fish Species
6.50	19	14	0	0	0	0.00	0
6.15	13	6	0	0	6	0.73	1
6.50	13	4	0	0	8	0.87	1
7.68	12	6	0	0	13	1.60	2
8.08	8	2	0	0	25	3.26	2
9.30	1	1	0	0	0	0.00	0
9.05	6	3	0	0	8	0.64	2
5.98	10	4	0	0	0	0.00	0
8.35	26	12	0	0	0	0.00	0
5.14	17	7	0	0	0	0.00	0
5.33	18	10	0	0	0	0.00	0
5.19	21	11	0	0	11	1.75	2
5.10	13	8	0	0	0	0.00	0
9.56	15	9	0	0	7	0.46	3
9.35	17	9	0	0	40	2.94	3
9.78	10	5	0	0	0	0.00	0
9.88	10	4	0	0	0	0.00	0
8.33	17	11	0	0	0	0.00	0
9.46	9	4	0	0	0	0.00	0
11.29	2	1	0	0	15	8.03	1
11.33	5	4	0	0	9	25.10	3
10.25	8	3	0	0	0	0.00	0
10.77	8	3	0	0	0	0.00	0
7.45	10	4	0	0	0	0.00	0
7.75	16	5	0	0	0	0.00	0
5.35	11	3	100	5185	23	9.99	5
7.70	8	4	100	4738	17	8.26	4

Throw Trap Number	River Segment	Habitat	Date	GPS North	GPS West	Water Temperature (C)	Depth (m)
3	Lower Wekiva	Vallisneria	100897	2848.33	8125.06	25.2	0.62
4	Lower Wekiva	Vallisneria	100897	2848.46	8125.02	25.3	0.52
5	Lower Wekiva	Vallisneria	100897	2848.42	8125.05	25.5	0.58
6	Lower Wekiva	Vallisneria	100897	2848.59	8125.05	25.2	0.55
7	Lower Wekiva	Vallisneria	100897	2848.79	8125.13	24.4	0.56
8	Lower Wekiva	Vallisneria	100897	2848.80	8125.13	24.1	0.61
9	Lower Wekiva	Vallisneria	100897	2848.77	8125.14	23.5	0.54
18	Lower Wekiva	Vallisneria	100897	2848.02	8124.93	25.1	0.42
19	Lower Wekiva	Vallisneria	100897	2848.31	8124.97	25.0	0.46
20	Lower Wekiva	Vallisneria	100997	2848.44	8125.02	24.7	0.35
21	Lower Wekiva	Vallisneria	100897	2848.38	8125.11	24.9	0.34
22	Lower Wekiva	Vallisneria	100897	2848.47	8125.04	24.7	0.43
23	Lower Wekiva	Vallisneria	100897	2848.83	8125.11	24.7	0.38
24	Lower Wekiva	Vallisneria	100897	2848.76	8125.18	24.6	0.41
25	Lower Wekiva	Vallisneria	100897	2848.77	8125.14	24.6	0.35
26	Lower Wekiva	Vallisneria	100997	2849.31	8125.09	24.7	0.52
27	Lower Wekiva	Vallisneria	100997	2848.29	8125.08	24.5	0.53
28	Lower Wekiva	Vallisneria	100997	2847.96	8124.89	24.3	0.61
29	Lower Wekiva	Vallisneria	100997	2847.95	8124.90	24.2	.
30	Lower Wekiva	Vallisneria	100997	2848.10	8124.96	24.2	0.54
36	Lower Wekiva	Vallisneria	100997	2848.45	8125.07	25.9	0.36
37	Lower Wekiva	Vallisneria	100997	2848.46	8125.07	25.5	0.38
38	Lower Wekiva	Vallisneria	100997	2848.42	8125.08	25.5	0.48
39	Lower Wekiva	Vallisneria	100997	2848.44	8125.06	25.2	0.44
40	Lower Wekiva	Vallisneria	100997	2848.10	8124.91	24.2	0.48
41	Lower Wekiva	Vallisneria	101397	2849.21	8125.10	23.8	0.35
42	Lower Wekiva	Vallisneria	101397	2849.20	8125.13	23.9	0.48

Dissolved Oxygen (mg/l)	Surface Velocity (cm/sec)	Bottom Velocity (cm/sec)	Plant Cover (%)	Plant Biomass (g)	Fish Density (Number/m2)	Fish Biomass (g/m2)	Number of Fish Species
7.52	20	3	95	3327	31	34.20	4
7.90	12	2	90	2772	44	19.04	7
7.75	7	2	50	1228	29	6.12	5
8.12	9	1	50	1820	14	2.54	3
7.00	19	1	100	4999	12	15.89	4
7.02	20	1	100	3576	9	6.70	4
6.14	22	2	90	1472	40	295.15	5
5.87	9	6	80	3222	43	11.32	6
7.48	6	4	75	2905	8	4.22	3
7.56	14	9	10	104	0	0.00	0
7.40	14	4	95	2145	16	21.67	6
7.04	5	3	90	2380	28	8.08	5
7.34	8	2	90	3048	6	15.37	5
8.15	19	1	90	2632	0	0.00	0
7.65	25	2	70	1578	3	0.61	1
6.92	3	2	100	5422	18	14.97	5
6.90	9	2	95	4520	5	18.94	3
5.26	19	2	70	4869	7	2.23	3
5.06	15	1	100	6955	8	50.67	4
5.02	16	5	30	786	26	4.44	3
7.46	16	4	25	1078	18	1.17	2
7.83	14	5	20	917	30	4.83	3
7.30	8	3	40	2037	36	7.10	4
7.20	12	2	40	892	33	47.09	5
4.90	4	2	85	4536	24	9.09	7
6.46	9	4	95	1330	18	8.80	3
6.09	4	3	90	2052	25	11.32	7

Throw Trap Number	River Segment	Habitat	Date	GPS North	GPS West	Water Temperature (C)	Depth (m)
43	Lower Wekiva	Vallisneria	101397	2849.18	8125.13	24.0	0.40
44	Lower Wekiva	Vallisneria	101397	2848.56	8125.05	25.6	0.39
45	Lower Wekiva	Vallisneria	101397	2848.48	8125.09	25.6	0.31
46	Lower Wekiva	Vallisneria	101397	2849.17	8125.18	24.6	0.51
47	Lower Wekiva	Vallisneria	101397	2849.12	8125.11	24.9	0.63
48	Lower Wekiva	Vallisneria	101397	2848.75	8125.16	26.3	0.64
49	Lower Wekiva	Vallisneria	101397	2848.79	8125.14	26.4	0.61
50	Lower Wekiva	Vallisneria	101397	2848.74	8125.14	26.3	0.59
56	Lower Wekiva	Vallisneria	100797	2849.22	8125.12	26.8	0.56
57	Lower Wekiva	Vallisneria	100797	2849.23	8125.11	26.5	0.65
58	Lower Wekiva	Vallisneria	100797	2849.44	8125.07	26.1	0.57
59	Lower Wekiva	Vallisneria	100797	2849.51	8124.92	25.6	0.54
60	Lower Wekiva	Vallisneria	100797	2849.58	8124.97	25.4	0.59
61	Lower Wekiva	Vallisneria	100797	2849.67	8124.89	24.2	0.54
62	Lower Wekiva	Vallisneria	100797	2849.22	8125.12	27.0	0.43
63	Lower Wekiva	Vallisneria	100797	2849.23	8125.14	27.1	0.47
64	Lower Wekiva	Vallisneria	100797	2849.23	8125.12	27.3	0.49
65	Lower Wekiva	Vallisneria	100797	2849.21	8125.05	26.9	0.48
66	Lower Wekiva	Vallisneria	100797	2849.55	8124.95	25.2	0.48
67	Lower Wekiva	Vallisneria	100797	2849.67	8124.84	24.3	0.43
68	Lower Wekiva	Vallisneria	100797	2849.66	8124.89	23.9	0.43
85	Middle Wekiva	Bare Bottom	101497	2847.18	8124.87	24.8	0.35
86	Middle Wekiva	Bare Bottom	101497	2847.37	8124.90	24.8	0.61
87	Middle Wekiva	Bare Bottom	101497	2847.46	8124.84	24.8	0.51
88	Middle Wekiva	Bare Bottom	101497	2847.45	8124.82	24.5	0.23
95	Middle Wekiva	Bare Bottom	101597	2845.61	8124.05	23.1	0.60
96	Middle Wekiva	Bare Bottom	101597	2845.89	8124.91	23.4	0.45

Dissolved Oxygen (mg/l)	Surface Velocity (cm/sec)	Bottom Velocity (cm/sec)	Plant Cover (%)	Plant Biomass (g)	Fish Density (Number/m2)	Fish Biomass (g/m2)	Number of Fish Species
7.19	10	3	80	2320	29	3.64	5
7.73	.	.	70	1860	13	12.09	2
7.60	.	.	25	227	8	1.08	3
7.38	17	2	100	3110	41	24.93	5
7.45	14	4	90	2671	38	7.68	5
9.95	17	3	75	2390	37	12.73	5
9.61	15	2	100	5615	10	10.01	4
9.33	9	2	100	4910	10	91.98	5
10.03	12	3	50	1311	31	18.37	4
9.85	3	2	80	2913	45	39.81	8
10.90	12	4	50	2158	25	3.06	3
10.25	14	2	70	2328	35	20.50	3
10.55	12	3	100	4815	12	12.47	5
7.70	6	3	30	1211	21	5.12	4
9.79	7	4	55	1132	29	3.50	4
10.15	7	2	100	5435	31	39.72	6
11.20	5	2	100	2878	31	10.80	4
10.15	16	2	25	919	21	2.11	4
9.85	28	3	100	4083	3	0.65	2
7.69	11	4	75	1984	7	15.85	3
7.65	10	3	100	5933	14	63.79	6
5.70	12	5	0	0	32	12.36	3
7.39	18	2	0	0	2	0.52	1
6.63	29	9	0	0	0	0.00	0
6.98	11	6	0	0	1	0.59	1
5.23	13	3	0	0	11	0.98	2
5.04	3	2	0	0	0	0.00	0

Throw Trap Number	River Segment	Habitat	Date	GPS North	GPS West	Water Temperature (C)	Depth (m)
97	Middle Wekiva	Bare Bottom	101597	2845.89	8124.91	23.5	0.42
98	Middle Wekiva	Bare Bottom	101597	2846.03	8124.95	23.8	0.58
99	Middle Wekiva	Bare Bottom	101597	2846.04	8124.98	24.0	0.63
100	Middle Wekiva	Bare Bottom	101597	2846.34	8124.96	24.2	0.55
89	Middle Wekiva	Hydrocotyle	101497	2847.44	8124.85	25.2	0.39
90	Middle Wekiva	Hydrocotyle	101497	2847.45	8124.81	24.4	0.30
101	Middle Wekiva	Hydrocotyle	101597	2845.73	8124.94	23.2	0.59
102	Middle Wekiva	Hydrocotyle	101597	2846.35	8124.95	24.3	0.47
103	Middle Wekiva	Hydrocotyle	101597	2846.46	8124.93	24.6	0.49
82	Middle Wekiva	Nuphar	101497	2847.36	8124.81	24.9	0.39
83	Middle Wekiva	Nuphar	101497	2847.46	8124.80	24.3	0.42
84	Middle Wekiva	Nuphar	101497	2847.47	8124.78	24.6	0.41
104	Middle Wekiva	Nuphar	101597	2845.51	8125.36	23.3	0.46
105	Middle Wekiva	Nuphar	101597	2845.65	8125.26	23.4	0.50
76	Middle Wekiva	Vallisneria	101497	2847.19	8124.86	24.9	0.38
77	Middle Wekiva	Vallisneria	101497	2847.28	8124.93	24.8	0.51
78	Middle Wekiva	Vallisneria	101497	2847.28	8124.92	24.8	0.55
79	Middle Wekiva	Vallisneria	101497	2847.43	8124.84	24.6	0.64
80	Middle Wekiva	Vallisneria	101497	2847.47	8124.83	23.9	0.51
81	Middle Wekiva	Vallisneria	101497	2847.51	8124.38	23.6	0.50
91	Middle Wekiva	Vallisneria	101597	2845.89	8124.92	23.3	0.48
92	Middle Wekiva	Vallisneria	101597	2845.92	8125.01	23.8	0.58
93	Middle Wekiva	Vallisneria	101597	2846.37	8124.90	23.9	0.50
94	Middle Wekiva	Vallisneria	101597	2846.46	8124.90	24.2	0.49
126	Little Wekiva	Hydrocotyle	102297	2843.21	8124.00	21.3	0.46
127	Little Wekiva	Hydrocotyle	102297	2843.26	8124.10	22.1	0.18
128	Little Wekiva	Hydrocotyle	102297	2843.23	8123.87	22.7	0.25

Dissolved Oxygen (mg/l)	Surface Velocity (cm/sec)	Bottom Velocity (cm/sec)	Plant Cover (%)	Plant Biomass (g)	Fish Density (Number/m2)	Fish Biomass (g/m2)	Number of Fish Species
5.72	5	1	0	0	11	2.25	3
5.81	8	7	0	0	7	3.31	3
5.24	15	8	0	0	2	0.16	1
6.10	15	2	0	0	5	0.81	2
4.70	1	2	50	4867	167	24.97	7
5.73	2	6	75	3455	20	3.97	4
5.00	2	4	80	5400	63	14.66	7
5.52	2	8	100	5627	94	8.28	6
5.45	2	3	100	5058	45	5.12	6
7.32	3	2	50	1236	38	10.31	6
5.68	2	1	30	465	15	5.10	4
5.46	6	1	20	645	10	1.95	1
5.55	8	2	10	223	6	0.32	2
5.48	8	3	30	821	5	1.49	3
6.03	16	7	90	2780	6	8.75	4
6.25	19	2	100	4023	25	30.32	5
5.88	7	1	80	1968	22	6.37	6
6.56	28	4	80	477	14	2.44	1
5.70	14	2	40	908	14	12.51	5
5.50	16	1	60	1515	18	12.06	4
5.12	5	1	50	1519	40	74.61	7
5.97	13	3	35	1268	6	1.89	3
6.21	20	1	80	2383	16	12.18	6
6.00	26	2	80	944	10	4.34	2
6.10	4	4	50	1445	56	7.95	8
6.80	0	0	80	1746	50	6.85	6
6.90	0	0	65	2795	63	32.12	6

Throw Trap Number	River Segment	Habitat	Date	GPS North	GPS West	Water Temperature (C)	Depth (m)
129	Little Wekiva	Hydrocotyle	102297	2843.20	8123.93	23.0	0.18
130	Little Wekiva	Hydrocotyle	102297	2843.24	8123.91	23.3	0.20
131	Little Wekiva	Nuphar	102297	2843.19	8123.95	22.0	0.29
132	Little Wekiva	Nuphar	102297	2843.19	8123.96	21.9	0.22
133	Little Wekiva	Nuphar	102297	2843.24	8123.99	22.5	0.30
134	Little Wekiva	Nuphar	102297	2843.30	8123.92	22.9	0.20
135	Little Wekiva	Nuphar	102297	2843.31	8123.82	23.0	0.35
121	Little Wekiva	Vallisneria	102297	2842.99	8123.99	21.4	0.20
122	Little Wekiva	Vallisneria	102297	2843.21	8123.94	21.5	0.18
123	Little Wekiva	Vallisneria	102297	2843.23	8123.93	21.8	0.35
124	Little Wekiva	Vallisneria	102297	2843.21	8123.94	22.2	0.42
125	Little Wekiva	Vallisneria	102297	2843.29	8123.96	22.8	0.45
106	Upper Wekiva	Hydrocotyle	102197	2843.24	8126.23	21.0	0.56
107	Upper Wekiva	Hydrocotyle	102197	2843.00	8126.01	21.7	0.53
108	Upper Wekiva	Hydrocotyle	102197	2843.32	8126.11	22.1	0.52
109	Upper Wekiva	Hydrocotyle	102197	2843.49	8125.93	21.8	0.55
110	Upper Wekiva	Hydrocotyle	102197	2843.43	8125.94	22.4	0.58
116	Upper Wekiva	Nuphar	102197	2843.26	8126.18	21.0	0.68
117	Upper Wekiva	Nuphar	102197	2843.28	8126.14	21.2	0.42
118	Upper Wekiva	Nuphar	102197	2843.73	8126.15	21.3	0.45
119	Upper Wekiva	Nuphar	102197	2843.24	8126.16	22.3	0.51
120	Upper Wekiva	Nuphar	102197	2843.48	8125.95	22.3	0.50
111	Upper Wekiva	Vallisneria	102197	2843.22	8126.22	20.9	0.65
112	Upper Wekiva	Vallisneria	102197	2843.26	8126.18	20.9	0.67
113	Upper Wekiva	Vallisneria	102197	2843.41	8126.11	21.8	0.62
114	Upper Wekiva	Vallisneria	102197	2843.62	8125.90	22.2	0.55
115	Upper Wekiva	Vallisneria	102197	2843.47	8125.93	22.3	0.53

Dissolved Oxygen (mg/l)	Surface Velocity (cm/sec)	Bottom Velocity (cm/sec)	Plant Cover (%)	Plant Biomass (g)	Fish Density (Number/m2)	Fish Biomass (g/m2)	Number of Fish Species
6.80	0	0	100	2702	15	9.54	4
7.40	11	10	40	1491	17	22.31	6
6.90	22	20	75	2073	143	59.37	11
6.60	6	.	60	885	6	1.98	1
7.30	1	.	90	2289	35	17.15	8
7.20	10	.	40	413	22	8.41	3
7.20	10	6	30	470	21	11.64	6
5.80	3	.	100	2709	19	51.06	4
6.70	3	1	70	932	66	39.35	5
6.90	22	16	100	6103	19	89.42	8
7.00	11	2	100	3946	19	37.09	8
7.40	42	5	100	2665	5	13.40	2
5.60	0	9	75	3017	25	5.54	6
6.30	1	4	85	3382	60	6.57	7
5.80	2	6	95	4893	47	5.61	7
6.20	1	3	100	3098	63	4.77	6
6.50	1	9	100	2573	35	5.47	7
5.70	5	2	25	609	8	2.72	2
5.80	3	2	30	875	8	3.02	3
5.90	9	4	30	603	1	2.26	1
5.70	2	2	35	933	4	0.48	2
5.70	5	6	20	578	0	0.00	0
5.30	13	3	90	2835	6	192.73	6
5.60	26	3	90	1322	1	0.66	1
6.10	8	5	70	1267	6	12.10	1
6.20	24	7	95	4231	9	37.67	2
6.50	14	4	80	1547	19	10.71	6

Appendix 3.1.3

**Spring 1997
Blocknet Physicochemical Data
Wekiva River System**

Spring Blocknet Number	River Segment	Habitat	Date	GPS North	GPS West	Area of Net (m2)	Plant Cover (%)
1	Little Wekiva	Nuphar	72497	2843.47	8123.95	1061	58
2	Little Wekiva	Vallisneria	72497	2843.46	8123.94	1750	40
3	Little Wekiva	Bare Bottom	72997	2842.77	8123.69	2277	0
4	Upper Wekiva	Hydrocotyle	72397	2844.55	8125.19	2200	80
5	Upper Wekiva	Vallisneria	72297	2843.02	8126.46	2100	85
6	Upper Wekiva	Nuphar	72297	2843.97	8125.66	2800	35
7	Lower Wekiva	Vallisneria	70897	2849.56	8124.96	2500	47
8	Lower Wekiva	Bare Bottom	70897	2849.44	8124.97	2500	0
9	Lower Wekiva	Bare Bottom	70997	2849.27	8125.11	2304	0
10	Lower Wekiva	Vallisneria	70997	2849.35	8125.06	2304	85
11	Lower Wekiva	Vallisneria	71097	2849.08	8125.18	2304	85
12	Lower Wekiva	Vallisneria	71097	2849.18	8125.12	2304	55
13	Lower Wekiva	Bare Bottom	72897	2848.80	8125.18	2500	0
14	Lower Wekiva	Bare Bottom	72897	2848.83	8128.14	2500	0
15	Lower Wekiva	Vallisneria	62797	2849.57	8124.90	2500	60
16	Lower Wekiva	Vallisneria	71797	2848.76	8125.10	2500	95
17	Lower Wekiva	Vallisneria	71797	2848.77	8125.06	2500	95
18	Lower Wekiva	Vallisneria	71797	2848.40	8125.10	2500	74
19	Lower Wekiva	Vallisneria	71897	2848.32	8125.00	2500	95
20	Lower Wekiva	Bare Bottom	71897	2848.16	8125.01	2500	0
21	Lower Wekiva	Vallisneria	71897	2848.45	8125.05	2500	98

Spring Blocknet Number	Water Temperature Rep 1	Water Temperature Rep 2	Water Temperature Rep 3	Water Temperature Rep 4	Water Temperature Rep 5
1	27.7	27.7	27.7	27.8	.
2	28.1	28.0	28.0	28.0	.
3	27.0	27.0	27.0	27.0	.
4	26.9	26.9	26.9	26.9	.
5	26.5	26.5	26.5	26.4	.
6	27.5	27.6	27.7	27.7	.
7	29.1	28.8	28.7	29.0	.
8	30.9	30.7	30.6	30.7	.
9	29.9	29.8	29.8	29.8	.
10	28.0	28.0	27.9	27.9	.
11	27.2	27.2	27.2	27.2	.
12	29.4	29.3	29.2	29.2	.
13	27.8	27.8	28.1	27.8	.
14	28.4	28.0	28.2	28.2	28.1
15	27.8	27.8	27.8	27.8	.
16	28.9	28.8	28.6	28.5	.
17	28.4	28.6	28.5	28.6	.
18	27.2	27.2	27.2	27.2	.
19	27.6	27.5	27.5	27.5	.
20	27.4	27.4	27.4	27.4	.
21	27.9	27.9	27.9	27.9	.

Spring Blocknet Number	Dissolved Oxygen Rep 1	Dissolved Oxygen Rep 2	Dissolved Oxygen Rep 3	Dissolved Oxygen Rep 4	Dissolved Oxygen Rep 5
1	4.70	4.80	4.60	4.70	.
2	4.80	4.80	4.70	4.80	.
3	5.20	5.20	5.20	5.20	.
4	5.50	5.20	4.80	5.80	.
5	6.30	6.20	6.20	6.20	.
6	5.90	5.70	5.70	5.80	.
7	7.95	7.49	7.55	7.97	.
8	8.36	8.30	8.68	8.46	.
9	8.40	8.48	8.41	8.45	.
10	7.20	7.19	7.23	7.20	.
11	6.88	6.74	6.76	6.79	.
12	5.62	7.20	7.65	8.15	.
13	9.50	9.59	9.80	9.21	9.33
14	10.20	9.80	10.10	10.10	9.90
15	7.00	7.02	6.92	7.04	.
16	10.10	10.20	9.90	9.50	.
17	11.00	10.60	10.40	10.40	.
18	7.00	6.90	6.80	6.80	.
19	6.90	7.00	6.90	7.20	.
20	5.40	5.60	5.70	5.80	.
21	7.30	7.40	7.30	7.60	.

Spring Blocknet Number	Water Depth Rep 1	Water Depth Rep 2	Water Depth Rep 3	Water Depth Rep 4	Water Depth Rep 5	Water Depth Rep 6	Water Depth Rep 7	Water Depth Rep 8	Water Depth Rep 9	Water Depth Rep 10
1	0.55	0.50	0.42	0.44	0.35	0.31	0.31	0.35	0.30	0.39
2	0.59	0.50	0.48	0.61	0.47	0.51	0.45	0.53	0.64	0.52
3	0.65	0.45	0.51	0.31	0.26	0.39	0.41	0.50	0.53	0.80
4	0.90	0.85	0.75	0.85	0.70	0.80	0.69	0.80	0.75	0.72
5	1.00	1.25	1.20	1.00	0.90	0.75	1.30	1.20	1.10	0.80
6	0.50	0.48	0.60	0.52	0.53	0.58	0.53	0.64	0.49	0.53
7	0.48	0.50	0.45	0.45	0.44	.	.	.	.	.
8	0.50	0.54	0.58	0.45	0.50	.	.	.	.	.
9	0.49	0.50	0.50	0.52	0.47	.	.	.	.	.
10	0.64	0.65	0.65	0.52	0.60	.	.	.	.	.
11	0.38	0.27	0.37	0.39	0.42	0.51	0.78	0.41	0.44	0.48
12	0.45	0.40	0.42	0.39	0.38	0.40	0.34	0.31	0.33	0.31
13	0.72	0.71	0.75	0.76	0.70	0.71	0.82	0.72	0.78	0.73
14	0.55	0.55	0.54	0.52	0.50	0.54	0.54	0.53	0.58	0.58
15	0.35	0.40	0.65	0.70	1.10	.	.	.	.	.
16	0.44	0.42	0.42	0.41	0.44	0.43	0.41	0.40	0.41	0.40
17	0.42	0.40	0.35	0.35	0.40	0.38	0.37	0.28	0.29	0.39
18	0.51	0.50	0.61	0.44	0.48	0.43	0.60	0.58	0.63	0.41
19	0.60	0.49	0.50	0.55	0.53	0.59	0.56	0.53	0.55	0.50
20	0.64	0.60	0.59	0.61	0.59	0.62	0.63	0.64	0.50	0.62
21	0.30	0.25	0.40	0.37	0.40	0.31	0.25	0.29	0.28	0.30

Spring Blocknet Number	Surface Velocity Rep 1	Surface Velocity Rep 2	Surface Velocity Rep 3	Surface Velocity Rep 4	Bottom Velocity Rep 1	Bottom Velocity Rep 2	Bottom Velocity Rep 3	Bottom Velocity Rep 4
1	16	12	7	6	11	9	5	4
2	13	20	23	17	4	0	6	8
3	13	18	16	15	7	7	9	5
4	2	5	3	5	0	4	3	5
5	20	23	24	18	3	2	5	2
6	13	11	5	6	7	4	3	3
7	15	18	21	12	5	7	0	9
8	9	12	12	10	7	9	9	5
9	20	15	15	15	10	7	9	8
10	25	21	22	23	10	8	8	8
11	36	38	35	25	7	2	7	5
12	19	14	14	17	3	4	8	8
13	15	7	11	15	3	4	6	4
14	17	29	15	24	6	15	8	13
15	9	9	13	19	3	6	7	5
16	25	26	25	26	4	2	2	2
17	21	20	17	17	3	2	1	1
18	21	17	22	21	3	3	2	1
19	19	19	18	19	4	7	4	5
20	12	23	22	15	10	10	11	7
21	9	9	7	5	2	0	0	1

Spring Blocknet Number	Plant Weight Rep 1	Plant Weight Rep 2	Plant Weight Rep 3	Plant Weight Rep 4	Plant Weight Rep 5
1	.	.	.	.	.
2	354	229	13	40	37
3	0	0	0	0	0
4	.	797	510	1934	1392
5	116	153	518	122	134
6	0	0	0	962	0
7	.	.	.	.	.
8	0	0	0	0	0
9	0	0	0	0	0
10	141	150	118	253	300
11	160	140	0	309	126
12	139	164	398	56	156
13	0	0	0	0	0
14	0	0	0	0	0
15	.	.	.	.	.
16	128	104	235	247	452
17	547	306	406	253	462
18	399	270	167	196	476
19	46	174	210	466	196
20	0	0	0	0	.
21	267	230	309	108	264

Appendix 3.1.4

Blocknet Data Summary for Spring 1997

Lower Wekiva River

Blocknet Number	River Segment	Habitat	Date	GPS North	GPS West	Plant Cover (%)	Mean Water Temperature (C)
8	Lower Wekiva	Bare Bottom	70897	2849.44	8124.97	0	30.7
9	Lower Wekiva	Bare Bottom	70997	2849.27	8125.11	0	29.8
13	Lower Wekiva	Bare Bottom	72897	2848.80	8125.18	0	27.9
14	Lower Wekiva	Bare Bottom	72897	2848.83	8128.14	0	28.2
20	Lower Wekiva	Bare Bottom	71897	2848.16	8125.01	0	27.4
7	Lower Wekiva	Vallisneria	70897	2849.56	8124.96	47	28.9
10	Lower Wekiva	Vallisneria	70997	2849.35	8125.06	85	28.0
11	Lower Wekiva	Vallisneria	71097	2849.08	8125.18	85	27.2
12	Lower Wekiva	Vallisneria	71097	2849.18	8125.12	55	29.3
15	Lower Wekiva	Vallisneria	62797	2849.57	8124.90	60	27.8
16	Lower Wekiva	Vallisneria	71797	2848.76	8125.10	95	28.7
17	Lower Wekiva	Vallisneria	71797	2848.77	8125.06	95	28.5
18	Lower Wekiva	Vallisneria	71797	2848.40	8125.10	74	27.2
19	Lower Wekiva	Vallisneria	71897	2848.32	8125.00	95	27.5
21	Lower Wekiva	Vallisneria	71897	2848.45	8125.05	98	27.9

Mean Depth (m)	Mean Dissolved Oxygen (mg/l)	Mean Surface Velocity (cm/sec)	Mean Bottom Velocity (cm/sec)	Mean Plant Biomass (g/0.0625m2)	Fish Density (Number/m2)	Fish Biomass (g/m2)	Number of Fish Species
0.51	8.5	10.8	7.5	0	0.01	1.6	4
0.50	8.4	16.3	8.5	0	0.11	12.6	1
0.74	9.5	12.0	4.3	0	0.01	0.0	1
0.54	10.0	21.3	10.5	0	0.00	0.0	0
0.60	5.6	18.0	9.5	0	0.08	0.5	5
0.46	7.7	16.5	5.3	.	0.43	9.1	10
0.61	7.2	22.8	8.5	192	0.81	16.3	11
0.45	6.8	33.5	5.3	147	1.05	12.0	9
0.37	7.2	16.0	5.8	183	1.65	41.2	16
0.64	7.0	12.5	5.3	.	0.82	34.3	9
0.42	9.9	25.5	2.5	233	1.35	24.2	11
0.36	10.6	18.8	1.8	395	1.76	26.2	10
0.52	6.9	20.3	2.3	302	0.97	16.0	11
0.54	7.0	18.8	5.0	218	0.86	45.6	13
0.32	7.4	7.5	0.8	236	1.90	43.4	15

Appendix 3.1.5

**Fall 1997
Blocknet Physicochemical Data
Wekiva River System**

Fall Blocknet Number	River Segment	Habitat	Date	GPS North	GPS West	Area of Net (m2)	Plant Cover (%)
1	Lower Wekiva	Vallisneria	110597	2849.60	8124.96	2500	100
2	Lower Wekiva	Vallisneria	110597	2848.48	8125.05	2500	100
3	Lower Wekiva	Bare Bottom	110697	2848.12	8125.01	2500	0
4	Lower Wekiva	Vallisneria	111797	.	.	2500	100
5	Lower Wekiva	Vallisneria	111797	2848.39	8125.02	2500	80
6	Lower Wekiva	Vallisneria	103097	2848.77	8125.15	2500	100
7	Lower Wekiva	Bare Bottom	103097	2848.85	8125.14	2500	0
8	Lower Wekiva	Bare Bottom	103097	2848.80	8125.15	2500	0
9	Lower Wekiva	Bare Bottom	102997	2849.27	8125.09	2500	0
10	Lower Wekiva	Vallisneria	102997	2849.38	8125.04	2500	100
11	Lower Wekiva	Vallisneria	102997	2848.75	8125.11	2500	100
12	Lower Wekiva	Bare Bottom	102997	2849.40	8125.06	2500	0
13	Lower Wekiva	Vallisneria	102897	2849.07	8125.20	2500	98
14	Lower Wekiva	Vallisneria	102897	2849.58	8124.96	2500	100
15	Lower Wekiva	Vallisneria	102897	2849.14	8125.16	2500	93
16	Upper Wekiva	Hydrocotyle	110497	2844.58	8125.20	2400	75
17	Upper Wekiva	Nuphar	110497	2843.95	8125.58	1925	40
18	Upper Wekiva	Vallisneria	110497	2842.98	8126.42	1750	60
19	Little Wekiva	Vallisneria	111897	2843.44	8121.96	2000	85
20	Little Wekiva	Nuphar	111897	2843.80	8123.99	1650	40
21	Little Wekiva	Bare Bottom	111897	2843.05	8123.49	1650	0

Fall Blocknet Number	Water Temperature Rep 1	Water Temperature Rep 2	Water Temperature Rep 3	Water Temperature Rep 4	Water Temperature Rep 5
1	20.3	20.3	20.3	20.3	.
2	20.3	20.3	20.3	20.3	.
3	20.3	20.3	20.3	20.4	.
4	18.8	18.8	18.8	18.8	.
5	19.5	19.4	19.4	19.3	19.2
6	21.3	21.3	21.2	21.1	.
7	22.1	22.1	22.2	22.2	.
8	22.4	22.1	22.0	22.0	.
9	21.2	21.2	21.2	21.1	.
10	19.7	19.7	19.7	19.7	.
11	20.5	20.5	20.6	20.6	.
12	20.2	20.2	20.2	20.2	.
13	22.0	22.0	22.0	22.1	.
14	22.5	22.4	22.4	22.4	.
15	21.4	21.5	21.6	21.6	.
16	21.2	21.2	21.1	21.1	.
17	20.6	20.4	20.3	20.1	.
18	21.0	21.0	21.0	21.0	.
19	20.4	20.4	20.4	20.4	.
20	20.0	20.0	20.0	20.0	.
21	21.1	21.1	21.1	21.1	.

Fall Blocknet Number	Dissolved Oxygen Rep 1	Dissolved Oxygen Rep 2	Dissolved Oxygen Rep 3	Dissolved Oxygen Rep 4
1	11.57	11.60	11.72	11.90
2	8.21	8.20	8.07	7.78
3	6.30	6.26	6.06	6.00
4	8.20	8.20	8.10	8.20
5	7.70	7.70	7.80	7.80
6	10.24	10.03	9.91	9.65
7	9.58	9.62	9.62	10.02
8	9.51	8.56	8.39	7.86
9	9.90	9.88	9.83	9.63
10	8.88	8.90	8.92	8.91
11	8.50	8.56	8.50	9.19
12	9.50	9.75	9.80	9.90
13	8.55	8.65	8.50	8.75
14	10.00	10.10	10.15	10.20
15	6.75	7.38	7.71	7.84
16	6.78	6.05	6.00	6.76
17	6.47	6.26	6.12	6.24
18	5.45	5.43	5.42	5.43
19	6.71	6.59	6.56	6.55
20	6.35	6.30	6.14	6.41
21	6.40	6.32	6.46	6.42

Fall Blocknet Number	Water Depth Rep 1	Water Depth Rep 2	Water Depth Rep 3	Water Depth Rep 4	Water Depth Rep 5	Water Depth Rep 6	Water Depth Rep 7	Water Depth Rep 8	Water Depth Rep 9	Water Depth Rep 10
1	0.59	0.60	0.59	0.52	0.62	0.51	0.52	0.59	0.61	0.75
2	0.61	0.61	0.65	0.62	0.59	0.61	0.66	0.65	0.56	0.60
3	0.61	0.65	0.58	0.47	0.40	0.44	0.51	0.59	0.58	0.65
4	0.68	0.65	0.60	0.69	0.67	0.66	0.67	0.64	0.69	0.62
5	0.56	0.61	0.61	0.65	0.62	0.60	0.62	0.67	0.70	0.62
6	0.49	0.49	0.50	0.54	0.42	0.58	0.56	0.49	.	.
7	0.72	0.70	0.79	0.75	0.81	0.89	0.85	0.80	.	.
8	0.58	0.55	0.58	0.64	0.62	0.55	0.61	0.55	.	.
9	0.60	0.60	0.64	0.65	0.61	0.59	0.62	0.61	.	.
10	0.70	0.69	0.62	0.64	0.68	0.63	0.70	0.72	.	.
11	0.34	0.43	0.54	0.60	0.54	0.54	0.49	0.48	.	.
12	0.62	0.56	0.57	0.55	0.58	0.62	0.63	0.58	.	.
13	0.50	0.58	0.62	0.59	0.60	0.48	0.55	0.68	.	.
14	0.52	0.53	0.53	0.51	0.55	0.62	0.61	0.58	.	.
15	0.55	0.53	0.63	0.56	0.61	0.52	0.58	0.54	0.53	0.53
16	0.90	0.70	0.70	0.75	0.80	0.88	0.85	0.90	0.67	0.90
17	0.70	0.59	0.51	0.58	0.60	0.60	0.55	0.50	0.58	0.55
18	0.94	0.90	1.00	1.00	0.92	0.95	1.10	0.98	1.10	1.08
19	0.48	0.57	0.49	0.54	0.60	0.50	0.51	0.60	.	.
20	0.55	0.11	0.60	0.64	0.18	0.12	0.39	0.32	.	.
21	0.23	0.30	0.45	0.43	0.60	0.20	0.47	0.50	0.35	0.35

Fall Blocknet Number	Surface Velocity Rep 1	Surface Velocity Rep 2	Surface Velocity Rep 3	Surface Velocity Rep 4	Surface Velocity Rep 5	Bottom Velocity Rep 1	Bottom Velocity Rep 2
1	16	18	13	16	.	2	2
2	14	18	21	18	.	3	4
3	31	28	20	29	.	21	18
4	13	23	18	17	19	4	2
5	7	9	9	10	9	2	3
6	26	21	18	9	.	1	3
7	13	10	8	5	.	10	4
8	10	8	4	5	.	5	5
9	10	10	12	11	.	4	2
10	19	9	10	12	.	2	1
11	8	8	14	7	.	3	4
12	8	10	11	7	.	6	7
13	18	16	11	16	11	.	.
14	24	18	24	12	.	.	.
15	14	14	12	15	.	.	.
16	15	16	10	12	.	9	8
17	9	7	5	9	.	4	5
18	26	23	13	9	.	3	1
19	23	7	8	15	.	4	1
20	12	7	4	6	.	2	1
21	8	6	8	10	.	3	1

Fall Blocknet Number	Bottom Velocity Rep 3	Bottom Velocity Rep 4	Bottom Velocity Rep 5	Plant Weight Rep 1	Plant Weight Rep 2	Plant Weight Rep 3	Plant Weight Rep 4	Plant Weight Rep 5
1	2	2	.	415	300	670	316	299
2	14	4	.	613	385	238	158	503
3	17	21	.	0	0	0	0	0
4	1	1	3	436	393	807	1238	376
5	2	3	3	467	110	201	693	0
6	3	2	.	363	367	696	749	723
7	1	3	.	0	0	0	0	0
8	4	1	.	0	0	0	0	0
9	4	6	.	0	0	0	0	.
10	2	2	.	318	312	407	324	538
11	3	3	.	300	448	539	250	779
12	7	3	.	0	0	0	0	0
13	.	.	.	53	39	258	340	348
14	.	.	.	293	585	490	417	617
15	.	.	.	125	197	138	169	138
16	3	3	.	300	512	232	526	588
17	4	6	.	.	.	.	.	.
18	2	1	.	293	189	164	47	184
19	2	5	.	882	268	803	73	354
20	.	.	.	.	.	.	.	.
21	1	3	.	0	0	0	0	0

Appendix 3.1.6

Blocknet Data Summary for Fall 1997

Lower Wekiva River

Blocknet Number	River Segment	Habitat	Date	GPS North	GPS West	Plant Cover (%)	Mean Water Temperature (C)
3	Lower Wekiva	Bare Bottom	110697	2848.12	8125.01	0	20.3
7	Lower Wekiva	Bare Bottom	103097	2848.85	8125.14	0	22.2
8	Lower Wekiva	Bare Bottom	103097	2848.80	8125.15	0	22.1
9	Lower Wekiva	Bare Bottom	102997	2849.27	8125.09	0	21.2
12	Lower Wekiva	Bare Bottom	102997	2849.40	8125.06	0	20.2
1	Lower Wekiva	Vallisneria	110597	2849.60	8124.96	100	20.3
2	Lower Wekiva	Vallisneria	110597	2848.48	8125.05	100	20.3
4	Lower Wekiva	Vallisneria	111797	.	.	100	18.8
5	Lower Wekiva	Vallisneria	111797	2848.39	8125.02	80	19.4
6	Lower Wekiva	Vallisneria	103097	2848.77	8125.15	100	21.2
10	Lower Wekiva	Vallisneria	102997	2849.38	8125.04	100	19.7
11	Lower Wekiva	Vallisneria	102997	2848.75	8125.11	100	20.6
13	Lower Wekiva	Vallisneria	102897	2849.07	8125.20	98	22.0
14	Lower Wekiva	Vallisneria	102897	2849.58	8124.96	100	22.4
15	Lower Wekiva	Vallisneria	102897	2849.14	8125.16	93	21.5

Mean Depth (m)	Mean Dissolved Oxygen (mg/l)	Mean Surface Velocity (cm/sec)	Mean Bottom Velocity (cm/sec)	Mean Plant Biomass (g/0.0625m2)	Fish Density (Number/m2)	Fish Biomass (g/m2)	Number of Fish Species
0.55	6.2	27.0	19.3	0	0.03	0.6	4
0.79	9.7	9.0	4.5	0	0.25	20.0	7
0.59	8.6	6.8	3.8	0	0.01	1.1	3
0.62	9.8	10.8	4.0	0	0.01	7.7	3
0.59	9.7	9.0	5.8	0	0.00	0.0	0
0.59	11.7	15.8	2.0	400	0.72	8.5	9
0.62	8.1	17.8	6.3	379	0.88	18.6	11
0.66	8.2	18.0	2.2	650	0.20	5.3	14
0.63	7.8	8.8	2.6	294	0.90	23.6	12
0.51	10.0	18.5	2.0	580	1.22	14.0	15
0.67	8.9	12.5	1.8	380	0.50	7.4	11
0.50	8.7	9.3	3.3	463	1.21	9.8	13
0.58	8.6	14.4	.	208	0.58	6.0	15
0.56	10.1	19.5	.	480	0.72	13.8	13
0.56	7.4	13.8	.	153	0.93	17.1	12

Appendix 3.1.7

System-Wide Sampling Water Chemistry Values
From
December 1997 Collection
Wekiva River System

Station	Site	gps n	gps w	Date	Time	Water Temperature (C)	Dissolved Oxygen (mg/l)	pH	Total Alkalinity (mg/l)	Conductivity (@25C)
LW3	1	28 49.64	81 24.91	120897	930	14.6	7.48	7.8	108	981
	2					14.9	7.43	7.9	108	1045
	3					14.4	8.4	7.8	108	670
LW2	1	28 49.18	81 25.21	120897	1000	14.3	7.9	7.8	104	515
	2					14.6	7.78	7.8	106	517
	3					14.6	7.9	7.8	106	555
LW1	1	28 48.56	81 25.04	120897	1030	14.7	8.35	7.8	104	374
	2					15.2	8.78	7.8	105	437
	3					15.7	7.96	7.8	105	549
MW2	1	28 49.90	81 25.07	120897	1045	15	7.23	7.8	106	361
	2					15	7.28	7.7	106	364
	3					14.9	7.29	7.8	106	363
MW1	1	28 45.40	81 25.02	120897	1120	15.9	6.57	7.7	106	345
	2					16	6.74	7.7	106	349
	3					15.9	6.69	7.7	106	344
UW2	1	28 44.55	81 25.19	120897	1200	15.9	6.39	7.7	105	342
	2					16	6.82	7.7	105	339
	3					17.2	7.04	7.8	107	341
UW1	1	28 42.92	81 26.51	120897	1240	19.5	5.89	7.9	108	303
	2					19.4	5.93	7.7	107	306
	3					19.3	6.05	7.8	107	301
L2	1	28 43.33	81 23.92	120897	1430	19.7	6.42	7.8	110	356
	2					19.7	6.38	7.8	110	350
	3					19.4	6.4	7.7	109	344
L1	1	28 43.16	81 23.97	120897	1440	20.1	6.22	7.9	109	341
	2					20.1	6.28	7.8	110	337
	3					19.9	6.14	7.8	110	343

Station	Site	Total Phosphorus (mg/l)	Total Nitrogen (mg/l)	Color (CU)	Chlorophyll (mg/m ³)	Organic Suspended Solids (mg/l)	Inorganic Suspended Solids (mg/l)
LW3	1	0.088	0.76	18	1.1	0.3	0.57
	2	0.091	0.74	18	1	0.02	0.33
	3	0.087	0.75	19	1	0.06	0.49
LW2	1	0.09	0.84	20	0.9	0.26	0.57
	2	0.095	0.83	20	1.2	0.66	0.61
	3	0.101	1.01	19	2	0.77	1.02
LW1	1	0.106	0.99	21	1.3	1.18	0.77
	2	0.101	0.95	20	0.8	0.38	0.73
	3	0.098	0.89	19	0.9	0.94	0.81
MW2	1	0.107	1.02	19	.	0.9	0.41
	2	0.107	0.93	19	.	0.62	0.41
	3	0.106	1.05	19	.	0.89	0.71
MW1	1	0.102	0.82	21	1.3	1.49	0.93
	2	0.094	1.2	14	1.1	1.14	1.01
	3	0.093	1.22	14	1.9	5.28	0.1
UW2	1	0.094	1.1	17	2	5.7	2.34
	2	0.095	1.18	17	0.8	1.06	0.61
	3	0.093	1.12	10	0.7	0.82	0.49
UW1	1	0.099	1.1	8	0.8	0.54	0.53
	2	0.099	1.19	7	0.5	0.62	0.33
	3	0.095	1.24	7	0.5	0.89	0.58
L2	1	0.168	1.07	13	2.7	2.02	2.01
	2	0.168	1.05	15	2.1	1.54	1.23
	3	0.167	1.07	16	2.1	1.28	1.01
L1	1	0.165	0.91	13	2.1	1.1	1.21
	2	0.168	0.95	13	2.1	1.1	1.09
	3	0.178	0.98	13	6.3	5.22	4.92

Appendix 3.1.8
Spring 1997 Throw Trap Fish Data
Wekiva River System

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
1	Little Wekiva	Vallisneria	Blackbanded darter	51	1.10
1	Little Wekiva	Vallisneria	Coastal shiner	46	0.82
1	Little Wekiva	Vallisneria	Tadpole madtom	32	0.35
2	Little Wekiva	Vallisneria	Blackbanded darter	44	0.80
2	Little Wekiva	Vallisneria	Brown darter	45	0.76
2	Little Wekiva	Vallisneria	Spotted sunfish	44	1.41
3	Little Wekiva	Vallisneria	Blackbanded darter	53	1.15
3	Little Wekiva	Vallisneria	Redbreast sunfish	53	2.38
4	Little Wekiva	Vallisneria	Blackbanded darter	25	0.13
4	Little Wekiva	Vallisneria	Largemouth bass	60	2.42
4	Little Wekiva	Vallisneria	Speckled madtom	52	1.59
4	Little Wekiva	Vallisneria	Speckled madtom	53	1.46
4	Little Wekiva	Vallisneria	Spotted sunfish	54	2.60
5	Little Wekiva	Vallisneria	No Fish in Trap	.	.
6	Little Wekiva	Nuphar	No Fish in Trap	.	.
7	Little Wekiva	Nuphar	No Fish in Trap	.	.
8	Little Wekiva	Nuphar	Blackbanded darter	35	0.31
9	Little Wekiva	Nuphar	Spotted sunfish	19	0.09
10	Little Wekiva	Nuphar	Mosquitofish	15	0.04
11	Little Wekiva	Hydrocotyle	Bluefin killifish	17	0.06
11	Little Wekiva	Hydrocotyle	Bluefin killifish	19	0.08
11	Little Wekiva	Hydrocotyle	Bluefin killifish	20	0.09
11	Little Wekiva	Hydrocotyle	Bluefin killifish	33	0.46
11	Little Wekiva	Hydrocotyle	Least killifish	10	0.01
11	Little Wekiva	Hydrocotyle	Least killifish	11	0.03
11	Little Wekiva	Hydrocotyle	Least killifish	14	0.04
11	Little Wekiva	Hydrocotyle	Least killifish	15	0.05
11	Little Wekiva	Hydrocotyle	Least killifish	16	0.05
11	Little Wekiva	Hydrocotyle	Least killifish	17	0.07
11	Little Wekiva	Hydrocotyle	Least killifish	18	0.09
11	Little Wekiva	Hydrocotyle	Least killifish	19	0.10
11	Little Wekiva	Hydrocotyle	Least killifish	19	0.08
11	Little Wekiva	Hydrocotyle	Least killifish	19	0.08
11	Little Wekiva	Hydrocotyle	Least killifish	25	0.19
11	Little Wekiva	Hydrocotyle	Mosquitofish	9	0.02
11	Little Wekiva	Hydrocotyle	Mosquitofish	11	0.02
11	Little Wekiva	Hydrocotyle	Mosquitofish	12	0.03
11	Little Wekiva	Hydrocotyle	Mosquitofish	13	0.03
11	Little Wekiva	Hydrocotyle	Mosquitofish	13	0.03
11	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	11	0.04
11	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	15	0.07
11	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	15	0.07
11	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.11
11	Little Wekiva	Hydrocotyle	Sailfin molly	15	0.05
11	Little Wekiva	Hydrocotyle	Sailfin molly	23	0.15
11	Little Wekiva	Hydrocotyle	Spotted sunfish	103	18.26
12	Little Wekiva	Hydrocotyle	Bluefin killifish	16	0.06
12	Little Wekiva	Hydrocotyle	Bluefin killifish	17	0.07
12	Little Wekiva	Hydrocotyle	Bluefin killifish	17	0.05
12	Little Wekiva	Hydrocotyle	Bluefin killifish	20	0.09
12	Little Wekiva	Hydrocotyle	Bluefin killifish	26	0.17
12	Little Wekiva	Hydrocotyle	Bluefin killifish	31	0.34
12	Little Wekiva	Hydrocotyle	Bluefin killifish	32	0.38
12	Little Wekiva	Hydrocotyle	Coastal shiner	52	1.10

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
12	Little Wekiva	Hydrocotyle	Least killifish	8	0.01
12	Little Wekiva	Hydrocotyle	Least killifish	9	0.01
12	Little Wekiva	Hydrocotyle	Least killifish	10	0.01
12	Little Wekiva	Hydrocotyle	Least killifish	10	0.01
12	Little Wekiva	Hydrocotyle	Least killifish	10	0.02
12	Little Wekiva	Hydrocotyle	Least killifish	10	0.01
12	Little Wekiva	Hydrocotyle	Least killifish	10	0.02
12	Little Wekiva	Hydrocotyle	Least killifish	11	0.02
12	Little Wekiva	Hydrocotyle	Least killifish	11	0.03
12	Little Wekiva	Hydrocotyle	Least killifish	12	0.03
12	Little Wekiva	Hydrocotyle	Least killifish	12	0.03
12	Little Wekiva	Hydrocotyle	Least killifish	13	0.02
12	Little Wekiva	Hydrocotyle	Least killifish	13	0.02
12	Little Wekiva	Hydrocotyle	Least killifish	14	0.04
12	Little Wekiva	Hydrocotyle	Least killifish	14	0.04
12	Little Wekiva	Hydrocotyle	Least killifish	14	0.04
12	Little Wekiva	Hydrocotyle	Least killifish	14	0.03
12	Little Wekiva	Hydrocotyle	Least killifish	15	0.04
12	Little Wekiva	Hydrocotyle	Least killifish	15	0.05
12	Little Wekiva	Hydrocotyle	Least killifish	15	0.04
12	Little Wekiva	Hydrocotyle	Least killifish	15	0.04
12	Little Wekiva	Hydrocotyle	Least killifish	15	0.05
12	Little Wekiva	Hydrocotyle	Least killifish	15	0.04
12	Little Wekiva	Hydrocotyle	Least killifish	15	0.05
12	Little Wekiva	Hydrocotyle	Least killifish	16	0.05
12	Little Wekiva	Hydrocotyle	Least killifish	16	0.05
12	Little Wekiva	Hydrocotyle	Least killifish	16	0.05
12	Little Wekiva	Hydrocotyle	Least killifish	16	0.05
12	Little Wekiva	Hydrocotyle	Least killifish	16	0.05
12	Little Wekiva	Hydrocotyle	Least killifish	16	0.04
12	Little Wekiva	Hydrocotyle	Least killifish	16	0.05
12	Little Wekiva	Hydrocotyle	Least killifish	16	0.06
12	Little Wekiva	Hydrocotyle	Least killifish	16	0.04
12	Little Wekiva	Hydrocotyle	Least killifish	16	0.06
12	Little Wekiva	Hydrocotyle	Least killifish	17	0.07
12	Little Wekiva	Hydrocotyle	Least killifish	17	0.07
12	Little Wekiva	Hydrocotyle	Least killifish	17	0.06
12	Little Wekiva	Hydrocotyle	Least killifish	17	0.07
12	Little Wekiva	Hydrocotyle	Least killifish	17	0.07
12	Little Wekiva	Hydrocotyle	Least killifish	18	0.09
12	Little Wekiva	Hydrocotyle	Least killifish	19	0.08
12	Little Wekiva	Hydrocotyle	Least killifish	19	0.10
12	Little Wekiva	Hydrocotyle	Least killifish	19	0.09
12	Little Wekiva	Hydrocotyle	Least killifish	19	0.08
12	Little Wekiva	Hydrocotyle	Least killifish	21	0.03
12	Little Wekiva	Hydrocotyle	Least killifish	24	0.18
12	Little Wekiva	Hydrocotyle	Mosquitofish	10	0.02
12	Little Wekiva	Hydrocotyle	Mosquitofish	10	0.01
12	Little Wekiva	Hydrocotyle	Mosquitofish	11	0.02
12	Little Wekiva	Hydrocotyle	Mosquitofish	12	0.03
12	Little Wekiva	Hydrocotyle	Mosquitofish	12	0.02
12	Little Wekiva	Hydrocotyle	Mosquitofish	12	0.03
12	Little Wekiva	Hydrocotyle	Mosquitofish	12	0.03
12	Little Wekiva	Hydrocotyle	Mosquitofish	12	0.03

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
12	Little Wekiva	Hydrocotyle	Mosquitofish	12	0.01
12	Little Wekiva	Hydrocotyle	Mosquitofish	13	0.03
12	Little Wekiva	Hydrocotyle	Mosquitofish	13	0.02
12	Little Wekiva	Hydrocotyle	Mosquitofish	14	0.03
12	Little Wekiva	Hydrocotyle	Mosquitofish	15	0.05
12	Little Wekiva	Hydrocotyle	Mosquitofish	15	0.02
12	Little Wekiva	Hydrocotyle	Mosquitofish	20	0.08
12	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.10
12	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.10
12	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	19	0.13
12	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	19	0.14
12	Little Wekiva	Hydrocotyle	Sailfin molly	15	0.05
12	Little Wekiva	Hydrocotyle	Sailfin molly	15	0.05
12	Little Wekiva	Hydrocotyle	Sailfin molly	16	0.06
12	Little Wekiva	Hydrocotyle	Sailfin molly	17	0.07
12	Little Wekiva	Hydrocotyle	Sailfin molly	18	0.08
12	Little Wekiva	Hydrocotyle	Sailfin molly	18	0.10
12	Little Wekiva	Hydrocotyle	Sailfin molly	18	0.10
12	Little Wekiva	Hydrocotyle	Sailfin molly	20	0.14
12	Little Wekiva	Hydrocotyle	Sailfin molly	21	0.13
12	Little Wekiva	Hydrocotyle	Spotted sunfish	19	0.11
13	Little Wekiva	Hydrocotyle	Bluefin killifish	13	0.03
13	Little Wekiva	Hydrocotyle	Bluefin killifish	28	0.31
13	Little Wekiva	Hydrocotyle	Bluefin killifish	30	0.36
13	Little Wekiva	Hydrocotyle	Least killifish	8	0.01
13	Little Wekiva	Hydrocotyle	Least killifish	8	0.01
13	Little Wekiva	Hydrocotyle	Least killifish	8	0.01
13	Little Wekiva	Hydrocotyle	Least killifish	9	0.01
13	Little Wekiva	Hydrocotyle	Least killifish	10	0.01
13	Little Wekiva	Hydrocotyle	Least killifish	10	0.02
13	Little Wekiva	Hydrocotyle	Least killifish	10	0.01
13	Little Wekiva	Hydrocotyle	Least killifish	10	0.01
13	Little Wekiva	Hydrocotyle	Least killifish	10	0.01
13	Little Wekiva	Hydrocotyle	Least killifish	10	0.02
13	Little Wekiva	Hydrocotyle	Least killifish	10	0.01
13	Little Wekiva	Hydrocotyle	Least killifish	11	0.02
13	Little Wekiva	Hydrocotyle	Least killifish	11	0.03
13	Little Wekiva	Hydrocotyle	Least killifish	11	0.02
13	Little Wekiva	Hydrocotyle	Least killifish	12	0.03
13	Little Wekiva	Hydrocotyle	Least killifish	12	0.03
13	Little Wekiva	Hydrocotyle	Least killifish	12	0.02
13	Little Wekiva	Hydrocotyle	Least killifish	12	0.03
13	Little Wekiva	Hydrocotyle	Least killifish	13	0.03
13	Little Wekiva	Hydrocotyle	Least killifish	13	0.03
13	Little Wekiva	Hydrocotyle	Least killifish	14	0.03
13	Little Wekiva	Hydrocotyle	Least killifish	14	0.04
13	Little Wekiva	Hydrocotyle	Least killifish	15	0.04
13	Little Wekiva	Hydrocotyle	Least killifish	15	0.04
13	Little Wekiva	Hydrocotyle	Least killifish	15	0.05
13	Little Wekiva	Hydrocotyle	Least killifish	15	0.05
13	Little Wekiva	Hydrocotyle	Least killifish	15	0.06
13	Little Wekiva	Hydrocotyle	Least killifish	16	0.07
13	Little Wekiva	Hydrocotyle	Least killifish	18	0.08
13	Little Wekiva	Hydrocotyle	Least killifish	20	0.11

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
13	Little Wekiva	Hydrocotyle	Least killifish	23	0.17
13	Little Wekiva	Hydrocotyle	Mosquitofish	9	0.01
13	Little Wekiva	Hydrocotyle	Mosquitofish	10	0.02
13	Little Wekiva	Hydrocotyle	Mosquitofish	12	0.03
13	Little Wekiva	Hydrocotyle	Mosquitofish	12	0.03
13	Little Wekiva	Hydrocotyle	Mosquitofish	13	0.03
13	Little Wekiva	Hydrocotyle	Mosquitofish	15	0.05
13	Little Wekiva	Hydrocotyle	Mosquitofish	15	0.05
13	Little Wekiva	Hydrocotyle	Mosquitofish	15	0.05
13	Little Wekiva	Hydrocotyle	Mosquitofish	16	0.05
13	Little Wekiva	Hydrocotyle	Mosquitofish	19	0.10
13	Little Wekiva	Hydrocotyle	Mosquitofish	21	0.12
13	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	19	0.14
13	Little Wekiva	Hydrocotyle	Sailfin molly	34	0.70
13	Little Wekiva	Hydrocotyle	Spotted sunfish	16	0.07
14	Little Wekiva	Hydrocotyle	Blackbanded darter	32	0.31
14	Little Wekiva	Hydrocotyle	Blackbanded darter	46	0.81
14	Little Wekiva	Hydrocotyle	Coastal shiner	30	0.21
14	Little Wekiva	Hydrocotyle	Coastal shiner	45	0.88
14	Little Wekiva	Hydrocotyle	Coastal shiner	47	1.01
14	Little Wekiva	Hydrocotyle	Least killifish	10	0.02
14	Little Wekiva	Hydrocotyle	Least killifish	11	0.04
14	Little Wekiva	Hydrocotyle	Least killifish	12	0.07
14	Little Wekiva	Hydrocotyle	Least killifish	14	0.03
14	Little Wekiva	Hydrocotyle	Least killifish	15	0.04
14	Little Wekiva	Hydrocotyle	Least killifish	15	0.04
14	Little Wekiva	Hydrocotyle	Least killifish	15	0.06
14	Little Wekiva	Hydrocotyle	Least killifish	16	0.06
14	Little Wekiva	Hydrocotyle	Least killifish	20	0.11
14	Little Wekiva	Hydrocotyle	Least killifish	23	0.15
14	Little Wekiva	Hydrocotyle	Mosquitofish	10	0.01
14	Little Wekiva	Hydrocotyle	Mosquitofish	10	0.01
14	Little Wekiva	Hydrocotyle	Mosquitofish	11	0.02
14	Little Wekiva	Hydrocotyle	Mosquitofish	15	0.04
14	Little Wekiva	Hydrocotyle	Mosquitofish	16	0.06
14	Little Wekiva	Hydrocotyle	Mosquitofish	19	0.08
14	Little Wekiva	Hydrocotyle	Mosquitofish	20	0.10
14	Little Wekiva	Hydrocotyle	Mosquitofish	21	0.10
14	Little Wekiva	Hydrocotyle	Mosquitofish	22	0.10
14	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	17	0.09
15	Little Wekiva	Hydrocotyle	Coastal shiner	46	0.83
15	Little Wekiva	Hydrocotyle	Least killifish	9	0.01
15	Little Wekiva	Hydrocotyle	Least killifish	10	0.02
15	Little Wekiva	Hydrocotyle	Least killifish	11	0.02
15	Little Wekiva	Hydrocotyle	Least killifish	12	0.02
15	Little Wekiva	Hydrocotyle	Least killifish	13	0.03
15	Little Wekiva	Hydrocotyle	Least killifish	13	0.03
15	Little Wekiva	Hydrocotyle	Least killifish	14	0.04
15	Little Wekiva	Hydrocotyle	Least killifish	15	0.05
15	Little Wekiva	Hydrocotyle	Least killifish	15	0.05
15	Little Wekiva	Hydrocotyle	Mosquitofish	10	0.02
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	11	0.02
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	11	0.03
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	11	0.03

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	12	0.10
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	12	0.03
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	12	0.03
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	12	0.04
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	12	0.03
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	12	0.04
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	13	0.04
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	13	0.04
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	13	0.04
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	13	0.04
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	13	0.04
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	13	0.04
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	13	0.05
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.05
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.04
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.05
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.05
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.06
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.05
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.05
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.05
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	15	0.05
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	15	0.06
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	15	0.07
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	16	0.08
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	16	0.07
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	17	0.10
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	17	0.90
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	17	0.11
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	17	0.11
15	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.11
16	Lower Wekiva	Vallisneria	Blackbanded darter	67	2.90
16	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.14
16	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.58
17	Lower Wekiva	Vallisneria	Brown darter	44	0.77
17	Lower Wekiva	Vallisneria	Spotted sunfish	74	7.96
18	Lower Wekiva	Vallisneria	Coastal shiner	60	1.98
18	Lower Wekiva	Vallisneria	Pugnose minnow	55	1.36
18	Lower Wekiva	Vallisneria	Spotted sunfish	65	5.28
18	Lower Wekiva	Vallisneria	Spotted sunfish	94	17.89
18	Lower Wekiva	Vallisneria	Spotted sunfish	105	22.82
18	Lower Wekiva	Vallisneria	Spotted sunfish	115	29.87
19	Lower Wekiva	Vallisneria	Speckled madtom	38	0.60
19	Lower Wekiva	Vallisneria	Tadpole madtom	20	0.08
19	Lower Wekiva	Vallisneria	Tadpole madtom	25	0.18
20	Lower Wekiva	Vallisneria	Redbreast sunfish	58	2.98
20	Lower Wekiva	Vallisneria	Sailfin shiner	34	0.29
20	Lower Wekiva	Vallisneria	Spotted sunfish	23	0.22
20	Lower Wekiva	Vallisneria	Spotted sunfish	48	1.89
20	Lower Wekiva	Vallisneria	Spotted sunfish	60	4.24
20	Lower Wekiva	Vallisneria	Spotted sunfish	62	4.43
20	Lower Wekiva	Vallisneria	Spotted sunfish	69	5.73
20	Lower Wekiva	Vallisneria	Spotted sunfish	88	13.27
21	Lower Wekiva	Bare Bottom	Tadpole madtom	29	0.28

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
21	Lower Wekiva	Bare Bottom	Tadpole madtom	43	0.77
22	Lower Wekiva	Bare Bottom	Tadpole madtom	53	1.68
23	Lower Wekiva	Bare Bottom	Coastal shiner	54	1.24
24	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
25	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
26	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
27	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
28	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
29	Lower Wekiva	Bare Bottom	Seminole killifish	59	1.79
29	Lower Wekiva	Bare Bottom	Tadpole madtom	20	0.12
29	Lower Wekiva	Bare Bottom	Tadpole madtom	22	0.12
29	Lower Wekiva	Bare Bottom	Tadpole madtom	40	0.82
30	Lower Wekiva	Bare Bottom	Tadpole madtom	19	0.09
31	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
32	Lower Wekiva	Bare Bottom	Bluefin killifish	12	0.03
32	Lower Wekiva	Bare Bottom	Bluefin killifish	14	0.04
32	Lower Wekiva	Bare Bottom	Bluefin killifish	14	0.04
32	Lower Wekiva	Bare Bottom	Bluefin killifish	14	0.05
32	Lower Wekiva	Bare Bottom	Bluefin killifish	16	0.07
32	Lower Wekiva	Bare Bottom	Bluefin killifish	18	0.08
32	Lower Wekiva	Bare Bottom	Bluefin killifish	18	0.06
32	Lower Wekiva	Bare Bottom	Bluefin killifish	19	0.08
32	Lower Wekiva	Bare Bottom	Bluefin killifish	20	0.10
32	Lower Wekiva	Bare Bottom	Bluefin killifish	21	0.14
32	Lower Wekiva	Bare Bottom	Bluefin killifish	22	0.16
32	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.18
32	Lower Wekiva	Bare Bottom	Bluefin killifish	26	0.20
32	Lower Wekiva	Bare Bottom	Bluefin killifish	30	0.30
32	Lower Wekiva	Bare Bottom	Bluefin killifish	33	0.42
32	Lower Wekiva	Bare Bottom	Bluefin killifish	35	0.53
32	Lower Wekiva	Bare Bottom	Bluefin killifish	36	0.53
33	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
34	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.11
34	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.14
34	Lower Wekiva	Vallisneria	Brown darter	44	0.79
35	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.41
35	Lower Wekiva	Vallisneria	Mosquitofish	28	0.24
35	Lower Wekiva	Vallisneria	Spotted sunfish	48	1.93
35	Lower Wekiva	Vallisneria	Spotted sunfish	68	5.79
35	Lower Wekiva	Vallisneria	Spotted sunfish	69	5.86
35	Lower Wekiva	Vallisneria	Spotted sunfish	80	9.28
35	Lower Wekiva	Vallisneria	Tadpole madtom	54	2.12
35	Lower Wekiva	Vallisneria	Tadpole madtom	55	1.84
36	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.26
36	Lower Wekiva	Vallisneria	Coastal shiner	44	0.78
36	Lower Wekiva	Vallisneria	Coastal shiner	45	0.78
36	Lower Wekiva	Vallisneria	Redear sunfish	227	215.00
36	Lower Wekiva	Vallisneria	Spotted sunfish	142	68.00
36	Lower Wekiva	Vallisneria	Tadpole madtom	10	0.03
36	Lower Wekiva	Vallisneria	Tadpole madtom	17	0.06
37	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.11
37	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.27
37	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.30
37	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.37

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
37	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.44
37	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.42
37	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.51
37	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.54
37	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.64
37	Lower Wekiva	Vallisneria	Coastal shiner	42	0.79
37	Lower Wekiva	Vallisneria	Coastal shiner	50	1.32
37	Lower Wekiva	Vallisneria	Coastal shiner	53	1.57
37	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.90
37	Lower Wekiva	Vallisneria	Pugnose minnow	47	0.96
37	Lower Wekiva	Vallisneria	Pugnose minnow	55	1.53
37	Lower Wekiva	Vallisneria	Spotted sunfish	77	9.63
38	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.51
38	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.44
38	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.52
38	Lower Wekiva	Vallisneria	Brown darter	31	0.29
39	Lower Wekiva	Vallisneria	Okefenokee pygmy sunfish	17	0.08
39	Lower Wekiva	Vallisneria	Okefenokee pygmy sunfish	18	0.12
39	Lower Wekiva	Vallisneria	Spotted sunfish	23	0.21
40	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.41
40	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.40
40	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.44
40	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.51
40	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.53
40	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.68
40	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.76
40	Lower Wekiva	Vallisneria	Pugnose minnow	32	0.29
40	Lower Wekiva	Vallisneria	Spotted sunfish	71	6.22
40	Lower Wekiva	Vallisneria	Spotted sunfish	75	9.25
40	Lower Wekiva	Vallisneria	Spotted sunfish	90	14.36
41	Lower Wekiva	Vallisneria	Pugnose minnow	47	0.85
41	Lower Wekiva	Vallisneria	Spotted sunfish	79	9.97
41	Lower Wekiva	Vallisneria	Spotted sunfish	90	14.57
41	Lower Wekiva	Vallisneria	Spotted sunfish	94	15.47
41	Lower Wekiva	Vallisneria	Spotted sunfish	112	28.00
42	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.49
42	Lower Wekiva	Vallisneria	Brown darter	39	0.54
42	Lower Wekiva	Vallisneria	Spotted sunfish	52	2.51
42	Lower Wekiva	Vallisneria	Spotted sunfish	75	8.29
42	Lower Wekiva	Vallisneria	Tadpole madtom	23	0.13
43	Lower Wekiva	Vallisneria	Spotted sunfish	57	3.44
43	Lower Wekiva	Vallisneria	Spotted sunfish	80	9.92
44	Lower Wekiva	Vallisneria	Redbreast sunfish	47	1.66
45	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.37
45	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.46
45	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.53
45	Lower Wekiva	Vallisneria	Spotted sunfish	46	1.88
45	Lower Wekiva	Vallisneria	Spotted sunfish	47	1.92
45	Lower Wekiva	Vallisneria	Spotted sunfish	55	3.39
45	Lower Wekiva	Vallisneria	Spotted sunfish	63	4.55
45	Lower Wekiva	Vallisneria	Spotted sunfish	70	6.24
45	Lower Wekiva	Vallisneria	Spotted sunfish	71	6.64
45	Lower Wekiva	Vallisneria	Spotted sunfish	88	11.68
45	Lower Wekiva	Vallisneria	Tadpole madtom	35	0.42

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
45	Lower Wekiva	Vallisneria	Tadpole madtom	35	0.44
46	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
47	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
48	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
49	Lower Wekiva	Vallisneria	No Fish in Trap	.	.
50	Lower Wekiva	Vallisneria	Redbreast sunfish	12	0.10
50	Lower Wekiva	Vallisneria	Spotted sunfish	.	.
50	Lower Wekiva	Vallisneria	Spotted sunfish	22	0.19
50	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.23
50	Lower Wekiva	Vallisneria	Spotted sunfish	90	15.23
50	Lower Wekiva	Vallisneria	Tadpole madtom	59	2.53
51	Lower Wekiva	Vallisneria	Pugnose minnow	47	0.85
52	Lower Wekiva	Vallisneria	Pugnose minnow	49	0.89
52	Lower Wekiva	Vallisneria	Spotted sunfish	56	3.37
53	Lower Wekiva	Vallisneria	Redbreast sunfish	17	0.09
53	Lower Wekiva	Vallisneria	Redbreast sunfish	29	0.32
54	Lower Wekiva	Vallisneria	Spotted sunfish	105	21.11
55	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.49
55	Lower Wekiva	Vallisneria	Pugnose minnow	48	1.22
55	Lower Wekiva	Vallisneria	Spotted sunfish	48	2.02
55	Lower Wekiva	Vallisneria	Spotted sunfish	69	7.13
55	Lower Wekiva	Vallisneria	Yellow bullhead	117	20.48
56	Lower Wekiva	Vallisneria	Coastal shiner	50	1.24
56	Lower Wekiva	Vallisneria	Tadpole madtom	38	0.60
57	Lower Wekiva	Vallisneria	Blackbanded darter	52	1.32
57	Lower Wekiva	Vallisneria	Blackbanded darter	55	1.40
58	Lower Wekiva	Vallisneria	Speckled madtom	37	0.53
58	Lower Wekiva	Vallisneria	Spotted sunfish	63	4.99
58	Lower Wekiva	Vallisneria	Spotted sunfish	79	9.53
59	Lower Wekiva	Vallisneria	Lake chubsucker	329	532.00
59	Lower Wekiva	Vallisneria	Redbreast sunfish	29	0.35
59	Lower Wekiva	Vallisneria	Redbreast sunfish	32	0.54
59	Lower Wekiva	Vallisneria	Redbreast sunfish	171	64.00
59	Lower Wekiva	Vallisneria	Spotted sunfish	49	2.01
59	Lower Wekiva	Vallisneria	Spotted sunfish	100	.
59	Lower Wekiva	Vallisneria	Spotted sunfish	100	.
59	Lower Wekiva	Vallisneria	Spotted sunfish	100	.
59	Lower Wekiva	Vallisneria	Spotted sunfish	122	33.00
59	Lower Wekiva	Vallisneria	Spotted sunfish	131	48.00
60	Lower Wekiva	Vallisneria	Brown darter	44	0.86
60	Lower Wekiva	Vallisneria	Tadpole madtom	15	0.03
60	Lower Wekiva	Vallisneria	Tadpole madtom	20	0.08
60	Lower Wekiva	Vallisneria	Tadpole madtom	74	4.26
61	Lower Wekiva	Vallisneria	Spotted sunfish	103	20.89
61	Lower Wekiva	Vallisneria	Tadpole madtom	21	0.16
62	Lower Wekiva	Vallisneria	Spotted sunfish	27	0.41
62	Lower Wekiva	Vallisneria	Spotted sunfish	48	2.19
62	Lower Wekiva	Vallisneria	Spotted sunfish	49	2.14
62	Lower Wekiva	Vallisneria	Spotted sunfish	59	4.16
62	Lower Wekiva	Vallisneria	Spotted sunfish	62	5.08
62	Lower Wekiva	Vallisneria	Spotted sunfish	70	7.11
62	Lower Wekiva	Vallisneria	Spotted sunfish	78	9.45
62	Lower Wekiva	Vallisneria	Spotted sunfish	80	10.33
63	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.25

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
63	Lower Wekiva	Vallisneria	Spotted sunfish	35	0.68
63	Lower Wekiva	Vallisneria	Spotted sunfish	100	21.86
64	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.04
64	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.75
64	Lower Wekiva	Vallisneria	Spotted sunfish	21	0.16
64	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.29
64	Lower Wekiva	Vallisneria	Spotted sunfish	60	3.92
64	Lower Wekiva	Vallisneria	Spotted sunfish	79	9.70
64	Lower Wekiva	Vallisneria	Spotted sunfish	130	.
65	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.34
65	Lower Wekiva	Vallisneria	Coastal shiner	36	0.41
65	Lower Wekiva	Vallisneria	Coastal shiner	50	1.21
65	Lower Wekiva	Vallisneria	Coastal shiner	60	1.95
65	Lower Wekiva	Vallisneria	Spotted sunfish	27	0.36
65	Lower Wekiva	Vallisneria	Spotted sunfish	80	10.13
65	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.43
66	Lower Wekiva	Vallisneria	Spotted sunfish	76	8.34
66	Lower Wekiva	Vallisneria	Spotted sunfish	83	12.38
67	Lower Wekiva	Vallisneria	Redbreast sunfish	15	0.06
67	Lower Wekiva	Vallisneria	Spotted sunfish	15	0.06
67	Lower Wekiva	Vallisneria	Tadpole madtom	55	1.83
67	Lower Wekiva	Vallisneria	Tadpole madtom	62	2.89
68	Lower Wekiva	Vallisneria	Brown darter	40	0.49
68	Lower Wekiva	Vallisneria	Largemouth bass	305	285.00
69	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.57
69	Lower Wekiva	Vallisneria	Speckled madtom	23	0.13
69	Lower Wekiva	Vallisneria	Spotted sunfish	110	26.12
69	Lower Wekiva	Vallisneria	Tadpole madtom	19	0.07
69	Lower Wekiva	Vallisneria	Tadpole madtom	20	0.07
69	Lower Wekiva	Vallisneria	Tadpole madtom	21	0.10
69	Lower Wekiva	Vallisneria	Tadpole madtom	62	3.42
69	Lower Wekiva	Vallisneria	Tadpole madtom	75	5.75
70	Lower Wekiva	Vallisneria	Largemouth bass	50	1.74
70	Lower Wekiva	Vallisneria	Spotted sunfish	50	.
70	Lower Wekiva	Vallisneria	Spotted sunfish	59	3.82
70	Lower Wekiva	Vallisneria	Spotted sunfish	75	8.07
70	Lower Wekiva	Vallisneria	Spotted sunfish	75	9.11
70	Lower Wekiva	Vallisneria	Spotted sunfish	90	14.44
70	Lower Wekiva	Vallisneria	Tadpole madtom	39	0.60
70	Lower Wekiva	Vallisneria	Tadpole madtom	62	3.20
71	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.09
71	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.13
71	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.25
71	Lower Wekiva	Vallisneria	Tadpole madtom	20	0.09
71	Lower Wekiva	Vallisneria	Tadpole madtom	21	0.13
71	Lower Wekiva	Vallisneria	Tadpole madtom	25	0.17
71	Lower Wekiva	Vallisneria	Tadpole madtom	25	0.21
71	Lower Wekiva	Vallisneria	Tadpole madtom	33	0.41
71	Lower Wekiva	Vallisneria	Tadpole madtom	38	0.66
71	Lower Wekiva	Vallisneria	Tadpole madtom	38	0.54
71	Lower Wekiva	Vallisneria	Tadpole madtom	57	1.83
72	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
73	Lower Wekiva	Bare Bottom	Coastal shiner	37	0.46
73	Lower Wekiva	Bare Bottom	Coastal shiner	40	0.56

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
73	Lower Wekiva	Bare Bottom	Coastal shiner	43	0.70
73	Lower Wekiva	Bare Bottom	Coastal shiner	45	0.85
73	Lower Wekiva	Bare Bottom	Coastal shiner	45	0.81
73	Lower Wekiva	Bare Bottom	Coastal shiner	45	0.85
73	Lower Wekiva	Bare Bottom	Coastal shiner	46	0.92
73	Lower Wekiva	Bare Bottom	Coastal shiner	47	0.97
73	Lower Wekiva	Bare Bottom	Coastal shiner	47	1.05
73	Lower Wekiva	Bare Bottom	Coastal shiner	47	0.91
73	Lower Wekiva	Bare Bottom	Coastal shiner	47	0.87
73	Lower Wekiva	Bare Bottom	Coastal shiner	47	0.99
73	Lower Wekiva	Bare Bottom	Coastal shiner	47	0.98
73	Lower Wekiva	Bare Bottom	Coastal shiner	48	1.04
73	Lower Wekiva	Bare Bottom	Coastal shiner	48	1.16
73	Lower Wekiva	Bare Bottom	Coastal shiner	49	1.10
73	Lower Wekiva	Bare Bottom	Coastal shiner	49	1.07
73	Lower Wekiva	Bare Bottom	Coastal shiner	49	1.10
73	Lower Wekiva	Bare Bottom	Coastal shiner	49	1.02
73	Lower Wekiva	Bare Bottom	Coastal shiner	49	1.18
73	Lower Wekiva	Bare Bottom	Coastal shiner	49	1.09
73	Lower Wekiva	Bare Bottom	Coastal shiner	49	1.12
73	Lower Wekiva	Bare Bottom	Coastal shiner	49	1.05
73	Lower Wekiva	Bare Bottom	Coastal shiner	50	1.24
73	Lower Wekiva	Bare Bottom	Coastal shiner	50	1.18
73	Lower Wekiva	Bare Bottom	Coastal shiner	50	1.21
73	Lower Wekiva	Bare Bottom	Coastal shiner	50	1.15
73	Lower Wekiva	Bare Bottom	Coastal shiner	50	1.29
73	Lower Wekiva	Bare Bottom	Coastal shiner	50	1.19
73	Lower Wekiva	Bare Bottom	Coastal shiner	50	1.21
73	Lower Wekiva	Bare Bottom	Coastal shiner	51	1.30
73	Lower Wekiva	Bare Bottom	Coastal shiner	51	1.19
73	Lower Wekiva	Bare Bottom	Coastal shiner	51	1.26
73	Lower Wekiva	Bare Bottom	Coastal shiner	52	1.35
73	Lower Wekiva	Bare Bottom	Coastal shiner	52	1.38
73	Lower Wekiva	Bare Bottom	Coastal shiner	53	1.35
73	Lower Wekiva	Bare Bottom	Coastal shiner	54	1.75
73	Lower Wekiva	Bare Bottom	Coastal shiner	55	1.70
73	Lower Wekiva	Bare Bottom	Coastal shiner	55	1.62
73	Lower Wekiva	Bare Bottom	Coastal shiner	55	1.67
73	Lower Wekiva	Bare Bottom	Coastal shiner	55	1.68
73	Lower Wekiva	Bare Bottom	Coastal shiner	56	1.68
73	Lower Wekiva	Bare Bottom	Coastal shiner	56	1.77
73	Lower Wekiva	Bare Bottom	Coastal shiner	56	1.73
73	Lower Wekiva	Bare Bottom	Coastal shiner	56	1.60
73	Lower Wekiva	Bare Bottom	Coastal shiner	57	1.62
73	Lower Wekiva	Bare Bottom	Coastal shiner	57	1.77
73	Lower Wekiva	Bare Bottom	Coastal shiner	57	1.64
73	Lower Wekiva	Bare Bottom	Coastal shiner	57	1.85
73	Lower Wekiva	Bare Bottom	Coastal shiner	58	1.54
73	Lower Wekiva	Bare Bottom	Coastal shiner	59	2.02
73	Lower Wekiva	Bare Bottom	Coastal shiner	59	1.82
73	Lower Wekiva	Bare Bottom	Coastal shiner	60	2.16
73	Lower Wekiva	Bare Bottom	Coastal shiner	60	1.94
73	Lower Wekiva	Bare Bottom	Coastal shiner	60	2.16
73	Lower Wekiva	Bare Bottom	Coastal shiner	60	2.33

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
73	Lower Wekiva	Bare Bottom	Coastal shiner	60	2.21
73	Lower Wekiva	Bare Bottom	Coastal shiner	61	2.19
73	Lower Wekiva	Bare Bottom	Coastal shiner	62	2.38
73	Lower Wekiva	Bare Bottom	Coastal shiner	62	2.35
73	Lower Wekiva	Bare Bottom	Coastal shiner	68	2.95
74	Lower Wekiva	Bare Bottom	Spotted sunfish	16	0.07
74	Lower Wekiva	Bare Bottom	Tadpole madtom	17	0.07
74	Lower Wekiva	Bare Bottom	Tadpole madtom	35	0.51
75	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
76	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
77	Lower Wekiva	Bare Bottom	No Fish in Trap	40	0.64
78	Lower Wekiva	Bare Bottom	Seminole killifish	16	0.03
78	Lower Wekiva	Bare Bottom	Seminole killifish	25	0.16
78	Lower Wekiva	Bare Bottom	Seminole killifish	25	0.13
78	Lower Wekiva	Bare Bottom	Seminole killifish	26	0.16
78	Lower Wekiva	Bare Bottom	Seminole killifish	28	0.14
79	Lower Wekiva	Vallisneria	Sailfin shiner	26	0.13
79	Lower Wekiva	Vallisneria	Sailfin shiner	29	0.16
79	Lower Wekiva	Vallisneria	Sailfin shiner	34	0.27
79	Lower Wekiva	Vallisneria	Speckled madtom	23	0.12
79	Lower Wekiva	Vallisneria	Speckled madtom	33	0.36
79	Lower Wekiva	Vallisneria	Spotted sunfish	105	22.89
80	Lower Wekiva	Vallisneria	Pugnose minnow	35	0.33
80	Lower Wekiva	Vallisneria	Sailfin shiner	33	0.31
80	Lower Wekiva	Vallisneria	Sailfin shiner	36	0.40
80	Lower Wekiva	Vallisneria	Sailfin shiner	45	0.65
81	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.22
81	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.39
81	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.46
81	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.48
81	Lower Wekiva	Vallisneria	Mosquitofish	20	0.10
81	Lower Wekiva	Vallisneria	Spotted sunfish	44	1.55
81	Lower Wekiva	Vallisneria	Spotted sunfish	63	4.38
81	Lower Wekiva	Vallisneria	Spotted sunfish	74	7.34
82	Lower Wekiva	Vallisneria	Mosquitofish	24	0.15
82	Lower Wekiva	Vallisneria	Mosquitofish	26	0.23
82	Lower Wekiva	Vallisneria	Mosquitofish	27	0.29
82	Lower Wekiva	Vallisneria	Mosquitofish	30	0.29
82	Lower Wekiva	Vallisneria	Spotted sunfish	14	0.05
82	Lower Wekiva	Vallisneria	Spotted sunfish	15	0.05
82	Lower Wekiva	Vallisneria	Spotted sunfish	28	0.35
82	Lower Wekiva	Vallisneria	Spotted sunfish	50	3.20
82	Lower Wekiva	Vallisneria	Spotted sunfish	78	8.65
82	Lower Wekiva	Vallisneria	Spotted sunfish	131	48.00
83	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
84	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
85	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.16
85	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.19
85	Lower Wekiva	Vallisneria	Mosquitofish	11	0.03
85	Lower Wekiva	Vallisneria	Spotted sunfish	15	0.06
86	Lower Wekiva	Vallisneria	Brown darter	36	0.47
86	Lower Wekiva	Vallisneria	Coastal shiner	55	1.54
86	Lower Wekiva	Vallisneria	Tadpole madtom	51	1.99
86	Lower Wekiva	Vallisneria	Tadpole madtom	70	4.02

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
87	Lower Wekiva	Vallisneria	Spotted sunfish	53	2.55
87	Lower Wekiva	Vallisneria	Spotted sunfish	67	5.93
87	Lower Wekiva	Vallisneria	Spotted sunfish	70	6.38
87	Lower Wekiva	Vallisneria	Spotted sunfish	87	12.35
87	Lower Wekiva	Vallisneria	Spotted sunfish	122	35.00
87	Lower Wekiva	Vallisneria	Spotted sunfish	143	59.00
87	Lower Wekiva	Vallisneria	Tadpole madtom	62	2.83
88	Lower Wekiva	Vallisneria	Sailfin shiner	38	0.41
89	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.38
89	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.68
89	Lower Wekiva	Vallisneria	Bluefin killifish	42	0.90
89	Lower Wekiva	Vallisneria	Spotted sunfish	57	3.10
89	Lower Wekiva	Vallisneria	Spotted sunfish	68	6.21
89	Lower Wekiva	Vallisneria	Spotted sunfish	74	7.72
89	Lower Wekiva	Vallisneria	Tadpole madtom	60	2.83
90	Lower Wekiva	Vallisneria	Bluenose shiner	55	1.33
90	Lower Wekiva	Vallisneria	Sailfin shiner	28	0.19
90	Lower Wekiva	Vallisneria	Sailfin shiner	30	0.23
90	Lower Wekiva	Vallisneria	Sailfin shiner	30	0.25
90	Lower Wekiva	Vallisneria	Sailfin shiner	31	0.22
90	Lower Wekiva	Vallisneria	Tadpole madtom	53	1.65
90	Lower Wekiva	Vallisneria	Tadpole madtom	60	2.51
91	Middle Wekiva	Vallisneria	Pugnose minnow	45	0.89
91	Middle Wekiva	Vallisneria	Redbreast sunfish	52	2.36
91	Middle Wekiva	Vallisneria	Redbreast sunfish	70	5.42
91	Middle Wekiva	Vallisneria	Sailfin shiner	35	0.37
91	Middle Wekiva	Vallisneria	Spotted sunfish	35	0.82
91	Middle Wekiva	Vallisneria	Spotted sunfish	35	0.70
91	Middle Wekiva	Vallisneria	Spotted sunfish	43	1.29
91	Middle Wekiva	Vallisneria	Spotted sunfish	52	2.35
91	Middle Wekiva	Vallisneria	Spotted sunfish	55	2.78
91	Middle Wekiva	Vallisneria	Spotted sunfish	68	5.58
92	Middle Wekiva	Vallisneria	Spotted sunfish	49	1.85
93	Middle Wekiva	Nuphar	No Fish in Trap	.	.
94	Middle Wekiva	Hydrocotyle	Bluefin killifish	34	0.36
94	Middle Wekiva	Hydrocotyle	Least killifish	10	0.02
94	Middle Wekiva	Hydrocotyle	Least killifish	17	0.05
94	Middle Wekiva	Hydrocotyle	Least killifish	17	0.08
94	Middle Wekiva	Hydrocotyle	Least killifish	18	0.11
94	Middle Wekiva	Hydrocotyle	Least killifish	18	0.07
94	Middle Wekiva	Hydrocotyle	Least killifish	19	0.08
94	Middle Wekiva	Hydrocotyle	Least killifish	20	0.11
94	Middle Wekiva	Hydrocotyle	Least killifish	21	0.13
94	Middle Wekiva	Hydrocotyle	Least killifish	22	0.13
94	Middle Wekiva	Hydrocotyle	Least killifish	27	0.24
94	Middle Wekiva	Hydrocotyle	Mosquitofish	10	0.01
94	Middle Wekiva	Hydrocotyle	Mosquitofish	10	0.01
94	Middle Wekiva	Hydrocotyle	Mosquitofish	12	0.02
94	Middle Wekiva	Hydrocotyle	Mosquitofish	13	0.02
94	Middle Wekiva	Hydrocotyle	Mosquitofish	17	0.05
94	Middle Wekiva	Hydrocotyle	Mosquitofish	23	0.14
94	Middle Wekiva	Hydrocotyle	Mosquitofish	25	0.14
94	Middle Wekiva	Hydrocotyle	Mosquitofish	29	0.28
94	Middle Wekiva	Hydrocotyle	Mosquitofish	29	0.25

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
94	Middle Wekiva	Hydrocotyle	Mosquitofish	30	0.36
94	Middle Wekiva	Hydrocotyle	Mosquitofish	32	0.34
94	Middle Wekiva	Hydrocotyle	Mosquitofish	32	0.38
94	Middle Wekiva	Hydrocotyle	Mosquitofish	34	0.53
94	Middle Wekiva	Hydrocotyle	Mosquitofish	38	0.67
94	Middle Wekiva	Hydrocotyle	Mosquitofish	41	1.01
94	Middle Wekiva	Hydrocotyle	Mosquitofish	42	0.85
94	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	20	0.16
94	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	22	0.18
94	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	23	0.23
94	Middle Wekiva	Hydrocotyle	Pirate perch	45	1.05
94	Middle Wekiva	Hydrocotyle	Sailfin molly	24	0.21
94	Middle Wekiva	Hydrocotyle	Sailfin molly	25	0.23
94	Middle Wekiva	Hydrocotyle	Sailfin molly	27	0.26
94	Middle Wekiva	Hydrocotyle	Sailfin molly	28	0.30
94	Middle Wekiva	Hydrocotyle	Sailfin molly	28	0.34
94	Middle Wekiva	Hydrocotyle	Sailfin molly	29	0.35
94	Middle Wekiva	Hydrocotyle	Sailfin molly	30	0.49
94	Middle Wekiva	Hydrocotyle	Sailfin molly	32	0.39
94	Middle Wekiva	Hydrocotyle	Sailfin molly	35	0.70
94	Middle Wekiva	Hydrocotyle	Sailfin molly	35	0.63
94	Middle Wekiva	Hydrocotyle	Sailfin molly	36	0.74
94	Middle Wekiva	Hydrocotyle	Sailfin molly	42	1.23
94	Middle Wekiva	Hydrocotyle	Spotted sunfish	55	2.88
94	Middle Wekiva	Hydrocotyle	Tadpole madtom	24	0.18
95	Middle Wekiva	Bare Bottom	Unidentifiable fish	15	0.02
95	Middle Wekiva	Bare Bottom	Unidentifiable fish	15	0.02
95	Middle Wekiva	Bare Bottom	Unidentifiable fish	15	0.02
96	Middle Wekiva	Bare Bottom	Bluefin killifish	21	0.08
97	Middle Wekiva	Vallisneria	Sailfin shiner	31	0.24
97	Middle Wekiva	Vallisneria	Sailfin shiner	34	0.31
97	Middle Wekiva	Vallisneria	Sailfin shiner	37	0.38
97	Middle Wekiva	Vallisneria	Tadpole madtom	30	0.29
97	Middle Wekiva	Vallisneria	Tadpole madtom	34	0.39
97	Middle Wekiva	Vallisneria	Tadpole madtom	55	1.69
98	Middle Wekiva	Vallisneria	Sailfin shiner	40	0.46
99	Middle Wekiva	Hydrocotyle	Bluefin killifish	20	0.12
99	Middle Wekiva	Hydrocotyle	Bluefin killifish	24	0.19
99	Middle Wekiva	Hydrocotyle	Bluefin killifish	25	0.18
99	Middle Wekiva	Hydrocotyle	Bluefin killifish	26	0.24
99	Middle Wekiva	Hydrocotyle	Bluefin killifish	26	0.24
99	Middle Wekiva	Hydrocotyle	Bluefin killifish	29	0.29
99	Middle Wekiva	Hydrocotyle	Coastal shiner	34	0.33
99	Middle Wekiva	Hydrocotyle	Coastal shiner	40	0.55
99	Middle Wekiva	Hydrocotyle	Coastal shiner	42	0.60
99	Middle Wekiva	Hydrocotyle	Coastal shiner	45	0.74
99	Middle Wekiva	Hydrocotyle	Coastal shiner	46	0.83
99	Middle Wekiva	Hydrocotyle	Coastal shiner	47	0.89
99	Middle Wekiva	Hydrocotyle	Coastal shiner	48	0.99
99	Middle Wekiva	Hydrocotyle	Coastal shiner	51	1.19
99	Middle Wekiva	Hydrocotyle	Coastal shiner	52	1.18
99	Middle Wekiva	Hydrocotyle	Coastal shiner	54	1.29
99	Middle Wekiva	Hydrocotyle	Coastal shiner	56	1.48
99	Middle Wekiva	Hydrocotyle	Coastal shiner	62	2.08

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
99	Middle Wekiva	Hydrocotyle	Least killifish	10	0.02
99	Middle Wekiva	Hydrocotyle	Least killifish	12	0.03
99	Middle Wekiva	Hydrocotyle	Least killifish	12	0.03
99	Middle Wekiva	Hydrocotyle	Least killifish	12	0.08
99	Middle Wekiva	Hydrocotyle	Least killifish	13	0.03
99	Middle Wekiva	Hydrocotyle	Least killifish	13	0.04
99	Middle Wekiva	Hydrocotyle	Least killifish	13	0.04
99	Middle Wekiva	Hydrocotyle	Least killifish	14	0.05
99	Middle Wekiva	Hydrocotyle	Least killifish	14	0.04
99	Middle Wekiva	Hydrocotyle	Least killifish	15	0.05
99	Middle Wekiva	Hydrocotyle	Least killifish	15	0.05
99	Middle Wekiva	Hydrocotyle	Least killifish	15	0.05
99	Middle Wekiva	Hydrocotyle	Least killifish	15	0.04
99	Middle Wekiva	Hydrocotyle	Least killifish	15	0.05
99	Middle Wekiva	Hydrocotyle	Least killifish	15	0.05
99	Middle Wekiva	Hydrocotyle	Least killifish	15	0.05
99	Middle Wekiva	Hydrocotyle	Least killifish	15	0.06
99	Middle Wekiva	Hydrocotyle	Least killifish	15	0.05
99	Middle Wekiva	Hydrocotyle	Least killifish	15	0.05
99	Middle Wekiva	Hydrocotyle	Least killifish	16	0.07
99	Middle Wekiva	Hydrocotyle	Least killifish	16	0.07
99	Middle Wekiva	Hydrocotyle	Least killifish	17	0.08
99	Middle Wekiva	Hydrocotyle	Least killifish	17	0.08
99	Middle Wekiva	Hydrocotyle	Least killifish	17	0.09
99	Middle Wekiva	Hydrocotyle	Least killifish	17	0.09
99	Middle Wekiva	Hydrocotyle	Least killifish	17	0.09
99	Middle Wekiva	Hydrocotyle	Least killifish	18	0.10
99	Middle Wekiva	Hydrocotyle	Least killifish	18	0.09
99	Middle Wekiva	Hydrocotyle	Least killifish	18	0.10
99	Middle Wekiva	Hydrocotyle	Least killifish	20	0.12
99	Middle Wekiva	Hydrocotyle	Least killifish	20	0.15
99	Middle Wekiva	Hydrocotyle	Least killifish	20	0.13
99	Middle Wekiva	Hydrocotyle	Least killifish	21	0.16
99	Middle Wekiva	Hydrocotyle	Least killifish	22	0.18
99	Middle Wekiva	Hydrocotyle	Least killifish	23	0.22
99	Middle Wekiva	Hydrocotyle	Least killifish	24	0.21
99	Middle Wekiva	Hydrocotyle	Least killifish	25	0.29
99	Middle Wekiva	Hydrocotyle	Least killifish	25	0.26
99	Middle Wekiva	Hydrocotyle	Least killifish	26	0.25
99	Middle Wekiva	Hydrocotyle	Least killifish	26	0.35
99	Middle Wekiva	Hydrocotyle	Mosquitofish	10	0.02
99	Middle Wekiva	Hydrocotyle	Mosquitofish	11	0.01
99	Middle Wekiva	Hydrocotyle	Mosquitofish	11	0.01
99	Middle Wekiva	Hydrocotyle	Mosquitofish	11	0.02
99	Middle Wekiva	Hydrocotyle	Mosquitofish	12	0.03
99	Middle Wekiva	Hydrocotyle	Mosquitofish	13	0.02
99	Middle Wekiva	Hydrocotyle	Mosquitofish	13	0.04
99	Middle Wekiva	Hydrocotyle	Mosquitofish	13	0.03
99	Middle Wekiva	Hydrocotyle	Mosquitofish	13	0.03
99	Middle Wekiva	Hydrocotyle	Mosquitofish	14	0.04
99	Middle Wekiva	Hydrocotyle	Mosquitofish	14	0.05
99	Middle Wekiva	Hydrocotyle	Mosquitofish	14	0.04
99	Middle Wekiva	Hydrocotyle	Mosquitofish	15	0.04
99	Middle Wekiva	Hydrocotyle	Mosquitofish	15	0.05

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
99	Middle Wekiva	Hydrocotyle	Mosquitofish	15	0.05
99	Middle Wekiva	Hydrocotyle	Mosquitofish	16	0.06
99	Middle Wekiva	Hydrocotyle	Mosquitofish	16	0.06
99	Middle Wekiva	Hydrocotyle	Mosquitofish	17	0.06
99	Middle Wekiva	Hydrocotyle	Mosquitofish	19	0.05
99	Middle Wekiva	Hydrocotyle	Mosquitofish	20	0.11
99	Middle Wekiva	Hydrocotyle	Mosquitofish	21	0.11
99	Middle Wekiva	Hydrocotyle	Mosquitofish	28	0.23
99	Middle Wekiva	Hydrocotyle	Mosquitofish	30	0.34
99	Middle Wekiva	Hydrocotyle	Mosquitofish	37	0.75
99	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.04
99	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	15	0.08
99	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	15	0.06
99	Middle Wekiva	Hydrocotyle	Sailfin molly	12	0.04
99	Middle Wekiva	Hydrocotyle	Sailfin molly	13	0.04
99	Middle Wekiva	Hydrocotyle	Sailfin molly	13	0.03
99	Middle Wekiva	Hydrocotyle	Sailfin molly	13	0.02
99	Middle Wekiva	Hydrocotyle	Sailfin molly	14	0.05
99	Middle Wekiva	Hydrocotyle	Sailfin molly	15	0.06
99	Middle Wekiva	Hydrocotyle	Sailfin molly	17	0.08
99	Middle Wekiva	Hydrocotyle	Sailfin molly	17	0.10
99	Middle Wekiva	Hydrocotyle	Sailfin molly	18	0.10
99	Middle Wekiva	Hydrocotyle	Sailfin molly	18	0.09
99	Middle Wekiva	Hydrocotyle	Sailfin molly	18	0.12
99	Middle Wekiva	Hydrocotyle	Sailfin molly	19	0.11
99	Middle Wekiva	Hydrocotyle	Sailfin molly	20	0.12
99	Middle Wekiva	Hydrocotyle	Sailfin molly	23	0.22
99	Middle Wekiva	Hydrocotyle	Sailfin molly	24	0.22
99	Middle Wekiva	Hydrocotyle	Sailfin molly	24	0.22
99	Middle Wekiva	Hydrocotyle	Sailfin molly	24	0.23
99	Middle Wekiva	Hydrocotyle	Sailfin molly	25	0.26
99	Middle Wekiva	Hydrocotyle	Sailfin molly	25	0.28
99	Middle Wekiva	Hydrocotyle	Sailfin molly	30	0.41
99	Middle Wekiva	Hydrocotyle	Sailfin molly	34	0.54
99	Middle Wekiva	Hydrocotyle	Sailfin molly	42	1.12
100	Middle Wekiva	Hydrocotyle	Least killifish	9	0.01
100	Middle Wekiva	Hydrocotyle	Least killifish	10	0.01
100	Middle Wekiva	Hydrocotyle	Least killifish	10	0.02
100	Middle Wekiva	Hydrocotyle	Least killifish	11	0.02
100	Middle Wekiva	Hydrocotyle	Least killifish	11	0.01
100	Middle Wekiva	Hydrocotyle	Least killifish	11	0.01
100	Middle Wekiva	Hydrocotyle	Least killifish	13	0.03
100	Middle Wekiva	Hydrocotyle	Least killifish	13	0.03
100	Middle Wekiva	Hydrocotyle	Least killifish	15	0.04
100	Middle Wekiva	Hydrocotyle	Least killifish	16	0.06
100	Middle Wekiva	Hydrocotyle	Least killifish	19	0.10
100	Middle Wekiva	Hydrocotyle	Mosquitofish	11	0.01
100	Middle Wekiva	Hydrocotyle	Mosquitofish	11	0.02
100	Middle Wekiva	Hydrocotyle	Mosquitofish	13	0.03
100	Middle Wekiva	Hydrocotyle	Mosquitofish	14	0.02
100	Middle Wekiva	Hydrocotyle	Mosquitofish	14	0.02
100	Middle Wekiva	Hydrocotyle	Mosquitofish	15	0.03
100	Middle Wekiva	Hydrocotyle	Mosquitofish	19	0.07
100	Middle Wekiva	Hydrocotyle	Mosquitofish	39	0.62

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
100	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	15	0.06
100	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	19	0.13
100	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	23	0.24
100	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	24	0.21
100	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	24	0.19
100	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	25	0.25
100	Middle Wekiva	Hydrocotyle	Redbreast sunfish	154	45.00
100	Middle Wekiva	Hydrocotyle	Tadpole madtom	14	0.03
100	Middle Wekiva	Hydrocotyle	Tadpole madtom	15	0.04
100	Middle Wekiva	Hydrocotyle	Tadpole madtom	16	0.05
101	Middle Wekiva	Vallisneria	Blackbanded darter	40	0.49
101	Middle Wekiva	Vallisneria	Blackbanded darter	55	1.37
101	Middle Wekiva	Vallisneria	Coastal shiner	54	1.36
101	Middle Wekiva	Vallisneria	Pugnose minnow	32	0.19
101	Middle Wekiva	Vallisneria	Spotted sunfish	58	3.65
102	Middle Wekiva	Hydrocotyle	Bluefin killifish	25	0.19
102	Middle Wekiva	Hydrocotyle	Least killifish	9	0.01
102	Middle Wekiva	Hydrocotyle	Least killifish	10	0.01
102	Middle Wekiva	Hydrocotyle	Least killifish	12	0.03
102	Middle Wekiva	Hydrocotyle	Least killifish	14	0.03
102	Middle Wekiva	Hydrocotyle	Least killifish	15	0.05
102	Middle Wekiva	Hydrocotyle	Least killifish	16	0.07
102	Middle Wekiva	Hydrocotyle	Least killifish	17	0.08
102	Middle Wekiva	Hydrocotyle	Least killifish	22	0.16
102	Middle Wekiva	Hydrocotyle	Mosquitofish	10	0.02
102	Middle Wekiva	Hydrocotyle	Mosquitofish	10	0.02
102	Middle Wekiva	Hydrocotyle	Mosquitofish	10	0.02
102	Middle Wekiva	Hydrocotyle	Mosquitofish	12	0.02
102	Middle Wekiva	Hydrocotyle	Mosquitofish	12	0.03
102	Middle Wekiva	Hydrocotyle	Mosquitofish	13	0.03
102	Middle Wekiva	Hydrocotyle	Mosquitofish	14	0.03
102	Middle Wekiva	Hydrocotyle	Mosquitofish	15	0.03
102	Middle Wekiva	Hydrocotyle	Mosquitofish	20	0.10
102	Middle Wekiva	Hydrocotyle	Mosquitofish	21	0.11
102	Middle Wekiva	Hydrocotyle	Mosquitofish	21	0.12
102	Middle Wekiva	Hydrocotyle	Mosquitofish	25	0.15
102	Middle Wekiva	Hydrocotyle	Mosquitofish	34	0.45
102	Middle Wekiva	Hydrocotyle	Mosquitofish	35	0.55
102	Middle Wekiva	Hydrocotyle	Mosquitofish	36	0.59
102	Middle Wekiva	Hydrocotyle	Mosquitofish	37	0.64
102	Middle Wekiva	Hydrocotyle	Mosquitofish	39	0.87
102	Middle Wekiva	Hydrocotyle	Mosquitofish	40	0.88
102	Middle Wekiva	Hydrocotyle	Mosquitofish	41	1.09
102	Middle Wekiva	Hydrocotyle	Sailfin molly	11	0.02
102	Middle Wekiva	Hydrocotyle	Sailfin molly	17	0.10
102	Middle Wekiva	Hydrocotyle	Sailfin molly	19	0.12
102	Middle Wekiva	Hydrocotyle	Sailfin molly	19	0.12
102	Middle Wekiva	Hydrocotyle	Sailfin molly	19	0.10
102	Middle Wekiva	Hydrocotyle	Sailfin molly	19	0.10
102	Middle Wekiva	Hydrocotyle	Sailfin molly	22	0.17
102	Middle Wekiva	Hydrocotyle	Sailfin molly	24	0.22
102	Middle Wekiva	Hydrocotyle	Sailfin molly	24	0.21
102	Middle Wekiva	Hydrocotyle	Sailfin molly	24	0.20
102	Middle Wekiva	Hydrocotyle	Sailfin molly	27	0.28

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
102	Middle Wekiva	Hydrocotyle	Speckled madtom	13	0.03
102	Middle Wekiva	Hydrocotyle	Speckled madtom	20	0.10
102	Middle Wekiva	Hydrocotyle	Speckled madtom	22	0.18
103	Middle Wekiva	Hydrocotyle	Bluefin killifish	32	0.38
103	Middle Wekiva	Hydrocotyle	Least killifish	7	0.01
103	Middle Wekiva	Hydrocotyle	Least killifish	8	0.01
103	Middle Wekiva	Hydrocotyle	Least killifish	8	0.01
103	Middle Wekiva	Hydrocotyle	Least killifish	9	0.01
103	Middle Wekiva	Hydrocotyle	Least killifish	9	0.02
103	Middle Wekiva	Hydrocotyle	Least killifish	9	0.01
103	Middle Wekiva	Hydrocotyle	Least killifish	9	0.01
103	Middle Wekiva	Hydrocotyle	Least killifish	10	0.02
103	Middle Wekiva	Hydrocotyle	Least killifish	10	0.02
103	Middle Wekiva	Hydrocotyle	Least killifish	10	0.02
103	Middle Wekiva	Hydrocotyle	Least killifish	10	0.01
103	Middle Wekiva	Hydrocotyle	Least killifish	10	0.03
103	Middle Wekiva	Hydrocotyle	Least killifish	11	0.02
103	Middle Wekiva	Hydrocotyle	Least killifish	11	0.03
103	Middle Wekiva	Hydrocotyle	Least killifish	11	0.02
103	Middle Wekiva	Hydrocotyle	Least killifish	12	0.02
103	Middle Wekiva	Hydrocotyle	Least killifish	12	0.03
103	Middle Wekiva	Hydrocotyle	Least killifish	12	0.03
103	Middle Wekiva	Hydrocotyle	Least killifish	12	0.03
103	Middle Wekiva	Hydrocotyle	Least killifish	12	0.02
103	Middle Wekiva	Hydrocotyle	Least killifish	12	0.02
103	Middle Wekiva	Hydrocotyle	Least killifish	13	0.02
103	Middle Wekiva	Hydrocotyle	Least killifish	13	0.02
103	Middle Wekiva	Hydrocotyle	Least killifish	13	0.03
103	Middle Wekiva	Hydrocotyle	Least killifish	14	0.04
103	Middle Wekiva	Hydrocotyle	Least killifish	14	0.03
103	Middle Wekiva	Hydrocotyle	Least killifish	14	0.03
103	Middle Wekiva	Hydrocotyle	Least killifish	14	0.05
103	Middle Wekiva	Hydrocotyle	Least killifish	15	0.05
103	Middle Wekiva	Hydrocotyle	Least killifish	15	0.05
103	Middle Wekiva	Hydrocotyle	Least killifish	16	0.07
103	Middle Wekiva	Hydrocotyle	Least killifish	17	0.09
103	Middle Wekiva	Hydrocotyle	Least killifish	17	0.08
103	Middle Wekiva	Hydrocotyle	Least killifish	18	0.09
103	Middle Wekiva	Hydrocotyle	Least killifish	19	0.10
103	Middle Wekiva	Hydrocotyle	Least killifish	19	0.09
103	Middle Wekiva	Hydrocotyle	Least killifish	19	0.11
103	Middle Wekiva	Hydrocotyle	Mosquitofish	9	0.01
103	Middle Wekiva	Hydrocotyle	Mosquitofish	10	0.02
103	Middle Wekiva	Hydrocotyle	Mosquitofish	10	0.01
103	Middle Wekiva	Hydrocotyle	Mosquitofish	10	0.02
103	Middle Wekiva	Hydrocotyle	Mosquitofish	10	0.01
103	Middle Wekiva	Hydrocotyle	Mosquitofish	11	0.02
103	Middle Wekiva	Hydrocotyle	Mosquitofish	11	0.02
103	Middle Wekiva	Hydrocotyle	Mosquitofish	12	0.03
103	Middle Wekiva	Hydrocotyle	Mosquitofish	12	0.02
103	Middle Wekiva	Hydrocotyle	Mosquitofish	14	0.03
103	Middle Wekiva	Hydrocotyle	Mosquitofish	15	0.04
103	Middle Wekiva	Hydrocotyle	Mosquitofish	25	0.16
103	Middle Wekiva	Hydrocotyle	Mosquitofish	29	0.27

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
103	Middle Wekiva	Hydrocotyle	Mosquitofish	32	0.43
103	Middle Wekiva	Hydrocotyle	Mosquitofish	35	0.53
103	Middle Wekiva	Hydrocotyle	Sailfin molly	12	0.02
103	Middle Wekiva	Hydrocotyle	Sailfin molly	15	0.06
103	Middle Wekiva	Hydrocotyle	Spotted sunfish	58	3.82
104	Middle Wekiva	Nuphar	No Fish in Trap	.	.
105	Middle Wekiva	Nuphar	Tadpole madtom	23	0.12
106	Middle Wekiva	Bare Bottom	No Fish in Trap	.	.
107	Middle Wekiva	Bare Bottom	No Fish in Trap	.	.
108	Middle Wekiva	Bare Bottom	No Fish in Trap	.	.
109	Middle Wekiva	Bare Bottom	No Fish in Trap	.	.
110	Middle Wekiva	Bare Bottom	Speckled madtom	17	0.05
111	Middle Wekiva	Bare Bottom	Coastal shiner	50	1.12
112	Middle Wekiva	Bare Bottom	Tadpole madtom	12	0.02
113	Middle Wekiva	Bare Bottom	Bluefin killifish	31	0.36
113	Middle Wekiva	Bare Bottom	Bluefin killifish	33	0.39
114	Middle Wekiva	Vallisneria	Spotted sunfish	45	1.64
114	Middle Wekiva	Vallisneria	Spotted sunfish	50	2.00
114	Middle Wekiva	Vallisneria	Spotted sunfish	72	7.04
114	Middle Wekiva	Vallisneria	Unidentifiable fish	.	.
115	Middle Wekiva	Vallisneria	Sailfin shiner	35	0.39
115	Middle Wekiva	Vallisneria	Spotted sunfish	49	2.26
115	Middle Wekiva	Vallisneria	Spotted sunfish	49	1.97
115	Middle Wekiva	Vallisneria	Spotted sunfish	59	3.58
115	Middle Wekiva	Vallisneria	Spotted sunfish	60	4.36
115	Middle Wekiva	Vallisneria	Spotted sunfish	71	6.44
115	Middle Wekiva	Vallisneria	Spotted sunfish	74	6.99
116	Middle Wekiva	Vallisneria	Sailfin shiner	29	0.18
116	Middle Wekiva	Vallisneria	Sailfin shiner	29	0.22
116	Middle Wekiva	Vallisneria	Sailfin shiner	35	0.38
116	Middle Wekiva	Vallisneria	Sailfin shiner	36	0.40
116	Middle Wekiva	Vallisneria	Sailfin shiner	36	0.40
116	Middle Wekiva	Vallisneria	Sailfin shiner	37	0.43
116	Middle Wekiva	Vallisneria	Sailfin shiner	37	0.45
116	Middle Wekiva	Vallisneria	Sailfin shiner	40	0.54
116	Middle Wekiva	Vallisneria	Sailfin shiner	41	0.64
116	Middle Wekiva	Vallisneria	Sailfin shiner	44	0.77
116	Middle Wekiva	Vallisneria	Spotted sunfish	43	1.40
116	Middle Wekiva	Vallisneria	Spotted sunfish	64	5.14
117	Middle Wekiva	Vallisneria	Sailfin shiner	28	0.19
117	Middle Wekiva	Vallisneria	Sailfin shiner	29	0.22
117	Middle Wekiva	Vallisneria	Sailfin shiner	30	0.26
117	Middle Wekiva	Vallisneria	Sailfin shiner	30	0.21
117	Middle Wekiva	Vallisneria	Sailfin shiner	32	0.28
117	Middle Wekiva	Vallisneria	Sailfin shiner	33	0.32
117	Middle Wekiva	Vallisneria	Sailfin shiner	35	0.39
117	Middle Wekiva	Vallisneria	Sailfin shiner	37	0.43
117	Middle Wekiva	Vallisneria	Sailfin shiner	38	0.48
117	Middle Wekiva	Vallisneria	Sailfin shiner	40	0.60
117	Middle Wekiva	Vallisneria	Speckled madtom	60	2.47
117	Middle Wekiva	Vallisneria	Spotted sunfish	58	3.11
118	Middle Wekiva	Vallisneria	Least killifish	20	0.11
118	Middle Wekiva	Vallisneria	Least killifish	25	0.25
118	Middle Wekiva	Vallisneria	Mosquitofish	17	0.08

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
118	Middle Wekiva	Vallisneria	Mosquitofish	44	1.25
118	Middle Wekiva	Vallisneria	Spotted sunfish	46	1.72
118	Middle Wekiva	Vallisneria	Spotted sunfish	64	4.77
119	Middle Wekiva	Nuphar	No Fish in Trap	.	.
120	Middle Wekiva	Nuphar	Bluefin killifish	35	0.43
120	Middle Wekiva	Nuphar	Bluefin killifish	38	0.53
120	Middle Wekiva	Nuphar	Sailfin shiner	.	0.16
120	Middle Wekiva	Nuphar	Sailfin shiner	24	0.10
120	Middle Wekiva	Nuphar	Sailfin shiner	27	0.14
120	Middle Wekiva	Nuphar	Sailfin shiner	31	0.25
121	Upper Wekiva	Vallisneria	Mosquitofish	29	0.22
121	Upper Wekiva	Vallisneria	Spotted sunfish	53	2.71
121	Upper Wekiva	Vallisneria	Spotted sunfish	60	3.51
121	Upper Wekiva	Vallisneria	Spotted sunfish	77	9.08
121	Upper Wekiva	Vallisneria	Spotted sunfish	88	14.19
121	Upper Wekiva	Vallisneria	Spotted sunfish	91	14.97
121	Upper Wekiva	Vallisneria	Tadpole madtom	55	1.69
122	Upper Wekiva	Nuphar	Mosquitofish	10	0.01
122	Upper Wekiva	Nuphar	Okefenokee pygmy sunfish	19	0.13
122	Upper Wekiva	Nuphar	Pugnose minnow	16	0.03
122	Upper Wekiva	Nuphar	Seminole killifish	19	0.04
123	Upper Wekiva	Nuphar	No Fish in Trap	.	.
124	Upper Wekiva	Hydrocotyle	Bluefin killifish	32	0.38
124	Upper Wekiva	Hydrocotyle	Bluefin killifish	32	0.39
124	Upper Wekiva	Hydrocotyle	Bluefin killifish	35	0.48
124	Upper Wekiva	Hydrocotyle	Least killifish	10	0.02
124	Upper Wekiva	Hydrocotyle	Least killifish	14	0.04
124	Upper Wekiva	Hydrocotyle	Least killifish	14	0.03
124	Upper Wekiva	Hydrocotyle	Least killifish	14	0.05
124	Upper Wekiva	Hydrocotyle	Least killifish	14	0.05
124	Upper Wekiva	Hydrocotyle	Least killifish	15	0.06
124	Upper Wekiva	Hydrocotyle	Least killifish	15	0.05
124	Upper Wekiva	Hydrocotyle	Least killifish	15	0.04
124	Upper Wekiva	Hydrocotyle	Least killifish	15	0.05
124	Upper Wekiva	Hydrocotyle	Least killifish	15	0.06
124	Upper Wekiva	Hydrocotyle	Least killifish	15	0.05
124	Upper Wekiva	Hydrocotyle	Least killifish	17	0.06
124	Upper Wekiva	Hydrocotyle	Least killifish	17	0.06
124	Upper Wekiva	Hydrocotyle	Least killifish	17	0.08
124	Upper Wekiva	Hydrocotyle	Least killifish	17	0.06
124	Upper Wekiva	Hydrocotyle	Least killifish	19	0.11
124	Upper Wekiva	Hydrocotyle	Least killifish	19	0.11
124	Upper Wekiva	Hydrocotyle	Least killifish	20	0.13
124	Upper Wekiva	Hydrocotyle	Least killifish	20	0.09
124	Upper Wekiva	Hydrocotyle	Least killifish	20	0.10
124	Upper Wekiva	Hydrocotyle	Least killifish	20	0.13
124	Upper Wekiva	Hydrocotyle	Least killifish	20	0.10
124	Upper Wekiva	Hydrocotyle	Least killifish	20	0.11
124	Upper Wekiva	Hydrocotyle	Least killifish	20	0.13
124	Upper Wekiva	Hydrocotyle	Least killifish	20	0.12
124	Upper Wekiva	Hydrocotyle	Least killifish	21	0.17
124	Upper Wekiva	Hydrocotyle	Least killifish	21	0.15
124	Upper Wekiva	Hydrocotyle	Least killifish	21	0.15

Spring 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
124	Upper Wekiva	Hydrocotyle	Least killifish	21	0.12
124	Upper Wekiva	Hydrocotyle	Least killifish	21	0.15
124	Upper Wekiva	Hydrocotyle	Least killifish	22	0.15
124	Upper Wekiva	Hydrocotyle	Least killifish	23	0.16
124	Upper Wekiva	Hydrocotyle	Least killifish	23	0.15
124	Upper Wekiva	Hydrocotyle	Least killifish	23	0.14
124	Upper Wekiva	Hydrocotyle	Least killifish	23	0.14
124	Upper Wekiva	Hydrocotyle	Least killifish	23	0.14
124	Upper Wekiva	Hydrocotyle	Least killifish	23	0.17
124	Upper Wekiva	Hydrocotyle	Least killifish	24	0.17
124	Upper Wekiva	Hydrocotyle	Mosquitofish	10	0.03
124	Upper Wekiva	Hydrocotyle	Mosquitofish	11	0.04
124	Upper Wekiva	Hydrocotyle	Mosquitofish	12	0.03
124	Upper Wekiva	Hydrocotyle	Mosquitofish	12	0.04
124	Upper Wekiva	Hydrocotyle	Mosquitofish	12	0.04
124	Upper Wekiva	Hydrocotyle	Mosquitofish	14	0.05
124	Upper Wekiva	Hydrocotyle	Mosquitofish	14	0.05
124	Upper Wekiva	Hydrocotyle	Mosquitofish	14	0.04
124	Upper Wekiva	Hydrocotyle	Mosquitofish	15	0.06
124	Upper Wekiva	Hydrocotyle	Mosquitofish	15	0.07
124	Upper Wekiva	Hydrocotyle	Mosquitofish	15	0.07
124	Upper Wekiva	Hydrocotyle	Mosquitofish	15	0.04
124	Upper Wekiva	Hydrocotyle	Mosquitofish	17	0.06
124	Upper Wekiva	Hydrocotyle	Mosquitofish	18	0.08
124	Upper Wekiva	Hydrocotyle	Mosquitofish	21	0.12
124	Upper Wekiva	Hydrocotyle	Mosquitofish	22	0.13
124	Upper Wekiva	Hydrocotyle	Mosquitofish	22	0.13
124	Upper Wekiva	Hydrocotyle	Mosquitofish	23	0.13
124	Upper Wekiva	Hydrocotyle	Mosquitofish	24	0.14
124	Upper Wekiva	Hydrocotyle	Mosquitofish	25	0.13
124	Upper Wekiva	Hydrocotyle	Mosquitofish	34	0.44
124	Upper Wekiva	Hydrocotyle	Mosquitofish	34	0.44
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	17	0.07
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.10
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.08
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.08
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.09
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.09
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.09
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.09
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	19	0.10
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	19	0.09
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	19	0.10
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	19	0.09
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	19	0.09
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	20	0.12
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	20	0.12
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	20	0.11
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	20	0.13
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	20	0.10
124	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	22	0.16
124	Upper Wekiva	Hydrocotyle	Sailfin molly	12	0.05
124	Upper Wekiva	Hydrocotyle	Sailfin molly	12	0.04
124	Upper Wekiva	Hydrocotyle	Sailfin molly	12	0.03

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Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
124	Upper Wekiva	Hydrocotyle	Sailfin molly	13	0.06
124	Upper Wekiva	Hydrocotyle	Sailfin molly	15	0.07
124	Upper Wekiva	Hydrocotyle	Sailfin molly	16	0.08
124	Upper Wekiva	Hydrocotyle	Sailfin molly	17	0.09
124	Upper Wekiva	Hydrocotyle	Sailfin molly	17	0.09
124	Upper Wekiva	Hydrocotyle	Sailfin molly	17	0.11
124	Upper Wekiva	Hydrocotyle	Sailfin molly	17	0.09
124	Upper Wekiva	Hydrocotyle	Sailfin molly	18	0.12
124	Upper Wekiva	Hydrocotyle	Sailfin molly	19	0.12
124	Upper Wekiva	Hydrocotyle	Sailfin molly	19	0.13
124	Upper Wekiva	Hydrocotyle	Sailfin molly	19	0.10
124	Upper Wekiva	Hydrocotyle	Sailfin molly	19	0.10
124	Upper Wekiva	Hydrocotyle	Sailfin molly	19	0.10
124	Upper Wekiva	Hydrocotyle	Sailfin molly	20	0.14
124	Upper Wekiva	Hydrocotyle	Sailfin molly	20	0.13
124	Upper Wekiva	Hydrocotyle	Sailfin molly	20	0.12
124	Upper Wekiva	Hydrocotyle	Sailfin molly	23	0.18
124	Upper Wekiva	Hydrocotyle	Sailfin molly	24	0.19
124	Upper Wekiva	Hydrocotyle	Sailfin molly	24	0.21
124	Upper Wekiva	Hydrocotyle	Sailfin molly	25	0.24
124	Upper Wekiva	Hydrocotyle	Sailfin molly	25	0.24
124	Upper Wekiva	Hydrocotyle	Spotted sunfish	75	7.72
124	Upper Wekiva	Hydrocotyle	Spotted sunfish	99	17.13
125	Upper Wekiva	Hydrocotyle	Bluefin killifish	19	0.16
125	Upper Wekiva	Hydrocotyle	Least killifish	8	0.01
125	Upper Wekiva	Hydrocotyle	Least killifish	8	0.01
125	Upper Wekiva	Hydrocotyle	Least killifish	9	0.02
125	Upper Wekiva	Hydrocotyle	Least killifish	10	0.02
125	Upper Wekiva	Hydrocotyle	Least killifish	10	0.02
125	Upper Wekiva	Hydrocotyle	Least killifish	12	0.03
125	Upper Wekiva	Hydrocotyle	Least killifish	12	0.03
125	Upper Wekiva	Hydrocotyle	Least killifish	13	0.04
125	Upper Wekiva	Hydrocotyle	Least killifish	13	0.03
125	Upper Wekiva	Hydrocotyle	Least killifish	13	0.04
125	Upper Wekiva	Hydrocotyle	Least killifish	14	0.04
125	Upper Wekiva	Hydrocotyle	Least killifish	14	0.04
125	Upper Wekiva	Hydrocotyle	Least killifish	14	0.04
125	Upper Wekiva	Hydrocotyle	Least killifish	14	0.03
125	Upper Wekiva	Hydrocotyle	Least killifish	15	0.04
125	Upper Wekiva	Hydrocotyle	Least killifish	15	0.05
125	Upper Wekiva	Hydrocotyle	Least killifish	15	0.05
125	Upper Wekiva	Hydrocotyle	Least killifish	15	0.05
125	Upper Wekiva	Hydrocotyle	Least killifish	15	0.05
125	Upper Wekiva	Hydrocotyle	Least killifish	15	0.06
125	Upper Wekiva	Hydrocotyle	Least killifish	17	0.07
125	Upper Wekiva	Hydrocotyle	Least killifish	18	0.09
125	Upper Wekiva	Hydrocotyle	Least killifish	22	0.17
125	Upper Wekiva	Hydrocotyle	Least killifish	22	0.14
125	Upper Wekiva	Hydrocotyle	Least killifish	22	0.17
125	Upper Wekiva	Hydrocotyle	Least killifish	23	0.15
125	Upper Wekiva	Hydrocotyle	Mosquitofish	11	0.04
125	Upper Wekiva	Hydrocotyle	Mosquitofish	12	0.04
125	Upper Wekiva	Hydrocotyle	Mosquitofish	15	0.06

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Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
125	Upper Wekiva	Hydrocotyle	Mosquitofish	15	0.03
125	Upper Wekiva	Hydrocotyle	Mosquitofish	18	0.11
125	Upper Wekiva	Hydrocotyle	Mosquitofish	19	0.08
125	Upper Wekiva	Hydrocotyle	Mosquitofish	20	0.09
125	Upper Wekiva	Hydrocotyle	Mosquitofish	20	0.08
125	Upper Wekiva	Hydrocotyle	Mosquitofish	22	0.13
125	Upper Wekiva	Hydrocotyle	Mosquitofish	25	0.19
125	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	10	0.04
125	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	11	0.03
125	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	12	0.03
125	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	13	0.05
125	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	13	0.04
125	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	13	0.04
125	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.06
125	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.05
125	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.04
125	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.04
125	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	15	0.05
125	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	15	0.05
125	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	17	0.08
125	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	20	0.14
125	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	20	0.12
125	Upper Wekiva	Hydrocotyle	Sailfin molly	10	0.02
125	Upper Wekiva	Hydrocotyle	Sailfin molly	10	0.02
125	Upper Wekiva	Hydrocotyle	Sailfin molly	10	0.01
125	Upper Wekiva	Hydrocotyle	Sailfin molly	10	0.02
125	Upper Wekiva	Hydrocotyle	Sailfin molly	15	0.06
125	Upper Wekiva	Hydrocotyle	Sailfin molly	23	0.22
125	Upper Wekiva	Hydrocotyle	Spotted sunfish	15	0.06
125	Upper Wekiva	Hydrocotyle	Spotted sunfish	52	2.39
125	Upper Wekiva	Hydrocotyle	Spotted sunfish	60	3.99
126	Upper Wekiva	Vallisneria	Coastal shiner	52	1.27
126	Upper Wekiva	Vallisneria	Coastal shiner	72	3.03
126	Upper Wekiva	Vallisneria	Redbreast sunfish	38	0.93
126	Upper Wekiva	Vallisneria	Spotted sunfish	47	1.84
126	Upper Wekiva	Vallisneria	Tadpole madtom	65	2.91
127	Upper Wekiva	Vallisneria	Coastal shiner	52	1.15
127	Upper Wekiva	Vallisneria	Spotted sunfish	43	1.45
127	Upper Wekiva	Vallisneria	Spotted sunfish	47	1.81
128	Upper Wekiva	Vallisneria	Brook silverside	75	1.60
128	Upper Wekiva	Vallisneria	Sailfin shiner	32	0.25
128	Upper Wekiva	Vallisneria	Sailfin shiner	36	0.41
128	Upper Wekiva	Vallisneria	Spotted sunfish	59	3.68
129	Upper Wekiva	Vallisneria	Pugnose minnow	40	0.73
129	Upper Wekiva	Vallisneria	Sailfin shiner	29	0.22
129	Upper Wekiva	Vallisneria	Sailfin shiner	30	0.23
129	Upper Wekiva	Vallisneria	Sailfin shiner	30	0.23
129	Upper Wekiva	Vallisneria	Sailfin shiner	31	0.25
129	Upper Wekiva	Vallisneria	Sailfin shiner	32	0.21
129	Upper Wekiva	Vallisneria	Sailfin shiner	32	0.28
129	Upper Wekiva	Vallisneria	Sailfin shiner	32	0.27
129	Upper Wekiva	Vallisneria	Sailfin shiner	35	0.38
129	Upper Wekiva	Vallisneria	Sailfin shiner	35	0.40
129	Upper Wekiva	Vallisneria	Sailfin shiner	36	0.45

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Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
129	Upper Wekiva	Vallisneria	Sailfin shiner	41	0.56
129	Upper Wekiva	Vallisneria	Tadpole madtom	65	3.08
129	Upper Wekiva	Vallisneria	Tadpole madtom	65	3.12
129	Upper Wekiva	Vallisneria	Tadpole madtom	65	3.35
129	Upper Wekiva	Vallisneria	Tadpole madtom	67	3.75
130	Upper Wekiva	Hydrocotyle	Least killifish	10	0.02
130	Upper Wekiva	Hydrocotyle	Least killifish	13	0.04
130	Upper Wekiva	Hydrocotyle	Least killifish	17	0.09
130	Upper Wekiva	Hydrocotyle	Least killifish	17	0.05
130	Upper Wekiva	Hydrocotyle	Least killifish	17	0.07
130	Upper Wekiva	Hydrocotyle	Least killifish	18	0.06
130	Upper Wekiva	Hydrocotyle	Least killifish	21	0.13
130	Upper Wekiva	Hydrocotyle	Mosquitofish	15	0.04
130	Upper Wekiva	Hydrocotyle	Mosquitofish	17	0.04
130	Upper Wekiva	Hydrocotyle	Mosquitofish	21	0.10
130	Upper Wekiva	Hydrocotyle	Mosquitofish	35	0.36
130	Upper Wekiva	Hydrocotyle	Mosquitofish	40	0.84
130	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	11	0.02
130	Upper Wekiva	Hydrocotyle	Tadpole madtom	21	0.09
130	Upper Wekiva	Hydrocotyle	Tadpole madtom	23	0.10
131	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	21	0.16
131	Upper Wekiva	Hydrocotyle	Redbreast sunfish	15	0.06
132	Upper Wekiva	Hydrocotyle	Largemouth bass	22	0.13
132	Upper Wekiva	Hydrocotyle	Least killifish	10	0.01
132	Upper Wekiva	Hydrocotyle	Least killifish	16	0.06
132	Upper Wekiva	Hydrocotyle	Least killifish	19	0.09
132	Upper Wekiva	Hydrocotyle	Mosquitofish	10	0.02
132	Upper Wekiva	Hydrocotyle	Mosquitofish	13	0.03
132	Upper Wekiva	Hydrocotyle	Mosquitofish	13	0.02
132	Upper Wekiva	Hydrocotyle	Mosquitofish	15	0.04
132	Upper Wekiva	Hydrocotyle	Mosquitofish	15	0.03
132	Upper Wekiva	Hydrocotyle	Mosquitofish	15	0.04
132	Upper Wekiva	Hydrocotyle	Mosquitofish	15	0.03
132	Upper Wekiva	Hydrocotyle	Mosquitofish	19	0.09
132	Upper Wekiva	Hydrocotyle	Mosquitofish	19	0.07
132	Upper Wekiva	Hydrocotyle	Mosquitofish	19	0.05
132	Upper Wekiva	Hydrocotyle	Mosquitofish	19	0.07
132	Upper Wekiva	Hydrocotyle	Mosquitofish	35	0.61
132	Upper Wekiva	Hydrocotyle	Redbreast sunfish	13	0.03
133	Upper Wekiva	Nuphar	Coastal shiner	54	1.11
133	Upper Wekiva	Nuphar	Sailfin molly	46	1.51
134	Upper Wekiva	Nuphar	Coastal shiner	53	1.26
134	Upper Wekiva	Nuphar	Coastal shiner	54	1.26
135	Upper Wekiva	Nuphar	Brown darter	39	0.46
135	Upper Wekiva	Nuphar	Coastal shiner	51	1.17
135	Upper Wekiva	Nuphar	Coastal shiner	52	1.23
135	Upper Wekiva	Nuphar	Coastal shiner	53	1.33
135	Upper Wekiva	Nuphar	Coastal shiner	54	1.41
135	Upper Wekiva	Nuphar	Coastal shiner	59	1.67

Appendix 3.1.9

Fall 1997 Throw Trap Fish Data

Wekiva River System

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
1	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.18
1	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
1	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.09
1	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.12
1	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.15
1	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.16
1	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.16
1	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.15
1	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.13
1	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.19
1	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.18
1	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.24
1	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.24
1	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.34
1	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.32
1	Lower Wekiva	Vallisneria	Brown darter	35	0.60
1	Lower Wekiva	Vallisneria	Brown darter	43	0.91
1	Lower Wekiva	Vallisneria	Sailfin shiner	35	0.48
1	Lower Wekiva	Vallisneria	Spotted sunfish	17	0.12
1	Lower Wekiva	Vallisneria	Spotted sunfish	18	0.23
1	Lower Wekiva	Vallisneria	Spotted sunfish	30	0.70
1	Lower Wekiva	Vallisneria	Spotted sunfish	50	2.88
1	Lower Wekiva	Vallisneria	Tadpole madtom	46	1.36
2	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.08
2	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
2	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.13
2	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.11
2	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.18
2	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.19
2	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.20
2	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.18
2	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.30
2	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.37
2	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.55
2	Lower Wekiva	Vallisneria	Redbreast sunfish	55	2.89
2	Lower Wekiva	Vallisneria	Spotted sunfish	18	0.13
2	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.78
2	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.70
2	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.31
2	Lower Wekiva	Vallisneria	Tadpole madtom	15	0.06
3	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
3	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.05
3	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.05
3	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
3	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
3	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
3	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.14
3	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.14
3	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.15
3	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.16
3	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.14
3	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.18
3	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.17
3	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.26

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
3	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.25
3	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.30
3	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.31
3	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.42
3	Lower Wekiva	Vallisneria	Seminole killifish	61	2.49
3	Lower Wekiva	Vallisneria	Seminole killifish	81	5.98
3	Lower Wekiva	Vallisneria	Spotted sunfish	11	0.06
3	Lower Wekiva	Vallisneria	Spotted sunfish	23	0.28
3	Lower Wekiva	Vallisneria	Spotted sunfish	55	4.05
3	Lower Wekiva	Vallisneria	Spotted sunfish	78	10.91
3	Lower Wekiva	Vallisneria	Tadpole madtom	33	0.53
3	Lower Wekiva	Vallisneria	Tadpole madtom	33	0.49
3	Lower Wekiva	Vallisneria	Tadpole madtom	43	0.88
3	Lower Wekiva	Vallisneria	Tadpole madtom	44	0.98
3	Lower Wekiva	Vallisneria	Tadpole madtom	45	1.03
3	Lower Wekiva	Vallisneria	Tadpole madtom	51	1.63
3	Lower Wekiva	Vallisneria	Tadpole madtom	53	1.86
4	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.03
4	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.04
4	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.03
4	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
4	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
4	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.11
4	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.13
4	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.14
4	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.16
4	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.21
4	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.21
4	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.24
4	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.28
4	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.35
4	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.74
4	Lower Wekiva	Vallisneria	Coastal shiner	42	0.90
4	Lower Wekiva	Vallisneria	Coastal shiner	43	0.86
4	Lower Wekiva	Vallisneria	Coastal shiner	44	1.06
4	Lower Wekiva	Vallisneria	Coastal shiner	44	1.05
4	Lower Wekiva	Vallisneria	Coastal shiner	45	0.99
4	Lower Wekiva	Vallisneria	Mosquitofish	20	0.14
4	Lower Wekiva	Vallisneria	Redbreast sunfish	13	0.08
4	Lower Wekiva	Vallisneria	Redbreast sunfish	17	0.15
4	Lower Wekiva	Vallisneria	Redbreast sunfish	17	0.15
4	Lower Wekiva	Vallisneria	Redbreast sunfish	18	0.16
4	Lower Wekiva	Vallisneria	Redbreast sunfish	22	0.31
4	Lower Wekiva	Vallisneria	Redbreast sunfish	23	0.33
4	Lower Wekiva	Vallisneria	Redbreast sunfish	23	0.27
4	Lower Wekiva	Vallisneria	Redbreast sunfish	23	0.33
4	Lower Wekiva	Vallisneria	Redbreast sunfish	24	0.26
4	Lower Wekiva	Vallisneria	Redbreast sunfish	28	0.43
4	Lower Wekiva	Vallisneria	Redbreast sunfish	28	0.48
4	Lower Wekiva	Vallisneria	Redbreast sunfish	34	0.75
4	Lower Wekiva	Vallisneria	Redbreast sunfish	45	1.53
4	Lower Wekiva	Vallisneria	Sailfin shiner	19	0.09
4	Lower Wekiva	Vallisneria	Sailfin shiner	34	0.43
4	Lower Wekiva	Vallisneria	Sailfin shiner	40	0.71

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
4	Lower Wekiva	Vallisneria	Spotted sunfish	33	0.84
4	Lower Wekiva	Vallisneria	Spotted sunfish	34	0.97
4	Lower Wekiva	Vallisneria	Tadpole madtom	17	0.08
4	Lower Wekiva	Vallisneria	Tadpole madtom	22	0.21
4	Lower Wekiva	Vallisneria	Tadpole madtom	24	0.26
4	Lower Wekiva	Vallisneria	Tadpole madtom	27	0.26
4	Lower Wekiva	Vallisneria	Tadpole madtom	55	2.17
5	Lower Wekiva	Vallisneria	Bluefin killifish	8	0.02
5	Lower Wekiva	Vallisneria	Bluefin killifish	8	0.02
5	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.02
5	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.03
5	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.03
5	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.04
5	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
5	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
5	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.07
5	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.10
5	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
5	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.14
5	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.14
5	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.14
5	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.12
5	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.16
5	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.23
5	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.19
5	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
5	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.29
5	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.41
5	Lower Wekiva	Vallisneria	Coastal shiner	27	0.20
5	Lower Wekiva	Vallisneria	Coastal shiner	42	0.80
5	Lower Wekiva	Vallisneria	Sailfin shiner	21	0.11
5	Lower Wekiva	Vallisneria	Sailfin shiner	40	0.58
5	Lower Wekiva	Vallisneria	Spotted sunfish	21	0.18
5	Lower Wekiva	Vallisneria	Spotted sunfish	31	0.72
5	Lower Wekiva	Vallisneria	Spotted sunfish	34	0.89
5	Lower Wekiva	Vallisneria	Tadpole madtom	14	0.05
6	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.03
6	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.08
6	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.03
6	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.05
6	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
6	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.07
6	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.11
6	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.11
6	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.13
6	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.15
6	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.37
6	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.43
6	Lower Wekiva	Vallisneria	Sailfin shiner	40	0.51
6	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.39
7	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.09
7	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.14
7	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.24
7	Lower Wekiva	Vallisneria	Spotted sunfish	28	0.56

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
7	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.88
7	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.26
7	Lower Wekiva	Vallisneria	Tadpole madtom	50	1.70
7	Lower Wekiva	Vallisneria	Tadpole madtom	51	1.68
7	Lower Wekiva	Vallisneria	Tadpole madtom	51	2.04
7	Lower Wekiva	Vallisneria	Tadpole madtom	54	1.61
7	Lower Wekiva	Vallisneria	Tadpole madtom	58	2.47
7	Lower Wekiva	Vallisneria	White catfish	66	3.22
8	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
8	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
8	Lower Wekiva	Vallisneria	Redbreast sunfish	56	3.26
8	Lower Wekiva	Vallisneria	Spotted sunfish	18	0.17
8	Lower Wekiva	Vallisneria	Spotted sunfish	29	0.57
8	Lower Wekiva	Vallisneria	Spotted sunfish	35	0.92
8	Lower Wekiva	Vallisneria	Tadpole madtom	24	0.22
8	Lower Wekiva	Vallisneria	Tadpole madtom	30	0.36
8	Lower Wekiva	Vallisneria	Tadpole madtom	44	1.07
9	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.04
9	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
9	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.07
9	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.10
9	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.09
9	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
9	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
9	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.13
9	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.14
9	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.14
9	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.16
9	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.18
9	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.15
9	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.17
9	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.17
9	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.17
9	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.18
9	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
9	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
9	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.19
9	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
9	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
9	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.20
9	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.23
9	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.24
9	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.23
9	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.23
9	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.25
9	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.28
9	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.28
9	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.39
9	Lower Wekiva	Vallisneria	Coastal shiner	33	0.44
9	Lower Wekiva	Vallisneria	Pugnose minnow	37	0.51
9	Lower Wekiva	Vallisneria	Redear sunfish	250	287.00
9	Lower Wekiva	Vallisneria	Tadpole madtom	20	0.15
9	Lower Wekiva	Vallisneria	Tadpole madtom	21	0.14
9	Lower Wekiva	Vallisneria	Tadpole madtom	22	0.15

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
9	Lower Wekiva	Vallisneria	Tadpole madtom	23	0.17
9	Lower Wekiva	Vallisneria	Tadpole madtom	25	0.25
9	Lower Wekiva	Vallisneria	Tadpole madtom	40	0.89
10	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
11	Lower Wekiva	Bare Bottom	Bluefin killifish	15	0.07
11	Lower Wekiva	Bare Bottom	Bluefin killifish	17	0.08
11	Lower Wekiva	Bare Bottom	Bluefin killifish	18	0.09
11	Lower Wekiva	Bare Bottom	Bluefin killifish	21	0.13
11	Lower Wekiva	Bare Bottom	Bluefin killifish	21	0.15
11	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.21
12	Lower Wekiva	Bare Bottom	Bluefin killifish	13	0.05
12	Lower Wekiva	Bare Bottom	Bluefin killifish	14	0.04
12	Lower Wekiva	Bare Bottom	Bluefin killifish	15	0.07
12	Lower Wekiva	Bare Bottom	Bluefin killifish	17	0.10
12	Lower Wekiva	Bare Bottom	Bluefin killifish	17	0.09
12	Lower Wekiva	Bare Bottom	Bluefin killifish	18	0.09
12	Lower Wekiva	Bare Bottom	Bluefin killifish	19	0.11
12	Lower Wekiva	Bare Bottom	Bluefin killifish	28	0.32
13	Lower Wekiva	Bare Bottom	Bluefin killifish	10	0.02
13	Lower Wekiva	Bare Bottom	Bluefin killifish	11	0.03
13	Lower Wekiva	Bare Bottom	Bluefin killifish	11	0.03
13	Lower Wekiva	Bare Bottom	Bluefin killifish	12	0.03
13	Lower Wekiva	Bare Bottom	Bluefin killifish	12	0.04
13	Lower Wekiva	Bare Bottom	Bluefin killifish	15	0.06
13	Lower Wekiva	Bare Bottom	Bluefin killifish	15	0.06
13	Lower Wekiva	Bare Bottom	Bluefin killifish	19	0.10
13	Lower Wekiva	Bare Bottom	Tadpole madtom	21	0.11
13	Lower Wekiva	Bare Bottom	Tadpole madtom	23	0.16
13	Lower Wekiva	Bare Bottom	Tadpole madtom	24	0.16
13	Lower Wekiva	Bare Bottom	Tadpole madtom	33	0.33
13	Lower Wekiva	Bare Bottom	Tadpole madtom	35	0.47
14	Lower Wekiva	Bare Bottom	Bluefin killifish	.	0.09
14	Lower Wekiva	Bare Bottom	Bluefin killifish	7	0.01
14	Lower Wekiva	Bare Bottom	Bluefin killifish	10	0.03
14	Lower Wekiva	Bare Bottom	Bluefin killifish	11	0.04
14	Lower Wekiva	Bare Bottom	Bluefin killifish	12	0.03
14	Lower Wekiva	Bare Bottom	Bluefin killifish	13	0.05
14	Lower Wekiva	Bare Bottom	Bluefin killifish	13	0.05
14	Lower Wekiva	Bare Bottom	Bluefin killifish	14	0.07
14	Lower Wekiva	Bare Bottom	Bluefin killifish	18	0.11
14	Lower Wekiva	Bare Bottom	Bluefin killifish	19	0.12
14	Lower Wekiva	Bare Bottom	Bluefin killifish	21	0.15
14	Lower Wekiva	Bare Bottom	Tadpole madtom	11	0.03
14	Lower Wekiva	Bare Bottom	Tadpole madtom	14	0.06
14	Lower Wekiva	Bare Bottom	Tadpole madtom	14	0.05
14	Lower Wekiva	Bare Bottom	Tadpole madtom	14	0.05
14	Lower Wekiva	Bare Bottom	Tadpole madtom	17	0.08
14	Lower Wekiva	Bare Bottom	Tadpole madtom	17	0.07
14	Lower Wekiva	Bare Bottom	Tadpole madtom	18	0.09
14	Lower Wekiva	Bare Bottom	Tadpole madtom	19	0.08
14	Lower Wekiva	Bare Bottom	Tadpole madtom	19	0.12
14	Lower Wekiva	Bare Bottom	Tadpole madtom	22	0.14
14	Lower Wekiva	Bare Bottom	Tadpole madtom	28	0.31
14	Lower Wekiva	Bare Bottom	Tadpole madtom	29	0.25

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
14	Lower Wekiva	Bare Bottom	Tadpole madtom	37	0.56
14	Lower Wekiva	Bare Bottom	Tadpole madtom	39	0.62
15	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
16	Lower Wekiva	Bare Bottom	Bluefin killifish	10	0.02
16	Lower Wekiva	Bare Bottom	Bluefin killifish	12	0.03
16	Lower Wekiva	Bare Bottom	Bluefin killifish	12	0.05
16	Lower Wekiva	Bare Bottom	Bluefin killifish	14	0.05
16	Lower Wekiva	Bare Bottom	Coastal shiner	20	0.08
16	Lower Wekiva	Bare Bottom	Coastal shiner	22	0.11
16	Lower Wekiva	Bare Bottom	Coastal shiner	22	0.11
16	Lower Wekiva	Bare Bottom	Coastal shiner	28	0.19
17	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
18	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.07
18	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.07
18	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.10
18	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.09
18	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.09
18	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.11
18	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
18	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.12
18	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.16
18	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.13
18	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.14
18	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.16
18	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.15
18	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.17
18	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.17
18	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.15
18	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.19
18	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.21
18	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.26
18	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
18	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.20
18	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.23
18	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.22
18	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.31
18	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.30
18	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.36
18	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.41
18	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.44
18	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.54
18	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.62
18	Lower Wekiva	Vallisneria	Least killifish	14	0.07
18	Lower Wekiva	Vallisneria	Least killifish	14	0.09
18	Lower Wekiva	Vallisneria	Least killifish	18	0.15
18	Lower Wekiva	Vallisneria	Least killifish	24	0.27
18	Lower Wekiva	Vallisneria	Mosquitofish	17	0.09
18	Lower Wekiva	Vallisneria	Mosquitofish	20	0.14
18	Lower Wekiva	Vallisneria	Sailfin shiner	24	0.16
18	Lower Wekiva	Vallisneria	Speckled madtom	57	1.92
18	Lower Wekiva	Vallisneria	Spotted sunfish	15	0.11
18	Lower Wekiva	Vallisneria	Spotted sunfish	22	0.29
18	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.46
18	Lower Wekiva	Vallisneria	Spotted sunfish	28	0.49

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
18	Lower Wekiva	Vallisneria	Spotted sunfish	28	0.61
19	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.02
19	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.05
19	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.07
19	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.07
19	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.11
19	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.38
19	Lower Wekiva	Vallisneria	Brown darter	40	0.67
19	Lower Wekiva	Vallisneria	Redbreast sunfish	55	2.85
20	Lower Wekiva	Vallisneria	No Fish in Trap	.	.
21	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
21	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
21	Lower Wekiva	Vallisneria	Bluefin killifish	41	0.94
21	Lower Wekiva	Vallisneria	Brown darter	41	0.91
21	Lower Wekiva	Vallisneria	Redbreast sunfish	51	2.17
21	Lower Wekiva	Vallisneria	Sailfin shiner	14	0.04
21	Lower Wekiva	Vallisneria	Sailfin shiner	39	0.51
21	Lower Wekiva	Vallisneria	Spotted sunfish	12	0.06
21	Lower Wekiva	Vallisneria	Spotted sunfish	16	0.10
21	Lower Wekiva	Vallisneria	Spotted sunfish	27	0.40
21	Lower Wekiva	Vallisneria	Spotted sunfish	29	0.57
21	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.81
21	Lower Wekiva	Vallisneria	Spotted sunfish	42	1.91
21	Lower Wekiva	Vallisneria	Spotted sunfish	80	10.38
21	Lower Wekiva	Vallisneria	Tadpole madtom	37	0.66
21	Lower Wekiva	Vallisneria	Tadpole madtom	54	2.07
22	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.03
22	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.02
22	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.02
22	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.02
22	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.03
22	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
22	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
22	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.04
22	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.04
22	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
22	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.08
22	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.09
22	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.09
22	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.14
22	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.16
22	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
22	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.30
22	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.26
22	Lower Wekiva	Vallisneria	Brown darter	35	0.49
22	Lower Wekiva	Vallisneria	Brown darter	38	0.60
22	Lower Wekiva	Vallisneria	Brown darter	44	0.94
22	Lower Wekiva	Vallisneria	Mosquitofish	9	0.02
22	Lower Wekiva	Vallisneria	Mosquitofish	14	0.07
22	Lower Wekiva	Vallisneria	Seminole killifish	56	1.39
22	Lower Wekiva	Vallisneria	Spotted sunfish	19	0.20
22	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.35
22	Lower Wekiva	Vallisneria	Spotted sunfish	36	1.07
22	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.27

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
23	Lower Wekiva	Vallisneria	Pirate perch	54	2.30
23	Lower Wekiva	Vallisneria	Redbreast sunfish	28	0.51
23	Lower Wekiva	Vallisneria	Redbreast sunfish	39	1.11
23	Lower Wekiva	Vallisneria	Spotted sunfish	76	8.82
23	Lower Wekiva	Vallisneria	Tadpole madtom	50	1.65
23	Lower Wekiva	Vallisneria	White catfish	42	0.98
24	Lower Wekiva	Vallisneria	No Fish in Trap	.	.
25	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
25	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.07
25	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.48
26	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.05
26	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.12
26	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.29
26	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.27
26	Lower Wekiva	Vallisneria	Bluefin killifish	41	0.81
26	Lower Wekiva	Vallisneria	Mosquitofish	20	0.15
26	Lower Wekiva	Vallisneria	Mosquitofish	29	0.44
26	Lower Wekiva	Vallisneria	Mosquitofish	45	0.08
26	Lower Wekiva	Vallisneria	Seminole killifish	26	2.02
26	Lower Wekiva	Vallisneria	Seminole killifish	56	2.02
26	Lower Wekiva	Vallisneria	Spotted sunfish	19	0.21
26	Lower Wekiva	Vallisneria	Spotted sunfish	21	0.25
26	Lower Wekiva	Vallisneria	Spotted sunfish	23	0.35
26	Lower Wekiva	Vallisneria	Spotted sunfish	30	0.71
26	Lower Wekiva	Vallisneria	Spotted sunfish	44	1.91
26	Lower Wekiva	Vallisneria	Spotted sunfish	55	3.58
26	Lower Wekiva	Vallisneria	Tadpole madtom	25	0.28
26	Lower Wekiva	Vallisneria	Tadpole madtom	48	1.43
27	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.30
27	Lower Wekiva	Vallisneria	Largemouth bass	94	10.19
27	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.87
27	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.48
27	Lower Wekiva	Vallisneria	Spotted sunfish	65	6.10
28	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
28	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.12
28	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
28	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.19
28	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.43
28	Lower Wekiva	Vallisneria	Coastal shiner	.	1.33
28	Lower Wekiva	Vallisneria	Spotted sunfish	.	.
29	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.21
29	Lower Wekiva	Vallisneria	Redbreast sunfish	42	1.49
29	Lower Wekiva	Vallisneria	Seminole killifish	54	1.71
29	Lower Wekiva	Vallisneria	Seminole killifish	79	6.26
29	Lower Wekiva	Vallisneria	Seminole killifish	106	12.70
29	Lower Wekiva	Vallisneria	Spotted sunfish	52	3.20
29	Lower Wekiva	Vallisneria	Spotted sunfish	54	3.64
29	Lower Wekiva	Vallisneria	Spotted sunfish	97	21.46
30	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
30	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
30	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
30	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.04
30	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
30	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.08

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
30	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
30	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
30	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.09
30	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
30	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.09
30	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.10
30	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.11
30	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.11
30	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.13
30	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.14
30	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.13
30	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.16
30	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.17
30	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.16
30	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.15
30	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.39
30	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.35
30	Lower Wekiva	Vallisneria	Coastal shiner	48	1.26
30	Lower Wekiva	Vallisneria	Tadpole madtom	19	0.14
30	Lower Wekiva	Vallisneria	Tadpole madtom	21	0.20
31	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
32	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
33	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
34	Lower Wekiva	Bare Bottom	Bluefin killifish	14	0.06
34	Lower Wekiva	Bare Bottom	Bluefin killifish	14	0.06
34	Lower Wekiva	Bare Bottom	Bluefin killifish	15	0.08
34	Lower Wekiva	Bare Bottom	Bluefin killifish	18	0.09
34	Lower Wekiva	Bare Bottom	Bluefin killifish	22	0.17
34	Lower Wekiva	Bare Bottom	Bluefin killifish	22	0.19
34	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.24
34	Lower Wekiva	Bare Bottom	Tadpole madtom	17	0.08
34	Lower Wekiva	Bare Bottom	Tadpole madtom	21	0.18
34	Lower Wekiva	Bare Bottom	Tadpole madtom	23	0.20
34	Lower Wekiva	Bare Bottom	Tadpole madtom	29	0.40
35	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
36	Lower Wekiva	Vallisneria	Bluefin killifish	7	0.03
36	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.01
36	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.02
36	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.03
36	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.03
36	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.03
36	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.04
36	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
36	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
36	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
36	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
36	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
36	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
36	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
36	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.10
36	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.13
36	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.24
36	Lower Wekiva	Vallisneria	Tadpole madtom	10	0.05
37	Lower Wekiva	Vallisneria	Bluefin killifish	.	.

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
37	Lower Wekiva	Vallisneria	Bluefin killifish	7	0.02
37	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.02
37	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.04
37	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
37	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
37	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
37	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
37	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.06
37	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.06
37	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.06
37	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
37	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.06
37	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.07
37	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.08
37	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
37	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.05
37	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.08
37	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.08
37	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.08
37	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.11
37	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.08
37	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.09
37	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
37	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.18
37	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.21
37	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.30
37	Lower Wekiva	Vallisneria	Tadpole madtom	22	0.15
37	Lower Wekiva	Vallisneria	Tadpole madtom	36	0.70
37	Lower Wekiva	Vallisneria	Yellow bullhead	51	1.88
38	Lower Wekiva	Vallisneria	Bluefin killifish	8	0.03
38	Lower Wekiva	Vallisneria	Bluefin killifish	8	0.02
38	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.02
38	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.03
38	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.02
38	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.03
38	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.04
38	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
38	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
38	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
38	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
38	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
38	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.04
38	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
38	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
38	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
38	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
38	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
38	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.05
38	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
38	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.08
38	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.10
38	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
38	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.08
38	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.11

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
38	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.13
38	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.14
38	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
38	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.24
38	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.43
38	Lower Wekiva	Vallisneria	Sailfin shiner	33	0.40
38	Lower Wekiva	Vallisneria	Sailfin shiner	36	0.53
38	Lower Wekiva	Vallisneria	Seminole killifish	59	2.13
38	Lower Wekiva	Vallisneria	Spotted sunfish	21	0.21
38	Lower Wekiva	Vallisneria	Spotted sunfish	22	0.32
38	Lower Wekiva	Vallisneria	Spotted sunfish	35	1.07
39	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.03
39	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.04
39	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
39	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.05
39	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
39	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
39	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
39	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
39	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.07
39	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
39	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
39	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
39	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
39	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
39	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.10
39	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.09
39	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
39	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
39	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.09
39	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.14
39	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.13
39	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.13
39	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.18
39	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
39	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.26
39	Lower Wekiva	Vallisneria	Coastal shiner	32	0.41
39	Lower Wekiva	Vallisneria	Coastal shiner	32	0.39
39	Lower Wekiva	Vallisneria	Coastal shiner	34	0.55
39	Lower Wekiva	Vallisneria	Coastal shiner	45	1.01
39	Lower Wekiva	Vallisneria	Coastal shiner	49	1.29
39	Lower Wekiva	Vallisneria	Lake chubsucker	143	40.36
39	Lower Wekiva	Vallisneria	Pugnose minnow	32	0.38
39	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.47
40	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.08
40	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.14
40	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.11
40	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.16
40	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.14
40	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.16
40	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.14
40	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.38
40	Lower Wekiva	Vallisneria	Brown darter	33	0.44
40	Lower Wekiva	Vallisneria	Largemouth bass	22	4.99

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
40	Lower Wekiva	Vallisneria	Least killifish	16	0.09
40	Lower Wekiva	Vallisneria	Mosquitofish	7	0.02
40	Lower Wekiva	Vallisneria	Mosquitofish	8	0.02
40	Lower Wekiva	Vallisneria	Mosquitofish	8	0.02
40	Lower Wekiva	Vallisneria	Mosquitofish	8	0.02
40	Lower Wekiva	Vallisneria	Mosquitofish	8	0.06
40	Lower Wekiva	Vallisneria	Mosquitofish	8	0.02
40	Lower Wekiva	Vallisneria	Mosquitofish	9	0.02
40	Lower Wekiva	Vallisneria	Mosquitofish	10	0.02
40	Lower Wekiva	Vallisneria	Mosquitofish	16	0.09
40	Lower Wekiva	Vallisneria	Mosquitofish	19	0.14
40	Lower Wekiva	Vallisneria	Mosquitofish	22	0.17
40	Lower Wekiva	Vallisneria	Seminole killifish	52	1.53
40	Lower Wekiva	Vallisneria	Spotted sunfish	17	0.13
41	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
41	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.07
41	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
41	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.12
41	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.12
41	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.18
41	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.18
41	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.17
41	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.40
41	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.41
41	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.44
41	Lower Wekiva	Vallisneria	Spotted sunfish	22	0.25
41	Lower Wekiva	Vallisneria	Tadpole madtom	22	0.19
41	Lower Wekiva	Vallisneria	Tadpole madtom	29	0.32
41	Lower Wekiva	Vallisneria	Tadpole madtom	46	1.07
41	Lower Wekiva	Vallisneria	Tadpole madtom	49	1.59
41	Lower Wekiva	Vallisneria	Tadpole madtom	50	1.68
41	Lower Wekiva	Vallisneria	Tadpole madtom	52	1.46
42	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.03
42	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.03
42	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.05
42	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
42	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.08
42	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
42	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.09
42	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
42	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.07
42	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.09
42	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
42	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.11
42	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.16
42	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.15
42	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.16
42	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.17
42	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.40
42	Lower Wekiva	Vallisneria	Redbreast sunfish	12	0.04
42	Lower Wekiva	Vallisneria	Redbreast sunfish	18	0.16
42	Lower Wekiva	Vallisneria	Sailfin shiner	.	0.05
42	Lower Wekiva	Vallisneria	Seminole killifish	69	3.36
42	Lower Wekiva	Vallisneria	Seminole killifish	81	5.45

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
42	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.28
42	Lower Wekiva	Vallisneria	Tadpole madtom	11	0.04
42	Lower Wekiva	Vallisneria	Unidentifiable fish	14	0.04
43	Lower Wekiva	Vallisneria	Bluefin killifish	8	0.01
43	Lower Wekiva	Vallisneria	Bluefin killifish	8	0.02
43	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.02
43	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.08
43	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.03
43	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.04
43	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
43	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
43	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
43	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.03
43	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
43	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
43	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.03
43	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
43	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.11
43	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.16
43	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.32
43	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.34
43	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.59
43	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.69
43	Lower Wekiva	Vallisneria	Coastal shiner	15	0.05
43	Lower Wekiva	Vallisneria	Mosquitofish	21	0.16
43	Lower Wekiva	Vallisneria	Seminole killifish	28	0.27
43	Lower Wekiva	Vallisneria	Tadpole madtom	13	0.05
43	Lower Wekiva	Vallisneria	Tadpole madtom	13	0.05
43	Lower Wekiva	Vallisneria	Tadpole madtom	14	0.05
43	Lower Wekiva	Vallisneria	Tadpole madtom	14	0.08
43	Lower Wekiva	Vallisneria	Tadpole madtom	16	0.10
43	Lower Wekiva	Vallisneria	Tadpole madtom	16	0.07
44	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.02
44	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.05
44	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.06
44	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.06
44	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.07
44	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.11
44	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.15
44	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.19
44	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.19
44	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.22
44	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.74
44	Lower Wekiva	Vallisneria	Spotted sunfish	36	1.02
44	Lower Wekiva	Vallisneria	Spotted sunfish	76	9.21
45	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.03
45	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
45	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.12
45	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.12
45	Lower Wekiva	Vallisneria	Coastal shiner	19	0.16
45	Lower Wekiva	Vallisneria	Coastal shiner	25	0.19
45	Lower Wekiva	Vallisneria	Coastal shiner	29	0.28
45	Lower Wekiva	Vallisneria	Tadpole madtom	18	0.10
46	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.02

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
46	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.02
46	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.03
46	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.04
46	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.04
46	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
46	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.06
46	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
46	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.06
46	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
46	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
46	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.06
46	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
46	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.10
46	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.10
46	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.09
46	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.09
46	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
46	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.12
46	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.13
46	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.18
46	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.17
46	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.17
46	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.25
46	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.29
46	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.31
46	Lower Wekiva	Vallisneria	Least killifish	13	0.06
46	Lower Wekiva	Vallisneria	Seminole killifish	61	2.60
46	Lower Wekiva	Vallisneria	Spotted sunfish	.	.
46	Lower Wekiva	Vallisneria	Spotted sunfish	13	0.06
46	Lower Wekiva	Vallisneria	Spotted sunfish	14	0.08
46	Lower Wekiva	Vallisneria	Spotted sunfish	16	0.12
46	Lower Wekiva	Vallisneria	Spotted sunfish	16	0.13
46	Lower Wekiva	Vallisneria	Spotted sunfish	19	0.21
46	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.49
46	Lower Wekiva	Vallisneria	Spotted sunfish	85	13.15
46	Lower Wekiva	Vallisneria	Tadpole madtom	9	0.03
46	Lower Wekiva	Vallisneria	Tadpole madtom	19	0.13
46	Lower Wekiva	Vallisneria	Tadpole madtom	27	0.31
46	Lower Wekiva	Vallisneria	Tadpole madtom	44	1.05
46	Lower Wekiva	Vallisneria	Tadpole madtom	59	2.77
47	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.03
47	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.04
47	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.03
47	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.04
47	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.06
47	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.05
47	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
47	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.05
47	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
47	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.07
47	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
47	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.09
47	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
47	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.09

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
47	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.12
47	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.13
47	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.14
47	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.13
47	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.11
47	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.12
47	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.17
47	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.22
47	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.25
47	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.23
47	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.40
47	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.46
47	Lower Wekiva	Vallisneria	Okefenokee pygmy sunfish	7	0.02
47	Lower Wekiva	Vallisneria	Okefenokee pygmy sunfish	17	0.13
47	Lower Wekiva	Vallisneria	Okefenokee pygmy sunfish	21	0.21
47	Lower Wekiva	Vallisneria	Redbreast sunfish	9	0.03
47	Lower Wekiva	Vallisneria	Redbreast sunfish	11	0.04
47	Lower Wekiva	Vallisneria	Redbreast sunfish	15	0.11
47	Lower Wekiva	Vallisneria	Redbreast sunfish	16	0.12
47	Lower Wekiva	Vallisneria	Redbreast sunfish	23	0.33
47	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.08
47	Lower Wekiva	Vallisneria	Tadpole madtom	13	0.05
47	Lower Wekiva	Vallisneria	Tadpole madtom	34	0.61
47	Lower Wekiva	Vallisneria	Tadpole madtom	48	1.63
48	Lower Wekiva	Vallisneria	Bluefin killifish	8	0.03
48	Lower Wekiva	Vallisneria	Bluefin killifish	8	0.02
48	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.02
48	Lower Wekiva	Vallisneria	Bluefin killifish	9	0.02
48	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.03
48	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.05
48	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
48	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.06
48	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
48	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.09
48	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.10
48	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.10
48	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.12
48	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.12
48	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.11
48	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.16
48	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.16
48	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.16
48	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.18
48	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.19
48	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.28
48	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.42
48	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.43
48	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.54
48	Lower Wekiva	Vallisneria	Coastal shiner	42	0.81
48	Lower Wekiva	Vallisneria	Seminole killifish	49	1.25
48	Lower Wekiva	Vallisneria	Spotted sunfish	21	0.27
48	Lower Wekiva	Vallisneria	Spotted sunfish	22	0.46
48	Lower Wekiva	Vallisneria	Tadpole madtom	14	0.07
48	Lower Wekiva	Vallisneria	Tadpole madtom	15	0.09

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Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
48	Lower Wekiva	Vallisneria	Tadpole madtom	22	0.16
48	Lower Wekiva	Vallisneria	Tadpole madtom	28	0.25
48	Lower Wekiva	Vallisneria	Tadpole madtom	28	0.32
48	Lower Wekiva	Vallisneria	Tadpole madtom	33	0.53
48	Lower Wekiva	Vallisneria	Tadpole madtom	38	0.70
48	Lower Wekiva	Vallisneria	Tadpole madtom	50	1.60
48	Lower Wekiva	Vallisneria	Tadpole madtom	60	2.71
49	Lower Wekiva	Vallisneria	Coastal shiner	35	0.46
49	Lower Wekiva	Vallisneria	Redbreast sunfish	19	0.17
49	Lower Wekiva	Vallisneria	Redbreast sunfish	37	0.85
49	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.17
49	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.11
49	Lower Wekiva	Vallisneria	Spotted sunfish	41	1.50
49	Lower Wekiva	Vallisneria	Spotted sunfish	49	2.72
49	Lower Wekiva	Vallisneria	Tadpole madtom	18	0.10
49	Lower Wekiva	Vallisneria	Tadpole madtom	31	0.43
49	Lower Wekiva	Vallisneria	Tadpole madtom	47	1.50
50	Lower Wekiva	Vallisneria	Blackbanded darter	69	3.35
50	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.46
50	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.57
50	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.90
50	Lower Wekiva	Vallisneria	Lake chubsucker	134	38.03
50	Lower Wekiva	Vallisneria	Spotted sunfish	33	0.81
50	Lower Wekiva	Vallisneria	Spotted sunfish	84	10.00
50	Lower Wekiva	Vallisneria	Spotted sunfish	90	12.00
50	Lower Wekiva	Vallisneria	Spotted sunfish	105	25.00
50	Lower Wekiva	Vallisneria	Tadpole madtom	39	0.86
51	Lower Wekiva	Bare Bottom	Bluefin killifish	24	0.21
51	Lower Wekiva	Bare Bottom	Coastal shiner	12	0.03
51	Lower Wekiva	Bare Bottom	Coastal shiner	14	0.05
51	Lower Wekiva	Bare Bottom	Unidentifiable fish	.	0.04
51	Lower Wekiva	Bare Bottom	Unidentifiable fish	.	0.04
51	Lower Wekiva	Bare Bottom	Unidentifiable fish	13	0.05
51	Lower Wekiva	Bare Bottom	Unidentifiable fish	13	0.04
52	Lower Wekiva	Bare Bottom	Blackbanded darter	13	0.04
52	Lower Wekiva	Bare Bottom	Blackbanded darter	14	0.04
52	Lower Wekiva	Bare Bottom	Blackbanded darter	14	0.05
52	Lower Wekiva	Bare Bottom	Blackbanded darter	23	0.15
52	Lower Wekiva	Bare Bottom	Bluefin killifish	28	0.32
52	Lower Wekiva	Bare Bottom	Bluefin killifish	34	0.55
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	.	0.03
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	.	0.03
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	11	0.04
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	11	0.03
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	12	0.04
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	12	0.04
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	12	0.04
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	12	0.03
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	13	0.05
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	13	0.04
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	13	0.05
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	13	0.04
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	13	0.04
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	13	0.04

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	13	0.05
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	13	0.04
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	14	0.05
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	14	0.05
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	14	0.06
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	14	0.06
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	14	0.05
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	14	0.06
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	14	0.06
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	14	0.05
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	14	0.05
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	15	0.08
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	15	0.06
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	16	0.08
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	16	0.07
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	16	0.08
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	16	0.07
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	16	0.06
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	17	0.09
52	Lower Wekiva	Bare Bottom	Unidentifiable fish	17	0.08
53	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
54	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
55	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
56	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.03
56	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.03
56	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.03
56	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.04
56	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
56	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
56	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
56	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.04
56	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.06
56	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.07
56	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.05
56	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.05
56	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.08
56	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
56	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.10
56	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.07
56	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.10
56	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.11
56	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.08
56	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.15
56	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.14
56	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.21
56	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.25
56	Lower Wekiva	Vallisneria	Largemouth bass	103	13.24
56	Lower Wekiva	Vallisneria	Spotted sunfish	11	0.05
56	Lower Wekiva	Vallisneria	Spotted sunfish	12	0.06
56	Lower Wekiva	Vallisneria	Spotted sunfish	18	0.16
56	Lower Wekiva	Vallisneria	Spotted sunfish	35	1.00
56	Lower Wekiva	Vallisneria	Tadpole madtom	14	0.05
56	Lower Wekiva	Vallisneria	Tadpole madtom	29	0.38
56	Lower Wekiva	Vallisneria	Tadpole madtom	54	1.53

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
57	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
57	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.13
57	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.13
57	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.19
57	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.24
57	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.26
57	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.25
57	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.44
57	Lower Wekiva	Vallisneria	Coastal shiner	18	0.09
57	Lower Wekiva	Vallisneria	Coastal shiner	19	0.09
57	Lower Wekiva	Vallisneria	Coastal shiner	20	0.08
57	Lower Wekiva	Vallisneria	Coastal shiner	20	0.12
57	Lower Wekiva	Vallisneria	Coastal shiner	23	0.14
57	Lower Wekiva	Vallisneria	Coastal shiner	25	0.14
57	Lower Wekiva	Vallisneria	Coastal shiner	32	0.37
57	Lower Wekiva	Vallisneria	Coastal shiner	38	0.62
57	Lower Wekiva	Vallisneria	Coastal shiner	41	0.79
57	Lower Wekiva	Vallisneria	Mosquitofish	26	0.31
57	Lower Wekiva	Vallisneria	Pugnose minnow	35	0.46
57	Lower Wekiva	Vallisneria	Pugnose minnow	41	0.77
57	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.77
57	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.92
57	Lower Wekiva	Vallisneria	Redbreast sunfish	12	0.08
57	Lower Wekiva	Vallisneria	Redbreast sunfish	13	0.07
57	Lower Wekiva	Vallisneria	Redbreast sunfish	14	0.09
57	Lower Wekiva	Vallisneria	Redbreast sunfish	14	0.10
57	Lower Wekiva	Vallisneria	Redbreast sunfish	16	0.09
57	Lower Wekiva	Vallisneria	Redbreast sunfish	16	0.13
57	Lower Wekiva	Vallisneria	Redbreast sunfish	16	0.10
57	Lower Wekiva	Vallisneria	Redbreast sunfish	17	0.14
57	Lower Wekiva	Vallisneria	Redbreast sunfish	17	0.15
57	Lower Wekiva	Vallisneria	Redbreast sunfish	18	0.18
57	Lower Wekiva	Vallisneria	Redbreast sunfish	18	0.18
57	Lower Wekiva	Vallisneria	Redbreast sunfish	19	0.18
57	Lower Wekiva	Vallisneria	Redbreast sunfish	20	0.20
57	Lower Wekiva	Vallisneria	Redbreast sunfish	23	0.24
57	Lower Wekiva	Vallisneria	Redbreast sunfish	25	0.37
57	Lower Wekiva	Vallisneria	Redbreast sunfish	29	0.49
57	Lower Wekiva	Vallisneria	Redbreast sunfish	38	1.34
57	Lower Wekiva	Vallisneria	Redbreast sunfish	62	4.10
57	Lower Wekiva	Vallisneria	Seminole killifish	49	1.28
57	Lower Wekiva	Vallisneria	Spotted sunfish	98	20.51
57	Lower Wekiva	Vallisneria	Tadpole madtom	25	0.28
57	Lower Wekiva	Vallisneria	Tadpole madtom	38	0.66
57	Lower Wekiva	Vallisneria	Tadpole madtom	48	1.44
58	Lower Wekiva	Vallisneria	Bluefin killifish	8	0.02
58	Lower Wekiva	Vallisneria	Bluefin killifish	8	0.02
58	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.03
58	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
58	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.09
58	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
58	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.15
58	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.14
58	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.18

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
58	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.21
58	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.41
58	Lower Wekiva	Vallisneria	Redbreast sunfish	11	0.06
58	Lower Wekiva	Vallisneria	Redbreast sunfish	13	0.07
58	Lower Wekiva	Vallisneria	Redbreast sunfish	13	0.08
58	Lower Wekiva	Vallisneria	Redbreast sunfish	15	0.09
58	Lower Wekiva	Vallisneria	Redbreast sunfish	21	0.21
58	Lower Wekiva	Vallisneria	Tadpole madtom	13	0.07
58	Lower Wekiva	Vallisneria	Tadpole madtom	16	0.09
58	Lower Wekiva	Vallisneria	Tadpole madtom	18	0.13
58	Lower Wekiva	Vallisneria	Tadpole madtom	18	0.12
58	Lower Wekiva	Vallisneria	Tadpole madtom	19	0.10
58	Lower Wekiva	Vallisneria	Tadpole madtom	20	0.11
58	Lower Wekiva	Vallisneria	Tadpole madtom	21	0.13
58	Lower Wekiva	Vallisneria	Tadpole madtom	21	0.12
58	Lower Wekiva	Vallisneria	Tadpole madtom	28	0.27
59	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.04
59	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
59	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.11
59	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.08
59	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.09
59	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
59	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
59	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.24
59	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.23
59	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.27
59	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.24
59	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.25
59	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.27
59	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.29
59	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.27
59	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.31
59	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.37
59	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.45
59	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.52
59	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.51
59	Lower Wekiva	Vallisneria	Coastal shiner	14	0.04
59	Lower Wekiva	Vallisneria	Coastal shiner	14	0.03
59	Lower Wekiva	Vallisneria	Coastal shiner	16	0.06
59	Lower Wekiva	Vallisneria	Coastal shiner	18	0.08
59	Lower Wekiva	Vallisneria	Coastal shiner	22	0.10
59	Lower Wekiva	Vallisneria	Coastal shiner	27	0.23
59	Lower Wekiva	Vallisneria	Redbreast sunfish	17	0.12
59	Lower Wekiva	Vallisneria	Redbreast sunfish	19	0.22
59	Lower Wekiva	Vallisneria	Redbreast sunfish	21	0.23
59	Lower Wekiva	Vallisneria	Redbreast sunfish	21	0.24
59	Lower Wekiva	Vallisneria	Redbreast sunfish	22	0.26
59	Lower Wekiva	Vallisneria	Redbreast sunfish	24	0.29
59	Lower Wekiva	Vallisneria	Redbreast sunfish	27	0.44
59	Lower Wekiva	Vallisneria	Redbreast sunfish	30	0.69
59	Lower Wekiva	Vallisneria	Redbreast sunfish	92	12.58
60	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.04
60	Lower Wekiva	Vallisneria	Dollar sunfish	18	0.16
60	Lower Wekiva	Vallisneria	Dollar sunfish	25	0.40

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
60	Lower Wekiva	Vallisneria	Dollar sunfish	29	0.54
60	Lower Wekiva	Vallisneria	Dollar sunfish	62	4.34
60	Lower Wekiva	Vallisneria	Dollar sunfish	64	4.35
60	Lower Wekiva	Vallisneria	Speckled madtom	23	0.22
60	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.30
60	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.87
60	Lower Wekiva	Vallisneria	Spotted sunfish	35	1.10
60	Lower Wekiva	Vallisneria	Tadpole madtom	13	0.05
60	Lower Wekiva	Vallisneria	Tadpole madtom	18	0.10
61	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.04
61	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.12
61	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.13
61	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.13
61	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.21
61	Lower Wekiva	Vallisneria	Coastal shiner	20	0.12
61	Lower Wekiva	Vallisneria	Coastal shiner	21	0.11
61	Lower Wekiva	Vallisneria	Coastal shiner	21	0.10
61	Lower Wekiva	Vallisneria	Coastal shiner	22	0.13
61	Lower Wekiva	Vallisneria	Coastal shiner	26	0.21
61	Lower Wekiva	Vallisneria	Coastal shiner	27	0.25
61	Lower Wekiva	Vallisneria	Coastal shiner	27	0.21
61	Lower Wekiva	Vallisneria	Coastal shiner	27	0.21
61	Lower Wekiva	Vallisneria	Coastal shiner	28	0.27
61	Lower Wekiva	Vallisneria	Coastal shiner	34	0.42
61	Lower Wekiva	Vallisneria	Pugnose minnow	38	0.57
61	Lower Wekiva	Vallisneria	Pugnose minnow	39	0.72
61	Lower Wekiva	Vallisneria	Redbreast sunfish	19	0.20
61	Lower Wekiva	Vallisneria	Redbreast sunfish	19	0.19
61	Lower Wekiva	Vallisneria	Redbreast sunfish	24	0.32
61	Lower Wekiva	Vallisneria	Redbreast sunfish	28	0.46
62	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
62	Lower Wekiva	Vallisneria	Bluefin killifish	12	0.04
62	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
62	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.05
62	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
62	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.06
62	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
62	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
62	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
62	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.08
62	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.06
62	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.07
62	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
62	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.08
62	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.10
62	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.09
62	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
62	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.11
62	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.12
62	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.12
62	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.08
62	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.10
62	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.13
62	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.32

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
62	Lower Wekiva	Vallisneria	Redbreast sunfish	18	0.17
62	Lower Wekiva	Vallisneria	Redbreast sunfish	19	0.19
62	Lower Wekiva	Vallisneria	Redbreast sunfish	26	0.40
62	Lower Wekiva	Vallisneria	Seminole killifish	27	0.22
62	Lower Wekiva	Vallisneria	Tadpole madtom	28	0.35
63	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.03
63	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.06
63	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.05
63	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
63	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.07
63	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.05
63	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
63	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.09
63	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
63	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
63	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.45
63	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.41
63	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.53
63	Lower Wekiva	Vallisneria	Mosquitofish	11	0.04
63	Lower Wekiva	Vallisneria	Redbreast sunfish	8	0.09
63	Lower Wekiva	Vallisneria	Redbreast sunfish	30	0.54
63	Lower Wekiva	Vallisneria	Redbreast sunfish	37	1.00
63	Lower Wekiva	Vallisneria	Redbreast sunfish	39	1.11
63	Lower Wekiva	Vallisneria	Redbreast sunfish	59	3.53
63	Lower Wekiva	Vallisneria	Redbreast sunfish	69	5.45
63	Lower Wekiva	Vallisneria	Sailfin shiner	29	0.28
63	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.78
63	Lower Wekiva	Vallisneria	Spotted sunfish	41	1.75
63	Lower Wekiva	Vallisneria	Spotted sunfish	51	3.54
63	Lower Wekiva	Vallisneria	Spotted sunfish	82	12.67
63	Lower Wekiva	Vallisneria	Tadpole madtom	28	0.32
63	Lower Wekiva	Vallisneria	Tadpole madtom	35	0.66
63	Lower Wekiva	Vallisneria	Tadpole madtom	39	0.89
63	Lower Wekiva	Vallisneria	Tadpole madtom	45	1.23
63	Lower Wekiva	Vallisneria	Tadpole madtom	49	1.46
63	Lower Wekiva	Vallisneria	Tadpole madtom	57	2.22
64	Lower Wekiva	Vallisneria	Bluefin killifish	8	0.02
64	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.05
64	Lower Wekiva	Vallisneria	Bluefin killifish	10	0.03
64	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.03
64	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
64	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.13
64	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.21
64	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.21
64	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.24
64	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.22
64	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.27
64	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.31
64	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.37
64	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.34
64	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.40
64	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.43
64	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.51
64	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.60

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
64	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.57
64	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.59
64	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.48
64	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.61
64	Lower Wekiva	Vallisneria	Bluefin killifish	42	1.03
64	Lower Wekiva	Vallisneria	Pugnose minnow	33	0.38
64	Lower Wekiva	Vallisneria	Redbreast sunfish	16	0.13
64	Lower Wekiva	Vallisneria	Redbreast sunfish	19	0.19
64	Lower Wekiva	Vallisneria	Redbreast sunfish	19	0.20
64	Lower Wekiva	Vallisneria	Tadpole madtom	10	0.04
64	Lower Wekiva	Vallisneria	Tadpole madtom	24	0.22
64	Lower Wekiva	Vallisneria	Tadpole madtom	39	0.74
64	Lower Wekiva	Vallisneria	Tadpole madtom	47	1.18
65	Lower Wekiva	Vallisneria	Bluefin killifish	11	0.04
65	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.08
65	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.06
65	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
65	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.08
65	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.09
65	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
65	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
65	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.15
65	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.20
65	Lower Wekiva	Vallisneria	Redbreast sunfish	25	0.33
65	Lower Wekiva	Vallisneria	Tadpole madtom	10	0.03
65	Lower Wekiva	Vallisneria	Tadpole madtom	17	0.08
65	Lower Wekiva	Vallisneria	Tadpole madtom	18	0.11
65	Lower Wekiva	Vallisneria	Tadpole madtom	20	0.14
65	Lower Wekiva	Vallisneria	Tadpole madtom	24	0.21
65	Lower Wekiva	Vallisneria	Unidentifiable fish	10	0.04
65	Lower Wekiva	Vallisneria	Unidentifiable fish	14	0.05
65	Lower Wekiva	Vallisneria	Unidentifiable fish	14	0.05
65	Lower Wekiva	Vallisneria	Unidentifiable fish	16	0.07
65	Lower Wekiva	Vallisneria	Unidentifiable fish	16	0.07
66	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.21
66	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.36
66	Lower Wekiva	Vallisneria	Tadpole madtom	16	0.08
67	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.07
67	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.19
67	Lower Wekiva	Vallisneria	Redbreast sunfish	99	14.97
67	Lower Wekiva	Vallisneria	Tadpole madtom	15	0.07
67	Lower Wekiva	Vallisneria	Tadpole madtom	16	0.13
67	Lower Wekiva	Vallisneria	Tadpole madtom	23	0.19
67	Lower Wekiva	Vallisneria	Tadpole madtom	24	0.23
68	Lower Wekiva	Vallisneria	Redbreast sunfish	34	0.79
68	Lower Wekiva	Vallisneria	Redbreast sunfish	52	3.00
68	Lower Wekiva	Vallisneria	Sailfin molly	36	0.99
68	Lower Wekiva	Vallisneria	Seminole killifish	73	2.84
68	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.38
68	Lower Wekiva	Vallisneria	Spotted sunfish	33	0.99
68	Lower Wekiva	Vallisneria	Spotted sunfish	35	1.16
68	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.47
68	Lower Wekiva	Vallisneria	Spotted sunfish	43	2.08
68	Lower Wekiva	Vallisneria	Spotted sunfish	120	37.44

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
68	Lower Wekiva	Vallisneria	White catfish	49	1.56
68	Lower Wekiva	Vallisneria	White catfish	53	1.94
68	Lower Wekiva	Vallisneria	White catfish	55	2.12
68	Lower Wekiva	Vallisneria	Yellow bullhead	78	7.03
69	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
70	Lower Wekiva	Bare Bottom	Brook silverside	13	0.04
70	Lower Wekiva	Bare Bottom	Brook silverside	14	0.05
70	Lower Wekiva	Bare Bottom	Brook silverside	16	0.06
70	Lower Wekiva	Bare Bottom	Brook silverside	16	0.06
70	Lower Wekiva	Bare Bottom	Brook silverside	38	0.42
70	Lower Wekiva	Bare Bottom	Brook silverside	40	0.57
70	Lower Wekiva	Bare Bottom	Brook silverside	41	0.56
70	Lower Wekiva	Bare Bottom	Brook silverside	42	0.68
70	Lower Wekiva	Bare Bottom	Brook silverside	44	0.68
70	Lower Wekiva	Bare Bottom	Brook silverside	44	0.63
70	Lower Wekiva	Bare Bottom	Brook silverside	44	0.68
70	Lower Wekiva	Bare Bottom	Brook silverside	47	0.81
70	Lower Wekiva	Bare Bottom	Brook silverside	48	0.92
70	Lower Wekiva	Bare Bottom	Brook silverside	49	1.00
70	Lower Wekiva	Bare Bottom	Brook silverside	50	0.87
71	Lower Wekiva	Bare Bottom	Redbreast sunfish	117	24.80
71	Lower Wekiva	Bare Bottom	Seminole killifish	14	0.03
71	Lower Wekiva	Bare Bottom	Unidentifiable fish	9	0.02
71	Lower Wekiva	Bare Bottom	Unidentifiable fish	9	0.02
71	Lower Wekiva	Bare Bottom	Unidentifiable fish	11	0.03
71	Lower Wekiva	Bare Bottom	Unidentifiable fish	12	0.04
71	Lower Wekiva	Bare Bottom	Unidentifiable fish	13	0.05
71	Lower Wekiva	Bare Bottom	Unidentifiable fish	14	0.05
71	Lower Wekiva	Bare Bottom	Unidentifiable fish	14	0.06
72	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
73	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
74	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
75	Lower Wekiva	Bare Bottom	No Fish in Trap	.	.
76	Middle Wekiva	Vallisneria	Bluefin killifish	21	0.14
76	Middle Wekiva	Vallisneria	Bluefin killifish	25	0.21
76	Middle Wekiva	Vallisneria	Least killifish	20	0.18
76	Middle Wekiva	Vallisneria	Spotted sunfish	22	0.24
76	Middle Wekiva	Vallisneria	Spotted sunfish	72	7.19
76	Middle Wekiva	Vallisneria	Tadpole madtom	38	0.79
77	Middle Wekiva	Vallisneria	Bluefin killifish	23	0.20
77	Middle Wekiva	Vallisneria	Bluefin killifish	32	0.45
77	Middle Wekiva	Vallisneria	Coastal shiner	37	0.61
77	Middle Wekiva	Vallisneria	Coastal shiner	38	0.63
77	Middle Wekiva	Vallisneria	Coastal shiner	40	0.74
77	Middle Wekiva	Vallisneria	Coastal shiner	40	0.68
77	Middle Wekiva	Vallisneria	Coastal shiner	40	0.76
77	Middle Wekiva	Vallisneria	Coastal shiner	40	0.69
77	Middle Wekiva	Vallisneria	Pugnose minnow	30	0.24
77	Middle Wekiva	Vallisneria	Pugnose minnow	38	0.54
77	Middle Wekiva	Vallisneria	Pugnose minnow	42	0.71
77	Middle Wekiva	Vallisneria	Pugnose minnow	44	0.92
77	Middle Wekiva	Vallisneria	Spotted sunfish	14	0.10
77	Middle Wekiva	Vallisneria	Spotted sunfish	30	0.67
77	Middle Wekiva	Vallisneria	Spotted sunfish	36	1.10

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
77	Middle Wekiva	Vallisneria	Spotted sunfish	38	1.23
77	Middle Wekiva	Vallisneria	Spotted sunfish	45	2.06
77	Middle Wekiva	Vallisneria	Spotted sunfish	54	3.31
77	Middle Wekiva	Vallisneria	Spotted sunfish	62	5.36
77	Middle Wekiva	Vallisneria	Tadpole madtom	32	0.46
77	Middle Wekiva	Vallisneria	Tadpole madtom	37	0.72
77	Middle Wekiva	Vallisneria	Tadpole madtom	45	1.04
77	Middle Wekiva	Vallisneria	Tadpole madtom	49	1.63
77	Middle Wekiva	Vallisneria	Tadpole madtom	57	2.26
77	Middle Wekiva	Vallisneria	Tadpole madtom	61	3.21
78	Middle Wekiva	Vallisneria	Bluefin killifish	11	0.06
78	Middle Wekiva	Vallisneria	Bluefin killifish	15	0.06
78	Middle Wekiva	Vallisneria	Bluefin killifish	16	0.07
78	Middle Wekiva	Vallisneria	Bluefin killifish	16	0.07
78	Middle Wekiva	Vallisneria	Bluefin killifish	20	0.12
78	Middle Wekiva	Vallisneria	Bluefin killifish	23	0.18
78	Middle Wekiva	Vallisneria	Bluefin killifish	24	0.20
78	Middle Wekiva	Vallisneria	Bluefin killifish	25	0.22
78	Middle Wekiva	Vallisneria	Bluefin killifish	32	0.47
78	Middle Wekiva	Vallisneria	Bluegill	16	0.11
78	Middle Wekiva	Vallisneria	Bluegill	25	0.37
78	Middle Wekiva	Vallisneria	Bluegill	33	0.82
78	Middle Wekiva	Vallisneria	Bluegill	35	0.96
78	Middle Wekiva	Vallisneria	Lake chubsucker	57	2.07
78	Middle Wekiva	Vallisneria	Least killifish	13	0.05
78	Middle Wekiva	Vallisneria	Mosquitofish	13	0.05
78	Middle Wekiva	Vallisneria	Mosquitofish	17	0.08
78	Middle Wekiva	Vallisneria	Sailfin shiner	12	0.02
78	Middle Wekiva	Vallisneria	Sailfin shiner	19	0.08
78	Middle Wekiva	Vallisneria	Sailfin shiner	19	0.09
78	Middle Wekiva	Vallisneria	Sailfin shiner	21	0.10
78	Middle Wekiva	Vallisneria	Sailfin shiner	22	0.12
79	Middle Wekiva	Vallisneria	Bluefin killifish	16	0.07
79	Middle Wekiva	Vallisneria	Bluefin killifish	16	0.09
79	Middle Wekiva	Vallisneria	Bluefin killifish	17	0.10
79	Middle Wekiva	Vallisneria	Bluefin killifish	18	0.10
79	Middle Wekiva	Vallisneria	Bluefin killifish	18	0.09
79	Middle Wekiva	Vallisneria	Bluefin killifish	19	0.15
79	Middle Wekiva	Vallisneria	Bluefin killifish	19	0.11
79	Middle Wekiva	Vallisneria	Bluefin killifish	20	0.12
79	Middle Wekiva	Vallisneria	Bluefin killifish	22	0.15
79	Middle Wekiva	Vallisneria	Bluefin killifish	22	0.17
79	Middle Wekiva	Vallisneria	Bluefin killifish	24	0.20
79	Middle Wekiva	Vallisneria	Bluefin killifish	28	0.28
79	Middle Wekiva	Vallisneria	Bluefin killifish	30	0.33
79	Middle Wekiva	Vallisneria	Bluefin killifish	31	0.48
80	Middle Wekiva	Vallisneria	Blackbanded darter	51	1.24
80	Middle Wekiva	Vallisneria	Bluefin killifish	15	0.08
80	Middle Wekiva	Vallisneria	Bluefin killifish	16	0.09
80	Middle Wekiva	Vallisneria	Bluefin killifish	17	0.09
80	Middle Wekiva	Vallisneria	Bluefin killifish	20	0.15
80	Middle Wekiva	Vallisneria	Bluefin killifish	22	0.15
80	Middle Wekiva	Vallisneria	Bluefin killifish	23	0.19
80	Middle Wekiva	Vallisneria	Bluefin killifish	27	0.29

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
80	Middle Wekiva	Vallisneria	Bluegill	16	0.12
80	Middle Wekiva	Vallisneria	Bluegill	60	4.26
80	Middle Wekiva	Vallisneria	Bluegill	63	5.37
80	Middle Wekiva	Vallisneria	Sailfin shiner	21	0.11
80	Middle Wekiva	Vallisneria	Sailfin shiner	22	0.11
80	Middle Wekiva	Vallisneria	Tadpole madtom	25	0.26
81	Middle Wekiva	Vallisneria	Bluefin killifish	18	0.10
81	Middle Wekiva	Vallisneria	Bluefin killifish	19	0.12
81	Middle Wekiva	Vallisneria	Bluefin killifish	20	0.12
81	Middle Wekiva	Vallisneria	Bluefin killifish	20	0.14
81	Middle Wekiva	Vallisneria	Bluefin killifish	20	0.14
81	Middle Wekiva	Vallisneria	Bluefin killifish	29	0.36
81	Middle Wekiva	Vallisneria	Bluefin killifish	30	0.36
81	Middle Wekiva	Vallisneria	Bluefin killifish	36	0.74
81	Middle Wekiva	Vallisneria	Pugnose minnow	34	0.40
81	Middle Wekiva	Vallisneria	Pugnose minnow	37	0.48
81	Middle Wekiva	Vallisneria	Pugnose minnow	42	0.64
81	Middle Wekiva	Vallisneria	Pugnose minnow	42	0.65
81	Middle Wekiva	Vallisneria	Pugnose minnow	47	0.87
81	Middle Wekiva	Vallisneria	Spotted sunfish	18	0.14
81	Middle Wekiva	Vallisneria	Spotted sunfish	64	5.22
81	Middle Wekiva	Vallisneria	Tadpole madtom	30	0.39
81	Middle Wekiva	Vallisneria	Tadpole madtom	34	0.55
81	Middle Wekiva	Vallisneria	Tadpole madtom	36	0.64
82	Middle Wekiva	Nuphar	Bluefin killifish	16	0.08
82	Middle Wekiva	Nuphar	Bluefin killifish	17	0.09
82	Middle Wekiva	Nuphar	Bluefin killifish	18	0.12
82	Middle Wekiva	Nuphar	Bluefin killifish	20	0.15
82	Middle Wekiva	Nuphar	Bluefin killifish	20	0.14
82	Middle Wekiva	Nuphar	Bluefin killifish	20	0.15
82	Middle Wekiva	Nuphar	Bluefin killifish	21	0.15
82	Middle Wekiva	Nuphar	Bluefin killifish	21	0.15
82	Middle Wekiva	Nuphar	Bluefin killifish	21	0.15
82	Middle Wekiva	Nuphar	Bluefin killifish	22	0.18
82	Middle Wekiva	Nuphar	Bluefin killifish	22	0.20
82	Middle Wekiva	Nuphar	Bluefin killifish	22	0.19
82	Middle Wekiva	Nuphar	Bluefin killifish	23	0.21
82	Middle Wekiva	Nuphar	Bluefin killifish	23	0.18
82	Middle Wekiva	Nuphar	Bluefin killifish	23	0.20
82	Middle Wekiva	Nuphar	Bluefin killifish	24	0.20
82	Middle Wekiva	Nuphar	Bluefin killifish	26	0.25
82	Middle Wekiva	Nuphar	Bluefin killifish	27	0.35
82	Middle Wekiva	Nuphar	Bluefin killifish	28	0.31
82	Middle Wekiva	Nuphar	Bluefin killifish	29	0.36
82	Middle Wekiva	Nuphar	Bluefin killifish	29	0.33
82	Middle Wekiva	Nuphar	Bluefin killifish	30	0.41
82	Middle Wekiva	Nuphar	Bluefin killifish	31	0.43
82	Middle Wekiva	Nuphar	Bluefin killifish	32	0.51
82	Middle Wekiva	Nuphar	Coastal shiner	39	0.61
82	Middle Wekiva	Nuphar	Coastal shiner	39	0.57
82	Middle Wekiva	Nuphar	Least killifish	13	0.05
82	Middle Wekiva	Nuphar	Mosquitofish	13	0.04
82	Middle Wekiva	Nuphar	Mosquitofish	17	0.10
82	Middle Wekiva	Nuphar	Mosquitofish	20	0.11

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
82	Middle Wekiva	Nuphar	Mosquitofish	20	0.12
82	Middle Wekiva	Nuphar	Mosquitofish	21	0.14
82	Middle Wekiva	Nuphar	Mosquitofish	23	0.19
82	Middle Wekiva	Nuphar	Mosquitofish	26	0.25
82	Middle Wekiva	Nuphar	Sailfin shiner	14	0.04
82	Middle Wekiva	Nuphar	Sailfin shiner	17	0.06
82	Middle Wekiva	Nuphar	Seminole killifish	49	1.16
82	Middle Wekiva	Nuphar	Seminole killifish	51	1.38
83	Middle Wekiva	Nuphar	Bluefin killifish	16	0.08
83	Middle Wekiva	Nuphar	Bluefin killifish	17	0.08
83	Middle Wekiva	Nuphar	Bluefin killifish	20	0.12
83	Middle Wekiva	Nuphar	Bluefin killifish	21	0.13
83	Middle Wekiva	Nuphar	Bluefin killifish	22	0.16
83	Middle Wekiva	Nuphar	Bluefin killifish	28	0.33
83	Middle Wekiva	Nuphar	Brown darter	32	0.37
83	Middle Wekiva	Nuphar	Sailfin shiner	19	0.07
83	Middle Wekiva	Nuphar	Sailfin shiner	23	0.13
83	Middle Wekiva	Nuphar	Sailfin shiner	24	0.17
83	Middle Wekiva	Nuphar	Sailfin shiner	27	0.19
83	Middle Wekiva	Nuphar	Sailfin shiner	28	0.22
83	Middle Wekiva	Nuphar	Seminole killifish	39	0.64
83	Middle Wekiva	Nuphar	Seminole killifish	42	0.82
83	Middle Wekiva	Nuphar	Seminole killifish	53	1.59
84	Middle Wekiva	Nuphar	Bluefin killifish	12	0.03
84	Middle Wekiva	Nuphar	Bluefin killifish	13	0.05
84	Middle Wekiva	Nuphar	Bluefin killifish	19	0.12
84	Middle Wekiva	Nuphar	Bluefin killifish	21	0.13
84	Middle Wekiva	Nuphar	Bluefin killifish	22	0.14
84	Middle Wekiva	Nuphar	Bluefin killifish	24	0.20
84	Middle Wekiva	Nuphar	Bluefin killifish	26	0.22
84	Middle Wekiva	Nuphar	Bluefin killifish	26	0.27
84	Middle Wekiva	Nuphar	Bluefin killifish	28	0.30
84	Middle Wekiva	Nuphar	Bluefin killifish	33	0.49
85	Middle Wekiva	Bare Bottom	Blackbanded darter	22	0.14
85	Middle Wekiva	Bare Bottom	Blackbanded darter	25	0.19
85	Middle Wekiva	Bare Bottom	Blackbanded darter	28	0.23
85	Middle Wekiva	Bare Bottom	Blackbanded darter	30	0.29
85	Middle Wekiva	Bare Bottom	Blackbanded darter	33	0.36
85	Middle Wekiva	Bare Bottom	Blackbanded darter	34	0.35
85	Middle Wekiva	Bare Bottom	Coastal shiner	14	0.04
85	Middle Wekiva	Bare Bottom	Coastal shiner	16	0.06
85	Middle Wekiva	Bare Bottom	Coastal shiner	16	0.06
85	Middle Wekiva	Bare Bottom	Coastal shiner	17	0.06
85	Middle Wekiva	Bare Bottom	Coastal shiner	17	0.08
85	Middle Wekiva	Bare Bottom	Coastal shiner	18	0.08
85	Middle Wekiva	Bare Bottom	Coastal shiner	18	0.07
85	Middle Wekiva	Bare Bottom	Coastal shiner	18	0.09
85	Middle Wekiva	Bare Bottom	Coastal shiner	19	0.11
85	Middle Wekiva	Bare Bottom	Coastal shiner	19	0.11
85	Middle Wekiva	Bare Bottom	Coastal shiner	19	0.09
85	Middle Wekiva	Bare Bottom	Coastal shiner	20	0.10
85	Middle Wekiva	Bare Bottom	Coastal shiner	21	0.12
85	Middle Wekiva	Bare Bottom	Coastal shiner	24	0.15
85	Middle Wekiva	Bare Bottom	Coastal shiner	24	0.15

Fall 1997 Throw Trap Fish Data - Wekiva River System

[illegible]

Fall 1997 Throw Trap Fish Data - Wekiva River System

[illegible]

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
89	Middle Wekiva	Hydrocotyle	Least killifish	13	0.07
89	Middle Wekiva	Hydrocotyle	Least killifish	13	0.05
89	Middle Wekiva	Hydrocotyle	Least killifish	13	0.05
89	Middle Wekiva	Hydrocotyle	Least killifish	13	0.06
89	Middle Wekiva	Hydrocotyle	Least killifish	13	0.06
89	Middle Wekiva	Hydrocotyle	Least killifish	13	0.05
89	Middle Wekiva	Hydrocotyle	Least killifish	13	0.05
89	Middle Wekiva	Hydrocotyle	Least killifish	13	0.06
89	Middle Wekiva	Hydrocotyle	Least killifish	13	0.05
89	Middle Wekiva	Hydrocotyle	Least killifish	13	0.05
89	Middle Wekiva	Hydrocotyle	Least killifish	13	0.06
89	Middle Wekiva	Hydrocotyle	Least killifish	13	0.05
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.09
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.06
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.06
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.05
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.08
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.05
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.06
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.06
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.08
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.06
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
89	Middle Wekiva	Hydrocotyle	Least killifish	14	0.08
89	Middle Wekiva	Hydrocotyle	Least killifish	15	0.08
89	Middle Wekiva	Hydrocotyle	Least killifish	15	0.09
89	Middle Wekiva	Hydrocotyle	Least killifish	16	0.11
89	Middle Wekiva	Hydrocotyle	Least killifish	16	0.10
89	Middle Wekiva	Hydrocotyle	Mosquitofish	10	0.03
89	Middle Wekiva	Hydrocotyle	Mosquitofish	10	0.02
89	Middle Wekiva	Hydrocotyle	Mosquitofish	12	0.03
89	Middle Wekiva	Hydrocotyle	Mosquitofish	12	0.04
89	Middle Wekiva	Hydrocotyle	Mosquitofish	13	0.04
89	Middle Wekiva	Hydrocotyle	Mosquitofish	13	0.04
89	Middle Wekiva	Hydrocotyle	Mosquitofish	14	0.06
89	Middle Wekiva	Hydrocotyle	Mosquitofish	14	0.06
89	Middle Wekiva	Hydrocotyle	Mosquitofish	14	0.06
89	Middle Wekiva	Hydrocotyle	Mosquitofish	16	0.08
89	Middle Wekiva	Hydrocotyle	Mosquitofish	22	0.16
89	Middle Wekiva	Hydrocotyle	Mosquitofish	24	0.21
89	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	8	0.03
89	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	9	0.03
89	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	16	0.12
89	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	16	0.11
89	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	16	0.13
89	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	17	0.12
89	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.13

Fall 1997 Throw Trap Fish Data-- Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
89	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	19	0.18
89	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	19	0.16
89	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	19	0.16
89	Middle Wekiva	Hydrocotyle	Redbreast sunfish	87	9.13
89	Middle Wekiva	Hydrocotyle	Sailfin molly	15	0.11
89	Middle Wekiva	Hydrocotyle	Sailfin molly	15	0.09
89	Middle Wekiva	Hydrocotyle	Sailfin molly	15	0.08
89	Middle Wekiva	Hydrocotyle	Sailfin molly	17	0.11
89	Middle Wekiva	Hydrocotyle	Sailfin molly	17	0.10
89	Middle Wekiva	Hydrocotyle	Sailfin molly	17	0.13
89	Middle Wekiva	Hydrocotyle	Sailfin molly	18	0.13
89	Middle Wekiva	Hydrocotyle	Sailfin molly	18	0.13
89	Middle Wekiva	Hydrocotyle	Sailfin molly	18	0.12
89	Middle Wekiva	Hydrocotyle	Sailfin molly	19	0.16
89	Middle Wekiva	Hydrocotyle	Sailfin molly	19	0.14
89	Middle Wekiva	Hydrocotyle	Sailfin molly	19	0.17
89	Middle Wekiva	Hydrocotyle	Sailfin molly	20	0.16
89	Middle Wekiva	Hydrocotyle	Sailfin molly	23	0.23
89	Middle Wekiva	Hydrocotyle	Sailfin molly	23	0.26
89	Middle Wekiva	Hydrocotyle	Spotted sunfish	61	4.63
90	Middle Wekiva	Hydrocotyle	Bluefin killifish	11	0.03
90	Middle Wekiva	Hydrocotyle	Bluefin killifish	17	0.08
90	Middle Wekiva	Hydrocotyle	Bluefin killifish	20	0.14
90	Middle Wekiva	Hydrocotyle	Bluefin killifish	22	0.18
90	Middle Wekiva	Hydrocotyle	Bluefin killifish	24	0.21
90	Middle Wekiva	Hydrocotyle	Bluefin killifish	24	0.24
90	Middle Wekiva	Hydrocotyle	Bluefin killifish	26	0.30
90	Middle Wekiva	Hydrocotyle	Bluefin killifish	27	0.33
90	Middle Wekiva	Hydrocotyle	Bluefin killifish	35	0.63
90	Middle Wekiva	Hydrocotyle	Least killifish	9	0.03
90	Middle Wekiva	Hydrocotyle	Least killifish	10	0.03
90	Middle Wekiva	Hydrocotyle	Least killifish	10	0.04
90	Middle Wekiva	Hydrocotyle	Least killifish	11	0.04
90	Middle Wekiva	Hydrocotyle	Least killifish	14	0.06
90	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
90	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.08
90	Middle Wekiva	Hydrocotyle	Spotted sunfish	15	0.10
90	Middle Wekiva	Hydrocotyle	Spotted sunfish	24	0.37
90	Middle Wekiva	Hydrocotyle	Spotted sunfish	26	0.44
90	Middle Wekiva	Hydrocotyle	Spotted sunfish	28	0.57
91	Middle Wekiva	Vallisneria	Bluegill	20	0.21
91	Middle Wekiva	Vallisneria	Bluegill	26	0.45
91	Middle Wekiva	Vallisneria	Bluegill	60	4.17
91	Middle Wekiva	Vallisneria	Bluegill	67	5.82
91	Middle Wekiva	Vallisneria	Lake chubsucker	103	12.07
91	Middle Wekiva	Vallisneria	Mosquitofish	29	0.39
91	Middle Wekiva	Vallisneria	Pugnose minnow	36	0.48
91	Middle Wekiva	Vallisneria	Pugnose minnow	37	0.54
91	Middle Wekiva	Vallisneria	Pugnose minnow	39	0.59
91	Middle Wekiva	Vallisneria	Pugnose minnow	40	0.63
91	Middle Wekiva	Vallisneria	Sailfin shiner	12	0.03
91	Middle Wekiva	Vallisneria	Sailfin shiner	13	0.04
91	Middle Wekiva	Vallisneria	Sailfin shiner	13	0.05
91	Middle Wekiva	Vallisneria	Sailfin shiner	15	0.04

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
91	Middle Wekiva	Vallisneria	Sailfin shiner	15	0.07
91	Middle Wekiva	Vallisneria	Sailfin shiner	16	0.06
91	Middle Wekiva	Vallisneria	Sailfin shiner	16	0.06
91	Middle Wekiva	Vallisneria	Sailfin shiner	16	0.06
91	Middle Wekiva	Vallisneria	Sailfin shiner	17	0.08
91	Middle Wekiva	Vallisneria	Sailfin shiner	17	0.09
91	Middle Wekiva	Vallisneria	Sailfin shiner	17	0.06
91	Middle Wekiva	Vallisneria	Sailfin shiner	17	0.06
91	Middle Wekiva	Vallisneria	Sailfin shiner	18	0.08
91	Middle Wekiva	Vallisneria	Sailfin shiner	18	0.08
91	Middle Wekiva	Vallisneria	Sailfin shiner	18	0.08
91	Middle Wekiva	Vallisneria	Sailfin shiner	18	0.07
91	Middle Wekiva	Vallisneria	Sailfin shiner	20	0.08
91	Middle Wekiva	Vallisneria	Sailfin shiner	20	0.11
91	Middle Wekiva	Vallisneria	Sailfin shiner	20	0.08
91	Middle Wekiva	Vallisneria	Sailfin shiner	21	0.11
91	Middle Wekiva	Vallisneria	Sailfin shiner	21	0.10
91	Middle Wekiva	Vallisneria	Sailfin shiner	25	0.17
91	Middle Wekiva	Vallisneria	Sailfin shiner	29	0.25
91	Middle Wekiva	Vallisneria	Sailfin shiner	31	0.38
91	Middle Wekiva	Vallisneria	Spotted sunfish	43	1.68
91	Middle Wekiva	Vallisneria	Spotted sunfish	126	40.00
91	Middle Wekiva	Vallisneria	Tadpole madtom	38	0.79
91	Middle Wekiva	Vallisneria	Tadpole madtom	42	1.12
91	Middle Wekiva	Vallisneria	Tadpole madtom	47	1.49
91	Middle Wekiva	Vallisneria	Tadpole madtom	53	1.89
92	Middle Wekiva	Vallisneria	Bluefin killifish	15	0.06
92	Middle Wekiva	Vallisneria	Bluefin killifish	16	0.08
92	Middle Wekiva	Vallisneria	Bluefin killifish	22	0.19
92	Middle Wekiva	Vallisneria	Bluefin killifish	41	0.98
92	Middle Wekiva	Vallisneria	Redbreast sunfish	19	0.21
92	Middle Wekiva	Vallisneria	Speckled madtom	30	0.37
93	Middle Wekiva	Vallisneria	Bluefin killifish	25	0.27
93	Middle Wekiva	Vallisneria	Bluefin killifish	26	0.27
93	Middle Wekiva	Vallisneria	Bluefin killifish	26	0.29
93	Middle Wekiva	Vallisneria	Bluefin killifish	27	0.30
93	Middle Wekiva	Vallisneria	Bluefin killifish	28	0.34
93	Middle Wekiva	Vallisneria	Bluefin killifish	29	0.33
93	Middle Wekiva	Vallisneria	Coastal shiner	50	1.21
93	Middle Wekiva	Vallisneria	Coastal shiner	60	2.10
93	Middle Wekiva	Vallisneria	Pugnose minnow	37	0.42
93	Middle Wekiva	Vallisneria	Pugnose minnow	38	0.51
93	Middle Wekiva	Vallisneria	Pugnose minnow	42	0.73
93	Middle Wekiva	Vallisneria	Sailfin shiner	24	0.15
93	Middle Wekiva	Vallisneria	Sailfin shiner	26	0.21
93	Middle Wekiva	Vallisneria	Spotted sunfish	17	0.19
93	Middle Wekiva	Vallisneria	Spotted sunfish	51	2.96
93	Middle Wekiva	Vallisneria	Tadpole madtom	52	1.90
94	Middle Wekiva	Vallisneria	Bluefin killifish	14	0.05
94	Middle Wekiva	Vallisneria	Bluefin killifish	17	0.09
94	Middle Wekiva	Vallisneria	Bluefin killifish	18	0.10
94	Middle Wekiva	Vallisneria	Bluefin killifish	19	0.12
94	Middle Wekiva	Vallisneria	Bluefin killifish	21	0.26
94	Middle Wekiva	Vallisneria	Bluefin killifish	25	0.26

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
94	Middle Wekiva	Vallisneria	Bluefin killifish	28	0.30
94	Middle Wekiva	Vallisneria	Bluefin killifish	28	0.33
94	Middle Wekiva	Vallisneria	Tadpole madtom	40	0.93
94	Middle Wekiva	Vallisneria	Tadpole madtom	50	1.90
95	Middle Wekiva	Bare Bottom	Bluefin killifish	14	0.05
95	Middle Wekiva	Bare Bottom	Bluefin killifish	14	0.05
95	Middle Wekiva	Bare Bottom	Bluefin killifish	17	0.08
95	Middle Wekiva	Bare Bottom	Bluefin killifish	17	0.08
95	Middle Wekiva	Bare Bottom	Bluefin killifish	17	0.09
95	Middle Wekiva	Bare Bottom	Bluefin killifish	18	0.09
95	Middle Wekiva	Bare Bottom	Bluefin killifish	18	0.09
95	Middle Wekiva	Bare Bottom	Bluefin killifish	20	0.13
95	Middle Wekiva	Bare Bottom	Tadpole madtom	16	0.07
95	Middle Wekiva	Bare Bottom	Tadpole madtom	19	0.12
95	Middle Wekiva	Bare Bottom	Tadpole madtom	20	0.13
96	Middle Wekiva	Bare Bottom	No Fish in Trap	.	.
97	Middle Wekiva	Bare Bottom	Bluefin killifish	15	0.07
97	Middle Wekiva	Bare Bottom	Bluefin killifish	15	0.08
97	Middle Wekiva	Bare Bottom	Bluefin killifish	16	0.08
97	Middle Wekiva	Bare Bottom	Bluefin killifish	18	0.11
97	Middle Wekiva	Bare Bottom	Bluefin killifish	19	0.13
97	Middle Wekiva	Bare Bottom	Bluefin killifish	22	0.17
97	Middle Wekiva	Bare Bottom	Bluefin killifish	27	0.27
97	Middle Wekiva	Bare Bottom	Least killifish	12	0.05
97	Middle Wekiva	Bare Bottom	Tadpole madtom	28	0.27
97	Middle Wekiva	Bare Bottom	Tadpole madtom	32	0.43
97	Middle Wekiva	Bare Bottom	Tadpole madtom	37	0.59
98	Middle Wekiva	Bare Bottom	Bluefin killifish	11	0.04
98	Middle Wekiva	Bare Bottom	Bluefin killifish	35	0.56
98	Middle Wekiva	Bare Bottom	Coastal shiner	27	0.24
98	Middle Wekiva	Bare Bottom	Coastal shiner	34	0.46
98	Middle Wekiva	Bare Bottom	Tadpole madtom	22	0.18
98	Middle Wekiva	Bare Bottom	Tadpole madtom	37	0.81
98	Middle Wekiva	Bare Bottom	Tadpole madtom	46	1.02
99	Middle Wekiva	Bare Bottom	Blackbanded darter	18	0.08
99	Middle Wekiva	Bare Bottom	Blackbanded darter	18	0.08
100	Middle Wekiva	Bare Bottom	Bluefin killifish	12	0.04
100	Middle Wekiva	Bare Bottom	Tadpole madtom	11	0.03
100	Middle Wekiva	Bare Bottom	Tadpole madtom	12	0.04
100	Middle Wekiva	Bare Bottom	Tadpole madtom	28	0.34
100	Middle Wekiva	Bare Bottom	Tadpole madtom	30	0.36
101	Middle Wekiva	Hydrocotyle	Bluefin killifish	23	0.21
101	Middle Wekiva	Hydrocotyle	Bluefin killifish	25	0.22
101	Middle Wekiva	Hydrocotyle	Bluefin killifish	28	0.31
101	Middle Wekiva	Hydrocotyle	Bluefin killifish	30	0.42
101	Middle Wekiva	Hydrocotyle	Coastal shiner	43	0.79
101	Middle Wekiva	Hydrocotyle	Least killifish	8	0.02
101	Middle Wekiva	Hydrocotyle	Least killifish	9	0.03
101	Middle Wekiva	Hydrocotyle	Least killifish	9	0.02
101	Middle Wekiva	Hydrocotyle	Least killifish	10	0.03
101	Middle Wekiva	Hydrocotyle	Least killifish	10	0.03
101	Middle Wekiva	Hydrocotyle	Least killifish	11	0.03
101	Middle Wekiva	Hydrocotyle	Least killifish	11	0.03
101	Middle Wekiva	Hydrocotyle	Least killifish	11	0.03

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
101	Middle Wekiva	Hydrocotyle	Least killifish	11	0.03
101	Middle Wekiva	Hydrocotyle	Least killifish	11	0.04
101	Middle Wekiva	Hydrocotyle	Least killifish	11	0.04
101	Middle Wekiva	Hydrocotyle	Least killifish	11	0.04
101	Middle Wekiva	Hydrocotyle	Least killifish	12	0.04
101	Middle Wekiva	Hydrocotyle	Least killifish	12	0.04
101	Middle Wekiva	Hydrocotyle	Least killifish	12	0.05
101	Middle Wekiva	Hydrocotyle	Least killifish	12	0.04
101	Middle Wekiva	Hydrocotyle	Least killifish	12	0.04
101	Middle Wekiva	Hydrocotyle	Least killifish	12	0.04
101	Middle Wekiva	Hydrocotyle	Least killifish	12	0.04
101	Middle Wekiva	Hydrocotyle	Least killifish	12	0.04
101	Middle Wekiva	Hydrocotyle	Least killifish	12	0.04
101	Middle Wekiva	Hydrocotyle	Least killifish	13	0.04
101	Middle Wekiva	Hydrocotyle	Least killifish	13	0.04
101	Middle Wekiva	Hydrocotyle	Least killifish	13	0.05
101	Middle Wekiva	Hydrocotyle	Least killifish	13	0.04
101	Middle Wekiva	Hydrocotyle	Least killifish	14	0.05
101	Middle Wekiva	Hydrocotyle	Least killifish	14	0.05
101	Middle Wekiva	Hydrocotyle	Least killifish	14	0.05
101	Middle Wekiva	Hydrocotyle	Least killifish	14	0.06
101	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
101	Middle Wekiva	Hydrocotyle	Least killifish	14	0.05
101	Middle Wekiva	Hydrocotyle	Least killifish	14	0.05
101	Middle Wekiva	Hydrocotyle	Least killifish	15	0.08
101	Middle Wekiva	Hydrocotyle	Mosquitofish	9	0.02
101	Middle Wekiva	Hydrocotyle	Mosquitofish	10	0.02
101	Middle Wekiva	Hydrocotyle	Mosquitofish	13	0.04
101	Middle Wekiva	Hydrocotyle	Mosquitofish	15	0.07
101	Middle Wekiva	Hydrocotyle	Mosquitofish	15	0.05
101	Middle Wekiva	Hydrocotyle	Mosquitofish	16	0.08
101	Middle Wekiva	Hydrocotyle	Mosquitofish	17	0.10
101	Middle Wekiva	Hydrocotyle	Mosquitofish	18	0.10
101	Middle Wekiva	Hydrocotyle	Mosquitofish	21	0.14
101	Middle Wekiva	Hydrocotyle	Mosquitofish	22	0.16
101	Middle Wekiva	Hydrocotyle	Mosquitofish	23	0.22
101	Middle Wekiva	Hydrocotyle	Mosquitofish	24	0.21
101	Middle Wekiva	Hydrocotyle	Mosquitofish	26	0.27
101	Middle Wekiva	Hydrocotyle	Mosquitofish	29	0.31
101	Middle Wekiva	Hydrocotyle	Mosquitofish	30	0.42
101	Middle Wekiva	Hydrocotyle	Mosquitofish	34	0.53
101	Middle Wekiva	Hydrocotyle	Mosquitofish	35	0.64
101	Middle Wekiva	Hydrocotyle	Mosquitofish	37	0.66
101	Middle Wekiva	Hydrocotyle	Mosquitofish	40	0.96
101	Middle Wekiva	Hydrocotyle	Sailfin molly	14	0.12
101	Middle Wekiva	Hydrocotyle	Sailfin molly	20	0.17
101	Middle Wekiva	Hydrocotyle	Sailfin molly	22	0.24
101	Middle Wekiva	Hydrocotyle	Sailfin molly	23	0.25
101	Middle Wekiva	Hydrocotyle	Sailfin molly	23	0.26
101	Middle Wekiva	Hydrocotyle	Spotted sunfish	42	1.51
101	Middle Wekiva	Hydrocotyle	Spotted sunfish	53	3.54
101	Middle Wekiva	Hydrocotyle	Tadpole madtom	29	0.35
102	Middle Wekiva	Hydrocotyle	Bluefin killifish	16	0.08
102	Middle Wekiva	Hydrocotyle	Bluefin killifish	19	0.14
102	Middle Wekiva	Hydrocotyle	Bluefin killifish	21	0.15
102	Middle Wekiva	Hydrocotyle	Bluefin killifish	21	0.18

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Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
102	Middle Wekiva	Hydrocotyle	Bluefin killifish	22	0.18
102	Middle Wekiva	Hydrocotyle	Least killifish	4	0.01
102	Middle Wekiva	Hydrocotyle	Least killifish	5	0.01
102	Middle Wekiva	Hydrocotyle	Least killifish	5	0.01
102	Middle Wekiva	Hydrocotyle	Least killifish	6	0.01
102	Middle Wekiva	Hydrocotyle	Least killifish	6	0.02
102	Middle Wekiva	Hydrocotyle	Least killifish	7	0.02
102	Middle Wekiva	Hydrocotyle	Least killifish	7	0.02
102	Middle Wekiva	Hydrocotyle	Least killifish	7	0.02
102	Middle Wekiva	Hydrocotyle	Least killifish	7	0.02
102	Middle Wekiva	Hydrocotyle	Least killifish	7	0.02
102	Middle Wekiva	Hydrocotyle	Least killifish	8	0.02
102	Middle Wekiva	Hydrocotyle	Least killifish	8	0.02
102	Middle Wekiva	Hydrocotyle	Least killifish	9	0.03
102	Middle Wekiva	Hydrocotyle	Least killifish	9	0.06
102	Middle Wekiva	Hydrocotyle	Least killifish	9	0.03
102	Middle Wekiva	Hydrocotyle	Least killifish	9	0.03
102	Middle Wekiva	Hydrocotyle	Least killifish	9	0.02
102	Middle Wekiva	Hydrocotyle	Least killifish	10	0.03
102	Middle Wekiva	Hydrocotyle	Least killifish	10	0.04
102	Middle Wekiva	Hydrocotyle	Least killifish	10	0.04
102	Middle Wekiva	Hydrocotyle	Least killifish	10	0.03
102	Middle Wekiva	Hydrocotyle	Least killifish	11	0.04
102	Middle Wekiva	Hydrocotyle	Least killifish	11	0.05
102	Middle Wekiva	Hydrocotyle	Least killifish	11	0.04
102	Middle Wekiva	Hydrocotyle	Least killifish	11	0.04
102	Middle Wekiva	Hydrocotyle	Least killifish	12	0.05
102	Middle Wekiva	Hydrocotyle	Least killifish	12	0.05
102	Middle Wekiva	Hydrocotyle	Least killifish	12	0.06
102	Middle Wekiva	Hydrocotyle	Least killifish	12	0.05
102	Middle Wekiva	Hydrocotyle	Least killifish	12	0.04
102	Middle Wekiva	Hydrocotyle	Least killifish	12	0.05
102	Middle Wekiva	Hydrocotyle	Least killifish	13	0.06
102	Middle Wekiva	Hydrocotyle	Least killifish	13	0.06
102	Middle Wekiva	Hydrocotyle	Least killifish	13	0.06
102	Middle Wekiva	Hydrocotyle	Least killifish	13	0.06
102	Middle Wekiva	Hydrocotyle	Least killifish	13	0.06
102	Middle Wekiva	Hydrocotyle	Least killifish	13	0.06
102	Middle Wekiva	Hydrocotyle	Least killifish	13	0.05
102	Middle Wekiva	Hydrocotyle	Least killifish	13	0.06
102	Middle Wekiva	Hydrocotyle	Least killifish	14	0.05
102	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
102	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
102	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
102	Middle Wekiva	Hydrocotyle	Least killifish	14	0.06
102	Middle Wekiva	Hydrocotyle	Least killifish	14	0.08
102	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
102	Middle Wekiva	Hydrocotyle	Least killifish	14	0.06
102	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
102	Middle Wekiva	Hydrocotyle	Least killifish	14	0.05
102	Middle Wekiva	Hydrocotyle	Least killifish	15	0.07
102	Middle Wekiva	Hydrocotyle	Least killifish	15	0.09
102	Middle Wekiva	Hydrocotyle	Least killifish	15	0.09
102	Middle Wekiva	Hydrocotyle	Least killifish	15	0.08

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
102	Middle Wekiva	Hydrocotyle	Least killifish	15	0.08
102	Middle Wekiva	Hydrocotyle	Least killifish	16	0.10
102	Middle Wekiva	Hydrocotyle	Least killifish	17	0.10
102	Middle Wekiva	Hydrocotyle	Mosquitofish	9	0.03
102	Middle Wekiva	Hydrocotyle	Mosquitofish	10	0.03
102	Middle Wekiva	Hydrocotyle	Mosquitofish	10	0.02
102	Middle Wekiva	Hydrocotyle	Mosquitofish	11	0.04
102	Middle Wekiva	Hydrocotyle	Mosquitofish	12	0.03
102	Middle Wekiva	Hydrocotyle	Mosquitofish	12	0.05
102	Middle Wekiva	Hydrocotyle	Mosquitofish	13	0.05
102	Middle Wekiva	Hydrocotyle	Mosquitofish	14	0.06
102	Middle Wekiva	Hydrocotyle	Mosquitofish	15	0.06
102	Middle Wekiva	Hydrocotyle	Mosquitofish	17	0.09
102	Middle Wekiva	Hydrocotyle	Mosquitofish	19	0.14
102	Middle Wekiva	Hydrocotyle	Mosquitofish	20	0.15
102	Middle Wekiva	Hydrocotyle	Mosquitofish	21	0.16
102	Middle Wekiva	Hydrocotyle	Mosquitofish	23	0.20
102	Middle Wekiva	Hydrocotyle	Mosquitofish	24	0.22
102	Middle Wekiva	Hydrocotyle	Mosquitofish	27	0.31
102	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	9	0.03
102	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	17	0.17
102	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	22	0.29
102	Middle Wekiva	Hydrocotyle	Redbreast sunfish	11	0.03
102	Middle Wekiva	Hydrocotyle	Redbreast sunfish	12	0.05
102	Middle Wekiva	Hydrocotyle	Redbreast sunfish	13	0.10
102	Middle Wekiva	Hydrocotyle	Redbreast sunfish	14	0.07
102	Middle Wekiva	Hydrocotyle	Sailfin molly	13	0.06
102	Middle Wekiva	Hydrocotyle	Sailfin molly	15	0.09
102	Middle Wekiva	Hydrocotyle	Sailfin molly	15	0.10
102	Middle Wekiva	Hydrocotyle	Sailfin molly	16	0.11
102	Middle Wekiva	Hydrocotyle	Sailfin molly	19	0.16
102	Middle Wekiva	Hydrocotyle	Sailfin molly	22	0.38
102	Middle Wekiva	Hydrocotyle	Sailfin molly	24	0.30
102	Middle Wekiva	Hydrocotyle	Sailfin molly	25	0.34
102	Middle Wekiva	Hydrocotyle	Sailfin molly	26	0.37
102	Middle Wekiva	Hydrocotyle	Sailfin molly	28	0.54
103	Middle Wekiva	Hydrocotyle	Bluefin killifish	18	0.11
103	Middle Wekiva	Hydrocotyle	Bluefin killifish	22	0.17
103	Middle Wekiva	Hydrocotyle	Least killifish	9	0.02
103	Middle Wekiva	Hydrocotyle	Least killifish	10	0.03
103	Middle Wekiva	Hydrocotyle	Least killifish	10	0.04
103	Middle Wekiva	Hydrocotyle	Least killifish	10	0.03
103	Middle Wekiva	Hydrocotyle	Least killifish	10	0.02
103	Middle Wekiva	Hydrocotyle	Least killifish	11	0.03
103	Middle Wekiva	Hydrocotyle	Least killifish	11	0.04
103	Middle Wekiva	Hydrocotyle	Least killifish	11	0.04
103	Middle Wekiva	Hydrocotyle	Least killifish	12	0.05
103	Middle Wekiva	Hydrocotyle	Least killifish	12	0.05
103	Middle Wekiva	Hydrocotyle	Least killifish	13	0.04
103	Middle Wekiva	Hydrocotyle	Least killifish	13	0.05
103	Middle Wekiva	Hydrocotyle	Least killifish	13	0.05
103	Middle Wekiva	Hydrocotyle	Least killifish	13	0.06
103	Middle Wekiva	Hydrocotyle	Least killifish	13	0.06

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Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
103	Middle Wekiva	Hydrocotyle	Least killifish	14	0.05
103	Middle Wekiva	Hydrocotyle	Least killifish	14	0.07
103	Middle Wekiva	Hydrocotyle	Least killifish	15	0.08
103	Middle Wekiva	Hydrocotyle	Least killifish	16	0.08
103	Middle Wekiva	Hydrocotyle	Least killifish	18	0.12
103	Middle Wekiva	Hydrocotyle	Least killifish	18	0.11
103	Middle Wekiva	Hydrocotyle	Mosquitofish	11	0.03
103	Middle Wekiva	Hydrocotyle	Mosquitofish	12	0.04
103	Middle Wekiva	Hydrocotyle	Mosquitofish	12	0.06
103	Middle Wekiva	Hydrocotyle	Mosquitofish	12	0.03
103	Middle Wekiva	Hydrocotyle	Mosquitofish	16	0.07
103	Middle Wekiva	Hydrocotyle	Mosquitofish	18	0.10
103	Middle Wekiva	Hydrocotyle	Mosquitofish	18	0.21
103	Middle Wekiva	Hydrocotyle	Mosquitofish	20	0.15
103	Middle Wekiva	Hydrocotyle	Mosquitofish	25	0.25
103	Middle Wekiva	Hydrocotyle	Mosquitofish	25	0.23
103	Middle Wekiva	Hydrocotyle	Mosquitofish	28	0.24
103	Middle Wekiva	Hydrocotyle	Mosquitofish	36	0.55
103	Middle Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.16
103	Middle Wekiva	Hydrocotyle	Sailfin molly	15	0.10
103	Middle Wekiva	Hydrocotyle	Sailfin molly	18	0.15
103	Middle Wekiva	Hydrocotyle	Sailfin molly	20	0.20
103	Middle Wekiva	Hydrocotyle	Sailfin molly	20	0.19
103	Middle Wekiva	Hydrocotyle	Sailfin molly	21	0.20
103	Middle Wekiva	Hydrocotyle	Sailfin molly	23	0.25
103	Middle Wekiva	Hydrocotyle	Sailfin molly	27	0.40
103	Middle Wekiva	Hydrocotyle	Tadpole madtom	11	0.06
104	Middle Wekiva	Nuphar	Bluefin killifish	10	0.03
104	Middle Wekiva	Nuphar	Bluefin killifish	11	0.04
104	Middle Wekiva	Nuphar	Bluefin killifish	14	0.04
104	Middle Wekiva	Nuphar	Coastal shiner	10	0.02
104	Middle Wekiva	Nuphar	Coastal shiner	17	0.07
104	Middle Wekiva	Nuphar	Coastal shiner	21	0.12
105	Middle Wekiva	Nuphar	Blackbanded darter	31	0.32
105	Middle Wekiva	Nuphar	Pugnose minnow	13	0.05
105	Middle Wekiva	Nuphar	Pugnose minnow	17	0.05
105	Middle Wekiva	Nuphar	Pugnose minnow	27	0.21
105	Middle Wekiva	Nuphar	Tadpole madtom	41	0.86
106	Upper Wekiva	Hydrocotyle	Blackbanded darter	27	0.23
106	Upper Wekiva	Hydrocotyle	Blackbanded darter	55	1.56
106	Upper Wekiva	Hydrocotyle	Bluefin killifish	12	0.04
106	Upper Wekiva	Hydrocotyle	Least killifish	8	0.02
106	Upper Wekiva	Hydrocotyle	Least killifish	9	0.02
106	Upper Wekiva	Hydrocotyle	Least killifish	10	0.03
106	Upper Wekiva	Hydrocotyle	Least killifish	10	0.02
106	Upper Wekiva	Hydrocotyle	Least killifish	11	0.04
106	Upper Wekiva	Hydrocotyle	Least killifish	12	0.06
106	Upper Wekiva	Hydrocotyle	Least killifish	13	0.06
106	Upper Wekiva	Hydrocotyle	Least killifish	13	0.06
106	Upper Wekiva	Hydrocotyle	Least killifish	14	0.05
106	Upper Wekiva	Hydrocotyle	Least killifish	14	0.05
106	Upper Wekiva	Hydrocotyle	Least killifish	16	0.07
106	Upper Wekiva	Hydrocotyle	Least killifish	16	0.08
106	Upper Wekiva	Hydrocotyle	Least killifish	18	0.10

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
106	Upper Wekiva	Hydrocotyle	Least killifish	21	0.13
106	Upper Wekiva	Hydrocotyle	Mosquitofish	14	0.05
106	Upper Wekiva	Hydrocotyle	Sailfin molly	20	0.15
106	Upper Wekiva	Hydrocotyle	Sailfin molly	22	0.24
106	Upper Wekiva	Hydrocotyle	Sailfin molly	27	0.33
106	Upper Wekiva	Hydrocotyle	Sailfin molly	29	0.41
106	Upper Wekiva	Hydrocotyle	Spotted sunfish	28	0.40
106	Upper Wekiva	Hydrocotyle	Spotted sunfish	31	0.58
106	Upper Wekiva	Hydrocotyle	Spotted sunfish	34	0.76
107	Upper Wekiva	Hydrocotyle	Bluefin killifish	13	0.04
107	Upper Wekiva	Hydrocotyle	Bluefin killifish	14	0.06
107	Upper Wekiva	Hydrocotyle	Bluefin killifish	15	0.08
107	Upper Wekiva	Hydrocotyle	Bluefin killifish	16	0.08
107	Upper Wekiva	Hydrocotyle	Bluefin killifish	17	0.10
107	Upper Wekiva	Hydrocotyle	Bluefin killifish	18	0.10
107	Upper Wekiva	Hydrocotyle	Bluefin killifish	22	0.14
107	Upper Wekiva	Hydrocotyle	Bluefin killifish	24	0.18
107	Upper Wekiva	Hydrocotyle	Bluefin killifish	25	0.21
107	Upper Wekiva	Hydrocotyle	Bluefin killifish	25	0.26
107	Upper Wekiva	Hydrocotyle	Least killifish	8	0.01
107	Upper Wekiva	Hydrocotyle	Least killifish	8	0.02
107	Upper Wekiva	Hydrocotyle	Least killifish	8	0.02
107	Upper Wekiva	Hydrocotyle	Least killifish	9	0.02
107	Upper Wekiva	Hydrocotyle	Least killifish	9	0.02
107	Upper Wekiva	Hydrocotyle	Least killifish	9	0.03
107	Upper Wekiva	Hydrocotyle	Least killifish	9	0.03
107	Upper Wekiva	Hydrocotyle	Least killifish	9	0.02
107	Upper Wekiva	Hydrocotyle	Least killifish	10	0.04
107	Upper Wekiva	Hydrocotyle	Least killifish	10	0.03
107	Upper Wekiva	Hydrocotyle	Least killifish	10	0.03
107	Upper Wekiva	Hydrocotyle	Least killifish	11	0.04
107	Upper Wekiva	Hydrocotyle	Least killifish	11	0.04
107	Upper Wekiva	Hydrocotyle	Least killifish	11	0.04
107	Upper Wekiva	Hydrocotyle	Least killifish	12	0.05
107	Upper Wekiva	Hydrocotyle	Least killifish	12	0.04
107	Upper Wekiva	Hydrocotyle	Least killifish	12	0.03
107	Upper Wekiva	Hydrocotyle	Least killifish	12	0.04
107	Upper Wekiva	Hydrocotyle	Least killifish	13	0.07
107	Upper Wekiva	Hydrocotyle	Least killifish	14	0.07
107	Upper Wekiva	Hydrocotyle	Least killifish	15	0.08
107	Upper Wekiva	Hydrocotyle	Least killifish	16	0.10
107	Upper Wekiva	Hydrocotyle	Mosquitofish	8	0.02
107	Upper Wekiva	Hydrocotyle	Mosquitofish	9	0.02
107	Upper Wekiva	Hydrocotyle	Mosquitofish	11	0.03
107	Upper Wekiva	Hydrocotyle	Mosquitofish	12	0.04
107	Upper Wekiva	Hydrocotyle	Mosquitofish	13	0.04
107	Upper Wekiva	Hydrocotyle	Mosquitofish	13	0.04
107	Upper Wekiva	Hydrocotyle	Mosquitofish	15	0.05
107	Upper Wekiva	Hydrocotyle	Mosquitofish	16	0.08
107	Upper Wekiva	Hydrocotyle	Mosquitofish	16	0.06
107	Upper Wekiva	Hydrocotyle	Mosquitofish	17	0.08
107	Upper Wekiva	Hydrocotyle	Mosquitofish	19	0.13
107	Upper Wekiva	Hydrocotyle	Mosquitofish	25	0.24
107	Upper Wekiva	Hydrocotyle	Pirate perch	49	1.71

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
107	Upper Wekiva	Hydrocotyle	Redbreast sunfish	11	0.05
107	Upper Wekiva	Hydrocotyle	Redbreast sunfish	11	0.04
107	Upper Wekiva	Hydrocotyle	Sailfin molly	13	0.06
107	Upper Wekiva	Hydrocotyle	Sailfin molly	15	0.08
107	Upper Wekiva	Hydrocotyle	Sailfin molly	15	0.09
107	Upper Wekiva	Hydrocotyle	Sailfin molly	16	0.09
107	Upper Wekiva	Hydrocotyle	Sailfin molly	17	0.13
107	Upper Wekiva	Hydrocotyle	Sailfin molly	19	0.18
107	Upper Wekiva	Hydrocotyle	Sailfin molly	19	0.15
107	Upper Wekiva	Hydrocotyle	Sailfin molly	19	0.12
107	Upper Wekiva	Hydrocotyle	Sailfin molly	21	0.20
107	Upper Wekiva	Hydrocotyle	Sailfin molly	21	0.17
107	Upper Wekiva	Hydrocotyle	Sailfin molly	22	0.20
107	Upper Wekiva	Hydrocotyle	Sailfin molly	23	0.25
107	Upper Wekiva	Hydrocotyle	Spotted sunfish	15	0.10
108	Upper Wekiva	Hydrocotyle	Least killifish	7	0.01
108	Upper Wekiva	Hydrocotyle	Least killifish	7	0.02
108	Upper Wekiva	Hydrocotyle	Least killifish	8	0.02
108	Upper Wekiva	Hydrocotyle	Least killifish	8	0.02
108	Upper Wekiva	Hydrocotyle	Least killifish	9	0.02
108	Upper Wekiva	Hydrocotyle	Least killifish	9	0.03
108	Upper Wekiva	Hydrocotyle	Least killifish	10	0.04
108	Upper Wekiva	Hydrocotyle	Least killifish	10	0.03
108	Upper Wekiva	Hydrocotyle	Least killifish	11	0.04
108	Upper Wekiva	Hydrocotyle	Least killifish	11	0.05
108	Upper Wekiva	Hydrocotyle	Least killifish	11	0.04
108	Upper Wekiva	Hydrocotyle	Least killifish	11	0.04
108	Upper Wekiva	Hydrocotyle	Least killifish	11	0.04
108	Upper Wekiva	Hydrocotyle	Least killifish	11	0.03
108	Upper Wekiva	Hydrocotyle	Least killifish	11	0.05
108	Upper Wekiva	Hydrocotyle	Least killifish	11	0.04
108	Upper Wekiva	Hydrocotyle	Least killifish	12	0.05
108	Upper Wekiva	Hydrocotyle	Least killifish	12	0.05
108	Upper Wekiva	Hydrocotyle	Least killifish	12	0.04
108	Upper Wekiva	Hydrocotyle	Least killifish	12	0.05
108	Upper Wekiva	Hydrocotyle	Least killifish	13	0.06
108	Upper Wekiva	Hydrocotyle	Least killifish	13	0.04
108	Upper Wekiva	Hydrocotyle	Least killifish	13	0.05
108	Upper Wekiva	Hydrocotyle	Least killifish	13	0.06
108	Upper Wekiva	Hydrocotyle	Least killifish	14	0.05
108	Upper Wekiva	Hydrocotyle	Least killifish	14	0.06
108	Upper Wekiva	Hydrocotyle	Mosquitofish	7	0.02
108	Upper Wekiva	Hydrocotyle	Mosquitofish	9	0.03
108	Upper Wekiva	Hydrocotyle	Mosquitofish	9	0.03
108	Upper Wekiva	Hydrocotyle	Mosquitofish	10	0.02
108	Upper Wekiva	Hydrocotyle	Mosquitofish	10	0.03
108	Upper Wekiva	Hydrocotyle	Mosquitofish	12	0.04
108	Upper Wekiva	Hydrocotyle	Mosquitofish	14	0.07
108	Upper Wekiva	Hydrocotyle	Mosquitofish	14	0.08
108	Upper Wekiva	Hydrocotyle	Mosquitofish	16	0.08
108	Upper Wekiva	Hydrocotyle	Mosquitofish	16	0.08
108	Upper Wekiva	Hydrocotyle	Mosquitofish	17	0.09
108	Upper Wekiva	Hydrocotyle	Mosquitofish	17	0.08
108	Upper Wekiva	Hydrocotyle	Mosquitofish	22	0.15

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
108	Upper Wekiva	Hydrocotyle	Mosquitofish	23	0.18
108	Upper Wekiva	Hydrocotyle	Mosquitofish	27	0.29
108	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	17	0.13
108	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	19	0.17
108	Upper Wekiva	Hydrocotyle	Pirate perch	48	1.37
108	Upper Wekiva	Hydrocotyle	Redbreast sunfish	20	0.22
108	Upper Wekiva	Hydrocotyle	Sailfin molly	19	0.16
108	Upper Wekiva	Hydrocotyle	Tadpole madtom	45	1.26
109	Upper Wekiva	Hydrocotyle	Bluefin killifish	10	0.02
109	Upper Wekiva	Hydrocotyle	Bluefin killifish	11	0.05
109	Upper Wekiva	Hydrocotyle	Bluefin killifish	11	0.04
109	Upper Wekiva	Hydrocotyle	Bluefin killifish	13	0.06
109	Upper Wekiva	Hydrocotyle	Bluefin killifish	14	0.06
109	Upper Wekiva	Hydrocotyle	Bluefin killifish	18	0.10
109	Upper Wekiva	Hydrocotyle	Bluefin killifish	19	0.14
109	Upper Wekiva	Hydrocotyle	Bluefin killifish	24	0.21
109	Upper Wekiva	Hydrocotyle	Bluefin killifish	25	0.26
109	Upper Wekiva	Hydrocotyle	Bluefin killifish	26	0.26
109	Upper Wekiva	Hydrocotyle	Least killifish	6	0.02
109	Upper Wekiva	Hydrocotyle	Least killifish	7	0.02
109	Upper Wekiva	Hydrocotyle	Least killifish	9	0.02
109	Upper Wekiva	Hydrocotyle	Least killifish	9	0.03
109	Upper Wekiva	Hydrocotyle	Least killifish	9	0.03
109	Upper Wekiva	Hydrocotyle	Least killifish	9	0.02
109	Upper Wekiva	Hydrocotyle	Least killifish	9	0.03
109	Upper Wekiva	Hydrocotyle	Least killifish	9	0.03
109	Upper Wekiva	Hydrocotyle	Least killifish	9	0.02
109	Upper Wekiva	Hydrocotyle	Least killifish	9	0.02
109	Upper Wekiva	Hydrocotyle	Least killifish	9	0.03
109	Upper Wekiva	Hydrocotyle	Least killifish	10	0.04
109	Upper Wekiva	Hydrocotyle	Least killifish	10	0.03
109	Upper Wekiva	Hydrocotyle	Least killifish	11	0.03
109	Upper Wekiva	Hydrocotyle	Least killifish	11	0.04
109	Upper Wekiva	Hydrocotyle	Least killifish	11	0.03
109	Upper Wekiva	Hydrocotyle	Least killifish	11	0.03
109	Upper Wekiva	Hydrocotyle	Least killifish	11	0.04
109	Upper Wekiva	Hydrocotyle	Least killifish	11	0.03
109	Upper Wekiva	Hydrocotyle	Least killifish	11	0.04
109	Upper Wekiva	Hydrocotyle	Least killifish	12	0.04
109	Upper Wekiva	Hydrocotyle	Least killifish	12	0.05
109	Upper Wekiva	Hydrocotyle	Least killifish	12	0.04
109	Upper Wekiva	Hydrocotyle	Least killifish	12	0.05
109	Upper Wekiva	Hydrocotyle	Least killifish	12	0.05
109	Upper Wekiva	Hydrocotyle	Least killifish	12	0.04
109	Upper Wekiva	Hydrocotyle	Least killifish	12	0.04
109	Upper Wekiva	Hydrocotyle	Least killifish	12	0.04
109	Upper Wekiva	Hydrocotyle	Least killifish	13	0.04
109	Upper Wekiva	Hydrocotyle	Least killifish	13	0.05
109	Upper Wekiva	Hydrocotyle	Least killifish	13	0.04
109	Upper Wekiva	Hydrocotyle	Least killifish	13	0.05
109	Upper Wekiva	Hydrocotyle	Least killifish	13	0.05
109	Upper Wekiva	Hydrocotyle	Least killifish	13	0.05
109	Upper Wekiva	Hydrocotyle	Least killifish	13	0.05
109	Upper Wekiva	Hydrocotyle	Least killifish	14	0.05
109	Upper Wekiva	Hydrocotyle	Least killifish	14	0.06
109	Upper Wekiva	Hydrocotyle	Least killifish	15	0.05

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Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
109	Upper Wekiva	Hydrocotyle	Mosquitofish	13	0.06
109	Upper Wekiva	Hydrocotyle	Mosquitofish	14	0.04
109	Upper Wekiva	Hydrocotyle	Mosquitofish	14	0.05
109	Upper Wekiva	Hydrocotyle	Mosquitofish	15	0.07
109	Upper Wekiva	Hydrocotyle	Mosquitofish	18	0.10
109	Upper Wekiva	Hydrocotyle	Mosquitofish	22	0.18
109	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.09
109	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	16	0.12
109	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	16	0.11
109	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	17	0.14
109	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.15
109	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	20	0.21
109	Upper Wekiva	Hydrocotyle	Redbreast sunfish	9	0.03
109	Upper Wekiva	Hydrocotyle	Redbreast sunfish	20	0.20
109	Upper Wekiva	Hydrocotyle	Redbreast sunfish	23	0.24
109	Upper Wekiva	Hydrocotyle	Redbreast sunfish	24	0.27
109	Upper Wekiva	Hydrocotyle	Tadpole madtom	23	0.17
110	Upper Wekiva	Hydrocotyle	Bluefin killifish	15	0.06
110	Upper Wekiva	Hydrocotyle	Bluefin killifish	15	0.07
110	Upper Wekiva	Hydrocotyle	Bluefin killifish	19	0.10
110	Upper Wekiva	Hydrocotyle	Bluefin killifish	21	0.16
110	Upper Wekiva	Hydrocotyle	Bluefin killifish	27	0.29
110	Upper Wekiva	Hydrocotyle	Bluefin killifish	33	0.51
110	Upper Wekiva	Hydrocotyle	Least killifish	8	0.03
110	Upper Wekiva	Hydrocotyle	Least killifish	9	0.02
110	Upper Wekiva	Hydrocotyle	Least killifish	9	0.03
110	Upper Wekiva	Hydrocotyle	Least killifish	18	0.12
110	Upper Wekiva	Hydrocotyle	Least killifish	20	0.13
110	Upper Wekiva	Hydrocotyle	Mosquitofish	9	0.03
110	Upper Wekiva	Hydrocotyle	Mosquitofish	12	0.03
110	Upper Wekiva	Hydrocotyle	Mosquitofish	13	0.04
110	Upper Wekiva	Hydrocotyle	Mosquitofish	13	0.04
110	Upper Wekiva	Hydrocotyle	Mosquitofish	13	0.05
110	Upper Wekiva	Hydrocotyle	Mosquitofish	14	0.06
110	Upper Wekiva	Hydrocotyle	Mosquitofish	16	0.07
110	Upper Wekiva	Hydrocotyle	Mosquitofish	18	0.10
110	Upper Wekiva	Hydrocotyle	Mosquitofish	18	0.09
110	Upper Wekiva	Hydrocotyle	Mosquitofish	20	0.11
110	Upper Wekiva	Hydrocotyle	Mosquitofish	22	0.17
110	Upper Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	20	0.20
110	Upper Wekiva	Hydrocotyle	Sailfin molly	18	0.14
110	Upper Wekiva	Hydrocotyle	Sailfin molly	20	0.17
110	Upper Wekiva	Hydrocotyle	Sailfin molly	21	0.18
110	Upper Wekiva	Hydrocotyle	Sailfin molly	28	0.37
110	Upper Wekiva	Hydrocotyle	Sailfin molly	29	0.39
110	Upper Wekiva	Hydrocotyle	Spotted sunfish	13	0.08
110	Upper Wekiva	Hydrocotyle	Spotted sunfish	18	0.16
110	Upper Wekiva	Hydrocotyle	Spotted sunfish	18	0.13
110	Upper Wekiva	Hydrocotyle	Spotted sunfish	36	1.08
110	Upper Wekiva	Hydrocotyle	Tadpole madtom	13	0.05
110	Upper Wekiva	Hydrocotyle	Tadpole madtom	15	0.07
110	Upper Wekiva	Hydrocotyle	Tadpole madtom	21	0.14
111	Upper Wekiva	Vallisneria	Blackbanded darter	60	1.98
111	Upper Wekiva	Vallisneria	Lake chubsucker	171	62.55

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Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
111	Upper Wekiva	Vallisneria	Pirate perch	58	2.74
111	Upper Wekiva	Vallisneria	Sailfin shiner	29	0.01
111	Upper Wekiva	Vallisneria	Tadpole madtom	29	0.45
111	Upper Wekiva	Vallisneria	Warmouth	180	125.00
112	Upper Wekiva	Vallisneria	Tadpole madtom	39	0.66
113	Upper Wekiva	Vallisneria	Spotted sunfish	14	0.08
113	Upper Wekiva	Vallisneria	Spotted sunfish	19	0.36
113	Upper Wekiva	Vallisneria	Spotted sunfish	38	1.13
113	Upper Wekiva	Vallisneria	Spotted sunfish	43	1.78
113	Upper Wekiva	Vallisneria	Spotted sunfish	54	3.67
113	Upper Wekiva	Vallisneria	Spotted sunfish	62	5.08
114	Upper Wekiva	Vallisneria	Seminole killifish	60	1.99
114	Upper Wekiva	Vallisneria	Spotted sunfish	15	0.09
114	Upper Wekiva	Vallisneria	Spotted sunfish	21	0.20
114	Upper Wekiva	Vallisneria	Spotted sunfish	29	0.57
114	Upper Wekiva	Vallisneria	Spotted sunfish	32	1.07
114	Upper Wekiva	Vallisneria	Spotted sunfish	32	0.77
114	Upper Wekiva	Vallisneria	Spotted sunfish	43	1.55
114	Upper Wekiva	Vallisneria	Spotted sunfish	87	12.65
114	Upper Wekiva	Vallisneria	Spotted sunfish	95	18.78
115	Upper Wekiva	Vallisneria	Blackbanded darter	47	1.05
115	Upper Wekiva	Vallisneria	Bluefin killifish	22	0.28
115	Upper Wekiva	Vallisneria	Bluefin killifish	28	0.36
115	Upper Wekiva	Vallisneria	Bluefin killifish	30	0.40
115	Upper Wekiva	Vallisneria	Bluefin killifish	31	0.67
115	Upper Wekiva	Vallisneria	Bluefin killifish	32	0.46
115	Upper Wekiva	Vallisneria	Bluefin killifish	33	0.48
115	Upper Wekiva	Vallisneria	Bluefin killifish	34	0.57
115	Upper Wekiva	Vallisneria	Pugnose minnow	36	0.44
115	Upper Wekiva	Vallisneria	Sailfin shiner	23	0.12
115	Upper Wekiva	Vallisneria	Sailfin shiner	37	0.50
115	Upper Wekiva	Vallisneria	Spotted sunfish	38	1.19
115	Upper Wekiva	Vallisneria	Tadpole madtom	15	0.08
115	Upper Wekiva	Vallisneria	Tadpole madtom	22	0.17
115	Upper Wekiva	Vallisneria	Tadpole madtom	29	0.34
115	Upper Wekiva	Vallisneria	Tadpole madtom	33	0.45
115	Upper Wekiva	Vallisneria	Tadpole madtom	41	0.95
115	Upper Wekiva	Vallisneria	Tadpole madtom	42	0.97
115	Upper Wekiva	Vallisneria	Tadpole madtom	44	1.23
116	Upper Wekiva	Nuphar	Blackbanded darter	42	0.68
116	Upper Wekiva	Nuphar	Coastal shiner	20	0.08
116	Upper Wekiva	Nuphar	Coastal shiner	21	0.12
116	Upper Wekiva	Nuphar	Coastal shiner	22	0.26
116	Upper Wekiva	Nuphar	Coastal shiner	29	0.24
116	Upper Wekiva	Nuphar	Coastal shiner	31	0.25
116	Upper Wekiva	Nuphar	Coastal shiner	33	0.36
116	Upper Wekiva	Nuphar	Coastal shiner	43	0.73
117	Upper Wekiva	Nuphar	Bluefin killifish	20	0.14
117	Upper Wekiva	Nuphar	Bluefin killifish	26	0.23
117	Upper Wekiva	Nuphar	Bluefin killifish	30	0.38
117	Upper Wekiva	Nuphar	Pugnose minnow	33	0.34
117	Upper Wekiva	Nuphar	Spotted sunfish	22	0.23
117	Upper Wekiva	Nuphar	Spotted sunfish	28	0.43
117	Upper Wekiva	Nuphar	Spotted sunfish	29	0.54

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Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
117	Upper Wekiva	Nuphar	Spotted sunfish	34	0.73
118	Upper Wekiva	Nuphar	Largemouth bass	58	2.26
119	Upper Wekiva	Nuphar	Coastal shiner	23	0.11
119	Upper Wekiva	Nuphar	Coastal shiner	31	0.30
119	Upper Wekiva	Nuphar	Unidentifiable fish	9	0.03
119	Upper Wekiva	Nuphar	Unidentifiable fish	13	0.04
120	Upper Wekiva	Nuphar	No Fish in Trap	.	.
121	Little Wekiva	Vallisneria	Bluegill	56	3.45
121	Little Wekiva	Vallisneria	Dollar sunfish	63	5.13
121	Little Wekiva	Vallisneria	Dollar sunfish	64	5.00
121	Little Wekiva	Vallisneria	Mosquitofish	16	0.06
121	Little Wekiva	Vallisneria	Mosquitofish	18	0.10
121	Little Wekiva	Vallisneria	Mosquitofish	23	0.14
121	Little Wekiva	Vallisneria	Spotted sunfish	19	0.16
121	Little Wekiva	Vallisneria	Spotted sunfish	26	0.37
121	Little Wekiva	Vallisneria	Spotted sunfish	28	0.59
121	Little Wekiva	Vallisneria	Spotted sunfish	28	0.55
121	Little Wekiva	Vallisneria	Spotted sunfish	28	0.42
121	Little Wekiva	Vallisneria	Spotted sunfish	29	0.57
121	Little Wekiva	Vallisneria	Spotted sunfish	31	0.65
121	Little Wekiva	Vallisneria	Spotted sunfish	55	3.53
121	Little Wekiva	Vallisneria	Spotted sunfish	59	4.24
121	Little Wekiva	Vallisneria	Spotted sunfish	63	5.52
121	Little Wekiva	Vallisneria	Spotted sunfish	63	4.64
121	Little Wekiva	Vallisneria	Spotted sunfish	69	7.24
121	Little Wekiva	Vallisneria	Spotted sunfish	76	8.70
122	Little Wekiva	Vallisneria	Bluefin killifish	17	0.08
122	Little Wekiva	Vallisneria	Bluefin killifish	20	0.14
122	Little Wekiva	Vallisneria	Bluefin killifish	20	0.14
122	Little Wekiva	Vallisneria	Bluefin killifish	24	0.24
122	Little Wekiva	Vallisneria	Bluefin killifish	29	0.36
122	Little Wekiva	Vallisneria	Bluefin killifish	29	0.36
122	Little Wekiva	Vallisneria	Bluefin killifish	34	0.56
122	Little Wekiva	Vallisneria	Least killifish	15	0.08
122	Little Wekiva	Vallisneria	Mosquitofish	16	0.07
122	Little Wekiva	Vallisneria	Mosquitofish	17	0.07
122	Little Wekiva	Vallisneria	Mosquitofish	17	0.09
122	Little Wekiva	Vallisneria	Mosquitofish	17	0.09
122	Little Wekiva	Vallisneria	Mosquitofish	17	0.09
122	Little Wekiva	Vallisneria	Mosquitofish	17	0.08
122	Little Wekiva	Vallisneria	Mosquitofish	18	0.11
122	Little Wekiva	Vallisneria	Mosquitofish	19	0.12
122	Little Wekiva	Vallisneria	Mosquitofish	19	0.10
122	Little Wekiva	Vallisneria	Mosquitofish	19	0.14
122	Little Wekiva	Vallisneria	Mosquitofish	19	0.13
122	Little Wekiva	Vallisneria	Mosquitofish	19	0.10
122	Little Wekiva	Vallisneria	Mosquitofish	20	0.14
122	Little Wekiva	Vallisneria	Mosquitofish	21	0.13
122	Little Wekiva	Vallisneria	Mosquitofish	23	0.19
122	Little Wekiva	Vallisneria	Mosquitofish	25	0.28
122	Little Wekiva	Vallisneria	Mosquitofish	25	0.21
122	Little Wekiva	Vallisneria	Mosquitofish	25	0.28
122	Little Wekiva	Vallisneria	Mosquitofish	28	0.11
122	Little Wekiva	Vallisneria	Mosquitofish	29	0.44

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
122	Little Wekiva	Vallisneria	Sailfin molly	25	0.35
122	Little Wekiva	Vallisneria	Sailfin molly	26	0.38
122	Little Wekiva	Vallisneria	Sailfin molly	26	0.37
122	Little Wekiva	Vallisneria	Sailfin molly	26	0.38
122	Little Wekiva	Vallisneria	Sailfin molly	27	0.44
122	Little Wekiva	Vallisneria	Sailfin molly	28	0.48
122	Little Wekiva	Vallisneria	Sailfin molly	28	0.41
122	Little Wekiva	Vallisneria	Sailfin molly	30	0.56
122	Little Wekiva	Vallisneria	Sailfin molly	30	0.51
122	Little Wekiva	Vallisneria	Sailfin molly	31	0.56
122	Little Wekiva	Vallisneria	Sailfin molly	31	0.52
122	Little Wekiva	Vallisneria	Sailfin molly	32	0.65
122	Little Wekiva	Vallisneria	Sailfin molly	32	0.60
122	Little Wekiva	Vallisneria	Sailfin molly	32	0.65
122	Little Wekiva	Vallisneria	Sailfin molly	32	0.62
122	Little Wekiva	Vallisneria	Sailfin molly	33	0.72
122	Little Wekiva	Vallisneria	Sailfin molly	34	0.77
122	Little Wekiva	Vallisneria	Sailfin molly	35	0.85
122	Little Wekiva	Vallisneria	Sailfin molly	35	0.79
122	Little Wekiva	Vallisneria	Sailfin molly	35	0.83
122	Little Wekiva	Vallisneria	Sailfin molly	36	0.89
122	Little Wekiva	Vallisneria	Sailfin molly	36	0.87
122	Little Wekiva	Vallisneria	Sailfin molly	36	0.84
122	Little Wekiva	Vallisneria	Sailfin molly	37	1.00
122	Little Wekiva	Vallisneria	Sailfin molly	37	0.89
122	Little Wekiva	Vallisneria	Sailfin molly	37	0.88
122	Little Wekiva	Vallisneria	Sailfin molly	38	0.96
122	Little Wekiva	Vallisneria	Sailfin molly	38	1.02
122	Little Wekiva	Vallisneria	Sailfin molly	38	0.95
122	Little Wekiva	Vallisneria	Sailfin molly	39	1.30
122	Little Wekiva	Vallisneria	Sailfin molly	40	1.14
122	Little Wekiva	Vallisneria	Sailfin molly	44	1.53
122	Little Wekiva	Vallisneria	Sailfin molly	46	1.69
122	Little Wekiva	Vallisneria	Sailfin molly	50	1.86
122	Little Wekiva	Vallisneria	Sailfin molly	54	2.38
122	Little Wekiva	Vallisneria	Sailfin molly	55	2.60
122	Little Wekiva	Vallisneria	White catfish	42	1.05
122	Little Wekiva	Vallisneria	White catfish	46	1.13
122	Little Wekiva	Vallisneria	Blackbanded darter	51	1.21
123	Little Wekiva	Vallisneria	Blackbanded darter	62	2.07
123	Little Wekiva	Vallisneria	Largemouth bass	132	24.00
123	Little Wekiva	Vallisneria	Redbreast sunfish	31	0.64
123	Little Wekiva	Vallisneria	Sailfin molly	63	3.59
123	Little Wekiva	Vallisneria	Seminole killifish	74	4.87
123	Little Wekiva	Vallisneria	Speckled madtom	49	1.32
123	Little Wekiva	Vallisneria	Speckled madtom	50	1.27
123	Little Wekiva	Vallisneria	Speckled madtom	56	2.26
123	Little Wekiva	Vallisneria	Speckled madtom	56	1.99
123	Little Wekiva	Vallisneria	Speckled madtom	60	2.75
123	Little Wekiva	Vallisneria	Speckled madtom	60	2.27
123	Little Wekiva	Vallisneria	Speckled madtom	65	3.25
123	Little Wekiva	Vallisneria	Spotted sunfish	33	0.81
123	Little Wekiva	Vallisneria	Spotted sunfish	56	3.73
123	Little Wekiva	Vallisneria	Spotted sunfish	58	4.00

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
123	Little Wekiva	Vallisneria	Spotted sunfish	60	4.77
123	Little Wekiva	Vallisneria	Spotted sunfish	103	23.33
123	Little Wekiva	Vallisneria	Tadpole madtom	46	1.29
124	Little Wekiva	Vallisneria	Dollar sunfish	66	5.37
124	Little Wekiva	Vallisneria	Ironcolor shiner	39	0.45
124	Little Wekiva	Vallisneria	Largemouth bass	95	9.00
124	Little Wekiva	Vallisneria	Pugnose minnow	44	0.76
124	Little Wekiva	Vallisneria	Redbreast sunfish	20	0.20
124	Little Wekiva	Vallisneria	Redbreast sunfish	28	0.44
124	Little Wekiva	Vallisneria	Redbreast sunfish	30	0.56
124	Little Wekiva	Vallisneria	Sailfin molly	43	1.42
124	Little Wekiva	Vallisneria	Sailfin molly	45	1.49
124	Little Wekiva	Vallisneria	Sailfin molly	51	2.30
124	Little Wekiva	Vallisneria	Seminole killifish	47	1.08
124	Little Wekiva	Vallisneria	Seminole killifish	67	3.03
124	Little Wekiva	Vallisneria	Seminole killifish	69	3.18
124	Little Wekiva	Vallisneria	Seminole killifish	79	4.93
124	Little Wekiva	Vallisneria	Spotted sunfish	21	0.25
124	Little Wekiva	Vallisneria	Spotted sunfish	27	0.46
124	Little Wekiva	Vallisneria	Spotted sunfish	31	0.65
124	Little Wekiva	Vallisneria	Spotted sunfish	33	0.78
124	Little Wekiva	Vallisneria	Spotted sunfish	33	0.74
125	Little Wekiva	Vallisneria	Blackbanded darter	54	1.47
125	Little Wekiva	Vallisneria	Blackbanded darter	58	1.69
125	Little Wekiva	Vallisneria	Spotted sunfish	32	0.71
125	Little Wekiva	Vallisneria	Spotted sunfish	59	3.97
125	Little Wekiva	Vallisneria	Spotted sunfish	64	5.56
126	Little Wekiva	Hydrocotyle	Blackbanded darter	44	0.79
126	Little Wekiva	Hydrocotyle	Blackbanded darter	50	1.14
126	Little Wekiva	Hydrocotyle	Coastal shiner	24	0.14
126	Little Wekiva	Hydrocotyle	Least killifish	10	0.03
126	Little Wekiva	Hydrocotyle	Least killifish	11	0.05
126	Little Wekiva	Hydrocotyle	Least killifish	11	0.04
126	Little Wekiva	Hydrocotyle	Least killifish	11	0.04
126	Little Wekiva	Hydrocotyle	Least killifish	12	0.05
126	Little Wekiva	Hydrocotyle	Least killifish	12	0.05
126	Little Wekiva	Hydrocotyle	Least killifish	12	0.05
126	Little Wekiva	Hydrocotyle	Least killifish	12	0.05
126	Little Wekiva	Hydrocotyle	Least killifish	12	0.05
126	Little Wekiva	Hydrocotyle	Least killifish	13	0.06
126	Little Wekiva	Hydrocotyle	Least killifish	13	0.06
126	Little Wekiva	Hydrocotyle	Least killifish	13	0.06
126	Little Wekiva	Hydrocotyle	Least killifish	15	0.08
126	Little Wekiva	Hydrocotyle	Least killifish	15	0.08
126	Little Wekiva	Hydrocotyle	Least killifish	15	0.08
126	Little Wekiva	Hydrocotyle	Least killifish	16	0.09
126	Little Wekiva	Hydrocotyle	Least killifish	16	0.11
126	Little Wekiva	Hydrocotyle	Least killifish	17	0.10
126	Little Wekiva	Hydrocotyle	Least killifish	17	0.10
126	Little Wekiva	Hydrocotyle	Least killifish	17	0.11
126	Little Wekiva	Hydrocotyle	Least killifish	17	0.10
126	Little Wekiva	Hydrocotyle	Least killifish	18	0.13
126	Little Wekiva	Hydrocotyle	Least killifish	18	0.13
126	Little Wekiva	Hydrocotyle	Least killifish	19	0.17

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Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
126	Little Wekiva	Hydrocotyle	Least killifish	19	0.13
126	Little Wekiva	Hydrocotyle	Least killifish	20	0.17
126	Little Wekiva	Hydrocotyle	Least killifish	23	0.20
126	Little Wekiva	Hydrocotyle	Least killifish	24	0.19
126	Little Wekiva	Hydrocotyle	Mosquitofish	14	0.07
126	Little Wekiva	Hydrocotyle	Mosquitofish	18	0.11
126	Little Wekiva	Hydrocotyle	Mosquitofish	19	0.12
126	Little Wekiva	Hydrocotyle	Mosquitofish	19	0.12
126	Little Wekiva	Hydrocotyle	Mosquitofish	20	0.14
126	Little Wekiva	Hydrocotyle	Mosquitofish	20	0.13
126	Little Wekiva	Hydrocotyle	Mosquitofish	20	0.13
126	Little Wekiva	Hydrocotyle	Mosquitofish	21	0.18
126	Little Wekiva	Hydrocotyle	Mosquitofish	22	0.21
126	Little Wekiva	Hydrocotyle	Mosquitofish	23	0.16
126	Little Wekiva	Hydrocotyle	Mosquitofish	23	0.18
126	Little Wekiva	Hydrocotyle	Mosquitofish	27	0.08
126	Little Wekiva	Hydrocotyle	Mosquitofish	28	0.31
126	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	12	0.05
126	Little Wekiva	Hydrocotyle	Redbreast sunfish	22	0.24
126	Little Wekiva	Hydrocotyle	Sailfin molly	12	0.06
126	Little Wekiva	Hydrocotyle	Sailfin molly	12	0.06
126	Little Wekiva	Hydrocotyle	Sailfin molly	13	0.08
126	Little Wekiva	Hydrocotyle	Sailfin molly	13	0.06
126	Little Wekiva	Hydrocotyle	Sailfin molly	14	0.08
126	Little Wekiva	Hydrocotyle	Sailfin molly	16	0.10
126	Little Wekiva	Hydrocotyle	Sailfin molly	18	0.14
126	Little Wekiva	Hydrocotyle	Sailfin molly	21	0.19
126	Little Wekiva	Hydrocotyle	Sailfin molly	23	0.25
126	Little Wekiva	Hydrocotyle	Sailfin shiner	18	0.07
127	Little Wekiva	Hydrocotyle	Bluefin killifish	12	0.04
127	Little Wekiva	Hydrocotyle	Bluefin killifish	17	0.10
127	Little Wekiva	Hydrocotyle	Bluefin killifish	20	0.12
127	Little Wekiva	Hydrocotyle	Least killifish	9	0.03
127	Little Wekiva	Hydrocotyle	Least killifish	11	0.04
127	Little Wekiva	Hydrocotyle	Least killifish	11	0.05
127	Little Wekiva	Hydrocotyle	Least killifish	12	0.06
127	Little Wekiva	Hydrocotyle	Least killifish	12	0.06
127	Little Wekiva	Hydrocotyle	Least killifish	13	0.06
127	Little Wekiva	Hydrocotyle	Least killifish	13	0.05
127	Little Wekiva	Hydrocotyle	Least killifish	14	0.07
127	Little Wekiva	Hydrocotyle	Least killifish	18	0.13
127	Little Wekiva	Hydrocotyle	Mosquitofish	12	0.06
127	Little Wekiva	Hydrocotyle	Mosquitofish	13	0.05
127	Little Wekiva	Hydrocotyle	Mosquitofish	14	0.05
127	Little Wekiva	Hydrocotyle	Mosquitofish	15	0.08
127	Little Wekiva	Hydrocotyle	Mosquitofish	16	0.06
127	Little Wekiva	Hydrocotyle	Mosquitofish	16	0.09
127	Little Wekiva	Hydrocotyle	Mosquitofish	16	0.08
127	Little Wekiva	Hydrocotyle	Mosquitofish	16	0.07
127	Little Wekiva	Hydrocotyle	Mosquitofish	16	0.08
127	Little Wekiva	Hydrocotyle	Mosquitofish	17	0.12
127	Little Wekiva	Hydrocotyle	Mosquitofish	18	0.10
127	Little Wekiva	Hydrocotyle	Mosquitofish	18	0.11
127	Little Wekiva	Hydrocotyle	Mosquitofish	18	0.11

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Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
127	Little Wekiva	Hydrocotyle	Mosquitofish	19	0.13
127	Little Wekiva	Hydrocotyle	Mosquitofish	19	0.12
127	Little Wekiva	Hydrocotyle	Mosquitofish	20	0.15
127	Little Wekiva	Hydrocotyle	Mosquitofish	21	0.15
127	Little Wekiva	Hydrocotyle	Mosquitofish	21	0.17
127	Little Wekiva	Hydrocotyle	Mosquitofish	23	0.20
127	Little Wekiva	Hydrocotyle	Mosquitofish	23	0.19
127	Little Wekiva	Hydrocotyle	Mosquitofish	24	0.23
127	Little Wekiva	Hydrocotyle	Mosquitofish	25	0.26
127	Little Wekiva	Hydrocotyle	Mosquitofish	26	0.29
127	Little Wekiva	Hydrocotyle	Mosquitofish	26	0.26
127	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	13	0.12
127	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	13	0.07
127	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.08
127	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.08
127	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	16	0.12
127	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	17	0.14
127	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	17	0.13
127	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.14
127	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.15
127	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	19	0.18
127	Little Wekiva	Hydrocotyle	Sailfin molly	28	0.42
127	Little Wekiva	Hydrocotyle	Spotted sunfish	21	0.23
127	Little Wekiva	Hydrocotyle	Spotted sunfish	24	0.29
127	Little Wekiva	Hydrocotyle	Spotted sunfish	31	0.68
128	Little Wekiva	Hydrocotyle	Bluefin killifish	16	0.08
128	Little Wekiva	Hydrocotyle	Least killifish	9	0.02
128	Little Wekiva	Hydrocotyle	Least killifish	11	0.04
128	Little Wekiva	Hydrocotyle	Least killifish	11	0.05
128	Little Wekiva	Hydrocotyle	Least killifish	11	0.05
128	Little Wekiva	Hydrocotyle	Least killifish	12	0.06
128	Little Wekiva	Hydrocotyle	Least killifish	12	0.06
128	Little Wekiva	Hydrocotyle	Least killifish	13	0.06
128	Little Wekiva	Hydrocotyle	Least killifish	13	0.06
128	Little Wekiva	Hydrocotyle	Least killifish	13	0.06
128	Little Wekiva	Hydrocotyle	Least killifish	13	0.06
128	Little Wekiva	Hydrocotyle	Least killifish	13	0.05
128	Little Wekiva	Hydrocotyle	Least killifish	13	0.06
128	Little Wekiva	Hydrocotyle	Least killifish	13	0.05
128	Little Wekiva	Hydrocotyle	Least killifish	13	0.06
128	Little Wekiva	Hydrocotyle	Least killifish	13	0.06
128	Little Wekiva	Hydrocotyle	Least killifish	13	0.06
128	Little Wekiva	Hydrocotyle	Least killifish	14	0.07
128	Little Wekiva	Hydrocotyle	Least killifish	14	0.07
128	Little Wekiva	Hydrocotyle	Least killifish	15	0.08
128	Little Wekiva	Hydrocotyle	Least killifish	15	0.10
128	Little Wekiva	Hydrocotyle	Least killifish	17	0.12
128	Little Wekiva	Hydrocotyle	Least killifish	17	0.13
128	Little Wekiva	Hydrocotyle	Least killifish	17	0.12
128	Little Wekiva	Hydrocotyle	Least killifish	19	0.14
128	Little Wekiva	Hydrocotyle	Mosquitofish	13	0.07
128	Little Wekiva	Hydrocotyle	Mosquitofish	14	0.08
128	Little Wekiva	Hydrocotyle	Mosquitofish	15	0.08

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Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
128	Little Wekiva	Hydrocotyle	Mosquitofish	15	0.07
128	Little Wekiva	Hydrocotyle	Mosquitofish	16	0.08
128	Little Wekiva	Hydrocotyle	Mosquitofish	17	0.11
128	Little Wekiva	Hydrocotyle	Mosquitofish	17	0.08
128	Little Wekiva	Hydrocotyle	Mosquitofish	18	0.14
128	Little Wekiva	Hydrocotyle	Mosquitofish	18	0.10
128	Little Wekiva	Hydrocotyle	Mosquitofish	18	0.11
128	Little Wekiva	Hydrocotyle	Mosquitofish	18	0.11
128	Little Wekiva	Hydrocotyle	Mosquitofish	19	0.12
128	Little Wekiva	Hydrocotyle	Mosquitofish	19	0.15
128	Little Wekiva	Hydrocotyle	Mosquitofish	19	0.13
128	Little Wekiva	Hydrocotyle	Mosquitofish	19	0.12
128	Little Wekiva	Hydrocotyle	Mosquitofish	19	0.14
128	Little Wekiva	Hydrocotyle	Mosquitofish	20	0.13
128	Little Wekiva	Hydrocotyle	Mosquitofish	21	0.15
128	Little Wekiva	Hydrocotyle	Mosquitofish	22	0.16
128	Little Wekiva	Hydrocotyle	Mosquitofish	24	0.22
128	Little Wekiva	Hydrocotyle	Mosquitofish	26	0.25
128	Little Wekiva	Hydrocotyle	Mosquitofish	27	0.25
128	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.07
128	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	16	0.11
128	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.15
128	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.15
128	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.15
128	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	18	0.16
128	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	21	0.26
128	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	21	0.26
128	Little Wekiva	Hydrocotyle	Sailfin molly	14	0.07
128	Little Wekiva	Hydrocotyle	Spotted sunfish	22	0.26
128	Little Wekiva	Hydrocotyle	Spotted sunfish	41	1.56
128	Little Wekiva	Hydrocotyle	Spotted sunfish	50	2.71
128	Little Wekiva	Hydrocotyle	Spotted sunfish	59	3.66
128	Little Wekiva	Hydrocotyle	Spotted sunfish	62	4.87
128	Little Wekiva	Hydrocotyle	Spotted sunfish	86	13.00
129	Little Wekiva	Hydrocotyle	Bluefin killifish	28	0.35
129	Little Wekiva	Hydrocotyle	Largemouth bass	85	7.59
129	Little Wekiva	Hydrocotyle	Mosquitofish	12	0.04
129	Little Wekiva	Hydrocotyle	Mosquitofish	12	0.05
129	Little Wekiva	Hydrocotyle	Mosquitofish	13	0.09
129	Little Wekiva	Hydrocotyle	Mosquitofish	14	0.08
129	Little Wekiva	Hydrocotyle	Mosquitofish	15	0.06
129	Little Wekiva	Hydrocotyle	Mosquitofish	16	0.09
129	Little Wekiva	Hydrocotyle	Mosquitofish	20	0.13
129	Little Wekiva	Hydrocotyle	Mosquitofish	27	0.27
129	Little Wekiva	Hydrocotyle	Mosquitofish	30	0.38
129	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.08
129	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	14	0.10
129	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	15	0.10
129	Little Wekiva	Hydrocotyle	Okefenokee pygmy sunfish	17	0.13
130	Little Wekiva	Hydrocotyle	Bluefin killifish	28	0.27
130	Little Wekiva	Hydrocotyle	Bluefin killifish	34	0.58
130	Little Wekiva	Hydrocotyle	Least killifish	14	0.08
130	Little Wekiva	Hydrocotyle	Least killifish	17	0.09
130	Little Wekiva	Hydrocotyle	Least killifish	22	0.23

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Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
130	Little Wekiva	Hydrocotyle	Mosquitofish	13	0.06
130	Little Wekiva	Hydrocotyle	Mosquitofish	18	0.11
130	Little Wekiva	Hydrocotyle	Mosquitofish	19	0.13
130	Little Wekiva	Hydrocotyle	Mosquitofish	20	0.14
130	Little Wekiva	Hydrocotyle	Mosquitofish	27	0.30
130	Little Wekiva	Hydrocotyle	Sailfin molly	36	0.86
130	Little Wekiva	Hydrocotyle	Sailfin molly	36	0.97
130	Little Wekiva	Hydrocotyle	Spotted sunfish	17	0.13
130	Little Wekiva	Hydrocotyle	Spotted sunfish	21	0.27
130	Little Wekiva	Hydrocotyle	Spotted sunfish	53	3.06
130	Little Wekiva	Hydrocotyle	Spotted sunfish	105	14.74
130	Little Wekiva	Hydrocotyle	Swamp Darter	31	0.29
131	Little Wekiva	Nuphar	Blackbanded darter	66	2.83
131	Little Wekiva	Nuphar	Bluefin killifish	21	0.15
131	Little Wekiva	Nuphar	Bluefin killifish	31	0.47
131	Little Wekiva	Nuphar	Bluefin killifish	32	0.49
131	Little Wekiva	Nuphar	Bluefin killifish	35	0.69
131	Little Wekiva	Nuphar	Coastal shiner	24	0.16
131	Little Wekiva	Nuphar	Coastal shiner	25	0.20
131	Little Wekiva	Nuphar	Coastal shiner	31	0.37
131	Little Wekiva	Nuphar	Coastal shiner	36	0.42
131	Little Wekiva	Nuphar	Coastal shiner	39	0.54
131	Little Wekiva	Nuphar	Coastal shiner	40	0.58
131	Little Wekiva	Nuphar	Coastal shiner	43	0.84
131	Little Wekiva	Nuphar	Coastal shiner	43	0.80
131	Little Wekiva	Nuphar	Coastal shiner	44	0.90
131	Little Wekiva	Nuphar	Coastal shiner	46	1.01
131	Little Wekiva	Nuphar	Coastal shiner	48	1.14
131	Little Wekiva	Nuphar	Coastal shiner	50	1.28
131	Little Wekiva	Nuphar	Coastal shiner	51	1.12
131	Little Wekiva	Nuphar	Ironcolor shiner	20	0.10
131	Little Wekiva	Nuphar	Ironcolor shiner	20	0.10
131	Little Wekiva	Nuphar	Ironcolor shiner	21	0.10
131	Little Wekiva	Nuphar	Ironcolor shiner	23	0.16
131	Little Wekiva	Nuphar	Ironcolor shiner	24	0.15
131	Little Wekiva	Nuphar	Ironcolor shiner	36	0.43
131	Little Wekiva	Nuphar	Ironcolor shiner	36	0.44
131	Little Wekiva	Nuphar	Ironcolor shiner	39	0.48
131	Little Wekiva	Nuphar	Ironcolor shiner	41	0.87
131	Little Wekiva	Nuphar	Ironcolor shiner	41	0.60
131	Little Wekiva	Nuphar	Ironcolor shiner	41	0.64
131	Little Wekiva	Nuphar	Ironcolor shiner	41	0.65
131	Little Wekiva	Nuphar	Ironcolor shiner	43	0.69
131	Little Wekiva	Nuphar	Ironcolor shiner	43	0.77
131	Little Wekiva	Nuphar	Ironcolor shiner	44	0.70
131	Little Wekiva	Nuphar	Ironcolor shiner	47	0.74
131	Little Wekiva	Nuphar	Mosquitofish	18	0.11
131	Little Wekiva	Nuphar	Mosquitofish	18	0.10
131	Little Wekiva	Nuphar	Mosquitofish	18	0.11
131	Little Wekiva	Nuphar	Mosquitofish	19	0.12
131	Little Wekiva	Nuphar	Mosquitofish	20	0.13
131	Little Wekiva	Nuphar	Mosquitofish	20	0.14
131	Little Wekiva	Nuphar	Mosquitofish	21	0.15
131	Little Wekiva	Nuphar	Mosquitofish	23	0.22

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
131	Little Wekiva	Nuphar	Mosquitofish	23	0.22
131	Little Wekiva	Nuphar	Mosquitofish	23	0.18
131	Little Wekiva	Nuphar	Mosquitofish	25	0.27
131	Little Wekiva	Nuphar	Mosquitofish	25	0.26
131	Little Wekiva	Nuphar	Mosquitofish	26	0.32
131	Little Wekiva	Nuphar	Redbreast sunfish	21	0.25
131	Little Wekiva	Nuphar	Sailfin shiner	16	0.06
131	Little Wekiva	Nuphar	Sailfin shiner	16	0.06
131	Little Wekiva	Nuphar	Sailfin shiner	17	0.07
131	Little Wekiva	Nuphar	Sailfin shiner	18	0.08
131	Little Wekiva	Nuphar	Sailfin shiner	19	0.10
131	Little Wekiva	Nuphar	Sailfin shiner	20	0.10
131	Little Wekiva	Nuphar	Sailfin shiner	20	0.10
131	Little Wekiva	Nuphar	Sailfin shiner	20	0.13
131	Little Wekiva	Nuphar	Sailfin shiner	20	0.10
131	Little Wekiva	Nuphar	Sailfin shiner	20	0.10
131	Little Wekiva	Nuphar	Sailfin shiner	21	0.12
131	Little Wekiva	Nuphar	Sailfin shiner	21	0.11
131	Little Wekiva	Nuphar	Sailfin shiner	21	0.11
131	Little Wekiva	Nuphar	Sailfin shiner	21	0.11
131	Little Wekiva	Nuphar	Sailfin shiner	21	0.10
131	Little Wekiva	Nuphar	Sailfin shiner	22	0.13
131	Little Wekiva	Nuphar	Sailfin shiner	22	0.13
131	Little Wekiva	Nuphar	Sailfin shiner	22	0.12
131	Little Wekiva	Nuphar	Sailfin shiner	22	0.13
131	Little Wekiva	Nuphar	Sailfin shiner	22	0.12
131	Little Wekiva	Nuphar	Sailfin shiner	22	0.13
131	Little Wekiva	Nuphar	Sailfin shiner	22	0.11
131	Little Wekiva	Nuphar	Sailfin shiner	23	0.14
131	Little Wekiva	Nuphar	Sailfin shiner	23	0.13
131	Little Wekiva	Nuphar	Sailfin shiner	23	0.15
131	Little Wekiva	Nuphar	Sailfin shiner	23	0.14
131	Little Wekiva	Nuphar	Sailfin shiner	23	0.15
131	Little Wekiva	Nuphar	Sailfin shiner	23	0.14
131	Little Wekiva	Nuphar	Sailfin shiner	23	0.14
131	Little Wekiva	Nuphar	Sailfin shiner	23	0.15
131	Little Wekiva	Nuphar	Sailfin shiner	23	0.13
131	Little Wekiva	Nuphar	Sailfin shiner	24	0.17
131	Little Wekiva	Nuphar	Sailfin shiner	24	0.17
131	Little Wekiva	Nuphar	Sailfin shiner	24	0.17
131	Little Wekiva	Nuphar	Sailfin shiner	24	0.17
131	Little Wekiva	Nuphar	Sailfin shiner	24	0.16
131	Little Wekiva	Nuphar	Sailfin shiner	24	0.15
131	Little Wekiva	Nuphar	Sailfin shiner	24	0.15
131	Little Wekiva	Nuphar	Sailfin shiner	25	0.17
131	Little Wekiva	Nuphar	Sailfin shiner	25	0.16
131	Little Wekiva	Nuphar	Sailfin shiner	25	0.17
131	Little Wekiva	Nuphar	Sailfin shiner	25	0.19
131	Little Wekiva	Nuphar	Sailfin shiner	25	0.20
131	Little Wekiva	Nuphar	Sailfin shiner	25	0.20
131	Little Wekiva	Nuphar	Sailfin shiner	25	0.19
131	Little Wekiva	Nuphar	Sailfin shiner	25	0.18
131	Little Wekiva	Nuphar	Sailfin shiner	25	0.16
131	Little Wekiva	Nuphar	Sailfin shiner	25	0.17

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
131	Little Wekiva	Nuphar	Sailfin shiner	25	0.21
131	Little Wekiva	Nuphar	Sailfin shiner	25	0.20
131	Little Wekiva	Nuphar	Sailfin shiner	26	0.19
131	Little Wekiva	Nuphar	Sailfin shiner	26	0.19
131	Little Wekiva	Nuphar	Sailfin shiner	26	0.16
131	Little Wekiva	Nuphar	Sailfin shiner	26	0.21
131	Little Wekiva	Nuphar	Sailfin shiner	26	0.18
131	Little Wekiva	Nuphar	Sailfin shiner	26	0.17
131	Little Wekiva	Nuphar	Sailfin shiner	26	0.22
131	Little Wekiva	Nuphar	Sailfin shiner	27	0.20
131	Little Wekiva	Nuphar	Sailfin shiner	27	0.20
131	Little Wekiva	Nuphar	Sailfin shiner	27	0.21
131	Little Wekiva	Nuphar	Sailfin shiner	27	0.22
131	Little Wekiva	Nuphar	Sailfin shiner	27	0.19
131	Little Wekiva	Nuphar	Sailfin shiner	28	0.25
131	Little Wekiva	Nuphar	Sailfin shiner	28	0.23
131	Little Wekiva	Nuphar	Sailfin shiner	28	0.19
131	Little Wekiva	Nuphar	Sailfin shiner	28	0.27
131	Little Wekiva	Nuphar	Sailfin shiner	28	0.25
131	Little Wekiva	Nuphar	Sailfin shiner	28	0.24
131	Little Wekiva	Nuphar	Sailfin shiner	28	0.25
131	Little Wekiva	Nuphar	Sailfin shiner	28	0.23
131	Little Wekiva	Nuphar	Sailfin shiner	28	0.21
131	Little Wekiva	Nuphar	Sailfin shiner	29	0.22
131	Little Wekiva	Nuphar	Sailfin shiner	29	0.22
131	Little Wekiva	Nuphar	Sailfin shiner	29	0.28
131	Little Wekiva	Nuphar	Sailfin shiner	29	0.23
131	Little Wekiva	Nuphar	Sailfin shiner	30	0.25
131	Little Wekiva	Nuphar	Sailfin shiner	30	0.30
131	Little Wekiva	Nuphar	Sailfin shiner	30	0.41
131	Little Wekiva	Nuphar	Sailfin shiner	31	0.32
131	Little Wekiva	Nuphar	Sailfin shiner	31	0.39
131	Little Wekiva	Nuphar	Sailfin shiner	31	0.31
131	Little Wekiva	Nuphar	Sailfin shiner	31	0.32
131	Little Wekiva	Nuphar	Sailfin shiner	32	0.35
131	Little Wekiva	Nuphar	Sailfin shiner	32	0.32
131	Little Wekiva	Nuphar	Sailfin shiner	32	0.35
131	Little Wekiva	Nuphar	Sailfin shiner	37	0.51
131	Little Wekiva	Nuphar	Sailfin shiner	39	0.53
131	Little Wekiva	Nuphar	Sailfin shiner	41	0.60
131	Little Wekiva	Nuphar	Seminole killifish	48	1.25
131	Little Wekiva	Nuphar	Seminole killifish	50	1.40
131	Little Wekiva	Nuphar	Seminole killifish	53	1.56
131	Little Wekiva	Nuphar	Seminole killifish	72	3.70
131	Little Wekiva	Nuphar	Spotted sunfish	70	7.63
131	Little Wekiva	Nuphar	Warmouth	33	0.85
131	Little Wekiva	Nuphar	White catfish	54	1.69
132	Little Wekiva	Nuphar	Mosquitofish	23	0.16
132	Little Wekiva	Nuphar	Mosquitofish	25	0.24
132	Little Wekiva	Nuphar	Mosquitofish	26	0.24
132	Little Wekiva	Nuphar	Mosquitofish	30	0.39
132	Little Wekiva	Nuphar	Mosquitofish	32	0.50
132	Little Wekiva	Nuphar	Mosquitofish	33	0.45
133	Little Wekiva	Nuphar	Bluefin killifish	17	0.09

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
133	Little Wekiva	Nuphar	Bluefin killifish	19	0.12
133	Little Wekiva	Nuphar	Bluefin killifish	29	0.33
133	Little Wekiva	Nuphar	Coastal shiner	49	1.28
133	Little Wekiva	Nuphar	Coastal shiner	50	1.20
133	Little Wekiva	Nuphar	Coastal shiner	53	1.56
133	Little Wekiva	Nuphar	Coastal shiner	57	1.73
133	Little Wekiva	Nuphar	Least killifish	13	0.07
133	Little Wekiva	Nuphar	Mosquitofish	16	0.09
133	Little Wekiva	Nuphar	Mosquitofish	20	0.12
133	Little Wekiva	Nuphar	Mosquitofish	20	0.15
133	Little Wekiva	Nuphar	Mosquitofish	20	0.12
133	Little Wekiva	Nuphar	Mosquitofish	20	0.14
133	Little Wekiva	Nuphar	Mosquitofish	20	0.16
133	Little Wekiva	Nuphar	Mosquitofish	22	0.18
133	Little Wekiva	Nuphar	Mosquitofish	22	0.16
133	Little Wekiva	Nuphar	Mosquitofish	23	0.23
133	Little Wekiva	Nuphar	Mosquitofish	24	0.21
133	Little Wekiva	Nuphar	Mosquitofish	25	0.25
133	Little Wekiva	Nuphar	Mosquitofish	27	0.34
133	Little Wekiva	Nuphar	Mosquitofish	27	0.29
133	Little Wekiva	Nuphar	Mosquitofish	28	0.34
133	Little Wekiva	Nuphar	Mosquitofish	28	0.35
133	Little Wekiva	Nuphar	Mosquitofish	30	0.44
133	Little Wekiva	Nuphar	Mosquitofish	30	0.40
133	Little Wekiva	Nuphar	Mosquitofish	31	0.48
133	Little Wekiva	Nuphar	Mosquitofish	40	0.76
133	Little Wekiva	Nuphar	Redbreast sunfish	21	0.19
133	Little Wekiva	Nuphar	Redbreast sunfish	21	0.24
133	Little Wekiva	Nuphar	Redbreast sunfish	25	0.35
133	Little Wekiva	Nuphar	Redear sunfish	43	1.33
133	Little Wekiva	Nuphar	Redear sunfish	45	1.65
133	Little Wekiva	Nuphar	Spotted sunfish	30	0.70
133	Little Wekiva	Nuphar	Spotted sunfish	34	0.81
133	Little Wekiva	Nuphar	Swamp Darter	33	0.29
134	Little Wekiva	Nuphar	Bluefin killifish	25	0.20
134	Little Wekiva	Nuphar	Bluefin killifish	28	0.32
134	Little Wekiva	Nuphar	Coastal shiner	35	0.45
134	Little Wekiva	Nuphar	Mosquitofish	16	0.06
134	Little Wekiva	Nuphar	Mosquitofish	19	0.10
134	Little Wekiva	Nuphar	Mosquitofish	20	0.13
134	Little Wekiva	Nuphar	Mosquitofish	20	0.11
134	Little Wekiva	Nuphar	Mosquitofish	21	0.16
134	Little Wekiva	Nuphar	Mosquitofish	22	0.14
134	Little Wekiva	Nuphar	Mosquitofish	23	0.20
134	Little Wekiva	Nuphar	Mosquitofish	24	0.20
134	Little Wekiva	Nuphar	Mosquitofish	26	0.24
134	Little Wekiva	Nuphar	Mosquitofish	26	0.28
134	Little Wekiva	Nuphar	Mosquitofish	28	0.32
134	Little Wekiva	Nuphar	Mosquitofish	31	0.43
134	Little Wekiva	Nuphar	Mosquitofish	32	0.49
134	Little Wekiva	Nuphar	Mosquitofish	32	0.48
134	Little Wekiva	Nuphar	Mosquitofish	38	0.52
134	Little Wekiva	Nuphar	Mosquitofish	40	0.76
134	Little Wekiva	Nuphar	Mosquitofish	41	0.85

Fall 1997 Throw Trap Fish Data - Wekiva River System

Throw Trap Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
134	Little Wekiva	Nuphar	Mosquitofish	42	0.88
134	Little Wekiva	Nuphar	Mosquitofish	44	1.09
135	Little Wekiva	Nuphar	Blackbanded darter	39	0.60
135	Little Wekiva	Nuphar	Blackbanded darter	46	0.87
135	Little Wekiva	Nuphar	Blackbanded darter	52	1.16
135	Little Wekiva	Nuphar	Bluefin killifish	35	0.55
135	Little Wekiva	Nuphar	Brown darter	38	0.56
135	Little Wekiva	Nuphar	Coastal shiner	28	0.23
135	Little Wekiva	Nuphar	Coastal shiner	28	0.20
135	Little Wekiva	Nuphar	Coastal shiner	29	0.24
135	Little Wekiva	Nuphar	Coastal shiner	33	0.33
135	Little Wekiva	Nuphar	Coastal shiner	38	0.53
135	Little Wekiva	Nuphar	Coastal shiner	40	0.59
135	Little Wekiva	Nuphar	Coastal shiner	41	0.59
135	Little Wekiva	Nuphar	Coastal shiner	42	0.67
135	Little Wekiva	Nuphar	Coastal shiner	44	0.69
135	Little Wekiva	Nuphar	Coastal shiner	48	1.12
135	Little Wekiva	Nuphar	Coastal shiner	52	1.37
135	Little Wekiva	Nuphar	Mosquitofish	20	0.13
135	Little Wekiva	Nuphar	Mosquitofish	22	0.17
135	Little Wekiva	Nuphar	Sailfin shiner	25	0.17
135	Little Wekiva	Nuphar	Sailfin shiner	34	0.39
135	Little Wekiva	Nuphar	Sailfin shiner	34	0.48

Appendix 3.1.10
Spring 1997 Blocknet Fish Data
Wekiva River System

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
1	1	Little Wekiva	Nuphar	Blackbanded darter	41	0.84
1	1	Little Wekiva	Nuphar	Blackbanded darter	52	1.00
1	1	Little Wekiva	Nuphar	Blackbanded darter	53	1.26
1	1	Little Wekiva	Nuphar	Coastal shiner	43	0.71
1	1	Little Wekiva	Nuphar	Coastal shiner	47	0.96
1	1	Little Wekiva	Nuphar	Coastal shiner	53	1.15
1	1	Little Wekiva	Nuphar	Coastal shiner	55	1.45
1	1	Little Wekiva	Nuphar	Lake chubsucker	153	43.00
1	1	Little Wekiva	Nuphar	Mosquitofish	40	1.00
1	1	Little Wekiva	Nuphar	Pugnose minnow	34	0.34
1	1	Little Wekiva	Nuphar	Pugnose minnow	37	0.41
1	1	Little Wekiva	Nuphar	Pugnose minnow	42	0.66
1	1	Little Wekiva	Nuphar	Sailfin shiner	40	0.58
1	1	Little Wekiva	Nuphar	Sailfin shiner	41	0.67
1	1	Little Wekiva	Nuphar	Spotted sunfish	49	2.00
1	1	Little Wekiva	Nuphar	Spotted sunfish	54	3.00
1	1	Little Wekiva	Nuphar	Spotted sunfish	70	6.00
1	1	Little Wekiva	Nuphar	Spotted sunfish	73	8.00
1	1	Little Wekiva	Nuphar	Spotted sunfish	80	10.00
1	1	Little Wekiva	Nuphar	Warmouth	140	52.00
1	2	Little Wekiva	Nuphar	Blackbanded darter	44	1.00
1	2	Little Wekiva	Nuphar	Brook silverside	46	0.46
1	2	Little Wekiva	Nuphar	Brook silverside	48	0.52
1	2	Little Wekiva	Nuphar	Coastal shiner	48	0.89
1	2	Little Wekiva	Nuphar	Coastal shiner	48	0.95
1	2	Little Wekiva	Nuphar	Coastal shiner	49	0.97
1	2	Little Wekiva	Nuphar	Coastal shiner	49	0.93
1	2	Little Wekiva	Nuphar	Coastal shiner	51	1.07
1	2	Little Wekiva	Nuphar	Largemouth bass	54	2.00
1	2	Little Wekiva	Nuphar	Mosquitofish	44	1.00
1	2	Little Wekiva	Nuphar	Sailfin shiner	42	0.66
1	2	Little Wekiva	Nuphar	Spotted sunfish	56	3.00
1	2	Little Wekiva	Nuphar	Warmouth	138	51.00
1	3	Little Wekiva	Nuphar	Brook silverside	52	0.69
1	3	Little Wekiva	Nuphar	Brook silverside	59	1.06
1	3	Little Wekiva	Nuphar	Coastal shiner	48	0.91
1	3	Little Wekiva	Nuphar	Coastal shiner	49	0.94
1	3	Little Wekiva	Nuphar	Redbreast sunfish	100	17.00
1	3	Little Wekiva	Nuphar	Redbreast sunfish	135	36.00
1	3	Little Wekiva	Nuphar	Warmouth	106	21.00
1	4	Little Wekiva	Nuphar	Spotted sunfish	82	11.00
1	4	Little Wekiva	Nuphar	Spotted sunfish	87	13.00
2	1	Little Wekiva	Vallisneria	Bowfin	415	715.00
2	1	Little Wekiva	Vallisneria	Coastal shiner	39	0.42
2	1	Little Wekiva	Vallisneria	Coastal shiner	47	0.82
2	1	Little Wekiva	Vallisneria	Coastal shiner	48	1.28
2	1	Little Wekiva	Vallisneria	Coastal shiner	49	0.99
2	1	Little Wekiva	Vallisneria	Coastal shiner	49	1.05
2	1	Little Wekiva	Vallisneria	Coastal shiner	50	1.13
2	1	Little Wekiva	Vallisneria	Coastal shiner	51	1.24
2	1	Little Wekiva	Vallisneria	Coastal shiner	52	1.28
2	1	Little Wekiva	Vallisneria	Coastal shiner	52	1.22
2	1	Little Wekiva	Vallisneria	Coastal shiner	53	1.33
2	1	Little Wekiva	Vallisneria	Coastal shiner	53	1.39

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
2	1	Little Wekiva	Vallisneria	Coastal shiner	54	1.23
2	1	Little Wekiva	Vallisneria	Coastal shiner	59	1.72
2	1	Little Wekiva	Vallisneria	Lake chubsucker	101	11.00
2	1	Little Wekiva	Vallisneria	Lake chubsucker	157	49.00
2	1	Little Wekiva	Vallisneria	Largemouth bass	86	7.00
2	1	Little Wekiva	Vallisneria	Mosquitofish	26	0.25
2	1	Little Wekiva	Vallisneria	Pugnose minnow	37	0.40
2	1	Little Wekiva	Vallisneria	Pugnose minnow	44	0.67
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	55	4.00
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	65	7.00
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	72	6.00
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	74	7.00
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	80	8.00
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	81	9.00
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	85	10.00
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	87	10.00
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	87	15.00
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	106	17.00
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	109	20.00
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	118	24.00
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	122	28.00
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	122	30.00
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	137	40.00
2	1	Little Wekiva	Vallisneria	Redbreast sunfish	137	42.00
2	1	Little Wekiva	Vallisneria	Seminole killifish	72	4.00
2	1	Little Wekiva	Vallisneria	Spotted sunfish	51	3.00
2	1	Little Wekiva	Vallisneria	Spotted sunfish	55	3.00
2	1	Little Wekiva	Vallisneria	Spotted sunfish	56	3.00
2	1	Little Wekiva	Vallisneria	Spotted sunfish	59	4.00
2	1	Little Wekiva	Vallisneria	Spotted sunfish	61	6.00
2	1	Little Wekiva	Vallisneria	Spotted sunfish	61	5.00
2	1	Little Wekiva	Vallisneria	Spotted sunfish	61	4.00
2	1	Little Wekiva	Vallisneria	Spotted sunfish	76	8.00
2	1	Little Wekiva	Vallisneria	Spotted sunfish	88	13.00
2	1	Little Wekiva	Vallisneria	Spotted sunfish	90	16.00
2	1	Little Wekiva	Vallisneria	Spotted sunfish	94	17.00
2	1	Little Wekiva	Vallisneria	Spotted sunfish	106	26.00
2	1	Little Wekiva	Vallisneria	Spotted sunfish	110	24.00
2	1	Little Wekiva	Vallisneria	Warmouth	117	32.00
2	2	Little Wekiva	Vallisneria	American eel	252	23.00
2	2	Little Wekiva	Vallisneria	Coastal shiner	50	1.09
2	2	Little Wekiva	Vallisneria	Coastal shiner	55	1.65
2	2	Little Wekiva	Vallisneria	Lake chubsucker	102	12.00
2	2	Little Wekiva	Vallisneria	Largemouth bass	75	4.00
2	2	Little Wekiva	Vallisneria	Redbreast sunfish	126	32.00
2	2	Little Wekiva	Vallisneria	Seminole killifish	104	10.00
2	2	Little Wekiva	Vallisneria	Seminole killifish	106	10.00
2	2	Little Wekiva	Vallisneria	Spotted sunfish	57	4.00
2	2	Little Wekiva	Vallisneria	Spotted sunfish	112	29.00
2	3	Little Wekiva	Vallisneria	Blackbanded darter	46	0.69
2	3	Little Wekiva	Vallisneria	Coastal shiner	48	0.94
2	3	Little Wekiva	Vallisneria	Coastal shiner	51	1.15
2	3	Little Wekiva	Vallisneria	Lake chubsucker	134	29.00
2	3	Little Wekiva	Vallisneria	Pugnose minnow	36	0.35

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
2	3	Little Wekiva	Vallisneria	Redbreast sunfish	72	6.00
2	3	Little Wekiva	Vallisneria	Redbreast sunfish	76	6.00
2	3	Little Wekiva	Vallisneria	Redbreast sunfish	104	19.00
2	3	Little Wekiva	Vallisneria	Redbreast sunfish	108	18.00
2	3	Little Wekiva	Vallisneria	Seminole killifish	67	3.00
2	3	Little Wekiva	Vallisneria	Seminole killifish	118	15.00
2	3	Little Wekiva	Vallisneria	Spotted sunfish	59	4.00
2	3	Little Wekiva	Vallisneria	Spotted sunfish	84	10.00
2	3	Little Wekiva	Vallisneria	Warmouth	152	68.00
2	4	Little Wekiva	Vallisneria	Coastal shiner	56	1.62
2	4	Little Wekiva	Vallisneria	Coastal shiner	59	1.55
2	4	Little Wekiva	Vallisneria	Pugnose minnow	35	0.33
2	4	Little Wekiva	Vallisneria	Seminole killifish	52	3.00
2	4	Little Wekiva	Vallisneria	Seminole killifish	104	10.00
2	4	Little Wekiva	Vallisneria	Seminole killifish	117	15.00
2	4	Little Wekiva	Vallisneria	Spotted sunfish	45	1.60
2	4	Little Wekiva	Vallisneria	Spotted sunfish	54	2.00
2	4	Little Wekiva	Vallisneria	Spotted sunfish	76	9.00
2	4	Little Wekiva	Vallisneria	Spotted sunfish	79	9.00
3	1	Little Wekiva	Bare Bottom	Mosquitofish	28	0.22
3	1	Little Wekiva	Bare Bottom	Redbreast sunfish	34	0.55
3	1	Little Wekiva	Bare Bottom	Redbreast sunfish	35	0.61
3	1	Little Wekiva	Bare Bottom	Redbreast sunfish	37	0.73
3	1	Little Wekiva	Bare Bottom	Redbreast sunfish	38	0.80
3	1	Little Wekiva	Bare Bottom	Redbreast sunfish	70	5.30
3	1	Little Wekiva	Bare Bottom	Redbreast sunfish	75	6.24
3	1	Little Wekiva	Bare Bottom	Redbreast sunfish	80	8.00
3	1	Little Wekiva	Bare Bottom	Redbreast sunfish	84	8.69
3	1	Little Wekiva	Bare Bottom	Redbreast sunfish	94	13.00
3	1	Little Wekiva	Bare Bottom	Redbreast sunfish	103	17.00
3	1	Little Wekiva	Bare Bottom	Redbreast sunfish	108	18.00
3	1	Little Wekiva	Bare Bottom	Redbreast sunfish	114	22.00
3	1	Little Wekiva	Bare Bottom	Redbreast sunfish	157	55.00
3	1	Little Wekiva	Bare Bottom	Spotted sunfish	50	2.24
3	1	Little Wekiva	Bare Bottom	Spotted sunfish	63	4.65
3	1	Little Wekiva	Bare Bottom	Spotted sunfish	77	8.68
3	1	Little Wekiva	Bare Bottom	Spotted sunfish	79	8.68
3	1	Little Wekiva	Bare Bottom	Spotted sunfish	89	13.00
3	1	Little Wekiva	Bare Bottom	Spotted sunfish	101	18.00
3	2	Little Wekiva	Bare Bottom	Bluegill	40	1.10
3	2	Little Wekiva	Bare Bottom	Brown bullhead	170	59.93
3	2	Little Wekiva	Bare Bottom	Dollar sunfish	50	2.50
3	2	Little Wekiva	Bare Bottom	Dollar sunfish	52	2.69
3	2	Little Wekiva	Bare Bottom	Dollar sunfish	64	4.80
3	2	Little Wekiva	Bare Bottom	Redbreast sunfish	85	9.00
3	2	Little Wekiva	Bare Bottom	Redbreast sunfish	85	9.00
3	2	Little Wekiva	Bare Bottom	Redbreast sunfish	87	10.00
3	2	Little Wekiva	Bare Bottom	Redbreast sunfish	88	10.00
3	2	Little Wekiva	Bare Bottom	Redbreast sunfish	121	27.00
3	2	Little Wekiva	Bare Bottom	Redbreast sunfish	130	33.00
3	2	Little Wekiva	Bare Bottom	Spotted sunfish	70	6.10
3	2	Little Wekiva	Bare Bottom	Spotted sunfish	118	27.00
3	2	Little Wekiva	Bare Bottom	Spotted sunfish	127	39.00
3	3	Little Wekiva	Bare Bottom	Brook silverside	57	1.01

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
3	3	Little Wekiva	Bare Bottom	Brook silverside	60	1.17
3	3	Little Wekiva	Bare Bottom	Largemouth bass	79	5.00
3	3	Little Wekiva	Bare Bottom	Redbreast sunfish	88	10.00
3	3	Little Wekiva	Bare Bottom	Redbreast sunfish	99	13.00
3	3	Little Wekiva	Bare Bottom	Redbreast sunfish	120	27.00
3	3	Little Wekiva	Bare Bottom	Seminole killifish	33	0.33
3	3	Little Wekiva	Bare Bottom	Spotted sunfish	107	21.00
3	4	Little Wekiva	Bare Bottom	Largemouth bass	81	6.00
3	4	Little Wekiva	Bare Bottom	Redbreast sunfish	82	10.00
3	4	Little Wekiva	Bare Bottom	Redbreast sunfish	100	18.00
3	4	Little Wekiva	Bare Bottom	Seminole killifish	36	0.40
3	4	Little Wekiva	Bare Bottom	Spotted sunfish	91	13.00
4	1	Upper Wekiva	Hydrocotyle	Bluegill	64	3.00
4	1	Upper Wekiva	Hydrocotyle	Coastal shiner	48	1.04
4	1	Upper Wekiva	Hydrocotyle	Coastal shiner	48	1.07
4	1	Upper Wekiva	Hydrocotyle	Coastal shiner	50	1.18
4	1	Upper Wekiva	Hydrocotyle	Coastal shiner	56	1.49
4	1	Upper Wekiva	Hydrocotyle	Largemouth bass	40	0.82
4	1	Upper Wekiva	Hydrocotyle	Largemouth bass	365	578.00
4	1	Upper Wekiva	Hydrocotyle	Mosquitofish	23	0.12
4	1	Upper Wekiva	Hydrocotyle	Mosquitofish	25	0.12
4	1	Upper Wekiva	Hydrocotyle	Pirate perch	39	0.88
4	1	Upper Wekiva	Hydrocotyle	Pirate perch	51	1.00
4	1	Upper Wekiva	Hydrocotyle	Pirate perch	56	2.00
4	1	Upper Wekiva	Hydrocotyle	Redbreast sunfish	39	0.90
4	1	Upper Wekiva	Hydrocotyle	Redbreast sunfish	65	5.00
4	1	Upper Wekiva	Hydrocotyle	Redbreast sunfish	90	11.00
4	1	Upper Wekiva	Hydrocotyle	Redbreast sunfish	177	89.00
4	1	Upper Wekiva	Hydrocotyle	Redbreast sunfish	185	100.00
4	1	Upper Wekiva	Hydrocotyle	Sailfin molly	32	0.49
4	1	Upper Wekiva	Hydrocotyle	Seminole killifish	51	1.00
4	2	Upper Wekiva	Hydrocotyle	Coastal shiner	50	1.10
4	2	Upper Wekiva	Hydrocotyle	Coastal shiner	52	1.30
4	2	Upper Wekiva	Hydrocotyle	Largemouth bass	39	0.64
4	2	Upper Wekiva	Hydrocotyle	Largemouth bass	174	57.00
4	2	Upper Wekiva	Hydrocotyle	Largemouth bass	338	471.00
4	2	Upper Wekiva	Hydrocotyle	Redbreast sunfish	45	2.00
4	2	Upper Wekiva	Hydrocotyle	Redbreast sunfish	62	4.00
4	2	Upper Wekiva	Hydrocotyle	Redbreast sunfish	67	6.00
4	2	Upper Wekiva	Hydrocotyle	Redbreast sunfish	74	6.00
4	2	Upper Wekiva	Hydrocotyle	Redbreast sunfish	90	9.00
4	2	Upper Wekiva	Hydrocotyle	Seminole killifish	44	1.00
4	2	Upper Wekiva	Hydrocotyle	Seminole killifish	58	2.00
4	3	Upper Wekiva	Hydrocotyle	Blackbanded darter	55	2.00
4	3	Upper Wekiva	Hydrocotyle	Coastal shiner	49	1.06
4	3	Upper Wekiva	Hydrocotyle	Coastal shiner	51	1.25
4	3	Upper Wekiva	Hydrocotyle	Coastal shiner	54	1.29
4	3	Upper Wekiva	Hydrocotyle	Mosquitofish	22	0.11
4	3	Upper Wekiva	Hydrocotyle	Mosquitofish	25	0.19
4	3	Upper Wekiva	Hydrocotyle	Pirate perch	46	1.00
4	3	Upper Wekiva	Hydrocotyle	Pugnose minnow	46	0.79
4	3	Upper Wekiva	Hydrocotyle	Pugnose minnow	49	0.78
4	3	Upper Wekiva	Hydrocotyle	Redbreast sunfish	150	50.00
4	3	Upper Wekiva	Hydrocotyle	Sailfin molly	40	1.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
4	4	Upper Wekiva	Hydrocotyle	Coastal shiner	37	0.36
4	4	Upper Wekiva	Hydrocotyle	Coastal shiner	48	0.89
4	4	Upper Wekiva	Hydrocotyle	Seminole killifish	63	2.00
5	1	Upper Wekiva	Vallisneria	Coastal shiner	50	1.15
5	1	Upper Wekiva	Vallisneria	Coastal shiner	51	1.07
5	1	Upper Wekiva	Vallisneria	Coastal shiner	54	1.49
5	1	Upper Wekiva	Vallisneria	Coastal shiner	54	1.46
5	1	Upper Wekiva	Vallisneria	Coastal shiner	54	1.23
5	1	Upper Wekiva	Vallisneria	Coastal shiner	56	1.77
5	1	Upper Wekiva	Vallisneria	Coastal shiner	56	1.68
5	1	Upper Wekiva	Vallisneria	Coastal shiner	56	1.50
5	1	Upper Wekiva	Vallisneria	Coastal shiner	56	1.60
5	1	Upper Wekiva	Vallisneria	Coastal shiner	58	1.68
5	1	Upper Wekiva	Vallisneria	Coastal shiner	59	1.92
5	1	Upper Wekiva	Vallisneria	Coastal shiner	61	1.91
5	1	Upper Wekiva	Vallisneria	Golden shiner	85	5.00
5	1	Upper Wekiva	Vallisneria	Golden shiner	239	136.00
5	1	Upper Wekiva	Vallisneria	Lake chubsucker	128	25.00
5	1	Upper Wekiva	Vallisneria	Lake chubsucker	168	57.00
5	1	Upper Wekiva	Vallisneria	Lake chubsucker	238	169.00
5	1	Upper Wekiva	Vallisneria	Largemouth bass	125	17.00
5	1	Upper Wekiva	Vallisneria	Largemouth bass	157	38.00
5	1	Upper Wekiva	Vallisneria	Pugnose minnow	50	0.88
5	1	Upper Wekiva	Vallisneria	Redbreast sunfish	63	4.00
5	1	Upper Wekiva	Vallisneria	Redbreast sunfish	64	6.00
5	1	Upper Wekiva	Vallisneria	Redbreast sunfish	97	12.00
5	1	Upper Wekiva	Vallisneria	Redbreast sunfish	107	17.00
5	1	Upper Wekiva	Vallisneria	Sailfin shiner	39	0.48
5	1	Upper Wekiva	Vallisneria	Sailfin shiner	39	0.46
5	1	Upper Wekiva	Vallisneria	Spotted sunfish	37	0.85
5	1	Upper Wekiva	Vallisneria	Spotted sunfish	58	3.00
5	1	Upper Wekiva	Vallisneria	Spotted sunfish	60	4.00
5	1	Upper Wekiva	Vallisneria	Spotted sunfish	69	5.00
5	1	Upper Wekiva	Vallisneria	Spotted sunfish	70	6.00
5	1	Upper Wekiva	Vallisneria	Spotted sunfish	78	8.00
5	1	Upper Wekiva	Vallisneria	Spotted sunfish	91	15.00
5	2	Upper Wekiva	Vallisneria	American eel	234	22.00
5	2	Upper Wekiva	Vallisneria	Coastal shiner	50	1.08
5	2	Upper Wekiva	Vallisneria	Coastal shiner	51	1.17
5	2	Upper Wekiva	Vallisneria	Coastal shiner	56	1.47
5	2	Upper Wekiva	Vallisneria	Coastal shiner	60	1.78
5	2	Upper Wekiva	Vallisneria	Lake chubsucker	179	65.00
5	2	Upper Wekiva	Vallisneria	Pugnose minnow	50	1.09
5	2	Upper Wekiva	Vallisneria	Sailfin shiner	33	0.30
5	2	Upper Wekiva	Vallisneria	Sailfin shiner	34	0.30
5	2	Upper Wekiva	Vallisneria	Sailfin shiner	35	0.33
5	2	Upper Wekiva	Vallisneria	Spotted sunfish	58	3.00
5	2	Upper Wekiva	Vallisneria	Spotted sunfish	62	4.00
5	2	Upper Wekiva	Vallisneria	Spotted sunfish	72	7.00
5	3	Upper Wekiva	Vallisneria	Brook silverside	67	1.29
5	3	Upper Wekiva	Vallisneria	Coastal shiner	51	1.30
5	3	Upper Wekiva	Vallisneria	Coastal shiner	57	1.37
5	3	Upper Wekiva	Vallisneria	Coastal shiner	59	2.32
5	3	Upper Wekiva	Vallisneria	Largemouth bass	148	31.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
5	3	Upper Wekiva	Vallisneria	Redbreast sunfish	60	3.00
5	3	Upper Wekiva	Vallisneria	Redbreast sunfish	117	26.00
5	3	Upper Wekiva	Vallisneria	Spotted sunfish	42	2.00
5	3	Upper Wekiva	Vallisneria	Spotted sunfish	64	4.00
5	3	Upper Wekiva	Vallisneria	Spotted sunfish	73	6.45
5	4	Upper Wekiva	Vallisneria	Lake chubsucker	170	57.00
5	4	Upper Wekiva	Vallisneria	Lake chubsucker	172	56.00
5	4	Upper Wekiva	Vallisneria	Lake chubsucker	175	57.00
5	4	Upper Wekiva	Vallisneria	Seminole killifish	118	15.00
5	4	Upper Wekiva	Vallisneria	Spotted sunfish	60	4.00
5	4	Upper Wekiva	Vallisneria	Spotted sunfish	83	9.00
6	1	Upper Wekiva	Nuphar	Blackbanded darter	52	1.13
6	1	Upper Wekiva	Nuphar	Bluefin killifish	22	0.12
6	1	Upper Wekiva	Nuphar	Least killifish	21	0.12
6	1	Upper Wekiva	Nuphar	Redbreast sunfish	34	0.59
6	1	Upper Wekiva	Nuphar	Redbreast sunfish	59	4.00
6	1	Upper Wekiva	Nuphar	Redbreast sunfish	74	6.00
6	1	Upper Wekiva	Nuphar	Redbreast sunfish	130	29.00
6	1	Upper Wekiva	Nuphar	Redbreast sunfish	137	38.00
6	1	Upper Wekiva	Nuphar	Redbreast sunfish	140	42.00
6	1	Upper Wekiva	Nuphar	Redbreast sunfish	141	39.00
6	1	Upper Wekiva	Nuphar	Redbreast sunfish	142	45.00
6	1	Upper Wekiva	Nuphar	Redbreast sunfish	151	45.00
6	1	Upper Wekiva	Nuphar	Redbreast sunfish	156	57.00
6	1	Upper Wekiva	Nuphar	Redbreast sunfish	198	122.00
6	1	Upper Wekiva	Nuphar	Redbreast sunfish	200	155.00
6	1	Upper Wekiva	Nuphar	Redbreast sunfish	230	167.00
6	1	Upper Wekiva	Nuphar	Seminole killifish	37	0.50
6	1	Upper Wekiva	Nuphar	Seminole killifish	46	0.88
6	1	Upper Wekiva	Nuphar	Seminole killifish	48	0.92
6	2	Upper Wekiva	Nuphar	Redbreast sunfish	98	14.00
6	2	Upper Wekiva	Nuphar	Redbreast sunfish	122	25.00
6	2	Upper Wekiva	Nuphar	Redbreast sunfish	140	37.00
6	2	Upper Wekiva	Nuphar	Redbreast sunfish	176	76.00
6	3	Upper Wekiva	Nuphar	Brook silverside	61	1.22
6	3	Upper Wekiva	Nuphar	Redbreast sunfish	38	1.00
6	3	Upper Wekiva	Nuphar	Seminole killifish	40	0.80
6	3	Upper Wekiva	Nuphar	Spotted sunfish	97	16.00
6	3	Upper Wekiva	Nuphar	Tadpole madtom	61	3.00
6	4	Upper Wekiva	Nuphar	No Fish in Removal	.	.
7	1	Lower Wekiva	Vallisneria	American eel	435	160.51
7	1	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.38
7	1	Lower Wekiva	Vallisneria	Brook silverside	75	2.14
7	1	Lower Wekiva	Vallisneria	Coastal shiner	39	0.47
7	1	Lower Wekiva	Vallisneria	Coastal shiner	43	0.68
7	1	Lower Wekiva	Vallisneria	Coastal shiner	44	0.77
7	1	Lower Wekiva	Vallisneria	Coastal shiner	45	0.79
7	1	Lower Wekiva	Vallisneria	Coastal shiner	45	0.79
7	1	Lower Wekiva	Vallisneria	Coastal shiner	46	0.89
7	1	Lower Wekiva	Vallisneria	Coastal shiner	46	0.86
7	1	Lower Wekiva	Vallisneria	Coastal shiner	48	1.09
7	1	Lower Wekiva	Vallisneria	Coastal shiner	49	1.14
7	1	Lower Wekiva	Vallisneria	Coastal shiner	50	1.24
7	1	Lower Wekiva	Vallisneria	Coastal shiner	50	1.09

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
7	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.30
7	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.31
7	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.31
7	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.29
7	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.37
7	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.43
7	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.50
7	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.48
7	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.42
7	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.53
7	1	Lower Wekiva	Vallisneria	Coastal shiner	56	1.48
7	1	Lower Wekiva	Vallisneria	Coastal shiner	57	1.44
7	1	Lower Wekiva	Vallisneria	Coastal shiner	59	1.74
7	1	Lower Wekiva	Vallisneria	Coastal shiner	63	2.21
7	1	Lower Wekiva	Vallisneria	Largemouth bass	62	2.94
7	1	Lower Wekiva	Vallisneria	Largemouth bass	85	8.00
7	1	Lower Wekiva	Vallisneria	Largemouth bass	175	63.00
7	1	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.62
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	43	1.37
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	50	1.95
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	80	7.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	89	10.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	90	10.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	90	11.65
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	91	12.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	97	16.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	100	16.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	104	17.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	109	20.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	110	21.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	112	17.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	114	24.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	115	22.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	118	25.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	120	28.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	123	28.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	124	30.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	124	28.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	125	29.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	125	29.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	125	29.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	132	37.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	136	37.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	136	40.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	148	48.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	156	59.00
7	1	Lower Wekiva	Vallisneria	Redbreast sunfish	161	66.00
7	1	Lower Wekiva	Vallisneria	Spotted sunfish	54	3.14
7	1	Lower Wekiva	Vallisneria	Spotted sunfish	80	10.33
7	1	Lower Wekiva	Vallisneria	Spotted sunfish	80	9.71
7	1	Lower Wekiva	Vallisneria	Spotted sunfish	111	29.00
7	1	Lower Wekiva	Vallisneria	Spotted sunfish	112	22.00
7	2	Lower Wekiva	Vallisneria	Bluegill	145	33.00
7	2	Lower Wekiva	Vallisneria	Coastal shiner	45	0.76

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
7	2	Lower Wekiva	Vallisneria	Coastal shiner	50	0.99
7	2	Lower Wekiva	Vallisneria	Coastal shiner	50	1.05
7	2	Lower Wekiva	Vallisneria	Coastal shiner	55	1.33
7	2	Lower Wekiva	Vallisneria	Largemouth bass	156	41.00
7	2	Lower Wekiva	Vallisneria	Pugnose minnow	47	0.79
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	45	1.40
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	82	8.00
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	87	9.00
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	89	10.00
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	96	13.00
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	96	12.00
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	102	16.00
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	103	17.00
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	119	27.00
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	122	26.00
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	127	32.00
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	128	27.00
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	135	38.00
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	145	41.00
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	153	54.00
7	2	Lower Wekiva	Vallisneria	Redbreast sunfish	168	63.00
7	2	Lower Wekiva	Vallisneria	Spotted sunfish	85	12.00
7	2	Lower Wekiva	Vallisneria	Spotted sunfish	97	18.00
7	2	Lower Wekiva	Vallisneria	Spotted sunfish	105	22.00
7	2	Lower Wekiva	Vallisneria	Spotted sunfish	118	33.00
7	2	Lower Wekiva	Vallisneria	Spotted sunfish	129	41.00
7	2	Lower Wekiva	Vallisneria	Spotted sunfish	143	64.00
7	3	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.51
7	3	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.66
7	3	Lower Wekiva	Vallisneria	Coastal shiner	47	0.90
7	3	Lower Wekiva	Vallisneria	Coastal shiner	50	0.99
7	3	Lower Wekiva	Vallisneria	Coastal shiner	50	1.23
7	3	Lower Wekiva	Vallisneria	Coastal shiner	54	1.37
7	3	Lower Wekiva	Vallisneria	Coastal shiner	56	1.81
7	3	Lower Wekiva	Vallisneria	Coastal shiner	60	2.19
7	3	Lower Wekiva	Vallisneria	Redbreast sunfish	45	1.65
7	3	Lower Wekiva	Vallisneria	Redbreast sunfish	85	10.00
7	3	Lower Wekiva	Vallisneria	Redbreast sunfish	101	17.00
7	3	Lower Wekiva	Vallisneria	Redbreast sunfish	101	18.00
7	3	Lower Wekiva	Vallisneria	Redbreast sunfish	103	17.00
7	3	Lower Wekiva	Vallisneria	Redbreast sunfish	140	42.00
7	3	Lower Wekiva	Vallisneria	Seminole killifish	119	17.00
7	3	Lower Wekiva	Vallisneria	Seminole killifish	120	17.33
7	4	Lower Wekiva	Vallisneria	Coastal shiner	50	1.09
7	4	Lower Wekiva	Vallisneria	Coastal shiner	55	1.52
7	4	Lower Wekiva	Vallisneria	Coastal shiner	56	1.47
7	4	Lower Wekiva	Vallisneria	Largemouth bass	80	7.00
7	4	Lower Wekiva	Vallisneria	Redbreast sunfish	55	2.70
7	4	Lower Wekiva	Vallisneria	Redbreast sunfish	80	8.54
7	4	Lower Wekiva	Vallisneria	Redbreast sunfish	106	18.00
7	4	Lower Wekiva	Vallisneria	Redbreast sunfish	125	30.00
7	4	Lower Wekiva	Vallisneria	Spotted sunfish	127	41.00
7	4	Lower Wekiva	Vallisneria	Spotted sunfish	130	47.00
8	1	Lower Wekiva	Bare Bottom	Atlantic stingray	485	363.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	32	0.40
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	34	0.30
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	34	0.38
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	35	0.37
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	37	0.46
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	37	0.48
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	40	0.65
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	41	0.67
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	42	0.67
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	42	0.74
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	44	0.80
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	45	0.90
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	47	1.03
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	47	1.02
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	50	1.16
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	52	1.33
8	1	Lower Wekiva	Bare Bottom	Seminole killifish	63	2.34
8	2	Lower Wekiva	Bare Bottom	Coastal shiner	19	0.06
8	2	Lower Wekiva	Bare Bottom	Coastal shiner	29	0.18
8	2	Lower Wekiva	Bare Bottom	Coastal shiner	47	0.92
8	2	Lower Wekiva	Bare Bottom	Seminole killifish	33	0.30
8	2	Lower Wekiva	Bare Bottom	Seminole killifish	36	0.41
8	2	Lower Wekiva	Bare Bottom	Seminole killifish	42	0.65
8	2	Lower Wekiva	Bare Bottom	Seminole killifish	42	0.89
8	2	Lower Wekiva	Bare Bottom	Seminole killifish	42	0.68
8	2	Lower Wekiva	Bare Bottom	Seminole killifish	42	0.66
8	2	Lower Wekiva	Bare Bottom	Seminole killifish	46	0.89
8	2	Lower Wekiva	Bare Bottom	Seminole killifish	47	0.99
8	2	Lower Wekiva	Bare Bottom	Seminole killifish	47	1.04
8	2	Lower Wekiva	Bare Bottom	Seminole killifish	50	1.13
8	2	Lower Wekiva	Bare Bottom	Seminole killifish	79	4.84
8	3	Lower Wekiva	Bare Bottom	Bluefin killifish	19	0.08
8	3	Lower Wekiva	Bare Bottom	Bluefin killifish	20	0.08
8	3	Lower Wekiva	Bare Bottom	Bluefin killifish	20	0.12
8	3	Lower Wekiva	Bare Bottom	Bluefin killifish	22	0.15
8	3	Lower Wekiva	Bare Bottom	Bluefin killifish	24	0.18
8	3	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.20
8	3	Lower Wekiva	Bare Bottom	Bluefin killifish	32	0.40
8	3	Lower Wekiva	Bare Bottom	Coastal shiner	21	0.10
8	3	Lower Wekiva	Bare Bottom	Coastal shiner	23	0.11
8	3	Lower Wekiva	Bare Bottom	Coastal shiner	24	0.12
8	3	Lower Wekiva	Bare Bottom	Coastal shiner	25	0.12
8	3	Lower Wekiva	Bare Bottom	Coastal shiner	28	0.19
8	3	Lower Wekiva	Bare Bottom	Coastal shiner	41	0.67
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	24	0.12
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	27	0.19
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	30	0.27
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	30	0.25
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	32	0.30
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	33	0.34
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	33	0.34
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	35	0.41
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	35	0.40
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	37	0.49

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	37	0.49
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	40	0.59
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	40	0.61
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	40	0.61
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	41	0.64
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	48	0.96
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	48	1.03
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	49	1.06
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	52	1.43
8	3	Lower Wekiva	Bare Bottom	Seminole killifish	52	1.22
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	.	.
9	1	Lower Wekiva	Bare Bottom	Striped mullet	216	109.00
9	1	Lower Wekiva	Bare Bottom	Striped mullet	223	119.34
9	1	Lower Wekiva	Bare Bottom	Striped mullet	228	122.00
9	1	Lower Wekiva	Bare Bottom	Striped mullet	230	119.00
9	2	Lower Wekiva	Bare Bottom	No Fish in Removal	.	.
9	3	Lower Wekiva	Bare Bottom	No Fish in Removal	.	.
9	4	Lower Wekiva	Bare Bottom	No Fish in Removal	.	.
10	1	Lower Wekiva	Vallisneria	American eel	258	32.90
10	1	Lower Wekiva	Vallisneria	American eel	380	101.00
10	1	Lower Wekiva	Vallisneria	Bluegill	101	21.00
10	1	Lower Wekiva	Vallisneria	Blue tilapia	65	5.23
10	1	Lower Wekiva	Vallisneria	Coastal shiner	43	0.76
10	1	Lower Wekiva	Vallisneria	Coastal shiner	45	0.84
10	1	Lower Wekiva	Vallisneria	Coastal shiner	54	1.40
10	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.42
10	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.63
10	1	Lower Wekiva	Vallisneria	Coastal shiner	56	1.78
10	1	Lower Wekiva	Vallisneria	Coastal shiner	57	1.88
10	1	Lower Wekiva	Vallisneria	Coastal shiner	60	2.19
10	1	Lower Wekiva	Vallisneria	Coastal shiner	60	2.21
10	1	Lower Wekiva	Vallisneria	Coastal shiner	60	2.02
10	1	Lower Wekiva	Vallisneria	Lake chubsucker	184	77.00
10	1	Lower Wekiva	Vallisneria	Lake chubsucker	210	119.00
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	42	1.25
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	46	1.80

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	47	1.72
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	59	3.00
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	66	5.01
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	74	6.02
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	75	7.22
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	76	6.89
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	79	7.00
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	84	6.00
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	95	12.00
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	96	14.00
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	99	13.00
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	100	14.00
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	101	15.00
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	101	18.00
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	102	14.00
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	106	21.00
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	106	20.00
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	117	24.00
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	124	34.00
10	1	Lower Wekiva	Vallisneria	Redear sunfish	100	16.00
10	1	Lower Wekiva	Vallisneria	Redear sunfish	102	19.00
10	1	Lower Wekiva	Vallisneria	Redear sunfish	131	45.00
10	1	Lower Wekiva	Vallisneria	Redear sunfish	143	59.00
10	1	Lower Wekiva	Vallisneria	Redear sunfish	150	75.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	55	3.43
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	65	5.24
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	73	5.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	73	8.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	73	7.69
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	80	10.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	82	9.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	85	9.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	85	11.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	86	10.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	90	13.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	91	14.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	91	14.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	92	14.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	94	16.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	96	16.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	99	18.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	99	18.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	101	13.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	107	28.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	109	24.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	110	26.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	119	25.00
10	2	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.51
10	2	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.54
10	2	Lower Wekiva	Vallisneria	Bluegill	86	11.00
10	2	Lower Wekiva	Vallisneria	Coastal shiner	45	0.81
10	2	Lower Wekiva	Vallisneria	Coastal shiner	50	1.09
10	2	Lower Wekiva	Vallisneria	Coastal shiner	56	1.79

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
10	2	Lower Wekiva	Vallisneria	Coastal shiner	59	2.07
10	2	Lower Wekiva	Vallisneria	Coastal shiner	59	1.69
10	2	Lower Wekiva	Vallisneria	Coastal shiner	60	1.90
10	2	Lower Wekiva	Vallisneria	Lake chubsucker	217	143.00
10	2	Lower Wekiva	Vallisneria	Largemouth bass	67	3.00
10	2	Lower Wekiva	Vallisneria	Largemouth bass	79	6.00
10	2	Lower Wekiva	Vallisneria	Largemouth bass	167	48.00
10	2	Lower Wekiva	Vallisneria	Redbreast sunfish	39	1.00
10	2	Lower Wekiva	Vallisneria	Redbreast sunfish	43	1.45
10	2	Lower Wekiva	Vallisneria	Redbreast sunfish	53	3.00
10	2	Lower Wekiva	Vallisneria	Redbreast sunfish	65	3.00
10	2	Lower Wekiva	Vallisneria	Redbreast sunfish	69	5.00
10	2	Lower Wekiva	Vallisneria	Redbreast sunfish	74	5.00
10	2	Lower Wekiva	Vallisneria	Redbreast sunfish	87	8.00
10	2	Lower Wekiva	Vallisneria	Redbreast sunfish	89	10.00
10	2	Lower Wekiva	Vallisneria	Redbreast sunfish	136	36.00
10	2	Lower Wekiva	Vallisneria	Redbreast sunfish	175	79.00
10	2	Lower Wekiva	Vallisneria	Redear sunfish	71	8.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	56	4.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	56	3.46
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	58	3.82
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	63	6.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	66	5.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	66	4.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	68	4.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	70	7.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	71	7.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	72	6.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	72	7.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	73	6.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	75	7.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	76	8.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	76	6.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	82	10.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	82	9.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	90	13.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	90	13.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	91	15.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	92	17.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	93	13.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	94	16.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	95	13.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	101	17.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	101	19.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	104	22.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	105	21.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	108	30.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	111	32.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	111	23.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	114	28.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	115	25.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	119	36.00
10	2	Lower Wekiva	Vallisneria	Tadpole madtom	48	1.52
10	2	Lower Wekiva	Vallisneria	Tadpole madtom	67	5.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
10	3	Lower Wekiva	Vallisneria	Redbreast sunfish	23	0.25
10	3	Lower Wekiva	Vallisneria	Redbreast sunfish	46	2.00
10	3	Lower Wekiva	Vallisneria	Redbreast sunfish	66	5.00
10	3	Lower Wekiva	Vallisneria	Redbreast sunfish	106	17.00
10	3	Lower Wekiva	Vallisneria	Redbreast sunfish	116	17.00
10	3	Lower Wekiva	Vallisneria	Redbreast sunfish	144	41.00
10	3	Lower Wekiva	Vallisneria	Redbreast sunfish	158	61.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	69	12.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	71	7.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	75	9.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	78	9.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	80	8.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	85	10.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	85	12.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	87	12.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	89	13.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	92	16.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	98	19.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	107	24.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	112	29.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	139	47.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	154	82.00
10	4	Lower Wekiva	Vallisneria	Coastal shiner	54	1.20
10	4	Lower Wekiva	Vallisneria	Coastal shiner	57	1.62
10	4	Lower Wekiva	Vallisneria	Largemouth bass	205	95.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	60	4.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	78	9.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	80	8.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	82	10.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	98	17.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	110	26.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	110	27.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	124	39.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	144	61.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	145	60.00
11	1	Lower Wekiva	Vallisneria	American eel	222	19.98
11	1	Lower Wekiva	Vallisneria	American eel	235	26.51
11	1	Lower Wekiva	Vallisneria	American eel	272	40.84
11	1	Lower Wekiva	Vallisneria	American eel	370	84.00
11	1	Lower Wekiva	Vallisneria	American eel	385	119.52
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.30
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.46
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.78
11	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.39
11	1	Lower Wekiva	Vallisneria	Coastal shiner	54	1.57
11	1	Lower Wekiva	Vallisneria	Coastal shiner	54	1.28
11	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.73
11	1	Lower Wekiva	Vallisneria	Coastal shiner	57	1.79
11	1	Lower Wekiva	Vallisneria	Coastal shiner	57	1.78
11	1	Lower Wekiva	Vallisneria	Coastal shiner	58	1.70
11	1	Lower Wekiva	Vallisneria	Coastal shiner	61	2.09
11	1	Lower Wekiva	Vallisneria	Coastal shiner	69	2.75
11	1	Lower Wekiva	Vallisneria	Golden shiner	130	19.52

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
11	1	Lower Wekiva	Vallisneria	Lake chubsucker	95	11.59
11	1	Lower Wekiva	Vallisneria	Largemouth bass	73	4.90
11	1	Lower Wekiva	Vallisneria	Redbreast sunfish	42	1.24
11	1	Lower Wekiva	Vallisneria	Redbreast sunfish	88	11.38
11	1	Lower Wekiva	Vallisneria	Redbreast sunfish	93	12.66
11	1	Lower Wekiva	Vallisneria	Seminole killifish	64	2.46
11	1	Lower Wekiva	Vallisneria	Seminole killifish	130	20.00
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	35	0.74
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.07
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	48	2.15
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	52	2.46
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	52	2.71
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	55	3.29
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	55	3.30
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	55	3.11
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	57	3.36
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	57	3.96
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	58	3.85
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	59	3.63
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	61	4.88
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	61	4.70
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	62	4.78
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	62	4.63
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	63	5.07
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	63	4.72
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	63	5.19
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	64	5.31
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	65	5.74
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	65	5.16
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	65	4.76
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	65	5.00
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	68	5.93
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	68	6.27
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	69	6.71
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	69	6.45
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	70	6.21
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	71	7.91
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	72	6.69
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	72	7.75
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	72	7.67
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	72	7.23
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	72	7.30
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	73	7.22
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	73	7.56
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	74	8.11
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	74	8.13
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	74	8.43
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	75	9.30
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	75	9.54
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	75	8.52
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	78	8.55
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	78	10.17
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	78	9.21
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	80	9.59

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	80	10.60
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	81	11.70
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	81	11.26
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	82	9.96
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	84	12.92
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.93
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	95	17.46
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	98	18.00
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	100	20.00
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	100	19.84
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	109	26.53
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	125	40.00
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	132	44.00
11	2	Lower Wekiva	Vallisneria	American eel	265	32.24
11	2	Lower Wekiva	Vallisneria	American eel	375	96.42
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.38
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.52
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.54
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.65
11	2	Lower Wekiva	Vallisneria	Coastal shiner	42	0.69
11	2	Lower Wekiva	Vallisneria	Coastal shiner	53	1.48
11	2	Lower Wekiva	Vallisneria	Coastal shiner	54	1.55
11	2	Lower Wekiva	Vallisneria	Coastal shiner	64	2.37
11	2	Lower Wekiva	Vallisneria	Lake chubsucker	78	6.13
11	2	Lower Wekiva	Vallisneria	Lake chubsucker	83	6.18
11	2	Lower Wekiva	Vallisneria	Lake chubsucker	89	7.96
11	2	Lower Wekiva	Vallisneria	Redbreast sunfish	72	6.41
11	2	Lower Wekiva	Vallisneria	Redbreast sunfish	75	6.67
11	2	Lower Wekiva	Vallisneria	Redbreast sunfish	103	17.00
11	2	Lower Wekiva	Vallisneria	Redbreast sunfish	105	17.00
11	2	Lower Wekiva	Vallisneria	Seminole killifish	52	1.30
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	50	2.34
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	50	2.54
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	50	2.45
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	52	3.01
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	54	3.03
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	55	3.35
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	56	3.55
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	58	3.40
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	60	4.32
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	62	4.65
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	62	4.80
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	62	4.71
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	64	5.16
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	65	5.51
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	65	5.84
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	67	5.98
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	67	6.47
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	68	5.75
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	69	6.91
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	69	6.78
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	70	7.00
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	70	7.00
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	71	7.24

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	71	6.63
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	72	7.69
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	72	7.34
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	72	7.15
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	73	8.54
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	74	7.99
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	74	7.93
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	75	8.48
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	78	10.11
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	84	12.05
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	85	12.00
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	86	12.00
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	90	14.00
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	97	17.00
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	101	19.00
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	112	29.00
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.28
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.44
11	3	Lower Wekiva	Vallisneria	Seminole killifish	73	3.84
11	3	Lower Wekiva	Vallisneria	Seminole killifish	106	12.00
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	52	2.73
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	58	3.62
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	58	3.62
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	59	3.79
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	65	4.93
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	69	6.02
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	70	7.05
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	72	7.14
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	75	8.15
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	75	8.20
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	78	9.21
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	82	10.89
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	82	10.80
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	83	12.00
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	83	12.17
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.44
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	95	16.65
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	97	18.00
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	106	23.00
11	4	Lower Wekiva	Vallisneria	American eel	330	73.77
11	4	Lower Wekiva	Vallisneria	American eel	390	125.57
11	4	Lower Wekiva	Vallisneria	Coastal shiner	52	1.40
11	4	Lower Wekiva	Vallisneria	Coastal shiner	54	1.35
11	4	Lower Wekiva	Vallisneria	Coastal shiner	55	1.48
11	4	Lower Wekiva	Vallisneria	Coastal shiner	62	2.05
11	4	Lower Wekiva	Vallisneria	Largemouth bass	75	5.00
11	4	Lower Wekiva	Vallisneria	Largemouth bass	96	10.00
11	4	Lower Wekiva	Vallisneria	Redbreast sunfish	67	4.68
11	4	Lower Wekiva	Vallisneria	Seminole killifish	55	1.62
11	4	Lower Wekiva	Vallisneria	Seminole killifish	70	3.50
11	4	Lower Wekiva	Vallisneria	Seminole killifish	72	3.97
11	4	Lower Wekiva	Vallisneria	Seminole killifish	77	4.48
11	4	Lower Wekiva	Vallisneria	Seminole killifish	120	17.00
11	4	Lower Wekiva	Vallisneria	Seminole killifish	139	26.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
11	4	Lower Wekiva	Vallisneria	Seminole killifish	140	28.00
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	53	2.85
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	54	3.33
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	57	3.36
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	65	4.82
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	68	5.79
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	70	6.00
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	72	7.58
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	72	7.06
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	73	8.25
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	74	8.24
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	75	9.44
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	79	11.14
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	79	9.22
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	85	13.00
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	85	11.50
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	90	16.56
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	91	17.00
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	103	23.00
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	105	23.00
11	5	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.37
11	5	Lower Wekiva	Vallisneria	Seminole killifish	56	1.71
11	5	Lower Wekiva	Vallisneria	Seminole killifish	69	3.09
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	49	2.50
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	53	3.11
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	54	3.26
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	55	3.18
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	60	4.91
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	72	7.54
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	80	10.79
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	85	13.18
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	90	14.87
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	90	15.71
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	92	16.13
12	1	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.33
12	1	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.54
12	1	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.51
12	1	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.51
12	1	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.61
12	1	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.72
12	1	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.74
12	1	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.74
12	1	Lower Wekiva	Vallisneria	Bluefin killifish	42	0.90
12	1	Lower Wekiva	Vallisneria	Brown darter	40	0.72
12	1	Lower Wekiva	Vallisneria	Coastal shiner	32	0.29
12	1	Lower Wekiva	Vallisneria	Coastal shiner	39	0.60
12	1	Lower Wekiva	Vallisneria	Coastal shiner	41	0.60
12	1	Lower Wekiva	Vallisneria	Coastal shiner	42	0.66
12	1	Lower Wekiva	Vallisneria	Coastal shiner	44	0.79
12	1	Lower Wekiva	Vallisneria	Coastal shiner	44	0.77
12	1	Lower Wekiva	Vallisneria	Coastal shiner	44	0.71
12	1	Lower Wekiva	Vallisneria	Coastal shiner	45	0.87
12	1	Lower Wekiva	Vallisneria	Coastal shiner	45	0.78
12	1	Lower Wekiva	Vallisneria	Coastal shiner	45	0.80

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
12	1	Lower Wekiva	Vallisneria	Coastal shiner	47	0.95
12	1	Lower Wekiva	Vallisneria	Coastal shiner	47	1.05
12	1	Lower Wekiva	Vallisneria	Coastal shiner	47	0.99
12	1	Lower Wekiva	Vallisneria	Coastal shiner	47	1.10
12	1	Lower Wekiva	Vallisneria	Coastal shiner	47	0.88
12	1	Lower Wekiva	Vallisneria	Coastal shiner	47	0.97
12	1	Lower Wekiva	Vallisneria	Coastal shiner	49	1.04
12	1	Lower Wekiva	Vallisneria	Coastal shiner	50	1.08
12	1	Lower Wekiva	Vallisneria	Coastal shiner	50	1.29
12	1	Lower Wekiva	Vallisneria	Coastal shiner	50	1.16
12	1	Lower Wekiva	Vallisneria	Coastal shiner	50	1.22
12	1	Lower Wekiva	Vallisneria	Coastal shiner	51	1.43
12	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.34
12	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.46
12	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.36
12	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.37
12	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.50
12	1	Lower Wekiva	Vallisneria	Coastal shiner	54	1.56
12	1	Lower Wekiva	Vallisneria	Coastal shiner	54	1.48
12	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.53
12	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.80
12	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.79
12	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.60
12	1	Lower Wekiva	Vallisneria	Coastal shiner	56	1.71
12	1	Lower Wekiva	Vallisneria	Coastal shiner	61	2.21
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	60	2.86
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	61	2.39
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	62	2.82
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	66	4.00
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	67	3.00
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	68	3.92
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	73	4.00
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	75	4.00
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	77	5.61
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	78	5.00
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	79	7.00
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	80	6.00
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	82	6.00
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	82	5.00
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	89	5.00
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	91	10.00
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	92	8.00
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	100	12.00
12	1	Lower Wekiva	Vallisneria	Lake chubsucker	168	59.00
12	1	Lower Wekiva	Vallisneria	Largemouth bass	52	2.00
12	1	Lower Wekiva	Vallisneria	Largemouth bass	83	7.00
12	1	Lower Wekiva	Vallisneria	Largemouth bass	162	44.00
12	1	Lower Wekiva	Vallisneria	Pugnose minnow	30	0.21
12	1	Lower Wekiva	Vallisneria	Pugnose minnow	30	0.19
12	1	Lower Wekiva	Vallisneria	Pugnose minnow	36	0.34
12	1	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.66
12	1	Lower Wekiva	Vallisneria	Pugnose minnow	50	1.05
12	1	Lower Wekiva	Vallisneria	Pugnose minnow	52	1.19
12	1	Lower Wekiva	Vallisneria	Pugnose minnow	52	1.33

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
12	1	Lower Wekiva	Vallisneria	Redbreast sunfish	24	0.27
12	1	Lower Wekiva	Vallisneria	Redbreast sunfish	41	1.20
12	1	Lower Wekiva	Vallisneria	Redbreast sunfish	44	1.43
12	1	Lower Wekiva	Vallisneria	Redbreast sunfish	45	1.59
12	1	Lower Wekiva	Vallisneria	Redbreast sunfish	65	4.53
12	1	Lower Wekiva	Vallisneria	Redbreast sunfish	68	4.84
12	1	Lower Wekiva	Vallisneria	Seminole killifish	45	0.95
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	49	2.34
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	50	2.74
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	54	3.08
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	54	3.12
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	54	3.34
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	55	3.46
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	55	3.08
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	56	3.66
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	57	3.61
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	59	4.11
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	60	4.18
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	66	5.90
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	72	7.48
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	73	7.44
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	74	7.00
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	78	10.06
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	80	10.53
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.00
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	97	18.00
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	100	20.00
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	102	22.00
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	118	35.00
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	121	37.00
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	123	38.00
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	126	41.00
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	129	46.00
12	1	Lower Wekiva	Vallisneria	Spotted sunfish	133	47.00
12	2	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.34
12	2	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.56
12	2	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.67
12	2	Lower Wekiva	Vallisneria	Bowfin	630	2652.00
12	2	Lower Wekiva	Vallisneria	Coastal shiner	40	0.63
12	2	Lower Wekiva	Vallisneria	Coastal shiner	41	0.67
12	2	Lower Wekiva	Vallisneria	Coastal shiner	43	0.58
12	2	Lower Wekiva	Vallisneria	Coastal shiner	44	0.77
12	2	Lower Wekiva	Vallisneria	Coastal shiner	45	0.94
12	2	Lower Wekiva	Vallisneria	Coastal shiner	46	0.96
12	2	Lower Wekiva	Vallisneria	Coastal shiner	46	0.91
12	2	Lower Wekiva	Vallisneria	Coastal shiner	47	1.08
12	2	Lower Wekiva	Vallisneria	Coastal shiner	48	1.08
12	2	Lower Wekiva	Vallisneria	Coastal shiner	50	1.23
12	2	Lower Wekiva	Vallisneria	Coastal shiner	50	1.27
12	2	Lower Wekiva	Vallisneria	Coastal shiner	51	1.11
12	2	Lower Wekiva	Vallisneria	Coastal shiner	51	1.19
12	2	Lower Wekiva	Vallisneria	Coastal shiner	51	1.22
12	2	Lower Wekiva	Vallisneria	Coastal shiner	52	1.48
12	2	Lower Wekiva	Vallisneria	Coastal shiner	53	1.50

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
12	2	Lower Wekiva	Vallisneria	Coastal shiner	53	1.27
12	2	Lower Wekiva	Vallisneria	Coastal shiner	54	1.44
12	2	Lower Wekiva	Vallisneria	Coastal shiner	54	1.87
12	2	Lower Wekiva	Vallisneria	Coastal shiner	54	1.58
12	2	Lower Wekiva	Vallisneria	Coastal shiner	55	1.33
12	2	Lower Wekiva	Vallisneria	Coastal shiner	55	1.46
12	2	Lower Wekiva	Vallisneria	Coastal shiner	55	1.72
12	2	Lower Wekiva	Vallisneria	Coastal shiner	56	1.78
12	2	Lower Wekiva	Vallisneria	Coastal shiner	57	1.90
12	2	Lower Wekiva	Vallisneria	Coastal shiner	57	1.89
12	2	Lower Wekiva	Vallisneria	Coastal shiner	59	2.06
12	2	Lower Wekiva	Vallisneria	Coastal shiner	60	1.98
12	2	Lower Wekiva	Vallisneria	Coastal shiner	60	1.99
12	2	Lower Wekiva	Vallisneria	Coastal shiner	60	2.04
12	2	Lower Wekiva	Vallisneria	Coastal shiner	61	2.06
12	2	Lower Wekiva	Vallisneria	Coastal shiner	62	2.05
12	2	Lower Wekiva	Vallisneria	Florida gar	596	895.00
12	2	Lower Wekiva	Vallisneria	Golden shiner	63	2.01
12	2	Lower Wekiva	Vallisneria	Golden shiner	76	3.81
12	2	Lower Wekiva	Vallisneria	Lake chubsucker	63	2.80
12	2	Lower Wekiva	Vallisneria	Lake chubsucker	86	7.00
12	2	Lower Wekiva	Vallisneria	Lake chubsucker	105	13.00
12	2	Lower Wekiva	Vallisneria	Mosquitofish	27	0.27
12	2	Lower Wekiva	Vallisneria	Mosquitofish	35	0.58
12	2	Lower Wekiva	Vallisneria	Mosquitofish	37	0.60
12	2	Lower Wekiva	Vallisneria	Mosquitofish	39	0.76
12	2	Lower Wekiva	Vallisneria	Mosquitofish	44	1.05
12	2	Lower Wekiva	Vallisneria	Mosquitofish	47	1.26
12	2	Lower Wekiva	Vallisneria	Mosquitofish	49	1.32
12	2	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.79
12	2	Lower Wekiva	Vallisneria	Pugnose minnow	52	1.16
12	2	Lower Wekiva	Vallisneria	Redbreast sunfish	40	1.04
12	2	Lower Wekiva	Vallisneria	Redbreast sunfish	84	9.70
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	37	0.92
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.03
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	54	3.06
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	55	2.97
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	55	2.97
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	55	3.26
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	64	4.87
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	65	5.15
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	69	6.55
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	70	7.10
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	70	7.23
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	71	7.35
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	72	7.77
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	74	8.02
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	78	9.11
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	95	17.73
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	97	17.00
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	103	21.00
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	104	21.00
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	105	23.00
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	112	26.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	139	57.00
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	141	60.00
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	142	60.00
12	2	Lower Wekiva	Vallisneria	Spotted sunfish	144	66.00
12	2	Lower Wekiva	Vallisneria	Tadpole madtom	74	4.54
12	3	Lower Wekiva	Vallisneria	American eel	490	245.00
12	3	Lower Wekiva	Vallisneria	American eel	617	594.00
12	3	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.58
12	3	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.54
12	3	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.64
12	3	Lower Wekiva	Vallisneria	Coastal shiner	42	0.60
12	3	Lower Wekiva	Vallisneria	Coastal shiner	45	0.84
12	3	Lower Wekiva	Vallisneria	Coastal shiner	45	0.87
12	3	Lower Wekiva	Vallisneria	Coastal shiner	45	0.77
12	3	Lower Wekiva	Vallisneria	Coastal shiner	46	0.93
12	3	Lower Wekiva	Vallisneria	Coastal shiner	47	0.91
12	3	Lower Wekiva	Vallisneria	Coastal shiner	48	1.02
12	3	Lower Wekiva	Vallisneria	Coastal shiner	48	1.03
12	3	Lower Wekiva	Vallisneria	Coastal shiner	49	0.98
12	3	Lower Wekiva	Vallisneria	Coastal shiner	50	1.19
12	3	Lower Wekiva	Vallisneria	Coastal shiner	50	1.25
12	3	Lower Wekiva	Vallisneria	Coastal shiner	50	1.30
12	3	Lower Wekiva	Vallisneria	Coastal shiner	52	1.35
12	3	Lower Wekiva	Vallisneria	Coastal shiner	52	1.26
12	3	Lower Wekiva	Vallisneria	Coastal shiner	52	1.36
12	3	Lower Wekiva	Vallisneria	Coastal shiner	52	1.24
12	3	Lower Wekiva	Vallisneria	Coastal shiner	52	1.29
12	3	Lower Wekiva	Vallisneria	Coastal shiner	54	1.56
12	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.43
12	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.44
12	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.29
12	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.60
12	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.42
12	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.64
12	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.65
12	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.76
12	3	Lower Wekiva	Vallisneria	Coastal shiner	56	1.63
12	3	Lower Wekiva	Vallisneria	Coastal shiner	56	1.78
12	3	Lower Wekiva	Vallisneria	Coastal shiner	57	1.65
12	3	Lower Wekiva	Vallisneria	Coastal shiner	57	1.73
12	3	Lower Wekiva	Vallisneria	Coastal shiner	57	1.70
12	3	Lower Wekiva	Vallisneria	Coastal shiner	57	1.75
12	3	Lower Wekiva	Vallisneria	Coastal shiner	57	1.76
12	3	Lower Wekiva	Vallisneria	Coastal shiner	57	1.86
12	3	Lower Wekiva	Vallisneria	Coastal shiner	58	1.80
12	3	Lower Wekiva	Vallisneria	Coastal shiner	59	1.83
12	3	Lower Wekiva	Vallisneria	Coastal shiner	59	2.09
12	3	Lower Wekiva	Vallisneria	Coastal shiner	60	2.19
12	3	Lower Wekiva	Vallisneria	Coastal shiner	60	2.01
12	3	Lower Wekiva	Vallisneria	Coastal shiner	60	2.29
12	3	Lower Wekiva	Vallisneria	Coastal shiner	60	2.10
12	3	Lower Wekiva	Vallisneria	Coastal shiner	60	2.02
12	3	Lower Wekiva	Vallisneria	Coastal shiner	60	2.26
12	3	Lower Wekiva	Vallisneria	Coastal shiner	62	2.44

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
12	3	Lower Wekiva	Vallisneria	Coastal shiner	63	2.52
12	3	Lower Wekiva	Vallisneria	Coastal shiner	63	2.23
12	3	Lower Wekiva	Vallisneria	Coastal shiner	64	2.43
12	3	Lower Wekiva	Vallisneria	Golden shiner	54	1.19
12	3	Lower Wekiva	Vallisneria	Lake chubsucker	66	3.45
12	3	Lower Wekiva	Vallisneria	Lake chubsucker	68	3.00
12	3	Lower Wekiva	Vallisneria	Lake chubsucker	70	4.08
12	3	Lower Wekiva	Vallisneria	Lake chubsucker	71	4.04
12	3	Lower Wekiva	Vallisneria	Largemouth bass	54	1.91
12	3	Lower Wekiva	Vallisneria	Largemouth bass	92	8.00
12	3	Lower Wekiva	Vallisneria	Mosquitofish	26	0.23
12	3	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.78
12	3	Lower Wekiva	Vallisneria	Pugnose minnow	49	1.08
12	3	Lower Wekiva	Vallisneria	Pugnose minnow	50	1.11
12	3	Lower Wekiva	Vallisneria	Redbreast sunfish	42	1.18
12	3	Lower Wekiva	Vallisneria	Spotted sunfish	63	4.93
12	3	Lower Wekiva	Vallisneria	Spotted sunfish	65	5.39
12	3	Lower Wekiva	Vallisneria	Spotted sunfish	70	6.68
12	3	Lower Wekiva	Vallisneria	Spotted sunfish	76	8.00
12	3	Lower Wekiva	Vallisneria	Spotted sunfish	79	9.00
12	3	Lower Wekiva	Vallisneria	Spotted sunfish	104	15.00
12	3	Lower Wekiva	Vallisneria	Spotted sunfish	107	28.00
12	3	Lower Wekiva	Vallisneria	Spotted sunfish	108	24.00
12	3	Lower Wekiva	Vallisneria	Spotted sunfish	110	27.00
12	3	Lower Wekiva	Vallisneria	Spotted sunfish	112	28.00
12	3	Lower Wekiva	Vallisneria	Spotted sunfish	129	46.00
12	4	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.23
12	4	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.54
12	4	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.63
12	4	Lower Wekiva	Vallisneria	Bluefin killifish	41	0.84
12	4	Lower Wekiva	Vallisneria	Bluefin killifish	41	0.77
12	4	Lower Wekiva	Vallisneria	Bluefin killifish	43	0.96
12	4	Lower Wekiva	Vallisneria	Coastal shiner	39	0.47
12	4	Lower Wekiva	Vallisneria	Coastal shiner	41	0.93
12	4	Lower Wekiva	Vallisneria	Coastal shiner	41	0.67
12	4	Lower Wekiva	Vallisneria	Coastal shiner	42	0.65
12	4	Lower Wekiva	Vallisneria	Coastal shiner	43	0.69
12	4	Lower Wekiva	Vallisneria	Coastal shiner	44	1.08
12	4	Lower Wekiva	Vallisneria	Coastal shiner	45	0.71
12	4	Lower Wekiva	Vallisneria	Coastal shiner	45	0.90
12	4	Lower Wekiva	Vallisneria	Coastal shiner	46	0.90
12	4	Lower Wekiva	Vallisneria	Coastal shiner	47	0.93
12	4	Lower Wekiva	Vallisneria	Coastal shiner	48	1.04
12	4	Lower Wekiva	Vallisneria	Coastal shiner	48	1.11
12	4	Lower Wekiva	Vallisneria	Coastal shiner	49	1.17
12	4	Lower Wekiva	Vallisneria	Coastal shiner	50	1.06
12	4	Lower Wekiva	Vallisneria	Coastal shiner	52	1.24
12	4	Lower Wekiva	Vallisneria	Coastal shiner	52	1.17
12	4	Lower Wekiva	Vallisneria	Coastal shiner	52	1.32
12	4	Lower Wekiva	Vallisneria	Coastal shiner	52	1.36
12	4	Lower Wekiva	Vallisneria	Coastal shiner	53	1.36
12	4	Lower Wekiva	Vallisneria	Coastal shiner	53	1.48
12	4	Lower Wekiva	Vallisneria	Coastal shiner	53	1.32
12	4	Lower Wekiva	Vallisneria	Coastal shiner	54	1.46

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
12	4	Lower Wekiva	Vallisneria	Coastal shiner	54	1.42
12	4	Lower Wekiva	Vallisneria	Coastal shiner	54	1.52
12	4	Lower Wekiva	Vallisneria	Coastal shiner	54	1.38
12	4	Lower Wekiva	Vallisneria	Coastal shiner	54	1.56
12	4	Lower Wekiva	Vallisneria	Coastal shiner	54	1.43
12	4	Lower Wekiva	Vallisneria	Coastal shiner	55	1.61
12	4	Lower Wekiva	Vallisneria	Coastal shiner	55	1.68
12	4	Lower Wekiva	Vallisneria	Coastal shiner	55	1.71
12	4	Lower Wekiva	Vallisneria	Coastal shiner	55	1.41
12	4	Lower Wekiva	Vallisneria	Coastal shiner	56	1.78
12	4	Lower Wekiva	Vallisneria	Coastal shiner	57	1.80
12	4	Lower Wekiva	Vallisneria	Coastal shiner	60	2.29
12	4	Lower Wekiva	Vallisneria	Coastal shiner	61	2.13
12	4	Lower Wekiva	Vallisneria	Coastal shiner	61	2.24
12	4	Lower Wekiva	Vallisneria	Coastal shiner	64	2.51
12	4	Lower Wekiva	Vallisneria	Lake chubsucker	58	2.30
12	4	Lower Wekiva	Vallisneria	Lake chubsucker	58	1.91
12	4	Lower Wekiva	Vallisneria	Lake chubsucker	58	2.12
12	4	Lower Wekiva	Vallisneria	Lake chubsucker	65	3.27
12	4	Lower Wekiva	Vallisneria	Lake chubsucker	74	5.22
12	4	Lower Wekiva	Vallisneria	Lake chubsucker	76	4.64
12	4	Lower Wekiva	Vallisneria	Lake chubsucker	82	7.00
12	4	Lower Wekiva	Vallisneria	Lake chubsucker	93	11.00
12	4	Lower Wekiva	Vallisneria	Largemouth bass	52	1.78
12	4	Lower Wekiva	Vallisneria	Largemouth bass	58	2.60
12	4	Lower Wekiva	Vallisneria	Largemouth bass	64	4.00
12	4	Lower Wekiva	Vallisneria	Mosquitofish	35	0.51
12	4	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.69
12	4	Lower Wekiva	Vallisneria	Redbreast sunfish	50	2.45
12	4	Lower Wekiva	Vallisneria	Redbreast sunfish	54	3.03
12	4	Lower Wekiva	Vallisneria	Redbreast sunfish	75	5.97
12	4	Lower Wekiva	Vallisneria	Sailfin shiner	29	0.18
12	4	Lower Wekiva	Vallisneria	Sailfin shiner	35	0.36
12	4	Lower Wekiva	Vallisneria	Sailfin shiner	38	0.46
12	4	Lower Wekiva	Vallisneria	Seminole killifish	63	2.25
12	4	Lower Wekiva	Vallisneria	Spotted sunfish	51	2.61
12	4	Lower Wekiva	Vallisneria	Spotted sunfish	75	8.20
12	4	Lower Wekiva	Vallisneria	Spotted sunfish	88	13.83
12	4	Lower Wekiva	Vallisneria	Spotted sunfish	92	17.00
12	4	Lower Wekiva	Vallisneria	Spotted sunfish	125	44.00
12	4	Lower Wekiva	Vallisneria	Spotted sunfish	130	45.00
13	1	Lower Wekiva	Bare Bottom	Redbreast sunfish	41	2.00
13	1	Lower Wekiva	Bare Bottom	Redbreast sunfish	57	3.00
13	2	Lower Wekiva	Bare Bottom	No Fish in Removal	.	.
13	3	Lower Wekiva	Bare Bottom	No Fish in Removal	.	.
14	1	Lower Wekiva	Bare Bottom	No Fish in Removal	.	.
14	2	Lower Wekiva	Bare Bottom	No Fish in Removal	.	.
14	3	Lower Wekiva	Bare Bottom	No Fish in Removal	.	.
15	1	Lower Wekiva	Vallisneria	Blackbanded darter	45	0.68
15	1	Lower Wekiva	Vallisneria	Bowfin	579	2215.00
15	1	Lower Wekiva	Vallisneria	Coastal shiner	44	0.69
15	1	Lower Wekiva	Vallisneria	Coastal shiner	44	0.76
15	1	Lower Wekiva	Vallisneria	Coastal shiner	44	0.64
15	1	Lower Wekiva	Vallisneria	Coastal shiner	45	0.81

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
15	1	Lower Wekiva	Vallisneria	Coastal shiner	45	0.74
15	1	Lower Wekiva	Vallisneria	Coastal shiner	47	1.06
15	1	Lower Wekiva	Vallisneria	Coastal shiner	50	1.19
15	1	Lower Wekiva	Vallisneria	Coastal shiner	51	1.07
15	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.84
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	73	6.29
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	76	6.87
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	80	8.38
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	85	10.03
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	87	10.09
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	91	13.53
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	92	11.45
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	94	13.07
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	95	13.19
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	95	13.75
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	95	13.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	95	13.28
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	97	14.44
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	97	14.28
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	97	14.28
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	99	14.89
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	99	16.48
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	100	16.57
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	100	15.22
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	100	15.22
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	100	16.16
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	100	15.86
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	101	16.28
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	102	15.34
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	102	18.05
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	102	16.71
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	106	19.40
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	106	18.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	107	21.20
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	107	21.20
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	107	19.62
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	108	20.76
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	108	19.04
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	108	20.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	109	19.85
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	109	21.63
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	110	21.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	111	23.51
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	111	22.10
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	111	23.46
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	113	22.99
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	114	24.22
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	115	23.51
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	119	26.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	119	27.64
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	120	28.37
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	120	28.05
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	121	27.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	121	30.82

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	122	31.70
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	123	29.28
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	124	32.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	127	31.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	128	29.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	129	26.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	130	21.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	136	22.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	136	28.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	139	25.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	140	35.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	145	34.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	146	38.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	146	50.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	150	58.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	151	40.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	152	36.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	167	70.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	173	67.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	174	80.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	176	67.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	193	100.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	197	107.00
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	210	68.00
15	1	Lower Wekiva	Vallisneria	Redear sunfish	162	68.00
15	1	Lower Wekiva	Vallisneria	Redear sunfish	163	85.00
15	1	Lower Wekiva	Vallisneria	Seminole killifish	111	14.47
15	1	Lower Wekiva	Vallisneria	Seminole killifish	130	25.43
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	71	6.86
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	89	13.69
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	98	20.00
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	99	20.37
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	99	19.15
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	101	24.56
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	107	24.14
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	113	33.09
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	118	35.45
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	123	29.00
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	125	44.34
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	127	34.00
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	137	40.00
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	145	53.00
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	145	48.00
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	148	68.00
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	151	68.00
15	2	Lower Wekiva	Vallisneria	Largemouth bass	57	2.45
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	80	8.04
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	82	8.73
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	89	12.03
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	89	11.27
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	90	11.46
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	91	12.87
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	95	13.66
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	96	13.55

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	98	15.68
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	100	16.45
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	100	16.26
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	100	16.36
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	101	17.81
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	103	16.34
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	104	19.11
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	104	18.61
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	104	17.64
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	108	19.97
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	109	20.66
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	109	20.62
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	111	22.57
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	112	22.54
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	117	26.62
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	117	26.43
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	118	28.06
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	121	29.00
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	123	22.00
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	123	28.00
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	125	25.00
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	130	35.00
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	136	37.00
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	137	40.00
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	142	40.00
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	143	40.00
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	153	43.00
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	164	60.00
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	180	90.00
15	2	Lower Wekiva	Vallisneria	Redear sunfish	218	219.00
15	2	Lower Wekiva	Vallisneria	Redear sunfish	232	256.00
15	2	Lower Wekiva	Vallisneria	Spotted sunfish	74	8.14
15	2	Lower Wekiva	Vallisneria	Spotted sunfish	88	14.00
15	2	Lower Wekiva	Vallisneria	Spotted sunfish	94	17.50
15	2	Lower Wekiva	Vallisneria	Spotted sunfish	121	34.00
15	2	Lower Wekiva	Vallisneria	Spotted sunfish	126	42.00
15	2	Lower Wekiva	Vallisneria	Spotted sunfish	156	88.00
15	3	Lower Wekiva	Vallisneria	Bluegill	167	93.00
15	3	Lower Wekiva	Vallisneria	Coastal shiner	54	1.35
15	3	Lower Wekiva	Vallisneria	Coastal shiner	58	1.93
15	3	Lower Wekiva	Vallisneria	Redbreast sunfish	63	3.69
15	3	Lower Wekiva	Vallisneria	Redbreast sunfish	80	8.04
15	3	Lower Wekiva	Vallisneria	Redbreast sunfish	85	10.32
15	3	Lower Wekiva	Vallisneria	Redbreast sunfish	90	11.45
15	3	Lower Wekiva	Vallisneria	Redbreast sunfish	90	10.46
15	3	Lower Wekiva	Vallisneria	Redbreast sunfish	100	17.83
15	3	Lower Wekiva	Vallisneria	Redbreast sunfish	114	26.00
15	3	Lower Wekiva	Vallisneria	Redbreast sunfish	119	27.00
15	3	Lower Wekiva	Vallisneria	Redbreast sunfish	132	36.00
15	3	Lower Wekiva	Vallisneria	Redbreast sunfish	133	28.00
15	3	Lower Wekiva	Vallisneria	Spotted sunfish	73	7.71
15	3	Lower Wekiva	Vallisneria	Spotted sunfish	80	10.43
15	3	Lower Wekiva	Vallisneria	Spotted sunfish	90	15.47
15	3	Lower Wekiva	Vallisneria	Spotted sunfish	96	19.20

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
15	3	Lower Wekiva	Vallisneria	Spotted sunfish	127	36.00
15	3	Lower Wekiva	Vallisneria	Spotted sunfish	128	41.00
15	3	Lower Wekiva	Vallisneria	Spotted sunfish	128	37.00
15	4	Lower Wekiva	Vallisneria	Redbreast sunfish	52	2.00
15	4	Lower Wekiva	Vallisneria	Redbreast sunfish	55	2.00
15	4	Lower Wekiva	Vallisneria	Redbreast sunfish	92	13.00
15	4	Lower Wekiva	Vallisneria	Redbreast sunfish	104	13.00
15	4	Lower Wekiva	Vallisneria	Redbreast sunfish	108	17.00
15	4	Lower Wekiva	Vallisneria	Redbreast sunfish	115	20.00
15	4	Lower Wekiva	Vallisneria	Redbreast sunfish	144	37.00
15	4	Lower Wekiva	Vallisneria	Redbreast sunfish	148	44.00
15	4	Lower Wekiva	Vallisneria	Redbreast sunfish	169	75.00
15	4	Lower Wekiva	Vallisneria	Redbreast sunfish	185	99.00
15	4	Lower Wekiva	Vallisneria	Redbreast sunfish	187	80.00
15	4	Lower Wekiva	Vallisneria	Redbreast sunfish	212	139.00
15	4	Lower Wekiva	Vallisneria	Seminole killifish	39	1.00
15	4	Lower Wekiva	Vallisneria	Spotted sunfish	55	3.00
15	4	Lower Wekiva	Vallisneria	Spotted sunfish	114	24.00
15	4	Lower Wekiva	Vallisneria	Spotted sunfish	122	38.00
15	4	Lower Wekiva	Vallisneria	Spotted sunfish	150	75.00
16	1	Lower Wekiva	Vallisneria	Blackbanded darter	55	1.67
16	1	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.39
16	1	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.51
16	1	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.64
16	1	Lower Wekiva	Vallisneria	Bluefin killifish	42	0.96
16	1	Lower Wekiva	Vallisneria	Coastal shiner	43	0.73
16	1	Lower Wekiva	Vallisneria	Coastal shiner	59	1.94
16	1	Lower Wekiva	Vallisneria	Largemouth bass	99	11.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	39	1.02
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	68	4.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	70	5.82
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	75	6.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	75	5.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	77	7.45
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	80	8.49
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	81	6.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	84	10.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	84	7.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	84	11.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	86	11.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	86	12.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	86	9.88
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	87	11.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	88	8.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	90	11.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	90	11.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	90	12.92
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	95	12.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	96	13.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	97	13.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	97	13.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	98	17.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	99	14.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	100	14.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	100	15.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	102	24.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	106	15.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	106	18.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	111	22.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	112	26.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	113	21.00
16	1	Lower Wekiva	Vallisneria	Redbreast sunfish	165	67.00
16	1	Lower Wekiva	Vallisneria	Redear sunfish	196	161.00
16	1	Lower Wekiva	Vallisneria	Seminole killifish	46	1.05
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	55	3.45
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	56	3.55
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	62	4.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	63	5.05
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	63	5.16
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	70	7.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	74	6.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	74	7.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	75	8.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	77	11.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	77	8.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	79	8.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	79	8.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	80	11.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	80	9.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	80	9.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	80	10.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	81	11.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	84	11.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	85	10.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	85	11.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	85	10.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	85	14.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	86	11.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	86	17.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	86	10.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	90	15.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	90	13.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	92	13.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	92	17.38
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	93	15.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	94	17.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	94	17.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	100	20.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	110	27.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	115	29.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	117	32.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	122	34.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	123	36.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	126	40.00
16	1	Lower Wekiva	Vallisneria	Spotted sunfish	130	45.00
16	2	Lower Wekiva	Vallisneria	Blackbanded darter	52	1.18
16	2	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.65
16	2	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.82

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
16	2	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.78
16	2	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.80
16	2	Lower Wekiva	Vallisneria	Coastal shiner	50	1.19
16	2	Lower Wekiva	Vallisneria	Coastal shiner	64	2.56
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	79	7.00
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	85	10.09
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	87	10.00
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	88	14.00
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	89	11.00
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	90	13.00
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	91	11.00
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	92	15.00
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	95	14.00
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	96	12.00
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	100	15.00
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	112	22.00
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	114	23.00
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	117	26.00
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	117	27.00
16	2	Lower Wekiva	Vallisneria	Redbreast sunfish	127	34.00
16	2	Lower Wekiva	Vallisneria	Seminole killifish	64	2.52
16	2	Lower Wekiva	Vallisneria	Seminole killifish	66	2.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	54	2.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	58	8.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	62	5.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	63	4.94
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	69	6.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	71	5.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	72	9.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	73	8.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	74	7.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	74	8.81
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	75	9.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	76	8.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	78	10.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	80	9.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	80	9.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	80	13.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	81	11.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	82	14.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	83	12.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	85	11.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	85	11.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	85	13.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	85	10.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	85	13.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	86	13.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	86	13.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	89	14.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	90	13.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	91	16.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	92	16.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	92	13.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	97	18.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	106	23.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	108	27.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	110	26.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	110	27.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	111	32.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	112	28.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	112	24.00
16	2	Lower Wekiva	Vallisneria	Spotted sunfish	115	30.00
16	2	Lower Wekiva	Vallisneria	Yellow bullhead	216	152.88
16	3	Lower Wekiva	Vallisneria	Blackbanded darter	46	0.91
16	3	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.39
16	3	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.46
16	3	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.57
16	3	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.58
16	3	Lower Wekiva	Vallisneria	Brown bullhead	286	330.00
16	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.37
16	3	Lower Wekiva	Vallisneria	Coastal shiner	60	2.06
16	3	Lower Wekiva	Vallisneria	Coastal shiner	61	2.05
16	3	Lower Wekiva	Vallisneria	Largemouth bass	80	7.00
16	3	Lower Wekiva	Vallisneria	Redbreast sunfish	60	5.00
16	3	Lower Wekiva	Vallisneria	Redbreast sunfish	65	4.00
16	3	Lower Wekiva	Vallisneria	Redbreast sunfish	75	8.00
16	3	Lower Wekiva	Vallisneria	Redbreast sunfish	81	7.00
16	3	Lower Wekiva	Vallisneria	Redbreast sunfish	102	15.00
16	3	Lower Wekiva	Vallisneria	Redbreast sunfish	137	36.00
16	3	Lower Wekiva	Vallisneria	Redbreast sunfish	153	59.00
16	3	Lower Wekiva	Vallisneria	Redbreast sunfish	154	60.00
16	3	Lower Wekiva	Vallisneria	Seminole killifish	42	0.94
16	3	Lower Wekiva	Vallisneria	Seminole killifish	49	1.16
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	50	2.18
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	54	2.92
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	59	4.01
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	60	3.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	70	6.81
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	71	7.15
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	74	9.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	78	8.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	82	10.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	82	12.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	84	15.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	84	12.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	85	13.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	85	11.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	86	14.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	87	16.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	87	14.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	90	14.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	90	17.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	90	14.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	94	17.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	95	18.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	95	18.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	95	17.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	97	22.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	101	23.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	102	20.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	104	21.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	105	33.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	108	26.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	112	27.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	118	33.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	120	39.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	122	35.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	126	37.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	127	45.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	130	42.00
16	3	Lower Wekiva	Vallisneria	Spotted sunfish	152	57.00
16	4	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.21
16	4	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.49
16	4	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.65
16	4	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.57
16	4	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.69
16	4	Lower Wekiva	Vallisneria	Bluefin killifish	41	0.75
16	4	Lower Wekiva	Vallisneria	Coastal shiner	51	1.46
16	4	Lower Wekiva	Vallisneria	Largemouth bass	95	16.00
16	4	Lower Wekiva	Vallisneria	Redbreast sunfish	72	8.00
16	4	Lower Wekiva	Vallisneria	Redbreast sunfish	77	12.00
16	4	Lower Wekiva	Vallisneria	Redbreast sunfish	118	26.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	62	4.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	62	9.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	74	5.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	74	8.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	75	8.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	77	10.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	81	11.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	81	11.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	81	17.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	85	11.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	85	12.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	86	13.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	90	12.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	92	13.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	95	15.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	95	18.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	96	16.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	96	24.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	100	19.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	110	26.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	111	30.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	121	35.00
16	4	Lower Wekiva	Vallisneria	Spotted sunfish	123	35.00
16	4	Lower Wekiva	Vallisneria	Tadpole madtom	59	2.00
17	1	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.82
17	1	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.86
17	1	Lower Wekiva	Vallisneria	Bluefin killifish	41	0.82
17	1	Lower Wekiva	Vallisneria	Coastal shiner	51	1.22
17	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.42
17	1	Lower Wekiva	Vallisneria	Coastal shiner	57	1.69

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
17	1	Lower Wekiva	Vallisneria	Coastal shiner	62	2.49
17	1	Lower Wekiva	Vallisneria	Coastal shiner	63	2.22
17	1	Lower Wekiva	Vallisneria	Coastal shiner	63	2.56
17	1	Lower Wekiva	Vallisneria	Lake chubsucker	50	1.51
17	1	Lower Wekiva	Vallisneria	Lake chubsucker	55	1.87
17	1	Lower Wekiva	Vallisneria	Lake chubsucker	55	1.92
17	1	Lower Wekiva	Vallisneria	Lake chubsucker	62	7.00
17	1	Lower Wekiva	Vallisneria	Lake chubsucker	70	3.00
17	1	Lower Wekiva	Vallisneria	Lake chubsucker	76	4.00
17	1	Lower Wekiva	Vallisneria	Lake chubsucker	81	7.00
17	1	Lower Wekiva	Vallisneria	Lake chubsucker	84	4.00
17	1	Lower Wekiva	Vallisneria	Lake chubsucker	86	9.00
17	1	Lower Wekiva	Vallisneria	Lake chubsucker	90	7.00
17	1	Lower Wekiva	Vallisneria	Largemouth bass	57	2.00
17	1	Lower Wekiva	Vallisneria	Largemouth bass	58	3.00
17	1	Lower Wekiva	Vallisneria	Largemouth bass	72	5.00
17	1	Lower Wekiva	Vallisneria	Largemouth bass	74	5.00
17	1	Lower Wekiva	Vallisneria	Largemouth bass	83	7.00
17	1	Lower Wekiva	Vallisneria	Largemouth bass	90	9.00
17	1	Lower Wekiva	Vallisneria	Largemouth bass	107	16.00
17	1	Lower Wekiva	Vallisneria	Pirate perch	42	1.17
17	1	Lower Wekiva	Vallisneria	Pirate perch	50	1.71
17	1	Lower Wekiva	Vallisneria	Redbreast sunfish	41	1.27
17	1	Lower Wekiva	Vallisneria	Redbreast sunfish	94	12.00
17	1	Lower Wekiva	Vallisneria	Redbreast sunfish	101	17.00
17	1	Lower Wekiva	Vallisneria	Seminole killifish	58	2.03
17	1	Lower Wekiva	Vallisneria	Seminole killifish	66	3.00
17	1	Lower Wekiva	Vallisneria	Seminole killifish	69	2.00
17	1	Lower Wekiva	Vallisneria	Seminole killifish	69	3.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	45	2.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	58	6.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	59	4.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	66	6.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	66	5.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	68	6.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	75	9.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	75	8.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	76	8.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	77	9.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	80	11.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	83	11.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	85	13.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	85	17.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	87	12.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	90	14.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	91	19.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	95	16.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	96	19.00
17	1	Lower Wekiva	Vallisneria	Spotted sunfish	104	23.00
17	1	Lower Wekiva	Vallisneria	Yellow bullhead	142	35.00
17	2	Lower Wekiva	Vallisneria	Blackbanded darter	63	2.42
17	2	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.60
17	2	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.65
17	2	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.56

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
17	2	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.60
17	2	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.70
17	2	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.74
17	2	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.67
17	2	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.66
17	2	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.81
17	2	Lower Wekiva	Vallisneria	Coastal shiner	45	0.92
17	2	Lower Wekiva	Vallisneria	Coastal shiner	48	0.98
17	2	Lower Wekiva	Vallisneria	Coastal shiner	49	1.04
17	2	Lower Wekiva	Vallisneria	Coastal shiner	50	1.18
17	2	Lower Wekiva	Vallisneria	Coastal shiner	50	1.09
17	2	Lower Wekiva	Vallisneria	Coastal shiner	51	1.23
17	2	Lower Wekiva	Vallisneria	Coastal shiner	52	1.21
17	2	Lower Wekiva	Vallisneria	Coastal shiner	52	1.31
17	2	Lower Wekiva	Vallisneria	Coastal shiner	52	1.25
17	2	Lower Wekiva	Vallisneria	Coastal shiner	54	1.48
17	2	Lower Wekiva	Vallisneria	Coastal shiner	54	1.37
17	2	Lower Wekiva	Vallisneria	Coastal shiner	55	1.62
17	2	Lower Wekiva	Vallisneria	Coastal shiner	55	1.64
17	2	Lower Wekiva	Vallisneria	Coastal shiner	57	1.93
17	2	Lower Wekiva	Vallisneria	Coastal shiner	59	1.93
17	2	Lower Wekiva	Vallisneria	Coastal shiner	60	2.14
17	2	Lower Wekiva	Vallisneria	Coastal shiner	60	2.29
17	2	Lower Wekiva	Vallisneria	Coastal shiner	61	2.06
17	2	Lower Wekiva	Vallisneria	Coastal shiner	62	2.18
17	2	Lower Wekiva	Vallisneria	Coastal shiner	63	2.46
17	2	Lower Wekiva	Vallisneria	Coastal shiner	65	2.86
17	2	Lower Wekiva	Vallisneria	Coastal shiner	65	2.51
17	2	Lower Wekiva	Vallisneria	Coastal shiner	65	2.75
17	2	Lower Wekiva	Vallisneria	Coastal shiner	66	2.75
17	2	Lower Wekiva	Vallisneria	Lake chubsucker	67	4.00
17	2	Lower Wekiva	Vallisneria	Lake chubsucker	69	4.00
17	2	Lower Wekiva	Vallisneria	Lake chubsucker	69	4.00
17	2	Lower Wekiva	Vallisneria	Lake chubsucker	71	8.00
17	2	Lower Wekiva	Vallisneria	Lake chubsucker	72	4.00
17	2	Lower Wekiva	Vallisneria	Lake chubsucker	77	5.41
17	2	Lower Wekiva	Vallisneria	Largemouth bass	66	3.00
17	2	Lower Wekiva	Vallisneria	Redbreast sunfish	80	10.00
17	2	Lower Wekiva	Vallisneria	Seminole killifish	60	3.00
17	2	Lower Wekiva	Vallisneria	Seminole killifish	77	4.00
17	2	Lower Wekiva	Vallisneria	Seminole killifish	81	5.00
17	2	Lower Wekiva	Vallisneria	Seminole killifish	85	5.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	55	2.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	60	4.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	60	2.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	64	5.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	65	5.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	66	6.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	74	7.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	74	5.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	76	9.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	77	9.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	77	11.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	80	11.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	81	11.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	81	9.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	81	10.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	83	10.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	87	10.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	88	16.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	92	14.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	95	18.00
17	2	Lower Wekiva	Vallisneria	Spotted sunfish	135	47.00
17	2	Lower Wekiva	Vallisneria	Yellow bullhead	64	2.00
17	3	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.67
17	3	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.70
17	3	Lower Wekiva	Vallisneria	Bluefin killifish	43	0.97
17	3	Lower Wekiva	Vallisneria	Coastal shiner	42	0.74
17	3	Lower Wekiva	Vallisneria	Coastal shiner	44	0.76
17	3	Lower Wekiva	Vallisneria	Coastal shiner	48	1.04
17	3	Lower Wekiva	Vallisneria	Coastal shiner	49	0.99
17	3	Lower Wekiva	Vallisneria	Coastal shiner	54	1.54
17	3	Lower Wekiva	Vallisneria	Coastal shiner	56	1.49
17	3	Lower Wekiva	Vallisneria	Coastal shiner	57	1.88
17	3	Lower Wekiva	Vallisneria	Coastal shiner	59	1.78
17	3	Lower Wekiva	Vallisneria	Coastal shiner	59	1.98
17	3	Lower Wekiva	Vallisneria	Coastal shiner	59	2.10
17	3	Lower Wekiva	Vallisneria	Coastal shiner	60	2.14
17	3	Lower Wekiva	Vallisneria	Coastal shiner	67	2.63
17	3	Lower Wekiva	Vallisneria	Lake chubsucker	81	6.00
17	3	Lower Wekiva	Vallisneria	Lake chubsucker	86	6.00
17	3	Lower Wekiva	Vallisneria	Redbreast sunfish	92	11.00
17	3	Lower Wekiva	Vallisneria	Redbreast sunfish	102	18.00
17	3	Lower Wekiva	Vallisneria	Redbreast sunfish	105	19.00
17	3	Lower Wekiva	Vallisneria	Seminole killifish	120	16.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	42	1.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	61	5.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	62	5.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	66	6.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	68	6.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	70	8.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	71	7.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	75	10.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	76	9.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	76	9.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	76	6.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	80	10.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	80	10.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	81	10.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	84	10.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	86	13.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	91	13.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	94	15.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	97	18.00
17	3	Lower Wekiva	Vallisneria	Spotted sunfish	122	37.00
17	3	Lower Wekiva	Vallisneria	Yellow bullhead	56	3.00
17	3	Lower Wekiva	Vallisneria	Yellow bullhead	65	5.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
17	3	Lower Wekiva	Vallisneria	Yellow bullhead	68	5.00
17	4	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.34
17	4	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.71
17	4	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.70
17	4	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.76
17	4	Lower Wekiva	Vallisneria	Coastal shiner	49	1.09
17	4	Lower Wekiva	Vallisneria	Coastal shiner	51	1.22
17	4	Lower Wekiva	Vallisneria	Coastal shiner	51	1.34
17	4	Lower Wekiva	Vallisneria	Coastal shiner	54	1.43
17	4	Lower Wekiva	Vallisneria	Coastal shiner	55	1.65
17	4	Lower Wekiva	Vallisneria	Coastal shiner	56	1.68
17	4	Lower Wekiva	Vallisneria	Coastal shiner	57	1.95
17	4	Lower Wekiva	Vallisneria	Coastal shiner	57	1.96
17	4	Lower Wekiva	Vallisneria	Coastal shiner	59	2.17
17	4	Lower Wekiva	Vallisneria	Coastal shiner	62	2.48
17	4	Lower Wekiva	Vallisneria	Coastal shiner	63	2.65
17	4	Lower Wekiva	Vallisneria	Coastal shiner	65	2.74
17	4	Lower Wekiva	Vallisneria	Lake chubsucker	65	3.00
17	4	Lower Wekiva	Vallisneria	Lake chubsucker	80	9.00
17	4	Lower Wekiva	Vallisneria	Lake chubsucker	85	6.00
17	4	Lower Wekiva	Vallisneria	Largemouth bass	87	7.00
17	4	Lower Wekiva	Vallisneria	Redbreast sunfish	70	8.00
17	4	Lower Wekiva	Vallisneria	Seminole killifish	55	6.00
17	4	Lower Wekiva	Vallisneria	Seminole killifish	72	6.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.22
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	58	7.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	58	4.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	60	5.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	65	6.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	71	12.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	72	9.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	75	11.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	76	11.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	80	12.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	80	14.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	80	11.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	86	20.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	87	16.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	90	14.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	96	17.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	101	25.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	115	31.00
17	4	Lower Wekiva	Vallisneria	Spotted sunfish	115	29.00
17	4	Lower Wekiva	Vallisneria	Yellow bullhead	62	5.00
17	4	Lower Wekiva	Vallisneria	Yellow bullhead	180	91.40
18	1	Lower Wekiva	Vallisneria	Blackbanded darter	59	1.80
18	1	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.71
18	1	Lower Wekiva	Vallisneria	Brown bullhead	303	443.00
18	1	Lower Wekiva	Vallisneria	Coastal shiner	25	0.17
18	1	Lower Wekiva	Vallisneria	Coastal shiner	36	0.38
18	1	Lower Wekiva	Vallisneria	Coastal shiner	39	0.48
18	1	Lower Wekiva	Vallisneria	Coastal shiner	40	0.55
18	1	Lower Wekiva	Vallisneria	Coastal shiner	40	0.58
18	1	Lower Wekiva	Vallisneria	Coastal shiner	41	0.53

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
18	1	Lower Wekiva	Vallisneria	Coastal shiner	41	0.65
18	1	Lower Wekiva	Vallisneria	Coastal shiner	47	1.66
18	1	Lower Wekiva	Vallisneria	Coastal shiner	49	1.14
18	1	Lower Wekiva	Vallisneria	Coastal shiner	49	1.07
18	1	Lower Wekiva	Vallisneria	Coastal shiner	50	1.09
18	1	Lower Wekiva	Vallisneria	Coastal shiner	50	2.24
18	1	Lower Wekiva	Vallisneria	Coastal shiner	50	1.24
18	1	Lower Wekiva	Vallisneria	Coastal shiner	51	1.35
18	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.39
18	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.18
18	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.40
18	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.59
18	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.36
18	1	Lower Wekiva	Vallisneria	Coastal shiner	54	1.50
18	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.43
18	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.33
18	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.69
18	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.50
18	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.70
18	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.69
18	1	Lower Wekiva	Vallisneria	Coastal shiner	56	1.82
18	1	Lower Wekiva	Vallisneria	Coastal shiner	56	1.61
18	1	Lower Wekiva	Vallisneria	Coastal shiner	56	1.64
18	1	Lower Wekiva	Vallisneria	Coastal shiner	56	1.63
18	1	Lower Wekiva	Vallisneria	Coastal shiner	56	1.56
18	1	Lower Wekiva	Vallisneria	Coastal shiner	57	1.84
18	1	Lower Wekiva	Vallisneria	Coastal shiner	57	2.02
18	1	Lower Wekiva	Vallisneria	Coastal shiner	58	1.87
18	1	Lower Wekiva	Vallisneria	Coastal shiner	58	1.64
18	1	Lower Wekiva	Vallisneria	Coastal shiner	59	1.86
18	1	Lower Wekiva	Vallisneria	Coastal shiner	59	1.87
18	1	Lower Wekiva	Vallisneria	Coastal shiner	59	1.92
18	1	Lower Wekiva	Vallisneria	Coastal shiner	59	2.05
18	1	Lower Wekiva	Vallisneria	Coastal shiner	60	2.03
18	1	Lower Wekiva	Vallisneria	Coastal shiner	62	4.38
18	1	Lower Wekiva	Vallisneria	Coastal shiner	64	2.73
18	1	Lower Wekiva	Vallisneria	Coastal shiner	70	6.84
18	1	Lower Wekiva	Vallisneria	Lake chubsucker	205	136.00
18	1	Lower Wekiva	Vallisneria	Lake chubsucker	206	124.00
18	1	Lower Wekiva	Vallisneria	Largemouth bass	75	5.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	29	0.43
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	72	6.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	73	5.87
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	74	6.32
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	77	6.72
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	78	8.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	78	8.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	79	9.48
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	80	7.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	81	8.44
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	81	8.75
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	82	9.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	82	8.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	82	11.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	85	9.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	86	8.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	86	10.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	86	10.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	87	10.66
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	87	10.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	91	12.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	91	12.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	96	15.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	96	15.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	96	15.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	98	13.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	100	17.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	102	17.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	102	16.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	102	17.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	103	16.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	103	18.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	105	16.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	109	21.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	115	25.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	120	26.00
18	1	Lower Wekiva	Vallisneria	Redbreast sunfish	124	28.00
18	1	Lower Wekiva	Vallisneria	Seminole killifish	52	1.78
18	1	Lower Wekiva	Vallisneria	Seminole killifish	55	1.58
18	1	Lower Wekiva	Vallisneria	Seminole killifish	59	2.01
18	1	Lower Wekiva	Vallisneria	Seminole killifish	67	3.01
18	1	Lower Wekiva	Vallisneria	Seminole killifish	73	3.78
18	1	Lower Wekiva	Vallisneria	Seminole killifish	75	4.46
18	1	Lower Wekiva	Vallisneria	Seminole killifish	76	4.10
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	62	4.00
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	70	6.34
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	82	10.66
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	83	12.00
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	85	12.00
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	85	11.00
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	86	12.00
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	89	13.00
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	92	15.00
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	97	16.00
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	101	20.00
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	108	28.00
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	115	32.00
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	131	55.00
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	133	51.00
18	1	Lower Wekiva	Vallisneria	Spotted sunfish	159	89.00
18	1	Lower Wekiva	Vallisneria	Tadpole madtom	40	0.60
18	1	Lower Wekiva	Vallisneria	Tadpole madtom	68	3.82
18	2	Lower Wekiva	Vallisneria	Brook silverside	78	2.18
18	2	Lower Wekiva	Vallisneria	Brook silverside	90	3.28
18	2	Lower Wekiva	Vallisneria	Coastal shiner	38	0.48
18	2	Lower Wekiva	Vallisneria	Coastal shiner	52	1.24
18	2	Lower Wekiva	Vallisneria	Coastal shiner	56	1.60
18	2	Lower Wekiva	Vallisneria	Coastal shiner	57	1.89

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
18	2	Lower Wekiva	Vallisneria	Coastal shiner	59	1.80
18	2	Lower Wekiva	Vallisneria	Coastal shiner	60	1.91
18	2	Lower Wekiva	Vallisneria	Coastal shiner	60	2.10
18	2	Lower Wekiva	Vallisneria	Coastal shiner	64	2.29
18	2	Lower Wekiva	Vallisneria	Coastal shiner	67	2.73
18	2	Lower Wekiva	Vallisneria	Largemouth bass	229	162.00
18	2	Lower Wekiva	Vallisneria	Redbreast sunfish	56	3.02
18	2	Lower Wekiva	Vallisneria	Redbreast sunfish	75	5.99
18	2	Lower Wekiva	Vallisneria	Redbreast sunfish	76	7.00
18	2	Lower Wekiva	Vallisneria	Redbreast sunfish	80	7.94
18	2	Lower Wekiva	Vallisneria	Redbreast sunfish	80	7.91
18	2	Lower Wekiva	Vallisneria	Redbreast sunfish	82	8.10
18	2	Lower Wekiva	Vallisneria	Redbreast sunfish	83	8.44
18	2	Lower Wekiva	Vallisneria	Redbreast sunfish	86	9.32
18	2	Lower Wekiva	Vallisneria	Redbreast sunfish	87	10.45
18	2	Lower Wekiva	Vallisneria	Redbreast sunfish	88	11.12
18	2	Lower Wekiva	Vallisneria	Redbreast sunfish	92	11.71
18	2	Lower Wekiva	Vallisneria	Redbreast sunfish	97	14.65
18	2	Lower Wekiva	Vallisneria	Redbreast sunfish	156	63.00
18	2	Lower Wekiva	Vallisneria	Redbreast sunfish	176	106.00
18	2	Lower Wekiva	Vallisneria	Redbreast sunfish	183	97.00
18	2	Lower Wekiva	Vallisneria	Spotted sunfish	67	5.51
18	2	Lower Wekiva	Vallisneria	Spotted sunfish	68	6.19
18	2	Lower Wekiva	Vallisneria	Spotted sunfish	89	14.25
18	2	Lower Wekiva	Vallisneria	Spotted sunfish	93	15.00
18	2	Lower Wekiva	Vallisneria	Spotted sunfish	99	20.23
18	2	Lower Wekiva	Vallisneria	Spotted sunfish	101	20.97
18	2	Lower Wekiva	Vallisneria	Spotted sunfish	118	44.00
18	2	Lower Wekiva	Vallisneria	Spotted sunfish	131	40.00
18	2	Lower Wekiva	Vallisneria	Spotted sunfish	146	44.00
18	2	Lower Wekiva	Vallisneria	Spotted sunfish	158	96.00
18	3	Lower Wekiva	Vallisneria	Blackbanded darter	81	5.10
18	3	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.53
18	3	Lower Wekiva	Vallisneria	Bluefin killifish	42	0.88
18	3	Lower Wekiva	Vallisneria	Bluefin killifish	43	1.00
18	3	Lower Wekiva	Vallisneria	Brook silverside	82	2.54
18	3	Lower Wekiva	Vallisneria	Brook silverside	84	2.67
18	3	Lower Wekiva	Vallisneria	Coastal shiner	36	0.36
18	3	Lower Wekiva	Vallisneria	Coastal shiner	49	1.00
18	3	Lower Wekiva	Vallisneria	Coastal shiner	50	1.18
18	3	Lower Wekiva	Vallisneria	Coastal shiner	52	1.14
18	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.63
18	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.47
18	3	Lower Wekiva	Vallisneria	Coastal shiner	56	1.53
18	3	Lower Wekiva	Vallisneria	Coastal shiner	57	1.58
18	3	Lower Wekiva	Vallisneria	Coastal shiner	57	1.60
18	3	Lower Wekiva	Vallisneria	Coastal shiner	57	2.07
18	3	Lower Wekiva	Vallisneria	Coastal shiner	57	1.58
18	3	Lower Wekiva	Vallisneria	Coastal shiner	60	2.00
18	3	Lower Wekiva	Vallisneria	Coastal shiner	60	1.92
18	3	Lower Wekiva	Vallisneria	Coastal shiner	62	2.28
18	3	Lower Wekiva	Vallisneria	Coastal shiner	62	2.36
18	3	Lower Wekiva	Vallisneria	Coastal shiner	67	2.67
18	3	Lower Wekiva	Vallisneria	Largemouth bass	175	59.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
18	3	Lower Wekiva	Vallisneria	Redbreast sunfish	78	7.00
18	3	Lower Wekiva	Vallisneria	Redbreast sunfish	79	8.00
18	3	Lower Wekiva	Vallisneria	Redbreast sunfish	79	6.00
18	3	Lower Wekiva	Vallisneria	Redbreast sunfish	82	9.00
18	3	Lower Wekiva	Vallisneria	Redbreast sunfish	82	11.00
18	3	Lower Wekiva	Vallisneria	Redbreast sunfish	98	17.00
18	3	Lower Wekiva	Vallisneria	Redbreast sunfish	101	16.00
18	3	Lower Wekiva	Vallisneria	Redbreast sunfish	101	20.00
18	3	Lower Wekiva	Vallisneria	Redbreast sunfish	103	18.00
18	3	Lower Wekiva	Vallisneria	Seminole killifish	76	4.00
18	3	Lower Wekiva	Vallisneria	Seminole killifish	80	8.00
18	3	Lower Wekiva	Vallisneria	Seminole killifish	85	5.00
18	3	Lower Wekiva	Vallisneria	Seminole killifish	86	5.00
18	3	Lower Wekiva	Vallisneria	Seminole killifish	87	9.00
18	3	Lower Wekiva	Vallisneria	Spotted sunfish	77	8.00
18	3	Lower Wekiva	Vallisneria	Spotted sunfish	84	11.00
18	3	Lower Wekiva	Vallisneria	Spotted sunfish	85	15.00
18	3	Lower Wekiva	Vallisneria	Spotted sunfish	89	14.00
18	3	Lower Wekiva	Vallisneria	Spotted sunfish	90	15.00
18	3	Lower Wekiva	Vallisneria	Spotted sunfish	91	16.00
18	3	Lower Wekiva	Vallisneria	Spotted sunfish	93	17.00
18	3	Lower Wekiva	Vallisneria	Spotted sunfish	95	19.00
18	3	Lower Wekiva	Vallisneria	Spotted sunfish	95	18.00
18	3	Lower Wekiva	Vallisneria	Spotted sunfish	97	19.00
18	3	Lower Wekiva	Vallisneria	Spotted sunfish	120	36.00
18	3	Lower Wekiva	Vallisneria	Spotted sunfish	131	54.00
18	4	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.59
18	4	Lower Wekiva	Vallisneria	Bluefin killifish	41	0.75
18	4	Lower Wekiva	Vallisneria	Coastal shiner	46	1.87
18	4	Lower Wekiva	Vallisneria	Coastal shiner	47	0.88
18	4	Lower Wekiva	Vallisneria	Coastal shiner	50	1.03
18	4	Lower Wekiva	Vallisneria	Coastal shiner	55	1.40
18	4	Lower Wekiva	Vallisneria	Coastal shiner	55	1.40
18	4	Lower Wekiva	Vallisneria	Coastal shiner	59	1.89
18	4	Lower Wekiva	Vallisneria	Coastal shiner	60	1.69
18	4	Lower Wekiva	Vallisneria	Coastal shiner	60	2.04
18	4	Lower Wekiva	Vallisneria	Coastal shiner	61	2.07
18	4	Lower Wekiva	Vallisneria	Coastal shiner	61	2.08
18	4	Lower Wekiva	Vallisneria	Coastal shiner	62	2.05
18	4	Lower Wekiva	Vallisneria	Coastal shiner	62	2.06
18	4	Lower Wekiva	Vallisneria	Coastal shiner	65	2.39
18	4	Lower Wekiva	Vallisneria	Redbreast sunfish	98	17.00
18	4	Lower Wekiva	Vallisneria	Redbreast sunfish	102	17.00
18	4	Lower Wekiva	Vallisneria	Seminole killifish	60	2.00
18	4	Lower Wekiva	Vallisneria	Seminole killifish	88	6.00
18	4	Lower Wekiva	Vallisneria	Spotted sunfish	70	7.00
18	4	Lower Wekiva	Vallisneria	Spotted sunfish	94	17.00
18	4	Lower Wekiva	Vallisneria	Spotted sunfish	100	20.00
18	4	Lower Wekiva	Vallisneria	Spotted sunfish	112	32.00
18	4	Lower Wekiva	Vallisneria	Spotted sunfish	118	65.00
18	4	Lower Wekiva	Vallisneria	Spotted sunfish	139	62.00
18	4	Lower Wekiva	Vallisneria	Spotted sunfish	160	85.00
19	1	Lower Wekiva	Vallisneria	American eel	394	125.86
19	1	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.48

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
19	1	Lower Wekiva	Vallisneria	Bluefin killifish	45	1.25
19	1	Lower Wekiva	Vallisneria	Bluegill	163	80.00
19	1	Lower Wekiva	Vallisneria	Brown bullhead	276	319.00
19	1	Lower Wekiva	Vallisneria	Coastal shiner	47	0.94
19	1	Lower Wekiva	Vallisneria	Coastal shiner	50	1.32
19	1	Lower Wekiva	Vallisneria	Coastal shiner	51	1.15
19	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.34
19	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.25
19	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.20
19	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.28
19	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.40
19	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.37
19	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.60
19	1	Lower Wekiva	Vallisneria	Coastal shiner	56	1.73
19	1	Lower Wekiva	Vallisneria	Coastal shiner	58	1.82
19	1	Lower Wekiva	Vallisneria	Coastal shiner	59	1.96
19	1	Lower Wekiva	Vallisneria	Coastal shiner	65	2.17
19	1	Lower Wekiva	Vallisneria	Lake chubsucker	192	84.00
19	1	Lower Wekiva	Vallisneria	Lake chubsucker	192	93.00
19	1	Lower Wekiva	Vallisneria	Lake chubsucker	251	216.00
19	1	Lower Wekiva	Vallisneria	Lake chubsucker	275	309.00
19	1	Lower Wekiva	Vallisneria	Lake chubsucker	280	323.00
19	1	Lower Wekiva	Vallisneria	Lake chubsucker	282	309.00
19	1	Lower Wekiva	Vallisneria	Lake chubsucker	303	380.00
19	1	Lower Wekiva	Vallisneria	Lake chubsucker	312	367.00
19	1	Lower Wekiva	Vallisneria	Largemouth bass	148	36.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	80	7.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	87	10.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	87	9.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	87	10.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	88	11.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	88	12.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	91	11.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	91	11.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	92	12.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	93	12.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	96	14.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	98	13.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	99	16.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	102	17.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	109	20.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	109	20.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	115	24.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	131	36.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	170	78.00
19	1	Lower Wekiva	Vallisneria	Redbreast sunfish	174	73.00
19	1	Lower Wekiva	Vallisneria	Redear sunfish	171	72.00
19	1	Lower Wekiva	Vallisneria	Redear sunfish	190	119.00
19	1	Lower Wekiva	Vallisneria	Redear sunfish	198	106.00
19	1	Lower Wekiva	Vallisneria	Redear sunfish	208	200.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	64	4.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	75	8.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	90	15.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	91	16.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	94	17.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	95	17.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	97	17.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	110	27.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	113	31.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	114	31.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	129	44.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	134	53.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	136	53.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	142	61.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	146	71.00
19	1	Lower Wekiva	Vallisneria	Spotted sunfish	162	94.00
19	1	Lower Wekiva	Vallisneria	Tadpole madtom	64	3.00
19	2	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.40
19	2	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.51
19	2	Lower Wekiva	Vallisneria	Brook silverside	73	2.01
19	2	Lower Wekiva	Vallisneria	Brown darter	32	0.30
19	2	Lower Wekiva	Vallisneria	Coastal shiner	43	0.84
19	2	Lower Wekiva	Vallisneria	Coastal shiner	45	0.78
19	2	Lower Wekiva	Vallisneria	Coastal shiner	52	1.35
19	2	Lower Wekiva	Vallisneria	Coastal shiner	52	1.24
19	2	Lower Wekiva	Vallisneria	Coastal shiner	53	1.34
19	2	Lower Wekiva	Vallisneria	Coastal shiner	53	1.35
19	2	Lower Wekiva	Vallisneria	Coastal shiner	53	1.34
19	2	Lower Wekiva	Vallisneria	Coastal shiner	54	1.60
19	2	Lower Wekiva	Vallisneria	Coastal shiner	55	1.75
19	2	Lower Wekiva	Vallisneria	Coastal shiner	55	1.25
19	2	Lower Wekiva	Vallisneria	Coastal shiner	55	1.61
19	2	Lower Wekiva	Vallisneria	Coastal shiner	56	1.65
19	2	Lower Wekiva	Vallisneria	Coastal shiner	56	1.79
19	2	Lower Wekiva	Vallisneria	Coastal shiner	56	1.54
19	2	Lower Wekiva	Vallisneria	Coastal shiner	57	1.83
19	2	Lower Wekiva	Vallisneria	Coastal shiner	58	1.83
19	2	Lower Wekiva	Vallisneria	Coastal shiner	58	1.74
19	2	Lower Wekiva	Vallisneria	Coastal shiner	58	1.80
19	2	Lower Wekiva	Vallisneria	Coastal shiner	59	1.88
19	2	Lower Wekiva	Vallisneria	Coastal shiner	60	2.22
19	2	Lower Wekiva	Vallisneria	Coastal shiner	63	2.28
19	2	Lower Wekiva	Vallisneria	Lake chubsucker	189	94.00
19	2	Lower Wekiva	Vallisneria	Lake chubsucker	300	359.00
19	2	Lower Wekiva	Vallisneria	Lake chubsucker	304	389.00
19	2	Lower Wekiva	Vallisneria	Largemouth bass	107	15.00
19	2	Lower Wekiva	Vallisneria	Redbreast sunfish	73	6.00
19	2	Lower Wekiva	Vallisneria	Redbreast sunfish	75	7.00
19	2	Lower Wekiva	Vallisneria	Redbreast sunfish	95	13.00
19	2	Lower Wekiva	Vallisneria	Redbreast sunfish	97	14.00
19	2	Lower Wekiva	Vallisneria	Redbreast sunfish	103	17.00
19	2	Lower Wekiva	Vallisneria	Redbreast sunfish	105	19.00
19	2	Lower Wekiva	Vallisneria	Redbreast sunfish	125	33.00
19	2	Lower Wekiva	Vallisneria	Redbreast sunfish	160	62.00
19	2	Lower Wekiva	Vallisneria	Redbreast sunfish	215	141.00
19	2	Lower Wekiva	Vallisneria	Spotted sunfish	70	7.00
19	2	Lower Wekiva	Vallisneria	Spotted sunfish	84	15.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
19	2	Lower Wekiva	Vallisneria	Spotted sunfish	87	14.00
19	2	Lower Wekiva	Vallisneria	Spotted sunfish	90	15.00
19	2	Lower Wekiva	Vallisneria	Spotted sunfish	90	15.00
19	2	Lower Wekiva	Vallisneria	Spotted sunfish	110	29.00
19	2	Lower Wekiva	Vallisneria	Spotted sunfish	111	28.00
19	2	Lower Wekiva	Vallisneria	Spotted sunfish	116	35.00
19	2	Lower Wekiva	Vallisneria	Spotted sunfish	120	35.00
19	2	Lower Wekiva	Vallisneria	Spotted sunfish	122	39.00
19	2	Lower Wekiva	Vallisneria	Spotted sunfish	132	55.00
19	2	Lower Wekiva	Vallisneria	Spotted sunfish	133	55.00
19	3	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.30
19	3	Lower Wekiva	Vallisneria	Bluefin killifish	46	0.68
19	3	Lower Wekiva	Vallisneria	Brook silverside	57	1.13
19	3	Lower Wekiva	Vallisneria	Coastal shiner	45	0.76
19	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.50
19	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.52
19	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.77
19	3	Lower Wekiva	Vallisneria	Coastal shiner	57	1.94
19	3	Lower Wekiva	Vallisneria	Coastal shiner	59	2.08
19	3	Lower Wekiva	Vallisneria	Coastal shiner	60	2.18
19	3	Lower Wekiva	Vallisneria	Coastal shiner	65	2.89
19	3	Lower Wekiva	Vallisneria	Lake chubsucker	164	56.00
19	3	Lower Wekiva	Vallisneria	Lake chubsucker	301	392.00
19	3	Lower Wekiva	Vallisneria	Lake chubsucker	312	398.00
19	3	Lower Wekiva	Vallisneria	Largemouth bass	186	78.00
19	3	Lower Wekiva	Vallisneria	Largemouth bass	190	88.00
19	3	Lower Wekiva	Vallisneria	Redbreast sunfish	79	8.00
19	3	Lower Wekiva	Vallisneria	Redbreast sunfish	90	14.00
19	3	Lower Wekiva	Vallisneria	Redbreast sunfish	95	16.00
19	3	Lower Wekiva	Vallisneria	Redbreast sunfish	128	35.00
19	3	Lower Wekiva	Vallisneria	Redbreast sunfish	161	65.00
19	3	Lower Wekiva	Vallisneria	Redear sunfish	169	90.00
19	3	Lower Wekiva	Vallisneria	Redear sunfish	217	189.00
19	3	Lower Wekiva	Vallisneria	Spotted sunfish	76	9.00
19	3	Lower Wekiva	Vallisneria	Spotted sunfish	79	11.00
19	3	Lower Wekiva	Vallisneria	Spotted sunfish	82	11.00
19	3	Lower Wekiva	Vallisneria	Spotted sunfish	82	14.00
19	3	Lower Wekiva	Vallisneria	Spotted sunfish	85	12.00
19	3	Lower Wekiva	Vallisneria	Spotted sunfish	100	22.00
19	3	Lower Wekiva	Vallisneria	Spotted sunfish	108	27.00
19	3	Lower Wekiva	Vallisneria	Spotted sunfish	120	35.00
19	3	Lower Wekiva	Vallisneria	Spotted sunfish	123	40.00
19	3	Lower Wekiva	Vallisneria	Spotted sunfish	133	51.00
19	3	Lower Wekiva	Vallisneria	Spotted sunfish	141	65.00
19	4	Lower Wekiva	Vallisneria	American eel	490	264.00
19	4	Lower Wekiva	Vallisneria	Lake chubsucker	140	34.00
19	4	Lower Wekiva	Vallisneria	Lake chubsucker	220	163.00
19	4	Lower Wekiva	Vallisneria	Redbreast sunfish	97	14.00
19	4	Lower Wekiva	Vallisneria	Redbreast sunfish	101	17.00
19	4	Lower Wekiva	Vallisneria	Redbreast sunfish	155	60.00
19	4	Lower Wekiva	Vallisneria	Redbreast sunfish	156	62.00
19	4	Lower Wekiva	Vallisneria	Redear sunfish	194	143.00
19	4	Lower Wekiva	Vallisneria	Spotted sunfish	92	14.00
19	4	Lower Wekiva	Vallisneria	Spotted sunfish	93	17.00

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
19	4	Lower Wekiva	Vallisneria	Spotted sunfish	95	18.00
19	4	Lower Wekiva	Vallisneria	Spotted sunfish	103	21.00
19	4	Lower Wekiva	Vallisneria	Spotted sunfish	113	29.00
19	4	Lower Wekiva	Vallisneria	Spotted sunfish	120	36.00
19	4	Lower Wekiva	Vallisneria	Spotted sunfish	121	36.00
19	4	Lower Wekiva	Vallisneria	Spotted sunfish	122	39.00
19	4	Lower Wekiva	Vallisneria	Spotted sunfish	123	40.00
19	4	Lower Wekiva	Vallisneria	Spotted sunfish	143	61.00
19	4	Lower Wekiva	Vallisneria	Spotted sunfish	145	68.00
19	4	Lower Wekiva	Vallisneria	Spotted sunfish	146	64.00
20	1	Lower Wekiva	Bare Bottom	Bluefin killifish	20	0.11
20	1	Lower Wekiva	Bare Bottom	Bluefin killifish	21	0.10
20	1	Lower Wekiva	Bare Bottom	Bluefin killifish	21	0.09
20	1	Lower Wekiva	Bare Bottom	Bluefin killifish	26	0.22
20	1	Lower Wekiva	Bare Bottom	Bluefin killifish	34	0.47
20	1	Lower Wekiva	Bare Bottom	Coastal shiner	22	0.06
20	1	Lower Wekiva	Bare Bottom	Coastal shiner	23	0.13
20	1	Lower Wekiva	Bare Bottom	Coastal shiner	23	0.13
20	1	Lower Wekiva	Bare Bottom	Coastal shiner	25	0.14
20	1	Lower Wekiva	Bare Bottom	Coastal shiner	25	0.15
20	1	Lower Wekiva	Bare Bottom	Coastal shiner	25	0.15
20	1	Lower Wekiva	Bare Bottom	Coastal shiner	26	0.15
20	1	Lower Wekiva	Bare Bottom	Coastal shiner	27	0.19
20	1	Lower Wekiva	Bare Bottom	Coastal shiner	31	0.25
20	1	Lower Wekiva	Bare Bottom	Mosquitofish	32	0.57
20	1	Lower Wekiva	Bare Bottom	Redbreast sunfish	162	67.07
20	1	Lower Wekiva	Bare Bottom	Seminole killifish	29	0.16
20	1	Lower Wekiva	Bare Bottom	Seminole killifish	34	0.37
20	1	Lower Wekiva	Bare Bottom	Seminole killifish	44	0.76
20	1	Lower Wekiva	Bare Bottom	Seminole killifish	45	0.85
20	1	Lower Wekiva	Bare Bottom	Seminole killifish	49	1.16
20	1	Lower Wekiva	Bare Bottom	Seminole killifish	55	1.59
20	1	Lower Wekiva	Bare Bottom	Seminole killifish	63	2.59
20	1	Lower Wekiva	Bare Bottom	Seminole killifish	65	2.50
20	1	Lower Wekiva	Bare Bottom	Seminole killifish	71	3.42
20	1	Lower Wekiva	Bare Bottom	Seminole killifish	74	3.99
20	1	Lower Wekiva	Bare Bottom	Seminole killifish	76	4.30
20	1	Lower Wekiva	Bare Bottom	Seminole killifish	78	4.24
20	2	Lower Wekiva	Bare Bottom	Bluefin killifish	20	0.11
20	2	Lower Wekiva	Bare Bottom	Bluefin killifish	29	0.26
20	2	Lower Wekiva	Bare Bottom	Coastal shiner	35	0.34
20	2	Lower Wekiva	Bare Bottom	Seminole killifish	35	0.40
20	2	Lower Wekiva	Bare Bottom	Seminole killifish	39	0.48
20	2	Lower Wekiva	Bare Bottom	Seminole killifish	42	0.73
20	2	Lower Wekiva	Bare Bottom	Seminole killifish	59	1.85
20	2	Lower Wekiva	Bare Bottom	Seminole killifish	68	3.12
20	2	Lower Wekiva	Bare Bottom	Seminole killifish	77	4.74
20	2	Lower Wekiva	Bare Bottom	Seminole killifish	86	6.36
20	3	Lower Wekiva	Bare Bottom	Seminole killifish	52	1.23
20	3	Lower Wekiva	Bare Bottom	Seminole killifish	56	1.74
20	3	Lower Wekiva	Bare Bottom	Seminole killifish	70	3.30
20	3	Lower Wekiva	Bare Bottom	Seminole killifish	71	3.39
20	3	Lower Wekiva	Bare Bottom	Seminole killifish	73	3.71
20	3	Lower Wekiva	Bare Bottom	Seminole killifish	77	4.50

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
20	4	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.16
20	4	Lower Wekiva	Bare Bottom	Bluefin killifish	28	0.22
21	1	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.16
21	1	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.44
21	1	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.58
21	1	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.60
21	1	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.73
21	1	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.71
21	1	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.74
21	1	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.73
21	1	Lower Wekiva	Vallisneria	Brook silverside	42	0.64
21	1	Lower Wekiva	Vallisneria	Brook silverside	50	0.77
21	1	Lower Wekiva	Vallisneria	Coastal shiner	48	1.05
21	1	Lower Wekiva	Vallisneria	Coastal shiner	50	1.26
21	1	Lower Wekiva	Vallisneria	Coastal shiner	51	1.20
21	1	Lower Wekiva	Vallisneria	Coastal shiner	51	1.27
21	1	Lower Wekiva	Vallisneria	Coastal shiner	51	1.21
21	1	Lower Wekiva	Vallisneria	Coastal shiner	51	1.26
21	1	Lower Wekiva	Vallisneria	Coastal shiner	51	1.20
21	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.32
21	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.18
21	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.29
21	1	Lower Wekiva	Vallisneria	Coastal shiner	54	1.38
21	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.58
21	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.52
21	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.54
21	1	Lower Wekiva	Vallisneria	Coastal shiner	56	1.63
21	1	Lower Wekiva	Vallisneria	Coastal shiner	57	1.52
21	1	Lower Wekiva	Vallisneria	Coastal shiner	57	1.65
21	1	Lower Wekiva	Vallisneria	Coastal shiner	58	1.54
21	1	Lower Wekiva	Vallisneria	Coastal shiner	60	1.94
21	1	Lower Wekiva	Vallisneria	Coastal shiner	60	2.24
21	1	Lower Wekiva	Vallisneria	Coastal shiner	61	2.10
21	1	Lower Wekiva	Vallisneria	Lake chubsucker	61	2.79
21	1	Lower Wekiva	Vallisneria	Lake chubsucker	64	2.93
21	1	Lower Wekiva	Vallisneria	Lake chubsucker	67	3.81
21	1	Lower Wekiva	Vallisneria	Lake chubsucker	69	4.07
21	1	Lower Wekiva	Vallisneria	Lake chubsucker	73	4.89
21	1	Lower Wekiva	Vallisneria	Lake chubsucker	74	4.94
21	1	Lower Wekiva	Vallisneria	Lake chubsucker	75	4.48
21	1	Lower Wekiva	Vallisneria	Lake chubsucker	75	5.01
21	1	Lower Wekiva	Vallisneria	Lake chubsucker	94	10.67
21	1	Lower Wekiva	Vallisneria	Lake chubsucker	94	9.88
21	1	Lower Wekiva	Vallisneria	Lake chubsucker	95	11.15
21	1	Lower Wekiva	Vallisneria	Lake chubsucker	95	9.89
21	1	Lower Wekiva	Vallisneria	Lake chubsucker	96	10.01
21	1	Lower Wekiva	Vallisneria	Lake chubsucker	158	54.46
21	1	Lower Wekiva	Vallisneria	Largemouth bass	66	3.55
21	1	Lower Wekiva	Vallisneria	Largemouth bass	90	8.64
21	1	Lower Wekiva	Vallisneria	Largemouth bass	98	13.34
21	1	Lower Wekiva	Vallisneria	Pugnose minnow	50	1.01
21	1	Lower Wekiva	Vallisneria	Pugnose minnow	50	1.16
21	1	Lower Wekiva	Vallisneria	Pugnose minnow	55	1.12
21	1	Lower Wekiva	Vallisneria	Redbreast sunfish	38	0.93

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
21	1	Lower Wekiva	Vallisneria	Redbreast sunfish	52	2.32
21	1	Lower Wekiva	Vallisneria	Redbreast sunfish	57	6.25
21	1	Lower Wekiva	Vallisneria	Redbreast sunfish	70	5.44
21	1	Lower Wekiva	Vallisneria	Redbreast sunfish	80	7.31
21	1	Lower Wekiva	Vallisneria	Redbreast sunfish	115	26.10
21	1	Lower Wekiva	Vallisneria	Redbreast sunfish	190	107.26
21	1	Lower Wekiva	Vallisneria	Redbreast sunfish	193	113.42
21	1	Lower Wekiva	Vallisneria	Sailfin molly	34	0.73
21	1	Lower Wekiva	Vallisneria	Sailfin shiner	37	0.51
21	1	Lower Wekiva	Vallisneria	Sailfin shiner	40	0.63
21	1	Lower Wekiva	Vallisneria	Seminole killifish	42	0.72
21	1	Lower Wekiva	Vallisneria	Seminole killifish	62	2.27
21	1	Lower Wekiva	Vallisneria	Seminole killifish	68	3.28
21	1	Lower Wekiva	Vallisneria	Seminole killifish	70	3.49
21	1	Lower Wekiva	Vallisneria	Seminole killifish	73	3.62
21	1	Lower Wekiva	Vallisneria	Seminole killifish	79	4.90
21	1	Lower Wekiva	Vallisneria	Seminole killifish	89	6.65
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	59	4.07
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	59	4.18
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	60	4.24
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	65	5.67
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	69	6.65
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	70	6.17
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	75	8.68
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	77	9.18
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	79	9.58
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	81	10.07
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	90	16.36
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	92	16.07
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	92	17.28
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	95	16.84
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	95	18.50
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	104	25.47
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	114	32.28
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	128	50.16
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	130	51.03
21	1	Lower Wekiva	Vallisneria	Spotted sunfish	140	65.91
21	2	Lower Wekiva	Vallisneria	American eel	493	226.00
21	2	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.45
21	2	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.49
21	2	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.57
21	2	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.55
21	2	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.67
21	2	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.51
21	2	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.75
21	2	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.74
21	2	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.77
21	2	Lower Wekiva	Vallisneria	Bluefin killifish	42	0.90
21	2	Lower Wekiva	Vallisneria	Brook silverside	54	0.81
21	2	Lower Wekiva	Vallisneria	Coastal shiner	48	1.09
21	2	Lower Wekiva	Vallisneria	Coastal shiner	52	1.22
21	2	Lower Wekiva	Vallisneria	Coastal shiner	52	1.26
21	2	Lower Wekiva	Vallisneria	Coastal shiner	53	1.52
21	2	Lower Wekiva	Vallisneria	Coastal shiner	55	1.51

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
21	2	Lower Wekiva	Vallisneria	Coastal shiner	57	1.61
21	2	Lower Wekiva	Vallisneria	Coastal shiner	57	1.96
21	2	Lower Wekiva	Vallisneria	Coastal shiner	58	1.79
21	2	Lower Wekiva	Vallisneria	Coastal shiner	60	1.69
21	2	Lower Wekiva	Vallisneria	Golden shiner	55	1.19
21	2	Lower Wekiva	Vallisneria	Lake chubsucker	60	2.35
21	2	Lower Wekiva	Vallisneria	Lake chubsucker	65	2.89
21	2	Lower Wekiva	Vallisneria	Lake chubsucker	65	3.42
21	2	Lower Wekiva	Vallisneria	Lake chubsucker	72	4.71
21	2	Lower Wekiva	Vallisneria	Lake chubsucker	75	5.05
21	2	Lower Wekiva	Vallisneria	Lake chubsucker	76	4.80
21	2	Lower Wekiva	Vallisneria	Lake chubsucker	77	5.88
21	2	Lower Wekiva	Vallisneria	Lake chubsucker	94	10.76
21	2	Lower Wekiva	Vallisneria	Lake chubsucker	120	24.88
21	2	Lower Wekiva	Vallisneria	Largemouth bass	46	1.23
21	2	Lower Wekiva	Vallisneria	Mosquitofish	27	0.26
21	2	Lower Wekiva	Vallisneria	Redbreast sunfish	27	0.33
21	2	Lower Wekiva	Vallisneria	Redbreast sunfish	43	1.34
21	2	Lower Wekiva	Vallisneria	Redbreast sunfish	80	8.44
21	2	Lower Wekiva	Vallisneria	Redbreast sunfish	84	9.06
21	2	Lower Wekiva	Vallisneria	Seminole killifish	29	0.23
21	2	Lower Wekiva	Vallisneria	Seminole killifish	57	1.90
21	2	Lower Wekiva	Vallisneria	Seminole killifish	59	2.11
21	2	Lower Wekiva	Vallisneria	Seminole killifish	66	2.85
21	2	Lower Wekiva	Vallisneria	Seminole killifish	70	3.39
21	2	Lower Wekiva	Vallisneria	Seminole killifish	75	4.61
21	2	Lower Wekiva	Vallisneria	Seminole killifish	75	4.50
21	2	Lower Wekiva	Vallisneria	Seminole killifish	87	6.23
21	2	Lower Wekiva	Vallisneria	Seminole killifish	104	11.84
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	55	3.68
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	56	3.15
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	60	3.99
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	60	3.65
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	62	4.03
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	64	5.07
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	65	5.40
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	65	5.41
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	70	7.01
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	73	7.52
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	73	7.37
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	77	9.14
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	77	9.29
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	78	8.02
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	80	9.73
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	82	10.68
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	82	10.31
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	85	12.53
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	85	13.16
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	85	12.74
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.55
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	88	12.34
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	89	14.96
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	90	15.57
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	92	15.83

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	94	18.79
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	94	17.57
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	95	16.38
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	98	21.40
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	106	27.73
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	110	29.09
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	112	32.15
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	114	30.29
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	124	47.99
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	127	43.96
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	128	49.03
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	130	43.61
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	137	46.72
21	2	Lower Wekiva	Vallisneria	Spotted sunfish	148	74.20
21	3	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.29
21	3	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.35
21	3	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.56
21	3	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.57
21	3	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.65
21	3	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.68
21	3	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.63
21	3	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.75
21	3	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.79
21	3	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.84
21	3	Lower Wekiva	Vallisneria	Bluefin killifish	41	0.83
21	3	Lower Wekiva	Vallisneria	Brook silverside	88	3.49
21	3	Lower Wekiva	Vallisneria	Coastal shiner	48	1.10
21	3	Lower Wekiva	Vallisneria	Coastal shiner	49	0.98
21	3	Lower Wekiva	Vallisneria	Coastal shiner	52	1.25
21	3	Lower Wekiva	Vallisneria	Coastal shiner	54	1.54
21	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.49
21	3	Lower Wekiva	Vallisneria	Coastal shiner	57	1.78
21	3	Lower Wekiva	Vallisneria	Coastal shiner	59	1.71
21	3	Lower Wekiva	Vallisneria	Coastal shiner	59	1.91
21	3	Lower Wekiva	Vallisneria	Golden shiner	53	1.16
21	3	Lower Wekiva	Vallisneria	Golden shiner	70	2.62
21	3	Lower Wekiva	Vallisneria	Golden shiner	70	2.75
21	3	Lower Wekiva	Vallisneria	Lake chubsucker	59	2.08
21	3	Lower Wekiva	Vallisneria	Lake chubsucker	59	2.28
21	3	Lower Wekiva	Vallisneria	Lake chubsucker	67	3.56
21	3	Lower Wekiva	Vallisneria	Lake chubsucker	74	4.63
21	3	Lower Wekiva	Vallisneria	Lake chubsucker	75	4.37
21	3	Lower Wekiva	Vallisneria	Lake chubsucker	83	7.39
21	3	Lower Wekiva	Vallisneria	Lake chubsucker	89	8.25
21	3	Lower Wekiva	Vallisneria	Lake chubsucker	93	10.81
21	3	Lower Wekiva	Vallisneria	Lake chubsucker	160	58.43
21	3	Lower Wekiva	Vallisneria	Largemouth bass	93	9.29
21	3	Lower Wekiva	Vallisneria	Mosquitofish	25	0.16
21	3	Lower Wekiva	Vallisneria	Mosquitofish	25	0.18
21	3	Lower Wekiva	Vallisneria	Mosquitofish	30	0.35
21	3	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.57
21	3	Lower Wekiva	Vallisneria	Redbreast sunfish	40	1.04
21	3	Lower Wekiva	Vallisneria	Redbreast sunfish	42	1.30
21	3	Lower Wekiva	Vallisneria	Redbreast sunfish	74	6.40

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
21	3	Lower Wekiva	Vallisneria	Redbreast sunfish	120	30.11
21	3	Lower Wekiva	Vallisneria	Sailfin molly	31	0.42
21	3	Lower Wekiva	Vallisneria	Sailfin molly	35	0.57
21	3	Lower Wekiva	Vallisneria	Seminole killifish	55	1.59
21	3	Lower Wekiva	Vallisneria	Seminole killifish	73	3.77
21	3	Lower Wekiva	Vallisneria	Seminole killifish	73	3.62
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.16
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	35	0.83
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.28
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.28
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	59	3.73
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	74	7.63
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	77	9.57
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	79	10.03
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	81	11.06
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	85	11.92
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	85	12.71
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	87	12.75
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	88	14.10
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	89	13.78
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	89	14.03
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	90	15.28
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	91	16.58
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	92	15.94
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	93	17.41
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	93	16.76
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	94	17.17
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	94	17.04
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	95	18.10
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	96	18.44
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	107	27.50
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	110	28.32
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	139	66.29
21	3	Lower Wekiva	Vallisneria	Spotted sunfish	153	92.68
21	4	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.04
21	4	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.19
21	4	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.25
21	4	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.43
21	4	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.48
21	4	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.54
21	4	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.49
21	4	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.59
21	4	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.59
21	4	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.55
21	4	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.68
21	4	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.63
21	4	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.73
21	4	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.75
21	4	Lower Wekiva	Vallisneria	Bluefin killifish	43	1.04
21	4	Lower Wekiva	Vallisneria	Brook silverside	56	1.00
21	4	Lower Wekiva	Vallisneria	Coastal shiner	47	1.00
21	4	Lower Wekiva	Vallisneria	Coastal shiner	52	1.13
21	4	Lower Wekiva	Vallisneria	Coastal shiner	58	1.74
21	4	Lower Wekiva	Vallisneria	Coastal shiner	59	1.99

Spring 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
21	4	Lower Wekiva	Vallisneria	Coastal shiner	60	2.12
21	4	Lower Wekiva	Vallisneria	Lake chubsucker	74	4.67
21	4	Lower Wekiva	Vallisneria	Lake chubsucker	82	7.04
21	4	Lower Wekiva	Vallisneria	Lake chubsucker	96	11.19
21	4	Lower Wekiva	Vallisneria	Mosquitofish	28	0.28
21	4	Lower Wekiva	Vallisneria	Mosquitofish	29	0.35
21	4	Lower Wekiva	Vallisneria	Redear sunfish	172	101.21
21	4	Lower Wekiva	Vallisneria	Sailfin molly	35	0.69
21	4	Lower Wekiva	Vallisneria	Seminole killifish	55	1.49
21	4	Lower Wekiva	Vallisneria	Seminole killifish	62	2.33
21	4	Lower Wekiva	Vallisneria	Seminole killifish	65	2.65
21	4	Lower Wekiva	Vallisneria	Seminole killifish	72	4.00
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	66	5.74
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	69	6.82
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	71	7.60
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	75	8.91
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	76	9.50
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	77	8.13
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	78	9.03
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	85	12.38
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	87	12.57
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	89	16.91
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	90	14.87
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	95	18.31
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	97	19.08
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	98	18.37
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	99	18.59
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	100	22.28
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	100	23.29
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	109	31.06
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	110	31.52
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	122	40.00
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	122	41.42
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	122	42.94
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	128	47.10
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	131	46.81
21	4	Lower Wekiva	Vallisneria	Spotted sunfish	135	61.64

Appendix 3.1.11
Fall 1997 Blocknet Fish Data
Wekiva River System

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
1	1	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.11
1	1	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.14
1	1	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.15
1	1	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.22
1	1	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.27
1	1	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.35
1	1	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.41
1	1	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.35
1	1	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.41
1	1	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.45
1	1	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.42
1	1	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.50
1	1	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.52
1	1	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.51
1	1	Lower Wekiva	Vallisneria	Coastal shiner	44	0.68
1	1	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.60
1	1	Lower Wekiva	Vallisneria	Pugnose minnow	50	1.01
1	1	Lower Wekiva	Vallisneria	Redbreast sunfish	50	2.08
1	1	Lower Wekiva	Vallisneria	Redbreast sunfish	77	7.45
1	1	Lower Wekiva	Vallisneria	Redbreast sunfish	158	57.00
1	1	Lower Wekiva	Vallisneria	Seminole killifish	51	1.15
1	1	Lower Wekiva	Vallisneria	Seminole killifish	55	1.52
1	1	Lower Wekiva	Vallisneria	Seminole killifish	75	3.83
1	1	Lower Wekiva	Vallisneria	Seminole killifish	76	4.27
1	1	Lower Wekiva	Vallisneria	Seminole killifish	84	5.67
1	1	Lower Wekiva	Vallisneria	Seminole killifish	90	7.38
1	1	Lower Wekiva	Vallisneria	Seminole killifish	93	8.99
1	1	Lower Wekiva	Vallisneria	Seminole killifish	104	13.00
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	30	0.54
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.42
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	44	1.66
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	49	2.54
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	59	4.76
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	96	17.00
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	97	18.00
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	109	26.00
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	113	30.00
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	120	33.00
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	122	39.00
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	124	35.00
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	125	39.00
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	126	42.00
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	133	44.00
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	135	47.00
1	1	Lower Wekiva	Vallisneria	Spotted sunfish	146	65.00
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.13
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.12
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.11
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.12
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.16
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.14
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.22
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.23
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.26

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.24
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.24
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.27
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.32
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.31
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.37
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.44
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.39
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.42
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.63
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.75
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	43	0.93
1	2	Lower Wekiva	Vallisneria	Bluefin killifish	43	0.96
1	2	Lower Wekiva	Vallisneria	Seminole killifish	73	3.80
1	2	Lower Wekiva	Vallisneria	Seminole killifish	87	6.78
1	2	Lower Wekiva	Vallisneria	Seminole killifish	88	6.63
1	2	Lower Wekiva	Vallisneria	Spotted sunfish	18	0.12
1	2	Lower Wekiva	Vallisneria	Spotted sunfish	33	0.74
1	2	Lower Wekiva	Vallisneria	Spotted sunfish	36	0.92
1	2	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.18
1	2	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.35
1	2	Lower Wekiva	Vallisneria	Spotted sunfish	102	22.00
1	2	Lower Wekiva	Vallisneria	Spotted sunfish	103	21.00
1	2	Lower Wekiva	Vallisneria	Spotted sunfish	112	30.00
1	2	Lower Wekiva	Vallisneria	Spotted sunfish	123	40.00
1	2	Lower Wekiva	Vallisneria	Spotted sunfish	126	39.00
1	3	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.15
1	3	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.15
1	3	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.24
1	3	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.24
1	3	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.30
1	3	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.36
1	3	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.66
1	3	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.53
1	3	Lower Wekiva	Vallisneria	Pugnose minnow	52	1.16
1	3	Lower Wekiva	Vallisneria	Redbreast sunfish	52	2.40
1	3	Lower Wekiva	Vallisneria	Redbreast sunfish	61	3.70
1	3	Lower Wekiva	Vallisneria	Redbreast sunfish	75	9.00
1	3	Lower Wekiva	Vallisneria	Redbreast sunfish	78	6.00
1	3	Lower Wekiva	Vallisneria	Redbreast sunfish	82	8.00
1	3	Lower Wekiva	Vallisneria	Redbreast sunfish	89	10.00
1	3	Lower Wekiva	Vallisneria	Seminole killifish	70	3.67
1	3	Lower Wekiva	Vallisneria	Seminole killifish	83	7.00
1	3	Lower Wekiva	Vallisneria	Seminole killifish	88	7.00
1	3	Lower Wekiva	Vallisneria	Seminole killifish	118	16.00
1	3	Lower Wekiva	Vallisneria	Spotted sunfish	43	1.74
1	3	Lower Wekiva	Vallisneria	Spotted sunfish	57	4.41
1	3	Lower Wekiva	Vallisneria	Spotted sunfish	105	22.00
1	3	Lower Wekiva	Vallisneria	Spotted sunfish	115	24.00
1	3	Lower Wekiva	Vallisneria	Tadpole madtom	57	2.75
1	3	Lower Wekiva	Vallisneria	White catfish	60	2.59
1	4	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.16
1	4	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.16
1	4	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.24

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
1	4	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.35
1	4	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.33
1	4	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.31
1	4	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.40
1	4	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.43
1	4	Lower Wekiva	Vallisneria	Pugnose minnow	40	0.50
1	4	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.62
1	4	Lower Wekiva	Vallisneria	Redbreast sunfish	64	4.17
1	4	Lower Wekiva	Vallisneria	Seminole killifish	92	6.00
1	4	Lower Wekiva	Vallisneria	Seminole killifish	112	14.00
1	4	Lower Wekiva	Vallisneria	Seminole killifish	115	11.00
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	33	0.78
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.08
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.27
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	42	1.53
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	45	1.88
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	47	2.21
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	48	2.32
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	49	2.55
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	58	4.53
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	89	15.00
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	92	17.00
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	97	18.00
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	100	17.00
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	101	21.00
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	117	36.00
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	117	34.00
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	130	47.00
1	4	Lower Wekiva	Vallisneria	Spotted sunfish	155	73.00
1	5	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.08
1	5	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.13
1	5	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.14
1	5	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.13
1	5	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.24
1	5	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.25
1	5	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.31
1	5	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.33
1	5	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.30
1	5	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.39
1	5	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.61
1	5	Lower Wekiva	Vallisneria	Seminole killifish	74	4.53
1	5	Lower Wekiva	Vallisneria	Seminole killifish	78	5.27
1	5	Lower Wekiva	Vallisneria	Seminole killifish	114	12.00
1	5	Lower Wekiva	Vallisneria	Spotted sunfish	19	0.13
1	5	Lower Wekiva	Vallisneria	Spotted sunfish	35	0.94
1	5	Lower Wekiva	Vallisneria	Spotted sunfish	42	1.56
1	5	Lower Wekiva	Vallisneria	Spotted sunfish	96	18.00
1	5	Lower Wekiva	Vallisneria	Spotted sunfish	97	20.00
1	5	Lower Wekiva	Vallisneria	Spotted sunfish	117	31.00
1	5	Lower Wekiva	Vallisneria	Yellow bullhead	65	3.93
2	1	Lower Wekiva	Vallisneria	Blackbanded darter	74	3.75
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.10
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.10
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.10

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.12
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.12
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.19
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.24
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.22
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.23
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.37
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.31
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.44
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.41
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.44
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.52
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.67
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.76
2	1	Lower Wekiva	Vallisneria	Bluefin killifish	42	0.86
2	1	Lower Wekiva	Vallisneria	Coastal shiner	30	0.23
2	1	Lower Wekiva	Vallisneria	Coastal shiner	36	0.40
2	1	Lower Wekiva	Vallisneria	Florida gar	510	571.00
2	1	Lower Wekiva	Vallisneria	Florida gar	526	599.00
2	1	Lower Wekiva	Vallisneria	Largemouth bass	83	6.00
2	1	Lower Wekiva	Vallisneria	Largemouth bass	106	14.00
2	1	Lower Wekiva	Vallisneria	Pugnose minnow	48	1.03
2	1	Lower Wekiva	Vallisneria	Pugnose minnow	50	1.09
2	1	Lower Wekiva	Vallisneria	Redear sunfish	159	72.00
2	1	Lower Wekiva	Vallisneria	Seminole killifish	60	2.18
2	1	Lower Wekiva	Vallisneria	Seminole killifish	70	3.67
2	1	Lower Wekiva	Vallisneria	Seminole killifish	70	3.79
2	1	Lower Wekiva	Vallisneria	Seminole killifish	74	3.89
2	1	Lower Wekiva	Vallisneria	Seminole killifish	75	4.30
2	1	Lower Wekiva	Vallisneria	Seminole killifish	75	4.44
2	1	Lower Wekiva	Vallisneria	Seminole killifish	76	4.77
2	1	Lower Wekiva	Vallisneria	Seminole killifish	77	4.82
2	1	Lower Wekiva	Vallisneria	Seminole killifish	77	4.42
2	1	Lower Wekiva	Vallisneria	Seminole killifish	78	5.23
2	1	Lower Wekiva	Vallisneria	Seminole killifish	78	4.64
2	1	Lower Wekiva	Vallisneria	Seminole killifish	80	5.07
2	1	Lower Wekiva	Vallisneria	Seminole killifish	80	5.40
2	1	Lower Wekiva	Vallisneria	Seminole killifish	80	5.52
2	1	Lower Wekiva	Vallisneria	Seminole killifish	81	5.76
2	1	Lower Wekiva	Vallisneria	Seminole killifish	82	4.85
2	1	Lower Wekiva	Vallisneria	Seminole killifish	84	6.51
2	1	Lower Wekiva	Vallisneria	Seminole killifish	85	6.65
2	1	Lower Wekiva	Vallisneria	Seminole killifish	86	6.57
2	1	Lower Wekiva	Vallisneria	Seminole killifish	87	7.26
2	1	Lower Wekiva	Vallisneria	Seminole killifish	91	8.43
2	1	Lower Wekiva	Vallisneria	Seminole killifish	93	9.33
2	1	Lower Wekiva	Vallisneria	Seminole killifish	95	10.04
2	1	Lower Wekiva	Vallisneria	Seminole killifish	95	7.99
2	1	Lower Wekiva	Vallisneria	Seminole killifish	98	9.33
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	.	27.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	.	27.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	18	0.11
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	27	0.40
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	29	0.50

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	30	0.65
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.14
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.32
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.36
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.44
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	76	10.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	85	16.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	88	13.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	91	14.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	92	16.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	93	14.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	94	15.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	96	16.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	97	19.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	103	22.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	109	25.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	111	26.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	114	30.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	117	36.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	121	39.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	124	41.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	137	54.00
2	1	Lower Wekiva	Vallisneria	Spotted sunfish	149	74.00
2	2	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.08
2	2	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.10
2	2	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.10
2	2	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.11
2	2	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.11
2	2	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.23
2	2	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.28
2	2	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.30
2	2	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.42
2	2	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.41
2	2	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.70
2	2	Lower Wekiva	Vallisneria	Coastal shiner	52	1.38
2	2	Lower Wekiva	Vallisneria	Coastal shiner	55	1.60
2	2	Lower Wekiva	Vallisneria	Coastal shiner	60	1.90
2	2	Lower Wekiva	Vallisneria	Lake chubsucker	226	158.00
2	2	Lower Wekiva	Vallisneria	Largemouth bass	118	20.00
2	2	Lower Wekiva	Vallisneria	Pugnose minnow	52	1.16
2	2	Lower Wekiva	Vallisneria	Seminole killifish	62	2.55
2	2	Lower Wekiva	Vallisneria	Seminole killifish	68	3.41
2	2	Lower Wekiva	Vallisneria	Seminole killifish	74	4.14
2	2	Lower Wekiva	Vallisneria	Seminole killifish	80	5.28
2	2	Lower Wekiva	Vallisneria	Seminole killifish	85	6.51
2	2	Lower Wekiva	Vallisneria	Seminole killifish	87	6.74
2	2	Lower Wekiva	Vallisneria	Seminole killifish	89	7.00
2	2	Lower Wekiva	Vallisneria	Seminole killifish	96	9.00
2	2	Lower Wekiva	Vallisneria	Seminole killifish	97	9.00
2	2	Lower Wekiva	Vallisneria	Seminole killifish	97	9.00
2	2	Lower Wekiva	Vallisneria	Seminole killifish	103	12.00
2	2	Lower Wekiva	Vallisneria	Seminole killifish	103	12.00
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.70
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	34	0.78

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	35	0.88
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.05
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	38	0.96
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.15
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.37
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.33
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	44	1.70
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	77	9.43
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	96	19.00
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	104	22.00
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	107	26.00
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	111	27.00
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	115	30.00
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	121	37.00
2	2	Lower Wekiva	Vallisneria	Spotted sunfish	122	39.00
2	3	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.04
2	3	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.07
2	3	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.07
2	3	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.08
2	3	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.12
2	3	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.12
2	3	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.21
2	3	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.14
2	3	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.38
2	3	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.43
2	3	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.55
2	3	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.67
2	3	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.68
2	3	Lower Wekiva	Vallisneria	Lake chubsucker	205	118.00
2	3	Lower Wekiva	Vallisneria	Seminole killifish	60	2.28
2	3	Lower Wekiva	Vallisneria	Seminole killifish	63	2.70
2	3	Lower Wekiva	Vallisneria	Seminole killifish	79	5.76
2	3	Lower Wekiva	Vallisneria	Seminole killifish	80	6.57
2	3	Lower Wekiva	Vallisneria	Seminole killifish	81	5.43
2	3	Lower Wekiva	Vallisneria	Seminole killifish	89	7.43
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	21	0.20
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.32
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	27	0.38
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	30	0.59
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.52
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	35	0.90
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.00
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.28
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	44	1.66
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	45	1.87
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	45	2.19
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	47	2.11
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	73	8.00
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	79	11.00
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	82	12.00
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	95	18.00
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	102	23.00
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	104	23.00
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	114	23.00

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	115	25.00
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	116	33.00
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	117	34.00
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	119	36.00
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	128	47.00
2	3	Lower Wekiva	Vallisneria	Spotted sunfish	137	61.00
2	3	Lower Wekiva	Vallisneria	Yellow bullhead	249	243.00
2	4	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.09
2	4	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.36
2	4	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.45
2	4	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.52
2	4	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.58
2	4	Lower Wekiva	Vallisneria	Lake chubsucker	71	4.18
2	4	Lower Wekiva	Vallisneria	Seminole killifish	57	1.96
2	4	Lower Wekiva	Vallisneria	Seminole killifish	60	2.06
2	4	Lower Wekiva	Vallisneria	Seminole killifish	70	3.58
2	4	Lower Wekiva	Vallisneria	Seminole killifish	77	4.89
2	4	Lower Wekiva	Vallisneria	Seminole killifish	83	5.73
2	4	Lower Wekiva	Vallisneria	Seminole killifish	103	11.00
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	20	0.17
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	21	0.17
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.29
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.32
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.28
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.31
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.32
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.26
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.39
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.38
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	41	1.09
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	42	1.63
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	44	1.84
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	89	15.00
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	92	15.00
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	108	26.00
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	109	25.00
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	114	32.00
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	121	37.00
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	123	40.00
2	4	Lower Wekiva	Vallisneria	Spotted sunfish	151	79.00
3	1	Lower Wekiva	Bare Bottom	Coastal shiner	47	0.83
3	1	Lower Wekiva	Bare Bottom	Coastal shiner	47	0.91
3	1	Lower Wekiva	Bare Bottom	Coastal shiner	50	1.09
3	1	Lower Wekiva	Bare Bottom	Coastal shiner	50	1.12
3	1	Lower Wekiva	Bare Bottom	Coastal shiner	50	1.11
3	1	Lower Wekiva	Bare Bottom	Coastal shiner	55	1.66
3	1	Lower Wekiva	Bare Bottom	Coastal shiner	55	1.58
3	1	Lower Wekiva	Bare Bottom	Redbreast sunfish	181	98.00
3	1	Lower Wekiva	Bare Bottom	Seminole killifish	86	6.00
3	1	Lower Wekiva	Bare Bottom	Seminole killifish	92	7.00
3	1	Lower Wekiva	Bare Bottom	Seminole killifish	106	12.00
3	1	Lower Wekiva	Bare Bottom	Seminole killifish	107	12.00
3	2	Lower Wekiva	Bare Bottom	Pugnose minnow	41	0.49
3	2	Lower Wekiva	Bare Bottom	Seminole killifish	52	1.27

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
4	1	Lower Wekiva	Vallisneria	American eel	330	97.00
4	1	Lower Wekiva	Vallisneria	Blackbanded darter	56	1.58
4	1	Lower Wekiva	Vallisneria	Blackbanded darter	60	1.98
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.12
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.11
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.12
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.15
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.27
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.28
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.31
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.33
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.38
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.34
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.42
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.45
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.46
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.55
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.44
4	1	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.50
4	1	Lower Wekiva	Vallisneria	Coastal shiner	30	0.29
4	1	Lower Wekiva	Vallisneria	Coastal shiner	36	0.42
4	1	Lower Wekiva	Vallisneria	Coastal shiner	42	0.69
4	1	Lower Wekiva	Vallisneria	Coastal shiner	43	0.72
4	1	Lower Wekiva	Vallisneria	Coastal shiner	44	0.83
4	1	Lower Wekiva	Vallisneria	Coastal shiner	45	0.92
4	1	Lower Wekiva	Vallisneria	Coastal shiner	47	1.04
4	1	Lower Wekiva	Vallisneria	Coastal shiner	51	1.25
4	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.42
4	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.48
4	1	Lower Wekiva	Vallisneria	Coastal shiner	54	1.69
4	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.51
4	1	Lower Wekiva	Vallisneria	Coastal shiner	56	1.70
4	1	Lower Wekiva	Vallisneria	Coastal shiner	58	2.34
4	1	Lower Wekiva	Vallisneria	Coastal shiner	58	0.99
4	1	Lower Wekiva	Vallisneria	Coastal shiner	59	1.96
4	1	Lower Wekiva	Vallisneria	Coastal shiner	62	2.30
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	28	0.21
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	39	0.65
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	39	0.56
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.73
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.79
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.79
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	46	0.86
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	46	0.88
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	46	1.02
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	47	0.96
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	47	0.96
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	48	1.01
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	48	0.96
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	49	0.98
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	50	1.26
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	52	1.21
4	1	Lower Wekiva	Vallisneria	Pugnose minnow	54	1.33
4	1	Lower Wekiva	Vallisneria	Redbreast sunfish	63	4.20

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
4	1	Lower Wekiva	Vallisneria	Redbreast sunfish	84	10.27
4	1	Lower Wekiva	Vallisneria	Redbreast sunfish	86	9.00
4	1	Lower Wekiva	Vallisneria	Redbreast sunfish	106	18.00
4	1	Lower Wekiva	Vallisneria	Sailfin shiner	23	0.13
4	1	Lower Wekiva	Vallisneria	Sailfin shiner	34	0.36
4	1	Lower Wekiva	Vallisneria	Sailfin shiner	38	0.59
4	1	Lower Wekiva	Vallisneria	Sailfin shiner	43	0.74
4	1	Lower Wekiva	Vallisneria	Seminole killifish	56	1.88
4	1	Lower Wekiva	Vallisneria	Seminole killifish	78	4.89
4	1	Lower Wekiva	Vallisneria	Seminole killifish	79	5.65
4	1	Lower Wekiva	Vallisneria	Seminole killifish	85	7.41
4	1	Lower Wekiva	Vallisneria	Seminole killifish	89	6.00
4	1	Lower Wekiva	Vallisneria	Seminole killifish	91	9.37
4	1	Lower Wekiva	Vallisneria	Seminole killifish	102	11.00
4	1	Lower Wekiva	Vallisneria	Seminole killifish	134	22.00
4	1	Lower Wekiva	Vallisneria	Spotted sunfish	31	0.67
4	1	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.24
4	1	Lower Wekiva	Vallisneria	Spotted sunfish	44	2.23
4	1	Lower Wekiva	Vallisneria	Spotted sunfish	44	2.02
4	1	Lower Wekiva	Vallisneria	Spotted sunfish	53	3.28
4	1	Lower Wekiva	Vallisneria	Spotted sunfish	68	7.04
4	1	Lower Wekiva	Vallisneria	Spotted sunfish	96	16.00
4	1	Lower Wekiva	Vallisneria	Spotted sunfish	102	20.00
4	1	Lower Wekiva	Vallisneria	Spotted sunfish	124	38.00
4	1	Lower Wekiva	Vallisneria	Yellow bullhead	262	271.00
4	2	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.13
4	2	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.14
4	2	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.18
4	2	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.33
4	2	Lower Wekiva	Vallisneria	Brook silverside	54	0.92
4	2	Lower Wekiva	Vallisneria	Coastal shiner	28	0.21
4	2	Lower Wekiva	Vallisneria	Coastal shiner	29	0.23
4	2	Lower Wekiva	Vallisneria	Coastal shiner	31	0.30
4	2	Lower Wekiva	Vallisneria	Coastal shiner	32	0.26
4	2	Lower Wekiva	Vallisneria	Coastal shiner	36	0.43
4	2	Lower Wekiva	Vallisneria	Coastal shiner	38	0.51
4	2	Lower Wekiva	Vallisneria	Coastal shiner	40	0.55
4	2	Lower Wekiva	Vallisneria	Coastal shiner	40	0.53
4	2	Lower Wekiva	Vallisneria	Coastal shiner	41	0.56
4	2	Lower Wekiva	Vallisneria	Coastal shiner	42	0.68
4	2	Lower Wekiva	Vallisneria	Coastal shiner	43	0.74
4	2	Lower Wekiva	Vallisneria	Coastal shiner	43	0.81
4	2	Lower Wekiva	Vallisneria	Coastal shiner	46	1.00
4	2	Lower Wekiva	Vallisneria	Coastal shiner	46	0.92
4	2	Lower Wekiva	Vallisneria	Coastal shiner	46	0.91
4	2	Lower Wekiva	Vallisneria	Coastal shiner	47	0.46
4	2	Lower Wekiva	Vallisneria	Coastal shiner	47	0.84
4	2	Lower Wekiva	Vallisneria	Coastal shiner	48	1.00
4	2	Lower Wekiva	Vallisneria	Coastal shiner	48	0.91
4	2	Lower Wekiva	Vallisneria	Coastal shiner	48	1.05
4	2	Lower Wekiva	Vallisneria	Coastal shiner	49	1.08
4	2	Lower Wekiva	Vallisneria	Coastal shiner	50	1.23
4	2	Lower Wekiva	Vallisneria	Coastal shiner	51	1.25
4	2	Lower Wekiva	Vallisneria	Coastal shiner	51	1.20

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
4	2	Lower Wekiva	Vallisneria	Coastal shiner	51	1.22
4	2	Lower Wekiva	Vallisneria	Coastal shiner	51	1.14
4	2	Lower Wekiva	Vallisneria	Coastal shiner	62	2.09
4	2	Lower Wekiva	Vallisneria	Largemouth bass	110	30.00
4	2	Lower Wekiva	Vallisneria	Largemouth bass	146	40.00
4	2	Lower Wekiva	Vallisneria	Mosquitofish	36	0.67
4	2	Lower Wekiva	Vallisneria	Pugnose minnow	37	0.46
4	2	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.68
4	2	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.83
4	2	Lower Wekiva	Vallisneria	Pugnose minnow	46	0.92
4	2	Lower Wekiva	Vallisneria	Pugnose minnow	46	0.88
4	2	Lower Wekiva	Vallisneria	Pugnose minnow	46	0.85
4	2	Lower Wekiva	Vallisneria	Pugnose minnow	50	1.17
4	2	Lower Wekiva	Vallisneria	Pugnose minnow	50	1.15
4	2	Lower Wekiva	Vallisneria	Pugnose minnow	53	1.24
4	2	Lower Wekiva	Vallisneria	Pugnose minnow	53	1.42
4	2	Lower Wekiva	Vallisneria	Pugnose minnow	53	1.31
4	2	Lower Wekiva	Vallisneria	Redear sunfish	208	175.00
4	2	Lower Wekiva	Vallisneria	Sailfin shiner	22	0.08
4	2	Lower Wekiva	Vallisneria	Sailfin shiner	26	0.19
4	2	Lower Wekiva	Vallisneria	Sailfin shiner	27	0.19
4	2	Lower Wekiva	Vallisneria	Sailfin shiner	28	0.20
4	2	Lower Wekiva	Vallisneria	Sailfin shiner	30	0.26
4	2	Lower Wekiva	Vallisneria	Sailfin shiner	35	0.41
4	2	Lower Wekiva	Vallisneria	Sailfin shiner	36	0.40
4	2	Lower Wekiva	Vallisneria	Sailfin shiner	36	0.47
4	2	Lower Wekiva	Vallisneria	Sailfin shiner	39	0.52
4	2	Lower Wekiva	Vallisneria	Spotted sunfish	31	0.66
4	2	Lower Wekiva	Vallisneria	Spotted sunfish	33	0.69
4	2	Lower Wekiva	Vallisneria	Spotted sunfish	133	54.00
4	2	Lower Wekiva	Vallisneria	Spotted sunfish	137	59.00
4	2	Lower Wekiva	Vallisneria	Spotted sunfish	148	60.00
4	3	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.17
4	3	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.19
4	3	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.50
4	3	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.99
4	3	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.78
4	3	Lower Wekiva	Vallisneria	Bluefin killifish	42	1.64
4	3	Lower Wekiva	Vallisneria	Coastal shiner	44	0.76
4	3	Lower Wekiva	Vallisneria	Coastal shiner	46	0.89
4	3	Lower Wekiva	Vallisneria	Coastal shiner	57	1.75
4	3	Lower Wekiva	Vallisneria	Largemouth bass	132	28.00
4	3	Lower Wekiva	Vallisneria	Pugnose minnow	36	0.42
4	3	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.65
4	3	Lower Wekiva	Vallisneria	Pugnose minnow	51	1.31
4	3	Lower Wekiva	Vallisneria	Redbreast sunfish	100	15.00
4	3	Lower Wekiva	Vallisneria	Sailfin shiner	30	0.24
4	3	Lower Wekiva	Vallisneria	Seminole killifish	97	11.00
4	3	Lower Wekiva	Vallisneria	Spotted sunfish	85	12.00
4	3	Lower Wekiva	Vallisneria	Spotted sunfish	105	26.00
5	1	Lower Wekiva	Vallisneria	Bluefin killifish	15	0.06
5	1	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.11
5	1	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.23
5	1	Lower Wekiva	Vallisneria	Bluefin killifish	46	1.40

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
5	1	Lower Wekiva	Vallisneria	Bluegill	113	23.00
5	1	Lower Wekiva	Vallisneria	Bluegill	135	38.00
5	1	Lower Wekiva	Vallisneria	Coastal shiner	33	0.39
5	1	Lower Wekiva	Vallisneria	Coastal shiner	34	0.40
5	1	Lower Wekiva	Vallisneria	Coastal shiner	35	0.38
5	1	Lower Wekiva	Vallisneria	Coastal shiner	38	0.56
5	1	Lower Wekiva	Vallisneria	Coastal shiner	38	0.60
5	1	Lower Wekiva	Vallisneria	Coastal shiner	39	0.56
5	1	Lower Wekiva	Vallisneria	Coastal shiner	41	0.72
5	1	Lower Wekiva	Vallisneria	Coastal shiner	41	0.71
5	1	Lower Wekiva	Vallisneria	Coastal shiner	42	0.79
5	1	Lower Wekiva	Vallisneria	Coastal shiner	43	0.79
5	1	Lower Wekiva	Vallisneria	Coastal shiner	43	0.81
5	1	Lower Wekiva	Vallisneria	Coastal shiner	43	0.78
5	1	Lower Wekiva	Vallisneria	Coastal shiner	45	0.95
5	1	Lower Wekiva	Vallisneria	Coastal shiner	46	0.98
5	1	Lower Wekiva	Vallisneria	Coastal shiner	46	1.06
5	1	Lower Wekiva	Vallisneria	Coastal shiner	47	0.97
5	1	Lower Wekiva	Vallisneria	Coastal shiner	48	1.00
5	1	Lower Wekiva	Vallisneria	Coastal shiner	49	1.12
5	1	Lower Wekiva	Vallisneria	Coastal shiner	50	1.35
5	1	Lower Wekiva	Vallisneria	Coastal shiner	50	1.27
5	1	Lower Wekiva	Vallisneria	Coastal shiner	51	1.39
5	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.02
5	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.45
5	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.34
5	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.49
5	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.52
5	1	Lower Wekiva	Vallisneria	Coastal shiner	54	1.66
5	1	Lower Wekiva	Vallisneria	Coastal shiner	54	1.46
5	1	Lower Wekiva	Vallisneria	Coastal shiner	56	1.77
5	1	Lower Wekiva	Vallisneria	Coastal shiner	58	1.95
5	1	Lower Wekiva	Vallisneria	Coastal shiner	58	1.81
5	1	Lower Wekiva	Vallisneria	Coastal shiner	60	2.17
5	1	Lower Wekiva	Vallisneria	Coastal shiner	61	2.17
5	1	Lower Wekiva	Vallisneria	Coastal shiner	63	2.27
5	1	Lower Wekiva	Vallisneria	Coastal shiner	63	2.31
5	1	Lower Wekiva	Vallisneria	Coastal shiner	64	2.71
5	1	Lower Wekiva	Vallisneria	Coastal shiner	64	2.39
5	1	Lower Wekiva	Vallisneria	Golden shiner	216	87.00
5	1	Lower Wekiva	Vallisneria	Lake chubsucker	122	23.96
5	1	Lower Wekiva	Vallisneria	Lake chubsucker	164	55.00
5	1	Lower Wekiva	Vallisneria	Largemouth bass	137	29.00
5	1	Lower Wekiva	Vallisneria	Largemouth bass	160	45.00
5	1	Lower Wekiva	Vallisneria	Largemouth bass	186	77.00
5	1	Lower Wekiva	Vallisneria	Pugnose minnow	40	0.61
5	1	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.73
5	1	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.83
5	1	Lower Wekiva	Vallisneria	Pugnose minnow	46	0.63
5	1	Lower Wekiva	Vallisneria	Pugnose minnow	47	0.99
5	1	Lower Wekiva	Vallisneria	Pugnose minnow	47	0.98
5	1	Lower Wekiva	Vallisneria	Pugnose minnow	49	1.15
5	1	Lower Wekiva	Vallisneria	Pugnose minnow	50	1.22
5	1	Lower Wekiva	Vallisneria	Pugnose minnow	50	1.15

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	26	0.32
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	27	0.38
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	39	1.04
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	47	1.42
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	58	3.47
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	98	15.43
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	103	17.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	106	18.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	107	18.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	107	19.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	110	19.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	113	23.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	116	23.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	120	27.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	120	25.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	124	27.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	134	37.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	141	42.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	147	48.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	153	56.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	154	54.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	156	52.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	157	52.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	159	53.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	160	61.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	161	58.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	163	65.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	170	72.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	176	91.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	176	80.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	179	84.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	179	73.00
5	1	Lower Wekiva	Vallisneria	Redbreast sunfish	184	98.00
5	1	Lower Wekiva	Vallisneria	Redear sunfish	257	301.00
5	1	Lower Wekiva	Vallisneria	Seminole killifish	42	0.79
5	1	Lower Wekiva	Vallisneria	Seminole killifish	42	0.79
5	1	Lower Wekiva	Vallisneria	Seminole killifish	45	0.90
5	1	Lower Wekiva	Vallisneria	Seminole killifish	45	0.95
5	1	Lower Wekiva	Vallisneria	Seminole killifish	47	1.08
5	1	Lower Wekiva	Vallisneria	Seminole killifish	47	1.01
5	1	Lower Wekiva	Vallisneria	Seminole killifish	51	1.40
5	1	Lower Wekiva	Vallisneria	Seminole killifish	51	1.26
5	1	Lower Wekiva	Vallisneria	Seminole killifish	55	1.68
5	1	Lower Wekiva	Vallisneria	Seminole killifish	56	1.91
5	1	Lower Wekiva	Vallisneria	Seminole killifish	58	1.90
5	1	Lower Wekiva	Vallisneria	Seminole killifish	58	1.81
5	1	Lower Wekiva	Vallisneria	Seminole killifish	59	2.12
5	1	Lower Wekiva	Vallisneria	Seminole killifish	59	2.57
5	1	Lower Wekiva	Vallisneria	Seminole killifish	59	2.13
5	1	Lower Wekiva	Vallisneria	Seminole killifish	61	2.21
5	1	Lower Wekiva	Vallisneria	Seminole killifish	61	2.37
5	1	Lower Wekiva	Vallisneria	Seminole killifish	61	2.10
5	1	Lower Wekiva	Vallisneria	Seminole killifish	66	2.77
5	1	Lower Wekiva	Vallisneria	Seminole killifish	69	3.45

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
5	1	Lower Wekiva	Vallisneria	Seminole killifish	71	3.85
5	1	Lower Wekiva	Vallisneria	Seminole killifish	71	3.52
5	1	Lower Wekiva	Vallisneria	Seminole killifish	74	4.01
5	1	Lower Wekiva	Vallisneria	Seminole killifish	75	4.38
5	1	Lower Wekiva	Vallisneria	Seminole killifish	78	4.83
5	1	Lower Wekiva	Vallisneria	Seminole killifish	82	5.75
5	1	Lower Wekiva	Vallisneria	Seminole killifish	95	9.09
5	1	Lower Wekiva	Vallisneria	Seminole killifish	111	13.14
5	1	Lower Wekiva	Vallisneria	Seminole killifish	117	16.07
5	1	Lower Wekiva	Vallisneria	Seminole killifish	144	28.00
5	1	Lower Wekiva	Vallisneria	Spotted sunfish	13	0.06
5	1	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.36
5	1	Lower Wekiva	Vallisneria	Spotted sunfish	28	0.57
5	1	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.80
5	1	Lower Wekiva	Vallisneria	Spotted sunfish	35	0.98
5	1	Lower Wekiva	Vallisneria	Spotted sunfish	36	1.05
5	1	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.19
5	1	Lower Wekiva	Vallisneria	Spotted sunfish	80	10.83
5	1	Lower Wekiva	Vallisneria	Spotted sunfish	81	11.10
5	1	Lower Wekiva	Vallisneria	Spotted sunfish	91	17.00
5	1	Lower Wekiva	Vallisneria	Spotted sunfish	110	29.00
5	1	Lower Wekiva	Vallisneria	Spotted sunfish	128	45.00
5	1	Lower Wekiva	Vallisneria	Spotted sunfish	155	74.00
5	2	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.11
5	2	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.12
5	2	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.16
5	2	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.14
5	2	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.16
5	2	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.17
5	2	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.20
5	2	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.24
5	2	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.27
5	2	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.28
5	2	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.33
5	2	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.17
5	2	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.40
5	2	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.46
5	2	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.49
5	2	Lower Wekiva	Vallisneria	Coastal shiner	38	0.56
5	2	Lower Wekiva	Vallisneria	Coastal shiner	38	0.57
5	2	Lower Wekiva	Vallisneria	Coastal shiner	39	0.60
5	2	Lower Wekiva	Vallisneria	Coastal shiner	41	0.64
5	2	Lower Wekiva	Vallisneria	Coastal shiner	41	0.68
5	2	Lower Wekiva	Vallisneria	Coastal shiner	41	0.70
5	2	Lower Wekiva	Vallisneria	Coastal shiner	42	0.67
5	2	Lower Wekiva	Vallisneria	Coastal shiner	42	0.79
5	2	Lower Wekiva	Vallisneria	Coastal shiner	44	0.77
5	2	Lower Wekiva	Vallisneria	Coastal shiner	47	1.09
5	2	Lower Wekiva	Vallisneria	Coastal shiner	47	1.04
5	2	Lower Wekiva	Vallisneria	Coastal shiner	48	1.07
5	2	Lower Wekiva	Vallisneria	Coastal shiner	48	1.06
5	2	Lower Wekiva	Vallisneria	Coastal shiner	50	1.28
5	2	Lower Wekiva	Vallisneria	Coastal shiner	51	1.15
5	2	Lower Wekiva	Vallisneria	Coastal shiner	58	1.75

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
5	2	Lower Wekiva	Vallisneria	Coastal shiner	59	1.39
5	2	Lower Wekiva	Vallisneria	Largemouth bass	113	17.00
5	2	Lower Wekiva	Vallisneria	Largemouth bass	133	28.00
5	2	Lower Wekiva	Vallisneria	Largemouth bass	134	28.00
5	2	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.63
5	2	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.97
5	2	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.82
5	2	Lower Wekiva	Vallisneria	Pugnose minnow	47	0.99
5	2	Lower Wekiva	Vallisneria	Pugnose minnow	48	1.13
5	2	Lower Wekiva	Vallisneria	Pugnose minnow	52	1.35
5	2	Lower Wekiva	Vallisneria	Pugnose minnow	53	1.32
5	2	Lower Wekiva	Vallisneria	Pugnose minnow	56	1.54
5	2	Lower Wekiva	Vallisneria	Redbreast sunfish	22	0.25
5	2	Lower Wekiva	Vallisneria	Redbreast sunfish	32	0.56
5	2	Lower Wekiva	Vallisneria	Redbreast sunfish	59	3.78
5	2	Lower Wekiva	Vallisneria	Redbreast sunfish	90	11.00
5	2	Lower Wekiva	Vallisneria	Redbreast sunfish	100	14.00
5	2	Lower Wekiva	Vallisneria	Redbreast sunfish	117	25.00
5	2	Lower Wekiva	Vallisneria	Redbreast sunfish	186	92.00
5	2	Lower Wekiva	Vallisneria	Seminole killifish	37	0.57
5	2	Lower Wekiva	Vallisneria	Seminole killifish	49	1.22
5	2	Lower Wekiva	Vallisneria	Seminole killifish	49	1.09
5	2	Lower Wekiva	Vallisneria	Seminole killifish	51	1.85
5	2	Lower Wekiva	Vallisneria	Seminole killifish	53	1.39
5	2	Lower Wekiva	Vallisneria	Seminole killifish	55	1.80
5	2	Lower Wekiva	Vallisneria	Seminole killifish	58	2.12
5	2	Lower Wekiva	Vallisneria	Seminole killifish	60	2.25
5	2	Lower Wekiva	Vallisneria	Seminole killifish	61	2.21
5	2	Lower Wekiva	Vallisneria	Seminole killifish	61	2.36
5	2	Lower Wekiva	Vallisneria	Seminole killifish	61	3.03
5	2	Lower Wekiva	Vallisneria	Seminole killifish	62	2.36
5	2	Lower Wekiva	Vallisneria	Seminole killifish	63	2.75
5	2	Lower Wekiva	Vallisneria	Seminole killifish	65	2.98
5	2	Lower Wekiva	Vallisneria	Seminole killifish	69	3.34
5	2	Lower Wekiva	Vallisneria	Seminole killifish	71	3.71
5	2	Lower Wekiva	Vallisneria	Seminole killifish	75	4.13
5	2	Lower Wekiva	Vallisneria	Seminole killifish	77	4.43
5	2	Lower Wekiva	Vallisneria	Seminole killifish	96	8.00
5	2	Lower Wekiva	Vallisneria	Seminole killifish	113	12.00
5	2	Lower Wekiva	Vallisneria	Spotted sunfish	22	0.26
5	2	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.30
5	2	Lower Wekiva	Vallisneria	Spotted sunfish	31	0.68
5	2	Lower Wekiva	Vallisneria	Spotted sunfish	33	0.86
5	2	Lower Wekiva	Vallisneria	Spotted sunfish	36	1.01
5	2	Lower Wekiva	Vallisneria	Spotted sunfish	92	17.00
5	2	Lower Wekiva	Vallisneria	Spotted sunfish	95	18.00
5	2	Lower Wekiva	Vallisneria	Spotted sunfish	99	21.00
5	2	Lower Wekiva	Vallisneria	Spotted sunfish	100	21.00
5	2	Lower Wekiva	Vallisneria	Spotted sunfish	104	24.00
5	2	Lower Wekiva	Vallisneria	Spotted sunfish	104	24.00
5	2	Lower Wekiva	Vallisneria	Spotted sunfish	110	26.00
5	2	Lower Wekiva	Vallisneria	Spotted sunfish	115	30.00
5	2	Lower Wekiva	Vallisneria	Spotted sunfish	122	38.00
5	3	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.12

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
5	3	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.20
5	3	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.45
5	3	Lower Wekiva	Vallisneria	Coastal shiner	39	0.46
5	3	Lower Wekiva	Vallisneria	Coastal shiner	46	0.82
5	3	Lower Wekiva	Vallisneria	Coastal shiner	58	2.11
5	3	Lower Wekiva	Vallisneria	Lake chubsucker	134	27.00
5	3	Lower Wekiva	Vallisneria	Lake chubsucker	147	41.00
5	3	Lower Wekiva	Vallisneria	Largemouth bass	97	11.00
5	3	Lower Wekiva	Vallisneria	Largemouth bass	106	15.00
5	3	Lower Wekiva	Vallisneria	Largemouth bass	158	46.00
5	3	Lower Wekiva	Vallisneria	Pugnose minnow	41	0.60
5	3	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.84
5	3	Lower Wekiva	Vallisneria	Pugnose minnow	51	1.16
5	3	Lower Wekiva	Vallisneria	Redbreast sunfish	61	4.72
5	3	Lower Wekiva	Vallisneria	Redbreast sunfish	75	6.00
5	3	Lower Wekiva	Vallisneria	Redbreast sunfish	116	22.00
5	3	Lower Wekiva	Vallisneria	Redbreast sunfish	117	17.00
5	3	Lower Wekiva	Vallisneria	Redbreast sunfish	117	23.00
5	3	Lower Wekiva	Vallisneria	Redbreast sunfish	121	28.00
5	3	Lower Wekiva	Vallisneria	Redear sunfish	235	252.00
5	3	Lower Wekiva	Vallisneria	Seminole killifish	42	0.75
5	3	Lower Wekiva	Vallisneria	Seminole killifish	57	2.09
5	3	Lower Wekiva	Vallisneria	Seminole killifish	57	1.87
5	3	Lower Wekiva	Vallisneria	Seminole killifish	59	2.03
5	3	Lower Wekiva	Vallisneria	Seminole killifish	59	2.04
5	3	Lower Wekiva	Vallisneria	Seminole killifish	60	2.39
5	3	Lower Wekiva	Vallisneria	Seminole killifish	62	2.68
5	3	Lower Wekiva	Vallisneria	Seminole killifish	63	2.64
5	3	Lower Wekiva	Vallisneria	Seminole killifish	66	3.12
5	3	Lower Wekiva	Vallisneria	Seminole killifish	75	4.45
5	3	Lower Wekiva	Vallisneria	Seminole killifish	89	7.48
5	3	Lower Wekiva	Vallisneria	Seminole killifish	130	19.00
5	3	Lower Wekiva	Vallisneria	Spotted sunfish	21	0.24
5	3	Lower Wekiva	Vallisneria	Spotted sunfish	22	0.30
5	3	Lower Wekiva	Vallisneria	Spotted sunfish	23	0.32
5	3	Lower Wekiva	Vallisneria	Spotted sunfish	29	0.59
5	3	Lower Wekiva	Vallisneria	Spotted sunfish	58	4.17
5	3	Lower Wekiva	Vallisneria	Spotted sunfish	92	17.00
5	3	Lower Wekiva	Vallisneria	Spotted sunfish	95	18.00
5	3	Lower Wekiva	Vallisneria	Spotted sunfish	96	19.00
5	3	Lower Wekiva	Vallisneria	Spotted sunfish	105	24.00
5	3	Lower Wekiva	Vallisneria	Spotted sunfish	126	45.00
5	3	Lower Wekiva	Vallisneria	Spotted sunfish	144	72.00
5	3	Lower Wekiva	Vallisneria	Spotted sunfish	165	90.00
5	3	Lower Wekiva	Vallisneria	Yellow bullhead	271	322.00
5	4	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.04
5	4	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
5	4	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.14
5	4	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.14
5	4	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.27
5	4	Lower Wekiva	Vallisneria	Coastal shiner	19	0.08
5	4	Lower Wekiva	Vallisneria	Coastal shiner	33	0.32
5	4	Lower Wekiva	Vallisneria	Coastal shiner	42	0.71
5	4	Lower Wekiva	Vallisneria	Coastal shiner	44	0.74

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
5	4	Lower Wekiva	Vallisneria	Coastal shiner	45	0.73
5	4	Lower Wekiva	Vallisneria	Coastal shiner	46	0.99
5	4	Lower Wekiva	Vallisneria	Coastal shiner	54	1.45
5	4	Lower Wekiva	Vallisneria	Coastal shiner	59	2.20
5	4	Lower Wekiva	Vallisneria	Coastal shiner	60	1.93
5	4	Lower Wekiva	Vallisneria	Largemouth bass	84	6.00
5	4	Lower Wekiva	Vallisneria	Redbreast sunfish	40	1.00
5	4	Lower Wekiva	Vallisneria	Redbreast sunfish	71	6.00
5	4	Lower Wekiva	Vallisneria	Redbreast sunfish	105	16.00
5	4	Lower Wekiva	Vallisneria	Seminole killifish	52	1.39
5	4	Lower Wekiva	Vallisneria	Seminole killifish	62	2.62
5	4	Lower Wekiva	Vallisneria	Seminole killifish	62	2.42
5	4	Lower Wekiva	Vallisneria	Seminole killifish	64	2.63
5	4	Lower Wekiva	Vallisneria	Seminole killifish	66	3.17
5	4	Lower Wekiva	Vallisneria	Seminole killifish	68	3.28
5	4	Lower Wekiva	Vallisneria	Seminole killifish	76	4.00
5	4	Lower Wekiva	Vallisneria	Seminole killifish	77	4.00
5	4	Lower Wekiva	Vallisneria	Seminole killifish	78	4.00
5	4	Lower Wekiva	Vallisneria	Spotted sunfish	88	13.00
5	4	Lower Wekiva	Vallisneria	Spotted sunfish	119	33.00
5	4	Lower Wekiva	Vallisneria	Spotted sunfish	132	51.00
5	4	Lower Wekiva	Vallisneria	Spotted sunfish	140	59.00
5	5	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.26
5	5	Lower Wekiva	Vallisneria	Lake chubsucker	106	14.68
5	5	Lower Wekiva	Vallisneria	Pugnose minnow	38	0.53
5	5	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.78
5	5	Lower Wekiva	Vallisneria	Redbreast sunfish	40	1.39
5	5	Lower Wekiva	Vallisneria	Redbreast sunfish	56	3.23
5	5	Lower Wekiva	Vallisneria	Seminole killifish	52	1.64
5	5	Lower Wekiva	Vallisneria	Seminole killifish	57	2.28
5	5	Lower Wekiva	Vallisneria	Seminole killifish	57	2.06
5	5	Lower Wekiva	Vallisneria	Seminole killifish	60	2.25
5	5	Lower Wekiva	Vallisneria	Seminole killifish	60	2.40
5	5	Lower Wekiva	Vallisneria	Seminole killifish	62	2.87
5	5	Lower Wekiva	Vallisneria	Seminole killifish	65	3.59
5	5	Lower Wekiva	Vallisneria	Seminole killifish	67	3.66
5	5	Lower Wekiva	Vallisneria	Seminole killifish	73	4.82
5	5	Lower Wekiva	Vallisneria	Seminole killifish	80	6.20
5	5	Lower Wekiva	Vallisneria	Seminole killifish	84	6.80
5	5	Lower Wekiva	Vallisneria	Seminole killifish	108	15.62
5	5	Lower Wekiva	Vallisneria	Spotted sunfish	15	0.13
5	5	Lower Wekiva	Vallisneria	Spotted sunfish	22	0.28
5	5	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.39
5	5	Lower Wekiva	Vallisneria	Spotted sunfish	34	1.00
5	5	Lower Wekiva	Vallisneria	Spotted sunfish	34	1.10
5	5	Lower Wekiva	Vallisneria	Spotted sunfish	77	10.47
5	5	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.00
5	5	Lower Wekiva	Vallisneria	Spotted sunfish	114	29.00
5	5	Lower Wekiva	Vallisneria	Spotted sunfish	114	26.00
6	1	Lower Wekiva	Vallisneria	Blackbanded darter	44	0.82
6	1	Lower Wekiva	Vallisneria	Blackbanded darter	52	1.24
6	1	Lower Wekiva	Vallisneria	Blackbanded darter	52	1.44
6	1	Lower Wekiva	Vallisneria	Blackbanded darter	52	1.31
6	1	Lower Wekiva	Vallisneria	Blackbanded darter	52	1.41

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
6	1	Lower Wekiva	Vallisneria	Blackbanded darter	54	1.43
6	1	Lower Wekiva	Vallisneria	Blackbanded darter	55	1.80
6	1	Lower Wekiva	Vallisneria	Blackbanded darter	55	1.26
6	1	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.89
6	1	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.87
6	1	Lower Wekiva	Vallisneria	Brook silverside	45	0.58
6	1	Lower Wekiva	Vallisneria	Coastal shiner	43	0.86
6	1	Lower Wekiva	Vallisneria	Ironcolor shiner	42	0.66
6	1	Lower Wekiva	Vallisneria	Lake chubsucker	75	5.95
6	1	Lower Wekiva	Vallisneria	Lake chubsucker	99	14.90
6	1	Lower Wekiva	Vallisneria	Lake chubsucker	108	18.11
6	1	Lower Wekiva	Vallisneria	Lake chubsucker	108	16.36
6	1	Lower Wekiva	Vallisneria	Lake chubsucker	114	20.57
6	1	Lower Wekiva	Vallisneria	Largemouth bass	126	22.00
6	1	Lower Wekiva	Vallisneria	Pugnose minnow	33	0.40
6	1	Lower Wekiva	Vallisneria	Pugnose minnow	34	0.36
6	1	Lower Wekiva	Vallisneria	Pugnose minnow	35	0.41
6	1	Lower Wekiva	Vallisneria	Pugnose minnow	35	0.46
6	1	Lower Wekiva	Vallisneria	Pugnose minnow	37	0.44
6	1	Lower Wekiva	Vallisneria	Pugnose minnow	41	0.75
6	1	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.65
6	1	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.79
6	1	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.88
6	1	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.85
6	1	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.83
6	1	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.89
6	1	Lower Wekiva	Vallisneria	Pugnose minnow	49	1.05
6	1	Lower Wekiva	Vallisneria	Redbreast sunfish	65	4.00
6	1	Lower Wekiva	Vallisneria	Redbreast sunfish	89	10.00
6	1	Lower Wekiva	Vallisneria	Redbreast sunfish	97	15.00
6	1	Lower Wekiva	Vallisneria	Seminole killifish	46	0.98
6	1	Lower Wekiva	Vallisneria	Seminole killifish	52	1.29
6	1	Lower Wekiva	Vallisneria	Seminole killifish	60	2.47
6	1	Lower Wekiva	Vallisneria	Seminole killifish	63	2.58
6	1	Lower Wekiva	Vallisneria	Seminole killifish	64	2.80
6	1	Lower Wekiva	Vallisneria	Seminole killifish	70	3.71
6	1	Lower Wekiva	Vallisneria	Seminole killifish	73	4.08
6	1	Lower Wekiva	Vallisneria	Seminole killifish	98	10.31
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	21	0.23
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.32
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	30	0.68
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	31	0.73
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.69
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.78
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	33	0.89
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	35	1.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	35	1.27
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.46
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.55
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	41	1.76
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	44	2.17
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	47	2.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	47	1.10

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	47	1.09
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	48	1.21
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	48	1.09
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	49	2.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	49	1.26
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	53	1.63
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	54	1.78
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	54	1.64
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	55	1.88
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	55	1.69
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	56	4.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	58	4.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	61	2.32
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	64	3.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	68	3.42
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	68	3.37
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	68	3.16
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	69	3.26
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	73	4.13
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	74	9.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	74	4.61
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	75	4.76
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	76	4.48
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	78	4.85
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	78	5.24
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	79	5.58
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	82	6.46
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	83	10.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	85	13.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	85	12.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	89	14.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	93	16.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	94	16.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	95	16.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	95	16.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	96	18.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	97	10.02
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	102	20.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	103	22.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	107	23.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	112	26.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	115	30.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	120	29.00
6	1	Lower Wekiva	Vallisneria	Spotted sunfish	133	47.00
6	1	Lower Wekiva	Vallisneria	White catfish	80	6.65
6	2	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.29
6	2	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.34
6	2	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.41
6	2	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.48
6	2	Lower Wekiva	Vallisneria	Bluefin killifish	41	1.05
6	2	Lower Wekiva	Vallisneria	Coastal shiner	32	0.36
6	2	Lower Wekiva	Vallisneria	Lake chubsucker	87	10.18
6	2	Lower Wekiva	Vallisneria	Lake chubsucker	91	10.46
6	2	Lower Wekiva	Vallisneria	Lake chubsucker	103	14.95

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
6	2	Lower Wekiva	Vallisneria	Largemouth bass	121	20.00
6	2	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.81
6	2	Lower Wekiva	Vallisneria	Seminole killifish	58	2.22
6	2	Lower Wekiva	Vallisneria	Seminole killifish	60	2.41
6	2	Lower Wekiva	Vallisneria	Seminole killifish	69	3.57
6	2	Lower Wekiva	Vallisneria	Seminole killifish	72	4.33
6	2	Lower Wekiva	Vallisneria	Seminole killifish	81	6.13
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	31	0.78
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.93
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	34	0.94
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	36	1.14
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	36	1.11
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.29
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.42
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	42	1.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	43	1.95
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	61	4.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	80	10.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	85	12.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	86	13.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	90	14.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	91	16.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	96	16.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	99	18.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	99	17.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	103	21.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	105	23.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	105	23.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	106	23.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	107	26.00
6	2	Lower Wekiva	Vallisneria	Spotted sunfish	117	32.00
6	2	Lower Wekiva	Vallisneria	Tadpole madtom	55	2.33
6	3	Lower Wekiva	Vallisneria	Blackbanded darter	46	1.02
6	3	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.13
6	3	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.49
6	3	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.51
6	3	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.53
6	3	Lower Wekiva	Vallisneria	Bluefin killifish	40	1.02
6	3	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.96
6	3	Lower Wekiva	Vallisneria	Coastal shiner	44	0.98
6	3	Lower Wekiva	Vallisneria	Pugnose minnow	39	0.59
6	3	Lower Wekiva	Vallisneria	Pugnose minnow	41	0.73
6	3	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.80
6	3	Lower Wekiva	Vallisneria	Redbreast sunfish	46	2.02
6	3	Lower Wekiva	Vallisneria	Redbreast sunfish	50	2.23
6	3	Lower Wekiva	Vallisneria	Redbreast sunfish	52	2.54
6	3	Lower Wekiva	Vallisneria	Seminole killifish	43	0.98
6	3	Lower Wekiva	Vallisneria	Seminole killifish	51	1.54
6	3	Lower Wekiva	Vallisneria	Seminole killifish	55	1.48
6	3	Lower Wekiva	Vallisneria	Seminole killifish	56	2.00
6	3	Lower Wekiva	Vallisneria	Seminole killifish	59	2.53
6	3	Lower Wekiva	Vallisneria	Seminole killifish	59	2.28
6	3	Lower Wekiva	Vallisneria	Seminole killifish	60	2.41

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
6	3	Lower Wekiva	Vallisneria	Seminole killifish	60	2.38
6	3	Lower Wekiva	Vallisneria	Seminole killifish	60	2.47
6	3	Lower Wekiva	Vallisneria	Seminole killifish	67	3.47
6	3	Lower Wekiva	Vallisneria	Seminole killifish	74	4.58
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	35	1.07
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.13
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.14
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.30
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.60
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	41	1.46
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	42	1.57
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	76	8.00
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	91	16.00
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	91	16.00
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	91	16.00
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	92	16.00
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	93	16.00
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	94	17.00
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	97	18.00
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	97	18.00
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	97	17.00
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	103	22.00
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	103	20.00
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	103	23.00
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	105	22.00
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	110	26.00
6	3	Lower Wekiva	Vallisneria	Spotted sunfish	119	32.00
6	3	Lower Wekiva	Vallisneria	Tadpole madtom	60	2.90
6	3	Lower Wekiva	Vallisneria	White catfish	73	5.55
6	4	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.19
6	4	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.50
6	4	Lower Wekiva	Vallisneria	Bluegill	113	20.00
6	4	Lower Wekiva	Vallisneria	Lake chubsucker	83	9.03
6	4	Lower Wekiva	Vallisneria	Lake chubsucker	96	11.50
6	4	Lower Wekiva	Vallisneria	Lake chubsucker	100	13.67
6	4	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.78
6	4	Lower Wekiva	Vallisneria	Seminole killifish	49	1.37
6	4	Lower Wekiva	Vallisneria	Seminole killifish	49	1.41
6	4	Lower Wekiva	Vallisneria	Seminole killifish	50	1.54
6	4	Lower Wekiva	Vallisneria	Seminole killifish	55	1.77
6	4	Lower Wekiva	Vallisneria	Seminole killifish	57	2.10
6	4	Lower Wekiva	Vallisneria	Seminole killifish	59	2.38
6	4	Lower Wekiva	Vallisneria	Seminole killifish	59	2.27
6	4	Lower Wekiva	Vallisneria	Seminole killifish	61	2.53
6	4	Lower Wekiva	Vallisneria	Seminole killifish	63	2.78
6	4	Lower Wekiva	Vallisneria	Seminole killifish	98	10.55
6	4	Lower Wekiva	Vallisneria	Seminole killifish	102	12.19
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	31	0.79
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	34	0.89
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.35
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.64
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	66	5.00
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	77	9.00
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	82	12.00

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	85	12.00
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.00
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	90	15.00
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	90	13.00
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	92	16.00
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	93	16.00
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	102	22.00
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	105	22.00
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	108	23.00
6	4	Lower Wekiva	Vallisneria	Spotted sunfish	115	29.00
6	4	Lower Wekiva	Vallisneria	White catfish	94	8.00
6	4	Lower Wekiva	Vallisneria	Yellow bullhead	250	234.00
7	1	Lower Wekiva	Bare Bottom	Atlantic needlefish	365	57.35
7	1	Lower Wekiva	Bare Bottom	Atlantic needlefish	370	56.00
7	1	Lower Wekiva	Bare Bottom	Atlantic needlefish	378	70.00
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	18	0.33
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	20	0.13
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	20	0.15
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	22	0.19
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	22	0.19
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	23	0.22
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.24
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.28
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.25
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.25
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.28
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.29
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.24
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	26	0.28
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	26	0.30
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	26	0.32
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	26	0.28
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	27	0.32
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	27	0.32
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	28	0.38
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	28	0.38
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	32	0.49
7	1	Lower Wekiva	Bare Bottom	Bluefin killifish	32	0.23
7	1	Lower Wekiva	Bare Bottom	Redbreast sunfish	186	95.00
7	1	Lower Wekiva	Bare Bottom	Redbreast sunfish	209	152.00
7	1	Lower Wekiva	Bare Bottom	Redbreast sunfish	214	147.00
7	1	Lower Wekiva	Bare Bottom	Seminole killifish	28	0.31
7	1	Lower Wekiva	Bare Bottom	Seminole killifish	38	0.65
7	1	Lower Wekiva	Bare Bottom	Seminole killifish	41	0.71
7	1	Lower Wekiva	Bare Bottom	Seminole killifish	43	0.89
7	1	Lower Wekiva	Bare Bottom	Seminole killifish	44	0.95
7	1	Lower Wekiva	Bare Bottom	Seminole killifish	47	1.24
7	1	Lower Wekiva	Bare Bottom	Seminole killifish	47	1.16
7	1	Lower Wekiva	Bare Bottom	Seminole killifish	48	1.22
7	1	Lower Wekiva	Bare Bottom	Seminole killifish	49	1.31
7	1	Lower Wekiva	Bare Bottom	Seminole killifish	49	1.45
7	1	Lower Wekiva	Bare Bottom	Seminole killifish	50	1.36
7	1	Lower Wekiva	Bare Bottom	Seminole killifish	55	1.98
7	1	Lower Wekiva	Bare Bottom	Seminole killifish	55	1.83

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
7	1	Lower Wekiva	Bare Bottom	Seminole killifish	58	2.09
7	1	Lower Wekiva	Bare Bottom	Seminole killifish	61	2.59
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	13	0.06
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	17	0.09
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	18	0.10
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	18	0.11
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	19	0.14
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	20	0.15
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	20	0.15
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	21	0.19
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	21	0.18
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	22	0.17
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	22	0.17
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	22	0.23
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	23	0.19
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	23	0.22
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	23	0.22
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	24	0.24
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	24	0.25
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	24	0.27
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.28
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.27
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.25
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.26
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.26
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.30
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	26	0.30
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	26	0.29
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	27	0.26
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	27	0.33
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	27	0.33
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	27	0.32
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	28	0.33
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	28	0.33
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	28	0.36
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	29	0.36
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	29	0.38
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	30	0.42
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	31	0.51
7	2	Lower Wekiva	Bare Bottom	Bluefin killifish	34	0.39
7	2	Lower Wekiva	Bare Bottom	Redbreast sunfish	200	130.00
7	2	Lower Wekiva	Bare Bottom	Redbreast sunfish	205	138.00
7	2	Lower Wekiva	Bare Bottom	Seminole killifish	30	0.38
7	2	Lower Wekiva	Bare Bottom	Seminole killifish	49	1.29
7	2	Lower Wekiva	Bare Bottom	Seminole killifish	49	1.28
7	2	Lower Wekiva	Bare Bottom	Seminole killifish	51	1.40
7	2	Lower Wekiva	Bare Bottom	Seminole killifish	56	1.97
7	2	Lower Wekiva	Bare Bottom	Seminole killifish	71	4.04
7	3	Lower Wekiva	Bare Bottom	Bluefin killifish	19	0.14
7	3	Lower Wekiva	Bare Bottom	Bluefin killifish	23	0.20
7	3	Lower Wekiva	Bare Bottom	Bluefin killifish	24	0.24
7	3	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.27
7	3	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.23
7	3	Lower Wekiva	Bare Bottom	Bluefin killifish	25	0.25

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
7	3	Lower Wekiva	Bare Bottom	Bluefin killifish	26	0.28
7	3	Lower Wekiva	Bare Bottom	Bluefin killifish	26	0.30
7	3	Lower Wekiva	Bare Bottom	Bluefin killifish	29	0.36
7	3	Lower Wekiva	Bare Bottom	Hogchoker	85	13.00
7	3	Lower Wekiva	Bare Bottom	Redbreast sunfish	194	105.00
7	3	Lower Wekiva	Bare Bottom	Redbreast sunfish	195	125.00
7	3	Lower Wekiva	Bare Bottom	Redbreast sunfish	206	130.00
7	3	Lower Wekiva	Bare Bottom	Redbreast sunfish	207	128.00
7	3	Lower Wekiva	Bare Bottom	Redbreast sunfish	210	123.00
7	3	Lower Wekiva	Bare Bottom	Redbreast sunfish	211	133.00
7	3	Lower Wekiva	Bare Bottom	Seminole killifish	28	0.31
7	3	Lower Wekiva	Bare Bottom	Seminole killifish	44	1.01
7	3	Lower Wekiva	Bare Bottom	Seminole killifish	60	2.26
7	3	Lower Wekiva	Bare Bottom	Striped mullet	465	1041.00
7	4	Lower Wekiva	Bare Bottom	Chain pickerel	369	302.00
7	4	Lower Wekiva	Bare Bottom	Redbreast sunfish	197	118.00
7	4	Lower Wekiva	Bare Bottom	Redbreast sunfish	205	130.00
7	4	Lower Wekiva	Bare Bottom	Redbreast sunfish	206	141.00
7	4	Lower Wekiva	Bare Bottom	Redbreast sunfish	211	160.00
7	4	Lower Wekiva	Bare Bottom	Redbreast sunfish	214	170.00
7	4	Lower Wekiva	Bare Bottom	Seminole killifish	45	0.96
7	4	Lower Wekiva	Bare Bottom	Seminole killifish	46	0.93
7	4	Lower Wekiva	Bare Bottom	Seminole killifish	48	1.18
7	4	Lower Wekiva	Bare Bottom	Seminole killifish	49	1.15
7	4	Lower Wekiva	Bare Bottom	Striped mullet	385	616.00
7	5	Lower Wekiva	Bare Bottom	Bluefin killifish	22	0.17
7	5	Lower Wekiva	Bare Bottom	Bluefin killifish	24	0.20
7	5	Lower Wekiva	Bare Bottom	Redbreast sunfish	175	82.00
7	5	Lower Wekiva	Bare Bottom	Redbreast sunfish	202	120.00
7	5	Lower Wekiva	Bare Bottom	Redbreast sunfish	203	144.00
8	1	Lower Wekiva	Bare Bottom	No Fish in Removal	.	.
8	2	Lower Wekiva	Bare Bottom	Redbreast sunfish	175	74.00
8	2	Lower Wekiva	Bare Bottom	Redbreast sunfish	196	107.00
8	2	Lower Wekiva	Bare Bottom	Seminole killifish	32	0.40
8	3	Lower Wekiva	Bare Bottom	Redbreast sunfish	160	63.00
9	1	Lower Wekiva	Bare Bottom	Atlantic stingray	630	914.00
9	1	Lower Wekiva	Bare Bottom	Atlantic stingray	640	871.00
9	1	Lower Wekiva	Bare Bottom	Coastal shiner	33	0.40
9	1	Lower Wekiva	Bare Bottom	Pugnose minnow	33	0.36
9	1	Lower Wekiva	Bare Bottom	Pugnose minnow	35	0.42
9	2	Lower Wekiva	Bare Bottom	No Fish in Removal	.	.
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.15
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.15
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.14
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.16
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.18
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.19
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.16
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.16
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.21
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.22
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.20
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.23
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.24

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.29
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.28
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.34
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.33
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.30
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.34
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.33
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.42
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.37
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.39
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.45
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.42
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.43
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.39
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.45
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.50
10	1	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.61
10	1	Lower Wekiva	Vallisneria	Lake chubsucker	104	13.71
10	1	Lower Wekiva	Vallisneria	Lake chubsucker	115	17.00
10	1	Lower Wekiva	Vallisneria	Lake chubsucker	122	27.67
10	1	Lower Wekiva	Vallisneria	Lake chubsucker	210	133.00
10	1	Lower Wekiva	Vallisneria	Mosquitofish	27	0.38
10	1	Lower Wekiva	Vallisneria	Mosquitofish	38	0.97
10	1	Lower Wekiva	Vallisneria	Mosquitofish	41	0.95
10	1	Lower Wekiva	Vallisneria	Mosquitofish	49	1.91
10	1	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.87
10	1	Lower Wekiva	Vallisneria	Pugnose minnow	46	0.94
10	1	Lower Wekiva	Vallisneria	Pugnose minnow	49	1.20
10	1	Lower Wekiva	Vallisneria	Pugnose minnow	50	1.15
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	56	2.90
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	59	3.30
10	1	Lower Wekiva	Vallisneria	Redbreast sunfish	101	17.55
10	1	Lower Wekiva	Vallisneria	Sailfin shiner	22	0.14
10	1	Lower Wekiva	Vallisneria	Seminole killifish	46	1.05
10	1	Lower Wekiva	Vallisneria	Seminole killifish	60	2.09
10	1	Lower Wekiva	Vallisneria	Seminole killifish	61	2.37
10	1	Lower Wekiva	Vallisneria	Seminole killifish	73	4.38
10	1	Lower Wekiva	Vallisneria	Seminole killifish	114	16.27
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	14	0.09
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	20	0.20
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	21	0.23
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.34
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.42
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.40
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.43
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.41
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	27	0.50
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	29	0.52
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	31	0.66
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.77
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.95
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	36	0.98
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.50
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.24

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	41	1.59
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	43	2.11
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	44	2.01
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	45	2.15
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	48	2.51
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	48	2.38
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	76	10.05
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	95	20.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	95	19.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	102	20.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	103	24.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	109	29.00
10	1	Lower Wekiva	Vallisneria	Spotted sunfish	125	46.00
10	2	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.15
10	2	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.21
10	2	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.28
10	2	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.30
10	2	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.34
10	2	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.34
10	2	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.45
10	2	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.52
10	2	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.88
10	2	Lower Wekiva	Vallisneria	Chain pickerel	405	460.00
10	2	Lower Wekiva	Vallisneria	Coastal shiner	51	1.21
10	2	Lower Wekiva	Vallisneria	Coastal shiner	54	1.78
10	2	Lower Wekiva	Vallisneria	Mosquitofish	19	0.14
10	2	Lower Wekiva	Vallisneria	Mosquitofish	21	0.14
10	2	Lower Wekiva	Vallisneria	Pugnose minnow	41	0.57
10	2	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.65
10	2	Lower Wekiva	Vallisneria	Pugnose minnow	49	1.05
10	2	Lower Wekiva	Vallisneria	Redbreast sunfish	68	5.33
10	2	Lower Wekiva	Vallisneria	Redbreast sunfish	80	8.90
10	2	Lower Wekiva	Vallisneria	Sailfin shiner	24	0.16
10	2	Lower Wekiva	Vallisneria	Seminole killifish	51	1.33
10	2	Lower Wekiva	Vallisneria	Seminole killifish	53	1.55
10	2	Lower Wekiva	Vallisneria	Seminole killifish	65	2.57
10	2	Lower Wekiva	Vallisneria	Seminole killifish	83	6.36
10	2	Lower Wekiva	Vallisneria	Seminole killifish	85	6.72
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	16	0.14
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	21	0.22
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	22	0.24
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.47
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.48
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.42
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.41
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	29	0.58
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	29	0.59
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	31	0.61
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.44
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	44	2.18
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	44	1.90
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	44	1.92
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	45	2.16
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	48	2.32

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	49	2.75
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	71	8.60
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	79	10.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	96	19.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	105	24.00
10	2	Lower Wekiva	Vallisneria	Spotted sunfish	111	28.00
10	2	Lower Wekiva	Vallisneria	Yellow bullhead	77	6.15
10	3	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.09
10	3	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.11
10	3	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.13
10	3	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.11
10	3	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.19
10	3	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.22
10	3	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.30
10	3	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.28
10	3	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.39
10	3	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.37
10	3	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.36
10	3	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.40
10	3	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.42
10	3	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.50
10	3	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.75
10	3	Lower Wekiva	Vallisneria	Coastal shiner	49	1.20
10	3	Lower Wekiva	Vallisneria	Lake chubsucker	122	24.57
10	3	Lower Wekiva	Vallisneria	Mosquitofish	17	0.10
10	3	Lower Wekiva	Vallisneria	Mosquitofish	24	0.22
10	3	Lower Wekiva	Vallisneria	Mosquitofish	26	0.25
10	3	Lower Wekiva	Vallisneria	Pugnose minnow	32	0.33
10	3	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.65
10	3	Lower Wekiva	Vallisneria	Sailfin shiner	15	0.04
10	3	Lower Wekiva	Vallisneria	Seminole killifish	52	1.41
10	3	Lower Wekiva	Vallisneria	Seminole killifish	54	1.66
10	3	Lower Wekiva	Vallisneria	Seminole killifish	57	1.98
10	3	Lower Wekiva	Vallisneria	Seminole killifish	62	2.69
10	3	Lower Wekiva	Vallisneria	Seminole killifish	72	4.00
10	3	Lower Wekiva	Vallisneria	Seminole killifish	77	4.94
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	17	0.12
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	20	0.22
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	22	0.25
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	23	0.31
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	23	0.29
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	23	0.29
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	23	0.30
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.38
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.43
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	27	0.50
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	31	0.71
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.82
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	34	0.88
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.45
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	41	1.48
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	104	23.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	107	24.00
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	115	31.00

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
10	3	Lower Wekiva	Vallisneria	Spotted sunfish	148	63.00
10	4	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.14
10	4	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.18
10	4	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.19
10	4	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.34
10	4	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.35
10	4	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.38
10	4	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.39
10	4	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.50
10	4	Lower Wekiva	Vallisneria	Mosquitofish	21	0.16
10	4	Lower Wekiva	Vallisneria	Mosquitofish	22	0.21
10	4	Lower Wekiva	Vallisneria	Mosquitofish	31	0.48
10	4	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.71
10	4	Lower Wekiva	Vallisneria	Pugnose minnow	48	1.09
10	4	Lower Wekiva	Vallisneria	Redbreast sunfish	49	2.07
10	4	Lower Wekiva	Vallisneria	Redbreast sunfish	67	4.93
10	4	Lower Wekiva	Vallisneria	Redbreast sunfish	68	5.23
10	4	Lower Wekiva	Vallisneria	Redbreast sunfish	110	20.00
10	4	Lower Wekiva	Vallisneria	Seminole killifish	83	5.77
10	4	Lower Wekiva	Vallisneria	Seminole killifish	113	14.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	14	0.08
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	19	0.18
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.35
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.43
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	28	0.56
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.56
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	45	2.10
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	47	2.45
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	97	20.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	97	17.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	108	25.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	119	34.00
10	4	Lower Wekiva	Vallisneria	Spotted sunfish	143	62.00
10	5	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.10
10	5	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.13
10	5	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.16
10	5	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.20
10	5	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.21
10	5	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.25
10	5	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.52
10	5	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.51
10	5	Lower Wekiva	Vallisneria	Lake chubsucker	200	105.00
10	5	Lower Wekiva	Vallisneria	Mosquitofish	19	0.12
10	5	Lower Wekiva	Vallisneria	Redbreast sunfish	74	6.00
10	5	Lower Wekiva	Vallisneria	Sailfin shiner	15	0.04
10	5	Lower Wekiva	Vallisneria	Sailfin shiner	16	0.05
10	5	Lower Wekiva	Vallisneria	Spotted sunfish	20	0.18
10	5	Lower Wekiva	Vallisneria	Spotted sunfish	23	0.28
10	5	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.39
10	5	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.43
10	5	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.42
10	5	Lower Wekiva	Vallisneria	Spotted sunfish	27	0.44
10	5	Lower Wekiva	Vallisneria	Spotted sunfish	28	0.49

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
10	5	Lower Wekiva	Vallisneria	Spotted sunfish	30	0.57
10	5	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.64
10	5	Lower Wekiva	Vallisneria	Spotted sunfish	63	5.56
10	5	Lower Wekiva	Vallisneria	Spotted sunfish	92	16.00
10	5	Lower Wekiva	Vallisneria	Spotted sunfish	111	26.00
10	5	Lower Wekiva	Vallisneria	Spotted sunfish	130	48.00
11	1	Lower Wekiva	Vallisneria	Blackbanded darter	60	1.98
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.23
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.24
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.23
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.29
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.30
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.32
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.31
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.35
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.39
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.35
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.38
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.41
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.39
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.39
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.46
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.44
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.43
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.54
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.54
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.51
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.52
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.44
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.60
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.49
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.62
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.65
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.80
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.61
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.73
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.69
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.79
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.82
11	1	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.97
11	1	Lower Wekiva	Vallisneria	Coastal shiner	38	0.56
11	1	Lower Wekiva	Vallisneria	Coastal shiner	43	0.93
11	1	Lower Wekiva	Vallisneria	Coastal shiner	49	1.39
11	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.60
11	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.50
11	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.59
11	1	Lower Wekiva	Vallisneria	Coastal shiner	54	1.85
11	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.72
11	1	Lower Wekiva	Vallisneria	Coastal shiner	60	2.39
11	1	Lower Wekiva	Vallisneria	Lake chubsucker	74	5.01
11	1	Lower Wekiva	Vallisneria	Lake chubsucker	74	4.79
11	1	Lower Wekiva	Vallisneria	Lake chubsucker	79	6.78
11	1	Lower Wekiva	Vallisneria	Lake chubsucker	87	8.62

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
11	1	Lower Wekiva	Vallisneria	Lake chubsucker	97	12.00
11	1	Lower Wekiva	Vallisneria	Lake chubsucker	105	14.00
11	1	Lower Wekiva	Vallisneria	Largemouth bass	78	5.00
11	1	Lower Wekiva	Vallisneria	Mosquitofish	24	0.24
11	1	Lower Wekiva	Vallisneria	Pirate perch	58	3.08
11	1	Lower Wekiva	Vallisneria	Pirate perch	59	3.56
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	36	0.50
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	36	0.51
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	37	0.54
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	38	0.57
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	38	0.56
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	39	0.62
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	40	0.68
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	40	0.62
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	40	0.68
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	40	0.70
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	40	0.64
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	40	0.67
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.63
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.77
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.79
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.72
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.79
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.80
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.82
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.82
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.93
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.90
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.97
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	46	0.87
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	48	1.03
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	48	1.05
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	49	1.16
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	53	1.50
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	55	1.55
11	1	Lower Wekiva	Vallisneria	Pugnose minnow	61	2.14
11	1	Lower Wekiva	Vallisneria	Redbreast sunfish	41	1.19
11	1	Lower Wekiva	Vallisneria	Redbreast sunfish	43	1.56
11	1	Lower Wekiva	Vallisneria	Redbreast sunfish	45	1.60
11	1	Lower Wekiva	Vallisneria	Redbreast sunfish	49	2.13
11	1	Lower Wekiva	Vallisneria	Redbreast sunfish	50	2.36
11	1	Lower Wekiva	Vallisneria	Redbreast sunfish	51	2.59
11	1	Lower Wekiva	Vallisneria	Redbreast sunfish	52	2.46
11	1	Lower Wekiva	Vallisneria	Redbreast sunfish	57	3.36
11	1	Lower Wekiva	Vallisneria	Seminole killifish	44	0.89
11	1	Lower Wekiva	Vallisneria	Seminole killifish	45	0.93
11	1	Lower Wekiva	Vallisneria	Seminole killifish	46	1.04
11	1	Lower Wekiva	Vallisneria	Seminole killifish	49	1.26
11	1	Lower Wekiva	Vallisneria	Seminole killifish	50	1.32
11	1	Lower Wekiva	Vallisneria	Seminole killifish	51	1.30
11	1	Lower Wekiva	Vallisneria	Seminole killifish	51	1.33
11	1	Lower Wekiva	Vallisneria	Seminole killifish	51	1.36
11	1	Lower Wekiva	Vallisneria	Seminole killifish	52	1.53
11	1	Lower Wekiva	Vallisneria	Seminole killifish	53	1.54

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
11	1	Lower Wekiva	Vallisneria	Seminole killifish	57	2.07
11	1	Lower Wekiva	Vallisneria	Seminole killifish	58	1.89
11	1	Lower Wekiva	Vallisneria	Seminole killifish	59	2.10
11	1	Lower Wekiva	Vallisneria	Seminole killifish	62	2.48
11	1	Lower Wekiva	Vallisneria	Seminole killifish	63	2.41
11	1	Lower Wekiva	Vallisneria	Seminole killifish	63	2.80
11	1	Lower Wekiva	Vallisneria	Seminole killifish	63	2.71
11	1	Lower Wekiva	Vallisneria	Seminole killifish	63	2.63
11	1	Lower Wekiva	Vallisneria	Seminole killifish	68	3.41
11	1	Lower Wekiva	Vallisneria	Seminole killifish	69	3.66
11	1	Lower Wekiva	Vallisneria	Seminole killifish	75	4.36
11	1	Lower Wekiva	Vallisneria	Seminole killifish	75	4.50
11	1	Lower Wekiva	Vallisneria	Seminole killifish	83	5.65
11	1	Lower Wekiva	Vallisneria	Seminole killifish	85	6.99
11	1	Lower Wekiva	Vallisneria	Seminole killifish	87	6.13
11	1	Lower Wekiva	Vallisneria	Seminole killifish	100	10.64
11	1	Lower Wekiva	Vallisneria	Seminole killifish	101	10.97
11	1	Lower Wekiva	Vallisneria	Seminole killifish	113	13.00
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.34
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.38
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.40
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	27	0.49
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	27	0.49
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	28	0.53
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	29	0.64
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	29	0.55
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	29	0.65
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	30	0.71
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	30	0.67
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	31	0.76
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	33	0.89
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	33	0.96
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	33	0.85
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	34	0.95
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	34	0.85
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	35	1.03
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	36	1.15
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.21
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.20
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.28
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.25
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.49
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.27
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.55
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.48
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	41	1.70
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	41	1.66
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	41	1.56
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	45	2.12
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	50	2.70
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	67	6.61
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	77	9.00
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	78	9.00
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	85	13.00

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.00
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	87	12.00
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	95	16.00
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	101	21.00
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	102	22.00
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	107	23.00
11	1	Lower Wekiva	Vallisneria	Spotted sunfish	117	32.00
11	1	Lower Wekiva	Vallisneria	White catfish	84	6.94
11	2	Lower Wekiva	Vallisneria	Blackbanded darter	58	1.77
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	13	0.18
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.08
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.09
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.12
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.13
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.11
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.17
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.17
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.19
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.22
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.20
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.26
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.23
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.31
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.32
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.30
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.34
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.44
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.36
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.45
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.43
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.42
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.44
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.48
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.53
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.68
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.66
11	2	Lower Wekiva	Vallisneria	Bluefin killifish	41	1.18
11	2	Lower Wekiva	Vallisneria	Coastal shiner	48	1.16
11	2	Lower Wekiva	Vallisneria	Lake chubsucker	56	2.13
11	2	Lower Wekiva	Vallisneria	Lake chubsucker	80	6.70
11	2	Lower Wekiva	Vallisneria	Lake chubsucker	88	8.22
11	2	Lower Wekiva	Vallisneria	Lake chubsucker	89	8.85
11	2	Lower Wekiva	Vallisneria	Lake chubsucker	103	15.57
11	2	Lower Wekiva	Vallisneria	Largemouth bass	101	11.00
11	2	Lower Wekiva	Vallisneria	Mosquitofish	23	0.20
11	2	Lower Wekiva	Vallisneria	Pirate perch	56	3.22
11	2	Lower Wekiva	Vallisneria	Pirate perch	56	2.74
11	2	Lower Wekiva	Vallisneria	Pirate perch	61	3.63
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	36	0.46
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	37	0.51
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	38	0.57

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	38	0.55
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	38	0.64
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	39	0.57
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	39	0.55
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	40	0.61
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	40	0.67
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	40	0.77
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	41	0.47
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	41	0.68
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	41	0.66
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	41	0.95
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.78
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.70
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.78
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.84
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.90
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.92
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	46	1.01
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	46	0.98
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	46	0.98
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	47	1.04
11	2	Lower Wekiva	Vallisneria	Pugnose minnow	48	1.17
11	2	Lower Wekiva	Vallisneria	Redbreast sunfish	42	1.32
11	2	Lower Wekiva	Vallisneria	Redbreast sunfish	47	1.92
11	2	Lower Wekiva	Vallisneria	Redbreast sunfish	48	2.12
11	2	Lower Wekiva	Vallisneria	Redbreast sunfish	56	2.93
11	2	Lower Wekiva	Vallisneria	Redbreast sunfish	59	3.59
11	2	Lower Wekiva	Vallisneria	Sailfin shiner	31	0.35
11	2	Lower Wekiva	Vallisneria	Seminole killifish	41	0.87
11	2	Lower Wekiva	Vallisneria	Seminole killifish	42	0.77
11	2	Lower Wekiva	Vallisneria	Seminole killifish	54	1.59
11	2	Lower Wekiva	Vallisneria	Seminole killifish	57	1.81
11	2	Lower Wekiva	Vallisneria	Seminole killifish	62	2.58
11	2	Lower Wekiva	Vallisneria	Seminole killifish	64	2.90
11	2	Lower Wekiva	Vallisneria	Seminole killifish	69	3.63
11	2	Lower Wekiva	Vallisneria	Seminole killifish	70	3.27
11	2	Lower Wekiva	Vallisneria	Seminole killifish	70	3.78
11	2	Lower Wekiva	Vallisneria	Seminole killifish	75	4.48
11	2	Lower Wekiva	Vallisneria	Seminole killifish	92	8.42
11	2	Lower Wekiva	Vallisneria	Seminole killifish	94	8.85
11	2	Lower Wekiva	Vallisneria	Seminole killifish	105	11.56
11	2	Lower Wekiva	Vallisneria	Seminole killifish	119	17.00
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	17	0.15
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	18	0.19
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	21	0.28
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.54
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	27	0.53
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	29	0.57
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	30	1.13
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	30	0.66
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.76
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	34	0.95
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	36	1.07
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	36	1.06

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	36	1.16
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.35
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.55
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	41	1.74
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	44	1.95
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	87	13.00
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	89	14.00
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	89	13.00
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	93	16.00
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	96	18.00
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	97	18.00
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	102	22.00
11	2	Lower Wekiva	Vallisneria	Spotted sunfish	110	27.00
11	3	Lower Wekiva	Vallisneria	Blackbanded darter	62	2.21
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.05
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.10
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.21
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.26
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.32
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.26
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.30
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.36
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.38
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.38
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.37
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.43
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.43
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.48
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.50
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.49
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.54
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.58
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.56
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.50
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.61
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.67
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.57
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.74
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.69
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.63
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.90
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.79
11	3	Lower Wekiva	Vallisneria	Bluefin killifish	41	0.91
11	3	Lower Wekiva	Vallisneria	Coastal shiner	47	1.12
11	3	Lower Wekiva	Vallisneria	Coastal shiner	48	1.36
11	3	Lower Wekiva	Vallisneria	Coastal shiner	49	1.23
11	3	Lower Wekiva	Vallisneria	Coastal shiner	49	1.21
11	3	Lower Wekiva	Vallisneria	Coastal shiner	51	1.53
11	3	Lower Wekiva	Vallisneria	Coastal shiner	52	1.41
11	3	Lower Wekiva	Vallisneria	Coastal shiner	62	2.48
11	3	Lower Wekiva	Vallisneria	Mosquitofish	34	0.62
11	3	Lower Wekiva	Vallisneria	Pirate perch	55	2.75
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	33	0.35

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	34	0.38
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	35	0.43
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	35	0.42
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	37	0.49
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	37	0.55
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	38	0.53
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	39	0.57
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	39	0.59
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	40	0.62
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	41	0.65
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	41	0.63
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	41	0.71
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.74
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.68
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.66
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.74
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.83
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.75
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.86
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.89
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.90
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	46	0.92
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	46	1.02
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	46	0.86
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	48	1.05
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	51	1.35
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	51	1.28
11	3	Lower Wekiva	Vallisneria	Pugnose minnow	56	1.54
11	3	Lower Wekiva	Vallisneria	Redbreast sunfish	33	0.86
11	3	Lower Wekiva	Vallisneria	Redbreast sunfish	44	1.64
11	3	Lower Wekiva	Vallisneria	Redbreast sunfish	60	3.90
11	3	Lower Wekiva	Vallisneria	Seminole killifish	47	1.02
11	3	Lower Wekiva	Vallisneria	Seminole killifish	47	0.95
11	3	Lower Wekiva	Vallisneria	Seminole killifish	49	1.26
11	3	Lower Wekiva	Vallisneria	Seminole killifish	53	1.73
11	3	Lower Wekiva	Vallisneria	Seminole killifish	58	2.04
11	3	Lower Wekiva	Vallisneria	Seminole killifish	63	2.59
11	3	Lower Wekiva	Vallisneria	Seminole killifish	64	2.88
11	3	Lower Wekiva	Vallisneria	Seminole killifish	66	3.24
11	3	Lower Wekiva	Vallisneria	Seminole killifish	72	4.01
11	3	Lower Wekiva	Vallisneria	Seminole killifish	73	4.08
11	3	Lower Wekiva	Vallisneria	Seminole killifish	78	4.63
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	23	0.31
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.33
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.36
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	27	0.46
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	29	0.58
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	29	0.55
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	30	0.65
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	30	0.60
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	30	0.64
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	31	0.76
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	34	0.88
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	36	1.05

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.20
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.21
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.42
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.32
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	41	1.66
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	42	1.54
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	42	1.66
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	45	2.06
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	45	1.90
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	61	4.81
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	75	9.87
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	80	10.00
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	81	10.00
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	87	12.00
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	91	16.00
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	92	15.00
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	93	17.00
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	93	16.00
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	96	18.00
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	97	18.00
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	100	19.00
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	104	23.00
11	3	Lower Wekiva	Vallisneria	Spotted sunfish	113	28.00
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.06
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.11
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.12
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.17
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.20
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.15
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.27
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.18
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.25
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.34
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.32
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.32
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.33
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.35
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.38
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.36
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.39
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.42
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.45
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.56
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.57
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.55
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.87
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	42	0.99
11	4	Lower Wekiva	Vallisneria	Bluefin killifish	42	0.96
11	4	Lower Wekiva	Vallisneria	Coastal shiner	45	0.90
11	4	Lower Wekiva	Vallisneria	Coastal shiner	55	1.63
11	4	Lower Wekiva	Vallisneria	Coastal shiner	58	1.90
11	4	Lower Wekiva	Vallisneria	Coastal shiner	62	2.36
11	4	Lower Wekiva	Vallisneria	Lake chubsucker	87	9.00
11	4	Lower Wekiva	Vallisneria	Lake chubsucker	97	12.37

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
11	4	Lower Wekiva	Vallisneria	Lake chubsucker	127	26.00
11	4	Lower Wekiva	Vallisneria	Mosquitofish	21	0.13
11	4	Lower Wekiva	Vallisneria	Pugnose minnow	38	0.48
11	4	Lower Wekiva	Vallisneria	Pugnose minnow	39	0.45
11	4	Lower Wekiva	Vallisneria	Pugnose minnow	40	0.49
11	4	Lower Wekiva	Vallisneria	Pugnose minnow	41	0.60
11	4	Lower Wekiva	Vallisneria	Pugnose minnow	41	0.59
11	4	Lower Wekiva	Vallisneria	Pugnose minnow	41	0.67
11	4	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.63
11	4	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.73
11	4	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.78
11	4	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.81
11	4	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.79
11	4	Lower Wekiva	Vallisneria	Pugnose minnow	46	0.84
11	4	Lower Wekiva	Vallisneria	Pugnose minnow	47	0.90
11	4	Lower Wekiva	Vallisneria	Pugnose minnow	55	1.11
11	4	Lower Wekiva	Vallisneria	Redbreast sunfish	43	1.39
11	4	Lower Wekiva	Vallisneria	Redbreast sunfish	53	2.26
11	4	Lower Wekiva	Vallisneria	Redbreast sunfish	60	3.76
11	4	Lower Wekiva	Vallisneria	Redbreast sunfish	62	3.97
11	4	Lower Wekiva	Vallisneria	Seminole killifish	45	0.86
11	4	Lower Wekiva	Vallisneria	Seminole killifish	46	0.84
11	4	Lower Wekiva	Vallisneria	Seminole killifish	49	1.13
11	4	Lower Wekiva	Vallisneria	Seminole killifish	49	1.09
11	4	Lower Wekiva	Vallisneria	Seminole killifish	50	1.17
11	4	Lower Wekiva	Vallisneria	Seminole killifish	51	1.38
11	4	Lower Wekiva	Vallisneria	Seminole killifish	53	1.66
11	4	Lower Wekiva	Vallisneria	Seminole killifish	54	1.55
11	4	Lower Wekiva	Vallisneria	Seminole killifish	55	1.54
11	4	Lower Wekiva	Vallisneria	Seminole killifish	56	1.77
11	4	Lower Wekiva	Vallisneria	Seminole killifish	67	3.40
11	4	Lower Wekiva	Vallisneria	Seminole killifish	76	4.77
11	4	Lower Wekiva	Vallisneria	Seminole killifish	92	7.91
11	4	Lower Wekiva	Vallisneria	Seminole killifish	108	11.00
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.36
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	35	0.74
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.16
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.19
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.27
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.37
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	42	1.53
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	46	2.20
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	65	6.18
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	96	18.74
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	98	18.00
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	107	24.00
11	4	Lower Wekiva	Vallisneria	Spotted sunfish	120	35.00
11	5	Lower Wekiva	Vallisneria	Bluefin killifish	19	0.09
11	5	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.11
11	5	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.23
11	5	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.40
11	5	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.52
11	5	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.63
11	5	Lower Wekiva	Vallisneria	Bluefin killifish	40	0.79

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
11	5	Lower Wekiva	Vallisneria	Coastal shiner	54	1.41
11	5	Lower Wekiva	Vallisneria	Lake chubsucker	83	7.70
11	5	Lower Wekiva	Vallisneria	Lake chubsucker	95	10.83
11	5	Lower Wekiva	Vallisneria	Pirate perch	65	4.07
11	5	Lower Wekiva	Vallisneria	Pugnose minnow	39	0.53
11	5	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.66
11	5	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.75
11	5	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.78
11	5	Lower Wekiva	Vallisneria	Redbreast sunfish	52	2.39
11	5	Lower Wekiva	Vallisneria	Seminole killifish	51	1.33
11	5	Lower Wekiva	Vallisneria	Seminole killifish	53	1.53
11	5	Lower Wekiva	Vallisneria	Seminole killifish	54	1.43
11	5	Lower Wekiva	Vallisneria	Seminole killifish	56	1.66
11	5	Lower Wekiva	Vallisneria	Seminole killifish	60	2.25
11	5	Lower Wekiva	Vallisneria	Seminole killifish	62	2.36
11	5	Lower Wekiva	Vallisneria	Seminole killifish	63	2.87
11	5	Lower Wekiva	Vallisneria	Seminole killifish	66	2.98
11	5	Lower Wekiva	Vallisneria	Seminole killifish	67	2.92
11	5	Lower Wekiva	Vallisneria	Seminole killifish	71	3.55
11	5	Lower Wekiva	Vallisneria	Seminole killifish	71	3.72
11	5	Lower Wekiva	Vallisneria	Seminole killifish	76	4.27
11	5	Lower Wekiva	Vallisneria	Seminole killifish	112	14.58
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	26	0.34
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	36	1.14
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.08
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.12
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	45	2.05
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	58	4.40
11	5	Lower Wekiva	Vallisneria	Spotted sunfish	93	17.26
11	5	Lower Wekiva	Vallisneria	White catfish	74	4.54
12	1	Lower Wekiva	Bare Bottom	No Fish in Removal	.	.
12	2	Lower Wekiva	Bare Bottom	No Fish in Removal	.	.
13	1	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.23
13	1	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.30
13	1	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.46
13	1	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.42
13	1	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.42
13	1	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.47
13	1	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.54
13	1	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.46
13	1	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.66
13	1	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.66
13	1	Lower Wekiva	Vallisneria	Bluefin killifish	37	0.66
13	1	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.84
13	1	Lower Wekiva	Vallisneria	Bluegill	67	5.83
13	1	Lower Wekiva	Vallisneria	Coastal shiner	16	0.06
13	1	Lower Wekiva	Vallisneria	Coastal shiner	19	0.09
13	1	Lower Wekiva	Vallisneria	Coastal shiner	26	0.19
13	1	Lower Wekiva	Vallisneria	Coastal shiner	31	0.33
13	1	Lower Wekiva	Vallisneria	Coastal shiner	32	0.33
13	1	Lower Wekiva	Vallisneria	Coastal shiner	33	0.37
13	1	Lower Wekiva	Vallisneria	Coastal shiner	37	0.54
13	1	Lower Wekiva	Vallisneria	Coastal shiner	43	0.95
13	1	Lower Wekiva	Vallisneria	Coastal shiner	44	0.97

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
13	1	Lower Wekiva	Vallisneria	Coastal shiner	44	0.88
13	1	Lower Wekiva	Vallisneria	Coastal shiner	45	1.03
13	1	Lower Wekiva	Vallisneria	Coastal shiner	48	1.17
13	1	Lower Wekiva	Vallisneria	Coastal shiner	51	1.40
13	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.12
13	1	Lower Wekiva	Vallisneria	Lake chubsucker	107	13.00
13	1	Lower Wekiva	Vallisneria	Lake chubsucker	110	17.00
13	1	Lower Wekiva	Vallisneria	Largemouth bass	129	23.00
13	1	Lower Wekiva	Vallisneria	Largemouth bass	220	122.00
13	1	Lower Wekiva	Vallisneria	Pirate perch	54	2.44
13	1	Lower Wekiva	Vallisneria	Pirate perch	62	3.68
13	1	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.94
13	1	Lower Wekiva	Vallisneria	Pugnose minnow	48	1.12
13	1	Lower Wekiva	Vallisneria	Pugnose minnow	50	1.23
13	1	Lower Wekiva	Vallisneria	Redbreast sunfish	25	0.34
13	1	Lower Wekiva	Vallisneria	Redbreast sunfish	44	1.53
13	1	Lower Wekiva	Vallisneria	Redbreast sunfish	49	2.02
13	1	Lower Wekiva	Vallisneria	Redbreast sunfish	53	2.61
13	1	Lower Wekiva	Vallisneria	Redbreast sunfish	76	6.00
13	1	Lower Wekiva	Vallisneria	Redbreast sunfish	96	11.00
13	1	Lower Wekiva	Vallisneria	Redear sunfish	118	29.00
13	1	Lower Wekiva	Vallisneria	Redear sunfish	128	32.00
13	1	Lower Wekiva	Vallisneria	Sailfin molly	35	0.80
13	1	Lower Wekiva	Vallisneria	Sailfin shiner	26	0.17
13	1	Lower Wekiva	Vallisneria	Seminole killifish	42	0.82
13	1	Lower Wekiva	Vallisneria	Seminole killifish	44	0.95
13	1	Lower Wekiva	Vallisneria	Seminole killifish	49	1.35
13	1	Lower Wekiva	Vallisneria	Seminole killifish	50	1.29
13	1	Lower Wekiva	Vallisneria	Seminole killifish	53	1.57
13	1	Lower Wekiva	Vallisneria	Seminole killifish	56	1.97
13	1	Lower Wekiva	Vallisneria	Seminole killifish	57	1.83
13	1	Lower Wekiva	Vallisneria	Seminole killifish	63	2.65
13	1	Lower Wekiva	Vallisneria	Seminole killifish	63	2.38
13	1	Lower Wekiva	Vallisneria	Seminole killifish	64	2.67
13	1	Lower Wekiva	Vallisneria	Seminole killifish	64	2.65
13	1	Lower Wekiva	Vallisneria	Seminole killifish	64	2.83
13	1	Lower Wekiva	Vallisneria	Seminole killifish	65	3.12
13	1	Lower Wekiva	Vallisneria	Seminole killifish	69	3.36
13	1	Lower Wekiva	Vallisneria	Seminole killifish	76	4.67
13	1	Lower Wekiva	Vallisneria	Seminole killifish	76	5.16
13	1	Lower Wekiva	Vallisneria	Seminole killifish	87	7.10
13	1	Lower Wekiva	Vallisneria	Seminole killifish	89	7.83
13	1	Lower Wekiva	Vallisneria	Seminole killifish	89	7.61
13	1	Lower Wekiva	Vallisneria	Seminole killifish	92	8.97
13	1	Lower Wekiva	Vallisneria	Seminole killifish	97	10.41
13	1	Lower Wekiva	Vallisneria	Seminole killifish	97	9.90
13	1	Lower Wekiva	Vallisneria	Seminole killifish	101	11.01
13	1	Lower Wekiva	Vallisneria	Seminole killifish	110	14.34
13	1	Lower Wekiva	Vallisneria	Seminole killifish	110	16.01
13	1	Lower Wekiva	Vallisneria	Seminole killifish	113	15.72
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	28	0.52
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	28	0.54
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	34	0.98
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	36	1.10

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.14
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.52
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	44	2.03
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	47	2.34
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	51	2.89
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	62	5.17
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	63	5.49
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	71	6.91
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	74	7.00
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	74	8.31
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	78	10.24
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	81	10.89
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	84	12.39
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	86	11.00
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	89	13.00
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	98	18.00
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	103	20.00
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	112	28.00
13	1	Lower Wekiva	Vallisneria	Spotted sunfish	113	29.00
13	2	Lower Wekiva	Vallisneria	Blackbanded darter	40	0.61
13	2	Lower Wekiva	Vallisneria	Blackbanded darter	55	1.70
13	2	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.30
13	2	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.38
13	2	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.40
13	2	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.46
13	2	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.52
13	2	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.52
13	2	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.76
13	2	Lower Wekiva	Vallisneria	Coastal shiner	25	0.16
13	2	Lower Wekiva	Vallisneria	Coastal shiner	32	0.38
13	2	Lower Wekiva	Vallisneria	Coastal shiner	32	0.33
13	2	Lower Wekiva	Vallisneria	Coastal shiner	33	0.31
13	2	Lower Wekiva	Vallisneria	Coastal shiner	34	0.38
13	2	Lower Wekiva	Vallisneria	Coastal shiner	37	0.47
13	2	Lower Wekiva	Vallisneria	Coastal shiner	38	0.58
13	2	Lower Wekiva	Vallisneria	Coastal shiner	39	0.68
13	2	Lower Wekiva	Vallisneria	Coastal shiner	43	0.90
13	2	Lower Wekiva	Vallisneria	Coastal shiner	43	0.84
13	2	Lower Wekiva	Vallisneria	Coastal shiner	44	0.89
13	2	Lower Wekiva	Vallisneria	Coastal shiner	46	0.98
13	2	Lower Wekiva	Vallisneria	Coastal shiner	48	1.09
13	2	Lower Wekiva	Vallisneria	Coastal shiner	51	1.27
13	2	Lower Wekiva	Vallisneria	Coastal shiner	51	1.42
13	2	Lower Wekiva	Vallisneria	Lake chubsucker	112	18.81
13	2	Lower Wekiva	Vallisneria	Largemouth bass	114	19.07
13	2	Lower Wekiva	Vallisneria	Pirate perch	53	2.57
13	2	Lower Wekiva	Vallisneria	Pugnose minnow	44	0.78
13	2	Lower Wekiva	Vallisneria	Redbreast sunfish	31	0.56
13	2	Lower Wekiva	Vallisneria	Redbreast sunfish	50	2.28
13	2	Lower Wekiva	Vallisneria	Redbreast sunfish	53	2.70
13	2	Lower Wekiva	Vallisneria	Redbreast sunfish	62	4.31
13	2	Lower Wekiva	Vallisneria	Sailfin molly	21	0.18
13	2	Lower Wekiva	Vallisneria	Sailfin shiner	22	0.10
13	2	Lower Wekiva	Vallisneria	Sailfin shiner	26	0.13

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
13	2	Lower Wekiva	Vallisneria	Sailfin shiner	38	0.55
13	2	Lower Wekiva	Vallisneria	Seminole killifish	41	0.72
13	2	Lower Wekiva	Vallisneria	Seminole killifish	43	0.85
13	2	Lower Wekiva	Vallisneria	Seminole killifish	43	0.84
13	2	Lower Wekiva	Vallisneria	Seminole killifish	44	0.98
13	2	Lower Wekiva	Vallisneria	Seminole killifish	46	1.10
13	2	Lower Wekiva	Vallisneria	Seminole killifish	48	1.15
13	2	Lower Wekiva	Vallisneria	Seminole killifish	51	1.53
13	2	Lower Wekiva	Vallisneria	Seminole killifish	52	1.70
13	2	Lower Wekiva	Vallisneria	Seminole killifish	52	1.48
13	2	Lower Wekiva	Vallisneria	Seminole killifish	55	1.84
13	2	Lower Wekiva	Vallisneria	Seminole killifish	61	2.52
13	2	Lower Wekiva	Vallisneria	Seminole killifish	61	2.50
13	2	Lower Wekiva	Vallisneria	Seminole killifish	63	2.59
13	2	Lower Wekiva	Vallisneria	Seminole killifish	71	3.72
13	2	Lower Wekiva	Vallisneria	Seminole killifish	81	5.91
13	2	Lower Wekiva	Vallisneria	Seminole killifish	88	7.56
13	2	Lower Wekiva	Vallisneria	Seminole killifish	95	10.35
13	2	Lower Wekiva	Vallisneria	Seminole killifish	96	10.56
13	2	Lower Wekiva	Vallisneria	Seminole killifish	98	10.38
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.41
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.41
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	33	0.83
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	33	0.86
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.19
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.21
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	37	1.23
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.28
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	39	1.48
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	41	1.65
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	44	1.92
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	50	3.17
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	59	4.69
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	65	6.17
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	74	9.41
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	76	8.77
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	78	10.16
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	81	12.96
13	2	Lower Wekiva	Vallisneria	Spotted sunfish	81	12.43
13	3	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.35
13	3	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.35
13	3	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.56
13	3	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.76
13	3	Lower Wekiva	Vallisneria	Bluefin killifish	38	0.75
13	3	Lower Wekiva	Vallisneria	Bluefin killifish	42	1.19
13	3	Lower Wekiva	Vallisneria	Coastal shiner	28	0.25
13	3	Lower Wekiva	Vallisneria	Coastal shiner	33	0.36
13	3	Lower Wekiva	Vallisneria	Coastal shiner	33	0.47
13	3	Lower Wekiva	Vallisneria	Coastal shiner	36	0.40
13	3	Lower Wekiva	Vallisneria	Coastal shiner	39	0.67
13	3	Lower Wekiva	Vallisneria	Coastal shiner	40	0.67
13	3	Lower Wekiva	Vallisneria	Coastal shiner	42	0.67
13	3	Lower Wekiva	Vallisneria	Coastal shiner	45	0.99
13	3	Lower Wekiva	Vallisneria	Coastal shiner	46	0.90

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
13	3	Lower Wekiva	Vallisneria	Coastal shiner	46	1.06
13	3	Lower Wekiva	Vallisneria	Coastal shiner	47	0.98
13	3	Lower Wekiva	Vallisneria	Coastal shiner	49	1.13
13	3	Lower Wekiva	Vallisneria	Ironcolor shiner	43	0.78
13	3	Lower Wekiva	Vallisneria	Ironcolor shiner	47	1.00
13	3	Lower Wekiva	Vallisneria	Lake chubsucker	78	5.45
13	3	Lower Wekiva	Vallisneria	Lake chubsucker	212	139.54
13	3	Lower Wekiva	Vallisneria	Largemouth bass	129	28.50
13	3	Lower Wekiva	Vallisneria	Largemouth bass	150	44.47
13	3	Lower Wekiva	Vallisneria	Pirate perch	64	4.15
13	3	Lower Wekiva	Vallisneria	Redbreast sunfish	26	0.44
13	3	Lower Wekiva	Vallisneria	Redbreast sunfish	30	0.63
13	3	Lower Wekiva	Vallisneria	Redbreast sunfish	56	2.96
13	3	Lower Wekiva	Vallisneria	Redbreast sunfish	61	4.35
13	3	Lower Wekiva	Vallisneria	Seminole killifish	36	0.54
13	3	Lower Wekiva	Vallisneria	Seminole killifish	45	0.97
13	3	Lower Wekiva	Vallisneria	Seminole killifish	45	1.00
13	3	Lower Wekiva	Vallisneria	Seminole killifish	46	1.11
13	3	Lower Wekiva	Vallisneria	Seminole killifish	47	1.05
13	3	Lower Wekiva	Vallisneria	Seminole killifish	51	1.18
13	3	Lower Wekiva	Vallisneria	Seminole killifish	53	1.55
13	3	Lower Wekiva	Vallisneria	Seminole killifish	61	2.53
13	3	Lower Wekiva	Vallisneria	Seminole killifish	63	2.71
13	3	Lower Wekiva	Vallisneria	Seminole killifish	73	4.02
13	3	Lower Wekiva	Vallisneria	Seminole killifish	87	7.08
13	3	Lower Wekiva	Vallisneria	Seminole killifish	90	7.17
13	3	Lower Wekiva	Vallisneria	Spotted sunfish	27	0.41
13	3	Lower Wekiva	Vallisneria	Spotted sunfish	30	0.66
13	3	Lower Wekiva	Vallisneria	Spotted sunfish	32	0.64
13	3	Lower Wekiva	Vallisneria	Spotted sunfish	34	0.99
13	3	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.19
13	3	Lower Wekiva	Vallisneria	Spotted sunfish	42	1.81
13	3	Lower Wekiva	Vallisneria	Spotted sunfish	46	2.26
13	3	Lower Wekiva	Vallisneria	Spotted sunfish	87	14.27
14	1	Lower Wekiva	Vallisneria	Brown bullhead	200	106.00
14	1	Lower Wekiva	Vallisneria	Brown bullhead	254	236.00
14	1	Lower Wekiva	Vallisneria	Largemouth bass	120	19.00
14	1	Lower Wekiva	Vallisneria	Largemouth bass	127	22.00
14	1	Lower Wekiva	Vallisneria	Redbreast sunfish	84	9.89
14	1	Lower Wekiva	Vallisneria	Redbreast sunfish	110	19.00
14	1	Lower Wekiva	Vallisneria	Redbreast sunfish	117	22.00
14	1	Lower Wekiva	Vallisneria	Redbreast sunfish	132	33.00
14	1	Lower Wekiva	Vallisneria	Sailfin molly	56	3.06
14	1	Lower Wekiva	Vallisneria	Seminole killifish	73	4.33
14	1	Lower Wekiva	Vallisneria	Seminole killifish	106	10.00
14	1	Lower Wekiva	Vallisneria	Seminole killifish	109	13.00
14	1	Lower Wekiva	Vallisneria	Seminole killifish	110	13.00
14	1	Lower Wekiva	Vallisneria	Spotted sunfish	40	1.59
14	1	Lower Wekiva	Vallisneria	Spotted sunfish	74	9.89
14	1	Lower Wekiva	Vallisneria	Spotted sunfish	81	13.17
14	1	Lower Wekiva	Vallisneria	Spotted sunfish	100	20.00
14	1	Lower Wekiva	Vallisneria	Spotted sunfish	105	23.00
14	1	Lower Wekiva	Vallisneria	Spotted sunfish	112	29.00
14	1	Lower Wekiva	Vallisneria	Spotted sunfish	112	27.00

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
14	1	Lower Wekiva	Vallisneria	Spotted sunfish	113	29.00
14	1	Lower Wekiva	Vallisneria	Spotted sunfish	115	30.00
14	1	Lower Wekiva	Vallisneria	Spotted sunfish	142	58.00
14	2	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.29
14	2	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.28
14	2	Lower Wekiva	Vallisneria	Coastal shiner	45	0.93
14	2	Lower Wekiva	Vallisneria	Coastal shiner	46	1.11
14	2	Lower Wekiva	Vallisneria	Largemouth bass	157	48.00
14	2	Lower Wekiva	Vallisneria	Mosquitofish	32	0.42
14	2	Lower Wekiva	Vallisneria	Redbreast sunfish	71	6.28
14	2	Lower Wekiva	Vallisneria	Redbreast sunfish	112	20.00
14	2	Lower Wekiva	Vallisneria	Seminole killifish	48	1.20
14	2	Lower Wekiva	Vallisneria	Seminole killifish	75	5.15
14	2	Lower Wekiva	Vallisneria	Seminole killifish	81	6.40
14	2	Lower Wekiva	Vallisneria	Seminole killifish	90	7.63
14	2	Lower Wekiva	Vallisneria	Seminole killifish	132	21.00
14	2	Lower Wekiva	Vallisneria	Spotted sunfish	28	0.49
14	2	Lower Wekiva	Vallisneria	Spotted sunfish	41	1.44
14	2	Lower Wekiva	Vallisneria	Spotted sunfish	46	2.34
14	2	Lower Wekiva	Vallisneria	Spotted sunfish	137	56.00
14	3	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.24
14	3	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.29
14	3	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.30
14	3	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.33
14	3	Lower Wekiva	Vallisneria	Coastal shiner	43	0.82
14	3	Lower Wekiva	Vallisneria	Coastal shiner	46	1.12
14	3	Lower Wekiva	Vallisneria	Lake chubsucker	243	227.00
14	3	Lower Wekiva	Vallisneria	Largemouth bass	125	25.54
14	3	Lower Wekiva	Vallisneria	Mosquitofish	19	0.13
14	3	Lower Wekiva	Vallisneria	Redbreast sunfish	49	2.38
14	3	Lower Wekiva	Vallisneria	Redbreast sunfish	62	4.36
14	3	Lower Wekiva	Vallisneria	Redbreast sunfish	76	7.71
14	3	Lower Wekiva	Vallisneria	Seminole killifish	44	1.08
14	3	Lower Wekiva	Vallisneria	Seminole killifish	75	5.03
14	3	Lower Wekiva	Vallisneria	Seminole killifish	108	14.76
14	3	Lower Wekiva	Vallisneria	Seminole killifish	123	21.17
14	3	Lower Wekiva	Vallisneria	Spotted sunfish	34	1.03
14	3	Lower Wekiva	Vallisneria	Spotted sunfish	97	22.88
14	3	Lower Wekiva	Vallisneria	Spotted sunfish	103	26.34
14	3	Lower Wekiva	Vallisneria	Spotted sunfish	112	31.42
14	3	Lower Wekiva	Vallisneria	Spotted sunfish	129	51.94
14	4	Lower Wekiva	Vallisneria	Mosquitofish	29	0.47
14	4	Lower Wekiva	Vallisneria	Mosquitofish	32	0.33
14	4	Lower Wekiva	Vallisneria	Redbreast sunfish	64	5.13
14	4	Lower Wekiva	Vallisneria	Redbreast sunfish	66	5.72
14	4	Lower Wekiva	Vallisneria	Redbreast sunfish	67	5.54
14	4	Lower Wekiva	Vallisneria	Redbreast sunfish	76	8.36
14	4	Lower Wekiva	Vallisneria	Redbreast sunfish	81	9.48
14	4	Lower Wekiva	Vallisneria	Redear sunfish	104	22.51
14	4	Lower Wekiva	Vallisneria	Sailfin molly	31	0.57
14	4	Lower Wekiva	Vallisneria	Seminole killifish	86	8.59
14	4	Lower Wekiva	Vallisneria	Seminole killifish	88	7.96
14	4	Lower Wekiva	Vallisneria	Seminole killifish	97	10.81
14	4	Lower Wekiva	Vallisneria	Seminole killifish	99	12.21

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
14	4	Lower Wekiva	Vallisneria	Seminole killifish	100	11.25
14	4	Lower Wekiva	Vallisneria	Seminole killifish	103	12.34
14	4	Lower Wekiva	Vallisneria	Seminole killifish	115	17.39
14	4	Lower Wekiva	Vallisneria	Spotted sunfish	43	2.12
14	4	Lower Wekiva	Vallisneria	Spotted sunfish	100	22.70
14	4	Lower Wekiva	Vallisneria	Spotted sunfish	101	23.53
14	4	Lower Wekiva	Vallisneria	Spotted sunfish	114	34.62
14	4	Lower Wekiva	Vallisneria	Spotted sunfish	114	36.61
14	4	Lower Wekiva	Vallisneria	Spotted sunfish	114	33.53
14	4	Lower Wekiva	Vallisneria	Spotted sunfish	122	45.54
14	4	Lower Wekiva	Vallisneria	Spotted sunfish	124	45.28
14	4	Lower Wekiva	Vallisneria	Spotted sunfish	128	50.46
14	5	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.13
14	5	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.27
14	5	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.37
14	5	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.44
14	5	Lower Wekiva	Vallisneria	Bluefin killifish	33	0.52
14	5	Lower Wekiva	Vallisneria	Coastal shiner	55	1.83
14	5	Lower Wekiva	Vallisneria	Pugnose minnow	46	0.97
14	5	Lower Wekiva	Vallisneria	Redbreast sunfish	66	5.30
14	5	Lower Wekiva	Vallisneria	Redbreast sunfish	144	42.00
14	5	Lower Wekiva	Vallisneria	Redear sunfish	158	71.00
14	5	Lower Wekiva	Vallisneria	Seminole killifish	71	4.66
14	5	Lower Wekiva	Vallisneria	Spotted sunfish	104	22.00
14	5	Lower Wekiva	Vallisneria	Spotted sunfish	117	30.00
14	5	Lower Wekiva	Vallisneria	Spotted sunfish	125	39.00
14	5	Lower Wekiva	Vallisneria	Spotted sunfish	130	45.00
14	6	Lower Wekiva	Vallisneria	Bluefin killifish	22	0.16
14	6	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.24
14	6	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.22
14	6	Lower Wekiva	Vallisneria	Bluegill	93	12.80
14	6	Lower Wekiva	Vallisneria	Coastal shiner	33	0.35
14	6	Lower Wekiva	Vallisneria	Mosquitofish	26	0.28
14	6	Lower Wekiva	Vallisneria	Redbreast sunfish	48	2.10
14	6	Lower Wekiva	Vallisneria	Redbreast sunfish	77	8.19
14	6	Lower Wekiva	Vallisneria	Sailfin molly	18	0.14
14	6	Lower Wekiva	Vallisneria	Seminole killifish	47	1.20
14	6	Lower Wekiva	Vallisneria	Seminole killifish	55	1.83
14	6	Lower Wekiva	Vallisneria	Seminole killifish	80	6.81
14	6	Lower Wekiva	Vallisneria	Seminole killifish	83	6.91
14	6	Lower Wekiva	Vallisneria	Spotted sunfish	43	1.96
14	6	Lower Wekiva	Vallisneria	Spotted sunfish	94	20.14
14	6	Lower Wekiva	Vallisneria	Spotted sunfish	94	21.53
14	6	Lower Wekiva	Vallisneria	Spotted sunfish	116	40.03
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.07
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	17	0.08
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.10
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.16
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.21
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.22
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.24
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.30
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.24

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.28
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.35
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.36
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.37
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.44
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.51
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.49
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.65
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.66
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	39	0.89
15	1	Lower Wekiva	Vallisneria	Bluefin killifish	41	1.01
15	1	Lower Wekiva	Vallisneria	Coastal shiner	16	0.07
15	1	Lower Wekiva	Vallisneria	Coastal shiner	18	0.09
15	1	Lower Wekiva	Vallisneria	Coastal shiner	19	0.09
15	1	Lower Wekiva	Vallisneria	Coastal shiner	19	0.12
15	1	Lower Wekiva	Vallisneria	Coastal shiner	20	0.09
15	1	Lower Wekiva	Vallisneria	Coastal shiner	21	0.11
15	1	Lower Wekiva	Vallisneria	Coastal shiner	21	0.13
15	1	Lower Wekiva	Vallisneria	Coastal shiner	22	0.13
15	1	Lower Wekiva	Vallisneria	Coastal shiner	22	0.18
15	1	Lower Wekiva	Vallisneria	Coastal shiner	22	0.12
15	1	Lower Wekiva	Vallisneria	Coastal shiner	22	0.12
15	1	Lower Wekiva	Vallisneria	Coastal shiner	23	0.16
15	1	Lower Wekiva	Vallisneria	Coastal shiner	23	0.14
15	1	Lower Wekiva	Vallisneria	Coastal shiner	23	0.15
15	1	Lower Wekiva	Vallisneria	Coastal shiner	24	0.18
15	1	Lower Wekiva	Vallisneria	Coastal shiner	24	0.18
15	1	Lower Wekiva	Vallisneria	Coastal shiner	24	0.16
15	1	Lower Wekiva	Vallisneria	Coastal shiner	24	0.16
15	1	Lower Wekiva	Vallisneria	Coastal shiner	24	0.15
15	1	Lower Wekiva	Vallisneria	Coastal shiner	24	0.19
15	1	Lower Wekiva	Vallisneria	Coastal shiner	26	0.22
15	1	Lower Wekiva	Vallisneria	Coastal shiner	26	0.22
15	1	Lower Wekiva	Vallisneria	Coastal shiner	26	0.19
15	1	Lower Wekiva	Vallisneria	Coastal shiner	27	0.22
15	1	Lower Wekiva	Vallisneria	Coastal shiner	28	0.24
15	1	Lower Wekiva	Vallisneria	Coastal shiner	28	0.24
15	1	Lower Wekiva	Vallisneria	Coastal shiner	28	0.29
15	1	Lower Wekiva	Vallisneria	Coastal shiner	29	0.27
15	1	Lower Wekiva	Vallisneria	Coastal shiner	29	0.27
15	1	Lower Wekiva	Vallisneria	Coastal shiner	29	0.24
15	1	Lower Wekiva	Vallisneria	Coastal shiner	30	0.29
15	1	Lower Wekiva	Vallisneria	Coastal shiner	30	0.29
15	1	Lower Wekiva	Vallisneria	Coastal shiner	30	0.32
15	1	Lower Wekiva	Vallisneria	Coastal shiner	30	0.31
15	1	Lower Wekiva	Vallisneria	Coastal shiner	32	0.39
15	1	Lower Wekiva	Vallisneria	Coastal shiner	32	0.38
15	1	Lower Wekiva	Vallisneria	Coastal shiner	32	0.38
15	1	Lower Wekiva	Vallisneria	Coastal shiner	32	0.39
15	1	Lower Wekiva	Vallisneria	Coastal shiner	33	0.45
15	1	Lower Wekiva	Vallisneria	Coastal shiner	34	0.41
15	1	Lower Wekiva	Vallisneria	Coastal shiner	35	0.46
15	1	Lower Wekiva	Vallisneria	Coastal shiner	35	0.50
15	1	Lower Wekiva	Vallisneria	Coastal shiner	35	0.49

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
15	1	Lower Wekiva	Vallisneria	Coastal shiner	36	0.48
15	1	Lower Wekiva	Vallisneria	Coastal shiner	39	0.61
15	1	Lower Wekiva	Vallisneria	Coastal shiner	40	0.71
15	1	Lower Wekiva	Vallisneria	Coastal shiner	42	0.80
15	1	Lower Wekiva	Vallisneria	Coastal shiner	43	0.84
15	1	Lower Wekiva	Vallisneria	Coastal shiner	44	1.04
15	1	Lower Wekiva	Vallisneria	Coastal shiner	44	0.88
15	1	Lower Wekiva	Vallisneria	Coastal shiner	45	0.99
15	1	Lower Wekiva	Vallisneria	Coastal shiner	46	0.98
15	1	Lower Wekiva	Vallisneria	Coastal shiner	47	1.26
15	1	Lower Wekiva	Vallisneria	Coastal shiner	47	1.21
15	1	Lower Wekiva	Vallisneria	Coastal shiner	48	1.11
15	1	Lower Wekiva	Vallisneria	Coastal shiner	48	1.18
15	1	Lower Wekiva	Vallisneria	Coastal shiner	49	1.39
15	1	Lower Wekiva	Vallisneria	Coastal shiner	49	1.41
15	1	Lower Wekiva	Vallisneria	Coastal shiner	49	1.25
15	1	Lower Wekiva	Vallisneria	Coastal shiner	49	1.29
15	1	Lower Wekiva	Vallisneria	Coastal shiner	50	1.32
15	1	Lower Wekiva	Vallisneria	Coastal shiner	51	1.51
15	1	Lower Wekiva	Vallisneria	Coastal shiner	52	1.28
15	1	Lower Wekiva	Vallisneria	Coastal shiner	53	1.70
15	1	Lower Wekiva	Vallisneria	Coastal shiner	54	1.68
15	1	Lower Wekiva	Vallisneria	Coastal shiner	55	1.80
15	1	Lower Wekiva	Vallisneria	Coastal shiner	56	1.98
15	1	Lower Wekiva	Vallisneria	Coastal shiner	57	1.89
15	1	Lower Wekiva	Vallisneria	Coastal shiner	57	1.86
15	1	Lower Wekiva	Vallisneria	Coastal shiner	57	1.89
15	1	Lower Wekiva	Vallisneria	Lake chubsucker	184	71.00
15	1	Lower Wekiva	Vallisneria	Lake chubsucker	255	236.00
15	1	Lower Wekiva	Vallisneria	Lake chubsucker	260	233.00
15	1	Lower Wekiva	Vallisneria	Lake chubsucker	283	326.00
15	1	Lower Wekiva	Vallisneria	Lake chubsucker	318	455.00
15	1	Lower Wekiva	Vallisneria	Pugnose minnow	24	0.21
15	1	Lower Wekiva	Vallisneria	Pugnose minnow	30	0.30
15	1	Lower Wekiva	Vallisneria	Pugnose minnow	42	0.86
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	16	0.11
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	21	0.28
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	32	0.72
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	36	0.99
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	55	3.15
15	1	Lower Wekiva	Vallisneria	Redbreast sunfish	106	18.00
15	1	Lower Wekiva	Vallisneria	Redear sunfish	145	47.00
15	1	Lower Wekiva	Vallisneria	Sailfin shiner	29	0.31
15	1	Lower Wekiva	Vallisneria	Seminole killifish	30	0.35
15	1	Lower Wekiva	Vallisneria	Seminole killifish	38	0.69
15	1	Lower Wekiva	Vallisneria	Seminole killifish	38	0.67
15	1	Lower Wekiva	Vallisneria	Seminole killifish	41	0.80
15	1	Lower Wekiva	Vallisneria	Seminole killifish	45	1.08
15	1	Lower Wekiva	Vallisneria	Seminole killifish	52	1.59
15	1	Lower Wekiva	Vallisneria	Seminole killifish	53	1.84
15	1	Lower Wekiva	Vallisneria	Seminole killifish	58	2.32
15	1	Lower Wekiva	Vallisneria	Seminole killifish	70	4.08
15	1	Lower Wekiva	Vallisneria	Seminole killifish	75	4.51
15	1	Lower Wekiva	Vallisneria	Seminole killifish	95	9.70

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
15	1	Lower Wekiva	Vallisneria	Seminole killifish	95	8.73
15	1	Lower Wekiva	Vallisneria	Seminole killifish	106	12.52
15	1	Lower Wekiva	Vallisneria	Seminole killifish	119	19.53
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.40
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	25	0.42
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	28	0.56
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	33	0.98
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	38	1.42
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	59	4.88
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	82	12.57
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	87	15.12
15	1	Lower Wekiva	Vallisneria	Spotted sunfish	129	45.00
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	20	0.12
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.12
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.15
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.22
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	24	0.21
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.27
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.35
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	28	0.35
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.41
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	29	0.39
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.46
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.46
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	32	0.56
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.58
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.71
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	35	0.64
15	2	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.72
15	2	Lower Wekiva	Vallisneria	Coastal shiner	.	0.19
15	2	Lower Wekiva	Vallisneria	Coastal shiner	17	0.06
15	2	Lower Wekiva	Vallisneria	Coastal shiner	18	0.09
15	2	Lower Wekiva	Vallisneria	Coastal shiner	18	0.08
15	2	Lower Wekiva	Vallisneria	Coastal shiner	19	0.08
15	2	Lower Wekiva	Vallisneria	Coastal shiner	19	0.09
15	2	Lower Wekiva	Vallisneria	Coastal shiner	20	0.09
15	2	Lower Wekiva	Vallisneria	Coastal shiner	20	0.09
15	2	Lower Wekiva	Vallisneria	Coastal shiner	21	0.10
15	2	Lower Wekiva	Vallisneria	Coastal shiner	22	0.13
15	2	Lower Wekiva	Vallisneria	Coastal shiner	22	0.11
15	2	Lower Wekiva	Vallisneria	Coastal shiner	22	0.17
15	2	Lower Wekiva	Vallisneria	Coastal shiner	22	0.14
15	2	Lower Wekiva	Vallisneria	Coastal shiner	23	0.16
15	2	Lower Wekiva	Vallisneria	Coastal shiner	23	0.18
15	2	Lower Wekiva	Vallisneria	Coastal shiner	23	0.17
15	2	Lower Wekiva	Vallisneria	Coastal shiner	23	0.14
15	2	Lower Wekiva	Vallisneria	Coastal shiner	24	0.16
15	2	Lower Wekiva	Vallisneria	Coastal shiner	24	0.18
15	2	Lower Wekiva	Vallisneria	Coastal shiner	24	0.15
15	2	Lower Wekiva	Vallisneria	Coastal shiner	24	0.15
15	2	Lower Wekiva	Vallisneria	Coastal shiner	24	0.17
15	2	Lower Wekiva	Vallisneria	Coastal shiner	25	0.19
15	2	Lower Wekiva	Vallisneria	Coastal shiner	25	0.19

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
15	2	Lower Wekiva	Vallisneria	Coastal shiner	25	0.19
15	2	Lower Wekiva	Vallisneria	Coastal shiner	25	0.18
15	2	Lower Wekiva	Vallisneria	Coastal shiner	25	0.17
15	2	Lower Wekiva	Vallisneria	Coastal shiner	25	0.20
15	2	Lower Wekiva	Vallisneria	Coastal shiner	25	0.18
15	2	Lower Wekiva	Vallisneria	Coastal shiner	26	0.19
15	2	Lower Wekiva	Vallisneria	Coastal shiner	26	0.19
15	2	Lower Wekiva	Vallisneria	Coastal shiner	26	0.20
15	2	Lower Wekiva	Vallisneria	Coastal shiner	27	0.21
15	2	Lower Wekiva	Vallisneria	Coastal shiner	27	0.22
15	2	Lower Wekiva	Vallisneria	Coastal shiner	28	0.26
15	2	Lower Wekiva	Vallisneria	Coastal shiner	28	0.25
15	2	Lower Wekiva	Vallisneria	Coastal shiner	28	0.26
15	2	Lower Wekiva	Vallisneria	Coastal shiner	28	0.28
15	2	Lower Wekiva	Vallisneria	Coastal shiner	29	0.28
15	2	Lower Wekiva	Vallisneria	Coastal shiner	30	0.34
15	2	Lower Wekiva	Vallisneria	Coastal shiner	30	0.27
15	2	Lower Wekiva	Vallisneria	Coastal shiner	30	0.28
15	2	Lower Wekiva	Vallisneria	Coastal shiner	30	0.30
15	2	Lower Wekiva	Vallisneria	Coastal shiner	30	0.32
15	2	Lower Wekiva	Vallisneria	Coastal shiner	31	0.30
15	2	Lower Wekiva	Vallisneria	Coastal shiner	31	0.33
15	2	Lower Wekiva	Vallisneria	Coastal shiner	31	0.33
15	2	Lower Wekiva	Vallisneria	Coastal shiner	32	0.35
15	2	Lower Wekiva	Vallisneria	Coastal shiner	32	0.35
15	2	Lower Wekiva	Vallisneria	Coastal shiner	33	0.37
15	2	Lower Wekiva	Vallisneria	Coastal shiner	33	0.32
15	2	Lower Wekiva	Vallisneria	Coastal shiner	33	0.39
15	2	Lower Wekiva	Vallisneria	Coastal shiner	33	0.41
15	2	Lower Wekiva	Vallisneria	Coastal shiner	33	0.43
15	2	Lower Wekiva	Vallisneria	Coastal shiner	34	0.38
15	2	Lower Wekiva	Vallisneria	Coastal shiner	34	0.37
15	2	Lower Wekiva	Vallisneria	Coastal shiner	34	0.39
15	2	Lower Wekiva	Vallisneria	Coastal shiner	34	0.46
15	2	Lower Wekiva	Vallisneria	Coastal shiner	36	0.50
15	2	Lower Wekiva	Vallisneria	Coastal shiner	36	0.56
15	2	Lower Wekiva	Vallisneria	Coastal shiner	36	0.46
15	2	Lower Wekiva	Vallisneria	Coastal shiner	36	0.51
15	2	Lower Wekiva	Vallisneria	Coastal shiner	36	0.52
15	2	Lower Wekiva	Vallisneria	Coastal shiner	37	0.47
15	2	Lower Wekiva	Vallisneria	Coastal shiner	37	0.51
15	2	Lower Wekiva	Vallisneria	Coastal shiner	38	0.57
15	2	Lower Wekiva	Vallisneria	Coastal shiner	38	0.57
15	2	Lower Wekiva	Vallisneria	Coastal shiner	38	0.57
15	2	Lower Wekiva	Vallisneria	Coastal shiner	39	0.73
15	2	Lower Wekiva	Vallisneria	Coastal shiner	39	0.58
15	2	Lower Wekiva	Vallisneria	Coastal shiner	42	0.71
15	2	Lower Wekiva	Vallisneria	Coastal shiner	42	0.79
15	2	Lower Wekiva	Vallisneria	Coastal shiner	43	0.89
15	2	Lower Wekiva	Vallisneria	Coastal shiner	44	0.90
15	2	Lower Wekiva	Vallisneria	Coastal shiner	44	0.84
15	2	Lower Wekiva	Vallisneria	Coastal shiner	46	1.01
15	2	Lower Wekiva	Vallisneria	Coastal shiner	47	1.21
15	2	Lower Wekiva	Vallisneria	Coastal shiner	48	1.15

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
15	2	Lower Wekiva	Vallisneria	Coastal shiner	48	1.23
15	2	Lower Wekiva	Vallisneria	Coastal shiner	48	1.09
15	2	Lower Wekiva	Vallisneria	Coastal shiner	48	1.30
15	2	Lower Wekiva	Vallisneria	Coastal shiner	48	1.22
15	2	Lower Wekiva	Vallisneria	Coastal shiner	48	1.13
15	2	Lower Wekiva	Vallisneria	Coastal shiner	49	1.25
15	2	Lower Wekiva	Vallisneria	Coastal shiner	49	1.28
15	2	Lower Wekiva	Vallisneria	Coastal shiner	49	1.07
15	2	Lower Wekiva	Vallisneria	Coastal shiner	49	1.21
15	2	Lower Wekiva	Vallisneria	Coastal shiner	49	1.32
15	2	Lower Wekiva	Vallisneria	Coastal shiner	49	1.18
15	2	Lower Wekiva	Vallisneria	Coastal shiner	50	1.40
15	2	Lower Wekiva	Vallisneria	Coastal shiner	50	1.45
15	2	Lower Wekiva	Vallisneria	Coastal shiner	50	1.39
15	2	Lower Wekiva	Vallisneria	Coastal shiner	51	1.43
15	2	Lower Wekiva	Vallisneria	Coastal shiner	51	1.39
15	2	Lower Wekiva	Vallisneria	Coastal shiner	52	1.38
15	2	Lower Wekiva	Vallisneria	Coastal shiner	53	1.85
15	2	Lower Wekiva	Vallisneria	Coastal shiner	53	1.76
15	2	Lower Wekiva	Vallisneria	Coastal shiner	53	1.67
15	2	Lower Wekiva	Vallisneria	Coastal shiner	53	1.50
15	2	Lower Wekiva	Vallisneria	Coastal shiner	54	1.60
15	2	Lower Wekiva	Vallisneria	Coastal shiner	55	1.85
15	2	Lower Wekiva	Vallisneria	Coastal shiner	56	1.85
15	2	Lower Wekiva	Vallisneria	Coastal shiner	57	1.75
15	2	Lower Wekiva	Vallisneria	Coastal shiner	57	1.89
15	2	Lower Wekiva	Vallisneria	Coastal shiner	58	1.76
15	2	Lower Wekiva	Vallisneria	Coastal shiner	59	2.10
15	2	Lower Wekiva	Vallisneria	Lake chubsucker	117	22.00
15	2	Lower Wekiva	Vallisneria	Lake chubsucker	240	188.00
15	2	Lower Wekiva	Vallisneria	Lake chubsucker	270	300.00
15	2	Lower Wekiva	Vallisneria	Pugnose minnow	35	0.41
15	2	Lower Wekiva	Vallisneria	Pugnose minnow	47	1.02
15	2	Lower Wekiva	Vallisneria	Pugnose minnow	47	1.09
15	2	Lower Wekiva	Vallisneria	Pugnose minnow	49	1.20
15	2	Lower Wekiva	Vallisneria	Pugnose minnow	50	1.29
15	2	Lower Wekiva	Vallisneria	Pugnose minnow	52	1.51
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	21	0.23
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	23	0.25
15	2	Lower Wekiva	Vallisneria	Redbreast sunfish	32	0.72
15	2	Lower Wekiva	Vallisneria	Redear sunfish	219	198.00
15	2	Lower Wekiva	Vallisneria	Seminole killifish	47	1.31
15	2	Lower Wekiva	Vallisneria	Seminole killifish	48	1.30
15	2	Lower Wekiva	Vallisneria	Seminole killifish	49	1.35
15	2	Lower Wekiva	Vallisneria	Seminole killifish	52	1.68
15	2	Lower Wekiva	Vallisneria	Seminole killifish	53	1.72
15	2	Lower Wekiva	Vallisneria	Seminole killifish	54	1.90
15	2	Lower Wekiva	Vallisneria	Seminole killifish	56	2.06
15	2	Lower Wekiva	Vallisneria	Seminole killifish	57	2.11
15	2	Lower Wekiva	Vallisneria	Seminole killifish	57	2.05
15	2	Lower Wekiva	Vallisneria	Seminole killifish	60	2.36
15	2	Lower Wekiva	Vallisneria	Seminole killifish	62	2.54
15	2	Lower Wekiva	Vallisneria	Seminole killifish	63	2.77
15	2	Lower Wekiva	Vallisneria	Seminole killifish	64	3.11

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
15	2	Lower Wekiva	Vallisneria	Seminole killifish	67	3.39
15	2	Lower Wekiva	Vallisneria	Seminole killifish	68	3.61
15	2	Lower Wekiva	Vallisneria	Seminole killifish	76	4.62
15	2	Lower Wekiva	Vallisneria	Seminole killifish	92	8.36
15	2	Lower Wekiva	Vallisneria	Seminole killifish	97	9.02
15	2	Lower Wekiva	Vallisneria	Seminole killifish	100	11.65
15	2	Lower Wekiva	Vallisneria	Seminole killifish	105	12.42
15	2	Lower Wekiva	Vallisneria	Spotted sunfish	24	0.37
15	2	Lower Wekiva	Vallisneria	Spotted sunfish	27	0.55
15	2	Lower Wekiva	Vallisneria	Spotted sunfish	31	0.78
15	2	Lower Wekiva	Vallisneria	Spotted sunfish	83	12.58
15	2	Lower Wekiva	Vallisneria	Spotted sunfish	108	27.00
15	3	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.06
15	3	Lower Wekiva	Vallisneria	Bluefin killifish	16	0.07
15	3	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.11
15	3	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
15	3	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.29
15	3	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.31
15	3	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.31
15	3	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.44
15	3	Lower Wekiva	Vallisneria	Bluefin killifish	30	0.45
15	3	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.48
15	3	Lower Wekiva	Vallisneria	Bluefin killifish	31	0.42
15	3	Lower Wekiva	Vallisneria	Bluefin killifish	34	0.67
15	3	Lower Wekiva	Vallisneria	Coastal shiner	20	0.12
15	3	Lower Wekiva	Vallisneria	Coastal shiner	20	0.10
15	3	Lower Wekiva	Vallisneria	Coastal shiner	26	0.19
15	3	Lower Wekiva	Vallisneria	Coastal shiner	27	0.21
15	3	Lower Wekiva	Vallisneria	Coastal shiner	27	0.21
15	3	Lower Wekiva	Vallisneria	Coastal shiner	28	0.22
15	3	Lower Wekiva	Vallisneria	Coastal shiner	28	0.22
15	3	Lower Wekiva	Vallisneria	Coastal shiner	29	0.24
15	3	Lower Wekiva	Vallisneria	Coastal shiner	29	0.26
15	3	Lower Wekiva	Vallisneria	Coastal shiner	29	0.28
15	3	Lower Wekiva	Vallisneria	Coastal shiner	31	0.32
15	3	Lower Wekiva	Vallisneria	Coastal shiner	34	0.40
15	3	Lower Wekiva	Vallisneria	Coastal shiner	34	0.41
15	3	Lower Wekiva	Vallisneria	Coastal shiner	35	0.42
15	3	Lower Wekiva	Vallisneria	Coastal shiner	35	0.47
15	3	Lower Wekiva	Vallisneria	Coastal shiner	36	0.48
15	3	Lower Wekiva	Vallisneria	Coastal shiner	36	0.49
15	3	Lower Wekiva	Vallisneria	Coastal shiner	37	0.52
15	3	Lower Wekiva	Vallisneria	Coastal shiner	37	1.21
15	3	Lower Wekiva	Vallisneria	Coastal shiner	37	0.47
15	3	Lower Wekiva	Vallisneria	Coastal shiner	37	0.52
15	3	Lower Wekiva	Vallisneria	Coastal shiner	37	0.51
15	3	Lower Wekiva	Vallisneria	Coastal shiner	45	1.02
15	3	Lower Wekiva	Vallisneria	Coastal shiner	45	1.01
15	3	Lower Wekiva	Vallisneria	Coastal shiner	46	1.01
15	3	Lower Wekiva	Vallisneria	Coastal shiner	47	0.95
15	3	Lower Wekiva	Vallisneria	Coastal shiner	47	1.03
15	3	Lower Wekiva	Vallisneria	Coastal shiner	48	1.22
15	3	Lower Wekiva	Vallisneria	Coastal shiner	49	1.14
15	3	Lower Wekiva	Vallisneria	Coastal shiner	49	1.17

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
15	3	Lower Wekiva	Vallisneria	Coastal shiner	50	1.38
15	3	Lower Wekiva	Vallisneria	Coastal shiner	51	1.60
15	3	Lower Wekiva	Vallisneria	Coastal shiner	51	1.36
15	3	Lower Wekiva	Vallisneria	Coastal shiner	51	1.46
15	3	Lower Wekiva	Vallisneria	Coastal shiner	51	1.55
15	3	Lower Wekiva	Vallisneria	Coastal shiner	53	1.64
15	3	Lower Wekiva	Vallisneria	Coastal shiner	54	1.71
15	3	Lower Wekiva	Vallisneria	Coastal shiner	55	1.59
15	3	Lower Wekiva	Vallisneria	Coastal shiner	57	1.81
15	3	Lower Wekiva	Vallisneria	Lake chubsucker	224	148.00
15	3	Lower Wekiva	Vallisneria	Pugnose minnow	30	0.25
15	3	Lower Wekiva	Vallisneria	Pugnose minnow	45	0.97
15	3	Lower Wekiva	Vallisneria	Pugnose minnow	46	0.97
15	3	Lower Wekiva	Vallisneria	Redbreast sunfish	57	3.37
15	3	Lower Wekiva	Vallisneria	Redear sunfish	178	93.00
15	3	Lower Wekiva	Vallisneria	Redear sunfish	196	142.00
15	3	Lower Wekiva	Vallisneria	Redear sunfish	254	290.00
15	3	Lower Wekiva	Vallisneria	Seminole killifish	44	0.97
15	3	Lower Wekiva	Vallisneria	Seminole killifish	44	0.90
15	3	Lower Wekiva	Vallisneria	Seminole killifish	46	1.15
15	3	Lower Wekiva	Vallisneria	Seminole killifish	49	1.30
15	3	Lower Wekiva	Vallisneria	Seminole killifish	53	1.74
15	3	Lower Wekiva	Vallisneria	Seminole killifish	60	2.48
15	3	Lower Wekiva	Vallisneria	Seminole killifish	69	3.33
15	3	Lower Wekiva	Vallisneria	Seminole killifish	83	5.85
15	3	Lower Wekiva	Vallisneria	Seminole killifish	85	6.75
15	3	Lower Wekiva	Vallisneria	Seminole killifish	100	11.50
15	3	Lower Wekiva	Vallisneria	Seminole killifish	130	21.00
15	3	Lower Wekiva	Vallisneria	Spotted sunfish	29	0.60
15	3	Lower Wekiva	Vallisneria	Spotted sunfish	30	0.66
15	3	Lower Wekiva	Vallisneria	Spotted sunfish	105	23.00
15	3	Lower Wekiva	Vallisneria	Spotted sunfish	135	57.00
15	4	Lower Wekiva	Vallisneria	Bluefin killifish	14	0.07
15	4	Lower Wekiva	Vallisneria	Bluefin killifish	18	0.12
15	4	Lower Wekiva	Vallisneria	Bluefin killifish	21	0.13
15	4	Lower Wekiva	Vallisneria	Bluefin killifish	23	0.20
15	4	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.24
15	4	Lower Wekiva	Vallisneria	Bluefin killifish	25	0.26
15	4	Lower Wekiva	Vallisneria	Bluefin killifish	26	0.25
15	4	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.29
15	4	Lower Wekiva	Vallisneria	Bluefin killifish	27	0.30
15	4	Lower Wekiva	Vallisneria	Bluefin killifish	36	0.65
15	4	Lower Wekiva	Vallisneria	Brook silverside	30	0.20
15	4	Lower Wekiva	Vallisneria	Brook silverside	40	0.43
15	4	Lower Wekiva	Vallisneria	Brook silverside	42	0.42
15	4	Lower Wekiva	Vallisneria	Brook silverside	46	0.65
15	4	Lower Wekiva	Vallisneria	Brook silverside	46	0.64
15	4	Lower Wekiva	Vallisneria	Brook silverside	47	0.62
15	4	Lower Wekiva	Vallisneria	Brook silverside	54	1.02
15	4	Lower Wekiva	Vallisneria	Brook silverside	55	1.13
15	4	Lower Wekiva	Vallisneria	Brook silverside	58	1.16
15	4	Lower Wekiva	Vallisneria	Brook silverside	59	1.15
15	4	Lower Wekiva	Vallisneria	Brook silverside	61	1.45
15	4	Lower Wekiva	Vallisneria	Brook silverside	62	1.35

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
15	4	Lower Wekiva	Vallisneria	Brook silverside	62	1.44
15	4	Lower Wekiva	Vallisneria	Brook silverside	64	1.58
15	4	Lower Wekiva	Vallisneria	Brook silverside	72	2.13
15	4	Lower Wekiva	Vallisneria	Coastal shiner	17	0.11
15	4	Lower Wekiva	Vallisneria	Coastal shiner	19	0.08
15	4	Lower Wekiva	Vallisneria	Coastal shiner	19	0.10
15	4	Lower Wekiva	Vallisneria	Coastal shiner	21	0.09
15	4	Lower Wekiva	Vallisneria	Coastal shiner	23	0.15
15	4	Lower Wekiva	Vallisneria	Coastal shiner	23	0.07
15	4	Lower Wekiva	Vallisneria	Coastal shiner	24	0.14
15	4	Lower Wekiva	Vallisneria	Coastal shiner	24	0.18
15	4	Lower Wekiva	Vallisneria	Coastal shiner	26	0.18
15	4	Lower Wekiva	Vallisneria	Coastal shiner	28	0.24
15	4	Lower Wekiva	Vallisneria	Coastal shiner	28	0.22
15	4	Lower Wekiva	Vallisneria	Coastal shiner	30	0.31
15	4	Lower Wekiva	Vallisneria	Coastal shiner	31	0.31
15	4	Lower Wekiva	Vallisneria	Coastal shiner	32	0.37
15	4	Lower Wekiva	Vallisneria	Coastal shiner	32	0.33
15	4	Lower Wekiva	Vallisneria	Coastal shiner	33	0.40
15	4	Lower Wekiva	Vallisneria	Coastal shiner	33	0.37
15	4	Lower Wekiva	Vallisneria	Coastal shiner	34	0.36
15	4	Lower Wekiva	Vallisneria	Coastal shiner	34	0.40
15	4	Lower Wekiva	Vallisneria	Coastal shiner	36	0.48
15	4	Lower Wekiva	Vallisneria	Coastal shiner	38	0.55
15	4	Lower Wekiva	Vallisneria	Coastal shiner	39	0.56
15	4	Lower Wekiva	Vallisneria	Coastal shiner	39	0.53
15	4	Lower Wekiva	Vallisneria	Coastal shiner	40	0.70
15	4	Lower Wekiva	Vallisneria	Coastal shiner	41	0.66
15	4	Lower Wekiva	Vallisneria	Coastal shiner	42	0.73
15	4	Lower Wekiva	Vallisneria	Coastal shiner	42	0.68
15	4	Lower Wekiva	Vallisneria	Coastal shiner	42	0.68
15	4	Lower Wekiva	Vallisneria	Coastal shiner	44	0.75
15	4	Lower Wekiva	Vallisneria	Coastal shiner	45	0.94
15	4	Lower Wekiva	Vallisneria	Coastal shiner	46	0.91
15	4	Lower Wekiva	Vallisneria	Coastal shiner	47	0.98
15	4	Lower Wekiva	Vallisneria	Coastal shiner	47	1.11
15	4	Lower Wekiva	Vallisneria	Coastal shiner	47	1.15
15	4	Lower Wekiva	Vallisneria	Coastal shiner	48	1.07
15	4	Lower Wekiva	Vallisneria	Coastal shiner	49	1.12
15	4	Lower Wekiva	Vallisneria	Coastal shiner	49	1.17
15	4	Lower Wekiva	Vallisneria	Coastal shiner	49	1.30
15	4	Lower Wekiva	Vallisneria	Coastal shiner	50	1.21
15	4	Lower Wekiva	Vallisneria	Coastal shiner	50	1.25
15	4	Lower Wekiva	Vallisneria	Coastal shiner	51	1.50
15	4	Lower Wekiva	Vallisneria	Coastal shiner	51	1.31
15	4	Lower Wekiva	Vallisneria	Coastal shiner	51	1.50
15	4	Lower Wekiva	Vallisneria	Coastal shiner	55	1.52
15	4	Lower Wekiva	Vallisneria	Coastal shiner	56	1.51
15	4	Lower Wekiva	Vallisneria	Coastal shiner	57	1.66
15	4	Lower Wekiva	Vallisneria	Coastal shiner	58	1.55
15	4	Lower Wekiva	Vallisneria	Coastal shiner	60	2.10
15	4	Lower Wekiva	Vallisneria	Ironcolor shiner	33	0.35
15	4	Lower Wekiva	Vallisneria	Largemouth bass	117	18.00
15	4	Lower Wekiva	Vallisneria	Pugnose minnow	43	0.87

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
15	4	Lower Wekiva	Vallisneria	Pugnose minnow	46	1.00
15	4	Lower Wekiva	Vallisneria	Pugnose minnow	48	0.95
15	4	Lower Wekiva	Vallisneria	Pugnose minnow	51	1.38
15	4	Lower Wekiva	Vallisneria	Pugnose minnow	55	1.76
15	4	Lower Wekiva	Vallisneria	Seminole killifish	51	1.42
15	4	Lower Wekiva	Vallisneria	Seminole killifish	52	1.50
15	4	Lower Wekiva	Vallisneria	Seminole killifish	56	1.91
15	4	Lower Wekiva	Vallisneria	Seminole killifish	66	3.31
15	4	Lower Wekiva	Vallisneria	Seminole killifish	77	5.92
15	4	Lower Wekiva	Vallisneria	Seminole killifish	77	4.75
15	4	Lower Wekiva	Vallisneria	Seminole killifish	92	9.21
15	4	Lower Wekiva	Vallisneria	Seminole killifish	97	11.03
15	4	Lower Wekiva	Vallisneria	Seminole killifish	102	10.46
15	4	Lower Wekiva	Vallisneria	Seminole killifish	106	12.63
15	4	Lower Wekiva	Vallisneria	Seminole killifish	124	22.47
15	4	Lower Wekiva	Vallisneria	Spotted sunfish	71	7.74
15	4	Lower Wekiva	Vallisneria	Spotted sunfish	91	17.37
16	1	Upper Wekiva	Hydrocotyle	Bluefin killifish	17	0.06
16	1	Upper Wekiva	Hydrocotyle	Coastal shiner	42	0.64
16	1	Upper Wekiva	Hydrocotyle	Coastal shiner	53	1.20
16	1	Upper Wekiva	Hydrocotyle	Florida gar	498	538.00
16	1	Upper Wekiva	Hydrocotyle	Lake chubsucker	242	165.00
16	1	Upper Wekiva	Hydrocotyle	Lake chubsucker	290	290.00
16	1	Upper Wekiva	Hydrocotyle	Lake chubsucker	295	332.00
16	1	Upper Wekiva	Hydrocotyle	Largemouth bass	279	252.00
16	1	Upper Wekiva	Hydrocotyle	Pirate perch	52	2.07
16	1	Upper Wekiva	Hydrocotyle	Pirate perch	72	5.00
16	1	Upper Wekiva	Hydrocotyle	Redbreast sunfish	87	9.00
16	1	Upper Wekiva	Hydrocotyle	Redbreast sunfish	110	18.00
16	1	Upper Wekiva	Hydrocotyle	Redbreast sunfish	131	33.00
16	1	Upper Wekiva	Hydrocotyle	Redbreast sunfish	164	70.00
16	1	Upper Wekiva	Hydrocotyle	Sailfin shiner	26	0.17
16	1	Upper Wekiva	Hydrocotyle	Seminole killifish	107	11.00
16	1	Upper Wekiva	Hydrocotyle	Spotted sunfish	37	0.80
16	1	Upper Wekiva	Hydrocotyle	Spotted sunfish	131	45.00
16	1	Upper Wekiva	Hydrocotyle	Spotted sunfish	131	44.00
16	1	Upper Wekiva	Hydrocotyle	Spotted sunfish	165	85.00
16	1	Upper Wekiva	Hydrocotyle	Spotted sunfish	179	128.00
16	1	Upper Wekiva	Hydrocotyle	Warmouth	155	82.00
16	1	Upper Wekiva	Hydrocotyle	Warmouth	165	91.00
16	2	Upper Wekiva	Hydrocotyle	Bluefin killifish	23	0.12
16	2	Upper Wekiva	Hydrocotyle	Bluegill	153	63.00
16	2	Upper Wekiva	Hydrocotyle	Bluegill	215	206.00
16	2	Upper Wekiva	Hydrocotyle	Coastal shiner	40	0.55
16	2	Upper Wekiva	Hydrocotyle	Coastal shiner	43	0.70
16	2	Upper Wekiva	Hydrocotyle	Coastal shiner	45	0.80
16	2	Upper Wekiva	Hydrocotyle	Coastal shiner	47	0.98
16	2	Upper Wekiva	Hydrocotyle	Coastal shiner	48	1.05
16	2	Upper Wekiva	Hydrocotyle	Coastal shiner	49	1.33
16	2	Upper Wekiva	Hydrocotyle	Coastal shiner	50	1.11
16	2	Upper Wekiva	Hydrocotyle	Coastal shiner	50	1.13
16	2	Upper Wekiva	Hydrocotyle	Coastal shiner	54	1.35
16	2	Upper Wekiva	Hydrocotyle	Coastal shiner	54	1.37
16	2	Upper Wekiva	Hydrocotyle	Lake chubsucker	290	314.00

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
16	2	Upper Wekiva	Hydrocotyle	Largemouth bass	218	117.00
16	2	Upper Wekiva	Hydrocotyle	Largemouth bass	271	257.00
16	2	Upper Wekiva	Hydrocotyle	Redbreast sunfish	85	9.51
16	2	Upper Wekiva	Hydrocotyle	Redbreast sunfish	90	12.55
16	2	Upper Wekiva	Hydrocotyle	Redbreast sunfish	197	118.00
16	2	Upper Wekiva	Hydrocotyle	Spotted sunfish	53	3.05
16	2	Upper Wekiva	Hydrocotyle	Spotted sunfish	60	4.38
16	2	Upper Wekiva	Hydrocotyle	Spotted sunfish	72	8.03
16	2	Upper Wekiva	Hydrocotyle	Spotted sunfish	75	7.48
16	2	Upper Wekiva	Hydrocotyle	Spotted sunfish	83	10.70
16	2	Upper Wekiva	Hydrocotyle	Spotted sunfish	108	24.00
16	2	Upper Wekiva	Hydrocotyle	Spotted sunfish	127	42.00
16	3	Upper Wekiva	Hydrocotyle	Bluefin killifish	22	0.13
16	3	Upper Wekiva	Hydrocotyle	Redear sunfish	118	25.00
16	3	Upper Wekiva	Hydrocotyle	Redear sunfish	217	192.00
16	3	Upper Wekiva	Hydrocotyle	Redear sunfish	242	265.00
16	3	Upper Wekiva	Hydrocotyle	Yellow bullhead	270	281.00
17	1	Upper Wekiva	Nuphar	Bluefin killifish	23	0.15
17	1	Upper Wekiva	Nuphar	Brook silverside	30	0.18
17	1	Upper Wekiva	Nuphar	Brook silverside	60	1.00
17	1	Upper Wekiva	Nuphar	Brook silverside	61	1.08
17	1	Upper Wekiva	Nuphar	Brook silverside	64	1.35
17	1	Upper Wekiva	Nuphar	Brook silverside	67	1.42
17	1	Upper Wekiva	Nuphar	Coastal shiner	25	0.14
17	1	Upper Wekiva	Nuphar	Coastal shiner	32	0.29
17	1	Upper Wekiva	Nuphar	Coastal shiner	32	0.32
17	1	Upper Wekiva	Nuphar	Coastal shiner	35	0.27
17	1	Upper Wekiva	Nuphar	Coastal shiner	37	0.43
17	1	Upper Wekiva	Nuphar	Coastal shiner	37	0.47
17	1	Upper Wekiva	Nuphar	Coastal shiner	39	0.48
17	1	Upper Wekiva	Nuphar	Coastal shiner	41	0.66
17	1	Upper Wekiva	Nuphar	Coastal shiner	43	0.78
17	1	Upper Wekiva	Nuphar	Coastal shiner	46	1.00
17	1	Upper Wekiva	Nuphar	Coastal shiner	49	1.06
17	1	Upper Wekiva	Nuphar	Coastal shiner	49	0.98
17	1	Upper Wekiva	Nuphar	Coastal shiner	53	1.37
17	1	Upper Wekiva	Nuphar	Mosquitofish	23	0.18
17	1	Upper Wekiva	Nuphar	Pugnose minnow	31	0.25
17	1	Upper Wekiva	Nuphar	Pugnose minnow	37	0.39
17	1	Upper Wekiva	Nuphar	Pugnose minnow	40	0.52
17	1	Upper Wekiva	Nuphar	Pugnose minnow	41	0.61
17	1	Upper Wekiva	Nuphar	Redbreast sunfish	21	0.22
17	1	Upper Wekiva	Nuphar	Redbreast sunfish	29	0.45
17	1	Upper Wekiva	Nuphar	Redbreast sunfish	45	1.64
17	1	Upper Wekiva	Nuphar	Redbreast sunfish	52	2.00
17	1	Upper Wekiva	Nuphar	Redbreast sunfish	68	5.00
17	1	Upper Wekiva	Nuphar	Redbreast sunfish	89	11.00
17	1	Upper Wekiva	Nuphar	Redbreast sunfish	113	19.00
17	1	Upper Wekiva	Nuphar	Redbreast sunfish	167	74.00
17	1	Upper Wekiva	Nuphar	Redbreast sunfish	187	92.00
17	1	Upper Wekiva	Nuphar	Redbreast sunfish	203	130.00
17	1	Upper Wekiva	Nuphar	Sailfin shiner	36	0.34
17	1	Upper Wekiva	Nuphar	Seminole killifish	53	1.44
17	1	Upper Wekiva	Nuphar	Spotted sunfish	41	0.64

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
17	1	Upper Wekiva	Nuphar	Spotted sunfish	53	1.41
17	1	Upper Wekiva	Nuphar	Spotted sunfish	61	2.25
17	1	Upper Wekiva	Nuphar	Spotted sunfish	66	2.68
17	1	Upper Wekiva	Nuphar	Spotted sunfish	69	7.00
17	1	Upper Wekiva	Nuphar	Spotted sunfish	84	12.00
17	2	Upper Wekiva	Nuphar	Bluefin killifish	22	0.15
17	2	Upper Wekiva	Nuphar	Brook silverside	25	0.09
17	2	Upper Wekiva	Nuphar	Brook silverside	34	0.23
17	2	Upper Wekiva	Nuphar	Brook silverside	42	0.40
17	2	Upper Wekiva	Nuphar	Brook silverside	44	0.41
17	2	Upper Wekiva	Nuphar	Brook silverside	45	0.46
17	2	Upper Wekiva	Nuphar	Brook silverside	46	0.51
17	2	Upper Wekiva	Nuphar	Brook silverside	61	1.05
17	2	Upper Wekiva	Nuphar	Brook silverside	63	1.19
17	2	Upper Wekiva	Nuphar	Coastal shiner	25	0.14
17	2	Upper Wekiva	Nuphar	Coastal shiner	29	0.18
17	2	Upper Wekiva	Nuphar	Coastal shiner	39	0.53
17	2	Upper Wekiva	Nuphar	Coastal shiner	42	0.62
17	2	Upper Wekiva	Nuphar	Coastal shiner	43	0.69
17	2	Upper Wekiva	Nuphar	Coastal shiner	45	0.81
17	2	Upper Wekiva	Nuphar	Coastal shiner	45	0.87
17	2	Upper Wekiva	Nuphar	Coastal shiner	47	0.93
17	2	Upper Wekiva	Nuphar	Coastal shiner	50	1.08
17	2	Upper Wekiva	Nuphar	Coastal shiner	56	1.41
17	2	Upper Wekiva	Nuphar	Pugnose minnow	38	0.40
17	2	Upper Wekiva	Nuphar	Pugnose minnow	40	0.49
17	2	Upper Wekiva	Nuphar	Redbreast sunfish	143	44.00
17	2	Upper Wekiva	Nuphar	Seminole killifish	40	0.55
17	2	Upper Wekiva	Nuphar	Seminole killifish	71	3.57
17	2	Upper Wekiva	Nuphar	Seminole killifish	73	3.28
17	2	Upper Wekiva	Nuphar	Seminole killifish	82	5.43
17	2	Upper Wekiva	Nuphar	Spotted sunfish	52	2.89
18	1	Upper Wekiva	Vallisneria	Coastal shiner	33	0.32
18	1	Upper Wekiva	Vallisneria	Coastal shiner	45	0.87
18	1	Upper Wekiva	Vallisneria	Coastal shiner	50	1.17
18	1	Upper Wekiva	Vallisneria	Coastal shiner	50	1.26
18	1	Upper Wekiva	Vallisneria	Coastal shiner	52	1.11
18	1	Upper Wekiva	Vallisneria	Coastal shiner	52	1.31
18	1	Upper Wekiva	Vallisneria	Coastal shiner	53	1.39
18	1	Upper Wekiva	Vallisneria	Coastal shiner	54	1.58
18	1	Upper Wekiva	Vallisneria	Coastal shiner	57	1.58
18	1	Upper Wekiva	Vallisneria	Coastal shiner	60	1.79
18	1	Upper Wekiva	Vallisneria	Coastal shiner	61	2.10
18	1	Upper Wekiva	Vallisneria	Coastal shiner	61	2.10
18	1	Upper Wekiva	Vallisneria	Dollar sunfish	65	5.00
18	1	Upper Wekiva	Vallisneria	Lake chubsucker	100	10.00
18	1	Upper Wekiva	Vallisneria	Largemouth bass	150	37.00
18	1	Upper Wekiva	Vallisneria	Pugnose minnow	40	0.48
18	1	Upper Wekiva	Vallisneria	Pugnose minnow	45	0.76
18	1	Upper Wekiva	Vallisneria	Pugnose minnow	45	0.64
18	1	Upper Wekiva	Vallisneria	Pugnose minnow	45	0.68
18	1	Upper Wekiva	Vallisneria	Pugnose minnow	47	0.79
18	1	Upper Wekiva	Vallisneria	Pugnose minnow	47	0.81
18	1	Upper Wekiva	Vallisneria	Redbreast sunfish	90	10.00

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
18	1	Upper Wekiva	Vallisneria	Redbreast sunfish	126	25.00
18	1	Upper Wekiva	Vallisneria	Seminole killifish	102	9.00
18	1	Upper Wekiva	Vallisneria	Spotted sunfish	41	1.36
18	1	Upper Wekiva	Vallisneria	Spotted sunfish	42	1.41
18	1	Upper Wekiva	Vallisneria	Spotted sunfish	68	6.00
18	1	Upper Wekiva	Vallisneria	Spotted sunfish	75	6.00
18	1	Upper Wekiva	Vallisneria	Spotted sunfish	86	12.00
18	2	Upper Wekiva	Vallisneria	Blackbanded darter	55	1.44
18	2	Upper Wekiva	Vallisneria	Coastal shiner	38	0.45
18	2	Upper Wekiva	Vallisneria	Coastal shiner	48	1.00
18	2	Upper Wekiva	Vallisneria	Coastal shiner	48	1.01
18	2	Upper Wekiva	Vallisneria	Coastal shiner	49	0.97
18	2	Upper Wekiva	Vallisneria	Coastal shiner	50	1.16
18	2	Upper Wekiva	Vallisneria	Coastal shiner	51	1.25
18	2	Upper Wekiva	Vallisneria	Coastal shiner	52	1.30
18	2	Upper Wekiva	Vallisneria	Coastal shiner	53	1.35
18	2	Upper Wekiva	Vallisneria	Coastal shiner	54	1.51
18	2	Upper Wekiva	Vallisneria	Largemouth bass	77	4.00
18	2	Upper Wekiva	Vallisneria	Pugnose minnow	43	0.66
18	2	Upper Wekiva	Vallisneria	Pugnose minnow	46	0.86
18	2	Upper Wekiva	Vallisneria	Spotted sunfish	42	1.51
18	2	Upper Wekiva	Vallisneria	Spotted sunfish	69	6.00
19	1	Little Wekiva	Vallisneria	American eel	285	39.64
19	1	Little Wekiva	Vallisneria	Blackbanded darter	45	0.87
19	1	Little Wekiva	Vallisneria	Blackbanded darter	51	1.12
19	1	Little Wekiva	Vallisneria	Blackbanded darter	62	2.38
19	1	Little Wekiva	Vallisneria	Bluefin killifish	30	0.35
19	1	Little Wekiva	Vallisneria	Bluegill	39	1.13
19	1	Little Wekiva	Vallisneria	Bluegill	41	1.07
19	1	Little Wekiva	Vallisneria	Bluegill	42	1.11
19	1	Little Wekiva	Vallisneria	Bluegill	46	1.34
19	1	Little Wekiva	Vallisneria	Bluegill	74	5.66
19	1	Little Wekiva	Vallisneria	Bluenose shiner	45	0.88
19	1	Little Wekiva	Vallisneria	Bowfin	490	1178.00
19	1	Little Wekiva	Vallisneria	Bowfin	575	1940.00
19	1	Little Wekiva	Vallisneria	Coastal shiner	31	0.31
19	1	Little Wekiva	Vallisneria	Coastal shiner	40	0.64
19	1	Little Wekiva	Vallisneria	Coastal shiner	45	0.97
19	1	Little Wekiva	Vallisneria	Coastal shiner	48	1.03
19	1	Little Wekiva	Vallisneria	Coastal shiner	52	1.43
19	1	Little Wekiva	Vallisneria	Coastal shiner	52	1.46
19	1	Little Wekiva	Vallisneria	Coastal shiner	54	1.57
19	1	Little Wekiva	Vallisneria	Dollar sunfish	58	3.79
19	1	Little Wekiva	Vallisneria	Dollar sunfish	59	3.74
19	1	Little Wekiva	Vallisneria	Dollar sunfish	62	5.54
19	1	Little Wekiva	Vallisneria	Ironcolor shiner	29	0.24
19	1	Little Wekiva	Vallisneria	Ironcolor shiner	40	0.59
19	1	Little Wekiva	Vallisneria	Ironcolor shiner	40	0.53
19	1	Little Wekiva	Vallisneria	Ironcolor shiner	41	0.66
19	1	Little Wekiva	Vallisneria	Ironcolor shiner	41	0.66
19	1	Little Wekiva	Vallisneria	Lake chubsucker	105	14.05
19	1	Little Wekiva	Vallisneria	Lake chubsucker	196	90.00
19	1	Little Wekiva	Vallisneria	Lake chubsucker	204	104.00
19	1	Little Wekiva	Vallisneria	Lake chubsucker	267	247.00

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
19	1	Little Wekiva	Vallisneria	Largemouth bass	260	186.00
19	1	Little Wekiva	Vallisneria	Mosquitofish	28	0.37
19	1	Little Wekiva	Vallisneria	Pugnose minnow	31	0.29
19	1	Little Wekiva	Vallisneria	Pugnose minnow	38	0.47
19	1	Little Wekiva	Vallisneria	Pugnose minnow	38	0.44
19	1	Little Wekiva	Vallisneria	Pugnose minnow	38	0.48
19	1	Little Wekiva	Vallisneria	Pugnose minnow	41	0.75
19	1	Little Wekiva	Vallisneria	Pugnose minnow	41	0.64
19	1	Little Wekiva	Vallisneria	Pugnose minnow	42	0.66
19	1	Little Wekiva	Vallisneria	Pugnose minnow	42	0.64
19	1	Little Wekiva	Vallisneria	Pugnose minnow	43	0.70
19	1	Little Wekiva	Vallisneria	Pugnose minnow	43	0.73
19	1	Little Wekiva	Vallisneria	Pugnose minnow	43	0.61
19	1	Little Wekiva	Vallisneria	Pugnose minnow	44	0.77
19	1	Little Wekiva	Vallisneria	Pugnose minnow	44	0.81
19	1	Little Wekiva	Vallisneria	Pugnose minnow	44	0.77
19	1	Little Wekiva	Vallisneria	Pugnose minnow	45	0.79
19	1	Little Wekiva	Vallisneria	Pugnose minnow	45	0.76
19	1	Little Wekiva	Vallisneria	Pugnose minnow	45	0.99
19	1	Little Wekiva	Vallisneria	Pugnose minnow	45	0.83
19	1	Little Wekiva	Vallisneria	Pugnose minnow	45	0.99
19	1	Little Wekiva	Vallisneria	Pugnose minnow	46	0.85
19	1	Little Wekiva	Vallisneria	Pugnose minnow	48	1.05
19	1	Little Wekiva	Vallisneria	Pugnose minnow	49	1.09
19	1	Little Wekiva	Vallisneria	Pugnose minnow	50	1.10
19	1	Little Wekiva	Vallisneria	Pugnose minnow	50	1.13
19	1	Little Wekiva	Vallisneria	Pugnose minnow	51	1.08
19	1	Little Wekiva	Vallisneria	Redbreast sunfish	21	0.24
19	1	Little Wekiva	Vallisneria	Redbreast sunfish	29	0.53
19	1	Little Wekiva	Vallisneria	Redbreast sunfish	70	6.00
19	1	Little Wekiva	Vallisneria	Redbreast sunfish	74	7.23
19	1	Little Wekiva	Vallisneria	Redbreast sunfish	81	8.00
19	1	Little Wekiva	Vallisneria	Redbreast sunfish	88	10.21
19	1	Little Wekiva	Vallisneria	Redbreast sunfish	97	14.00
19	1	Little Wekiva	Vallisneria	Redbreast sunfish	98	16.00
19	1	Little Wekiva	Vallisneria	Redbreast sunfish	109	18.00
19	1	Little Wekiva	Vallisneria	Redbreast sunfish	136	41.00
19	1	Little Wekiva	Vallisneria	Redbreast sunfish	159	61.00
19	1	Little Wekiva	Vallisneria	Redear sunfish	242	220.00
19	1	Little Wekiva	Vallisneria	Sailfin shiner	19	0.07
19	1	Little Wekiva	Vallisneria	Sailfin shiner	24	0.12
19	1	Little Wekiva	Vallisneria	Sailfin shiner	25	0.15
19	1	Little Wekiva	Vallisneria	Sailfin shiner	25	0.18
19	1	Little Wekiva	Vallisneria	Sailfin shiner	25	0.15
19	1	Little Wekiva	Vallisneria	Sailfin shiner	29	0.25
19	1	Little Wekiva	Vallisneria	Sailfin shiner	30	0.26
19	1	Little Wekiva	Vallisneria	Sailfin shiner	30	0.26
19	1	Little Wekiva	Vallisneria	Sailfin shiner	30	0.26
19	1	Little Wekiva	Vallisneria	Sailfin shiner	32	0.32
19	1	Little Wekiva	Vallisneria	Sailfin shiner	34	0.32
19	1	Little Wekiva	Vallisneria	Sailfin shiner	34	0.37
19	1	Little Wekiva	Vallisneria	Sailfin shiner	40	0.60
19	1	Little Wekiva	Vallisneria	Seminole killifish	78	4.68
19	1	Little Wekiva	Vallisneria	Seminole killifish	84	6.15

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
19	1	Little Wekiva	Vallisneria	Seminole killifish	87	6.88
19	1	Little Wekiva	Vallisneria	Seminole killifish	88	6.92
19	1	Little Wekiva	Vallisneria	Seminole killifish	97	9.11
19	1	Little Wekiva	Vallisneria	Seminole killifish	102	9.00
19	1	Little Wekiva	Vallisneria	Seminole killifish	105	10.00
19	1	Little Wekiva	Vallisneria	Spotted sunfish	28	0.58
19	1	Little Wekiva	Vallisneria	Spotted sunfish	33	0.81
19	1	Little Wekiva	Vallisneria	Spotted sunfish	36	1.07
19	1	Little Wekiva	Vallisneria	Spotted sunfish	49	2.45
19	1	Little Wekiva	Vallisneria	Spotted sunfish	56	3.92
19	1	Little Wekiva	Vallisneria	Spotted sunfish	56	3.62
19	1	Little Wekiva	Vallisneria	Spotted sunfish	58	4.77
19	1	Little Wekiva	Vallisneria	Spotted sunfish	59	3.92
19	1	Little Wekiva	Vallisneria	Spotted sunfish	60	4.69
19	1	Little Wekiva	Vallisneria	Spotted sunfish	62	6.51
19	1	Little Wekiva	Vallisneria	Spotted sunfish	64	5.29
19	1	Little Wekiva	Vallisneria	Spotted sunfish	66	5.17
19	1	Little Wekiva	Vallisneria	Spotted sunfish	71	7.31
19	1	Little Wekiva	Vallisneria	Spotted sunfish	72	7.74
19	1	Little Wekiva	Vallisneria	Spotted sunfish	74	8.44
19	1	Little Wekiva	Vallisneria	Spotted sunfish	77	10.25
19	1	Little Wekiva	Vallisneria	Spotted sunfish	83	12.87
19	1	Little Wekiva	Vallisneria	Spotted sunfish	85	14.07
19	1	Little Wekiva	Vallisneria	Spotted sunfish	90	14.00
19	1	Little Wekiva	Vallisneria	Spotted sunfish	90	13.00
19	1	Little Wekiva	Vallisneria	Spotted sunfish	90	16.03
19	1	Little Wekiva	Vallisneria	Spotted sunfish	94	17.00
19	1	Little Wekiva	Vallisneria	Spotted sunfish	116	33.00
19	1	Little Wekiva	Vallisneria	Spotted sunfish	137	52.00
19	1	Little Wekiva	Vallisneria	Warmouth	137	44.00
19	1	Little Wekiva	Vallisneria	Warmouth	140	49.00
19	1	Little Wekiva	Vallisneria	Warmouth	209	128.00
19	2	Little Wekiva	Vallisneria	American eel	495	216.00
19	2	Little Wekiva	Vallisneria	Bluefin killifish	30	0.42
19	2	Little Wekiva	Vallisneria	Coastal shiner	38	0.55
19	2	Little Wekiva	Vallisneria	Coastal shiner	40	1.01
19	2	Little Wekiva	Vallisneria	Coastal shiner	41	0.67
19	2	Little Wekiva	Vallisneria	Coastal shiner	43	0.75
19	2	Little Wekiva	Vallisneria	Coastal shiner	46	0.96
19	2	Little Wekiva	Vallisneria	Coastal shiner	53	1.32
19	2	Little Wekiva	Vallisneria	Coastal shiner	55	1.78
19	2	Little Wekiva	Vallisneria	Coastal shiner	56	1.71
19	2	Little Wekiva	Vallisneria	Dollar sunfish	59	4.57
19	2	Little Wekiva	Vallisneria	Dollar sunfish	61	4.74
19	2	Little Wekiva	Vallisneria	Dollar sunfish	63	5.20
19	2	Little Wekiva	Vallisneria	Lake chubsucker	117	21.00
19	2	Little Wekiva	Vallisneria	Lake chubsucker	136	31.00
19	2	Little Wekiva	Vallisneria	Lake chubsucker	174	61.00
19	2	Little Wekiva	Vallisneria	Largemouth bass	110	15.00
19	2	Little Wekiva	Vallisneria	Mosquitofish	25	0.26
19	2	Little Wekiva	Vallisneria	Mosquitofish	30	0.45
19	2	Little Wekiva	Vallisneria	Mosquitofish	30	0.50
19	2	Little Wekiva	Vallisneria	Mosquitofish	32	0.48
19	2	Little Wekiva	Vallisneria	Pugnose minnow	39	0.57

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
19	2	Little Wekiva	Vallisneria	Pugnose minnow	40	0.55
19	2	Little Wekiva	Vallisneria	Pugnose minnow	41	0.57
19	2	Little Wekiva	Vallisneria	Pugnose minnow	42	0.63
19	2	Little Wekiva	Vallisneria	Pugnose minnow	44	0.77
19	2	Little Wekiva	Vallisneria	Pugnose minnow	45	0.84
19	2	Little Wekiva	Vallisneria	Pugnose minnow	46	0.95
19	2	Little Wekiva	Vallisneria	Pugnose minnow	46	1.09
19	2	Little Wekiva	Vallisneria	Pugnose minnow	46	0.77
19	2	Little Wekiva	Vallisneria	Pugnose minnow	47	1.03
19	2	Little Wekiva	Vallisneria	Pugnose minnow	50	1.11
19	2	Little Wekiva	Vallisneria	Pugnose minnow	50	1.13
19	2	Little Wekiva	Vallisneria	Pugnose minnow	51	1.07
19	2	Little Wekiva	Vallisneria	Redbreast sunfish	84	9.79
19	2	Little Wekiva	Vallisneria	Redbreast sunfish	85	10.78
19	2	Little Wekiva	Vallisneria	Redbreast sunfish	86	11.09
19	2	Little Wekiva	Vallisneria	Redbreast sunfish	116	25.70
19	2	Little Wekiva	Vallisneria	Redbreast sunfish	146	42.00
19	2	Little Wekiva	Vallisneria	Redear sunfish	44	1.58
19	2	Little Wekiva	Vallisneria	Sailfin shiner	26	0.21
19	2	Little Wekiva	Vallisneria	Sailfin shiner	30	0.29
19	2	Little Wekiva	Vallisneria	Sailfin shiner	31	0.30
19	2	Little Wekiva	Vallisneria	Sailfin shiner	32	0.35
19	2	Little Wekiva	Vallisneria	Seminole killifish	67	3.01
19	2	Little Wekiva	Vallisneria	Seminole killifish	75	4.65
19	2	Little Wekiva	Vallisneria	Seminole killifish	76	4.52
19	2	Little Wekiva	Vallisneria	Seminole killifish	85	6.75
19	2	Little Wekiva	Vallisneria	Seminole killifish	87	4.81
19	2	Little Wekiva	Vallisneria	Seminole killifish	87	7.15
19	2	Little Wekiva	Vallisneria	Seminole killifish	91	7.80
19	2	Little Wekiva	Vallisneria	Seminole killifish	96	9.59
19	2	Little Wekiva	Vallisneria	Seminole killifish	98	9.90
19	2	Little Wekiva	Vallisneria	Seminole killifish	108	13.67
19	2	Little Wekiva	Vallisneria	Seminole killifish	109	12.71
19	2	Little Wekiva	Vallisneria	Spotted sunfish	36	1.10
19	2	Little Wekiva	Vallisneria	Spotted sunfish	56	3.43
19	2	Little Wekiva	Vallisneria	Spotted sunfish	59	4.43
19	2	Little Wekiva	Vallisneria	Spotted sunfish	65	5.79
19	2	Little Wekiva	Vallisneria	Spotted sunfish	68	6.70
19	2	Little Wekiva	Vallisneria	Spotted sunfish	68	7.04
19	2	Little Wekiva	Vallisneria	Spotted sunfish	69	6.92
19	2	Little Wekiva	Vallisneria	Spotted sunfish	77	9.66
19	2	Little Wekiva	Vallisneria	Spotted sunfish	79	10.15
19	2	Little Wekiva	Vallisneria	Spotted sunfish	91	17.62
19	2	Little Wekiva	Vallisneria	Spotted sunfish	101	21.23
19	2	Little Wekiva	Vallisneria	Warmouth	106	26.11
19	2	Little Wekiva	Vallisneria	Warmouth	124	36.00
19	2	Little Wekiva	Vallisneria	Warmouth	174	115.00
19	3	Little Wekiva	Vallisneria	Blackbanded darter	54	1.43
19	3	Little Wekiva	Vallisneria	Bluefin killifish	21	0.20
19	3	Little Wekiva	Vallisneria	Coastal shiner	32	0.39
19	3	Little Wekiva	Vallisneria	Coastal shiner	34	0.42
19	3	Little Wekiva	Vallisneria	Coastal shiner	50	1.34
19	3	Little Wekiva	Vallisneria	Dollar sunfish	58	4.16
19	3	Little Wekiva	Vallisneria	Ironcolor shiner	41	0.63

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
19	3	Little Wekiva	Vallisneria	Ironcolor shiner	41	0.60
19	3	Little Wekiva	Vallisneria	Lake chubsucker	237	160.00
19	3	Little Wekiva	Vallisneria	Mosquitofish	28	0.37
19	3	Little Wekiva	Vallisneria	Pugnose minnow	37	0.48
19	3	Little Wekiva	Vallisneria	Pugnose minnow	39	0.60
19	3	Little Wekiva	Vallisneria	Pugnose minnow	39	0.57
19	3	Little Wekiva	Vallisneria	Pugnose minnow	41	0.68
19	3	Little Wekiva	Vallisneria	Pugnose minnow	45	0.96
19	3	Little Wekiva	Vallisneria	Pugnose minnow	48	1.01
19	3	Little Wekiva	Vallisneria	Redbreast sunfish	141	43.00
19	3	Little Wekiva	Vallisneria	Redbreast sunfish	142	50.00
19	3	Little Wekiva	Vallisneria	Redear sunfish	109	20.00
19	3	Little Wekiva	Vallisneria	Sailfin shiner	27	0.23
19	3	Little Wekiva	Vallisneria	Sailfin shiner	29	0.27
19	3	Little Wekiva	Vallisneria	Sailfin shiner	29	0.27
19	3	Little Wekiva	Vallisneria	Sailfin shiner	30	0.32
19	3	Little Wekiva	Vallisneria	Sailfin shiner	31	0.31
19	3	Little Wekiva	Vallisneria	Sailfin shiner	36	0.54
19	3	Little Wekiva	Vallisneria	Sailfin shiner	41	0.70
19	3	Little Wekiva	Vallisneria	Seminole killifish	67	3.38
19	3	Little Wekiva	Vallisneria	Seminole killifish	75	4.58
19	3	Little Wekiva	Vallisneria	Seminole killifish	107	13.06
19	3	Little Wekiva	Vallisneria	Seminole killifish	115	15.91
19	3	Little Wekiva	Vallisneria	Speckled madtom	51	1.83
19	3	Little Wekiva	Vallisneria	Spotted sunfish	26	0.45
19	3	Little Wekiva	Vallisneria	Spotted sunfish	28	0.51
19	3	Little Wekiva	Vallisneria	Spotted sunfish	29	0.64
19	3	Little Wekiva	Vallisneria	Spotted sunfish	71	7.35
19	3	Little Wekiva	Vallisneria	Spotted sunfish	78	11.32
19	3	Little Wekiva	Vallisneria	Spotted sunfish	81	12.55
19	3	Little Wekiva	Vallisneria	Spotted sunfish	84	10.36
19	3	Little Wekiva	Vallisneria	Spotted sunfish	95	16.00
19	3	Little Wekiva	Vallisneria	Spotted sunfish	98	18.00
19	3	Little Wekiva	Vallisneria	Spotted sunfish	102	21.00
19	3	Little Wekiva	Vallisneria	Spotted sunfish	115	28.00
19	3	Little Wekiva	Vallisneria	Spotted sunfish	116	23.00
19	3	Little Wekiva	Vallisneria	Spotted sunfish	139	58.00
19	4	Little Wekiva	Vallisneria	Bluenose shiner	43	0.73
19	4	Little Wekiva	Vallisneria	Coastal shiner	42	0.71
19	4	Little Wekiva	Vallisneria	Coastal shiner	46	0.95
19	4	Little Wekiva	Vallisneria	Coastal shiner	47	0.96
19	4	Little Wekiva	Vallisneria	Dollar sunfish	62	4.45
19	4	Little Wekiva	Vallisneria	Dollar sunfish	68	5.59
19	4	Little Wekiva	Vallisneria	Dollar sunfish	70	6.74
19	4	Little Wekiva	Vallisneria	Dollar sunfish	71	7.81
19	4	Little Wekiva	Vallisneria	Mosquitofish	30	0.40
19	4	Little Wekiva	Vallisneria	Pugnose minnow	45	0.80
19	4	Little Wekiva	Vallisneria	Redbreast sunfish	140	43.00
19	4	Little Wekiva	Vallisneria	Sailfin shiner	25	0.16
19	4	Little Wekiva	Vallisneria	Seminole killifish	60	2.05
19	4	Little Wekiva	Vallisneria	Seminole killifish	71	3.62
19	4	Little Wekiva	Vallisneria	Seminole killifish	85	6.67
19	4	Little Wekiva	Vallisneria	Seminole killifish	116	13.18
19	4	Little Wekiva	Vallisneria	Seminole killifish	116	12.34

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
19	4	Little Wekiva	Vallisneria	Seminole killifish	126	23.41
19	4	Little Wekiva	Vallisneria	Spotted sunfish	27	0.53
19	4	Little Wekiva	Vallisneria	Spotted sunfish	37	1.17
19	4	Little Wekiva	Vallisneria	Spotted sunfish	53	3.34
19	4	Little Wekiva	Vallisneria	Spotted sunfish	71	9.28
19	4	Little Wekiva	Vallisneria	Spotted sunfish	88	14.00
19	4	Little Wekiva	Vallisneria	Spotted sunfish	127	39.00
19	4	Little Wekiva	Vallisneria	Warmouth	183	119.00
20	1	Little Wekiva	Nuphar	Blackbanded darter	36	0.43
20	1	Little Wekiva	Nuphar	Blackbanded darter	40	0.59
20	1	Little Wekiva	Nuphar	Blackbanded darter	47	1.00
20	1	Little Wekiva	Nuphar	Blackbanded darter	49	1.20
20	1	Little Wekiva	Nuphar	Bluefin killifish	24	0.21
20	1	Little Wekiva	Nuphar	Coastal shiner	21	0.20
20	1	Little Wekiva	Nuphar	Coastal shiner	21	0.11
20	1	Little Wekiva	Nuphar	Coastal shiner	25	0.17
20	1	Little Wekiva	Nuphar	Coastal shiner	26	0.23
20	1	Little Wekiva	Nuphar	Coastal shiner	26	0.21
20	1	Little Wekiva	Nuphar	Coastal shiner	27	0.23
20	1	Little Wekiva	Nuphar	Coastal shiner	27	0.19
20	1	Little Wekiva	Nuphar	Coastal shiner	27	0.22
20	1	Little Wekiva	Nuphar	Coastal shiner	28	0.24
20	1	Little Wekiva	Nuphar	Coastal shiner	29	0.26
20	1	Little Wekiva	Nuphar	Coastal shiner	29	0.31
20	1	Little Wekiva	Nuphar	Coastal shiner	29	0.24
20	1	Little Wekiva	Nuphar	Coastal shiner	30	0.29
20	1	Little Wekiva	Nuphar	Coastal shiner	30	0.29
20	1	Little Wekiva	Nuphar	Coastal shiner	30	0.28
20	1	Little Wekiva	Nuphar	Coastal shiner	31	0.28
20	1	Little Wekiva	Nuphar	Coastal shiner	31	0.30
20	1	Little Wekiva	Nuphar	Coastal shiner	32	0.36
20	1	Little Wekiva	Nuphar	Coastal shiner	32	0.33
20	1	Little Wekiva	Nuphar	Coastal shiner	32	0.35
20	1	Little Wekiva	Nuphar	Coastal shiner	32	0.32
20	1	Little Wekiva	Nuphar	Coastal shiner	32	0.36
20	1	Little Wekiva	Nuphar	Coastal shiner	33	0.34
20	1	Little Wekiva	Nuphar	Coastal shiner	34	0.39
20	1	Little Wekiva	Nuphar	Coastal shiner	37	0.50
20	1	Little Wekiva	Nuphar	Coastal shiner	37	0.55
20	1	Little Wekiva	Nuphar	Coastal shiner	41	0.66
20	1	Little Wekiva	Nuphar	Coastal shiner	41	0.66
20	1	Little Wekiva	Nuphar	Coastal shiner	41	0.59
20	1	Little Wekiva	Nuphar	Coastal shiner	44	0.87
20	1	Little Wekiva	Nuphar	Coastal shiner	45	0.76
20	1	Little Wekiva	Nuphar	Coastal shiner	46	0.97
20	1	Little Wekiva	Nuphar	Coastal shiner	48	1.08
20	1	Little Wekiva	Nuphar	Coastal shiner	48	1.21
20	1	Little Wekiva	Nuphar	Coastal shiner	49	1.14
20	1	Little Wekiva	Nuphar	Coastal shiner	50	1.35
20	1	Little Wekiva	Nuphar	Coastal shiner	50	1.26
20	1	Little Wekiva	Nuphar	Coastal shiner	51	1.27
20	1	Little Wekiva	Nuphar	Coastal shiner	52	1.34
20	1	Little Wekiva	Nuphar	Coastal shiner	52	1.29
20	1	Little Wekiva	Nuphar	Coastal shiner	54	1.62

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
20	1	Little Wekiva	Nuphar	Coastal shiner	56	1.74
20	1	Little Wekiva	Nuphar	Coastal shiner	56	1.94
20	1	Little Wekiva	Nuphar	Coastal shiner	57	1.98
20	1	Little Wekiva	Nuphar	Coastal shiner	58	1.88
20	1	Little Wekiva	Nuphar	Coastal shiner	61	2.22
20	1	Little Wekiva	Nuphar	Coastal shiner	62	2.33
20	1	Little Wekiva	Nuphar	Ironcolor shiner	44	0.75
20	1	Little Wekiva	Nuphar	Pugnose minnow	32	0.29
20	1	Little Wekiva	Nuphar	Pugnose minnow	37	0.49
20	1	Little Wekiva	Nuphar	Pugnose minnow	40	0.62
20	1	Little Wekiva	Nuphar	Redbreast sunfish	29	0.54
20	1	Little Wekiva	Nuphar	Redbreast sunfish	82	8.46
20	1	Little Wekiva	Nuphar	Redbreast sunfish	83	9.45
20	1	Little Wekiva	Nuphar	Redbreast sunfish	173	91.41
20	1	Little Wekiva	Nuphar	Redbreast sunfish	174	88.08
20	1	Little Wekiva	Nuphar	Redear sunfish	169	95.56
20	1	Little Wekiva	Nuphar	Redear sunfish	179	97.63
20	1	Little Wekiva	Nuphar	Sailfin shiner	26	0.22
20	1	Little Wekiva	Nuphar	Seminole killifish	40	0.67
20	1	Little Wekiva	Nuphar	Seminole killifish	43	0.91
20	1	Little Wekiva	Nuphar	Seminole killifish	44	0.89
20	1	Little Wekiva	Nuphar	Seminole killifish	45	1.01
20	1	Little Wekiva	Nuphar	Seminole killifish	47	1.04
20	1	Little Wekiva	Nuphar	Seminole killifish	52	1.47
20	1	Little Wekiva	Nuphar	Seminole killifish	56	1.80
20	1	Little Wekiva	Nuphar	Seminole killifish	69	3.22
20	1	Little Wekiva	Nuphar	Seminole killifish	74	4.25
20	1	Little Wekiva	Nuphar	Seminole killifish	85	6.00
20	1	Little Wekiva	Nuphar	Spotted sunfish	33	0.92
20	2	Little Wekiva	Nuphar	Blackbanded darter	34	0.39
20	2	Little Wekiva	Nuphar	Blackbanded darter	53	1.37
20	2	Little Wekiva	Nuphar	Bluefin killifish	29	0.34
20	2	Little Wekiva	Nuphar	Brook silverside	46	0.65
20	2	Little Wekiva	Nuphar	Brook silverside	58	1.17
20	2	Little Wekiva	Nuphar	Coastal shiner	21	0.11
20	2	Little Wekiva	Nuphar	Coastal shiner	23	0.16
20	2	Little Wekiva	Nuphar	Coastal shiner	24	0.16
20	2	Little Wekiva	Nuphar	Coastal shiner	25	0.17
20	2	Little Wekiva	Nuphar	Coastal shiner	25	0.19
20	2	Little Wekiva	Nuphar	Coastal shiner	26	0.17
20	2	Little Wekiva	Nuphar	Coastal shiner	26	0.21
20	2	Little Wekiva	Nuphar	Coastal shiner	26	0.19
20	2	Little Wekiva	Nuphar	Coastal shiner	26	0.19
20	2	Little Wekiva	Nuphar	Coastal shiner	27	0.24
20	2	Little Wekiva	Nuphar	Coastal shiner	28	0.23
20	2	Little Wekiva	Nuphar	Coastal shiner	29	0.42
20	2	Little Wekiva	Nuphar	Coastal shiner	29	0.26
20	2	Little Wekiva	Nuphar	Coastal shiner	30	0.26
20	2	Little Wekiva	Nuphar	Coastal shiner	30	0.30
20	2	Little Wekiva	Nuphar	Coastal shiner	31	0.28
20	2	Little Wekiva	Nuphar	Coastal shiner	32	0.31
20	2	Little Wekiva	Nuphar	Coastal shiner	33	0.35
20	2	Little Wekiva	Nuphar	Coastal shiner	33	0.30
20	2	Little Wekiva	Nuphar	Coastal shiner	33	0.38

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
20	2	Little Wekiva	Nuphar	Coastal shiner	35	0.42
20	2	Little Wekiva	Nuphar	Coastal shiner	35	0.41
20	2	Little Wekiva	Nuphar	Coastal shiner	35	0.46
20	2	Little Wekiva	Nuphar	Coastal shiner	37	0.55
20	2	Little Wekiva	Nuphar	Coastal shiner	43	0.78
20	2	Little Wekiva	Nuphar	Coastal shiner	45	0.97
20	2	Little Wekiva	Nuphar	Coastal shiner	45	0.82
20	2	Little Wekiva	Nuphar	Coastal shiner	46	0.99
20	2	Little Wekiva	Nuphar	Coastal shiner	47	1.08
20	2	Little Wekiva	Nuphar	Coastal shiner	55	1.70
20	2	Little Wekiva	Nuphar	Ironcolor shiner	26	0.17
20	2	Little Wekiva	Nuphar	Ironcolor shiner	39	0.54
20	2	Little Wekiva	Nuphar	Ironcolor shiner	46	1.02
20	2	Little Wekiva	Nuphar	Mosquitofish	25	0.25
20	2	Little Wekiva	Nuphar	Pugnose minnow	37	0.48
20	2	Little Wekiva	Nuphar	Pugnose minnow	45	0.78
20	2	Little Wekiva	Nuphar	Redbreast sunfish	84	8.85
20	2	Little Wekiva	Nuphar	Redbreast sunfish	139	42.20
20	2	Little Wekiva	Nuphar	Seminole killifish	25	0.17
20	2	Little Wekiva	Nuphar	Seminole killifish	38	0.58
20	2	Little Wekiva	Nuphar	Seminole killifish	44	0.80
20	2	Little Wekiva	Nuphar	Seminole killifish	45	0.93
20	2	Little Wekiva	Nuphar	Seminole killifish	47	1.05
20	2	Little Wekiva	Nuphar	Seminole killifish	47	0.94
20	2	Little Wekiva	Nuphar	Seminole killifish	65	2.67
20	2	Little Wekiva	Nuphar	Seminole killifish	67	3.02
20	2	Little Wekiva	Nuphar	Seminole killifish	67	2.72
20	2	Little Wekiva	Nuphar	Seminole killifish	67	1.95
20	2	Little Wekiva	Nuphar	Seminole killifish	86	6.60
20	2	Little Wekiva	Nuphar	Seminole killifish	88	5.74
20	2	Little Wekiva	Nuphar	Seminole killifish	92	8.59
20	2	Little Wekiva	Nuphar	Seminole killifish	138	29.07
20	2	Little Wekiva	Nuphar	Spotted sunfish	96	20.38
20	3	Little Wekiva	Nuphar	Blackbanded darter	40	0.56
20	3	Little Wekiva	Nuphar	Brook silverside	41	0.43
20	3	Little Wekiva	Nuphar	Coastal shiner	23	0.15
20	3	Little Wekiva	Nuphar	Coastal shiner	25	0.16
20	3	Little Wekiva	Nuphar	Coastal shiner	26	0.20
20	3	Little Wekiva	Nuphar	Coastal shiner	26	0.21
20	3	Little Wekiva	Nuphar	Coastal shiner	27	0.22
20	3	Little Wekiva	Nuphar	Coastal shiner	28	0.24
20	3	Little Wekiva	Nuphar	Coastal shiner	28	0.24
20	3	Little Wekiva	Nuphar	Coastal shiner	29	0.23
20	3	Little Wekiva	Nuphar	Coastal shiner	30	0.25
20	3	Little Wekiva	Nuphar	Coastal shiner	31	0.34
20	3	Little Wekiva	Nuphar	Coastal shiner	31	0.31
20	3	Little Wekiva	Nuphar	Coastal shiner	31	0.31
20	3	Little Wekiva	Nuphar	Coastal shiner	31	0.29
20	3	Little Wekiva	Nuphar	Coastal shiner	32	0.33
20	3	Little Wekiva	Nuphar	Coastal shiner	34	0.43
20	3	Little Wekiva	Nuphar	Coastal shiner	34	0.37
20	3	Little Wekiva	Nuphar	Coastal shiner	38	0.47
20	3	Little Wekiva	Nuphar	Coastal shiner	41	0.64
20	3	Little Wekiva	Nuphar	Coastal shiner	58	1.73

Fall 1997 Blocknet Fish Data - Wekiva River System

Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
20	3	Little Wekiva	Nuphar	Ironcolor shiner	43	0.70
20	3	Little Wekiva	Nuphar	Redbreast sunfish	22	0.23
20	3	Little Wekiva	Nuphar	Redbreast sunfish	26	0.41
20	3	Little Wekiva	Nuphar	Redbreast sunfish	74	6.25
20	3	Little Wekiva	Nuphar	Redbreast sunfish	109	19.60
20	3	Little Wekiva	Nuphar	Redbreast sunfish	123	30.89
20	3	Little Wekiva	Nuphar	Seminole killifish	47	1.02
20	3	Little Wekiva	Nuphar	Seminole killifish	73	3.40
21	1	Little Wekiva	Bare Bottom	Blackbanded darter	35	0.45
21	1	Little Wekiva	Bare Bottom	Blackbanded darter	36	0.52
21	1	Little Wekiva	Bare Bottom	Blackbanded darter	37	0.50
21	1	Little Wekiva	Bare Bottom	Blackbanded darter	42	0.75
21	1	Little Wekiva	Bare Bottom	Bluefin killifish	21	0.17
21	1	Little Wekiva	Bare Bottom	Bluefin killifish	26	0.30
21	1	Little Wekiva	Bare Bottom	Bluefin killifish	28	0.31
21	1	Little Wekiva	Bare Bottom	Coastal shiner	25	0.21
21	1	Little Wekiva	Bare Bottom	Coastal shiner	26	0.24
21	1	Little Wekiva	Bare Bottom	Coastal shiner	26	0.18
21	1	Little Wekiva	Bare Bottom	Coastal shiner	29	0.26
21	1	Little Wekiva	Bare Bottom	Coastal shiner	29	0.29
21	1	Little Wekiva	Bare Bottom	Coastal shiner	29	0.29
21	1	Little Wekiva	Bare Bottom	Coastal shiner	30	0.27
21	1	Little Wekiva	Bare Bottom	Coastal shiner	31	0.29
21	1	Little Wekiva	Bare Bottom	Coastal shiner	31	0.36
21	1	Little Wekiva	Bare Bottom	Coastal shiner	32	0.32
21	1	Little Wekiva	Bare Bottom	Coastal shiner	33	0.37
21	1	Little Wekiva	Bare Bottom	Coastal shiner	36	0.50
21	1	Little Wekiva	Bare Bottom	Golden topminnow	51	1.97
21	1	Little Wekiva	Bare Bottom	Golden topminnow	56	2.61
21	1	Little Wekiva	Bare Bottom	Ironcolor shiner	38	0.45
21	1	Little Wekiva	Bare Bottom	Largemouth bass	79	6.62
21	1	Little Wekiva	Bare Bottom	Largemouth bass	114	16.21
21	1	Little Wekiva	Bare Bottom	Mosquitofish	19	0.13
21	1	Little Wekiva	Bare Bottom	Mosquitofish	21	0.15
21	1	Little Wekiva	Bare Bottom	Mosquitofish	23	0.22
21	1	Little Wekiva	Bare Bottom	Mosquitofish	26	0.34
21	1	Little Wekiva	Bare Bottom	Mosquitofish	39	0.87
21	1	Little Wekiva	Bare Bottom	Okefenokee pygmy sunfish	14	0.11
21	1	Little Wekiva	Bare Bottom	Pugnose minnow	32	0.30
21	1	Little Wekiva	Bare Bottom	Redbreast sunfish	25	0.38
21	1	Little Wekiva	Bare Bottom	Redbreast sunfish	27	0.41
21	1	Little Wekiva	Bare Bottom	Redbreast sunfish	28	0.51
21	1	Little Wekiva	Bare Bottom	Redbreast sunfish	31	0.63
21	1	Little Wekiva	Bare Bottom	Redbreast sunfish	31	0.72
21	1	Little Wekiva	Bare Bottom	Redbreast sunfish	34	0.84
21	1	Little Wekiva	Bare Bottom	Redbreast sunfish	34	0.85
21	1	Little Wekiva	Bare Bottom	Redbreast sunfish	35	0.97
21	1	Little Wekiva	Bare Bottom	Redbreast sunfish	36	0.94
21	1	Little Wekiva	Bare Bottom	Redbreast sunfish	40	1.58
21	1	Little Wekiva	Bare Bottom	Redbreast sunfish	55	3.46
21	1	Little Wekiva	Bare Bottom	Redbreast sunfish	74	6.51
21	1	Little Wekiva	Bare Bottom	Sailfin molly	19	0.19
21	1	Little Wekiva	Bare Bottom	Sailfin molly	20	0.21
21	1	Little Wekiva	Bare Bottom	Sailfin molly	22	0.26

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Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
21	1	Little Wekiva	Bare Bottom	Sailfin molly	25	0.38
21	1	Little Wekiva	Bare Bottom	Sailfin molly	30	0.60
21	1	Little Wekiva	Bare Bottom	Sailfin molly	31	0.57
21	1	Little Wekiva	Bare Bottom	Sailfin molly	34	0.82
21	1	Little Wekiva	Bare Bottom	Sailfin molly	35	0.81
21	1	Little Wekiva	Bare Bottom	Sailfin molly	41	1.31
21	1	Little Wekiva	Bare Bottom	Sailfin molly	42	1.36
21	1	Little Wekiva	Bare Bottom	Sailfin molly	48	1.86
21	1	Little Wekiva	Bare Bottom	Seminole killifish	32	0.43
21	1	Little Wekiva	Bare Bottom	Seminole killifish	38	0.60
21	1	Little Wekiva	Bare Bottom	Seminole killifish	46	1.05
21	1	Little Wekiva	Bare Bottom	Seminole killifish	65	2.71
21	1	Little Wekiva	Bare Bottom	Spotted sunfish	64	4.95
21	1	Little Wekiva	Bare Bottom	Warmouth	25	0.30
21	1	Little Wekiva	Bare Bottom	Warmouth	26	0.39
21	1	Little Wekiva	Bare Bottom	Warmouth	28	0.39
21	1	Little Wekiva	Bare Bottom	Warmouth	31	0.59
21	1	Little Wekiva	Bare Bottom	Warmouth	32	0.68
21	1	Little Wekiva	Bare Bottom	Warmouth	34	0.83
21	2	Little Wekiva	Bare Bottom	Blackbanded darter	32	0.37
21	2	Little Wekiva	Bare Bottom	Brook silverside	58	1.31
21	2	Little Wekiva	Bare Bottom	Brook silverside	70	1.94
21	2	Little Wekiva	Bare Bottom	Coastal shiner	24	0.15
21	2	Little Wekiva	Bare Bottom	Coastal shiner	24	0.22
21	2	Little Wekiva	Bare Bottom	Coastal shiner	27	0.24
21	2	Little Wekiva	Bare Bottom	Coastal shiner	28	0.40
21	2	Little Wekiva	Bare Bottom	Coastal shiner	30	0.31
21	2	Little Wekiva	Bare Bottom	Coastal shiner	31	0.29
21	2	Little Wekiva	Bare Bottom	Coastal shiner	32	0.33
21	2	Little Wekiva	Bare Bottom	Coastal shiner	32	0.33
21	2	Little Wekiva	Bare Bottom	Coastal shiner	33	0.40
21	2	Little Wekiva	Bare Bottom	Coastal shiner	33	0.38
21	2	Little Wekiva	Bare Bottom	Coastal shiner	34	0.40
21	2	Little Wekiva	Bare Bottom	Coastal shiner	34	0.43
21	2	Little Wekiva	Bare Bottom	Coastal shiner	35	0.44
21	2	Little Wekiva	Bare Bottom	Coastal shiner	35	0.44
21	2	Little Wekiva	Bare Bottom	Coastal shiner	38	0.58
21	2	Little Wekiva	Bare Bottom	Mosquitofish	31	0.44
21	2	Little Wekiva	Bare Bottom	Mosquitofish	40	0.91
21	2	Little Wekiva	Bare Bottom	Mosquitofish	41	0.89
21	2	Little Wekiva	Bare Bottom	Redbreast sunfish	28	0.49
21	2	Little Wekiva	Bare Bottom	Redbreast sunfish	66	4.85
21	2	Little Wekiva	Bare Bottom	Sailfin molly	29	0.49
21	2	Little Wekiva	Bare Bottom	Sailfin molly	38	0.91
21	2	Little Wekiva	Bare Bottom	Seminole killifish	39	0.74
21	2	Little Wekiva	Bare Bottom	Seminole killifish	41	0.71
21	2	Little Wekiva	Bare Bottom	Seminole killifish	41	0.77
21	2	Little Wekiva	Bare Bottom	Seminole killifish	42	0.75
21	2	Little Wekiva	Bare Bottom	Seminole killifish	45	0.95
21	2	Little Wekiva	Bare Bottom	Seminole killifish	47	1.08
21	2	Little Wekiva	Bare Bottom	Seminole killifish	49	1.10
21	2	Little Wekiva	Bare Bottom	Seminole killifish	50	1.26
21	2	Little Wekiva	Bare Bottom	Seminole killifish	51	1.19
21	2	Little Wekiva	Bare Bottom	Seminole killifish	56	1.66

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Blocknet Number	Removal Number	River Segment	Habitat	Species Collected	Total Length (mm)	Wet Weight (grams)
21	2	Little Wekiva	Bare Bottom	Seminole killifish	58	1.83
21	2	Little Wekiva	Bare Bottom	Seminole killifish	58	1.86
21	2	Little Wekiva	Bare Bottom	Seminole killifish	62	2.29
21	2	Little Wekiva	Bare Bottom	Seminole killifish	67	2.80
21	2	Little Wekiva	Bare Bottom	Spotted sunfish	99	19.86
21	3	Little Wekiva	Bare Bottom	Coastal shiner	28	0.21
21	3	Little Wekiva	Bare Bottom	Coastal shiner	28	0.23
21	3	Little Wekiva	Bare Bottom	Coastal shiner	41	0.61
21	3	Little Wekiva	Bare Bottom	Redbreast sunfish	23	0.28
21	3	Little Wekiva	Bare Bottom	Redbreast sunfish	29	0.56
21	3	Little Wekiva	Bare Bottom	Redbreast sunfish	29	0.54
21	3	Little Wekiva	Bare Bottom	Sailfin molly	35	0.86
21	3	Little Wekiva	Bare Bottom	Sailfin shiner	34	0.31
21	3	Little Wekiva	Bare Bottom	Seminole killifish	35	0.46
21	3	Little Wekiva	Bare Bottom	Seminole killifish	41	0.72
21	3	Little Wekiva	Bare Bottom	Seminole killifish	41	0.65
21	3	Little Wekiva	Bare Bottom	Seminole killifish	59	1.90
21	3	Little Wekiva	Bare Bottom	Seminole killifish	67	2.73

Appendix 3.2.1

1997 Blocknet Fish and Physicochemical Data Summary

Little Wekiva River and Upper Wekiva River

Blocknet Number	River Segment	Habitat	Date	GPS North	GPS West	Plant Cover (%)	Mean Water Temperature (C)
3	Little Wekiva	Bare Bottom	72997	2842.77	8123.69	0	27.0
1	Little Wekiva	Nuphar	72497	2843.47	8123.95	58	27.7
2	Little Wekiva	Vallisneria	72497	2843.46	8123.94	40	28.0
4	Upper Wekiva	Hydrocotyle	72397	2844.55	8125.19	80	26.9
6	Upper Wekiva	Nuphar	72297	2843.97	8125.66	35	27.6
5	Upper Wekiva	Vallisneria	72297	2843.02	8126.46	85	26.5

Mean Depth (m)	Mean Dissolved Oxygen (mg/l)	Mean Surface Velocity (cm/sec)	Mean Bottom Velocity (cm/sec)	Mean Plant Biomass (g/0.0625m2)	Fish Density (Number/m2)	Fish Biomass (g/m2)	Number of Fish Species
0.48	5.2	15.5	7.0	0	0.24	3.2	9
0.39	4.7	10.3	7.3	.	0.24	3.5	11
0.53	4.8	18.3	4.5	135	0.44	9.8	12
0.78	5.3	3.8	3.0	1158	0.13	7.0	10
0.54	5.8	8.8	4.3	192	0.09	3.6	8
1.05	6.2	21.3	3.0	209	0.28	5.5	11

Blocknet Number	River Segment	Habitat	Date	GPS North	GPS West	Plant Cover (%)	Mean Water Temperature (C)
21	Little Wekiva	Bare Bottom	111897	2843.05	8123.49	0	21.1
20	Little Wekiva	Nuphar	111897	2843.80	8123.99	40	20.0
19	Little Wekiva	Vallisneria	111897	2843.44	8121.96	85	20.4
16	Upper Wekiva	Hydrocotyle	110497	2844.58	8125.20	75	21.2
17	Upper Wekiva	Nuphar	110497	2843.95	8125.58	40	20.4
18	Upper Wekiva	Vallisneria	110497	2842.98	8126.42	60	21.0

Mean Depth (m)	Mean Dissolved Oxygen (mg/l)	Mean Surface Velocity (cm/sec)	Mean Bottom Velocity (cm/sec)	Mean Plant Biomass (g/0.0625m2)	Fish Density (Number/m2)	Fish Biomass (g/m2)	Number of Fish Species
0.39	6.4	8.0	2.0	0	0.22	0.7	16
0.36	6.3	7.3	1.5	.	0.34	4.3	12
0.54	6.6	13.3	3.0	476	0.88	35.3	20
0.81	6.4	13.3	5.8	432	0.20	23.2	14
0.58	6.3	7.5	4.8	.	0.18	2.5	9
1.00	5.4	17.8	1.8	175	0.13	0.9	9