APPENDIX 12.F. SUMMARY OF REGRESSION ANALYSES RELATING FRESHWATER INFLOW TO DISTRIBUTION, MONTHLY ABUNDANCE, AND ANNUAL ABUNDANCE DERIVED FROM THE FIM'S DATASET 2001-2011.

Distribution 21.3-m Seine

Summary of Spearman's correlation analyses relating pseudo-species distributional response (km_U) to continuously lagged mean freshwater inflow for 21.3-m seine hauls collected in the lower St. Johns River . Sig. is number of significant (P<0.050) correlation(s), Not Sig. is number of non-significant correlation(s). The highest significant absolute rho (p<0.05) is presented along with the associated lag times that were used in linear regression. Bold lag is associated with the highest absolute rho. Other lags used in linear regression had rho values within ± 3% of the highest value.

Species	*Common name*	*Size (mm)*	*Months*	*FIM Zones*	*Sig.*	*Not Sig.*	rho	*Lag (days)*
Anchoa hepsetus	Striped anchovy	0 to 45	May-Sep	1-8	0	3		
Anchoa mitchilli	Bay anchovy	0 to 50	Apr-Jan	1-8	0	3		
Bairdiella chrysoura	Silver perch	0 to 30	May-Jun	1-8	1	2	-0.77	60
Bairdiella chrysoura	Silver perch	31 to 55	May-Jul	1-8	3	0	-0.76	60
Bairdiella chrysoura	Silver perch	56 to 85	Jun-Sep	1-8	1	2	-0.60	90
Brevoortia spp.	Menhaden	20-40	Feb-Mar	1-3	0	3		
Callinectes sapidus	Blue crab	0 to 30	Jan-Dec	1-8	0	3		
Callinectes sapidus	Blue crab	50 to 120	Mar-Dec	1-8	0	3		
Ctenogobius shufeldti	Freshwater goby	0 to 50	Nov-Mar	1-8	0	3		
Eucinostomus harengulus	Tidewater mojarra	40 to 65	Jul-Dec	1-8	0	3		
Fundulus seminolis	Seminole killifish	0 to 80	Jun-Sep	1-8	0	3		
Gambusia holbrooki	Eastern mosquitofish	0 to 32	Oct-Mar	1-8	0	3		
Gobiosoma bosc	Naked goby	20 to 35	Dec-Apr	1-8	2	1	-0.52	60
Lagodon rhomboides	Pinfish	0 to 35	Feb-Apr	1-8	0	3		
Lagodon rhomboides	Pinfish	36 to 70	Apr-Jul	1-8	0	3		
Leiostomus xanthurus	Spot	0 to 25	Feb-Mar	1-8	0	3		
Leiostomus xanthurus	Spot	26 to 55	Mar-Apr	1-8	0	3		
Leiostomus xanthurus	Spot	56 to 75	Apr-Jun	1-8	0	3		
Lepomis auritus	Redbreast sunfish	20 to 110	Jan-Dec	1-8	0	3		
Lepomis macrochirus	Bluegill	20 to 65	Aug-Nov	1-8	0	3		
Lepomis microlophus	Redear sunfish	20 to 80	Aug-Dec	1-8	0	3		
Litopenaeus setiferus	White shrimp	0 to 15	Jun-Jul	1-8	2	1	-0.70	90
Litopenaeus setiferus	White shrimp	0 to 15	Aug-Nov	1-8	3	0	-0.60	30
Litopenaeus setiferus	White shrimp	16 to 23	Jun- Aug	1-8	0	3		
Lucania parva	Rainwater killifish	0 to 32	Mar-Jun	1-8	0	3		
Menidia menidia	Atlantic silversides	25 to40	May-Aug	1-2	0	3		
Menidia menidia	Atlantic silversides	41 to 55	Jun-Sep	1-2	0	3		
Menidia menidia	Atlantic silversides	56 to 75	Sep-Feb	1-3	0	3		
Menidia spp.	Silversides	25 to40	Jan-Dec	1-8	0	3		
Menidia spp.	Silversides	41 to 55	Jan-Dec	1-8	0	3		
Menidia spp.	Silversides	56 to 75	Jan-Dec	1-8	0	3		
Microgobius gulosus	Clown goby	0 to 28	Sep-Dec	1-8	1	2	-0.43	30
Microgobius gulosus	Clown goby	29 to 45	Mar-Jun	1-8	0	3		
Micropogonias undulatus	Atlantic croaker	0 to 25	Dec-Feb	1-8	0	3		
Micropogonias undulatus	Atlantic croaker	35 to 65	Apr-May	1-8	0	3		
Micropogonias undulatus	Atlantic croaker	66 to 96	Apr-Jun	1-8	0	3		

Distribution 21.3 m Seine Continued

Species	Common name	Size (mm)	Months	FIM Zones	Sig.	Not Sig.	rho	Lag (days)
Micropterus salmoides	Largemouth bass	0 to 39	Apr-Jun	1-8	0	3		
Micropterus salmoides	Largemouth bass	40 to 140	May-Aug	1-8	0	3		
Mugil cephalus	Striped mullet	0 to 30	Jan-Apr	1-8	0	3		
Mugil cephalus	Striped mullet	31 to 45	Mar-Jun	1-8	1	2	-0.56	30
Mugil cephalus	Striped mullet	46 to 75	May-Jul	1-8	0	3		
Notemigonus chrysoleucas	Golden shiner	0 to 50	May-Jul	1-8	0	3		
Notemigonus chrysoleucas	Golden shiner	51 to 100	Jun-Nov	1-8	0	3		
Paralichthys lethostigma	Southern flounder	0 to 50	Feb-Jun	1-8	0	3		
Strongylura marina	Atlantic needlefish	100 to 175	Apr-Oct	1-8	0	3		
Syngnathus scovelli	Gulf pipefish	0 to 120	May-Oct	1-8	0	3		
Trinectes maculates	Hogchoker	0 to 30	Jul-Feb	1-8	0	3		
Trinectes maculates	Hogchoker	31 to 60	Apr-Jan	1-8	0	3		

Best-fit linear distributional response (kmU) to continuously lagged mean freshwater inflow for pseudo-species collected with 21.3-m seines in the lower St. Johns River. Both untransformed and transformed data (fourth root) were used to develop regressions and only the best-fit regression (highest PRESS r^2) is presented here. An "x" in DW indicates that the Durbin-Watson statistic was significant ($p<0.05$). Press r^2 = predicted residual sum of squares statistic.

Species	Common name	Size (mm)	Months	Zones	Lag (Days)	Transform	df	Intercept	Linear coef.	Linear P	r2	DW	Press r2
Bairdiella chrysoura	Silver perch	0 to 30	May to Jun	1-8	60	Both	7	4.03	-0.2016	0.0150	0.5947		0.3895
Bairdiella chrysoura	Silver perch	31 to 55	May to Jul	1-8	60	Both	13	4.05	-0.1995	0.0001	0.7274		0.6044
Bairdiella chrysoura	Silver perch	56 to 85	Jun to Sep	1-8	90	Dep	12	3.11	-0.0001	0.0006	0.6368		0.4991
Gobiosoma bosc	Naked goby	20 to 35	Dec to Apr	1-8	60	Ind	22	183.39	-12.7645	0.0118	0.2550		0.1484
Litopenaeus setiferus	White shrimp	0 to 15	Jun to Jul	1-8	90	Both	9	3.92	-0.2151	0.0025	0.6572		0.5086
Litopenaeus setiferus	White shrimp	0 to 15	Aug to Nov	1-8	30	Dep	19	2.67	-0.0000	0.0005	0.4807		0.3613
Microgobius gulosus	Clown goby	0 to 28	Sep to Dec	1-8	30	Both	22	3.35	-0.0346	0.0096	0.2679		0.0523
Mugil cephalus	Striped mullet	31 to 45	Mar to Jun	1-8	30	Ind	14	199.36	-17.8704	0.0221	0.3209		0.1394

Distribution 183-m Seine

Summary of Spearman's correlation analyses relating pseudo-species distributional response (km_U) to continuously lagged mean freshwater inflow for 183-m seine hauls collected in the lower St. Johns River . Sig. is number of significant (P<0.050) correlation(s), Not Sig. is number of non-significant correlation(s). The highest significant absolute rho (p<0.05) is presented along with the associated lag times that were used in linear regression. Bold lag is associated with the highest absolute rho. Other lags used in linear regression had rho values within ± 3% of the highest value.

Species	*Common name*	*Size (mm)*	*Months*	*FIM Zones*	*Sig.*	*Not Sig.*	rho	*Lag(days)*
Archosargus probatocephalus	Sheepshead	201 to 425	Jan-Dec	1-4	0	3		
Bairdiella chrysoura	Silver perch	80 to 100	Sep-Oct	1-4	0	3		
Bairdiella chrysoura	Silver perch	101 to 130	Sep-Mar	1-4	0	3		
Callinectes sapidus	Blue crab	40 to 90	Jan-Oct	1-4	0	3		
Callinectes sapidus	Blue crab	91 to 170	Apr-Oct	1-4	0	3		
Chloroscombrus chrysurus	Atlantic bumper	50 to 110	Jul-Oct	1-4	3	0	-0.55	30
Chloroscombrus chrysurus	Atlantic bumper	111 to 150	Jul-Oct	1-4	0	3		
Citharichthys spilopterus	Bay whiff	71 to 100	Jun-Sep	1-4	0	3		
Dasyatis sabina	Atlantic stingray	125 to 325	Apr-Sep	1-4	0	3		
Diapterus auratus	Irish pompano	60 to 110	Oct-Dec	1-4	0	3		
Dorosoma cepedianum	Gizzard shad	0 to 200	Jun-Oct	1-4	0	3		
Dorosoma petenense	Threadfin shad	75 to 125	Jul-Nov	1-4	0	3		
Elops saurus	Ladyfish	150 to 300	Aug-Nov	1-4	0	3		
Eucinostomus harengulus	Tidewater mojarra	60 to 90	Aug-Dec	1-4	0	3		
Ictalurus punctatus	Channel catfish	150 to 275	May-Sep	1-4	0	3		
Lagodon rhomboides	Pinfish	70 to 100	Jun-Sep	1-4	0	3		
Lagodon rhomboides	Pinfish	101 to 130	Jul-Oct	1-4	2	1	-0.42	**60**, 90
Lagodon rhomboides	Pinfish	131 to 160	Aug-Oct	1-4	3	0	-0.79	90
Leiostomus xanthurus	Spot	60 to 90	Apr-Jun	1-4	0	3		
Leiostomus xanthurus	Spot	91 to 120	May-Sep	1-4	0	3		
Leiostomus xanthurus	Spot	121 to 140	Sep-Dec	1-4	0	3		
Lepomis macrochirus	Bluegill	60 to 120	Jan-Dec	1-4	0	3		
Lepomis microlophus	Redear sunfish	0 to 125	Nov-Jun	1-4	3	0	-0.57	60,**90**
Litopenaeus setiferus	White shrimp	18 to 25	Jul-Nov	1-4	0	3		
Micropogonias undulatus	Atlantic croaker	60 to 100	Mar-Jun	1-4	0	3		
Micropogonias undulatus	Atlantic croaker	101 to 130	May-Oct	1-4	0	3		
Mugil cephalus	Striped mullet	75 to 125	Aug-Apr	1-4	0	3		
Mugil cephalus	Striped mullet	126 to 175	Sep-Apr	1-4	3	0	-0.37	90
Mugil cephalus	Striped mullet	176 to 250	Jan-Dec	1-4	1	2	-0.22	90
Mugil cephalus	Striped mullet	251 to 375	Jan-Dec	1-4	0	3		
Mugil curema	White mullet	100 to 130	Oct-Jan	1-4	2	1	-0.39	30,**60**
Mugil curema	White mullet	131 to 150	Sep-Jan	1-4	0	3		
Mugil curema	White mullet	151 to 200	May-Dec	1-4	1	2	-0.43	90
Orthopristis chrysoptera	Pigfish	80 to 130	Jul-Sep	1-4	0	3		
Sciaenops ocellatus	Red drum	50 to 125	Mar-Jun	1-4	0	3		
Sciaenops ocellatus	Red drum	201 to 350	Jul-May	1-4	1	2	-0.41	90
Strongylura marina	Atlantic needlefish	325 to 500	Aug-Mar	1-4	0	3		

Distribution 183-m Seine Continued

Best-fit linear distributional response (kmU) to continuously lagged mean freshwater inflow for pseudo-species collected with 1831.3-m seines in the lower St. Johns River. Both untransformed and transformed data (fourth root) were used to develop regressions and only the best-fit regression (highest PRESS r^2) is presented here. An "x" in DW indicates that the Durbin-Watson statistic was significant ($p<0.05$). Press r^2 = predicted residual sum of squares statistic.

Species	*Common name*	*Size (mm)*	*Months*	*Zones*	*Days*	*Transform*	*df*	*Intercept*	*Linear coef.*	*Linear P*	*r2*	*DW*	*Press r2*
Chloroscombrus chrysurus	Atlantic bumper	50 to 110	Jul to Oct	1-4	30	Ind	15	71.86	-6.1079	0.0088	0.3765		0.2157
Lagodon rhomboides	Pinfish	101 to 130	Jul to Oct	1-4	90	Dep	27	2.64	-0.0000	0.0088	0.2279		0.0792
Lagodon rhomboides	Pinfish	131 to 160	Aug to Oct	1-4	90	Ind	16	114.18	-10.6688	0.0001	0.6035	x	0.5111
Lepomis microlophus	Redear sunfish	0 to 125	Nov to Jun	1-4	60	Both	16	2.89	-0.0220	0.0128	0.3289	x	0.1518
Mugil curema	White mullet	151 to 200	May to Dec	1-4	90	Ind	43	75.10	-6.0310	0.0011	0.2230		0.1592
Sciaenops ocellatus	Red Drum	201 to 350	Jul to May	1-4	90	Ind	40	69.78	-4.5028	0.0049	0.1814	x	0.1213

Distribution 6.1-m Trawl

Summary of Spearman's correlation analyses relating pseudo-species distributional response (km_U) to continuously lagged mean freshwater inflow for 6.1-m trawls collected in the lower St. Johns River . Sig. is number of significant (P<0.050) correlation(s), Not Sig. is number of non-significant correlation(s). The highest significant absolute rho (p<0.05) is presented along with the associated lag times that were used in linear regression. Bold lag is associated with the highest absolute rho. Other lags used in linear regression had rho values within ± 3% of the highest value.

Species	*Common name*	*Size (mm)*	*Months*	*FIM Zones*	*Sig.*	*Not Sig.*	rho	*Lag(days)*
Ameiurus catus	White catfish	25 to 100	Sep-Mar	1-8	1	2	-0.40	90
Ameiurus catus	White catfish	101 to 200	Jan-Dec	1-8	0	3		
Anchoa mitchilli	Bay anchovy	20 to 35	Jul-Jan	1-8	2	1	-0.48	30
Anchoa mitchilli	Bay anchovy	36 to 60	May-Jan	1-8	0	3		
Callinectes sapidus	Blue crab	10 to 50	Oct-Feb	1-8	2	1	-0.42	**60**, 90
Callinectes sapidus	Blue crab	51 to 80	May-Oct	1-8	0	3		
Callinectes sapidus	Blue crab	81 to 110	May-Oct	1-8	0	3		
Callinectes sapidus	Blue crab	111 to 180	Jun-Dec	1-8	0	3		
Citharichthys spilopterus	Bay whiff	20 to 50	Apr-Jun	1-8	0	3		
Citharichthys spilopterus	Bay whiff	51 to 90	May-Sep	1-8	3	0	-0.57	60
Ctenogobius shufeldti	Freshwater goby	30 to 55	Dec-Mar	1-8	0	3		
Cynoscion regalis	Atlantic weakfish	0 to 25	May-Sep	1-8	0	3		
Cynoscion regalis	Atlantic weakfish	26 to 40	May-Oct	1-8	0	3		
Cynoscion regalis	Atlantic weakfish	41 to 75	Jun-Nov	1-8	3	0	-0.58	30
Dasyatis sabina	Atlantic stingray	150 to 275	Jul-Feb	1-8	0	3		
Ictalurus punctatus	Channel catfish	50 to 100	Sep-Jan	1-8	3	0	-0.52	**30**, 90
Ictalurus punctatus	Channel catfish	101 to 350	Jan-Dec	1-8	0	3		
Leiostomus xanthurus	Spot	10 to 25	Feb-Mar	1-8	0	3		
Leiostomus xanthurus	Spot	26 to 40	Mar-May	1-8	0	3		
Leiostomus xanthurus	Spot	41 to 60	Apr-Jun	1-8	0	3		
Leiostomus xanthurus	Spot	61 to 90	May-Aug	1-8	1	2	-0.50	30
Lepomis macrochirus	Bluegill	71 to 210	Oct-Mar	1-8	0	3		
Litopenaeus setiferus	White shrimp	4 to 11	Jun-Sep	1-8	3	0	-0.57	30
Litopenaeus setiferus	White shrimp	12 to 27	Jul-Oct	1-8	0	3		
Microgobius gulosus	Clown goby	19 to 28	Jul-Mar	1-8	0	3		
Microgobius gulosus	Clown goby	29 to 36	Sep-Apr	1-8	0	3		
Microgobius gulosus	Clown goby	37 to 56	Oct-Apr	1-8	0	3		
Micropogonias undulatus	Atlantic croaker	0 to 25	Dec-Mar	1-8	0	3		
Micropogonias undulatus	Atlantic croaker	26 to 40	Jan-May	1-8	3	0	-0.63	30
Micropogonias undulatus	Atlantic croaker	41 to 60	Feb-Jun	1-8	3	0	-0.57	60
Micropogonias undulatus	Atlantic croaker	61 to 85	Mar-Jul	1-8	3	0	-0.72	30
Paralichthys lethostigma	Southern flounder	101 to 225	Jul-Feb	1-8	2	1	-0.47	90
Trinectes maculatus	Hogchoker	20 to 45	Sep-Mar	1-8	2	1	-0.63	90
Trinectes maculatus	Hogchoker	46 to 75	Jul-Feb	1-8	1	2	-0.41	90

Distribution 6.1-m Trawl Continued

Best-fit linear distributional response (kmU) to continuously lagged mean freshwater inflow for pseudo-species collected with 6.1-m trawl in the lower St. Johns River. Both untransformed and transformed data (fourth root) were used to develop regressions and only the best-fit regression (highest PRESS r^2) is presented here. An "x" in DW indicates that the Durbin-Watson statistic was significant ($p<0.05$). Press r^2 = predicted residual sum of squares statistic.

Species	Common name	Size (mm)	Months	Zones	Days	Transform	df	Intercept	Linear coef.	Linear P	r2	DW	Press r2
Ameiurus catus	White catfish	25 to 100	Sep to Mar	1-8	90	Both	28	3.52	-0.0460	0.0209	0.1764		0.0555
Anchoa mitchilli	Bay anchovy	20 to 35	Jul to Jan	1-8	30	Ind	35	145.34	-8.0972	0.0041	0.2127	x	0.1281
Citharichthys spilopterus	Bay whiff	51 to 90	May to Sep	1-8	60	Both	24	3.65	-0.1258	0.0043	0.2925	x	0.0721
Cynoscion regalis	Atlantic weakfish	41 to 75	Jun to Nov	1-8	30	None	30	94.43	-0.0043	0.0004	0.3417	x	0.2455
Ictalurus punctatus	Channel catfish	50 to 100	Sep to Jan	1-8	90	None	18	119.66	-0.0038	0.0176	0.2751	x	0.1434
Leiostomus xanthurus	Spot	61 to 90	May to Aug	1-8	30	Ind	18	145.96	-9.1993	0.0157	0.2835		0.0777
Litopenaeus setiferus	White shrimp	4 to 11	Jun to Sep	1-8	30	Both	21	3.79	-0.14	0.0009	0.4174		0.3086
Micropogonias undulates	Atlantic croaker	26 to 40	Jan to May	1-8	30	None	23	106.07	-0.0027	0.0034	0.3166		0.2194
Micropogonias undulates	Atlantic croaker	41 to 60	Feb to Jun	1-8	60	None	23	103.68	-0.0034	0.0019	0.3476		0.2425
Micropogonias undulates	Atlantic croaker	61 to 85	Mar to Jul	1-8	30	Both	24	3.43	-0.0549	0.0001	0.4670		0.3822
Paralichthys lethostigma	Southern flounder	101 to 225	Jul to Feb	1-8	90	Ind	41	146.06	-8.1363	0.0021	0.2082		0.1282
Trinectes maculatus	Hogchoker	20 to 45	Sep to Mar	1-8	90	Ind	37	141.44	-8.0251	0.0002	0.3247	x	0.2513
Trinectes maculatus	Hogchoker	46 to 75	Jul to Feb	1-8	90	Ind	44	109.07	-4.7940	0.0076	0.1513	x	0.0728

Monthly Abundance 21.3-m Seine

Summary of Spearman's correlation analyses relating pseudo-species monthly relative abundance to continuously lagged mean freshwater inflow for 21.3-m seines collected in the lower St. Johns River . Sig. is number of significant (P<0.050) correlation(s), Not Sig. is number of non-significant correlation(s). The highest significant absolute rho (p<0.05) is presented along with the associated lag times that were used in linear regression. Bold lag is associated with the highest absolute rho. Other lags used in linear regression had rho values within ± 3% of the highest value.

Species	*Common name*	*Size (mm)*	*Months*	*FIM Zones*	*Sig.*	*Not Sig.*	rho	*Lag (days)*
Anchoa hepsetus	Striped anchovy	0 to 45	May-Sep	1-4	1	11	-0.34	30
Anchoa mitchilli	Bay anchovy	0 to 50	Apr-Jan	1-3	0	12		
Bairdiella chrysoura	Silver perch	0 to 30	May-Jun	1-4	2	10	-0.56	120
Bairdiella chrysoura	Silver perch	31 to 55	May-Jul	1-6	4	8	-0.71	90
Bairdiella chrysoura	Silver perch	56 to 85	Jun-Sep	1-6	0	12		
Brevoortia spp.	Menhaden	20-40	Feb-Mar	1-3	0	12		
Callinectes sapidus	Blue crab	0 to 30	Jan-Dec	1-4	3	9	-0.23	120
Callinectes sapidus	Blue crab	50 to 120	Mar-Dec	1-8	0	12		
Citharichthys spilopterus	Bay whiff	0 to 50	Apr-Jun	1-2	0	12		
Citharichthys spilopterus	Bay whiff	51 to 90	May-Aug	1-2	0	12		
Ctenogobius boleosoma	Darter goby	0 to 35	Jan-Dec	1-3	3	9	0.27	30
Ctenogobius shufeldti	Freshwater goby	0 to 50	Nov-Mar	1-4	8	4	0.49	360
Cynoscion nebulosus	Spotted seatrout	0 to 30	Jun-Oct	1-2	4	8	-0.35	180
Cynoscion nebulosus	Spotted seatrout	31 to 50	Jun-Oct	1-6	12	0	-0.82	150,**180**
Cynoscion nebulosus	Spotted seatrout	51 to 110	Jul-Dec	1-6	12	0	-0.67	240,270,**300**,330
Eucinostomus harengulus	Tidewater mojarra	40 to 65	Jul-Dec	1-4	2	10	-0.35	30
Fundulus heteroclitus	Mummichog	0 to 34	Jun-Jul	1-2	0	12		
Fundulus heteroclitus	Mummichog	0 to 34	Dec-Jan	1-2	6	6	-0.62	360
Fundulus heteroclitus	Mummichog	35 to 60	Nov-Jul	1-2	10	2	-0.30	180
Fundulus seminolis	Seminole killifish	0 to 80	Jun-Sep	6-8	0	12		
Gambusia holbrooki	Eastern mosquitofish	0 to 32	Oct-Mar	6-8	0	12		
Gobiosoma bosc	Naked goby	20 to 35	Dec-Apr	1-8	9	3	-0.67	**180**,210,240,270
Lagodon rhomboides	Pinfish	0 to 35	Feb-Apr	1-5	0	12		
Lagodon rhomboides	Pinfish	36 to 70	Apr-Jul	1-5	5	7	-0.55	**300**,330
Leiostomus xanthurus	Spot	0 to 25	Feb-Mar	1-2	0	12		
Leiostomus xanthurus	Spot	26 to 55	Mar-Apr	1-3	0	12		
Leiostomus xanthurus	Spot	56 to 75	Apr-Jun	1-4	0	12		
Lepomis auritus	Redbreast sunfish	20 to 110	Jan-Dec	3-4	7	5	0.45	300,330,**360**
Lepomis auritus	Redbreast sunfish	20 to 110	Jan-Dec	6-8	0	12		
Lepomis macrochirus	Bluegill	20 to 65	Aug-Nov	3-4	12	0	0.72	300,**330**
Lepomis macrochirus	Bluegill	20 to 65	Aug-Nov	6-7	3	9	0.44	90
Lepomis microlophus	Redear sunfish	20 to 80	Aug-Dec	7-8	3	9	0.40	90
Litopenaeus setiferus	White shrimp	0 to 15	Jun-Jul	1-4	0	12		
Litopenaeus setiferus	White shrimp	0 to 15	Aug-Nov	1-4	0	12		
Litopenaeus setiferus	White shrimp	16 to 23	Jun- Aug	1-3	0	12		
Lucania parva	Rainwater killifish	0 to 32	Mar-Jun	4-8	8	4	-0.83	270
Menidia menidia	Atlantic silversides	25 to40	May-Aug	1-2	0	12		
Menidia menidia	Atlantic silversides	41 to 55	Jun-Sep	1-2	0	12		
Menidia menidia	Atlantic silversides	56 to 75	Sep-Feb	1-3	0	12		
Menidia spp.	Silversides	25 to40	Jan-Dec	1-8	11	2	-0.41	90, **120**
Menidia spp.	Silversides	41 to 55	Jan-Dec	1-8	11	2	-0.53	**60**,90
Menidia spp.	Silversides	56 to 75	Jan-Dec	1-8	0	3		
Microgobius gulosus	Clown goby	0 to 28	Sep-Dec	4-8	0	12		
Microgobius gulosus	Clown goby	29 to 45	Mar-Jun	4-8	0	12		

Monthly Abundance 21.3-m Seine Continued

Species	Common name	Size (mm)	Months	FIM Zones	Sig.	Not Sig.	rho	Lag (days)
Micropogonias undulatus	Atlantic croaker	0 to 25	Dec-Feb	1-4	0	12		
Micropogonias undulatus	Atlantic croaker	35 to 65	Apr-May	1-4	0	12		
Micropogonias undulatus	Atlantic croaker	66 to 96	Apr-Jun	1-4	0	12		
Micropterus salmoides	Largemouth bass	0 to 39	Apr-Jun	4-8	0	12		
Micropterus salmoides	Largemouth bass	40 to 140	May-Aug	4-8	0	12		
Mugil cephalus	Striped mullet	0 to 30	Jan-Apr	1-3	0	12		
Mugil cephalus	Striped mullet	31 to 45	Mar-Jun	1-5	5	7	0.52	150,**180,**210
Mugil cephalus	Striped mullet	46 to 75	May-Jul	1-8	0	12		
Mugil curema	White mullet	0 to 30	Apr-Jun	1-2	0	12		
Mugil curema	White mullet	31 to 80	Jun-Jul	1-2	3	9	0.54	180
Notemigonus chrysoleucas	Golden shiner	0 to 50	May-Jul	6-8	7	5	-0.63	180
Notemigonus chrysoleucas	Golden shiner	51 to 100	Jun-Nov	6-8	0	12		
Paralichthys lethostigma	Southern flounder	0 to 50	Feb-Jun	1-8	2	10	0.43	60
Sciaenops ocellatus	Red drum	0 to 35	Oct-Dec	1-4	8	4	-0.46	210,**240**
Sciaenops ocellatus	Red drum	36 to 80	Dec-Mar	1-4	2	10	-0.42	360
Strongylura marina	Atlantic needlefish	100 to 175	Apr-Oct	5-8	1	11	-0.32	60
Syngnathus scovelli	Gulf pipefish	0 to 120	May-Oct	4-8	12	0	-0.77	210
Trinectes maculates	Hogchoker	0 to 30	Jul-Feb	3-8	1	11	0.34	30
Trinectes maculates	Hogchoker	31 to 60	Apr-Jan	3-8	1	11	0.25	360

Best-fit linear monthly abundance response to continuously lagged mean freshwater inflow for pseudo-species collected with 21.3-m seines in the lower St. Johns River. Both untransformed and transformed data (fourth root)were used to develop regressions and only the best-fit regression (highest PRESS r^2) is presented here. An "x" in DW indicates that the Durbin-Watson statistic was significant ($p<0.05$). Press r^2 = predicted residual sum of squares statistic.

Species	Common name	Size (mm)	Months	Zones	Days	Transform	df	Intercept	Linear coef.	Linear P	r2	DW	Press r2
Bairdiella chrysoura	Silver perch	31 to 55	May to Jul	1-6	90	Both	14	3.60	-0.3394	0.0065	0.4211		0.1759
Ctenogobius shufeldti	Freshwater goby	0 to 50	Nov to Mar	1-4	360	Dep	35	-0.32	0.0002	0.0005	0.2924	x	0.2031
Cynoscion nebulosus	Spotted seatrout	31 to 50	Jun to Oct	1-6	150	Both	27	2.65	-0.3014	0.0000	0.6517	x	0.6075
Cynoscion nebulosus	Spotted seatrout	51 to 110	Jul to Dec	1-6	300	Both	34	2.56	-0.2784	0.0001	0.3875	x	0.3317
Fundulus heteroclitus	Mummichog	0 to 34	Dec to Jan	1-2	360	Both	13	5.44	-0.5540	0.0060	0.4530	x	0.3066
Gobiosoma bosc	Naked goby	20 to 35	Dec to Apr	1-8	210	Both	24	2.10	-0.1762	0.0001	0.4668		0.3494
Lagodon rhomboides	Pinfish	36 to 70	Apr to Jul	1-5	300	Dep	19	1.93	-0.0001	0.0111	0.2938	x	0.1759
Lepomis auritus	Redbreast sunfish	20 to 110	Jan to Dec	3-4	360	Both	89	-1.85	0.2936	0.0000	0.2069		0.1758
Lepomis macrochirus	Bluegill	20 to 65	Aug to Nov	3-4	300	Both	30	-4.04	0.6060	0.0000	0.5160		0.4632
Lepomis macrochirus	Bluegill	20 to 65	Aug to Nov	6-7	90	Both	22	0.45	0.1709	0.0284	0.2001		0.0297
Lepomis microlophus	Redear sunfish	20 to 80	Aug to Dec	7-8	90	Both	28	-0.60	0.1703	0.0420	0.1395	x	0.0200
Lucania parva	Rainwater killifish	0 to 32	Mar to Jun	4-8	270	Both	18	7.97	-0.7371	0.0000	0.7119		0.6461
Menidia spp,	Silversides	25-40	Jan to Dec	1-8	120	Both	65	2.05	-0.0001	0.0002	0.1917		0.1488
Menidia spp,	Silversides	41-55	Jan to Dec	1-8	60	Both	65	2.17	-0.1012	0.0000	0.2604		0.2211
Mugil cephalus	Striped mullet	31 to 45	Mar to Jun	1-5	210	Both	18	-1.52	0.3269	0.0402	0.2135		0.0245
Mugil curema	White mullet	31 to 80	Jun to Jul	1-2	180	Dep	14	0.33	0.0002	0.0229	0.3180		0.0374
Notemigonus chrysoleucas	Golden shiner	0 to 50	May to Jul	6-8	180	Both	14	3.67	-0.3807	0.0410	0.2657		0.0623
Paralichthys lethostigma	Southern flounder	0 to 50	Feb to Jun	1-8	60	Both	23	-0.73	0.1620	0.0265	0.1964		0.0691
Sciaenops ocellatus	Red drum	36 to 80	Dec to Mar	1-4	360	Dep	27	1.01	-0.0001	0.0089	0.2276		0.0870
Syngnathus scovelli	Gulf pipefish	0 to 120	May to Oct	4-8	210	Dep	32	1.43	-0.0002	0.0000	0.6452		0.6051

Monthly Abundance 183-m Seine

Summary of Spearman's correlation analyses relating monthly pseudo-species relative abundance to continuously lagged mean freshwater inflow for 183-m seines collected in the lower St. Johns River . Sig. is number of significant (P<0.050) correlation(s), Not Sig. is number of non-significant correlation(s). The highest significant absolute rho (p<0.05) is presented along with the associated lag times that were used in linear regression. Bold lag is associated with the highest absolute rho. Other lags used in linear regression had rho values within ± 3% of the highest value.

Species	*Common name*	*Size (mm)*	*Months*	*FIM Zones*	*Sig.*	*Not Sig.*	rho	*Lag (days)*
Ameiurus catus	White catfish	100 to 250	May-Sep	4	0	12		
Ameiurus catus	White catfish	251 to 300	Jul-Sep	4	0	12		
Archosargus probatocephalus	Sheepshead	201 to 425	Jan-Dec	1-2	0	12		
Bairdiella chrysoura	Silver perch	80 to 100	Sep-Oct	4	1	11	-0.53	90
Bairdiella chrysoura	Silver perch	101 to 130	Sep-Mar	1-4	0	12		
Bairdiella chrysoura	Silver perch	131 to 170	Nov-Mar	1-2	2	10	0.45	30
Callinectes sapidus	Blue crab	40 to 90	Jan-Oct	2-4	7	5	-0.33	30
Callinectes sapidus	Blue crab	91 to 170	Apr-Oct	2-4	12	0	-0.53	150,**180,**210,270,300
Caranx hippos	Crevalle jack	50 to 200	Jun-Sep	1-4	9	3	-0.40	240
Chilomycterus schoepfii	Striped burrfish	40 to 110	June-Oct	1-2	12	0	-0.68	150
Chloroscombrus chrysurus	Atlantic bumper	50 to 110	Jul-Oct	1-2	0	12		
Chloroscombrus chrysurus	Atlantic bumper	111 to 150	Jul-Oct	1-2	0	12		
Citharichthys spilopterus	Bay whiff	50 to 70	Jun-Jul	1-4	10	2	-0.73	150
Citharichthys spilopterus	Bay whiff	71 to 100	Jun-Sep	1-4	7	5	-0.47	**300**,330
Cynoscion nebulosus	Spotted seatrout	100 to 200	Sep-May	1-4	0	12		
Cynoscion nebulosus	Spotted seatrout	201 to 325	Nov-Mar	1-2	0	12		
Dasyatis sabina	Atlantic stingray	125 to 325	Apr-Sep	1-4	6	6	-0.35	90
Diapterus auratus	Irish pompano	60 to 110	Oct-Dec	1-4	0	12		
Dorosoma cepedianum	Gizzard shad	0 to 200	Jun-Oct	3-4	0	12		
Dorosoma cepedianum	Gizzard shad	201 to 375	May-Nov	3-4	2	10	-0.28	270
Dorosoma petenense	Threadfin shad	75 to 125	Jul-Nov	3-4	5	7	-0.36	240
Elops saurus	Ladyfish	150 to 300	Aug-Nov	1-4	0	12		
Elops saurus	Ladyfish	301 to 525	May-Sep	1-2	0	12		
Etropus crossotus	Fringed flounder	50 to 85	Sep-Dec	1-3	4	8	-0.50	60
Eucinostomus gula	Silver jenny	65 to 90	Aug-Dec	1-4	10	2	-0.47	120
Eucinostomus harengulus	Tidewater mojarra	60 to 90	Aug-Dec	1-4	7	5	-0.45	120
Eucinostomus harengulus	Tidewater mojarra	91 to 110	May-Jun	4	8	4	-0.66	240,**270,**300,330,360
Ictalurus punctatus	Channel catfish	150 to 275	May-Sep	4	7	5	0.35	210
Lagodon rhomboides	Pinfish	70 to 100	Jun-Sep	2-4	3	9	-0.40	360
Lagodon rhomboides	Pinfish	101 to 130	Jul-Oct	1-4	12	0	-0.62	330,**360**
Lagodon rhomboids	Pinfish	131 to 160	Aug-Oct	1-4	12	0	-0.65	330,**360**
Leiostomus xanthurus	Spot	60 to 90	Apr-Jun	1-4	5	7	-0.55	**30**,60
Leiostomus xanthurus	Spot	91 to 120	May-Sep	1-4	12	12	-0.62	60
Leiostomus xanthurus	Spot	121 to 140	Sep-Dec	1-4	0	12		
Lepisosteus osseus	Longnose gar	675 to 950	Mar-Dec	3-4	0	12		
Lepomis auritus	Redbreast sunfish	80 to 130	Oct-Jun	4	0	12		
Lepomis auritus	Redbreast sunfish	131 to 190	Sep-Apr	4	0	12		
Lepomis macrochirus	Bluegill	60 to 120	Jan-Dec	4	9	3	0.39	360
Lepomis macrochirus	Bluegill	121 to 200	Dec-Jul	4	0	12		
Lepomis microlophus	Redear sunfish	0 to 125	Nov-Jun	4	12	0	0.62	360
Lepomis microlophus	Redear sunfish	126 to 250	Jan-Dec	4	0	12		
Litopenaeus setiferus	White shrimp	18 to 25	Jul-Nov	3	0	12		
Micropogonias undulatus	Atlantic croaker	60 to 100	Mar-Jun	4	6	6	-0.48	180,210,240,**270**
Micropogonias undulatus	Atlantic croaker	101 to 130	May-Oct	3-4	1	11	-0.29	30

Monthly Abundance 183-m Seine Continued

Species	*Common name*	*Size (mm)*	*Months*	*FIM Zones*	*Sig.*	*Not Sig.*	rho	*Lag (days)*
Micropogonias undulatus	Atlantic croaker	131 to 170	Jul-Sep	1	6	6	-0.52	30,**60**,90,120
Micropterus salmoides	Largemouth bass	126 to 250	Nov-Mar	4	1	11	0.33	360
Mugil cephalus	Striped mullet	75 to 125	Aug-Apr	3-4	0	12		
Mugil cephalus	Striped mullet	126 to 175	Sep-Apr	1-4	0	12		
Mugil cephalus	Striped mullet	176 to 250	Jan-Dec	1-2	0	12		
Mugil cephalus	Striped mullet	251 to 375	Jan-Dec	1-4	0	12		
Mugil curema	White mullet	100 to 130	Oct-Jan	2-4	12	0	-0.57	150
Mugil curema	White mullet	131 to 150	Sep-Jan	1-2	0	12		
Mugil curema	White mullet	151 to 200	May-Dec	1-2	3	9	-0.31	360
Mugil curema	White mullet	201 to 260	May-Oct	1-2	0	12		
Opisthonema oglinum	Atlantic thread herring	70 to 110	Feb-Jun	1-2	0	12		
Opisthonema oglinum	Atlantic thread herring	70 to 110	Aug-Oct	1-2	6	6	-0.55	**60**,90
Opisthonema oglinum	Atlantic thread herring	111 to 170	Apr-Jun	1-2	0	12		
Orthopristis chrysoptera	Pigfish	80 to 130	Jul-Sep	2-4	6	6	-0.55	30
Paralichthys albigutta	Gulf flounder	60 to 180	Mar-Sep	1-3	12	0	-0.52	360
Paralichthys lethostigma	Southern flounder	126 to 325	Feb-Nov	1-3	8	4	-0.32	120
Pogonias cromis	Black drum	150 to 250	May-Nov	1-2	0	12		
Sciaenops ocellatus	Red drum	50 to 125	Mar-Jun	3-4	0	12		
Sciaenops ocellatus	Red drum	126 to 200	Apr-Jul	1-4	0	12		
Sciaenops ocellatus	Red drum	201 to 350	Jul-May	1-4	4	8	0.28	30
Sciaenops ocellatus	Red drum	351 to 700	Jan-Dec	1-4	0	12		
Selene vomer	Lookdown	30 to 80	Jun-Nov	1-3	2	10	-0.32	360
Selene vomer	Lookdown	110 to 160	Sep-Oct	2	0	12		
Strongylura marina	Atlantic needlefish	325 to 500	Aug-Mar	1-4	7	5	-0.36	270

Monthly Abundance 183-m Seine Continued

Best-fit linear monthly abundance response to continuously lagged mean freshwater inflow for pseudo-species collected with 183-m seines in the lower St. Johns River. Both untransformed and transformed data (fourth root) were used to develop regressions and only the best-fit regression (highest PRESS r^2) is presented here. An "x" in DW indicates that the Durbin-Watson statistic was significant ($p<0.05$). Press r^2 = predicted residual sum of squares statistic.

Species	*Common name*	*Size (mm)*	*Months*	*Zones*	*Days*	*Transform*	*df*	*Intercept*	*Linear coef.*	*Linear P*	*r2*	*DW*	*Press r2*
Bairdiella chrysoura	Silver perch	80 to 100	Sep to Oct	4	90	Both	14	3.48	-0.3807	0.0416	0.2644	x	-0.0555
Bairdiella chrysoura	Silver perch	131 to 170	Nov to Mar	1-2	30	Both	35	-1.25	0.2032	0.0064	0.1939		0.1203
Callinectes sapidus	Blue crab	91 to 170	Apr to Oct	2-4	180	Both	52	2.40	-0.2045	0.0001	0.2557	x	0.1967
Caranx hippos	Crevalle jack	50 to 200	Jun to Sep	1-4	240	Ind	30	4.14	-0.4499	0.0122	0.1919	x	0.0897
Citharichthys spilopterus	Bay whiff	71 to 100	Jun to Sep	1-4	300	Both	30	2.77	-0.2513	0.0056	0.2286		0.1158
Etropus crossotus	Fringed flounder	50 to 85	Sep to Dec	1-3	60	Both	30	2.14	-0.1911	0.0029	0.2593		0.1673
Eucinostomus gula	Silver jenny	65 to 90	Aug to Dec	1-4	120	Dep	38	0.98	-0.0001	0.0047	0.1915		0.1127
Eucinostomus harengulus	Tidewater mojarra	60 to 90	Aug to Dec	1-4	120	Dep	38	1.19	-0.0001	0.0048	0.1912		0.0973
Eucinostomus harengulus	Tidewater mojarra	91 to 110	May to Jun	4	360	Both	13	7.54	-0.8894	0.0054	0.4603		0.0576
Lagodon rhomboids	Pinfish	70 to 100	Jun to Sep	2-4	360	Dep	30	2.34	-0.0001	0.0312	0.1455	x	0.0313
Lagodon rhomboids	Pinfish	101 to 130	Jul to Oct	1-4	330	Both	30	4.53	-0.3877	0.0005	0.3331	x	0.2546
Lagodon rhomboids	Pinfish	131 to 160	Aug to Oct	1-4	360	Ind	22	21.12	-2.3302	0.0011	0.3891		0.2716
Leiostomus xanthurus	Spot	60 to 90	Apr to Jun	1-4	60	Both	20	4.06	-0.3683	0.0024	0.3763	x	0.2181
Leiostomus xanthurus	Spot	91 to 120	May to ep	1-4	60	Both	37	3.08	-0.2559	0.0002	0.3148		0.2135
Lepomis microlophus	Redear sunfish	0 to 125	Nov to Jun	4	360	Dep	57	-0.61	0.0003	0.0000	0.3769	x	0.3398
Micropogonias undulatus	Atlantic croaker	60 to 100	Mar to Jun	4	240	Both	27	4.78	-0.4893	0.0197	0.1854		0.0515
Micropogonias undulatus	Atlantic croaker	131 to 170	Jul to Sep	1	120	Ind	22	51.71	-6.2591	0.0034	0.3283	x	0.1551
Mugil curema	White mullet	100 to 130	Oct to Jan	2-4	150	Both	29	4.06	-0.3140	0.0021	0.2822		0.1806
Opisthonema oglinum	Atlantic thread herring	70 to 110	Aug to Oct	1-2	60	Both	22	3.12	-0.3264	0.0033	0.3307		0.1938
Orthopristis chrysoptera	Pigfish	80 to 130	Jul to Sep	2-4	30	Both	22	2.38	-0.2528	0.0058	0.2983	x	0.1566
Paralichthys albigutta	Gulf flounder	60 to 180	Mar to Sep	1-3	360	Both	51	2.69	-0.2829	0.0001	0.2705		0.2145

Monthly Abundance 6.1-m Trawl

Summary of Spearman's correlation analyses relating monthly pseudo-species relative abundance to continuously lagged mean freshwater inflow for 183-m seines collected in the lower St. Johns River . Sig. is number of significant (P<0.050) correlation(s), Not Sig. is number of non-significant correlation(s). The highest significant absolute rho (p<0.05) is presented along with the associated lag times that were used in linear regression. Bold lag is associated with the highest absolute rho. Other lags used in linear regression had rho values within ± 3% of the highest value.

Species	*Common name*	*Size (mm)*	*Months*	*FIM Zones*	*Sig.*	*Not Sig.*	rho	*Lag (days)*
Achirus lineatus	Lined sole	10 to 60	Jan-Dec	1-4	3	9	0.33	30
Achirus lineatus	Lined sole	61 to 120	Jan-Dec	1-2	0	12		
Ameiurus catus	White catfish	25 to 100	Sep-Mar	3-8	12	0	0.84	270,300,**330,**360
Ameiurus catus	White catfish	101 to 200	Jan-Dec	3-8	7	5	0.59	360
Anchoa mitchilli	Bay anchovy	20 to 35	Jul-Jan	1-8	12	0	-0.49	150,**180**
Anchoa mitchilli	Bay anchovy	36 to 60	May-Jan	1-4	12	0	-0.36	180
Bairdiella chrysoura	Silver perch	10 to 40	May-Aug	1-4	1	11	-0.38	30
Bairdiella chrysoura	Silver perch	100 to 130	Oct-Apr	1-3	7	5	0.41	**60**,90
Callinectes sapidus	Blue crab	10 to 50	Oct-Feb	1-4	7	5	0.49	360
Callinectes sapidus	Blue crab	51 to 80	May-Oct	1-4	4	8	-0.37	30
Callinectes sapidus	Blue crab	81 to 110	May-Oct	1-4	7	5	-0.43	30,**60,**90,120
Callinectes sapidus	Blue crab	111 to 180	Jun-Dec	1-8	12	0	-0.70	150,**180**,210
Citharichthys spilopterus	Bay whiff	20 to 50	Apr-Jun	1-8	0	12		
Citharichthys spilopterus	Bay whiff	51 to 90	May-Sep	1-7	4	8	-0.48	90
Ctenogobius shufeldti	Freshwater goby	30 to 55	Dec-Mar	3-4	12	0	0.67	360
Cynoscion regalis	Atlantic weakfish	0 to 25	May-Sep	1-3	0	12		
Cynoscion regalis	Atlantic weakfish	26 to 40	May-Oct	1-4	0	12		
Cynoscion regalis	Atlantic weakfish	41 to 75	Jun-Nov	1-8	8	4	-0.56	**90**,120
Dasyatis sabina	Atlantic stingray	150 to 275	Jul-Feb	1-8	0	12		
Etropus crossotus	Fringed flounder	30 to 60	Jul-Nov	1-3	0	12		
Etropus crossotus	Fringed flounder	61 to 90	Aug-Dec	1-3	12	0	-0.49	30
Ictalurus punctatus	Channel catfish	50 to 100	Sep-Jan	4-8	12	0	0.82	180,**210**,240,270
Ictalurus punctatus	Channel catfish	101 to 350	Jan-Dec	4-8	9	3	0.36	360
Leiostomus xanthurus	Spot	10 to 25	Feb-Mar	1-3	0	12		
Leiostomus xanthurus	Spot	26 to 40	Mar-May	1-4	1	11	0.46	30
Leiostomus xanthurus	Spot	41 to 60	Apr-Jun	1-4	2	10	0.49	60
Leiostomus xanthurus	Spot	61 to 90	May-Aug	1-8	2	10	0.46	120
Lepomis macrochirus	Bluegill	71 to 210	Oct-Mar	3-8	0	12		
Litopenaeus setiferus	White shrimp	4 to 11	Jun-Sep	1-5	0	12		
Litopenaeus setiferus	White shrimp	12 to 27	Jul-Oct	1-8	2	10	0.43	210,**240**
Menticirrhus americanus	Southern kingfish	10 to 40	May-Sep	1-4	0	12		
Microgobius gulosus	Clown goby	19 to 28	Jul-Mar	4-8	5	7	-0.38	270
Microgobius gulosus	Clown goby	29 to 36	Sep-Apr	4-8	9	3	-0.55	**240**,270
Microgobius gulosus	Clown goby	37 to 56	Oct-Apr	4-8	10	2	-0.62	**270**,300
Micropogonias undulatus	Atlantic croaker	0 to 25	Dec-Mar	1-4	0	12		
Micropogonias undulatus	Atlantic croaker	26 to 40	Jan-May	3-8	0	12		
Micropogonias undulatus	Atlantic croaker	41 to 60	Feb-Jun	3-8	0	12		
Micropogonias undulatus	Atlantic croaker	61 to 85	Mar-Jul	3-8	0	12		
Paralichthys lethostigma	Southern flounder	0 to 50	Feb-May	1-5	2	10	0.66	30
Paralichthys lethostigma	Southern flounder	51 to 100	Apr-Sep	1-8	7	5	0.60	**180**,210
Paralichthys lethostigma	Southern flounder	101 to 225	Jul-Feb	1-8	1	11	-0.29	120
Symphurus plagiusa	Blackcheek tonguefish	20 to 60	Jun-Feb	1-3	0	12		
Symphurus plagiusa	Blackcheek tonguefish	61 to 110	Jul-Dec	1-3	0	12		
Trinectes maculates	Hogchoker	20 to 45	Sep-Mar	3-6	12	0	0.56	60,**150**,180
Trinectes maculates	Hogchoker	46 to 75	Jul-Feb	3-6	8	4	0.33	300

Monthly Abundance 6.1-m Trawl Continued

Best-fit linear monthly abundance response to continuously lagged mean freshwater inflow for pseudo-species collected with 6.1-m trawl in the lower St. Johns River. Both untransformed and transformed data (fourth root) were used to develop regressions and only the best-fit regression (highest PRESS r^2) is presented here. An "x" in DW indicates that the Durbin-Watson statistic was significant ($p<0.05$). Press r^2 = predicted residual sum of squares statistic.

Species	*Common name*	*Size (mm)*	*Months*	*Zones*	*Days*	*Transform*	*df*	*Intercept*	*Linear coef.*	*Linear P*	*r2*	*DW*	*Press r2*
Ameiurus catus	White catfish	25 to 100	Sep to Mar	3-8	300	Both	37	-3.41	0.5427	0.0000	0.6903	x	0.6556
Ameiurus catus	White catfish	101 to 200	Jan to Dec	3-8	360	Both	64	-1.12	0.2426	0.0000	0.3510	x	0.3119
Anchoa mitchilli	Bay anchovy	20 to 35	Jul to Jan	1-8	180	Both	39	3.96	-0.3260	0.0023	0.2137		0.1407
Bairdiella chrysoura	Silver perch	100 to 130	Oct to Apr	1-3	90	Both	50	-0.48	0.1276	0.0009	0.1996		0.1366
Callinectes sapidus	Blue crab	10 to 50	Oct to Feb	1-4	360	None	36	-0.13	0.0002	0.0036	0.2127	x	0.1292
Callinectes sapidus	Blue crab	81 to 110	May to Oct	1-4	120	Ind	45	1.94	-0.1885	0.0020	0.1925	x	0.1199
Callinectes sapidus	Blue crab	111 to 180	Jun to Dec	1-8	180	Ind	39	6.78	-0.7249	0.0000	0.4685		0.4133
Citharichthys spilopterus	Bay whiff	51 to 90	May to Sep	1-7	90	Ind	26	1.79	-0.1772	0.0124	0.2174	x	0.0967
Ctenogobius shufeldti	Freshwater goby	30 to 55	Dec to Mar	3-4	360	Dep	27	-0.60	0.0003	0.0002	0.4167	x	0.3451
Cynoscion regalis	Atlantic weakfish	41 to 75	Jun to Nov	1-8	90	Dep	33	1.06	-0.0001	0.0000	0.4223	x	0.3290
Etropus crossotus	Fringed flounder	61 to 90	Aug to Dec	1-3	30	Ind	38	1.97	-0.1908	0.0015	0.2754	x	0.1945
Ictalurus punctatus	Channel catfish	50 to 100	Sep to Jan	4-8	180	Both	27	-2.01	0.3277	0.0000	0.6693		0.6235
Leiostomus xanthurus	Spot	41 to 60	Apr to Jun	1-4	60	Both	20	-1.35	0.3689	0.0065	0.3158		0.1964
Leiostomus xanthurus	Spot	61 to 90	May to Aug	1-8	120	Both	20	-0.20	0.1595	0.0307	0.2129	x	0.0565
Litopenaeus setiferus	White shrimp	12 to 27	Jul to Oct	1-8	210	Both	22	-0.77	0.2995	0.0249	0.2085	x	0.0826
Microgobius gulosus	Clown goby	29 to 36	Sep to Apr	4-8	270	Ind	42	1.69	-0.1809	0.0001	0.3158		0.2488
Microgobius gulosus	Clown goby	37 to 56	Oct to Apr	4-8	300	Ind	36	2.41	-0.2744	0.0003	0.3131		0.2121
Paralichthys lethostigma	Southern flounder	0 to 50	Feb to May	1-5	30	Both	18	-0.72	0.1895	0.0062	0.3479		0.1760
Paralichthys lethostigma	Southern flounder	51 to 100	Apr to Sep	1-8	210	Both	31	-0.92	0.1785	0.0018	0.2744	x	0.1903
Trinectes maculatus	Hogchoker	20 to 45	Sep to Mar	3-6	60	Ind	37	-4.92	0.8544	0.0000	0.3647		0.2558

Annual Abundance 21.3-m Seine

Summary of Spearman's correlation analyses relating annual pseudo-species relative abundance to continuously lagged mean freshwater inflow for 21.3-m seines collected in the lower St. Johns River . Sig. is number of significant (P<0.050) correlation(s), Not Sig. is number of non-significant correlation(s). The highest significant absolute rho (p<0.05) is presented along with the associated lag times that were used in linear regression. Bold lag is associated with the highest absolute rho. Other lags used in linear regression had rho values within ± 3% of the highest value.

Species	*Common name*	*Size (mm)*	*Months*	*FIM Zones*	*Sig.*	*Not Sig.*	rho	*Lag (days)*
Anchoa hepsetus	Striped anchovy	0 to 45	May-Sep	1-4	0	12		
Anchoa mitchilli	Bay anchovy	0 to 50	Apr-Jan	1-3	0	12		
Bairdiella chrysoura	Silver perch	0 to 30	May-Jun	1-4	0	12		
Bairdiella chrysoura	Silver perch	31 to 55	May-Jul	1-4	0	12		
Bairdiella chrysoura	Silver perch	56 to 85	Jun-Sep	1-4	0	12		
Brevortia spp.	Menhaden	20 to 40	Feb - Mar	1-3	0	12		
Callinectes sapidus	Blue crab	0 to 30	Jan-Dec	1-4	0	12		
Callinectes sapidus	Blue crab	50 to 120	Mar-Dec	1-4	0	12		
Citharichthys spilopterus	Bay whiff	0 to 50	Apr-Jun	1-2	0	12		
Citharichthys spilopterus	Bay whiff	51 to 90	May-Aug	1-2	0	12		
Ctenogobius boleosoma	Darter goby	0 to 35	Jan-Dec	1-3	0	12		
Ctenogobius shufeldti	Freshwater goby	0 to 50	Nov-Mar	1-4	0	12		
Cynoscion nebulosus	Spotted seatrout	0 to 30	Jun-Oct	1-2	0	12		
Cynoscion nebulosus	Spotted seatrout	31 to 50	Jun-Oct	1-4	1	11	-0.65	60
Cynoscion nebulosus	Spotted seatrout	51 to 110	Jul-Dec	1-4	0	12		
Eucinostomus harengulus	Tidewater mojarra	40 to 65	Jul-Dec	1-4	0	12		
Fundulus heteroclitus	Mummichog	0 to 34	Jun-Jul	1-2	0	12		
Fundulus heteroclitus	Mummichog	0 to 34	Dec-Jan	1-2	7	5	-0.78	30,60,**270,300,**330
Fundulus heteroclitus	Mummichog	35 to 60	Nov-Jul	1-2	3	9	-0.73	240
Gobiosoma bosc	Naked goby	20 to 35	Dec-Apr	1-4	10	2	-0.78	**240,**270,300,**360**
Lagodon rhomboides	Pinfish	0 to 35	Feb-Apr	1-4	0	12		
Lagodon rhomboides	Pinfish	36 to 70	Apr-Jul	1-4	3	9	-0.68	150,**180, 210**
Leiostomus xanthurus	Spot	0 to 25	Feb-Mar	1-2	0	12		
Leiostomus xanthurus	Spot	26 to 55	Mar-Apr	1-3	0	12		
Leiostomus xanthurus	Spot	56 to 75	Apr-Jun	1-4	0	12		
Lepomis auritus	Redbreast sunfish	20 to 110	Jan-Dec	3-4	9	3	0.85	330,**360**
Lepomis macrochirus	Bluegill	20 to 65	Aug-Nov	3-4	3	9	0.70	300,**330, 360**
Litopenaeus setiferus	White shrimp	0 to 15	Jun-Jul	1-4	0	12		
Litopenaeus setiferus	White shrimp	0 to 15	Aug-Nov	1-4	0	12		
Litopenaeus setiferus	White shrimp	16 to 23	Jun- Aug	1-3	0	12		
Menidia menidia	Atlantic silversides	25 to40	May-Aug	1-2	0	12		
Menidia menidia	Atlantic silversides	41 to 55	Jun-Sep	1-2	0	12		
Menidia menidia	Atlantic silversides	56 to 75	Sep-Feb	1-3	0	12		
Menidia spp.	Silversides	25 to40	Jan-Dec	1-8	0	12		
Menidia spp.	Silversides	41 to 55	Jan-Dec	1-8	0	12		
Menidia spp.	Silversides	56 to 75	Jan-Dec	1-8	0	12		
Micropogonias undulatus	Atlantic croaker	0 to 25	Dec-Feb	1-4	0	12		
Micropogonias undulatus	Atlantic croaker	35 to 65	Apr-May	1-4	0	12		
Micropogonias undulatus	Atlantic croaker	66 to 96	Apr-Jun	1-4	0	12		
Mugil cephalus	Striped mullet	0 to 30	Jan-Apr	1-3	0	12		
Mugil cephalus	Striped mullet	31 to 45	Mar-Jun	1-4	7	5	0.72	**180**,210,240
Mugil cephalus	Striped mullet	46 to 75	May-Jul	1-4	0	12		
Mugil curema	White mullet	0 to 30	Apr-Jun	1-2	0	12		
Mugil curema	White mullet	31 to 80	Jun-Jul	1-2	0	12		

Annual Abundance 21.3-m Seine Continued

Species	Common name	Size (mm)	Months	FIM Zones	Sig.	Not Sig.	rho	Lag (days)
Paralichthys lethostigma	Southern flounder	0 to 50	Feb-Jun	1-4	0	12		
Sciaenops ocellatus	Red drum	0 to 35	Oct-Dec	1-4	0	12		
Sciaenops ocellatus	Red drum	36 to 80	Dec-Mar	1-4	0	12		
Trinectes maculates	Hogchoker	0 to 30	Jul-Feb	3-4	1	11	0.75	30
Trinectes maculates	Hogchoker	31 to 60	Apr-Jan	3-4	0	12		

Best-fit linear annual abundance response to continuously lagged mean freshwater inflow for pseudo-species collected with 21.3-m seine in the lower St. Johns River. Both untransformed and transformed data (fourth root) were used to develop regressions and only the best-fit regression (highest r^2) is presented here. An "x" in DW indicates that the Durbin-Watson statistic was significant ($p<0.05$). Press r^2 = predicted residual sum of squares statistic.

Species	Common name	Size (mm)	Months	Zones	Days	Transform	df	Intercept	Linear coef.	Linear P	r2	DW	Press r2
Fundulus heteroclitus	Mummichog	0 to 34	Dec to Jan	1-2	30	Ind	7	17.18	-1.7339	0.0021	0.7623		0.6271
Gobiosoma bosc	Naked goby	20 to 35	Dec to Apr	1-4	240	Both	7	1.75	-0.1242	0.0166	0.5832	x	0.2431
Lepomis auritus	Redbreast sunfish	20 to 110	Jan to Dec	3-4	360	None	8	-0.38	0.0002	0.0014	0.7398		0.4712
Lepomis macrochirus	Bluegill	20 to 65	Aug to Nov	3-4	300	None	8	-2.14	0.0009	0.0079	0.6074		0.3759
Mugil cephalus	Striped mullet	31 to 45	Mar to Jun	1-4	210	Both	8	-1.16	0.2832	0.0182	0.5224	x	0.3371

Annual Abundance 183-m Seine

Summary of Spearman's correlation analyses relating annual pseudo-species relative abundance to continuously lagged mean freshwater inflow for 183-m seines collected in the lower St. Johns River . Sig. is number of significant (P<0.050) correlation(s), Not Sig. is number of non-significant correlation(s). The highest significant absolute rho (p<0.05) is presented along with the associated lag times that were used in linear regression. Bold lag is associated with the highest absolute rho. Other lags used in linear regression had rho values within ± 3% of the highest value.

Species	*Common name*	*Size (mm)*	*Months*	*FIM Zones*	*Sig.*	*Not Sig.*	rho	*Lag (days)*
Ameiurus catus	White catfish	100 to 250	May-Sep	4	0	12		
Ameiurus catus	White catfish	251 to 300	Jul-Sep	4	0	12		
Archosargus probatocephalus	Sheepshead	201 to 425	Jan-Dec	1-2	0	12		
Bairdiella chrysoura	Silver perch	80 to 100	Sep-Oct	4	0	12		
Bairdiella chrysoura	Silver perch	101 to 130	Sep-Mar	1-4	0	12		
Bairdiella chrysoura	Silver perch	131 to 170	Nov-Mar	1-2	0	12		
Callinectes sapidus	Blue crab	40 to 90	Jan-Oct	2-4	0	12		
Callinectes sapidus	Blue crab	91 to 170	Apr-Oct	2-4	0	12		
Caranx hippos	Crevalle jack	50 to 200	Jun-Sep	1-4	0	12		
Chilomycterus schoepfii	Striped burrfish	40 to 110	June-Oct	1-2	11	1	-0.81	**270, 300, 330**
Chloroscombrus chrysurus	Atlantic bumper	50 to 110	Jul-Oct	1-2	0	12		
Chloroscombrus chrysurus	Atlantic bumper	111 to 150	Jul-Oct	1-2	0	12		
Citharichthys spilopterus	Bay whiff	50 to 70	Jun-Jul	1-4	3	9	-0.68	**90**,120,150
Citharichthys spilopterus	Bay whiff	71 to 100	Jun-Sep	1-4	6	6	-0.70	**90, 270, 300, 330**
Cynoscion nebulosus	Spotted seatrout	100 to 200	Sep-May	1-4	0	12		
Cynoscion nebulosus	Spotted seatrout	201 to 325	Nov-Mar	1-2	5	7	0.75	**30**,60
Dasyatis sabina	Atlantic stingray	125 to 325	Apr-Sep	1-4	0	12		
Diapterus auratus	Irish pompano	60 to 110	Oct-Dec	1-4	1	11	0.65	360
Dorosoma cepedianum	Gizzard shad	0 to 200	Jun-Oct	3-4	0	12		
Dorosoma cepedianum	Gizzard shad	201 to 375	May-Nov	3-4	0	12		
Dorosoma petenense	Threadfin shad	75 to 125	Jul-Nov	3-4	0	12		
Elops saurus	Ladyfish	150 to 300	Aug-Nov	1-4	0	12		
Elops saurus	Ladyfish	301 to 525	May-Sep	1-2	0	12		
Etropus crossotus	Fringed flounder	50 to 85	Sep-Dec	1-3	0	12		
Eucinostomus gula	Silver jenny	65 to 90	Aug-Dec	1-4	0	12		
Eucinostomus harengulus	Tidewater mojarra	60 to 90	Aug-Dec	1-4	1	11	-0.67	30
Eucinostomus harengulus	Tidewater mojarra	91 to 110	May-Jun	4	0	12		
Ictalurus punctatus	Channel catfish	150 to 275	May-Sep	4	12	0	0.83	90,120,**150**
Ictalurus punctatus	Channel catfish	300 to 525	Sep-Mar	4	0	12		
Lagodon rhomboides	Pinfish	70 to 100	Jun-Sep	2-4	0	12		
Lagodon rhomboides	Pinfish	101 to 130	Jul-Oct	1-4	7	5	-0.78	**270, 300, 330**
Lagodon rhomboids	Pinfish	131 to 160	Aug-Oct	1-4	12	0	-0.87	30
Leiostomus xanthurus	Spot	60 to 90	Apr-Jun	1-4	1	11	-0.64	30
Leiostomus xanthurus	Spot	91 to 120	May-Sep	1-4	0	12		
Leiostomus xanthurus	Spot	121 to 140	Sep-Dec	1-4	0	12		
Lepisosteus osseus	Longnose gar	675 to 950	Mar-Dec	3-4	0	12		
Lepomis auritus	Redbreast sunfish	131 to 190	Sep-Apr	4	3	9	-0.72	30
Lepomis macrochirus	Bluegill	60 to 120	Jan-Dec	4	0	12		
Lepomis macrochirus	Bluegill	121 to 200	Dec-Jul	4	0	12		
Lepomis microlophus	Redear sunfish	0 to 125	Nov-Jun	4	0	12		
Lepomis microlophus	Redear sunfish	126 to 250	Jan-Dec	4	0	12		
Litopenaeus setiferus	White shrimp	18 to 25	Jul-Nov	3	0	12		
Micropogonias undulatus	Atlantic croaker	60 to 100	Mar-Jun	4	0	12		
Micropogonias undulatus	Atlantic croaker	101 to 130	May-Oct	3-4	0	12		

Annual Abundance 183-m Seine cont.

Species	*Common name*	*Size (mm)*	*Months*	*FIM Zones*	*Sig.*	*Not Sig.*	rho	*Lag (days)*
Micropogonias undulatus	Atlantic croaker	131 to 170	Jul-Sep	1	0	12		
Micropterus salmoides	Largemouth bass	126 to 250	Nov-Mar	4	0	12		
Micropterus salmoides	Largemouth bass	251 to 325	Nov-Mar	4	0	12		
Mugil cephalus	Striped mullet	75 to 125	Aug-Apr	3-4	0	12		
Mugil cephalus	Striped mullet	126 to 175	Sep-Apr	1-4	0	12		
Mugil cephalus	Striped mullet	176 to 250	Jan-Dec	1-2	0	12		
Mugil cephalus	Striped mullet	251 to 375	Jan-Dec	1-4	0	12		
Mugil curema	White mullet	100 to 130	Oct-Jan	2-4	0	12		
Mugil curema	White mullet	131 to 150	Sep-Jan	1-2	0	12		
Mugil curema	White mullet	151 to 200	May-Dec	1-2	0	12		
Mugil curema	White mullet	201 to 260	May-Oct	1-2	0	12		
Opisthonema oglinum	Atlantic thread herring	70 to 110	Feb-Jun	1-2	0	12		
Opisthonema oglinum	Atlantic thread herring	70 to 110	Aug-Oct	1-2	0	12		
Opisthonema oglinum	Atlantic thread herring	111 to 170	Apr-Jun	1-2	0	12		
Orthopristis chrysoptera	Pigfish	80 to 130	Jul-Sep	2-4	0	12		
Paralichthys albigutta	Gulf flounder	60 to 180	Mar-Sep	1-3	11	1	-0.81	90,**150,**180 **210, 240,**270
Paralichthys lethostigma	Southern flounder	126 to 325	Feb-Nov	1-3	1	11	-0.64	150
Sciaenops ocellatus	Red drum	50 to 125	Mar-Jun	3-4	0	12		
Sciaenops ocellatus	Red drum	126 to 200	Apr-Jul	1-4	0	12		
Sciaenops ocellatus	Red drum	201 to 350	Jul-May	1-4	0	12		
Sciaenops ocellatus	Red drum	351 to 700	Jan-Dec	1-4	0	12		
Selene vomer	Lookdown	30 to 80	Jun-Nov	1-3	3	9	-0.67	**270, 300, 330**
Sphoeroides nephelus	Southern puffer	70 to 170	Aug-Nov	1-3	10	2	-0.89	150,180,**210**
Strongylura marina	Atlantic needlefish	325 to 500	Aug-Mar	1-4	6	6	-0.77	**30**,120

Best-fit linear annual abundance response to continuously lagged mean freshwater inflow for pseudo-species collected with 183-m seine in the lower St. Johns River. Both untransformed and transformed data (fourth root)were used to develop regressions and only the best-fit regression (highest r^2) is presented here. An "x" in DW indicates that the Durbin-Watson statistic was significant ($p<0.05$). Press r^2 = predicted residual sum of squares statistic.

Species	*Common name*	*Size (mm)*	*Months*	*Zone*	*Days*	*Transform*	*df*	*Intercept*	*Linear coef.*	*Linear P*	*r2*	*DW*	*Press r2*
Chilomycterus schoepfii	Striped burrfish	40 to 110	Jun to Oct	1-2	270	Dep	8	1.33	-0.0002	0.0037	0.6728		0.4364
Citharichthys spilopterus	Bay whiff	50 to 70	Jun to Jul	1-4	90	Dep	8	1.06	-0.0002	0.0228	0.4968		0.1414
Citharichthys spilopterus	Bay whiff	71 to 100	Jun to Sep	1-4	300	Both	8	2.11	-0.1489	0.0134	0.5550	x	0.2381
Cynoscion nebulosus	Spotted seatrout	201 to 325	Nov to Mar	1-2	60	None	7	0.22	0.0001	0.0180	0.5742		0.4395
Diapterus auratus	Irish pompano	60 to 110	Oct to Dec	1-4	360	Dep	8	0.44	0.0001	0.0088	0.5965		0.0867
Ictalurus punctatus	Channel catfish	150 to 275	May to Sep	4	150	Both	8	-2.93	0.4699	0.0080	0.6061	x	0.3921
Lagodon rhomboides	Pinfish	101 to 130	Jul to Oct	1-4	300	Ind	8	43.37	-4.5456	0.0121	0.5659	x	0.3810
Lagodon rhomboides	Pinfish	131 to 160	Aug to Oct	1-4	30	Both	8	3.01	-0.2374	0.0060	0.6324		0.2210
Leiostomus xanthurus	Spot	60 to 90	Apr to Jun	1-4	30	Ind	8	52.25	-6.0629	0.0245	0.4885		0.2290
Lepomis auritus	Redbreast sunfish	131 to 190	Sep to Apr	4	30	Ind	7	5.97	-0.5819	0.0018	0.7740		0.6423
Paralichthys albigutta	Gulf flounder	60 to 180	Mar to Sep	1-3	150	Dep	8	0.92	-0.0001	0.0281	0.4724	x	0.1260
Paralichthys lethostigma	Southern flounder	126 to 325	Feb to Nov	1-3	150	Both	8	1.26	-0.0609	0.0141	0.5497	x	0.2224
Sphoeroides nephelus	Southern puffer	70 to 170	Aug to Nov	1-3	210	Both	8	2.25	-0.2093	0.0014	0.7396		0.6055

Annual Abundance 6.1-m Trawl

Summary of Spearman's correlation analyses relating annual pseudo-species relative abundance to continuously lagged mean freshwater inflow for 183-m seines collected in the lower St. Johns River . Sig. is number of significant (P<0.050) correlation(s), Not Sig. is number of non-significant correlation(s). The highest significant absolute rho (p<0.05) is presented along with the associated lag times that were used in linear regression. Bold lag is associated with the highest absolute rho. Other lags used in linear regression had rho values within ± 3% of the highest value

Species	*Common name*	*Size (mm)*	*Months*	*FIM Zones*	*Sig.*	*Not Sig.*	rho	*Lag (days)*
Achirus lineatus	Lined sole	10 to 60	Jan-Dec	1-4	0	12		
Achirus lineatus	Lined sole	61 to 120	Jan-Dec	1-2	0	12		
Anchoa mitchilli	Bay anchovy	36 to 60	May-Jan	1-4	2	10	-0.77	**330, 360**
Bairdiella chrysoura	Silver perch	10 to 40	May-Aug	1-4	0	12		
Bairdiella chrysoura	Silver perch	100 to 130	Oct-Apr	1-3	0	12		
Callinectes sapidus	Blue crab	10 to 50	Oct-Feb	1-4	0	12		
Callinectes sapidus	Blue crab	51 to 80	May-Oct	1-4	0	12		
Callinectes sapidus	Blue crab	81 to 110	May-Oct	1-4	1	11	-0.65	60
Callinectes sapidus	Blue crab	111 to 180	Jun-Dec	1-4	0	12		
Citharichthys spilopterus	Bay whiff	20 to 50	Apr-Jun	1-4	0	12		
Citharichthys spilopterus	Bay whiff	51 to 90	May-Sep	1-4	4	8	-0.71	90
Ctenogobius shufeldti	Freshwater goby	30 to 55	Dec-Mar	3-4	6	6	0.77	270,300
Cynoscion regalis	Atlantic weakfish	0 to 25	May-Sep	1-3	0	12		
Cynoscion regalis	Atlantic weakfish	26 to 40	May-Oct	1-4	0	12		
Cynoscion regalis	Atlantic weakfish	41 to 75	Jun-Nov	1-4	0	12		
Dasyatis sabina	Atlantic stingray	150 to 275	Jul-Feb	1-4	0	12		
Etropus crossotus	Fringed flounder	30 to 60	Jul-Nov	1-3	0	12		
Etropus crossotus	Fringed flounder	61 to 90	Aug-Dec	1-3	0	12		
Lagodon rhomboides	Pinfish	80 to 100	Nov-Mar	1-3	0	12		
Leiostomus xanthurus	Spot	10 to 25	Feb-Mar	1-3	0	12		
Leiostomus xanthurus	Spot	26 to 40	Mar-May	1-4	0	12		
Leiostomus xanthurus	Spot	41 to 60	Apr-Jun	1-4	0	12		
Leiostomus xanthurus	Spot	61 to 90	May-Aug	1-4	0	12		
Lepomis macrochirus	Bluegill	20 to 70	Oct-Dec	3-4	0	12		
Litopenaeus setiferus	White shrimp	4 to 11	Jun-Sep	1-4	0	12		
Litopenaeus setiferus	White shrimp	12 to 27	Jul-Oct	1-4	0	12		
Menticirrhus americanus	Southern kingfish	10 to 40	May-Sep	1-4	0	12		
Micropogonias undulatus	Atlantic croaker	0 to 25	Dec-Mar	1-4	0	12		
Paralichthys lethostigma	Southern flounder	0 to 50	Feb-May	1-4	0	12		
Paralichthys lethostigma	Southern flounder	101 to 225	Jul-Feb	1-4	0	12		
Symphurus plagiusa	Blackcheek tonguefish	20 to 60	Jun-Feb	1-3	0	12		
Symphurus plagiusa	Blackcheek tonguefish	61 to 110	Jul-Dec	1-3	0	12		
Trinectes maculates	Hogchoker	20 to 45	Sep-Mar	1-4	6	6	0.75	60,**90**,180
Trinectes maculates	Hogchoker	46 to 75	Jul-Feb	1-4	0	12		

Annual Abundance 6.1-m Trawl Continued

Best-fit linear annual abundance response to continuously lagged mean freshwater inflow for pseudo-species collected with 6.1-m trawl seine in the lower St. Johns River. Both untransformed and transformed data (fourth root)were used to develop regressions and only the best-fit regression (highest PRESS r^2) is presented here. An "x" in DW indicates that the Durbin-Watson statistic was significant ($p<0.05$). Press r^2 = predicted residual sum of squares statistic.

Species	*Common name*	*Size (mm)*	*Months*	*Zones*	*Days*	*Transform*	*df*	*Intercept*	*Linear coef.*	*Linear P*	*r2*	*DW*	*Press r2*
Anchoa mitchilli	Bay anchovy	36 to 60	May to Jan	1-4	360	Both	7	3.50	-0.2297	0.0099	0.6376	x	0.3566
Ctenogobius shufeldti	Freshwater goby	30 to 55	Dec to Mar	3-4	360	Dep	7	-0.73	0.0003	0.0115	0.6225		0.3383
Trinectes maculatus	Hogchoker	20 to 45	Sep to Mar	1-4	60	Both	7	-0.25	0.1568	0.0147	0.5964	x	0.3779