Approved Education Partner Excursions

Important details:

- You are responsible for contacting the field trip location/provider for additional details, including the price, availability, and scheduling. Field trip cost should be included on the budget portion of your grant application. It is the teacher's responsibility to confirm the field trip is focused on freshwater or estuarine resources.
- Classroom activities are required for all Education Partner Excursions and help reinforce and expand freshwater and estuarine concepts.
- If you would like to submit another field trip program for consideration, please email a thorough description of the program and how it encompasses freshwater or estuarine education to the Blue School Grant program manager at llabeur@sjrwmd.com for review and approval.

Multiple Counties

Environmental Education Centers (EEC)

EECs may or may not have the ability to accommodate Blue School Grant field programs based upon their schedule of school district field trip programs. Feel free to contact the educators at an EEC within your school's county for availability.

Your Local State Park

Teachers and students frequently use state parks as outdoor classrooms. Florida school groups, including vocational schools, colleges, and universities, can visit a state park without paying the day-use entry fee. Coordinate with your school principal, professor, or other appropriate official to write a letter stating that the park visit is related to a specific school curriculum and is for educational purposes. Organized groups composed of children younger than 18 must have at least one adult chaperone for every 10 children.

UF/IFAS County Extension Offices

The University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS) created the Florida Yards and Neighborhoods Program. This set of nine guiding principles help save water and reduce water pollution in the landscape. Contact your county Extension office to learn how the FFL coordinator can assist with your grant.

Water Resource Management Facilities

Local utilities may be able to field trip requests. Your class can have the opportunity to learn more about the following:

- Desalination plants
- Wastewater treatment facilities
- Water reservoirs
- Water treatment facilities

Jacksonville Zoo and Gardens

Water Warriors - In this program students will learn about our local water resources and the threats they are facing such as plastic debris, run off, and habitat loss. When we visit your school, we will work with the students to complete a water conservation project. Then, when your students visit the Zoo, they will get a guided tour to our favorite local waterway ambassador- the Florida Manatee! To schedule a Connecting Classrooms to Conservation program please email blume@jacksonvillezoo.org.

Alachua

Florida Museum of Natural History

The Florida Museum of Natural History is a library of life, capturing the variety and wonder of the natural world around us. The Museum's collections, research, exhibits and programs exist to inspire people to care about life on Earth and make a positive difference in its future.

Self-guided visits are available for groups to visit Museum exhibits, Butterfly Rainforest and/or Special Exhibit in person without the benefit of docents or staff. You may self-guide multiple exhibits.

Hands on Gainesville

Hands On Gainesville encourages a student as apprentice approach to learning, with the belief that learning by doing leads to better understanding. They encourage students to see science everywhere in the world and especially in their community.

Hands On Gainesville will help you build a community team where students and business work together to create an interactive science exhibit. Let the students learn what the business is all about and find the science involved. The exhibit becomes a 'Point of Interest' on our Sci-Map showcasing your science or technology to the community.

Sweetwater Wetlands Park

Sweetwater Wetlands Park is a man-made wetland habitat of more than 125 acres. Shaped like the head of an alligator, the park has several miles of trails and is teeming with plants and animals. It was designed to improve water quality by filtering out pollution and nutrients.

Fishing for Success

A typical program consists of 2 hands-on, educational activities followed by a break for lunch, with fishing as the day's grand finale. The average time spent on a field trip is 3 to 4 hours. A typical trip costs \$7.00 per child, with no charge for teachers and chaperones. We also host "fishing only" trips which last 1 to 2 hours. Fishing only trips are \$5.00 per angler.

Aquatic Invertebrates

Students use dip nets to catch aquatic invertebrates from our ponds. After collecting for an allotted time, participants gather with their dishpans of live critters. FFS biologists then provide a brief aquatic ecology lesson to identify what they have caught and discuss their biology, habits, and importance in the food chain/web of a pond.

Introduction to Fish

FFS biologists give an overview of the identification, anatomy, and ecology of some of Florida's common freshwater fish. Students can touch and interact with the live fish used in these demonstrations. They also learn how to handle fish safely. Information about aquaculture (fish farming) is also available if so desired.

Aquatic Plants

FFS biologists emphasize Florida's common aquatic and semi-aquatic plants and weeds on a learning walk around the ponds. Participants collect and learn how to identify a variety of plants. There is a discussion of the biology and role of plants in aquatic ecosystems and the methods used to control aquatic plants when they become invasive.

Water Quality (Grades 6-12)

Students learn the basics of water chemistry and its importance to fish survival. Participants collect pond water samples and measure various physical and chemical parameters (e.g., temperature, dissolved oxygen, pH, and clarity) using water test kits and scientific equipment. Students learn how to maintain water quality to ensure the survival of aquatic life.

Fishing

As a grand finale to the visit, youth have the opportunity to fish ponds heavily stocked with largemouth bass, bluegill, redear sunfish, and channel catfish. Novice anglers learn basic fishing skills, angler ethics, and safety. FFS provides all bait, tackle, and equipment.

Off-Site Programs

FFS personnel visit schools on a limited basis to give educational presentations on the biology and ecology of aquatic invertebrates and fish found in Florida lakes and ponds. If circumstances permit, FFS staff can participate in your environmental education and ecology events.

To schedule a visit, please contact:

Ms. Bethan Gillett Phone: (352) 273-3622 Email: bgillett@ufl.edu

Brevard

Brevard Zoo

Florida Expedition (onsite grades 2-12) - From swamp and wetlands to forests and scrub, students learn Florida habitats are home to many animals. We will take students into the Florida exhibit and with careful observations, investigate animals and their exceptional features.

Lagoon Quest Virtual Program - Dive into the Indian River Lagoon on this student-led, educator-guided adventure featuring a seining demonstration, species identification and much more. Your students will gain an appreciation for and awareness of this natural treasure. Integrated with fourth-grade science, math, social studies and language arts curriculum. Contact Ms. Bri Forte at bforte@brevardzoo.org to register.

Barrier Island Sanctuary & Archie Carr Wildlife Refuge

The Barrier Island Center acts as the visitor center for Archie Carr National Wildlife Refuge and provides many opportunities to learn about the different ecosystems and wildlife that can be found in the Refuge. They focus heavily on educating the public about sea turtles, the species that are endangered and that can be found on the Refuge, and how we can do our part to help protect them. Archie Carr National Wildlife Refuge stretches across 20.5 miles of beach and shoreline habitat between Melbourne Beach and Wabasso Beach along Florida's east coast in Brevard and Indian River Counties. The refuge was designated to protect habitat at the most significant area for loggerhead sea turtle nesting in the world, and the most significant area for green turtle nesting in North America.

Enchanted Forest Sanctuary

Located in the southern limits of the City of Titusville, the Enchanted Forest Sanctuary preserves a diversity of natural habitats. Several miles of hiking trails allow visitors to enjoy the natural beauty of the region. Wildlife observation, nature photography, and hiking are popular recreational activities. A wonderful wealth of plant life also abounds as both temperate (northern) and subtropical (southern) species grow in the Sanctuary together. The Management & Education Center interprets the Sanctuary's unique natural features for visitors of all ages and abilities.

There are five basic habitat types found at the Enchanted Forest Sanctuary: Oak scrub, mesic and hydric hammock, wet prairie, and pine flatwood. Wildlife species found here include the Eastern indigo snake, Florida scrub lizard, gopher tortoise, white-tailed deer, and bobcat.

Sams House at Pine Island Conservation Area

From Ice Age animals to Native Americans to early pioneers, Pine Island Conservation Area has a rich history. Mastodon tusks, pottery sherds, and 19th century farm tools found on site help piece together the story of this special place.

Enjoy hiking, biking, horseback riding, fishing, canoeing, and kayaking through five different habitats and over six miles of trails. Wading birds, bald eagles, alligators, manatees, and bobcats are just a few of the animals that you may see. The Environmentally Endangered Lands Program and the St. Johns River Water Management District jointly own this over 880-acre site.

Educational offerings meet the benchmark for Grades 6 "Earth Science and Ecology": Understand the dynamic systems of earth through explorations into the soils, water, and habitats of the Pine Island Conservation Area.

Turkey Creek Sanctuary and Margaret Hames Nature Center

Established in 1981, the Sanctuary offers a 1.85-mile boardwalk passing through hydric (wet) hammock, mesic (moist) hammock, and sand pine scrub communities, and 1.5 miles of jogging trails through native forest, both excellent for viewing a multitude of wildlife.

The on-site Margaret Hames Nature Center, opened in 1992, offers interpretive exhibits, and environmental education programs, including nature day camps, tours, nature library and gift store.

Riverwalk Park Nature Center

The Riverwalk Nature Center features educational displays on the habitats and animals of the Indian River Lagoon. Many hands-on activities about the marine environment await inquisitive visitors. Aquaria are spread throughout the center, showcasing the animals of the Indian River Lagoon.

Estuary Explorers: This program explores the Indian River Lagoon, its different ecosystems, and its importance to both wildlife and humans. Students will also learn about the two major groups of fish (bony and cartilaginous), adaptations for swimming

and feeding, and the purposes of coloration. Students will be seine netting in the Indian River Lagoon where they will be able to collect fish with nets and identify them.

Drifting Away - A Lesson in Plankton: Students will learn about the two types of plankton (phyto- and zoo-), food chains, and human interactions with plankton. Students will be given a chance to see plankton close-up using a plankton net and Discovery Scope magnifiers. Students will be able to construct their own planktonic organism and will be able to test its ability to drift.

Flotsam and Jetsam: Students will explore concepts related to ocean currents, tides, runoff, drift seeds, and sources of hazardous marine debris. Students will participate in a hands-on activity where they explore marine debris from the lagoon and how it may have been transported to the shore.

Merritt Island National Wildlife Refuge

Merritt Island National Wildlife Refuge, located along Florida's coast about 60 miles east of the city of Orlando, was established by agreement as an overlay of the National Aeronautics and Space Administration's John F. Kennedy Space Center. The refuge lies within one of the most productive estuaries in the country.

Ranger led programs: The 2–4-hour long programs are available to public, private, home school, and scout groups. Programs can be adapted to various grade levels. Please schedule your program three weeks in advance.

Marine Discovery Center

WISE WATER: Students will get a close glimpse of the underground world of watersheds and how connected they are to other habitats. We will discuss different water-based statistics, as well as test our knowledge on sustainable water use. Students will be challenged to create their own Water Wise plan.

DISCOVERY ECO ADVENTURE TOUR: What could be better than cruising the lagoon while learning about the wildlife that inhabits the area? Perhaps dolphins will be playing, or birds will be diving to capture prey. A naturalist will be along to stimulate students' curiosities about the most biologically diverse estuary in North America.

INDIAN RIVER LAGOON EXPERIENCE: Their most popular program offers students a chance to participate in land-based activities as well as taking a tour on our boat.

Dolphins, manatees, birds, and other marine life may be encountered as the naturalist describes the lagoon and its inhabitants. Land activities may include a habitat hike, a plankton study, an invertebrate presentation, or several other options.

Clay

Camp Chowenwaw Park

Camp Chowenwaw (Cho'-wen-waw), is a beautiful 150-acre recreation site on Black Creek, located in Green Cove Springs near its confluence with the St. Johns River. The new Pawpaw Nature Center is now open at Camp Chowenwaw Park, from 10 am - 3pm, every day the park is open. Stop by to learn about habitats and animals found in Clay County.

Duval

Jacksonville University: Connected

For decades, scientists and students at Jacksonville University's Marine Science Research Institute have studied the river and its diverse ecosystems. *Connected* is an open invitation to explore, discover, and engage with the beautiful St. Johns River, and it's a call to respect, value, and protect this vital natural resource. The Connected Program can work with teachers to design a field trip program for students of all ages. Two example field experiences are provided below:

River observations: up to 24 guests can go for a tour of Jacksonville University's Marine Science Research Institute followed by an hour-long trip on the St. Johns River to make observations and water quality measurements. The RV Larkin (AKA: floating classroom) has plenty of seating, a bathroom, and comes with fuel, captain, and first mate. A YSI can be used to measure pH, temperature, dissolved oxygen, and salinity. A turbidity meter and fluorometer are also available for measuring particulates and chlorophyll.

Hands-on Hydrology: students will learn about watersheds, pollution, and solutions using a hands-on lesson with the Enviroscape watershed model. The students will then go on a walking tour of the following hydrological and man-made features at the

Jacksonville Arboretum & Gardens: a spring-fed creek, seep, lake formed from a barrow pit, dry retention pond, and a storm water outflow pipe.

Tree Hill Nature Center

Located in the center of Jacksonville, Florida, Tree Hill is the perfect place in our community to benefit from important environmental programs and experience family fun in a natural environment. Tree Hill is home to more than 50 acres of trails, a Florida Natural History Museum, butterfly and hummingbird gardens, and native animals. Tree Hill Nature Center promotes environmental stewardship to the community through quality, hands-on educational programs, and low-cost access to natural areas. At Tree Hill Nature Center, school students and teachers can attend field study classes on forest ecology surrounded by Tree Hill's unique combination of three ecosystems and beautiful surroundings.

Timucuan Ecological and Historic Preserve - National Park Service

Visit one of the last unspoiled coastal wetlands on the Atlantic Coast. Discover 6,000 years of human history and experience the beauty of salt marshes, coastal dunes, and hardwood hammocks. The Timucuan Preserve includes Fort Caroline and Kingsley Plantation. Ranger-guided programs are offered at Fort Caroline and Kingsley Plantation.

Indian River

Environmental Learning Center

The Environmental Learning Center is a 64-acre natural lagoon island preserve in Vero Beach. Experience native Florida in a peaceful lagoon setting with beautiful vistas and close-up encounters with wildlife and native plants in a setting that inspires wellness. Experience the Indian River Lagoon through extensive boardwalks and walking trails, learn about native plants in the greenhouse, take a canoe or pontoon boat ride with EcoVentures, experience the 145-gallon Touch Tank at Discovery Station and Aquariums where you'll learn all about the lagoon.

ORCA

ORCA is dedicated to the protection and restoration of aquatic ecosystems and the species they sustain through the development of innovative technologies, science-based conservation action, and community education and outreach. Their participatory educational experiences were developed to bridge the gap between citizen science and education by offering students of all ages, the opportunity to engage in real-world science and citizen science that challenges them to problem solve, inquire, engage, and think critically.

Data Jam: The Team ORCA Data Jam is a unique competition that challenges entrants to look at real science datasets collected by ORCA citizen scientists and come up with a creative and artistic way to display and share their findings with others.

A Day in the Life of the Indian River Lagoon: This annual, long-term project is designed to help students develop an appreciation for and knowledge of the IRL by collecting valuable biological, chemical, and physical parameters of an adopted sampling location. The data collected will provide a better understanding of current health issues and stressors facing this waterway.

Pelican Island Audubon Society

Audubon House: Their goal is to offer a series of exciting visits to good birding locations that will get people outdoors while keeping each other safe and healthy. Birding offers a wonderful means of escaping the indoors, exercising, socializing with friends at a distance and contributing to our mental well-being.

Lake

P.E.A.R. Park - Nature Center & Wildlife Conservation Area (WCA)

This "passive" recreation area has over five miles of trails to explore, a "wildlife watch post" with a green roof overlooking an ephemeral wetland, a pavilion amidst a xeric native plant and pollinator demonstration garden, an overlook pavilion, nature center, Eastern Bluebird boxes, and natural communities' restoration including scrub, ephemeral wetland, native meadow, longleaf pine sandhill and pine flatwoods. The Parks & Trails

Events Guide details interpretive events which allow more in depth and personalized experiences at many of our conservation properties.

Trout Lake Nature Center

The 230-acre property features a museum, educational displays, several trails, a swinging bridge, and a picnic area. Staff at Trout Lake Nature Center are on a mission to educate and inform people of all ages about not only the environment, but how to protect and preserve the lands, waters, and their inhabitants. As a regional educational resource, they hold numerous demonstrations, talks, events, and educational opportunities that will interest all ages. Staff work together with the Lake County school system to provide students an opportunity to gain a unique perspective of the area's wildlife and lands. The following programs are offered:

What Lies Beneath: Students investigate the Floridan aquifer using a groundwater model. This model helps students understand how groundwater moves, springs flow and pollution travels underground. They learn about the soils of Lake County and perform percolation tests. In addition, they test the waters of Trout Lake to determine what can live there. Students will construct a micro-habitat after learning the components needed for it to function.

Wondrous Watersheds: Earth Systems—the Water Connection: Using an augmented-reality watershed model, students learn about watershed functions, point and non-point pollution and best management practices or BMPs to protect our surface water. Students assemble a watershed floor puzzle and assume the role of home and business owners in our watersheds. Live frogs and toads, and a game of survival, help students understand why amphibians are good indicators of water quality. In addition, they test the waters of Trout Lake using test strips and macro invertebrates to determine what can live there.

Water World: Using dip nets students collect and record the macro invertebrates found in Trout Lake. By travelling back in history, students complete an activity that teaches about the value of water and difficulties encountered by early settlers in obtaining water. Students estimate the water found on earth, what percentage can be found in many common foods, and how much water is found in our bodies along with how it keeps us healthy.

Marion

Discovery Center at Tuscawilla Park

The Discovery Center offers the following program: Exploring pH | Grades 6 through 12 Potential of Hydrogen, or pH as it is commonly referred to, is an important aspect of our everyday lives. From the way we digest our food, to plant defenses, acids and bases are everywhere! Join the Discovery Center as we investigate pH through a virtual presentation.

Ocala Wetland Recharge Park

The Ocala Wetland Recharge Park allows the City of Ocala to efficiently use its water resources. By developing and operating this park, the City of Ocala has created a wetland ecosystem, is improving water quality, and boosting regional groundwater supplies, by utilizing treated wastewater. The park sits on a 60-acre site, located near Lillian Bryant Park. The Ocala Wetland Recharge Park is home to educational exhibits and kiosks, boardwalks, two and a half miles of paved walking trail, and wildlife overlooks.

Nassau

Amelia Island Nature Center

The Amelia Island Nature Center offers a tour of the ecology of Amelia | On this Island Hopper tour, visit the 3 ecosystems of a barrier island. Learn about the flora and fauna of the surrounding local area, from the sandy dunes and tidal salt marsh to the lush forest of the property.

Amelia River Cruises

Amelia Island is surrounded by wilderness. To the south, Big Talbot, Little Talbot, and Fort George encompass the Timucuan Ecological Preserve. To the north, you'll find Cumberland Island National Seashore and Fort Clinch State Park that makes up about ten percent of Amelia Island. Just to the west are the Tiger Islands and Tiger Basin, most

of which are part of the Fort Clinch Aquatic Preserve. It is in this setting that Amelia River Cruises will offer our Shrimping Eco Tour.

Egans Creek Greenway

Egans Creek Greenway, located on the northern end of Amelia Island, Florida, opened in 2000 as an undeveloped park for conservation and passive recreational use. Funding for the land acquisition was provided by the Florida Communities Trust and the City of Fernandina Beach. Managed by the City Parks and Recreation Department, the park consists of over 300 acres of protected lands with a variety of natural wildlife and vegetation.

Orange

Audubon Center for Birds of Prey

Located in the city of Maitland and the Town of Eatonville, this urban environmental Audubon Center focuses on the rescue, medical treatment, rehabilitation, and release of Florida's raptors. Visitors can learn about the unique adaptations of raptors; challenges they face and the many ways to get involved with helping birds of prey and the important habitats and resources they depend on. Programs like "Water You Waiting For?!" would be a good fit for the Blue School Grant. This specialized 3-hour program focuses on the WEB (Water, Energy and Birds), and their interconnections. In addition to a tour of the Center, participants conduct water testing experiments and explore a nearby pond for life, while learning why healthy water in ecosystems is important for birds, other wildlife, and humans.

Blue Springs Adventures

Wildlife and Vegetation School Charters: Their outdoor classroom has a seat with a view reserved for students of all ages. Young scholars are invited to board one of the Guest Services pontoon boats for a nature-oriented tour of the St. Johns River at Blue Spring State Park. This Field Trip is designed to bring the Environmental Sciences to students in a way they can understand and see the relationships that exist in our subtropical wetland ecosystem across central and south Florida. Water is the dominant element in

Florida, it shapes the land, vegetation, sea life, birds, and animal life in our area. All of these components connect us with the natural world and shines a light on the importance of respecting and preserving the environment.

Boggy Creek Airboat Adventures

Ecology Program: Students create, test, and visualize how various factors within the watershed can impact storm water runoff and flooding. Students explore the value of retention ponds and wetlands in flood management. Students construct their own levees and witness how stream flow is affected during times of high runoff. Students work as a team to find and test solutions to a variety of floodplain problems.

Orlando Easterly Wetlands Reclamation Project

The Orlando Wetlands Park is a man-made wetland designed to provide advanced treatment for reclaimed water from the City of Orlando and other local cities. The Park is 1650 acres in size and located in Christmas, Florida.

The Education Center is a visitor center with permanent and seasonal exhibits that include live animals and multimedia displays. The center is located just west of the parking lot and is open to the public from 9 a.m. to 3 p.m. on Fridays and Saturdays (all year) and Sundays (September - March).

Putnam

The Water Works Environmental Education Center

The Water Works Environmental Education Center (WWEEC) is located in Palatka, FL, at 1101 Whitewater Drive. The 9-plus-acre property is owned by the city of Palatka and has much historical and educational value — especially relating to water and environmental concerns.

WWEEC promotes the conservation of clean freshwater at home, in the workplace, and as part of the local community by sharing knowledge about the historic Water Works facility, gardening practices derived from organic gardening, permaculture, edible landscape concepts, and the use of native plants as alternatives to water. The wetlands

and upland natural habitats allow linkages to the St. Johns River and opportunities for interactions with the St. Johns River Center in Downtown Palatka.

Seminole

Altamonte Springs Science Incubator

The Altamonte Springs Science Incubator (AS₂I) is an innovative program that promotes career readiness in the high-tech, high-demand fields of science, technology, engineering, and math (S.T.E.M.).

Structured programming is conducted on a weekly basis in conjunction with the annual Seminole County School calendar at Lake Lotus Park and the Regional Water Reclamation Facility. Field experiences are scheduled on Mondays and Tuesdays for middle and high school students in Seminole County.

During each visit, students participate in hands-on experimentation and data collection, discuss career opportunities, and interact with scientists, engineers, and park rangers. In addition to providing STEM learning, AS₂I includes internship and scholarship opportunities for participating students.

Ed Yarborough Nature Center at Geneva Wilderness Area

School Field Trips: The Geneva Wilderness Area and the Ed Yarborough Nature Center can serve as wonderful outdoor classrooms and provide a great opportunity for first-hand experiential learning for K-12 students. Children will visit with the live animal residents, engage with exhibits, and displays and explore natural habitats in the wilderness area.

In-School Programs: Their environmental education classroom program is a 45–50-minute program about general topics related to natural sciences in Florida. Content is geared towards standards-based topics for each specific grade level. The Natural Lands' staff will bring live specimens, skulls, displays and other related visual aides to give students a hands-on experience as they learn.

Seminole Audubon Society

Lake Harney Wilderness Area in Geneva: The Lake Harney Wilderness Area (LHWA), approximately 300 acres, is located on the St. Johns River and the northwest shore of Lake Harney. This site is home to an historic crossing of the Flagler Railroad, Native American shell middens, oak hammocks, and mixed hardwood swamps. This site also contains extensive floodplain marshes associated with Lake Harney, which serve as important feeding grounds for wading birds and as a natural filter improving water quality.

D Ranch Preserve in Osteen: Owned and managed by Conservation Florida, D Ranch Preserve is a beautiful 476-acre piece of wild Florida that is now protected forever. In addition to buffering public conservation lands, D Ranch further protects the Lake Monroe watershed. The preserve contains 149 acres of critical Florida scrub habitat and 60 acres of scrubby flatwoods. Many iconic Florida species require this habitat for their survival, including Florida Scrub-Jays, sand skinks, eastern indigo snakes, wood storks, burrowing owls, and gopher tortoises. This special property's rare ecosystems provide habitat for Florida's wildlife. It also builds on current conservation areas and helps protect Florida's freshwater.

St. Johns

GTM NERR Visitor Center

Teeming with life, the Guana Tolomato Matanzas National Estuarine Research Reserve (GTM Research Reserve) is a dynamic, ever-changing place with many interconnected habitats from the ocean to the forests. Find the following programs:

Migrating Marshes (Grades 6-12): Students will measure and track salt marsh vegetation biodiversity and observe how drones can be used to measure changes on a larger scale. Students will also hike into the uplands ecosystem and observe and discuss natural resource uses, impacts, and conservation in the past and present. It is strongly recommended that students wear clothing they don't mind getting wet and/or muddy.

Salt Marsh Seining (Grades 6-12): This field experiment explores water quality and organism diversity around Guana Dam. Students will seine in order to observe what species are in Guana River and Guana Lake while learning how to use state-of-the-art water quality and weather parameter collection technology. Topics discussed include dissolved oxygen, pH, salinity, water/air temperature and how these parameters affect biodiversity. It is strongly recommended that students wear clothing they don't mind getting wet and/or muddy.

Volusia

Lyonia Environmental Center

Lyonia Environmental Center (LEC) offers insights into Volusia County's fragile ecosystems through hands-on displays and educational programs. It's part of the Deltona Regional Library complex at 2150 Eustace Ave., Deltona.

The center's environmental specialists and volunteers promote an understanding of the county's natural environment, the heritage it sustains, and the challenges it faces.

Marine Science Center

Their school field trips offer five programs that can accommodate students in grades K-12 and are coordinated with Next Generation Standards. School field trip programs are as follows:

Marine Science Center Exhibit Tour: Students and Groups will be guided on a tour of the Marine Science Center (MSC) focusing on Volusia County's ecosystems and MSC's rehabilitation efforts. Your field trip will be led by educators to explore and learn about the reptiles in the classroom. You will also journey through the Florida ecosystems in the gallery and have an interactive hands-on experience at the touch tank. You will then venture onto the turtle terrace and get an insight into how we rescue, rehabilitate, and release the sick and injured sea turtles who come into our hospital. Finally, you will meet the raptors and walk through our bird sanctuary to learn the many fascinating facts about birds of prey. You can have gift shop time, if your group picks that option, to take home a keepsake and memory of your visit.

Estuary Program (Including Seine Netting): With outdoor hands-on and in water activities in the estuary, students will study and learn about the fish, animals, and plants that live in this habitat. They will gain an understanding of their important role in our environment. Your students will practice the ancient art of seine netting, a technique used by the Native American Indians, and pull seine nets to collect and study the inhabitants of this brackish water system.

Students will learn the definition of an ecosystem, including the abiotic and biotic components and processes. They will understand that ecosystems have no specific scale and can change when biotic or abiotic components, or processes within the ecosystem change. They will even discover the wonders of things they can't see, microscopic plankton exploration, and may also conduct some water quality tests to help assess the health of the water they are immersed in.