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RIVER CENTER

The River Center is a program of the Loxahatchee River District. The Loxahatchee River District, an award-winning wastewater treatment facility established in 1971 to protect the Loxahatchee River from pollutants, is the leading authority on the Loxahatchee River. Its physical plant can treat up to 11 million gallons of wastewater from northern Palm Beach and southern Martin Counties each day, preventing those pollutants from entering our watershed. This special district also provides both scientific and educational programs for the Loxahatchee River and serves as an advisory agency for the many diverse efforts under way.



WWW.LOXAHATCHEERIVER.ORG

PREVISIT INFORMATION

We are delighted that you have chosen to bring your campers to the Loxahatchee River District's River Center for an educational field trip experience. The River Center staff would like for your visit to be as fun and educational as possible. The goal of this field experience is to instill the campers with an understanding and appreciation of the Loxahatchee River watershed through its unique plant and animal habitats as well as a new perspective on water resources and conservation. To make this an enjoyable field trip for teachers, campers, and our program presenters, please follow these guidelines.

PLEASE READ

Please contact the River Center if you will be *more than 15 minutes late* or for any questions, concerns, or changes at 561-743-7123 ext. 4200 or Education@LRECD.org.

SCHEDULE

10 A.M. - 11:30 A.M. OR 1 P.M. - 3 P.M.

You may wish to provide a snack before or during the bus ride to the River Center. Groups are welcome to use the small pavilions in the park and visit the playground after their program.

RECOMMENDATIONS FOR A GOOD TRIP

- Campers should wear name tags with their first name.
- Chaperones: 1:6 ratio for younger groups (ages 5-9) or 1:10 ratio for older groups (ages 10+).

EXPECTATIONS

- Camp Directors and chaperones will be responsible for discipline of the children. All adults will be active participants in the activities with the children.
- Campers are expected to be good listeners, respectful to our program presenters, listen carefully and follow directions.
- There are live animals on site and in aquaria, so please do not tap or bang on the aquariums or exhibits in order to avoid stressing the animals.
- Campers should practice classroom behaviors including keeping their hands to themselves, not talking out of turn, and watching for attention clues.
- To minimize distractions for campers, *please remind all chaperones and teachers to switch cell phones to silent*.

ADDRESS AND DIRECTIONS

Address: 805 U.S. Highway 1 Jupiter, FL 33477

Directions:

- I-95: Exit 87A (Jupiter Exit) East Indiantown Road (Turnpike: Exit 116 Indiantown Road)
- Indiantown Road: Travel EAST until you reach U.S. Highway 1
- Turn Left (NORTH) onto U.S. Highway 1
- Travel NORTH through one stoplight, turn right (EAST) at the flashing light into Burt Reynolds Park.
- The River Center is the light blue building located by the fire station.

PROGRAM: WILDLIFE IS EVERYWHERE

GRADE LEVEL: PRE-K - K

CHECKLIST

MY NOTES DEPOSIT PAID (\$50) BUS RESERVED PERMISSION SLIPS COMMUNICATE ANY 504/IEP/ESOL/ESE/ **ACCESSIBILITY ISSUES REMAINING PAYMENT DUE DAY OF THE PROGRAM** STUDENT NAME TAGS 1:10 RATIO FOR **CHAPERONES PACKED LUNCHES** Ť. **SNACK BEFORE PROGRAM DIRECTIONS FOR THE BUS DRIVER COMPLETE RIVER CENTER SURVEY AFTER** THE PROGRAM **SURVEY LINKS** In-Person Field Trips: https://www.surveymonkey.com/r/RCschool Virtual Field Trips:

https://www.surveymonkey.com/r/rcvirtual



WHAT TO BRING

Certain portions of your program may take place outdoors. Please have your campers dressed appropriately for Florida weather.

- Closed toe shoes
- Sunscreen
- Hat
- Refillable water bottle

BACKGROUND

Wildlife includes any animals that have not been domesticated by people. Wild animals obtain their own food, water, shelter, and air as well as other needs. Wildlife includes worms, snails, insects, invertebrates, as well as vertebrates including fish, amphibians, reptiles, birds, and mammals. Wildlife is found on land, in soil, in water, and in the air.

EXPLORE

VISIT TO THE RIVER CENTER

- 1. Welcome, introduction to the River Center, overview of today's field trip, and safety/rules talk
- 2. Divide the campers into 2 groups to rotate through 3 different activities
 - a. Lovin' the Loxahatchee River Tour focusing on fish species, anatomy, adaptations, and habitats
 - b. Wildlife is Everywhere Garden Activity
 - c. Water resources discussion Where our water comes from, how we use water, where it goes once it is down the drain, water conservation
- 3. Touch Tank Demonstration

EXPERIENCE

WILDLIFE IS EVERYWHERE

Nature Says: Campers learn about animal sounds and movements, as well as other naturally occurring activities through our version of "Simon Says."

Wildlife is Everywhere: Campers will become Wildlife Scientists going on an adventure looking for wildlife in our own garden. They will learn how to sneak up on animals, observe them, and maybe even catch some animals along the way.

CONNECT

POST VISIT ACTIVITY - SELECT AN ACTIVITY

HABITATS

- Do some research on Florida coral reefs, limestone rock reefs, seagrass, and mangrove habitats. Once the students have completed their research have them choose a habitat and create a piece of art, slide show, puppet show, movie, poem, or other art of their choice to represent their chosen habitat.
- Once the habitats are complete have the students explain why they chose that habitat.
- Choose and animal that they saw at the River Center. They can use Playdough, Legos, construction paper, or other design materials to create that animal.
- Give them a time limit and have them share their art.

SENSES

- Before you begin, discuss with your students that they will using their senses to perceive the environment and become aware that the way humans perceive the environment differs from the way other organisms perceive it.
- Review the five senses with your students. Ask students to give examples of how the information we perceive using our senses helps us survive in the world (smelling smoke warns us of fire, hearing thunder warns us of lightning, etc.)
- Select an area in the house, yard, or park and ask them to use their senses to make as many observations as they can about the site. Allow 2-3 minutes of silence to complete this observation activity. They should share their observations with others in the group.

REFLECTION

- Choose an animal that you have seen in the River Center to be your "organism."
- What would it be like to be your "organism"?
- How does it move, find food and water, avoids danger, etc.?
- Encourage students to get down in their roles...act out their role and view the environment from the perspective of their organism.
- Ask individual students to describe what the environment was like from their organism's perspective and have other students try to guess what their organism was.
- Conduct a group discussion comparing and contrasting the perspectives different organisms can have in the same environment. Be sure to stress the fact that different people (or organisms) might have different perceptions of an environment based on their own observations, but there is no right and wrong.

RIVER CENTER EXHIBITS

Connecting the tour and the activity



WILD AND SCENIC

The Loxahatchee River is a unique and important habitat to our area! It was the first, out of two, rivers in the state of Florida to be designated as Wild & Scenic because of its natural importance. That means no human can alter the natural area; it is designated for wildlife. The water in the river is freshwater, and it flows in one direction- down the river towards the coast! There are many creatures that call this river home including the American Alligator, various turtle species, fish, river otters, frogs, and birds to name a fewplus the saltwater pioneers that travel into freshwater such as manatees, crabs, some sharks, and certain fish! You will notice the turtles, and fish, are comfortable around people and that is because before they came to the River Center, they were pets! Pets are different from wildlife since they were born in captivity and raised around people, so they don't have a fear of humans, instead they associate humans with food! It is great when a pet is not afraid of people, but not so great when a wild animal has no fear of people. Always remember that pets do not belong in the wild since they don't completely know how to take care of themselves. They will hang around humans to get food. That can be a scary encounter if you are outside and approached by a big alligator! You would assume the alligator is approaching you to maybe harm you, but what if that was an alligator raised in captivity then released into the wild and he was just looking for a person to give him food? How would you be able to tell the difference? The sad truth is you can't tell, and many animals that are wrongfully released into the wild end up being killed by humans that think they are dangerous, and not realizing they were raised by people.



OYSTER AQUARIUM

What do you notice about the fish in this tank? Do they all have the same body shape? Are they all the same color? Are they all swimming at the same level in the water? Fish have different body shapes depending on their adaptations! Adaptations are features that help creatures survive. Our needlefish has adapted to have a slender and pointed body shape, allowing them to move quickly through the water to avoid predators and catch prey. However, our pufferfish is the opposite; they have a rounded bulky body and cannot swim very fast! Instead, pufferfish have spines all over their body to protect themselves from predators- when threatened they take in water through their mouth and make their body look as big and spiky as they can to intimidate predators.



CORAL REEF TANK

Coral reefs can be extremely abundant in all forms of life from fish, to corals, sponges, crustaceans, marine mammals, and marine reptiles just to name a few! Even though these habitats can be plentiful, they are still delicate ecosystems that can be taken out of balance very easily. We never want to take anything from the wild and bring it home because we can disrupt the health of the ecosystem. Not to mention it is not good for our environment to take a wild animal away from its home when you could go to a pet store and buy an animal that was born in captivity and needs a human home! Because certain habitats are so delicate, they have been deemed marine protected areas, which means no human can alter that habitat in any way! This act of protecting our valuable ecosystems has allowed venerable species to bounce back.

LOXAHATCHEE RIVER DISTRICT

FOCUS AREA CONNECTIONS



STORMWATER

As stormwater enters aquatic habitats, it brings other potentially harmful contaminates to the ecosystem. Stormwater can contain chemical pollutants, solid pollution, and bacteria which can disrupt water quality, contaminate the soil profile, and make plants and animals sick. Stormwater in the form of runoff will also erode beaches, shorelines and riverbanks further limiting chance for survival. By responsibly managing stormwater the LRD limits this risk to wildlife.



SOLID WASTE

Any solid waste in an ecosystem can be eaten by wildlife causing health issues and potential fatalities. Solid wastes can also block plants from growing, further limiting food sources and available shelter. The LRD limits the amount of solid waste entering ecosystems by removing solid pollutants through filtering and recycling wastewater and assisting in stormwater management before it re-enters a habitat through stormwater runoff.



WATER SUPPLY

The overall water conditions determine whether wildlife, and their food, can survive in a habitat. Salinity, temperature and water clarity effect what plants and animals can live in a habitat; if the habitat cannot support an animal's food, then they cannot live there either. The LRD helps to limit this issue by recycling wastewater and assisting in stormwater management, so it does not enter the river system, along with conducting water quality monitoring research to further assist the health of the Loxahatchee River and the surrounding watershed.



WASTEWATER

The LRD not only recycles and treats wastewater but conducts water research for the betterment of the local environment and community. By recycling wastewater, the surrounding ecosystems are cleaner and healthier. Recycling wasteater also works to prevent future water issues by limiting the amount of water being removed from our aquifers and educating the public about responsible water usage.

POST FIELD TRIP LESSON

Thank you for participating in a field trip at the River Center. We hope your campers enjoyed their experience learning about the Loxahatchee River ecosystems as well as the different hands-on activities and animal encounters.

We are always looking for feedback and ways to improve our programs at the River Center. Please take a couple of minutes to complete the River Center's field trip survey. We would really appreciate it!

https://www.surveymonkey.com/r/RCcamp

Attended a Virtual Field Trip? Use this survey: https://www.surveymonkey.com/r/rcvirtual

Please refer to the "Connect" section as a post-lesson activity. This is for you to utilize back at camp or to send home with campers as a continuation of your experience at the River Center. They are an educational, fun, and creative way to gain more knowledge.

We appreciate your support and interest in the River Center and our programs. Please contact us with any questions or concerns. We look forward to seeing you and your campers at the River Center in the future!

River Center - Loxahatchee River District 805 North U.S. Highway One Jupiter, FL 33477 (561) 743-7123 ext. 4200 (561) 743-6314 [Fax] education@LRECD.org www.LRDRiverCenter.org Explore | Experience | Connect