Jungle Trail - Wetland Wonders
Grade level: K – 2nd
30 – 50 min

Learning Objectives:

Identify the four parts of a habitat.
Discover what can be seen from the boardwalk and identify some plants and animals.

Materials:
Wildlife cards
Up to 4 plastic jars with lids
Jar with string attached

Introduction at the Jungle Trail sign, then stop periodically along the boardwalk to gather everyone's attention and introduce a topic.

This is not really a jungle, but a swamp. A swamp has muddy ground that is sometimes under water. That is why we also call this a wetland.

There are different kinds of wetland habitats. There are specific plants and animals that make the swamp their home.

What animals do you think we might see? (turtles, snakes, lizards, insects, spiders, birds)

Stop at tip-up trees. What you are looking at is the underside of the roots, much like the bottom of your shoe. Wetland trees have adapted to have shallow roots. Perhaps this is because most of the nutrients are near the surface, and in order for the roots to get air, they stay near the surface. Different plants develop different adaptations to cope with living in soil that is under water some of the time.
When a large tree falls down, it pulls up some of the soil with it and leaves a low spot that fills with water and becomes this great little habitat for lots of things like frogs, small fish, turtles and insects. They are safe here from the predators that are in deeper water. Predators, such as snakes and small alligators, may find them easy prey.

Habitats provide four basic needs for wildlife: food, water, shelter (cover), and space.

To help them remember, pantomime eating, drinking, hands in tent over head for shelter, and arms out wide for space.
Group the students into threes and fours. Hand out cards with an animal printed on the front. If needed, ask the adults to help read the back of the cards. Instruct the students to slowly follow you (about 50' or so) while looking closely to where their animal could live. **Stop and ask each group something about the habitat where their animal could live.** *Example: point to trees with woodpecker holes. Bird group; how could a bird use this tree? Snake group; Where might a snake take cover? Large groups will not allow all*

the children to answer questions, but include at least one question to each group before moving on. (When doing the 50 minute class, pass out the cards again on your return trip. This time give the students a different animal to find their habitat.)

Stop to observe flowers in bloom or fruits, butterflies and other insects and spiders, etc. Catch and show some insects or other creatures that you can safely put in the jars. Release them again stressing that we want to return them to their homes (habitats).

Introduce as many of the following topics as you have time or interest.

Some examples that can be pointed out: Poison ivy and how it climbs. Blackberries have prickers and edible fruit. Swamp Rose has thorns and rose hips are good animal food. Climbing Aster blooms in Fall. Sweet Gum trees have lines of holes in their bark made by a woodpecker called the Yellow Bellied Sapsucker. Dahoon Holly has red berries that are food for birds. Many tree trunks are buttressed at the base for stability in saturated soil. Water hemlock has big white flower clusters in the summer and sometimes you can see Black Swallowtail caterpillars feeding on them.

The water is brown in the Black Creek because of tannins that leach out of the dead leaves and seeds that fall into the water. We have so many swamps and marshes that the whole river is brown as tea. We call this a **black water system**. It is the natural condition of the Black Creek and St. John's River. Dip the jar with the string attached into the creek to show them the color of the water.

Manatees can be observed in this area when the water is warm (They usually return late April or early May). They are herbivores. They graze on the submerged grasses and other plants in the shallow water. What is the problem we have with manatees and boats? Propellers hit them because they are often just under the surface. They are hard to see because the water is so dark. An average fully grown manatee is about 1000lbs and ten feet long. They can eat about 150lbs of food a day. Newborn babies are 60-70lbs and 4ft in length.

Point out the **Bald Eagle's nest** just above the tree line. The eagles made a new nest in another nearby tree when this tree died. It is just outside the park boundary. Bald Eagles return with their same mate to the same nest each winter. Young eaglets fledge around the beginning of April.

There are many water snakes in our area. You are more likely to see one of the non-venomous species such as the **Brown Water Snake** from this boardwalk instead of a Cottonmouth Water Moccasin. Water Moccasins will inhabit areas far into the swamp and other areas of the park. Please be alert to all snakes and let them be.

Alligators and Turtles are also common in the Black Creek. They will climb up on logs or shallow shorelines to bask in the sun. Being reptiles, they need the sun to warm them so they can move and digest food properly.

Fiddler Crabs sometimes can be seen scurrying to hide in their holes in the mud. They are small brown crabs with one large, sometimes white claw and one small claw. When the water comes up, they plug the hole with mud to trap the air in their burrow until low tide comes again.