

SIX MILE CYPRESS SLOUGH PRESERVE



EXPLORER'S COMPANION



LEE COUNTY
Parks & Recreation

WWW.LEEPARKS.ORG

Tips and Tricks for Spotting Wildlife



- Be as quiet as possible.
- Walk slowly.
- Watch and listen for movement.
- Keep your eyes and head moving in all directions.
- Stand or sit still for a few minutes.
- Take time to look at ordinary things.



And don't forget your binoculars!

Welcome

This “Explorers Companion” will help guide your exploration and answer questions during your walk. Number markers along the trail located on the left-side hand rail correspond to this guide book. (A green painted board designates their location on the boardwalk itself.) The total length of the boardwalk is 1.2 miles. Enjoy your visit!



Pine Flatwoods

Page 4, Stations 5-9



Hardwood Transition

Page 7, Stations 10-14



Flag Pond

Page 11, Stations 15-21



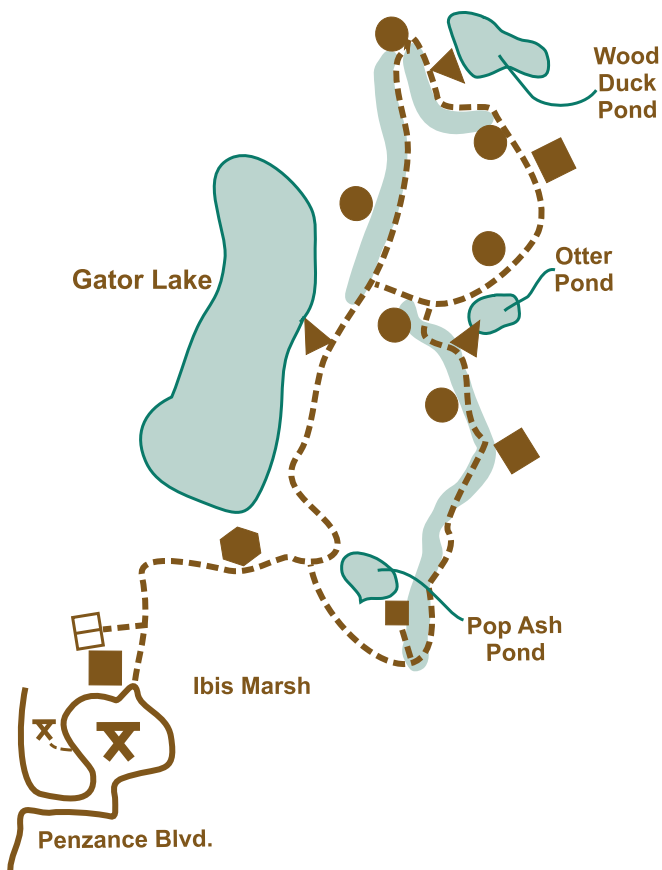
Hammock

Page 15, Stations 22-25



Cypress Slough

Page 17, Stations 26-31



Interpretive Facility Legend

Boardwalk Trail - - - - -

Shelter/Photo Blind ■

Seating Enclave ●

Observation Deck ▲

Amphitheater ⬡

Restrooms □

Picnic Areas ✕



Water levels fluctuate dramatically within the preserve depending on the season. All of our water is fresh water from rain, so our wettest months are during hurricane season (June through November).

Once the summer rains diminish, the water level starts to drop. This is important for the wildlife because as the water in the ponds recedes fish become concentrated in smaller and smaller areas. This concentration provides wading birds with an easily obtainable food/energy source needed in large amounts to help feed themselves and their new young in the spring.



About 3 miles north of our entrance, a road slices through the Preserve. Because of this impact, the area before you was rehabilitated. It is called a mitigation area. Alien invasive trees, the Melaleuca, were eradicated and native plants reintroduced.

In 1990, cypress trees that were about 8 years old were planted. These conifers shed their needle-like leaves in the winter. The trees put out new leaves in early spring and their canopy becomes dark green during the summer months. This is a great area to have a close up view of this beautiful tree.

Cypress produce cones that look like round balls. They are quite heavy and are dispersed by the water in which they fall. Water also helps to soften the hard, resinous seed coating aiding in germination.



The Slough is a crowded ecosystem where every available niche or job is filled by plants and animals adapted to life in a wetland. As you saunter the boardwalk trail, you will walk through about 80 acres of the preserve. Take time to discover the roles and interactions of the animals and plants in five natural communities here in the Slough.

Pine Flatwoods Community



The fringe area of the Slough is indicated by the pine trees. The land is at a higher elevation than the interior and is generally dry except during the wet summer season. The soil is basically sandy, with only small amounts of organic matter.

The fringe area is one of the major communities that make up the Slough ecosystem. This area is very important for wildlife that benefit from its dry land and cover while meeting their water needs in the adjacent wetland community.



5

The Six Mile Cypress Slough Preserve has a diverse array of plant and animal communities within the 2,500+ acres. These communities occur in distinct zones related to ground elevations, types of soil, and water depths found in the Slough at different times of the year.



6

The “lake” in front of you was formed when sandy soil was excavated to create the base for Six Mile Cypress Parkway. Since that time Gator Lake was formed from rain and ground waters. Plants and animals have moved in to create a fresh water lake community.

While three sides of Gator Lake have steep vertical drops, the fourth side (across the lake) was graded to a more natural slope and planted with native trees and aquatic species to provide a feeding area for wading birds. Some species found here include the Great Egret, Snowy Egret, Little Blue Heron, Tri-colored Heron, White Ibis and occasionally Wood Storks and Roseate Spoonbills.





7

The Slash Pine received its name from the cuts or “slash” marks people made into the bark to collect sap for the production of turpentine.

A native to flatwoods communities, the Slash Pine is fast growing with a straight, tall trunk measuring up to 100 feet. Millions of Slash Pines are planted each year throughout Florida to replace those cut for lumber, pulpwood, and turpentine production.



The Slash Pine is well adapted to this community because its deep taproot not only provides access to underground water during dry times but also acts as an anchor during high winds. Its thick bark and protected seeds are also resistant to the periodic natural fires that sweep through pine flatwoods following lightning strikes.



8

Wax Myrtle is an easily recognized resident of this fringe community because of its variable shaped leaves that are aromatic when crushed. A common shrub of the edge of the Slough, its dense foliage provides a good habitat for nesting songbirds. Many local and migratory birds also feed on its berries.





9



One of the most important functions of the Six Mile Cypress Slough is that it acts as a natural travel corridor for wildlife by connecting northern Lee County to the Estero Bay Preserve.

Many animals are permanent residents such as Raccoon, Grey Squirrel, Five-Lined Skink, Red-Shouldered Hawk, Wild Turkey and the Southern Black Racer.

Visitors that may pass through the Slough include Bobcat, River Otter, White-Tailed Deer and even Black Bear. A keen eye may note evidence left behind by a traveling visitor...like a feather, tracks in the mud or scat (droppings).



Hardwood Transition Community





10

By now you have noticed a change from the more open Pine Flatwoods fringe to the shaded interior of the cypress Slough. You can feel the difference entering the Slough since the air is cooler and more humid. Although the elevation is only inches lower, the soil here has changed from well-aerated sands to a sandy loam with greater moisture.

Plants that need both wet and dry periods during the year flourish in this transition area. It also provides secluded hideaways for frogs, snakes, and turtles near the deep water areas of the Slough.



11

Water levels fluctuate and the canopy above it creates shade, both of which present special challenges for plants.



A number of plants have adapted to an aerial way of life where these conditions vary. These epiphytes, or plants that grow upon another plant, are not parasitic, but rather draw their food/energy from other sources. Bromeliads have developed cup-like forms which allow the plant to collect rain water and decomposing vegetation. Additionally, many orchids have specialized stems which store water and food to support them through the dry season and periods of drought.

Found on the trunk and branches of larger trees, these plants simply use the tree as support, taking advantage of greater sunlight found in upper portions of the forest. Height also allows their seeds to be dispersed more easily by the wind.



12

A variety of ferns and other plants live within the Slough because constant moisture, shady conditions and rich soil are optimal for their growth.



The Swamp fern is the most abundant ground cover in this community. Several ferns grow here as epiphytes including the Resurrection Fern. Its name is derived from its response to rain. It appears to wither and die during dry weather, but revives or “resurrects” with each rain.

The Laurel Oak is a common oak with slender branches forming a broad, dense, rounded crown. Its shade is plentiful as are its acorns. Wood Duck, Blue Jays, Wild Turkey and Gray Squirrels rely on these acorns for food/energy in the fall and winter.



13

One of the residents that likes the cover of this transition zone is the Carolina Anole. You may see them darting along the boardwalk or climbing branches looking for insects and spiders, their main source of food/energy. This lizard has the ability to camouflage itself by changing colors from brilliant green to dark brown, or any intermediate shade in-between. The male has a large, bright

throat pouch called a “dewlap” that is displayed for courtship or territorial behavior.



Another resident that is frequently seen in this area is the Pileated Woodpecker. Watch nearby trees for this crow-sized woodpecker or listen for their loud drumming or far carrying call. This bird is well equipped with a strong bill for chipping into dead tree trunks as it searches for boring beetles and carpenter ants. The largest of Florida woodpeckers, it has a red crest and black and white pattern making it quite a sight to see among the dark shades of the cypress Slough.



14

The Cabbage Palm or Sabal palmetto is the state tree of Florida. It is extremely adaptable to many habitats from dry pine flatwoods to cypress swamps. The cabbage in the name stems from the "heart" or bud found at the center of the palm fronds. It resembles cabbage in flavor and appearance. Once an important food source for early Florida inhabitants, hearts of palm are still considered a delicacy. Unfortunately, removal of the bud causes the death of the palm.

The Cabbage Palm supports a variety of plant and animal life in its crown of leaves and leaf stems. Frogs, lizards, and insects take advantage of rain water that is collected by the leaves. Seeds

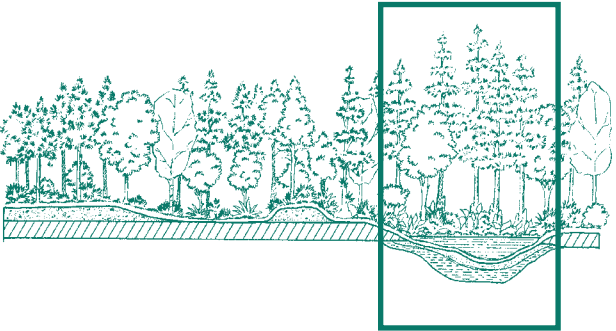


deposited along the trunk by visiting birds find damp, protected spots ideal for germination.

The black, ripe fruits of the Cabbage Palm are an important food/energy source for animals such as raccoons, squirrels, mockingbirds, woodpeckers and opossums. As you can see, this plant is of great value to the overall community.



Flag Pond Community



15

Welcome to the central wet area of the Slough. This interior portion is usually under water much of the year and has a number of depressions or flag ponds within it. Travel for aquatic animals is easier through this central Slough area since the flag ponds are connected by a series of flow-ways.



16

These ponds are named for the tall broad-leaved plants called Fireflag or Alligator Flag which dominate these open areas. During the summer wet season when water is plentiful in the Slough, the Fireflag's vigorous dense growth provides habitat for a variety of fresh-water fish such as Bass, Bluegill, Gar, Oscar and Catfish. Other animal life, including wading birds use the broad leaves as an area in which to feed.



17

One of the most visible and beautiful forms of wildlife found in the Slough are birds. The Slough is home to dozens of species of songbirds, wading birds and birds of prey, including many which are threatened or endangered. The Slough also plays an important role as a resting spot for migratory birds.

Hérons are interesting feeders. When fish are plentiful the birds wade through the water spearing their prey with their sharp bills. As fish become less plentiful during the dry season, the heron will often disturb the debris on the pond bottom. Fish are then forced into the open water where the heron can spear them.





18

Because the water level is higher in this area of the Slough, many of the old cypress stumps act



as dry, secure islands (not to be confused with the rounded cypress knees). If you are lucky, you may see an animal napping here like a raccoon, snake, armadillo, or even an otter.

Throughout the Slough you will find fallen logs carpeted with plants taking advantage of the above water location and the rich nutrients provided by decaying wood. This naturally occurring process of decay provides the building materials needed for new life to begin and the cycle to repeat itself.



19

The Pond Cypress before you is among the oldest of the living organisms in the Slough. Fortunately, it was left when most of the area was logged years ago.



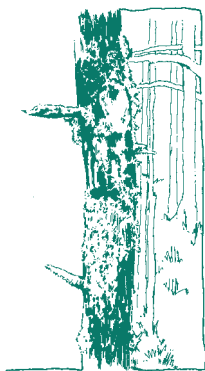
Cypress are characterized by an unusual trunk formation. The base of the trunk is much wider than the upper portions. This type of growth is known as a buttress. Cypress trees also produce "knees" from their roots which emerge through the ground. These knees provide the tree with additional support in the wet organic soil in which they grow, but they will never grow into another tree.

Cypress trees are once again falling victim to logging predominately for use as mulch. Thousands of cypress trees are felled each year to fill the demand for this product. Use of alternative sources such as pine needles, Melaleuca chips or oaks leaves can help to reduce the demand and prevent exploitation of these grand trees.



20

The colored “patches of paint” you see on the trunks of trees throughout this area are really unique plant forms. Lichens exist as a combined relationship between an alga which produces food and a fungus which provides physical support.



Lichens may be patches of white, green, gray or pink on the bark of the tree, or may appear in a more scaly or mossy form on twigs or trunks. They do not harm the tree on which they make their home.



21

These uncommon ferns, called Strap Ferns, are easy to identify due to their unusual strap or sword-like leaves. They are quite widespread throughout the Slough, usually growing on rotten logs, stumps and even on trees. They grow just above the water level and take advantage of their humid location. They cannot grow on the ground because they would drown during times of high water.





Hammock Community



22

Throughout the interior of the Slough, many hammocks can be found. A hammock is a small “island” of higher elevation than the surrounding wetlands. This allows plants which could not survive being submerged under water to grow in the interior of the Slough.

One of the hardwood trees able to grow in this hammock is the American elm. It is recognizable by its doubly toothed green leaves. Its seeds, surrounded entirely by a wing, are disseminated by spring winds and are a popular food/energy source for flocks of migrating Goldfinches.



23



This “island” hammock is a good habitat for the state’s most abundant palm, the Saw Palmetto. This sprawling, branching palm seldom reaches more than six feet in height and has smaller, more circular fronds than the Cabbage Palm. Besides providing good protective cover for animal life, the Saw Palmetto has white fragrant flowers that produce nectar harvested by bees. The flowers then become fruit that is a valuable food/energy source for a myriad of wildlife.



24

Hammocks also provide a rest area of dry land for many animals in the Slough. A keen ear or a watchful eye may spot the rustling of a snake through the hammock vegetation. Fifteen varieties of snakes make the Slough their home. While most are harmless like the Southern Black Racer and Banded-water snake, the Slough is home to the Florida Cottonmouth. It is best to respect all wildlife and watch from a distance as they go about their daily chores.



25

Yellow-bellied Sapsuckers drill neat holes in a row into the inner bark of trees. (It doesn't hurt the tree.) The bird uses its brush-like tongue to gather the sap and any insects that are attracted to the sweet, sticky ooze.

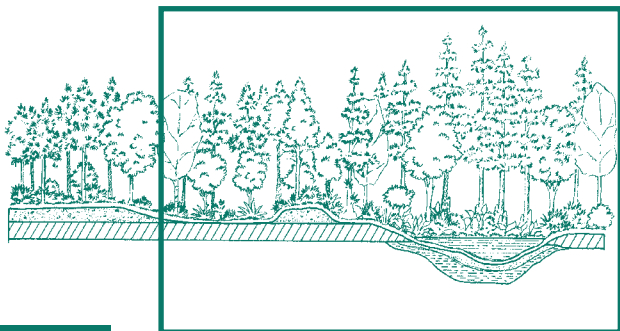
Several kinds of woodpeckers live in the Slough or migrate here for the winter. They use the trees as a food/energy source and nesting site.

Woodpeckers eat a variety of foods including fruit and the larvae of insect pests. Woodpeckers don't always peck holes into trees, but often feed on the insects which are on the outside bark of the tree. This "doctoring" helps keep the whole forest healthy.





Cypress Slough Community



26

The central Slough area has soil made up of sandy loam or silt material and is covered with water approximately four to six months out of the year.

The lush plant life absorbs pollutants from the water while slowing the flow, allowing sediments to settle out. This process cleans the water as it flows southwest through the Slough to deliver fresh water to the Estero Bay Aquatic Preserve.

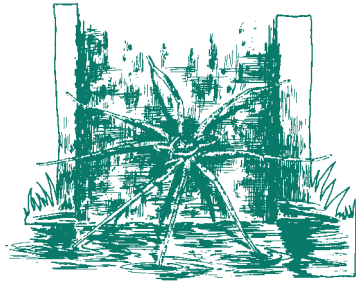
The water is clear despite the tea-stained color caused by decomposing organic material. You may also occasionally see oily spots on the water. This is from the resin contained in cypress cones.

The dense forest canopy provides shade which helps to modify temperature extremes and thus slow the evaporation of water, the life blood of the Slough.



27

The trees of the Slough provide shelter and food/energy for many residents. You may see a fishing spider hunting where the water meets a tree trunk. The water surface acts as a web. The spider captures prey that has fallen onto the water or it may even dive into the water after submerged prey.



28

The water in the Slough is not stagnant but flows slowly to the southwest, eventually emptying into Estero Bay. This flow can be seen by watching floating leaves or rippling currents around logs or branches in the water. The path you see here through the aquatic vegetation is one of the many flow-ways between ponds. River otters, turtles and alligators use these natural pathways for travel within the Slough.





29

The small, twisted trees that you can see growing throughout this area of the Slough are called Pond Apples. The Pond Apple loses its oval shaped leaves during the dry winter months. During the summer months, large green fruits that resemble apples are produced which are eaten by squirrels, raccoons and turtles.



30

You may have noticed the tiny fish in the water called Gambusia or mosquito fish. They feed primarily upon mosquito larvae greatly limiting the number of mosquitoes that actually reach maturity. These Gambusia not only keep the mosquito population in check but also play an important part in the food chain themselves as they are eaten by others. Other common fish in the Slough include Sailfin Mollies (notice the male's bright orange and blue dorsal fin), the colorful flagfish and several species of killifish.



31

Conclusion or just the beginning

Through experiencing and understanding this complex wetland community, we hope that human visitors will take action at home to help preserve these important ecosystems. Decisions we make in our daily lives have direct effects on fragile wetlands.

We hope that you enjoyed your visit today and look forward to your return another time, another season to continue your relationship with the natural world.

Remember...

This brochure was made from trees. Please return this brochure to the box provided at the end of your walk. It will be waiting for your return.

Thank you!

The Six Mile Cypress Slough, A Lee County Regional Park / Preserve and Florida Greenway, was purchased by the residents of Lee County and the South Florida Water Management District through the Save Our Rivers Program.

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To learn more about Lee County Regional Parks, preserves, beaches and programs visit us on the world wide web at: www.leeparks.org





Program at Amphitheater

To learn more specifics about programs, volunteering and wildlife at the Six Mile Cypress Slough Preserve call: (239) 533-7550 or visit us online at: www.leeparks.org/sixmile/



History of the Six Mile Cypress Slough Preserve



In 1976 a group of Lee County students studying the role of forested wetland in Florida's ecology became alarmed at how fast these environmental treasures were disappearing to private interests.

The students, known simply as “the Monday Group”, envisioned a place where visitors could stroll amongst majestic cypress trees and catch the whisper of Florida's primordial past.

They sought an oasis where guests could observe the vast array of plants and animals that can live in a place which is sometimes land, sometimes water, sometimes both.

In such pristine surroundings they hoped that people could begin to learn how wetlands provide priceless, but often hidden benefits such as water purification and storage, natural flood control and wildlife habitat.

Knowing that Six-Mile Cypress Slough was under imminent threat from logging in the channeling away of its water, the Monday Group launched a daring campaign to save it for future generations. Lee County voters responded overwhelmingly by increasing their own taxes to purchase and convert the Slough into a preserve.

But worthy causes are not always easily won. Much effort was needed throughout the 1980s to protect the Six-Mile Cypress watershed from the results of outside development (pollutants, draining off of vital water sources).

The Lee County Board of Commissioners and South Florida Water Management District found themselves more than once battling to maintain the integrity of the Preserve's water source.

These efforts culminated in 1991 with Lee County Parks and Recreation opening the Preserve's boardwalk and facilities to visitors.

Today, Parks and Recreation remain challenged with balancing the needs of water conservation and wildlife management with the recreational needs of the public.

As part of that, a growing cadre of volunteer naturalists educate the Preserve's many visitors as to the interrelationships of water, wildlife, plants, and man- fanning the flames of that torch lit by Lee County students some two decades earlier.

We invite you to come and experience the uniqueness that is Six Mile Cypress Slough Preserve. Take a step back into the Florida that used to be and glimpse a future replete with possibilities.

Written by Volunteer Naturalist, Gayle Schmidt





Bring A Friend





For further exploration, join an experienced volunteer for a Guided Nature Walk.



Please return this brochure.