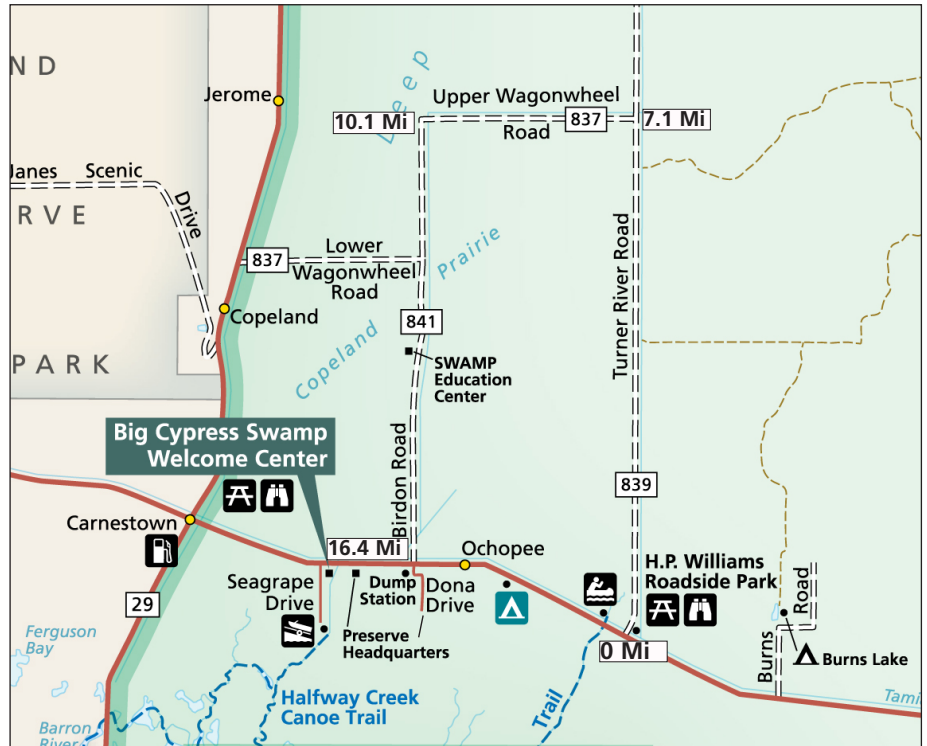




Big Cypress: A Look Inside

Turner River, Upper Wagonwheel and Birdon Road Loop Drive

Shining waters, flurries of wings, and sunning alligators are all things you may experience along the Turner River Road in Big Cypress National Preserve. The 1950s brought the addition of this road to the Big Cypress Swamp. Building in South Florida presents a challenge for you must rise above the water by borrowing land. This creates a system of canals mirroring the road ways. During the wet season, May to October, water is plentiful throughout the Preserve, and wildlife disperses. During the remainder of the year when water may be scarce, canals provide habitat for a myriad of wildlife. As you travel, this guide will introduce you to some of the residents you may meet along the road.



Map of the Turner River Road Loop Drive starting from the intersection of US 41 and Turner River Road. Mileages are indicated in a counter clockwise pattern at all major intersections.

Mile 0

H.P. Williams Roadside Park marks the entrance to the Turner River Road. Homer P. Williams was an engineer for the Collier Company during the construction of the Tamiami Trail, a feat completed in 1928, that now offers access to the area for many. The roadside park offers restrooms, picnic tables and a safe platform for viewing wildlife. Alligators, fish, turtles, and birds abound along this boardwalk during the dry season, which hints at the experiences to come.

Mile 0.8

The Turner River Road acts as a dam through the swamp, cutting off the Turner River, located to the west, from its water source. Culverts, like the ones you are driving over, and earthen plugs in the canal, installed in 1988, force some water flow into the river.

Open water on your rear left plays host to a variety of trees but one in particular stands out — the cypress tree (*Taxodium distichum*.)

Big Cypress National Preserve, established in 1974, hosts an abundance of cypress trees. These water-loving trees live hundreds of years and lose their leaves during the dry season. The buttressed bases provide, like storm proofing your home, protection from strong winds. The cypress trees were harvested while Turner River Road was being built. Today, many cypress trees are survivors or the descendants of those harvested. At the height of logging in the late 1950s, one million board feet per week was removed from the swamp and used for docks, boats

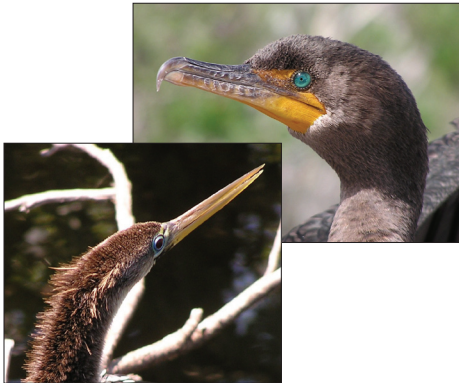
and other purposes. The rot-resistant nature of cypress made it a prime commodity.

Mile 0.8-2.4 Turner River Road

Amidst the cypress trees you might notice coastal plain willows (*Salix caroliniana*) framing windows into the canal. These willows prefer the moist soils along the canal and provide homes and protection for bird life. Peer in through a window and look into the canal. Fish abound as they follow the draw-down of water during the dry season. Many varieties of fish call the canal home. Have you seen a fish with a long body and pointed snout?

(Continued on page 2)

This pointed fish is a Florida gar (*Lepisosteus platyrhincus*). When oxygen levels are low in the water, gar surface to fill an air bladder. They also prey on fish with the same behavior. Another canal fish, with an almost “bug-eyed” appearance, a red-ringed eye on the tail and black stripes is known as the oscar (*Astronotus ocellatus*). The oscar, one of the first exotic fishes reported in the 1950s, is a popular sport fish today.



The sharp beak of the aninga, lower left, contrasts with the hooked beak of the double-crested cormorant.

Fish are common prey in the canal. Notice the water surface is often punctuated with fish predators like the aninga (*Anhinga anhinga*) and the double-crested cormorant (*Phalacrocorax auritus*). Both species fish by swimming, but catch prey using different adaptations. The aninga uses its sharp pointed beak to spear fish, and may use tree limbs or rocks to free a fish reluctant to fall from the beak. With a toss into the air, the entire fish is swallowed head first. The aninga regularly swims with only the head and neck visible, like a water snake, earning itself the nickname of “snakebird.” Both species take on water as they swim, allowing them to dive deeper. Cormorants catch fish in their beaks as they swim. When they take flight from the water, their appearance is that of a laden bomber struggling to gain altitude. Both aningas and double-crested cormorants often perch in the trees or along telephone lines with wings spread. This posture allows a combination of sun and wind to dry their wings and assists in removing water parasites.

Mile 2.4 - 7.1 Turner River Road They aren’t just wading around.

Cormorants and aningas are not alone in their search for prey. Wading birds also use the canals to hunt. As the name implies these birds are often found walking in water looking for food. One family, herons and egrets (pictured below), dominate the species seen along the canal.

The largest of these waders, the great blue heron (*Ardea herodias*), has a grayish-blue body with a distinctive black stripe over its eye. It stands at 52” tall and uses this height to peer into the water to find fish, reptiles and amphibians. The great egret (*Ardea alba*) stands at 40” and has a white body, yellow beak, and dark legs. Like many in this family, they both rely on keen vision to spot prey. These two use their ability to stand immobile coupled with lightning fast reflexes to first spot, then catch prey.

Cattle egrets (*Bubulcus ibis*) and snowy egrets (*Egretta thula*) are nearly half the height of the great egret, but share the same white plumage. The white may appear as lack of camouflage, but

to prey they resemble a cloud in the sky. Cattle egrets have a yellow-orange bill and, unlike the larger members of the family they glean insects from the ground in open drier environments. The snowy egret seeks prey close to water and uses markedly yellow feet as “lures” to attract fish.

Little blue herons (*Egretta caerulea*) exhibit the stand-and-wait foraging technique that the “greats” use. The image below displays the indicative blue legs, body, neck, head, and beak of this small heron. The tricolored heron (*Egretta tricolor*) is similar in size, but the contrasting plumage of a dark breast with a light belly and reddish neck divulges this heron’s identity. The tricolored heron is one of the most active foragers in this family. They prance and pirouette with one wing extended as they forage, performing a beautiful yet purposeful dance. Prey flushed from hiding are easy to catch.

(Continued on page 3)



Wading birds of Big Cypress National Preserve. Top (left to right) great blue heron, great egret and cattle egret. Bottom (left to right) snowy egret, little blue heron and tricolored heron.

Warming Up to Activity.

Getting the most from your bill doesn't just apply to the dollar. As adults, the white ibis (*Eudocimus albus*) display a white body and brilliantly orange beak with a noticeable downward curve. The immatures have brown wings. These birds forage in the ground and water, using their beak like a needle of a sewing machine. Each stitch probes the ground, providing an opportunity to capture aquatic insects, crustaceans, small fish or amphibians.



Wood stork (foreground) and immature white ibis resting in a slash pine tree.

The ibis need to touch their food before they eat it. This strategy also applies to the wood stork (*Mycteria americana*), a long-legged wading bird with a heavier body than most waders and a featherless head. It takes a wood stork 0.025 seconds to snap their bill shut once they have touched prey. Their active foraging creates a need to rest as the day wanes.

Sun drenched days provide alligators, snakes, and turtles a time to rest and to warm after an active night. We fuel our internal furnace with food, but reptiles need to bask, using the sun for warmth.

The American alligator (*Alligator mississippiensis*) is the most famous resident and adept predator along Turner River Road. They bask on the canal rims using a combination of sun and water to control their body temperature. As they warm,



American alligator having a snack (double-crested cormorant) along the canal.

their activity may increase. Fish, small mammals, birds, reptiles, and even other alligators are food for this remarkable predator. During the dry season, eating occurs on average, once a week. As water and air temperatures shift, so may their eating habits. *Allow alligators plenty of space. Please help keep wildlife wild by not feeding or harassing them.*

Another reptile, which often maintains its own safe distance, is the red-bellied turtle (*Chrysemys nelsoni*). Contrary to what the name implies, the bellies are not always red; the back of the shell has red blotches. These turtles may be seen basking on rocks or resting at the surface of the water and will frequently jump into the water or dive if you approach. Red-bellied turtles eat some insects, but are largely herbivorous, feeding on aquatic plants.



Red-bellied turtle basking in the sun's rays.

Aquatic plant populations vary along the canal. As you approach the Upper Wagonwheel Road junction, you will discover these plants fill the canal. They concentrate along access roads into the Preserve.

Windmill Tram Trail and Concho Billie are two of 15 locations where off-road vehicles may access the backcountry. Each access point is gated and a permit is required for travel. These restrictions help to ensure protection of the national preserve.

Mile 7.1-10.1

Upper Wagonwheel Road, north of Concho Billie, marks the north side of the loop. As you turn west you follow a different canal with an abundance of aquatic plants as well as the presence of tall grasses like the common reed (*Phragmites australis*). This grass is native to Florida and provides cover to wildlife. Stop a moment and listen. What do you hear? Bird calls are often heard before the birds are seen. Common moorhens



Yellow tickseed (*Coreopsis leavenworthii*) highlights several prairies along the route.

(*Gallinula chloropus*) forage in the grasses and at the surface of the water, feeding mostly on plants and some invertebrates. Look for a black body with a distinctive white stripe on the flank and red coloring above and circling the beak. The red is not indicative, for it may be found on another member of this family—the purple gallinule (*Porphyryla martinica*). A light blue spot above the red beak coupled with a purple-blue head, neck, breast, and belly identifies this bird. The gallinule eats seeds and plants, showing its bright yellow legs as it walks on top of aquatic vegetation.

Beyond the Water

(Continued from page 3)

The canal is only part of the beauty of this area. The sawgrass prairie borders the north side of the canal and the south side of the road. The prairie stretches for miles and offers habitat for a diversity of wildlife. Sawgrass (*Cladium jamaicense*), the dominate vegetation, has a spiny toothed leaf with edges like a saw blade.



Cabbage palms rising out of the sawgrass.

The sea of sawgrass gives rise to islands of palm trees. The cabbage palm (*Sabal palmetto*) towers over the grass reaching heights of 80 feet. This palm is the Florida state tree, an award well deserved. There are a number of uses for this tree. Humans eat hearts of palm, and American Indians harvest fronds for roof construction. The palm is not valued solely for its uses, as its beauty is appreciated by many.



Slash pines tower over a cabbage palm.

The beauty of the palms to the north is equaled by the splendor of the pinelands to the south. Slash pines (*Pinus elliottii* var. *densa*) reign as the native pine in Big Cypress National Preserve. The name slash is derived from the method of extracting resin from the trees by scoring or slashing to start the flow. This historic process was employed to extract resin for use in the production of turpentine. The resin continues to be extracted today but not by human hands. The beak of the red-cockaded woodpecker (*picoides borealis*), an endangered species, penetrates the bark to start resin flow. To protect young, they nest in live pine trees where resin flow creates a sticky situation for would-be predators of chicks. Pines provide homes for some and resting places for others.

Watch the skies for red-shouldered hawks (*Buteo lineatus*) soaring overhead. They use keen vision to locate small mammals, reptiles, and amphibians to eat. They perch in pines to feed and to rest.

Mile 10.1-16.4 Birdon Road

Upper Wagonwheel gives way to Birdon Road as you turn left and head south.

Mile 11

Take a moment and look to the west, and you may notice a small group of dense trees near the road. The Australian pine (*Casuarina equisetifolia*) is not a true pine nor a native to Florida. Historically planted as a windbreak, this non-native (exotic) is currently under control in the Preserve, but other species thrive in this sub-tropical environment, though they do not have a natural place. Some are invasive, competing aggressively with native species. These introductions, whether accidental or intentional, may damage the natural habitat of natives. By learning more about exotics you can help Preserve managers protect and promote a natural ecosystem.



Australian pines are so dense they shade out any plants beneath them.

Mile 14.3 SWAMP Class Room

Big Cypress offers a variety of educational experiences including the Swamp Water and Me Program (SWAMP). This program provides an opportunity for sixth grade students to discover and explore Big Cypress. The program uses a combination of classroom and outdoor activities to provide an understanding of the diversity of the swamp.

Mile 16.4 Finish to Route 41

The end of Birdon Road brings you back to the Tamiami Trail (US 41) completing the scenic drive loop. If inspired to learn more or embark on another adventure, inquire at the Big Cypress Swamp Welcome Center located west of the Birdon Road/Tamiami Trail Junction about opportunities to see more.

From December through April a series of programs are available to the public. Programs include swamp walks, canoe trips, hikes and talks. Please contact the welcome center at (239) 695-4758 for more information.

Big Cypress is home to a diversity of residents. Today, as you traveled you looked through windows of willows and grasses into that home. Your experience is a special gift, for this place is unique. Respecting this home and its residents will provide Big Cypress and all who call it home the greatest gift of all — survival.

