



Corkscrew  
Swamp Sanctuary

## Along the Boardwalk

December, 2006

www.corkscrew.audubon.org

### Volunteer Field Trips

Jan. 12 .. Little Corkscrew Island  
Jan. 16 .. North end sunset truck trip  
Jan. 22 .. Fisheating Creek canoe trip

*Details & sign up in the Bunting House*

### Wish List updated

Many thanks to those who have responded to the Wish List. In addition to donations mentioned in previous newsletters, a major gift funded a raised deck on the observation platform.

We all benefit from the generosity of donors, and contributions designated to Corkscrew stay here. With a check, you may donate an item or make a contribution towards an item. Please be sure to indicate the item on your check or with an accompanying letter.

#### *The Wish List, under \$100*

- \*compasses (\$15 ea.)
- \*field equipment packs (\$50 ea.)
- new American flag & pole for front of visitor center (~\$50)
- laminating for sets of species prints for Youth Education (\$70 ea.)

#### *The Wish List, \$100-\$200*

- \*Nomex fire pants (\$100 ea.)
- wheelchairs (\$175 ea.)
- \*radios for burn crews (\$200 ea.)

#### *The Wish List, over \$200*

- \*GPS device (\$300)
- spotting scopes (\$1,000)

#### *School Sponsorships*

The curriculum programs for 1,250 students in 2nd and 5th grades are underwritten by Friends of Corkscrew, Science Department of the Collier County School District, and South Florida Water Management District. Sponsors are still needed for individual classes and/or schools for the 2006-2007 school year. Field trip reports and photos are on the Corkscrew web site.

For sponsorship levels and gift questions, contact Candace Forsyth, at cforsyth@audubon.org or 348-9151x111. Make all checks payable to National Audubon Society.

*\* fire equipment for resource team*

### Boardwalk improvements to aid walks

Two projects funded by volunteer donations will improve the boardwalk experience for visitors.

All of the small educational signs along the boardwalk have been replaced, many with new photographs, and all with a Distance Walked bar at the bottom to let visitors know how far they've come. One new sign (Dahoon Holly) was added and several were moved to better locations.

Then, a 6x12 foot platform was added to the existing observation platform to raise visitors above the tops of the willows for better viewing of stork nesting colonies in cypress trees on the far sides of the marsh. The viewing platform is accessible from steps.

The signs were completed and installed in mid November and the raised viewing platform was finished during the first week in December.

### What do you say if...

...a visitor is walking on the boardwalk and eating food?

Politely tell the visitor, "Please refrain from eating food on the boardwalk. It is not healthy for the animals should anything drop, and it may create a safety concern for other visitors.

"In addition to being unhealthy for animals, if they learn to associate food with people and lose their normal fear

of humans, they can become much more aggressive and dangerous. Sometimes they even have to be killed to eliminate that threat. We don't ever want that possibility to happen."

Then, tell the person that both we and the wildlife really appreciate his or her cooperation.

### Quick ID Guide

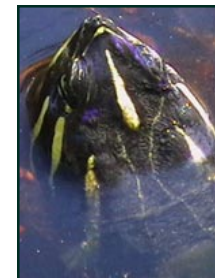
#### How do you tell a Red-bellied Turtle from a Peninsula Cooter?

The sure way is to look at the tops of the heads. A Cooter has a wide stripe in the center of the head and has thinner stripes that go over the eyes. A Red-bellied only has the wide center stripe but there are no other stripes on the top of the head.



Cooter

A less reliable way is the shape of the shell. The Red-bellied shell is evenly domed with the high point half way back. The high point of the Cooter shell is usually toward the front, about 1/3 back, and then the shell slopes gradually to the rear.



Red-bellied



## In Case a Visitor Asks

### Why does the water look dirty, sometimes oily, and what causes the bubbles?

Swamp water gets its brownish color from tannins contained in needles and other leaves which drop into the water. These tannins, which are organic molecules, give it the brown or polluted look. In actuality, swamp water isn't dirty at all, but is rather quite clean.

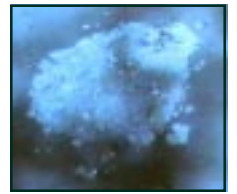
**Tip:** To explain the concept to a visitor, mention the process to brew tea. When a tea bag is placed in water, it turns the water brown because the tannins are released from the tea leaves.

Sometimes there appear to be "oil slicks" on the surface of the water. Those aren't pollution either, but are from the oily resins leached from the

cypress needles, twigs, and branches that have fallen into the water.

At other times, pollen from trees and bushes may fall to the surface and appear to be a floating, dull brown or green film.

A related phenomenon is bubbles that make their way to the surface of the water, principally in summer months. These bubbles are typically caused by gases released from decomposing plant material in the water and are not necessarily caused by fish or alligators.



## November Sightings



A Pied-billed Grebe has been a south lake resident for most of the month (November 21).



Jingle Bell Orchids - *Harisella porecta* - bloom in a cypress by the wet prairie (November 10).



An American Bittern hunts in Alligator Flag just past the first water gauge (November 14).



A female Anhinga gets some early morning sun by the north lake (November 3).

### Snail Kites are nearby

Ed observed a male Snail Kite on November 24 and again on the 25th near the observation platform on wash-out road. On one occasion, it flew up with an Apple Snail in its talons.

### Unusual Green Treefrog appears

from Mike Knight

Thank our Sunday boardwalk volunteers for spotting this very rare gem on November 19! She's a Green Treefrog (*Hyla cinerea*) in an extraordinary BLUE phase. You are more likely to win the lottery than to find something like this, especially living in the wild!

Why blue? Normal Green Treefrogs (and Green Anoles) have yellow and blue pigments that overlap to get green. Very rarely a genetic anomaly produces an animal that lacks



the yellow pigment; the result is a beautiful blue.

Physiological changes from temperature, stress, etc. cause the blue to vary from sky blue to a deep sapphire.

Plans are to put her on display in the visitor center after the holidays.

## Wood Stork

### *Mycteria americana*

In spite of a 40-inch length and a 61-inch wingspan, about twice the width of a normal washing machine, the Wood Stork is relatively light, weighing an average of only 5.3 pounds.

Visitors typically notice the bare dark gray head, the long, gray, heavy and slightly curved bill (juveniles have a cream-colored bill and their heads are more dusky), and the starkly contrasting white body and black flight feathers. Most visitors don't see the pink feet which are brighter when the stork is ready for breeding. Point them out! In flight, storks often soar high in flocks, thousands of feet in the air using thermals, and they can glide for miles.

The Wood Stork's principal diet is fish, crayfish, mollusks, reptiles and amphibians. It feeds entirely by touch (grope-feeding) by walking slowly through the water with its bill partially open. Often one wing may be extended to create a shaded area, an artificial hiding spot for unsuspecting prey, and it often pumps a foot to startle prey into moving.

The stork's bill snaps shut whenever food touches it. The bill snap takes only 0.025 seconds, one of the fastest reaction times known among all vertebrates. Some think this motion is entirely reflexive; however, when storks feed in very tangled vegetation, they do not "snap" at the weeds, which suggests a more calculated feeding technique.

Hunting by touch is not unique, but most other touch hunters like spoonbills, ibises and shorebirds tend to prey on slow movers like worms, crabs and snails. The Wood Stork snapping technique, used to capture fast moving prey, is unique and it is a significant advantage to finding food in very shallow, muddy waters where other birds cannot feed due to sight restrictions.

Wood Storks time their breeding cycle to coincide with the amount of food available, which depends on the

water level. Ideally, the water should be 15-18" deep with prey concentrated in isolated pools. They require the high density of prey to support their typical 440 lbs. of fish/per typical nest (2 adults and 2 fledged chicks) consumed during a breeding season. Nesting may begin as early as November or as late as March, but the earlier the storks nest, the more likely they will be success-



ful; if the young are not fledged by the time summer rains begin, adults abandon the nests because they will be unable to find enough food for the chicks.

The entire breeding cycle takes approximately 130 to 150 days to complete, which means over one third of the year is spent in breeding activities.

Wood Storks nest in colonies at the very tops of the cypress trees. The colonies are found from the Everglades north throughout Florida and along coastal Georgia and South Carolina.

Nests are made of sticks, vines, leaves and Spanish moss in which the female lays two to five eggs, each one or two days apart. Eggs hatch in the order they were laid, in 28 to 32 days.

Chicks are born helpless and unable to fly, weighing about 2 ounces. Competition for food is fierce, so in times of shortage, only the oldest and biggest survive. Week old chicks are fed 15 times a day and grow very rapidly.

Both parents guard the nest and feed the young. Since stork nests are high in the trees and are exposed to the warm sunlight, the parents keep chicks cool by shading them with their wings and by dribbling water over them, which the parents carry in their throats.

By week eight, the young chicks are exercising their wings, and at week nine they typically fledge.

Wood Storks can live for at least 10 years, but mortality rates are high in the first year. Juvenile storks reach sexual maturity in their fourth year.

Storks are generally silent except around the nest. They don't sing, but chicks may hum, hiss and illicit an occasional "bullfrog croak." Adults "cackle" when roosting by making clattering noises with their bills.

The Wood Stork is the only native stork in North America and its numbers have consistently declined since the early 1900's, most likely due to wetland destruction and drainage, flood control and questionable water management policies. It was added to the endangered species list in February, 1984.