



Corkscrew
Swamp Sanctuary

Along the Boardwalk

May, 2009

www.corkscrew.audubon.org

Stork researchers assist CSS staff

Two new staff members are on board for the 2009 Wood Stork nesting season to assist with research into stork nesting and feeding habits.

Jim Easton is from Melbourne Beach, Florida. He is the process of finishing his B.A. in Environmental Studies from Florida Gulf Coast University in Fort Myers.



He has previously worked for the Inland Ecology Research Group out of Florida Gulf Coast University as a research assistant. This work included bird, fish, mammal, aquatic invertebrate, and herpetofaunal surveys throughout the soon-to-be developed Babcock Ranch property.

Jim also works for the Community Environmental Service out of Fort

Myers where he is involved with exotic removal, lake management, and native plantings for local communities. Jim looks forward to working at Cork-



screw on the Wood Stork foraging project.

Eric Fortman recently received his B.A. in Biology from Eckerd College in St. Petersburg.

Eric spent last summer as an intern studying fish physiology at Hong Kong Baptist University and spent the fall as a teaching intern at Seacamp (Big Pine Key, FL).

As an undergrad, he was part of a maritime search and rescue team (EC-SAR) and was photo editor of the college newspaper, *The Triton*.

In the future, Eric hopes to incorporate his love of photography into his science career.

Wood Stork update...

Fledging is over half done, around 1,500 chicks so far.

Natural wetlands are not much more than gator holes now, so the foraging landscape is changing. Already birds must fly to the outer portions of the core foraging area and beyond to feed, using drying agriculture ditches and many sections of canals.

Most chicks in nests now will fledge around mid-May but they will have the added stress of longer flights to food, and the adults are not as likely to stay around to supplement them.

That translates to around 1,000 remaining nestlings facing harsher foraging conditions and therefore much lower post-fledging survival rates.

TogetherGreen...

The next TogetherGreen Volunteer Day is Saturday, May 9. The project is landscaping for wildlife around the visitor center and parking lot garden areas. Contact Sally to sign up.

Ed's anniversary...

May 1, 2009, is the 35th anniversary of Sanctuary Director Ed Carlson's full time employment with Audubon, which began May 1, 1974.

Formal and informal celebrations will occur throughout the coming year.

Quick ID Guide: Giant, Palamedes, Black and Spicebush Swallowtails



Giant Swallowtail

Wings open: second yellow stripe, across upper wings
Wings closed: wings, body yellow



Palamedes Swallowtail

Wings open: solid yellow band across lower wings
Wings closed: wide horizontal stripe on body



Black Swallowtail

Wings open: royal blue on bottoms of hind wings; yellow spots across lower wings
Wings closed: body spotted



Spicebush Swallowtail

Wings open: large azure patches on hind wings; white spots along borders
Wings closed: body spotted

Bird Trivia

Which North American heron is most inclined to forage using foot-raking or foot-stirring?

Discover the answer at www.collieraudubon.org/birding.html

What are the red flowers that are growing out from the sides of trees?



First, the plants are in the Tillandsia family and are not part of the tree.



Second, the red is not the flower. Ten different species of Tillandsia may be observed from the boardwalk, and most have a common form: stiff leaves grow upward from a compact rosette at the base, and a flower stalk, or florescence, emerges from the center. Spanish Moss and Ball Moss are the exceptions.

The flower spikes are distinctive features. They can project from a few inches to six or seven feet from the base rosette. During flowering, they have colorful bracts varying from pastel greens and yellow to bright red. These

are often mistaken for the flowers, but they are not.

The actual flowers have small purple petals that protrude from the bracts, but they only last a day or two. The intensity of the color, the size, and the shape vary depending on the species of Tillandsia. The yellow at the tip of the flowers is the pollen.

Hummingbirds are primary pollinators of the Tillandsia, transferring the pollen from one plant to another as they probe deep into the purple flowers to get nectar. Insects are secondary pollinators.

April Sightings



Fledged Roseate Spoonbills from Corkscrew nests forage at the north lake (April 10).



Indigo Buntings foraged in the central marsh, at the feeders, and at the lakes (April 21).



Wood Stork fledglings appeared in numbers at the north lake toward the month's end (April 21).

Odds & Ends

Basking lizards need sun for health as well as warmth

Lizards and other cold-blooded critters bask in the sun to keep warm. But they also do it for the vitamin D, a new study finds.

“It’s a long-standing assumption that thermoregulation is the only reason that lizards bask,” said study leader Kristopher Karsten, a biologist at Texas Christian University. “Our results suggest that in addition to thermoregulation, vitamin D regulation appears to have a significant impact on basking behavior as well.”

Lizards, like humans and most other vertebrates, get vitamin D in two ways: they can absorb it from food, and they can produce it in their skin with an assist from UV radiation.

To test whether chameleons alter their sunning behavior based on dietary vitamin D intake, Karsten observed the behavior of two different groups.

One group had high internal vitamin D levels, thanks to a diet of crickets dusted with a vitamin D powder. The other group ate regular crickets and had low vitamin D.

The chameleons were then placed in individual outdoor enclosures that offered open areas for direct sun and a tree to offer filtered sun and shade.

The chameleons fed the low vitamin D diet compensated by increasing their exposure to the sun’s UV rays.

Chameleons with high vitamin D diets, on the other hand, limited their

UV exposure by staying in the shade much more often.

“It appears that Panther Chameleons have the ability to gauge their internal vitamin D levels and alter their basking behavior accordingly,” Karsten said.

“The chameleons were as effective as mathematically possible by our methods at regulating toward optimal UV exposure for their vitamin D profile,” he said. “We thought they were probably pretty good at regulating their UV exposure; we just didn’t think they’d be this good.”

The study results are published in the May/June issue of the journal *Physiological and Biochemical Zoology*.



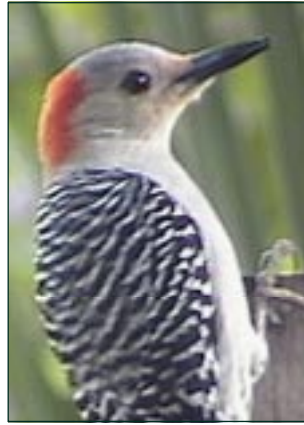
Red-bellied Woodpecker *Melanerpes carolinus*



The red belly



Juvenile



Female



Male

The Red-bellied Woodpecker is the most common woodpecker in the Southeast and is found in most of the eastern United States except for northern New England. A medium to large-sized woodpecker, it lives in a variety of dry or damp forests as well as in suburban areas where it is a familiar sight at bird feeders and in backyards.

The *red-bellied* comes from a light red wash on the belly, *above far left*, although it is usually hard to see. The name *red-headed* was already taken.

Adult males and females are easy to distinguish. The male's crown and nape of the neck are red while the breast and face are a dull gray, *above far right*. The female is similar but has red only on the nape and above the bill; her crown is gray, *above second from right*. Both are about nine inches in length, have a wingspread around 17 inches, and have bands of black and white on their backs, which are referred to as a "ladder back." Immature birds have little or no red on their heads and their crown has a brownish tint, *above second from left*.

Their calls are distinctive. There is a loud, often repeated *churrrrr* and a loud *chuck-chuck-chuck*, descending in pitch. The calls are usually short in duration as opposed to the long continuous calls of Pileated Woodpeckers.

Red-bellied Woodpeckers glean insects from bark, probe and excavate into dead wood, scale bark, hawk for flying insects, and hang upside down for berries,

which at Corkscrew includes figs, elderberries, and even Wax Myrtle. Favorite natural foods are insects, especially beetles, grasshoppers, and ants; seeds; fruit; and sap; and they will occasionally eat lizards, treefrogs, small fish, nestlings, birds, and eggs. In the winter when insects are harder to find, the Red-bellied Woodpecker's diet is mostly seeds, and it can often be found at bird feeders where it is fond of sunflower seed and of peanuts.

Drumming in early spring signals that the male Red-bellied Woodpecker is claiming territory and hopes to court a mate for a season of nesting and raising young. Similar to other woodpeckers, drumming is the primary source for attracting and communicating with potential mates and later for defining and defending a territory. The drumming may be done on hollow limbs, gutters, house siding, utility poles, or any other surface that resonates loudly.

Displays include crest raising, wing and tail spreading, bowing, and V-shaped flight. The actual courtship is simple: Red-bellied Woodpeckers tap their bills together. They are monogamous throughout the nesting season and some may form pair bonds that last over several seasons.

The nest cavity is built by both the male and female in a dead or dying tree or in a dead limb, and it takes about seven to ten days to finish. An unusual behavior during nest excavation is mu-

tual tapping at a potential nesting cavity. One bird enters while the other stays outside, and they take turns tapping to each other.

The cavity is lined with wood chips and is about a foot deep. New cavities are built each year, but pairs frequently use the same trees in successive years. Favored trees may have three or four cavities lined down the trunk.

The female lays from two to six eggs on the wood chips in the bottom of the cavity. Both male and female incubate the eggs for about 12 days with the male incubating at night. Eggs hatch in about three weeks and both parents care for the young. Chicks fledge in about a month but will stay with their parents until the fall.

Cool facts

- The male Red-bellied Woodpecker has a longer bill and a longer, wider tongue tip than the female. These adaptations may allow the male to reach deeper into furrows to extract prey and may allow the sexes to divide up the resources in one area.
- Red-bellied Woodpeckers compete vigorously for nest hole sites, but they are often evicted from completed nest cavities by European Starlings. Where starlings are common, half of all Red-bellied Woodpecker nesting cavities may be taken over by starlings.