



Corkscrew  
Swamp Sanctuary

## Along the Boardwalk

February, 2008

[www.corkscrew.audubon.org](http://www.corkscrew.audubon.org)

### Nesting Bald Eagles

Watch live videos from Audubon of Florida's EagleCam by going to

[mms://puffin.audubon.org/wmtencoder/eaglecam2.wmv](http://mms://puffin.audubon.org/wmtencoder/eaglecam2.wmv)

## New species of damselfly discovered at Corkscrew

A casual visit to Corkscrew in December to look for dragonflies and other wildlife has resulted in the discovery of a damselfly thought to exist only in southern Mexico and Central America. The Lucifer Damsel (*Chrysobasis lucifer*) is, in the words of discoverer Dr. Dennis Paulson, "entirely unexpected in the United States, certainly not in Florida."

Recently retired as Director of the Slater Museum of Natural History in Tacoma, Washington, Paulson is working on a two volume set of field guides to North American Odonata (dragonflies and damselflies). Finding the Lucifer Damsel was a high priority because no one had ever photographed one before.

Paulson had found one male Lucifer Damsel on a trip to Fakahatchee in January, 2000, and published a note on the discovery in the newsletter of the Dragonfly Society of the Americas. But four subsequent attempts to find it again in Fakahatchee, including one as recently as December, failed.

However, on a December 13 visit to Corkscrew, Dr. Paulson and his wife found at least three individuals of each sex in about a half hour of hanging out near the Ed Carlson bench, and he man-

aged to photograph a couple of them. They found another one much further around the walk, so Paulson suspects that they are breeding and thriving throughout the sanctuary.

The Lucifer Damsel is small, a little over an inch long, and quite slender. It flies from near the ground to barely above head level on the boardwalk. It exists in woodland habitats, and it is probably only active on sunny days.

The damselflies observed at Corkscrew were only present in dry areas and not around water, leading Paulson to suspect that they may spend the dry season as adults in the woodland, then move to the water to breed during the rainy season.

"When the damsels landed between their flights, if you weren't watching closely, they could immediately disappear," he said. "They mostly perched on very slender, leafless hanging vines

and slender leaf tips. They foraged by flying slowly through the air among the vegetation or right out in the open, when the sun was shining on the area.

Foraging was typical of most coenagrionid damselflies: checking the substrate for tiny insects that they grab and then quickly land on another perch to eat.

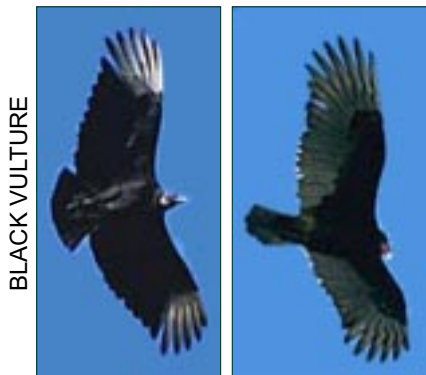
They appeared most likely to land when they had caught something."

Dr. Paulson and several colleagues plan to return to Corkscrew as early as this month to further study the Lucifer Damsel. They want to see how, or if, females here differ from those from Central America. They already know that there are variances in color in the males, but previously, no one had ever found a female in the United States.

"You have this very special species at Corkscrew," said Dr. Paulson, "and it's great to know that its U.S. populations are well protected."



## Quick ID Guide: Black and Turkey vultures overhead, on horizon

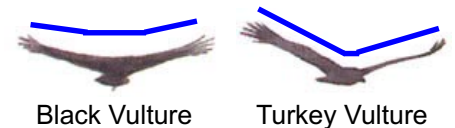


When soaring vultures are too high in the sky to pick out colors, two clues are still available to identify them.

First, look at the wings. The bodies are dark. The Black Vulture has light only on the wing tips while the Turkey Vulture has light along the entire back of the wing.

Second, look at the tails. The Black Vulture has a wide, short tail while the Turkey Vulture has a thin, long tail.

When the vultures are on the horizon, look for wing position. Black Vultures hold their wings on an almost horizontal plane while the Turkey Vultures hold their wings in much more of a V-shape (dihedral).



## New interns bring continents of experience

**Dawn Beyer** brings a wealth of experience to Corkscrew, having just finished six-months working on a fire crew at Pacific Oasis in Ashland, Oregon. Before that, she was a Peace Corps volunteer in Honduras where she raised funds for electricity projects, conducted workshops for women and children, and helped communities create community gardens.

She earned an Associates of Arts degree from Lane Community College in Eugene, Oregon, before the Peace Corps, and since has worked in landscape/nursery businesses in Oregon where her duties included plant propagation, nursery care and maintenance,



landscape design, plant sales/shipping, and general plant care.

**Denise Nemeth** comes to Corkscrew having just earned her Bachelor's degree in Environmental Studies from the University of Michigan with a specialization in plants. While at UM, she

worked in the Matthaei Botanical Garden and Nichols Arboretum where she assisted with landscape design, maintained the organic food gardens, and maintained trails. She also implemented the photographic documentation of plants and researched information for the Peony Garden Guide.

Born in Brazil, she graduated with an IBU diploma from Escuela Campo Alegre in Caracas, Venezuela, and interned with Procter & Gamble in Buenos Aires, Argentina.

*Notes:* Brad Kolhoff will be profiled in the March newsletter. Amy Fleischer has accepted a job at Mote Marine.

## January Sightings



A female and male Painted Bunting forage below the Bunting House feeders (January 25).



A River Otter prepares to dine on Crayfish at the north lake (January 11).



An Eastern Screech Owl gets some sun in its hole near Sign 11 (January 25).

## updates

### Education Department

by Rebecca Beck, Education Director

As we head into the busiest months of the year, I would like to take a moment to recognize the achievements of the Youth Education Team in those forgotten, often labeled "not so busy months" of October, November and December.

Each year as I sit in the silence of the summer, it seems that there is an eerie lull, the same that comes with the calm before a storm.

As fall approaches, the emails start pouring in, the phone rings begin to thunder in our ears and the program reservations flood our calendars. **HERE THEY COME!**

Just when it seems the frenzy is un-

manageable, the sweet song of volunteer voices echo among our boardwalk, library and lunch table. At last, calm is restored and the bright horizon of season is again in view.

This fall, the Youth Education Team hosted 100 FGCU Environmental Biology students, over 300 5th grade Wild Florida Adventurers and over 200 additional Boardwalk Adventurers of varying ages. Interns and volunteers dedicated over 200 hours of time and most of all, this fall it was **THEY** who reminded **ME** why we do what we do... to teach, inspire and encourage change. Discovery awakens all!

Thank you Helen, Derek, Jim, Donna, Diane, Amy, Heather, Dick, Candace and Alex! I look forward to hosting the next 1500 and know that

with you all, along with our returning team members Bob, Greg, Ann and Mark, that we will succeed!

We welcome any new volunteers who would like to join us! Contact Rebecca in the office or by emailing [rbeck@audubon.org](mailto:rbeck@audubon.org)!

### Fund Raising Committee

The Volunteer Fund Raising Committee has raised \$29,390 from 60 volunteers as of the middle of January. There is currently a balance of \$15,120 after the first three payments for the new interpretational signs.

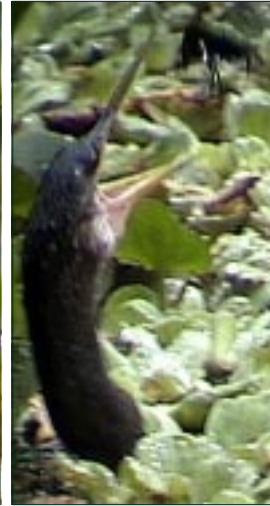
Total invoices for the signs will exceed the funds raised to date. To donate to this project, please contact Lori in the office.

# Anhinga

*Anhinga anhinga*

Water Turkey. Snakebird. Black Darter. American Darter. Anhinga. Whatever the common name, it's an *Anhinga anhinga*.

The Anhinga is a member of the darter family, *Anhingidae*, and is closely related to the Indian (*Anhinga melanogaster*), African (*Anhinga rufa*), and Australian (*Anhinga novae-hollandiae*) Darters.



further north than the Anhinga's.

The Anhinga preys primarily on fish, but its diet can also include aquatic invertebrates like Crayfish (*near left photo*) and insects. Although not a particularly fast swimmer, it is an effective aquatic hunter, re-

The name *snakebird* comes from its swimming nearly submerged with just its head and long, thin, curved neck exposed. *Water turkey* comes from the spread tail with a wide band at the tip like a turkey, seen when swimming and often seen in flight; *darter* refers to the way it captures prey by quickly spearing the fish with its sharp bill.

There is agreement that the name *Anhinga* comes from Tupí Indian, but there is disagreement about its meaning. James Jobling (*A Dictionary of Scientific Bird Names*) says it means devil bird or evil spirit of the woods, while Helmut Sick (*Birds in Brazil*) says that it means small head.

The Anhinga's range includes Mexico, Central America, Panama, Cuba, and the United States from North Carolina to Texas and south. Its range is limited by cool temperatures and low amounts of sunshine.

Anhingas prefer fresh water and coastal aquatic habitats that include shrub or tree-covered banks, islands or shores. These habitats include lakes, marshes, swamps, mangrove swamps, shallow coastal bays, and lagoons.

The Anhinga's head is small and appears to be an extension of its long neck. In this neck, the 8th and 9th cervical vertebrae create a hinge-like apparatus that allows the quick catching of prey. The long, sharp, serrated bill also aids in hunting. Although its shape is similar to that of a Cormorant, the hunting action of the head and neck is more like a heron.

The male Anhinga has brighter colors than the female. The male has greenish-black plumage overall, accentuated by silver-gray feathers on the upper back and wings. Females have a light brown head, neck, and chest. When breeding, the skin around the eye turns a bright turquoise color. Molting of all flight feathers at the same time renders it flightless for a while.

Anhingas don't have feathers that are waterproofed by oils like a duck's, nor it does have a layer of insulating body feathers like a Cormorant. When the Anhinga goes into the water, all of its feathers become completely wet, causing it to lose buoyancy. This allows it to dive easily and search for fish under the water. However, it also causes rapid heat loss, so Anhingas must spread their wings in the sun to warm up again.

Anhingas outwardly resemble Cormorants, but there are differences. The Cormorant is a more powerful swimmer and hunts faster swimming fish, while the Anhinga is much slower in the water and therefore hunts slower swimming fish. Anhingas soar but they need gliding flights from trees in order to start flight; the Cormorant is not able to soar but can easily take off from the water. The Anhinga's low metabolic rate causes it to chill rapidly, so it is limited to a southern range in North America; the Cormorant is able to maintain a higher body temperature and can deal with colder temperatures, so its range extends

lying on its quick neck and sharp bill to catch prey. It targets slower moving species of fish and stalks them underwater, finally striking out with its long neck and spearing the prey with its bill. It then brings the prey above water and jerks it off its bill, manipulating it in order to swallow the fish head first.

Unlike the Cormorant, the Anhinga has no economic impact because it does not eat fish that humans might eat.

Anhingas reach sexual maturity around two years of age and are monogamous. The nests are frequently placed within large mixed-species colonies of herons, egrets, and cormorants and are built of twigs and moss, lined with leaves and small twigs. They may be as low as five feet above the ground, or as high as 100 feet in tree tops.

Once the pair is formed, the male gathers nesting material while the female builds a platform nest, which is usually on a branch overhanging water or in open areas in the tops of trees. The female constructs the nest by weaving sticks together and padding it with live twigs and green leaves.

The highly territorial males defend threats to nesting territories with extensive displays and even fighting. If another male approaches the territory, the resident male spreads its wings and snaps its bill. If no retreat occurs, the two may peck at each other's heads and necks. Females are less aggressive but will defend the nest if necessary.