



Corkscrew
Swamp Sanctuary

Along the Boardwalk

August, 2007

www.corkscrew.audubon.org

Interns supply cheesy jokes, enthusiasm

What state is high in the middle and round on both ends? Ohio! I am **Angie Germano** and I am from Cleveland. Not only do I have a great love for cheesy jokes, but I am also enjoying myself at Corkscrew.



The amazing wildlife is quite a bit different from my native lands and the weather is a tad hot and humid, but I already feel at home with all the lovely people I have met. After graduation at Ohio University in June, I'll enter the Peace Corps and then work in environmental education/land management.



My name is **Brooke Rockentine**. Before I came to Corkscrew I was living in Detroit, Michigan, and going to Eastern Michigan University. I like to hang out with my best friend and my younger brother, and I like to go to new places and meet new people.

During my internship, my term as a Michigan FFA (Future Farmers of America) state officer ended. In the future, I would like to become an agriscience teacher and teach high school students everything about agriscience and FFA.

Quick ID Guide: Identifying plants by leaves Alligator Flag, Pickerelweed, and two of the Sagittaria

When plants aren't blooming, identification is more challenging. However, leaves are just as distinctive as blooms, and they are always there.

Four plants that grow in similar habitats have superficially similar leaves. A closer look, especially at the bases, reveals noticeable differences.

The base of the Alligator Flag (*Thalia geniculata*) leaf is almost

straight across (photo 1). Lance-leaved Arrowhead (*Sagittaria lancifolia*) leaves extend down on to the stem (photo 2). Pickerelweed (*Pontederia cordata*) has shallow rounded lobes (photo 3), and Broad-leaved Arrowhead (*Sagittaria latifolia*) has deep, sharply pointed lobes (photo 4). All Sagittaria are also called "Duck Potato."

Each leaf has a different vein pattern, but



looking at the leaf bases is the easiest way to identify them.

Have the Red-cockaded Woodpeckers returned?

Red-cockaded Woodpeckers may have returned to Corkscrew. Robbie Wooster spotted one on June 29 in the pines adjacent to Rookery Lane. Efforts to reestablish them may follow.

The RCW was foraging for insects in bark crevices. Later, it flew towards the pines around Jason's house.



©2007 Ralph Arwood taken in Big Cypress

"I've often thought Corkscrew could support at least two colonies of RCW's and have been watching for them," said Dr. Jerry Jackson. "Certainly the pinelands near the visitor center might be one colony site and the pinelands near the old plume-hunters camp could be another.

"Because this [Corkscrew] is habitat that is protected in perpetuity, I would certainly support trying to establish them there."

Ghost Orchid colony spotted from boardwalk

A colony of Ghost Orchids with nine blooms was spotted from the boardwalk on Saturday, July 7, by visitors scanning the trees for a Barred Owl.

The orchids, pictured below, are about 45 feet high on a bald cypress opposite the Cypress Knee sign. Roots go up and down the trunk approximately four feet each direction, suggesting the colony has been there, unnoticed, for at least 25-30 years.



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Bird Trivia Why aren't Blue Jay feathers blue?

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

Why is this place called Corkscrew Swamp?

Several tales are in circulation about the origin of the name *Corkscrew*, some more colorful than others. But the best explanation comes from an interview on January 31, 1977, of Joe P. Brown of Immokalee by then Audubon president Carl Buchheister:

“Back in the olden days when they used to come up out of the salt water into what is now know as the Imperial River to get fresh water for their boats

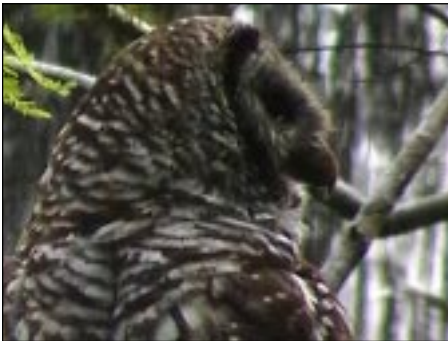
— they didn’t have any wells in those days — they’d have to take a cask and come up into the headwaters of that creek to get the fresh rain water, and it was so twisty that they called it Corkscrew Creek, or Corkscrew River, at that time. Actually, the headwaters of that was what is now known as Corkscrew Swamp.”

The interview is from an article by Buchheister on the history of Cork-

screw from 1952-1967 that is available on the Corkscrew web site– click on “Information” and then on “Historical Articles.”

It remained the Corkscrew Creek or River until the 1950’s when a developer renamed the section that ran through Bonita Springs the Imperial River. However, Corkscrew Swamp and Corkscrew Marsh retained the original names.

July Sightings



Birders looking for this Barred Owl on July 7 discovered the Ghost Orchid instead (July 13).



Florida Leaf-footed Bugs of varying sizes were seen regularly in mid July (July 6).



A *Calopogon palludis* (Pale Grass-pink Orchid) blooms near a fire trail in the pines (July 18).

Bobcats, Coyotes, and Panthers. Oh My!

Corkscrew volunteer and photographer Ralph Arwood has been photographing and documenting Corkscrew and Southwest Florida wildlife for over 35 years.

His notes explain capturing these and other species. The photos provide visual evidence of what roams through Corkscrew at night when the sun and people are gone.

“The pictures were taken using a Trail Master infrared trigger. The infrared beam is aimed across a trail. When the animal breaks the beam, the camera is triggered.

“Because the animal will often look in the direction of the sound from the camera, I have set it up to take three pictures, one second apart each time that it is triggered. This has worked well for all the animals except the coyote, which ran off after the first picture.

“The camera is in a waterproof case so it can be left in place. With extra batteries to power the camera and strobe

light, it can run 24/7 for about a week.

“Turkey pictures have all been during daylight. The coyote and panthers were at night. The bobcats are usually



at night but I did get one during daylight. The camera records the time of each photo, so we can get exact times for each photo.”



These photos were taken at the fish farm, which is about two miles north of the Blair Center: Bobcat (May 24, 2007), left top; Coyote (May 26, 2007), left bottom; Panther (June 26, 2007), above.

Friends in the Night

Corkscrew's Bats: Second in a Species Profile Series

Eastern Pipistrelles

Pipistrellus sublavus

Eastern Pipistrelles is Florida's smallest bat, weighing in at a mere 1/4 ounce. The body is less than two inches long, with an eight to ten inch wingspan. They are solitary except at mating and in small nursery groups.

Eastern Pipistrelles are some of the earliest bats to emerge in the evening and are often seen in the ambient light as they move to foraging grounds. They are relatively slow and erratic in flight, often fluttering and flitting along watercourses or over pastures and woodlands much like large moths.

They can catch prey at a rate of an insect every two seconds, increasing body mass as much as 25 percent in 30 minutes. The typical diet consists of flies, mosquitoes, flying ants, small beetles and small moths.



Eastern Pipistrelles inhabit marshes and open woods near the edges of water. They appear to prefer watercourses as foraging grounds and are not usually found in open fields or deep forests. Although not considered abundant, they are present throughout Florida, except in the Keys.

Florida roost habitat includes tree foliage and cavities, Spanish moss, and occasionally buildings.

Fur color varies from silvery-gray to light brown. Individual hairs are tri-colored; dark base, yellow-brown

middle, and dark tips. The wings have black wing membranes contrasting with reddish-orange forearms.

Eastern Pipistrelles are obligate hibernators, meaning that they still hibernate even though food is available. Because they cannot remotely withstand freezing temperatures, they are among the first species to begin hibernating and some of the last to emerge. They generally hibernate individually.

Mating occurs in autumn before hibernation, and mating is the only time males and females are ever together. Females give birth to twins from late May to mid July. Having twins is rare among other bat species. At three weeks the young are able to fly, they are weaned and begin to forage with their mothers at four weeks, and at five weeks, they are independent. Sexual maturity is at 3 to 11 months.

hibernacula: the shelter of a hibernating animal; from the Latin *hibernaculum*, winter residence. Most bats use caves or rock crevices for hibernacula to survive cold winter temperatures. However, many bats in Southwest Florida remain active all year, roosting in a state of torpor during spells of cold temperatures.

Evening Bat

Nycticeius humeralis

Evening Bats are one of the smaller bats, weighing less than half an ounce. Their tiny bodies fit easily in the palm of a hand, but with a wingspan of about eight to ten inches, they seem larger in flight.

Evening Bats are one of the more abundant species in Florida except in the Keys. Their range extends throughout the eastern United States. They are more prevalent in the southeastern states but are uncommon in most of the northern part of their range.

The fur is brown, sometimes with a bronze to reddish tint. A small, broad, dark, naked muzzle distinguishes them from other small brown bats.

These bats usually emerge early, 15-20 minutes after sunset, and fly a slow steady course when foraging.



They prefer open areas and are often visible over open fields and ponds. Around human areas, they follow roadways and hunt at street lights. Females return to the roost to feed their young during the night.

The Evening Bat's food preferences are similar to those of the Big Brown Bat (see July newsletter), primarily beetles and true bugs, but they eat more moths. In Florida, Evening Bats also have been seen foraging for mosquitoes, flying ants and termites, beetles, stinkbugs, June bugs, and flies.

In natural areas, Evening Bats roost behind loose bark, in the crevices and cavities of dead trees, and in abandoned woodpecker cavities. They readily adapt to bat houses, often sharing the space with other bat species; they've even been found roosting in the

folds of outdoor patio umbrellas.

Evening Bats prefer a woodland or mixed woodland/open area habitat for nesting colonies. Colony sizes range from just a few to around 70.

Evening Bats are one of the few bats which almost never enter caves. In Florida, they leave bat houses from late summer to early autumn and return in the early spring of the following year to establish maternity colonies. No one knows where they go in the winter.

Evening Bats have a relatively short life span of about 10 years. Mating typically occurs in the fall although fertilization is delayed until spring. One to three pups are usually born in May.

The mother is at rest the first two weeks after the pups are born and the young stay nestled under her wings. During the third week they are able to fly, practicing agility in the air and landings. Pups stop nursing at about nine weeks when they are able to eat insects on their own.

Profile

Limpkin

Aramus guarauna

Many birders and photographers come to Corkscrew with a specific species in mind. Perhaps it's the Painted Bunting, Wood Stork, or Swallow-tailed Kite. Often, it's the Limpkin.

The Limpkin's range in the United States is limited to freshwater marshes, swamp forests, and shores of rivers, lakes and ponds in Florida. Strays have very rarely wandered further north. It is also found on the coasts of Mexico and Central America, and across most of South America.

The Limpkin is the only member of its taxonomic family. Although it resembles herons and ibises, it is more closely related to rails and cranes.

Limpkins are moderate sized wading birds, 25-29 inches tall with a wingspan of about three and a half feet. The sexes are similar in appearance although the male is slightly larger. Juveniles appear similar to adults but have fewer, thinner white spots.

One of the most distinguishing features is its call – a loud, unmistakable scream, usually in a series of four or more at a time. It is an eerie call, and movie directors sometimes used a tape of the *kree-ow*, *kra-ow* call as jungle background noise in some of the old black-and-white Tarzan movies.

Adult Limpkins also have a loud, single “cluck”; juveniles use a wheezy hiss to call for parents to bring food.

Another identifiable trait is its foraging behavior. Primary food is Apple Snails (*Pomacea spp.*) and freshwater mussels. It jabs and sweeps the bill searching for snails, or hunts visually in clear water. Because the snails are algae eaters, Limpkins frequently hunt at bases of cypress trees or fallen logs where snails will more likely be found.

The Limpkin's bill is uniquely adapted to feeding on Apple Snails. The closed bill has a gap just before the tip that makes the bill act like tweezers. The tip itself is curved slightly to the right so it can be slipped into the right-handed chamber of the snail. When a snail is



caught, the Limpkin takes it to a solid spot of ground or log, turns the snail shell opening upward, cuts through the muscle attachment, and pulls the snail out. Extraction takes about 10 to 20 seconds and the snail shell is rarely broken. A collection of empty snail shells indicates a favorite Limpkin feeding spot.

Territorial males engage in aggressive, ritualistic confrontations that include charging, retreating, and loud calling. Sometimes, there's foot-fighting.

Nesting occurs early February through May. The nest is a platform of sticks, vines, leaves, moss, grass, and

other vegetation and is built in a tremendously wide variety of locations from slowly sinking piles of aquatic vegetation and in dense tangles of vines and branches to between cypress knees, in the tops of Sabal Palms, and in cypress trees as high as 40 feet above the ground.

Five to six eggs are typically laid and incubation takes about 27 days. At hatching, chicks are covered with down and the next day swim, walk, and run.

Chicks follow the adults into the water. Adults will often “park” the chicks on floating vegetation or at a shallow spot and then hunt. When they bring food back to the chicks, only one chick is fed until it's full while the other chicks calmly wait their turns. They learn about snail extraction by watching the adults.

Chicks forage independently at about nine weeks.

Once abundant in Florida, the Limpkin was almost eradicated by humans hunting for food. Conversion of wetlands for agriculture, flood control, and development contributed to the species' decline.

Today the population is fairly stable, although the Florida Fish and Wildlife Commission lists the Limpkin as a species of special concern.

Its main threats today are wetland drainage and anything that diminishes Apple Snail abundance. In some areas, thick mats of exotic plants such as water hyacinths prevent Limpkins from finding snails and other food. Dense cattail stands along the shores of rivers and lakes also degrade foraging habitat and access to the mollusk prey.