



Corkscrew
Swamp Sanctuary

Along the Boardwalk

March, 2009

www.corkscrew.audubon.org

Two chicks in Corkscrew eagle nest

Earlier it was reported that two Bald Eagles were nesting in the Sanctuary. Since that time Corkscrew staff have been monitoring the nest.

Throughout most of January the adult eagles could be seen taking turns at the nest, often with only tops of their heads visible above the nest. Only during the “changing of the guard” did anyone have the chance to see the eagles in flight or perched off the nest.

A few weeks ago, the behavior of the eagles changed noticeably. Rather than sitting low inside the nest, the adult birds perched at the side of the nest.

During the most recent nest check, two young eagles were seen poking their heads up periodically. A few days earlier while a parent circled in flight overhead, one chick stood up and stretched its wings, right.

The parent eagle tending the nest also



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made one dramatic fly-by, above, close to the observation point, which is far away from the nest.

Now that there are two young in the nest, the adult eagles should be observed with more frequency as they fly to and from the nest with food.

The best viewing location is the observation bench overlooking the wet prairie just before entering the bald cypress forest. The nest itself cannot be seen, but the adult eagles have been clearly viewed in flight over the trees from the wet prairie bench.



Volunteer notes...

Volunteer Recognition Dinner

The 2009 volunteer recognition dinner will be at the Blair Audubon Center on Thursday, March 19, from 4:30 to 7:30 P.M..

Volunteers planning to attend need to indicate so on the sign up sheet in the Bunting House.

March volunteer field trip

A sign up sheet for a volunteer field trip (swamp buggy trip to the north end) on March 16 is posted in the Bunting House. Space is limited.

Permanent stork/orchid scopes

The Volunteer Fundraising Committee’s 2009 goal is to raise enough money to purchase two semi-permanent observation scopes.

One would alternate between the observation platform during stork nesting season and the boardwalk during the ghost orchid blooming period. A second scope would be placed at either the north or south lake.

Fixed scopes would eliminate the need for volunteers to place and retrieve the current spotting scopes each day during those seasons and to constantly tend and adjust scopes mounted on tripods which are moved or bumped by visitors.

Boardwalk naturalists are encouraged to make a contribution of whatever amount they can towards the scopes.

Bird Trivia

What are “halcyon days”?

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

Quick ID Guide: Two willows – Coastal Plain Willow and Virginia Willow



Coastal Plain Willow (*Salix caroliniana*) left, has yellow catkins (blooms) and long, narrow, light green leaves. Coastal Plain Willow grows in drier areas like the wet prairie and marsh. It is a true willow.



Virginia Willow (*Itea virginica*), right, has white catkins (blooms) and wider, darker green leaves. Virginia Willow is a wetland plant and is naturally found only in the cypress forest. It is not in the willow family.





Tail-light Damselfly found in numbers

In late January, Mike Knight and interns Beth Beigel, Kate Halstead, and Kyle Pritchard assisted researcher Jerrell Daigle in the quest to document the Tail-Light Damselfly (*Chrysobasis lucifer*).

Previously, this diminutive species was known only from populations in Central America but was recently discovered in southwest Florida (see February, 2008, Corkscrew volunteer newsletter).

Earlier attempts to locate multiple specimens at Corkscrew were generally unsuccessful; however, this time around we hit the jackpot!

Numerous damselflies were found throughout the cypress forest along the boardwalk and in back country locations.

No indication of the yellow tail seen as in the Central American populations was found, but rather a bright red tailed species is present in the Corkscrew population.

Females are either light blue or dark dusky gray while mature males appear to have two color phases, one blue with an orange tail and the other emerald green with a red tail (photo at top of column).

The females fly about two feet above the ground around the ferns; males fly higher, about eye level up to eight feet, perching on vines and leaf tips.

One mated pair was found as well as a female laying eggs in the stem of Taperleaf Water Horehound (*Lycopus rubellus*).

The small damselflies appear to take advantage of the mid-winter months when predatory dragonflies are scarce and when the open cypress canopy allows warm sunlight to penetrate to the understory habitat where the species is most active.

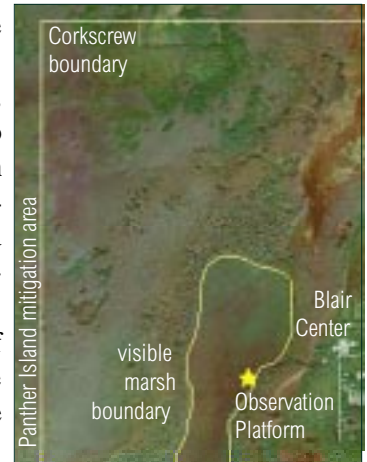
In Case a Visitor Asks

How much of what can be seen from the observation platform belongs to Corkscrew?

The quick answer is, "Everything except the radio towers to the north."

Looking north from the observation platform, the edge of the marsh is .82 miles (stork nests to the north are about 1 mile away). The northern boundary of the Sanctuary is approximately 2.74 miles north of the observation platform. On a road map, the northwestern corner of Sanctuary property is on the Lee County/Collier County line.

Looking west from the platform, the edge of the marsh is about .45 miles away while Corkscrew's western boundary is almost one mile further.



February Sightings



An Indigo Bunting in winter plumage feeds below the Bunting House feeders (February 10).



A Barred Owl holds its chick while peering from its nesting cavity (February 20).

A Little TLC, Please

Spotting scopes are valuable tools to use on the boardwalk to help visitors enjoy their experience.

Although the scopes belong to Corkscrew, volunteers are asked to treat the scopes as if they were their own personal property. To that end, volunteers are asked to please remember to:

- Place the scope and tripod in the cart with the scope body up and the tripod legs down so that the eyepiece and scope don't get damaged.
- Collapse the tripod legs completely before putting the scope/tripod in the cart. This will eliminate the possibility of the scope falling out during transport.
- Whoever takes a scope out is responsible for bringing it in at night. Recently, two separate days left the ex-

pensive Svarovski scope on the boardwalk all night. Day captains need to stress this to their respective crews.

- Clean the lenses as needed using the lens pen in the little black box located in each scope cart. Spares are kept in a box above the microwave in the Bunting House
- Bring in and/or cover the scopes in the event of rain.
- Report any maintenance needed on the scopes or tripods to Sally.

For volunteers who would like a refresher or a training session on scope use and care, Sally will be offering one on Wednesday, March 11, from 2:00 – 3:00 P.M. (care, maintenance, practical experience setting up). A sign up sheet is in the Bunting House.

Profile

Salvinia is a floating fern that is native to Central and South America where it is common and wide-ranging from southern Mexico to northern Argentina and Brazil. There are 10 species of Salvinia in the world, seven originating in the Neotropics, and none are native to North America.

The species at Corkscrew, *Salvinia minima*, is about 3/4 inch in width and commonly occurs in freshwater ponds and swamps from the peninsula to the central panhandle of Florida. Another common name for it is Water Spangles.

Salvinia minima has been cultivated in greenhouses and gardens in the United States since the late 1880's. Early plants in Florida likely entered natural areas from flooding of cultivated pools or through intentional release. *Salvinia minima* is still widely available in the water garden trade, either as a sale item or a contaminant.

Although it continues to infest new regions, it is not included on the Federal Noxious Weed List and is prohibited only in the states of Texas and Louisiana.

Salvinia minima is most often found in shallow backwaters of lakes and ponds, ditches, slow flowing streams, cypress swamps and marshes.

Salvinia is a free floating, rootless aquatic fern. Horizontal, branching rhizomes (sort of like roots) float just below the water surface and produce two floating to emergent fronds (leaves), and a third, submersed frond that is divided into filaments. The floating fronds are circular to oval in shape, with heart shaped bases and rounded to notched tips. Leaf length ranges from 0.4 to 2.0 cm. Smaller round, flat fronds lie on the water surface; larger fronds become elongated and fold upright on the midrib.

Fronds growing in shade remain broadly flat and round, and emerald green. Fronds growing in full sun be-



come larger and elongated and are often a paler green to an almost rust brown. The upper surfaces of floating leaves are uniformly covered with rows of white, bristly hairs. The stalks of each hair divide into four thin branches that spread out at the tips. These branching hairs create a water repellent shield.

Although Salvinia is a true fern, it seems to be a sterile species and is not known to produce fertile spores. Regardless, it has sporocarps which are common among the submersed leaves of large plants. Sporocarps are sacs which enclose smaller sacs (sporangia) that are formed to hold microscopic spores. Shaped like small lemons about 1 mm wide, sporocarps are attached in spirals along the submersed filaments.

The plants reproduce strictly by the fragmentation of the rhizome (roots) and spread to other bodies of water by flooding or by being carried on the backs of turtles and alligators and on the feet of wading birds. The continuous branching and fragmentation of rhizomes turns out large volumes of vegetative daughter plants throughout the growing season. Copious hairy coverings minimize the desiccation of plants spotted on boats, boat trailers, alligators, turtles and even dogs leaving the water.

Lateral buds deeply imbedded in the rhizome may lie dormant during periods of dry downs and cold temperatures. Small rhizome fragments, commonly sheltered in associating vegetation, provide material for reintroduction on the return of favorable growing conditions.



While *Salvinia minima* often crowds out Duckweed (*Spirodela punctata*), an investigation of competition between Salvinia, Duckweed and *Azolla caroliniana* (Mosquito Fern) in north Florida found *Salvinia minima* dominating during the summer months. Later in the season, Salvinia was impacted by flooding and freezing and Duckweed became the most abundant species.

A nasty cousin...

Corkscrew's Salvinia is relatively benign, but it has a cousin that isn't, and Corkscrew has a biological control to help the USDA in eradication efforts.

Giant Salvinia, *Salvinia molesta*, is one of the world's most noxious aquatic weeds, dominating slow moving or quiet fresh waters. Its fronds may grow to silver dollar size, and it is an aggressive, species that negatively impacts aquatic environments and local economies.

Under optimal conditions, its mats can double in size every 2-4 days. Biomass weights of live plants approach those recorded for Water Hyacinth.

Salvinia molesta has been documented in Naples since 1999 in a canal along Airport Road where it has repeatedly been treated. In late 2000, heavily infested retention and irrigation ponds draining the canal were discovered to be the source of reoccurring growths.

The Salvinia Weevil, *Cyrtobagous salviniae*, is a proven biocontrol agent for *Salvinia molesta*, and it is present in Corkscrew. This tiny insect causes immense damage to plants by tunneling through rhizomes and feeding on terminal buds. Such feeding acts to greatly reduce large infestations of *S. molesta*.

The Florida type of *C. salviniae* has been collected here for several years by the USDA, bred in labs, and released to control Giant Salvinia elsewhere in the country. Its miniscule size makes it difficult to spot, but brown fronds indicate its presence.

Dot is Actual Size

