



Corkscrew
Swamp Sanctuary

Along the Boardwalk

July, 2009

www.corkscrew.audubon.org

Butterfly census

The annual count will begin at 9 AM on Tuesday, July 21, and end at approximately 3 PM. Contact Sally if you are interested in helping.

Ghost Orchid ready for another multi-bloom season

The Ghost Orchid is native only to Southwest Florida and Cuba. In Florida, its range is very localized in swamps in the Fakahatchee, Big Cypress, and Corkscrew.

Most Ghost Orchids are infrequent bloomers with flowers not appearing for years between the seasons when they do bloom. Typically, Ghost Orchids will have one or two blooms, although there may be more, and rarely a plant will bloom twice in the same season.

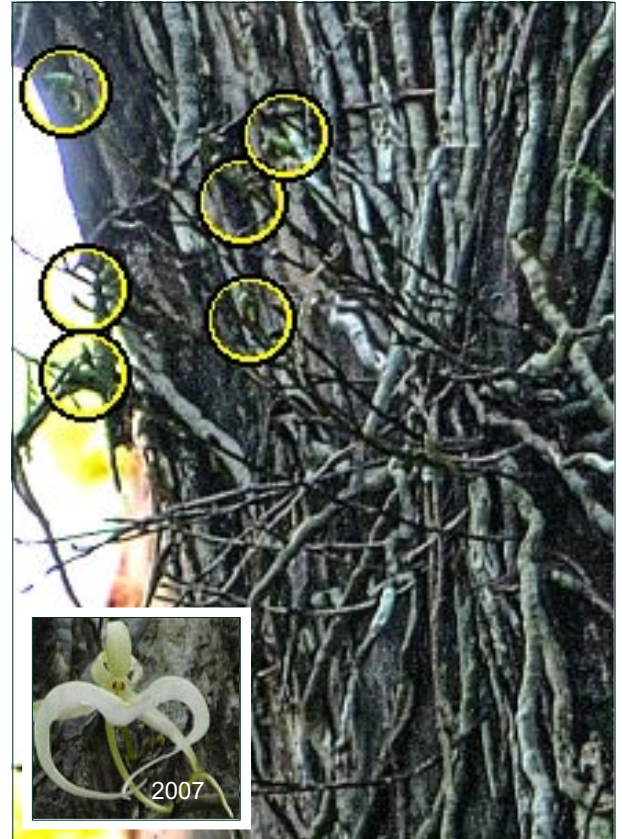
Dubbed “Super Ghost” by Fakahatchee biologist Mike Owen, the Ghost Orchid at Corkscrew is unique.

In 2007, the Ghost Orchid bloomed three separate times between July 7 and October 15. The first time, it had 12 blooms, the second time it had 10 blooms, and the third time it had three blooms.

Last year, it again bloomed three separate times during the season. The first bloom appeared June 23 with five other buds visible from the boardwalk. Eventually, 10 blooms were open at once. The second blooming was in mid July, and it bloomed a third time with three flowers in August.

In 2009, it appears ready to put on another spectacular show. Still too small to be seen through binoculars, the six small green buds, circled in yellow at the right, were photographed by Rod Wiley on June 24.

Blooms typically appear May through August and rarely in other months; the heaviest blooming period is in July. The buds open in succession, usually one to two at a time, and the individual blooms last from 10-14 days. Check the Corkscrew web site for updates.



Quick ID Guide: Ferns commonly seen along the boardwalk, part 2

Note: The name “Boston Fern” is applied to all five species of sword ferns (*Nephrolepis* spp.) found in Collier County.

Many “Boston Ferns” sold in garden stores are invasive exotics rather than the two native ferns shown below.



- ① **Sword Fern:** pinnate (blades divided into leaflets); frond narrows toward the tip *and* the base; pinna (leaflet) about two times as long as wide; pinna close
- ② **Giant Sword Fern:** pinnate; frond only narrows toward the tip; pinna (leaflet) about four times as long as wide; space between pinna; frond more vine-like
- ③ **Golden Polypody:** pinnatifid (pinna not cut all the way to midvein); widely lobed; rhizome (root) thick, golden brown, and fuzzy looking
- ④ **Giant Leather Fern:** pinnate; very large; pinna stiff, leathery-looking; spores cover entire bottom of pinna and look like suede



Bird Trivia

What is the difference between a bird call and a bird song?

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

In Case a Visitor Asks

Why do some plants bear fruit while others of the same species don't?

The answer has to do with how the plants reproduce.

Some species have individual plants that are distinctly male or distinctly female. On these plants, only the female plant will produce seeds or fruit.

The fancy word for this type of plant is *dioecious*, which comes from the Greek for “two households.” Examples of dioecious species at Corkscrew include Dahoon Holly, Coastal Plain Willow, Wax Myrtle, and Groundsel.



A Dahoon Holly with berries must be a female plant.

Other species which have both the male and female reproductive structures (flowers, pollen, seeds, cones, etc.) on a single plant and are called *monoecious*. Pond Cypress, for example, are monoecious with male cones (tassel-looking) toward the top of a tree and female cones (the round cones appearing now) lower on the same plant or on neighboring plants.

The term *dioecious* is typically used only for plant species.

When a plant species is dioecious, at least one male plant must be present in a group for the fruit-bearing female plants to be pollinated.

People who buy dioecious species at a garden store and expect them to bear fruit may be disappointed unless they were lucky and bought both male and female plants. Dioecious species cannot self-fertilize.

Most animal species, like birds, reptiles, and mammals including people are dioecious.

June Sightings



One of the north lake Barred Owl fledglings stretches in the sun (June 5).



Pine-pink Orchids bloom in the pine flatwood near the Insect Adventure trail (June 16).



A Loggerhead Shrike scans the observation platform upper deck for Paper Wasps (June 26).

Odds & Ends

Bird knees and frog eyes— five things you may never have thought about

What's the black dot in the middle of otherwise white bird droppings?

The black dot is fecal matter; the white is urine. Both collect together and are voided simultaneously out of the same orifice. Feces are in the middle because the urine is slightly sticky and clings to them.

Do birds have knees?

Birds have three leg parts just as we do, but the top segment (similar to our thigh) is hidden in feathers. Birds have a knee complete with patella (knee cap) that bends forward and functions much like ours. What appears to be a knee that bends backwards is the equivalent of a heel that

separates what would compare to an ankle from the bones of the foot. Birds actually stand on their toes all the time, like a ballerina, rather than stand on their entire feet.

Why do frogs close their eyes when they swallow?

Frog eyes bulge inside their faces as well as the outside. The underside of the eyeball is covered with a sheet of tissue and protrudes into the mouth cavity. In order for frogs to swallow, they have to push material in the mouth into the esophagus. They use their eyes by depressing the eye into the mouth cavity; mammals use their tongues to do the same thing.

What is the aroma we can smell when it “smells like rain”?

Most scientists credit humidity for the aroma. Humidity doesn't smell, but it enhances the smells of things around it. The heightened smell of plants, soil, and animals, plus the increased scent of gaseous elements in the air around us, creates the sense/smell that it is going to rain.

Why do birds stand on one foot?

Two reasons. Most bird legs and feet lack feathers for insulation. Significant heat is lost during cold weather. Tucking one leg into feathers conserves body heat. Another reason is just to rest the leg and foot.

Coastal Plain Willow

Salix caroliniana

The Coastal Plain Willow is native to the United States. It is the only willow that occurs naturally in South Florida, and it is the most common willow in the entire state.

Coastal Plain Willow is a common small to medium sized wetland tree found in swamps, along ditches, at the edges of ponds and marshes, and at the ocean in depressions between dunes. The genus name, *Salix*, is derived from two Celtic words meaning “near water.”

It is a sturdy and well-anchored tree that has a long life span relative to most other plant species. It is a rapid grower, maturing in around 20 years with a height of around 30 feet.

Coastal Plain Willow provides significant cover and some food for wild life. It is the only native larval host plant for Viceroy butterflies. According to *Butterflies of Eastern North America*, the Coastal Plain Willow is host to 111 different species of butterflies and moths, and it hosts a variety of other species.

Willow-hosted insects are an important part of Corkscrew’s education programs. A Corkscrew El-



ementary student, *above*, studies a Cottonwood Leaf Beetle whose entire life cycle occurs on the willow, during an Insect Adventure field trip. A group of 4H students, *right*, examine and photograph willow wildlife for their projects during a different field trip.

Other wildlife, especially deer, eat willow twigs, buds, and leaves.

Although deciduous, willows in Southwest Florida barely lose their leaves in December before the catkin inflorescences appear and the new crop of leaves burst forth. Its most active growth period is in the spring.

The many long, narrow leaves are



arranged on spindly branches. Leaves have a silvery white, waxy coating on the underside.

Separate male and female trees bear somewhat inconspicuous flowers in catkins (inset photo above) in mid-spring. Flowers on the female trees mature to clusters of small pods which open to reveal white, silk-tipped seeds which are then dispersed by the wind.

Although it is a wetland tree, it does have medium tolerance to drought, and like most hardwood species, willows are capable of sprouting back after fire.

People have utilized the Coastal Plain Willow in a myriad of ways.

The inner bark and leaves of many willows, including the Coastal Plain Willow, yields the medicinal extract salicin (salicylic acid). This chemical is the active ingredient in common aspirin, and chewing a leaf provides the familiar taste of aspirin. Native Americans chewed or boiled tea from the leaves and inner bark of this medicinal tree to relieve fever and minor pain from toothache, arthritis, and headache. One of the willow’s local nicknames around the Okefenokee is the “toothache tree.”

Native Americans used the willow to treat a variety of other ills. An inner bark concoction was used for colds, fever, diarrhea and dysentery.

Native Americans fashioned the inner bark into ropes, bags, and fish nets. Willow branches also provided straight and sturdy shafts for making arrows.

Twigs of willow, known as osiers, are still woven into baskets and wicker furniture.

The reddish brown wood breaks down rapidly when in contact with the soil, providing ready nutrients for other plants that grow in sandy soils.

Although soft and too weak for structural framing, the wood resists splitting. At one time it was a top choice for artificial limbs. Pioneers turned willow wood into charcoal, which they ground fine and used as a component in gunpowder. The long, flexible branches are used for making willow chairs and tables.

In an article on creating a rain garden to conserve and recycle water, *Audubon Magazine* recommended the Coastal Plain Willow as one of 13 trees and shrubs to plant (“Good to the Last Drop,” *Audubon*, September 2003).

