Corkscrew Swamp Sanctuary

# Along the Boardwalk

August, 2008 www.corkscrew.audubon.org

## Audubon/Toyota go green together

TogetherGreen is an Audubon program funded by Toyota that aims to provide opportunities through grants that inspire people everywhere to take action at home and in their communities to improve the health of the environment. It's all about helping people get involved in creating a brighter, healthier future.

Corkscrew has already been awarded a Volunteer Days grant. The grant will fund six different Volunteer Days spread throughout the year that focus on the restoration of old agricultural areas within the Sanctuary into natural wildlife habitats. Those interested in helping are asked to donate six hours of their time for a day. Materials, tools, and refreshments will be provided.

The first day is September 27. More information about the Volunteer Days program will be in the September newsletter.

Another aspect of the program is Innovation Grants for land, water, and energy conservation.

Corkscrew has applied for a such an Innovation Grant which, if awarded in September, would be used to create a "restoration classroom" that engages people in restoring 28 acres of the old tree farm area north of the Blair Center to an upland pine flatwoods suitable for gopher tortoises and bobwhite quail.

## Quick ID Guide: large orbweaver spiders

The **Black-and-yellow Argiope** (genus *Argiope)*, also called a **Garden Orbweaver**, is a summer and fall spider. It is usually found low in bushes and on grasses. It is a common garden spider around homes.

The Black-and-yellow Argiope tends to stay in the center of its web with its legs extended to the front and back. Its "zipper" forms a zig-zag pattern. When disturbed, it usually drops to the ground. Young spiders may be more brownish and white.

The **Spotted Orbweaver** (genus *Neoscona)* is a summer and fall spider found in the cypress forest. Its web is often high in trees, spanning a lot of air. Webs may also be head high across the boardwalk early in the morning.

The Spotted Orbweaver tends to stay in the center of its web with its legs tucked beneath it. Its "zipper" is often more of a white blur in the center of the web. When disturbed, it retreats up on a single strand of its web to a resting spot on a twig or under a leaf.

**Bird Trivia** **Relative to body size, which owl has the longest legs?**
Discover the answer at www.collieraudubon.org/birding.html

## Calendar Updates

### Annual Butterfly Survey

Save Tuesday, August 5, if exploring Corkscrew's boardwalk and off-boardwalk areas in search of butterfly species sounds interesting. Participants do not need to be butterfly experts. The survey starts at 8:30 AM. Contact Sally for more information and to volunteer.

### Volunteer Activities

- *December 3, 2008…*
  Welcome back/potluck dinner
- *December 20, 2008…*
  Corkscrew Christmas Bird Count
- *March 19, 2009…*
  Volunteer recognition dinner

### 2008-2009 Art Exhibits

The following artists will be displaying in the Blair Center:

- *October, 2008…*
  Quilt show
- *November & December, 2008…*
  Christine Reichow watercolors
- *January, 2009…*
  John Costin hand-colored etchings
- *February, 2009…*
  Ralph Arwood photography
- *March, 2009…*
  Rod Wiley photography
- *April 2009…*
  Prem Subrahmanyam photography
- *November & December 2009…*
  Maxis Gamez photography

### Discover Corkscrew

Dates for some Discover Corkscrew activities have been set, including Early Bird Walks, Morning Walks, Sunset Strolls, Night Walks, and Florida Master Naturalist Classes (wetlands and uplands modules). More dates and classes will be added to the calendar as they become available.

All dates and activities are posted on the 2008-2009 Activities Calendar on the Corkscrew web page. Click on "Information" and then in the right column, click on "Calendar of Activities."

## In Case a Visitor Asks

# What's the tall, feathery looking plant growing in the wet prairie?

It's Dogfennel *(Eupatorium capillifolium)*, an aggressive native perennial found throughout much of the Southeast. It is a member of the *Asteraceae* (sunflower) family.

It is particularly troublesome in unimproved or overgrazed pastures where it adds to the decline of forage yield and quality. Cattle do not normally feed on dogfennel, but it may be eaten when other forages are lacking. However, the leaves contain low levels of the toxin tremitol, which causes dehydration when ingested by cattle.

Dogfennel is also a frequent invader of everglades sawgrass communities during drought. It most commonly only grows in dry sandy soils.

While dogfennel has almost no value to humans, it is eaten by the male Scarlet-bodied Wasp Moth, which feeds on the plant while mature and stores its toxins to ward off predators.

The species epithet *capillifolium* derives from the Latin *capill* meaning "hair" and *foli(um)* meaning "a leaf" referring to the thin leaf segments.

The genus name *Eupatorium* was given in honor of Mithridates VI of Pontus (132 BC - 63 BC), also called Eupator Dionysius. Mithridates VI had many brothers, who he killed to clear his path to the throne, and a sister, who he married.

Mithridates sought to strengthen himself against poisoning by taking less than lethal doses of poison on a regular basis. This practice came to be known as *mithridatism*. Unfortunately for Mithridates, the practice worked against him in the end. During the 3rd Mithridatic War, Pompey the Great defeated Mithridates. Mithridates tried to poison himself instead of being captured but was unsuccessful because he had become tolerant of all the known poisons of his day. He instead had to stab himself with his own sword.

## July Sightings

A Ruby-throated Hummingbird pauses in a Live Oak near the butterfly garden (July 18).

Seven blooms are visible on the Ghost Orchid from the spotting scope (July 11).

An early migrant, a Louisiana Waterthrush, forages at the south lake (July 15).

## How Does That Work?

# How do treefrogs cling to both wet and dry surfaces?

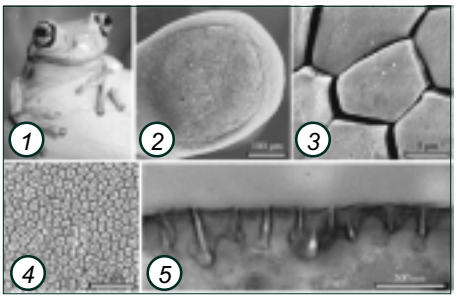
A tree frog's foot is surprisingly sophisticated. The pad on the bottom of a tree frog's toe is coated with a mucus film. This layer of fluid led scientists to believe that the pads cling to a surface by wet adhesion—the force that makes a damp piece of paper stick to a window. But wet adhesion is only part of the picture.

Each toe pad consists of hexagonal skin cells that are covered with microscopic bumps that poke through the mucus film and make direct, dry contact with a surface. The mucus-filled channels separate the cells. This enables the tree frog to toggle between wet adhesion, which is useful on rough surfaces, and dry friction, which gives the frog a grip on smooth terrain.

The mucus has a watery consistency, causing it to flow away quickly so a pad can directly contact a surface.

The mucus channels not only provide the mucus film but also serve an important role in treefrog traction. On wet surfaces, they funnel away excess fluid. On dry or uneven surfaces, or when a frog hangs upside down, the mucus creates surface tension and viscosity—in other words, extra clinginess.

The channels also allow the hexagonal cells to tilt and conform to contoured surfaces like those of a leaf.




**Morphology of tree frog toe pads:** (1) tree frog; (2) toe pad, (3) epidermis with hexagonal epithelial cells; (4) high power view of the surface of a single hexagonal cell showing peg-like projections; and (5) cross-section through cell surface.

*photo © 2006 The Royal Society, published online 2006 May 30.*

# Northern Parula

## *Parula americanus*

The one warbler that summers at Corkscrew year in and year out is the Northern Parula. It is a common breeder throughout most of Florida and is usually found by listening to its loud, persistent song.

Males have two distinct songs while females tend to be quiet. The first song, heard in the spring, is an ascending trill with a separate end note. It is used to attract mates. The second call is a series of buzzy notes, which the male most often uses to identify and defend its territory.

The Northern Parula is the smallest eastern wood warbler, weighing in at barely a quarter of an ounce and only about four and a half inches long.

Males and females have yellowish throats and chests and two white wing bars. The male has an orange and black patch across the breast and a small black eyeline, which females and immature birds lack.

Both genders have a bluish patch on their backs. When John J. Audubon first saw the birds, he named them "Blue Yellow Back Warbler."

Parulas are active in the mid and upper canopy where they forage at branch tips for insects, most commonly ants, bees, wasps, and spiders. They rarely look for food close to the trunk of a tree.

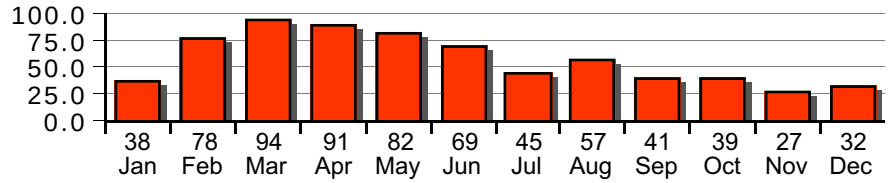
The Parula breeds from southern Canada to southern Florida, and it is found throughout Florida during migration, which peaks in August-September and again in March-April. The majority of Parulas winter in Mexico, Central America, and the West Indies, but some do winter in subtropical southern Florida *(see chart above right)*.

Parula anting on the boardwalk railing.

Male Northern Parula

Nest of alternate materials near south lake, April 2007

Female Northern Parula




*Numbers are the percent of days each month that one or more Northern Parulas were observed by volunteers on the boardwalk.*

When breeding, the Northern Parula prefers cypress and hardwood swamps, hardwood forests, pine-oak woodlands, or wherever Spanish moss thrives. They favor woods with a very dense understory of saplings and shrubs that is near still or slow-moving water. The male arrives first in a nesting area and establishes a territory.

In the South, Northern Parulas nest most frequently in a high clump of Spanish moss, which makes the nest very difficult to spot from below.

They fashion the nest by hollowing out a mass of the Spanish moss and forming a cup near the bottom. An entrance hole is built in the side near the rim of the cup, and often a second hole is built on the opposite side of the nest. The female, with a little help from the male, lines the nest with epiphytic fibers, fine grass, hair, and plant down.

In the northern breeding grounds, Parulas will use beard lichens for nest sites. When Spanish moss or lichen isn't available or isn't dense enough, the nest may be made of existing hanging clusters of twigs or leaves. The same nesting site is often used in successive years.

In Florida, nest building starts toward the end of March and in April, and pairs are generally monogamous. Eggs are laid as early as the first week of April, and second broods are possible because Parulas remain on the breeding grounds until late August. Three to five eggs are laid, one per day, and the female incubates the eggs for 12 to 14 days. The nestlings fledge after 10 days.

## Fast Facts

- Parula is pronounced PAR-a-la or PAR-ya-la, according to *Birds of North America.*
- * Both males and females breed in their first year.
- The oldest documented Parula lived for seven years.