



Corkscrew
Swamp Sanctuary

Along the Boardwalk

September, 2009

www.corkscrew.audubon.org

2009-2010 calendar begins to fill

Dates of activities for the 2009-2010 season are being established with more to come.

Of immediate interest for volunteers are the Volunteer Welcome Back Dinner (Thursday, December 3, from 4-6 PM), the Corkscrew Christmas Bird Count (Saturday, December 19, all day), and the annual Volunteer Recognition Dinner (Thursday, March 25, from 4:30-7:30 PM).

More information and sign-up sheets for the two volunteer dinners will be posted in the Bunting House as the dates draw closer. To participate in the Christmas Bird Count, please contact Sally Stein, the count coordinator.

Dates for Discover Corkscrew programs are also firming up.

Six Early Bird walks are scheduled, beginning November 17; 21 Morning Walks begin January 6; ten Sunset Strolls start October 16; and eight Night Walks begin October 21.

A new offering is Digiscoping, set for February 3. The clinic will be led by Jim Danzenbaker, sales manager for

the Sporting Optics Division of Kowa Optimed Inc., and will focus on the basics of digiscoping with point-and-shoot as well as SLR cameras. The first half hour will be spent in the classroom and the remaining time outside practicing, weather permitting. Digiscoping is taking photographs through a spotting scope with a digital camera.

Three Deep Sky programs and two Wildflower Walks are also on the schedule, and three classes of "Solar Observations" are being planned.

Two Florida Master Naturalist classes will be offered, each consisting of six sessions. The wetlands module will begin October 27 and the uplands module will begin April 13.

A workshop on digital photography as well as other classes may be offered. Information will be posted on the Corkscrew web site.

A full listing of program, as well as information about registration, costs, and size limits for each class are at www.corkscrew.audubon.org/Discover.html.

Quick ID Guide: Gulf Fritillary, Julia, Ruddy Daggerwing

All three orange butterflies are the same size (1-9/16") and in flight could be easily confused.

The Gulf Fritillary and the Julia are most often found in open fields, roadsides, and gardens. The Ruddy Daggerwing is most often found in the cypress forest and hammock edges.

The fritillary and the daggerwing are a bright red-orange while the Julia is an orange-brown. Male Julias are brighter than the females

From above, the fritillary has a number of dark spots with white centers; the male Julia has no noticeable markings and the female has black bands across the forewing; the Daggerwing has three dark vertical stripes.

Both fritillaries and Julias use Passion Vine as host plants while the daggerwing uses figs.

When in doubt, assume it's a fritillary in an open area and a daggerwing in a wooded area.

Fritillary, top; Julia, center, Daggerwing, bottom



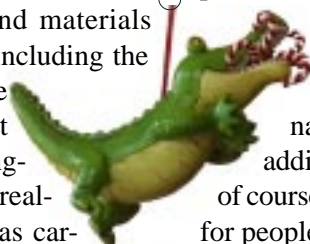
Nature Store stocked for holiday shopping

Get an early jump on holiday shopping by visiting the Nature Store. Holiday items including ornaments, lights, gifts, and 2010 calendars are arriving.

Ornaments and materials vary. Some are ceramic including the whimsical such as the candy-crunching gator at the right and the cane-clinging frog above as well as realistic ceramic birds such as car-

dinals and hummingbirds; other ornaments are glass such as the hummingbird at the right, owls, and gift-bearing gators; and many are hand-painted wooden ornaments including egrets, finches, cardinals, and Painted Buntings.

There are also strings of nature-themed holiday lights in addition to holiday gift cards. And of course, there are plenty of gift items for people of all ages.



What do butterflies and other insects do when it rains, and where do they go?

Where insects go when it rains depends on how much rain falls and on the species of insect.

If the rain is light enough, many insects stay out and are unaffected.

If rain is moderate, most insects adapt and seek shelter. Butterflies and many other insects find a spot under flowers, leaves, branches or other vegetation, cling to the spot, and use it like an umbrella; or, if they are small enough, they may take shelter in a bark crevice.



If the rain is heavy, things can be quite different. Insects that frequent water more often, like mosquitoes and water beetles, can negotiate rising, flooding and flowing water with more ease and they simply go with the flow.

Insects that are more accustomed to dry land are the most affected. Larger insects will cling to whatever shelter they can find until they are eventually washed along by running water. However, it is uncommon for

insects to drown because of heavy rain. Most are just displaced and then find themselves in new surroundings.

Small burrowing insects such as ants find air pockets in underground burrows, even during flooding and flowing water. They require very little oxygen and can survive for weeks using air pockets that are always available even in densely flooded areas.

Once the waters subside there is a high rate of survival among the small insects that used these air pockets. However, the insect or colony may choose to relocate to a higher area.

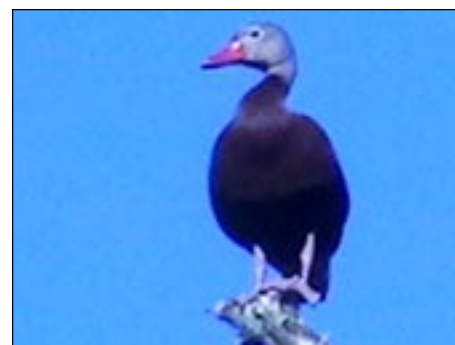
August Sightings



A young male panther passes through the fish farm every 7-10 days (R. Arwood, August 8).



A Green Treefrog rests on a cypress branch near the observation platform (August 21).



A Black-bellied Whistling Duck watches over the north lake early in the morning (August 11).

Odds & Ends

Bats can recognize, identify voices and calls of other individual bats

According to a study in the journal *PLoS Computational Biology*, bats can differentiate the ultrasonic echolocation calls that other bats make so they can actually recognize other individuals.

Bats use brief bursts of sound in sonar navigation – bouncing sound waves off their surroundings to find their way and locate prey. They also use this sonar to locate and identify other bats hunting close by.

In the first part of the study, Dr. Yossi Yovel from the Weizmann Institute of Science, Israel, and his colleagues in Germany recorded the echolocation calls of five greater mouse-eared bats and then tested the

bats' ability to identify the others by playing the recorded sounds and rewarding bats with their favorite food, a mealworm, if they crawled toward one specific bat's sound.

In the next stage – the test – bats were rewarded no matter what choice they made, and they still chose correctly more than 80% of the time.

“So we knew the bats were able to distinguish individuals,” said Dr. Yovel. “But it wasn't clear what they're using to discriminate one from the other. In comparison with humans, it's like being able to recognize a person just by listening to the same one-syllable yell in different voices.”

In the second part of the study, Dr. Yovel's team designed a computer model to mimic the way in which the bats compared the different sounds.

“Our analysis showed that each bat has a typical distribution in the frequencies that it emits, probably a result of the differences in each animal's vocal chords.” He thinks the bats may have an internal reference sound against which they can compare these subtle differences.

This may explain how bats remain in a group when flying at high speeds in darkness, and how they avoid interference between each others' echolocation calls.

Profile Cabbage Palm

Sabal palmetto

Cabbage Palms are about as hurricane-proof as a tree can be. They stand after many hurricanes have blown over the oaks and snapped the pines in two.

The Cabbage Palm was named the official state tree of Florida in 1953 and appears in the state seals of Florida and South Carolina.

The Cabbage Palm is a robust palm with a single, unbranched trunk that typically grows to about 50 feet but sometimes may reach heights of 80 feet. It has a spread of 10 to 15 feet and has a symmetrical crown of large, fan-shaped fronds that spread around its top.

Like many palms, the crown is typically wider when grown in shade and more compact when grown in full sun. The palm's root system is deeply penetrating and may reach depths of 15-20 feet.

Young cabbage palms may take up to ten years before they begin to form a trunk. They grow slowly these first years as root system and the crown forms. Once the trunk does begin to develop the growth rate increases somewhat.

Fronds are alternate, fan-shaped, four to eight-feet long and have a midrib that curves down from the top of the tree. The leaf margins have deep divisions and, many fibers.

Fronds emerge directly from the trunk, which is often covered with old frond stem bases called "boots" that are arranged in a criss-cross pattern. Depending on the individual palm, these may persist down the trunk to the ground even in very old palms. Other trees in the same vicinity may shed their boots revealing a rough fibrous brown trunk. Eventually the trunk will age to gray and the surface will become smooth.

Organic debris often collects in these leaf bases. It is not uncommon to

see a cabbage palm transformed into a hanging garden of ferns and other species. At Corkscrew, the most commonly found fern growing in the base of the boots is the Golden Polypody.

In mid-summer, the cabbage palm bears creamy white flowers on a long branched inflorescence that is held completely within the crown. The fragrant flowers appear in early summer and are followed in late fall or early winter by green spherical fruit that is about one

third of an inch in diameter. When the fruit ripens in the fall, it is almost black in color. Inside is a shiny brown seed that is about one quarter of an inch in diameter.

Squirrels, raccoons, bears, bobwhites, wild turkeys, and many other species of mammals and birds feast on the fruits and seeds.

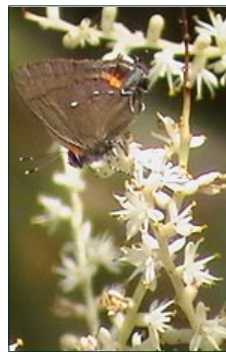
Parts of the Cabbage Palm have been made into a variety of things: pilings for wharfs because they resist attacks by seaworms, stems hollowed out to form pipes for carrying water, ornamental table tops from polished stem cross-sections, scrub brushes from the bark fibers and leaf sheaths, and logs for cribbing in early fortifications because they did not produce lethal splinters when struck by cannonballs.

Today, brooms have been made from the young leaves while older fronds are often made into baskets, mats and hats.

The large leaf buds of immature cabbage palms are used in cooking to make swamp cabbage and hearts of palm salad. However, removal of the bud is lethal to the palm.

Currently, young cabbage palmetto fronds are collected and shipped worldwide each spring for use on Palm Sunday. Cabbage Palms are in flower when many other plants are not and are a significant source of a strong but delicious dark-amber honey.

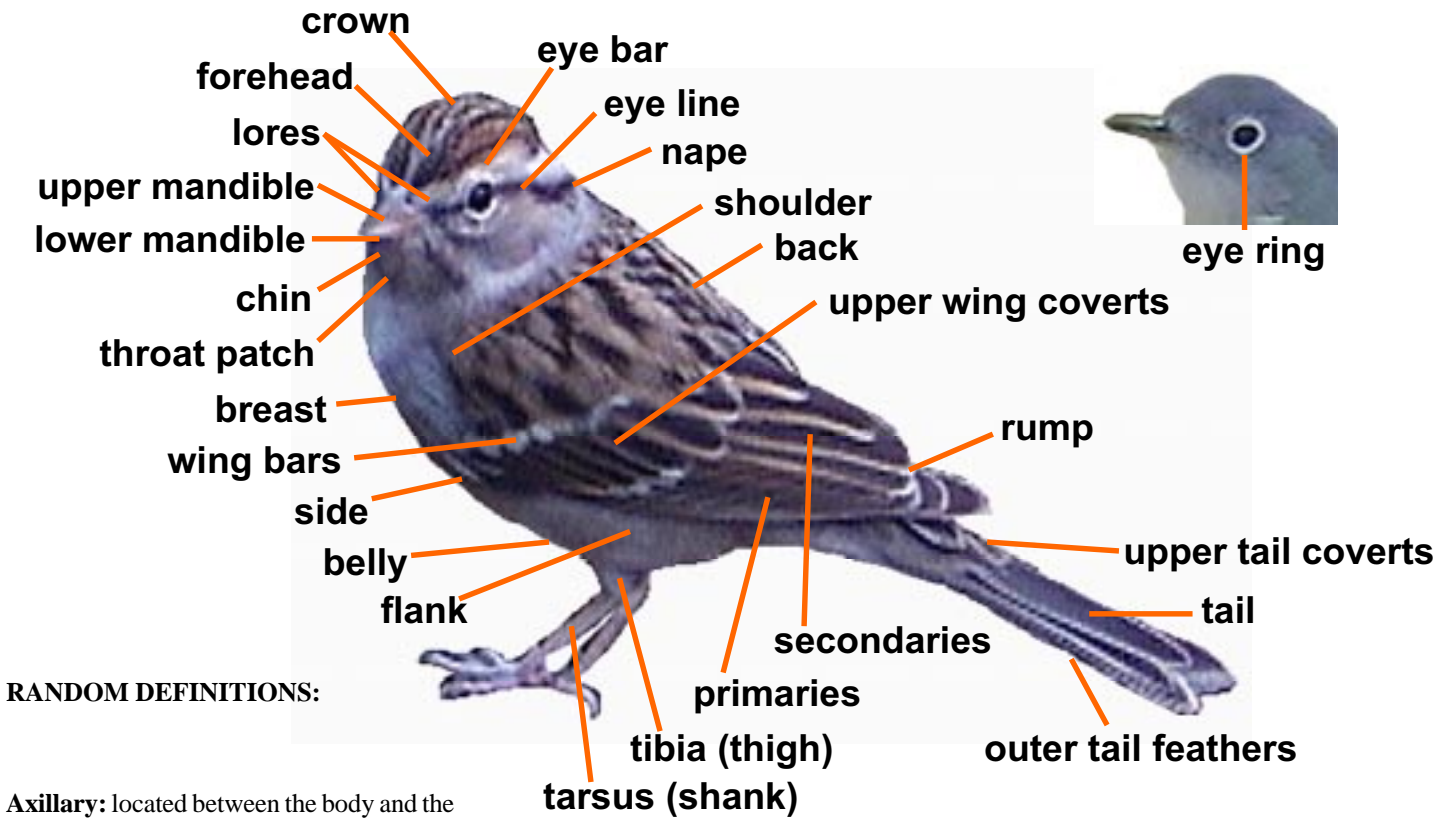
Cabbage Palms were an important tree to the Seminole Indians, who often made their homes on cabbage-palm hammocks. They made bread meal from the fruit, which had a sweet, prune like flavor, and they used the palm fronds to make baskets and to thatch their pavilions, called chickees. A modern chickee with the Cabbage Palm-thatched roof is part of the Strickland Outdoor Education Center by the library.



Reference

As the fall migration begins, challenges identifying birds resurface from the previous year's migration. Trying to read and understand "bird talk" in field guides, or from knowledgeable birders can be trying, especially when a description says something akin to "the key is the color of the lores and the length of the upper tail coverts." If the question, "What on earth are lores and coverts?" arises, then the guide below may help clear up some of the confusion.

Bird Topography



RANDOM DEFINITIONS:

Axillary: located between the body and the wing of the bird. Similar to the human armpit and is also called the wingpit.

Covert: short feathers that cover the bases of longer feathers, usually at wings or tail.

Dihedral: when a bird in flight holds its wings such that they appear to form a "V" shape they are called dihedral

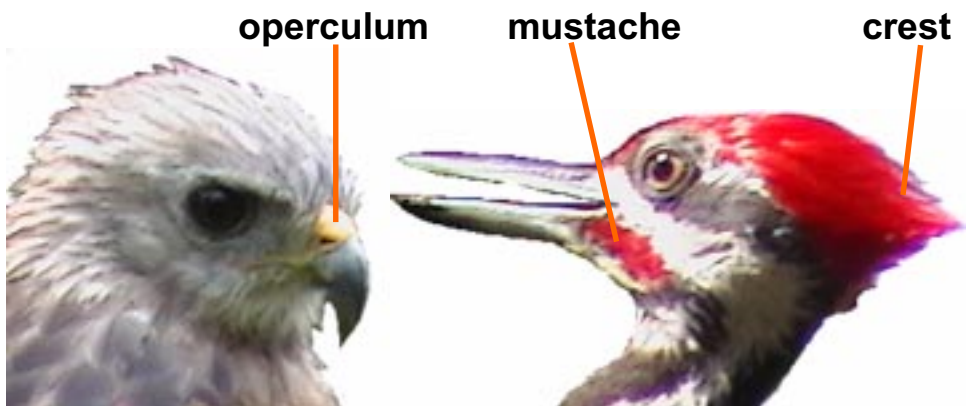
Eye bar: the line of differently colored feathers over the eyes.

Eye line: the line of feathers just in front of and behind the eyes.

Eye ring: the circle around the eye formed of feathers that are a different color from the rest of the face

Gape: the hinge where the mandibles meet; also called commissure

Lore: the space between the eye and the bill.



Mustache: the contrasting color patch from the chin down through the throat area

Operculum: the smooth and featherless patch of skin located where the beak attaches to the forehead of certain birds. It is often enlarged and brightly colored. It is also called the cere.

Throat patch: feathers of a contrasting color found on the throat.

Wing bars: pale or white tips of the greater and median secondary coverts on the wings. From a distance, it can be viewed as a horizontally striped pattern making the wing look layered.