



Corkscrew
Swamp Sanctuary

Along the Boardwalk

August, 2009

www.corkscrew.audubon.org

Storks enjoy good nesting season

A final, official figures are in for this season's Wood Stork nesting.

According to Jason Lauritsen, assistant sanctuary director, the colonies at Corkscrew initiated just over 1,100 nests without any significant abandonment of nests or nest failures.

Early nesting birds, those that initiated nesting by around mid-January, had approximately 2.7 chicks per nest on average.

Stork pairs that waited until after mid-January to begin nesting had approximately 2.1 chicks per nest.

Approximately 28% of the birds nested early (about 320 nests), but the bulk of the nesting (72%, or about 800 nests) started late as usual.

Together, the 1,120 nests produced 2,570 chicks.

In addition to lower productivity (chicks per nest), the late fledging chicks faced a more difficult feeding environment as water levels

were exceedingly low when they came off the nest, and some early heavy rains fell in May diluting what was left of the foraging base.

The earliest chicks to fledge probably had ample time to build their flight muscles and hone their feeding skills, giving them a much better chance of survival during their first year when chick mortality rates are the highest.

Compared to recent years, 2008-2009 was a great nesting season, helping compensate for the lack of nesting during the previous two years.

The three most successful years in recent past were in 1992 with 1,200 nests/2,750 chicks; in 2000 with 1,720 nests/2,540 chicks; and in 2002 with 1,240 nests/3,160 chicks. The average for the last ten years is 610 nests and 1,100 chicks per season.

Complete nesting data from 1958 through 2009 is at www.corkscrew.audubon.org/Wildlife/Birds/Nesting_Data.html.



Annual butterfly count nets 40 species

Thirteen volunteers in three groups covered the boardwalk, north end, and Panther Island on July 21 counting butterflies for the annual NABA tally.

40 species were found with 963 individuals. Most commonly seen were Queens (355 individuals), Viceroy (139 individuals) and Pearl Crescents (60 individuals).

From the boardwalk, 20 species were identified, the most common, in descending order, being Queen, Brazilian Skipper, and Gulf Fritillary.

Complete totals are in the wildlife section on the Corkscrew web page.

Give a day, get a night

All 53 hotels in the United States operated by Sage Hospitality are giving away a free night or up to 50% off to guests who prove they completed at least eight hours of community service between July 1 and December 20, 2009.

Applicants must provide a letter on the nonprofit organization's letterhead verifying the completion of the volunteer hours at a 501c3 organization.

The room must be reserved at least 48 hours before arrival and guests must pay taxes for the room. Blackout dates apply and there are a limited number of rooms available at each hotel. The offer runs to December 20. Details are at www.giveadaygetanight.com.

Quick ID Guide: Two common doves: Ground Dove and Mourning Dove

Mourning Doves are the most common dove in North America and are the most slender, but they are almost twice the size of the Ground Dove.

Legs and feet of Mourning Doves are pink and the bill is dark; Ground Doves are the opposite: a pinkish bill and darker legs and feet.

The Mourning Dove has a few black spots toward the rear of its wings while the Ground Dove has a series of dark spots on the wing coverts that almost resemble bars. The Ground Dove's breast has a pinkish cast while

the Mourning Dove's breast is gray.

In flight, the wings of the Mourning Dove are more pointed and are grayish underneath. The wings of the Ground Dove are more rounded and

Ground Dove (*Columbina passerina*)



have a noticeable reddish-brown hue.

In flight, the Mourning Dove's tail is long and tapered while the Ground Dove's tail is shorter and more rounded.

Mourning Dove (*Zenaida macroura*)



In Case a Visitor Asks

When do birds sleep?

If Barred Owls are active day and night, and if Mockinbirds forage during the day and sing at night, when do they all sleep?

No one has ever actually proven that sleep is physiologically necessary for birds because sleep patterns in birds are challenging to measure scientifically. Laboratory experiments can't duplicate the varied conditions birds must face in their natural environments, and even the smallest sound or movement in a lab would disrupt the natural patterns the scientists are trying to study. But there are theories.

A main benefit of sleep/rest for birds may be that standing still helps conserve energy. Resting motionless, during day or night, with eyes open or closed, reduces the need to be 24-hour feeding machines in order to maintain a high metabolism.

So birds will nap lightly off and on day and night rather than sleep soundly. There are advantages to that strategy.

Smaller birds must be concerned with predators both during the day and during the night. If they're sound asleep, they can't hear or see a potential predator hovering above or lurking below, and they can't do anything about it. Not good for the bird!

Birds have two sleep phases: *quiet sleep* when they open their eyes and peek every three to six seconds, and *active sleep* when their eyes stay shut.

Birds that are most active during the day nap more frequently at night; birds that are most active at night nap more frequently during the day.

Communal roosting increases the amount of time available for active sleep because at any time there will always be some peekers on the alert for possible predators.

Younger, less dominant birds that must roost at the edges of the colony have less active sleep because their location makes them more vulnerable.

July Sightings



A black bear cub lounges in a cypress limb along the observation platform spur (July 14).



Pig Frogs quickly repopulated the two lakes. Juveniles appeared in late July (July 17).



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Eight blooms opened on the Ghost Orchid by late July with more buds appearing (July 21).

Odds & Ends

Would you believe... Mosquitoes do not bite, sting, or feed on blood

How do mosquitoes bite?

Mosquitoes don't really bite, nor do they really sting in the sense of a hypodermic needle piercing the skin.

Females saw their way in. The female mosquito proboscis (long tubular mouth parts used for feeding) consists of six different shafts. Four are cutting and piercing tools; a fifth transports saliva to the host; the sixth transports blood from the host.

When a female mosquito pierces the skin, she injects a small amount of saliva into the wound before drawing blood. The saliva makes penetration easier, acts as somewhat of an anesthetic on the host, and prevents the blood from clotting in her food canal.

Why do mosquitoes bite?

Both male and female mosquitoes feed on plant nectar, fruit juices and liquids that ooze from plants. The sugar is burned as fuel for flight and is replenished on a daily basis. Mosquitoes don't feed on warm-blooded hosts.

Mosquitoes belong to a group of insects that requires a protein in blood to develop fertile eggs. Since males do not lay eggs, male mosquitoes do not bite. Females are the blood-seeking egg producers.

Female mosquitoes lay multiple batches of eggs and require a fresh blood meal for each batch. Blood is reserved for egg production and is imbibed less frequently.

What causes the welt and itch?

It isn't the bite or loss of blood. It's an allergic reaction to the saliva, which is why some people are more affected by mosquito bites than others.

Four mosquito myths

1. *Bug zappers are effective against mosquitoes.* Bug zappers do not control mosquitoes and can reduce the populations of beneficial insects.
2. *Electronic repellents keep mosquitoes away.* They don't; save your money.
3. *Some mosquitoes can be two inches long.* They don't get that big; it was probably a crane fly.
4. *Mosquitoes nest in vegetation.* Mosquitoes do not nest.

Ruddy Daggerwing

Marpesia petreus

The Ruddy Daggerwing is one of Corkscrew's most common and most colorful summer butterflies. Also called the Southern Daggertail, and in the West Indies the Tailed Flambeau, its range is from Brazil north through Central America and Mexico, and from the West Indies north to southern Florida. Occasionally some stray north to a few states in the Southwest and the Great Plains.

The Ruddy Daggerwing flies in Florida for most of the year but is most commonly seen from May through July. It is in the brush-footed family and its closest relatives are the Admirals.

Although in flight it might be mistaken for a Julia, the Ruddy Daggerwing is easily identifiable: its wingspread is about three inches, the tip of its forewing is elongated, the hindwing has long dagger-like tails, its topside is bright orange with three thin black lines, and its underside is mottled brown and black. When perched with wings closed, it closely resembles a dead leaf.

It inhabits tropical lowland forests and edges and hardwood hammocks. Its larval (caterpillar) host plant in Corkscrew is the Strangler Fig (*Ficus aurea*), so from the boardwalk it is most frequently seen in the cypress forest. Elsewhere, it will also use the Common Fig

(*F. carica*) and wild Banyan tree (*F. citrifolia*).

Although the caterpillars feed almost exclusively on

fig leaves, adult butterflies are more generalist feeders, nectaring at milkweed, Climbing Hempweed, and Cabbage Palm and feeding on rotting figs and other fruits.

When it's time for mating, male Ruddy Daggerwings perch in sunlit trees about 15-30 feet above ground level and watch for passing females. During this time, males are territorial and frequently fly down from their perches to investigate anything that is bright orange.

After mating, females search for suitable Strangler Figs on which to lay eggs. The initial contact is usually visual, based on leaf shape or other clues such as the presence of figs.

The female lands on the plant and tastes or smells it with the chemical sensors on her feet. If she finds the plant suitable, she will lay single eggs on stems near emerging leaves or on young fruit. Eggs typically hatch within a few days after being laid and the small larva



begin to feed. In South Florida, there are usually three broods a year.

New Ruddy Daggerwing caterpillars lack the bright triangular patches of older caterpillars and are well camouflaged on leaf stems and twigs. They have enormous appetites and grow rapidly. To accommodate their rapid growth, each larva sheds its skin several times, and the appearance of the larva changes slightly after each molt.

When fully grown, larva seek a sheltered place on a Strangler Fig, attach to a leaf or twig, and molt into the pupa. When the butterfly emerges, it unfolds and dries its wings and is ready to begin the cycle anew.



Life Cycle of the Ruddy Daggerwing Butterfly

- (1) egg laid on young Strangler Fig fruit, (2) emergent caterpillar, (3) caterpillar after intermediate molt, (4) final stage of caterpillar, (5) pupa on underside of Thalia leaf, (6) butterfly emerging from cocoon

