OBSERVATIONS FROM NATURE

JULY 11-31, 2011
PHOTOGRAPHS BY
JOYCE AND GARY KOCHERT

July 10

The house we rented in Florida is on a canal, and it has a boat dock. Some Needlefish could be seen gliding about. The biggest of these was about 10 inches long. I had no way to catch one, so I can not



be sure of the identification, but this one is probably an Atlantic Needlefish (*Strongylura marina*). The blue tail fin is the main character I am using for this identification.



Here is Jack at the beach with a large group of Laughing Gulls (*Leucophaeus atricilla*) that are hoping for a handout.

Various birds enjoyed sitting on the fences bounding the back yard. Here is a Little Blue Heron (*Egretta caerulea*) showing its characteristic gray beak with a dark tip. The much larger Great Blue Heron (*Ardea* herodias) was a more frequent visitor to the back yard.



Here is Another creature I photographed off the boat dock in the canal. It is very small, only about 1.5 inches in length. I think it is a juvenile needlefish. Note the nice blue eyes.



We visited an aquarium in Tarpon Springs. They had some Lionfish (*Pterois volitans?*) on display. These very interesting-looking creatures are native to the Indo-Pacific region, where about 30 species occur. They are popular species for marine aquaria. Two species were inadvertently introduced into the Atlantic in the mid-1990/s, and they are fast becoming a very undesirable invasive species. They reproduce rapidly; their populations have reached densities several times that found in their native



range. Lionfish compete for food with more desirable food fish such as snappers and groupers. Lionfish are also well-known for their very venomous spines. The spines protrude from the body in a manner somewhat similar to the mane of a lion, giving the fish its common name. Because of this very effective defense, adult Lionfish have few known predators. Lionfish can cause extreme pain, headaches, and nausea in a human unfortunate enough to be stuck by one. However, few fatalities have been recorded. To control the expanding population in the Caribbean, many organizations are promoting the harvesting of Lionfish for food. The fillets are safe to eat, and are said to be very tasty. I saw a TV news item this week in which Lionfish were speared by a scuba diver, prepared, and eaten.

July 13

We went for a trip to a sandbar/island just north of Anclote Key. A lot ot terns were standing around on the beach. The larger ones below are Royal Terns (*Thalasseus maximus*) in non-breeding plumage. The smaller ones in the back are, I think, Forster's Terns (*Sterna forsteri*), and the black-billed ones center left are Sandwich Terns (*Sterna sanvicensis*), one juvenile and one in breeding plumage.





Here is a Blue Crab (*Callinectes sapidus*) that was crawling about very near the beach.

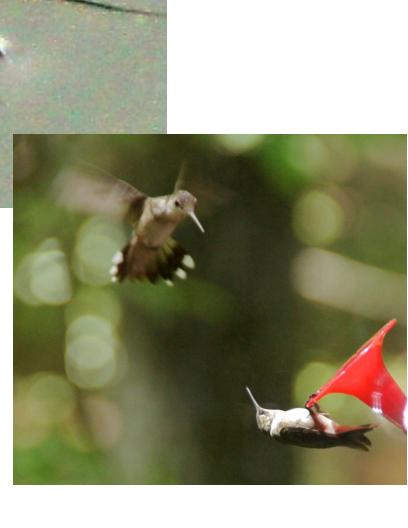
There were a lots of scallops to be found in the sea grass just off the beach. When disturbed they went swimming off by opening and closing their shells forcibly to expel water. These are probably Bay Scallops (*Argopecten irradians*), but I am not sure.

Each scallop has many bright blue "eyes" arranged along the edge of the mantle. These can be used to detect light and dark as well as motion.

Back home again. Here are two more pictures of water striders taken off the boat dock behind my house. These are small, less than 1/2 inch in "legspan". They are differently colored than the ones I took earlier (see July 6). I don't know if they are a different species or if this species is sexually dimorphic.



There is a lot of activity around the hummingbird feeders. There are multiple feeding perches on each feeder, but they insist trying to drive each other off.



This small dragonfly was caught in a spider web when I first spotted it. I could not see any spider in or around the nest. The dragonfly was quite alive when I plucked it from the web. It is a tiny thing, as you can see from its size relative to my fingers. It is a female Eastern Amberwing (*Penthemis tenera*). I have seen lots of males of this species flying around the lake, but have yet to get a good picture of one. When I released this one, it flew away in a very sprightly fashion.





This species has nice dark red eyes and a lighter red stigmas (the rectangular-shaped patch of color on the front edge of each wing near the tip).

In the picture at right, the characteristic two yellow-green stripes can be seen on the front of the thorax. The two very short antennae can just be made out on the closeup of the head shown above..

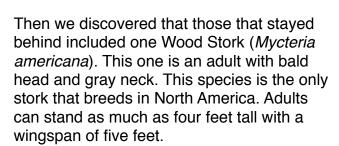
Driving to Statesboro, Georgia, we stopped at a cotton field so I could take some pictures of the flowers and the developing bolls. Cotton flowers are a nice red when they are first opening, but soon turn pure white. An immature cotton boll is shown at lower right. This type of cotton (*Gossypium hursutum*), or Upland Cotton, was domesticated in Mexico or Central America about 5,000 years ago. Cotton is in the same plant family (Malvaceae) as hibiscis, okra, cacao (the source of chocolate), and baobab (the very picturesque giant trees found in Africa and Australis)..

I hope to add some pictures later of the bolls when they mature and open to reveal the cotton fibers and seeds.

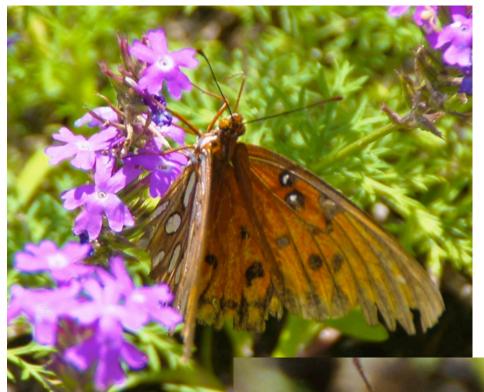




Further down the road, we saw a swamp with lots of egrets feeding. These are Great Egrets (*Ardea alba*). When we stopped for photographs, most of them took off.







At the next stop, there was a Gulf Fritillary (Argraulis vanillae) feeding on Verbena. This view shows the diagnostic black-rimmed white spots on the forewing. Note how frazzled the trailing edges of the wings are on this one.

The picture below shows the nice spotted head and the long proboscis uncoiled to probe into a Verbena flower for nectar. The large underwing spots can also be seen on the creature's left wing.

The Gulf Fritillary gets the "Gulf" in its names because it is sometimes seen in large groups migrating across the Gulf of Mexico. It is native from Argentina through Central America and Mexico into the Southern United States. On the West Coast it is found as far north as the San Francisco Bay area.



The larvae feed exclusively on passionflowers, such as the Maypop that I described in these notes for July 8.

The underwing pattern is shown in the picture to the left. Again, note the very frazzled wings.

I have seen Robber Flies around on several occasions. Although they superficially look like some sort of bee or wasp (Order Hymenoptera), they are in fact a type of fly (Order Diptera). Robber Flies are predators of other insects, and they are very adept at catching their prey on the wing. They behave somewhat like dragonflies in this respect. They perch and watch for passing insects. then fly out to catch them. Dragonflies, however, patrol the airways much more than do Robber Flies seem to. The latter seem to perch and ambush almost exclusively. They are usually regarded as a helpful species, although they do not confine their diet to pest insects, and will catch and eat honeybees, for example.

There are more than 1000 species of Robber Flies in the U.S. with most species found in the Western part of the country. Eastern states usually have about 100 species. Georgia has 144 reported species. The one I have pictured here is about 1.5

inches long, and I think it is Promachus rufipes (I do not know a common name for it).





I took more pictures of dragonflies down by the lake. This picture of a Widow Skimmer (*Libellula luctuosa*) shows an interesting habit.

Dragonflies are insects, and have six legs. When perching, however, they often hold on with only four. The front pair of legs, as you can see if you look closely, are wrapped around its "neck" just behind the head. Some authors say this enables them to take off faster; others say they put their front legs there to wipe their compound eyes.

The blue-gray surface coat on the abdomen of this dragonfly is a waxy, frosty-looking secretion that tends to increase as the dragonfly ages. It resembles the surface coat of certain





fruits, such as grapes. The adjective used to describe such a coating is "pruinose", a word derived from the Latin for hoarfrost.