

Pelican Island Audubon Society

Peligrum



- founded in 1964 to serve Indian River County -

P.O. Box 1833, VERO BEACH, FL 32961 772-567-3520 www.pelicanislandaudubon.org

Our 46th Year Vol. 46 No. 3 March 2010

Our Mission: To preserve and protect the animals, plants, and natural communities in Indian River County through advocacy, education, and public awareness.

A Freezer Full of Fish

**March 15, 2010 ☆ 7:30 p.m.
Vero Beach Community Center**



The Pelican Island Audubon Society March 15, 2010 general meeting starting at 7:30 p.m. in the Vero Beach Community Center, 2266 14th Avenue features Dr. Jon Moore presenting a program entitled *A Freezer Full of Fish* recounting his experiences in the Antarctic. Tamara Howard of FAU interviewed Dr. Moore about his trip:

“In the spring of 2009, Dr. Moore spent five weeks on a research cruise to Antarctica aboard a Russian ship. The primary goal of the cruise was to investigate the fishes and invertebrates around the South Orkney Islands off the Antarctic Peninsula. The South Orkney Islands were the site of intensive overfishing in the 1970s and 1980s, resulting in greatly reduced numbers of fish and invertebrates. In 1990, the area was closed to all commercial fishing.

‘In 1999, a research vessel went back to that area to determine whether stopping the fishing had improved the populations of fishes and invertebrates. They actually found little improvement. So, our trip was to investigate whether nearly twenty years of no fishing had helped the populations. It turns out that the populations were finally improving. This says a lot about how long it takes for fish and invertebrate populations to rebound from overfishing,’ said Dr. Moore.

The cruise also examined fishes from the tip of the Antarctic Peninsula, collected oceanographic data, studied penguin and fur seal colonies on some of the Antarctic Islands, and picked up scientists who were returning from work at two field stations. Dr. Moore said, ‘Not only did we get a lot of information on the fish and invertebrate populations and how they recovered from fishing, but we also found several species unknown to science (including quite a few invertebrate species and possibly two new fish species). In addition, we discovered invertebrate reefs made of sponges and bryozoans. We wrote a preliminary report on the results of the cruise, but I am working on a formal paper listing all the fish species we caught and what we discovered about their biology.’”

Jon Moore is an Associate Professor of biology at Florida Atlantic University’s, Wilkes Honors College in Jupiter. He received a B.S. in Geosciences and a B.S. in Ecology and Evolutionary Biology at the University of Arizona. He received his M.S. and Ph. D. in Biology from Yale University. He has studied deep-sea fishes for 20 years. For the last six years he has explored a number of seamounts off the east coast of the US using the manned submersible Alvin and the unmanned ROV Hercules. Dr Moore also has a land-based research program studying reptiles and amphibians in southern Florida, including a number of invasive lizards. *Stay and enjoy light refreshments after the program.*

Bird Photo of the Month



“Stretch, Stare and Sit...3 Wood Storks” by Don Morris

Place taken 01-12-2010: my back yard in Grand Harbor
Camera: Casio EX FH 20 point and shoot on tripod
Lens: 520mm zoom 1/500sec f 8 ISO 100

Learn more, including viewing a large color image of this photo and how to enter your own photographs, at www.pelicanislandaudubon.org

Upcoming Events

March 7 - PBS Frontline documentary *Poisoned Waters* written by Hedrick Smith, Free, 7 :00 p.m., Emerson Center, 1590 27th Avenue, Vero Beach - (772) 778-5249.

March 13 - birding field trip to Padgett Ranch led by Jens & Melissa Tripson. Carpool leaving from Vero Beach at 7:00 a.m. Space is limited. Call 772-567-3520 for reservations and directions.

March 13 - Pelican Island Wildlife Festival, 10:00 a.m.-6:00 p.m., Riverview Park, Sebastian, 772-562-3909 x258.

March 26 - 6th Annual Goby Fest, St. Sebastian River Preserve State Park, 10:00 a.m. to 4:00 p.m., 772-643-4925

March 26-28 - 6th Annual Audubon Academy, *Possibilities Through Partnerships*, Gainesville, presented by Audubon of Florida and its chapters, www.audubonofflorida.org or 352-475-1999 or 850-251-1297

Kite Flying by Linda Chancellor

Several years ago on a breezy day in March, I happen to look up in the sky and noticed the silhouette of a large bird with a forked tail soaring on the air currents. I ran inside to get my husband and a camera and quickly returned to see this beautiful bird continue to soar and swoop as if it did not have a care in the world and then it was gone over the tree tops. We raced to grab a bird book and identify this bird. It was the American Swallow-tailed Kite, *Elanoides forficatus*. The wing span of this bird is 48 to 50 inches. The Swallow-tail Kite's range is all of Florida and the southern parts of Georgia, Alabama and Mississippi. The underside of the Kite is a distinct black and white pattern which is the key to identification as most of its life is spent on the wing. These birds grab prey on the wing by slowly descending, grabbing prey feet first and then swooping upward (kiting). They also drink on the wing by skimming along the water like swallows.

Two weeks later we drove to Stephan Foster State Park, located on the historic Suwannee River for the Annual Florida Trails Convention. Stephen Foster misspelled the name to Swanee to fit the music. The park was full of blooming azaleas at that time of the year. A museum and a historic Carillion that plays many of Stephan Foster's famous tunes are located in the park. The park, located in the historic town of White Springs, was also designated as one of the Florida Trail Gateway Cities (www.whitesprings.org). White Springs was incorporated in 1800 and was famous for its sulfur mineral springs. It is a lovely historic town to walk through. We had planned to kayak a section of the Suwannee River even though there was a good chance of rain. The river current was very slow and

we felt as if we were the only ones on the river. Suddenly I spotted a silhouette against the cloudy sky. The white underbelly, black wings and that forked tail. It looped and swooped for a while and then it was gone. Two more times that day we spotted solo kites. When we finished our paddle we headed for the local café. As we entered the building what a surprise to see both walls painted with murals depicting the Suwannee River with its native trees, plants and wildlife. There it was another Swallow-tailed Kite included in one of the murals. When we returned last year the café had closed but I still think of the special sightings of that trip.



Imagine my surprise when I spotted a Swallow-tail kite for the third time that month. This time it was on a highway sign for The Great Florida State Birding Trail. The Great Florida State Birding Trail is a project of the Florida Fish and Wildlife Conservation Commission (the Kite is on their logo also). The trail uses 2000 miles of highway to unify over 489 sites that are excellent bird watching sites or provide opportunities for bird education. Why was this bird chosen for the logo. I emailed Mark Kiser, Birding Trail Coordinator, to ask why. He responded that he had been there at the creation of this project but did not know the answer. He believed it was chosen because Florida has more Swallow-tailed Kites than any other state and it represents Florida well because it can be found statewide. Maybe it is the silhouette. Think about it, no other bird is so striking on the wing and so easy to identify. In researching for the article I found that the The Florida Fish and Wildlife Conservation Commission also writes a newsletter several times a year appropriately called Kite Tales. You can access it at <http://myfwc.com/gfbt/> and then choose trail newsletter.

Where have all the insects gone? Long time passing... When will they ever return? A Case for Native Gardens.

Most folks know little about the most diverse group of organisms ever to evolve on our planet. And if they do, it is usually regarding a negative experience with mosquitoes, no-see-ums, cockroaches, wasps, termites, fire ants, or crop eating caterpillars. Usually the solution is to hire a pest control firm to try to eradicate them. These pesky insects actually are just a small percentage of the more than 920,000 described insects species found in the world. Thousands more are described yearly, and some researchers estimate that there are 15 to 30 million insect species still not described. Insects have been here a long time beginning about 350 million years ago, while humans first appeared about 100,000 years ago.

Insects represent 85 percent of all animal species (Mammals 4,000, Birds 9,000, Reptiles and Amphibians 5,500, and Fishes 18,000). There are more species of dragonflies than mammals and almost twice as many butterflies as birds. Insects play a vital role, as they are critical food sources low on the food chain for many species.

Plants are essential to life on this planet. With few exceptions, neither we nor anything else can live without them. They provide the oxygen we breathe, capture the sun's energy, which through photosynthesis turns this energy into food. Plants often are referred to as a primary producer of the "food web," and they provide animals, including humans with shelter.

Worldwide, 37 percent of animal species are plant-eating insects. These species convert plant tissue to insect tissue that provides food in the form of themselves for other species. As E. O. Wilson points out: "a land without insects is a land without most forms of higher life." Nearly all (96%) terrestrial bird species in North America rely on insects and other arthropods to feed their young. In other words, insects provide energy to animals that can't eat plants. Part of the nearly 50% population reduction in many of our bird species, within the space of 50 years, is the result of the loss of native plants that serve as food for insects that birds require to rear their young.

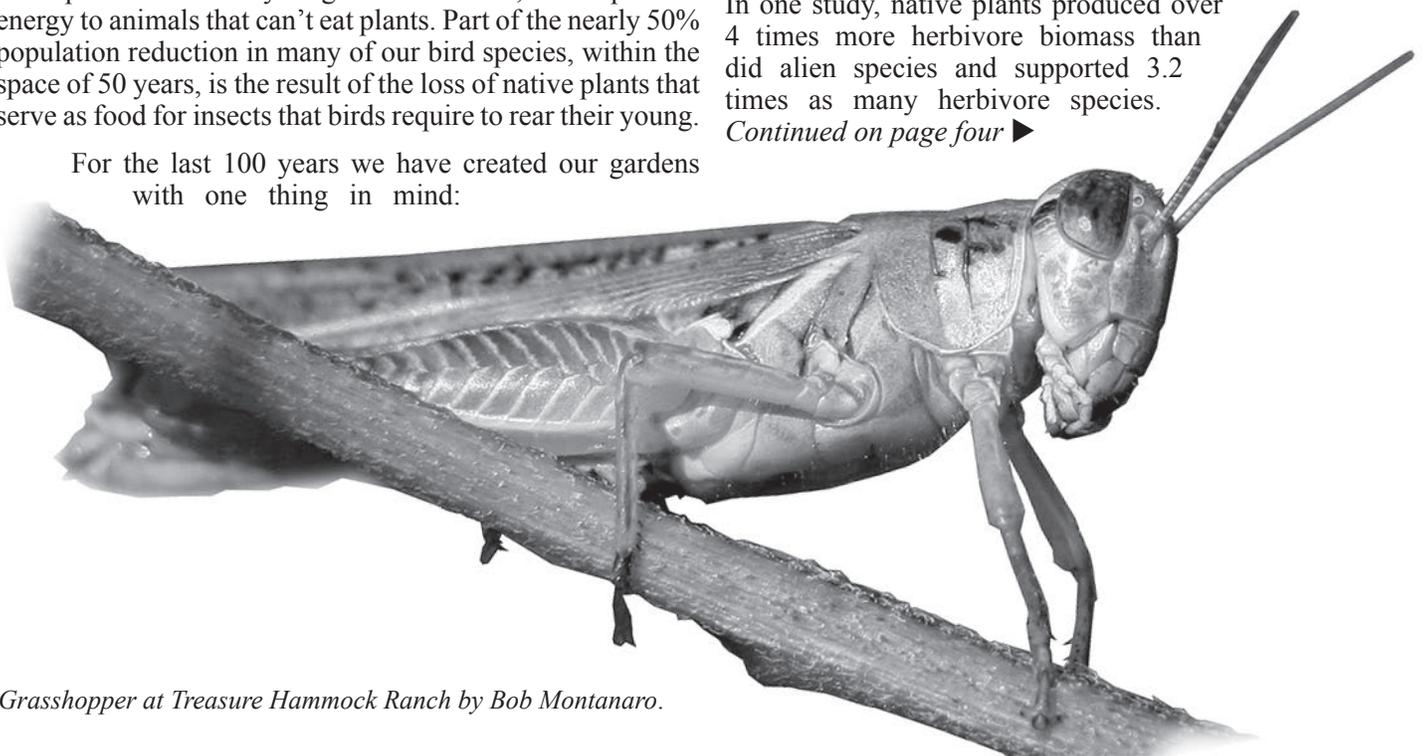
For the last 100 years we have created our gardens with one thing in mind:

aesthetics. A new book entitled *Bringing Nature Home-How You Can Sustain Wildlife with Native Plants* by Douglas W. Tallamy points out: "All plants are not created equal, particularly in their ability to support wildlife." Tallamy, an entomologist, noticed that many showy alien plants do not have insect damage compared to natives. Our native insects have adapted to our native plants for food, but unfortunately most native insects are not able to eat or to survive on alien plant species. Alien plants have different chemicals that are unrecognizable, poisonous or can't be digested by our native insects. With the continued habitat destruction on our planet and the resulting loss of species, this book redefines what gardens need to be like to preserve our native flora and fauna and maintain biodiversity. Most plant eating insects (90%) are specialists feeding only on one species of plant, and 10% are generalist feeding on more than one, thus we need a variety of plants to support numerous insects to support varied wildlife. Yards with large areas of grass are thus what are termed a "monoculture" meaning there is one plant species instead of a variety needed to support diverse insects.

Tallamy suggests that we fundamentally need to change the way we think about our gardens and their role in the larger landscape. Moreover, gardens with natives could be extremely important in preserving our ecosystems. He points out: "Like it or not, gardeners have become important players in the management of our nation's wildlife." They can provide the biodiversity needed to support our native plants and animals and the ecosystems that sustain them. "Gardening with natives is no longer just a peripheral ...It is an important part of a paradigm shift in our shaky relationship with the planet that sustains us."

In one study, native plants produced over 4 times more herbivore biomass than did alien species and supported 3.2 times as many herbivore species.

Continued on page four ►



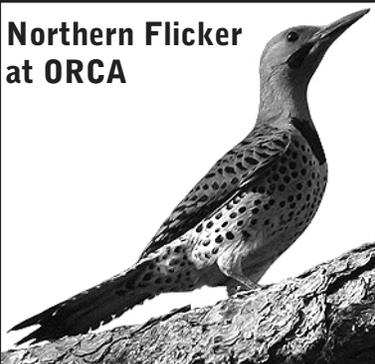
Grasshopper at Treasure Hammock Ranch by Bob Montanaro.

Officers
 President
Richard H. Baker, Ph.D.
 1st Vice President
Jens Tripson
 2nd Vice President
Susan Boyd
 Recording Secretary
Darlene Halliday
 Corresponding Secretary
Peter Sutherland
 Treasurer
Robert Adair

Elected Directors
 Bob Bruce '12
 Joe Carroll '11
 David Cox, Ph.D. '12
 Deborah Ecker '11
 Nancy Irvin '10
 Susan Richardson '10
Appointed Board Members
 Leah Blythe
 Pat Casselberry
 Joel Day
 Bill Halliday
 Tina Marchese
 John Orcutt
 Neil Stalter
Advisory Board Members
 Janice Broda
 Lynne Larkin
 Melissa Tripson
 Billi Wagner

Pelican Island Audubon Society, Inc. is registered with the Florida Dept. of Agriculture & Consumer Services. A copy of the official registration and financial information may be obtained from the Div. of Consumer Services by calling toll-free within Florida 1-800-435-7352. Registration does not imply endorsement, approval, or recommendation by the State.

Northern Flicker at ORCA



After a talk on *Birds of ORCA* by Richard Baker on Feb. 20, the 2010 ORCA volunteer training class found this Northern Flicker (*Colaptes auratus*), a medium-sized to large woodpecker, along the South ORCA trail.

For more information, visit www.ourorca.org

► *Continued from page three* ► Native plants in the study supported a whopping 35 times more caterpillar biomass than the aliens: moths, butterflies, and sawfly caterpillars were the largest diet component of insectivorous birds. Alien plants occupy space and use resources (light, water, and soil nutrients) that would otherwise have been available for a native plant, but do not pass the energy it harnesses from the sun up the food web as the insects will not be feeding on them. Interestingly, the alien buddleias or butterfly bush attract nectar-seeking butterflies and are common in many butterfly gardens, but no larvae can live on the plant! Thus adults do not lay their eggs on such plants, but only come for the nectar.

Today over 5,000 species of alien species have invaded the natural areas of North America. They become pests themselves, and they can bring in as hitchhikers, serious pests and diseases into the country. In Indian River County we have 3 recent examples:

- Laurel wilt, a new disease of redbay (*Persea borbonia*) and other plant species in the family Lauraceae, is causing widespread mortality in the coastal regions of South Carolina, Georgia and Florida. The disease is caused by an exotic fungus (*Raffaelea* species) that was introduced in 2002 by an exotic insect, the redbay ambrosia beetle (*Xyleborus glabratus*), which is native to Asia and is the 12th new species of ambrosia beetle introduced into the U.S. since 1990.
- A weevil, (*Metamasius callizona*), a native to southern Mexico and Central America, was detected in Broward County in 1989 attacks and kills our large native Tillandsia bromeliads and also Catopsis and Guzmania genera.
- In Florida, we have a bacterium (*Candidatus liberibacter*) that causes greening disease in citrus also an alien, considered to be the worst citrus disease in the world. First seen in August 2005, it has spread to all citrus producing counties in Florida by the Asian citrus psyllid (*Diaphorina citri*), a tiny homopteran insect that arrived on infested orange jasmine, an ornamental plant that is shipped by the thousands throughout the state by discount stores. Robert Adair, Director of the Florida Research Center, states that our famous citrus groves will be dramatically reduced in Indian River County and the State of Florida in the next 3 to 5 years due to this deadly disease unless a cure is found. Some 'alien' plants like avocado or mangoes feed people, squirrels, raccoons, ... and are pecked upon by birds.

There is no debate that we should close our borders to carriers of human diseases like SARS, mad cow disease, and avian flu virus. Why are the native plants that sustain us and our native animals less worthy of protection? We can all do a better job supporting the natural world, which is both beautiful and full of life. Why can't our yards reflect this? What if every homeowner with a yard, began planting more diverse native plants, replacing our monocultures? Native plants are more likely to survive frosts, use less water, pesticides, and fertilizer thus saving us money and reducing pollution. However, native plants put in the wrong habitat may require water or fertilizer, and therefore the 'right' native plant needs to be put in the right place.

Life began in Florida with native plants, but may end with aliens...unless we act together now.

Richard Baker, President

Visit Pelican Island Audubon on the web at

www.pelicanislandaudubon.org

Thank you to Jens & Melissa Tripson for the refreshments at the February meeting.

Pelican Island Audubon Society 2010 Membership

National Audubon*	\$20	_____
Pelican Island Audubon**		_____
Individual	\$20	_____
Family	\$30	_____
Supporting Contribution	\$50	_____
Student***	\$5	_____
Total	\$	_____

*National Audubon membership

This includes subscriptions to *Audubon Magazine* and *The Florida Naturalist*.

**Pelican Island Audubon membership

Dues which PIAS will use for environmental education and advocacy and subscription to the *Peligram*

***Student Membership receive electronic copy of Peligram only - requires e-mail address

NAME: _____

ADDRESS: _____

E-Mail

Please send your name and address along with a check payable to the "Pelican Island Audubon Society" to:

Pelican Island Audubon Society
P.O. Box 1833, Vero Beach, FL 32961

Credit card payments call (772) 567-3520 M - F 9AM-1PM
 Please email us if there is a local environmental issue which concerns you at piaudubon@bellsouth.net