

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 52st Year Vol. 52 No. 4 April 2016

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

April 11, 2016 ❖ 6:00 p.m.

The science and politics of climate change and ocean acidification and its impacts on Florida with Corry Westbrook

North Indian River County Library

1001 Sebastian Blvd. (CR 512), Sebastian

Corry Westbrook has worked on climate change issues for over a decade. She was Federal Policy Director for Oceana and Legislative Director at National Wildlife Federation in Washington, D.C. Early in her career she was a Grassroots Coordinator for the National Audubon Society and she worked for the Environmental Protection Agency. Corry ran for US Congress in Florida's 8th Congressional district in 2013-2014 on an environmental platform. She is currently serving on the boards of directors for the Pelican Island Audubon Society and Marine Resources Council. Corry has a BA degree from Florida International University in Environmental Studies/minor in Biology and a MA degree in Environmental and Natural Resource Policy from the George Washington University.

April 18, 2016 ❖ 7:30 p.m.

What does the manatee say?

Manatee Communication &

Vocalizations with Beth Brady, Ph.D.

Vero Beach Community Center

2266 14th Avenue, Vero Beach

Beth Brady's research focuses on manatee communication. While dolphin communication has been extensively studied, the language of our state marine mammal remains relatively unknown. Manatees create several vocalizations, but we know very little about when they communicate, why, and the circumstances surrounding their "conversations." Analyzing data gathered from hydrophone is teaching us more about the manatee vocal repertoire and how it is used under different behavioral contexts.

A PhD candidate at Florida Atlantic University, Beth received a MA degree in Marine Biology at Nova Southeastern University and is now an online instructor in Oceanography at Broward College. She volunteers with the Marine Mammal Rescue Team and Sea to Shore Alliance, a non-profit organization dedicated to conservation of endangered marine mammals.

Spoonbill Watch Volunteers Needed

PIAS is beginning a pilot project to track Roseate Spoonbills in Indian River County in cooperation with scientists from Audubon Florida and National Audubon. Data show that Roseate Spoonbills are abandoning historical foraging/nesting sites in southern Florida because of sea-level rise and are moving northward. We have one known colony in our county at the Stick Marsh northwest of Fellsmere. It is possible that more birds may move into our county to feed and nest. PIAS needs the help of citizen-scientist volunteers to document foraging and nesting areas. Those data will be shared with Audubon scientists trying to understand the response of this species to climate change.

Volunteers are needed for two different initiatives:

1. Monitoring of nesting and foraging at the Stick Marsh colony: this requires volunteer(s) to visit the colony once a week before nesting begins and twice a week until the chicks fledge. Volunteers will be trained to identify the plumage stages of Spoonbills, examine birds for presence of bands, determine the flight lines of adults flying to and from the colony to identify foraging locations, and alerting scientists to the presence of chicks.

See the new page on the PIAS website for more information about plumage stages, flight-line observations and banding types.

2. From anywhere in the county observations of feeding aggregations of Roseate Spoonbills (more than 5 birds feeding together), any indications of courtship, and any nesting activity would be most helpful. If you see any of these behaviors, please note the time, date, exact location and behavior observed. Report those observations to the PIAS office by phone (772)567-3520 or email piaudubon@yahoo.com and scientists will verify your observations.

Your observations will be invaluable to scientists studying this lovely bird and you will be helping conserve this iconic Florida bird in our region.

Upcoming Events & Field Trips

Call 772-567-3520 for reservations and directions.

April 9 - Bee Gum Point with Jim Shea

May 14 - Bee Gum Point with Jim Shea

Masthead photo: Painted Bunting by Bob Montanaro.

Bird of the Month by Juanita Baker

Although this is a once in a blue moon photo by Bob Montanaro, we often see Mourning Doves in our neighborhoods and farms sitting on wires. Mourning Doves have thrived on human encroachment by easily adapting to humans. They build a hurried platform nest of sticks in 2-4 days. An average of 2 eggs are laid in 2-3 days. Both parents share in all aspects of chick rearing. After 15 days of incubation, young are hatched. Squabs keep their eyes closed for 2-3 days, completely dependent on parents even for temperature regulation, but grow rapidly.

Both parents produce "crop milk" (extremely high in protein, fat, minerals, antioxidants, immune enhancements) collected in a pouch in the throat, unique to pigeons and doves, (and independently evolved in flamingos, and male Emperor Penguins).¹ Parents feed crop milk for 3-4 days, then begin eating seeds to soften in the crop milk for 6 days, then give only regurgitated soft seeds. Feathers emerge in a week, complete in 15 days when the squabs fledge, hanging around their nest for two days. Then the male takes them to feeding grounds and roost trees but progressively decreases feeding them until 30 days old when they are on their own. However, the female is readying for the next brood and lays eggs again, even within two days after the fledglings left.



"Once in a blue moon" Mourning Dove
© 2016 Bob Montanaro

In Florida, being a year-round resident, they are prolific, having multiple broods in a year. However, cold northern states' birds migrate down all the Flyways. So during winter months, Florida has migrating flocks of Mourning Doves, some go on to Cuba. One of the most abundant bird populations in the US, estimated at 300-400 million, they breed in all continental U.S. states. Mourning Doves eat a 99% diet of wild seeds and waste grain scattered on the ground. Humans find their meat tasty, so purposely prepare fields for hunting to attract this prized game bird. Because doves are very fast flyers (~55 mph) yet make sudden erratic maneuvers, 1 million U.S. hunters feel challenged, prize them, and annually harvest about 20 million birds.

View a large color image and learn how to enter your own photos at www.PelicanIslandAudubon.org

An amazing day by Linda Chancellor

After driving through very dense fog our group finally arrived at the Wakodahatchee Wetlands at 7:30 am. This wetlands ecosystem, located in Delray Beach, had been created using fifty acres of unused utility land. My last visit had been in March 2014, under very clear skies. But this time would be different because the wetlands were enveloped in heavy gray fog giving them a dream like appearance. The small native pond apple trees looked like small floating islands. In their branches were dozens of great white egrets. Some of them nesting while others were preening their wispy snowy-white breeding plumage. Bright green duckweed and the large heart-shaped leaves of spatterdock with its canary yellow blooms broke up the otherwise gray color of the water's surface.

Breaking the spell I looked down, next to the boardwalk, and watched a beautiful purple gallinule with his bright colorful red and yellow bill climb along the stem of an alligator flag. With each overlapping step of his large yellow feet the stem bent lower and lower until he reached the seed head at the end of the spike. Then squabbling noises

came from a nearby ten foot tall clump of giant leather fern. I spotted three tricolor herons nestled among the large upright fronds. In one nest a heron pointed his bill upward and stretched his neck up and down while calling out. During breeding season the yellow bill turns an intense blue turquoise color with a black tip, five white plumes form a crest on their head and the yellow legs become pink. Quite a display!

The fog eventually lifted, the sun became very bright and the temperature rose. The dream like world had vanished. We enjoyed many more bird watching opportunities that morning and after lunch we went to the Green Cay Nature Center where there was even more to see. A long but rewarding day.

Thanks Bill Loftus for coordinating and leading this trip.



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NEW E-MAIL ADDRESS

Make a note that Pelican Island Audubon has a new e-mail address: **PIAudubon@yahoo.com**

Let's Work Together to help solve a Major Problem in our Lagoon

The President's Hoot by Richard H. Baker

If last week's photos of tens of thousands, perhaps more, dead fish belonging to 30 species in the Indian River Lagoon, doesn't make you sick and move you to want to do something to save our Lagoon, probably nothing will. Scientists think that nighttime respiration by the huge brown-tide algal bloom consumed the dissolved oxygen in the water below that needed by the fishes to survive. During the kill, the Ocean Research and Conservation Association recorded zero dissolved oxygen in the Banana River off of Cocoa. Fish need oxygen to breath, just as we do! During 2013 algal bloom we wondered why the seagrasses, Brown Pelicans, Dolphins, and Manatees died. This latest mortality event shows we have not done enough to fix the problem. Indeed, the death and decay of these fishes will contribute to the cycle of decline because their bodies will release bound-up nutrients into the water where they will feed more algae. The science of Ecology teaches about ecosystems that reach "tipping points" that move those systems into new and often unwanted conditions – has the Lagoon reached such a tipping point?

Unfortunately algae blooms and animal deaths were not enough of a warning! We have great scientists and Environmental Champions, but many of our politicians at all levels have not heeded their warnings about algae blooms that result from excessive nutrients (some due to septic tank and fertilizer runoff) and harmful pollutants. Our officials' response is to lay off staff and cut budgets while they feed us platitudes about their concern for the environment. We need a completely new mindset to save our Lagoon, the Everglades, our springs, lakes and rivers if the environment that supports us is to survive.

These fishes are more than just the canaries in the coal mines. Unfortunately this terrible event will affect many other organisms we cannot see, including those upon which charismatic animals like dolphins, manatees and birds depend. In turn, the economy and health of our region depends on a clean healthy environment. Nobody wants to buy a home on a dead Lagoon, or hire a guide and buy gear to fish where most fish have died. Fish are important in our food chain and in our local economy. We even have fish in our stormwater ponds that eat the mosquitoes that we would normally have to kill with chemical spraying! Those same fishes feed the birds that enrich our lives and draw birding tourists to our area. Some folks either do not care about fish or the environment or have not been educated about the consequences of their daily activities that pollute our environment and harm the Lagoon. Fortunately, many people care about our economy and our quality of life. A healthy Lagoon contributes \$3.4 billion per year to our community. If we can't fish or swim in, what will happen to our economy? Tourism provides jobs.

We must STOP treating our Lagoon like a garbage dump: Pay attention to the signs that say "All Canals lead to the

Lagoon." The ditches and swales near your homes send whatever you put on your lawns and driveways into the Lagoon in a short amount of time! We need to:

1. Greatly reduce fertilizer and herbicide use on our yards and farms, and pass stronger local and state laws to limit their use.
2. Eliminate all septic tanks and hook up to sewers. Septic tanks are nothing but glorified outhouses that send nitrogen and phosphorus into our waterways. Stop using reclaimed wastewater and ban land disposal of sewage sludge.
3. Build stormwater ponds to hold and clean all water that drains from parking lots and roads.
4. Use native plants that don't require additional water, herbicides, or fertilizer.
5. Educate the public, especially our children. We need to follow India's Supreme Court order that everyone of India's 1.3 billion schools and its 650-plus universities must educate each student about their severe ecological problems, from polluted air and water to disease-spreading lack of sanitation will. If India is beginning to teach their 300 million kids to be environmentalists and



improve their environment and sustainability, why can't we Americans? PIAS has started its Audubon Advocates After-School pilot program where 48 kids come weekly to our Audubon House to learn about our environment and sustainability.

6. Use public transportation, drive fuel-efficient cars, and support solar energy in "The Sunshine State."
7. Stop converting natural areas, especially wetlands, to developments and parking lots. We are destroying the plants and animals on our planet by taking over their habitats, giving them less and less space every year. How much are we willing to give up to make our Indian River Lagoon healthy again?

8. Vote only for officials who fund Amendment 1 and the Clean Water Act as intended. We must elect people who will listen to the will of the people and take the necessary actions to restore the Lagoon.
9. Stop firing water-management/land management staff who do their jobs by enforcing rules on issuing permits for wetland and natural-area development. Restore funding to the water-management districts.

Finally, test the water quality coming from our canals and ditches for heavy metals, nitrogen, phosphorus, and herbicides and fertilizers. Are discharges from agriculture, suburban and urban developments safe for the plants, animals and humans using the Lagoon? What are the effects of using herbicides to clear drainage canals and ditches of aquatic and woody plants? I am concerned for the health of the cane pole fishers who have fished our canals and ditches and depend on those fishes as a major food source. Can we work together on these issues? Maybe you can volunteer to help write a grant for funding to allow periodic testing of our waters. Let's not wait for someone else to do it!

Pelican Island Audubon Society Officers & Directors
Officers: President **Richard H. Baker, Ph.D.**, Vice President **Bob Bruce**, Recording Secretary **Darlene Halliday**, Corresponding Secretary **Diane Morgan**, Treasurer **Steve Goff** — Elected Directors: **David Cox, Ph.D. '17**, **Graham Cox, Ph.D. '17**, **Nancy Irvin '19**, **Bill Loftus, Ph.D. '18**, **Toni Robinson '19**, **Bonnie Swanson '18** — Appointed Board Members: **Donna Halleran**, **Bill Halliday**, **Tina Marchese**, **Karen Schuster**
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.

Birds migrate-and members can too!
Please consider “migrating” up to one of our Sustainable Memberships- Scrub-jay (\$100) or Osprey (\$200).

Anyone who contributes \$100 or \$200 per year to the Annual Fund is automatically recognized as a Pelican Island Audubon Society Sustaining or Double Sustaining Member. Think about a \$25 or \$50 per quarter donation, which works out to only \$2 to \$4 a week to support our mission.

Sustaining Members are critical to the Society. If every Society member contributed \$100 or \$200 every year, PIAS could increase its efforts to help fulfill our mission in Indian River County and support the continued growth of our programs. This is a tax-deductible contribution to a 501(c)(3) organization and includes your membership renewal to Pelican Island Audubon!

- \$100 Florida Scrub-Jay Level \$200 Osprey Level

Other Annual Membership Options:

- \$20 Individual \$30 Family

Is this a membership renewal? Yes No

Join National Audubon Society for an additional \$20 a year.

I want to make an additional tax deductible donation of \$ _____

Total \$ _____

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

or join online using your credit card at:

<http://www.pelicanislandaudubon.org/membership.html>
 Questions: call 772-567-3520 or e-mail piaudubon@yahoo.com

Plant of the Month by Janice Broda
Native Florida Citrus?

Christopher Columbus is credited with bringing the “first” citrus to the Florida in 1493, yet five species of native citrus in the genus *Zanthoxylum* (yellow wood) predated his arrival. These native citrus species lack the succulent fruit of exotic oranges, lemons, limes and grapefruit. Instead, their dry fruits contain tiny hard seeds that are nonetheless favored and spread by birds.



Hercules-club (*Zanthoxylum clava-herculis*), a moderate to fast-growing deciduous tree, is found throughout the southern U.S. westward to Texas and now is full of flowers -- and pollinators -- along the Centennial Trail at Pelican Island National Wildlife Refuge. Each yellowish-green flower has five petals and is tiny, but the clusters of multiple flowers can be quite showy.

This plant is dioecious: Male and female flowers are on different plants. Bees and other pollinators appear glad to do their job. Follicles ripen from green to tan-brown on female plants and each follicle splits open to reveal one, shiny hard black seed.



Southern prickly ash is another common name for this plant. Its pale grey bark is covered with distinctive pyramid-shaped “warts”, each punctuated by a thorn, until, in later years, the thorns wear away. Reddish brown sharp spines adorn its odd-pinnate compound leaves. Thorns and spines deter browsing by animals but do not stop giant swallowtail butterflies (*Papilio cresphontes*) from using this plant (and all citrus trees) as their larval host plant.

The bark and the leaves are aromatic and have been used medicinally. Chew on a soft, young leaf to release a citrusy taste and a mouth-numbing substance that give rise to another common name: toothache tree.

Drought tolerant upon establishment, this tree can be a wonderful addition to your landscape for a feeling of Fall, for early spring pollinators, for larval food for giant swallowtail butterflies, and for the birds.