



Peligram

April
2026



Land & Water Issues & Solutions Forum

Saturday, April 25, 2026

8:30AM - 4:00PM

The Emerson Center

1590 27th Avenue, Vero Beach

Cost \$25

Includes lunch

See centerfold for more information
& how to register.

Join Clean Water Coalition, Indian River Neighborhood Association, and Pelican Island Audubon Society for a public forum that aims to increase public awareness of county-wide land and water resource challenges-particularly the declining health of the Indian River Lagoon and Blue Cypress Lake-and the consequential actions needed to improve and protect these vital ecosystems.

Bald Cypress at Blue Cypress Lake by Richard H. Baker, Ph.D.



RiverKidz is a nature club that meets twice a month for the WHOLE family to enjoy. Our meetups consist of guest speakers, field trips, educational activities, service activities, kayaking, and more! If you ever wanted to be involved in helping your environment or you just want to explore the outdoors more, this is the group to join. **For more info, email piaudubonedu@gmail.com**

4/11/26 - Kayaking at Round Island
10AM-12PM Whole family - 1PM-3PM Teens

5/9/26 - Eyes on Seagrass with Heather Stapleton from the Indian River Lagoon National Estuary Program at the Wabasso Causeway
10am-12pm Whole family
1p-3pm Teens

Audubon Advocates Art Show at the IG Center
Art in Public Places
February 2 through May 11, 2026
1590 9th Street (Oslo Rd), Vero Beach

J. McLAUGHLIN

Save the date!

Saturday, May 2, 2026 from noon to 4:00 PM

Sip & Shop at J. McLaughlin

6210 A1A, Indian River Shores

Proceeds benefit Pelican Island Audubon Society.

Tuesday Morning Hikes with Leader Ricky Ray

Various locations – Meeting at 7:00 a.m. at IHOP (westside) 88th Avenue & Route 60 – All level welcome – For more information – call/text: 928-853-9654 – snacks, water, binoculars, and bug spray is recommended. No registration required. Most walks are 3-4 miles.



Our Mission: To preserve and protect the animals, plants, and natural communities, and the land and water on which they depend in Indian River County through education, advocacy, and public awareness.

Executive Director **Donna Halleran**
Environmental Educator **Jennifer Satterly**
Office Manager **Bob Montanaro**

Officers & Directors

Officers

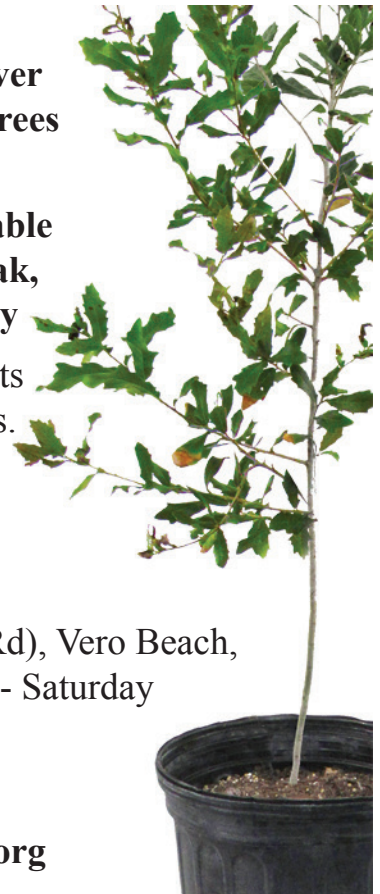
Board Chair **Richard H. Baker, Ph.D.**
1st Vice-Chair **Steve Palmquist**

2nd Vice-Chair **Open**
Recording Secretary **Lorna Thibeault**
Corresponding Secretary **Open**
Treasurer **Steve Goff**
Elected Directors:
Albert Alley, M.D. '26
Bill Loftus, Ph.D. '27
Nick Polge, Ph.D. '28
Ricky Ray '28
Bonnie Swanson '27
Appointed Board Members:
Justine Carter
William Johnson
John Nelson
Hadi Shalhoub, D.O.

Stop by and browse the native plant nursery - over 33,323 native plants & trees distributed so far!

Free Native Trees Available in 1 gallon pots: Live Oak, Bald Cypress, Mahogany

A selection of native plants are available at low prices.



Audubon House

195 9th Street SE (Oslo Rd), Vero Beach, on Monday - Wednesday - Saturday from 9AM to 11AM

More at

PelicanIslandAudubon.org

All schedules subject to change. Check PelicanIslandAudubon.org for latest.

FIELD TRIPS

Space is limited. Registration is required.

For the schedule & to register visit

PelicanIslandAudubon.org

MEETINGS

View the full Meeting schedule at PelicanIslandAudubon.org

April 13 – North County Library
1001 Sebastian Blvd. (CR 512), Sebastian
Introduction to Shorebirds And Seabirds
with Yagen Gutierrez
Conservation Specialist, Brevard Zoo

April 27 – Vero Beach Community Center
2266 14th Avenue, Vero Beach
Impacts of Environmental Shifts on Coastal Ecosystems
with Tim Moore, Ph.D., Harbor Branch Oceanographic Institute

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.

Audubon House
195 9th Street SE (Oslo Rd.), Vero Beach
M - F | 9AM - 1PM

Mailing Address:

P.O. Box 1833, Vero Beach, FL 32961

Phone: 772-567-3520

E-Mail: piaudubon@yahoo.com

Website:

www.PelicanIslandAudubon.org

The Big Freeze AKA Winter Storm Gianna

by Linda Chancellor



By the time you read this article I will know which plants truly survived in my yard and what didn't. The last week in January brought spring temperatures with my Laurel Oak sprouting new green leaves and their catkins dumping yellow pollen on the car. The weekend of January 31st through February 2nd Winter Storm Gianna moved in across Florida and the Carolinas. The storm was referred to as a Historic Cold Outbreak. An arctic air blast brought record-low temperatures and freezing conditions. The possibility of snow was predicted for many parts of North Florida. At my house the temperature began to drop and it continued down into the 30s. Earlier I had covered some of the orchids growing in my trees. I brought about 15 plants into the garage and turned on the small space heater we used in the camper. The cold temperatures were accompanied by strong winds which made the temperatures feel up to 10 degrees colder (wind chill). This was not ordinary winter weather for Florida and it began to last for days. As the week progressed I could see more and more cold damage to many of my plants including the orchids under frost cloth. I had expected damage to my tropical plants but not to my native plants. I was stunned to see my 10 foot high Firebush had lost all of its leaves and immediately thought of the hummingbirds that sought out the flowers. I believe the location of a plant and how much protection it had from the wind and cold temperatures will determine its survival.

FYI – The National Weather Service does not name Winter Storms -but unofficially the Weather Channel does. Indian River County used to be designated as planting Zone 9A -where plants could tolerate 20 to 25 degree temperatures for a short time. It was changed to Zone 10A, where plants could tolerate 30 to 35 for a short time, because our temperatures had increased by 3 degrees between 2012 and 2023.

Because people are always looking for different plants many tropical Zone 10A and Zone 10B plants and trees have been introduced and sold as suitable for planting in our yards. Many of these plants won't survive Winter Storm Gianna. UFIFAS is recommending that you not prune damaged plants for several weeks to see if they might resprout.

Pelican Island Audubon Society Summer Nature Adventure Camps 2026

Give your child a summer of outdoor adventure, exploration, and education!

Summer Nature Adventure Camp

Dates: June 15th - 19th

July 20th - 24th

Times: 8:30AM to 3:00PM

Camp is for students entering
5th through 8th grade.

Cost: \$200

Aftercare available for an
additional \$75/week

\$50 discount for
Audubon Advocate graduates

Activities include:

Kayaking, hiking, swimming, clean-ups,
outdoor adventures, science education, and
more!

Survival Nature Adventure Camp

Dates: June 22nd - 26th

Times: 8:30AM to 3:00PM

Camp is for students entering
5th through 8th grade.

Cost: \$200

Aftercare available for an
additional \$75/week

\$50 discount for
Audubon Advocate graduates

Activities include:

Survival skills such as fire starting, shelter
building, essentials for hiking & surviving
in the wild, plant identification, outdoor
adventures, science education, and more!

Special Needs Adventure Camp

Dates: June 8th - 12th

July 27th - 31st

Times: 8:30AM to 3:00PM

Camp is for students entering
3rd through 5th grade with a disability.

Cost: \$200

Aftercare available for an
additional \$75/week

Activities include:

Kayaking, hiking, swimming, clean-ups,
outdoor adventures, science education, and
more!

To register, visit PelicanIslandAudubon.org or call 772-567-3520
For questions, email Jen Satterly at piaudubonedu@gmail.com

My Hoot



❖ Richard H. Baker, Ph.D. ❖



Image from *Reflections of Blue Cypress* by Richard & Juanita Baker.

Land and Water Issues and Solutions

Our quality of life in Indian River County largely depends on the land and water around us. The very special environment of our County extends from the Blue Cypress Lake wetlands and headwaters of the St. Johns River in the western portion of the County to the Indian River Lagoon and barrier island to the east – separated by coastal ridges that were once dunes when sea level was much higher.



Indian River Lagoon in Vero Beach.

Earth's health and our quality of life are in serious jeopardy. Our local, state, and federal governments seem to ignore science. Nitrogen and phosphorus from septic tanks and our wastewater pollute our land and water. Effort is being made to remove septic tanks and connect homes to sewer systems, but not quickly enough.

Fortunately, Indian River County has banned “Biosolids” (human poop) from Miami-Dade and Broward counties, which was previously applied to our agricultural lands, but meanwhile, our own poop and trash fill up our County's mountainous landfill. Despite having native ground covers available, we install invasive sod grasses from Asia, Africa, and South America on our lawns and pastures, and putting 80% of our public drinking water supply on them, adding fertilizers and chemicals that pollute our land and water, and then using gas mowers and blowers that pollute the air we breathe. Climate Change is real! The 10 warmest years on record have all occurred in the past decade (2014-2023).

Our oceans' plants absorb our carbon emissions and supply more than 50% of Earth's oxygen, without which, like fresh water, we can't survive. Oceans provide much of our food, regulate the climate, and support important wildlife species. Oceans are essential for all life on Earth. Yet huge quantities of plastics enter the oceans, causing the deaths of more than one million seabirds from consumption or entanglement. Over 90% of seabirds have plastic in their stomachs, causing starvation, internal blockage, and poisoning. Microplastics are now found in the human body, in our blood, lungs, placenta, and brain, which may increase risks for cancer, heart disease, and dementia. Forests also absorb our carbon emissions and produce the oxygen we breathe. About 80% of terrestrial plants and animals live in forests and cannot survive without them. But, we cut billions of trees every year or convert forests to farms or cities – altering our land and water! Greed and ignorance drive the conversion of natural lands, including our parks into oilfields, hotels, and other commercial buildings.

Our brain and heart are 73% water, and our lungs are 83%. While our Earth is covered in water, less than 1% is fresh water (about 0.01% of total

water) in rivers, lakes, and streams. Florida is fortunate to have our underground aquifers, but they are rapidly being depleted, polluted, and affected by us. Average freshwater springs flows have declined by an estimated 33% since the 1950s due to over-pumping. Aquifers have declined since the 1990s, approximately one foot per decade.

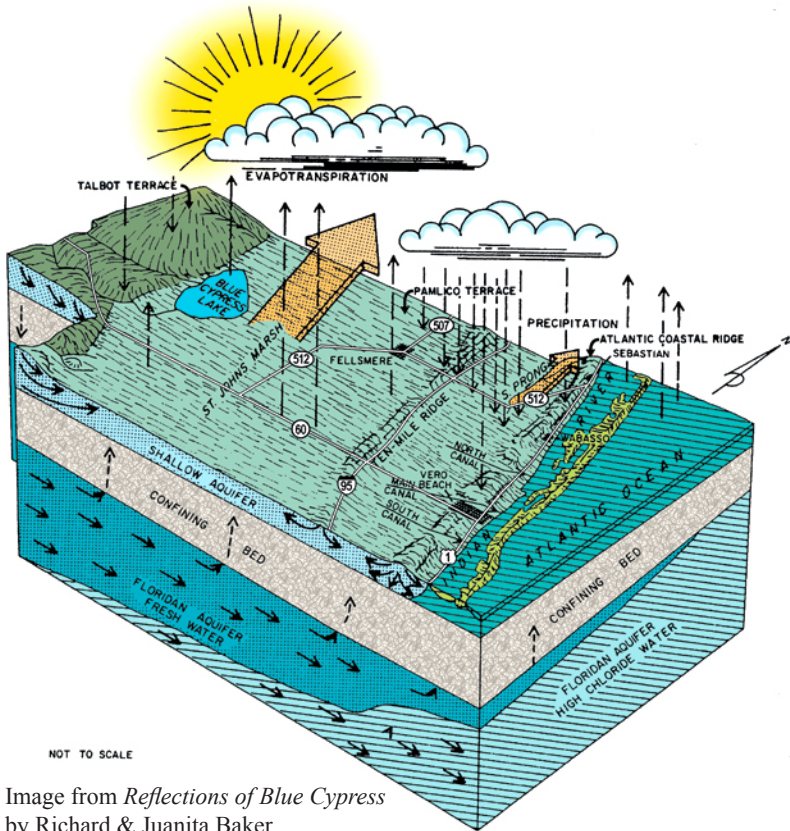


Image from *Reflections of Blue Cypress* by Richard & Juanita Baker.

We must quickly act to restore and protect our damaged land and water. The Clean Water Coalition (CWC), Indian River Neighborhood Association (IRNA), and Pelican Island Audubon have organized a Forum “Land & Water Issues & Solutions Forum” on Saturday, April 25th, at the Emerson Center (See the cover). The Forum’s purpose is to increase public awareness of (a) County-wide land and water resource issues – including the degraded health of the Indian River Lagoon and Blue Cypress Lake, and (b) the public need for State and local government actions to improve sewer infrastructure, wastewater treatment facility upgrades, stormwater management, habitat restoration, and preservation of environmental lands.

We seek to bring together multiple County organizations to more effectively drive restoration and protection of our land and water. Time is running out - we need immediate collective action to restore and revitalize the environmental systems that keep us, our wildlife, habitats, and waters healthy. Our quality of life and human survival depend upon these actions.

Do come to attend our forum on April 25, 2026! Ask your friends and neighbors to come with you. There will be 11 great speakers from different organizations, universities, and critical government institutions who will speak on what is needed. All of us working together can make the changes necessary to protect our beautiful County and planet on which we all depend. If we cooperate to address our environmental issues, we can make positive changes within our lifetimes.

Land & Water Issues & Solutions Forum

Continued from front cover

Speaker Presentations:

- *Reviving the Indian River Lagoon, A National Treasure* by Duane DeFreese, Ph.D., Indian River Lagoon National Estuary Program
- *Habitat Management & Restoration on Conservation Lands* by Beth Powell, Indian River County Parks, Recreation, & Conservation and Dave Fuss, Indian River Land Trust
- *The 4 W’s of the County’s Integrated Plan* by Sean Lieske, Indian River County Utility Services
- *City of Vero Beach & Wastewater Systems* by Rob Bolton, City of Vero Beach Water & Sewer
- *Rethinking Stormwater: Low Impact Living for a Healthier Lagoon* by Dr. Laura Wilson, Marine Resources Council
- *Towards Creating a Living Landscape* by Dr. Craig Huegel, University of South Florida
- *The Way Back: How Historical Land Cover Change Can Inform Conservation & Restoration in the Indian River Lagoon Watershed* by Kai C. Rains Ph.D., St. Petersburg College
- *What is the Florida Flood Hub?* by Charles Jacoby, The Florida Flood Hub for Applied Research and Innovation
- *A Lagoon Under Pressure: Population Growth, Water Quality, & Seagrass Restoration in the Indian River Lagoon* by Dr. Rachel Brewton, Harbor Branch Oceanographic Institute-Florida Atlantic University
- *Biosolid Use & Human Impacts* by Gary Roderick, Former - Southeast District of Florida Department of Environmental Protection
- *Indian River Lagoon Cleanup: Budget Shortfalls Undermine Restoration* by Eric Draper, Environmental Policy Analyst

View full forum program or register here:



IndianRiverNA.com/Forum

Sponsored by:



Clean Water Coalition

CWC

of Indian River County, Inc.

Bad News for birds and birders! by William Loftus, Ph.D.

Have you noticed that the number of birds that you used to spot while birding just don't seem to be there anymore? Well, if you have, you are not alone, and there are scientific data to back up your observations.

A recent study published in the prestigious scientific journal *Science* presented evidence that birds in the United States are declining faster than previously thought. The scientists, from universities in the U.S. and Czech Republic, analyzed a huge data set for abundance change and its acceleration for 261 bird species, 54 avian families, and 10 habitats from 1987 to 2021. The data were taken from the North American Breeding Bird Survey, a long-term monitoring program of the U.S. Geological Survey. Hotspots of decline focused on the southern, warmer sections of North America; hotspots of accelerating decline were in the mid-Atlantic and midwestern states and California, matching patterns of agricultural intensity. Overall, 122 species (47%) exhibit significant declines, of which 63 also show acceleration of this decline. This correlational analysis indicated that declines in bird numbers were greatest in places with intensive agriculture and increasing temperature, suggesting that climate change may have a role. Unfortunately, the data also suggest that declines have accelerated over the time period studied.

These results add to the growing body of evidence for bird population declines published by other scientists, including an important 2019 paper also in *Science* that concluded North American bird populations had declined by 2.9 billion breeding adults, or 29% since 1970. Birders have noted anecdotally that birds just don't seem to be present in past numbers, and these studies bear that out. These observations include migratory species for which the 2019 paper reported a steep decline in biomass passage of migrating birds.

These two North American studies are correlational and do not attribute a reason or reasons for the declines. Birds face many natural challenges in their lives, and human impacts have only added to those. We know many birds have perished from cats and window strikes, along with habitat loss and conversion to urban/suburban developments and agriculture in North America and their winter homes. The so-called "insect apocalypse" has also been a major factor. Loss of insects has drastically reduced the food availability for insect-eating birds, but perhaps more critically, for the young of all bird species that require insects. A 2021 study found that while terrestrial, insect-dependent birds declined by nearly 3 billion individuals over the past 50 years, terrestrial birds that did not depend as much on insects actually increased over the same time period. Similarly, in an intensive European 2023 study of bird declines, agricultural intensification, especially the use of pesticides and fertilizers, was the main driver for most bird-population declines, especially for insectivorous species.

So, what can we do to help our birds? Several steps come to mind that could pay big dividends if we all did our part: use less fertilizer and pesticide products in our homes and gardens; buy organic and don't waste food; keep cats indoors; use bird-safe window decals; and plant native species in our managed landscapes to increase the populations of the insects that birds need.



Indigo Buntings by Bob Montanaro.

Citations:

- Leroy, F., M. A. Jarzyna, and P. Keil. 2026. Acceleration hotspots of North American birds' decline are associated with agriculture. *Science* 391:917-921.
- Rigal, S., V. Dakos, H. Alonso, A. Auniņš, Z. Benkő, L. Brotons, T. Chodkiewicz, P. Chylarecki, E. de Carli, J. C. Del Moral, C. Domşa, V. Escandell, B. Fontaine, R. Foppen, R. Gregory, S. Harris, S. Herrando, M. Husby, C. Ieronymidou, F. Jiguet, J. Kennedy, A. Klvaňová, P. Kmecl, L. Kuczyński, P. Kurlavičius, J. A. Kålås, A. Lehtikoinen, Å. Lindström, R. Lorrillière, C. Moshøj, R. Nellis, D. Noble, D. P. Eskildsen, J.-Y. Paquet, M. Pélissié, C. Pladevall, D. Portolou, J. Reif, H. Schmid, B. Seaman, Z. D. Szabo, T. Szép, G. T. Florenzano, N. Teufelbauer, S. Trautmann, C. van Turnhout, Z. Vermouzek, T. Vikstrøm, P. Voříšek, A. Weiserbs, V. Devictor, 2023. Farmland practices are driving bird population decline across Europe. *Proc. Natl. Acad. Sci. U.S.A.* **120**, e2216573120.
- Rosenberg, K.V., A. M. Dokter, P. J. Blancher, J. R. Sauer, A. C. Smith, P. A. Smith, J. C. Stanton, A. Panjabi, L. Helft, M. Parr, and P. P. Marra. 2019. Decline of the North American avifauna. *Science* 366:120-124.
- Tallamy, D.W. and W.G. Shriver. 2021. Are declines in insects and insectivorous birds related? *Ornithological Applications* 123:1-8.

Classroom Jobs

by Jen Satterly, Environmental Educator

Last year, we introduced classroom jobs into our after-school routine with a simple goal: to bring structure and calm to the final ten minutes of the day. Too often, that time felt chaotic—while I rushed to close up the classroom, students drifted without purpose, energy escalating into noise and disorder. It became clear that something needed to change. What I didn't anticipate was that this small adjustment would offer far more than just a productive way to fill ten minutes.

The first step was identifying tasks that needed to be completed and could be managed by students with minimal direction. We established several roles. Movers transport our whiteboard and teaching cart to the outdoor classroom. The Green Team handles compost, trash, and recycling. Dish Duty dries snack dishes and tidies the sink area. Collector roles—such as nametag, water bottle, pencil, and binder collectors—ensure materials are gathered and organized. Bathroom Duty checks for cleanliness, empties trash cans, and leaves the space in good condition.

Each role is represented by a color-coded job card outlining responsibilities. At the start of each day, students find their assigned job placed with their nametag and water bottle, providing a clear visual cue. After reviewing expectations at the beginning of the semester, students quickly internalize their responsibilities. They clip their job cards to the board, ensuring accountability and consistency throughout the day.

While the initial goal of improving focus during the final ten minutes was fully achieved, the broader impact has been far more meaningful.

Students are genuinely excited about their roles. Rather than resisting what might feel like chores, they eagerly anticipate their assignments, often discussing and celebrating them with peers. Some roles are so popular that students even try to trade jobs. What began as a management strategy has become a source of daily engagement and enthusiasm.

More importantly, these jobs have strengthened our classroom community. There is a shared sense of responsibility and teamwork. Students regularly step in to help one another, and when someone is absent, others willingly take on additional tasks. The classroom feels less like a temporary space and more like a collective environment where everyone contributes.

It has also been eye-opening to recognize how many students have limited experience with household responsibilities. These classroom roles provide valuable, real-world life skills—organization, accountability, and care for shared spaces. Some students even begin carrying these habits home, discovering a sense of pride in contributing beyond the classroom.

Perhaps most rewarding is the growth in confidence and ownership. Through these simple tasks, students begin to see themselves as essential members of the classroom. They are not passive participants—they are contributors. This sense of ownership fosters pride, builds confidence, and reinforces their value within a team.

Ultimately, these classroom jobs have created ripple effects far beyond their original purpose. They are helping students understand teamwork, responsibility, and their individual impact. Each day, they are learning that their actions matter—not just in the classroom, but in the wider world. Watching this growth unfold is truly remarkable.



**Don't miss the Pelican Island
Audubon Yard Sale!
Sunday, April 12, 2026
9AM-1PM**

Audubon House
195 9th St. SE (Oslo Rd.), Vero Beach
Household Goods, Camera Accessories,
Books, Jewelry, & Much More!

All proceeds benefit Pelican Island Audubon's Educational Programs.
Rent a space for \$25.
Absolutely NO EARLY BIRDS! Rain or Shine

Indian River County Stormwater presents
Summer Camp for the Lagoon
July 6-17, 2026 for incoming 6th to 9th Graders
at Audubon House, 195 9th St. SE

(Oslo Rd.), Vero Beach



Activities include:
Kayaking & hiking
Water quality sampling
Environmental games



Field trips to Sebastian Inlet, stormwater parks, and the Indian
River County Landfill among other places

COST: \$300 for 10 days

Register at PelicanIslandAudubon.org
Questions: Email aperalta@indianriver.gov

Adopt an Advocate! Please help support our 14-week outdoor science, after-school Audubon Advocates program, which focuses each year on 5th graders from four underserved elementary schools.

Goal: Improve science vocabulary, mental health, and opportunities for under-represented minorities and girls to be comfortable outdoors and become Environmental Advocates for Indian River County.

Focus: Introduce students to outdoor, hands-on Lagoon science, help them understand the interconnectedness of life and the value of all native species, and help them be good stewards of the environment.

The environmental educator takes students outdoors into nature to kayak, photograph, sketch, meet a variety of scientists in the field, familiarize themselves with scientific methods, collect specimens, document their

experiences, and educate others at school and their parents, family, and friends. While learning “leave no trace & earth manners.”

Results: Educated, healthier, empowered students; new aspirations and possibilities for underrepresented students; and, over time, a healthier Lagoon.

It will be transformative for the students, their parents, our community, and our environment—and for you as a sponsor!

Please Adopt an Advocate: Do Something Extraordinary! \$500 Supports One 5th Grader per term, or consider giving what you can.

Help fund one or more students to attend our 14-week after-school program at Audubon House. Thank you!

Name _____

Address _____

City _____ State _____ Zip _____

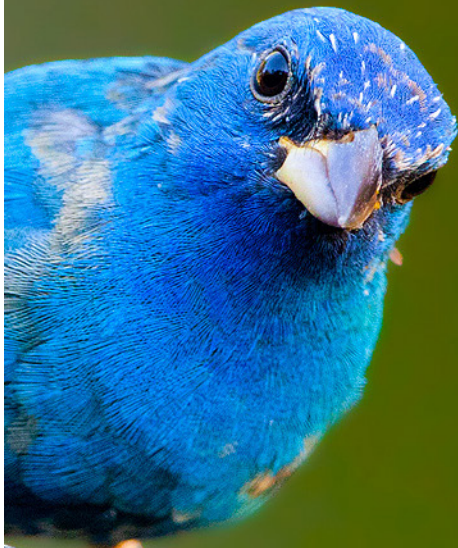
Telephone _____

Email _____

My check is enclosed. Make check payable to Pelican Island Audubon Society, or donate online at PelicanIslandAudubon.org

1 Student \$500 any amount

(Please check) if you would like an update on your sponsored student.



Pelican Island Audubon Society is looking for volunteers to help in the following areas:

- Native Gardens – Help watering plants and/or selling plants
- Bird Walks – Lead walks - Kayak Tours – Lead tours
- Outreach – Help with events such as Festivals, Landscape Conference, help with movie nights, greeting people at monthly meetings
- Teaching a course of interest
- Grant writing

If you have any questions or the time to help with any of the above, please contact Lorna Thibeault at piasvolunteer@gmail.com or (203) 687-7156.

Go Green!

Members may sign up to have the Peligram emailed to them. Saves postage and paper. Email piaudubon@yahoo.com with your name & email address with “Peligram” in the subject line.



Pelican Island Audubon Society Membership Form

Enclosed is my:

NAME _____ \$ _____ \$30 for annual membership

ADDRESS _____ \$ _____ \$35 for family membership

CITY, STATE ZIP _____ \$ _____ \$100 Scrub-Jay sustaining membership

E-MAIL _____ \$ _____ \$200 Osprey sustaining membership

_____ \$ _____ contribution

_____ \$ _____ TOTAL

Please mail this completed form with a check made out to:
 Pelican Island Audubon Society
 P.O. Box 1833
 Vero Beach, FL 32961

Or join online using a credit card at www.PelicanIslandAudubon.org