

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 45th Year Vol. 45 No. 4 April 2009

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

Marine Environmental Research and Education at the Smithsonian Marine Station

The April 20 meeting of Pelican Island Audubon features Dr. Valerie Paul, director of the Smithsonian Marine Station in Ft. Pierce. The meeting starts at 7:30 p.m. at the Vero Beach Community Center, 2266 14th Avenue. The Smithsonian Marine Station at Fort Pierce, Florida is a center for research and education in the marine sciences, specializing in studies of biodiversity and ecology of the marine and estuarine ecosystems of south Florida. Research focuses on the Indian River Lagoon and nearshore waters of Florida's east central coast, with comparative studies throughout coastal Florida. The Marine Station is administered by the Smithsonian's National Museum of Natural History and serves as a field station which draws up to 120 top scientists and students each year from the Smithsonian and collaborating institutions around the world. Research focuses on biodiversity, life histories, and ecology of marine organisms and their habitats, ranging from estuarine seagrass beds and mangrove swamps to coastal beaches, the continental shelf and the open ocean. Information uncovered by this research has been published to date in 6 books and over 760 articles in scientific journals and forms the basis for effective public policies, conservation efforts, and sustainable resource management.

The Smithsonian Marine Station has partnered with St. Lucie County to create the Smithsonian Marine Ecosystems Exhibit where visitors can explore six different Florida marine habitats and learn about the complexity and importance of marine ecosystems. The largest aquarium is a model of a Caribbean coral reef. Other displays include living models of seagrass, mangrove, estuarine and nearshore habitats, as well as a deepwater *Oculina* coral reef. A variety of educational programs are offered to the public.

Dr. Valerie Paul's educational background includes a Ph.D. in Marine Biology from Scripps Institution of Oceanography at the University of California San Diego. She served on the faculty of the University of Guam Marine Laboratory from 1985-2002. Valerie's research interests include marine chemical ecology, marine plant-herbivore interactions, coral reef ecology, and marine natural products, publishing over 175 scientific papers and book chapters and has edited a book on marine chemical ecology. She is a Fellow of the American Association for the Advancement of Science, receiving awards from the National Science Foundation including a Faculty Award for Women Scientists and Engineers (1991-1996) and a Visiting Professorships for Women award (1996-1997). Currently she has an appointment as Affiliate Professor at Florida Atlantic University.

Light refreshments to be served following the program.

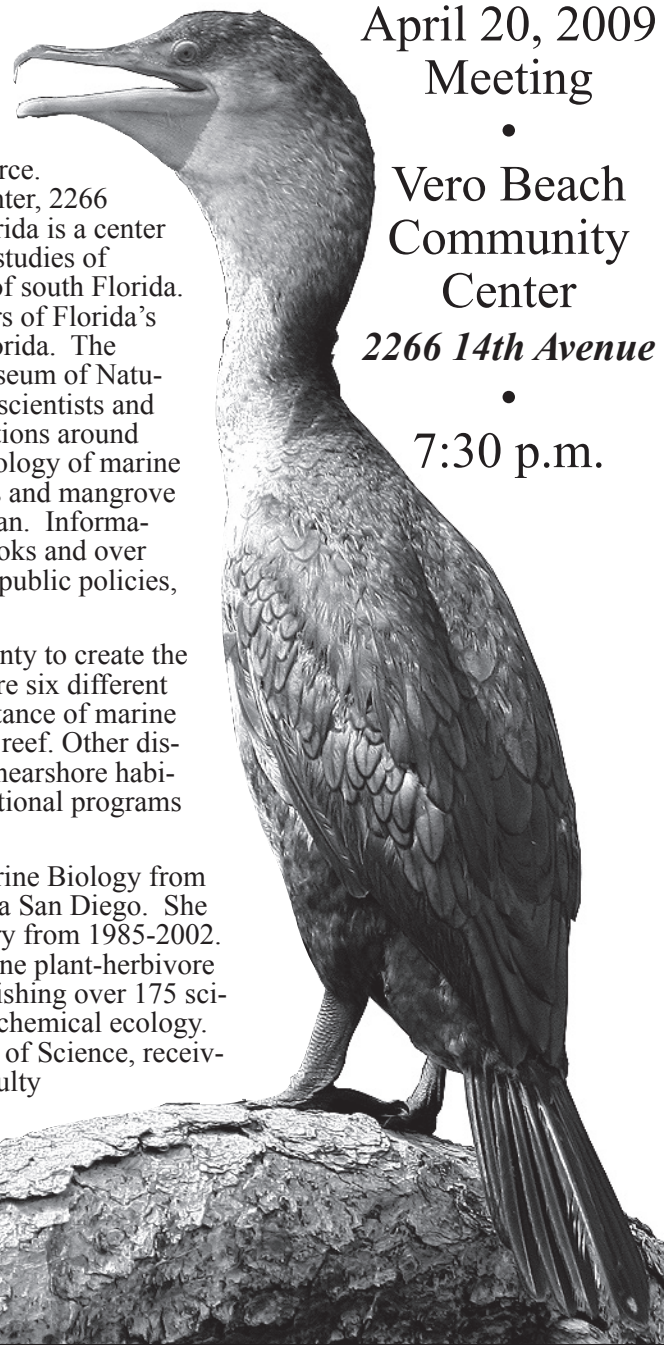
*juvenile Double-crested Cormorant
by Bob Montanaro*

April 20, 2009
Meeting

•
Vero Beach
Community
Center

•
2266 14th Avenue

•
7:30 p.m.



Royal Terns at Sebastian Inlet State Park

by Linda Chancellor

You see them on the beach, around twenty looking like sentinels. **Royal Terns, *Sterna maxima***, standing with their wispy black crests, blowing in the breeze. I approach them slowly, they all sidestep in unison two or three steps up the beach but still stand their ground. Their long, heavy orange bill shows up vividly above their pale gray body and wings. These birds are often found near saltwater habitats such as beaches, bays and other coastal areas. They winter along the coast from North Carolina south including Florida's coastline. Royal Terns nest in dense colonies of up to 10,000 nests on sandy or rocky islands from mid April through May. The one buff spotted olive egg is laid on sand or in a cup of dead sea grass. Many times these nests are destroyed by high tides or storms. To deter flooding the parents defecate directly on the rim of the nest and as it hardens it builds a lip. The chick leaves the nest within a day of hatching and join other chicks in a group known as a **crèche**. This group can contain as many as a thousand chicks but still each is fed by its individual parents. The adult Royal Terns feed by hovering above the water and diving for small fish. They sometimes will eat crustaceans. A group of Royal Terns is known collectively as a "**highness**" of terns.

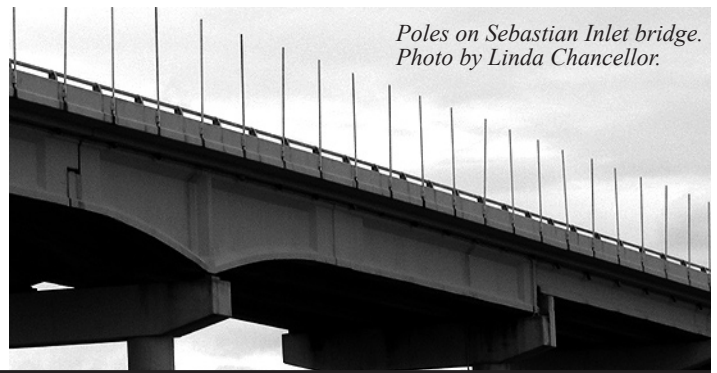
They look safe and content but still they face hazards. In researching material for this article I found a study done in 2001 concerning the number of Road - killed Royal Terns recovered at Sebastian Inlet State Park (SISP): <http://repositories.cdlib.org/cgi/view-content.cgi?article=1022&context=jmie/roadeo>

I contacted Terese Harber - a SISP Park Ranger, who participated in the original study, to get a current update. As I approached the Sebastian Inlet Bridge I saw them standing like sentinels on the bridge. This time they were not Royal Terns but three meter high poles installed to protect the Royal Terns. The study, in 2001, stated that 97 Royal Terns had become road kill between 1989 - 1993 from collisions with motor vehicles crossing the bridge. This provided the data needed to have DOT install a total of 122 poles along both sides of the bridge to encourage the birds to fly higher thus avoiding the traffic. After the installation, in 1994, tallies for road kill from 1995 - 1999 resulted in 26 Royal Tern

deaths. Terese said that they continue to monitor injured and road killed animals but that government cutbacks had cut into the regularity of the duty. Together we checked the data from 2000 to 2008. In 2000 hurricanes had damaged many of the poles and that year ten Royal Tern deaths were recorded. From 2001 through 2008 24 deaths were recorded. This shows the poles continue to be effective. Many of the dead birds showed weaken birds that may not have been able to achieve lift to avoid the cars. She was unsure why the birds were weakened and hoped this would be studied in the future.

The logs also showed that the Bridge is not the only danger the birds encounter. A number of Royal Terns are being injured from being hooked or tangled in fishing line. In 2008 the number of Royal Terns road killed on the bridge was two, one was a parking lot fatality and seven were found dead and staff were unable to determine cause of death. However, 19 additional birds were documented to have fishing related injuries. The leg identification bands of all dead and injured birds are logged and sent to the Banding Bird Lab in Laurel, Maryland. They return information regarding where the bird was originally tagged (its home breeding grounds). Recovery of bands prior to 2001 resulted in birds from eleven breeding sites in North Carolina. 2008 data resulted in birds from six breeding sites in North Carolina and one from Maryland.

Royal Terns are not the only birds facing the dangers of fishing hooks and lines. The logs show this is a big problem contributing to the deaths and injuries of many water birds. If the death and injury rates are to be further reduced one must find the underlying problem of why and how they are being hooked.



Poles on Sebastian Inlet bridge.
Photo by Linda Chancellor.

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Common Birds in Decline

by Graham Cox, Ph.D.

John Ogden, Director of Bird Conservation programs for Audubon of Florida, is developing a draft of a statewide strategy that will ask Audubon chapters to join as partners in solving the riddle of the declining once-common bird species. Ogden spoke to the PIAS chapter Match 16, 2009, explaining that there are three big categories of conservation problems for bird species in Florida. Category number one he described as the “clumping species” – they tend to gather together in clumps, easily identifiable geographic locations such as nesting colonies. They have special habitat requirements, they are easier to identify and so it is easier to develop a conservation strategy because “they are in one place, such as sanctuaries and refuges, Important Bird Areas, in discrete areas.”

The two other categories do not clump together, Ogden explained. “We do not have nearly so much experience with conservation strategies for dealing with them.” Category two birds have no flocks, no concentrated areas, they are habitat generalists; they are known as the ‘common birds in decline’, many in rapid decline. This category includes the red-headed woodpecker, once common in oak and pines woods, but now largely gone. “Once they were common, but we do not know precisely why they have declined and therefore do not have a specific conservation strategy to deal with them”, Ogden said.

The third category is the neo-tropical migrants. They follow the flyways up the east and west coasts of the Florida peninsula from their wintering areas in the tropics and South America. They do not nest or winter here. This category includes many species of warblers. They have to be fat to cross the water during both spring and fall; they need lots of food and cover, and Florida is the crucial staging area as they make their long flights. Their numbers and status are not certain but they are certainly declining in their wintering and nesting areas, said Ogden. They are also habitat generalists during migration and they stop in our front and back yards for food. In the spring, they come back hungry and stressed after crossing the Gulf of Mexico and the Caribbean going north.

Extensive habitat destruction is having an impact on these birds by cutting their food supplies both before and during each seasonal migration. “In some places their winter habitat and food supplies are now so poor that warblers are delaying their migration north – and nesting - because they have difficulty building up the fat reserves needed for long flights. But we have other information that suggests some other birds are migrating and nesting earlier because of possible climate change effects; these two trends must be causing stress for migrating birds,” Ogden said.

For each of these three categories we have to have distinct conservation strategies, Ogden explained. “For group one, we know what to do but we are not doing it everywhere” – that is, create sanctuaries, IBAs, refuges for the clumping species. But we also need a multi-state strategy and for this we need better data. “You have to protect many sites. These birds, such as least terns and black skimmers, need options because they move around. We need cooperation between all the states. We need chapter volunteers, for example, doing beach surveys.”

“We have to think about categories two and three. Category two species are the common birds in decline. For

example, in Florida, Breeding Bird Survey information shows meadowlarks have declined 85 percent, towhees down 60 percent, quail down 80 percent, red headed woodpeckers are down 75 percent. Most of this has happened in the last 40 years,” Ogden said.

We need a draft document that outlines a strategy, Ogden said. He will send a copy of a draft strategy to the chapters, and ask them to join in partnerships, for example, by picking five focal species, asking chapter members to look in their respective counties, and use the e-Bird site to enter information.”

“Most often we are not sure why these species are declining. For example, when National Audubon started work on the restoration of the California condor “during a series of public meetings we heard 47 different reasons for their decline. When we investigated, we found they were all wrong. So it is important to know with some level of confidence which problem we need to solve. We need to know more than simply ‘it is a habitat issue’. Things are more complicated than that. We must know more specifically, why they are declining in order to develop effective conservation plans. We must select some focal species and ask for help from all the chapters in Florida,” Ogden said.

For the third category, the neo-tropical migrants, the birds that leave and come back hungry, we need to protect and expand good habitats and food options, especially in the expansive urban areas of Florida. The idea is to create “urban oases” for our migrating birds.

“The urban and suburban parks, yards and gardens are important for their survival. We are proposing to better document abundance and diversity of migrating birds in these urban settings. And we need to know more specifically what they are eating. We need to think in the same terms as ‘butterfly gardens’ and do some serious ‘bird gardening’ in our yards and parks and along our streets. We have to connect birds to plants, for example, and document all their eating habits. We need to develop a good list of plant seeds, fruits and flowers that attract birds, even if the plants and trees are non-invasive, non-natives. To document all this we need good partnerships, especially with the birders in the Audubon chapters, and with the state and federal resource agencies which have the funds to help design and implement conservation strategies for these neo-tropical migrants”



*Black-bellied Plover
at Sebastian Inlet State Park
by Bob Montanaro.*

The President's Hoot

Our 2009 Unsung Heroes



Many people working together giving their time leads to accomplishing great things. Pelican Island Audubon's philosophy on giving awards is that it is so important to thank and recognize those who have contributed to our chapter and our community. We believe it will encourage theirs and others' further involvement. It documents the history and let's everyone know about our activities. It is also an opportunity to make everyone aware of these unsung heroes as well as PIAS's many initiatives. Finally, it makes all of us feel good that we are honoring others. This year more than in the past, our 2009 awards are given to folks who day in and day out contribute to our society. They make this a better place to live and improve our quality of life.

Board Member of the Year: **Joe Carroll**, in addition to his Scrub Jay Population Monitoring, (Jay Watch), has organized the Indian River Lagoon Coalition composed of 3 county chapters and other organizations to identify and stand up for the issues impacting our precious Lagoon, which is essential to our tourist and fishing industries let alone nature's habitat diversity and food source.

Special Service Award: **Billi Wagner**. This is given to a PIAS member who has made special contribution or for outstanding service. Billi is our county's Eagle Watch Coordinator monitoring and tracking Bald Eagles and has worked closely with our new affiliate chapter at Grand Harbor to install over 16 birdhouses.

Environmental Educator Award: **Rosemary Badger** started as a fulltime Naturalist with the Environmental Learning Center in 1999. (Her previous environmental education experience includes Gumbo Limbo Environmental Complex in Boca Raton and National Audubon Society in Miami.). Shortly after joining the ELC, Rosemary started the ELC preschool programs, Young Explorers Nature Hour, as well as Nature Nuggets where a parent and child come and learn to experience nature together. She also organizes the very popular ELC Summer Camps and teaches the youngest campers. In Rosemary's own words, "Where else do you get to play outdoors, instill a love of being outdoors, play with young kids and get paid?" She is so "unsung" that when I told her about the award, she said "I think you have the wrong person, you must mean so and so at the ELC." Thank you Rosemary for helping children and other visitors understand nature and its value.

Environmental Citizen: **Coastal Tech** set a great example for the county and are beginning to rightly be "Sung Heroes" as you may have seen their photo on the front page of the PJ. They have adopted Prange Island and are installing

educational signs, restoring camping areas, removing the exotics, maintaining trails, and cleaning up bird endangering trash. Also most important, they are doing the Civil Engineering and having the survey work done Pro Bono for our new Audubon Education Center. Michael Walther Jimmy Sellers accepted the award for Coastal Tech.

Environmental Landscaping: **Elwood Holzworth** and **Brenda Davis**, Indian River Soil and Water Conservation District are quietly responsible for planting 500 cypress trees with the help of the guiding the youth volunteer corps in 5 subdivisions around ponds each year for the next 3 years. Planting trees will prevent water evaporation and give us oxygen, helping our beleaguered planet.

Eleanor Kleckner Award: **Bob Montanaro**, our Office Manager has generously spent hours observing, photographing all steps of the production and surrounding wildlife on the Florida Cattle Ranch developing the Website promoting local sustainable agriculture and local history and speaking widely around the state. He has been our knowledgeable and artistic ambassador!

Maggy Bowman/Conservationist of the Year:

- **Keith McCully**, Indian River County Stormwater Engineer, & **Cliff Southard**, Indian River County Project Engineer invented a mechanical method to clean up the Main Relief Canal Project of refuge and sediments
- **Himanshu Mehta**, IRC Solid Waste Disposal District, expanded our county's Recycling and Recovery Programs

President's Award: **George Glenn**, Indian River County Attorney's Office, Protecting Conservation Lands worked hard, saving the Sand Lakes Track from Development.

Special Recognition/Merit/Achievements Awards were given to:

- **Kristen and Mike Beck**, Kayaks, Etc., for Public Environmental Education, Support of Local Environmental Initiatives, Green Business, and "Making Indian River County a Better Place to Live"
 - **Habitat for Humanity**, saving our ancient stored sun's energy, they installed nonpolluting Solar Water Heaters in all 60 New Homes (Steps Toward Green Building : Construction Waste Recycling, Birdhouse Construction with scrap wood, follow Energy Star & FPL Build Smart). Andy Bowler, President and CEO accepted the award.
 - **George F. Hamner, Jr.**, Chair of Indian River County Planning and Planning Commission, for his service to improve Indian River County by his special handling of the changes in the mining ordinances. There were very polarized positions and he guided the process forward in
-

the P&Z.

• **Dr. Graham Cox**, for over a year, has worked hard for our chapter in developing the program for the Audubon Academy we hosted last April, arranging the key note speaker and conducting a workshop, writing the Toyota Grant application and the present Quality of Life State of Florida Grant for \$1,000, which we got. Leading this Project he has interviewed key community members and leaders to work together to be aware of environmental, economic and social issues impacting our quality of life in IRC, planning focus groups to identify valued qualities and through a community survey prioritizing them. Eventually this will lead to objective measures to demonstrate why IRC is a great place to live due to environmental regulations and growth management, unlike some counties.

We appreciate you!

Richard Baker, President

Photos by Juanita Baker, Diane Wilson, & Bob Montanaro.



Butterfly talk & walk

Dr. Marc Minno, noted butterfly expert, held a seminar in March on butterflies for volunteers at the Oslo Riverfront Conservation Area. Learn more about Pelican Island Audubon & ORCA activities at

www.pelicanislandaudubon.org



Who is this?



Rose-Breasted Grosbeak (female)
Answer:

The male of this species lives up to its descriptive name by its bold pattern of black, white, and rose. The female, by contrast, resembles more a large sparrow or finch about 7-8 inches long streaked brown and white. This bird nests throughout Canada to as far south as northern Georgia and winters in Florida, the Caribbean, to as far south as northern South America. Found

in wooded and brushy areas, this bird will forage for insects, seeds, fruits, and buds. Cornell Lab states this bird's song "is like that of the robin, only as song by an opera singer, being mellower and more sweetly melodic." The population is stable and common. *Species info from Cornell Lab of Ornithology. Photo by Bob Montanaro from Treasure Hammock Ranch (www.floridacattleranch.org).*

Plant of the Month

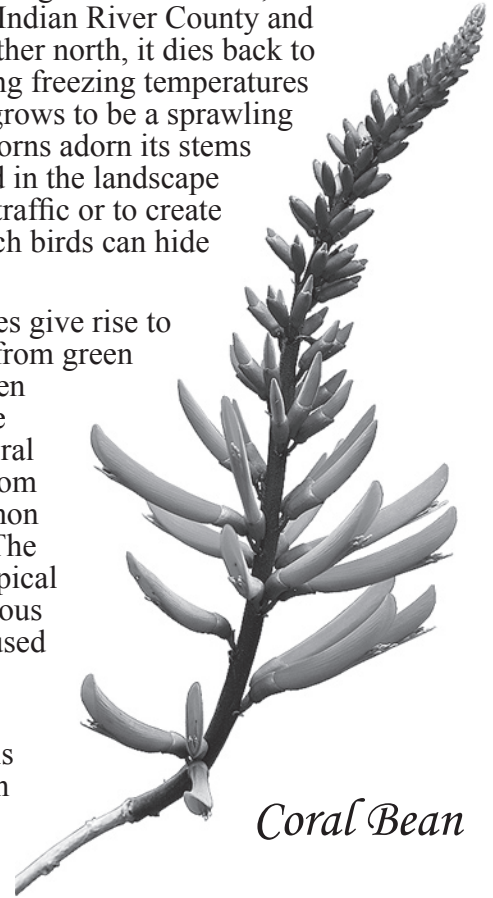
by Janice Broda

Have you noticed the striking spikes of scarlet flowers of the coral bean around town? Hummingbirds and butterflies nectar on these showy flowers.

Coral bean (*Erythrina herbacea*) grows among the saw palmettos on the back side of our beach dunes, in our pine flatwoods, in sunny interstices in our hammocks, and even in disturbed places. This drought tolerant plant has distinctive and attractive wedge-shaped leaves borne in 3's. In full sun with protection from salt, this plant will grow into a small, often multi-trunked, tree in Indian River County and southward. Further north, it dies back to the ground during freezing temperatures and quickly re-grows to be a sprawling shrub. Small thorns adorn its stems so it can be used in the landscape to deter human traffic or to create a thicket in which birds can hide from predators.

The flower spikes give rise to pods that ripen from green to brown and then split length-wise to expose the coral colored seeds from which the common name derives. The seeds of this tropical plant are poisonous and reportedly used to poison rats in Mexico.

Cherokee bean is another common name for this plant, which is a member of the pea or bean (Fabaceae) family.



Coral Bean

Photo by Janice Broda.

Pelican Island Audubon Society 2009 Membership

Because each Audubon chapter is expected to support its operations without retention of members' dues -- which are sent to and retained by National Audubon -- **WE NEED YOUR FINANCIAL SUPPORT** for our many educational programs, field trips and environmental advocacy projects; for our handling of public questions; and the ten issues of our newsletter the *Peligram* we send to each member.

National Audubon*	\$20	_____
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*National Audubon membership
This includes subscriptions to *Audubon Magazine* and *The Florida Naturalist*.

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Please email us if there is a local environmental issue which concerns you at piaudubon@bellsouth.net

April & May Field Trips with Rick Lucas

April 11, 2009—Turkey Creek Sanctuary in Palm Bay. Carpoolers meet at Wal-Mart on US 1 in Sebastian. Park next to US 1 west of the gas pumps. We will leave promptly at 7am. Directions: US 1 north to Port Malabar Blvd, West to Turkey Creek.

May 9, 2009—Forster's Preserve in Wabasso. Meet in Forster's parking lot at 7am. Directions: US 1 to CR 510, East to Jungle Trail, South to Forster's Preserve.

Please call 772-567-3520 for reservations & information.