



SPRING 2007

# Florida Naturalist

**PROTECTING**  
Northeast Florida's Shorebirds

Audubon's Comprehensive  
Coastal Program

**CONFRONTING CLIMATE CHANGE:**  
Florida's Energy Policy  
Needs an Overhaul



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## EXECUTIVE DIRECTOR'S MESSAGE



Florida's coasts are a stage for constantly exciting bird life, teeming and noisy with their antics. I've enjoyed hours watching a mass of pelicans, gulls, and cormorants dive in a feeding frenzy, stirring the ocean's waters to froth. I've seen diminutive sanderlings racing with the shoal, stiff-legged and determined. I've watched a line of northern gannets taking turns making lazy eights above the waves. I've also stepped lightly to avoid flushing seabirds that were resting on beaches, storing strength for a long migration.

Watching these enchanting avian visitors to Florida's beaches is inspiring and yet disturbing, when one contemplates the threats to their natural habitats. Coastal development, management practices (including what is inaccurately termed renourishment), and boat-wake damage to seagrass beds all adversely affect the health of our beaches. Migrating global visitors, including black-bellied plovers and western sanderlings, are threatened by the impacts of global climate change, which in Florida is causing surface temperatures and levels to rise, opening the way to increased erosion and loss of beach habitats.

There is hope, however, that many of these human-caused threats can be reversed. With the help of our staff and dedicated volunteers, Audubon of Florida is working rigorously to turn the tide for seabirds by protecting coastal habitats. In this edition of the Florida Naturalist, we focus on our work to examine the threats, motivate volunteers, and engage with public agencies. Pages four and five highlight expanding efforts in Northeast Florida; Audubon of Florida's Coastal Islands Sanctuaries program, aided by hundreds of ColonyWatch volunteers, is detailed on pages six and seven.

We share our beaches and the natural environment with our avian friends, and the health of their populations indicates how well we are doing to safeguard the habitats on which we both depend. Protecting birds and beaches can be as simple as leaving your dog at home when you visit the coast. Dogs often flush resting shorebirds, harming nesting birds' chicks and eggs. You can join Audubon's efforts to survey, patrol and protect nesting colonies, and assist in local advocacy for conservation, restoration, and land use decisions. Read on for more about the resources available to you, and get out into nature for inspiration.

A handwritten signature in black ink, appearing to read 'David E. Anderson'.

David E. Anderson  
Executive Director, Audubon of Florida



Photo by R.J. Wiley

## *Florida Legislative Session:*

# An Excellent Opportunity to Protect Birds and Habitats

The Florida legislature convened in March and Audubon of Florida's state policy advocates began diligent work to ensure that this session, which adjourns in May, accomplishes a priority conservation agenda.

The Legislature has an excellent opportunity to protect our state's birds and habitats by acting this year to pass:

1. A bold plan to heal Lake Okeechobee (see pages 4 and 5 of this edition of *The Florida Naturalist*).
2. Funding for Everglades restoration.
3. Increased state land acquisition and conservation through Florida Forever.
4. Legislation proposed by Senator Michael Bennett to protect and restore seagrass beds from the effects of propeller scarring from recreational boating along Florida's coasts.
5. Legislation proposed by Senator Nancy Argenziano to protect Florida's springs in the northern peninsula of the Panhandle.
6. Appropriations proposed by Senator James King Jr. to improve water quality in the lower northerly basin of the St. Johns River.

As the session opened, Audubon was optimistic that progress was possible, judging from Governor Charlie Crist's proposed budget and signals that the legislature will increase funding for conservation. Audubon applauded Governor Crist's recommended state budget because it will increase funding for the Florida Forever Land Acquisition Program, and provide funds for key restoration of the Everglades, Lake Okeechobee, and the St. Lucie and Caloosahatchee estuaries.

Florida's wildly successful conservation land acquisition program, Florida Forever, will sunset in 2010. Audubon and a coalition of partners are advocating for acceleration of this program's spending. Governor Crist recommended a \$100 million increase, to \$400 million. While this is a good step, Audubon is calling on the legislature to authorize \$600 million in the Florida Forever budget this session.

"By funding the increase, as has been traditionally done, with added debt service, it will have negligible effects on next year's—and even the long term—state budget," says Audubon State Policy Director Eric Draper. "It's a fiscally pragmatic and environmentally strategic move."

With thousands of new people moving into Florida every year and spiraling development pressure, acting now to acquire and preserve natural lands will protect our natural resources and the quality of life of every Floridian.

Follow the State Legislature's progress this session, and partner in Audubon's efforts by joining Audubon's Conservation Action Network at <http://ga1.org/natureadvocate/home.html>. You will receive weekly Advocate newsletters during the three-month legislative session, and will have the opportunity to communicate with decision makers on priority conservation issues.



## Northeast Florida's Shorebirds **IN THE SPOTLIGHT**

Whether they stay all winter—as do endangered piping plovers—or, like red knots, use beaches as a stopover to rest and feed between arctic breeding grounds and South American wintering grounds, shorebirds depend on healthy coastal habitat in Northeast Florida.

Yet, coastal management and human disturbance, exacerbated by global climate change impacts, pose significant risks to shorebird habitat and their populations. Thanks to the generous support of the Jessie Ball duPont Fund and dedicated chapter volunteers, Audubon of Florida is expanding its coastal protection work in its strategic northeast Florida region. The first step to helping protect shorebirds and their habitats is an understanding of the threats.

### **Coastal Management and Beach “Renourishment”**

Humans have interrupted the natural geological processes of erosion and accretion that shape shorelines. Man-made inlets punched through barrier islands disturb the natural sediment flow, robbing some beaches of sand replenishment sources and redirecting sand to other areas. Seawalls and bulkheads intended to protect coastal structures from undermining erosion accelerate it instead. The expensive, temporary fix called beach “renourishment” involves dredging submerged sediments and depositing them on existing beaches, killing the invertebrate life in both.

Shorebirds are affected dramatically by this elimination of the spatial extent of shoal, flats and shoreline habitat. Depositing sand dredged from the ocean bottom on beaches not only kills the invertebrates in the source sand, but also smothers the prey invertebrates on the beach,

reducing the quality of the remaining habitat for wintering shorebirds. Emerging science indicates it can take a year for these prey invertebrates to return in significant quantities to “renourished” beaches.

### **Disturbance**

Even coastal areas protected by public acquisition may not be providing the habitat quality needed by wildlife. Recreational use of these areas increasingly interrupts shorebirds in their feeding, nesting and breeding activities. A single disturbance can prove fatal to eggs and chicks of nesting birds, and effects on wintering and migrating birds can be dire. Birds that don't find adequate food before setting out on long migrations may never arrive at breeding or wintering grounds.

### **Climate Change Double-Whammy**

At the coast, rising sea levels could radically affect the range of habitat types available for shorebirds. While mudflat, intertidal and

## Northeast Chapters Collaborate to Survey and Protect Shorebirds

In February, Flagler Audubon's monthly meeting focused on shorebird identification, with a seminar that paired a talk by St. Johns Water Management District biologist/ornithologist Dr. Gian Basili with an introduction to the Florida Fish and Wildlife Conservation Commission (FWC) shorebird observation database by FWC Assistant Regional Biologist Sarah Johnson. "Winter shorebirds can be such a challenge to identify, we wanted to really get into the nitty-gritty of identification, and give people the skills to help them contribute to shorebird conservation in Northeast Florida," said Don White, co-president of Flagler Audubon.

The morning after the seminar, birders from Flagler, Duval and St. Johns Audubon chapters conducted what could become an annual First Friday in February winter shorebird survey. Covering all public coastal accesses in Flagler and St. Johns counties and portions of the Intracoastal Waterway, the chapter members partnered with staff and volunteers from the Florida State Parks, the US Fish and Wildlife Service (USFWS), Guana Tolomato Matanzas National Estuarine Research Reserve (GTMNERR), and others to collect data on winter shorebird use of Northeast Florida.

Audubon's Flagler and St. Petersburg chapters are among those using the Fish and Wildlife Commission's (FWC) shorebird database to monitor rooftop colonies of least terns. The database can now also accommodate data on wintering shorebirds of conservation interest.

All the data better equip the FWC to comment on development or beach renourishment proposals. "Like sea turtles, shorebirds and their nests are protected by law. However, the real key to protecting future generations of beach wildlife will be public stewardship of these resources. We see these surveys as one way our chapters can do our part,"

said St. Johns Audubon President Diane Reed.

To learn more about the FWC shorebird database, visit its web interface at <http://www.myfwc.com/shorebirds/BNB/>.

Photo of red knots by R. J. Wiley



Photo of Piping Plover by Andrew Wraithmell

beachfront inhabitants would ordinarily just move upslope ahead of the water, human development often blocks this path.

Temperature-limited habitats like boreal forests could shift northward as the Arctic warms, encroaching on areas of arctic tundra. This affects Florida's bird conservation because the tundra is only a migration away. Many of Florida's winter shorebird mainstays breed there, including ruddy turnstones, sanderlings, black-bellied plovers and western sandpipers.

### How You Can Help

1. Get involved in your community's land use debates. Tell elected officials that continued coastal development, given rising sea levels and the high costs of coastal management and insurance, is impractical and short-sighted.
2. Contribute to the decision-making process for beach renourishment and related decisions in

your area, making sure that wildlife—particularly shorebirds—are taken into account.

3. When you're at the beach or in a boat, take care not to flush flocks of shorebirds, keeping an eye out for cryptic, solitary species such as plovers.

4. Take dogs only to non-coastal destinations or, if the beach is a must, be sure they stay on a leash. Dogs may be even more disturbing to birds than pedestrians, causing birds to flush at greater distances.

5. Support land managers' efforts to reduce, restrict or eliminate driving cars on public beaches. The threat to public safety and natural resources is too great.

6. Help wildlife managers assess the extent and distribution of Florida's shorebird resources by formalizing coastal birding fieldtrips into shorebird surveys. Report your sightings to the Florida Fish and Wildlife Conservation Commission's shorebird observation database.

## RESOURCES for Better Birding

Get to know Northeast Florida better: join a birding field trip with a local chapter or attend a regional birding celebration this spring!

**Spring Birding Events in NE Florida**  
**First Coast Birding & Nature Festival**  
April 12-15, 2007  
[www.getaway4florida.com/bird\\_festival\\_2007](http://www.getaway4florida.com/bird_festival_2007)

**Wild Amelia Nature Festival**  
May 18-20, 2007  
[www.wildamelia.com](http://www.wildamelia.com)

**NE Florida's Audubon Chapters**  
**Duval Audubon Society**  
(Nassau, Duval and Clay counties)  
[www.duvalaudubon.org](http://www.duvalaudubon.org)

**Flagler Audubon Society**  
[www.flaglerlibrary.org/audubon/audubon1.htm](http://www.flaglerlibrary.org/audubon/audubon1.htm)

**St. Johns County Audubon Society**  
[www.stjohnsaudubon.org](http://www.stjohnsaudubon.org)



Photo of great blue heron by R J Wiley

## PROTECTING COASTAL BIRDS: Audubon Science and Citizen Advocacy in Action

Life can be tough for waterbirds in Florida. Their habitat is shrinking, with beach erosion, invasion by non-native plants, and human development. Their nesting colonies are vulnerable, often disturbed unintentionally by boaters, beachgoers, and their pets. The threats are many, but with the help of nearly 200 Audubon volunteers and the comprehensive Audubon of Florida Coastal Islands Sanctuaries (FCIS) program, more than 30 species, including herons and egrets, ibis, pelicans, anhingas, roseate spoonbills, terns, and gulls are a little bit safer.

Audubon's Florida Coastal Islands Sanctuaries is located in Tampa, but its reach extends throughout coastal Florida. Each year, Audubon staff and volunteers from Audubon chapters in St. Petersburg, Clearwater, Tampa, Manatee County, and Sarasota, as well as the Space Coast and Everglades chapters, work to protect locally significant nesting waterbird colonies. From Citrus to Charlotte counties, Audubon surveyed 115 colonial waterbird colonies in 2006, documenting 47,942 pairs

of colonial waterbirds nesting in the west-central Florida region. Staff of Audubon's FCIS actively participated in the protection of 95 percent of these, either directly or through established cooperative relationships and active partnerships.

### How Do They Do It?

To protect birds and their habitats, Audubon's Florida Coastal Islands Sanctuaries Program, led by Ann B. Hodgson, Ph.D., Audubon's Gulf Coast Ecosystem Science Coordinator, and Ann F. Paul, M.S., Tampa Bay Regional Coordinator, use tools that include scientific survey techniques and analysis, active patrolling and posting signs, habitat restoration, and management to control erosion and remove non-native invasive species and predators. Policy advocacy and public education also help to create a culture of conservation. The program is extensive and comprehensive. Highlights include:

## Volunteering in Project ColonyWatch

Conceived by the late Rich Paul, who worked for 31 years for Audubon of Florida, Project ColonyWatch recruits and trains volunteer wardens along the Gulf Coast and Florida's east coast. Volunteers from eight Audubon chapters participate in the program, lending valuable time, dedication and skill to surveying, patrolling and educating the public, as well as posting signs and roping off vulnerable nesting areas.

"One of the more important results of colony surveys is the identification of problems at nesting colonies, during the nesting season," Hodgson said. "This allows us to respond rapidly and, in some instances, to intervene and remove the disturbance, providing nesting birds with a safer colony site and the opportunity to nest successfully."

## Managing and Restoring Habitat

Audubon scientists designed, planned and implemented ten habitat restoration and management projects last year alone. One project is designed to reduce boat-wake effects from traffic on the Intracoastal Waterway in lower Sarasota Bay. The boat-wakes are eroding the mangroves on Roberts Bay Bird Colony Islands, which are important nesting habitat for brown pelicans, double-crested cormorants, great blue herons, great egrets, and lesser numbers of small herons. The proposed project will install a wave-break on the Intracoastal-facing sides of the islands, using oyster shell and sand fill, and avoiding seagrass meadows. The crushing impacts of waves, which have reduced the islands' nesting area by 50 percent, will be moderated. Sarasota County and the Sarasota Bay Estuary Program will construct the project in fall 2007 using Audubon's design concept.

In Hillsborough Bay, Audubon scientists are working on a multi-year project to remove non-native invasive leadtree, Brazilian pepper, carrotwood trees and shrubs. They will replant native trees to provide nesting habitat on Bird Island at the Richard T. Paul Alafia Bank Bird Sanctuary. At Tarpon Key and Little Bird Key National Wildlife refuges, the scientists are working with U.S. Fish and Wildlife Service biologists on a long-term project to install oyster reefs and to plant smooth cordgrass on refuge shorelines to reduce erosion there.

With Tampa BayWatch, the Audubon FCIS program coordinated volunteer boat captains and their crews last year to visit 50 bird habitat islands where they collected monofilament fishing line and other materials that entangle and kill birds and other wildlife. The project was designed by Audubon and Tampa BayWatch to occur during a morning high tide in October, when most birds are not nesting in the greater Tampa Bay system. This timing reduced impacts on wildlife and allowed boat access to the islands. birds, eggs and young. This environmental education program helped the public understand the rationale for posting and protecting nesting areas, and improved compliance with posted zones.



## CREATING a Conservation Culture

A new project, called Beach Stewards, was initiated this nesting season in Pinellas County through Audubon's Beach-Nesting Bird Conservation Committee. Beach Stewards set up spotting scopes and umbrellas adjacent to posted bird colonies on holiday weekends. Beach-goers were shown how to spot the often-hard-to-see

nesting birds, eggs and young. This environmental education program helped the public understand the rationale for posting and protecting nesting areas, and improved compliance with posted zones.



Boaters, however unwittingly, can wreak havoc on nesting colonies and marine life, and wakes from boats

directly impact coastal erosion. To help reverse the damage, Audubon has written and produced three Boater's Guides in cooperation with the Tampa Bay Estuary Program. These are the Hillsborough Bay Boater's Guide, the Boca Ciega Bay Boater's Guide, and the Clearwater Harbor/St. Joseph Sound Boater's Guide. The guides include information on fish, dolphins, turtles, and wildlife, particularly important bird populations, tips for boater safety and navigation, and accurate local maps. To date, 120,000 copies have been distributed in the region.

Guides are available as environmental information brochures from the Tampa Bay Estuary Program, the Tampa Port Authority, and the Hillsborough County City and County Planning Commission.

*Photos by Aydelette Kelsey. Top: Clearwater Audubon volunteers Irene Hernandez and Marianne Korosy inspect a royal tern colony on Three Rooker Island. Center: Clearwater Audubon member Ted Tanner collects fireworks refuse around a black skimmer nesting area on north Anclote Bar after July 4th.*



## A Bold Plan Needed to Heal Lake Okeechobee

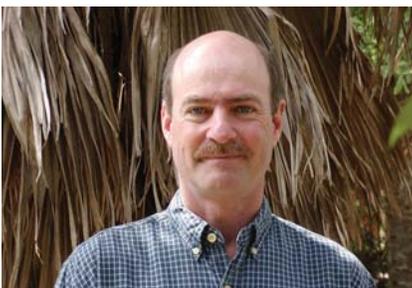
Audubon of Florida brought together its strong science and advocacy this year when it launched its Eight for the Lake — Eight for Estuaries campaign to achieve real solutions—unhindered by politics or cost concerns—to restore Lake Okeechobee.

Since launching the campaign and its report, *Lake Okeechobee Restoration: Watershed, Weather and Strategies toward Achieving Goals*, in January, thousands of people have joined in calling on the Florida Legislature to pass a bold plan that includes concrete measures to incorporate the most updated scientific data into calculations for water storage and treatment needs, as well as to:

- Stop dumping sewage sludge in the Lake Okeechobee Watershed
- Strengthen rules for new development to cut stormwater runoff and pollution
- Store enough water in recreated wetlands and other areas to buffer the Lake and estuaries during dry and rainy seasons.

The good news is that Governor Charlie Crist and Florida legislators clearly support increased funding for Everglades, Lake Okeechobee, and estuary clean up and restoration, to the tune of up to \$200 million. The funds, to be used through the year 2020, will support activities in a technical plan that will be drafted over the next year. Audubon has worked hard in the legislative process to make sure that this plan is a meaningful guide to getting the real action needed to solve what ails Lake Okeechobee and the estuaries.

Too much untreated, polluted water is entering the lake because the natural wetlands that stored and filtered the water have been lost, and developers are



### DR. PAUL GRAY honored as Defender of the Everglades

Friends of the Everglades, the environmental organization founded by Marjory Stoneman Douglas, recently honored Audubon's Lake Okeechobee expert Paul Gray, Ph.D., with its Defenders of the Everglades Award. "I'm greatly honored," Dr. Gray told the organization at the awards ceremony in March.

A consistent champion of restoring Lake Okeechobee and its watershed as part of the greater Everglades system, Dr. Gray has worked for Audubon since 1995, beginning as a warden of Audubon's Ordway-Whittell Kissimmee Prairie Sanctuary before it was incorporated into the new Kissimmee Prairie Preserve State Park. He is the sixth Lake Okeechobee Audubon warden since 1936 and considers it not just a great job, but an honor, to be able to hold the position.

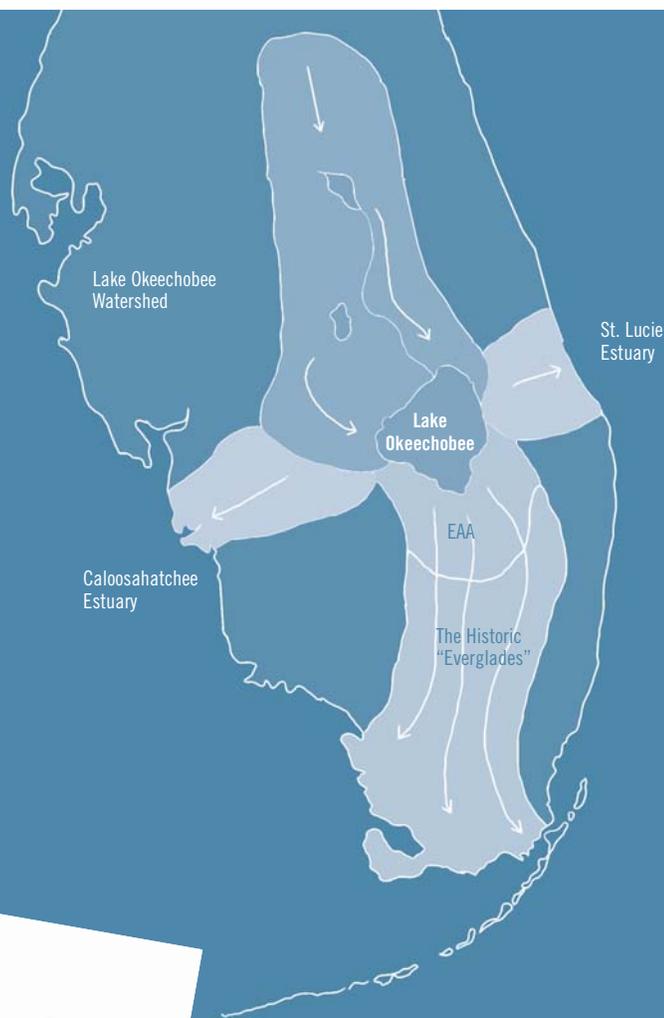
Dr. Gray was the lead author of the recent Audubon report, "Lake Okeechobee Restoration: Watershed, Weather and Strategies toward Achieving Goals," which provides policy makers with a strong scientific foundation for increasing water storage and treatment around the lake to fully restore the lake and its watershed. Congratulations, Dr. Gray.

still being allowed to add more pollution, as are many urban sewage treatment plants, which use farmland in the Lake Okeechobee watershed to dispose of sludge. There is currently insufficient water storage and water treatment both north of and south of Lake Okeechobee to handle these problems. Therefore, nutrient-laden water raises the lake to dangerous levels, causing serious environmental damage. Water is then dumped, untreated, to the estuaries, causing further harm to these ecosystems. During droughts, water rapidly becomes scarce as lake levels become dangerously low, largely because water was wastefully dumped downstream when it was abundant, instead of being stored and cleaned for future needs.

Solutions exist, but achieving them is complicated by the lack of the real measurements of water inflows and calculations for determining phosphorus pollution levels and water storage needs. Two years ago the South Florida Water Management District (SFWMD) announced in a press release that Florida had entered a wetter weather cycle. These data need to be incorporated into calculations of restoration needs.

Audubon will continue to work to make sure that the Legislature passes concrete solutions that will go a long way toward healing the lake and estuaries. And Audubon and its partners will continue to campaign until state leaders act to protect the wildlife and communities that depend on healthy ecosystems.

*Photo by South Florida Water Management District.  
Map by Laurie Freeman-Gray.*



*Historically, Lake Okeechobee's pure water flowed south and nourished the Everglades. Currently, the lake's water is polluted and rapidly shunted through a series of dikes and canals to the estuaries.*



## Conservation Award to Audubon's JAMIE FURGANG

Audubon of Florida's Senior Policy Associate Jamie Furgang was honored for outstanding achievements in conservation. Furgang has worked for Audubon for three years, advocating for environmental protection and Everglades restoration. Her work on behalf of the conservation community was recognized at a March 17 awards event held jointly by the Martin County Conservation Alliance and The Conservation Alliance of St. Lucie County.

## FLORIDA'S ENERGY POLICY NEEDS AN OVERHAUL TO MEET GLOBAL WARMING CHALLENGES

Florida is on the frontlines of some of the most devastating impacts of global warming, from sea level rise and coastal erosion to more intense tropical storms and hurricanes. Continuing policies that increase, not decrease, emissions of greenhouse gases that cause climate change will exacerbate rather than solve the great challenges Floridians and the state face.

To step up and solve the myriad impacts of climate change requires significant changes in existing state energy policy. To contribute to crafting those changes, Audubon of Florida has developed recommendations to state decision makers. In a letter to the Florida Public Service Commission (PSC), Audubon calls on the commission to evaluate and modify its current policy of encouraging regulated Florida utilities to achieve a Balanced Fuel Supply (BFS). The BFS policy, coupled with the PSC Environmental Cost Recovery (which lets utilities pass environmental costs on to ratepayers), encourages coal-fired power plants, ten of which are currently proposed in Florida.

These proposed plants, if built, will be enormous contributors of greenhouse gases and mercury over their lifetimes. Ratepayers, investors, and the environment will be stuck with this harmful technology at the same time that national and international efforts are underway to regulate carbon dioxide emissions by establishing mandatory CO<sub>2</sub> reductions programs, the letter said. Rather than pursue business as usual and encourage coal plants, Audubon is urging the PSC to join efforts to recommend legislative changes that will achieve a clean energy policy.

Audubon is suggesting policy changes, some of which may require the PSC to seek different direction from the Florida Legislature. Our proposed changes are based on the following conclusions:

1. The promotion of coal-fired power plants is contrary to the PSC's stated mission to facilitate the efficient provision of safe and reliable utility services at fair prices.
2. From the perspective of climate change, coal-fired power plants represent backward and harmful technology because, of all fossil fuel energy sources coal plants emit the highest levels of the greenhouse gas, carbon dioxide (CO<sub>2</sub>).
3. The BFS policy undermines local, national and international efforts to curb greenhouse gas emissions and establish mandatory CO<sub>2</sub> reductions programs.
4. The BFS policy, coupled with the PSC Environmental Cost Recovery Clause, place undue financial risks on Florida ratepayers.
5. The BFS policy increases energy inefficiency and environmental impacts associated with proposed plant locations.

**“Global warming is a clear and present danger to Florida’s environment, wildlife and our communities,”** said Audubon State Policy Director Eric Draper. **“By creating the policy tools to regulate, rather than encourage, increased emissions of carbon dioxide, state leaders would be leading the way to an environmentally sound and sustainable Florida now and in the future.”**

*Photo by Christina Evans*



## STEPS TO ACHIEVING A CLEAN ENERGY POLICY FOR FLORIDA

Audubon of Florida has developed policy recommendations that, if implemented, would help the state change course—away from destructive energy generation, such as coal—and toward a safer, more sustainable basket of clean energy options. In its letter to the PSC, Audubon recommends that decision makers:

1. Conduct a clear analysis of regulatory risks and opportunities. Currently, carbon dioxide is an unregulated pollutant. The PSC should require Florida utilities to factor future CO<sub>2</sub> cap costs into resource planning, and ensure that mandatory emissions reductions costs are not passed on to Florida ratepayers.
2. Factor carbon sequestration into cost projections. Current research to sequester carbon dioxide may result in the commercial viability of this technology to reduce this greenhouse gas. While these advances are not foreseen for at least a decade and will likely not be sufficient to address the challenges of reducing greenhouse gas emissions confronting Florida, the nation, and the world, at some point, the technology may be required. This eventuality should be factored into consumer-borne costs.
3. Modify the Balanced Fuel Supply Policy to create a Clean Energy Policy for Florida: Rather than invest public and private dollars into increasing coal-based energy generation (to achieve a Balanced Fuel Supply), the state and utility companies should more aggressively invest in a policy to increase clean energy generating options, by increasing and providing incentives for the development of and access to renewable energy sources, including solar and wind power generation, and co-generation.
4. Aggressively promote the development of alternative energy markets. Less than one percent of Florida's energy is generated through renewable sources, indicating a huge potential market for clean energy production.
5. Promote and facilitate more aggressive energy efficiency and conservation. Investment in energy conservation has proven successful and should be more aggressively pursued by the state and utilities.
6. Promote ecologically sound locations for power plants. An ecologically sound and fiscally responsible alternative to the BFS policy would be to develop policy alternatives that promote smaller plants on, or close to, load centers that are already connected to the electrical grid. Additionally, promoting decentralized co-generation or combined heat and power generators would contribute electricity in the most efficient and cost-effective form because they recycle waste heat.



## RARE BLUE FROG DISCOVERED AT CORKSCREW SWAMP SANCTUARY

Volunteer naturalists noticed a blue frog along the Corkscrew's boardwalk trail last year, and alerted the Sanctuary's natural resources manager, Mike Knight. A Ph.D. candidate in vertebrate ecology and a specialist in reptiles and amphibians, Knight identified it as a Green Treefrog (*Hyla cinerea*), common to Corkscrew Swamp. But why was this green treefrog blue?

Overlapping yellow and blue pigments give green frogs their normal coloration, he explained. Very rarely, a genetic anomaly results in an absence of one or more color pigments—in this case, yellow pigmentation is missing. “You are more likely to win the lottery, or even find an albino frog, than to discover a blue frog in nature. I'm surprised she survived in the wild,” said Knight.

Dr. Jerry Jackson, Professor of Environmental Studies at Florida Gulf Coast University, confirmed that the blue frog is an exceptional find, an example of the spectacular diversity of wildlife that exists in nature, and even in our own backyards. “In the face of overwhelming habitat loss and species extinctions, it is truly great to find something like this,” Jackson said.

The Sanctuary is open every day of the year. **Call 239-348-9151 for information on opening times and admission fees or visit the website [www.corkscrew.audubon.org](http://www.corkscrew.audubon.org).**

*Photo of Blue tree frog by Mike Knight*

# Audubon's 25 Years of Habitat Restoration in The Florida Keys

A conservationist's definition of "progress" is very different from most people's idea of it. A report illustrating 50 completed projects by the Audubon-managed Keys Environmental Restoration Fund (KERF) documents progress as it might be defined by the creatures whose habitats have been reclaimed.

The program has restored more than 63 acres to date, square inch by square inch.

But the improvements to those 63 acres have returned an additional 1,000 acres of habitat to pristine condition by restoring natural water flows or stabilizing the soil. Activities such as mapping invasive

exotic vegetation in the entire Keys, vessel impact damage to seagrass beds, and mosquito ditches in Lower Keys Refuges help land owners manage their resources more effectively.

Project manager Jeanette Hobbs administers the 25-year-old program that carefully reclaims and enhances habitats, primarily on public lands, throughout the Florida Keys. The work has included eradicating ill-conceived construction projects, returning filled wetlands to their natural states, and controlling invasive exotic plants. The goal is to return the subject areas to the way they were before human disturbance, and to help the Keys' fragile ecosystems survive for a few more generations.

The Keys Environmental Restoration Fund (KERF) came into being in 1981 when penalties triggered by violations were placed in a trust fund, with restoration work being overseen by the Army Corps of Engineers. In the early 1990s the legal trust activities were

satisfied and the Fund came under the sole administration of Audubon of Florida; monies now come mainly from mitigation fees and grant programs. Habitat restoration and enhancement are KERF's primary activities, but its role in recent years has expanded to include facilitation and coordination of resources and project needs for local habitat conservation agencies.

In the comprehensive 2006 report, available online at [www.audubonofflorida.org/pubs.html](http://www.audubonofflorida.org/pubs.html), Hobbs acknowledges her colleagues in conservation and the public landowners of the Keys who have brought projects to her attention and allowed crews to work in their "backyards." The publication has a ready-made historical feeling because some before-and-after documentary photos are from 35mm non-digital images that had discolored with age.

"After 25 years the Fund is stronger and more committed to Florida Keys conservation than ever," said Hobbs. "We are seeing the fruits of past projects and planning new ones that continue to restore the pieces of whole ecosystems." She noted that new parcels are being added all the time through Florida Forever, the state's land acquisition program. "Our work will continue as long as parks and refuges continue to expand."

Audubon's conservation work in these coastal areas not only helps to protect the water, lands and wildlife, it also enhances the overall environment that makes the Florida Keys a successful tourist destination. This is proof that people and nature both can thrive, when sound environmental policies and the will to implement them are in effect.



Tree snail photo by Phil Poland.  
Photos of white crowned pigeon  
and Key deer by Jeanette Hobbs.

**Stock Island tree snail** (*Orthalicus reses reses*). One project removed invasive exotic vegetation in the Key West Botanical Garden, which contains the last stand of mature tropical hardwood hammock on Stock Island. The tree snail endures here in its "type locality" (Latin *locus typicus*), meaning this was the first location where the species was found.

## Key Deer

Big Pine Key is the site of projects that benefit endangered Florida Key deer and Lower Keys marsh rabbit, as well as fresh-water fish, wading shorebirds and water-fowl. Restored tidal flow improved life for seagrass communities.

## White-crowned pigeon

The wetland restoration projects benefit wading birds, and hammock projects help the endangered white-crowned pigeon, shown here. Overall, KERF's work provides habitat and food for massive migrations through the Keys every spring and fall.

## Orange Audubon Society 2007 Nature Photo Contest

Orange Audubon Society (OAS) announces its 19th Annual Kit & Sidney Chertok Nature Photography Contest, which offers nature-loving shutterbugs two separate categories of competition and two prize packages with a combined value of \$1,050. "Florida's Birds!" and "No Birds Allowed!" are the category themes.

Contest objectives include promoting interest and concern for preserving Florida's native fauna and flora, while encouraging nature photography. That means subject matter in each category must be native to Florida, and may contain no significant traces of humans or human-made objects.

The digital photo competition is open to all ages. For specifications, submission criteria, and entry fee information, see the application form (PDF file) at [www.orangeaudubonfl.org](http://www.orangeaudubonfl.org). **For additional information, contact Teresa Williams: 407-644-0796 or [mwilliams@cfl.rr.com](mailto:mwilliams@cfl.rr.com).**

## Florida Scores in Great Backyard Bird Count

Florida and several of its cities figured among the "top ten" in several categories of the recent Great Backyard Bird Count. Florida participants submitted 3,009 checklists, placing it ninth among states/provinces submitting the most checklists. For species reported, the state came in third, after Texas and California, with 280 species. Florida ranked first in the number of individual birds reported—an impressive 2,144,737.

Tallahassee's 362 submissions put it third in the nation for localities submitting the most checklists, and that city ranked fifth for number of species sighted, reporting 151. St. Petersburg topped the list for the most birds counted in any locality nationwide with a total of 1,710, 219.

To see the complete rankings, visit <http://gbbc.birdsource.org/gbbcApps/top10>

*Photo of anhinga by R J Wiley*



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At Audubon, we have always understood the vital connection between people and nature.

**By including a bequest to Audubon in your will, you can help ensure a brighter future for both.**

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I bequeath to the National Audubon Society, Inc., a not-for-profit organization located at 700 Broadway, New York, NY 10003, \_\_\_\_\_% of my residuary estate for the benefit of Audubon of Florida.



To learn more, call for a free brochure. Wayne Mones, Vice President, Planned giving, National Audubon Society, 700 Broadway, New York, NY 10003, 212-979-3033. [www.plannedgifts@audubon.org](http://www.plannedgifts@audubon.org)



## PARTNERS IN CONSERVATION: Eagle Ambassador relocated to Zoo

Ray, a non-releasable young bald eagle, headed to a new home last September thanks to the unique partnership between Audubon Center for Birds of Prey and the Central Florida Zoo. As part of the Center's rehabilitation program, birds that are non-releasable due to injuries are often transferred to other licensed facilities and placed in their care.

The fledgling Ray was admitted to the Center in spring 2006 after being rescued by a Sarasota rehabilitator. Examination revealed that the 12-week-old had fallen from the nest, broken a wing, and had been on the ground untended for some time. The shoulder injury was so severe that Ray will never be able to fly free. Instead, the bird began a rigorous training program and has become an eagle ambassador, educating the public about the importance of bald eagles and their habitat.

Ray Balut, a senior volunteer at Audubon Center for Birds of Prey and a master falconer, trained the young eagle to perch on the glove and gradually introduced him to other humans. He named the young bird "Ray" after his

father, Lt. Colonel Ramon R. Balut, USAF, who flew with the "strength and courage of eagles" every time he took to the skies over North Vietnam.

"We were so honored to receive the call offering us this eagle," said Sandi Linn, Director of Education at the Central Florida Zoo. "Although our animal keepers work with many species, the bald eagle was not one of them." From June through September, the Education Keepers traveled from the Central Florida Zoo, dedicating several hours a week to learn proper eagles handling techniques and bonding with this individual bird. This young eagle has a life expectancy of 30-40 years, thanks to the rescue. As an Eagle Ambassador, Ray gives visitors to the Central Florida Zoo an up-close encounter with a magnificent species.

"Partnering with facilities such as the Central Florida Zoo allows us to reach an even broader audience to promote eagle conservation," said Dianna Flynt, Center Supervisor at Audubon Center for Birds of Prey. "It's a winning situation for both organizations."



*Baby owls by Susie Warner*

Spring is right around the corner, and what better gift to give yourself, friends, and family than to support Audubon Center for Birds of Prey. Spring is the Center's busiest season with up to 20 percent of our annual patient load arriving now. Many of these are babies, orphaned when storms blow their nests out of trees or cause limbs to weaken and break. **Please take a moment to renew your adoption, or purchase a new adoption for friends and family members. It's a great way to usher in this season!**

An "adoption" is an annual investment in the care, feeding and medical treatment of birds brought to the Center for care, and for those permanently housed at the Center for community education programs. Become a Buddy, Parent, Guardian or Protector by adopting a species that resides at the Center. Contributions also support Center educational programs that help protect these species' special habitats in Florida. For details call 407-644-0190, or check out the web site at [http://www.audubonofflorida.org/who\\_centers\\_CBOP\\_adoptabird.html](http://www.audubonofflorida.org/who_centers_CBOP_adoptabird.html)

**ADOPT-a-BIRD**

Financial information about National Audubon Society can be obtained by writing to us at 700 Broadway, New York, NY 10003 or as stated below: NATIONAL AUDUBON SOCIETY FLORIDA REGISTRATION # CH281: A COPY OF THE OFFICIAL REGISTRATION AND FINANCIAL INFORMATION MAY BE OBTAINED FROM THE DIVISION OF CONSUMER SERVICES BY CALLING TOLL-FREE, 1-800-435-7352 WITHIN THE STATE. REGISTRATION DOES NOT IMPLY ENDORSEMENT, APPROVAL, OR RECOMMENDATION BY THE STATE.

## Remembering Sandy Sprunt, a Conservation Icon



Alexander Sprunt IV,  
1928 – 2007

Alexander “Sandy” Sprunt IV was born in Charleston, South Carolina. His father introduced him to the field of ornithology at an early age, and the love of nature was part of everything father and son accomplished. In 1952, armed with degrees in biology and wildlife management, Sandy began a 43-year career with Audubon.

His leadership as National Audubon Research Director from 1960 through the late 80s resulted in studies of wading birds, seabirds, bald eagles, California condors, white crowned pigeons and West Indian flamingoes. The work contributed to the conservation of these species and their habitats. His presence on boards of directors, including the Monroe County Land Authority, the Florida Keys Land and Sea Trust, the Asa Wright Nature Center (Trinidad), and the Bahamas National Trust, helped to guide the development of far-reaching conservation policies.

Those who worked directly with Sandy discovered that his truthfulness and positive outlook brought diverse opinions and personalities together for the common environmental good. He was touched when a nature trail in Trinidad (2004) and an environmental area in the Florida Keys (2005) were named in his honor. Sandy helped to build the original boardwalk at Corkscrew Swamp Sanctuary, and so his family asks that friends celebrate his remarkable life with donations to the Sanctuary in care of Ed Carlson, director.

## Florida Conservation Network

Go to [www.ga1.org/natureadvocate](http://www.ga1.org/natureadvocate) to join Audubon’s Florida Conservation Network (FCN). Get weekly updates on environmental issues in the legislative session, and tips on making your voice heard.



**Donate**

### Please Support Audubon of Florida

Visit [www.audubonofflorida.org](http://www.audubonofflorida.org) and click on Donate to support Audubon of Florida’s initiatives or mail your contribution to Audubon of Florida  
444 Brickell Avenue, Suite 850, Miami FL33131

## Audubon of Florida Staff

### Audubon of Florida State Office

444 Brickell Avenue, Suite 850  
Miami, FL 33131  
(305) 371-6399 (305) 371-6398 Fax

#### David E. Anderson

*Executive Director*

#### Mark Kraus, Ph D,

*Deputy State Director*

#### Tim Bachmeyer, Ph D,

*Director of Development*

Dory Ahearn,

*Development Assistant*

Michael England,

*State Finance & Budget Manager*

Susan Fortunow, *HR & Executive Assistant*

Jamie Furgang, *Sr. Everglades Policy Associate*

Vicky Johnston, *Donor Relations Coordinator*

Wendy Martinez,

*Contracts & Payables Coordinator*

Denise Palacios,

*Receptionist/Office Assistant*

Traci Romine,

*Policy & Communications Advisor*

### Tallahassee Office

2507 Callaway Road, Suite 103

Tallahassee, FL 32303

(850) 222-2473 (850) 224-6056 Fax

#### Eric Draper, Deputy Dir. of Policy

Brad Cornell,

*Big Cypress Ecosystem Policy Associate*

Brian Chunmney, *Policy Assistant*

Jacqueline Sulek, *Chapter Coordinator*

Julie Wraithmell, *Conservation Associate*

### Tavernier Science Center

115 Indian Mound Trail

Tavernier, FL 33070

(305) 852-5092 (305) 852-8012 Fax

#### Jerome Lorenz, Ph D,

*State Director of Research*

Brian Banks, *Biologist*

Kate Banick, *Research Associate*

Lucille Canavan, *Office Manger*

Luis Canedo, *Research Associate*

Greg Ellis, *Biologist*

Peter Frezza, *Research Coordinator*

David Green, *Graduate Associate*

Stephanie Hurder, *Field Technician*

Tanya Manchester, *Field Technician*

Gary Mosley, *Grants & Finance Assistant*

Brennan Mulrooney, *Field Technician*

Michelle Robinson, *Biologist*

Shawn Smith Liston, *Senior Scientist*

John Steiglitz, *Field Technician*

### Florida Coastal Islands Sanctuaries

410 Ware Blvd., Suite 702

Tampa, FL 33619

(813) 623-6826 (813) 623-4086 Fax

#### Ann Hodgson, Ph D,

*Gulf Coast Ecosystem Science Coordinator*

Ann Paul, *Tampa Bay Area Regional Coordinator*

Mark Rachal, *Field Biologist*

### Corkscrew Swamp Sanctuary

375 Sanctuary Road West

Naples, FL 34120

(239) 348-9151 (239) 348-9155 Fax

#### Ed Carlson, Sanctuary Director

Rebecca Beck, *Youth Education Coordinator*

Steven Corriveau, *Maintenance Supervisor*

Candace Forsyth, *SW FL Major Gifts*

*Coordinator*

Paul Gootkin, *Assistant Nature Store Manager*

Mike Knight,

*Resource Management Specialist*

Jason Lauritsen,

*Big Cypress Ecosystem Science Coordinator*

Vanessa Morris, *Sales Associate*

Bobby Ray Nichols, *Building Caretaker*

Lori Piper, *Office Manager*

Mary Short, *Nature Store Manager*

Sally Stein, *Volunteer/Adult Ed. Coordinator*

Part time: Julia Askey, *Bethany Summeralls*

*Sales Associates;*

Roger Barry, Gerald Griggs,

Mike Shunney, Amy Wiggins,

*Admissions Associates;*

Maryann Summeralls, *Store Associate*

### Ahhochee Hill

Christie Anderberg, *Manager*

24268 Lake Lindsey Road

Brooksville, FL 34601

(352) 797- 3545

### Keys Environmental Restoration Fund

Jeanette Hobbs, *Manager*

11400 Overseas Highway, Suite 204

Marathon, FL 33050

(305) 289-9988 (305) 289-0073 Fax

### Audubon Center for Birds of Prey

1101 Audubon Way, Maitland, FL 32751

(407) 644-0190 (407) 644-8940 Fax

(407) 539-5700 (407) 539-5701 Fax

**Katie Gill Warner, Center Administrator**

**Charles Lee, Director of Advocacy**

Dianna Flynt, *Rehabilitation Supervisor*

Beth Evans Lott, *Raptor Clinic Technician*

Lisa Morgan, *Raptor Rehab Technician*

Samantha Stock, *Raptor Clinic Technician*

Lynda White, *Eagle Watch Coordinator*

PT: Gina Holt, Teri Marks, *Ed/Vol. Program Coord.*

### Lake Okeechobee Campaign

100 Riverwood Circle

Lorida, FL 33857

(863) 467-8497 (863) 467-8460 Fax

**Paul Gray, Ph D, Science Coordinator**

*Lake Okeechobee Watershed*

## SAVE THE DATE! 2007 Audubon Assembly, November 1-3



### By popular demand, we are going to the beach!

**New location for 2007:** Hilton Cocoa Beach Oceanfront.

View accommodations and special room rates at <http://www.hiltoncocoabeach.com/>

**Special Audubon Assembly room rates:** \$119 available until October 2.

Don't miss the information-packed programs and exciting awards when Florida's conservation-minded citizens gather this November in Cocoa Beach. Join chapter leaders and members, Audubon staff and scientists, wildlife professionals, environmental advocates, agency and elected officials to network and learn about how we are, together, making a difference for the environment.

#### **Kick off the event at a reception on Thursday, November 1**

Assembly registration information and details about programs, exhibits, and field trips to nearby birding hotspots will appear in the summer *Naturalist*. Information will also be available at [www.audubonofflorida.org](http://www.audubonofflorida.org) starting in July 8.

*Photo of marbled godwits by R. J. Wiley*

**Audubon's Mission** *To conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats, for the benefit of humanity and the earth's biological diversity.*



444 Brickell Avenue, Suite 850, Miami, Florida 33131  
Tel 305 371 6399 Fax 305 371 6398  
[www.audubonofflorida.org](http://www.audubonofflorida.org)

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**Executive Director** *David E. Anderson*

**Policy & Communications Advisor** *Traci Romine*

**Editorial Consultant** *Susan Cumins*

**Design and Production** *Franz Franc Design Group*

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