

Audubon FLORIDA

SPRING 2016

Naturalist



Photo by Linda Martino

It's a Baby Issue

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Photo By Ralph Atwood



*Steve Lynch, Chairman
Florida Audubon Society*

Dear Audubon Members and Supporters,

Few things in nature touch us like babies in the wild. Birds' mighty efforts to nest, hatch, feed, and fledge their young tell us so much about the resiliency of nature. People connect with parents' struggle to adequately provide for the next generation.

This issue of the Audubon Florida *Naturalist* magazine is dedicated to some of Florida's most famous baby birds and the people who protect them.

I heard Audubon's Corkscrew Swamp Sanctuary Director Jason Lauritsen say that Wood Stork parents must gather 400 pounds of fish for themselves and their babies each nesting season. Once birds had nature to themselves. But with 20 million people living in all parts of Florida, birds are often pushed to the margins of existence.

Baby birds face many threats. Habitat loss, predators, human disturbance, invasive species, and water pollution, along with storms and droughts, are just some of the challenges. As more and more people choose Florida to live and vacation, we expect these threats to grow.

On the coasts, we recruit bird stewards to monitor and defend nesting areas. Inland, Audubon Jay Watch and EagleWatch train citizen scientists to collect important data on Florida Scrub-Jays and Bald Eagles. In the Everglades, Audubon land managers restore habitat that Wood Storks need for foraging. In Florida Bay, Audubon scientists study water quality and prey fish that Roseate Spoonbills and a host of other wading birds rely on to feed their young. In Tampa Bay, nesting islands remain safe thanks to Audubon wardens. And across Florida, Audubon staff and volunteers advocate to agency and elected officials for water and land conservation.

Birds need our help to face these challenges. Please donate or volunteer. You can do both at the new <http://fl.audubon.org>.

Sincerely,

Steve Lynch
Chairman, Audubon Florida

P.S. I'm delighted to tell you that the Audubon Florida family has recently grown. Please join me in welcoming our newest chapter, Cedar Keys Audubon Society at the mouth of the Suwannee River. There are now 45 Audubon chapters in Florida!



It's a Baby Issue

*Eric Draper, Executive Director
Audubon Florida*



Least Tern and chick by RJ Wiley

Dear Friends,

One of my favorite recent trips was taking a group of people to see a shorebird colony on a Panhandle beach - right on the edge of a parking lot. We marveled at how a few hundred tern parents and chicks could survive so close to human activity. But the baby birds seemed to feel safe beyond the stakes, string, and signs marking the colony borders. They seemed to know that Audubon volunteer stewards in yellow vests held back human intruders.

It was such a great experience that I posted on social media sites and repeated stories about the wildlife spectacular. Weeks later, Deputy Director Julie Wraithmell told me that feral cats had eaten or disturbed every chick. The colony failed. Pictures of cats crossing the road with chicks in their mouths told of another painful loss in the long-running battle to bring back thriving bird populations to Florida's coasts.

We did not give up - are not giving up. We redoubled efforts to create strongholds for coastal wildlife so that eggs can hatch and baby birds can fledge to sustain their species.

The fact is that baby birds need food and shelter from the elements and predators. Most species are specialized and will do okay in undisturbed native habitats. There are good and bad years. It is human changes to natural conditions that throw nesting success out of balance.

It takes human effort to ensure the survival of baby birds. Maybe it's the feeder in your yard, or your native plants attracting bugs and lizards. Perhaps the nearby wetland produces fish, frogs, and crayfish. It may be you providing alternatives to abandoned housecats or insisting on raccoon-proof trash bins.

Some wild birds are adjusting to humans. Audubon's EagleWatch program reports productive raptor nests in close proximity to human hustle and bustle. Yet, other birds need our active intervention. Wading birds in the Everglades are plummeting. Pythons, poor water conditions. We're not sure. In either case, if we want storks and spoonbills to dress up the Everglades, we have to find ways to create nesting strongholds.

I hope you enjoy the stories about our efforts to protect baby birds and their habitat in this spring edition of the *Naturalist*. You can help save Florida's baby birds by supporting Audubon's science-based conservation work at www.GivetoAudubonFlorida.org. Or, consider volunteering with your local Audubon chapter or citizen science program. For opportunities to get involved, please visit <http://fl.audubon.org/get-involved>.

Thank you for all that you do for Florida's baby birds.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Draper".

Eric Draper, Executive Director
Audubon Florida

A Commitment to Protecting Feathered Babies and Their Habitat

Sure, baby birds are cute (albeit sometimes in that “face only a mother could love” kind of way). But they are also a touchstone that brings much of Audubon’s work into sharp focus. Baby birds make science meaningful to the public, partners, and decision-makers. They are also an important measure of the effectiveness of our conservation actions and define the urgency of our advocacy.

It’s not enough to have adult birds survive, we need them to reproduce. The success or failure of a bird’s nesting season tells us a lot about the future of that species. Populations of some long-lived birds might take years to show declines. Monitoring bird breeding behavior helps Audubon scientists identify and respond to threats. Some protection strategies take years to have an effect. That’s why Audubon is invested in birds for the long haul.

Failed nesting is obvious—whether it’s Wood Stork chicks starving in the nest for lack of food or Black Skimmer chicks snatched by opportunistic predators when parents are flushed by beachgoers. That impact is tangible, measurable, and galvanizing.

Bird conservation requires helping species meet all the requirements of each stage of their life histories. The times in their lives when they have the least margin for error are some of the most important for our attention, like nesting season.

Think about it. Parents have to defend their territory, feed themselves and their family, and protect their nest, chicks, and eggs from predators. And if food is scarce, parents must fly longer distances in search of food for themselves and return with food for their nestlings – an enormous energy investment in breeding success. They are tied to their nesting area because to abandon it would be to abandon their offspring.

Thankfully, we can help Florida’s birds during breeding season by:

1. **Ensuring they have sufficient, healthy nesting sites.** For example, Alachua Audubon Society’s efforts to erect nest boxes on utility easements for Southeastern American Kestrels are helping this species overcome a crippling lack of available nesting cavities.
2. **Protecting nesting sites from disturbance.** Nesting birds need to protect their eggs and young from predators and the elements. Coastal bird stewards chaperone nesting areas to protect them from disturbance by beachgoers.
3. **Removing hazards.** Both Tampa and Sarasota Audubon engage with the staff of Audubon’s Florida Coastal Island Sanctuaries to clean rookery islands of entangling fishing line every year, preparing these vulnerable sites for the next generation.
4. **Limiting hyper-abundant or non-native predators.** Corkscrew Swamp Sanctuary’s Dr. Shawn Clem and her team are studying the arrival of exotics and other species to restored habitat, to try to better understand the role new exotic predators have on native species and their habitat.
5. **Ensuring appropriate, quality food for adults and chicks alike.** Besides mapping family territories for Florida Scrub-Jays, Audubon Jay Watch spreads the important message that not only is hand-feeding Scrub-Jays illegal, but it is harmful to the survival of their chicks.
6. **Monitoring how birds react to habitat changes.** With 75 years of data on Roseate Spoonbills and their food sources, the Everglades Science Center team is able to identify how birds they react to environmental changes and can describe what conditions are important for successful nesting.

Barred Owls



Using Audubon Science to Inform Public Policy

In some cases, no amount of on-the-ground fieldwork can improve the outlook for baby birds without establishing and defending public policies that protect them and their habitats. And so, while Audubon staff and volunteers sweat on the ground to protect baby birds, they also work to educate and influence agency and elected officials. Nowhere is this more evident than with Audubon's Everglades Conservation Team as they deftly navigate the political and policy intricacies of the Comprehensive Everglades Restoration Plan and its decades-long implementation. Audubon measures restoration success as each new generation of babies takes flight: Roseate Spoonbills, Everglade Snail Kites, Wood Storks, and Bald Eagles.



Great Egrets

National Audubon Society Strategic Plan Update

In the five-year update of the National Audubon Society's strategic plan, we have redoubled our commitment to full lifecycle conservation. This means we are working to conserve our hemisphere's birds whether they are breeding in the Arctic, passing through Florida on migration, or wintering in Tierra del Fuego. In each location where a bird occurs during its life cycle, there are conservation actions that can be undertaken to improve their success. We recognize that conservation is a partnership, where place-based conservation helps each bird for the time that it is there. And so for our breeding birds, we do all we can to help them succeed and send future generations off on the next stage of their journey, hoping that in their next stop, they'll be shown the same care we afforded them here.



Royal Terns

Photo by David Macri

Black Skimmers

With their tuxedo-like plumage and orange-and-black bills, state Threatened Black Skimmers are among the most striking birds nesting on Florida's beaches. On the wing, they are all grace and agility, skimming the surface of the water in search of prey, dragging their lower mandible until it encounters a fish and reflexively snapping it up, without missing a beat.

On the beach where they nest in shallow scrapes in the sand, skimmers are as comical as they are graceful in the air. With raucous calls and outsized bills, they look like the clowns of the beach, even relaxing by stretching out on the sand like a dog at rest—to the uninitiated, they can be easily mistaken for dead!

Parents tasked with protecting their eggs and chicks from the punishing sun and opportunistic predators are too easily disturbed by beachgoers. Ironically, as one of our biggest beach-nesting birds, they are one of the most easily upset. Posted areas and stewards help to protect them at key sites around the state—in many places, expanded Critical Wildlife Area designations are warranted to better protect them.

While last year was a banner year for fledging skimmers in the Florida Panhandle, some of the state's largest colonies in southwest Florida were decimated by fish crows. The bird stewards of Audubon Society of the Western Everglades and Marco Island deserve extra kudos for their persistence in the face of adversity last season, sticking with the birds despite this disappointment.

One glimmer of hope is the skimmers' ability to nest on rooftops in some cases, where they are better protected from disturbance but face threats of their own. While nesting skimmers are not as successful in ground colonies on the Atlantic

Coast, they do have some successful rooftop nesting—most notably in Brevard County where Space Coast Audubon volunteers have been doing a heroic job year after year of returning fallen chicks at a rooftop site, while working with the building owners to plan improvements to make the roof safer in future years.

Florida is especially important for skimmers in the winter too, receiving many of the birds that breed to our north in the Atlantic Flyway. In 2015, Audubon's Dr. Marianne Korosy and staff, Dr. Beth Forsy and her Eckerd College students, Florida Fish and Wildlife Conservation Commission staff, and members of St. Pete and Clearwater Audubon banded fledglings to learn more about their movements, site fidelity, and life span. Volunteers and staff from around Florida were excited to resight these birds on Marco Island, Cocoa Beach, and even on the north shore of Lake Okeechobee!

Skimmers are in need of stewards in many parts of the state—email your name and location to fconservation@audubon.org to get started.



Photo by R. Munguia



Brown Pelicans

Brown Pelican chicks look almost like dinosaurs, bony and covered in white fuzz. They sit hungrily at attention on warm days with their bill pouches undulating as they pant, waiting for parents to return with a gullet full of fish.

Now a common sight on both of Florida's coasts, Brown Pelicans were once on the brink because of exploitation and the damaging side effects of a pesticide known as DDT. Thankfully, DDT was banned in the U.S. and the birds largely recovered by the 1980s.

Audubon is heavily invested in this species, having managed many Brown Pelican nesting islands with wardens, biologists, and volunteers – particularly in the Greater Tampa Bay region – for more than 80 years.

However, their future is uncertain. Threats to Brown Pelicans include habitat loss (due to development, sea level rise, and disturbance), declines in prey fish populations, and death by fishing line entanglement.

Today, Audubon Florida biologists monitor and manage dozens of pelican rookery islands, especially on the Gulf Coast. We have also acquired sanctuaries for pelicans and their allies, like Lanark Reef in Franklin County. And we've undertaken expensive, large-scale erosion control and restoration projects at others, like the Richard T. Paul Alafia Bank Sanctuary in Tampa Bay, which is leased to Audubon by the Mosaic Company, and the St. George Island Causeway, which is part of the Apalachicola National Estuarine Research Reserve.

In addition to protecting these areas from erosion, Audubon's Coastal Conservation Team is working on adding protections from human disturbance for these rare, vulnerable places.

Audubon has also stepped forward to meet the growing challenge of pelican deaths caused by entanglement in discarded fishing line. Death by entanglement has serious repercussions for a Brown Pelican family. If a parent dies, the results are disastrous for chicks. To combat this problem, Audubon's Mark Rachal and Ann Paul work with Sandy Reed of Tampa Audubon and other leaders in Tampa and Sarasota bays to coordinate annual clean-ups to make nesting islands safer for Brown Pelicans and their chicks.

At the Skyway Pier, volunteers from Tampa Audubon and their partners have drastically reduced entanglement rates—by teaching proper unhooking, removing fish cleaning stations, and spreading the word not to feed Brown Pelicans. Local Audubon chapters are also showing great leadership for this species. Tampa, St. Petersburg, Manatee, Lake Region, Pelican Island, and Bay County Audubon Societies have engaged the public with signs, brochures, and volunteers to teach coastal anglers how to unhook inadvertently hooked pelicans. And their efforts are making a huge difference.

The Brown Pelican is a bellwether for the health of our coasts and has been an enduring icon for conservation in Florida. You can help make sure it stays this way.



**Download our brochure:
<http://bit.ly/HelpPelicans>**

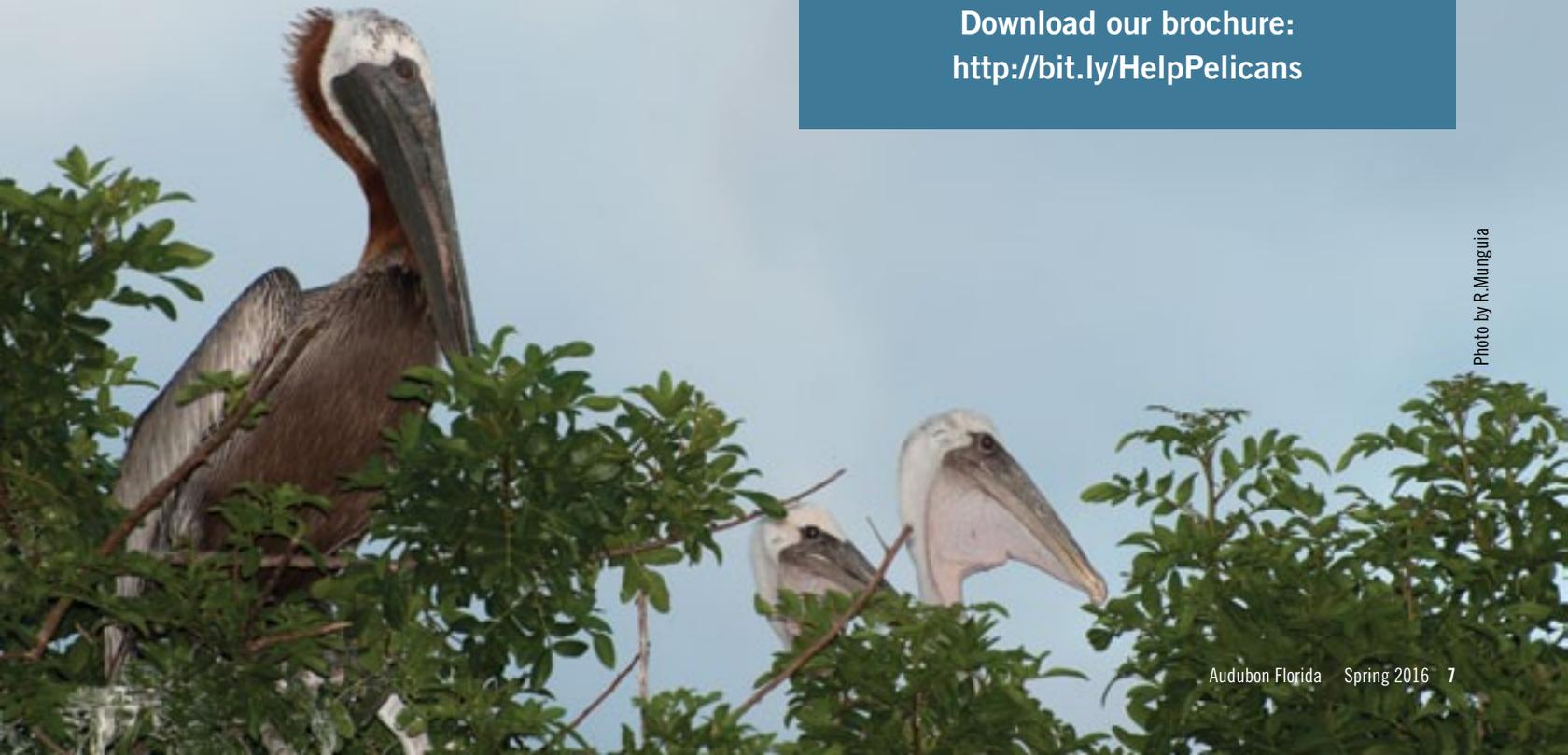


Photo by R. Munguia

Florida Scrub-Jays

Raucous and bold, gregarious, and intelligent – all describe Florida’s only endemic bird species, the federally Threatened Florida Scrub-Jay. Shiny blue and silver plumage adorns this friendly and ever-vocal avian crowd-pleaser, a bird sought after by visitors and residents alike.

Florida Scrub-Jays are among only 3% of Earth’s cooperatively-breeding bird species. They live in family groups of up to 8 adults with “helper” birds that are often offspring of the breeding pair from previous years. Helpers improve survival of all by feeding nestlings and keeping a watchful eye out for predators closing in on naïve, young Scrub-Jays.

No bird is more representative of the subtle beauty and biodiversity of Florida’s unique oak scrub habitat and none is better suited to be the scrub’s best known “umbrella” species. Scrub habitat kept low and open by prescribed fire - which Florida Scrub-Jays must have to survive and produce young - is habitat to which more than 75 other rare animals and plants are restricted.

Scrub-oaks thrive in sandy, nutrient-poor soils blanketing ancient sand dunes that lie parallel to Florida’s long peninsula along Gulf and Atlantic coastlines and in the interior on the Lake Wales Ridge. It’s a harsh environment in which to make a living.

Fire applied at intervals of 5-20 years keeps scrub oaks short and sand pines sparse, providing Scrub-Jays with broad predator visibility to protect their young. The fire also keeps sandy soil patches bare so that Scrub-Jays can each cache up to 8,000 acorns during fall months and relocate the majority of them to feed their families during insect-less winter months.

Florida’s Scrub-Jay population has declined by 80-90% from an estimated 40,000 birds in the late 19th Century. Much of the bird’s unique habitat was converted to citrus groves and row crops, subdivisions, and shopping centers so it’s more important than ever to conserve and manage remaining scrub. Except for large scrubland tracts that support hundreds of Florida Scrub-Jay family groups – such as Ocala National Forest, Avon Park Air Force Range, and Merritt Island National Wildlife Refuge, remaining scrublands tend to be smaller and more isolated from other scrub tracts. Smaller scrub properties host fewer Scrub-Jay families that fledge few juveniles each year so these small populations tend to dwindle and disappear over time.

Jay Watch, Audubon’s popular citizen science program, provides trained volunteers to map and count adults and juveniles on scrublands. Annual Scrub-Jay breeding productivity and territory locations on each surveyed tract are provided to land managers who base fire prescriptions and budgets on Scrub-Jay population trends. Jay Watch is an indispensable program for the health of agency-managed lands and Florida Scrub-Jay population recovery.

To find out more about Audubon’s Jay Watch program or to enroll in an upcoming training, email Jacqui Sulek at jsulek@audubon.org

Photos by Reed Bowman



Florida Grasshopper Sparrows

Imagine you live in a forest, 30 times taller than your head, composed of a mixture of oak trees, bushes, palmettos, tall grasses, and swarms of new flowers blooming each month. You run well and live and raise your young on the ground. And you are a bird who can fly above the forest but rarely do so for fear of pterodactyl-sized raptors. On the ground are snakes whose backs can be as tall as you are and monstrous mammals that want to eat you. Stinging ants will mob and kill your babies if they can. Your forest home goes from extreme drought in May to being flooded a few months later. And it burns every couple of years, sometimes to the ground.

This is the life of a Florida Grasshopper Sparrow and its “forest” is only knee high to a human. It is Florida’s dry prairie ecosystem. These sparrows live their entire lives in central Florida, some may never venture more than a mile from where they were born. Their genus name, *Ammodramus*, means “sand runner,” celebrating their terrestrial locomotion more than their flying abilities.

This sparrow is the most endangered bird in the continental United States. Loss of prairie habitat was the first cause of their decline, but now, in spite of three large conservation properties left to live on, the Sparrows still are declining.

Fortunately, scientists and managers from many agencies are working together to figure out why. Florida Fish and Wildlife Conservation Commission (FWC) researchers at Three Lakes Wildlife Management Area have color-banded almost all the remaining males to track population trends. In addition, FWC has deployed innovative predator fences around sparrow nests, which appears to have doubled the birds’ success rate.

A sparrow population on private land is also being studied, primarily by the University of Maryland. Land managers are mixing up burn patterns to offer maximum habitat options to choose from. And after a few years of preliminary breeding efforts with migratory Grasshopper Sparrows, seven Florida Grasshopper Sparrows were brought in last year to start a flock for captive breeding.

Unfortunately, the future of this unique Florida bird is very much in doubt. Audubon’s Dr. Paul Gray works with the Florida Grasshopper Sparrow Working Group to find solutions. Audubon Florida has also provided funding for additional field technicians at the Kissimmee Prairie Preserve State Park for several years.

But mostly, Florida Grasshopper Sparrows and their babies need public support for funding the vital research and captive breeding efforts needed to reverse their decline and restore healthy populations to Florida’s dry prairie.



Photo by Christina L. Evans

Everglade Snail Kites

Everglade Snail Kites and their babies are a flagship symbol of South Florida's ongoing water crisis. The survival of this species in Florida is intimately tied to our ability to manage water for the environment as well as human consumption.

The Florida apple snail is the Everglade Snail Kite's main food source. Their bills are specifically adapted to pull these snails from their shells with ease. Historically, native snails would nest in abundance throughout Florida, laying their eggs just above the water line in shallow wetlands. But as lands were drained to accommodate human development and agriculture, the number of snails decreased, forcing Kites to travel great distances to find sufficient food.

Water quality also impacts the ability of Everglade Snail Kites to find food. Kites visually search for snails and rely on foraging areas that are relatively clear and open. Increasing phosphorus pollution and altered water management have resulted in dense stands of exotic and invasive plants replacing the native, more open, vegetation. This makes the Kite's task of finding apple snails ever more difficult.

The extreme low water levels on Lake Okeechobee in 2011 demonstrated the impact that water management decisions can have on this endangered species. That year, the nesting season began with Florida already suffering in a serious drought. Audubon advocated that water restrictions be placed on all consumptive users. But as the summer progressed, water levels continued to drop.

When water would no longer flow by gravity to the thirsty agricultural fields south of the Lake, over Audubon's objection, the South Florida Water Management District installed pumps to move remaining water over the dike to reach farms. As the water receded, Kite nests were stranded on mudflats and parents could not feed their young. Nests were abandoned and babies died.

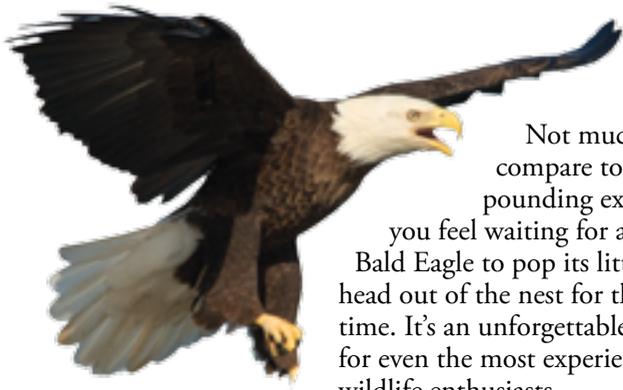
Only 700 Kites remained in Florida as recently as 2009. The population has since increased, but this appears to be because they are now feeding on a larger exotic apple snail that is not as sensitive to changing water levels as the native snail.

Initially, biologists thought that Kites would not be strong enough to lift these oversized shells. It was thought that the Kites' specifically adapted bill was too small to eat the larger exotic snails. Audubon's Dr. Paul Gray once witnessed a young Kite spend a whole day trying (unsuccessfully) to open one.

However, the Kites learned to utilize available resources. In under two years after the exotics arrived, Kites had successfully taught their young to target the smaller exotic snails. While the full impact of this new species on the ecosystem is not yet known and must be viewed with caution, in some regions Kites now seem to thrive on the exotic snail.

This remarkable development is an example of wildlife's ability to adapt when faced with difficult circumstances. But watching a native bird rely on an exotic food source must also serve as a reminder of the urgency to restore native habitat conditions for this iconic messenger of the Everglades.





Not much can compare to the heart-pounding excitement you feel waiting for a newborn Bald Eagle to pop its little gray head out of the nest for the first time. It's an unforgettable moment for even the most experienced wildlife enthusiasts.

Adult Bald Eagles are bone-crushingly powerful animals, with approximately a 7-inch spread on the foot and talons and 300 pounds pressure of gripping strength. Yet they often show their gentle side, by balling up their feet and walking gingerly around newly laid eggs and young. Observers often note how tenderly adult eagles feed and guard their chicks. Eagles are dedicated parents. Their job is to raise the fastest growing raptor species by size; by 10 weeks old eagle babies look sometimes larger than their parents. Such a feat requires a lot of food.

Habitat loss related to growth and development is changing the landscape for Florida's Bald Eagles. Those changes are evident in the data that Audubon EagleWatch citizen scientists collect. Over 250 volunteers record data on nests annually, with many of those nests located in man-made structures such as cell phone towers, transmission towers, platforms, and ballfield lighting structures – not exactly the safest places to raise a family.

Yet because EagleWatchers keep a close eye on 18% of the state's population of eagles, many eaglets that are injured during nesting season receive help. The most dedicated volunteers

Bald Eagles

check their nests daily to document the successes and failures that face each new eagle generation. But data collection is only one part of their job. These volunteers are also usually the first to find out when something goes wrong for a baby eagle. It's not uncommon for a young eagle to jump out of a nest before it is ready or for a spring storm to blow a bird to the ground. Often times the young eagles are injured in their fall, with broken bones being the most common injury.

When EagleWatchers find an injured eagle, they call local wildlife officials who bring the injured babies to the Audubon Center for Birds of Prey near Orlando. Hundreds of baby birds make their way through the Center's Raptor Trauma clinic and rehabilitation facilities every year. The Center averages about 80-100 Bald Eagles annually, with about 25 of those being babies – nestlings, pre-fledges, and fledglings. After an eagle is medically cleared by Center staff, it is released near the spot it was found or placed back into a nest.

Audubon EagleWatchers are on hand, of course, to continue their amazing stewardship of this iconic species.

EagleWatch works with agencies to ensure protections and conservation measures for the eagles and their habitat. Continuing to grow the EagleWatch program on a statewide basis is the worthiest of goals and certainly one of the most fulfilling for the many people who dedicate their volunteer time to the conservation of Florida's Bald Eagles. Their success is an indication of healthy ecosystems and adaptability.

To learn how you can help please email eaglewatch@audubon.org or call the Audubon Center for Birds of Prey at 407-644-0190.



Roseate Spoonbills

It all began some years ago when Audubon's Dr. Jerry Lorenz found himself in a Roseate Spoonbill nesting colony with an interpretive ranger from Everglades National Park. Together they were placing tiny, colored bands around the legs of spoonbill chicks. These bands help scientists understand more about the lives and movements of these iconic pink birds. After quickly banding the chicks, Dr. Lorenz returned them to the nest with a silent wish that he would see them again someday. And he does. Either in person or through pictures submitted through Audubon Florida's Banded Roseate Spoonbill resighting website.

Between 2003 and 2009, Audubon Florida staff and volunteers banded more than 3000 Spoonbill chicks in both Florida Bay and Tampa Bay. Reported observations of banded birds help scientists learn about post-breeding movements of young and adult spoonbills, life histories, survival, and how these factors relate to habitat condition and availability. Spoonbills are important indicators of aquatic ecosystem health.

Using the information he learned from years of banding and resighting birds, Dr. Lorenz is now updating the Roseate Spoonbill account for the Birds of North America – the definitive summary of our current understanding of each bird species. The last version of the spoonbill account was written in 2000. Although this account was well-researched and well-written, the most noteworthy statement in the opening paragraphs is “Relatively little is known about this species.” Audubon's goal is to fill in some of these gaps in our knowledge and use that information to foment change in the management of not only the Everglades but aquatic ecosystems throughout Florida.

You can help. If you see a banded Roseate Spoonbill in the wild, note your location, take a photo, and visit <http://bit.ly/SpoonbillReport>.

Just one example: in 2000, the life expectancy of a spoonbill in the wild was reported to be less than seven years. Dr. Lorenz and his team are currently receiving reports of birds in the wild that were banded up to 12 years ago. And Audubon's Everglades Science Team recently recaptured an adult bird that was banded 16 years ago. We outfitted that individual with a satellite tracking device that recorded its movements for two years. At that time, the 18-year-old bird was attending to a nest in Florida Bay, telling us that spoonbills actively breed until at least age 18.

Our work confirmed that the average age of sexual maturity is between three and four years of age, and although this is highly variable, it allows us to estimate the life expectancy of spoonbills in the wild to be between 25 and 30 years. Due to a significant decline in available funding, this important scientific effort has been reduced to banding only a handful of chicks every year. However, Audubon's Everglades Science Center is now working with Pelican Island Audubon Society to develop a “Spoonbill Watch” program based on Audubon Florida's successful Jay Watch and EagleWatch citizen science programs. We hope that Spoonbill Watch will be just as successful, particularly in understanding how this primarily coastal species will respond to sea level rise and global climate change.



Wood Storks

A loud clacking of bills, a continuous relay of whooshes and whistles from the wings of adults coming and going from nests and a near-deafening din of raspy wheezes from thousands of fuzzy-headed chicks begging for food. This is the harmonious soundtrack of Corkscrew Swamp Sanctuary's active Wood Stork colony.

The specter of this annual event, from the graceful movement of oversized, black-fringed, white wings to the unexpected beauty of dark, scaly, bald heads contrasted with pockets filled with the new life of delicate white fluff-balls, is captivating. It was these sights and sounds that first put the Corkscrew Swamp on Audubon's radar during a time when national sentiment was that wetlands should be drained, logged, and filled - not protected for the bounty of life they hold forth.

These sights and sounds are largely absent from Corkscrew in recent years. Historic Wood Stork colonies are struggling, not only at Corkscrew but throughout the Greater Everglades. While the Sanctuary was able to protect the old-growth bald cypress where Wood Storks nest and some of the surrounding wet prairie and marshes where they feed, the tremendous food requirements of these large-bodied birds (with fast-growing chicks) are only met with a core foraging area (CFA) that extends well beyond Corkscrew's border. In fact, the Sanctuary (now 13,000 acres) contributes <2% of the CFA of the Corkscrew Wood Stork colony, underscoring Audubon's critical need to engage support throughout the Greater Everglades ecosystem, not only at nesting sites.

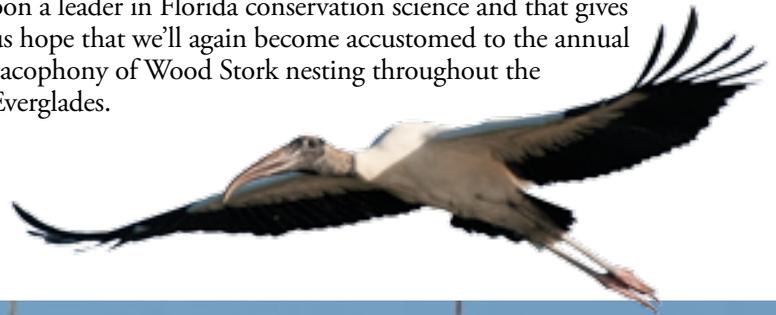
The marked decline in Wood Storks throughout the Everglades is a symptom of changes to the aquatic prey base caused by altered hydrology and land use changes. Not limited by nesting sites, the success of Everglades Wood Storks depends only on

their ability to find food, primarily concentrations of small fish and crayfish, in <15 inches of water.

Wood Stork energy requirements are high compared to other wading birds. During a nesting season, one Wood Stork nest (two adults and an average of 2.25 chicks) requires 443 pounds of food for courtship, nest building, incubation, caring for chicks, and chick growth. Scaling this up, the Corkscrew colony that saw about 6,000 pairs in the early-1960s required about 2.7 million pounds of food.

While Wood Storks appear to be doing well in other parts of their range, even expanding their historic range farther north into the Carolinas, their struggle in the Greater Everglades indicates ecosystem-level problems. Audubon's science and policy teams are on the ground and engaged with these problems, working closely with partners throughout the state to address them.

Biologists at our Western Everglades Research Center are conducting research to better understand links between land use, water levels, aquatic prey, and wading birds. Audubon's Policy Team uses this information to inform their advocacy for wetlands restoration which will be needed for years to come. It is this marriage of science and policy that helps make Audubon a leader in Florida conservation science and that gives us hope that we'll again become accustomed to the annual cacophony of Wood Stork nesting throughout the Everglades.



Photos by R. Munguia

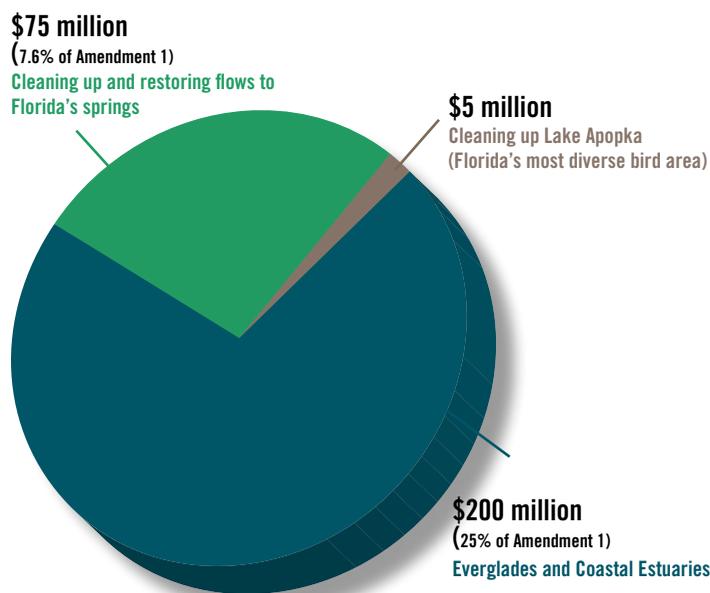
2016 Legislative Session Report

By Eric Draper, Executive Director

The 2016 Florida Legislative Session wrapped up in March. On behalf of the Audubon Florida volunteer and staff advocacy team, thank you for your inspiring effort this year. Indeed, it appears that the prospect of elections may have motivated lawmakers to treat the environment a bit better this year than last. It might also be the fact that huge volumes of polluted water from Lake Okeechobee have been sent to coastal estuaries when the natural path of water is to flow south to be cleaned up and released into the Everglades. But I believe it was your efforts, and the efforts of others like you, that had the greatest effect. You give power to the voice of Florida conservation.

Dedicating Amendment 1 Dollars

HB 989 reserved a significant percentage of voter-approved Amendment 1 dollars for Everglades restoration, estuary recovery, springs preservation, and cleaning up the terribly polluted Lake Apopka. Specifically:



I am proud to tell you that Audubon is credited with helping pass this good bill and we will work to dedicate even more Amendment 1 dollars in the future.

State Lands

HB 1075 started as a bill promoting surplus of conservation lands and the use of land conservation funds to underwrite water supply projects. Audubon worked with conservation allies to fix the worst parts of the bill. A process for swapping state lands for conservation easements now must meet the test of providing “net conservation value.” HB 1075 reaffirmed the Florida Forever program and gives new priority to water protection.



Audubon's Eric Draper with State Senators addressing the media about funding for parks and land conservation.

Florida's Water

SB 552 disappointed most conservation advocates for what it did not accomplish, which is to set Florida on a rapid path to solving the problems with Florida's springs and polluted coastal waters. Nevertheless, as part of Audubon's work, state agencies are now required to enforce state water quality programs and the practices agricultural discharges must follow to avoid adding pollution to waterways. Stopping the discharges to coastal estuaries and restoring springs will take tough new rules to conserve water and control pollution sources.

Budget

The final budget, while generous to the Everglades and springs, fell short of our goal for land conservation. Last year, when Audubon worked with others to pass the Water and Land Amendment, we expected the Legislature to devote at least \$150 million to land conservation. This year, \$92 million is going to that purpose, which is up from \$52 million last year.

Persistence Pays Off

In 2007, Audubon fought to win a ban on dumping sewage sludge in the Lake Okeechobee watershed, cutting 25% of the lake's pollution. In 2010, we got then-Senator Lee Constantine to pass a law to eliminate the absurd uncontrolled practice of dumping millions of tons of septic tank pump-out in vulnerable watersheds. After years of watching the septic tank industry delay the ban, we are glad to report that septage dumping and its impact on our springs and waterways finally ends in 2016.

Building a Brighter Future for Florida's Baby Birds

Donor Spotlight: Jud Laird

A successful businessman and native of South Florida, Jud Laird understands the importance of the conservation of Florida's special places now and for future generations. Fifteen years ago, Jud discovered Audubon's Corkscrew Swamp Sanctuary in Naples and soon became a frequent visitor. He would often bring along other Miamians he thought would enjoy it.

During one of his visits, a Corkscrew staff member encouraged him to join Audubon. As a thank you, he received a canvas Audubon tote bag that he uses to this day. People often ask him what Audubon is when they see the bag and he is always delighted to stop what he's doing and tell them.

A few years ago, after meeting some of Audubon's staff who are based in Miami, he realized how much Audubon does throughout the state. Jud became more supportive as a donor and encouraged others to join and get involved.

In 2012, the Audubon Florida Board of Directors invited Jud to join them. Of course, he accepted. In his own words, "the staff and volunteers around Florida do so much and I am proud of the work they do. My job is to give them as much support as I can to accomplish so many great things."

Jud's generosity has supported Audubon in many ways. In addition to his financial gifts, he also provides rent-free



Jud Laird, José Net, Sebastian Laird-Net, and new baby Marcus Judson Laird-Net

office space for the state headquarters at his office buildings in Miami, donated pea rock to the Everglades Science Center when rainfall had washed out their parking lot and has introduced numerous friends and colleagues to Audubon who have themselves become supporters.

Thank you, Jud.

Stepping Up for the Everglades



Audubon's Everglades Science Center (ESC) biologist Mike Kline went on an epic 300-mile bicycle ride from the Florida Keys to the Audubon Assembly in Orlando last October. The trip raised valuable visibility and funds towards reaching our equipment requirements to effectively continue vital research and monitoring efforts in and around Florida Bay.

Thanks to matching funds from Darden Sustainability we were able to buy a 20' Pathfinder boat. This boat, respectfully named the "Bob Allen," is perfect for our research needs in Florida Bay. Not only is it in excellent condition, but it has plenty of

room for all our equipment. We are grateful for the support in getting our researchers off the docks and back into Florida Bay. We could not have done it without the staff, our state board members and other Assembly goers.

Through monitoring water quality, prey fish, submerged aquatic vegetation, and nesting Roseate Spoonbill colonies, ESC is able to play a major role in the preservation of this marine environment. Thanks to our supporters, we are able to provide critical data that yields practical management information on how to restore and manage Florida Bay.

We would like to recognize state board member Paul Ferber and Gator Ford for the generous donation of a reliable Ford F250. This truck is vital to completing our research and is already trailering boats and hauling equipment most days of the week.

Thank you to all for the contributions. Together, we are making conservation a reality in Florida! Please keep up with Audubon's Everglades Science Center online at: <http://www.restorefloridabay.org>.

Corporate Supporters of Audubon's Everglades Science Center:

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Please contact Cathy Rodgers at croddgers@audubon.org or (407) 489-1497 for estate planning or to make an end of year gift of stock. For other gifts go to www.GivetoAudubonFlorida.org. Gifts specified for Audubon Florida or Florida Audubon Society will be used exclusively to support conservation in Florida.



Save the Date! Audubon FLORIDA Assembly 2016

October 28-29, 2016 – Sirata Beach Resort – St. Petersburg, Florida

Audubon Florida is proud to announce that we will hold the 2016 Audubon Assembly at the beautiful Sirata Beach Resort on St. Petersburg beach.

Join us for Florida's premiere conservation event!

- Hear inspiring talks from leading guest speakers.
- Participate in workshops hosted by Audubon's citizen science and conservation program leaders.
- Explore unique natural places with chapter hosts St. Petersburg and Clearwater Audubon Societies. Join local leaders to tour Ft. Desoto State Park, one of Florida's premier birding hotspots, boasting a checklist of over 320 species.
- Play a part in setting Audubon Florida's annual conservation agenda.
- Network with chapter leaders, staff, and conservation professionals from around the state.
- And much, much more!



Photo by R. J. Wiley