



EVERGLADE KITE

NEWSLETTER

Monthly Newsletter for Audubon Everglades
VOL 59 | Issue 8 | April 2019



Photo: Northern Cardinal © 2019 Susan Faulkner Davis. All rights reserved.

April Bird of the Month: Northern Cardinal (*Cardinalis cardinalis*)

by Clive & Celecia Pinnock

The vibrant red color of the male cardinal with its red crest and accented black face has made this species one of the most recognized in eastern North America, from as far north as eastern Canada to southern Florida. Due to its popularity, the Northern Cardinal is the official state bird of no fewer than seven states in the eastern United States. The mostly brown female, although not as brightly colored as the well-recognized male, also sports a sharp crest and warm red accents. Because cardinals seldom migrate, our neighbors in the northern states are able to enjoy the brilliant splashes of color the red male and his attractive mate add to otherwise drab or snow-covered landscapes.

Northern Cardinals are typically observed in dense thickets, shrubby areas such as forest edges, overgrown fields, hedgerows, well-planted backyards, marshy thickets and ornamental landscaping. They nest in dense foliage, and the male looks for conspicuous perches from which to sing while establishing his territory and advertising his availability to a receptive female. Although pairs may stay together for successive years, about 20% of birds will seek other mates in successive seasons.

With the spread of towns and suburbs across eastern North America, cardinals, once primarily a southern species, have been able to expand their ranges

further north. Suburban gardens, parks, orchards and similar habitats have been instrumental in attracting and keeping cardinals in these new areas, providing ample food resources and nesting sites.

Cardinals eat mainly seeds and fruit, supplementing these with insects, which are predominantly fed to the young during the spring and summer nesting seasons. Common fruits and seeds include hackberry, wild grape, mulberry, blackberry, grasses and sedges. With the increasing popularity of using birdfeeders to attract birds to backyards, nature centers, school yard gardens, etc., birdseed mixtures, especially those including black oil sunflower seeds, have worked

continued on page 3

UPCOMING TRIPS APRIL 2018

Always check the website calendar for details, registration links and last minute changes. Unless otherwise specified, trips are "Just Show Up."

06 SAT (7:30A-12P) STA-1E    
(Rick Schofield, coord.)

07 SUN (8A-10A) Spanish River Park    
(Luis 'Beto' Matheus)

09 TUE (8A-10A) Wakodahatchee
(Chris Golia)     

10 WED (7:30A-11:30A) Loxahatchee NWR     
(Rick Schofield)

11 THU (7:30A-9:30A) Green Cay
(Paton White)     

13 SAT (7:30A-10A) Peaceful Waters
(Scott Zucker)    

14 SUN (ALL DAY) Everglades National Park    (Mark Cook)   

19 FRI (8A-10A) Wakodahatchee
(Valleri Brauer)     

27 SAT (8A-10A) Frenchman's Forest
(Melanie & Steve Garcia)    

27 SAT (8A-10A) Serenoa Glade Preserve (Kyle Matera)
    

28 SUN (8A-10A) Spanish River Park    
(Linda McCandless / Kathy Walters)

JUNE 2019

The following advance registration field trips in June will become available for online registration on their corresponding dates during the month of April, e.g., registration for the June 01 trip begins April 01.

01 SAT (7A-12P) STA-1E (June Challenge)    
(Chuck Weber)

TRIP KEY

EFFORT/DIFFICULTY

-  **Easy:** Boardwalk or paved level surface; or birding mainly from bike / boat / auto
-  **Moderate:** Improved trail; dirt and uneven surfaces
-  **Challenging:** Improved or unimproved trail; uneven, rocky, and/or wet surfaces

DISTANCE

-   **Sitting /Driving:** no walking required
-   **Short:** less than 1 mile
-   **Medium:** 1-1.5 miles
-   **Long:** more than 1.5 miles

OTHER

-  New and/or unique trips
-  There is an associated cost
-  Advance registration required
-  Family-friendly
-  Handicap Accessible
-  Audubon Everglades Friend priority

Long-Term Change and the Study of the Florida Scrub-Jay: A 50 year Perspective

by Gail Tomei

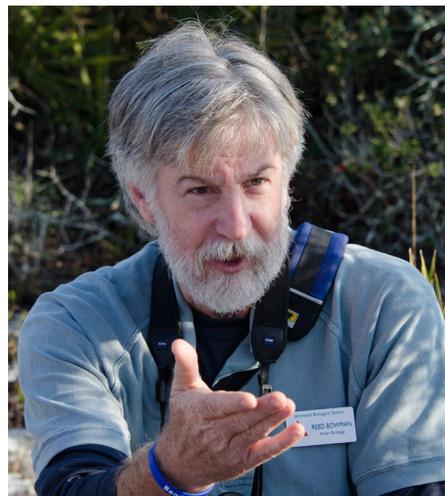
Reed Bowman, Ph.D | Director, Avian Ecology Program, Archbold Biological Station

APR

02

Tuesday, April 2 at 7PM

Meeting and program are free and open to the public. Doors open at 6:30PM for light refreshments, in rooms 101 and 102 at [FAU Pine Jog Environmental Education Center](#), 6301 Summit Blvd (near Jog Road) in West Palm Beach. We look forward to seeing you there!



In his program, "Insights gained from 50 years of study: the socially complex lives of Florida Scrub-Jays," Dr Reed Bowman uses insights gained from the long-term study of the Florida Scrub Jay at the Archbold Biological Station to describe the behaviors of this unique species. The only species of bird endemic to Florida and one of only 15 species endemic to the entire continental United States, it is tracked by birders who travel from across the country to observe it. The bird is known to have been present in Florida as a distinct species for at least 2 million years.

ABOUT DR. REED BOWMAN

Dr. Reed Bowman is the Director of the Avian Ecology

Program at Archbold Biological Station. He has lived and worked in Florida for nearly 35 years and is co-author of the recent book Florida Bird Species: An Annotated List. For the last 35 years, he has studied several of Florida's most endangered birds: the Florida Scrub-Jay, Red-cockaded Woodpecker, Florida Grasshopper Sparrow and White-crowned Pigeon. He is a Fellow of the American Ornithological Society, past President of the Association of Field Ornithologists and the Florida Ornithological Society, and recipient of the Margaret Morse Nice Medal for lifetime achievement in ornithology from the Wilson Ornithological Society. He directs the long-term study of Florida Scrub-Jay ecology, one of the world's longest-running studies of wild birds, now in its 50th year. He has authored over 90 scientific papers, edited or authored three books, and was one of the co-founders of JayWatch, a volunteer citizen-science project that monitors populations of Florida Scrub-Jays throughout the state.

Audubon Everglades has been a strong supporter of the JayWatch program. The Florida Scrub-Jay was officially listed as a threatened state species by the Florida Fish and Wildlife Conservation Commission in 1975, and it was listed as a threatened federal species by the United States Fish and Wildlife Service in 1987. It is estimated that, in the last 100 years, 90% of the Florida Scrub-Jay's population has been lost.

May's Monthly Meeting will be held Tuesday, May 7 at 7PM at FAU Pine Jog Environmental Education Center. The speaker will be Michael Rawls, Landscape Architect, Palm Beach County Water Utilities, presenting "Wakodahatchee & Green Cay Wetlands: A Beautiful Way to Conserve Water"

well to attract cardinals and other seed eaters (blue jays, woodpeckers and squirrels). The insect diet is primarily made up of beetles, flies, ants, caterpillars, and grasshoppers. Meat protein also comes in the form of spiders and centipedes.

Nests are usually well hidden in dense shrubbery, vine-tangled thickets and the like, anywhere from 1 to 15 feet above the ground. The nest is made by the female, using material supplied by the male, who

spends most of his time guarding the territory. Three to five eggs are laid and incubation by the female lasts for 12 to 13 days. Both parents care for the young, which generally fledge 9 to 11 days after hatching. The male may continue caring for the young for a short period after fledging, while the female begins a second nest. Two or three broods are sometimes raised in a season, especially in southern states, where temperatures are more accommodating.



Photo: Gray Catbird © 2019 Susan Young. All rights reserved.

March Bird of the Month: Gray Catbird (*Dumetella carolinensis*)

by Clive & Celecia Pinnock

This dark gray bird is a member of the Mimidae family, which includes Mockingbirds and Thrashers. It is a family of birds noted for the rich variety and repertory of their songs, in which at times they mimic or incorporate segments of songs sung by other bird species residing within their territories. One of the most notable sounds produced by the Gray Catbird is the “mewing,” from which it gets its name.

The catbird’s dark gray body is accented by a black cap and tail and chestnut undertail feathers (coverts), the latter not readily apparent until the bird lifts its tail in alertness to something that has caught its attention or when observed from below the branch on which it is perched. The habitat typically preferred by catbirds is that preferred by other members of its family, namely a variety of thickets, shrubs, hedges, forest edges and streamside brushes.

Both male and female adult birds are identical, but the male’s conspicuous behavior while establishing his territory, singing and actively driving other species from his home turf, makes him easily recognizable.

For most of the year, the catbirds’ diet includes an assortment of ground-dwelling insects (ants, beetles, grass hoppers, crickets, bugs and even spiders, caterpillars and millipedes), which they locate by scratching through leaves on the ground. These food items are also the main fare for the nestlings, which have a significant need for protein in the earliest stages of life. Adults also avail themselves of seasonal fruit in the form of both wild and cultivated berries (elderberries, poison ivy, strawberries, cherries, greenbrier, bay and blackberries), and at times they are viewed as garden pests because of their fondness for cultivated fruit.

The nest is built predominantly by the female out of building material supplied by the male. The cup-shaped nest is placed in dense thickets, generally a few feet above the ground. From two to six eggs are laid and incubated by the female for 12 to 15 days. Both parents, however, assist in feeding and caring for the young. When nest parasites such as Brown-headed Cowbirds lay their eggs in the nests of catbirds, their eggs are generally recognized, pierced and ejected.

WELCOME TO THE HERNANDEZ WHITE IBIS PROJECT*

*information printed with permission from Catharine Noelle Welch, White Ibis Project.

Since 2009 scientists at the Hernandez Lab at the University of Georgia have been studying the White Ibis (*Eudocimus albus*) in urban areas in south Florida. The main goal of their research is to understand the effects of urbanization on this bird in South Florida, primarily in Palm Beach County. The project began with their Band & Re-sighting Project and has recently expanded with the inception of their GPS Transmitter Project in 2015. Please explore their website to learn more <http://hernandezlabuga.wixsite.com/ugawhiteibis>.

White ibises are beautiful wading birds, synonymous with Florida wetlands. However, likely due to rampant development, these birds have become highly urbanized. In some cases, flocks of birds are extremely habituated and beg for food in parks and neighborhoods. This shift in behavior, from foraging on aquatic invertebrates in clean water to consuming anthropogenic food, may come at a cost to their health. Dr. Hernandez is investigating two themes: 1) what is the consequence of this shift in behavior for the health of Ibises, 2) do Ibises play a role as carriers of potentially zoonotic pathogens?

The White Ibis (*Eudocimus albus*) is a semi-nomadic wading bird found in wetland and coastal areas of the southern United States, Central America, and northern South America. Adult ibis have snowy white feathers, pink or red colored faces and legs, and a distinctive curved bill. Juvenile ibis have both brown and white feathers. Ibis typically eat crayfish, frogs, and small fish. They may also eat terrestrial invertebrates from agricultural areas, residential yards, and urban parks. Ibis in some urban areas have become habituated to people and will accept and beg for human food, including bread.

continued on page 4

WHEN IS A WHITE IBIS JUST NOT ANOTHER WHITE IBIS?

by Doreen LePage

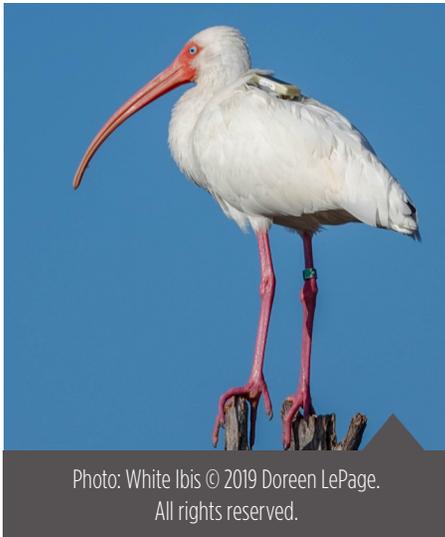


Photo: White Ibis © 2019 Doreen LePage. All rights reserved.

While out on a Sunday morning birding trip, I stopped along Indian Mound Road in Wellington, not far from the Wellington Preserve, to photograph a Red-headed Woodpecker looking very elegant in the early morning light. A White Ibis flew onto an adjacent snag and caught my attention. I noted that the Ibis had a transponder implanted on its back and thought that

was odd. I captured a photo. Later that afternoon, I was chatting with my friend Suzanne Zuckerman. Suzanne did a quick internet search while we were on the phone and sent me a link to a research study. I sent my photo and eBird report to Catharine Noelle Welch of the University of Georgia Hernandez Lab's White Ibis Project.

The next morning I had a note from Catherine informing me that I had, indeed, found one of their study birds. This bird had been captured in Palm Beach Gardens and released in Spring 2016. Its transmitter was no longer working, so they were thrilled to know that he was alive and doing well away from an urban environment. The Hernandez Lab asked if we could place a write-up in our newsletter. If you come upon any of their research birds, take photos of both the bird and its leg band number. The information below this photo provides a description of the research project and a link to their website. The website has instructions on reporting information on any banded/transponder birds you discover. So, next time you see a WHIB in the field, take a good look at it!

[Ibis continued from page 3](#)

White Ibis have suffered large population declines over the past century and are now listed as a Species of Special Concern in Florida. Their current and future success is closely tied to the success of ongoing Everglades ecosystem restoration projects. Ibis use of urban habitats may offer an alternative to their wild Everglades habitat but comes with additional challenges for the birds. Ibis may have better and more consistent access to food at landfills and water treatment wetlands, in residential yards, and at various urban parks. They may also deal with increased stressors, poorer quality food, and increased exposure to disease from environmental sources and other wild animals.

Ibis that visit urban habitats often continue to forage for wild prey. We believe they roost nightly and breed in wild habitats. However, some appear to visit the same urban sites every day. We do not currently know to what extent ibis visit and re-visit urban sites, whether they largely rely upon human food or use it as a supplement, or how human food and urban habitat use affect their health. If urban habitats do not impede the continued health and success of ibis, then such areas could serve an important role as alternative habitat. Research into Ibis health and urban habitat use may also help us to better understand and conserve other Everglades wading bird species.

Florida Legislators Will Soon be Voting on Bills Impacting the Environment

by Scott Zucker

The 2019 Florida Legislative Session has begun, and our legislators are expected to introduce nearly 2000 bills this year. Audubon Everglades, working in consultation with the legislative policy team from Audubon Florida, is closely following this year's legislative bills that pertain to our avian and environmental concerns as they are introduced and move through committee.

Many of these bills may never see the light of day on the floor of their respective chambers. Those that do may face support and opposition along the way. It is too early to fully support or oppose these bills, since their language and intent may change with input from constituents, lobbyists and special interests. Their value as a benefit to our environment can improve or worsen as they move through committee. So, at this point, we continue to closely monitor these bills and are indicating whether we view them in their current form as favorable or unfavorable. If we feel

action is needed, we will send out an action alert to those who signed up for our conservation news and updates. [Please sign up here](#) if you wish to hear from us and haven't already signed up.

To see a more complete description of the bills below or to follow the progress of the bills [go here](#) and type in the bill number in the space provided on top where it says "Go to bill."

PROTECTING FLORIDA'S WATER QUALITY

(Favorable) Senate Bill 1278/House Bill 415 (**Biosolids Management**): These companion bills introduced by Senator Debbie Mayfield (R-Melbourne) and Representative Erin Grall (R-Vero Beach) would reduce phosphorus and nitrogen pollution from biosolids. They are the result of concern over the water quality problems that occurred in Blue Cypress Lake last year and focus on how Florida disposes of the solid sludge leftover after treating wastewater.

(Favorable) Senate Bill 214/House Bill 85 (**More Oversight on Sewage Treatment and Disposal Systems (Septic Tanks)**): These companion bills introduced by Sen. Joe Gruters (R-Sarasota) and by Rep. Will Robinson (R-Sarasota) would require a Department of Health (DOH) septic system inspection program with established rules regarding required repairs and mandate that prospective homebuyers are made aware of the septic system's recommended maintenance at the point of sale.

(Favorable) Senate Bill 1758/House Bill 1395 (**Protect Waterways from wastewater runoff**): These bills introduced by Senator Debbie Mayfield (R-Melbourne) and Representative Holly Raschein (R-Florida Keys) would transfer septic tank regulation from the DOH to the Department of Environmental Protection (DEP); establish a DEP wastewater grant program to fund septic tank remediation and upgrade wastewater treatment systems; reduce nutrient pollution of

[continued on page 7](#)

Profile: Dan O'Malley

by Kristen Murtaugh



Photo: Dan O'Malley

Dan O'Malley has been an important figure in the south Florida birding community since his move here three years ago. He has been a trip leader for Audubon Everglades outings to STA 1A and 2. He has also led field trips at the Audubon Assembly. Since February of this year, he has been an eBird reviewer for Palm Beach County.

Dan grew up in Cranston, Rhode Island. In high school he volunteered for Save the Bay in Providence and did an internship there. This is where he developed an interest in marine science and ecology. Some of his work was clerical, but there were opportunities for assisting with native plantings and salt marsh maintenance. His first job out of college was as a Research Assistant back with Save the Bay. Using the scuba diving skills he had acquired during high school, he harvested and transplanted eel grass and conducted sea scallop surveys in Narragansett Bay.

Dan received his B.S. in Ecology and Evolutionary Biology from Tulane University and his M.S. in Marine and Environmental Biology from Nicholls State University in Thibodaux, Louisiana. His interest in birding was piqued in an ornithology class in his junior year in college. The class's first field trip was to a park across the street from the campus. It was the first time Dan had really looked closely at birds; he saw a Ruby-crowned Kinglet and suddenly realized how many wonderful tiny birds were all around us. Later in the semester the professor took the students on field trips to a banding station and down to the coast. After this class Dan looked for classes he could take on birds and terrestrial species. While he was getting his master's degree, he did an internship with the Barataria-Terrebonne National Estuary Program surveying for Wilson's Plovers and other beach nesting birds on the Louisiana coast.

Dan has been a Wildlife Legacy Biologist at the Florida Fish and Wildlife Conservation since March of 2016. His responsibilities include evaluating State Wildlife Grants (SWG) for marine habitat restoration projects and reviewing reports and conducting site visits to ensure that SWG project deliverables are being completed and following proposed methodologies. He appreciates having the latitude to work in the field, not only on marine species, but also on terrestrial species and birds. Previously, Dan spent three years as a field biologist in the Natural Heritage Program of the Louisiana Department of Wildlife and Fisheries, where he conducted nongame species surveys in a variety of upland, wetland and coastal habitats. He enjoyed the adventures in ATVs, helicopters, and boats that were his transportation for field surveys.

Dan is an ambassador for Louisiana birding. He says there is good volume in all seasons, especially of waterfowl and sparrows. He thinks the opportunities for great sightings during the fall and spring fall-outs along the coast are underappreciated. There are great wildlife refuges, cattle ranches, and rice fields in Louisiana.

I asked Dan to tell me about his work as an eBird reviewer and how the data verification process works. Dan partners with Judd Patterson from the National Park Service to review Palm Beach County reports. Here's the data verification process: the eBird automated data filters alert Dan and Judd to reports that need review; the reports may be flagged for different reasons, including unusual species, out of season sightings, or high counts; the two evaluate any data that the birder has added, such as field notes and photos, and then either confirm the sighting or send an email asking for more information. Dan says that he finds many data entry errors. He urges eBirders to read the introductory material at the eBird website. The FAQ answer to "How can I document my birds better?" is helpful. Dan asks: What are the field marks you used to I.D. the bird? What separated it from other species? It doesn't help at all to say where you found the bird. And, please don't simply put an X next to the number of birds seen. Try to estimate the count. The numbers will never be perfect; there are always ones you didn't see, but an estimate contributes to the quality of the data. There are three informative tutorials on eBird that teach you how to get good estimates of the numbers of birds you are seeing, whether it be single-species flocks, mixed-species flocks, or feeder birds, and they use the same methods that scientists use.

eBird is a Citizen Science project, and participants should aim for reproducibility (the ability of an experiment or calculation to be duplicated by other researchers working independently) just as scientists do. Checklists should be useful 50-200 years from now. To make them useful, Dan says that a lot of data should be provided, including information about the habitat, the trails you used, and the weather. Pictures of the habitat provide good information. You may be birding today in a forest of 30-year old pine trees; in 6 months even, that area could be clear-cut. eBird reports provide critical data for research, conservation, and education. The quality of that data must be high.

In May, Dan will be leaving south Florida for Tampa, where he will begin classes at the University of South Florida toward a new career - Nursing. His previous science studies will have a new context as he considers the goal of earning a graduate degree and becoming a nurse anesthetist or a nurse practitioner. Dan looks forward to birding up there, but he promises to return to Palm Beach County to bird with friends, when he has time off. He plans to stay in Florida, where he can pursue some of his favorite activities - scuba diving, boating, spear fishing, snorkeling, and, of course, birding! We thank Dan for all his contributions to the birding community in south Florida, and we wish him the best in this exciting next chapter of his life!

SMALLER EVENTS WORTH DOING

by Vicki Rogerson

On March 2, Sue Revie, Bill Mauser and I set up Binocular Bootcamp at the 3rd Annual Outdoor Adventure Day at John Prince Park's Smythe Pavilion. This is an event put on by the Florida Youth Conservation Centers Network (FYCCN) and Palm Beach County Parks and Recreation. FYCCN is a public-private partnership created by the Florida Fish and Wildlife Conservation Commission to provide outdoor activities and opportunities for youth and their families. The activities run the gamut from fishing and archery to the Everglades Youth Conservation Camp, which is located in the J.W. Corbett Wildlife Management Area and provides residential summer camps. During the school year the camp offers day and residential school programs. Audubon Everglades is a partner with FYCCN and uses binoculars provided by them to teach youth birding skills.

This is not a big festival, but it is an unusual one. And, while there are not a lot of tabling exhibitors, there is fishing, archery, bike riding, rock wall climbing,

continued on page 6

CURRENT VOLUNTEER OPPORTUNITIES

by Susan McKerny

APRIL IS NATIONAL VOLUNTEER MONTH



AUDUBON EVERGLADES VOLUNTEERS ARE PRICELESS!

We continue to hear from other Audubon chapters that they are impressed with all we are able to offer with an all volunteer organization. Each one of you who volunteers in any capacity makes it possible. There are always opportunities to get involved - remember, YOU are what hope looks like to a bird - get involved!

There are many ways to get involved, one is certain to be a fit for your interest, skills and abilities.

We would love to have you join the team of Audubon Everglades volunteers.

If you have a special interest or talent, or simply want to give back to Audubon Everglades as a volunteer, please check the list of volunteer opportunities for an area where you might get involved. If your interest area is not listed and you are ready to volunteer, get in touch with us and let us know your interest as there are new ways to get involved all the time.

If you would like more information or are ready to get involved, please send an email to President@AudubonEverglades.org. We look forward to having you on our team!

CURRENT OPPORTUNITIES

Citizen Science Projects

(bird surveys, habitat projects, etc.)

Community Events

Conservation Advocacy Team

Education and Outreach

Newsletter Coordinator

Monthly meeting set-up and closing

Social Media

Volunteer Organizer

Events continued from page 5

and kayaking. The kids and their families love it. At our Binocular Bootcamp this year, kids and adults got a mini lesson in using binoculars and then tried them out on a colorful flamingo painting we had placed a distance away. We asked them questions to see if they were really focusing in on their subject and then turned them to the nearby waterway and trees to sight the real birds. Project Perch members Ruth Wright, Chris Golia, and Mary Young joined us for some owl talk and helped with our binocular activity. I don't know what we will do next year, but I am sure it will be something fun for this group!

On March 9 Karen Lindquist, Doris Chafin, Ruth Wright, and I were at the Palm Beach County Natural Areas Festival at Winding Waters Natural Area. This event is put on by Environmental Resource Management (ERM), the county department tasked with the acquisition, creation, design, and management of our 31,000 acres of natural areas. ERM also "administers a range of environmental programs designed to protect, preserve, and enhance Palm Beach County's natural resources, both on land and water." If you go to see the American Oystercatchers at Snook Island, thank ERM; if you visit Pine Glades to watch the sunset and the wading birds come in to roost, or if you ride your bike on any of the miles and miles of multi-use trails that connect many of our natural areas and parks, thank ERM. The March 9th event had many county-wide activities that led up to the final celebration. The day started with a 5k race through Winding Waters and had many highlights, including incredible exhibitors, guided hikes and kayak tours, a prescribed burn, Apple Snail release, and Pine Tree Planting.

Audubon Everglades invited people to play Bird Friend or Foe with us. This game asks people of all ages to look at different items and decide if they are helpful or harmful to birds. Sometimes the questions can be

tricky because certain items, such as a cats, can be both harmful and harmless. Outside, cats are harmful, inside, they are not. A bag of coffee, which seems neither helpful nor harmful, is both, depending on whether it is shade-grown or not. I was impressed that kids were immediately calling the toy car that represented real cars and trucks harmful. When I asked them why, they all told me it was because of pollution. My answer is harmful because of the millions of birds that collide with cars and trucks each year. Score an extra point for the kids! One of the items is a picture of a communication tower. Quite a few people were counting that item as helpful. When I asked why, they said because it provides perches for birds. They were shocked when I told them how many collisions birds have with communication towers, power lines, and wind turbines (50 million/year). I was glad to be able to tell them about some of the solutions to lessen those numbers. I have about 20 items, and each person that plays, youth or adult, finds something they didn't know or are intrigued about. As a prize for adults, we offered one of our Backyard Birds posters, and the younger ones had the choice of a toy insect or bird. As we played our game, we noticed that a couple of the kids took their bird prize over to our Backyard Birds poster to identify it. This may not seem exciting, but the missing link in youth and birding is identifying the bird. To paraphrase the idiom about leading a horse to water, you can lead a kid to a field guide, but you can't make him interested! What a great day. These kids gave me a lot to think about and some really good ideas. I enjoyed this event so much and am grateful for all the help from Doris, Karen and Ruth.

Our next Audubon Everglades event is Earth Day at Okecheelee Nature Center on April 13. Maybe you would like to volunteer! Please contact Vicki at 561-352-7835.



Photo: Outdoor Adventure Day "Flamingo Kids" © 2019 Mary Young. All rights reserved.

AUDUBON EVERGLADES PHOTOGRAPHY CLUB

by Scott Zucker



Photo: March featured speaker Barry Heimlich flanked by Photography Club officers Scott Zucker and Peter Lekos © Lora Lekos 2019. All rights reserved.

Our March Monthly meeting featured Barry Heimlich. A birder with a life list in North America of 531 species, Barry entertained our members with his lively descriptions of how he captured images of birds here in Palm Beach County and around the country.

The Photography Club made an impromptu visit to Green Cay on March 9th. 15 participants were able to

capture wonderful images of the nearly 50 species of birds seen in the early morning light. Our sightings included Roseate Spoonbills, Purple Gallinules, Downy Woodpeckers, a Red-shouldered Hawk, and many others. As always, Club President Pete Lekos and the more experienced photographers offered the novice photographers individual tips on how to capture great images.

Some of the images captured at Green Cay will likely make their debut at the Club's April 22 monthly meeting, where we will have our fourth competition of the year. Accomplished photographer Mike Cohen, who loves to discuss photography and share his knowledge of sites, techniques, equipment and, most importantly, art and composition in hopes of encouraging and inspiring others, will be our judge. This competition will include "Open Nature" and "Black and White," our featured special nature subject that night.

Please join us at our next meeting or outing and make your photography more rewarding and enjoyable. Club meetings begin at 7 PM at St. Michael's Lutheran Church, 1925 Birkdale Drive, Wellington FL 33414

For more information please contact [Dr. Pete Lekos](#) at 201-600-646 [or visit us online](#).

[Legislators continued from page 4](#)

springs under a new basin management action plan; and establish a timeframe requiring wastewater treatment plants to notify customers of unlawful discharges of raw or partially treated sewage into any waterway or aquifer.

(Favorable) Senate Bill 216/House Bill 141 (**Protect Water Quality of Aquifers and Waterways**): These companion bills by Sen. Joe Gruters (R-Sarasota) and Rep. Randy Fine (R-Palm Bay) would notify customers after sewage spills into a waterway or aquifer, provide penalties for spills, and waive penalties if facilities invest in upgrades to avoid further spills.

FRACKING

(Favorable) Senate Bill 146/House Bill 239 (**Ban Advanced Well Stimulation Treatment - Fracking**): These companion bills by Sen. Linda Stewart (D-Orlando) and Rep. Heather Fitzenhagen (R-Fort Myers) define the term "advanced well stimulation treatment" to include any fluid injected into a rock formation; prohibits advanced well stimulation treatments; clarifies that permits for drilling or operating a well do not authorize advanced well stimulation treatments.

(Favorable) Senate bill 314 (**Ban Advanced Well Stimulation Treatment - Fracking**): This bill

introduced by Senator Bill Montford (D-Tallahassee) is similar to bill SB146 above, except that it defines the terms "high-pressure well stimulation" and "matrix acidization" (the primary form of fracking used in Florida) and prohibits both.

PROTECTING FLORIDA'S UNDEVELOPED LAND

(Favorable) Senate Bill 944 (**Purchase land with Land Acquisition Trust Fund**): This bill introduced by Linda Stewart (D-Orlando) would require that \$100 million be spent annually from the Land Acquisition Trust Fund for the Florida Forever Trust Fund. This is good news but falls far short of the previous \$300 million allocation reduced or defunded by the Gov. Scott administration.

PROTECTING OUR TREES

(Unfavorable) Senate Bill 1400/House Bill 1159 (**Tree Trimming and Removal**): These companion bills introduced by Sen. Ben Albritton (R- Bartow) and Rep. Mike La Rosa (R- St. Cloud) are broadly written "pre-emption" bills that supersede local government protection of trees.

PROMOTING COASTAL RESILIENCY

(Favorable) Senate Bill 78 (**Protect Florida's Coasts**): This bill introduced by Sen. Jose Javier Rodriguez (D-Miami) requires the completion of sea level impact

project studies prior to coastal infrastructure projects that receive state funding and requires the DEP to develop a uniform standard for their projections.

REDUCING SINGLE-USE PLASTIC

(Favorable) Senate Bill 502 (**Prohibition of Plastic Carryout Bags and Straws**): This bill introduced by local Sen. Kevin Rader (D-Palm Beach County) would prohibit a store or food service business from providing a carryout bag made of plastic film to a customer and prohibit a food service business from selling or providing a single-use plastic straw to a customer.

(Unfavorable) Senate Bill 588/House Bill 603 (**Undermines Ban on Single-use plastic straws**): These companion bills introduced by Sen. Travis Hutson (R-St. Augustine) and Rep. Anthony Sabatini, (R-Howey in the Hill) are "preemption" bills that prevent local governments from passing their own ordinances to restrict single-use plastic straws.

To find your Senator: [go here](#) and type your address in the space provided.

To find your Representative: [go here](#) and type your address in the space provided.

PROJECT PERCH BURROWING OWLS NEED YOUR HELP

by Mary Young



Photo: the tools needed for project perch volunteers

We are hoping our Audubon Everglades members can help us, through donations, to afford the tools for installation of the crush-proof/flood-resistant artificial burrows that create safe homes for our feathered friends.

Most of the installations happen on school athletic fields. After we give an informational presentation in the classroom, the children sign their name on the burrow, help us dig, tossing dirt onto a blue tarp, and then place the burrow in the ground at the correct angle. If the pick axe is necessary, we adults use it. Next, they help us shake the dirt from the tarp over the burrow and mound the white play sand in front of the burrow entrance. (The white play sand serves as a highly visible “welcome mat” for owls flying at dusk or dawn to see this as a new home; easy digging.) And of course, the children’s favorite part is pressing their handprints into the sand while smoothing it out. Then they help us hammer poles in around the burrows, rope it off and hang the informational signs. When we come back a few months later, the students help us pour new white sand and learn to maintain the burrows by using a 3-prong hand cultivator to clear grass away from the burrow. In this way, children become stewards for the owls.

Your financial donation will help us buy:

Tools needed for Installation and Maintenance	(approximate cost)
60’ long Spud Bar with tapered point - (aka San Angelo Bar)	(\$35.00 each)
8-ft x 6-ft Blue Polyethylene Tarp	(\$7.00 each)
32 oz. Rubber Mallet	(\$8.00 each)
5 lb. Pick Axe - we only need one	(\$35.00 each)
Long-handled (spade point) digging shovels	(\$25.00 each)
3-pronged Hand Cultivator	(\$14.00 each)
White Play Sand	(\$4.50 each)

For questions and to donate gently used tools please call (561) 301-0909. Or to send a check and have us buy the tool/s we need, please make the check out to Audubon Everglades and specifically state on the check that it is for “Project Perch Tools” and mail it to: Audubon Everglades, P.O. Box 16914, West Palm Beach, FL 33416.

2019 INTERNATIONAL FESTIVAL OF OWLS HALL OF FAME SPECIAL ACHIEVEMENT AWARD: DR. RICHARD RAID

by Doreen LePage

The ecosystems around the Florida Everglades are healthier, thanks to Dr. Richard Raid’s extra-curricular love of working with owls, students and farmers. Dr. Raid’s primary occupation is as a professor of plant pathology in the University of Florida Everglades Research and Education Center, but his passion is the UFBarn Owl Program.

The idea of using Barn Owls for sustainable pest control in the Everglades Agricultural Area stemmed from a 1994 high school science fair project. Dr. Raid took the idea and ran with it, engaging thousands of students to build owl nest boxes and dissect owl pellets to understand what the owls were eating. Two students have completed their master’s degrees through the Barn Owl Project.

Dr. Raid also engages the farmers in the project, and, as a result, the sugarcane companies sometimes pay for the nest box building supplies. Farmers are saving millions of dollars in crop damage every year, thanks to the Barn Owls.

While the project started with only a few dozen pairs of owls, there are now more than 400 pairs, with a whopping 80% of nest boxes occupied. Besides greatly increasing the population of owls in the area, the project has greatly reduced the use of rodenticides, which helps owls as well as many other predators in the area.

Faced with Africanized honey bees invading the owl nest boxes, Dr. Raid developed effective methods to get them out of the boxes and into hives where they could be captured. This technique helps more than just owls, since these bees also attack humans.

Dr. Raid participated in the first international conference on using Barn Owls as biological pest control and is currently helping to write a field manual on the subject. His passion will likely continue to make a significant positive impact on owls, farmers, students and the environment for years to come.

Audubon Everglades is proud to congratulate Dr. Raid on this prestigious award, which recognizes the work he has accomplished during his career to benefit Barn Owls and our environment here in Palm Beach County. Watch for a special Owl Prowl Field Trip next year!

THE BIRD NERD: DO YOU KNOW WHAT “ZYGODACTYLY” IS?

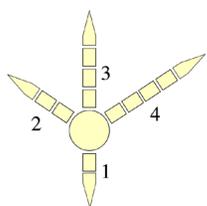
by Bob Dieterich



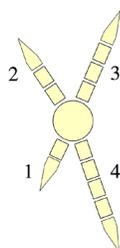
Photo: © Natasha Ong (Unsplash)

“Zygodactyly” is a particular arrangement of digits in birds. This is the first in a series looking at how the structure of birds’ feet – the number and orientation of their toes – can provide insight into their ways of life.

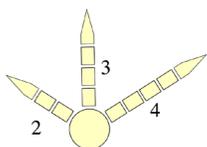
Ostriches are unique in having only two toes, which function as hooves. Emus, other ratites, and quail have three toes, but all other birds are four-toed. The standard foot structure in birds is anisodactyly, three toes in front and one behind, particularly evident in the passerines, also known as “perching” birds.



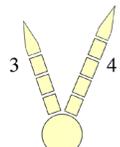
Anisodactylie



Zygodactylie



Tridactylie



Didactylie

Bird-feets.png: Uwe Gille/derivative work:
Fred the Oyster [CC BY-SA 3.0]

But several groups of birds have two toes in front, the second and third digits, and two behind, the first and fourth digits. This is known as zygodactyly. Our famous rarity from a month ago, the Dark-billed Cuckoo, belongs to one of these groups, which, besides the cuckoos, include the parrots, woodpeckers, owls, and osprey. Since none of these groups are closely related, we know that zygodactyly has evolved in the bird lineage multiple times.



Northern Saw-whet Owl © National Audubon Society

This foot arrangement is advantageous in several ways. Remember that birds have only their feet and bills to manipulate their environment. Their forelimbs – wings – are primarily dedicated to flight (or are vestigial), so the structure of a bird’s

foot can be crucial to its survival. The zygodactyl arrangement enables birds to grasp things better and to move about more securely among tree trunks and branches. Think of parrots clambering in the treetops, grabbing and eating ripe fruits. Woodpeckers are more firmly anchored in their vertical positions on tree trunks. Raptors get a better grip on their prey; this is particularly important for ospreys, which target slippery fish. Cuckoos ramble along tree limbs looking for caterpillars and other insects, unlike the birds that flit about and catch their insect prey on the wing. Besides exhibiting these adaptive abilities, many birds within the zygodactyl groups can also rotate the outer hind toe forward at will as the situation requires.

It may not be immediately obvious, but feet are a pretty good indicator of how a bird makes a living. I’ll have more to say about this with additional examples in later installments.

The 2018 membership year runs from January 1, 2018 - May 31, 2019. Join Friends of Audubon Everglades today.
New memberships joining between now and May 31, 2019 will have an expiration date of May 31, 2020.

JOIN AUDUBON

MEMBERSHIP APPLICATION

There are two ways to join Audubon Everglades:

FRIENDS OF AUDUBON EVERGLADES MEMBERSHIP:

All your membership dues and contributions are put to use supporting local conservation projects and educational programs in Palm Beach County. You will receive 12 issues of the Kite newsletter, priority for some special trips and discounted rates at some events and vendors. Join using the PayPal link off our website or by mailing the attached membership application. The Audubon Everglades Kite newsletter is available by email only.

NATIONAL AUDUBON SOCIETY MEMBERSHIP:

includes membership in Florida Audubon and Audubon Everglades plus one year of the Audubon magazine. [Join online here.](#)

Your NAS membership does not grant you the special privileges and discounts afforded to those who are local Friends of Audubon Everglades members. If you choose to join us through National Audubon Society, please also consider becoming a Friend of Audubon Everglades to support local conservation and education initiatives.

Yes, I want to become a member of FRIENDS OF AUDUBON EVERGLADES

Join now using PayPal. Go to AudubonEverglades.org/membership to complete the application.

Or, complete this form and mail your check to: Audubon Society of the Everglades, PO Box 16914, West Palm Beach, Florida 33416-6914

Please check one: \$25 (Single) \$20 (Student) \$20 (Senior) \$35 (Household*) \$75 (Patron*)

Please feel free to give above the membership amount with a contribution of \$ _____

New Member Renewal

Name _____

Email _____

Phone _____

Address _____

City _____

State _____ ZIP _____

*If you selected Household or Patron Membership, please provide the names of all members living at the same address. (2 adults and children under age 18)

Household/Patron Additional Names _____
