

EVERGIADE KITE NEWSLETER Northly Newsletter for Audubon Everglades VOL 59 | Issue 9 | May 2019



Photo: Blue Jay © Jamez Picard/Unsplash

Bird of the Month: Blue Jay *(Cyanocitta cristata)*

The Blue Jay is one of the most familiar birds at backyard feeders in eastern North America. Their active pursuit of food, variety of raucous calls and highly noticeable plumage make the presence of these birds unmistakable. The large blue, highly mobile crest atop the bird's head, the black barring and white patches on blue wings and tail, and the black necklace on grayish underparts set this species apart from other songbirds in our region.

Although Blue Jays are natural forest dwellers, they are intelligent and adaptable, taking quick advantage of feeding opportunities presented at backyard feeders. Their favorite foods are acorns, various nuts, fruit, seeds and grain. They typically fulfill their need for protein by consuming caterpillars, grasshoppers, crickets, grubs, spiders, snails and even dead and dying small vertebrates. Surprisingly, however, at times these birds will raid the nests of neighboring birds and eat the eggs and young.

Their love of acorns has meant that Blue Jays have unwittingly planted oak trees in many areas where they cached nuts in the ground and forgot to recover them. An interesting feeding strategy used by jays to get the "meat" out of nuts like sunflower seeds or acorns, is to hold the nut between their feet and use their beak to hammer and break open the exterior shell. It has been speculated that Blue Jays mimic the call of a raptor (such as a Red-tailed Hawk) as they approach a feeder in order to cause the other feeding birds to scatter and give the jays a chance to gather up as much food as possible. The trick typically doesn't last long, however, because the other birds quickly

by Clive & Celecia Pinnock

realize that there are no raptors present and return to the feeder.

During courtship the male may chase the female throughout the nesting territory and, at times, will feed her. During nesting, however, birds are far less conspicuous in their vocalization and behavior. Their ability to hide their nest is well documented. They can place it anywhere from 10 to 50 feet above the ground, generally in either a deciduous or coniferous tree. Both male and female build the large cup-shaped nest, and the pair incubates the 3 - 7 pale blue eggs spotted with brown and gray for 16 - 18 days. Cared for by both parents, the young fledge in 17 - 21 days. If at any time during the nesting period a predator approaches the nest, the adults attack with loud aggressive calls designed to drive the predator off.

UPCOMING TRIPS MAY 2018

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

01 WED (8A-10A) Seacrest Scrub (Sue Young) 15

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

O4 SAT (8A-11:30A) Evergreen Cemetery (with SFAS) (Paddy Cunningham) ● ↓ <1 ↓

05 SUN (8A-10A) Tall Cypress (Bruce Pickholtz)

11 SAT (6:30A-12:30P) ★ Pelagic (Rick Schofield) ● **1:0**

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 115 Medium: 1-1.5 miles **19>1.5** Long: more than 1.5 miles OTHER New and/or Family-friendly unique trips There is an Handicap Accessible associated cost Audubon Everglades Advance registration Friend priority required

Wakodahatchee & Green Cay Wetlands: A Beautiful Way To Conserve Water Dy Mary Dunning

Michael E. Rawls, R.L.A. | Landscape Architect at Palm Beach County Water Utilities Department



Tuesday, May 7 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 <u>FAU Pine Jog Environmental Education Center</u>, 6301 Summit Blvd (near Jog Road) in West Palm Beach. We look forward to seeing you there!



Michael Rawls, Landscape Architect at Palm Beach County Water Utilities Department, will discuss water quality and wetlands restoration at the Audubon Everglades May 7 program. In his presentation Rawls will review the history of Green Cay Wetlands, design and implementation of the project, water reclamation, habitat creation, the educational aspect of the project, and how the project has impacted the community.

After Palm Beach County Water Utilities Department opened the successful Wakodahatchee Wetlands in

1996, they had the opportunity to expand their water treatment operation. Farmers and environmentalists Ted and Trudy Winsberg sold the land they owned across from Wakodahatchee to the County at a reduced price with the condition it be used to create treatment wetlands and habitat. With a team of consultants, Rawls and PBCWUD staff designed a plan for Green Cay that would build and improve upon the treatment systems used at Wakodahatchee, create a habitat, and place a high emphasis on public access and environmental education.

Approximately 800,000 people visit Green Cay each year to walk its 1.5 miles of boardwalk which winds through a variety of habitats, including cabbage palm hammock, cypress swamp, wetland hammock, and tropical hardwood hammock. The water reclamation project filters millions of gallons of water each day in its wetlands which attract over 200 species of birds, making it the most visited location in Palm Beach County for birders, nature photographers and residents to experience wetland ecology and water conservation first-hand.

June's Monthly Meeting will be held Tuesday, June 4 at 7PM at FAU Pine Jog Environmental Education Center. The speaker will be Carmen Vare, Environmental Program Supervisor, Palm Beach County Environmental Resources Management, presenting "Mangroves, their Inhabitants, and Restoration"

Profile: Chris Golia by Kristen Murtaugh



I recently sat down with Chris Golia on her screened porch, which looks out on her butterfly garden and on a lake in her development. Chris joined the Audubon Everglades board in April, and I wanted to get to know her better.

Chris grew up in Marilla, New York, a small town near Buffalo. She attended the State University of New York - Geneseo, where she majored in French. She has lived in many places, including Albany, New York, Wauwatosa, Wisconsin, St. Louis, Missouri, the Philadelphia area, and New Jersey. She has two sons and five grandchildren.

Chris's career was in the area of patient relations and service excellence in the health care industry. She came to Florida in 2000 as Regional Director for fundraising for the Deborah Hospital Foundation's Heart and Lung Center in New Jersey. In 2003 she transferred back to New Jersey, and in 2011 she returned to Florida as Director of Volunteers at Hospice by the Sea in Boca Raton. Customer service has always been her passion. Chris is a talented trainer and an inspiring speaker. She enjoys helping staff strengthen their communication skills, learn the power of a positive word and a simple act of kindness, and build a caring, supportive team.

Since her retirement in 2017. Chris's life continues to be defined by service. She volunteers for the Trustbridge Hospice Center at the Delray Beach Medical Center, where she sits with patients, listens to their stories and feeds them. Their caretakers have an

opportunity for respite while she stays at their loved ones' bedside. She also cares for an elderly woman in her neighborhood. One morning a week she helps her garden or takes her shopping. Chris loves to cook and, now that she no longer has her sons to feed, often cooks up treats for the young people across the street. Chris is an active volunteer at her church and with Audubon.

Chris loves birds. She doesn't keep lists or chase after rarities, but birding gives her joy. Her former motherin-law, an artist who painted birds, especially cardinals, and taught Chris to observe their behavior. Since her retirement, Chris has indulged her love of adventure and new experiences with travel that provides an opportunity to see new birds. Three years ago, she took an exciting National Parks trip in the American West. This past February she took a winter birding trip to Minnesota, where she saw several owls - the Great Grey Owl, the Northern Hawk Owl, and, of course, the Snowy Owl. A highlight of the trip was the Sax-Zim Bog Birding Festival in Duluth. People who live there distribute a map of their backyards, where visitors can see certain birds at certain times of the year. Chris loves small birding festivals like this, which give her a chance to meet new people and share the love of birding in a new locale. And, of course, having grown up in New York's Snowbelt region, Chris was not challenged by the Minnesota chill! This summer Chris is taking a 12-day Road Scholar trip to Costa Rica.

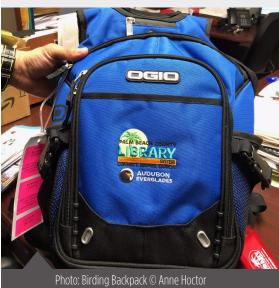
An Audubon Everglades brochure and attendance at a meeting impressed Chris with our chapter's strengths. She was enthusiastic about her experience in the Conservation Stewardship Training course and highly recommends it. She particularly enjoyed meeting the local experts and experiencing their passion and inspiring commitment. She has volunteered for Project Perch, she has written thank you notes to our meeting speakers, she leads Audubon walks at Wakodahatchee, and now she looks forward to continuing to contribute as a member-at-large of the Board.

At the end of our conversation, I always ask what questions I didn't ask that my interviewees would like to answer or what interests they have that we haven't discussed. Once again, I got wonderful answers. Chris loves to sing, and music has been a big part of her life. She was once the lead soloist at her church and was also the lead singer for a commercial rock group called Crystal Revelation, back "when dinosaurs ruled the world," she clarified. Also, Chris once worked in a flower shop. She has used her floral design skills to create a beautiful garden in her Florida vard.

I thoroughly enjoyed interviewing Chris. Her kind and loving attitude towards people and towards the natural world shines brightly through her conversation. She is thoughtful and conscientious about how she spends her time. Service gives meaning to her days. She is grateful for her rich life and wants to give back. Audubon Everglades is fortunate to have her commitment to the Board. Chris will be a dedicated and strong contributor to the life of our chapter.

PBC BIRDING BACKPACKS

by Anne Hoctor



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At our April meeting, Adam Davis of the Palm Beach County Library System, introduced the Birding Backpack, one of six the Library will be lending to its patrons. The backpacks will contain a pair of adult binoculars and two pairs of binoculars for children. They will also include a birding guide, an Audubon Everglades birding location guide and a notebook, all of which the borrower may keep. The backpacks may be borrowed from the library for a period of three weeks. The accompanying photo shows one of the backpacks that Audubon Everglades sponsored.

OUT WITH THE OLD, IN WITH THE NEW: SFWMD GOVERNING BOARD SETS WELCOMING TONE

by Scott Zucker

I attended with guarded expectations my first South Florida Water Management District (SFWMD) Governing Board Meeting since Governor DeSantis asked for the resignations of the members appointed by former Governor Scott. After their 2018 November meeting, when the former board, in an agenda item added at the 11th hour, had unanimously approved the leasing to Florida Crystals of 16,000 acres of stateowned land where the new EAA reservoir is to be built, Gov. DeSantis had promised transparency and appointed board members who share his promise to restore the Everglades and protect Florida's waters.

Well, what a surprise it was upon my arrival to the District headquarters on Gun Club Rd. to pick up an agenda and discover that there would be a presentation on SFWMD's scientific plan on nutrient removal from water discharged by the Storm Water Treatment Plants into the Everglades and on the "ecological health of Lake Okeechobee and south Florida's coastal estuaries, and the restoration of the Everglades, the Kissimmee River and its floodplain."

In addition, there were six opportunities for public comment listed on the agenda: opportunities for general comment at the beginning and end, and opportunities on four specific agenda items, with the phrases "Public comment is encouraged" and "Public comment is welcome." Under the Scott board. comments were usually limited until the end of the meeting, and the board chair was always ready to cut speakers off immediately if they exceeded their allotted time. During this meeting, no speakers were cut off if they exceeded their three minutes, and the Board even asked thoughtful questions to those commenting from the environmental community. This was practically unheard of under the Scott Governing Board, who were often indifferent and sometimes antagonistic to environmental representatives.

District Bureau Chief of Applied Science Dr. Susan Gray spoke for nearly eighty minutes on the environmental nature and impact of the District's operations. She covered the affects of Lake Okeechobee levels on wading bird foraging and nesting activity, the increase of submerged aquatic vegetation as a result of lower lake levels, and how SFWMD measures potential Cyanobacteria Bloom. This information has been missing from board meetings in the last few years. Dr. Gray's scientific presentation is now a regular part of the new board's meetings, and she was peppered with questions about the subjects she covered. Board Vice-Chair Scott Wagner was particularly concerned about the success of wading bird nesting in the 16 counties SFWMD oversees and enquired about the success of wading bird nesting in Lake Okeechobee and throughout the Everglades with relation to historical numbers dating back to the plume trade.

While the Scott Board had seemed to view the Endangered Everglades Snail Kite's nesting locations a hindrance to water level management, the DeSantis Board asked about the health of the Snail Kite population. And, in an effort to show transparency in how the SFWMD works, board member Jacqui Thurlow-Lippisch asked that it be made public who is on the periodic scientist conference call concerning water level monitoring and the health of Lake Okeechobee so more members of the public could have input into the monitoring process.

Board members were intent on discussing the phosphorous levels of water that flows into the STAs with SFWMD staff, who, instead, wanted to focus on the outflows. While not specifically stated, this raises questions about SFWMD staff commitment (and Florida Department of Environmental Protection's commitment) to measure

the degree to which farm and ranch land runoff is contributing to nutrient pollution levels in the lake.

The board also openly discussed the importance of meeting the goals of reduced phosphorous discharge mandated by the Consent Decree, unlike the previous board of Governor Scott appointees, who unsuccessfully went to court earlier this year in order to withdraw from the obligation to abide by the Decree.

Bringing attention to April being Water Conservation Month, Thurlow-Lippisch called for the board to lead the way in implementing water conservation, saying, "We should be disciplined in our use of water and how we care about our environment." She also called upon the board to work closely with environmental groups formerly out of their purview, "This is the perfect opportunity to form partnerships with IFAS and Florida Native Plants to talk about water conservation." She expressed displeasure at the current situation (e.g.,



"the 60% of our water that we waste on our lawns... atrocious"), and she praised Broward County for having a two day per week watering restriction.

Following Thurlow-Lippisch's comments, Board member Cheryl Mead announced that she had a Florida Friendly and National Wildlife Federation certified yard.

A discussion about the Cape Sable Seaside Sparrow, a ground-nesting endangered species (called a "Goldilocks Bird" because it requires ideal conditions for survival) whose designated critical habitat and nesting grounds lie in the middle of the traditional southern water flows in the Everglades, was the one negative takeaway from the meeting. The lively, sometimes hyperbolical exchange focused primarily on how this unique bird was an impediment to Everglades Restoration and what could be done to mitigate the problem. The board's zeal to complete Everglades Restoration and send the water south is to be commended, but, unfortunately, here they are at odds with the Endangered Species Act consultation to the Army Corps of Engineers regarding Everglades Restoration: close water release structures during the birds' breeding season and divert the flow elsewhere.

While this may just be the honeymoon phase, I cannot ever recall seeing the Governing Board so engaged in discussions about the health of the bird population and of the Greater Everglades Ecosystem before. The old board usually raced through meetings, with little to no science discussed, so meetings could end by lunch. This meeting lasted well into the late afternoon. So, if you plan to attend the May meeting (meetings are held on the second Thursday of the month), be prepared to learn along with the board, to have your comments heard, and to be there for a "full" day. Oh, the cafeteria food is eatable. You can view the entire meeting here.

AUDUBON EVERGLADES GONE VIRAL!

by Vicki Rogerson



Photo: Eastern Screech Owl and Wood Duck duckling © Laurie Wolf 2019. All rights reserved.

If I asked you whether you saw the owl and duckling photo, what would your answer be? Well, over one and a half million people have seen the famous Eastern Screech Owl and Wood Duck duckling photo on Audubon Everglades' Facebook page. Vicki Rogerson first saw the photo posted on her neighborhood Facebook page by Laurie Wolf. Laurie is a local photographer and artist who shares her photos of wildlife (mostly birds) with her neighborhood, Jupiter Farms, and Vicki's neighborhood, Palm Beach Country Estates. Vicki asked whether she could share the story and photos on Audubon Everglades' Facebook page, and the rest is history. To date there have been over 19 thousand likes, 2 thousand comments, 17 thousand shares, and 1,518,014 people reached. Local station WPTV aired her story. <u>National Geographic writer Jason Bittel</u> <u>reached out to us to contact Laurie and wrote an</u> <u>excellent article.</u> The DoDo and Bored Panda picked it up. <u>BirdWatchingDaily.com sent it out in an email</u> <u>blast</u>, People.com covered it, and the Frans de Waal Facebook page shared it. The Center for Biological Diversity, Entertainment 9 from Australia, and LADbible a social media publisher based in England have now shared the news. It will be interesting to see if our owl and duck continue around the world! To explain how the Wood Duck duckling wound up in the Eastern Screech Owl nest box, and lived to tell the tale, I ask you to remember lessons from our chapter biologist Clive Pinnock about precocial behavior and brood parasitism!

CURRENT VOLUNTEER OPPORTUNITIES by Susan McKemy



YOU CAN MAKE A DIFFERENCE Volunteer with Audubon everglades

Do you have some free time to share? Would you like to get more involved with Audubon Everglades? We have plenty of volunteer opportunities and are sure to have a place where you can make a difference. Remember, YOU are what hope looks like to a bird - get involved!

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. If your interest area is not listed but you would like to volunteer, get in touch with us and let us know your interest. 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 <u>President@</u> <u>AudubonEverglades.org</u>. 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 Monthly meeting set-up and closing Social Media Volunteer Organizer

AUDUBON EVERGLADES PHOTOGRAPHY CLUB

by Scott Zucker



Photo: May ribbon winners in attendance (from left to right): Quest Judge Mike Cohen, Lora Lekos, Club Pres. Pete Lekos, Scott Laurence, Charlene Raphael, Cindy Darling, Scott Zucker, Alan Chin Lee, Robert DeCuir, Tom Rasmussen © Mary Young 2019. All rights reserved.

Photography Club Members displayed some of their most unique images of the year at our April 22 club competition. The special category challenged photographers to leave their comfort zone and submit Black and White nature images that did not include avian species (not even the Black-andwhite Warbler). The Open Nature category accepted all nature subjects, including birds. Accomplished photographer Mike Cohen, an art photographer who places a premium on composition, expertly judged the competition. All ribbon winners from the exciting evening can be seen here on the Auduboneverglades. com website.

The Photography Club season concludes on May 20 with our "Best of the Best" annual end-of-vear competition. All previous ribbon-winning photos will automatically be entered, along with selected images from club members who did not receive ribbons for images entered in competitions this year. To mark this special competition, multiple judges will provide feedback on the photographs and select the top images of the year. The judges who have already committed are Alan Leckner, an art director who has his own graphic design firm, and Lance Worley, an award-winning and published photographer. Both judges have been featured presenters at previous monthly meetings.

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.



Salon Group Merit Nature Open Award Winner, Lora Leko's "Osprey with Fish" © Lora Lekos 2019. All rights reserved.

WHAT'S NEW WITH *Plants for birds*?

by Vicki Rogerson

Audubon Everglades (AE) was able to sponsor \$2000 in Native Habitat Grants for Green Schools this spring with generous support from Florida Power & Light. We received seven proposals from elementary, middle and high schools. The proposals included everything from creating pollinator, butterfly and hummingbird gardens to transforming a retention pond. The one element they all had in common was restoring habitat with native plants.

As you can imagine, it was difficult to choose just four projects. We were able to fully fund four and, with additional funds from our *Plants for Birds* program. we gave a starter kit of native plants to all seven. Vicki Rogerson and Kat Rahla, your friendly *Plants for*

Birds specialists, visited each school and made site evaluations. We gave out materials on local native plant resources, hummingbirds, bird-friendly habitat tips, and pollinator/butterfly gardens.

With the help of AE members Susan Davis and Cindy Darling, we hosted an informal open house for Green School team members at Indian Trails Native Nurserv with owner Jane Thompson. This was so successful that we hope to do it again with more teachers and Audubon Everglades members. We are in the process of revisiting schools with follow-up materials based on each project. AE members, Chuck and Linda Hignite, donated a bounty of Corkystem Passionflower vines from their garden just in time for these visits. It has been rewarding to work with Lauren Butcher from the FAU Pine Jog Environmental Green Schools Recognition Program and each of the students and teachers we have met. We can't wait to go back and see their progress!



Audubon Everglades hosts open house at Indian Trails Native Nursery for Green Schools © Susan Davis 2019.

PROJECT PERCH, BURROWING OWLS AND PALM BEACH COUNTY SCHOOLS

by Susan Davis and Mary Young



After two years of carefully building contacts, we are excited that Palm Beach County schools warmly embraced Project Perch this school year. Just recently we visited three schools, met with a promising high school student interested in studying Burrowing Owls, and helped students install artificial burrows.

In March, at a middle school that is also a Green School, Susan Davis, Don Davis and Mary Young, assisted by Holly Krahe, taught five periods of 6th and 7th grade science students about Florida Burrowing Owls. That same week, Don, Mary and Anne Hoctor guided and assisted the school's Garden Club students one day and the Animal Rescue Club the next day in digging and installing two artificial burrows. Through these efforts we were able to reach at least 250 students and several teachers at the school. We will continue using the PowerPoint presentations that we developed for future teaching opportunities at all grade levels.

A Green School Teacher of the Year wants us to speak to the students in her Environmental Club and is also interested in creating habitat and installing burrows on her school campus.

Another teacher, who had seen our "Wanted" flyer for the Florida Burrowing Owl at the Palm Beach Zoo, contacted us about her 9th grade student who was scheduled to give a talk on Burrowing Owls at the zoo and wanted a poster to show the audience. The student chose the Florida Burrowing Owl as her four-year student project and wrote her first research paper on artificial burrows. The Project Perch team met with her in April to discuss ways she could collaborate with us throughout her high school years. This is an aspect of school partnership that we had not expected, and we are hopeful that more students will choose to work with us and become stewards of the environment.

A child who received our Burrowing Owl handouts during our presentation at his school told his mother, who is a teacher, what he had learned. She contacted us about giving students at the school where she teaches our BUOW presentation. We will be able to reach another 200 5th, 6th and 7th graders there before the end of this school year.

The assistant principal at an elementary school told us that people from Audubon have called his school asking for access to photograph Burrowing Owls. He said that security at schools is tight. They will not allow photographers on their campus, and fielding these calls takes the staff away from important work. We are concerned that our positive relationship with the Palm Beach County Schools, which we have worked hard to establish over the last two years, could be jeopardized. We all need to tell people clearly not to call schools about owls. Florida Burrowing Owls are a threatened species and they require privacy if they are to thrive.

Remember that we are always searching for Burrowing Owls in Palm Beach County. If you or someone you know sees owls, other than the ones at FAU, please contact us. We're also looking for people who would enjoy working with Project Perch at community events and/or helping us in the schools. To contact us, email: projectperchpbc@ auduboneverglades.org, or call Mary Young at (561) 876-8815 or Susan Davis at (561) 790 3584.

A LITTLE BIRD TOLD ME: IT'S TIME TO RENEW YOUR FRIENDS OF AUDUBON EVERGLADES MEMBERSHIP!

by Doreen LePage

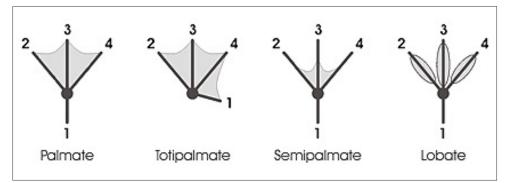
Your 2018 membership to Friends of Audubon Everglades will expire on 5/31/19. Some of you have already renewed for the 2019/20 club year, and we thank you for being loyal members. The success and strength of our club rely upon the generous support of its members. This year, as part of our club's rebranding, our membership year was aligned with our programs, field trips and photography club activities. We have all enjoyed the five free months of membership the board approved to help with that realignment. Even better news . . . the dues will remain the same this upcoming year. \$25 - Single, \$20 - Student, \$20 - Senior, \$35 - Household, and \$75 - Patron.

How can you help us with your renewal? You can renew using the secure PayPal option. Be sure to provide all the information on the form, even if you think your information has not changed. We are discovering that many members have new email addresses or phone numbers and our records are outdated. Part of recent club rebranding was our conscious decision to transition the club into a "Go Green" organization. Our newsletter and mailings are distributed using email. If we lose your currant email or phone number, we can no longer communicate with you. This would be unfortunate for both sides.

We will still accept renewals mailed via the USPS. Unfortunately, though, this process requires additional volunteer time. Someone has to go to the post office once a week to gather the mail and then distribute the checks to the treasurer and mail the renewal forms to the membership chair. Besides creating extra work for volunteers, this delays notice that you have paid your dues. Several times last year, I emailed reminder notices to folks who had already paid their dues. All of this can be avoided with the use of PayPal. We thank members who currently use PayPal, it is a huge help to the club and provides accurate (trackable) records for both the treasurer and membership chair.

We will continue to accept renewals at the monthly meetings, but please note that this year no payment

THE BIRD NERD: FOOT ADAPTATIONS IN AQUATIC BIRDS by Bob Dieterich



Birds are an eclectic group, pursuing a multitude of life strategies. There are aerialists like swifts and albatrosses, landlubbers like quail and tinamous, tropical rainforest dwellers and polar inhabitants like penguins and auks. Many species are particularly adapted to aquatic habitats, and, while it may seem that aquatic living is a specific pursuit, adaptations to it are quite varied. This diversity is especially evident in foot structure.

Waterfowl, such as geese and ducks, are the archetypical web-footed birds, in which the front three toes are connected. This is officially termed palmate webbing. Gulls, terns, flamingos, loons, petrels, penguins, and a host of others all have palmate webbing, which helps power them above and below the water surface.

Other bird families have different types of webbing to serve the same function. Pelicans and related families,

such as cormorants, boobies, and anhinga, have what is called totipalmate webbing, where all four toes are connected. That structure creates an even larger surface area for propelling a bird through the water.

Another type of webbing is called lobate webbing. This is where the individual toes bear lobes of skin to increase surface area but the toes themselves are not connected. Grebes and coots have this type of foot structure, which perhaps facilitates their movement through emergent marsh vegetation, where full webbing would be a hindrance.

Other foot adaptations include semipalmated webbing, where the webbing is only partial between the toes, an adaptation seen among some sandpipers and plovers. A radical departure from the webbing norm among aquatic birds is found in such species as the gallinule and jacana. Instead of webs on their feet, these birds have incredibly long toes that help







distribute their weight and permit them to walk on floating vegetation, giving them the appearance of "walking on water."

So, among the wide array of bird groups that have adapted to aquatic living, a variety of solutions in the form of foot structure have been found to succeed. Next time you're out birding, spend a little time to take note of the remarkable diversity in the legs and feet of your subjects.

Membership continued from page 7

will be accepted without a fully completed renewal form. We appreciate your help so we can update our records appropriately.

During the grace period for membership (June 1- July 31), email reminders will be sent every few weeks to anyone who has not renewed their dues. On August 1 all non-renewals will be dropped from our membership roll. Our goal is to have no one in that position!

Please take time out of your busy schedule to renew your membership today. Note: <u>This link will take you</u> to the Audubon Everglades website. You may get a notice that it is not a secure site. However, once you click on the PayPal button, you will be transferred to their secure website to complete your transaction. 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

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.

MEMBERSHIP APPLICATION

Ver I want to become a member of FDIENDS OF AUDUDON EVEDCIADES

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