Two-thirds of North American Birds are at Risk of Extinction

National Audubon Society’s new climate report, Survival by Degrees: 389 Bird Species on the Brink, shows that birds will be forced to relocate to find favorable homes. And they may not survive. Two-thirds of North American birds are at increasing risk of extinction from global temperature rise. The fate of birds and humans is deeply connected. Because birds are present in every landscape (unlike other animals), birds tell us about the health of places in which we all live. If a landscape or ecosystem is broken for birds, it is, or will soon be, for people. If we protect birds, we protect the earth. As an indicator species, birds are telling us that there is still time to get this right if we take action now and demand action from our elected officials at every level of government. We must reduce greenhouse gas emissions at an urgent speed and on a wide scale from every sector of our economy—electricity generation, agriculture, transportation, commercial and residential building and industrial processes.

Already we are seeing the impacts of climate change with sea level rise in Florida, longer fire seasons and drought in the West and stronger hurricanes in the Gulf and Eastern seaboard. And it’s affecting bird migrations as well. Global warming changes the distribution of plants and other animals that birds need for nesting, protection, and food. That means birds could run out of places to live and food to eat.

The positive message is…this is still in our control! We can decide what the future holds for the birds we all love. If we take action now and keep global warming at the lowest projected warming scenario, 76 percent of “at risk” bird species will be better off.

What you can do:

- **Increase yard habitat** by planting trees and native plants. Add a bird bath. Benefits: plants attract insects that provide food for birds plus lovely butterflies for you to enjoy and provide shelter and nesting areas for birds. The nectar, seeds, berries, and insects will sustain birds and diverse wildlife.

- **Leave dead trees (snags)** which provide nesting and food for cavity nesters like woodpeckers & owls.

- **Avoid or reduce pesticides** around your home and garden.

- **Use less plastic.** Avoid single-use plastics including bags, bottles, wraps, and disposable utensils. It’s far better to choose reusable items, but if you do have disposable plastic, be sure to recycle it.
• **Make windows safe.** On the outside of the window, install screens or break up reflections—using film, paint, or Acopian BirdSavers or other string spaced no more than two inches high or four inches wide.

• **Keep cats indoors.** Save birds and keep cats healthy by keeping cats indoors. You can also train your cat to be on a leash.

Read National Audubon Society’s new climate report, *Survival by Degrees: 389 Bird Species on the Brink* on this link: [https://www.audubon.org/survival-degrees-about-study](https://www.audubon.org/survival-degrees-about-study)

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**Put your old Christmas tree to good use—start a brush pile near your bird feeder.** Not only will it provide good year-round cover for birds, but it will also take up a lot less space in your local land fill.

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**Great American Teach-In Midway Elementary School, Sanford**

Is it a Roseate Spoonbill or a Flamingo?

For the 2019 **Great American Teach-In** at Midway Elementary School, Marguerite Terwilleger, Peggy Stickney and Joy Rector represented Seminole Audubon Society. They presented to all the kindergarten classes and one first grade class.

The presentation consisted of answering - what is the Audubon Society? Who was John James Audubon? what is an ornithologist, what is a naturalist, what is a painter, what is a bird, how to protect birds and how to identify a Roseate Spoonbill.

The one goal was to have the students know that the wild pink bird they see in central Florida is most likely a Roseate Spoonbill, not a Flamingo. We had the students pretend the feeding behavior of Roseate Spoonbills and Flamingos. Also, the students looked at the slide of the two birds and discussed how the birds are alike and different. They watched this video of Celery Fields in Sarasota, Florida, to see feeding behavior.  [https://www.youtube.com/watch?v=mZtrvqVQsyE](https://www.youtube.com/watch?v=mZtrvqVQsyE)

A couple of weeks later Joy Rector was at Midway Elementary School. A kindergarten teacher proudly told Joy, “Over Thanksgiving I went to Sea World with my family and told them the birds we are looking at are Spoonbills.” Success of our goal!

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**Joy Rector**  
**Peggy Stickney**  
**Marguerite Terwilleger**
Reddish Egret is a species that never fully recovered from the devastating plume trade in the 1920s and 1930s that left none in Florida. Unlike other wading birds that recovered Reddish Egret numbers remain small, with just a few hundred currently counted in the state. They are the most rare and most habitat-restricted heron in Florida and they are on the state endangered species list.

In 2018, a lethal Gulf Coast red tide littered beaches with dead wildlife. In October 2019 there was another outbreak of red tide with concentrations of the toxic algae higher and more toxic than in 2018. It is the likely culprit in the death of two Reddish Egrets in Ding Darling National Wildlife Refuge on Sanibel Island on Florida’s southwest Gulf coast. These two birds were tagged as part of a research project trying to understand why this species has not recovered.

“These birds are giving us a signal,” said zoologist Ken Meyer, director of the Avian Research and Conservation Institute in Gainesville, which led the study. “It might seem insignificant, but what they’re revealing to us is that the problems that we already know about are a problem, and are not going away. They’re only getting worse.”

In 2014, Meyer outfitted five birds with trackers to study the movements of the small family of Reddish Egrets at Ding Darling National Wildlife Refuge on Sanibel. Wildlife managers wanted to better understand why reddish egret populations around Florida have continued to flounder.

Their entertaining and drunken-appearing foraging behavior may be part of why the birds’ numbers remain so low. Clear water and a hard bottom are required to hunt in this manner. These birds are territorial, and if the habitat deteriorates, the birds suffer.

The two research birds, named Ding #2 and Darling, were particularly valuable because they lived so long, in and near the protected refuge. That appears to have helped them survive about twice as long as other reddish egrets Meyer has studied in the Keys, where car strikes and other predators are more common. The birds’ radio trackers quit last year after batteries expectedly ran out, but the birds could frequently be spotted along the four-mile Wildlife Drive that runs the length of the refuge.

In November, Meyer got word from the Clinic for the Rehabilitation of Wildlife, or CROW, in Sanibel that Ding #2 had been found in bad shape, showing signs of red tide poisoning. Rescuers said they couldn’t save the bird. A few days later the second tagged egret, Darling, was brought in, also showing signs of red tide poisoning. The egret was unable to stand or eat on its own and died four days later.

In a blog post Friday, Meyer called Ding #2 an icon of research, “contributing over 8,000 precise locations as he fed, rested, roosted, nested, and graced us with his presence...Ding#2’s data represent a priceless conservation legacy, making his debilitation and death, almost certainly the result of yet another severe invasion of red tide, all the sadder.”

Meyer worries that while red tides occur naturally, and egrets and other birds have likely survived centuries of tides, manmade pollution and climate change are making the tides worse and more lethal.

Excerpts from Florida Climate Change Initiative
Citizens Fight the State’s Inadequate Plans to Restore 15 Outstanding Florida Springs

On Wednesday, November 20, springs advocates concluded a seven-day administrative hearing in Tallahassee, before Administrative Law Judge Francine Folkes, to challenge the Florida Department of Environmental Protection’s (FDEP) ineffective water quality plans (Basin Management Action Plans or BMAPs) for 15 Outstanding Florida Springs. These plans fail to meet the minimum standards in state law, including, most importantly, the ability to reach the total maximum daily load (TMDL) water quality goal within 20 years.

In recent years, the state has adopted 36 Basin Management Action Plans designed to protect important rivers, lakes, and estuaries. The Outstanding Florida Springs BMAPs, required by the Florida Springs and Aquifer Protection Act, are the first to be challenged in the state. Attorneys John Thomas, Anne Harvey, Doug MacLaughlin, and Terrell Arline represented the petitioners.

The unprecedented legal challenges, originally filed in January 2019 by seven conservation organizations and three individuals, cover three springs of the Santa Fe River basin (Our Santa Fe River, Ichetucknee Alliance, Jim Tatum, Paul Still), seven springs of the Suwannee River basin (Sierra Club, Tom Greenhaugh), Silver and Rainbow Springs (Rainbow River Conservation, Silver Springs Alliance), Wekiwa and Rock Springs (Friends of Wekiva River), and Volusia Blue Spring (Save the Manatee Club). The Florida Springs Council led the effort to raise funding, recruit expert witnesses, and coordinate among the numerous petitioners.

The hearing began with FDEP presenting its case that the BMAPs met the minimum requirements in state law. Despite the clear inability of several of the BMAPs to achieve the necessary pollution load reduction, FDEP argued that the plans could nevertheless meet water quality goals within 20 years because of uncertainty in the fate and transport of nitrogen through groundwater and because “adaptive management” would allow them to amend and improve the plans every five years as they are implemented. FDEP witnesses argued that the BMAPs were not required to require pollutant reductions for categories of polluters, despite the clear intent of Florida law and FDEP’s own rules. FDEP also claimed that it did not have the authority to reduce pollution beyond what was already in the BMAPs.

As Florida Springs Council Board Member Bob Palmer, who oversaw the case for FSC, explains, “Over and over again FDEP misinterpreted the law, science, and data to make its job easier, with apparently no concern over whether the plans would actually work. The challenged BMAPs fail to meet water quality goals, fail to account for future growth in pollution, and fail to provide serious recommendations and the required information to make these plans successful in the future.”

Under cross-examination, FDEP witnesses acknowledged that project and funding information required under state law was missing for many of the nitrogen reduction projects listed in the BMAPs. They admitted to significant errors in the BMAPs, particularly related to their assumptions for septic tank nitrogen loading and the benefits from converting to advanced septic systems. Questioning further revealed that FDEP’s plans relied on credits from total adoption of advanced agricultural practices that are neither required, funded, nor widely practiced.

According to Save the Manatee Club attorney Anne Harvey, “Because of these errors the water quality plans for Volusia Blue, Wekiwa, Rock, Silver, and Rainbow Springs will only achieve a fraction of the reduction in nitrogen loading assumed by the Department. There is no reason why the people of Florida should have to wait five years for DEP to correct its mistakes and produce honest plans.”

FSC attorneys presented evidence that FDEP had changed its interpretation of the law and science during the drafting process. In early drafts of the BMAPs, the Department acknowledged a “gap” between the reductions needed to achieve the water quality goal and the reductions achievable through the BMAPs. At the hearing, FDEP witnesses testified that it was not possible to evaluate the effectiveness of the plans because of uncertainty in how nitrogen travels through the aquifer.

More significantly, FDEP removed or weakened important policy recommendations relating to agricultural pollution, which accounts for more than two-thirds of nitrogen pollution to Outstanding Florida Springs, at the request of the Department of Agricultural and Consumer Services (DACS). While DEP’s witnesses pointed to a lack of cooperation from the Department of Agriculture and Consumer Services for their inability to meaningfully address agricultural
pollution, the draft plans show the DEP essentially allowed DACS to rewrite the plans to remove any urgency or cost estimates regarding necessary advances in reducing agricultural pollution.

“What’s most distressing,” says FSC executive director Ryan Smart, “is that DEP actually had better plans at one point in time. Draft plans did account for future growth, were honest about what needed to be done to address agricultural pollution, and gave policy recommendations and estimated costs to meet water quality goals. We’ve seen the draft plans and presented them to the court. They clearly show that DEP buckled to political pressure and changed the plans to be less honest and effective.”

Expert witnesses did a credible job showing FDEP under-estimated septic tank nitrogen loads and miscalculated the benefits of transitioning from conventional to advanced septic systems. They also showed that where BMAPs have been implemented, like in the Santa Fe and Suwannee basins, they have completely failed to curb the increase in pollution to springs. In fact, because the BMAPs do not account for future growth in agricultural production, water quality is likely to get worse, even after BMAP implementation.

On the final day of the hearing, famed springs photographer John Moran presented a collection of his photographs documenting the decline of Florida’s springs and what we all stand to lose if FDEP’s failed plans go into law. FSC attorneys, experts, and volunteers have drafted a “Proposed Recommended Order” and it will be submitted to the court for consideration. In early 2020, we expect a decision and look forward to working with FDEP to draft new, successful, Basin Management Action Plans that restore water quality in Outstanding Florida Springs and meet the requirements under state law.

Donations made to Friends of the Wekiva River, Inc. to help defray the legal expenses for this case have been greatly appreciated.
Birders Push Back Against the Wind Industry

Samuel Kendall

Wind-generated electricity is now the fastest-growing source of electricity in the U.S. The benefits of this trend are significant: near zero greenhouse gas emissions, little or no use of fresh water, and reductions in fossil-fuel-sourced particulate air pollution. Over 57,000 land-based wind turbines are currently in use from the Dakotas to Texas and into the northeastern and western states. To minimize disastrous climate effects caused by greenhouse gases climate scientists say wind power must be increased 4–5 times by 2050. That will be a lot of big turbines!

Other than the fossil fuel companies, birders may be the most troubled by these statistics. Turbine collision fatalities of birds and bats are serious. Habitat fragmentation from wind tower pads and connecting roads are also a concern. Researchers say over 1.4 billion birds are killed each year by domestic cats. Lower down the scale of bird mortality causes are buildings, power lines, cell towers, pesticides, and now we must add wind electric turbines.

A report (#21) in the 2019 fall edition of Issues In Ecology describes the current state of bird/bat collision research. Potential resolutions to the problem are lagging behind the rapid pace of wind turbine installations. Government agencies, NGOs and other private groups are trying to advance science-based answers but funding and manpower are not readily available. One prototype technology could be acoustic deterrence for both bats and birds. Data collection is insufficient. The report recommends first focusing research on species whose populations are already at risk.

Concerns have reached a level now where bird and bat lovers are taking action against the wind industry. In Canada, Ontario’s environment minister has canceled a 29-turbine wind farm near Ottawa. He said the blades would likely cause irreversible harm to populations of little brown, big brown and hoary bats. Developers of the $200M project will likely sue.

An offshore wind farm in Lake Erie near Cleveland is being challenged in court by the American Bird Conservancy and Black Swamp Bird Observatory. The project is located within a National Audubon Important Bird Area. Large concentrations of migrating songbirds, loons, red-breasted mergansers and other waterfowl routinely travel the route. The challengers claim the US DOE and the Army Corps of Engineers failed to comply with the National Environmental Policy Act (NEPA).

Florida and most other southeast state birders don’t have to confront this conflict between carbon-free wind energy and bird/bat mortality. Wind speeds here are not consistently strong enough to attract wind farm investors.

About 8.6 million metric tons of plastic enter the world’s oceans every year.
Do your part—Reduce YOUR use of single-use plastic.

Earthday.org
Program Notes

Our November 10th program, Fertilize Appropriately, was an interesting and informative program by Dr. Terrence Fullerton of the University of Florida IFAS Extension for Seminole County. He explained the nutritional requirements of various plants and the importance of knowing pH requirements. Fertilizer containing phosphorus should not be applied to turf or plants unless a state-certified soil or tissue test verifies that there is a phosphorus deficiency. Soil tests are available at IFAS for only $2. By law fertilizer containing nitrogen or phosphorus cannot be applied to lawns between June 1-September 30. If fertilizer is needed, the best time to fertilize is in April using slow-release fertilizer. The appropriate blend for Florida soil is Nitrogen 16 - Phosphorus 0 – Potassium 8. Leave grass clippings on the yard for added nutrition as a natural compost. Don’t mow or apply fertilizers within 15 feet of a waterbody. The overall goal of the Seminole County fertilizer ordinance is to minimize excess fertilizer runoff and protect the County’s natural water resources. For more information, go to http://www.seminolecountyfl.gov/fertilizer

Butterflies and the Plants They Need was the title of Faith Jones’ program at our meeting on December 8. The program commenced with an explanation of the life cycle of butterflies and included spectacular images of the emergence of a butterfly from its pupa (chrysalis) stage. An explanation of butterfly anatomy was followed by things a butterfly needs to survive – food, water from mud, and shelter. Butterflies’ food needs are different in their adult stage than in their larval (caterpillar) stage. The first portion of the program concluded with butterfly taxonomy.

She then showed images of many of the butterflies that can be found in Central Florida, pointing out key features for identification and showing what plants are needed for egg-laying and the larval stage for each species. To entertain the attendees, Faith included a few pictures from a recent trip to Egypt. These included a Hoopoe.

Congratulations to the many door prize winners and thanks to all of those who donated items.

Trip Notes

Blue Heron Pontoon Boat Tour November 16. Even with a chilly Florida day, there were a lot of birds on the river. The two-hour tour on the St. John’s River took us into the Ocala National Forest, Lake Woodruff National Wildlife Refuge and river tributaries. Our boat captain and tour guide was entertaining and very knowledgeable, providing lots of information about the habitat and river history as well as pointing out birds. We saw 20 species of birds plus a deer. Highlights included Limpkin, Bald Eagle, Great Egret, vultures, herons, sandhill crane and American Bittern.
**Wekiva Christmas Bird Count**
On December 14th SAS members participated in the 120th annual Christmas Bird Count (CBC). The CBC is the longest running citizen-science project in the world. Each count takes place in an established circle that is 15 miles in diameter.

Each December SAS is responsible for zones 10 & 11. This year we had seven groups and individuals counting in those zones, and at least four other members counting in other zones.

This year we had great feeder counts in zone 10, thanks to Sarah Donlan and Michelle Vaughn. One group in zone 11 tallied 71 species. One of the thrills of the day was a Wilson’s Snipe located by Chuck Honaker off Primera Blvd.

Crystal Lake Preserve is located in zone 10, and Connie Dolan managed to find 34 species with 107 individuals on that property.

The “gold star” for this year’s count goes to our new, dedicated member, Dave Branchett, who counted for nine hours and tallied 42 species with 720 individuals!

We appreciate everyone who participated, and especially Leslie Martin for coordinating and compiling the data from zones 10 & 11. We also are thankful for Jay Exum who is the official compiler for the entire Wekiva CBC.

**Upcoming Programs**
Held at 2:00 pm on the 2nd Sunday each month at the North Branch of the Seminole Co. Public Library located at 150 North Palmetto Ave. in Sanford. Meetings are free and open to the public.

**January 12, 2020**
**Bears, Bears, Bears** - Lori Lindsay
Did you know that twenty percent of Florida’s black bear population is located in Seminole County? Or, that Florida Black Bears are our state’s largest land mammal? Join us for an educational program about Florida Black Bears presented by Lori Lindsay, Program Coordinator with Florida Fish and Wildlife Conservation Commission (FWC). Bears are an important part of Florida’s natural heritage. Keeping them wild and away from human use areas is a responsibility we all must share.

**February 9, 2020**
**Little Things Mean A Lot** – Wayne Bennett
Have you ever looked at an image and said, “I wish I could make an image like that?” Well, you can! It’s a matter of: learning how to see things with a creative eye, how to understand what it is you want to accomplish and how to get there, understanding which lens to use, how to think “out of the box” and looking for the little things that can make a big difference in your imagery. Professional photographer Wayne Bennett will share these tips and his photos from his trips in the U.S. and around the world.
March 8, 2020

**Birds of Colombia and Ecuador - Leslie Martin**

Stalwart bird-seeking traveler Leslie Martin will share with us photos and experiences from her birding trips to Ecuador and Colombia. There have been about 1100 species of birds confirmed in the U.S. Colombia has 1850 species of birds, 81 of which are endemic. Ecuador has 1635 species of birds with seven endemic. Leslie will show both bird and landscape images.

**Upcoming Trips**

**Saturday January 18, 2020**

**Black Bear Wilderness Area, Sanford**

This Seminole County Natural Land consists of 1600 acres in northwest Seminole County and features a variety of wetland habitats. The floodplain of the St. Johns River, Wet Prairie, Hydric Hammock, and Cypress Swamps form a mosaic of habitat diversity which hosts wildlife such as the white-tailed deer, Swallow-tailed Kite, and Florida Black Bear. Its large size and proximity to other public lands make this site an important piece in a puzzle connecting natural areas between the Wekiva/St. Johns basins and the Ocala National Forest. Meet at the trailhead at 8 am, 5298 Michigan Ave., Sanford, FL. The trail consists of uneven ground; solid footwear is necessary. Leader: Audubon Board Member, Lewis Gray

**Saturday February 15, 2020**

**Audubon Park, Deltona**

Join us on a bird walk at this City of Deltona park where 167 avian species have been recorded. The recreational facility features boardwalks, nature trails, and interpretive kiosks. The property is also used for stormwater management and natural resource preservation purposes. Bird count from this hike will be submitted to The Great Backyard Bird Count 2020 corresponding to the dates for the event, Feb. 14-17. Meet 8:00 am at the park located near the intersection of Lush Lane and Doyle Road.

**Thursday February 20, 2020**

**Blue Spring State Park, Orange City**

Manatee Observation. This time of year there are often manatees galore in the spring run. In addition we could see other river dwellers, wading birds, birds of prey, alligators, and possibly Florida Scrub-Jays. It can be cold, so dress accordingly, including comfortable shoes, and hat. Carpool from JoAnn’s Fabrics near Seminole Town Center, 7:30 am sharp. Manatees will be in the warm water from the spring. If the air is cold a magical steam bath is created. If desired, lunch at Swamphouse Grill, Highbanks Marina in DeBary, afterwards.

**Saturday March 12, 2020**

**Orlando Wetlands Park, Christmas**

Join us for a guided tram tour of this premier birding area where 220 bird species have been documented. Weather may be cold and there is very little shade, so dress accordingly. Bring water & snack. Meet at the park at 8:30 am or carpool from in front of Ross, Walmart parking lot, 17/92 near Lake Mary Blvd. Carpool will leave at 7:45 am.
April 16-18, 2020 (Thurs-Fri-Sat)

**Crystal River Overnight**
11419 W. Fort Island Trail, Crystal River, FL 34429
Reserve a cabin, book your own hotel, or bring your RV. Make your own reservation. Activities will be finalized based on participants’ interests and can include birding, archeological dig area, and a day trip to Tarpon Springs with boat tour on the Gulf of Mexico. This is a diverse area, including Homosassa Wildlife State Park nearby. Join us for all 3 nights or any part of the trip. Sanford to Crystal River is a 2-hour drive. Carpooling is possible. Reservations are required. Contact: sarahdonlan42@gmail.com. Deadline Feb 1. Make your reservations as soon as possible. It is a busy time of year in that area, especially with Spring bird migration.

What’s Happening Outside in January & February?

January is the best time of year for watching waterfowl on wetlands, lakes, and prairies. It is also a good time to observe hawks and American Kestrels along highways. Over large marsh systems, clouds of tree swallows spiral down at sunset to roost. Cedar Waxwings and American Robins are eating fruits such as holly berries.

Nesting season begins for Roseate Spoonbills, Florida Sandhill Cranes, hawks and owls. In mid to late January male cardinals begin territorial signing (signing or singing??), Snail Kites begin courtship in Central Florida, and early returning Purple Martins can be seen in South to Central Florida.

During cold spells, West Indian Manatees congregate at natural springs and industrial warm water sites. Carolina yellow jessamine blooms in north and central Florida woods. Gray Foxes, Bobcats and Raccoons are at peak of courtship and breeding this month. It is deer mating season in the Panhandle. Florida Black Bear in north Florida are sleeping in dens.

During February, Purple Martin scouts look over North Florida nesting sites. Make sure your houses are up! Clean and repair Eastern Bluebird nest boxes as they also will be choosing their nest sites.

Greater Sandhill Cranes migrate from Florida northward to Michigan and Wisconsin. Purple Finches and Pine Siskins will leave North Florida feeders and begin their migration back to northern nesting areas. At various locations around the state, nesting season begins for Ospreys, Woodstorks, Snowy Plovers, and Burrowing Owls. In the Dry Tortugas, Sooty Terns, and Magnificent Frigatebirds begin their nesting season.

In South Florida, it is mating season for Wild Turkeys and Northern Bobwhites while in North Florida Woodcocks begin exhibiting their courtship displays.

Woodpeckers begin their mating season and announce territories by drumming on trees, houses, and other objects.

Bald cypress trees leaf out. Trilliums and dogtooth violets bloom in Florida Panhandle ravines.

Watch for West Indian Manatees swimming in spring runs.

Eastern moles are breeding this month in tunnels under our lawns. Pocket gophers begin their spring breeding season. The first litters of gray squirrels are born. Bear cubs are born in dens this month, and deer fawns start to arrive.

You can see January and February are great wildlife-watching months, so get outside and enjoy!

*Information from Florida Fish and Wildlife Conservation Commission*
SAS Adopts Lake Jesup Park

SAS is adopting Lake Jesup Park as part of Seminole County’s Adopt-a-Park Program. Our plan is to meet at the park monthly to pick up trash, etc. We may even do a little birding while we are there! Meet at the park for the first scheduled clean up: **January 25th** 8:00 am. If you are interested in helping, please contact Marguerite Terwilleger at mterwilleger51@gmail.com or Leslie Martin at woodstork.martin@gmail.com. Lake Jesup Park is located at 5159 S. Sanford Avenue in Sanford.

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**Visit the SAS Booth**

at these Festivals

**Lyonia Wildlife Festival**
Saturday, February 8 at Lyonia Environmental Center, 2150 Eustace Ave., Deltona FL 32725

**10th Annual Seminole Garden Expo**
Saturday, February 22 at Seminole County Extension Service, 250 W. County Home Road, Sanford, FL 32773
23rd Annual Backyard Bird Count

More than 160,000 people of all ages and walks of life worldwide join the four-day count each February to create an annual snapshot of the distribution and abundance of birds.

We invite you to participate! For at least 15 minutes on one or more days of the count, February 14-17, 2020, simply tally the numbers and kinds of birds you see. You can count from any location, anywhere in the world, for as long as you wish! Every February, count for as little as 15 minutes in your own backyard and you will help expand our understanding of birds. Visit birdcount.org for full details.

If you’re new to the count you must create a free online eBird.org account to enter your checklists. If you already have an eBird account, or if you have participated in another Cornell Lab citizen-science project, you can use your existing login information.

In 2019, Great Backyard Bird Count participants in more than 100 countries counted more than 6,800 species of birds on more than 200,000 checklists!

During the count, you can explore what others are seeing in your area or around the world. Share your bird photos by entering the photo contest, or enjoy images pouring in from across the globe. You can even add photos and sounds to your checklist.

Your help is needed every year to make the GBBC successful!

Why count birds?

Scientists and bird enthusiasts can learn a lot by knowing where the birds are. Bird populations are dynamic; they are constantly in flux. No single scientist or team of scientists could hope to document and understand the complex distribution and movements of so many species in such a short time.

Scientists use information from the Great Backyard Bird Count, along with observations from other citizen-science projects, such as the Christmas Bird Count, Project FeederWatch, and eBird, to get the “big picture” about what is happening to bird populations. The longer these data are collected, the more meaningful they become in helping scientists investigate far-reaching questions, like these:

- How will the weather and climate change influence bird populations?
- Some birds, such as winter finches, appear in large numbers during some years but not others. Where are these species from year to year, and what can we learn from these patterns?
- How will the timing of birds’ migrations compare with past years?
- How are bird diseases, such as West Nile virus, affecting birds in different regions?
- What kinds of differences in bird diversity are apparent in cities versus suburban, rural, and natural areas?

Information from birdcount.org

The great Pacific Garbage Patch is one of the five garbage filled gyres in the world’s oceans. The Pacific garbage patch is three times the size of France!

NOAA.gov

Keep Up With SAS

Visit our website SeminoleAudubon.org or follow us on:

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## Board of Directors & Committee Chairs (eff. 7/1/19)

**SeminoleAudubon@gmail.com**

### Board Members & Office & Roles

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<td>2019-2021</td>
<td>Lewis Gray</td>
<td>Jane Isle</td>
<td><a href="mailto:lewisgray@bellsouth.net">lewisgray@bellsouth.net</a></td>
</tr>
<tr>
<td>2019-2021</td>
<td>Leslie Martin</td>
<td>Programs &amp; Trips</td>
<td><a href="mailto:lesielou63@gmail.com">lesielou63@gmail.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Christmas Bird Count, Backyard Bird Count</td>
<td></td>
</tr>
<tr>
<td>2018-2020</td>
<td>Corrinne Wertz</td>
<td>Publications</td>
<td><a href="mailto:cwertz127@aol.com">cwertz127@aol.com</a></td>
</tr>
</tbody>
</table>

### Board Support Positions

- **Marty Shepherd**: Membership
- **Mindy Hellman**: Recording Secretary
- **Jim Peters**: Purple Martins
- **Peggy Stickney**: Press, Corresponding Sec.
- **Sam Kendall**: Energy
- **Faith Jones**: Newsletter Compiler
- **Shirley Fosse**: Phone Communication
- **Joy Rector & Cecilia Carey**: Elementary Education
- **Cecilia & John Carey**: Conservation
- **Margaret Loring**: New Member Welcome Letter
- **Nihal Hafez**: Refreshments
- **Chuck Honaker**: SAS Premiums
- **Joy Rector & Cecilia Carey**: Monthly Meetings PowerPoint, Email blasts, Meet Up

### AUDUBON MEMBERSHIP APPLICATION

**Introductory offer For New Members Only $20.00/1 year**

*Join on our website SeminoleAudubon.org using Chapter Code C0ZE310Z*

Make checks payable to **National Audubon Society**. Complete this form and mail with your check to:

Seminole Audubon Society, P.O. Box 2977, Sanford FL 32772-2977

**Seminole Audubon Associate Membership $10.00/ year**

Available to Audubon Society members assigned to other chapters.

<table>
<thead>
<tr>
<th>Name:</th>
<th>__________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>____________________________________________</td>
</tr>
<tr>
<td>City, State, Zipcode:</td>
<td>____________________________________________</td>
</tr>
<tr>
<td>Phone/ e-mail:</td>
<td>__________________________</td>
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</tbody>
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_Federally recognized 501 (c)(3) non-profit corporation A COPY OF THE OFFICIAL REGISTRATION AND FINANCIAL INFORMATION MAY BE OBTAINED FROM THE DIVISION OF CONSUMER SERVICES BY CALLING TOLL-FREE WITHIN FLORIDA 800-435-7325. REGISTRATION DOES NOT IMPLY ENDORSEMENT, APPROVAL OR RECOMMENDATION BY THE STATE. REGISTRATION NUMBER CH23448._
## Calendar of Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday Jan. 12</td>
<td>Bears, Bears, Bears</td>
<td>Sanford, Seminole Co.</td>
</tr>
<tr>
<td>Sunday Feb. 9</td>
<td>Little Things Mean A Lot in Wildlife Photography</td>
<td>Sanford, Seminole Co. Co.</td>
</tr>
<tr>
<td>Sunday Mar. 8</td>
<td>Birds of Colombia and Ecuador</td>
<td>Sanford, Seminole Co. Co.</td>
</tr>
</tbody>
</table>

**Program Meetings**  
Program Meetings are held at 2:00 pm on Sunday afternoons in the Meeting Room of the Seminole Co. Public Library located at 150 N. Palmetto Ave., in downtown Sanford. Call 407-797-4636 for details.

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
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<td>Bears, Bears, Bears</td>
<td>Sanford, Seminole Co.</td>
</tr>
<tr>
<td>Saturday Jan. 18</td>
<td>Adopt-A-Park: Lake Jesup Park, Sanford. Cleanup &amp; Birding 8:00 am.</td>
<td>Sanford, Seminole Co.</td>
</tr>
<tr>
<td>Saturday Feb. 15</td>
<td>Audubon Park, Deltona</td>
<td>Sanford, Seminole Co.</td>
</tr>
<tr>
<td>Thursday Feb. 20</td>
<td>Blue Spring State Park, Orange City</td>
<td>Sanford, Seminole Co.</td>
</tr>
<tr>
<td>Saturday Mar. 12</td>
<td>Orlando Wetlands Park, Christmas</td>
<td>Sanford, Seminole Co.</td>
</tr>
<tr>
<td>Thursday Apr. 16-18</td>
<td>Crystal River Overnight.</td>
<td>Sanford, Seminole Co.</td>
</tr>
</tbody>
</table>

**SAS Field Trips**  
Details and registration information for all of these trips are in this issue of The JAY and on www.meetup.com/seminoleaudubon-com, or e-mail us at seminoleaudubon@gmail.com

<table>
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<th>Date</th>
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<tbody>
<tr>
<td>Saturday Jan. 18</td>
<td>Black Bear Wilderness Area, Sanford</td>
<td>Sanford, Seminole Co.</td>
</tr>
<tr>
<td>Saturday Feb. 15</td>
<td>Audubon Park, Deltona</td>
<td>Sanford, Seminole Co.</td>
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</tr>
</tbody>
</table>

**Crystal Lake Preserve, Lake Mary.**

Work mornings. Time and meeting location 407-323-4506 or bdenslow@cfl.rr.com

**Seminole County Natural Lands Guided Hikes, Must Pre-register**  
407-665-2211, Cost $3.00

<table>
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<tr>
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<th>Event Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sat. Jan. 18</td>
<td>Nocturnal Animals 7:30- 9:30 pm</td>
<td>Lake Harney Wilderness Area</td>
</tr>
<tr>
<td>Sat. Feb. 22</td>
<td>Nocturnal Animals 7:30- 9:30 pm</td>
<td>Econ River Wilderness Area</td>
</tr>
<tr>
<td>Sat. Feb. 29</td>
<td>Geneva History Hike 8:00– 10:00 am</td>
<td>Lake Harney Wilderness Area</td>
</tr>
<tr>
<td>Sat. Mar. 28</td>
<td>Herp (reptile) Hike 7:30– 9:30 pm</td>
<td>Geneva Wilderness Area</td>
</tr>
</tbody>
</table>

**Other Activities**

Jan. 16-20  Fourth Annual North Shore Birding Festival on Lake Apopka, See page 11 for details.
Jan. 22-27  23rd Annual Space Coast Birding & Wildlife Festival, Titusville, [https://scbwf.org/](https://scbwf.org/)
Sat. Feb. 8  Lyonia Wildlife Festival 9:00 am – 3:00 pm. Lyonia Preserve, Deltona.
Fri.-Mon. Feb 14-17 Great Backyard Bird Count, Birdcount.org
Sat. Feb. 22 10th Annual Seminole Garden Expo 9:00 am to 3:00 pm. 250 W. County Home Rd. Sanford