January Speaker Series Program ~ Thursday, January 28, 2016

“Whooping Cranes”
Colleen Chase, Operation Migration

Social from 7 – 7:30 pm with program following

WHO Festival
Wildlife Heritage & Outdoors Festival
Saturday, February 6, 2016
St. Marks National Wildlife Refuge

Wildlife-Friendly Yards Tour
Apalachee Audubon Chapter Fundraiser
Saturday, February 13, 2016
10:00 AM – 4:00 PM
Cost: $10.00
Tickets available at Native Nurseries, 1661 Centerville Road
& Wild Birds Unlimited, 1505-2 Governor's Square Boulevard

18th Annual Great Backyard Bird Count, 2016
February 12-15, 2016
http://www.birdsource.org/gbbc

February Speaker Series Program ~ Thursday, February 25, 2016

NOTE – Change of Location to FSU, King Life Science Bldg. Auditorium
319 Stadium Drive ~ Free Parking
Parking Lot & Garage on Stadium Drive just south of King Building

“Native Pollinators – Ecology and Identification”
Dr. Josh Campbell, Dept. of Entomology, University of Florida
Co-sponsors ~ FSU Dept. of Biological Science, Apalachee Audubon Society,
Native Nurseries, Tallahassee Garden Club
Reception ~ 7:00 PM  Program ~ 7:30-8:30 PM
Apalachee Audubon Society, Inc.
2015 – 2016
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The Apalachee Audubon Society is established as a nonprofit corporation for the purposes of environmental education, the appreciation of wildlife and natural history, and the conservation of the environment and resources.

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You can sign up to receive free the Apalachee Audubon Society newsletter and announcements of coming field trips, activities and events by joining our Google Groups email notification list at: http://www.apalachee.org/aas/about/aas-mailing-list/. For more, see www.apalachee.org.

Editorial Note from Karen Willes — I want to thank Suzanna MacIntosh for her support and confidence in my ability to become the new AAS Newsletter Editor due to her health challenges. Suzanna is to be commended for her commitment and her skill in producing a beautiful newsletter, both in layout and content, for over 4 years.

This January/February 2016 edition contains articles which focus on the upcoming programs for Apalachee Audubon Society and St. Marks National Wildlife Refuge. The newsletter articles are in order of the scheduled dates — January AAS Program on Whooping Cranes, St. Marks WHO Festival, Wildlife-Friendly Yards Tour, Great Backyard Bird Count, & February AAS Program on Native Pollinators. Following those articles are additional landscape articles, book reviews, birding field trips, and information about many other activities in our area. Thanks to all who provided copy — those who wrote articles, provided photographs, or gave reprint permission. I hope you will find the newsletter interesting, informative, and worthy of sharing with others.
People migrate. During the winter holidays they desire to go home — that safe place with a warm fire, good food and ancestral nurturing. The classic poem, *The Night Before Christmas*, reflects this. “’Twas the night before Christmas, when all through the house, not a creature was stirring, not even a mouse. The stockings were hung by the chimney with care...The children were nestled all snug in their beds, while visions of sugar plums danced in their heads.” Holidays are for homecoming. Definitions of home may vary, but basically it is where the heart is. It is a safe harbor, a refuge, a haven for rest or a fount of sustenance. We long to be home for the holidays, no matter where we are or what we are doing. We yearn for the migration home.

In nature winter is a season of migrations. Wildlife escape the cold scarcity of winter, looking for a place of refuge. All creatures, great and small are on the move. These migrations are well documented and celebrated like our Monarch Butterfly Festival at St. Marks National Wildlife Refuge and the ‘Swift Night Out’ when these birds return to their chimney lodge in Wakulla Springs State Park. And now it’s the Whooping Cranes’ turn.

The return of the ‘Whoopers’, who are still on the brink of extinction, is especially fulfilling to our psyche, a transformation of what is lost into something found. Operation Migration brought the Whooping Cranes back and recreated their long and difficult migration. We cleverly tricked them using disguises and ultralights to mimic them, allowing the cranes to imprint to us as their parents. On land and in
the air, we coaxed a species to follow us and resume migration. We should appreciate the unlikely success of this restoration and make sure this effort becomes an annual event.

Climate change poses the next great threat to migrations. While habitat loss begins this chain of calamities, climate change transforms what little habitat that has survived into something totally different. Nature is adaptable. The appearance of manatees as regularly breeding residents in Wakulla Springs, where they were rarely seen before, is an example of habitat expansion due to climate change. Anticipated warmer temperatures and more copious rainfall predicted for our area will likely improve the water starved estuary of the Apalachicola River and rejuvenate coastal fisheries. However sea level rise will submerge and drown coastal shorebird habitat. Necessary breeding sites like Lanark Reef, reputed as important shorebird breeding habitat, while currently preserved and protected by us, will slip beneath the waves with rising sea levels. Likewise, many species will be further separated from critical habitat and traditional food sources — forced either to adapt or go extinct.

Nature needs us now, more than ever. If it works, let’s keep it working; let’s not let them change Operation Migration now. Look for permutations of adaptation, and encourage wildlife proliferation in any way possible. It is likely we will have to rethink our restoration plans. Celebrate the return of the Whooping Cranes, and the success of Operation Migration, and enjoy this new year with close friends and relations sharing a bounty and an uncertain future with maybe another local festival, possibly for manatees.
Whooping Cranes return to eastern North America
By George Archibald, Co-founder International Crane Foundation, Baraboo, Wisconsin
www.savingcranes.org

Reprinted with permission from International Crane Foundation and Florida Wildlife Federation

When the Whooping Cranes were more abundant in former centuries, they wintered from the Chesapeake Bay to the north Mexican plateau, and nested on the Great Plains of Canada and the U.S. and in southern Louisiana. By 1940 they were reduced to a flock of fewer than 20 wintering on the coast of Texas at the Aransas National Wildlife Refuge. The last time a Whooping Crane had been seen in Louisiana was in 1950.

Starting in the mid-1960s, the governments of Canada (where the cranes nested) and the U.S. (where they wintered), started a captive breeding program at the Patuxent Wildlife Research Center (PWRC) in Maryland by taking one egg from several two-egg nests of the wild cranes in Wood Buffalo National Park, Canada. Today the population of wild cranes migrating from Canada to the U.S. has increased to about 300, and the captive flock to about 160 at several centers.

Between 1993 and 2006, 289 birds reared in captivity at PWRC, the International Crane Foundation (ICF) in Wisconsin, and other centers, were released into the wild in central Florida with the hope of establishing a non-migratory population akin to the resident Florida Sandhill Cranes. Because the total mortality of released Whooping Cranes and those hatched in the wild outweighed the natural recruitment in the wild, the experiment was discontinued in 2006. Problems included loss of wetlands to drought and development, collision with power lines, and predation, especially of cranes which were flightless during the natural cycle when they replace their wing feathers.

In 2001, the Necedah National Wildlife Refuge (NWR) in central Wisconsin and the Chassahowitzka NWR on the Gulf Coast of Florida were selected respectively as the release and wintering areas for a new migratory flock in eastern North America. Initially, costume-reared cranes were taught to follow ultra-light aircraft operated by a non-profit organization, Operation Migration (OM), to teach the young cranes the migration route. Later, newly-fledged captive-reared cranes from ICF were also released with wild Whooping Cranes and also Sandhill Cranes at Necedah and other locations in Wisconsin. In recent years OM has led cranes to other locations in the southeast U.S., including St. Marks NWR in the panhandle of Florida.

Today there are about 100 cranes in this new eastern migratory population. They breed in Wisconsin, and spend their winters from southwestern Indiana to northern Alabama, and into north-western Florida. Although these cranes have been nesting at and near Necedah NWR, they have not been very successful at hatching and rearing chicks, apparently because black flies that hatch in spring in this area parasitize the incubating cranes and cause them to desert their nests. Since 2011, releases have shifted to eastern Wisconsin, where black fly populations are much lower.

Also in 2011, a new Whooping Crane reintroduction project was started in southwest Louisiana where hundreds of thousands of acres of fresh water wetlands once supported both breeding and wintering Whooping Cranes. There are now about 40 birds in this non-migratory flock; in spring 2014, one pair incubated eggs in a nest on a crawfish pond – the first nest of eggs documented in Louisiana since 1939! In 2015, there were four nests with eggs!

The Louisiana Whooping Cranes were likely driven to extinction by shooting. Shooting of cranes by vandals is now a significant problem for all the Whooping Crane populations. For the new eastern migratory population, shootings account for at least 20% of the total mortality, an unsustainable loss for this precious resource. We all must work together to address this threat to the cranes; raising community awareness and pride, engaging citizen scientists to monitor and look out for the cranes, and working with the justice system for stiffer penalties for those who harm the cranes are all important to this effort.

Click on the links for biographical information about Dr. George Archibald (https://www.savingcranes.org/george-archibald/) and his account of his visit to Tallahassee on January 5, 2014 (https://www.savingcranes.org/travels-with-george-florida-2014/).
In the 1980’s, Canadian naturalist Bill Carrick learned that he could imprint Canada geese (Branta canadensis) to follow him while he motored around Lake Scugog in his boat. Once the goslings fledged, they flew beside him, creating a unique filming opportunity.

Bill Lishman is a Canadian artist, sculptor and inventor who was among the first Canadians to fly ultralight aircraft. He realized that the speed of Mr. Carrick’s boat matched the speed of his aircraft and he thought that maybe he could take the concept one step further by actually flying with the geese.

After several attempts and a difficult learning curve, he was finally successful in 1988. He spent the fall of that year documenting his daily flights around the countryside with his gaggle of imprinted geese. He produced a heart-warming video called C’mon Geese, which won several international awards.

Eventually that video was seen by Terry Kohler of Windway Capital, based in Sheboygan, Wisconsin. Mr Kohler is an avid pilot, an environmentalist and a long-time supporter of the International Crane Foundation. He showed Bill Lishman’s video to Dr. George Archibald, co-founder of ICF and the world’s leading crane expert. The idea of using ultralight-aircraft to teach birds to migrate was hatched.

Precocial birds like cranes, swans and geese learn to migrate by following their parents. The route they use to reach their wintering grounds may have evolved over millions of years but it is passed from one generation to the next. There are no maps or sign posts and when the last bird to use the route dies, so too does that knowledge. Before Mr. Lishman’s successful flights with geese and Dr. Archibald’s suggestion to use it to teach migration, there was no method of reintroducing Whooping cranes into a migratory situation.

In 1993 Bill Lishman asked Joe Duff to join him in an attempt to conduct the first ever human-led migration of birds. At the time, Duff was a fellow ultralight pilot and a successful commercial photographer. The two artist-turned-biologists imprinted 18 Canada geese and, in the fall, they used two ultralights to lead them from Purple Hill in Ontario, across Lake Ontario, to the Environment Studies Division of Airlie Center in Warrenton, Virginia. Sixteen of those birds survived the winter and thirteen returned on their own the following spring. That record setting trip was documented by ABC’s 20/20.

Operation Migration was founded as a Canadian Registered Charity in 1994. (In 1999 it was granted 501-c3 status in the United States.) In 1995 Lishman and Duff formed a limited company called In The Sky Productions and contracted with Columbia Pictures to produce Fly Away Home, starring Jeff Daniels and Anna Paquin. In The Sky Productions provided the story rights, the wildlife permits, the geese, the flying and
even some of the cinematography for the popular film.

In the years that followed, Operation Migration conducted several migration experiments with Canada geese, Trumpeter swans (Cygnus buccinator), Sandhill cranes (Grus canadensis) and Whooping cranes (Grus americana). The results of the early studies with non-endangered Sandhill cranes were presented each year to the International Whooping Crane Recovery Team. By 1998, Joe Duff was able to demonstrate that he and his team could imprint a crane species and lead those birds along a pre-selected migration route to a safe wintering area. In the spring, the birds would initiate their own return migration back to the introduction area where they first learned to fly, while avoiding humans and using appropriate habitat.

Up to that point the Recovery Team had been struggling to augment the only naturally-occurring population of Whooping cranes. Down to only 15 individuals in the 1940’s, their numbers had slowly increased but they were still threatened by avian disease, storm events such as hurricanes, chemical spills, and human encroachments. Operation Migration was asked to spearhead an attempt to reintroduce a second migratory population in Eastern North America.

In 1999, the Whooping Crane Eastern Partnership was formed as a consortium of nine federal, state and private agencies each contributing their resources to achieve a common goal. Operation Migration was responsible for care and training of the Whooping cranes from hatch until they were released at the wintering grounds in Florida.

Founding members of WCEP (pronounced “WeeSep”) include:

International Crane Foundation
National Fish and Wildlife Foundation
Operation Migration
US Fish and Wildlife Service
USGS Patuxent Wildlife Research Center
USGS Wildlife Health Center
Whooping Crane Recovery Team
Wisconsin Department of Natural Resources
Wisconsin Natural Resources Foundation

Necedah National Wildlife Refuge in Wisconsin was selected as the reintroduction site and Chassahowitzka NWR in Florida as the wintering grounds. Between them was 1250 miles and seven states. In 2000, Operation Migration and its new partners conducted a migration with non-endangered Sandhill cranes to determine if cranes could be led that far and to establish a list of stopover locations.
During that time, the US Fish and Wildlife Service acquired the permits needed, including an exemption within the Endangered Species Act known as the Non-Essential, Experimental Population Designation (NEP). This exemption reduced the status of the birds OM introduced from endangered to threatened and encouraged the cooperation of seven direct line states and 13 neighboring states, plus two Canadian provinces into which the birds may disperse.

In 2001 WCEP began the reintroduction and 7 Whooping cranes were led to Florida and monitored over the winter. The following spring 6 of the 7 returned to Wisconsin (one had been predated over the winter by bobcat).

In 2005 WCEP began experimenting with a second reintroduction method. Known as the Direct Autumn Release (DAR), birds were raised at ICF, introduced into the Wisconsin wetlands and released in the fall near experienced Whooping cranes that OM had taught to migrate.

The first wild chick was hatched in 2006 and followed its parents along the route OM taught them. It was confirmed that December near the wintering grounds in Florida - proving that the concept was sound. It was the first wild-produced migratory Whooping crane to hatch in eastern U.S. since the last nest was reported in 1878.

Despite this milestone, the population was slow to reproduce and many of the nests initiated at Necedah were abandoned mid-incubation. Of the more than 200 species of blackflies in North America, at least three are known to target birds. Unfortunately, all three are present in the wetlands around Necedah.

Although work continues to mitigate the blackfly problem and increase reproduction, WCEP moved the release sites to what is referred to as the “Wisconsin rectangle.” This is an area of fragmented wetland east of Necedah with very few of the blackfly species that attack birds. Ultralight releases began at White River Marsh State Wildlife Area and DAR releases began at the Horicon NWR in 2011.

In 2013, WCEP completed an 18 month long Structured Decision Making process that used Population Viability Analysis and algorithms to evaluate this reintroduction. It was determined that the best chance for the population to persist is to keep reintroducing birds into the Wisconsin rectangle for the next five years.

THE FUTURE OF OPERATION MIGRATION       http://operationmigration.org/InTheField/usfws-vision/

On October 15, 2015, the U.S. Fish and Wildlife Service posted a document that outlined their vision for the next 5 years for the introduction of Whooping Cranes into the Eastern Migratory Population. In their Vision Document one of the changes they have proposed is to end the use of the ultralight-guided migrations. Operation Migration has responded to their proposal in a document that also includes an online petition asking for support of ultralight-led migration (http://operationmigration.org/InTheField/usfws-vision/). The annual meeting of the Whooping Crane Eastern Partnership (WCEP) will be held on January 20-21, 2016, the week before Colleen Chase, Operation Migration board member and volunteer, is our AAS Speaker Series guest on Thursday, January 28, 2016.
“100 Years of Migratory Bird Conservation Celebrated at Refuge WHO Festival”

By Robin Will, Supervisory Ranger, St. Marks NWR

Saturday, February 6, 2016 ~ St. Marks National Wildlife Refuge

The year 2016 marks the centennial of the Convention between the U.S. and Great Britain (for Canada) for the Protection of Migratory Birds. The Migratory Bird Treaty and three others that followed — with Japan, Russia and Mexico, form the cornerstones of efforts to conserve migratory birds that migrate across international borders. St. Marks National Wildlife Refuge will recognize the story of 100 years of migratory bird conservation at its annual Wildlife Heritage & Outdoors (WHO) Festival, to be held on Saturday, February 6, 2016.

Why are we excited about migratory birds? They connect people to nature through beauty, sound and color. They provide countless opportunities for enjoyment by birdwatchers, hunters and outdoor enthusiasts. They are indicators of healthy habitats, which are healthy for people, too. They benefit the economy in the U.S., supporting pollination of our food, recreational opportunities, creating jobs, and generating billions of dollars in revenue. Statistics from the 2011 National Survey of Fishing, Hunting and Wildlife-Associated Recreation show that: 46.7 million Americans enjoy watching and feeding birds, $13 billion in local, state, and federal tax revenue results from birdwatching, 2.6 million Americans hunt migratory birds and $1.8 billion is spent on migratory bird hunting equipment and trips in the United States.

“In the early 1900s, hunting native birds was common and largely unrestricted. Birds were baited relentlessly and shot at close range without consideration for numbers or season. Market hunters harvested tens of millions of wild migratory birds per year and carted them to urban markets for food, the millinery trade, and export.”

Photos ~ USFWS Files

Why celebrate the Treaty? It was a critical step in the process of getting unregulated...
hunting of waterfowl under control. The Treaty promised protection for migratory waterfowl and game species that were threatened by overhunting for food, sport or trade of parts. The Migratory Bird Treaty Act was the first legal document to make it unlawful to “pursue, hunt, take, capture, kill, possess, sell, purchase, barter, import, export, or transport any migratory bird, or any part, nest, or egg…, unless authorized under permit…” Today, the U.S. Fish & Wildlife Service celebrates the Treaty with federal, state, private, non-governmental, tribal and international partners in continuing to conserve, protect, and manage migratory bird populations and their habitats for future generations.

At the WHO festival, visitors going through the exhibits and demonstrations will learn more about our migratory birds:

- Bird walks open to all levels of birding
- Bird scavenger hunt with prizes
- Duck calling and turkey calling contest for youth
- Bird feeding and housing demonstrations
- Bird photography with our St. Marks NWR Photo Club
- Bird masks and crafts for children
- Bird conservation art contest for youth
- Bird habitat – Is your backyard bird-friendly?
- Citizen science bird projects that need your help

And more!

Also, we will have our regular exhibits by our great partners that support the festival mission to “connect people to nature” through outdoor pursuits and local heritage: Big Bend Flyfishers, Operation Migration Whooping Crane Project, Tallahassee Museum of History and Natural Science, San Marcos de Apalache Historic State Park, Get Outdoors Florida! Coalition, Apalachee Audubon Society, St. Marks NWR Photo Club, Friends of the St. Marks Wildlife Refuge, music, food by the St. Marks Grill, and much more. The festival is from 11 am – 4 pm and regular entrance fees apply. Due to live animal exhibits and wildlife tours, please leave your pets at home. For more information, please call 850/925-6121.
Wildlife-Friendly Yards Tour ~ 2016

By Tammy Brown

It’s that time of year again for the 9th Annual Wildlife-Friendly Yards Tour! If you haven’t done this tour before, those who have will tell you it’s the best $10 you can spend for an activity here in Tallahassee. Each year we have chosen five hosts for their environmentally friendly yards and the great ideas they have come up with to attract local and migrant birds and wildlife. With this tour happening in the middle of winter, it is not the ordinary style garden tour. It’s a chance to see the ‘bones’ of the yard and catch a glimpse of some fabulous winter birds. The yards of the host homes range from large to small, and will inspire you with new ideas to enhance your own yard for wildlife.

This year our event takes place on Saturday, February 13, 2016, from 10:00 AM – 4:00 PM. Tickets will be available in January at Native Nurseries (NativeNurseries.com) and Wild Birds Unlimited (tallahassee.wbu.com) and will be available through the day of the tour. The tour takes place rain or shine. Birds are very active when it’s stormy, so don’t let that stop you. This is a fundraiser for the local Audubon Chapter.

It’s shaping up to be another spectacular year not to be missed. Spread the word and bring your friends. Help us make this tour the most successful yet. We thank the hosts, both past and present, who have volunteered their yards and time, and the long list of volunteers who have helped make this event so special each year.
Great Backyard Bird Count, 2016

http://www.birdsource.org/gbbc

By Fran Rutkovsky

The 18th annual Great Backyard Bird Count takes place February 12-15, 2016. This event, now global, provides a “winter snapshot” of distribution of birds. Participants observe and count the birds at a given location and enter the results at http://www.birdcount.org. The counts can be conducted anywhere – yards, parks, trails, etc. – though a separate checklist must be made for each location. During the weekend, the online data is updated many time a day, and you can keep up with what birds are being reported where (click on “Explore Data”). In 2015 participants from more than 100 countries submitted over 147,000 checklists with a total of 5,090 bird species.

Another part of the event is the GBBC Photo Contest. Check out the Photo Gallery on the website for past photos and winners. AAS Members Glenda Simmons & Judy Lyle had winning photos in past contests. Glenda Simmons won Fourth Place Overall in 2012 and in 2014 July Lyle won First Place in Composition. The GBBC coincides with our annual Wildlife-Friendly Yards Tour. Some of our hosts may be keeping yard tallies for the day to submit later. You can help by pointing out any birds you see that are not already on the list. The GBBC is a joint project of the National Audubon Society and the Cornell Lab of Ornithology with Canadian partner Bird Studies Canada. It also receives support from Wild Birds Unlimited.

**Eastern Bluebird**
Great Backyard Bird Count Winning Entry
Fourth Place Overall ~ 2012
*Photo Credit ~ Glenda Simmons*

**Pine Warbler**
Great Backyard Bird Count Winning Entry
First Place, Composition ~ 2014
*Photo Credit ~ Judy Lyle*
Imagine a world without bees and other pollinators. Without cross-pollination, there would be no apples, oranges, blueberries, broccoli, squash or most other fruits and vegetables. Bees are our most important pollinators because they deliberately forage for pollen, unlike other insects such as butterflies which forage primarily for nectar and may accidently come into contact with pollen.

Bees also exhibit ‘flower constancy’, visiting one particular plant species during any given foraging trip. By foraging from the same type of flower, pollen is not wasted on the wrong species of flower. This is also how beekeepers are able to produce specific honeys such as tupelo, orange blossom or sourwood.

Other insects that pollinate are wasps, butterflies, moths, flies and beetles. Gardeners can help increase populations of pollinators by planting a diversity of plants that are attractive to these insects. Native plants are often the best because native pollinators are adapted to foraging from these flowers efficiently and effectively.

There are many trees and shrubs that attract pollinators – holly, red maple, redbud, cabbage palm, Chickasaw plum and blueberry are just a few that literally buzz with bees when in bloom. Some of the best garden plants in our yard for attracting pollinators are purple coneflower, horsemint, ironweed, African blue basil and anise hyssop.

As gardeners, we can go one step further in helping pollinators. Try to avoid using insecticides and especially steer clear of garden insecticides that contain neonicotinoids. These are systemic chemicals that are taken up through various plant parts and distributed throughout the plant making the plant toxic to aphids, bugs, beetles and caterpillars as well as to pollinators that are gathering pollen and nectar, even though they may be safe to people and other mammals.

If you want to learn more about native pollinating insects, please attend our Apalachee Audubon meeting on Thursday, February 25, 2016 to learn about the ecology and identification of native pollinators. You will learn that many of our bees are solitary nesters and therefore do not have a colony to defend. Thus they are quite docile. Many of them nest in the ground and there are things you can do in your yard to encourage them.

Because we are expecting a larger audience, the program will be held at the King Building on the FSU campus (see map). There is easy and free parking.

Donna Legare is co-owner of Native Nurseries and serves on the board of Apalachee Audubon Society.
Our yard has too much shade for a nice sunny butterfly/pollinator garden, but I've found that planting in pots is one solution since I can move them around as needed. With experimentation over the years I've found what will work best for the butterflies, hummingbirds, and bees, and I replace them with new plants if they don't return after winter. I try to have something blooming for each season of the year. But I'm also lucky to have a ravine behind my yard where I can observe what attracts birds and pollinators and just do a little clean up in winter.

I'm also lucky to have various wildflowers that come up in the yard on their own. I encourage them where they are and also move them to try someplace else. Some of my favorites are Ironweed, Mistflower, Bidens Alba/Beggar's Tick, Carolina Elephant's Foot, and Hairy Leafcup/Bear's-foot. This past summer and fall I walked around the yard almost daily and photographed some of the many pollinators that were attracted to these flowers. I was amazed at the variety!

Recently I applied for and received documentation for a Certified Wildlife Habitat through the National Wildlife Federation. I would think that many AAS members are also eligible. Check out the web site and also the Million Pollinator Garden Challenge. To certify your yard, you need to provide the basics: food and water sources, cover, and a place for wildlife to raise young.

National Wildlife Federation: Garden for Wildlife

Million Pollinator Garden Challenge
http://blog.nwf.org/2015/06/million-pollinator-garden-challenge/
http://millionpollinatorgardens.org/
LANDSCAPE FOR LIFE
Based on the principles of the Sustainable Sites Initiative™

Developed by the Lady Bird Johnson Wildflower Center and the United States Botanic Garden
Shared by Suzanna MacIntosh

Landscape For Life™ was developed by the Lady Bird Johnson Wildflower Center and the United States Botanic Garden. It is based on the principles of the Sustainable Sites Initiative, SITES™, which is the nation’s first rating system for sustainable landscapes. SITES is an interdisciplinary collaborative effort by the American Society of Landscape Architects, the Lady Bird Johnson Wildflower Center at the University of Texas at Austin, and the United States Botanic Garden along with a diverse group of stakeholder organizations (www.sustainablesites.org). The Landscape For Life (LFL) program defines sustainability “as the process of attempting to meet the needs of today without compromising the needs of tomorrow” and it provides common sense ways we can add beautiful as well as functional sustainable landscape and garden elements to our own yards. We are indebted to the Lady Bird Johnson Wildflower Center, www.wildflower.org, the United States Botanic Garden, www.usbg.gov, and Landscape For Life, www.landscapeforlife.org, for sharing this material.

The Importance of Plants in Sustainable Gardening

Plants provide beauty and a sense of place to the home landscape as well as many other benefits. They cool the air through evaporation (transpiration) and provide shade which also helps mitigate urban heat island effects. Properly placed vegetation can help reduce energy use and costs by shading a house during summer and providing a wind break during the cold winter months. Through the process of photosynthesis, plants sequester CO2 and release oxygen. Other benefits include controlling erosion by reducing the intensity of rainfall hitting the ground, increasing the absorption of water into the soil, and helping hold soil together with their root systems. Plants also help remove pollutants from the air and water. Gardening also has many health benefits and a beautiful garden provides a relaxing and restful setting. By adding fruit trees to your yard you can pick your own home-grown fruit and a vegetable garden can provide nutritious and flavorful food. Additionally, adding pollinator-friendly flowers to your vegetable garden increases the yield of some vegetables and adds alternative beauty to the garden. And, overall, a well landscaped yard and garden area can increase residential resale value.

Some of the most important benefits plants provide are food and shelter for birds, butterflies and other wildlife. Not too long ago, native plants were abundant in gardens, along fencerows and roadsides and in natural areas, but now often the plants and habitat that birds and wildlife depend upon for survival are in short supply. As more highways and parking lots are built and more land cleared...
and developed, these natural areas are becoming drastically reduced and spaced farther apart. Invasive non-native plants often choke out native plants and large lawns, which provide little sustenance or shelter for birds and insects, reduce needed habitat. This makes it hard for many wildlife species to survive. One quarter of the birds in the United States are in danger of slipping into extinction with a leading cause being habitat loss and degradation caused by a loss of food, shelter and clean water. Migratory birds are especially at risk. Each of us can help by reestablishing some native habitat in our gardens to help offset the loss of critical wildlife habitat. If space is limited a window box or a few pots of plants are great additions to a home or apartment.

Shelter, food and water are essential in a wildlife garden. The best food sources are a diverse selection of native plants. For the vast majority of native wildlife, most of the non-native plants that have been incorporated into our gardens for more than a century do not provide sufficient food. As native plant communities consist of vertical plant layers, to provide habitat niches for the widest array of wildlife it helps to recreate various vertical layers of vegetation—trees, shrubs, flowers, and grasses—similar to those found in nearby natural areas. Plants in the ground layer partition their environment vertically. Spring ephemeral wildflowers bloom first, typically raising their foliage only a few inches above the leaf litter. When they go dormant, taller ferns and wildflowers overtop them creating a diverse understory. The next layer, the midstory, is composed of saplings of canopy tree species as well as smaller flowering trees such as dogwoods and redbuds. The canopy, the tallest layer of a forest, is composed of mature trees. In general, the more vertical layers there are the more complex the vegetative structure and the more habitat is created for a wider array of wildlife.

In urban settings we can add ‘hedge rows’ around the perimeter of the yard; birds and butterflies depend on the shelter and food sources these provide. Leave snags (standing dead or dying trees), if they are not a danger, as they provide nesting, foraging, perching and roosting sites. By reducing your lawn area, you can provide safe corridors for birds and this also helps reduce water and chemical use. Herbicides, fungicides and pesticides can be lethal to birds and butterflies and runoff pollutes our groundwater, so they should be used sparingly. Don’t be too tidy; leaving some leaf litter for overwintering butterflies enriches your soil and provides plants protection from extreme weather. Brush piles also provide shelter and habitat for birds and other wildlife. To complete your garden, you’ll need a secure water source, and for butterflies a puddling area and basking area.

**Snags — “The Wildlife Tree”**

http://wdfw.wa.gov/living/snags/

*Photo Credit ~ Martha Ivey*

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See page 11 for 2016 Wildlife-Friendly Yards Tour details.

*Photo Credits ~ Suzanna MacIntosh*
It is important to recognize that every garden is influenced by not only the regional climate but also microclimates, which are formed when the prevailing climate of a region interacts with objects in the garden. For example, planting beds located on the south side of a house or garden wall receive more sunlight and are typically warmer than those on the north side. Low areas of the garden may be cooler at night due to pockets of cold air pooling in the depressions. When the cold air drops below freezing, frost pockets will form and can cause damage to plants. Homeowners should select plants that are best suited to each particular microclimate within the site.

Aside from adding beauty, distinctiveness and a sense of place to our gardens, native plants are often better adapted to the local soil and climate and more resistant to local pests and diseases. They often need less water and maintenance once established. Few people had noted the critical connection between native plants and wildlife until Dr. Doug Tallamy’s book, *Bringing Nature Home*, [http://www.bringingnaturehome.net/gardening-for-life.html](http://www.bringingnaturehome.net/gardening-for-life.html), caught the attention of many knowledgeable gardeners across the nation and caused a paradigm shift in the way many people garden.

Native plants are the foundation of ecological biodiversity and each native plant provides something special no other plant can. Butterflies and other plant-eating insects evolved with native plants and they are interdependent. In the caterpillar stage, a soon-to-be butterfly needs a specific native plant to develop. This plant is called the ‘host plant’. For Monarch butterflies, the host plant is Milkweed, *Asclepias spp.* A butterfly species will only lay eggs on its host plant and they can’t survive in the caterpillar stage without its nourishment. Later adult butterflies and other pollinators need a variety of nectar-rich blossoms during the spring, summer and fall. In turn, flowering plants (including fruits and vegetables) need pollinators to produce fertile seeds and crops.

Unfortunately, native plants are disappearing at an alarming rate. Botanists are concerned about the survival of one in every five of this country’s native plants, which provide critical habitat for countless other creatures. To help prevent the further loss of these plants, many can be attractively incorporated into our home gardens. Landscape For Life defines a native plant as “a species that exists in a region without human introduction”; another definition of a native plant is “a plant that was present in a particular location prior to European settlement”. However, defining a native plant can be complicated. Over time, by natural selection, a plant species adapts almost imperceptibly to particular environmental conditions and can be considered an “ecotype” of the species. And, to mix it up more, we have hybrids of native plants, bred often for hardiness and bloom and to be “pest-free”. This is sometimes at the expense of important characteristics like nectar and scent.
An important point is that a native plant has evolved as part of a greater community, an ecosystem, and it doesn’t exist naturally alone in the environment. An example of this is the Longleaf Pine ecosystem. The open canopy of the Longleaf Pine forest sustains one of the most diverse animal and plant ecosystems in the world. As you add native plants to your garden, consider creating an area that incorporates features of the natural environment.

Native plants add beauty to a garden, just as they do in natural areas. The great variety of regional native plants provides gardeners with options that can support any garden design. As with all plants, gardeners should consider the soil type, pH, sun and shade requirements, and watering needs of native vegetation before planting. Non-native appropriate plants that can be sustainably maintained without the addition of regular inputs or resources, like fertilizers or pesticides, and that are not invasive can add to the garden’s beauty and diversity.

A few tried and true native plants to consider incorporating into your garden are Native Azaleas and Hollies, Magnolias, Cedars, Oaks, Dogwoods, Redbud, Wax Myrtle, Chikasaw Plum, and Spicebush. There are many more and it is fun to learn about the beautiful native plants of our region. Here are some great resources: Florida Native Plant Society, [www.fnps.org](http://www.fnps.org); Florida Wildflower Foundation, [http://flawildflowers.org/](http://flawildflowers.org/); Lady Bird Johnson Wildflower Center: [www.wildflower.org](http://www.wildflower.org) & the Pollinator Partnerships Ecoregional Planting Guide: [http://pollinator.org/PDFs/Guides/OuterCoastalrev7FINAL.pdf](http://pollinator.org/PDFs/Guides/OuterCoastalrev7FINAL.pdf).

Landscape For Life material and logo reprinted with permission. This series will be continued in the next newsletter with “The Importance of Water in a Sustainable Garden”. More information about plants is available from LFL at [http://landscapeforlife.org/plants/](http://landscapeforlife.org/plants/).

Additional resources:
- **Audubon – Creating Bird-Friendly Communities**: [https://www.audubon.org/conservation/creating-bird-friendly-communities](https://www.audubon.org/conservation/creating-bird-friendly-communities);
- **Audubon Florida - Invasive Species App**: [http://fl.audubon.org/conservation-yes-there-app](http://fl.audubon.org/conservation-yes-there-app);

Longleaf Pine Habitat — Apalachicola Bluffs and Ravines Preserve

The Nature Conservancy

*Photo Credit ~ Karen Willes*
Two Book Reviews for the New Year
By Pat Press, Audubon Educator


This wonderful book is a guide to pollinating insects and how they impact our environment (bees, butterflies, moths, wasps, spiders, etc.). It also speaks about how WE humans impact the pollinators by using pesticides and herbicides and other unnecessary pest controls.

While giving useful information this book offers in-depth plans and templates and tips for attracting pollinators. There is sound research information on conservation, gardening and community action. As a reference book this book gives beautiful full-color photos for bee and butterfly identification, as well as habitat and species data.

If you want to befriend pollinators, or want to learn how to build bee boxes or bumble bee houses, or just want to learn about bees and butterflies I highly recommend this book. If you want to make a difference join the Xerces Society and learn more about their conservation and action programs. Attracting Native Pollinators would be a great birthday or holiday gift for a relative or friend. You can find it on the web at www.xerces.org/books/ and on www.amazon.com.


If you are searching for a terrific book for kids that is both interesting and informative The Honeybee Man is it. This fabulous picture book by Nargi and Brooker is a real narrative about Fred, a beekeeper who keeps three beehives on the roof of his apartment building in the middle of Brooklyn, New York. This endearing old man calls the bees “his sweeties” and names his three queens: Queen Mab, Queen Nefertiti, and Queen Bodicea. The queens stay busy while the worker bees are busy building wax rooms, feeding babies, and collecting nectar. Fred says his rooftop smells like a mixture of caramel and ripe peaches.

This delightful book is very rich with imagery and the use of sensory words which describe the world of the bees. Fred tries to imagine flying with the bees over Brooklyn with the wind and the sun on his back. He can’t wait to harvest the sweet honey and share it with his neighbors.

Lela Nargi’s inspiration for this book was two real life apiarists. Her descriptions of Fred and his pet cat, named Cat, and his apartment with the patchwork quilt on the bed and the various print wallpaper on the walls makes you feel like you are in the story. Some of the pictures themselves are cut-paper collages done by Krysten Brooker easily appear 3D. All of the illustrations and diagrams are exceptionally well done. This book is a wonderful combination of playfulness and story which will enchant both children and adults.
January Field Trips
By Helen King

We have some great field trips planned for you. We hope you will join us. Please email Helen King at thekingsom@gmail.com if you plan to attend. This month we will be looking for birds large and small. Both trips will be finished by lunchtime.

**Saturday, January 16: Tall Timbers Research Station**
Meet in the main parking lot at 8 am. This trip is limited to 15 participants, so please email me at thekingsom@gmail.com if you plan to attend.

**Directions to Tall Timbers:** [https://goo.gl/maps/zi9RoJzKQ1Q2](https://goo.gl/maps/zi9RoJzKQ1Q2)
Head North 8.3 miles from the intersection of US319 and Bannerman Rd and turn left on CR12 (brown sign for Tall Timbers on the right). Go 2.7 miles and turn left onto Henry Beadel Dr. Go 0.4 miles and bear to the left for the parking lot.

**Friday, January 29: Southwood and Environs**
The male whooping crane (11-09) has arrived so meet at the north pond on Biltmore Avenue at 7:00 AM. We will also be birding other areas around Southwood. This trip is also limited to 15 participants, so please e-mail me at thekingsom@gmail.com if you plan to attend.

February field trips will be announced later.
For notification of coming field trips, subscribe to Apalachee Audubon's Google Groups email notification list available at [www.apalachee.org](http://www.apalachee.org).
Field Trip birding reports are recorded at ebird, NFB, and with Apalachee Audubon.

Come bird with us!

**Photos from December Birding Trips with Helen King**

**Friday, December 5**
*Birdsong Nature Center*

**Eastern Bluebird**
*Birders at Birdsong*
*Photo Credits ~ Brian Lloyd*

**Saturday, December 11**
*Apalachicola Bluffs and Ravines Preserve*

**Palm Warbler**
*Alum Bluff*
*Photo Credits ~ Karen Willes*
Wolf Creek Trout Lily Preserve is a 140-acre conservation area owned by Grady County through many generous private donations, including the previous owners, Flint River Timber Company, and a grant from the Georgia Land Conservation Program. Established in 2009 through the efforts of volunteers from the Magnolia Chapter (Tallahassee) of the Florida Native Plant Society (including some Georgians), it is destined to remain forever undisturbed from human development, protecting the many acres and literally tens of millions of beautiful yellow and maroon dimpled trout lilies and thousands of maroon spotted trillium. This is the largest extent of these trout lilies known anywhere in the world, and certainly a jewel of Grady County!

How did these plants come to be there? They are usually found in the Appalachian mountains. The theory is that they migrated from the mountains probably tens of thousands of years ago. When the last ice age receded they were left in some spots in southwest Georgia and north Florida, east of the Chattahoochee, Flint, and Apalachicola Rivers. Apparently the Wolf Creek spot is just right for them - a north facing slope of just the right angle, a hardwood forest with dappled sunlight in the winter, soils of just the right type and depth before underlying clay. Whatever the reasons, they prospered at the site, and Grady County is blessed with a beautiful marvel for all lovers of nature! It is definitely a photographer’s paradise!

Check their website for 2016 tour information. www.wolfcreektroutlilypreserve.com
Florida Historic Capitol Museum
“The Best That Nature Has to Offer: The History of Florida State Parks”
December 3, 2015 – May 1, 2016
Florida Historic Capitol Museum
400 South Monroe Street • Tallahassee, FL
Phone: (850) 487-1902 • www.flhistoriccapitol.gov

Established by the Florida Legislature in 1935, the Florida Park Service has played an instrumental role in preserving our state’s natural environment and its cultural resources, while providing unique recreational activities for citizens and visitors. The park system encompasses the wide variety of environments which make Florida special. The Florida Park Service has developed into one of the finest state park systems in the nation. The Florida Historic Capitol Museum invites you to view a historically significant collection that showcases how Florida’s state parks have preserved natural beauty and benefitted citizens for the past eighty years. Free Admission (donations appreciated)

Join National Audubon Society & enjoy free membership in Apalachee Audubon & Audubon Florida for just $20 a year!

Membership includes Audubon, National Audubon’s bimonthly flagship publication. Each issue of this award-winning publication features beautiful photography and engaging journalism. Our Apalachee Audubon Chapter newsletter will keep you informed of local and statewide Audubon and other nature-related events and will share birding and conservation information and news.

You can pay for membership using a credit card by calling Audubon’s toll free customer service number, 1(844)428-3826. (Please mention our chapter ID, E19, for AAS to get full credit for a new membership.) If you prefer to pay by check for an annual membership, send your $20 check made payable to National Audubon Society (please add Apalachee Audubon’s chapter ID, E19) and mail to:

National Audubon Society
225 Varick Street, 7th Floor
New York, NY 10014
Attn: Chance Mueleck

Allow 4-6 weeks for the arrival of your first issue of Audubon. The cost of membership is tax deductible except for $7.50 (which is allocated to Audubon magazine).

Audubon Memberships Make Great Gifts!

Florida Bluebird Society Regional Meeting
“How to Change Your Landscaping to Benefit Birds, Bees, Butterflies and other Wildlife”

SATURDAY • FEBRUARY 6, 2016
10:30 A.M. – MEET & GREET • 11:00 A.M. – PRESENTATION
Leon County Public Library – Eastside Branch
1583 Pedrick Road • Tallahassee, Florida 32317
To assist with refreshments please RSVP by February 5 to: floridabluebirdsociety@gmail.com

Remember Winter Hummingbirds!

Just a reminder that winter means the return of winter hummingbirds. If you took your feeder down, hang it back up! Now is the time to watch your feeders closely, our winter guests will be arriving soon and will be looking for a good place to stay while they are in the area. If you see a hummingbird, contact master bird bander, Fred Dietrich at 850 591-7430 or fdietrich@gmail.com. Fred will do his best to band your bird. His work, along with other banders, is helping us to understand the migratory habits of these birds. For updates: http://hummingbirdresearch.net/

A Great Gift Idea to enjoy all year long!

A great book for bird and nature lovers!

Please see www.apalachee.org for a list of locations where the Apalachee Audubon Society’s Great Birding Spots in Tallahassee, Florida and Surrounding Areas is available.
Enjoy Outdoor Activities in Tallahassee and Surrounding Areas

**Lost Creek Forest**
By Beth Grant

Many interesting activities are planned for this fall at **Lost Creek Forest**, an old-growth hardwood slope forest and wetlands in Thomas County near Thomasville. As events are scheduled for this very special place, they’ll be posted on Facebook and at [www.lostcreekforest.eventbrite.com](http://www.lostcreekforest.eventbrite.com).

**Birdsong Nature Center**
2106 Meridian Road
Thomasville, Georgia

Wednesday, Friday & Saturday, 9 am-5 pm; Sunday, 1-5 pm
Admission: $5-adults; $2.50-children, 4-12 years
Free to members

For a schedule of special activities, please see [www.birdsongnaturecenter.org](http://www.birdsongnaturecenter.org) & Facebook, or call 229 377-4408 or 800 953-BIRD (2473)

Birdsong Nature Center
Celebrating 30 years in April 2016!

**Mission San Luis**
The Mission with its historic village is open Tuesday - Sunday from 10 a.m. to 4 p.m. Admission is $5 for adults; $3 for seniors (65+); $2 for children 6 to 17; and free for members, children under 6 and active duty military with ID. More information, [www.missionsanluis.org](http://www.missionsanluis.org).

**St. Marks National Wildlife Refuge**
1255 Lighthouse Road
St. Marks, Florida 32355
(850) 925-6121
[www.fws.gov/refuge/st_marks/](http://www.fws.gov/refuge/st_marks/)

**Gulf Specimen Marine Lab**
222 Clark Drive
Panacea, FL 32346
850 984-5297
[www.gulfspecimen.org](http://www.gulfspecimen.org)

Fun for the whole family!

**Wakulla Springs State Park**
465 Wakulla Park Drive
Wakulla Springs, Florida 32327 - (850) 561-7286

**Morning Nature Walks**
Free with Park Admission (Meet in the Lodge Lobby)

- Please call (850) 561-7286 to make your reservation.
- Friday, January 1 ~ 9:00-10:30 AM
- Saturdays ~ January 9, 16, & February 20 ~ 9:00-10:30 AM

Wakulla Springs State Park will host a ranger-led early morning trek through its varying forest communities. Habitats alter with slight changes in elevation. For those early rising guests in the magnificent Wakulla Springs Lodge, those wishing to burn a few calories after or in preparation for breakfast in the dining room, or for those who are simply curious; this walk through the woods in the early morning light may hold a surprise or two.

For more information and activities, please see: [https://www.floridastateparks.org/park/Wakulla-Springs](https://www.floridastateparks.org/park/Wakulla-Springs)

**St. Francis Wildlife Association**

St. Francis Wildlife, a non-profit organization founded in 1978, provides humane care and rehabilitation for thousands of wild birds and animals in our community each year as well as unique wildlife education programs.

To learn more: [www.stfranciswildlife.org](http://www.stfranciswildlife.org).

St. Francis Wildlife - 5580 Salem Road, Quincy, FL 32352

In all things of nature there is something of the marvelous. Aristotle