

# APALACHEE AUDUBON SOCIETY



## Speaker Series

*Free and open to the public.*

*Social begins at 7 pm & meeting at 7:30 pm (unless otherwise noted). Speaker Series programs are held at the Unitarian Universalist Church, 2810 N. Meridian Rd., Tallahassee. Directions and more information: [www.apalachee.org](http://www.apalachee.org).*

### 2015-2016 Program Dates

2015	2016
September 24	January 28
October 22	February 25
November 19*	March 24
*3rd Thursday	April 28
None in December	May - TBA

For over 50 years Jack and his late wife, Dr. Anne Rudloe, the founders of Gulf Specimen Marine Lab (GSML), have promoted sea turtle conservation in the Florida Panhandle. During this time, they became the area's foremost experts on sea turtle conservation and habitat protection. Their son, Cypress, has joined the family mission as well, giving lectures on local ecology and managing the SeaMobile project.



Photo above & above right: Jack Rudloe released 3 rehabilitated Kemp's ridley turtles at St. Marks NWR, June 2015.

## Apalachee Audubon Society Mission Statement:

Protection of the environment through education, appreciation, and conservation.

NEWSLETTER OF THE APALACHEE AUDUBON SOCIETY, INC.

NOVEMBER – DECEMBER 2015

November Program: Thursday, November 19<sup>th</sup>

## “Florida Sea Turtles – Ancient, Mysterious & Endangered” Jack Rudloe, Gulf Specimen Marine Lab

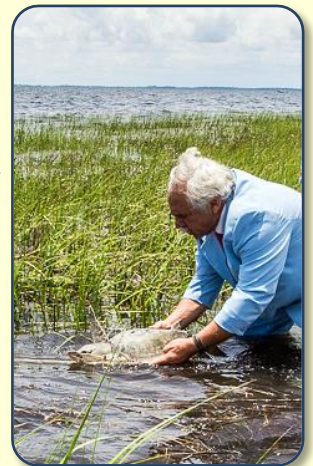
*Book signing and Social from 7 – 7:30 pm with program following*

Of some 250 species of turtles, few have attracted more human interest than the sea turtles that swim the world's oceans. Sea turtles have been entwined with human affairs for thousands of years. Sea turtles bones have been found in middens left by people living almost 60,000 years ago and the first coins struck in Greece in the 8<sup>th</sup> century BCE were engraved with sea turtles which were sacred to Aphrodite.

In the modern world sea turtles have been driven to the brink of extinction by over-hunting. In recent years they have become the center of an extraordinary worldwide outpouring of human caring. Thousands of scientists and volunteers have devoted years and careers to saving these gentle giants and tens of thousands of well-wishers in hundreds of countries have contributed to groups working to save sea turtles. The five species of sea turtles found in Florida are: loggerhead, Kemp's ridley, leatherback, hawksbill, and green.



SeaMobile Touch Lab  
Courtesy GSML



Jack Rudloe releasing  
Kemp's ridley turtle  
Photos by Nick Baldwin

GSML's sea turtle research and conservation program, founded in 1964, is the third oldest in the United States. GSML was an early advocate of providing legal protection when sea turtles were still commercially harvested. After passage of the federal Endangered Species Act, GSML coordinated with state and federal agencies and became the regional sea turtle rehabilitation center. The lab holds a certificate for sea turtle rehabilitation and uses social media to keep the public aware and involved in stewardship and restoration efforts. The nationally recognized, non-profit center provides members of the public with a hands-on experience in learning about the wetlands and coastline of North Florida, from touch tanks – where visitors can touch living specimens and learn about their role in the local ecosystem – to long field trips trekking through swamps. More than 15,000 people pass through the center's doors each year and the SeaMobile mobile unit has reached over 175,000 people. Jack and Anne's **National Geographic** 1994 article, “Sea Turtles in a Race for Survival.” helped create a blueprint for the conservation path of future publications and gave them a place of honor at the National Geographic Museum. For more information, please see <http://www.gulfspecimen.org/wp-content/themes/gulfspecimens/media/articles/5-NG-turtle-race.pdf>, <https://www.youtube.com/watch?v=YqxU6-EFLV8> and [www.gulfspecimen.org](http://www.gulfspecimen.org).

**Apalachee Audubon Society, Inc.  
2015 – 2016  
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**AAS Logo Design:** Charlotte Forehand

**Newsletter Editor:** Suzanna MacIntosh  
[aasnewsletter2011-audubon@yahoo.com](mailto:aasnewsletter2011-audubon@yahoo.com)

**Web Administrator:** Kathleen Carr  
850 322-7910

**Apalachee Audubon Society, Inc.  
P. O. Box 1237  
Tallahassee, FL 32303**

Apalachee Audubon Society, Inc. (AAS) is a 501(c)(3) tax exempt organization. All memberships and contributions are tax-deductible to the extent allowed by law.

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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.

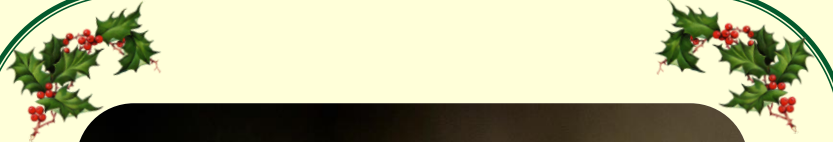
For information, announcements of coming field trips, activities and events and to receive the Apalachee Audubon Society newsletter free, please sign up for AAS Google Groups email notification list at [www.apalachee.org](http://www.apalachee.org).

Enjoy Apalachee Audubon on Facebook!



**In every walk with nature one receives far more than he seeks.**

**– John Muir**



Vermilion Flycatcher

Photo by Karen Willes

**“Holiday Wishes”  
AAS President Dr. Seán McGlynn**

*I would like to wish everyone a wonderful holiday season and a Happy New Year! On behalf of the Apalachee Audubon Society Board of Directors, I'd like to especially thank all our members. You are Apalachee Audubon! Your continued participation is vitally important and we look forward to seeing you in 2016. During the holidays, may you be surrounded by loved ones and find time to share treasured moments together and celebrate those intangible gifts you are blessed with.*



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## President's Message

### Seán E. McGlynn, Ph.D.



Dr. Seán E. McGlynn

*Photo by Nick Baldwin*

There are numerous exciting announcements in this November edition of the Apalachee Audubon Newsletter! The first is that the Monarch butterflies returned this year on their fall migration and over 4000 people attended the 27<sup>th</sup> annual Monarch Festival at St. Marks NWR to celebrate. Leading up to that at our October program St. Marks Refuge Supervisory Ranger Robin Will and Ranger Scott Davis shared information about an exciting new initiative at St. Marks NWR to help with the conservation needs of Monarch butterflies and to help increase the availability of native milkweed. This month we will host the legendary writer and naturalist Jack Rudloe, the cornerstone of ecology for the Florida Panhandle, who will speak to us of his quest to save the Sea Turtles. We hope you will join us Thursday, November 19<sup>th</sup> at 7 pm. We will be serving organic, shade-grown “Bird Friendly” coffee during the social from 7-7:30 pm and Jack Rudloe will be signing some of his great books...what a special holiday gift one (or more) of Jack’s books would be!

The goals of Apalachee Audubon this year are: *Outreach; Conservation and Restoration*. The Board of Directors just approved a comprehensive *Conservation Plan*, which embraces the tenants of ecology and promotes these goals. Apalachee Audubon is and will continue to be a leader in environmental conservation. In September 2012 National Audubon purchased Lanark Reef and we are now all stewards of one of the most biologically significant sites in Florida for winter shorebirds. We are currently getting more lands approved for purchase like the Fallschase Tract, a fundamentally important parcel that cements the integrity of the Lafayette Heritage Trails, Greenways, St Marks Flyways, Wakulla Springs State Park and the St Marks NWR. The Fallschase parcel is a valuable recharge area for the aquifer and unparalleled wading habitat for threatened species like Wood Storks and Limpkins and a haven for Florida Black Bears. We are assisting wintering birds as the heat of the summer abates and the crispness of fall permeates the air in what may be a record breaking El Nino infused cold wet winter with our Shorebird Stewardship, Eagle Watch and our developing Bachman’s Sparrow Monitoring Programs.

The mission of National Audubon is “*To conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity, and the earth’s biological diversity*”. If you look through our newsletters, you will find that we are interested and involved with conserving every type of natural habitat, including all types of water from oceans, lakes, estuaries, rivers, streams to wetlands. In addition, we are increasing our understanding of the complexity of groundwater and surface water interactions as they relate to our springs and our aquifer. We have always focused on birds, which are so important to us all. They are also a barometer of the health of our environment. With the alarming decreases in many common bird species it is more important than ever to protect, conserve and restore needed habitat. Everything is interconnected and so we are working to protect our environment on every level.

In closing I want to thank Suzanna Macintosh for her unfailing dedication, eloquence and hard work in bringing this newsletter to you over the years. We will miss her greatly as she takes time off to recover her health and vigor. We will strive to follow her example and continue her quest to fulfill the mission of Apalachee Audubon, to “*Protect of the environment through education, appreciation, and conservation.*”

We wish you a Happy Holiday filled with native plants, pollinators, beasts and birds. And as we welcome in the coming New Year we hope you will join Apalachee Audubon as we work together to conserve and enjoy the beauty of the number one biodiversity hot spot in Florida.

#### *Note from the Editor*

Regrettably I am resigning as Newsletter Editor. Earlier this fall I hurt my back and the injury makes working at a computer almost impossible. Happily Karen Willes will serve as Apalachee Audubon’s new Editor and I know Karen will do an outstanding job. Thank you for the opportunity to serve as editor; it has been a pleasure working with so many great people for the members and friends of our wonderful chapter! Best wishes for the holidays, the coming New Year and always.

~ Suzanna MacIntosh



*Photo by Nick Baldwin*



**Ashe Magnolia Pod with Seeds**

*Photos by Fran Rutkovsky*

## In the Yard By Fran Rutkovsky



This time of year birds are enjoying the natural seeds and berries instead of coming to the feeders. Take a closer look at the dying flowers in your yard. Instead of cutting them down, consider leaving them at least through fall and early winter. The birds may pluck the seeds that are left, and caterpillars may use the plants for overwintering. Be sure to keep your birdbaths filled with clean water.

Before long the cold weather will be here, and the feeder birds will return. Winter birds such as Chipping Sparrows will then be mobbing your feeders. Last winter we had an abundance of Pine Siskins. Will they return? Will we have more wintering hummingbirds? Stay tuned---

Project FeederWatch begins in mid-November and runs through early April. (See article below.) I always look forward to this winter ritual.



**Coneflower, above: Ironweed & Passionfruit, right.**

*Photos by Fran Rutkovsky*



### Project FeederWatch 2015

By Fran Rutkovsky

The 2015 season for Project FeederWatch begins Saturday, November 14, 2105, and runs through Friday, April 8, 2016. This is a winter-long survey of birds that visit feeders in yards, nature centers, and other locations in North America.

The data that volunteer participants submit help scientists track movements of winter bird populations and long-term trends. This is a fun endeavor, easy to do, and helps you learn more about the birds that frequent the feeders in your own yard. Participants keep track of birds that come to feeders/birdbaths/fruited trees & shrubs within a count area on designated days. The details and instructions, along with photos and data from past years, are available on the Project FeederWatch website, <http://feedervatch.org>. A fee of \$15 helps to support the project. Project FeederWatch is a joint project of the Cornell Lab of Ornithology and Bird Studies Canada.



**Pine Siskin and Goldfinch**

*Photo by Janeen Langley*



**"Our studies have shown that even modest increases in the native plant cover on suburban properties significantly increases the number and species of breeding birds, including birds of conservation concern." - Doug Tallamy, Bringing Nature Home**  
<http://www.bringingnaturehome.net/gardening-for-life.html>

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## Plants Make Perfect Presents

By Donna Legare



Red Cedar with Amaryllis and Paperwhites nearby

*Photos by Mary McMullen*

It was difficult figuring out what to give my mother-in-law for Christmas until I realized how much she liked plants. It should have been obvious given the size and age of the Christmas cactus plants that thrived on her back porch. She estimated one of them at 30 years or older! Those plants are still alive, inherited by our son Joe. Over the years we gave her camellias, blueberry bushes, grape vines and a kumquat tree. She appreciated these gifts and especially enjoyed the camaraderie of grandchildren during blueberry picking season. Although she is no longer with us, we think of her each year as we pick hundreds of kumquats for Jody's kumquat marmalade.

In this day and age of electronics, why not help your children or grandchildren develop an appreciation for plants? My children used to get tulip bulbs in their stockings to be planted on Christmas day for a brilliant show at Valentine's Day. When our son was about ten years old, he asked for his very own lemon tree. He had grown up picking lemons from Grammy Jean's Meyer lemon tree in Fernandina Beach. His lemon tree now

produces 50 - 75 lemons each year. One Christmas when our daughter was a young teenager, she asked for a houseplant to hang in her bedroom. I chose a Pothos because it is very easy to grow and I wanted her to be successful. That plant traveled to college with her and survived dorm life.

Blueberry bushes, deerberry, Elliot's blueberry and sparkleberry trees make excellent presents that encourage and support our native Southeastern blueberry bees, the major pollinator of blueberry flowers. This interesting bee emerges from its underground nest every year and lives out its life cycle during the short period of time in which blueberries bloom.

A young man once visited the nursery with his 5 year old daughter looking for the perfect Hanukah bush; they left with a bushy rosemary plant. A good choice, I thought, rosemary for remembrance. I smiled as they left, thinking about this young man who used to come in as a child with his mother and now he's passing his love of plants to his daughter.

Here are a few other ideas for plant gifts:

- ✓ tea olives for great fragrance
- ✓ holly trees (flowers for bees, berries for birds)
- ✓ native azaleas for spring color and hummingbird & butterfly nectar
- ✓ any native plant for its value to wildlife
- ✓ catnip for cat lovers
- ✓ basket of herb plants – Greek oregano, rosemary, thyme...

A plant is a gift that can be enjoyed for many years to come.

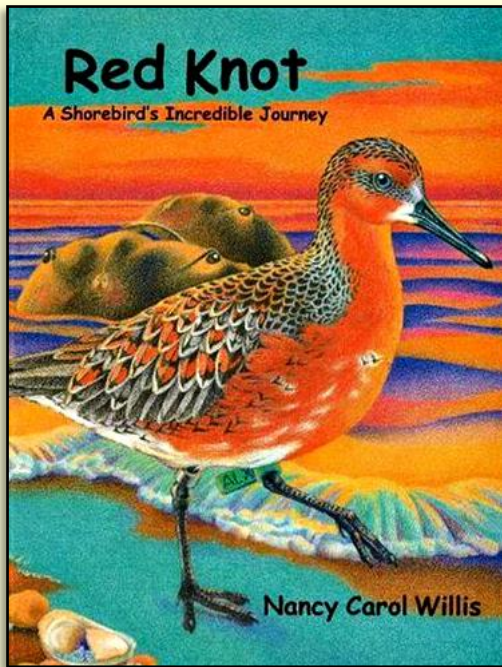
*Donna Legare is co-owner of Native Nurseries, [www.nativenurseries.com](http://www.nativenurseries.com).*



Citrus Tree



## Two Picture Books for the Holidays and Reading Time



One of the best books on science for kids is *Red Knot: A Shorebird's Incredible Journey* by Nancy Carol Willis. This is a terrific non-fiction book for young readers (ages 5-12) with an explanation of bird migration at a level they can understand. The book is written in a time frame of the Red Knot's journey as a diary from its beginning to end. It traces the little bird's (the size of a robin) migration from the bottom of South America in Tierra del Fuego to Nunavit in the arctic of Northern Canada.

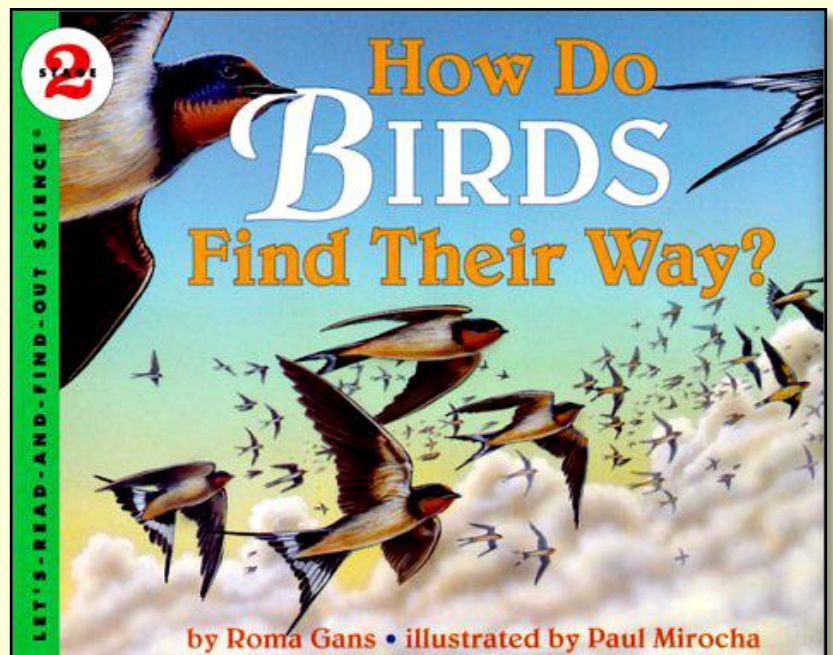
Red Knot's journey begins with the bird's need for fueling up for her long 10,000 mile trip, and the need to refuel along the way in Brazil and in North America along the Delaware and New Jersey shores. The Red Knot reaches Delaware Bay just as the horseshoe crabs are laying their eggs in nests along the shoreline. The birds swoop in to eat the eggs that are dragged from their nests by the crabs' scuttling across the beaches. After gaining weight to fuel her flight the Red Knot approaches the final stage of her journey, the flight to the northern tundra where she will make a nest, mate, and raise her young family.

This picture book has terrific full-page illustrations throughout. It has maps, charts, and a glossary in the back. There is an explanation of why scientists use bird-banding to find out information on the migration patterns of birds and other animals. This book has been endorsed by Russell W. Peterson, former president of the National Audubon Society and Governor of Delaware.

Children love to learn about the "why" of things. They have a natural curiosity about the world they live in and this should be nurtured with helpful books along the way. This is why I highly recommend the book *How Do Birds Find Their Way?* written by Roma Gans and illustrated by Paul Mirocha.

This picture book was written for ages 5-9 and it explains to children why birds don't need maps. They seem to have an internal compass and find their way on long journeys from their summer homes to their winter homes in the Arctic, northern United States, and Canada by using landmarks, and the setting of the sun. The birds also apparently use the stars and gravity to guide them on their migration routes. Both of these excellent books are in paperback and may be found at your favorite bookstore, online, and at your local libraries.

*Pat Press and Carol Franchi serve as Co-Chairs of the Education Committee of the Apalachee Audubon Society. Please see [www.apalachee.org](http://www.apalachee.org) for more of the Education Committee's book recommendations for you and your family to enjoy.*



# LANDSCAPE FOR LIFE™

Based on the principles of the Sustainable Sites Initiative™

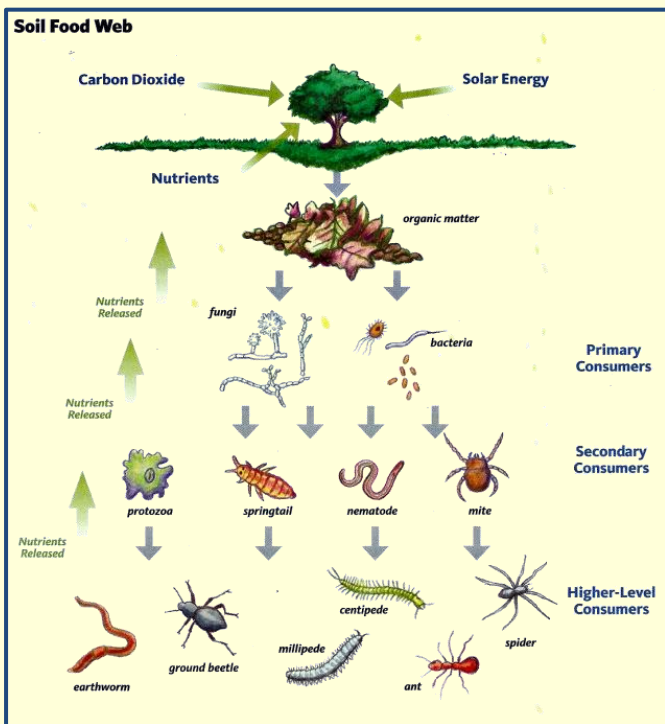
Developed by the Lady Bird Johnson Wildflower Center and the United States Botanic Garden

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](http://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](http://www.wildflower.org), the United States Botanic Garden, [www.usbg.gov](http://www.usbg.gov), and Landscape for Life, [www.landscapeforlife.org](http://www.landscapeforlife.org), for sharing this material.*

## The Importance of Soil in Sustainable Gardening

*This is the 2<sup>nd</sup> of a 5-part series based on the Landscape for Life program. A sustainable garden and landscape depends upon healthy soil. Here we'll look at the importance of the "soil food web" and look at ways to increase the fertility of soils naturally, how to use fewer pesticides and herbicides, and how to increase soils' ability to conserve water and minimize runoff and pollution.*



*Healthy soil is alive with bacteria, fungi, protozoa, nematodes, earthworms and other organisms. As the earth evolved, these organisms and plants formed very complex mutually beneficial relationships. Sustainable gardening focuses on restoring and protecting this evolutionary balance and enabling these complex relationships. Because of its complexity, what we know about soil is still evolving and one of the leading voices is that of Dr. Elaine R. Ingham, an internationally respected soil microbiologist with over 40 years of experience. In Thomas Christopher's book, *The New American Landscape*, Dr. Ingham emphasizes the important relationships between plants and the organisms in healthy soil. These organisms provide nutrients and create passageways for air and water to penetrate among soil particles along with many other benefits. One teaspoon of productive soil contains between 100 million and 1 billion bacteria. There are over 5 million species of bacteria, with each species adapted to a very specific set of conditions. As the plant grows and changes, different species of bacteria along with other organisms perform different functions. For instance, if the plant is attacked by a pest, the plant signals this change and a specific set of bacteria swings into action.*

**The soil food web is the key to fertile soil. It is made up of primary, secondary, and higher-level consumers that support each other in producing healthy, nutrient-rich soils.** Courtesy of Landscape for Life

*The important thing to keep in mind is the complexity and interdependency of these processes. A good rule of thumb is that when in doubt look at what*

*happens in a natural ecosystem nearby. For example, in nature leaves and other plant materials cover the soil where they provide protective mulch for roots and organisms from weather extremes and from compaction from heavy rainfall. They also help reduce puddling and runoff and they help water seep in and reduce evaporation. Over time the decaying vegetation also provides additional nutrients. Soil type, whether predominantly sand, clay or silt will determine how quickly water and nutrients travel through the soil; local climate and rainfall will also affect gardening selections, but understanding the importance of and the basics of the soil food web is the foundation for sustainable gardening for us all; and, although most of us have soils that have been amended or changed from their natural state in our yards, Dr. Ingham and many experts recommend that one of the most important things we each can do to help soil is to enable the dynamics of the soil food web. By working with nature, we can find that natural processes do much of the work for us in a more efficient way. ~ SM*

*Continued on next page*

## Landscape for Life™

### The Importance of Soil in Sustainable Gardening

Soil is a complex mixture of weathered rock and mineral particles; the living organisms of the soil food web; and the decaying remains of plants, animals, and microorganisms. Soil forms the foundation of sustainable gardens and provides a variety of ecosystem services. Healthy soil is critical to the success of sustainable gardens. Using sustainable gardening practices can help restore and protect the benefits our soils can provide.

The soil food web is the key to fertile soil. This diverse community of organisms making up the soil food web can be organized into functional groups depending on how they obtain energy. Plants are producers and use the sun's energy to convert water and carbon dioxide into food (carbohydrates) via photosynthesis. Primary consumers include decomposers (mainly fungi and bacteria) and herbivores (mainly animals) and are capable of obtaining energy by digesting leaves and other plant matter. Secondary consumers feed on primary consumers, and then they release nutrients that can be absorbed directly by plants, as well as undigested remains that become part of the organic soil matter. Higher-level consumers feed on secondary consumers. Their fecal pellets and undigested remains also return nutrients to soil. The production and breakdown of organic matter by organisms maintains soil fertility and in turn aids in healthy plant growth, nutrient cycling, pollutant removal, and improved soil structure.

In order to maintain these ecosystem services, we need to support the basic needs of soil organisms by providing air, water, nutrients, and a hospitable soil environment. Modern society has left much of Earth's soil eroded, exhausted, and polluted. Unsustainable gardening practices, such as applying too much fertilizer or compacting soil, has contributed to the problem. Here are some strategies for improving damaged soils along with stewardship practices that will support gardeners in maintaining soil health and for protecting and encouraging soil organisms:

- Limit soil disturbance and tillage.
- Restore overly compacted soils to allow air and water movement.
- Avoid leaving soils bare by covering soils with plants or mulch. Regularly apply layers of compost or organic mulch to the top of the soil.
- Avoid pesticide use that may harm soil biota.
- Plant a diverse garden to provide a variety of food sources.
- Grasscycle - Use a lawn mower that returns mulched lawn clippings to the soil.
- Allow leaves and other plant materials to decompose throughout the garden.

Having your soil pH tested is a beneficial and often cost-effective gardening practice. Soil pH is a measure of soil acidity or alkalinity. The pH scale ranges from 0 to 14, with 7 representing neutral. From pH 0 to 7 the soil becomes less acidic, while from 7 to 14 it becomes increasingly alkaline. Soil pH affects the availability of minerals and nutrients to plants. Before a nutrient can be used by a plant, it must be dissolved in the soil solution. Most plants prefer a slightly acidic to neutral soil, with a pH of 6 to 7, because that is the range in which most nutrients are readily available. University extension labs (*in Florida*, <http://edis.ifas.ufl.edu/m/#publication?id=SS187>) or commercial labs conduct standard soil tests for about \$25 to \$40. Knowing your soil's pH can save you money on unnecessary fertilizer and plants that are not adapted to the natural soil conditions. A lab test can help avoid nutrient imbalances from excess fertilizer that can run off and pollute waterways. It will also help determine which plants are best suited to growing in the garden. Although they can vary somewhat by state, a standard soil test result typically includes the following measurements:

- Soil pH
- Levels of potassium, phosphorus, calcium, magnesium, and sulfur
- Organic content
- Lead contamination and what to do about it
- Recommended nutrient or soil amendments (*Recommendations are based on the needs of agricultural crops. Unless vegetables*

*Continued on next page*



*are being cultivated, nutrient recommendations may be much higher than what is needed to support garden plants. If they are not part of the standard test, levels of nitrogen and other nutrients, sodium, soil texture, and other factors can be tested for an extra charge, but must be specifically requested.)*

The elements essential to plant health are classified as macronutrients, which are needed in large quantities, and micronutrients, which are required in minute amounts. Both are necessary for healthy plants. The primary macronutrients are nitrogen (N) <http://edis.ifas.ufl.edu/m/#publication?id=SS479>, phosphorus (P), and potassium (K). The relative proportions of these nutrients are listed as N-P-K on fertilizer labels. Fertilizers may be either natural or synthetic. There are advantages and disadvantages to the use of both types. Although natural fertilizers can cost significantly more, take longer to apply and see the results than synthetic, they can offer a number of benefits, (*Fertilizers*: <http://edis.ifas.ufl.edu/mg448>). Whenever appropriate, use single-nutrient fertilizers instead of complete fertilizers that contain nitrogen, phosphorus, and potassium. For example, if soil is low in nitrogen but not in phosphorus and potassium, use blood meal, fish emulsion, or other high-nitrogen natural fertilizer or grow green manure. Growing green manures, grains, and legumes as cover crops, is a good way to increase the amount of organic matter and nutrients in soil. Cover crops reduce the need for fertilizer. They also help suppress weeds, aerate the soil, increase its capacity to conserve moisture, and protect it from being compacted by rain and eroded by water or wind.

The goal of applying fertilizer is to provide just enough to supply the needs of the plant. Too much fertilizer can run off into nearby waters, leach into groundwater, or lead to weed problems. A plant's health should be the guide. If plants suffer from a lack of vigor, retarded growth, sparse foliage, or leaf discoloration, they may be nutrient deficient, although improper drainage or inadequate aeration are also likely causes. Adding compost and mulch can help with your soils' fertility naturally and alleviate compaction over time. The help of knowledgeable staff at a local garden shop/nursery is invaluable and can save you time and money in the long-run.

If possible add a compost pile and/or bin to your yard and apply organic mulches to your garden. Your fallen leaves, pine needles, and yard clippings are valuable as mulch or compost. It's important to place mulch an inch or two back from the base of plants to avoid diseases. Vermicomposting is a fun activity for many and helps utilize many of your leftover kitchen scraps; though as with compost, add citrus sparingly and avoid introducing bones, dairy products, or meats.

In a sustainable garden:

- Soils are healthy, living ecosystems that provide the needed air and water flow to support plant growth and a diverse soil food web.
- Soil provides habitat for a wide range of organisms such as bacteria, fungi, insects, and earthworms.
- Soil absorbs rainfall and mitigates flooding.
- Rainfall infiltrates soil and replenishes groundwater supplies.
- Soil removes pollutants and cleanses water.
- Soil stores water for plants, wildlife, and people.
- Soil stores carbon.
- Soils are protected by vegetation or mulch.
- Soil supports vegetation that provides a variety of ecosystem services.
- Vegetation is selected based on what can thrive in the existing soil type.
- Organic matter from the garden is used to support the soil food web and healthy vegetation.

More information: [http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/soils/health/biology/?cid=nrcs142p2\\_053868](http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/soils/health/biology/?cid=nrcs142p2_053868), <http://njaes.rutgers.edu/organiclandcare/forhomeowners.html>, <http://soilhealth.cals.cornell.edu/extension/presentations/2005bird.pdf>, <http://www.newfarm.org/features/2006/0906/nematodes/kimbleevans.shtml>, and Florida-Friendly Landscaping, <http://fyn.ifas.ufl.edu/>

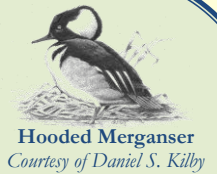


*This series will be continued in the Apalachee Audubon newsletter; next "Plants in a Sustainable Garden".*

*Logo and LFL material used and reprinted with permission from Landscape for Life™.*

## November & December 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](mailto:thekingsom@gmail.com) if you plan to attend.

*In November we will hunt for ducks (with our binoculars and cameras) which are on their way down south.*

### **Saturday, November 7: Lake Seminole/3 Rivers State Park**

Meet at the Pilot gas station at the intersection of US90 West and I-10 at 8 am. We will be carpooling; please indicate if you are a willing driver. We will return for a late lunch.

### **Friday, November 13: St. Mark's NWR**

Meet at 8 am at the Visitor's Center. There will be some walking required.

*In December we have the opportunity to visit inland birding spots, looking for our winter visitors.*

### **Saturday, Dec. 5: Birdsong Nature Center**

Meet at the Trader Joe's parking lot at 8 am, where we will carpool. There is a \$5 admission and we will be doing a fair amount of walking.

### **Friday, Dec. 11: Apalachicola Bluffs and Ravines**

Meet at the Trader Joe's parking lot at 7:30 am, where we will carpool. This is a Nature Conservancy property and Annie Schmidt will be leading us. There will be open air riding and also some walking.

*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.*

## Field Trip Photographs

*Thank you to Karen Willes and Brian Lloyd for sharing photographs from recent AAS field trips. We hope you'll enjoy them.  
Come bird with us when you can. We have a great group; we learn from one another and have a terrific time!*



*From top left, clockwise: Swamp Sparrow, Brown Thrasher, Fox Squirrel, Gopher Tortoise - Photos by Brian Lloyd taken at 3 Rivers State Park; St. Marks NWR, Northern Pintails - Photos by Karen Willes taken at St. Marks NWR*



## 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](mailto: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/>.

### First Friday Gallery Hop

## LastFirst Festive Flea: Pop Up Holiday Bazaar IVORY TOWER COLLECTIVE

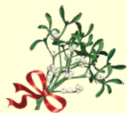
Friday, Dec. 4<sup>th</sup> from 6 – 9 p.m.



663 Industrial Dr. Tallahassee - Railroad Square Art Park

**12 cakewalks to benefit Apalachee Audubon!**

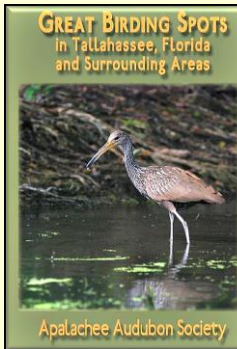
Support Local & Independent Artists, Designers & Crafters



## A Great Gift Idea to enjoy all year long!

*A great book for bird and nature lovers!*

Please see [www.apalachee.org](http://www.apalachee.org) for a list of locations that the Apalachee Audubon Society's **Great Birding Spots in Tallahassee, Florida and Surrounding Areas** is available.



## 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.flhistoriccaptol.gov](http://www.flhistoriccaptol.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 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 Holiday Gifts!**  
*Give the gift of the outdoors this holiday!*

## You're Invited to Native Nurseries

### Holiday Open House



Sunday, November 29<sup>th</sup> from 2 – 4 pm

*Enjoy a stroll through the fragrant Fraser Fir Christmas tree forest and visit the Wren's Nest Christmas Shop. Join the staff for a cup of hot cider, home baked treats and listen to the music of local bluegrass band, Grass Gone Blue.*

*Native Nurseries will be open 10 am - 5 pm on Sundays  
between Thanksgiving & Christmas*

1661 Centerville Road  
Tallahassee, Florida – 850 386-8882

[www.nativenurseries.com](http://www.nativenurseries.com)



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).

Winter Solstice Celebration: December 12-13, 2015

Join Mission San Luis for two days of Indian culture, crafts, demonstrations, living history, astronomy, speakers, theater, and more!

Saturday, December 12 (10 am - 8 pm)  
Sunday, December 13 (10 am - 4 pm)



\* **Apalachee Audubon Society** will be exhibiting at this festival on Saturday, Dec. 12<sup>th</sup> with educational and membership information. Please call Pat Press and Carol Franchi at 850 539-5765 for further details.



125 North Gadsden Street - Tallahassee, Florida 32301  
850.222.8800 - [www.lemoyne.org](http://www.lemoyne.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!

Operation Migration



*The Whooping Cranes are coming!*

To follow this year's migration, please see the "Latest Posts" at [www.operationmigration.org](http://www.operationmigration.org)

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.

Saturday, December 12 from 9:00-10:30am  
Friday, January 1 from 9:00-10:30am

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>



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  
850 627-4151