May General Meeting

Friendly Fronds: Basic Biology and Current Research on the Ferns of Florida

Emily B. Sessa
Assistant Professor
Department of Biology • University of Florida

7:00 pm, Tuesday, May 16, 2017
Come early for the Plant ID Workshop at 6:15
Phillips Hall, Unitarian-Universalist Fellowship
4225 NW 34th Street, Gainesville, FL 32605

Emily Sessa is Assistant Professor of Plant Systematics in the Biology Department at the University of Florida. Her research focuses on understanding the ecological and evolutionary processes that have shaped fern diversity on earth. Ferns are her primary plants of interest, and she uses phylogenetics (the study of relationships) as well as historical biogeography, molecular dating, diversification analyses, and studies of physiology and climatic niche to understand fern evolution. In her talk for the Florida Native Plant Society, she will discuss basic fern biology and morphology, some common local species, and some of the main research projects currently underway in her lab at UF.

May Field Trip:
Silver Springs Forest Conservation Area
Saturday, May 13, 8:30 a.m.

The Marion Big Scrub Chapter has arranged a field trip to the new Silver Springs Forest Conservation area and has invited us to join them.
Meet at 8:30 am at Pearl Country Store and gas station on Hwy 441 in Micanopy to caravan or carpool to the entrance station on CR 326 (6381 FL-326, Silver Springs, FL 34488). There is little parking available at the entrance and we will be driving into the Conservation Area on roads difficult to navigate in a passenger vehicle with very low clearance so carpooling with off-road worthy vehicles is recommended. The field trip will be guided by J.B. Miller, Land Resource Specialist for the St. Johns River Water Management District.

This from Greg Ballinger of the FNPS Big Scrub chapter, our hosts: “Natural communities on the property range from flatwoods to hydric hammock and bottomland forest. The property was purchased by SJRWMD to protect the headwaters of Half Mile Creek and an unnamed tributary that flow into the Silver and Ocklawaha rivers, which are designated as Outstanding Florida Waters. The tract includes 378 acres of wetlands along these two creeks. Most of the uplands on Silver Springs Forest Conservation Area are currently in pine plantations.”

SJRWMD partnered with the Florida Dept. of Environmental Protection (DEP) and the Conservation Trust for Florida (CTF) to purchase this conservation land from Rayonier Inc. in 2015. The property provides a buffer where forests capture rainwater to recharge the aquifer and augment the flow of nearby Silver Springs. The purchase also protects (con’t on Page 3)
The 37th Annual Conference of the Florida Native Plant Society will be held in the heart of Florida, and central to the largest river restoration project in the world! The Kissimmee River restoration, a joint project by the US Army Corps of Engineers and the South Florida Water Management District, is designed to restore the complex relationships between land, wildlife, water and climate that were torn apart when the river was channelized in 1962.

Go to [http://fnps.org/conference/2017](http://fnps.org/conference/2017) to see conference and field trip schedules and information about lodging and registration.

Nominating committee members Anne Cox, Martha Steuart and Kim Zarillo have recommended a slate of officers to be voted on by the FNPS membership at the annual membership meeting, which will take place Saturday, May 20 at 8a.m. in the Longhorn Center of the Westgate River Ranch (as part of the annual conference).

Paynes Prairie’s own Susan Carr has been nominated to serve as president of FNPS. Dr. Carr is a native of Gainesville, Florida, where her interest in the natural world began as a child exploring the wild lands of Alachua County. After receiving a BS in botany from the University of Florida (UF), Susan worked as an ecologist before returning to graduate school to earn a master’s degree in plant biology from Louisiana State University. After returning to Florida, Susan obtained a PhD in wildlife ecology and conservation from UF. Her PhD research centered on the ecology and diversity of re-maintained pinelands in Florida, and it was from this work that she developed an appreciation for Florida’s wild lands and an avid interest in land conservation.

Photo Credits: Our thanks to Wesley Hetrick for permission to use his photo, Sunrise at Paynes Prairie, on Page 1. See more of Wesley’s images at [https://www.flickr.com/photos/wesleyhetrick](https://www.flickr.com/photos/wesleyhetrick) Also to Peter May for permission to use his Rhexia photo. See more of Peter’s work at [http://www2.stetson.edu/~pmay/index.htm](http://www2.stetson.edu/~pmay/index.htm)
May Field Trip (con’t. from page 1)

the headwaters of Half Mile Creek and an unnamed tributary that flow into the Silver and Ocklawaha rivers, both designated as Outstanding Florida Waters. Other benefits of the property include reducing nitrate loading into springs and rivers, allowing for hydrologic restoration that will result in water quality improvement, and creating opportunities for water storage. The property links Indian Lake State Forest, Silver Springs State Park, the Cross Florida Greenway and district-managed lands to the Ocala National Forest. The property serves as a buffer between the 30,000-acre Sleepy Creek Lands cattle ranch and Silver Springs, which struggles with ever increasing amounts of harmful nutrients and will remain a recharge area for the spring. A portion of the funding used to acquire this property came from the Forest Legacy Program, a joint federal and state government initiative with the goal of promoting sustainable forestry practices, and protecting natural, cultural and recreational resources. The Conservation Trust for Florida, a 501(c)(3) nonprofit land trust, raised additional funds for the purchase of the property via contributions from charitable foundations and individuals who supported the project.

“This is our mission. This is part of our business plan. More and more we are facilitating these transactions,” said Susan Carr, Conservation Trust Fund of Florida board president.

Spring Plant Sale Report

By Lisa Jelks

Spring sprang early this year, which put everyone in a mood to enhance their yards with new plants. Reducing lawn surface and providing bird and bee habitat is fast becoming the norm. This is a great trend, not only for the spread of native plants but also to decrease the amount of fertilizer, herbicides, and pesticides from reaching our drinking water supply.

The Spring Native Plant Sale at Morningside Nature Center provided a wonderful opportunity for these smart folks to stock up on beautiful native wildflowers, vines, grasses, and trees! We had a constant stream of people coming to the Chapter tent asking questions and learning about the “right plant for the right place.” We provided many customers with personal landscaping advice, one of our unique features of these sales—it is well received and fun for all.

Shoppers were able to enjoy the bluegrass melodies of Boilin’ Oil, traverse the Morningside grounds on the guided wildflower walk while enjoying fresh roasted coffee and pastries, and learn about exotic plants (bad) and water-wise landscapes (good). Stay tuned for the announcement of the Fall sale dates!
Our April 2017 yard visit brings us to the home of John and Wilma Gordon. Both of them having grown up on farms in Illinois, they are partners in creating their beautiful yard. They purchased the 2 1/2 acre property, a former farm in northwest Gainesville, in 1983, built their home in 1988, and proceeded to raise their children. Years later, the children grown and gone, they looked around and decided to make a wildflower meadow of the big grassy, sunny area to the north of the house.

It was a tour of gardens in France that inspired them to begin. But where to begin? The native plant sale, of course. They bought a $25 packet of wildflower seeds at the sale, sowed it, and plants came up but - what were they? Thus began their meadow adventure.

Beginning in 2008, John sowed goldenmane tickseed (Coreopsis basalis) and annual phlox (Phlox drummondii) in an oval-shaped area about 50 x 70 feet in the field on the north side of the house. Since that time, Wilma has added native wildflowers in concentric inner ovals, with 30" paths in between: Twinflower (Dychoriste oblongifolia), eastern smooth beartongue (Penstemon laevigatus), poppy mallow (Callirhoe papaver), purple coneflower (Echinacea purpurea), Stokes aster (Stokesia laevis), blue curls (Trichostema dichotomum), graceful blazing star (Liatris gracilis), partridge pea (Chamaecrista fasciculata), tropical sage (Salvia coccinea), softhair coneflower (Rudbeckia mollis), black-eyed susan (Rudbeckia hirta), wild petunia (Ruella caroliniensis), browneyed susan (Rudbeckia triloba), Leavenworth’s tickseed (Coreopsis leavenworthii), blanket flower (Gaillardia pulchella), Florida scrub skullcap (Scutellaria arenicola), lanceleaf tickseed (Coreopsis lanceolata), and fringeleaf tickseed (Coreopsis integrifolia).

The plants and seeds came from various sources. For example, one day while Wilma was helping to pot up plants for the Master Gardener plant sale, a plant fell off the table. No one knew what it was. She took it home and put it in a pot and the next fall it bloomed, so she took it to Marc Frank at UF for identification and found it was Coreopsis integrifolia.

Management of the wildflower meadow is minimal: weeding, hand watering of recent plant-ings, adding a little mulch consisting of shredded leaves. Except for Wilma’s inner oval, the field is mowed from July through September, which is when the fall bloomers are getting ready to show off.

A second large circle, to the south, contains non-natives such as poppies, larkspur, Rudbeckia cultivars, and pentas. Honey bees are busy here. Purple passionflower (Passiflora incarnata) makes its way among the plants and on a trellis. Butterfly milkweed (Asclepias tuberosa) has just come up along the edge, encouraged by a little water in this droughty season.

Appearing as a large mound further to the south, the septic drain field is nearly covered with a very healthy population of turkey tangle fogfruit (Phyla nodiflora); the top of the mound is in the process of being planted with narrowleaf silkgrass (Pityopsis graminifolia).

We move on to the front of the house. Along the street is a wide shady area planted largely with non-natives such as “pass-along” gingers, and also includes coonties (Zamia pumila), firebush (Hamelia patens), and the cultivar Walter’s viburnum densa (Viburnum obovatum ‘densa’). Closer to the house, needle palm (Rhapidophyllum hystrix), shumard oak (Quercus shumardii), and various hollies (Ilex spp.) are pointed out to us.

To the south of the house is a wetter, wooded area. Wilma tells of her first venture into these woods, long after the children were grown, when she discovered native ferns as tall as herself: cinnamon fern (Osmunda cinnamomea) and royal fern (Osmunda regalis). She took a video of them and was amazed by all the bird song on the video that she hadn’t noticed while she was there.

One day while she was away, John surprised her with the video that she hadn’t noticed while she was there.

It took three years, but now there are paths there and we walk through, seeing lots of the above mentioned ferns, as well as bracken fern (Pteridium aquilinum), netted chain fern (Woodwardia areolata), partridge berry (Mitchella (Con’t. on page 5)
Florida Native Plant Society visits Northern Alabama

In April, the Florida Native Plant Society toured northern Alabama, lured by unique geologic regions that functioned as refugia during the ice ages. Situated along the Little Catawba River, the Kathy Stiles Freeland Bibb County Glades, has thin rocky soils of dolomite limestone, high in magnesium, tolerated only by specialized plants. Featured plants included the endemic sticky rosinweed (Silphium glutinosum), the graceful fragrant sumac (Rhus aromaticum), and the lime barren stitchwort (Mononeuria patula). The Kaul Wildflower Garden in Birmingham Botanical Gardens is landscaped into an old sandstone quarry. Along the trails are tulip poplar (Liriodendron tulipifera), flowering magnolia (Magnolia grandiflora), common Christmas fern (Polystichum acrosticos), and the native American wisteria (Wisteria frutescens). At St. Bernard Benedictine Abbey, the Philadelphia daisy (Erigeron philadelphicus) covered a hillside, along a wall was a bright clump of red prairie coneflower (Ratibida columnifera).

At Cane Creek Canyon Preserve, our host Jim Lacefield is author of Lost Worlds and Alabama Rocks. In an old field was fragrant Eastern bee-balm (Monarda bradburiana). The steep trail down the canyon drops through rock clefts, and down stone steps. A fossil-specked ledge with a spectacular cascade of water had been a beach during a prehistoric era. Tucked into crevasses is French’s shooting star (Dodecatheon frenchii). We had a magnificent vista of the valley. The Butternut Hickory canker is wiping out “white walnut”. River banks at the canyon bottom had scattered river cane (Arundinaria gigantea) that will someday all flower at the same time. We encountered the yellow-throated white Alabama azalea (Rhododendron alabamensis) with its cloying fragrance and, under a little bridge, the Yellow Ladies' Slipper (Cypripedium pubescens).

With conservation organization Wild South, we visited the Sipsey Wilderness Area in the Bankhead National Forest. The well-burned National Forest contrasted with the dense understory of the unburned Wilderness Area and initiated an interesting discussion on the benefits and detriments of controlled fire as an ecosystem management tool. Along the Sipsey River, the eastern hemlock trees (Tsuga canadensis) have not yet been impacted by the wooly adelphid. Plants along the trail included Trillium, False Solomon’s seal (Melanthimum racinosum), oak-leaved hydrangea (Hydrangea quercifolia) which is the state flower, and foam flower (Tiarella cordifolia). Invasive species requiring control include Japanese privet (Ligustrum japonicum), white rose (Rosa carolina), and...
## Plant ID Workshop for March 2017

*By Paul Cohen and Robert Garren*

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Family</th>
<th>Status</th>
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<tr>
<td>Andropogon sp.</td>
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<td>Asimina angustifolia</td>
<td>Slimleaf pawpaw</td>
<td>Annonaceae</td>
<td>Not Native</td>
</tr>
<tr>
<td>cf. Bulbostylis barbata (sterile)</td>
<td>Watergrass</td>
<td>Cyperaceae</td>
<td>Native</td>
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<td>Campanula floridana</td>
<td>Florida bellflower</td>
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<tr>
<td>Cocculus carolinus</td>
<td>Carolina coralbead</td>
<td>Menispermaceae</td>
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<tr>
<td>Dichanthelium commutatum</td>
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</tr>
<tr>
<td>Dysphania ambrosioides</td>
<td>Mexican tea</td>
<td>Amaranthaceae</td>
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<tr>
<td>Eupatorium capillifolium</td>
<td>Dog fennel</td>
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</tr>
<tr>
<td>Gamochaeta purpurea</td>
<td>Spoonleaf purple everlasting</td>
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<td>Merrema dissecta</td>
<td>Noyau vine</td>
<td>Convolvulaceae</td>
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<td>Mock bishop's-weed</td>
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<td>Sophronanthe hispida</td>
<td>Rough hedgehyssop</td>
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<tr>
<td>Vitis cinerea var. floridana</td>
<td>Florida grape</td>
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</table>

† Though considered endemic to Florida, collections made in 2013 from a cemetery in Mobile Co., AL are considered to be introduced there.

We extend gratitude to all those who participated. The workshop is intended to be educational not a plant ID service. Nomenclature adapted from “Atlas of Florida Vascular Plants” ([http://www.florida.plantatlas.usf.edu/](http://www.florida.plantatlas.usf.edu)).
Can you grow *Rhexia* from seed?

You could win $100 worth of plants from Notestein’s Nursery if you are the first to propagate *Rhexia*, our namesake, from seed. You will need to grow several flats of four inch pots in time for either our Spring or Fall Native Plant Sale to qualify. Call Jim with questions - 352-372-2107.

This space available!

Promote your business - be a Chapter sponsor!

Eight issues for only $100

Contact Goldie at afn49@mindspring.com

To become a sponsor of the FNPS Paynes Prairie Chapter email your business card size ad in JPG or TIFF format to Goldie Schwartz at afn49@mindspring.com. Ads appear in eight issues January-November (except for summer months) for $100 or monthly for $12.50.
The Mission of the Florida Native Plant Society is to promote the preservation, conservation, and restoration of the native plants and native plant communities of Florida.

The Society fulfills this mission through:

- Support for conservation land acquisition;
- Land management that enhances habitat suitability for native plants;
- Education;
- Public policies that protect our native flora, especially rare species;
- Research on native plant species; and,
- Encouragement of local landscaping practices and policies that preserve Florida's native plant heritage.