<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>President’s Message</td>
<td>2</td>
</tr>
<tr>
<td>Plant Rescue News</td>
<td>8</td>
</tr>
<tr>
<td>Chapter News</td>
<td>9</td>
</tr>
<tr>
<td>Upcoming GNPS Events</td>
<td>11</td>
</tr>
<tr>
<td>Membership Renewal</td>
<td>12</td>
</tr>
</tbody>
</table>

**South Georgia Native Plan and Wildflower Symposium**  
*By Rhonda Barlow*  
Page 3  
Sharing the highlights of a coastal plains region symposium.

**Reynolds Nature Preserve Crooked Creek Forest -- Why is it Special?**  
*By Helen B. Brown*  
Page 5  
A descriptive discussion on one of the most plant divers areas in Georgia.

**Checklist of Native Ferns and Relatives at Reynolds Preserve**  
*By Helen B. Brown and Steve Bowling*  
Page 7  
Catalog of taxonomic ordered ferns growing after English ivy removal.
Dear Members,

What an amazing spring season we are having! We started the year off with a bang learning about invasive management from Walter Bland and then in February, we had quite possibly the biggest GNPS Plant Symposium turnout ever. I am so excited to see more and more people from around the state seeking GNPS programs and education.

This past March we made a great connection with Hands on Atlanta to try and reach new audiences of people who have not had the chance to learn all about the great projects that Georgia Native Plant Society volunteers manage every week. I am happy to report that this new partnership brought over 25 new folks out to the GNPS Atlanta Beltline site just across from Freedom Park on the Beltline. Building partnerships with like-minded community groups is such an important way to spread our message to plant natives and pull invasives!

We have been working on a plan to bring GNPS to community festivals and farmer markets. Would you like to represent GNPS in your community events and share the good work of native plant conservation and education? Please email me at info@gnps.org and we can discuss your role in bringing GNPS into your community and neighborhoods.

I look forward to seeing you all at the next GNPS event!

With much gratitude,

Lane Conville-Canney
GNPS Board of Directors
Motivated by the desire to eventually attend the GNPS Coastal Plain Chapter meetings or activities, coupled with finding the symposium topics interesting and being on vacation, I signed up to attend the South Georgia Native Plant and Wildflower Symposium. My experience at the Symposium was worth the seven-hour roundtrip drive and this article is an effort to share the highlights of the day with those who could not attend the Symposium.

The topics presented included:

*Bringing Nature Home*, presented by Beth Wiggins Grant, gave a general reminder of how native plants are the basics of a healthy environment. The main take-away thought for me was, “Biodiversity losses are a clear signal that humanity’s life support systems are failing. Biodiversity runs the ecosystems on which we depend and the services they provide. The more diverse an ecosystem is, the more services it will provide. With the increase in human population we need more ecosystem services, not fewer. As we kill off biodiversity, we get fewer services.” Who really thinks about plants in terms of the “services” they provide for us humans – but they do serve us well if we let them. I was reminded that just fifteen minutes in a natural native setting will assist in relieving hypertension, hyperactivity, stress, depression, and improve the immune system. The four things she discussed that we need to do to live with wildlife are to “protect remaining areas, to create corridors connecting natural areas in our yards, neighborhoods, roadsides, power corridors, to reduce the area now in lawn, and to begin the transition from alien ornamentals to native ornamentals”. If you would like for her to present this information to an interested group, contact her at bethgrant@bellsouth.net.

*Water: Wet and Wonderful*, presented by Gary Hawkins, a water resource management specialist with the University of Georgia, focused the majority of his talk on how water shapes our landscape and water’s role in our everyday lives. I learned a lot about watersheds and storm water runoff. The main take-away thought for me was the concept that urban storm water runoff is the same as rural sediment and erosion, what you call the same problem happening in different areas is determined by your perception. I also learned that no matter where we live, we all live in a watershed – there are 52 large watersheds in Georgia that feed into 14 river basins and then out to sea. He discussed how different ground cover determines how rain settles and
sediment form. He has a rainfall simulator, that he did not bring to the Symposium, to help illustrate this concept. If you would like for him to present this information to an interested group, contact him at ghawkins@uga.edu.

Some Basics of Plant Identification and the Essential Role of the Herbarium in Accurate and Consistent Identification and Name of Plants, presented by Richard Carter, a Biology professor at Valdosta State University. And yes, his talk was as extensive as the topic’s title. During the first part of his presentation, he reviewed the history and current operations of the Valdosta State University’s Valdosta State University Herbarium (VSC). I found it fascinating to know such a facility is located in Georgia and is open to the public by appointment. The second half of his talk was about how to systematically identify plants. My main take-away from this lecture was the nice booklet containing pictures, descriptions, and definitions. I will use this guide to assist as I teach myself the basics of plant identification.

Four exhibits were set up. The exhibitors included the Coastal Plain Chapter of the Georgia Native Plant Society, the Rosalynn Carter Butterfly Trail, the EcoScapes, and the National Garden Clubs local chapters. Participants had the opportunity to purchase books, nature identification manipulatives, and garden tools. Free packets of seeds to plant a butterfly garden were offered. Free handouts on various topics related to native plants and wildflowers were displayed.

The food was plentiful and good. I bought plants from the native plant sale and am eager to watch them grow. The Symposium was very well organized and I look forward to attending in 2018 – hope to see you there.
One of the most interesting, most diverse forests in this area is that of the hardwood forest you see as you walk down Crooked Creek Trail at Reynolds Nature Preserve. Indeed, the entire Reynolds Preserve is a treasure which Clayton County holds. However, the Crooked Creek Forest Area has an especially rich and diverse ground cover with a number of native shrubs also present. This is the several acres in which staff at Reynolds and volunteers led by members of the Reynolds Board of Trustees worked for over ten years to remove the thick masses of English ivy (*Hedera helix*) covering the forest floor and making its way up many of the trees. We also pulled privet (*Ligustrum*) and we are still pulling Japanese honeysuckle (*Lonicera japonica*) and stilt grass (*Microstegium*).

With the removal of the English ivy, a diverse ground cover appeared in the Crooked Creek Forest. In early spring, a large area of trout lilies (*Erythronium americanum*) was present along the trail as well as other scattered wildflowers such as wild ginger (*Asarum*), toothwort (*Cardamine diphylla*), pipsissewa (*Chimaphila umbellata*) and crane-fly orchid (*Tipularia discolor*). In April, a variety of wildflowers are usually present, including four species of *Trillium*, several species of violets (*Viola*), star chickweed (*Stellaria pubera*), Dutchman’s breeches (*Dicentra cucullaria*), Solomon’s seal (*Polygonatum*), Solomon’s plume (*Maianthemum racemosum*) and others. By April, ferns are present in large numbers and make up much of the ground cover with 12 species of native ferns identified. (See list on page 7.) Lady fern (*Athyrium filix-femina*) and Christmas fern (*Polystichum acrostichoides*) are the most common ferns in this forest and are easily spotted. Christmas fern is an evergreen fern, present year-round, while lady fern and others are present from late March or early April until they become dormant in late autumn.

Shrubs appearing as an understory under the trees include *Rhododendron*, mountain laurel (*Kalmia latifolia*), dog hobble (*Leucothoe*), native *Hydrangea*, hearts-a-bursting (*Euonymus americanus*) and others.

The Crooked Creek Forest is an example of a Piedmont hardwood forest, which is the climax community in the southern Piedmont. A series of ecological communities make up ecological succession with the climax community last and taking 100-200 years to
appear. Climax communities are groups of plants and animals that will remain indefinitely unchanged unless a calamity occurs such as the forester’s chainsaw, fire, a climate change, or some other catastrophe. When an area is completely cleared of vegetation then allowed to repopulate, the first pioneer plants which appear and cling to the ground are generally small, low-lying, and drought-resistant.

The pioneers are gradually replaced over several years by taller grasses, such as broom sedge in this area, and drought-resistant wildflowers. Within a few more years, shrubs and young pine trees appear among the broom sedge. The pine trees grow over the next 20-50 years until we have a pine forest. Pine seedlings need significant amounts of light in order to grow beyond the seedling stage while hardwood seedlings can and do germinate and grow on the pine (Pinus) forest floor. This means that a climax hardwood forest with oaks (Quercus), maples (Acer), and others gradually come in to replace the pine (Pinus) forest. This succession proceeds to the hardwood forest stage so long as nothing happens to stop it—such as mowing, heavy foot traffic, fire, asphalting, or clearing the area. The climax stage represents the most stable, the most diverse, and the most layered community in the series of communities making up ecological succession. It is one which the European settlers saw even as they proceeded to destroy parts of it in order to build houses and to farm.

As great as Reynolds Nature Preserve is, the small Crooked Creek Forest and the other forests which make up Reynolds Nature Preserve, do not have the very large trees or as rich a species diversity as the hardwood forests which our foreparents saw. However, these do remind us of that as do Fernbank Forest and other hardwood forests we are fortunate to still have from both an ecological and historical viewpoint. Let us hope to keep these climax Piedmont hardwood forests from the ravages of developers as well as invasive plants and animals.
Ferns are spore-producing vascular plants with underground stems and roots with above ground leaves (fronds). Their leaves are frequently compound and divided into leaflets (pinnae). Spores are generally borne on the backs of leaflets, although some species have separate vegetative and spore-producing leaves.

Reference: Source for identification of most of this list is taken from: *Ferns of Georgia*, 1951 and 1968, by McVaugh and Pyron.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Latin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Cedar</td>
<td>Clubmoss, <em>Lycopodium sp.</em> possibly <em>flabelliforme</em></td>
<td>“Fern relative” or lower vascular plant—present but rare at Reynolds; has not been found in Crooked Creek Forest</td>
</tr>
<tr>
<td>Rattlesnake Fern</td>
<td><em>Botrychium virginianum</em></td>
<td>Occurs as individual plants rather than in clusters</td>
</tr>
<tr>
<td>Cinnamon Fern</td>
<td><em>Osmunda cinnamomea</em></td>
<td>Large fern with separate spore-bearing leaves, infrequent at Reynolds</td>
</tr>
<tr>
<td>Royal Fern</td>
<td><em>Osmunda regalis</em></td>
<td>Large fern with separate spore-bearing leaves, infrequent</td>
</tr>
<tr>
<td>Sensitive Fern</td>
<td><em>Onclea sensibilis</em></td>
<td>Has separate spore-bearing leaves</td>
</tr>
<tr>
<td>Christmas Fern</td>
<td><em>Polystichum acrostichoides</em></td>
<td>Evergreen fern, occurs throughout the preserve during all seasons, usually only fern present in winter, spores on upper third of leaflets</td>
</tr>
<tr>
<td>Broad Beech Fern</td>
<td><em>Dryopteris hexagonoptera</em></td>
<td>Infrequent at Reynolds</td>
</tr>
<tr>
<td>New York Fern/Tapering Fern</td>
<td><em>Dryopteris noveboracensis</em></td>
<td>Rare at the preserve</td>
</tr>
<tr>
<td>Lady Fern</td>
<td><em>Athyrium aspleniodes</em></td>
<td>Occurs throughout the preserve during all seasons except winter; most abundant fern along Crooked Creek Trail; spores on back of leaves</td>
</tr>
<tr>
<td>Ebony Spleenwort</td>
<td><em>Asplenium platyneuron</em></td>
<td>In frequent, spores on backs of leaves</td>
</tr>
<tr>
<td>Chain Fern</td>
<td><em>Woodwardia virginica/ Lorinseria areolate</em></td>
<td>Spores in chain-like sporangium on separate reproductive leaves</td>
</tr>
<tr>
<td>Bracken Fern</td>
<td><em>Pteridium aquilinum</em></td>
<td>Fern with 2x compound leaves (leaflets divided into sub-leaflets), occurs in several sunny areas at the preserve</td>
</tr>
<tr>
<td>Resurrection Fern</td>
<td><em>Polypodium polypodioides</em></td>
<td>Occurs attached to trees and logs, common at Reynolds, spores on backs of leaves</td>
</tr>
</tbody>
</table>

Want to add to or correct this list? Contact helenbotany@aol.com
Native Plant Rescue News

Because the La Niña weather pattern presented us with a decidedly “un-wintery” winter this time around, we’ve had more opportunities to explore and work in our gardens this season than we usually do.

We look forward to a new year of rescuing Georgia’s native plants. This year GNPS has a large new site to rescue! Watch for the Ellis Lake site to appear on the rescue schedule. Hopefully many of you will be able to explore it and dig some wonderful plants. To date, the following plants have been seen at this site:

- **Yucca filamentosa** – Adam’s needle
- **Bignonia capreolata** – crossvine (hummingbirds love it)
- **Acer leucoderme** – chalk-bark maple

*Juniperus virginianus* – Eastern red cedar (For numerous Native American tribes, the red cedar tree symbolizes the tree of life and is burned in sweat lodges and in purification rites.)

- **Tipularia discolor** - crane-fly orchid
- **Hexastylis arifolia** - wild evergreen ginger/little brown jugs
- **Goodyera pubescens** - rattlesnake orchid or rattlesnake plantain
- **Hypericum hyericoides** - St. Andrews Cross
- **Mitchella repens** – partridgeberry
- **Polystichum acrostichoides** - Christmas fern (a true “workhorse” in the native garden.)
- **Chimaphila maculata** - spotted wintergreen or pipsissewa
- **Decumaria barbara** - climbing hydrangea (not to be confused with the non-native *Hydrangea anomala*, also called climbing hydrangea)
- **Asplenium platyneuron** - ebony spleenwort fern (a small, polite, and charming evergreen fern)
- **Hieracium venosum** - rattlesnake weed
- **Fagus grandifolia** - beech tree (Young trees retain their leaves in winter and look beautiful)
- **Onoclea sensibilis** - sensitive fern
- **Carpinus caroliniana** - musclewood tree

Various mosses

There are sure to be more plants found at Ellis Lake as the months and seasons change. As always, we’ll also continue to rescue at most of our existing rescue sites.

When going on a GNPS plant rescue, please remember that this warm winter will probably give us an early and abundant tick population. Wear long sleeves and long pants. Be extra careful to spray with insect repellent just before you head into the woods and to do a “tick check” when you get home. Tucking pant legs into the tops of knee socks won’t get you any fashion points, but it, along with a good insect repellent spray, will help keep ticks from crawling up your legs.

**The Plant Rescue Committee **
Chapter News: Coastal Plain Chapter (CPC)

Text by Amy Heidt

The Coastal Plain Chapter (CPC) of the Georgia Native Plant Society held its annual meeting on March 22\textsuperscript{nd} at the South Georgia Native Plant and Wildflower Symposium in Tifton, Georgia. There was a native plant sale in conjunction with the symposium.

The Coastal Plain Chapter has produced two pamphlets we are disseminating for public outreach: \textit{Landscaping & Gardening with Native Plants in Georgia’s Coastal Plain} and \textit{Conserving Native Wildflowers and Plant Communities in Georgia}.

We are currently working on a third pamphlet titled, \textit{Native Plant Alternatives to Invasive Ornamentals for Landscaping in Coastal Plain Georgia}, which will be available sometime this year. The suggested natives have similar growth patterns, blooms, and blooming times as the invasive ornamentals and are far better for ecosystems, wildlife, and pollinators.

During the summer of 2016, the Coastal Plain Chapter had its first native plant sale at the Tifton Farmer’s Market held on Saturdays in Spring-Fall at the Georgia Agricultural Museum in Tifton. Plants were sold and informational brochures about native plants were distributed. Money from plant sales went to the CPC.

This past fall we held a general meeting October 3\textsuperscript{rd}, in Brunswick, Georgia. The business meeting was held in the morning, along with a tour of the native plants garden at the Department of Natural Resources (DNR). The tour was led by Eamonn Leonard. After the lunch break, we were given a tour, led by Keren Giovengo, of the native plants garden at the University of Georgia Marine Extension Office.

CPC again participated in the Tifton Seed Swap at the Georgia Agricultural Museum and Historic Village in January, 2017. Native plant seeds were given away along with growing instructions and informational and educational brochures about native plants in the landscape.

On February 3\textsuperscript{rd} and 4\textsuperscript{th}, 2017, the Coastal Plain Chapter members helped with set up and registration at the Georgia Native Plant Society meeting in Macon, Georgia. The chapter’s information table contained a tri-fold display board showcasing the 2016 activities, informational brochures, and chapter membership forms. Coastal Plain Chapter members were on hand at the information to answer questions before the meeting and during all breaks.

In April, 2017, we will help sponsor and participate in A Day in the Woods at Gaskins Forestry Education Center in Alapaha, Georgia. This is a free event held annually for public education and outreach to highlight the importance of forest ecosystems to the community. The Coastal Plain Chapter will supply funds to help offset operating costs and will have an exhibit of native plants for residential landscaping. Informational and educational brochures will be distributed and native plants given away to participants.
Two thousand seventeen has already been very busy for our chapter. We are completing work enhancing the entrance area where our Buffalo Creek Trail meets the Carrollton Green Belt (an 18 mile walking/biking trail that circles Carrollton through both public and private lands). A generous grant from the Community Foundation of West Georgia has allowed us to purchase plants, trellises, a split rail fence, river rock, a bike rack, bird houses, and apiary supplies. Gina and Mike Strickland will donate materials for a boardwalk we will install in a bog garden in the adjacent meadow and pollinator gardens areas. A grant from GNPS allowed us to add a kiosk to this entrance area.

Carol Hight spoke to the Carrollton Junior Woman's Club on spring ephemerals and presented a seed propagation workshop for the Douglasville Master Gardeners. She also obtained a grant from the Carroll County Master Gardeners to plant natives in the Maple Street entrance to the Carrollton Greenbelt, another entrance we have been enhancing for the Green Belt.

Our February public meeting featured a presentation by Richard Littleton, titled Beekeeper Collapse Disorder. Richard, a program assistant with the UGA Extension Office, Carroll County, will oversee installation and maintenance of our apiary.

The April public meeting, Gardening and Landscaping with Mosses, will be presented by Dr. Robert Wyatt, Dept of Botany & Ecology, UGA. On Earth Day, April 22nd, Katie Flint, new to our area, will hold the grand opening of her native plant nursery at the King of Crops Farm and Nursery in nearby Winston. The King of Crops Farm and Nursery is a 68 acre farm that supplies ingredients for the popsicles of King of Pops, known and loved in the Atlanta area. Katie will also be the featured speaker (seed propagation) at our annual fall workshop in September.

Our chapter’s first annual spring workshop theme is BUILD A HOME FOR A BUG-EATIN’ BOG PLANT!! Learn to Build a Container Bog and Take It Home with a Real, Live Carnivorous Pitcher Plant!!, highlights a hands on workshop on building bog gardens for containers and home landscapes. Robert Barr, an expert on bog and carnivorous pitcher plants, will be the instructor. For those interested, see our chapter website for registration information.

We have recently added a new feature to our chapter website: Carpool. Carpool allows members to sign up to offer or seek rides to meetings, field trips, rescues, etc. We thank Mike Strickland, our webmaster, for designing this secure and easy to use tool.
Upcoming Events and Announcements

**GNPS Board of Directors Meeting** on June 13th from 6:00p - 7:00p. Meeting in the Hardin Conference Room in the Atlanta Botanical Gardens. All members are invited to join the meeting of the Board of Directors.

Restoration Workdays

GNPS has regularly scheduled workdays at a variety of locations in the metro Atlanta area: Smyrna, Marietta, Stone Mountain and others. Chapters have restoration projects as well. You can learn a lot about native and invasive plants and take pride in helping to restore areas back to their natural state. Our Stone Mountain Propagation Project helps you learn more about propagating native plants. Come join us anytime.

Learn about [our restoration projects here.](#)

Find regularly scheduled workdays on [our calendar here.](#)

Please refer to our [website](#) for more details and current information on announcements and events. Thank you!
Georgia Native Plant Society Membership & Renewal
Memberships are effective for one calendar year, beginning January 1st.

Choose membership level: (Select one)

___ Individual ($30)    ___ Senior, 55 and older ($25)
___ Family ($50)    ___ Full-Time Student ($25)
___ Business /Commercial/Educational ($250)    ___ Lifetime Individual/Family ($1,000)

Chapter Affiliation:

___ No Affiliation    ___ West Georgia Chapter             ___ Coastal Plain Chapter    ___ Redbud Project Chapter

___ Check here if in addition to your membership renewal, you have included $_____ to be distributed as follows:

___ Education

___ Conservation/Propagation/Restoration

___ Jeane Reeves Memorial Grants and Scholarship Program

___ Unrestricted

Total Enclosed: ________________    Check #: ________________

Trade Name (if applicable): __________________________________________

First Name: ______________________  Middle Initial: ____  Last Name: __________________________

If Family, list additional names: __________________________________________

Address: ____________________________________________________________

Home Phone: ______________________  Work Phone: ______________________

Email Address: _______________________________________________________

(Email address is required if you wish to receive the Listserv and/or Electronic Newsletter.)

___ Check here if you prefer NOT to receive emails from our list server which contain information about meetings, plant rescues, work parties and other items of interest to the membership.

The full-color newsletter will be sent electronically. If you require a print version, which will be black and white, check here: ____

Please mail completed renewal form to the following address: GNPS, PO Box 422085, Atlanta, GA 30342-2085