

The Journal of the South Carolina Native Plant Society



October 2016

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Name this native plant

A little different approach to this column. The following text is from [A New Voyage to Carolina](#) by John Lawson, describing his travels in North and South Carolina in the first decade of the 18th century:

*The Maycock bears a glorious
Flower, and Apple of an agreeable
Sweet, mixt with an acid Taste.
This is also a Summer vine.*

Match wits with one of our pioneer Carolina naturalists!

The Journal of the South Carolina Native Plant Society

Published quarterly
Editor: Bill Stringer
Design Editor: Charlene Mayfield
Upstate Chapter - Greenville
Lowcountry Chapter -
Charleston
Midlands Chapter - Columbia
Piedmont Chapter - Rock Hill
South Coast Chapter - Beaufort

South Carolina Native Plant Society: 1996 – 2016 Twenty Years of Growth and Accomplishment

Long ago in 1996, a few native plant enthusiasts who felt that there should be an organization to focus attention on South Carolina's native plants and native communities started talking about forming just such an organization. The Society continues to grow from its beginnings in the Greenville-Clemson area. We have added several regional chapter organizations. The original organization became the Upstate chapter. Then the Lowcountry chapter was formed in the Charleston area. The Midlands chapter in Columbia serves the central part of the State. The Piedmont chapter was formed in the Rock Hill area. The South Coast chapter is now active in the Beaufort-Hilton Head area. Chapters carry out regional programs of educational speaker meetings, field trips and plant sales. Along with adding chapters we have continued to grow our membership numbers. We look forward to assisting groups in other areas of the State in organizing to serve their own local areas.



Our logo for 20 years

Twenty years later, the South Carolina Native Plant Society is an effective state-wide presence in promoting, protecting and restoring diverse native communities. Along the way, our focus on science and activism in support of natives has earned the Society a leadership role in the environmental movement in our State. Our goals statement contains these charges:

- Educate and inform members and the general public about the importance of native plants.
- Support efforts by government agencies to protect habitats and endangered species.
- Encourage the use of native plant materials in public and private landscaping.
- Promote the commercial availability of native plant materials.

The Society has from the beginning organized and presented Symposia to provide statewide educational opportunities. These Symposia are held in the different chapter regions of the State. Symposia consist of prominent speakers, informational workshops and field trips to show off native plant communities around our state. Also, local chapters have organized well-attended regular

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Twentieth Anniversary South Carolina Native Plant Symposium

South Carolina Native Plant Society,

South Carolina Botanical Garden and South Carolina Garden Club

Clemson, South Carolina, October 7 – 9, 2016

This year's 20th Anniversary of the South Carolina Native Plant Society is the occasion for a landmark Native Plant Symposium. The theme, Native Plants Connect Communities, makes the case for a great coming-together. Co-sponsored by the South Carolina Native Plant Society, the South Carolina Botanical Garden, and The Garden Club of South Carolina, the Symposium is organized to highlight the connections between native landscape communities, educational botanical gardens, and the garden communities that we establish and nurture in our home environments. People inhabit these communities, and share them with many types of wildlife – songbirds, mammals, butterflies and other insects, and the fungi and other organisms that are our silent partners in this great scheme.

To get us in the mood for a two-day meeting of the minds, the Symposium will lead off on Friday evening with a Sip and Stroll in the SC Botanical Garden, an opportunity to combine good company, good food and beverage, and a wonderful, relaxed outdoors experience.

The Symposium program offers a wide variety of learning opportunities, and a **spectacular** cast of presenters. Our first keynoter, Dr. Drew Lanham, a world-class ornithologist and teacher, will discuss native plants - songbirds relationships in the Jocassee Gorges, a large, internationally recognized natural area in the Upstate. Our second keynoter, Dr. Patrick McMillan, will present an historical view of the South Carolina landscape, from the early plant explorers whose names can be found enshrined in Latin species names, like *Asclepias michauxii*, *Trillium catesbaeii*, and *Aster walteri*; through European settlement and widespread clearing for agriculture; to the present.

- We have a firefighter, wildlife biologist, registered forester, and registered yoga instructor (Johnny Stowe of SC DNR) who will talk about the important place of managed fire in historic and modern southern landscapes.

- We have a retired but busy botany professor from Erskine College (Jan Haldeman), who will teach us to make useful health remedies from wild-growing plants.



- We have a faculty member at Clemson (Calvin Sawyer) who has led efforts to restore an historic waterway on the Clemson campus to a more historic, sustainable configuration, after a century or more of alteration to facilitate profitable agriculture. He will guide a walking/talking tour of the site.

- We have an artist/storyteller (Nancy Basket) who uses natural, and often problematic, plant materials to make art, while sharing stories and legends from the perspective of her Cherokee heritage.

- We have a landscape designer (Rick Huffman) who bases his designs on native plant community principles to create beautiful as well as sustainable landscapes.

- We have a very knowledgeable mycologist (Tradd Cotter, mushroom expert) , who explains the invisible, but vitally important native plant/ fungal associations that have a huge role in bringing about the stability that we see in natural ecosystems.

- Amanda McNulty brings a fresh perspective to floral display design, using materials gathered from nearby, as well as interesting containers.

- David Bradshaw walks the walk and talks the talk of medicinal use of plants found around our home teepees. You will have a chance to walk and talk with him.

- Miller Putnam and Julie Hill have become major supporters of Upstate native plant sales by applying their knowledge of plant propagation in Miller's greenhouse built in a home swimming pool in Greenville. They will share their propagation tips.

- An inch of rain falling on an acre of ground deposits 27,154 gallons (113 tons) of water. Kim Counts Morganello discusses ways to cope with this potentially huge mess, while saving water and money and reducing negative environmental impact. (Unfortunately, Hurricane Matthew forced Kim to cancel her appearance.)

Oconee, Pickens and Greenville Counties have some magnificent natural landscapes with wonderful plant and animal communities. Guided field trips will go to lands that have been protected for future generations to experience. We have a set of four guided field trips on Saturday to see and experience these areas. We have assembled a very knowledgeable set of field trip leaders to guide your experience. Folks like Rudy Mancke and Tim Lee, Bill Ransom and Scott Stegenga, Frank Holleman and Wes Cooler, and Bill Stringer.

And on Sunday, experience the wonders of the Clemson Experimental Forest, the world's best outdoor forestry and wildlife laboratory, with five trips available. Old and new hands with knowledge of the CEF include Skip Still and Tim Lee, Dan Whitten, Kyle Barrett and James Wilkins, Sara Wilcer, and Nate Shipley.

So come prepared to meet new people and ideas, hear some enlightening discussions of communities, see some beautiful landscapes, and take home an expanded view of what a landscape is, and how to fit into it in a more meaningful way. You will go home tired but happy!

Be in the know without snail-mail news!

We are not “dissing” the USPS here, and will still be faithful customers. But for a quick, easy way to get notification of any upcoming Society-sponsored event state-wide, sign up for our Tiny Letter e-mail announcement service. You can do this by going to our homepage, (www.scnps.org), clicking on the little brown window (see figure 1). Sign up by entering your e-mail address, and clicking Subscribe. Then, any announcement posted by any chapter statewide will be sent to you in an e-mail. Don't worry about receiving a large increase in e-mail traffic. As it is now, a busy week will result in five or so announcements, with no ads for “How to Whiten your Teeth in 10 Minutes” or “How to get Slim Sexy Abs”! (I resent their implication that I have an Abs problem!).

Anyway, you will be in the know about Society lectures, field trips, plant rescues, etc. And you won't have to wait for a newsletter in the mail.

It also means you don't have to select multiple chapters for membership when you join or renew. Just check the chapter you will be most active in. This will give you a more dependable source of info, and save your membership folks a lot of confusion from multiple chapter selections. Win/win, folks!

Receive our E-mail Updates

To receive notices about upcoming activities, please enter your e-mail address below. Your address will not be shared and you may unsubscribe at any time.

subscribe

Figure 1. Tiny Letter service sign-up window on www.scnps.org.

SC Native Plant Society Leads Protection of Shoals Lily Site

About 10 years ago, a call came in to the Native Plant Society from Bill Quinn, who was a member of a group that jointly owned a site on Stevens Creek in McCormick County that had a significant population of shoals spider lily (*Hymenocallis coronaria*). This is a plant about which the famed naturalist-explorer William Bartram made the first recorded observation in 1773, when he found it growing in the Savannah River at the "cataracts of Augusta." The fragrant flower, he wrote, "almost alone possesses the little rocky islets."

Mr. Quinn was very interested in establishing protected status for this site. He inquired whether the Society would be interested in purchasing the site. Bill Sharpton and Bill Stringer drove down to meet Mr. Quinn on the site. We were totally enamored with what we saw: Stevens Creek full of lilies, an historical, relatively intact grist mill, and excellent quality water flow. We assured Quinn that we were interested, but that we had to sell the idea to the entire Society.

Well, the site sells itself once you have seen it, but being totally impressed with 13 acres and a creek full of lilies is not the same as actually buying the site. The site was owned jointly by several people, and Mr. Quinn would have to get the property into the hands of a subset of folks who were motivated to preserve it. Also, the Society would have to come up with a significant packet of money to make the purchase. Over the next 10 years, Mr. Quinn was able to get into a position to sell the property, and the ball came into our court to negotiate for the purchase, and to get serious about fund-raising. We had to

raise enough cash to purchase 12.8 acres of forest land with an historic grist mill site, and a creek full of lilies.

The South Carolina State Conservation Bank appeared to be a good funding source. We set out to get an appraisal of the site to provide documentation that the Bank would need to consider a grant proposal. With some wonderful help from Frank Holleman and Mac Stone of Naturaland Trust, a land conservation organization in Greenville, we were able



Rocky shoals spider lily at protected site on Stevens Creek. Photo courtesy of Bill Sharpton at www.treehuggerimages.com.

to get a grant proposal in to the Bank in time to meet their deadline. The Bank finally informed us that our request for a \$100,000 to Naturaland Trust was approved. The grant paid the purchase price, and SCNPS paid the closing and other costs.

So, the Society's dream of obtaining the land and placing it under protection was realized, with the help of Naturaland Trust. We still have to purchase a conservation easement. This document stipulates the conditions to be maintained on the site, and will assure that the protection conditions are maintained. The Upper Savanna Land Trust (USLT) will

hold the easement. The role of the USLT is to inspect the property on an annual basis to monitor the site for compliance with stipulated conditions. Recent exploration of Stevens Creek has revealed the extirpation of two other historically documented shoals spider lily sites, so this makes our efforts on this site even more vital than we had imagined. Also, a survey by US Fish and Wildlife Service professionals revealed populations of four native mussels in the creek, one of which is

proposed for endangered species listing. We have also spotted long-nosed gar fish (*Lepisosteus osseus*) spawning on the site.

The Society has named a committee to devise a management plan for the site. The land is covered with a mixed hardwood-loblolly pine forest community, so the management requirements are minimal. We will pay attention to invasive species development on the site. We anticipate making a few

inexpensive repairs to the building on the site and a bridge over the millrace canal. We are also considering constructing a small open pole-type pavilion building to host meetings and workshops on site. So now the Society will mount a project to raise funds to cover the costs of site improvement and repair.

What do we get for these efforts and expense? A beautiful creek full of magnificent shoals spider lilies; a centrally located site for meetings, workshops and retreats; and the satisfaction of knowing that we have provided protection for a rare and endangered native plant habitat that will outlive us all.

Our plant ID guy says “Business is slow”

I just want to remind everyone that I am still available to attempt to identify any plants you may have from a digital image, here on this site. It has been slow this last year! If you do not wish to put the image on our site, you can still send it to me privately at srhill50@msn.com, and let me know if you want the answer to be private or not [you can also indicate that if you want to send it to the site]. I used to do all of them by email, and this current site was just a faster way to do it at times – but I like to try to identify plants of most kinds on or off the site [not mushrooms, mosses, algae or other non-vascular plants, however] and you are welcome to send images to me. I enjoy a challenge!

–Steve Hill [Ph.D Botanist] SC-NPS

For info on submitting an ID request, or to see some recent identifications, go to <http://scnps.org/education/plant-identification/>. Be sure to read Dr. Hill’s guidelines for submitting an ID request. If possible, read the guidelines prior to making photos to send, as a correctly composed photo makes the ID much easier and more accurate.

[We are very lucky to have the services of Dr. Hill in providing plant ID’s. I’ve yet to see him defeated by an ID request. You can go to <http://scnps.org/education/plant-identification/> to see some of the ID’s he has made. –Editor]

Should You Dig Plants from the Wild for your Landscape?

Bill Stringer

We all should be using more native plants in our landscapes for several reasons: Enhancing the attractiveness; enhancing the ecological soundness; increasing wildlife and pollinator habitat value, avoiding use of potential invasive plants; reducing reliance on irrigation, fertilizers and pesticides; enhancing your “sense of place”, and so on. Further, we should use local genotypes of native plants whenever possible. For some, this begs the question: Should I dig native plants from the wild?

There are two questions in this question. There is the issue of ethics, and there is the issue of biology. First let’s look at the [ethics question](#).

First, Is the plant on your property, or do you have permission from the property owner? This is the very minimum gateway to your answer. This involves respect for property rights. Permission from the landowner is absolutely vital, and digging without permission is a serious ethical breach, not to mention a legal risk. Beyond that, any digging in the wild damages the habitat by removing components of a functioning ecosystem.

Or, is the plant on public property? Public property belongs to us all. We all should have equal opportunity to enjoy the views available on roadsides, state and national forests, and parks. I for one notice attractive specimens of native plants along roadsides, and anticipate the view of that blooming butterfly milkweed around the next bend in the road. I also notice when it has disappeared overnight because someone dug it up. The same issues of ethics and ecosystem damage from above apply on public lands, so digging on public property is ethically wrong.

Next, are you aware of conditions required for the survival and persistence of the plant? Some plants have rather specific requirements for establishment and persistence in a site. Orchids, for instance, depend on a mutualistic relationship with specific soil fungal species. Moving a plant from a site where it is prospering (obviously in equilibrium with its habitat) to a site where it did not exist before runs the risk of introducing that plant to a totally inappropriate habitat. Different soil water relationships, and soil chemical and physical properties between the dig site and your garden can result in the death of your dug plant. That dead plant represents a loss to its source habitat and a waste of your efforts to introduce it into your site.

Finally, are you prepared to take heroic measures to assure the survival of the plant? Some dug plants may be able to survive with ample watering and soil amendment. But if the soil at your planting site does not drain well, applying enough water to keep the plant adequately watered may create saturated soil around the plant, thus promoting root and crown rot, and killing the plant. This may necessitate frequent, small water applications. The ratio of shade to sun at the planting site also influences the water needs. More sun translates to greater water needs. And remember that blooming season, when you are likely to notice the plant, is the worst time to transplant a dug plant.

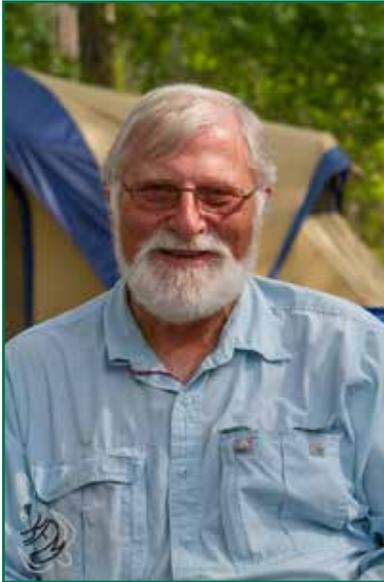
There is one scenario where the ethics question is moot: A plant rescue. Plant rescues arise when areas containing native species are about to be bulldozed for development purposes. In this situation, native plants are facing imminent physical destruction. Then, given permission from the landowner

continued on back page

In Memoriam
Wayne M. Grooms
1945 - 2016

We are incredibly sad to say goodbye to our friend, Wayne Grooms. Wayne passed away on June 12, 2016. He was doing his favorite thing, walking in and enjoying nature. Wayne was the ultimate field-trip leader, rare-plant finder and storyteller for all who encountered him on the trails. He touched so many people in the field bringing them closer to nature. Here are just a few of those voices...

"I met Wayne on what may have been my very first SCNPS or SCAN outing, to Alwehav Plantation in 2002. Wayne was not only a botanist, but a walking compendium of southern folkways and stories. We hit it off immediately. Wayne was cynical, pessimistic, irreverent, perverse, erudite, and always in good

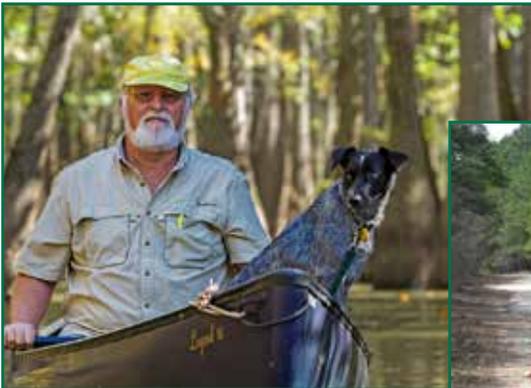


Our good friend Wayne Grooms, gone but not forgotten.

humor. Wayne's commentary on human nature could keep anyone in stitches. Real nature was different, though. Whether it was a longleaf savannah resplendent with wildflowers, the small and fragrant miracle of trailing arbutus, or the irresistible lure of a good swimming hole, Wayne's admiration for all things wild and beautiful was transparent and spontaneous. His friendship was a gift that I will not forget....."

"We at SCWF are deeply saddened by the passing of Wayne Grooms. He was extremely valuable to the Midlands Master

Naturalist program as the leader of our Peachtree Rock trip for many years, and had just begun leading Advanced Trainings there as well. He will be greatly missed by all who had the good fortune to walk in the woods with him....."



Wayne and best friend



Wayne and a young naturalist



Wayne at Congaree National Park

“Wayne Grooms was a fine naturalist. He was a great friend and a good man. In fact, Wayne and I often joked that I was his illegitimate son, all while discussing everything from politics to Sandhills geology. His enthusiasm was infectious and he leaves behind a legion of students more knowledgeable and understanding because he taught us. I am, without a doubt, a better naturalist because of Wayne. The world cannot afford to lose Wayne Grooms. But we have, so it is now up to us to carry on his legacy... Of conservation, of education and of embracing and enjoying the beauty around us with a smile as big as Wayne's.

His passing is a significant loss for so many. More than once, he and I drank bourbon from an empty Vienna sausage can at the end of a day in the field. Wayne, there will be bourbon lifted for you, my friend. Of that, you can rest assured....”

“Wayne was a part of the land he protected and praised in a way not seen before. It always seemed to me that he was just born right out of some woodland womb or spawned right out of some stream, like he just walked up out of the longleaf pine and started telling stories that made you feel like you were as hitched to

those hills of sand as he was. You’d just expect to see Wayne mixed in with the rosemary and the mountain laurel and the sand myrtle, so incredibly intertwined in a way that always inspired. Whatever magical connection he had to the forest, he extended it to others selflessly, and he granted us passage into places we could not travel to on our own. We’d all do well to live like Wayne and to water the seeds he so graciously sowed in the Sandhills and beyond. I think that is the least we can do to celebrate his life and his love for this land. Well done, Wayne. Well done....”

“Wayne’s curiosity about all natural things was contagious. I immediately gravitated towards his quick wit and generous personality. I think we first bonded over discovering a wild hog skull at Congaree Bluffs and continued the friendship swimming in Big Pine Tree Creek, along with many other botanical excursions. Wandering in the woods was always a bit more interesting and definitely more fun when done with Wayne, who was always ready to go when I suggested a new (or old!) place to explore. No one could help coming away from a field trip with him without a new bit of knowledge and a brighter outlook. I am so glad I got to walk with him....”



Wayne at Peachtree Rock



Sandhills rosemary, his favorite plant



Wayne on a field trip to Stevens Creek HP

informational meetings, workshops and field trips. Our members around the State have made numerous invited presentations to other groups on the beauty and value of native plants and communities.

We organized native seed collection field trips, initially to meet a need for seeds by the US Forest Service. We have since collected native seeds to support the South Carolina Botanical Garden, and to provide seed supplies for other native plant restoration projects. Our native seed efforts with the USDA Forest Service received national recognition. An outgrowth of this native seed effort came in the form of the opportunity to host the 6th Eastern Native Grass Symposium, a four-day meeting of national stature, in Columbia in October 2008 (Fig. 1). To access a copy of the Proceedings, go to: <http://nativegrasses.utk.edu/publications/6thProceedingsENGSPdf>.

To promote the greater availability of native plants, and to discourage indiscriminant collection of native plants from natural areas, we have developed native plant sales. We obtain native plants from certified native nurseries, as well as through propagation by Society members. The public response to these sales has been most enthusiastic. The proceeds from these sales provide funds for carrying out projects in support of the Society's goals. Sales are also opportunities to provide educational information to members and the public. Plant sales continue to have a major impact on native plant acceptance and use.

Society chapters have embarked on programs of providing monetary support to students in the form of scholarships to attend regionally important native plant conferences; and grants to assist college students in pursuing native plant-based research endeavors. We have also contributed funding and volunteer support to local native garden establishment and habitat restoration projects.

The Society has spoken up for wise management of natural resources in South Carolina. Agencies have factored our input into management plans and day to day activities. We have crafted collaborations with numerous other local, state, and regional natural resource advocacy groups. Our input is regularly sought out by natural resource managers (Fig.2). Society members serve roles in local and statewide agency advisory boards. Numerous

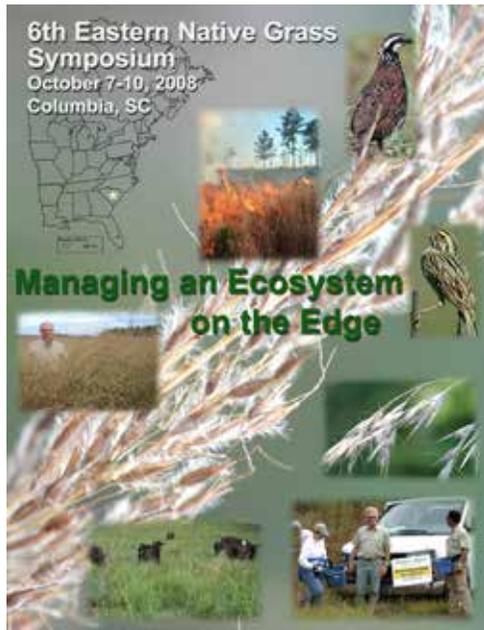


Figure 1. Proceedings of the 6th Eastern Native Grass Symposium

Society members have been recognized via awards for excellence from agencies, presented at the regional, state and local levels. When needed, we have stood up against decision-making processes that we felt were moving in destructive directions.

The Society, by encouraging and leading citizens into our natural areas, has served to raise alarm bells about emerging invasive plant problems. Low Country members spotted unreported areas of cogongrass, a horribly invasive grass, in the Frances Marion National Forest. This sparked a statewide program by Clemson's Department of Plant Industry to train folks to recognize and report this pest. The Society collaborated in this training. Several small outbreaks have been detected as a result of this program. In the Upstate, fig buttercup, a very invasive plant in floodplains, was spotted

in Greenville, and further surveys detected it in other watersheds in the Piedmont. A program of judicious herbicide spraying has been mounted to try and control this threat to floodplain vegetation (Fig. 3).

There have been two opportunities the Society to get "boots on the ground" in rare plant community protection. The first came in the form of our taking ownership of a Carolina bay in Bamberg County that contains the federally listed endangered Canby's dropwort (*Oxypolis canbyii*). With leadership from the Lowcountry and Midlands chapters, we put together a committee, formulated management plans, obtained some funding, and with help from a lot of Society volunteers, proceeded to dramatically increase the population of the endangered dropwort, as well starting the restoration of a longleaf pine-wiregrass community of the site. The success with the Canby's dropwort has garnered University research attention to saving and promoting this rare plant. (See Fig. 4)



Figure 2. Successful collaboration with state and federal agencies



INVASIVE ALERT: Fig Buttercup documented in SC

Figure 3. Detection of invasive plants by SC Native Plant Society members. Cogongrass (top) and Fig Buttercup (bottom).

Recently we have collaborated with the Naturaland Trust to purchase a 13-acre site on Stevens Creek in McCormick County that contains the largest un-protected community of shoals spider lily (*Hymenocallis coronaria*) in the State. The Upper Savannah Land Trust will hold a conservation easement as a means to protect in perpetuity this magnificent site and the lilies community. The Society is formulating a management plan to characterize and sustain the special nature of this site (See Fig. 5).



Figure 4. Endangered Canby's dropwort prospering at Melissa Matthews Bay in Bamberg County. Member Sudie Thomas at work assessing progress on the site. Photo courtesy of April Pulsanan, US Fish and Wildlife Service.

A wonderful source of pride is the Certificate in Native Plant Studies program that has recently resulted from collaboration with the SC Botanical Garden. One of our members brought to a Society meeting a flier from a similar program in a nearby state. We saw the obvious link to our top priority goal of educating the public on the value of native plants. We recognized this as a way to provide a laser-like focus on native plants education. We went to the SC Botanical Garden with the idea, and a joint committee got to work on plans for the program. The Botanical Garden provides the day-to-day management of the course of study. Instructors come from Native Plant Society members, Botanical Garden personnel, and other groups. Announcement of the program produced a gratifying response and enrollment, and the program has rapidly become a booming success. We will soon have our first group of graduates. For information on this program, go to <http://www.clemson.edu/public/scbg/certificate/>.

There is not nearly enough space here for a complete listing of accomplishments. But it is clear that, during our first 20 years, the Society has gained stature in education, and acceptance by local, state and national agencies and organizations. Our insistence on a scientific basis for our programs and consultations has paid off richly. We have seen native plant interest and use gain considerable "traction" with the public in our twenty-year tenure. We have seen members evolve from interested beginners to effective advocates, teachers, and practitioners. We are working with two very rare plant sites that will serve as living lessons in native habitat restoration. With growth in membership and state coverage, we will gain the human resources to expand our reach and impact. We look forward with confidence to continued positive impact on the natural resources of our State in the next twenty years. There is much to do, so won't you join the effort?

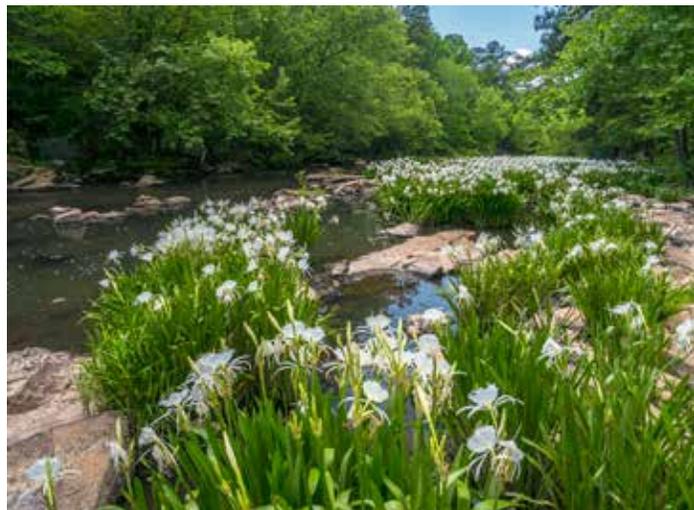


Figure 5. Protected rocky shoals spider lily site in McCormick County. Photo courtesy of Bill Sharpton at www.treehuggerimages.com

Fall Foods From Nature

By Dan Whitten

The harvest season is upon us. The natural thing to do is fatten up for winter. Well, at least we can sample some of nature's treats that have to be good for us since they taste so good. Here are some of my favorites.

The end of summer favorite is the **Pawpaw** (*Asimina triloba*) or custard apple as it was once called (Fig. 1). They ripen near the end of August to early September. You need to eat these up fast or process them for later as they are very perishable. For this reason you never see them sold commercially. Pawpaw smoothies are wonderful. Pawpaw ice cream is even better. To process, remove skin and seeds and put measured amounts (1 or 2 cups) into freezer bags and flatten to about 3/8" for easier thawing latter.



Figure 1. Pawpaw (*Asimina triloba*). Photo courtesy of John Gwaltney at <http://www.southeasternflora.com/> and Forestry Suppliers, Inc.



Figure 2. Muscadine grapes (*Vitis rotundifolia*). Photo courtesy of Carl Hunter @ www.plants.usda.gov



Figure 3. Smooth sumac (*Rhus glabra*). Photo courtesy of John Gwaltney at <http://www.southeasternflora.com/> and Forestry Suppliers, Inc.

The **muscadine grapes** (*Vitis rotundifolia*) are next in the progression (Fig. 2). They make a good car snack as long as it is warm enough to have the window down for seed and skin disposal. Otherwise muscadine jelly is what we do. After heating the washed muscadines in a large pan with a little water, they go into the food mill for getting the pulp out for jelly. The skins and seeds inside the food mill are put back into the pot with more water and brought to a boil. The juice is strained off and sweetened to taste for a great grape drink.

Then the seed heads of **Smooth Sumac** (*Rhus glabra*) mature into that tight cone of bright red (Fig. 3). They are pruned off and bagged. The opened bags are brought home and put in the hot sun for about an hour to drive off the spiders and stinkbugs that often abide in the seed heads. While the bugs are evacuating, you can bring to boil a large pot of water of 1 to 2 gallons. Take off the heat before adding Sumac seed tops because boiling breaks down the vitamin C and that is not good. Just sucking on one seed tells you that it contains a good bit of citric acid. Let pot set several hours to overnight and then strain out seeds. Then filter out tiny hairs by pouring through a paper towel or coffee filter. Then sweeten to taste. If too dark red and sour, add water to taste.

Goldenrods also make a fine tea. **Sweet Goldenrod** (*Solidago odora*) is the strongest flavored species but all have the smell and taste of anise (Fig. 4). Clip off the upper stem with several leaves and flower head. Sweet

Goldenrod has alternate, sessile leaves with one principal vein. The flowers appear terminally and on the upper side of arching branches. Follow a similar procedure to the Sumac tea. You will notice that this concoction will make a bubbly head at first when you stir in the sweetener.

The pounding on the roof at night which often makes me levitate off the bed is a good sign that the acorns are getting ready to harvest. **White Oak** (*Quercus alba*) in the upstate (Fig 5a) and **Live Oak**, (*Quercus virginiana*) (Fig. 5b) are the oaks with the sweetest meat or least tannic acid. Both can be tolerated when eaten raw without too much bitterness. But the main idea here is to make some acorn flour. A spoonful of acorn flour added to bread, pancakes, cookies – any recipe using flour, will give it a darker color and nutty taste. I've been told that my acorn boosted pancakes with blueberries added were the best ever! After peeling the shells and splitting in



Figure 4. Anise-scented goldenrod (*Solidago odora*). Photos courtesy of Jeffrey Pippin at <http://www.jeffpippin.com/plants/plants.html>



Figure 5a. White oak leaves and acorns.

Photo courtesy of Virginia Native Plant Society at <http://vnps.org/>.

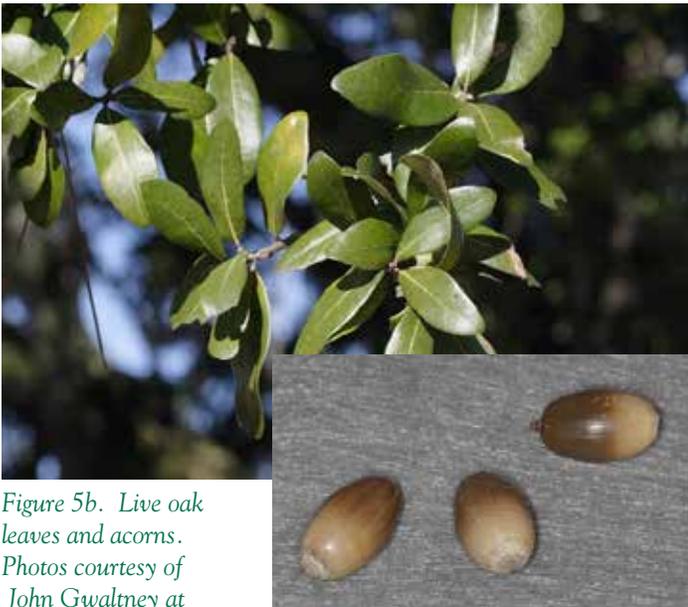


Figure 5b. Live oak leaves and acorns.

Photos courtesy of John Gwaltney at <http://www.southeasternflora.com/> and Forestry Suppliers, Inc.



Figure 6. Hen of the woods (*Grifola frondosa*) mushroom. Courtesy of Davepd at Wikimedia Commons. <https://commons.wikimedia.org/wiki/File:Hen-of-the-woods.jpg>.

half, add to a pot of boiling water. Bring a second pot to boil so that for 3 to 4 times, you add the nuts into already hot water. Save the first pour of water for a sore throat gargle or for topical treatment of poison ivy. While the acorns are still wet, put them in a food processor and take them down to a rough mash. Spread this mash out onto a cookie sheet and parch in the oven. Next I use an electric coffee grinder to powder up the acorn material. Each time I sift into one container and recycle what stays in strainer back into coffee grinder. Repeat until all is sifted. This will leave a rather grainy mixture, which is fine for some things, but to get a fine powder you must use a mortar and pestle.

Finally, from late September through November, be on the lookout for **Hen of the Woods** (*Grifola frondosa*). Some call this choice edible mushroom Mitake (Fig. 6). They

both taste the same however you pronounce it. These are a layered mass of greyish-brown, fleshy spoon-shaped caps with branching white stalks underneath coming from a compound base. They often grow from the ground at the base of an oak tree or sometimes other trees. Maypop. These are wonderful sautéed in butter or olive oil and used in many recipes as well.

Cautions: Don't eat wild edibles unless you are sure of identity and proper preparation. Don't harvest from power line right-of-ways or busy road sides due to herbicides and pollutants. Get permission from landowners. Mushrooms for personal use and not resale are allowable to harvest in state and national parks. Harvest sustainably. That means leave one for wildlife, one for reseeding, one for others and the fourth one, take respectfully. Enjoy the wild harvest!

(Should You Dig from page 5)

and the grading contractor, plants can be salvaged and transplanted into sites that offer a suitable habitat. This is a great way to obtain native plants for public landscaping projects, such as school grounds or parks. But then you still need to consider the biological issues discussed below. And you may need to plan for heroic measures (such as growing in pots under irrigation) if rescue is necessary in an inopportune season.

Then there is the biological issue. A perennial plant growing in a wild site is there because a seedling found the site to provide the

necessary conditions for germination, and subsequently found it suitable for development and persistence. Suitability of a site derives from a number of site characteristics. Among these are site lighting, soil depth, soil water storage capacity, soil pH and nutrients, soil organic matter, etc. Transplant a plant to a site with the wrong light

environment, wrong soil water characteristics, or wrong nutritional/ pH status, and it is likely to be very short-lived. Some plants have other requirements, including companion species on the site. Some species may need a mutualistic relationship with another species to survive. An example is downy false foxglove (*Aureolaria virginica*), which is a hemi-parasite on oaks (*Quercus* spp.). This species has chlorophyll and photosynthesis, but thrives only when its roots develop in close proximity with oak tree roots. Many native orchids are similar, but have an obligate relationship with a soil mycorrhizal fungus, without which they will not persist.

Then there is the effect of digging the plant out of a compatible site. Native plants tend to have very substantial root systems, because they evolved in soils with low nutrients, or low water supply. Most native plants dug from a wild site leave a lot of their root system on the site, whether because of digging a narrow root-ball, or a shallow root ball. This is a problem because the active uptake sites for water and nutrients are at the very tips of roots. Most roots can only absorb nutrients and water in the distal ½ inch or so of the root. The rest of the root length is just a pipe to convey the nutrients and water to where they are needed in the plant. This becomes a

problem when we dig up a milkweed plant root ball 8" wide by 8" deep, when the intact plant had a root system 12' wide and maybe 24" deep. We just left the majority of the active root absorbing surface in the soil, and take home a plant with a seriously truncated root system. Then, if we take off most of the soil on that harvested root ball at transplanting, we just lost most of the remaining absorptive root surface.

If the plant we dug is a sun loving milkweed, and we dug it during the growing season, when it caught our attention, and then we transplant it into a new sunny "home", it will have an almost impossible job of re-establishing itself. We will

have to chop off most of the leafy canopy and all the flowers, to reduce the demand for water placed on the truncated root system. And we'd better be ready to water it frequently, to supply it with enough water, but not so much water as to create a wetter habitat than the plant can tolerate.



Photo courtesy of John Gwaltney, Southeasternflora.com

If we dig a plant that requires a host to satisfy its hemi-parasitic habit, we must be careful to plant it within the root zone of a host plant. But when we dig a hole under an oak tree to plant that *Aureolaria* plant, we just disturbed the tree root system in the hole, where the truncated root system of the dug plant must establish the hemi-parasite relationship.

If we were so unwise as to dig an native orchid species with an obligate relationship with a soil fungus, chances are that we will not get that plant to survive longer than 6 months to a year, even if we do everything right.

So what should we do? Try to find plants that are growing in a pot, where they were propagated from seed, or vegetative root or stem cuttings. When we take the growing plant out of the pot, it will have its absorption system much more intact. And never purchase plants from unscrupulous plant sellers who dig native plants from the wild for sale. These folks can do tremendous damage to wild-growing native plant communities.

So, if you choose to dig established native plants, be sure to ask yourself these ethical and biological questions, and answer them truthfully. It is a loss for us and the other wild organisms that are our co-travelers. I look forward to seeing you at our next sanctioned, authorized plant rescue or native plant sale!