Cullowhee Native Plant Conference 2018: Plant Diversity Abounds!

By Bettina Darveaux

The annual Cullowhee Native Plant Conference is just so refreshing for its native plant-loving participants. With four days of learning about plants from speakers, vendors and each other, and from experiencing plants in their natural habitats on the field trips, I always leave the conference even more passionate about, and in awe of, the incredible diversity of plants we have in our state and their adaptations to their environments.

Grassland communities were a major theme of presentations this year, and coincidentally with one of the field trips that I attended. Did you know that the grasslands in our southeastern region are even more diverse than the vast prairie regions of the Midwest? Also, our southeastern grasslands occur in smaller swaths, in a mosaic pattern with the other vegetation types found in this part of the country.

Within the context of plant communities, our field trip leaders showed us examples of the grasses, sedges, and rushes found in the rich coves, northern hardwoods, spruce fir forests, and acidic coves along the Blue Ridge Parkway. We learned how to hone in on the individual grass spikelets, to observe key features (continued on page 4)
This is my first “Presidents Report” and I want to confess one thing up front: I am not a plant expert! What I am is a native plant enthusiast with the willingness to learn more and help others who share that passion.

In my relatively short time as a member, I have recognized a few folks do a lot of the work necessary to make this Society a success and I thank them for their contributions! I want to see if we can get more people involved in helping the Society. I firmly believe that every member has something to contribute and speaking from experience, you do not have to be a native plant expert to help. I find that when I help in an event I learn a whole lot about our native plants.

Even if you are unable to participate in one or our events, you may be able to help make it fun and a learning experience. Our upcoming Fall and Spring trips will require a lot of work to make them a success and while we have not finalized sites for those adventures, we’ll need help arranging for speakers, coordinating hikes and hike leaders, finding suitable lodging (NOT making reservations for anyone), and even helping with the plant auction at the Spring outing. Contact your chapter chair or one of the board members if you want to help. We’ll put you in touch with the right person.

Take a look at our website (www.ncwildflower.org) and see the list of committees (under “about” “board members) and find something there to get involved. Don’t be afraid to ask – I don’t believe anyone should be refused the opportunity to assist.

Thank you for giving me the honor of being part of the leadership team of the NCNPS! If you have a suggestion on how to make the Society even better, please send me an e-mail!

Go Native!

John Clarke
johnclarke@ncwildflower.org
Annual Membership Meeting & Picnic

Cures Win Blomquist Award at June 2nd Meeting

Congratulations to Bill and Jen Cure of Cures Nursery, who received the NCNPS H.L. Blomquist Award for Promoting Native Plants. Members of the Margaret Reid Chapter, the Cures host several chapter events and have hosted tours with the Triad Chapter, the North American Rock Garden Piedmont chapter, the NC Botanical Garden tour guides and several garden clubs. As their operation has grown, they have added more herbaceous native plants in their retail sales. Their reach and influence even went international when they sponsored a booth at the North American Rock Garden Society Annual Meeting. They are regulars at the Cullowhee Native Plant Conference, and add a very generous element to our annual Society picnics by bringing trays of free plants for the membership!

Outgoing Board members, including Trena McNabb and Jean Woods, received Awards of Appreciation from the Society. Jean's final report as President included the good news that “We have 832 members — the most ever.” The event was held at Hagan Stone Park near Greensboro.
of the glumes, lemma, and palea, as well as the arrangement of spikelets and whether they disarticulate or not -- all important characteristics needed for keying out this group of plants. At every stop, we saw Mountain Oatgrass (*Danthonia compressa*), which is the most common grass found in our Southern Appalachians, especially on grassy balds. We also found Wavy Hair-grass (*Avenella flexuosa*, formerly *Deschampsia flexuosa*) with its crimped pedicels and delicate inflorescences looking so beautifully backlit.

It is well known that the more senses that are involved in a learning experience, the more likely we will remember the information presented. This explains why our leader started stomping his foot on the trail to demonstrate how Path Rush (*Juncus tenuis*) grows in heavily compacted soils most commonly along well-worn trails and even laid down on the forest floor in a lush carpet of Pennsylvania Sedge (*Carex pensylvanica*), exhibiting its luxurious texture and rhizomatous nature.

Although the focus of this full-day field trip was on grasses, no one could ignore the astonishing diversity of blooming native wildflowers, shrubs, trees, mosses, lichens and ferns this time of year. We visited an acidic mountain cove community where sphagnum moss (*Sphagnum* sp.) was growing and a high elevation seep bog at Graveyard Fields where Roundleaf Sundew (*Drosera rotundifolia*), Michaux's Saxifrage (*Hydatica petiolaris*, formerly *Saxifraga michauxii*), Cranberry (*Vaccinium macrocarpon*), and two orchids; Small's Twayblade (*Listera smallii*), and Club-Spur Orchid (*Platanthera clavellata*) were present. This was a simply amazing sight on this warm sunny day!

I even had the opportunity of returning to this seep bog on my half-day field trip two days later and enjoyed a completely different experience. The weather was very cool and foggy, and the field trip leader focused on field characteristics and interesting stories about many of the native shrubs and plant species. One story was about buzz pollination — how bees buzzing cause the pollen to vibrate out of the small opening at the tip of the cranberry flower anthers. I saw so many plants that I hadn’t noticed just a couple days before.

Experiencing the diversity of habitats and plant species of our NC mountains at this conference is so magical and completely revitalizes me. I’m sure everyone at the conference was similarly rejuvenated.
Certified Native Plant Habitats

The NCNPS has received reports from four Society members about five gardens certified recently as Native Plant Habitats. The reports come from Adam and Carol Webb of Summerfield; Sharyn Caudell of Durham; Brent Stoltz of the Given Estates Retirement Community in Asheville; and Don Lendle, writing about the Forsyth Habitat Campus, as well as his own property in Winston-Salem.

Adam and Carol have lived in their Summerfield home for three years. The previous owners “completely neglected the landscaping,” Adam wrote. “As such, I spent my first year here removing old landscape fabric and digging out stumps. He went on to establish a butterfly garden and replacing “vast swaths of lawn” with garden beds. He and Carol have been delighted by the increased presence of birds, insects and natural beauty around their house.

Sharyn Caudell reports that when she moved to Durham 13 years ago, the first thing she did was remove a long front bank of English Ivy. She was able to replace non-natives with about 160 native plants. “When I lose a shrub or plant, I replace it with a native one. This garden is a labor of love, and many visits to the NC Botanical Garden and Niche Gardens,” she said. Sharyn uses only sustainable gardening methods. ”I’ve used my nearly 70 years of gardening experience here. I plant for birds and bugs!”

At Given Estates Retirement Community in Asheville, Brent Stoltz says, there are 14 acres of meadows, as well as several forest edges and rain gardens dedicated to promoting native plants and eradicating nonnative species. “We began our focus on native species 15 years ago. I have been here for seven years of that time. During my time here, we have introduced hundreds of native species into our meadows and forest areas. We accomplished this through installing 1-gallon containers and thousands of native grass plugs.” They chose plants that “not only thrive in their meadow environment but also are beneficial for pollinators and provide our residents and visitors with a variety of color throughout the year.”

The creation of the gardens at Forsyth Habitat, Don Lendle reports, were part of the NC Audubon Society’s Bird-Friendly Yard Program. Forsyth Audubon partnered with Forsyth Habitat to install native plant gardens at their Education Campus, 1023 W. 14th St. in Winston-Salem. This was accomplished with volunteer help over a three-year period. The gardens, open to the public, are used as a classroom by Forsyth Habitat to instruct on home landscape planning and maintenance, and are also used by the County Extension Agency to educate landscape contractors.

Don also reports that he and his wife were drawn to their own property many years ago by the beautiful tall trees, meadows and pastures. A home had been built on the property with minimal tree cutting, and the previous homeowners had started “nice flower beds with some native plants and a large vegetable garden area.” They became more interested in native plants though the Audubon’s Bird-Friendly Yard Program about six years ago. “With the help of Susan Andrews, we embarked on a program of introducing more natives to our property and removing non-natives and invasive plants,” he said. Call 336-972-2689 if you’d like to visit their garden.

—Larry Mellichamp
Our beautiful North Carolina mountains are home to many invasive shrubs that are common in the rest of the state and have been featured in earlier Chlorofiends columns, including silverberries/olives (*Elaeagnus* spp.), Multiflora Rose (*Rosa multiflora*), and Chinese Privet (*Ligustrum sinense*). For this column, we'll look at some species that are more common in the mountains and/or appear to be spreading there.

Wineberry (*Rubus phoenicolasius*) is now common in the North Carolina mountains, and is sometimes found in the piedmont as well. This hardy, fast-growing Asian raspberry is prized for its delicious fruit, and was introduced to the United States in 1890 to help create new raspberry cultivars. The plant has alternate, toothed, trifoliate compound leaves that are silvery-hairy beneath. The stems (canes) are spiny and covered with reddish glandular hairs that also cover the sepals. It thrives in cool, moist areas and proliferates along forest edges and roadsides and in open forests and fields. Birds and other animals relish the fruit and disperse the seeds; the plant can also grow from root nodes and can root at the tips of the canes, forming dense thickets. It now grows from eastern Canada and New England south to Georgia and Alabama and west to Michigan, Illinois, and Arkansas.

Japanese Barberry (*Berberis thunbergii*) is also an Asian shrub that can root at the tips of branches that come in contact with soil, and can form a dense thicket from only a single shrub. In addition to shading out other plants, its decomposing leaves change soil chemistry, impacting native plant diversity. It has simple, untoothed oval leaves that may alternate along the stem or occur in clusters, inconspicuous yellow flowers, and bright red oval fruits that dangle in groups of 2 to 4. Like so many non-native ornamentals, it is fast growing, disease resistant, and can thrive in sun and shade; thanks to these attributes and its red fall foliage, it is very popular in the nursery trade, with numerous cultivars. Like Wineberry, birds and small animals eat the fruit and disperse the seeds. Barberry's sharp spines ensure that deer won't browse on it, which means that in natural areas, the deer eat everything else and the barberry continues to spread. This species is currently uncommon throughout North Carolina, but likely to spread more (a NCNPS member has observed it along the Blue Ridge Parkway from the NC/VA border to Cherokee); it now grows in eastern Canada and most of the eastern half of the US, as well as in Montana, Wyoming, and Washington.

European Barberry (*Berberis vulgaris*), which has toothed leaves (continued next page)
and larger clusters of flowers and fruits, was brought to the United States early during European settlement, where it was used for dyes and jam. Farmers discovered, however, that it was a host to a wheat rust, and children would be paid to dig it up; due to eradication efforts, it is much less common than it once was. Japanese Barberry, which is not a wheat-rust host, was introduced as an ornamental around 1864.

Japanese Meadowsweet (Spiraea japonica) is another eastern Asian species that a keen-eyed member has observed along the Blue Ridge Parkway, especially north of Asheville (although this invader can be found in both the NC mountains and piedmont). Introduced as an ornamental around 1879, and with many cultivars now in the trade, this small shrub thrives in a variety of habitats, especially roadsides, stream banks, fields, open woodlands, and disturbed areas. In the Rose family, it has alternate, toothed leaves, with pink (rarely white) flowers growing in flattish clusters (a corymb). The undersides of the leaves are hairy on the veins, unlike the native Steeplebush (Spiraea tomentosa), whose lower leaf surface is densely tomentose and whose inflorescence is an elongated panicle. Two native meadowsweets also have flowers in corymbs (Spiraea corymbosa and Spiraea virginiana), but their flowers are usually white and their leaves lack the long, pointed tips typical of Japanese Meadowsweet. Similar to Wineberry and Japanese Barberry, Japanese Meadowsweet can form dense stands and displace native vegetation. The fruits are smooth capsules containing tiny seeds that are easily dispersed along waterways. This species grows from eastern Canada south to Georgia and Alabama and west to Michigan, Illinois, and Missouri.

Japanese Barberry in fruit. —Tracie Jeffries

Burning Bush/Winged Wahoo (Euonymus alatus) rounds out this collection of east-Asian species popular in the nursery trade. Introduced in the 1860s and with many cultivars, Burning Bush has been widely planted for its ease of growth and red fall foliage and fruit (dispersed by many birds and small animals). It tolerates shade and a variety of soil types and quickly forms dense stands that outcompete native plants; like the other species featured here, it now grows throughout much of eastern Canada and the US.

Thanks to Jean Woods and Tracie Jeffries for sharing mountain observations. As always, GO NATIVE!

Chlorofiends! is a regular column in Native Plant News. If you have information or comments on invasive species in North Carolina, please share them with Lisa Gould (lisalgould@gmail.com).

*Thanks to Jim Butcher’s The Dresden Files for the column title.
A Piedmont Patch in Chapel Hill

By Catherine Bollinger

The urbanization of North Carolina, especially the Piedmont region, is undeniable. Forests and fields are being replaced rapidly by strip malls and suburbs. Those of us who appreciate native ecosystems have been noticing their decline for some time. Invasive non-native species are increasingly prevalent, and native flora and fauna are being displaced at alarming rates.

In collaboration with several like-minded organizations, the parishioners of the Episcopal Church of the Advocate decided to create a safe haven and food source for displaced wildlife by planting as many native plant species as possible on part of their 15-acre property, which includes an old one-acre farm pond. To begin the work, they applied for and won a Stewardship of Creation grant from The Episcopal Church in November 2017. Funds from the three-year grant are mostly allocated for educational outreach activities that include a Web site (www.piedmontpatch.org), a Facebook page, and the sponsorship of free quarterly lectures open to the public on relevant topics.

The first free lecture on Feb. 17 featured Debbie Roos, an agricultural extension agent in Chatham County who is known throughout the region for her expertise on pollinators and pollinator gardens. The second lecture on May 19 featured Amy Brightwood, a horticultural therapist, who spoke on the therapeutic value of working with plants. The next lecture will feature Barbara Driscoll, a member of the New Hope Audubon Society (a Piedmont Patch partner), who will talk about the benefits of planting bird-friendly natives, demonstrate how to maintain bird boxes, and identify native birds visiting the site.

A small portion of the grant was allocated for the acquisition of plants; most of those funds were spent on over 700 plugs of four species of native grasses and about 100 tough native wildflowers (12 species), which were planted on the earthen dam on one side of the pond. On April 14, 40 volunteers planted everything in around two hours. Since then, additional species have been added, thanks to generous donations from Cure Nursery, the North Carolina Botanical Garden, and Plant Delights Nursery.

Fall Planting Day is scheduled for Oct. 20. Volunteers will add bird-friendly shrubs and trees using grant funds and a donation from the New Hope Audubon Society. On June 5, volunteers from the New Hope Audubon Society donated and installed five Eastern Bluebird and five Brown-headed Nuthatch boxes. Seventeen days later, bluebirds hatched from a nest built in one of those bluebird boxes—a clear demonstration of the need for creating wildlife habitat wherever possible.

The goal of this project is to serve as an example of how public and private landscapes can become havens for displaced wildlife by incorporating native plants in their designs, restoring native habitat one patch of Piedmont at a time. The grounds of the Church of the Advocate are open to the public. All are invited to stop by and survey the Piedmont Patch plantings. You can even try your hand at fishing in the pond—the church provides poles. The address is 8410 Merin Road, Chapel Hill, NC 27516.
By Virginia Currie

Think of a day that you spent hours outside in the sun, running in the woods, helping in the garden, swimming in the sunshine. How did you feel as the time came for the day to end? Could you have gone all night long chasing fireflies and roasting s’mores, or were you ready to recharge your body’s battery with a good night’s sleep? Like you, many plants around us take time to rest.

Although they are still, plants are quite active all summer long. They are busy turning carbon dioxide into oxygen, making food, filtering the air and perhaps making flowers to be pollinated. Do you think plants need to rest after a long hot busy summer? How do you suppose plants prepare themselves for bed? Look around you right now and you might see plants changing as they prepare to rest for the winter!

Fall is considered to be the best time to plant trees and other perennial plants (plants that live for more than two years). Why? The temperatures are cooler and the days are shorter! In the fall, the plants’ energy moves from the above-ground parts, downward into the roots. We see this happen in trees whose leaves change colors and drop to the ground, and in the smaller plants that disappear underground for the winter, but come back in spring.

The cool days of fall give perennial plants time to establish a strong, supportive root system before they go to sleep in the winter. Those plants will wake up in the spring with the strong foundation they need to suck up water and nutrients to be healthy all season long.

Planting native plants (plants that were here before the arrival of Europeans) provides food for insects and birds, and also gives shelter and hiding spaces to small critters. In this season of thanks, what better way to say “thank you” to plants than to recognize all the ways in which they support your own life?

How many items in your house can you count that once started out as a living plant? How much of your food is either a plant, the fruit of a plant, or once ate a steady diet of plants, itself? How many critters outside of your window rely on plants as food or shelter? Let’s show our gratitude by helping the plants right back. I can’t wait to get together with my family and friends to tuck some “new neighbors” into the native plant community right outside my house! How about you?

If your family isn’t sure where to find native plants, check the NCNPS website where there are many links to resources on where to get native plants in North Carolina. Have fun!
**Book Review**


The Carolina coast has (at last!) its own comprehensive guide. Its author is a professor emeritus at UNCW and a long-time friend and member of our SE Coast Chapter. The area covered is the barrier islands, beaches and adjacent mainland where tides, salt water and salt spray influence habitat.

Coastal habitats are some of the most obviously dynamic habitats on earth. There is no better place to begin to understand habitats as systems responding over time to change. Dr. Hosier is a fine educator, and his chapters on the environmental factors at work and their effects on plants are superb.

Unusual for a field guide, the book includes an in-depth look at landscaping and restoration of coastal sites, stressing the importance of retaining plants already there. The unique usefulness of the plant lists is that they are specific to habitat. Each habitat has a list of recommended plants, including a few exotics, with information on habit; form, size and texture; interesting flowers/fruit; sunlight and moisture requirements and detailed comments. Given the current interest in rain gardens, a separate column (suitable for rain gardens?) makes it easy to scan for plants for this use. There is also a chapter on plants that are invasive on the coast with a photo and discussion on each.

But the main attraction of the book for most native plant lovers is the plant gallery covering a wide range of species, including grasses and ferns. The photographs are large enough to show details clearly. Entries often include photos of flowers and fruit. The text is comprehensive and written by a biologist with a good eye for memorable details. For identification of our coastal plants by people with no background in botany, this is as good as it gets.

No matter where you live, once you have read this guide, you will never again think of “the beach” as a simple intersection of sun, sand, ocean and recumbent bodies.

-Cary Paynter

**I Spy... A Fall Flower! *Coreopsis latifola* — Tickseed With a Surprise!**

This is one of the only tickseeds that will grow and flower dependably in the shade. Several years ago, Larry Mellichamp gave me a flat of seedlings of this species, as there was not much interest in it. He knew that my garden was primarily shade, and said that it would grow and flower here. And he was oh so right! It makes a wonderful clump that spreads minimally. The plants grow from 15-30" tall and starts their show of bright yellow flowers at end of summer, continuing through mid-autumn. The blooms are from 1-2" across and are a bright yellow color. They seem to readily set seed each year and form the nice fluffy seed heads one is used to seeing in other tickseeds. The seed are best if winter-sown and will germinate early the following spring. I have had a few flower the first year after sowing, but generally, it is the second season when most will start flowering.

-Mark Rose
Member Spotlight: Jane Srail

When Did You Join?
“Way back! Maybe in the 1980s when it was the NC Wildflower Society. I was busy with my organic garden and raising children. My mother had always had a Victory Garden. I received a mailing about the Society’s Spring and Fall Outings.” A native of Illinois, “I was just blown away by North Carolina’s mountains and vistas (during outings). That was before chapters were formed.”

What is Your Background?
“I don’t have a background in biology. I was a psychology major. But I would buy an outrageous amount of plants I knew nothing about and install them in our woods.” Now, she’s a state-certified Environmental Educator. On her half-acre property in Statesville, she replaced traditional shrubs with natives. “If people with traditional yards saw my yard, they would think it’s unkempt. It’s full of plants and natural mulch.”

How Do You Share Your Love of Natives?
“The Farmers Market is a blessing for older people like me. We (she and her husband Joe) listen to the music and talk. We make sure children learn about the plants and are able take one home. I remind (market shoppers) that if you plant the native plants, you will get more living things such as birds and butterflies.”

Jane Srail, who participates in the South Piedmont Chapter, is a regular at the Statesville Farmers Market, where she promotes native plants. The market is held 3-6 p.m. each Thursday night at Pecan Park, May to October.

The South Piedmont Chapter, represented by Gail Whitcomb and friends, participated in the Hickory Grove Fourth of July Parade with a colorful float. Hickory Grove is a neighborhood of Charlotte.
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We’re Wild About Natives!

Will Stuart - Tracie Jeffries