



Native Plant News

NEWSLETTER OF THE NORTH CAROLINA NATIVE PLANT SOCIETY

Native Plant News
Katherine Schlosser, editor

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NC Natural Heritage Program's Fourth Approximation

As the project made possible by your generous grant comes to a close, I thought the members of the Native Plant Society might like a review of the work you funded. From January through April, I worked with Mike Schafale, the community ecologist of the Natural Heritage Program, converting natural community data records to his new edition of the classification system.

The North Carolina Natural Heritage Program (NHP) is a state government organization whose mission is to inventory, track, and help conserve the biodiversity in our state. Part of this mission has been to classify and describe the natural communities in publications developed by NHP. These publications are available for download for free at www.ncnhp.org.

We refer to successive versions of these publications as "approximations" in recognition of the fact that the process of discovering and classifying the natural communities of NC is ongoing, and more information is being gathered each year, which may strengthen or change our concepts. Each new approximation is based on field research and quantitative analysis of research plots, such as the Carolina Vegetation Survey database. The Natural Heritage Program currently has about 4500 records of high quality natural communities across the



Basic Oak-Hickory forest, Falls Dam Slope.
Michael Schafale

state, and new examples are found each year, through the work of NHP biologists and partners.

Mike Schafale's Fourth Approximation is the most recent refinement of the natural community classification system used by the Natural Heritage Program, and will guide conservation of natural areas for years to come. With funding from a grant provided by the Native Plant Society, I helped convert NHP records of natural communities from the Third Approximation to the Fourth Approximation, in a process somewhat parallel to the program's efforts to update the taxonomic standard for plant species from the *Flora* produced by Radford, Ahles, and Bell (1968) to the current *Flora* being developed by Weakley (currently available draft form).

The bulk of the work consisted of changing community type and subtype names to the new system. Some of

these were a simple switch from one older name to one new name. Many more involved a change from one older type to two or more possible subtypes under the new revision.

We used recorded data on the geography, topography, geology, and botany of communities to figure out which subtype was most applicable. The most complex records involved a change from one older type to more than one subtype within the same

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President's Message



As it been hot enough for you? I know it has been here in Brevard, so I know it has been even hotter in the Piedmont and coast. Hopefully, it will let up soon.

As some of you know I had a shoulder replacement the end of June, so my digging in the dirt has been stopped for a while. I just carried a watering can around the yard with one arm, taking care of my new additions. I don't water my natives once they are established and they seem to take care of themselves.

Spring was early this year, but beautiful here in the mountains, as those of you know who attended our spring outing at Saluda. We saw many species of trillium, lots of other unusual and interesting flowers, had great guides, and a

wonderful place to stay, all thanks to Lynda Waldrep, who organizes our trips.

And she has another great trip lined up for this fall, September, 28, 29 30. Stay tuned for details.

I am looking forward to leading the NCNPS for the next 2 years, but Tom Harville is a hard act to follow. Tom, in the 6 years of his presidency (3 terms), has really grown the Society, not only in number of members, but in the amount of money that we are able to give each year in the form of scholarships, grants, and donations to conservation activities that support our native plants.

In addition, Tom has been a strong voice in the state for the protection and appreciation of North Carolina's flora. We will miss Tom, but are thankful that he will still be involved in the running of the society.

I hope to continue the excellent work that Tom has started, but I need your help to do this. We can all contribute to making the NC NPS a strong force and voice for NC native plants by being members, speaking out for the protection and propagation of our natives, buying only nursery propagated plants, not digging or collecting in any manner in the wild unless you are on an ap

proved plant rescue, and planting native in your yard.

Remember:

Even modest increases in the native plant cover on suburban properties significantly increases the number and species of breeding birds, including birds of conservation concern. As gardeners and stewards of our land, we have never been so empowered to help save biodiversity from extinction, and the need to do so has never been so great. All we need to do is plant native plants!

Dr. Douglas Tallamy Chair of the Dept. of Entomology and Wildlife Ecology at the University of Delaware. *Bringing Nature Home.*





Fourth Approximation continued



Low Elevation Seep

record. For example, a High Elevation Red Oak Forest community from the 3rd Approximation might turn out to include the Typic, Rich, and Heath subtypes in the 4th Approximation. Updating the records in these cases meant mapping or estimating area of each community type or subtype in addition to figuring out which ones were present.

When possible, I also used the opportunity of examining the maps and records to improve the recorded data. I checked the recorded community locations against 2010 aerial photos and, when necessary, revised boundaries or even deleted community records when the photos showed evidence of community destruction such as clear-cutting or development. Although the loss of natural communities is sad, having that information up-to-date improves our data quality.

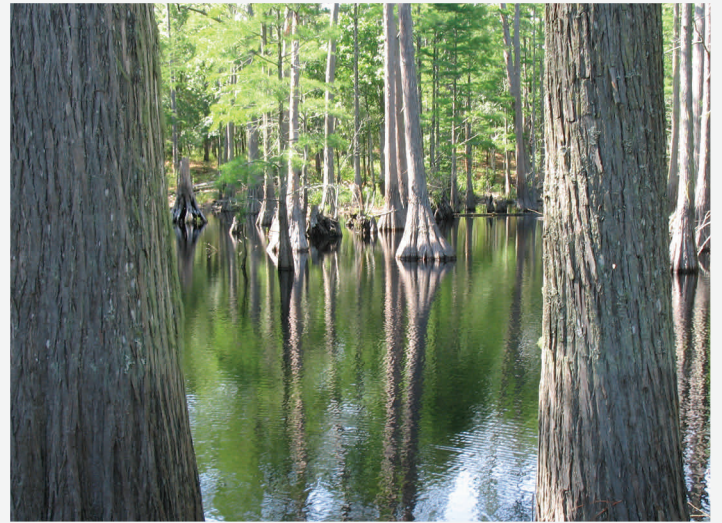
A much more pleasant task in improving data quality was using topography, aerial photos, and written reports to more precisely map communities. Many communities that were previously mapped as general points are now mapped as precise polygons. Of course, more field work will be needed to verify those polygons, but they do provide a better estimate of the likely community locations.

With all of the natural community records now in the new classification (the 4th approximation), the Natural Heritage

Program can begin using the new and improved database.

We will be able to easily tell how many occurrences are known for each community type, and how many acres there are for most. One of the next tasks will be to determine formal rarity/imperilment ranks for each. It will also be possible to begin comparing the different occurrences of each type and figuring out which are the best examples. This in turn will affect how the program rates the ecological significance of potential natural areas, and will allow it to more accurately advise land conservation groups which areas are most important to pursue.

All told, I worked 510 hours on this project and handled more than a thousand community records. My portion of the work, however, is tiny compared to Mike Schafale's two decades of work on this new revision and the countless hours put in over the years by the field biologists of the Natural Heritage Program.



Cypress
Michael Schafale

I'm grateful to have had the opportunity to work with this organization, and I thank you all for your generous support of my efforts.

Kimberly Israel
NC Natural Heritage Program



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Board Member News



With accolades to retiring President, Tom Harville, and a warm welcome to new President, Jean Woods, leadership of the NCNPS continues in excellent hands.

Send new email address information to the Treasurer to assure that you continue to receive newsletters and other communications from NCNPS.

Article and photo submissions are welcome. Articles are best sent electronically as MS Word documents or directly in an email. Photos are best sent as jpegs. Submitted information will be acknowledged, and you will be notified when the information will appear in the newsletter.

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South East Coast Chapter

A Note of Thanks to Robert Thornhill, who led a trip to Shaken Creek:

Thank you SO much for your time, expertise, and enthusiasm yesterday...what an awesome walk!

Your detailed explanations for species identification are really helpful to our group. It was exciting to see so many species -

Shaken Creek is clearly a special place! (and we've visited in the past, but it was wonderful for our group to explore the area with someone who knows so much about it!) I know a number of us were particularly thrilled to see *Carex lutea* and *Thalictrum cooleyi*.

Hope you had a productive remainder of your day in the field!

Tick count...zero!

Thanks so much for leading our group,

Lara Berkley and Cary Paynter
NC Native Plant Society SE Coast chapter



Thalictrum cooleyi

Native Plant News

NCNPS Fall Trip Sept. 28—30

Working with the Catawba Lands Conservancy and the Cabarrus Co. SWCD, your NC Native Plant Society is planning a great weekend in the area around Mt. Pleasant for this fall's outing.

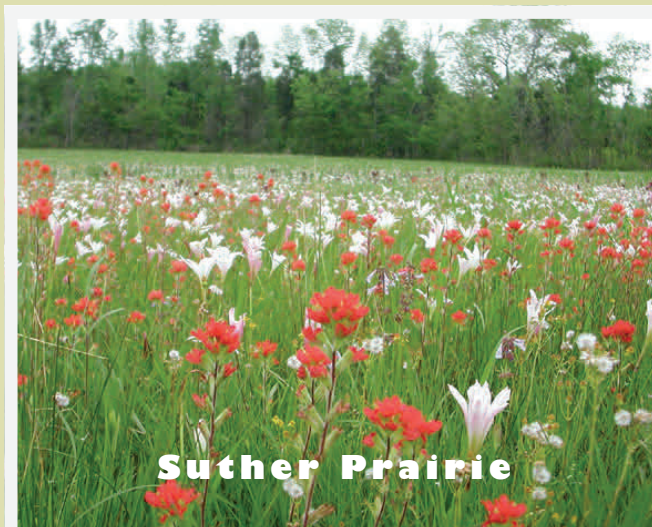
Dates are set for Sept. 28-30, and some of the locales to be visited are lands recently under protection as well as the premier natural heritage area of Suther prairie. Mt. Pleasant will be the official location for this event.

Buffalo Creek Savannah, comprising 392 ac., has yet to be inventoried and is the most recent acquisition. It promises to have fall blooming plants and interesting grasses. NCNPS outing participants may enjoy helping identify the forbes, trees, and shrubs in this area.

The Pharr Family Farm consists of 66,186 ac. and has several ponds, home sites, and land along the Rocky River. There is also a significant natural heritage site nearby.

There is one motel in Mt. Pleasant, Carolina Country Inn, <http://www.carolinacountryinnandsuites.com/> as well as two B&B's, Franklin St. B&B and the Inn at Mt. Pleasant. For those who prefer a full service motel, Hampton Inn at Dickens Place in Concord is a little further out, about 15 mi. from Mt. Pleasant. www.concordkannapolis.hamptoninn.com

Look forward to a full itinerary of the program for the weekend as well as the registration form in the next newsletter.



Suther Prairie



Tom Baugh's water conservation efforts

In 2004 we moved from White Oak Cottage, our home in the deep woods between Atlanta and Chattanooga, to Hidden Springs our current home in the mountains of Western North Carolina.

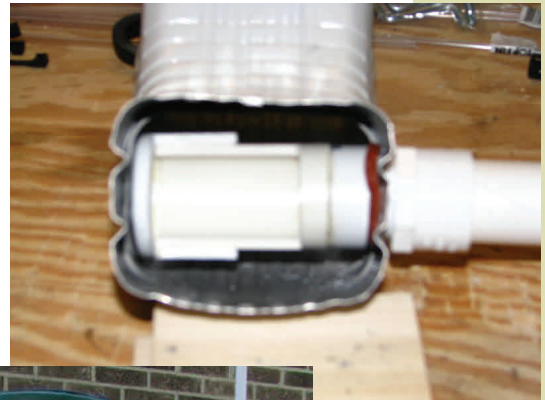
White Oak was on a well and at the end of the power line. When the electrons stopped flowing so did the water from our well. For decades we have routinely held potable bottled water in the pantry. But, as the saying goes, it didn't take a rocket scientist to realize that several days without sanitary water could cause a problem. That realization led to the establishment of a rainwater collection and holding tank on the slope behind the house a few feet from the master-bathroom window. When the power from the Co-op went out, we connected a hose to the drain on the tank, pulled it through the bathroom window and into the reservoir of the commode, or through the adjacent kitchen window to fill a pan that was then heated on the wood stove and used for washing.

The relocation to Hidden Springs in rural Henderson County, North Carolina posed a different kind of water problem. Although the water service here is more frequently interrupted, the interruptions are for shorter periods while the corporate owner of the system replaces worn sections of line.

The water challenge at Hidden Springs is the cost of using the water for irrigation purposes. We had no sooner purchased Hidden Springs when we began to remove lawn and the introduced exotic perennials and shrubs. These species were replaced with species native to this part of North Carolina. On the whole, native species, properly located and correctly planted may eventually require less water and care than exotics but during their establishment period there is often not much difference.

Consequently, we found it necessary to again collect rainwater, this time to irrigate the numerous new plants replacing the introduced box woods. Like the device at

White Oak Cottage in Georgia, the water catcher at Hidden Springs is fed from the downspout from the gutter system (Figure 1). The actual collection device is constructed from odds and ends of pvc pipe and connectors (Figure 2). Because of the southern exposure, during the summer months the water in the tank gets quite warm and quickly stale with an unpleasant odor. We use an aquarium aerator in the garage, on a timer and connected to the tank with flexible 'aquarium' tubing and an air stone, to agitate the water in the tank several times a day.





Composting Contradictions

Life often seems filled with contradictions and we sure have one here at Hidden Springs, our home in the mountains of western North Carolina, where we are doing our best to replace turf grass, and exotic shrubs and perennials with native vegetation.

The contradiction is in one of the techniques we use to stimulate growth among the natives. At Hidden Springs we compost a great amount of the remaining nonnative plant material to produce a rich and welcomed mix for the native plant gardens. We culture daylilies and hostas and layer their green leaves in with the brown leaves of our fall crop of oak, maple, poplar, and ash, and other species. We frequently get two crops of daylily blades. Depending on how celebratory we feel, we might harvest the flower stem, sans the seed heads, and tie them into shocks for use as decorations over the fall holidays.

Over the past decade we have used several different home-built composters (Figure 1) but the most successful to date has been a 115 gallon stationary bin composter, constructed primarily of recycled material and purchased from one of the big box stores (Figure 2). In addition to the layers of brown and green we also add unused plant material from the kitchen and the robust aquatic vegetation grown in the artificial pond in the garden adjacent to the Studio on the eastern side of our home (Figure 3).

By the way, unlike many of our neighbors, our tree leaves are a fall crop not a concern to be blown into piles with a noisy blower. Not only do the tree leaves enrich our compost but they also carpet the paths that wander throughout the gardens at Hidden Springs reducing unwanted vegetation that otherwise requires weeding (Figure 4).

Tom Baugh
Hidden Springs

Fig. 1



Fig. 2



Fig. 3



Fig. 4





Lady's Slippers of the Eastern United States



Jim Drake

This new 24 page booklet from Jim Drake covers eight taxa of Lady's Slippers of the Eastern United States. It contains lots of colorful photos including some that show flower structure.

Reasonably priced at \$7.50 plus 1.50 shipping.

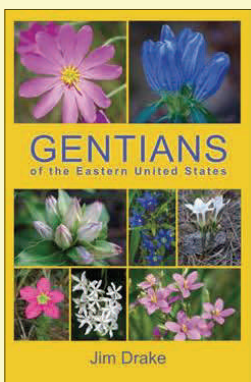
This book by author Jim Drake covers the family Gentianaceae occurring within the Eastern United States. It is possibly the most comprehensive text covering the vast range of genera within the family.

Jim has attempted to provide descriptions of all members of this family within his very broadly defined "eastern" U.S. Text descriptions along with ample photographs help the reader to understand and enjoy the range of wildflowers included within this diverse family.

\$24.95 plus shipping.

Add 6% sales tax only if buyer is in Georgia

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We are also selling a nice sized canvas tote bag, with forest green bottom and handles, that sports our logo on the front. A special deal for non-members is that included with the purchase of the \$15 totes is a one year free membership.

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