

TENNESSEE NATIVE PLANT SOCIETY

Volume 37, Number 3

September 2013



New Program to Promote Native Plant Gardening

TNPS is teaming up with the Chattanooga Arboretum and Nature Center (CA&NC) and the Tennessee Valley Wild Ones to establish a Certificate in Native Plants course of study. Patterned similarly to programs offered by the State Botanical Garden of Georgia and the Birmingham Botanical Garden, it will consist of a set of courses in botany, conservation, and plant communities, and native plant gardening.

The goal is to teach and promote native plant gardening. As Dennis Bishop, curator of the Chattanooga Arboretum and spearhead of the program puts it, "We want the students to take this stuff home and put it into practice in their communities. However, to do that the students need to first come to know our native plants and how they work in the natural world."

Courses in botany, plant conservation, plant communities, and designing with native plants will form the core curriculum. Electives will include a variety of classes, such as those on wildflowers (spring, summer, and fall), trees, shrubs, and bird and butterfly gardens. Field trips to local Chattanooga natural areas to see native plants in their communities, as well as to native plant gardens to show how native plants can be used in landscaping, are also in the works.

The New England Wildflower Society was the first to offer a Certification in Native Plants curriculum, more than 20 years ago. Like theirs, the TNPS-

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Annual Meeting on the Banks of Lake Barkley

An extra-full schedule of events has been organized for the TNPS Annual Meeting being held jointly this year with the Kentucky Native Plant Society.

The joint gathering will be September 20-22 at Lake Barkley State Park.

New to the schedule are two programs by Rita Venable, whose guide book to butterflies is scheduled to be published in October. Her programs, one at 10 a.m. and the other at 1 p.m. Saturday (Sept. 21), provide an option for members not joining the field trips.

The main field trip will be led by Tara Littlefield, rare plant botanist for the Kentucky State Nature Preserves Commission. The destination will be Mantle Rock/Livingston County Natural Area. The Mantle Rock Preserve is a project of the Nature Conservancy, which is working to restore this area to a healthy

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Veronicastrum virginicum (culver's root)

Photo by Bart Jones



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Meeting Schedule
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TNPS Newsletter

September 2013

Vol. 37, No. 3

This newsletter is a publication of the Tennessee Native Plant Society and is published four times a year, generally in February, June, August, and November.

The Tennessee Native Plant Society (TNPS) was founded in 1978. Its purposes are to assist in the exchange of information and encourage fellowship among Tennessee's botanists, both amateur and professional; to promote public education about Tennessee flora and wild plants in general; to provide, through publication of a newsletter or journal, a formal means of documenting information on Tennessee flora and of informing the public about wild plants; and to promote the protection and enhancement of Tennessee's wild plant communities.

Dues for each calendar year are:

Regular: \$20

Student: Complimentary

Institution: \$50

Life: \$250

Dues may be sent to:

Tennessee Native Plant Society

P.O. Box 159274

Nashville, TN 37215

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Please send comments or material for the newsletter to TNPS Newsletter, P.O. Box 856, Sewanee, TN 37375 or

lathamdavis@bellsouth.net

TNPS Website:

www.tnps.org/



A Letter from the President

The time for the Annual Meeting is fast approaching. Even though the deadline for pre-registration has passed, it doesn't mean you can't join us. If you'd still like to attend the meeting, just make your own room reservations at Lake Barkley. You will need to send your registration fee of \$15 to Lorie Emens at the address listed on the registration form, or bring it to the meeting. You will also need to arrange for your own lunch on Saturday. If you make your own reservations and plan to pay the fee at the meeting, please email Lorie at wildflowerlorie@gmail.com to let her know you plan to attend.

This is going to be a great meeting with wonderful talks and exciting field trips. In this edition of the newsletter you will also notice the design for a special T-shirt commemorating this meeting with the Kentucky Native Plant Society. I hope this will encourage you to send your registration, and if you plan to purchase a T-shirt, please include that information on the form along with the size shirt you would like. If you have already sent your form to Lorie Emens but would like to order a shirt, send a check for \$12 to Lorie and note the size on the memo line of the check.

Don't forget, we have a field trip before the Annual Meeting. September 7 is the date of the Lost Cove hike in Sewanee. Check the details on the website and Facebook. This trip will be quite interesting, so make plans to attend if you can.

It's hard to imagine that the year is beginning to wind down. It seems like just a few short weeks ago I was at the Spring Wildflower Pilgrimage. Now we are talking about fall displays of purple or golden composites and colorful autumn foliage. And before we know it, we will be planning next year's field trips. We need more field trip leaders. Those of us who lead multiple hikes each year quickly run out of new sites to visit and rely on new leaders to take the membership to unexplored (at least for us) places. If you know of a great place for us to have a field trip and would like to lead it, please let us know.

See you on the trail,

Bart

This is the illustration for the special T-shirt that is on sale to members attending the annual meeting, which is being held jointly with the Kentucky Native Plant Society at Lake Barkley. Additional information can be found in the schedule on page 3.



TNPS/KNPS Joint Meeting
Sept. 20-22, 2013

Annual Meeting Provides Exciting Schedule

—Continued

prairie. The rare glade habitat here is home to many species that can survive only in these endangered places.

The featured speakers will be Edward Chester on Friday evening and Ron Jones at Saturday evening.

Members are encouraged to check in and receive a name tag and T-shirt between 3 and 5 p.m. on Friday, September 20. A social hour is set to begin at 4 p.m., with dinner to be available between 5:00 and 7:00.

TNPS will hold a general membership meeting from 7:30 to 8:00.

Details of the schedule are listed below for easy reference. Drive safely.

Friday, Sept. 20

3:00-5:00 – Check In/Name Tag and Tshirt Pick Up

4:00-5:00 – Social Hour/Mixer

5:00-7:00 – Dinner

7:30-8:00 – TNPS General Membership Meeting

8:00-8:15 – Field Trip Info

8:15-9:30 – Dr. Edward Chester, “My Life and Times in the Big Barrens of Kentucky and Tennessee”

Saturday, Sept. 21

7:00-8:30 – Breakfast

9:00-4:00 – Field Trip (Box Lunches provided)

Mantle Rock/Livingston County Natural Area. Carpooling required.

<http://www.nps.gov/trte/historyculture/mantlerockpreserve.htm>

<http://naturepreserves.ky.gov/naturepreserves/Pages/newmansbluff.aspx>

10:00-11:00 – Rita Venable, “A Home for Butterflies”

1:00-2:00 – Rita Venable, “Butterflies of Tennessee”

4:30-6:00 – KNPS Board Meeting

5:00-7:00 – Dinner

7:00-7:20 – KNPS General Meeting

7:30-9:00 – Dr. Ron Jones, “Woody Plants of Kentucky and Tennessee, Current Status and Future Prospects in the Age of Climate Change”

Sunday, Sept. 22

7:00-8:30 – Breakfast/Check Out

9:00-10:00 – TNPS Board Meeting

10:00-1:00 – Field Trip

There is a \$15 registration fee for the meeting even if you have made your own room reservations, and not gone through Lorie Emens of TNPS. You will also be responsible for your own lunch on Saturday during the field trips.

T-shirts are \$12 and **MUST BE PRE-ORDERED**. If you have already registered or are handling your own reservations late, a check, with the size listed on the check, can be sent to:

Lorie Emens, 9705 Kingsbridge Cove, Lakeland, TN 38002.

TVC Releases New Legislative Scores

Tennessee Conservation Voters will be finalizing and distributing a comprehensive Legislative Scorecard in the next few weeks. But we already know that the adopted budget fully funds land acquisition for state parks, wetlands and agricultural conservation. And, for a change, two items passed specifically mentioning native plants. Senate Joint Resolution 111 and House Joint Resolution 132 are identical. Both put the legislature on record as urging the Tennessee Department of Environment & Conservation and the federal Office of Surface Mining Reclamation and Enforcement to work together

“with the purpose of studying the feasibility of reestablishing plant and animal species native to Tennessee’s coalfield areas. The goal of this cooperation shall be to encourage appropriate reclamation methods of coal mined lands in order to maximize the reestablishment of native species and to promote the environmental stewardship of reclamation.”

For further involvement and information contact Tennessee Conservation Voters <http://www.tnconservationvoters.org> or feel free to contact Michelle Haynes, TNPS representative to TCV.



Echinacea tennesseensis

The Needle for “Sewing” Seeds

Needle-grass (*Piptochaetium avenaceum*)

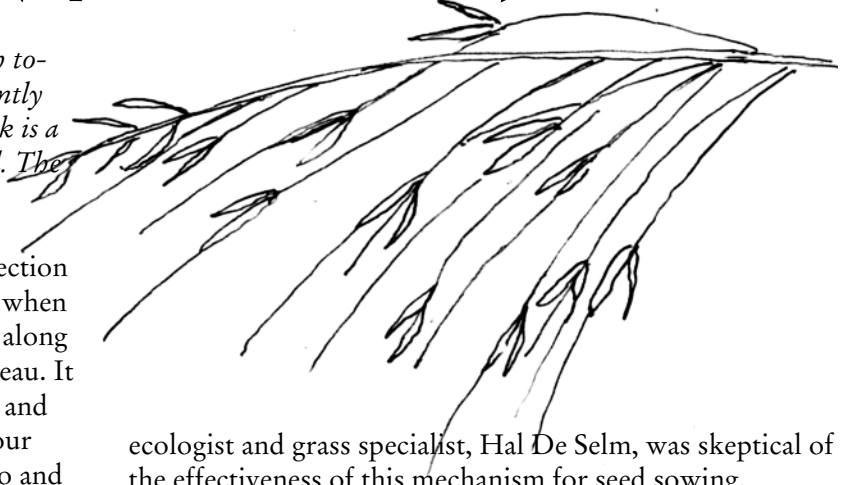
Larry Pounds and his son Ben Pounds spent a month together hiking the Cumberland Trail. They are currently writing a book about the experience. Part of the book is a series of short essays about plants seen along the trail. The following is one of those essays.

Finding needle-grass on the Signal Mountain Section of the CT (Cumberland Trail) should be easy when the needles are attached to the grass. It grows along the CT in the woodland openings on top of the plateau. It likes recently burned areas. The needles are striking and attaching, striking in appearance and attaching to your clothes. The needle is the grass’s seed. It is about two and a half inches long! If you stray off the path when the seeds are ready to disperse, you may find that the grass has found you even if you have not yet found it.

Oddly the sharp end of the needle is not the end that sticks out from the plant. Pick a needle from the grass and touch both ends to feel this fact. This arrangement would seem to make attachment to your clothes or the fur of animals trickier. Still, we found the grass did well at dispersing its seeds on our clothes.

There is another oddity about this grass. At the base of the needles are structures called awns that can twist and are hygroscopic. Hygroscopic means water absorbing but the important thing is that as the awns absorb water they untwist and as they dry they re-twist.

According to some authorities the twisting and un-twisting with different moisture levels helps the seed drill into the ground. The late University of Tennessee plant



ecologist and grass specialist, Hal De Selm, was skeptical of the effectiveness of this mechanism for seed sowing.

Someone could make a horror movie about a person swallowing a bunch of needle-grass seeds which then drill into their intestines. Veterinarians actually deal with something like this horror when grazing animals have the bad judgment to munch needle-grass. The needle seeds are clearly a problem when eaten. The problem may or may not be aggravated by twisting awns.

Needle-grass with needles attached gives novice grass students an easy chance to put a name on a grass. On Signal Mountain it often grows with another grass that is also reasonably easy to pick out. Downy oatgrass (*Danthonia sericea*) is usually about three feet tall with very hairy leaf sheaths. To find the sheaths look at the base of the leaves. The sheath is where the leaf wraps around the stem. So if you want to start learning grasses try looking for the needles of needle-grass and the hairy sheaths of downy oatgrass.



Epilogue

Also known as blackseed speargrass, needle grass, is native to the southeastern and northeastern U.S. in deciduous hardwood thickets and dry woods, rocky slopes and outcrops.

The same action mentioned above about the twisting of the awns that allow seeds to penetrate the soil is dangerous to animals if the “foxtails” enter the nostrils or ears (or even mouths), causing infection and, sometimes, death.

On the other hand, some researchers have determined that needle grass is a valuable food source. Drought tolerant, it is used in landscaping and in areas subject to erosion.

Your Ideas, Opinions Are Requested

TNPS was founded in 1978 by a small group of friends and acquaintances with a love of wildflowers and native plants, and in many ways this remains an informal group, but with a larger membership. Interests vary, however, for there are many ways to embrace the field of native plants. To help us all understand the breadth of interest among our members, we present here a survey. We would appreciate your participation. We hope to publish the results, which—who knows—might influence the direction of TNPS and the ways we share our passion for flora.

Mark one or more of the choices provided. You may cut out and return this page to the editor or email the answers. Elaborate on any of the questions. The editor's addresses are on page two. Thank you.

Which of the following special interests spur your fascination with wildflowers and other native flora:

- Taxonomy
- Physiology
- Ecology
- Art and Aesthetics
- Gardening and Propagation
- The Environment
- Other _____

What methods do you use to explore your interest in wildflowers?:

- Hikes and Field Trips
- Journaling
- Photography
- Reading
- Classes and Workshops
- Conversations with Friends

What kinds of material do you like most to read in the TNPS Newsletter?:

- General Articles about Plants and People
- Technical Articles about Species
- Field Trip Reports
- Material on Environmental Issues
- Letters from Members
- News of the Botanical World
- News about TNPS

Put another way, what would you like to see more of in the Newsletter?:

- 1.
- 2.

What other activities would help you enjoy your passion for wildflowers?:

- Workshops about Plant Identification
- Workshops about Native Plant Gardening
- Local TNPS Meetings with Members in Your Area
- Workshops on Photographing Plants
- Workshops on Drawing and Painting Native Plants
- Participation in a Native Plant Survey
- And Something Else? _____

If asked, how would you like to assist TNPS?:

- Write an Occasional Article for the Newsletter
- Lead a Field Trip in Your Area
- Serve on the Board of Directors
- Help Organize a Workshop or Conference
- Help with a Conservation Effort
- Make a Gift Toward a TNPS Project
- Or This _____



Stiff-haired sunflower (Helianthus hirsutus)

TNPS FIELD TRIPS



Photo by Bart Jones

Lythrum alatum (winged loosestrife)

Cane Creek Canyon Preserve, Alabama August 3, 2013

Eighteen TNPS members and visitors arrived at Cane Creek Canyon Preserve just south of Tusculum, Alabama on August 3 for our second outing there. After enjoying a wonderful, but cool, spring foray last year, we thought we would see what late summer held for us.

After a quick round of visits to the facilities, we hit the trail. The path to the waterfall held a few plants of interest including false flowering spurge (*Euphorbia pubentissima*) which the UT Herbarium site (unlike the USDA page) lists as a synonym of *E. corollata*, but looks VERY different. As we continued, we came to a wetter, open area where a few plants of yellow fringed orchid (*Platanthera ciliaris*) greeted us. Though fairly common in Tennessee, especially on the Cumberland Plateau, this plant is rare in Alabama. No matter, it is always a crowd-pleaser and was a very cooperative subject for many cameras. Other plants in this spot were round-leaved thoroughwort (*Eupatorium rotundifolium*), boneset (*E. perfoliatum*), royal fern (*Osmunda regalis*), and rough goldenrod (*Solidago rugosa*). A small barren area was adjacent and added Loomis' mountain-mint (*Pycnanthemum*

loomisii), milk pea (*Galactia volubilis*), three species of false foxgloves (*Aureolaria flava*, *A. pectinata*, and *A. virginica*), and winged loosestrife (*Lythrum alatum*).

As we entered the woodland trail that led to Cane Creek, we were quickly surrounded by thickets of giant cane (*Arundinaria gigantea*) and the yellow flowers of southern rosinweed (*Silphium asteriscus*) and woodland sunflower (*Helianthus divaricatus*) dotted the edge of the trail. On almost every clump of these flowers at least one Lace-winged Roadside-Skipper butterfly was intently imbibing on nectar. This butterfly is usually uncommon, but due to the abundance of its host plant, giant cane, it was atypically common here.

Once at the creek, we quickly arrived at the first of the Alabama warbonnet (*Jamesianthus alabamense*) plants. Unfortunately with the crazy cool spring and summer we've had, there were no flowers, just a few buds. So on to the picnic pavilion where we enjoyed our lunch. Just as we were finishing, the roar of approaching rain was heard. Luckily, the pavilion provided perfect shelter for the short-lived shower.

We continued on to an area where the exposed limestone along the creek generated some small glade-like areas. These were ablaze with flowers and accompanying butterflies. The standout here was culver's root (*Veronicastrum virginicum*) that towered above the other species that included purple coneflower (*Echinacea purpurea*), whorled rosinweed (*Silphium trifoliatum* var. *latifolium*), small-headed sunflower (*Helianthus microcephalus*), dense blazingstar (*Liatris spicata*), rattlesnake master (*Eryngium yuccifolium*), and cutleaf prairie dock (*Silphium pinnatifidum*) though not in bloom. At the farthest pocket of the glades, I found a Golden Banded-Skipper in the clutches of a crab spider. This is a rare butterfly in the eastern US and was a county record.



Liatris spicata (spiked blazingstar)

Another hoped-for highlight for this field trip was the extremely rare butterfly, swamp metalmark, discovered here a couple of years ago and disjunct from the nearest populations by several hundred miles. Again the cool year bit us, as there were no adults, but we did find several caterpillars feeding on its host plant, tall

TNPS FIELD TRIPS

thistle (*Cirsium altissimum*). The area where they are found is an old beaver pond and several species that like moist conditions were found here including bear's foot (*Smallanthus uvedalius*) and green-headed coneflower (*Rudbeckia laciniata*). A few in the group went into the woods to see the butternut trees (*Juglans cinerea*) while the rest of us went back.

Many thanks go to Jim and Faye Lacefield who always welcome us with their wonderful hospitality. I'm sure this is not our last visit to Cane Creek Canyon.



Bart Jones

TNPS group on August field trip at Cane Creek Canyon, Alabama

Photo by Bart Jones

A New and Colorful Guide for Winter Sojourns

If you enjoy hiking the open woods of winter and find yourself trying to identify the plants around you, without blossoms and leaves but from the more subtle barks and twigs, you should try this new arrival — new, that is, come October.

Woody Plants of Kentucky and Tennessee, the Complete Winter Guide to Their Identification and Use will come to us from Ron Jones and Eugene Wofford, both familiar names to most TNPS members. The book will feature color images of more than 400 species, and will provide keys to the genera and species, as well as descriptions of the genera.

Each species entry will include information on Latin meanings, common names, habitats and distributions, and additional relevant notes. Whether taken into the field or enjoyed at home, *Woody Plants of Kentucky and Tennessee* promises to be a comprehensive and accessible resource for professional and amateur botanists, students, landscapers, homeowners, and outdoor enthusiasts.

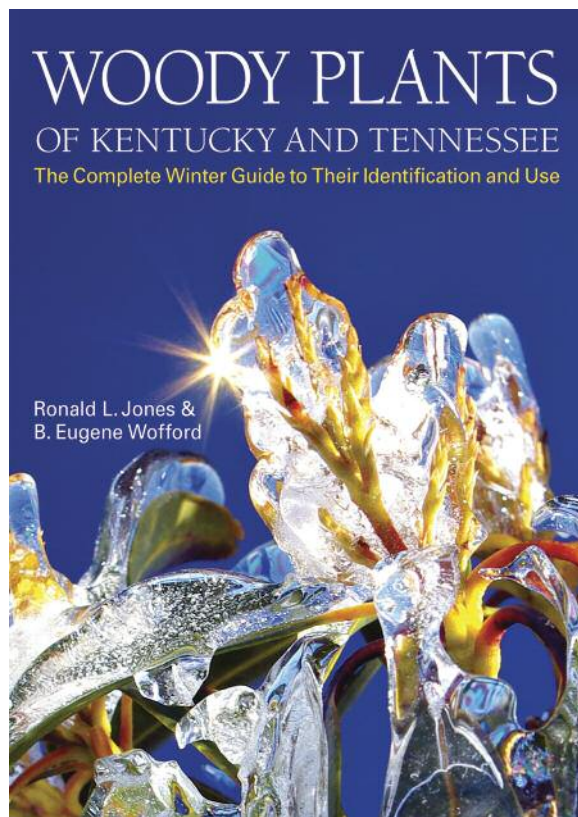
Eugene Wofford is research professor and director of the herbarium at the University of Tennessee. He is the author of *Guide to the Vascular Plants of the Blue Ridge* and coauthor of *Guide to Trees, Shrubs, and Woody Vines of Tennessee*. He lives in Knoxville.

Ron Jones is founding professor of biological sciences and curator of the herbarium at Eastern Kentucky Univer-

sity. He is the author of *Plant Life of Kentucky* and lives in Richmond, Kentucky.

TNPS has contributed to the book's publication by the University of Kentucky Press.

224 pages, 630 color photos, two maps, 7 x 10, \$45



Native Plant Program — Continued

CA&NC program will emphasize hands-on learning, and participants will proceed through the courses at their own pace.

The cost per class is still being worked out, but it will be in the range of \$10 per hour of instruction. Eight-hour core classes would be \$80 per student; four-hour electives and field trips \$40.

“This collaborative venture is a first for TNPS and for Tennessee. We're thrilled to be partnering with these two great organizations in what promises to be a worthwhile program of study,” commented TNPS president Bart Jones.

Mary Priestley is representing TNPS on the planning committee. For more information, contact Mary marypriestley@bellsouth.net or Dennis Bishop dbishop@chattanooga.org. If all goes according to plan, the first classes will be offered in January of 2014. Look for details soon on the CA&NC website <http://www.chattanooga.org>, or on our website at www.tnps.org.



Photo by Bart Jones

Platanthera ciliaris (yellow fringed orchid)

Check Your Dues Date?

Check your mailing label—the year through which you have paid dues is printed at the top. If the date's 2012 or 2011, please send a check promptly to Darel Hess, our treasurer. TNPS, P.O. Box 159274, Nashville, TN 37215.

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