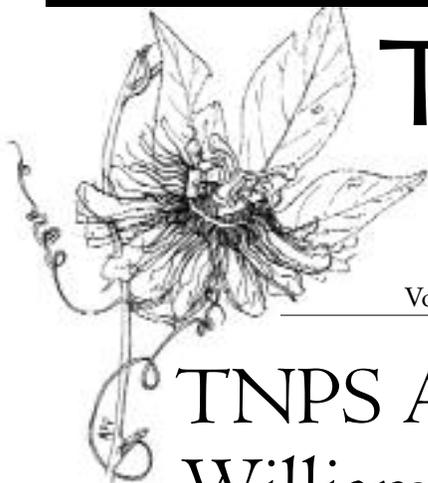


TENNESSEE NATIVE PLANT SOCIETY

Volume 38, Number 3

October 2014



TNPS Awards to Kathleen Williams and Hal DeSelm

A weekend of programs, awards, and a field trip to May Prairie were part of the TNPS annual meeting Sept. 19-20 at Beersheba Springs, which is situated at the edge of Savage Gulf State Natural Area.

During the membership meeting, Kathleen Williams, executive director of Tennessee Parks and Greenways Foundation, was named recipient of the 2014 TNPS Conservation Award. The late Hal DeSelm, professor emeritus of botany at the University of Tennessee and long-time TNPS member, was inducted into the Botanist Hall of Fame. (See more complete information in this issue.)

A roster of nominees for TNPS offices and the board of directors was announced, with the election process to be completed by the end of the year. (See complete story in this issue.)

On the opening night of the gathering, Aaron Floden, representing the University of Tennessee Herbarium, presented an outstanding program on trillium species.

The second night's program was given by Heather Slayton, a forest health unit leader, who gave a lively presentation, with illustrations, about the hemlock woolly adelgid.

The hemlock adelgid has devastated whole populations of eastern hemlocks across the Appalachians and is invading the Cumberland Plateau,



Kathleen Williams, winner of this year's Conservation Award, admires the view at Pogue Creek Canyon.

Continued on back page

Nominees Named for Officer and Board Terms

Susan Sweetser, a long-time TNPS member, has been nominated to replace retiring Bart Jones, who is closing out a four-year tenure as president of the society.

Sweetser is leading a slate of nominees toward two-year terms beginning in January.

Other nominees include Todd Crabtree, vice-president; Lorie Emens, treasurer; and Margie Hunter, who continues as secretary. Nominees for three positions on the board of directors are Dennis Horn, Larry Pounds, and a new face among the leaders, Louise Gregory.

Lorie Emens, a horticulturalist from the Memphis area, moves up from the board into the treasurer's position, replacing Darel Hess, who has managed the books with precision since 2010.

The slate of nominees was presented at September's annual meeting. Additional nominees may be made but only under strict requirements of the TNPS By-Laws. (See requirements on page 4.)

Susan and her husband Allen joined TNPS at the Great Smoky Mountains Wildflower Pilgrimage

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TNPS Newsletter

October 2014

Vol. 38, 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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Todd Crabtree, Vice-President

Margie Hunter, Secretary

Darel Hess, Treasurer

Directors

Bertha Chrietzburg

Lorie Emens

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Dennis Horn

Larry Pounds

Susan Sweetser

Latham Davis, Editor

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TNPS Website:
www.tnps.org/



A Letter from the President

Having just returned home from our annual membership meeting in Beer-sheba Springs, I still reflect back on the previous year's accomplishments with a sense of satisfaction and pride, not as an individual, but as part of a wonderful organization composed of hundreds of amazing people who care about the plants and natural heritage of Tennessee.

As my time as president comes to a close, I can't help but to look back over the past four years in the same way. It was with great trepidation that I accepted the office. As a member of the board of directors and then as secretary, I had seen up close the fantastic job each of my predecessors had done.

Jane Norris had steered the society through the travails of the early years of the wildflower field guide when everything seemed to be critically important and problems weighed so heavily. Just as it seemed the book might never make it to a publisher, Karl Heinzman provided the know-how and confidence to make it happen.

When Mary Priestley assumed the presidency, I'm sure she felt many of the things I did. She took over as the society shifted its focus from the field guide. Mary took the opportunity of a book in hand to bring attention to TNPS like never before. Her efforts resulted in a surge of new memberships and publicity for the group on TV and in print.

So what was I going to do? First, I was going to make sure that I listened to our members. I was so lucky to have a board that could provide great ideas. One of the hallmarks of my four years is the creation of the TNPS Botanical Hall of Fame, an idea proposed by Latham Davis. I also wanted to provide support for local conservation groups that often struggle financially, but do tremendous work with little. These organizations are often overshadowed by larger national groups but are the epitome of the oft-quoted saying, "think globally, act locally" and I hope that's what we've done. These two objectives coordinate with an initiative of Mary's, the TNPS Conservation Award.

I'm also very proud of the work we've done in supporting other books in the past year. *The Woody Plants of Kentucky and Tennessee: The Complete Winter Guide to Their Identification and Uses* by Ron Jones and Eugene Wofford, Rita Venable's *Butterflies of Tennessee, Field and Garden*, as well as the upcoming *Manual of the Vascular Flora of Tennessee* are all excellent examples of projects that TNPS has supported to further the public's natural history education. TNPS and many of our members have contributed to another educational project, the Tennessee Naturalist Program, that I hope will become as synonymous with citizen scientists as the Master Gardener Program is with horticulture. As I step away, it is this that I wish to be the epitaph of my presidency, that TNPS made great strides in educating the public to the beauty of Tennessee's natural communities.



Southern prairie aster (*Eurybia hemispherica*)

photo by Bart Jones

President's Letter – continued

Now it is time for a new president to assume the mantle of leadership. Thanks to the efforts of the nominating committee the following slate of officers and directors are put before the membership for election:

President— Susan Sweetser
 Vice-President— Todd Crabtree
 Treasurer— Lorie Emens
 Secretary— Margie Hunter
 Directors— Dennis Horn, Larry Pounds, and Louise Gregory

As in the past, these nominees will be elected on January 1 unless there are other names placed in nomination. If you would like to nominate someone else or place your name for consideration, please let us know as soon as possible. A new list of nominees would then be presented before the membership, and a vote would take place to determine the new officials.

It is also my pleasure to announce this year's honorees for the awards I mentioned earlier in this article. In June, the Board met and agreed to grant \$500 to the Tennessee Parks and Greenways Foundation to support the great work they do in securing land and money to insure that future generations of Tennesseans will be able to enjoy the abundant natural beauty of our state. When discussing all that TPGF is doing and has accomplished, there was a consensus that their executive director,

Kathleen Williams, would be a natural choice for the TNPS Conservation Award, so the Board voted to give the award to her.

Finally, we turned our attention to the 2014 class of the TNPS Botanical Hall of Fame. Two nominees were discussed at length, after which the decision was made to honor Dr. Hal DeSelm. There are short biographies of

both winners in this issue of the newsletter that will make it clear why these people and the organization are worthy recipients of their respective awards.

Finally, even though the society is in good shape financially, we did experience a significant drop in membership dues this past year. This is my fault in large part as I failed to send reminder notices to those in arrears. If you receive the print form of the newsletter and it shows a date earlier than 2014, please take this time to renew. If you receive the electronic version, I will be sending emails to those members who need to catch up. The membership log will be edited at the end of the year, so don't hesitate in sending in your dues. And again, accept my apologies for failing to notify you sooner.

See you on the trail.

Bart



Blue Mistflower (Conoclinium coelestinum)

photo by Bart Jones

Kathleen Williams: Energetic, Dedicated Conservationist

When Kathleen Williams was selected for the TNPS Conservation Award, it seemed to be a surprise, mainly because she had been overlooked for so long.

The board of directors had just voted to give \$500 to Tennessee Parks and Greenways Foundation for its work to protect plant ecosystems. Suddenly members were able to recall that it was Williams who had been the force behind that organization for all of its 17 years.

Under her leadership, TennGreen, as it's also known, has protected more than 15,000 acres of forested land through acquisition and conservation easements and has saved more than 40 natural treasures across the state.

Its mission has been to protect Tennessee's natural treasures and to create a network of parks, greenways, and wildlife areas. Several innovative programs have been started. Under one such initiative, grants totaling \$315,000 have helped nonprofit groups begin or improve greenway/blueway projects.

Previously, Kathleen was executive director of the Tennessee Recreation and Parks Association and helped establish permanent dedicated funding for land acquisition through the Tennessee Real Estate Transfer Fund. Then after the fund was eliminated, Kathleen organized a successful state-wide effort to restore more than \$16 million in annual funding to conservation.

Kathleen has received awards from many other organizations, including Tennessee Trails Association, the Sierra Club, and the National Wildlife Federation. More information about TennGreen may be found at www.tenngreen.org.

DeSelm's Research and Life a Treasure

Hal DeSelm, for 33 years a member of the botany department and ecology program at the University of Tennessee and a long-time member of this society, has been inducted into the TNPS Botanist Hall of Fame.

Professor DeSelm is not being honored simply for his service to the university and to his students, though that is exceptional. TNPS wants to recognize his extensive study and documentation of plant communities throughout the state.

His colleagues at the University of Tennessee note that before his death in July 2011, Professor DeSelm "compiled the most comprehensive sample of the natural vegetation communities of Tennessee in existence. As a distinguished conservation biologist and professor of botany and ecology . . . he was responsible for the conservation of some of Tennessee's rarest ecosystems. . . . He sampled over 3,000 sites, primarily in old growth forests, but also in wetlands, floodplains, barrens, and glades.

"He catalogued many reference sites that no longer exist in their natural state. Remarkably, this work was largely funded by Dr. DeSelm and his wife. . . . It was a labor of love. These data are a treasure to the state of Tennessee, as was he." (Tree Improvement Program, DeSelm Papers: treeimprovement.utk.edu)

DeSelm envisioned using his data to compose a book, "The Natural Terrestrial Vegetation of Tennessee," but his death kept him from realizing his dream. A plan has been developed to organize the data and to prepare for publication. Funding is being sought.

More information is available at the website www.treeimprovement.utk.edu

Veterans and Newcomer Among Nominees

—Continued

in the mid-'80s. Their home then, as now, was a 16-acre tract of limestone ridge tops, north-facing slopes, and a floodplain that all support several different plant communities. It was a near-perfect classroom for a growing interest in botany.

"The first wildflower we learned was the bloodroot, and we've been learning ever since," Susan said. "Our early plant mentors were Ed Schell, Tom Patrick, and Dennis Horn. We spent many hours on the trail with these plant experts. One of the best things about TNPS is learning something on every trip."

Once only novice participants in the Wildflower Pilgrimage, both Susan and Allen are now hike leaders for the Pilgrimage. They have also participated in fern forays as a part of the Smokies Discover Life in America.

A board member for many seasons, Susan has also served as treasurer.

Board Nominees

Dennis Horn and Larry Pounds have been nominated to continue to serve on the board of directors. Louise Gregory has been nominated to replace Lorie Emens, who jumps to the treasurer's job.

Louise joined TNPS in 2006. It was the occasion, she remembers, when she bought a copy of the TNPS wildflower book at a lawn and garden show in Decatur County where she lives. She was inspired to join walks with Bart Jones.

"TNPS has opened up a new world to me—plants, geography, geology, and people," she said. "Most of the people I now count as friends and look forward to seeing on walks and at the annual meeting would not be in my world without TNPS."

In 2007 Louise retired from teaching high school algebra and geometry, though she continued to substitute for five more years. She has been married for 50 years to Joe Gregory. Her children, Richard and Julianna (who is a TNPS member), both teach at the college level.

Dennis Horn, retired and at home in Tullahoma, is a premier taxonomist despite his "amateur" status. Among the founders of TNPS, Dennis is said to harbor a complete collection of society newsletters.

Larry Pounds is a botanical consultant with a Ph.D. in plant ecology and specializes in rare plants and habitats. He and his son have worked together on plant inventories along the new Cumberland Trail.

Both Dennis and Larry are veteran hike guides for the Smoky Mountains Wildflower Pilgrimage.

How the Election Process is Completed

Under TNPS By-Laws, all nominees will automatically begin their terms in January unless additional nominees are forthcoming.

Any eligible member may be nominated to the board of directors by written petition of not less than ten members, received by the chair of the nominating committee within three weeks of publication of this issue of the newsletter. Therefore, if you would like to make a nomination, contact Susan Sweetser immediately at ssretire@yahoo.com. Nominations must be accompanied by the written consent of the nominee to be a candidate and to serve if elected.

TNPS FIELD TRIPS



Photo by Dr. David Hill

May Prairie, TNPS Annual Meeting September 20, 2014

This trip took us to May Prairie, a 346-acre natural area in Coffee County. The prairie is an open grassland community surrounded by oak forest. The forest formed the headwaters of the prairie tributary before it was drained for agricultural use. Recent restoration work seeks to return the prairie tributary to a more normal location and flow. A major restoration challenge is to prevent woody species from encroaching any further into the prairie, even pushing back the forest to reclaim lost prairie.

Grasses and sunflowers of many species were abundant during our visit. The soil seed bank has repopulated the prairie with a rich variety of native plants with more likely to be seen in the future. Some are disjunct from their original populations along the coast or the mid-western prairies. May Prairie is a beautiful place to visit with the springtime offering a completely different view of the prairie species.

Karen Ripple

Flat Creek Trail, Great Smoky Mountains August 23, 2014

We couldn't have picked a better day to be in the mountains. It was in the '90s close by but we had cool temperatures and no rain all day. Our group consisted of several folks from West Tennessee—Louise, David, Tobie, and Bettina; Nita and Donna from Clarksville; locals Juliana, Larry, Judy, Carolyn, Bruce and the Sweetsers. The long distance award goes to Harland from Massachusetts.

We were followed along the trail by white snakeroot (*Ageratina altissima*) with many sightings of Indian pipe/ghost plant (*Monotropa uniflora*). We did find pink turtlehead (*Chelone lyonii*) and scarlet bee balm (*Monarda didyma*) in bloom. In other wet areas along Flat Creek, we saw swamp or rough leaved goldenrod (*Solidago patula*). The fly poison (*Amianthium muscitoxicum*) was in abundance but only in fruit. Small flower or Appalachian bunch flower (*Melanthium parviflora*) traveled along the trail and was a first for many folks.

Ferns were along the entire trail and the most unusual was silvery glade fern (*Deparia acrostichoides*). Showy stands of cut-leaf coneflower (*Rudbeckia laciniata*) also kept us company as we walked down the trail. Some of us added a boost to our senses by smelling crushed ramp (*Alium tricoccum*) seeds and chewing sorrel leaves.

Several people left Balsam Mountain via the 29 mile one-way road to Cherokee. Allen and I camped and took the road out Sunday a.m. A few of the plants we saw were Rugel's ragwort (*Rugelia nudicaulis*), a Smoky Mountains endemic and Steele's Joe Pye weed (*Eutrochium steelei*). If you haven't ever driven this road, it is a botanical treasure.

Susan Sweetser



Todd Crabtree, right, Tennessee state botanist, guides members into the open areas of May Prairie, during the annual-meeting weekend.

Photo by Dr. David Hill

TNPS FIELD TRIPS

Flat Rock Cedar Glade and Barrens Natural Area September 6, 2014

This natural area contains a variety of habitats including forests, glades and barrens. There are even a few sinkholes that harbor plants that favor a cooler environment.

As we hiked the trail we observed a sampling of these habitats and the plants that grow there. The most extreme sites are in the center of the limestone glades. These areas of mostly bare rock have pockets of thin soil that support a few species that are adapted to the harsh conditions. Some plants germinate from seeds, grow and produce a new generation of seeds before the dry weather arrives at the end of summer. Soon after this the plants begin to



Allium cernuum

Todd Crabtree

wither and die, completing their life cycle in a few months. One of these annuals is poverty grass (*Sporobolus vaginiflorus*).

We saw numerous plants carpeting the gravel portions of the glades and some were growing as small tufts in the bedrock where bits of soil had accumulated in small depressions. Glade heliotrope (*Heliotropium tenellum*) also occurs in the dry gravel of the open glades. Missouri

primrose (*Oenothera macrocarpa*) needs a deeper soil but still grows in the glades and we saw plants with numerous fruits.

There is a nodding onion in middle Tennessee that is found in many limestone glades. It differs from *Allium cernuum* but that is what we must call it until further investigations determine its proper taxonomic placement and identity. We saw these plants at their most floriferous and they are striking when in full flower.

Price's aster (*Symphyotrichum priceae*) isn't rare and can be quite abundant along the edges of glades. It is usually light lavender colored but the petals can vary to almost white. At the time of our trip it was in the early stages of flowering.

We saw other plants characteristic of barrens where deeper soils allow them to survive and reproduce. Ontario blazing star (*Liatris cylindracea*) was flowering nicely alongside Gattinger's goldenrod (*Solidago gattingeri*). Northern slender ladies' tresses (*Spiranthes lacera* var. *gracilis*) was scattered in the barrens at several points near the trail. This plant is attractive but even more so when viewed through a 10x hand

lens. The tiny flowers look like they are made of crystalline sugar. (See photo on page eight.)

When we were making our way back to the trailhead through the forest we saw a native bean. Thicket bean (*Phaseolus polystachios*) is closely related to the pole beans that we grow in our home gardens. It is a perennial and grows in open woods or at the edge of a forest. The plants we saw were no longer flowering but had produced several beans.

The preceding months of normal amounts of rain led to more robust and floriferous plants in the glades and barrens. The following list includes most of the species we observed and most were in flower.

Todd Crabtree

PARTIAL FLAT ROCK PLANT LIST

Aureolaria flava
Symphyotrichum priceae
Cassia fascicularis
Rudbeckia triloba var. *triloba*
Kuhnia eupatorioides
Liatris cylindracea
Solidago gattingeri
Sida elliotii
Dasystema macrophylla
Spiranthes lacera var. *gracilis*
Asterella tenella (a liverwort)
Mecardonia acuminata
Allium cernuum
Heliotropium tenellum
Strophostyles umbellata
Asclepias verticillata
Lobelia appendiculata var. *gattingeri*
Liatris aspera
Desmodium ciliare
Scleria verticillata
Helenium autumnale
Samolus valerandi ssp. *parviflorus*
Silphium pinnatifidum
Sporobolus heterolepis
Callicarpa americana
Phaseolus polystachios
Saccharum alopecuroides
Glandularia canadensis
Centaurea beibersteinii (an invasive)
Sporobolus vaginiflorus

TNPS FIELD TRIPS

Sweetser Ranch
September 13, 2014

Participating: 18 humans, one dog.

We were the guests of Allen, Susan, and Lacie Sweetser on the Sweetser's property in the ridge and valley region near Powell, Tennessee. We had perfect weather for our walk.

After a short detour to see ginseng in fruit (a rescue), we started out with a walk through the woods, where we saw Appalachian bugbane (*Cimicifuga rubifolia*) and *Prenanthes crepidinea*, two rare plants. Susan demonstrated the use of Chinese yam vine (*Dioscorea polystachya*) fruits to make artificial warts, very useful with Halloween coming up!

We proceeded into a field along the creek bottom, where we encountered a number of late summer composites, including



Rugel's ragwort as found on the Heintooga Ridge Road during Sweetser trip to Flat Creek

wheat vine (*Polygonum scandens*).

Then we crossed the field for one of the highlights of the hike, a huge patch of about 30 to 40 *Spiranthes odorata*, another rare plant. After that treat we proceeded back to the house for lunch, chicken salad sandwiches and Susan's sinful chocolate mint covered Oreos. Allen and Susan gave us a tour of the house and told us what it's like to live off the grid (laundry appears to be the most problematic thing).

After a brief postprandial rest we climbed one of the Sweetser's own personal mountains to see more plants. One of the highlights of the day was all the goldenrods: we



Michelle Haynes, Susan Sweetser, and Bettina Ault exploring the Sweetser ranch.

counted seven species (*Solidago caesia*, *S. erecta*, *S. ulmifolia*, *S. sphacelata*, *S. canadensis*, *S. nemoralis*, and *S. speciosa*).

On the top of the ridge we found a large patch of pine-sap (*Monotropa hypopithys*) and several striped gentian plants (*Gentiana villosa*). We also found a small patch of St. Andrew's cross (*Hypericum stragulum*). Allen showed us three of the four *Commelina* species in Tennessee, *C. communis* (two blue and one white petal), *C. virginiana* (three blue petals), and *C. diffusa* (three small blue petals).

We followed a Sweetser-made trail down the other side of the ridge and walked back through the woods, where we had a chance to see the results of a "geological happening": a Volkswagon-sized chunk of rock that fell off the dolomitic limestone cliff on February 20, 1986.

Back at the house we relaxed for a few minutes before heading back to our respective homes. Many thanks to the Sweetser's for an enjoyable day!

Bettina Ault

Annual Meeting — Continued

which is the western limit of the hemlock's range. The loss of hemlocks in the Appalachians throughout the eastern states has meant the loss of the complex ecosystems associated with these coniferous giants.

Brought into the U.S. on nursery stock from Asia, the tiny adelgid has no natural enemies, and hemlocks are at its mercy. Systemic insecticides are effective and are being used selectively in national and state parks and forests, as well as by private landowners. However, the insecticides are effective for only a few years with each application and their use is not economically feasible over wide areas.

Laboratories are also experimenting with the introduction of beetles that are natural predators of the hemlock adelgid. These may prove to be a long-term solution, though they too are an exotic species.

Heather Slayton recommended the website protecttnforests.org for answers to other questions about the hemlock adelgid and other pests.

Both programs were arranged by Todd Crabtree.



Todd Crabtree

Spiranthes lacera var gracilis photographed at the Flat Rock Cedar Glades and Barrens State Natural Area.

Check Your Dues Date, and Checkout the TNPS Website

You can renew your membership online quickly and easily at www.tnps.org. While you are there, check out other nice features of the website. Newsletter issues are also available online in color, and you can ask for your own copy by email.

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