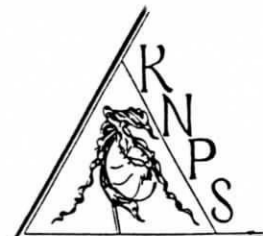


The Lady-Slipper

The Official Newsletter of the Kentucky Native Plant Society



Volume 11, Number 4

November 1996

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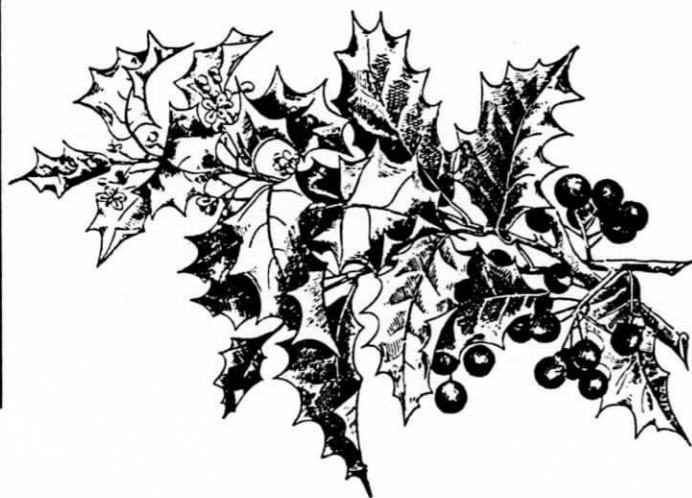
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President's Message

David A. Eakin

Well, here we are - enjoying nature's last glorious burst of beauty before the apparent winter death! Soon we will be reflecting fondly on the walks and talks of this year's growing season, from mountain majesty, to the wetlands, to the western remnant prairies. And on that note, a debt of thanks to our very efficient friend, Clara Wieland, for her excellent coordination of the KNPS field trips!

Even as nature prepares for overwintering, we have begun the process of planning for next year's activities. We had an excellent Strategic Planning Session at Maywoods, although there were several who wished to participate but were hindered by previous personal obligations. I would like to thank my wife, Darlene, for sharing her twenty years of expertise in long range strategic planning and association management with the workshop participants. As a member of KNPS, she shares our mutual desire to advocate the preservation, restoration and protection of Kentucky's unique heritage of biodiversity. Acting as facilitator, she helped us generate a very productive planning session. I can't give you the details at present, but the results are being reviewed by the Board prior to final approval. I would also like to thank the participants for their active role in assessing the goals and expectations of the KNPS. Each made considerable personal sacrifice to be able to attend.



So, while you are perfecting your capacity to stave off cabin fever, be assured that your Board will be not be inactive. With the Spring, we anticipate the unfolding and activation of an exciting strategic plan to forward the goals of the Kentucky Native Plant Society. Until then, I wish you an enjoyable holiday season!

Sincerely,

Dave Eakin

David Eakin may be reached at Biological Sciences Department, Eastern Kentucky University (606) 622-2258.



An open letter to the board and membership of the Kentucky Native Plant Society...

Dear Wilson Francis, David Eakin and Members of the Kentucky Native Plant Society,

Thank you for your financial support in helping sponsor the symposium on "The Impact of Exotic Plants on Kentucky's Biodiversity," this past October. Your sponsorship enabled us to invite several leading experts in the field to share their knowledge of exotic plants both on a national and global scale. With 84 attendees, we met

our first goal which was to raise public awareness on this important issue. From the interest shown we are planning the next phase which is to publish a list of Kentucky's most troublesome exotic species and to develop "Weed Alerts." We also will be working to strengthen existing weed laws.

We hope the Kentucky Native Plant Society will continue to be a partner in our efforts to protect Kentucky's biodiversity.

Sincerely,

Conference Steering Committee:

Patricia D. Haragan, Vice-President KNPS

Joyce Bender, Kentucky State Nature Preserves Commission

Clara Wieland, Kentucky Native Plant Society



Winter Conferences 1997

Meetings of Interest to Kentucky Native Plant Society Members...

1997 Midwestern Rare Plant Conference

The Missouri Botanical Garden and the Center for Plant Conservation will host the first Midwestern Rare Plant Conference and Task Force meeting February 19-21, 1997 at the Missouri Botanical Garden in St. Louis.

The conference will address topics on research and management of rare plants in Missouri, Arkansas, Illinois, Indiana, Kentucky, Tennessee and surrounding areas.

For more information and registration materials contact:

Dr. Kayri Havens
Rare Plant Conference, Missouri Botanical
Garden, P.O. Box 299, St. Louis, MO 63166
Tel: (314) 577-9487
Fax: (314) 577-9465
e-mail: havens@mobot.org

1997 Landscaping for Biodiversity Conference:

Birds, Butterflies and Black- Eyed Susans Right in Your Own Backyard

Are you interested in observing wildlife in your backyard, in developing an outdoor classroom, or are you concerned about the loss of wildlife habitat because of urbanization? Do you care about the quality of life in our urban environments for all people? If you answered yes to any of these questions, this conference is for you.

This conference is designed to meet the information needs of a wide variety of audiences with the shared desire to make their property more "wild" and attract wildlife and protect biodiversity.

We welcome you to this conference to hear from nationally recognized speakers discussing topics important to all of us. For example, Dr. Charles Covell from the University of Louisville, author of "A Field Guide to the Eastern Moths," will speak on Gardening for Moths, and Neil Diboll from Prairie Nursery, will speak on the re-establishment of prairies.

Biodiversity has become the ecological buzzword of the 1990's. Agriculture, forestry, and strip mining have greatly impacted wildlands and biodiversity throughout Kentucky. Urban and industrial development also impact wildlands and the biodiversity of Kentucky. However, urban development does not have to destroy all the wildlife habitat values of the land. This conference will provide up-to-date information from national specialists on a variety of topics including conservation planning and home landscaping for wildlife.

The conference will be held at the Marriott Griffin Gate Resort in Lexington, Kentucky on January 21-24, 1997. Preregistration for the conference is \$30, if paid before January 1, 1997; registration at the door is \$75. For the banquet alone with keynote speaker Ken Druse, the cost is \$25.00.

For more information please contact Dr. Tom Barnes, Department of Forestry, University of Kentucky, Lexington, Ky 40546-0073, phone (606) 257-8633; fax (606) 323-1031; e-mail tbarnes@ca.uky.edu.





📖 **Book Announcement:**

Invasive Plants: Weeds of the Global Garden

From the most serious and widespread invasives to those that are problematic in geographically limited areas, **Invasive Plants: Weeds of the Global Garden**, covers the non-native plants that are driving out indigenous species and, in the worst cases, radically altering native ecosystems throughout North America.

The core of this brand-new handbook - the first of its kind- is an encyclopedia of scores of invasives used horticulturally. They include the most widespread invasive plants, such as purple loosestrife; others such as baby's breath, *Gypsophila paniculata*, which are problems in a limited area - in this case, the Great Lakes dune systems; and still others that are only slightly invasive right now but pose potential threats for the future.

Written by many of the country's

leading weed experts, (including KNPS Vice-President Pat Haragan), scientists and natural area managers in twenty states and the District of Columbia, this groundbreaking guide:

- ✓helps identify invasives in every region with color photos & detailed descriptions
- ✓covers their ecological impacts
- ✓explains how best to control them

This 112 page book is available for \$7.95 plus \$3.75 for postage & handling from: Brooklyn Botanic Garden, 1000 Washington Avenue, Brooklyn, NY 11225



Pat's Weed Patch

Pat Haragan

**Tree-of-Heaven**

Tree-of-Heaven (*Ailanthus altissima*) is a small to medium sized tree that readily establishes itself in disturbed sites such as roadsides, fence rows, railroads, vacant city lots and open forested areas. It is an aggressive woody plant that is considered by many botanists to be one of the most troublesome species found throughout Kentucky.

This rapidly growing tree has compound leaves that are odd pinnate with 11-25 narrow leaflets and the crushed leaves and branchlets are foul smelling. The small greenish-yellow flowers open in June and July and are produced in clusters at the ends of the branches. The winged greenish-tan to bright red fruits are slightly curled and twirl through the air often traveling great distances from the parent plant. It has been observed that one tree may produce as many as 350,000 seeds per year. It also spreads by basal suckers.

Tree-of-heaven is native to eastern Asia and was imported into the United States in 1784 by a Philadelphia gardener. Since then, it has escaped from cultivation and has

spread throughout the eastern half of the country and is localized in the western part of the United States. Once established, this species is difficult to eradicate and it is therefore on several states' "top 10" invasive exotic plant lists.

The common name refers to the illusion that the tree grows until it reaches heaven.

Pat Haragan is Vice President of the KNPS and a regular contributor to the newsletter. She may be reached at (502) 852-0868.

Action Taken at KNPS Fall Board Meeting

Pam Long

The KNPS Board of Directors took the following actions at the Fall board meeting held at Maywoods in Garrard County, Kentucky, October 11, 1996.

➤ Adopted the revised KNPS color brochure designed by Charles Chandler and authorized printing of 5000 copies (estimated cost \$1400), for distribution at State Parks and other localities.

➤ Approved an honorarium of \$500, for Charles Chandler for his contribution of professional services to the Society in designing the new promotional brochure.

➤ Adopted a revised dues structure for membership in the Society. Individual memberships will be \$7/ year and family memberships will be \$10/year, effective 1997.

➤Endorsed the continuation of Ron Jones' effort to produce a 10th year anniversary booklet of significant articles from the KNPS Newsletter 1986-1996, and set aside funding (estimated at \$3,200) for printing costs.

➤Approved two grants per year in the amount of \$250, each for environmental education with native plant demonstration gardens.

➤Deb Harwell announced that due to relocation of her family she is resigning her position on the Board. She further thanked the Society for the initial native plant demonstration garden grant she received at Providence School in Clark County, and shared with the board the many benefits and positive learning experiences it has provided for potential future botanists.

➤Due to absence of the treasurer, no formal report was given; the balance is assumed to be at about \$10,000, based on the report provided in the spring.

Pam Long is the Secretary of the Kentucky Native Plant Society. She may be reached at (606) 254-3101.



Taxonomic status of the varieties of Seneca snakeroot, *Polygala senega*

Amy E. Trauth and
Robert F. C. Naczi

Seneca snakeroot, *Polygala senega* (Polygalaceae), is an uncommon plant ranging throughout most of eastern North America. Two varieties have been described for this species: variety *senega* and variety *latifolia*. The taxonomic merit of these varieties is controversial. In general, both the reproductive and vegetative features of variety *latifolia* are much larger than those of the variety *senega*.

The goals of this research were 1) to more accurately define taxonomic differences between the varieties and 2) to test the hypothesis that the varieties *senega* and *latifolia* are separate species with morphologic differences not merely induced by ecology.

Most of my work on the project has been in the laboratory and field. In the laboratory, univariate and multivariate statistical analyses of thirteen vegetative and seven reproductive characters have been completed on 165 specimens from eleven herbaria. Among these measured morphologic characters are length of the shoot and inflorescence, length/width ratio of leaves, length of the wing and keel, and size of the seed. Field research involved gathering specimens of both varieties and habitat data, including soil samples.

Preliminary results suggest significant differences between the measured morphologic characters. These results could point towards better taxonomic treatment of the varieties of *Polygala senega* as separate species.

Amy E. Trauth is the first recipient of the KNPS Botany Student Research Award. This article represents an abstract of the paper she presented at the 1996 Kentucky Academy of Science meeting. Her research was conducted under the direction of Dr. Robert F. C. Naczi at Northern Kentucky University.



KNPS Certification Program in Native Plant Studies

Winter / Spring 1997 Course Offerings

Certification courses are offered by the KNPS as part of a curriculum developed to educate KNPS members in native plant studies. These courses are also open to anyone interested in learning about native plants in Kentucky. For more information on the KNPS Certification Program, please contact Dr. Ron Jones, Biology Department, Eastern Kentucky University, Richmond, KY 40475. (606) 622-3056, or ECU Herbarium (606) 622-6257.

Field Geology for the Amateur Naturalist
Mark Sweet, Geologist, Geoscience, Inc.
Georgetown, Ky.

Do you want to understand one of the major influences of plant distribution? The objective of this course is to familiarize students with the basic concepts of geology and the geology of

Central and South Central Kentucky. The course will be very 'hands-on' and will consist of two classroom exercises and three field trips.

Classroom meetings will be Feb. 19th at 6:30-8:30 pm & March 13th at 6:30-7:30pm. Field trips are Saturdays, Feb. 22, March 1, & March 8, 1997. Meet at Roark Building, Room 103, ECU Campus, Richmond, Ky. Tuition: \$90.00, book fee \$10. Register with ECU Special Programs at (606) 622-1228.

**Forest Trees, Spring Flowers and More:
An Introduction to Native Plant
Identification and Woodland Ecology.**
Judith Weckman, Berea College & Tim
Weckman, Eastern Kentucky University.

Would you like a guided interpretive tour through some of our local woodlands? With three walks and talks in April you can find out which trees and herbs bring spring to Central Kentucky. This course is designed for native plant enthusiasts, hikers, and bird watchers who would like an introduction to our native trees, mosses and flowering herbs. Beyond providing an introduction to plant identification, we will discuss the ecology, structure and dynamics of our local woodlands. This course will help answer basic questions about our plants and their habitats.

Class meets Saturdays April 12, 19, & 26, from 10:00 am to 2:00 pm. Moore Building, Room 202, ECU Campus, Richmond, Ky. Tuition: \$76.00. Register with ECU Special Programs at (606) 622-1228.



ANNOUNCEMENT

KENTUCKY NATIVE PLANT SOCIETY RESEARCH GRANTS FOR STUDENTS

KNPS is pleased to announce its latest program furthering botanical knowledge and understanding in Kentucky. Beginning in 1996, up to two annual grants of \$250 will be awarded for **field-based botanical projects which contribute to the knowledge of Kentucky's flora or natural communities**. Grants will be awarded to students attending a Kentucky college or university. Both graduate and undergraduate students are eligible with one grant reserved for each level.

Proposals will be reviewed by the KNPS Grant Committee. Proposals must include:

1. Curriculum vitae;
2. Proposal (not to exceed two single-spaced typed pages) describing the proposed research and the role the grant would play;
3. Itemized budget; and
4. Two letters of recommendation, one of which must be from the major professor or project director.

Applicants are encouraged to become members of the KNPS, but membership is not required to be awarded a grant.

Submit three copies of all items listed above including letters of recommendation to:

David D. Taylor
USDA Forest Service
1700 Bypass Road
Winchester, Kentucky 40391

Deadline for receipt of all materials: February 15, 1997

ANNOUNCEMENT**KENTUCKY NATIVE PLANT SOCIETY
SCHOOL EDUCATIONAL PROJECT GRANTS**

KNPS is pleased to announce its latest program furthering botanical knowledge and understanding in Kentucky. Beginning in April 1997, two annual grants of \$250. each will be awarded to further funding needs for educational projects which promote an understanding and knowledge or appreciation of Kentucky's flora and natural communities. The grant may be awarded to either a Kentucky primary or secondary school, but preference is for primary/middle schools. This grant is designed to supplement funds already secured from other sources and is not intended to be a stand-alone grant. The grant may be used to purchase materials such as trees and wildflower plants or seeds native to Kentucky. The grant may not be used to pay for earthwork, pond building or building supplies. Proposals may be submitted by groups of people as well as individuals at Kentucky schools.

Proposals will be reviewed by the KNPS Grant Committee. Proposals must include:

1. A brief resume presenting project direction experience, educational experience, etc, which indicates the knowledge/experience to carry the project to completion.;
2. A proposal (not to exceed three pages excluding supporting drawings/diagrams) which describes the project, explains how it promotes education towards botanical/ecological understanding of Kentucky's environment, lists other project contributors (e.g., financial, in-kind and labor), and describes the role the grant would play;
3. An itemized budget; and
4. A letter of support from the school principal

Applicants are encouraged to become members of the KNPS, but membership is not required to be awarded a grant.

Submit three copies of all items listed above including letters of support to:

David D. Taylor
USDA Forest Service
1700 Bypass Road
Winchester, Kentucky 40391

Deadline for receipt of all materials: March 21, 1997

Kentucky Native Plant Society Membership Survey:

The KNPS treasurer has recently reported that the Society has accumulated approximately \$10,000. We are currently using these moneys to support various projects. **Please rate the importance of each of these projects to the KNPS.**

- ☐ field botany research at Kentucky educational institutions, undergraduate & graduate level
 ___ very important ___ fairly important ___ not very important
- ☐ native plant demonstration gardens for primary/secondary/middle schools in the state
 ___ very important ___ fairly important ___ not very important
- ☐ production of a 10 year review booklet of selected newsletter articles
 ___ very important ___ fairly important ___ not very important
- ☐ updated brochure to promote the society and increase membership
 ___ very important ___ fairly important ___ not very important

What additional types of projects, if any, should the KNPS underwrite ?

The Newsletter has depended primarily on contributions from Kentucky botanists and KNPS members. It has covered field trip descriptions, informative pieces about basic botany, and special topics (biodiversity, etc.).

What kinds of articles have been most interesting to you? (✓ all that apply)

- | | | |
|------------------------|-----------------------|-----------------------------|
| ___ field trip reports | ___ plant communities | ___ rare plants |
| ___ Pat's Weed Patch | ___ Plant Places | ___ botanical history |
| ___ Curators' Corner | ___ news items | ___ current botany research |
| | | ___ other (please specify) |

I would like to see articles in the Newsletter on...

I would like to read selected articles from other regional Native Plant Society newsletters.

___ yes ___ no

As a member of the Kentucky Native Plant Society I would like to participate (✓ all that apply)

- | | | |
|------------------------------------|--|--|
| ___ as a field trip participant | ___ as a field trip leader | ___ as a contributor to the newsletter |
| ___ as a KNPS Board Member | ___ in a 'Labor Day' with Kentucky Nature Preserves Commission | |
| ___ by suggesting Field Trip sites | ___ by suggesting names of potential Newsletter contributors | |

Thank you! Return this page with your dues for 1997 and let us know what you think. Please send us your name and phone number if you would like to contribute time in any capacity.

Kentucky's Federally Listed Endangered Plants

Braun's Rock Cress
Cumberland Sandwort
Chaffseed
Short's Goldenrod
Running Buffalo Clover

Arabis perstellata
Menyanthes cumberlandensis
Schwalbea americana
Solidago shortii
Trifolium stoloniferum



Kentucky Native Plant Society 1997 Membership Form

Memberships are for calendar year (Jan-Dec). Dues are modest, please keep your membership current. Membership expiration is listed at the top of your mailing label.

Name _____ Address _____

City _____ State _____ Zip _____ KY County _____

Please mark membership category, enclose **check** (please do not send cash) payable to "KNPS", and remit to: KNPS Membership, c/o Biology Department, Eastern Kentucky University, Richmond, KY 40475

Membership Renewal _____ New Membership _____

Annual Individual Membership (\$7.00) _____ Annual Family Membership (\$10.00) _____

_____ Lifetime Individual (\$100.00) _____ Lifetime Family (\$140.00)

The Kentucky Native Plant Society, Inc. was founded in 1986 as a botanical organization for all persons interested in the native flora and vegetation of Kentucky. The goals of the KNPS are to serve as a medium of information exchange, and to promote native plant conservation and public education in botany and botanical research in Kentucky. Annual dues of \$7.00 (\$10.00 family) may be sent to: KNPS Membership, c/o Department of Biological Sciences, Eastern Kentucky University, Richmond, KY 40475.

The KNPS Newsletter is printed Feb., May, Aug., & Nov. Deadlines for submissions are the 10th of the month preceding printing month. Send articles and correspondence to : KNPS Newsletter Editor, c/o Department of Biological Sciences, Eastern Kentucky University, Richmond, KY 40475.

KNPS Officers:

President: David Eakin, Biology Dept., ECU, Richmond, KY 40475 (606) 622-2258. Vice-President: Patricia Haragan, Davies Herbarium, University of Louisville, Louisville, KY 40207, (502) 852-0868. Secretary: Pam Long, 4601 Frogtown Ln., Lexington, KY 40513, (606) 254-3101. Treasurer: Steve Sensenig, 1694 Fairview Rd., Lawrenceburg, KY 40342, (502) 839-7366.

Board of Directors:

Greta Fields, Box 217, Jenkins, KY 41537, (606) 633-1963. Charles Lapham, 16 Winn School Rd., Glasgow, KY 42141, (502) 646-4060. Deborah Harwell, 3325 New Boonesboro Rd., Winchester, KY 40391. (606)745-7901. R. Hughes Walker, 115 Briarwood, Versailles, KY 40383, (606) 873-0032.

Editor: Timothy J. Weckman, Biological Sciences, Eastern Kentucky University, Richmond, KY 40475, (606) 622-1533.

**The Kentucky
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Richmond, KY 40475

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