From the President

Happy New Year to each and everyone of you. As 1995 begins, I hope each of you will plan to participate in at least one activity of our society. We have many interesting and informative fieldtrips planned. Our spring meeting will be as exciting as ever and this year we will play host to the Tennessee Native Plant Society with our fall wildflower weekend at Natural Bridge State Park. For the fall meeting please remember to make your reservations early and let them know that you are attending the fall wildflower weekend as room reservations are being held specifically for this meeting.

There is still time to submit a name for our "Name Our Newsletter" contest. Remember, a name will be chosen during our spring board meeting on March 25 and the winner will be announced during our spring meeting at Natural Bridge State Park. Send your entries to me at the address below.

There are still some T-shirts available (mostly medium and X-large). Just submit $8.00 plus $1.00 for postage (check or money order made out to KNPS) to me at my new address, 917 Brookhaven Drive, Frankfort, KY 40601. Many thanks to all who have ordered T-shirts already. Your support and interest is appreciated.

Many thanks to all of our newest lifetime members. This level of support is much
appreciated. With our treasury in excellent shape, we will be discussing several ways to put our money to good use to promote and encourage interest and/or studies dealing with our native flora. Look forward to our next issue of the newsletter as we begin to unveil these new activities.

The Green in Winter--Mosses
Judith E. Rozeman

Winter has come to Kentucky. Most of us have all but given up on botanizing in Kentucky's woods and fields. Some of us take this time to practice winter bud identification or perhaps take a closer look at the dried forms of many herbaceous species. Consider, however, that winter is a great time to get acquainted with and appreciate the ever-bright and green of the many moss species that clothe the trees, rocks, and soils of the sleeping forests.

Bryophytes include the mosses, liverworts, and hornworts. Even in the dead of winter, many species of these small plants thrive and even reproduce. Mosses in particular are pioneers in ecological succession. They provide the microhabitats which serve as nurseries and cover for invertebrates and their larvae as well as the seedlings of herbs and trees. Mosses also are important in hydrological cycles, holding up to 60% of the water in some ecosystems such as boreal forests. Many birds are known to uses mosses in nest building. Humankind has relied on the mosses for bedding, caulking of boats, fiber for baskets, ground cover in orchards, fuel (peat or Sphagnum), horticultural practices (packing plants, moss gardening), and even wound dressing. Certain species are used to monitor air pollution levels while others are used as indicators of the elemental composition of their substrate (e.g., copper reserves).

Five common genera of mosses that may easily be observed year round in Kentucky include Climacium (tree moss), Bryum argenteum (silver moss), Leucobryum (white or cushion moss), Thuidium (fern or feather moss), and Sphagnum (peat moss). Look for Climacium (meaning "like a ladder") in places like Raven Run in Fayette County on the rocks and soil above Jack’s Creek. There it forms dense colonies on fairly steep limestone outcrops. It might also be found in beech-hemlock woods in the Cumberland Plateau. This moss looks like a miniature tree (3-4 inches high). Architects sometimes use it to represent trees when landscaping models. Bryum argenteum is the common velvety-looking moss that grows in sidewalk cracks or disturbed soils around the world. Bryum means moss and argenteum means silver (the moss first appears bright green and then turns silver as it ages). Leucobryum (meaning "white moss") species are the whitish

Sphagnum Moss
green, very cushiony-looking carpet mosses found on rock and soil in practically any dry woods. *Thuidium* ("Thuja-like") or fern moss has a fern-like, branching habit and is commonly found in thick mats on damp, decaying nursery logs. Its tiny "leaves" resemble those of *Thuja* (northern white cedar or arborvitae). In old-growth forests, *Thuidium* can form a dense covering over the decaying organic matter which litters the forest floor. The genus *Sphagnum* (peat moss) contains dozens of species occurring worldwide and is often found in open bogs and wet seeps in forests. Look for it also in crevices and rocky, wet places in the Red River Gorge or near Cumberland Falls. *Sphagnum* is soft and spongy and branches in a spiral about the stem. It has clustered tip giving it a shaggy-headed appearance. Many species are light green and some are even a deep red!

This article provides a brief introduction to our native moss flora. In future writings, I would like to focus on moss taxonomy, structure, physiology, and ecological significance. Bryophytes in general have been largely undercollected and identified in Kentucky. More than 100 counties are without any official collections. However, it is best to study these tiny plants in their natural setting as even a small clump may represent years of growth. Use a 10x hand lens to examine the shape of a moss "leaf" or the odd configuration of a "fruiting" specimen's capsule and stalk (the sporophyte). Note the many microhabitats that mosses occupy (rocks, trees, soil, streams, and rotten logs). Most importantly, enjoy the simple beauty of mosses in the winter landscape.

Did you know that there are only three plants endemic to Kentucky? They are Glade Cress (*Leavenworthia exigua var. laciniata*), Short's Goldenrod (*Solidago shortii*), and White-haired Goldenrod (*Solidago albopilosa*).

**What's in a Name?**
by Landon McKinney

In our last newsletter, I left you some questions to ponder. Does the royal catchfly catch flies? Does the trout lily in some way resemble a fish and who is Joe-Pye anyway? For those of you who may still be wondering about the questions posed, I would like to quote from a letter I received from one of our "If you touch *Silene* you know its stem exudes a sticky substance......", "the trout lily has leaves which are spotted like the skin of a trout or fawn......", "I've read that he (Joe Pye) was an Indian medicine man in New England in colonial times. He supposedly cured typhoid.
fever and other diseases using concoctions made from *Eupatorium.*” Many thanks to Carole for her kind letter and her expressed interest in wildflower folklore.

Well let's jump right in with one of everyone's favorites, azaleas or rhododendrons. *Rhododendron* is greek for “rose tree” while azalea is derived from greek meaning “dry” referring to its habitat of dry, rocky woods. Now “rose tree”, which refers to the color effect of the masses of flowers, seems appropriate. Azalea, on the other hand, seems inappropriate because most species may also be found in moist or wet woods, some exclusively so. The name azalea was applied based on the first habitat where the plant was encountered and is not now indicative for later discoveries of many of the other species. This is a similar situation to species such as eastern redcedar (*Juniperus virginiana*), *virginiana* based on the first state where this species' was found and described and not now indicative of this species entire range. As knowledge of our native flora has increased tremendously over the past couple of centuries, it is easy to see that the descriptive terminology applied in both common and scientific names may sometimes appear inappropriate or at least misleading.

References to famous botanists abound in both common and scientific names. Examples include, for instance, *Carex grayi*, named after Asa Gray, a man who probably contributed more to the North American flora than any other historical figure. The genus name for one of our more popular mints (bee-balm, wild bergamot) is *Monarda*, named after Nicholas Monardes (1493-1588). He was a physician/botanist in Seville, Spain who wrote a book “Joyful News out of the New Found World” which described useful american plants. *Bartonia virginica* was named after B. S. Barton (1766-1803), another physician/botanist who, among other important botanical contributions, wrote the first botanical text for the United States. *Eupatorium* spp. (boneset, Joe Pye weed, etc.) was named after Mithridates Eupator, King of Pontus near the Black Sea. He apparently discovered that one particular species of this genus could be used as an antidote for poison.

Vivid imaginations have played part in a number of plant names. For instance, *Aletris farinosa* (colic root, star grass) has its basis in Greek mythology. *Aletris* is the name of a female slave who ground meal. This alludes to the mealy (powdery) appearance of the perianth (sepals, petals). How about *Aquilegia* spp. (columbine), the genus name derived from the Latin “aquila” for eagle. Some imaginative botanist saw the form of an eagle in the flowers of this, one of our most uniquely different and beautiful wildflowers. Now I’m sorry folks, but I just do not see an eagle.

Here’s one that I always wondered about, hawkweed (*Hieracium* spp.). This small composite has, typically, a basal rosette of leaves and a rather tall flower stalk terminating with one to several small, yellow (usually), sunflower-like heads. There is nothing about this plant that could possibly resemble a hawk.
Well it seems that the Greek word for hawk is “hieros”. The reference that I happen to be using suggested that Pliny used the juice of one of these plants in an eye salve which supposedly improved vision markedly and gave

the younger was a nephew to the elder. While there was no clear indication which one was the Pliny in question, the encyclopedia did refer to a 37 volume work on natural history by the elder and attributed nothing in the way of natural history to the younger. I will never know for sure but I can assume that the elder is the most likely of the two.

Well I seem to have gotten off the subject just a little so now would be a good time to close. Before I go, let me leave you with several more questions to ponder. Who was Saint John, what is a wort (not wart), and was Hazel really a witch?

Replanting the Matthews Garden
by Pam Long

The University of Kentucky has completed the water line extension that seriously disturbed the Ruth Matthews Garden, the UK botanical research garden. Several volunteers assisted Dr. Meijer last spring with a plant rescue effort. Volunteers will be needed in early spring to replant a section of the garden with wildflowers and native grasses. Mulched trails also will be constructed to enhance the natural woodland landscape.

The garden already has been provided with a handicapped access area; plans are for benches and markers to be installed. Anyone interested in donated design ideas, materials for trail construction, or cuttings from native plants, please contact Charles Chandler (606-277-9718), Wayne Long, or myself (606-254-3101). Replanting of the Matthews Garden is planned for late March or early April. This will allow trails to be designed around new spring growth. Plan to come out and donate a few hours of time to a project that will give delight to generations of students and many other discerning botanists.
KNPS Certification Classes at Eastern Kentucky University
by Ron Jones

Nine classes in the KNPS Certification Program in Native Plant Studies have now been offered at Eastern Kentucky University. The sequence of classes has been Basic Botany and Plant Ecology in fall, 1992; Plant Taxonomy and Plant Communities in spring, 1993; Fall Wildflowers and Mosses in fall, 1993; Kentucky Wildflower Keying in Spring, 1994; and Woody Plants and Sedges in Fall, 1994. Class sizes have ranged from 7 to 17 with an average of about 12. The first group of students now are ready to begin their research projects, take another couple of classes, and finish their certification. These classes are designed as community education courses aimed at enlightening the public on issues concerning our native flora. It is hoped that graduates of the program will serve in leadership roles in the on-going efforts to preserve and restore native Kentucky flora.

The general program consists of six core classes, as well as four special topics classes. Students will keep a notebook of their certification experiences—this notebook must be approved by the Director of the Program. In addition, students complete a research project of their own design.

The classes listed in this newsletter include an advanced class for our more experienced students and a beginning class for those who missed the initial sequence. The Basic Botany course is a required class in our certification program. The Field Techniques class is aimed at those students interested in learning research techniques and applying them in an independent project.

The certification program has been a success at EKU and could be initiated elsewhere. It would be good to get similar programs going in the Covington, Lexington, Louisville, Bowling Green, and Murray areas. Attempts have been made to get classes offered elsewhere, but so far to no avail. Anyone interested in offering the classes listed above or other similar classes should contact me at (606) 622-1531, or write me at Department of Biological Sciences, Eastern Kentucky University, Richmond, KY 40475.

To register for these KNPS Certification classes, call (606) 622-1228. In January, all KNPS members should receive a copy of the EKU Special Programs brochure which details these and other classes at EKU.

Basic Botany for the Amateur Naturalist

This course is for the amateur naturalist, and no previous background in botany or science is expected. If you have ever wondered why and how plants are put together so differently than animals (both inside and out), then you will discover a new world of exciting information from this study. Hands-on learning for every participant will be available in a fully-equipped botanical laboratory. You will use microscopes to examine the fascinating details of the plant body. You will learn how plants function in ecosystems as photosynthetic machines, and why none of us could exist on the planet without them.

Instructor: Dr. David A. Eakin (Asst. Professor of Biology, Eastern Kentucky University)
Dates: Saturdays; Feb 11, 18, March 4, 11
Time: 9:00 - 12:00 a.m.
Place: Moore Building Room 202
Tuition: $76 (book fee of $15-20)
Field Techniques in Native Plant Research

This course is for the advanced student in the KNPS Certification Program in Native Plant Studies. It is recommended for students that have completed at least three of the certification classes, but others may enroll if they are interested in these topics. This course will cover several aspects of botanical field research, including the collection and preservation of plant specimens, the establishment of a herbarium, methods of community and population sampling, rare plant monitoring, and the use of maps (topographic, geologic, and soils). An independent research project is required for the certification process, and this course will assist the student in selecting and getting started on a project.

Instructor: Dr. Ron Jones (Professor of Biology, Eastern Kentucky University)
Dates: Saturdays; March 4, 11, 19, April 1
Time: 1:00 - 4:00 p.m.
Place: Moore Building Room 202

Aquilegia canadensis (Wild Columbine)

Mark your Calendars--1995 Field Trips, Meetings, and Educational Opportunities
by Clara Wieland

Another year, soon it will be spring, and we will visit many lovely spots to see our native flora. Again, many thanks to all the leaders who give their expertise and time to lead these events. KNPS has tried to schedule a full calendar of events. However, due to several leaders and me being out of town this past holiday season, details for the fall events are not yet complete. Please watch for further details in future newsletters. Please remember to call the field trip leader or Clara Wieland (606-266-5548) to make reservations for the trip, and to ask any questions you may have about weather, directions, etc.

Dress appropriately, especially footwise—we may cross creeks and climb hills. If an event includes lunchtime, you may wish to bring a snack and water. Be ready for a fun learning experience. Please call Clara Wieland if you have a special place to show us or any suggestion for a field trip or workshop. KNPS needs your input! Happy New Year and great wildflowering.

KNPS Certification Program: Basic Botany for the Amateur Naturalist

Saturdays, February 11, 18, March 4, 11; 9:00 - 12:00 a.m. (see article on page 6).

KNPS Certification Program: Field Techniques in Native Plant Research

Saturdays, March 4, 11, 18, April 1; 1:00 - 4:00 p.m. (see article on this page).
KNPS Board Meeting

Saturday, March 25, 11:00 a.m. Kentucky Nature Preserves Commission office in Frankfort.

Spring at Floracliff, the Mary E. Wharton Nature Sanctuary

Sunday, April 9, 1 p.m. (Eastern Time). Fayette County.

Two springs ago we attempted to catch early spring here. It was cold and few plants were in bloom. Surely, we will catch the spring array of this diverse plant community. Trails are quite obscure, meandering down to the bottom of Elk Lick Creek Gorge and back up again. Due to the sensitivity of the site and guidelines set down by the private foundation that owns the area, this trip is limited to 15 people, and visitors must sign a waiver of responsibility. Clara Wieland, old wildflower stalker, will lead this trip. Call her at (606) 266-5548 to register and for weather-related questions. Meet at 1 p.m. at Jerry’s at the Interstate 75 and Athens-Boonesboro interchange in southeastern Lexington. From the north, take I-75 south to exit 104 (KY 418, Athens-Boonesboro Road). Turn right at the end of the ramp and Jerry’s is directly on your right. From the south, take I-75 north to exit 104. Turn left over the top of the ramp. Jerry’s is on your right after you cross I-75.

Great Smokey Mountains Wildflower Pilgrimage

Thursday--Saturday, April 27-29. Call the Botany Department at the University of Tennessee (615-974-2256) for a brochure or more information on the many field trips and presentations.

The Horse Lick Creek Bioreserve
One of The Nature Conservancy’s Last Great Places

Saturday, April 29, 10:30 a.m. (Eastern Time). Jackson and Rockcastle counties.

Jim Hays, Bioreserve Director, will explain how the Conservancy is trying to promote a sustainable economy for local residents as well as preserve a unique ecosystem. Besides owning 1400 acres in the area, TNC is working with private landowners and the Daniel Boone National Forest. There are numerous interesting features in the area, including rare mussel and fish species, sandstone and limestone mixed flora, and caves. We will see an array of spring flowers. Be prepared to cross a creek. Meet at McDonald’s in Berea. Get off of Interstate 75 in Berea at exit 76. McDonald’s is at the interchange. Call Clara Wieland (606-266-5548) to register for the field trip and for any other questions about weather, directions, etc. Limited to 15 people.

Wildflower Weekend at Natural Bridge State Resort Park
and Annual Spring Meeting of the Kentucky Native Plant Society

Friday--Sunday, May 5-7. See details on page 11.

A Search for the Kentucky Lady's Slipper along Sturgeon Creek

Saturday, May 27, 10 a.m. (Eastern Time). Lee and Owsley counties.

Danny Barrett, former KNPS board member, will lead us in his territory to look for these beautiful orchids. Cypripedium kentuckiense is a very showy lady’s slipper that
appears to be declining under pressure from overcollection. It is found in Kentucky and a few other states but we got to name it. We will see other flora in bloom on the way, maybe even a Cumberland azalea. Danny, although retired from the Corps of Engineers, is quite busy. Last year he won a state environmental award for his work with introducing young people to the appreciation of our natural heritage. Meet at Dairy Queen in Beattyville. From Natural Bridge State Resort Park, take KY 11 south. Dairy Queen will be on the left just before you get to Beattyville. Please call Danny (606-593-5097) or Clara Wieland (606-266-5548) to register or if you have questions. There may be a creek to cross. This is Memorial Day weekend and it will be a memorable day if you see these beautiful flowers in bloom!

Tour of the Greenhouses, Growth Chamber, and Laboratory of Drs. Jerry & Carol Baskin

Saturday, June 17, 1 p.m. (Eastern Time). University of Kentucky.

Carol and Jerry will show us their studies on the germination and life history of plants. The heredity and biological basis of understanding species is their focus of research. Come, it will be fascinating. Two of their graduate students also will host us. Meet near the greenhouses behind the Thomas Hunt Morgan Biological Sciences building on Rose Street in Lexington. You can park for free in the Medical Plaza parking lot, which can be accessed from Washington or Virginia (extended) avenues. The greenhouses are visible from there. Call Clara Wieland (606-266-5548) or the Baskins (606-257-8770--days) to register.

Editor’s Note: The Baskins grow a greater variety of plants than what you see on many field trips!

A Home Visit to the Donna & Larry Gooch Farm

Saturday, July 8, 10:30 a.m. (Eastern Time). Lincoln County.

Donna and Larry did not realize when they moved to their farm that there were very special plants on the land. In addition to many native grasses, they have found yellow fringed, purple fringeless, and ragged fringed orchids. We hope some of the orchids and other flowers will be in bloom. Who knows—we may discover the extremely rare sundew? Meet at the Gooch Farm. From Crab Orchard (southeast of Stanford), take KY 39 south for 7 miles. Turn right on McMullin Road. Their drive is the second on the left (365 McMullin Road). The farm is bordered by a white fence. From Somerset, take KY 39 north for 21 miles. McMullin Road will be on the left. Be alert—on the opposite side of KY 39 the road is named John Cash Road—don’t turn there! Donna was a bird enthusiast before a wildflower enthusiast. She says this is a great place to bird. Limited to 10 people. PLEASE register by calling Clara Wieland at (606) 266-5548.

A Landon McKinney Adventure in the Purchase Area of Western Kentucky

Saturday and Sunday, July 22 and 23.

Last year’s trip was special—so much was seen on the roadsides, and in the prairie remnants and wetlands (November 1994 newsletter). Landon may not be able to top it, but he is willing to show us different sites and try.

Watch for details in the next newsletter.
A Trip to the Top of Blanton Forest

Saturday, August 5. Harlan County.

There was much grumbling about conflicts in the November 1993 KNPS Fall Wildflower Class. Everyone in the class wanted to be at the Blanton Forest field trip and at the same time wanted to be in the class. So a promise was made to do it again. Tom Bloom from the Kentucky Nature Preserves Commission will take us to the top of Pine Mountain through this outstanding old-growth forest. Details announced next newsletter.

Joint Meeting of the Kentucky and Tennessee Native Plant Societies

Friday--Sunday, September 8-10. Natural Bridge State Resort Park.

Help us show off the Red River Gorge area to our visitors. They were very good hosts at our joint meeting last fall. Let's return the favor. Details will be announced in the next newsletter.

The Bluegrass Swamp -- Lee's Branch

Saturday, September 23, 10:30 a.m. (Eastern Time). Woodford County.

Deborah White, Kentucky Nature Preserves Commission botanist, will lead us to this unusual geological and botanical area of the Bluegrass surrounded by horse farms. Libby and Brereton Jones are graciously allowing access to the best remaining wetland in the Bluegrass. We hope to see the rare scented ladies' tress orchid, turtlehead, swamp white oak, and other wetland species. Limited to 10 people. Please call Clara Wieland to register and for directions (606-266-5548).

Mushroom Foray

Friday and Saturday, September 29-30. Natural Bridge State Park. Phone (800) 325-1710 for details.

Eastview Barrens or Thereabouts Native Grasslands in the Fall

Sunday, October 15. Hardin County.

Julian Campbell, Kentucky Nature Conservancy botanist, will lead us on this meander. Maybe we will see what happens after a prescribed burn. It's always a learning experience with Julian. Details will be announced in a future newsletter.

Announcements

There are three new lifetime members in the Native Plant Society:

Clara Wieland
William and Barbara Rafaill
Dr. William S. Bryant

Thanks for your support!

We wish KNPS Board member and staunch supporter Charlie Lapham a speedy and complete recovery from surgery he underwent in December.

Entries for the Name our KNPS Newsletter Contest can be submitted until the March 25 Board Meeting.
Submit to President Landon McKinney (address on back page).
Make Plans to Attend

Wildflower Weekend at Natural Bridge

May 5-7, 1995

Featuring Special Guest Speakers

Orie Loucks
Miami University

Dan Pittillo
Western Carolina University

Field trips, workshops, and children's programs begin 3:00 p.m. Friday.
Registration Fee: $3 Individual, $5 Family. Cosponsored by the Kentucky State Parks, U.S. Forest Service, and the Kentucky Native Plant Society
For information contact Natural Bridge State Park, Slade, KY 40376
(606) 663-2214 or (800) 325-1710

Kentucky Native Plant Society Membership Form

All memberships run for the calendar year (January through December). Dues received after November 1 are put toward the following year. Members are paid up through the year indicated on their newsletter label.

Name

Address

City State Zip KY County

Home Phone (______) Work Phone (______) Check here if you want your name, address, and phone number omitted from any membership lists the Native Plant Society publishes in the newsletter.

Please check one:

_____ Annual Individual Membership ($5) _____ Lifetime Individual Membership ($100)

_____ Annual Family Membership ($7) _____ Lifetime Family Membership ($140)

Please check one: _____ Renewal _____ New Membership

ATTENTION NEW MEMBERS! Please check one:

_____ Send all back issues of the current calendar year.

_____ Start my membership at the beginning of the next calendar year.

Total Amount Enclosed:

Make checks payable to Kentucky Native Plant Society. KNPS is a non-profit organization and gifts are tax-deductible. Return this form to: KNPS Membership, c/o Dept. of Biological Sciences, Eastern Kentucky University, Richmond, KY 40475.
Kentucky Native Plant Society Newsletter Volume 10, No. 1

Upcoming Events

Basic Botany Course begins February 11.

Field Techniques in Native Plant Research Course begins March 4.

Spring at Floracliff Field Trip on April 9.

One of The Last Great Places -- Horse Lick Creek Field Trip on April 29.

Wildflower Weekend at Natural Bridge State Park -- May 5-7.

Kentucky Lady's Slipper Search along Sturgeon Creek -- May 27.

Saxifraga virginiana
(=Early Saxifrage)

The Kentucky Native Plant Society, Inc. was founded in 1988 as a botanical organization for all persons interested in the native flora and vegetation of Kentucky. The goals of KNPS are to serve as a medium of information exchange, to promote native plant conservation, public education in botany, and botanical research in Kentucky. Annual dues of $5.00 (Family $7.00) may be sent to KNPS Membership, c/o Dept. of Biological Sciences, Eastern Kentucky University, Richmond, KY 40475.

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The Kentucky
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