President’s Message

David A. Eakin
KNPS President Elect

At this year's meeting we had a changing of the guard. Wilson Francis, stepped down as interim president and I was elected to head the Society. The KNPS owes Wilson a debt of gratitude for agreeing to accept this extra responsibility. The short notice and his already demanding responsibilities as Park Naturalist did not daunt his enthusiasm, however, and he has capably overseen this year's activities. When you see him be sure to say thanks!

Allow me to introduce myself. I am currently an assistant professor of biology with Eastern Kentucky University. My love is teaching, my profession botany, and my expertise the classification and molecular biology of mosses and liverworts.

As president elect of the KNPS, I am concerned with continuing our tradition of environmental awareness and the love of Kentucky's unique native flora. I would like to see us continue those activities which have become the hallmark of the KNPS. Our annual wildflower weekend at Natural Bridge, co-sponsored by the Park and the Forest Service, is a focal point for both amateur and professional naturalists to share energy and information about our natural heritage. Our Native Plant Studies Certification program continues to provide our members the opportunity to raise their level of understanding and expertise about our botanical heritage. Further hands on learning opportunities are available to us when we take advantage of the KNPS field trips.
Nevertheless, I would like to see us strive toward an even higher level of involvement. We have grown steadily over the years, and in the process have accumulated a sizeable treasury. This allows us to consider integrating more ambitious projects into the existing fabric of the KNPS. I share the sentiments of our Board of Directors, that this money should be used to promote the goals of the KNPS by encouraging the kinds of research and educational projects which promote the conservation of native plants and natural plant communities.

To this end, the Board of Directors has awarded two $250 grants for the spring of 1996. In keeping with our goal of encouraging botanical research in Kentucky, the first goes to Amy Trauth, a student under the direction of Dr. Rob Naezzi at Northern Kentucky University. Amy is researching two morphological varieties of *Polygala senega* in the Milkwort family. And in conjunction with our desire to promote public education, we are providing funds for the purchase of native plants that will be part of an outdoor classroom for school children at Providence Elementary School in Clark County.

Deborah Harwell, one of our new board members, brought this proposal forward and will be reporting about it in upcoming newsletters. Deb should be recognized for her vision in developing this project which will promote awareness of our native plants. We hope this will serve as a catalyst for other such projects which focus on the early education and involvement of young students.

Unquestionably, early education and exposure to our native plants can develop a lifelong love and dedication to their protection. Many of us can trace our passion for plants and the natural wonders of this earth to similar opportunities in our own childhood.

In conclusion, I want to remind you why people group together in organizations. By pooling our resources and talents, we can accomplish goals which are impossible to achieve as individuals. Collectively, we are more powerful, both socially and politically. I would like to help us to more clearly focus this combined energy and expertise on the problems of conserving native plants, and educating our friends and neighbors about the natural plant communities of Kentucky. Our natural biodiversity is being threatened on many fronts. May we continue to build upon our past successes, while expanding our efforts to preserve and protect the natural heritage with which we have been so richly blessed!

David A. Eakin is an Assistant Professor in the Biology Department and Associate Curator of the Herbarium at Eastern Kentucky University. He may be reached at (606) 622-2258.
PLANT PLACES...
The Best in Public Access Sites for Viewing and Studying our Native Flora

Native Plants are Growing Along the Information Superhighway

Charlie Lapham

There is quite a bit of information of interest to most KNPS members on the Information Superhighway, particularly the graphical portion of the Internet called the World Wide Web. There is also lots of technical data for botanists. Sites tend to offer links to related sites so the trick is finding the first few sites of interest to you.

Internet addresses are called locations. Each location has its own Uniform Resource Locator in "nerd" talk or just URL. To visit the site, type the URL in the location field and tell your program to go to it. Links between net sites are simplicity itself, you either click a mouse or push a key.

Here are some Internet sites to get you started or perhaps, inspired. The URL's are in square brackets [ ]. They must be typed exactly, including case and forward (not back) slashes "/". This is the end of Nerdy stuff for a while.

- **Florida Wildflower Page** [http://www-wayne-leon.scri.fsu.edu/~mikems/] Lots of fine pictures of Florida Native Plants. Orchid people must see this one.
- **Texas A & M Herbaria** [http://www.csdl.tamu.edu/flora/tamuherb.html/] Illustrated treatment of two families of southwest desert plants. First class work done by Kartesz group.
- **California Native Plant Society** [http://www.calpoly.edu/~dchippin/cnps-main] Scientific and legal data and strong environmental activism, they offer a CD-ROM Disc with 2000 photos of 600+ species of California Wildflowers at cost ($35.00). John Muir would be proud.
- **Kansas Prairie Wildflowers** [http://www.ksu.edu/~owensby/wildflower.htm/] Good for prairie species also found in central and western parts of Ky.
- **The Tallgrass Prairie of Illinois** [http://www.prairie.net.org/tallgrass/tgp07.htm] (zero rather than o) My favorite site so far! Anyone who thinks electronic publication in botany will never replace paper should study this site.
- **Netscape** [http://home.netscape.com/ndx.html/] No wildflowers but this is where you get the Netscape v2.0 Web browser. Advanced sites tell you this is needed to best view their site. Free to Academia. 90 day free trial for the rest of us. Good on-line support after you actually buy it ($50). This is THE state of the art hypertext browser right now.
- **Wildflowers in Texas** [chico rice edu/armadillo/wildflowers/wild.html/] Texas wildflowers, good photography.
- **Maddog's Texas Wildflower Page** [http://www.io.com/~maddog/photos_f.html/] Nice photos but not too scientific. Botany students will probably understand the one called DYC (damn yellow composite).
- **Biota of North America Project**
  [http://www.csdi.tamu.edu/flora/kartesz/bonap2.htm/] Dr. Kartesz and a lot of associates have been working on this database for 20 years. I think that predated the first IBM PC, it's a long time in this business anyway. Dr. Campbell’s Kentucky Atlas is part of this database. Data access is through the next URL who presumably supplied some grant money.

- **USDA Natural Resources Conservation Service Plants Database**
  [http://trident.ftc.nrcs.usda.gov/plants/]
  As near as I can tell this is the mother lode of US plant data. They are starting to add illustrations which will probably increase their traffic considerably.

- **Kew Gardens**
  [http://www.rbgkew.org.uk/science/] Her Majesties Royal Botanic Garden in England. This is on the world wide web. International access is no different except it's usually somewhat slower because the international phone lines are more clogged than the domestic ones.

- **Gray Herbarium**
  [gopher://huh.harvard.edu:70/11/project_information/authority/botany/gray_cards] The Immense Gray Herbarium at Harvard can be searched on the net.

- **University of Toledo Wildflowers**
  (unofficial student run server) 
  [http://131.183.61.190/interesting/stuff/wildflowers/wildflr.html/] Good pictures, our sort of plants.

- **American Association of Plant Taxonomists**

- **The Nature Conservancy**
  [http://www.tnc.org] The national page debuted in April and Kentucky was in progress early in May. The wide scope of the Conservancy's efforts is evident from these pages.

- **Missouri Botanical Garden**

- **Biodiversity and Biological Collections Web Server**

Here are some e-mail sites (the graphics sites also usually have built in e-mail too):

- **Kentucky State Nature Preserves Commission**
  [name.ksnpc@msmail.state.ky.us] The new volunteer coordinator is Brad Nyholm. He is at [bnyholm.ksnpc@msmail.state.ky.us]

- **Charlie Lapham, amateur botanist**
  [lapham@scrtc.blue.net]

- **Addresses of people in academia** can be found through their university home pages Search[http://www.utexas.edu/word/univ] to find the home pages.

For graphics, you need a computer with a modem and an Internet access port. The computer should have a color monitor with decent graphics capabilities. The modem should be 28.8k- don't bother with anything less than 14.4 k because the pictures will be pretty slow even with the fastest modem.
The local Internet providers are usually a better deal than the on-line services. A local provider is one you can call without a toll charge. Your local computer stores or phone company will know who the local providers are. (For example, residential access charges at South Central Rural Telephone Co-Operative vary from $10/mo. for 10 hours up to $30/mo. for unlimited time.) Kentucky is one of the states leading the country in Internet availability. If you haven't got it yet, Internet access is coming soon!

KNPS members on the Net who have trouble finding these sites can contact the author via e-mail. He will try to keep a trouble log and hopefully can get you unstuck relatively quickly. If you can't even get on the net, or can't figure out e-mail, he is at (502) 646-4060.

The KNPS Board of Directors will discuss the possibility of a KNPS home page in June. Members may send their suggestions for this project by e-mail, voice mail or snail-mail to the addresses given in this issue.

Charlie Lapham is a KNPS Board Member and an avid botanist. He may be reached on the phone line at (502) 646-4060.

Purple Loosestrife

Purple loosestrife, (*Lythrum salicaria* L.) is an aggressive perennial plant, native to Eurasia, North Africa, and Australia. It is easily identified during late June through September when it is in bloom. The purplish-red flowers are borne in a showy spike-like panicle up to one foot long.

The first report of this species in North America was in Pursh's "Flora Americae Septentrionalis" in 1814. Two eminent botanists, John Torrey and Asa Gray, wrote in 1856 that its status as a native plant was "not clear." It was not until 1890, when the sixth edition of Gray's Manual of Botany was published that the species was treated as a plant naturalized from Europe and therefore a nonindigenous member of the North American flora. By the late 19th and early 20th centuries, this species had spread into the glaciated wetlands of North America and had become an aggressive weed in some areas, particularly in the Great Lakes Region, the St. Lawrence River Valley, and the Hudson River Valley.
Purple loosestrife spreads rapidly, often forming large, dense, monotypic stands that displace native wetland species. It eliminates essential food and cover for wetland inhabitants.

This species has recently been found in Kentucky where it occurs in wetlands, along streambanks, pond margins and roadside ditches mostly in the northern half of the state.

Annual KNPS Spring Meeting Review

Pam Long

I am addressing this article to all those people that felt they were too busy to attend the Annual Spring Meeting of the KNPS at Natural Bridge State Resort Park. We had a wonderful time!! The weather was outstanding, the walks were exciting and informative, and the evening presentations were simply incredible. What wonderful fellowship all who attended enjoyed, sharing that same delight and meditation over the beauty of a columbine, or the experience of viewing a lush green liverwort spreading across a sandstone boulder. Once again our thanks to Wilson Francis, Park Naturalist and his staff for all the great planning and coordination that went into creating a memorable weekend.

On Friday, those who arrived early participated in short field trips around the Park. Friday evening activities began with the election of officers for 1996. Our officers and directors are President: David A. Eakin, Vice-President: Patricia D. Haragan, Secretary: Pam Long, Treasurer: Steve Sensenig, Board of Directors: Greta Fields, Deborah Harwell, R. Hughes Walker, and Charlie Lapham.
The keynote speaker was Dr. Tom Barnes, extension specialist from the University of Kentucky. Dr. Barnes is an accomplished wildflower photographer and has conducted a number of workshops on the art. His program highlighted the landscape approach to wildflower photography—an interesting change from the usual close-up pictures of wildflowers we usually see in presentations. The slides were fantastic, as Tom had used great effort to represent the habitat of each plant portrayed. After, we were entertained by Wilson’s antics in handing out door prizes. This was great fun, and everyone was appreciative of the nice gifts that they eventually received.

Saturday many field trips were offered and it was difficult to choose. My family and I enjoyed a morning walk with David Eakin, the new president of the KNPS. His knowledge of liverworts and mosses was amazing. We were also accompanied by David Taylor, botanist with the US Forest Service, and the combined input of both provided the participants with a short course in moss anatomy and terminology.

On Saturday afternoon, my family and I chose a pollination biology walk with Ron Jones, professor at Eastern Kentucky University, and chair of the KNPS Certification Program committee. During the walk we examined many flowers and talked about the pollinators of each. How wonderful to truly appreciate the complete growth and development process of our spring ephemerals. We examined the floral structure of crested dwarf’ iris (Iris cristata), and discussed the bisexual nature of Jack/Jill in the pulpit (Arisaema triphyllum). We observed the lovely flower of wild ginger (Asarum canadense), and discussed its pollination by beetles. Also to our amazement, midway through the walk we spotted a columbine (Aquilegia canadensis), with a hummingbird flying back and forth among its blooms. I don’t know how Ron arranged that, but it was truly an exciting experience as every wildflower enthusiast knows.

Other field trips focused on orchids with the lady-slipper (Cypripedium calceolus and C. acaule) and whorled pogonia (Isotria verticillata) being the most sought after. Many other lovely wildflowers were in full bloom and a joy to behold. On Saturday evening Dr. Jim Butler of the University of Alberta presented an entertaining talk entitled, “The Naturalists Rights of Spring.” The slides were phenomenal, reflecting his extensive travels and his commentary kept the audience amused. What a wonderful presentation!

On Sunday a few walks were offered but my family opted to return home, tired and happy, with four new T-shirts and two new KNPS caps. If you missed the spring meeting, plan to attend the fall. Details will be available in the August newsletter.

Pam Long is the secretary of the Kentucky Native Plant Society, and has written previously about the Mathews Garden in Lexington. She may be reached at (606) 254-3101.
KNPS Certification Program in Native Plant Studies

Summer-Fall 1996 Course Offerings

Certification courses are offered by the KNPS as part of a curriculum developed to educate KNPS members in native plant studies. 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 EKU Herbarium (606) 622-6257.

Course offerings for Fall-Winter 1996-97 are being developed, with a list of offerings available in the August 1996 newsletter. Members are encouraged to take advantage of the extensive field trips presented in the coming month. (See pages 10-11).

CURATORS’ CORNER

The Davies Herbarium at the University of Louisville

Patricia D. Haragan

The Davies Herbarium at the University of Louisville contains an excellent collection of vascular plants with 35,000 specimens representing the flora of Kentucky and the southeastern United States. The Herbarium has been completely renovated, and is now housed in a converted warehouse on Floyd Street.

The Herbarium began in the 1930’s when Dr. P.A. Davies, then chairman of the department of Biology started a vascular plant collection. Upon his death in 1961, the herbarium was named in his honor and control was turned over to a committee of botanists headed by Dr. Arland T. Hotchkiss. In 1964, Dr. W. S. Davis, a plant systematist from UCLA took over the curatorial duties which he continues to the present time.

Specialized collections within the Davies include a study of the Red River Gorge area, as well as specimens for the floras of Oldham, Meade, Bullitt, Breckinridge, Carroll, Edmonson and Campbell counties.
The herbarium is also the official repository for specimens from a number of federally funded environmental surveys in Kentucky. Included are specimens from an area now occupied by the Louisville Gas and Electric Company fossil fuel generating plant in Trimble county, and collections from a study of the Salt River before its impoundment to form Taylorsville Lake. Extensive collections of the Water Resources Laboratory's work at Doe Run Lake are also maintained. There are several collections from Australia, Utah and Iowa. The Davies also assisted the University of North Carolina during their construction of the Flora of the southeastern United States. Over 3,000 specimens of Kentucky plants were exchanged for an equal number of plants from the University of North Carolina.

In the spring of 1995, I was hired as Associate Curator to update and organize the collection. This hasn't been an easy task and priorities had to be made. First and foremost the building needed extensive cleaning and painting. Once this was done the cases were reorganized according to the Cronquist system, specimens refilled, and new genus covers made. Secondly, a backlog of about 4,000 specimens had to be mounted and accessioned. This backlog included specimens from the Kentucky Nature Preserves Commission, aquatic plant specimens of Dr. Arland Hotchkiss; part of Dr. Max Medley's Kentucky collections, a donation Cyperaceae and weeds from Dr. Charles Bryson, a USDA botanist, as well as my own weed collections. Lastly, once the collection was organized and accessible, specimen label data could be entered into a computer program for data sharing with other herbaria.

To date, the first goal has been completed. Working with the collection has been a joy and a headache (due to moth balls). However, it is clear that the Davies Herbarium is a rich repository of plants representing the natural history and biodiversity of Kentucky. It is an important collection that continues to provide basic material for research at the University as well as community level. In addition to specimen loans to other academic institutions and researchers, several organizations, such as the Kentucky Society of Natural History and the Louisville Olmsted Conservancy-Metro Parks have shown interest and support.

The future of the Davies Herbarium looks bright. Upon his retirement, Dr. Davis plans to take on full-time curatorial duties and continue his research work in *Malacothrix* (Asteraceae). Dr. Medley is pursuing his studies on the flora of Kentucky and the Orchidaceae, and I continue to work on the weed flora of Kentucky and the southeastern United States. It is has been exciting to see the changes that have taken place in the past few months and Dr. Davis and I welcome visitors to use the collection.

Pat Haragan is Vice President of KNPS, and Associate Curator of the Davies Herbarium. She may be reached at (502) 852-0868 or (502) 852-5940.
KNPS Sponsored Field Trips & Regional Events of Interest for 1996

Clara Wieland, KNPS Field Trip Coordinator

Please Note: To ensure that enough participants will attend a trip and that the leader(s) can do an effective job REGISTRATION IS REQUIRED FOR ALL FIELD TRIPS. Unless otherwise noted, please call Clara Wieland at (606) 266-5548, to register.

EXPLORE THE REMNANT WETLANDS OF CENTRAL KENTUCKY
Saturday, July 20, 1996. 10:00 am Eastern Time. Madison and surrounding counties.
Leader: Ron Jones, Botanist, Eastern Kentucky University
Ron will lead an expedition into remnant wetlands in Madison and surrounding counties. This is a chance to "get your feet wet," and learn to recognize some of our common hydrophytes. Shoes may get wet! Bring water, hat and lunch. Meet at Shoney’s, exit 87 off I-75, Richmond. Limit 20. Register with Ron at (606) 623-6494.

VISIT A LIMESTONE GLADE IN SUMMER- JIM SCUDDER PRESERVE,
Saturday, August 24, 1996. 10:00 am Eastern Time. Hardin County.
Leader: Joyce Bender, Stewardship Director, Kentucky Nature Preserves Commission.
Joyce plans to introduce us to prairie glade vegetation, and explain management strategies used to keep these systems healthy. These rare habitats are populated by grasses and composites not found in other areas of Kentucky. (Note: Several years ago I did see my first Helenium orchid on the way to the glade). Meet in E-town at Burger King off I-65 and Rt 62. From Louisville, take I-65 to E-town and exit for Rt 62. From Lexington, take BG Parkway to E-town. Take I-65 North about .6 mi to exit 94 (Rt 62). Moderate walk. Bring water, snack, hat & sturdy shoes. Limit 14.

SHANTY HOLLOW POCKET WILDERNESS AND WKU HERBARIUM
Saturday, September 14, 1996. 11:00 am Eastern Time. Warren County.
Leader: Zack Murrell, Botanist, Western Kentucky University.
Zack will host us at his Plant Systematics and Molecular Laboratory at WKU. Then he will lead us to Shanty Hollow, a limestone and sandstone gorge, with cliffs, deciduous forests and ferns. Meet in Bowling Green at the Cracker Barrel, at I-65 exit 22. Scottsville Rd. (Rt 231). Bring a bag lunch. Limited to 20 people.

MUSHROOM FORAY - NATURAL BRIDGE STATE RESORT PARK
September 27, 28, 1996. For more information call the park at 800-325-1710.

FALL PLANTS AND ECOLOGY OF AN OPEN CORRIDOR AND ADJACENT PINE-HARDWOOD WOODS
Saturday, October 5, 1996. 10:30 am Eastern Time. Cumberland Falls area, Whitley County.
Leader: David Taylor, US Forest Service Botanist.
David has volunteered to lead us to this diverse habitat again. David prepared a checklist and brochure on how this area "happened." Thirty-four different composites were found on the last field trip. Don't miss this opportunity to see this mosaic of plants. Meet at Dupont Lodge, Cumberland Falls State Resort Park. Take I-75 to exit 25. which is the Rt 25W and Rt 90 exit. Follow Rt 90 West and signs to the State Park Lodge. Bring a lunch and water. Limit 12.
EXOTIC PLANTS SYMPOSIUM AND THEIR IMPACT ON BIODIVERSITY:
Saturday, October 19, 1996. Winchester, KY

A day long seminar on the problems presented by invasive exotic plants. Speakers include Dr. John Randall, The Nature Conservancy, Dr. Randy Westbrook, USDA -APHIS, Patricia D. Haragan, Associate Curator of the Davies Herbarium, author of Weeds of Kentucky and Adjacent States, Joyce Bender, Kentucky Nature Preserves Commission, and others. This conference will focus on the problems of invasive non-natives and help us begin to think about solutions. (Final program details in August newsletter.) Please plan to attend!

A FALL AFTERNOON AT GRIFFITH WOODS - THE LAST ASH-OAK SAVANNAH
Sunday, November 3, 1996. 1:00 pm Eastern Time. Fayette County.
Leader: Martina Hines, Kentucky State Nature Preserves Commission

Martina will show us the last remnant of savannah that once covered the Bluegrass. Martina will talk about the natural history and the plants associated with this unique ecosystem. This might have been what the Bluegrass looked like for many centuries until Europeans came. Join us for this easy walk. Meet at the Marriott's Griffin Gate parking lot area off Newton Pike. From I-64/75 the north side of Lexington, take the Newton Pike exit. Turn toward Lexington. The Marriott is a short distance on the left off of Newton Pike. Limited to 12.

Kentucky Native Plant Society 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 list.

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 ($5.00) ______  Annual Family Membership ($7.00) ______

Lifetime Individual ($100.00) ______  Lifetime Family ($140.00) ______

Also available are official KNPS Caps (gray, red, green) $11.00/each, 10th Anniversary T-Shirts (x-large only) $13.00/each, KNPS Emblem Polo Shirts (large only in kelly green, navy and light blue) $30.00/each, KNPS Patches (black on white) $4.00/each. Only a few of each of these items are left. All prices include postage.

Send orders to: Steve Sensenig, KNPS Treasurer, 1694 Fairview Rd, Lawrenceburg, KY 40342
KNPS ACTIVITY CALENDAR FOR 1996

July 20: Remnant Wetlands of Central Kentucky Field Trip
August 24: Jim Scudder Preserve Field Trip
September 14: Shanty Hollow/ WKU Field Trip
September 27-28: Mushroom Foray, Natural Bridge State Resort Park
October 5: Fall Composites / Old Field Ecology Field Trip
October 19: Exotic Plants and their Impact on Biodiversity Conference
November 3: Griffith Woods Savannah Field Trip