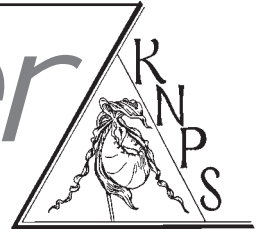


The Lady-Slipper



Kentucky Native Plant Society

Number 21:4

Winter 2006

Dear Members:

The board of directors met recently to discuss the future of the Native Plant Society. We are a viable and vibrant organization but we always need to look at ourselves to ensure we are being good stewards of the tasks the members set before us. As many of you may, or may not, be aware, the KNPS has been running a deficit for the past two years, i.e. we spent more money that we had coming in. At our recent board meeting we have discussed numerous methods of correcting this imbalance to ensure the long-term survival of the society. Consequently, we wanted you, the membership, to be aware of the situation and provide us with your feedback. At the present time the largest percentage of our operating expense has been the production of the newsletter. We have a very high quality newsletter, one of the best in the state, however this quality comes at a cost. The newsletter, on an annual basis costs about \$5,200 to produce and send and the costs are roughly broken down as printing \$2,000,

design \$2,800, and mailing \$400. We have developed a small survey that we would like for you to complete so we can gauge what the membership wants to do with respect to the future of the society. We currently have about 250 members who pay annual dues, and about 100 life members. One thing that would help greatly is to increase our paying members to 400. If every current member would just find one new member for KNPS, that would alleviate our immediate financial problems! Please take a few minutes to complete the survey and return your answers either via email to our membership committee chairperson Steve Hess at hess_s@bellsouth.net or return via snail mail to Steve's home address. Your input will help determine how the board proceeds in the future. Other very important items that were approved included a new dues category, family with a \$25.00 annual membership fee, and an effort to redo our brochure. The reason we are updating the brochure is to make it current with the new dues structure, but more importantly to use it as a recruiting tool for new members. We anticipate contacting various other natural history organizations throughout the state and the master gardeners in an effort to strengthen our membership numbers. We are all in this together and we value your input. By the way, have you looked at the website lately? Dave Luzader has done an excellent job reworking it and there is a ton of information on the site. In the next several weeks you will notice a good number of field trips that are going to be offered to the membership. In addition, the wildflower of the month has rotated from the bladderwort to the yellow-eyed grass. Take a look and see how your chapter is striving to meet the needs of our members, you.

Sincerely, *President Tom Barnes*

In this issue--

President's Message	1
Trilliums of Kentucky	2
Coefficients of Conservatism	4
Weed Alert--Akebia	5
Ellwood Jerome Carr, Folk Botanist of KY	6
Who Am I?	7
KNPS Hike Schedule	8
General Interest Survey	9
Native Plant Certification Survey.....	11
Calendar of Events.....	12

Spring Native Plant Sales *Mark your calendar!*

Saturday, April 28, 2007

Salato Wildlife Education Center
#1 Sportsmans Lane
Frankfort, KY
(502)564-7863
www.fw.ky.gov

April 27 & 28; May 18 & 19, 2007

Fridays from 12-8 pm; Saturdays from 9 am-5 pm
Dropseed Native Plant Nursery
13930 Brush Run Road
Louisville, KY
(502)762-1080
www.dropseednursery.com

April 20-end of May

Fridays and Saturdays only; 9 am-5 pm
Shooting Star Nursery
160 Soards Road
Georgetown, KY
(502) 867-7979
www.shootingstarnursery.com



is intended to be published by the Kentucky Native Plant Society [IRC 501(c)(3)] in March, June, Sept., and Dec. Deadlines are the 15th of the prior months, but Editorial Committee members welcome article submissions at any time.

Send dues and inquiries about membership status to: KNPS Membership, P.O. Box 1152, Berea, KY 40403. FOR ALL OTHER BUSINESS contact an appropriate Officer / Board Member below:

KNPS Officers—

President: Thomas G. Barnes - Department of Forestry, University of Kentucky, Lexington, KY 40546-0073, 859-257-8633, tbarnes@uky.edu

Vice-president: Patricia D. Haragan - 713 Greenridge Lane, Louisville, KY 40207, 502-894-0674, patricia.haragan@olmstedparks.org or caribpat@aol.com

Secretary: Amanda McKinney - 3964 Woodchase Drive, Erlanger, KY 41018, (859) 283-5377, honey.adm@hotmail.com

Treasurer: Kathleen Jones - P.O. Box 1152, Berea, KY 40403

KNPS Executive Board Members—
Dave Luzader - 5646 Taylor Mill Rd., Taylor Mill, KY 41015, 859-356-8581, d luzader@insightbb.com

Jason (Zeb) Weese - Kentucky State Nature Preserves Commission, 801 Schenkel Lane Frankfort, KY 40601, (502) 573-2886, zeb.weese@ky.gov

Tara Littlefield - 353A Woodland Ave Lexington Kentucky 40508, 859-333-9887, tara.littlefield@ky.gov

Alan Nations - 13020 Mitchell Hill Rd, Fairdale, KY 40118, alan.nations@olmstedparks.org, 502-235-8068

Native Plant Studies Certification Program Director - Landon McKinney - ASC Group, Inc., 1616 Burlington Pike, Suite A, Florence, KY 41042; 859-283-5377; lmckinney@ascgroup.net
Co-Directors: Ron Jones and Margaret Shea

The Lady-Slipper Editorial Committee - Landon McKinney (see contact info above) and Ron Jones - Biological Sciences, Eastern Kentucky University, Richmond, KY 40475, 859-622-6257, ron.jones@eku.edu

The Lady-Slipper design and production - Amy McIntosh, 255 Sunset Ave., Richmond, KY 40475, 859-626-5207, amy.mcintosh6@eku.edu

Webmaster - Dave Luzader (see contact info above)

Trilliums in Kentucky

by Susan Farmer, *The University of Tennessee*

Trilliums, with their three leaves and solitary flower, are one of the most recognizable of the spring wildflowers. With a distribution across North America and eastern Asia, the center of highest diversity is in the southern Appalachian Mountains. There are 5 or possibly 6 species and 4 named hybrids of *Trillium* in Asia, 8 species in western North America and 30 in eastern North America. I place *Trillium* in the family Trilliaceae, a family comprised of 6 genera. Three of the genera exhibit a wide distribution: *Paris* from Iceland to Japan, *Daiswa* from eastern Asia, and *Trillium* from North America and eastern Asia; and three are monotypic, endemic genera: *Trillidium*, with a tepaloid inflorescence, from the Himalayan Mountains; *Kinugasa*, with petaloid sepals, from Japan; and the newly described *Pseudotrillium*, with spotted petals, from the Pacific Northwest. The two traditional genera, *Paris* and *Trillium* were separated solely on the basis of number of petals: *Trillium* has three petals with *Paris* having from four to eleven.



Trillium luteum

photo by Amy McIntosh



Trillium sessile

photo by Amy McIntosh

Trillium is currently divided into two subgenera: *Phyllantherum*, the sessile-flowered species, and *Trillium*, the pedicellate species. Members of both subgenera are found in Kentucky. The sessile flowered species include the familiar yellow *Trillium luteum* and its brownish-maroon sisters: *Trillium cuneatum*, *T. recurvatum*, and *T. sessile*. These plants are typically characterized by spotted leaves (although *T. sessile* frequently has unspotted leaves); a lack of a stem or pedicel between the leaves and the flower; and a flower with vertical (as opposed to spreading) petals. *Trillium recurvatum* and *T. sessile* are the most easily identified of the group. *Trillium recurvatum* has petiolate leaves which arch upwards from the stem forming a valley for the flower to nestle in. The diminutive, green ovary and very long stigmatic branches quickly identify *T. sessile*. While the yellow *T. luteum* can usually be identified by color, it is not unusual for *T. cuneatum* flowers to occur in a variety of shades from dark reddish-brown to yellow so other characters such as floral scent (lemony for *T. luteum*, spicy for *T. cuneatum*), or petal shape (lanceolate for *T. luteum* and oblanceolate for *T. cuneatum*) may be needed to distinguish the two.

The pedicellate trilliums are usually divided into two groups: the Erectum Group and the Grandiflorum Group based on the nature of the petals. The petals in the members of the Erectum Group appear coarser, and when white merely turn brown as they age; the petals in the Grandiflorum Group appear more delicate and frequently turn a vivid pink with age. In fact, *T. undulatum*, the painted trillium, is the only species to have a patterned flower. Its characteristic red blaze at the base of the petals and petiolate leaves make this species of *Trillium*

easy to identify; it is also one of the few that can be reliably identified in fruit: its fruit is a bright red berry.

The Erectum Group is a complex group. These species can be difficult to separate from one another; all have coarse, typically maroon or white petals that turn brown as they age. These species present in Kentucky are *Trillium erectum*, *T. flexipes*, and *T. sulcatum*. *Trillium erectum* can be either red or white, but the flower is very flat appearing almost two-dimensional whereas in *T. sulcatum* the flower has a more cupped appearance rather like a candle-snuffer. Primarily found over limestone, *T. flexipes* is a white flower with a white, pale pink or pale yellow ovary.

The other pedicellate Trilliums include the familiar painted trillium, *Trillium undulatum* (mentioned above), the great white trillium, *T. grandiflorum*, *T. pusillum*, and the diminutive *T. nivale*. The petals of both *T. grandiflorum* and *T. pusillum* turn a vibrant pink as they age; in addition, there are populations of *T. grandiflorum* that are known to open pink as well. Relationships between these species has been the subject of on-going research at the University of Tennessee.



Trillium erectum

photo by Amy McIntosh

It was thought that *T. nivale* and *T. pusillum* might be closely related because of the presence of a common style which is a rare character in *Trillium*; in the other species, the stigmatic branches sit sessile on the top of the ovary. Molecular evidence, however, indicates that this is not the case. It appears that *T. grandiflorum* and *T. nivale* may in fact be sister species; this relationship however is not supported

by morphology. *Trillium pusillum* is a member of a complex containing *T. catesbaei* and the federally-listed *T. persistens*; *T. pusillum* is the only member of the complex occurring in Kentucky.

Trillium pusillum is the early flowering of the pedicellate *Trillium*; in fact, it may flower as early as late February. The taxonomy of this plant has been the subject of debate and study since the 1980s; it has been seen as a single species, a single species with from two to five varieties, or as a number of closely related separate species. Traditionally, taxa allied with *T. pusillum* were differentiated based on habitat: if the plants were found in wet habitats (ranging from seeps, spring-wet floodplains, to swamps subject to inundation), it was considered to be *T. pusillum* or *T. pusillum* var. *pusillum*; if the plants were found on dry, upland, frequently rocky slopes it was considered to be *T. pusillum* var. *ozarkanum*



Trillium grandiflorum

photo by Amy McIntosh

or simply *T. ozarkanum*. *Trillium pusillum* var. *virginianum* or *T. virginianum* is usually considered to be different because of the virtual absence of a pedicel.

Molecular evidence suggests that *T. pusillum* is composed of three groups: the Virginianum Group of sessile-flowered to almost sessile-flowered plants, the Pusillum Group of southern coastal plain plants, and the Ozarkanum Group consisting of the interior plants.

It is the Ozarkanum Group, which consists of *Trillium pusillum* var. *alabamicum* and *T. pusillum* var. *ozarkanum*, that is found in Kentucky. Generally, variety *alabamicum* is found in wet areas whereas *ozarkanum* is found in drier areas; phenology between the two is different as well:

variety *alabamicum* flowers earlier and has usually completely senesced while var. *ozarkanum* is still viable. Habitat, however, can be variable; the Cumberland County population in Tennessee, while situated on a dry upland slope has been shown to be variety *alabamicum*. While the wetland populations of *T. pusillum* in Kentucky have not been sampled for DNA analysis, morphometric analysis of quantitative data (e.g., measurements) indicate that all populations of *T. pusillum* in Kentucky are variety *ozarkanum*.



Trillium undulatum

photo by Amy McIntosh



Trillium pusillum

photo by Susan Farmer

Trillium pusillum and *T. nivale* are rare in Kentucky. As you go out early this spring, be alert for the small white *Trillium*; it just might be a new population.

Check out our newly revised website at

www.knps.org

Coefficients of Conservatism – A Tool for Gardeners?

by Margaret Shea

The Coefficients of Conservatism were developed for the plants of Kentucky about five years ago by Deb White, Marc Evans (The Kentucky State Nature Preserves Commission), Doug Ladd (Missouri Nature Conservancy), and me. The Coefficients were originally developed to help conservationists prioritize sites for protection – however, the more I used this tool, the more applications I found for it.

Each native species has been assigned a coefficient of conservatism between 1 and 10. A species with a coefficient of 10 is very picky about where it will grow - it can not tolerate disturbance well and is only found in certain habitats. An example of a very conservative species would be the Kentucky Lady Slipper Orchid, which only grows in certain rich bottomland hardwood forests and is not found in disturbed sites. A species with a coefficient of conservatism of 1 is a very weedy species – one that would grow almost anywhere and tolerate a great deal of disturbance. An example of a weedy species with a low coefficient of conservatism is Ragweed – it is found in a wide variety of habitats and is very tolerant of disturbance. The coefficients were assigned to species based on how botanists and ecologists observed each species growing in Kentucky.

These coefficients can be used to develop an index of quality for natural areas - averaging the coefficients of all the plants from a site will give you an index of the site's integrity. Simply stated, if many picky plants are present at a site, you are in a special natural area. This index can be used to compare two sites in order to set priorities for protection, or it can be used to compare the same site before and after management or restoration work.

I have also found the coefficients to be helpful in choosing plants to use for restoration projects. Using seeds from plants with coefficients of 9 and 10 is unlikely to be a success – these species are unlikely to establish in a disturbed area being restored. On the other hand, planting too much of a species with a coefficient of 1 or 2 might result in that species completely dominating the mix.

I also like to look at the coefficients from the viewpoint of a gardener. The coefficients give an indication of whether you should be on the look-out for a certain species to take over your garden – or whether you need to treat it with extra TLC. Since I prefer a low maintenance garden, I avoid the highly ranked species. However, the low-ranked, weedy species can take over your garden and need to be weeded out.

The database is currently on the Dropseed Native Plant Nursery website – www.dropseednursery.com. The database also indicates which species are native to the state and which have been introduced, and provides additional information on each species including its growth form, wetland status, and whether it is annual or perennial. The coefficients are one piece of information about Kentucky's native plants to help you understand how they behave in nature – and how they might behave in your back yard.



It's Membership Renewal Time!

Kentucky Native Plant Society
Membership Form

Name(s) _____

Address _____

City, State, Zip _____

KY County _____

Tel.: (home) _____

(work) _____

E-mail _____

- Add me to the e-mail list for time-critical native plant news
- Include my contact info in any future KNPS Member Directory

Membership Categories:

- Individual \$15
- Family \$25
- Lifetime \$200

- This is a renewal
- This is a new membership

Membership \$ _____

Gift (optional) \$ _____

Gifts are tax deductible [IRC 501 (c)(3)]

Total \$ _____

(Payable to Kentucky Native Plant Society)

Return form & dues in enclosed envelope to:
KNPS Membership, P.O. Box 1152, Berea, KY 40403

Note: *You membership is paid through the year that is noted on your newsletter address label. Annual memberships are for the January-December calendar year.*

WEED ALERT: AKEBIA

Issued by the Louisville Olmsted Parks Conservancy
Herbarium

Akebia (Akebia quinata), also known as fiveleaf Akebia and chocolate vine, is a twining woody vine or groundcover that was introduced into the United States in 1845 as a garden ornamental. Native to central China, Korea and Japan, this species is the only member of the tropical family, Lardizabalaceae in Kentucky. The plant, when young, has green vines which turn brown at maturity. The alternate leaves are divided into 5 oval leaflets that are entire margined and 1 to 3 inches long. Small, fragrant flowers consist of both separate male and female flowers which are produced in axillary clusters. The female flowers, about 1 inch wide are plum-colored to brown while the smaller, rosy-purple flowers are male. Although the fruit is rarely produced and hard to find, it is a 3 to 5 inches long, oblong purplish berry with black seeds imbedded in a fleshy pulp.

This aggressive species spreads vegetatively and grows 20-40 feet in a single growing season thriving in sun, shade, wet or dry conditions as well as low and high pH. The primary means of dispersal is mainly through human activity. Today, it is still available in the nursery trade.



Akebia is rare in Kentucky and reported from only three counties: Bourbon, Rockcastle and Jefferson. At Cherokee Park, in Louisville, it is locally invasive in rich, mesic woodlands. It grows quickly and can kill existing ground vegetation as well as climb over and smother canopy trees. In one area, it has formed a massive green shroud towering above the forest floor to 40 feet or more, twining around everything in its path.

Control options are determined on a site by site basis. At Cherokee Park, we have achieved best results from a combination of manual, mechanical, and chemical treatments. We cut climbing vines at the base of trees and shrubs with hand pruners and treat the fresh cut stem with a small amount of Glyphosate product, mixed in accordance with manufacture's directions. In areas where a ground cover has formed, we lightly pass over the areas with a brush cutter, cutting and exposing the stems. Immediately, we treat the exposed stems and foliage with a fine spray of Glyphosate product. We also hand pull all isolated and spreading vines outside the areas of concentration. Akebia is often found in areas with healthy populations of native trees, shrubs, and herbaceous plants. Careful consideration should be given to timing when applying herbicide. Delaying treatment until after spring flowers have died back is advised. Never spray herbicide on akebia climbing native trees and shrubs or allow overspray to come in contact with them. Any of these methods alone will work as well keeping the areas heavily mulched with wood chips and other organic mulches for at least two growing seasons. Close monitoring is important and follow up treatment is normally necessary regardless of which method you choose to eradicate Akebia. For more information or questions, contact Alan Nations, Naturalist, Natural Areas Manager, Louisville Olmsted Parks Conservancy at Alan.Nations@olmstedparks.org.

To help prevent, or minimize the spread and establishment of new infestations, the Louisville Olmsted Parks Conservancy is alerting concerned personnel to be on the watch for this aggressive exotic plant. For any questions on the identity of Akebia or to report any sightings, please contact Patricia D. Haragan, botanist who is helping to document the spread of this species in Kentucky at Patricia.Haragan@olmstedparks.org.

KNPS Committees

Membership: Co-chairs - Steve Sensenig - 1694 Fairview Rd., Lawrenceburg, KY 40342; 502-604-1420; digger@wmbinc.com and Steve Hess - 517 Leicester Cr., Louisville, KY 40222; hess_s@bellsouth.net

Special Projects: Chair - Zeb Weese (see p. 2)
Members - Tara Littlefield (see p. 2), Mary Carol Cooper - #1 Game Farm Rd., Frankfort, KY, 40601; 502-564-5280; marycarolcooper@insightbb.com

Fieldtrips: Chair - Patricia Haragan (see p. 2)
Member - Steve Hess (see above)

Communications: Chair - Amy McIntosh (see p. 2)

Grants: Chair - David Taylor - USDA-Forest Service, 1700 Bypass Rd., Winchester, KY, 40391; 859-745-3167; dtaylor@fs.fed.us

Ellwood Jerome Carr--Folk Botanist of Kentucky

by Amy McIntosh

Author's note: I was introduced to Carr's collection during the summer of 2005, just months after his death. I had the pleasure of inventorying his notebooks and researching his life. The inventory was made possible with the assistance of a grant from the Kentucky Humanities Council. This article is a brief biography that I assembled from his collection of notes.

Ellwood J. Carr was born November 11, 1909 in Allegheny Co., Pennsylvania. He also lived in Indiana prior to moving to California. Along with his wife, Ruth Sexton, Carr farmed 2,000 acres of commercial crops along Sacramento River, Ca. where they began raising four children: Donald, Richard, Kenneth and Dianne.

In 1954, at the age of 45, Bud (as he was known by friends) accepted the position of farm manager of Henderson Settlement Mission in Bell County, Kentucky. Although it is unclear if their oldest son, Donald, then 19, made the trip with them, Richard was 13, Kenneth was 11, and Dianne was four when the family traveled to their new home. They moved a family of at least five and all their possessions over 2,500 miles in a moving van.

The Henderson Settlement was under the new leadership of Tex Evans at the time. Evans revived the agricultural program with Carr's help and created a craft store for locals to market their skills. The craft store concept evidently made an impression on the Carrs—they would start a similar business a few years later. After 3 years at the Settlement, the Carrs decided to leave for the nearby town of Chenoa. Carr stated that they felt too isolated from the surrounding community at the Settlement. In 1957 the Carrs purchased a country store in Chenoa. Ruth and Bud managed the store together at first while the family shared a living area over the store consisting of four small rooms.

The situation in Eastern KY was starting to decline at this time. Many deep mines were closed and there was high unemployment and no government support. When the store opened, Carr was offered bloodroot and ginseng in exchange for groceries and other necessities. He had no knowledge of



Ginseng collector, from Carr's slide collection

the woodland herbs, but was aware of the dire situation of his neighbors and decided to research these offerings. Local harvesters, such as the ginseng collector in Carr's photo, can be thanked for his initial interest in wild plants.

Carr had no formal education in botany. However, he educated himself by borrowing a copy of the American botanical bible, Britton and Brown's *Illustrated Flora* from Union College. Carr's early attempts to identify plants consisted of holding the plant in one hand and comparing it, page by page, to the illustrations provided in his guide. His writings indicate that sometimes three trips through the volumes were necessary at first. However, Carr began to learn and eventually master the dense jargon of botany and was able to utilize the keys provided in the guide to more quickly identify subjects.

Carr began to collect and identify specimens for displays at a community center the couple opened adjacent to the store. Collecting, pressing and identifying specimens became a passion for Carr. In the early 1960s, the Carrs turned the Community Center into a craft business. Carr's Cabin Crafts was envisioned as a means to help the locals develop a sellable product. Gourdcraft became a focus for the business, and Carr attempted to locate seeds for all available varieties of gourds. In 1963 he planted nearly 5 acres of these gourds.

In less than nine years, Carr's knowledge of Kentucky's flora had grown so much that he was hired, in 1966, by Pine Mountain State Park to create and care for a wildflower garden. This was only part of his job with the park, which included tasks of park naturalist, business manager, desk clerk and auditor. The garden was a huge undertaking which included plans for inclusion of 168 families of plants. The plants were largely organized by type, with areas devoted to mints, goldenrods, shade plants, and many other groups. His plans for the gardens also included a surveyor's map on which he drew plans for an irrigation system. Unfortunately, the park rejected the irrigation system due to expense. The garden was not well maintained after Carr's departure, and no longer exists.

In early 1967, Carr was approached by Mrs. Clyde Buckley, who wanted to memorialize her late husband with a wildlife sanctuary. She asked Carr to work as director and naturalist at the sanctuary, which consisted of 235 acres near Frankfort, KY. Carr quickly transformed the abandoned farm into the Clyde E. Buckley Wildlife Sanctuary, which received its charter from the National Audubon Society less than two years after Carr's hire.

While at the Buckley sanctuary, Carr began to host wild food workshops, complete with tasting parties. In addition, he created a collection of native plants used for herbal medicine which served as a teaching collection. In

1973 he started a medicinal plant workshop series. In every workshop or lecture Carr presented, he was cautious to warn participants against using wild plants without a solid knowledge of plant identification. An original poem written in longhand in Carr's notes indicates his respect for native poisonous plants:

*Consider this tragic and
tear jerking tome.
Of the girl who went wild
in the woods all alone.
Without looking at her books
or considering their looks,
She nibbled some roots
and tasty young shoots,
And dropped dead before
she got home.*

Upon reaching the National Audubon's mandatory retirement age in 1975, Carr returned to his home in Chenoa. He was undeterred by his increasing age and remained extremely active in botanical pursuits. Carr continued wild food and medicinal plant workshops long after his retirement from the Sanctuary at the age of 65.

Carr's interest in plants was well documented by his photography. From the late 60s until the early 80s, Carr amassed a collection of over 23,000 photographic images. Most of these were color slides which he utilized for lectures and to accompany published articles.



Carr in Buckley Sanctuary uniform with camera, from his collection

He meticulously numbered and labeled all of his slides. In addition, he kept numerical and subject lists of all of the slides within his collection. Such copious record keeping was evident in his plant collections, lecture notes, and other endeavors. He was an obsessively organized man.

The 1970s were a time of extreme productivity for him. Carr lectured widely

on wild foods, medicinal plants and Kentucky wildlife. In 1971, three of Carr's photographs appeared in Mary Wharton's classic guide to the wildflowers and ferns of Kentucky. He began to give workshops at the Pine Mountain Settlement School. For nine years the school hosted his Medicinal Plants workshops, and for at least 5 years, a Wild Plant Foods workshop was held there as well. At the 4th annual wild plant foods workshop 250 people attended and Carr offered 60 plant food dishes in ten different categories as a complete dinner in courses.

In 1972 Carr began a weekly article in the *Herald-Leader*, which focused on the life history of a different plant each week. His text for *Strolling through the Woods* appeared with original photographs.

Less than a year after his retirement, Carr was named the Science Director of the *Living Arts and Science Center* in Lexington. In 1976 Carr was named Kentucky Naturalist of the Year by Kentucky Natural History Society. This prestigious honor was bestowed merely 19 years after the first ginseng collectors brought their roots in for trade at the country store. Upon Carr's retirement from the Living Arts and Science Center, his collection was showcased in a month long exhibit at the center entitled "The Naturalist".

Once again, the Carrs returned to their home in Chenoa and Ruth continued to manage the country store while Bud began a new project, and continued to collect plants. Carr's "Herbary" consisted of a concrete 20x20' building adjacent to the store. At

continued, page 8

Who am I?



photo by Troy Evans

I am a wetland perennial herb, usually emergent from standing water. My leaves are simple and about half as long as wide (unlike my more common relative that has cordate leaves). My flowers have 6 "tepals" and 3 stamens, and a superior ovary. I have an extremely wide continental range, but am considered rare in Kentucky.

Fall 2006 Who Am I? answer:

This is plant is *Limnobium spongia* (Frog's bit), Family Hydrocharitaceae, author (Bosc) Rich.ex Steud. Found in ponds and lakes in western Ky in the Mississippi Embayment area.

The following KNPS members correctly identified the last species:

Ralph J. Schuler Jr., Frank Melton
Susan Wilson, Chris Bidwell
and Judy Dumke

Send your answer including family name, genus and species name, the correct author citation, and the geographic range of the species to ron.jones@eku.edu

Continued from page 7

this location, Carr offered weeklong workshops on medicinal plants and actively collected, bought and resold native herbs. A price list from 1980 includes a list of 80 herbs he sold in ½ oz. and 2 oz. amounts. Initially, Carr harvested and prepared each herb himself. He kept detailed records regarding time investment. Carr calculated fair prices for each of the 80 herbs he resold, then bought from local collectors.

In addition to collecting, Carr kept phenology records on flowering plants in Bell and Harlan Counties from 1972-1981. These records indicate the date of the first bloom for each species. By 1979, Carr had amassed two major collections of plants from Bell and Woodford Counties. During his collecting, he found 6 species previously unknown for Kentucky. Duplicates of some of his collection are now housed at the UK herbarium. His collections included over 5000 pressed herbarium specimens. His plan was to publish floras for the two counties. However, this work was not completed.

In 1980, his weekly column, *Strolling through the Woods* ended with issue of his 401st article. In 1983, Carr was chosen as 1 of 27 herbalists of US to be included in *Herbal Pathfinders: Voices of the Herbal Renaissance*. In 1983, Carr was still very active, and served as president of the Kentucky Methodist Historical Society. In September 1984, Carr was chosen as the featured speaker at the annual conference of the Kentucky Association for Environmental Education (KAEE). However, in the mid-1980s, the Carrs both experienced declining health. On April 12, 1984 the E. J. Carr Plant Studies Center was incorporated as a separate non-profit entity at PMSS. His entire botanical collection, equipment, slides and library were donated to the Plant Studies Center. At the time of the donation, over 20 years ago, the collection was estimated to be worth over \$44,000.

The last record of a public presentation by Carr is a Winter Botany Seminar at PMSS that he led in February of 1985. In October of 1985 Carr requested that the Board of the Plant Studies Center donate the entire collection to PMSS for educational uses and the corporation was dissolved. Ruth preceded him in death, and Ellwood J. Carr died, after suffering several years from a severe stroke, on March 26, 2005.

Carr had a determined spirit and an ability to face new challenges at any age. His contribution to Kentucky was incredible. Even though he was a transplant to Kentucky at the age of 45, he continued to learn and actively contribute for thirty years, until his mid-seventies.

KNPS 2007 Hike Schedule

Walks are limited to twenty participants. Please call the number provided and register prior to each hike.

Feb 17, 2007. Berea College, Berea, KY. Folks meet at the Indian Fort Theatre parking lot, about 3 miles east of Berea on Ky Hwy 21, at 9:30 a.m. Leader: David Taylor, 859-745-3167.

March 31, 2007. Pine Creek Barrens, Bulitt County to see the Kentucky Glade Cress. Leader: Tara Littlefield 502-573-2886 ext 106.

May 5, 2007. Rivercliffs State Nature Preserve, Franklin Co., KY. Meet at 10 AM. Easy walk but some uphill. Leader: Deb White, (502) 573 2886.

May 19, 2007. Cherokee Park, Louisville, KY. Folks meet at the Daniel Boone Monument on Eastern Parkway (park entrance) at 9:30. Easy Walk. Alan Nations, staff naturalist and restoration specialist will lead the walk. Call Darlene Yann at the LOPC at 502-456-8125.

September 15, 2007. Otter Creek State Park, Brandenburg, KY. A moderately difficult walk through scenic Otter Creek State Park with naturalist, J. Bryan Lewis. Meet at the main building located at 850 Otter Creek Park Rd at 9:00 a.m. Call 502-574-4583 or 942-3211 for information.

October 6, 2007. Powerline/right-of-way walk with Dave Taylor not far from Cumberland Falls SRP, KY. The location is off KY 92. Meet at 10:00 a.m at Dupont Lodge parking lot, and drive back east to the site. Call 859-745-3167 for information.

Native Plant Certification Courses

Two courses will be offered
Spring Semester 2007 at NKU:

Basic Plant Ecology

Feb. 17, 24, Mar. 3, 10

Basic Botany

Mar. 24, 31, April 7, 14

9 am-12:00 noon each Saturday

For more info contact:

Community Connections, Northern KY University
Founders Hall 306, Highland Heights, KY 41099

Kentucky Native Plant Society General Interest Survey

Name _____

Address _____

email (*this is especially needed*):

1. Please rank the following from most important (number 1) to least important (number 4) as a reason that you belong to the Kentucky Native Plant Society:

- _____ Newsletter
- _____ Field Trips (including our annual wildflower weekend in April at Natural Bridge)
- _____ Classes or educational opportunities
- _____ School or research grants
- Other _____

2. Which of the following areas would you be willing to volunteer your time and talent?

- _____ Newsletter
- _____ Field Trips
- _____ Classes or educational opportunities
- _____ School or research grants
- Other _____

3. What format would you prefer to receive the newsletter?

- _____ Electronic (either by email or from the web site)
- _____ Hard Copy

4. Our current newsletter is more article-oriented than most native plant newsletters. It often includes scientific articles, as well as popular ones, often accompanied by photos. Would you prefer that the newsletter:

- _____ keep the current format
- _____ be reduced to a news format, with only announcements, news releases, brief articles, upcoming events, etc.
- _____ be expanded, for perhaps one issue a year, to a more "journal" type format, with research articles from members, students, and others.

5. What do you consider to be the most important activities of the KNPS (rank 1-10, with 1 being most significant):

- _____ field trips to see rare plants
- _____ field trips to specific habitats or areas for general observations of a variety of attractive or interesting species
- _____ field trips to collect scientific data (involving members with research)
- _____ work with other conservation groups on projects
- _____ establish rare plant gardens or seed banks
- _____ sponsor conferences dealing with native plant issues
- _____ organize plant rescues and other conservation activities
- _____ sponsor periodic lectures around the state
- _____ fund student research and establishment of native plant gardens at schools
- _____ set up certification program in native plant studies across the state
- other _____

Any other comments on the future of the KNPS are appreciated:

Fold and mail this survey form (address provided on reverse) or email responses (survey will also be posted on KNPS web site www.knps.org) to: hess_s@bellsouth.net (that's hess_s)

Note: if each member will recruit one new member for KNPS, then our financial situation will be resolved. Please try!

Thank You!

PLACE
STAMP
HERE

Steve Hess
517 Leicester Circle
Louisville, KY 40222

Kentucky Native Plant Society

The Kentucky Native Plant Society offers a series of courses leading to **Certification in Native Plant Studies**. These classes are designed as community education courses to enlighten the public on issues concerning our native flora. Graduates of the program will be uniquely prepared to serve in leadership roles in on-going efforts to preserve and restore our native Kentucky flora.

Current course offerings are listed below. Core courses meet for 12 hours (four three-hour sessions). Special topics courses meet for one day and topics vary as instructors are available.

A **Special Achievement Certification** is available for those interested in conducting a research project as part of their certification process.

Courses are currently offered through Northern Kentucky University. We plan to be able to offer the certification courses at alternative sites in Covington-Cincinnati, Bowling Green, Richmond, Louisville and other areas depending on interest. The approximate cost is \$75 for a core course.

Core Courses - it is strongly recommended that all 6 be taken

1. Basic Botany for the Amateur Naturalist
2. Plant Ecology for the Amateur Naturalist
3. Plant Taxonomy for the Amateur Naturalist
4. Plant Communities of Kentucky
5. Kentucky Wildflowers (Spring or Fall)
6. Kentucky Trees and Shrubs

Special Topics Courses - select at least 6

1. How to Know the Kentucky Mosses
2. How to Know the Sedges of Kentucky
3. Field Methods for Native Plant Research
4. Field Geology for the Amateur Naturalist
5. Spring Wildflowers and Trees
6. Aquatic Plants of Kentucky
7. Gardening with Native Plants
8. Rare Plant Conservation
9. Kentucky Grasses

We apologize for being delinquent in offering a full slate of courses at some sites (i.e. at Bernheim) in the past. Over the next couple of years we plan to revamp our program and offer a full set of courses at several sites across the state.

Certification Program Survey Form

Please indicate your interests by filling out the survey form and mailing it to the address below (form is also available at www.knps.org).

Name _____
 Address _____
 Phone _____
 Email _____

I am interested in the KNPS Certification Program at (circle all that apply):

Richmond Covington
 Bowling Green Louisville
 Other _____

I would prefer the following schedule (circle one):

4 Saturdays
 4 Weekdays
 2 Weekends (Sat., overnight, and Sun.)
 Other _____

I have taken the following courses:

Course	Location	Instructor

I am particularly interested in the following courses:

I would recommend that the following courses be offered:

Return to:

Landon McKinney, ASC Group, Inc.,
 1616 Burlington Pike, Suite A, Florence, KY 41042.
 You also email your responses to
lmckinney@ascgroup.net.

Calendar of KNPS and Other Native Plant-related Events

Natural Bridge Events:

Exploring Arch Country Guided Hikes: February 9 & 10 (Arches Weekend); June 9; July 14; Aug 11; Dec 1, 2007
For the adventurous only! Join a naturalist for these guided hikes throughout Kentucky's land of the arches. You'll get a good look at the area's rugged cliff lines, rockhouses, rhododendrons, and natural arches. Destinations include White's Branch Arch, Whittleton Arch, Kentucky's Natural Bridge, and many other lesser known destinations! Each trip is different, distances vary from 6 to 12 miles, with a 6-9 hour duration. Preregistration is required, contact Noelle Theres at noelle.theres@ky.gov. Fee is \$15 (Limit 12 people), includes guide, snacks and Natural Bridge bandana.

Invasive Species Volunteer Workshops: Feb 3, March 3, June 2, July 7, Aug 4, Nov 3, 2007
Help stop this invasion of exotic plants by volunteering to assist the naturalist staff in pulling and cutting some of the worst invaders. This is great opportunity for individuals and groups to improve the environmental health of our public lands! Each volunteer day begins at 9:00 am at Natural Bridge's Hemlock Lodge, and ends whenever you get tired! Preregistration is encouraged, contact Noelle Theres at noelle.theres@ky.gov.

Arches Hiking Weekend: February 9-10, 2007
There are hundreds of natural arches and bridges within a few miles of Kentucky's Natural Bridge, and winter is the best time to see them. Join experienced guides for a day of hikes throughout the area ranging from short easy walks to long treks in the backcountry. Evening speakers will focus on the geology and history of the area. On site registration fee is \$5 per adult and \$2 per child. Contact Noelle Theres at noelle.theres@ky.gov.

Wildflower Weekend: April 19-22, 2007
The Natural Bridge area is home to hundreds to species of native plants; enjoy them this weekend with other botanists, gardeners, and nature lovers. Our field trips are for all levels of participation, from beginner to advanced wildflower enthusiast and from short easy walks in Natural Bridge to longer hikes in Red River Gorge. Our evening speakers will focus on the native plants of the region. On site registration fee is \$5 per adult and \$2 per child. Contact Noelle Theres at noelle.theres@ky.gov



Back Issues of
The Lady-Slipper
and KNPS Grant Application
details are posted on the
KNPS WEBSITE --
www.knps.org

SEE PAGE 2 FOR CONTACT INFORMATION.

*(Return address below is for
POST OFFICE USE ONLY.)*

Kentucky Native Plant Society
c/o Department of Biological Sciences
Moore 235
Eastern Kentucky University
521 Lancaster Ave.
Richmond, KY 40475-3102

NON-PROFIT ORG.
U.S. POSTAGE
PAID
RICHMOND KY 40475
PERMIT NO. 116