



The Lady-Slipper

Summer 2013

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www.knps.org

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Western Kentucky's Swamp Leather-flower

Robert Dunlap, KSNPC volunteer

One of the plants I look for every spring in western Kentucky is *Clematis crispa*, commonly known as Blue Jasmine or Swamp Leather-Flower. *C. crispa* is listed as "Threatened" by the Kentucky State Nature Preserves Commission and is only known from the four western counties along the Mississippi and Ohio Rivers – Ballard, Carlisle, Hickman and Fulton. It occurs in a few counties across the rivers in southern Illinois and western Missouri and becomes more common as you head into the southern states.

As its name implies, this native clematis likes to grow in wetlands, floodplains and swamps. All of the sites where I've found this plant growing in Ballard and Carlisle counties are flooded for some portion of the year when the rivers decide to overflow their banks. In addition to enjoying getting its feet wet, *C. crispa* prefers a bright location and is usually found competing for sunlight along with all the other vine species that like to grow in swampy conditions. The stems of this herbaceous vine grow to a length of 6-10 feet and the plants die back to ground level each winter. The flowers consist of four sepals (no petals) that curl backwards resulting in an urn-like appearance.

Finding this plant in the field is a matter of being in the right place at the right time. Searching for the purple-blue flowers before the neighboring vines have put out all of their foliage affords the best chance for success. Another option that requires good eyesight is to search for the distinctive seed pods, sometimes referred to as "Devil's Darning Needles" in the fall.

Two additional native clematis species that can be found in western Kentucky include *C. pitcheri* (Bluebill) and *C. virginiana* (Virgin's Bower). Differentiating *C. crispa* from *C. pitcheri* is best accomplished by examining the undersides of the leaves. *C. pitcheri* exhibits a prominent raised network of veins which are absent on *C. crispa*.

A quick internet search turned up several native plant nurseries where Swamp Leather-Flower can be purchased. From the planting advice given on these sites it apparently does well when grown in containers and I'm guessing it would make a nice addition to an outdoor pond or water garden.



C. crispa photos in this article by Bob Dunlap.

KNPS President's Message by Alan Nations

Greetings,

I hope you all had a chance to get out and enjoy the beautiful spring. The wildflowers were spectacular and the woodlands were lush. The cooler temperatures and spring showers felt great in contrast to the last few years of drought. We can only hope this will continue through the summer.

Wildflower Weekend at Natural Bridge was another great success, thanks to all who contributed in so many ways. Wildflower Weekend is an important program for the Society and is enjoyed by so many of our members each year. Park Naturalist Brian Gasdorf and Tyler Morgan deserve much credit for the success of this program. We value our long standing relationship with Natural Bridge State Park and appreciate all their support over the last 27 years.

We are looking forward to a joint meeting with the Tennessee Native Plant Society in September at Lake Barkley. It has been twenty years since the two organizations last met together for a fall meeting. Barkley is beautiful in the fall and we will provide some great speakers and interesting programs for everyone to enjoy. More details and information will be sent to you, and will also be on our website and Facebook page. I hope to see you all there. Be safe and enjoy the summer!

Alan

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The Lady-Slipper is intended to be published by the Kentucky Native Plant Society [IRC 501(c)(3)] in March, June, Sept., and Dec. Deadlines are the 10th of the prior months, but Editorial Committee members welcome article submissions at any time. Send dues and membership status inquiries to:

Kentucky Native Plant Society Membership, 801 Schenkel Lane, Frankfort, KY 40601

www.knps.org

info@knps.org

**JOIN US FOR THE KNPS/TNPS JOINT FALL MEETING
AT LAKE BARKLEY STATE PARK!**

September 20–22, 2013

Please complete and return by August 20

Registration fee per person \$15.00	# _____	@ \$15.00	_____
Room: Single per night		\$101.16	_____
Double per person, per night		\$50.58	_____

Those sharing a room should register
together. Two checks may be sent.

Box Lunch for Saturday Field Trip	_____	@ \$ 10.91	_____
Saturday Buffet Lunch	_____	@ \$ 12.17	_____
		TOTAL	_____

Other meals may be purchased individually at the park restaurant:
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Registrant #1 Information:

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Telephone _____
Email _____
Special Needs _____

Registrant #2 Information (if sharing a room):

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Mail check(s) payable to TNPS to:
Lorie Emens
9705 Kingsbridge Cove
Lakeland, TN 38002



For many years the KNPS fall meetings have been held in central and eastern Kentucky, so it is about time we all headed west to the Jackson Purchase! This fall we will have a joint meeting with the Tennessee Native Plant Society at Lake Barkley State Park. Field trips are still being arranged, but it is likely we will visit areas in Land Between the Lakes National Recreation Area and some of Livingston County's award-winning natural areas like Newman's Bluff! Registration is being handled by our friends at TNPS, so for more information on lodging please contact

info@tnps.org; KNPS is working on the field trip details.



Newman's Bluff in October 2011; photo by Zeb Weese

For information on Lake Barkley State Park, go to:
<http://parks.ky.gov/parks/resortparks/lake-barkley>

For info on Livingston County Natural Areas, check out:
<http://naturepreserves.ky.gov/naturepreserves/Pages/newmansbluff.aspx>

From the KNPS Archives

The Brambles (*Rubus* spp.) of Kentucky

by Gary W. Libby

The KNPS has been producing *Lady-slippers* for two decades now, and we've had a lot of great articles appear over the years. We will be republishing some of these articles over the coming issues, with a focus on taxonomy and life history of Kentucky's native plants. Our first reprint is from the May 1994 issue, Volume 9 Number 2. Enjoy!

This group of plants which is known by many other names such as briars, blackberries, raspberries, dewberries, and wineberries, includes all the members of the genus *Rubus* which is in the rose family (Rosaceae). The genus *Rubus* is represented by 20 species in Kentucky, of which six are naturalized and now a part of our flora. The other 14 species are native to this region. Throughout the history of plant description, species of *Rubus* have been a difficult taxonomic problem. During the early to mid 1900's, many authors accepted several hundred species of *Rubus* as occurring in the eastern United States. The comprehensive work of L. H. Bailey (1941-1945, 1947, 1949), entitled *Rubus in North America*, is an excellent work on the genus. Bailey recognized more than 470 species as occurring in North America but today, most taxonomists consider the majority of these species to be forms or microspecies.

Most brambles send up a series of biennial stems from a perennial base. During their first year these are termed primocanes; they are usually unbranched and normally do not flower. During their second year they are known as floricanes; they increase no more in length, but emit a number of short lateral branches with a few leaves and usually a terminal flower or inflorescence. The leaves of the primocane are compound in most species; those of the floricanes are often partly simple and often of a different shape. Primocane variation was used by L. H. Bailey and other authors to define species. Bailey believed that material could not be properly identified without primocanes and floricanes from the same plant and this was often a difficult task for collectors. Today, although some primocane characteristics are used, species are not defined by them.

There are several reasons that the taxonomy of this genus has been a problem for botanists. Morphological variation in *Rubus* exists because

of phenomena such as apomixis (asexual reproduction or vegetative propagation), agamospermy (embryo produced without sexual union), pseudogamy (apomicts that require pollination for seed set), and intraspecific hybridization (sexual reproduction where the parents are different species). These phenomena and their associated taxonomic problems have caused many botanists to refrain from studying or classifying *Rubus* species or to merely label something a hybrid if it does not conform to existing keys. For these reasons, a more conservative taxonomic approach to this genus is taken today such as that of Gleason and Cronquist (1991).

The brambles of Kentucky can be divided into five groups or subgenera:

- Subgenus *Anoplobatus* (flowering raspberries)
- Subgenus *Chamaemorus* (red raspberries)
- Subgenus *Cylactis* (dwarf raspberries)
- Subgenus *Idaeobatus* (blackberries and dewberries)

The flowering raspberries have mostly simple leaves which are broadly triangular (Figure 1). The flowers are rose or purple (rarely white)

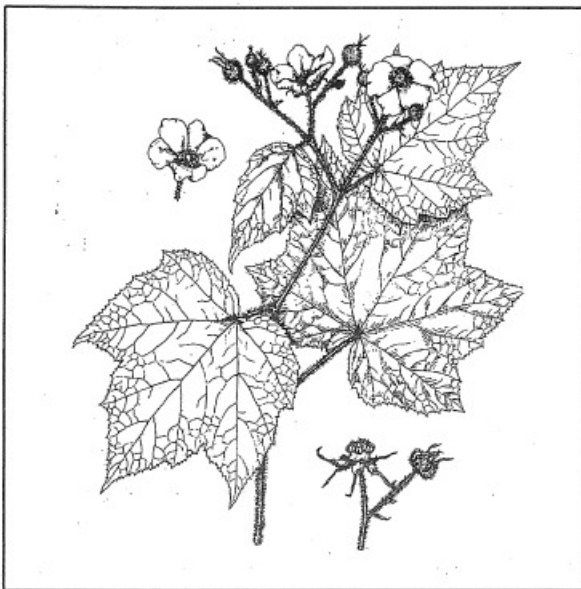


Figure 1. A typical flowering raspberry (*Rubus odoratus*). From Bailey, 1941-1945.

and the fruits are red and rather dry. This subgenus is represented by only one species in Kentucky, *Rubus odoratus* (flowering raspberry). Flowering raspberries grow in moist, shady places and margins of woods. They are similar to the red raspberries, but the leaves (which are sometimes simple) are broadly rounded, not triangular. The flowers are white to greenish-white and the fruit is red or yellow. There is only one red raspberry found in Kentucky (*Rubus idaeus* var. *strigosus*) which is very similar to the cultivated red raspberry (*R. idaeus* var. *idaeus* [many cultivars]). Red raspberries grow in dry or moist woods, fields, and roadsides. Some of the cultivated red raspberries escape locally and may cross with native species.

The dwarf raspberries are herbaceous and not well differentiated into primocanes and floricanes. Dwarf raspberries have dark red fruits and the flowers are white to greenish-white. There is only one dwarf raspberry found in Kentucky (*Rubus pubescens*) which is rare and grows in damp woods and bogs.

The raspberries and blackberries/dewberries have woody stems and are biennial, persisting throughout the winter and bearing flowers the second year. The raspberries have fruit that separates from the receptacle which is persistent on the pedicel. The raspberries found in Kentucky are *Rubus occidentalis* (black raspberry), *R. phoenicolasius* (wineberry), and *R. illecebrosus* (strawberry-raspberry). The last two species are introduced and escaped in Kentucky. The raspberries have mostly white flowers and red to black fruits. Raspberries grow in dry or moist woods, fields and thickets, and roadsides.

The blackberries and dewberries have fruit that separates from the stem with the central receptacle included. Blackberries and dewberries are our largest and most taxonomically difficult groups of brambles. The blackberries in Kentucky include *Rubus setosus* (bristly blackberry), *R. allegheniensis* (common blackberry), *R. canadensis* (smooth blackberry), *R. pensilvanicus* (Pennsylvania blackberry) (Figure 2), *R. argutus* (southern blackberry), *R. laciniatus* (evergreen blackberry), *R. discolor* (Hi-



Figure 2. A typical blackberry (*Rubus pensilvanicus*). From Bailey, 1941-1945.

Himalayan blackberry), and *R. bifrons* (Himalaya-berry). The last three are introduced and escaped in Kentucky. Blackberry flowers are mostly white, rarely pink-purple, and the fruits are dark red or black. Blackberries are the most common bramble in Kentucky and can be found growing (sometimes in impenetrable patches) on roadsides, fields and thickets, disturbed habitats, and dry or moist woods.

The dewberries generally have low-arching or sprawling primocanes and root at nodes or at least at the tips). The dewberries in Kentucky include *Rubus trivialis* (coastal-plain dewberry), *R. hispidus* (swamp-dewberry), *R. recurvicaulis* (Blanchard's dewberry), *R. flagellaris* (northern dewberry), *R. enslenii* (southern dewberry)(Figure 3), and *R. caesius* (European dewberry). The last

species is introduced and escaped in Kentucky. Dewberries have mostly white to whitish-green flowers and red to black fruits. They are found in dry, sandy soil, disturbed habitats, and dry or moist woods.

Though this is only a brief summary of the brambles of Kentucky, it may provide a greater understanding and a deeper appreciation for these shrubs and vines. Brambles provide food for wildlife and birds. Man has cultivated many *Rubus* species for their edible drupes. Some species are grown as ornamentals or hedge row plantings. Brambles are an interesting group of plants that can be found almost anywhere in temperate regions. They grow in various habitats both natural and highly disturbed. Brambles flower from mid-May to mid-

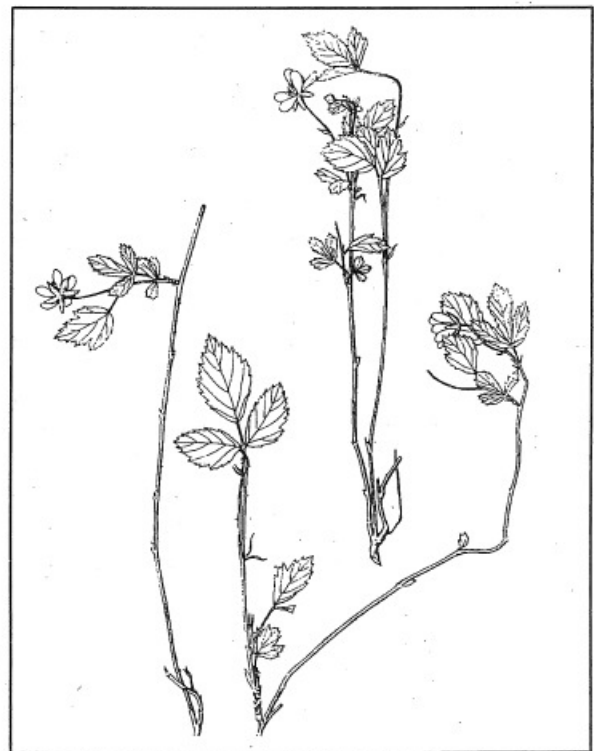


Figure 3. A typical dewberry (*Rubus enslenii*). From Bailey, 1941-1945.

June and fruit throughout the summer in Kentucky. Bramble roots have been used medicinally, either chewed or made into tea in cholera infantum and chronic dysentery (Rafinesque, 1828). Ripe fruit preserves, jams, jelly or syrup were believed to be beneficial in putrid and malignant fevers, and scurvy. Raspberries and blackberries make delicious distilled water, beer, mead, and wine. They also are said to dissolve tartar of the teeth. The twigs dye silk and wool. The fruits of all species, wild and introduced, are edible and some are quite delicious. So take a closer look at these plants, which are considered weeds by some, and admire their beauty as well as their ability to grow in various habitat types. Though it is difficult to go anywhere without seeing a bramble, the eastern portion of the state has the greatest diversity of brambles. So as you are out enjoying the summer wildflowers this season, don't forget the brambles.

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http://knps.org/

Kentucky Native Plant Society - www.knps.org

Welcome to
The Kentucky Native Plant Society

Kentucky Native Plant Society
www.knps.org

HOME INFORMATION NEWS/EVENTS MEMBERSHIP LINKS

The Kentucky Native Plant Society was founded in 1986 for everyone interested in the native plants and wildflowers of Kentucky. Plants are essential to both the well-being of our Commonwealth's natural ecosystems and our enjoyment of its unique environment. With members in Kentucky and neighboring states, the Kentucky Native Plant Society is a leader in promoting education about, appreciation for, and conservation of our native flora.

Our mission is to promote education, preservation, and protection of Kentucky native plants and ecological systems.

The Lady-Slipper Archives

Fall 2011 Newsletter

The Lady-Slipper

KNPS Native Plant Stewardship Certification Program

**EXPLORE YOUR WEBSITE
AT WWW.KNPS.ORG!**

Find the KNPS on Facebook!



<https://www.facebook.com/groups/69397006016/>

By Popular Demand...

They're BACK!

Preserve the GREAT OUTDOORS with GREAT PLATES from the past.

HELP US
Nature's Finest
Kentucky Heritage Land Conservation Fund
HeritageLand.Ky.gov

SAVE KY
Nature's Finest
Vicerey (*Limenitis archippus*) Kentucky State Butterfly

4EVER
Nature's Finest
Northern Cardinal (*Cardinalis cardinalis*) Kentucky State Bird

Drive home your support for the great outdoors.

Many of the natural areas mentioned in this issue such as Newman's Bluff and Griffith Woods were purchased with the assistance of the Kentucky Heritage Land Conservation Fund! Supporting these efforts is as simple as buying a "Nature's Finest" license plate for your car! For more info go to <http://heritageland.ky.gov/>



Kentucky Conservation Committee

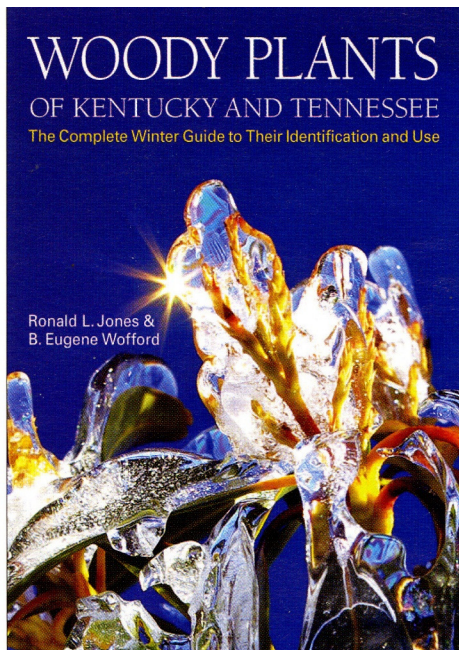
The Kentucky Native Plant Society is an official Affiliate of the Kentucky Conservation Committee!

The KCC is the state's only organization dedicated solely to providing a non-partisan voice for Kentucky's environmental community in Frankfort. KCC works to make sound environmental stewardship a priority for elected officials and voters. For more information on KCC's activities, just go to:

www.kyconservation.org

New Book Alert!

The KNPS is happy to announce the latest book by former KNPS president Dr. Ron Jones! For more information just go to www.kentuckypress.com



Nature/Field Guides/Regional

October

224 pages · 7 x 10 · 630 color photos, 2 maps

ISBN 978-0-8131-4250-0 · Cloth \$45.00s

ISBN 978-0-8131-4310-1 · PDF

ISBN 978-0-8131-4309-5 · EPUB

"This book is an excellent resource for those who need to identify the woody plants of the two states in winter conditions. The images and writing are superb and represent one of the best collections of this type that I have seen."
—Edward W. Chester, Austin Peay State University

"A significant contribution to our knowledge and understanding of the plants of Kentucky, Tennessee, and adjacent regions of the Southeast. The images will be of tremendous benefit to those seeking to identify plants during the fall, winter, and early spring."
—Zack Murrell, Appalachian State University

Woody Plants of Kentucky and Tennessee

The Complete Winter Guide to Their Identification and Use

Ronald L. Jones and B. Eugene Wofford

For centuries people have used trees, shrubs, and woody vines for food, clothing, ritual, construction, scientific study, and more. However, these important plants are easy to overlook during the winter months, when the absence of leaves, fruit, and other distinguishing characteristics makes them difficult to recognize.

This comprehensive volume is the essential guide to woody plants in Kentucky, Tennessee, and surrounding states during the winter season. Featuring color images of more than four hundred species, this detailed botanical resource provides keys to the genera and species, as well as descriptions of the genera. The species accounts include useful information on Latin meanings, common names, habitats and distributions, and notes on toxicity, nativity, rarity, and wetland status. In addition, authors Ronald L. Jones and B. Eugene Wofford provide notes on practical uses for the plants, including food, medicine, fiber, and weapons.

Whether taken into the field or enjoyed at home, *Woody Plants of Kentucky and Tennessee* is a comprehensive and accessible resource for professional and amateur botanists, students, commercial landscapers, homeowners, and outdoor enthusiasts.

Ronald L. Jones is Foundation Professor of Biological Sciences and curator of the herbarium at Eastern Kentucky University. He is the author of *Plant Life of Kentucky* and lives in Richmond, Kentucky.

B. Eugene Wofford is research professor and director of the herbarium at the University of Tennessee. He is the author of *Guide to the Vascular Plants of the Blue Ridge* and coauthor of *Guide to the Trees, Shrubs, and Woody Vines of Tennessee*. He lives in Knoxville, Tennessee.

ALSO OF INTEREST

Plant Life of Kentucky
An Illustrated Guide to the Vascular Flora

Plant Life of Kentucky

An Illustrated Guide to the Vascular Flora

Ronald L. Jones

Want to help with plant conservation – maybe even improve your plant skills?

For KNPS members interested in getting hands-on involvement with real plant conservation in Kentucky...

...the Kentucky State Nature Preserves Commission needs YOU!

Projects that we need help with:

- * Updating rare plant records at select locations (KSNPC supplies the locations). Records are aging at an alarming rate and we are unable to keep these updated.
- * Cataloging plant pictures – while cataloging doesn't sound fun, looking at plant images is!
- * Provide more native plant images to the Commission –we need high quality photos of native plants.
- * Improve our plant collection. We are very close to having our plant collection in a database so we will know what we have – and what we don't have. We need help in reviewing the plant specimens and entering the information.
- * Retrieving records from Kentucky herbaria. We have many of these records but new specimens are being collected all the time and this information is very important in assessing rare plants.

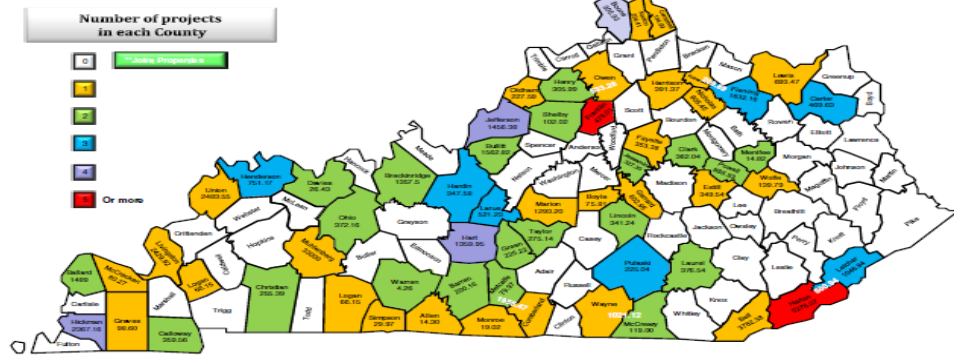
Contact Tara Littlefield at KSNPC for more information at tara.littlefield@ky.gov.

...the Kentucky Heritage Land Conservation Fund needs YOU, too!

The KHLCF has purchased and protected 80,000 acres in Kentucky since 1994—these include many of the parks and nature preserves in your area! Unfortunately, most of these sites are in desperate need of stewardship assistance. As budgets get tight and agency staffs are dwindling, invasive plants are increasingly crowding out our native species at many of these conservation areas. If your county is colored in on this map, that means there is land close by that needs your help! From hand-pulling garlic mustard to using a chainsaw and herbicide, there is plenty of work to be done on all these sites to suit your interest and abilities. Scout groups, church groups, garden clubs—many hands make light work! Contact Zeb Weese at zeb.weese@ky.gov for more information on how you can help!

Kentucky Heritage Land Conservation Fund

Protected Projects



...and so does The Arboretum in Lexington!

A unique opportunity for KNPS members to help with a living native plant museum in the heart of the Bluegrass -- The Arboretum's 'Walk Across Kentucky'. The Walk Across Kentucky at The Arboretum in Lexington was designed to showcase the diverse physiographic regions of Kentucky. The plant collections offer education and research opportunities for visitors, and also serve as an ex-situ conservation site (a true living museum). Now, almost 25 years after the first wild collected trees were planted, The Walk Across Kentucky is expanding development of specific Kentucky native plant communities. By featuring regionally appropriate plant material, stone, and interpretive signage, we hope our new plant-community exhibits will enhance visitor experience by highlighting Kentucky's natural diversity in a central location. We would be pleased to work with any KNPS members who would be willing to donate seed, plants, or stones of Kentucky provenance. Some of our most unique and interesting plants have come from enthusiastic friends who share part of their own landscape with The Arboretum and its visitors. Please contact Todd Rounsaville at todd.rousaville@uky.edu for more information.

KNPS Native Plant Stewardship Certification

Program Objectives

The KNPS Native Plant Stewardship Program was established to provide participants with the following:

- Background knowledge about Kentucky's native plant resources
- Knowledge about threats to native plant resources
- Experience managing for and restoring native plant resources

Program Overview

The full certification program consists of six one-day sessions, and is designed to be completed by one set of participants from start to finish. Three of these sessions are classroom-type courses, and three are field courses. These will be spread out over a six month period, with one course each month. Each full program offering will be based out of one area of the state, but the location will vary over time to allow for participation in different parts of the state.

Basic Program Information

Each session is limited to 15 participants, with on-line registration being open until it is filled (first come first served, on-line payment by credit card required). **For this reason, we ask that you check your calendar before registering, and if you know you will be unable to attend more than one course please do not register and wait until another session is offered. Certification is issued when all six classes have been attended. Make-ups can be completed in future sessions.**

Cost: \$90 (\$45 student)

This cost includes registration to all six courses, class materials, and a one-year membership or renewal to the Kentucky Native Plant Society.

Questions? certification@knps.org

For more info on our current schedule go to:
<http://www.knps.org/stewardshipcert.html>



Kentucky Native Plant Society
801 Schenkel Lane
Frankfort, KY 40601

2013 KNPS Membership Application or Renewal

Detach and send to: Kentucky Native Plant Society / 801 Schenkel Lane / Frankfort, KY 40601

Note: To pay by credit card or PayPal account, please visit the website www.knps.org.

Name(s)* _____

Membership Type: (memberships are for calendar year)

E-mail(s)* _____

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City, State, Zip* _____

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_____ Individual \$15 (includes e-newsletter)
_____ Family \$25 (includes e-newsletter to 1-4 e-mails)
_____ Lifetime \$200 (includes electronic newsletter indefinitely)
_____ Additional gift (optional, tax-deductible)
Total _____ Check No. _____

* denotes required fields, we MUST have your e-mail address in order to distribute the newsletter!

The Kentucky Native Plant Society was founded in 1986 for everyone interested in the native plants, trees, and wildflowers of Kentucky. Plants are essential to both the well-being of our Commonwealth's natural ecosystems and our enjoyment of its unique environment. With members in Kentucky and neighboring states, the Kentucky Native Plant Society is a leader in promoting education about, appreciation for, and conservation of the native flora of our Commonwealth.