

# The Lady-Slipper

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[www.knps.org](http://www.knps.org)

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## Announcing the KNPS Fall Meeting at Shakertown

**Saturday, September 11, 2010**

Plans are underway to for the KNPS Fall meeting at Mercer County's Shaker Village of Pleasant Hill (<http://www.shakervillageky.org/>)! Preliminary plans are for several field trips on Saturday morning and Saturday afternoon in the Kentucky River palisades region, followed by an afternoon program indoors.

Details will be posted to [www.KNPS.org](http://www.KNPS.org) as they are finalized, but here is our tentative schedule (all hikes subject to change):

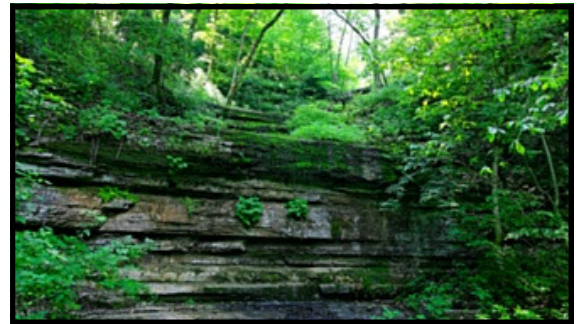
### **9 AM field trips**

(meet at the West Family Wash House, area "C", in the main village):

Don Pelly, Shakertown Naturalist- birding hike to Shakertown's native grass plantings.

David Taylor, US Forest Service- woody plant walk on the Shaker Village grounds.

Zeb Weese, KNPS- Kentucky River canoe trip (limit 14 adults).



Palisades from [www.shakervillage.org](http://www.shakervillage.org)

### **1 PM field trips** (meet at the West Family Wash House):

Tara Littlefield, KY State Nature Preserves– field trip to Jessamine Creek Gorge (limit 3 vehicles)

Alan Nations, NativeScapes, Inc, - hike on the Shaker Village grounds.

Sarah Hall, Kentucky State University- hike to Tom Dorman State Nature Preserve.

### **5 PM presentations** at the West Family Wash House:

Dr. Luke Dodd, UK Forestry, will present "Impacts of forest management on foraging bats in hardwood forests" followed by Greg Abernathy, KY State Nature Preserves Commission, on "Biodiversity of Kentucky"

**Registration will take place in the West Family Wash House prior to each field trip.**

**Fee is \$10 per person and includes all trips and presentations.**

### Fall meeting accommodations near Shaker Village:

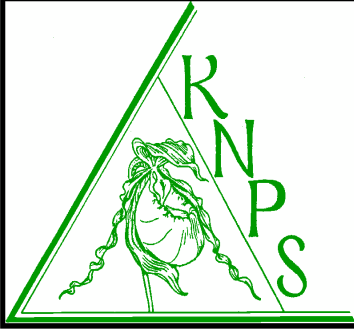
|                      |  |                |
|----------------------|--|----------------|
| Shaker Village       | <a href="http://www.shakervillageky.org">www.shakervillageky.org</a> | (800) 734-5611 |
| Country Hearth Inn   | <a href="http://www.countryhearth.com">www.countryhearth.com</a>     | (859) 734-2400 |
| Days Inn Harrodsburg | <a href="http://www.daysinn.com">www.daysinn.com</a>                 | (859) 734-9431 |
| Beaumont Inn         | <a href="http://www.beaumontinn.com">www.beaumontinn.com</a>         | (859) 734-3381 |
| Bright Leaf Resort   |  | (859) 734-5481 |
| Parkview Guest House |  | (859) 734-4429 |
| Economy Inn          |  | (859) 734-4218 |
| Bluegrass Inn        |  | (859) 734-7782 |

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## The President's Message

By Alan Nations



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:

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Greetings! In May I had the honor of attending the first Southeastern Native Plant Societies Summit, representing the Kentucky Native Plant Society. The summit was hosted by the Florida Native Plant Society in Tallahassee. Representatives from seven other states were in attendance including Florida, Georgia, Tennessee, Louisiana, Texas, Mississippi and Virginia. The event was held in conjunction with Florida's annual conference.

The primary focus of the summit was invasive plants and their effects on each state's native plant communities and ecological systems. Following the introductions each delegate gave a presentation describing their invasive plants and the problems they are experiencing. Some delegates described programs in their state to combat the spread of invasives. The discussion was very informative; I was surprised to hear how strikingly similar the circumstances are in most states, although the species do vary. I was prepared when my time came and addressed some of our invasive issues in Kentucky, focusing on the rapid spread of bush honeysuckle (*Lonicera maackii*) and tree-of-heaven (*Ailanthus altissima*) which are, in my view, our most destructive and rapidly spreading species. I also emphasized the need for legislative change to stop the nursery industry and others from growing, shipping and selling invasive plants in all states. I ended with my thoughts on public education, suggesting that we could be more effective by empowering the public through an educational campaign. We developed an outline for work plan development; each delegate was given a topic for research and presentation at next year's summit, which will be held at Cullowhee, NC. We have been assigned the topic of maintaining the genetic integrity of natural populations. Our challenge will be to determine whether this is a concern for KNPS and the state of Kentucky and, if so, to develop strategies to address it. We are also tasked with identifying concerns related to the use of native plants for biofuel. Please contact me if you would like to participate in a working group on these topics.

The meeting was the beginning of a regional approach for dealing with invasives. I was very impressed by the Florida Native Plant Society's members and staff, especially Past President Gene Kelly's leadership in founding and hosting the summit. I would encourage anyone to attend one of Florida's annual conferences; this was a first class event with great speakers, field trip leaders, and truly unique plants and ecological systems.

Unusual weather conditions all over Kentucky seem to have had positive effects on some of our native plants. I have seen prolific blooms of spring and summer wildflowers, as well as good growth rates and blooms on trees and shrubs. I encourage you to visit a park or natural area. Take your camera – this is a record year for butterflies. Make plans to attend our fall meeting at Shakertown. It is going to be a fun event with lots of activities for all!

Contact Alan at [info@knps.org](mailto:info@knps.org) if you would like to be involved with the 2011 Southeastern Native Plant Societies Summit!

## Tall Tree Tales: Those Magnolias!

By Dr. Neil Pederson & Dr. Ryan McEwan

[Note: Before we move into our next subject, a small point of clarification is in order. Although these columns are co-authored, the lead author rotates. The last column on *Calciphiles* was lead by Ryan, not Neil.]

Those Magnolias. Those mysterious Magnolias! The trees in the genus *Magnolia* inhabiting the mesophytic forests of eastern U.S. add so many layers of complexity, awe and beauty to our forests (Figure 1). They are certainly a drawing card in return visits to the forests of eastern Kentucky. In fact, those Magnolias have been drawing folks to the forests of eastern Kentucky for centuries and were an important attraction for famous botanists as far back as the 18<sup>th</sup> century.

Perhaps the most awe-inspiring *Magnolia* species is the appropriately named bigleaf *Magnolia* (*Magnolia macrophylla*). Having the largest leaves in these forests and one of the largest flowers in temperate North America (Figure 2), this unusual tree is certainly an eye-catcher. If you've ever been on the trail to Gray's Arch from the Nada Tunnel Road in the Red River Gorge or poked around in the bottom of Cane Creek Wildlife Management area near London, KY, you cannot help nearly tripping over the rocks and logs at your feet (but hopefully not the snakes!) as your attention is averted to the mid-canopy and stands of *Magnolia* deeper into the forest (Figure 3). Among the many additions to the forest that they bring, these *Magnolias* lend a tropical feel. In fact, friends on a hike from the Nada Tunnel Road kept expecting to see sloths perched in the crowns of these trees (Perhaps at one time the paleo sloths of North America did perch in the crowns of these species of *Magnolias*?). Bigleaf not only decorates our forests in the spring and summer with its large leaves and flowers, it adds depth to the forest floor with the glaucous underside and cinnamon brown upper surface of its leaves (Figure 4). Bigleaf *Magnolia* stimulates and excites our visual senses nearly year round. In fact, one of the best identifiers for this species is its large silver buds and stout twigs in the autumn, winter and early spring (Figure 5).



Figure 1 – Bigleaf *Magnolia* captures the fascination of young and old.

A bit later than the paleo sloth era, but still historical, bigleaf *Magnolia* drew Andre Michaux eastward after his first encounter with the species near Charlotte, NC. According to Donald Culross Peattie, Michaux was “forever watching for it” after his first encounter with the species in North Carolina. His search was greatly rewarded as he moved into the Cumberland Mountain region. Bigleaf was not the only *Magnolia* to draw the attention of early botanists. William Bartram gave mountain *Magnolia* (*Magnolia fraseri* – also known as Fraser *Magnolia*) its first common name while on what he thought was the highest ridge in the Cherokee Mountains in May 1774. Umbrella *Magnolia* (*Magnolia tripetala* – also known as umbrella tree) was first described by Mark Catesby in 1743. Cucumbertree (*Magnolia acuminata* – also known as cucumber *Magnolia*), the largest, oldest-proven and most northerly *Magnolia* (Figure 6), was ‘discovered’ by European culture in 1736 and quickly distributed to gardens in England and France.

Europeans were thrilled over the American *Magnolias* in the 18<sup>th</sup> century as it was an entirely new genus of trees to them. *Magnolia* is one of the most ancient broadleaf species, dating to at least 90 million years ago during the Cretaceous era. This genus was

(Continued on page 4)

present in Europe, North America and eastern Asia, but is now only found naturally in North America and Asia. In fact, Asia has the most diversity within the genus with perhaps be as many as 300 *Magnolia* species! Asian *Magnolias* include *Magnolia obovata*, a species that on the surface appears to be bigleaf's sibling (Figure 7). There can be no doubt as to why *Magnolia* captured the attention of 18<sup>th</sup> century Europeans.

What is somewhat troubling is the lack of scientific investigation into the natural history of these trees, especially for bigleaf *Magnolia*. A quick search using the term *Magnolia macrophylla* in the *Web of Science*, a database of scientific publications, yields only a few papers focused on the ecology of the species. Further investigation returns a slew of studies for herbal, medicinal and beauty applications conducted by mostly Asian scientists. We also found some work that used genetic analyses to divine the divergence of the North American *Magnolia* genus from Asia. Our literature search did turn up a paper entitled "*An ecological study of Magnolia macrophylla in Gaston County, North Carolina*" by Robert Tompkins that was published nearly in the Cretaceous era – 2004! Really, how has this amazing species not captured the attention of ecologists for scientific study??!! [aside I: the *Web of Science* is not an end-all, be-all for ecological literature, so no doubt there are more investigations; aside II: Peattie notes that green cucumbertree cones were picked and infused in whiskey giving it a "*pleasant bitter*." We intend to thoroughly test this latter hypothesis in the near future. No doubt *Magnolia* knowledge is being lost from our literature and culture].

There are so many questions that immediately pop to mind when gazing among these pre-historic, tropical-esque creatures. *How old do these species live? How do they naturally regenerate and recruit into our forests? How do plants with such large leaves shed the heat load they bear in the Southern Appalachian region?* All of these are very simple questions that do not seem to be linked to a deeper body of scientific literature.

A quick web search for "*Magnolia macrophylla*", including *Google Scholar*, reveals this gap in knowledge. For example, a few sites indicate that bigleaf *Magnolia* grows to a maximum of height of 50-65 feet. A brief visit to Rock Creek Research Natural Area in the Daniel Boone National Forest, however, led to a rough maximum height of 99' as measured by Jess Riddle (Figure 2), a master's stu-



Figure 2 – A flower and the vertical and folded leaves on the 99' tall bigleaf *Magnolia* measured by Jess Riddle.



Figure 3 – A stand of *Magnolia* saplings along the trail to Gray's Arch.



Figure 4 – Bigleaf Magnolia autumnal.

dent at SUNY College of Environmental Science and Forestry. If the maximum height can be improved upon so easily in a 3-hr visit, one wonders how tall could this species grow? Likewise, the *Silvics of North American Trees*, the U.S. Forest Service 'encyclopedia' for major tree species, suggested that cucumbertree seldom lives beyond 150 yrs. Yet, the second cucumbertree cored by Neil was aged to be 348 yrs and a second tree in that same population of 20 samples to be 315 yrs. As the paper reporting that cucumbertree age was going to press, Dale Luthringer and Will Blozan found a fallen individual in Cook Forest, PA that looked old. Dale, Ed Frank and Anthony Kelly of the Eastern Native Tree Society collected a cookie of this tree 20' above its base; it was hollow. Nonetheless, at this height, the tree is roughly aged to 436 yrs! Imagine if a systematic investigation was made for this species? Could it live 600 yrs?

Some new investigations into the ecology of Magnolias are underway. The study in Gaston County, NC indicates that bigleaf Magnolia is more associated with American beech and sweetgum saplings than most other trees in that specific area. Minimum reproductive age of bigleaf Magnolia in that study was 25 yrs and most individuals were 25-35 yrs old. Tomkins, author of this study, suggests that periodic canopy disturbance is needed to maintain bigleaf Magnolia in the forest. A direct investigation of disturbance history forests with umbrella Magnolia, cucumbertree and bigleaf Magnolia in the Daniel Boone National Forest near London, KY by Kacie Tackett, a master's degree student at Eastern Kentucky University, should give greater insight into the timing and relationship between canopy disturbance and these species. To date, Kacie has found maximum ages for bigleaf Magnolia ranging from 69-80 yrs in Rock Creek and 73-94 yrs in Cane Creek. Upon completion of this study, we will have learned much more about the dynamics of These Magnolias in Kentucky's forests.

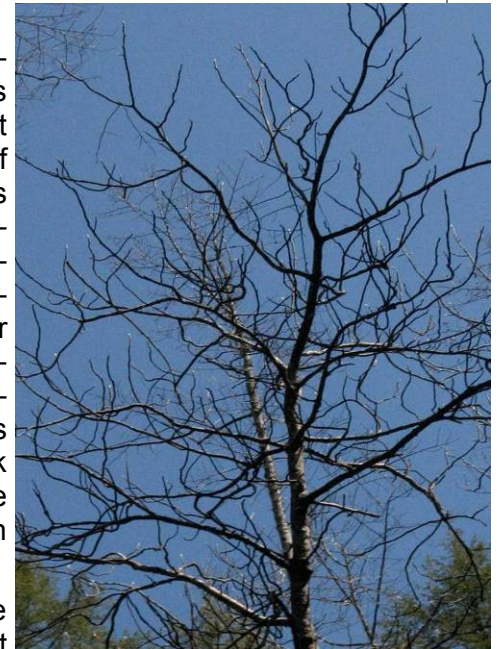


Figure 5 – The stout twigs and large, silver buds on a bare bigleaf Magnolia.



Figure 6 – Neil next to a large cucumbertree in Rock Creek, KY.

How Magnolia's with larger leaves handle heat stress or are affected by climate might be even at an earlier stage of investigation. Results of a preliminary study by Neil in the northern end of the Smoky Mountains indicates that radial growth of both mountain Magnolia and cucumbertree is limited by growing-season drought. However, while cucumbertree has stronger correlations to drought than mountain Magnolia (the species with the bigger leaf of the two species), mountain Magnolia's drought sensitivity might be driven more by temperature than cucumbertree. Much more research in various locations is needed to determine if these results are meaningful. However, the vertical leaves of the bigleaf Magnolia measured by Jess Riddle gives an indication how this species handles the heavy heat load generated during the sultry summers

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Picture 7 – Arrangement (left) and a close up (right) of *Magnolia obovata* leaves in the Sichuan Province, China.

in central Kentucky (Figure 2). Plants lose moisture during hot days through the stomata much like a dog panting in the heat. Evaporation at a leaf's surface cools the leaf surface. Bigleaf Magnolia's large leaves collect much of the Sun's energy, which would put a strain on it maintaining a positive moisture balance during mid-day. The leaves in Figure 2 are pointed vertically or somewhat folded. Similar to our ancestors who evolved to walk on two feet in the African savanna,

vertical leaves reduce the amount of exposed surface area to collect heat. Thus, one possible way bigleaf Magnolia might reduce its heat burden is to arrange its leaves in such a way to minimize its solar exposure. Of course, this idea, like many others, requires intensive scientific study.

Those Magnolias. Those mysterious Magnolias of the eastern deciduous forest - ancient, beautiful, but still largely unknown to modern science. 🌿

## **Southeasternflora.com: a practical new resource for native plant i.d.**

by John Gwaltney, [www.southeasternflora.com](http://www.southeasternflora.com)

The new [www.Southeasternflora.com](http://www.Southeasternflora.com) provides a wealth of plant identification information that is both comprehensive and easy to use. Whether you are an amateur or professional, this site is an invaluable resource that is only a mouse click away. Originally created to help fill the void of plant identification books in middle and high school libraries, Southeasternflora.com is a valuable resource to help identify native or naturalized plants in the southeastern United States. Started in the summer of 2005, the site covers more than 1,100 trees, shrubs, vines, and herbaceous plants with over 17,400 photographs. And because Southeasternflora.com is a work in progress, new plants and improved photographs are being added as found.

Although there are many informative web sites with good descriptions and photographs to help *confirm* the identification of a plant, most do not help *identify* the plant in question. Southeasternflora.com was created to help the user identify their plant specimen. By simply identifying the flower color, the user is given a thumbnail photograph of all plants that match the criteria provided. If a thumbnail resembles the specimen, simply clicks the thumbnail for the page for that plant. On that page, more detailed photographs will illustrate different parts of the plant from various views and angles. Some will show the different leaves of the plant whereas others may show the stem in some detail. Some even highlight distinguishing characteristics such as thorns or spines, fruit, hairs, bark, etc.

Another valuable feature are the plant notes to help further distinguish similar species. These notes may include information about blooming time, the number of flowers in a particular part of the plant, whether a plant has a distinctive fragrance when the leaf is crushed, or some other feature that cannot be photographed or might be missed upon a first inspection.

Professionals who have been extremely helpful in identification of plants and in helping to find new plants are Heather Sullivan, Heritage Botanist and Herbarium Curator with The Mississippi Museum of Natural Science; Dr. Charles Bryson, Ph.D. Research Botanist with USDA-ARS; and Tate Thriffiley, Ecologist with USDA Forest Service, DeSoto National Forest. Keep in mind that it is always a good idea to use several references to accurately identify your specimen. 🌿

## Native plant propagation through stem cuttings: tips from an amateur

By Patricia Hartman, Gardenside Natives



In March of this year, I got the crazy notion to start a native plant stand at the farmers' market. I knew it was on the late side, but the idea firmly rooted itself in my head and I knew I had to try. I found some seeds I'd saved from the previous year, ordered some more, and divided up some of my overcrowded plants. But divisions can only go so far. And despite the seedlings' steady progress, I knew I wouldn't have the variety and sizes of plants I wanted by fall planting season.

Forced to expand my horizons, I started searching for an additional way to supplement my inventory. Naturally that led me to stem cuttings, which had always seemed mysterious and inordinately complicated to me. Nevertheless, I decided to give it a try and I'm glad I did.

Phlox from cuttings grown by Gardenside Natives

It turns out that a small-scale stem cutting operation is surprisingly easy! All you need is a simple propagation chamber, rooting medium, fresh stems from your favorite plants, and a little patience. What follows is a brief account of what I learned over the last few months.

### Research mode

My first stop was the public library. I browsed the shelves and was happy to find several books on plant propagation, even some specifically geared toward native plants from the eastern U.S. Armed with reading materials, I learned about the differences between softwood, semi-hardwood, and hardwood cuttings; the best times to take cuttings from particular species; different kinds of rooting hormones, and more. Two books by William Cullina (one each on wildflowers and woody plants) as well as Harry Phillips' *Growing and Propagating Wildflowers* proved especially valuable.

As helpful as the books were, they all made one critical assumption that didn't hold for me: the propagator had access to a greenhouse with a misting system. Given the cloud of uncertainty over my stem rooting skills, I didn't want to invest a lot of money on the front end. So where to search for tips on how propagate on the cheap? Google and Craig's List of course! It turns out you *don't* need an expensive propagation chamber or misting system in place, just a humid environment with indirect natural light. I found an excellent design on Mike McGroarty's website (<http://www.freeplants.com/homemade-plant-propagation.htm>). It's simply an upside-down fishtank sitting on a wooden dirt-filled frame with a hardware cloth bottom (see website for details). (Warning: you have to take the good with the bad on this website. McGroarty's propagation tips proved very useful, but his jubilation over the thousands of burning bush and Japanese red maples you can propagate using said tips can be a little off-putting to the native plant enthusiast.)

## Getting started

Now with a head full of other people's knowledge and a design, I got down to the specifics. Based on the authors' recommendations of "easy" species and what was available in my yard, I chose 4 of my favorites for the first round: mountain summersweet (*Clethra acuminata*), Virginia sweetspire (*Itea virginiana*), shrubby St. John's wort (*Hypericum prolificum*), and garden phlox (*Phlox paniculata*). I chose one more that I hadn't found any information on: fragrant sumac (*Rhus aromatica*).

I decided to use a rooting hormone (Dip'n'Grow in this case). Not all plants require one to establish, but it can expedite the process and help with some of the more difficult species. The critical thing is that you want to use the right concentration for the species and time of year. Using too high of a concentration on new spring growth can burn sensitive tissue whereas woody fall stems require a higher concentration in order to penetrate stronger defenses. Again, William Cullina's books were good resources for species-specific dilutions. The cost is minimal—the \$20 bottle of Dip'n'Grow will last me at least a couple of years.



Both tanks completed.

Executing the plan took less than a day's work. Building the frame and spray-painting the tank didn't take more than a couple of hours. I thoroughly cleaned the tank to discourage growth of fungus and mildews (they really emphasize keeping everything as sterile as possible), then filled the frame with a moist mixture of equal parts peat and sand. Taking the cuttings was quick and easy. I did one species at a time because it's good to get them in the rooting medium as soon as possible. With a clean, sharp pair of scissors, I took 3-5 inch angled cuttings from the terminal end of the stems, then wrapped them in a moist towel to prevent them

from drying out. Following collection, I pulled the leaves off the bottom 2-3 inches, dipped each stem end in diluted rooting hormone, and stuck it in the tray. I really crowded them in there—sixty cuttings fit in a single 10-gallon tank with room to spare.

Then it was just a matter of patience! I dutifully misted the plants every morning and evening, watered the entire thing about once a week to keep the soil moist, and waited. I kept a close eye on them, removed any signs of mold, fallen leaves, or dead stems (see below). After about a month, I started giving them a little tug to see if they resisted being pulled out and they did! After looking at a few, I decided to let them build up some more roots, but by 5-6 weeks, they were good to go. I transplanted them to 6-inch pots, fed them a little bone and blood meal, gave them a few days in full shade to adjust, and gradually inched them toward the sun as they continue to add new growth.

## Results!

After following the authors' directions to a tee, over 80% of my *Clethra*, *Itea*, and *Hypericum* took root! The *Clethra* and *Itea* had well-developed root balls when I removed them and they seamlessly transitioned from the aquarium to individual containers. The *Hypericum* was in fine shape, but with less im-



pressive roots. I suspect it's because the plants tried to flower a couple of times. I kept pinching the flowers back to shunt the energy back to the roots and that seemed to do the job. They don't look quite as pretty as the other two, but they're perking up as the fresh growth is really coming on now. At 8 weeks, the official jury is still out on garden phlox, but it looks promising. They're getting there, just a little slower than the others. I expect to transplant them in the next couple of weeks.

None of my references mentioned stem cuttings from sumac and I'm starting to believe there's a good reason for it. Despite my best efforts, every one of my 40 stems blackened and died within a few weeks. That said, my sumac can always use a little trimming so I plan to keep tweaking the method and plugging away at it until I've given it my best shot...

#### In conclusion

Although I don't think anything's as fun as watching your plants grow from a tiny seed into a beautiful flowering plant, plant propagation through cuttings turned out to be inexpensive, educational, and fun! I now have 30-40 clones of some of my favorite specimens to sell at the market and to share with family and friends. As I plan my fall and winter projects, I also realize I now have a way to get my gardening fix throughout the year! 🌱

#### Helpful Resources for Plant Propagation

Growing and propagating wild flowers / Harry Phillips

Mike McGroarty's Plant Propagation website: [www.freeplants.com/homemade-plant-propagation.htm](http://www.freeplants.com/homemade-plant-propagation.htm)

Native trees, shrubs, and vines: A guide to using, growing, and propagating North American woody plants / William Cullina

New England Wild Flower Society guide to growing and propagating wildflowers of the United States and Canada / William Cullina

Plant propagation A to Z: growing plants for free / Geoff Bryant



Mountain summersweet from cuttings.

Questions? Contact Patricia at [gardensidenatives@gmail.com](mailto:gardensidenatives@gmail.com),

<https://sites.google.com/site/gardensidenatives/>

or <http://www.facebook.com/GardensideNatives>



## New state record wildflower found on the Cumberland River —the western wallflower (*Erysimum capitatum* var. *capitatum*)

by Tara Littlefield, KSNPC botanist



*Erysimum capitatum* var. *capitatum*

*Erysimum capitatum* var. *capitatum*, commonly known as the western wallflower, was located in spring of 2010 growing on limestone and shale bluffs overlooking the Cumberland River. This plant, a member of the mustard family, was extremely showy with glowing orange flowers that could be seen from a distance through woods. This interesting bluff community seemed to perpetuate itself with frequent sloughing of steep rocky slopes into the river, with the flooding of 2010 causing significant erosion.

*E. capitatum* var. *capitatum* was reported in Kentucky in 2008 by Thompson and Poindexter. This population is believed to be introduced by a seed mix and was found in Berea along a roadside. This showy wildflower is popular in commercial western wildflower mixes. Non-native populations of this *Erysimum* have also been found in Tennessee. The Cumberland River population deemed of native occurrence because of the associated plant community, frequency of other rare plants, and remoteness of location.

Associates of *E. capitatum* var. *capitatum* include an overstory of *Quercus muehlenbergii* (chinkapin oak), *Quercus alba* (white oak), *Juniperus virginiana* (eastern red cedar), *Ulmus thomasii* (rock elm), *Gymnocladus dioicus* (Kentucky coffeetree), and *Fraxinus quadrangulata* (blue ash).

Shrub associates include *Ptelea trifoliata* (common hop tree), *Staphylea trifolia* (bladdernut), *Cornus florida* (flowering dogwood), *Cornus drummondii* (rough leaf dogwood) and *Hypericum prolificum* (shrubby St. Johns wort). Herbaceous associates include *Valerianella* sp. (corn salad), *Opuntia humifusa* (prickly pear), *Allium cernuum* (nodding onion), *Penstemon hirsutus* (hairy beardtongue), *Elymus hystrix* (bottlebrush grass), *Bromus* sp. (Brome grass), *Trisetum* sp. (horse gentian), *Dodecatheon meadia* (shooting star), *Pleopeltis polypodioides* (resurrection fern), *Trillium recurvatum* (recurved trillium) and *Blephilia* sp (wood mint).

Rare plant associates include *Viburnum molle* (softleaf arrowwood), *Matelea caroliniensis* (Carolina milkvine), *Philadelphicus pubescens* (Ozarkian mock orange) and *Glandularia canadensis* (rose vervain). The taxonomy of the *Glandularia* found in this community is currently being studied by Tennessee botanists. It has potential to become a new species endemic to just a few counties in Kentucky and Tennessee!

To learn more about these species visit <http://eppcapp.ky.gov/nprareplants/index.aspx> or <http://www.natureserve.org/explorer/>

See also Thompson, R. and D. Poindexter. 2008. Six Noteworthy Vascular Plants for Kentucky: Two State Records and Four Range Extensions *Journal of the Kentucky Academy of Science* 69(1):66-68.



Join the KNPS Facebook group!



Just click below!

<http://www.facebook.com/group.php?gid=6939700601>

**Wildflower Weekend 2010 Photo Contest Winners!**

1st place -- Bill Scott



2nd place -- Bill Scott



3rd place -- Jack McKinney



Remember to send your photos from the Fall 2010 Shakertown Meeting to  
KNPS webmaster Dave Luzader at [dluzader@insightbb.com](mailto:dluzader@insightbb.com) !

## KNPS Filed Trip Report: Roundstone Native Seed

By Tara Littlefield, KSNPC botanist

Propagation of native plants has long been an interest to Kentucky Native Plant Society members. We are pleased to announce that the Society is beginning to offer a series of field trips to visit native plant nurseries throughout Kentucky. Our first trip was in early July of this year when about a dozen KNPS members, including a group of members from Bernheim Arboretum and Research Forest, were able to tour one of Kentucky's finest native plant operations, Roundstone Native Seed near Upton.

Randy Seymour, owner and co founder of Roundstone Native Seed with his son John, graciously showed us around the facilities. We discussed the different types of programs that Roundstone is involved with including farm bill programs, biofuel crops, prairie restoration, reclamation projects, forage, and wildlife habitat improvement. Randy emphasized the importance of using native ecotypes in conservation projects, as well as minimizing use of fertilizers and pesticides when possible. We toured through buildings that housed the large threshing machines that are used to separate out seeds and the refrigerated building that they use to store their inventory. Roundstone has grown from a small family business to a large operation that relies on a multitude of machines and gadgets, including many homemade machines and their own fire truck to aid in burning their native plant fields. For the second portion of the trip we headed into the native plant fields where we witnessed some fine seed plots of gray headed cone-flower, big and little bluestem, and more.

“my mind is always boggled by all the questions their operation raises...and that’s even before you get to the questions about botany and ecology”.

As KNPS member Charlie Chandler put it, “I’m pretty astounded by what the Seymours have managed to put together and accomplish and my mind is always boggled by all the questions their operation raises—homestyle vs. industrial, organic vs. chemical, gardening vs. agriculture, business vs.

pleasure, and that’s even before you get to the questions about botany and ecology”.



Randy Seymour shows off his first seed thresher to KNPS member Andrew Berry

In the past 15 years Roundstone Native Seed has made quite a name for themselves. Beginning with Randy and John collecting seeds from remnant prairie species near their farm, they have progressed to collaborate with multiple states and coordinate with over 30 growers that produce native seed for them.

The Seymours are pioneers in the native seed industry and have contributed a great deal of innovation into its advancement. The operation rests on a strong foundation of product quality, ecological integrity, and family values. The Kentucky Native Plant Society is grateful for the contributions of Roundstone Native Seed and looks forward to many more years of partnering and collaboration.

Visit [www.roundstoneseed.com](http://www.roundstoneseed.com) for more information about one of Kentucky's most successful native plant operations.



**Announcing the KNPS Fall Meeting at Shaker Village****Saturday, September 11, 2010**

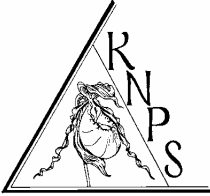
Plans are underway to for the Fall meeting at Shakertown! Preliminary plans are for several field trips on Saturday morning and Saturday afternoon in the Kentucky River palisades region followed by an afternoon program indoors. Details will be posted to [www.KNPS.org](http://www.KNPS.org) as they are available, but if you would like to reserve lodging please contact Shaker Village at 800-734-5611. See page one of this issue for more details!

**KNPS Field Trip to Big Bend Loop at Cumberland Falls****Saturday, October 16, 2010 from 10 AM –2 PM**

Kentucky State University botanist Sarah Hall will lead this trip during the peak of fall color. This will be a 4.5 mile hike, easy to moderate difficulty. We'll take a look at woody plants and fall foliage, and any wildflowers we might find. Questions or RSVP to Sarah Hall by Tuesday, October 12: e-mail [shall@chpl.net](mailto:shall@chpl.net) or phone 859-494-5789.

**WANTED:****YOUR CONTRIBUTION!**

The KNPS *Ladyslipper* is fortunate to have articles written by many of Kentucky's leading botanists, but we want all of our members to have a voice. Send us any thoughts you may have on the articles in this issue, or anything else KNPS related, by e-mailing [info@knps.org](mailto:info@knps.org) with the subject "Letter to the Ladyslipper". Have an idea for an article you'd like to write or know about a native plant event in your area? We'd like to hear about them as well!



Kentucky Native Plant Society  
801 Schenkel Lane  
Frankfort, KY 40601

### 2010 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](http://www.knps.org).**

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

Questions? E-mail "[info@knps.org](mailto:info@knps.org)" for help!

*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.*