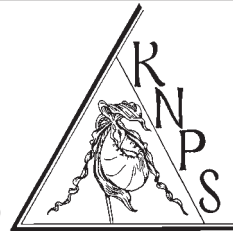


The Lady-Slipper



Kentucky Native Plant Society

Number 24:1

Winter 2008 & Spring 2009

Greetings from your new president, Alan Nations!

I hope this newsletter finds you all well, and on your way to recovering from the winter storms. I must first say it is an honor and privilege to serve as President of the Kentucky Native Plant Society. Thank you all for your vote of confidence. I would also like to thank Dr. Tom Barnes for his service, and I look forward to working with him on our board in his new position as immediate past president.

Here is a short bio to introduce myself. I am employed as a naturalist with the Blackacre Conservancy, where my work focus is Natural Areas, Interpretation and Historic Preservation at Blackacre State Nature Preserve. I was previously employed with the Olmsted Conservancy of Louisville as a naturalist; there I worked to develop and implement a restoration plan for Cherokee, Seneca and Shawnee Parks natural areas and riparian corridors. My son Brad and I have a small business called NativeScapes Inc. which works exclusively with Kentucky native plants, using a holistic approach to restoring natural areas and human environments. I had a prior career with the US Coast Guard. There my work was diverse but much of my time was spent at sea enforcing US laws and treaties. My focus was fisheries and the protection of sea turtles and other endangered species. I am a graduate of Columbia College and the US Coast Guard Maritime Law Enforcement Academy, an International Society of Arboriculture certified arborist, and a certified interpretive guide naturalist. I serve on the board of the Exotic Pest Plant Council of Kentucky. My spare time is spent botanizing, backpacking and honing my skills in wildlife and plant photography. I enjoy doing independent studies. My present subject is the black bear. My wife Elaine and I are now empty nesters living in Fairdale Kentuck.

The recent executive board meeting was my first opportunity to speak to the board. At the top of my list of concerns is membership, which has been slowly but steadily declining. We must reverse this trend. I am asking for your support and suggestions to help solve this serious issue. I suspect the problem is due in part to communication, as is so often the case. One of my goals as president is to seek ways to communicate more effectively with our membership and ensure they always feel connected.

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KNPS Annual Wildflower Weekend April 17-19, 2009

Natural Bridge State Resort Park

Field trips

Thursday – 4:00pm

Friday – 8:30am, 1:30pm,
4:00pm

Saturday – 8:30am,
9:00am, 1:30pm,
2:00pm

Sunday – 9:00am



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.

Evening speakers

Friday night, 7:30 pm

Neil Pederson of Eastern Kentucky University will give a presentation on Old Growth Forests.

Saturday night, 7:30 pm

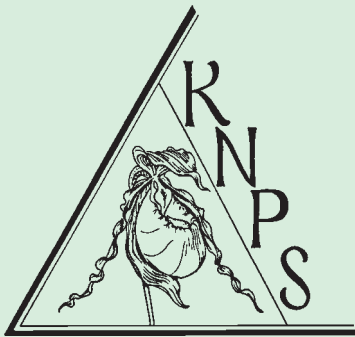
Tara Littlefield of the Kentucky State Nature Preserves Commission will give a short presentation on white-haired goldenrod.

Marc Evans, also of the KSNPC, will give a presentation on the protected unique natural areas in Kentucky.

On site registration fee is \$10 per adult; \$3 for children to age 17. Registration is upon arrival. Participants can pick up an agenda for the Weekend at the Hemlock Lodge when they arrive. Contact Brian Gasdorf at 606-663-2214 or brian.gasdorf@ky.gov for more info. To make lodge reservations call 1-800-325-1710. More information: www.knps.org

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The Lady-Slipper

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Invasive Alien Plants in Kentucky

Where are they from; how do they grow; what can we do?

by Julian Campbell, Bluegrass Woodland Restoration Center;
3525 Willowood Road, Lexington, KY 40517
Tel: (858) 229 7711; email julian.campbell@insight.com (please call first)

Summary

Where are they from? About 20% of the ca. 2700 wild vascular plant species in Kentucky are aliens. The great majority (78%) are broadly Eurasian; others come from East & South Asia (11%), Central & South America (6%), and western North America (5%). In several cases, the alien or native status is uncertain, or there are probably mixed races. Uncertainty is pronounced within a group of southern weedy species that may have spread north with the advent of corn and beans about 2000 years ago. Most initial invasions after Virginian settlement were also accidental weeds, but an increasingly significant group of problematic species have escaped from purposeful agricultural or horticultural introductions, especially from East Asia. Some of these species are still being actively promoted by commercial horticulture. Some of the horticultural escapes and some weeds of old fields, thickets and disturbed woods have become particularly problematic because they invade and persist in at least partial shade.

How do they grow? Alien percentages increase from species typical of acid infertile soils (0-2% alien) to those of highly fertile or base-rich soils (25-30%). There is also an increase with increasing overall 'openness' of typical habitats, from shady woodland (with ca. 2%) to sunny grassland (ca. 20%) and then disturbed bare ground, exposed rock or open water (ca. 45%). Aliens tolerant of shade (including trails and edges inside woods) are mostly East Asian (50-60%); about 40% of all East Asian aliens are in this group, but only 4-5% of Eurasian. Aliens are less frequent at dry or wet extremes, but spotted knapweed and white sweet clover are problems in xeric calcareous glades; autumn olive, mimosa-tree and sericea lespedeza (all nitrogen fixers) are becoming serious local problems along the rocky banks of wilder Appalachian rivers; and a few aquatic aliens may become serious problems in free-flowing streams. Most aliens have persistent exposure and growth through the fall and winter, especially winter annuals (e.g. common chickweed), biennials (e.g. garlic mustard and sweet clovers), short/running perennials (e.g. gill-over-the-ground); and to a lesser extent, some rosette perennials (e.g. English plantain), tillering tussock graminoids (e.g. common bluegrass), vines (e.g. purple winter-creeper) and small trees/shrubs (e.g. bush-honeysuckles). This trend may be related to the browsing or burning regimes that species have typically evolved with during dormant seasons.

What can we do? Unless we give up on the more fertile farmed landscapes with few remnants of original vegetation and high



Paulownia tomentosa

numbers of aliens, a completely new type of stewardship will be required in these landscapes. There are general needs to replant or re-sow native species, especially those that can match competition from aliens; to restore more natural disturbance regimes, with development of appropriate prescriptions for burning or browsing; and to micromanage the worst alien species with removal by manual, mechanical or chemical means. We need more people to live around restored woodlands and grasslands in order to do this work. Such people should become most knowledgeable about their areas; they will develop efficient techniques adapted to their particular circumstances; they will develop a special fondness for their local environment; and they will become our best local guides, interpreters, educators and researchers. We must find appropriate ways to derive appropriate income from conserved areas. Funds from government or philanthropy are not going to be sufficient. For example, in the central Bluegrass, income could come from native plant nurseries and seed production, together with associated services for restoration in the region; from attractive native fruits and nut orchards; from selected wood products, crops, livestock and game, plus various fee-paying activities or services (on- or off-site).

Where are they from?

There are about 2700 species of vascular plants growing wild in Kentucky, unaided by cultivation or occasional accidental entry as non-persistent waifs along railroads or highways. About 20% of these species are generally considered alien, that is, having invaded the state after settlement in 1770-1800. Table 1 lists some of the most serious invasive alien species in the state, together with their first published records, and their general origin. These species are clearly problems or threats to natural areas, and, some may influence other ecological functions and economic activities in the state. However, the status of several species remains uncertain, and their potential future impact is hard to predict or evaluate.

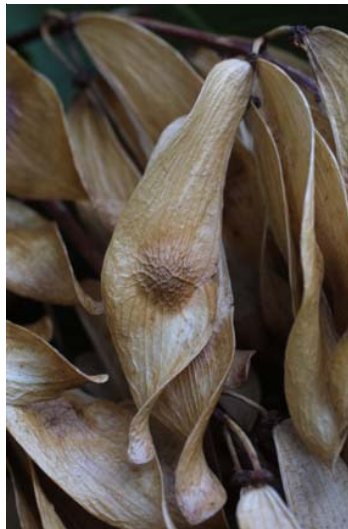
The earliest wave of invaders in Kentucky came from Europe with the settlers. Today, some of the most common species dating from that period are mostly weeds of gardens, waste land, old fields and thin woods typical of farmland: such as gill-over-the-ground (*Glechoma hederacea*), English plantain (*Plantago*



Albizzia julibrissin

lanceolata), common chickweed (*Stellaria media*), tall mullein (*Verbascum thapsus*) and the common thistle (*Cirsium vulgare*). Other common species today include cultivated pasture grasses (especially *Poa pratensis*; also *Agrostis gigantea*, *Dactylis glomerata*) and pasture legumes (especially *Trifolium repens*), herbs (especially *Mentha* spp.) and the escaped white mulberry (*Morus alba*), which was grown for silk-worms.

During the 19th Century, several additional cultivated plants were introduced and some have now become problematic. These included ornamental trees and shrubs from East Asia, such as tree-of-heaven (*Ailanthus altissima*), princess tree (*Paulownia tomentosa*) and Japanese honeysuckle (*Lonicera japonica*). Other introductions included more pasture species, on purpose or by accident, such as tall fescue (*Festuca arundinacea*), smooth brome (*Bromus inermis*), Johnson grass (*Sorghum halepense*) and sweet clovers (*Melilotus* spp.). The invaluable reports of Garman (1900, 1902, 1913, 1914) provide much detail concerning some introductions and their early trials, uses or problems at the University of Kentucky's farm and elsewhere.



Ailanthus altissima

During the 20th Century introductions of species accelerated, especially from East Asia, for ornamental uses, reclamation and supposed wildlife benefits. Several ornamentals have now become serious problems, at least locally, including Japanese knotweed (*Reynoutria japonica*), Japanese pink spiraea (*S. japonica*), multiflora rose (*Rosa multiflora*), wineberry (*Rubus phoenicolasius*), Siberian crabapple (*Malus baccata*), Bradford pear (*Pyrus calleryana*), Davur buckthorn (*Rhamnus davurica*), mimosa tree (*Albizzia julibrissin*), *Euonymus* spp., bush-honeysuckles (*Lonicera* spp.), privets (*Ligustrum* spp.), star-of-Bethlehem (*Ornithogalum umbellatum*) and plume-grass (*Miscanthus sinensis*). Several

species intended to stabilize soil or feed game animals have now become widely invasive, including several legumes: kudzu (*Pueraria montana*), sericea lespedeza (*Lespedeza cuneata*), annual bush-clovers (*Kummerowia* spp.), crown vetch (*Coronilla varia*), and regular vetches (*Vicia* spp.).

Tall fescue was developed further with a selection program during 1920-1940, culminating in the promotion of "Kentucky 31" strain,

continued on page 4

Invasive Aliens, continued from page 3

which greatly changed the ecology of Kentucky's grasslands. Several new European weeds of old fields and thickets appeared that have eventually become problematic weeds, including garlic mustard (*Alliaria petiolata*), spotted knapweed (*Centaurea biebersteinii*) and creeping thistle (*Cirsium arvense*). In less managed areas, abandoned fields, woods and riparian zones, several Japanese weeds appeared with considerable shade-tolerance, especially after 1950; the most serious problems now include stilt grass (*Microstegium vimineum*), carpet-grass (*Arthraxon hispidus*), purple

smartweed (*Persicaria longisetata*), beefstake plant (*Perilla frutescens*), a related wood-mint (*Mosla dianthera*), and the riverweed amaranth (*Achyranthes japonica*).

A majority of the most serious invasive species were introduced on purpose, and this has continued even in recent decades (Table 1c). About half of these species have escaped from horticultural uses. Several others were introduced for forage, reclamation or wildlife. Only about a third have been accidental introductions of weeds.

Table 1. The most problematic or threatening invasive plants in natural areas of Kentucky.

Codes for types of invasion are: AS = East Asian; EU = Eurasian (including Mediterranean region); Ne = locally spread within Eastern North America; Nw = Western North American. Codes in bold indicate species with at least partial shade tolerance (degrees 2-3) or frequent occurrence within disturbed woods (not just at outside edges). Under "reclamation" are included species often planted in the name of "wildlife." F indicates that introduction was promoted by agencies of the U.S. government; some are still recommended.

* Asterisks after species names indicate species that may have mixed alien and native races in eastern North America. Some of these may not be as problematic as the other listed species. See Medley's (1993) thesis (especially where marked "M") and the draft of the Kentucky Atlas (Campbell & Medley, in prep.) for details of the literature cited and other references; however, further exploration of the literature is still needed.

(a) Species that are the most serious problems for natural areas and widespread across the state

Species name	Common name	First report in KY	Type of invasion
<i>Ailanthus altissima</i>	Tree-of-heaven	Hussey (1876); M	AS horticultural escape
<i>Albizia julibrissin</i>	Mimosa-tree	Fernald (1950)	AS horticultural escape
<i>Bromus inermis</i>	Smooth brome	Garman (1900)	EU forage escape
<i>Centaurea biebersteinii</i>	Spotted knapweed	Braun (1943)	EU pasture weed
<i>Cirsium arvense</i>	Creeping thistle	Garman (1914)	EU pasture weed
<i>Conium maculatum</i>	Poison hemlock	Anderson (1924)	EU thicket/garden weed
<i>Coronilla varia</i>	Crown-vetch	Braun (1943)	EU reclamation escape; F
<i>Euonymus alata</i>	Burning-bush	Martin & al. (1979)	AS horticultural escape
<i>Euonymus fortunei</i>	Purple winter-creeper	Gunn (1959); M	AS horticultural escape
<i>Festuca arundinacea</i>	Tall fescue	Garman (1900)	EU forage escape; F
<i>Glechoma hederacea</i>	Gill-over-the-ground	Rafinesque (1824)	EU thicket/garden weed
<i>Kummerowia stipulacea</i>	Japanese annual bush-clover	Braun (1943)	AS reclamation escape; F
<i>Kummerowia striata</i>	Korean annual bush-clover	Braun (1943)	AS reclamation escape; F
<i>Lamium purpureum</i>	Red dead-nettle	Braun (1943)	EU thicket/garden weed
<i>Lespedeza cuneata</i>	Sericea lespedeza	Braun (1943)	AS reclamation escape; F
<i>Lonicera japonica</i>	Japanese honeysuckle	Gray (1864)	AS horticultural escape
<i>Lonicera maackii</i>	Amur bush-honeysuckle	Gunn (1959)	AS horticultural escape
<i>Melilotus albus</i>	White sweet-clover	Garman (1902)	EU pasture weed
<i>Melilotus officinalis</i>	Yellow sweet-clover	Garman (1902)	EU pasture weed
<i>Microstegium vimineum</i>	Japanese stilt-grass	Braun (1943)	AS thicket/garden weed
<i>Morus alba</i>	White mulberry	Imlay (1797)	AS horticultural escape
<i>Ornithogalum umbellatum</i>	Star-of-Bethlehem	Braun (1943)	EU horticultural escape
<i>Perilla frutescens</i>	Beefstake plant	Braun (1943)	AS thicket/garden weed
<i>Persicaria longisetata</i>	Jap. purple smartweed	Fernald (1950)	AS thicket/garden weed
<i>Phragmites australis</i> *	Common reed	Browne & A. (1976)	EU wetland weed
<i>?Poa pratensis</i> *	Common bluegrass	Imlay (1797)	EU forage escape
<i>Pueraria montana</i>	Kudzu	Davies (1955)	AS reclamation escape; F
<i>Reynoutria japonica</i>	Japanese knotweed	Braun (1943)	AS horticultural escape
<i>Rosa multiflora</i>	Multiflora rose	Browne (1967)	AS reclamation escape; F
<i>Stellaria media</i>	Common chickweed	Short (1828-29)	EU thicket/garden weed
<i>Sorghum halepense</i>	Johnson grass	Garman (1900)	EU forage escape?

Wildflower of the Year 2009

Blue False Indigo (*Baptisia australis*)

By Mary Carol Cooper
Kentucky Department of Fish and Wildlife Resources
Salato Native Plant Program Coordinator
Salato Wildlife Education Center

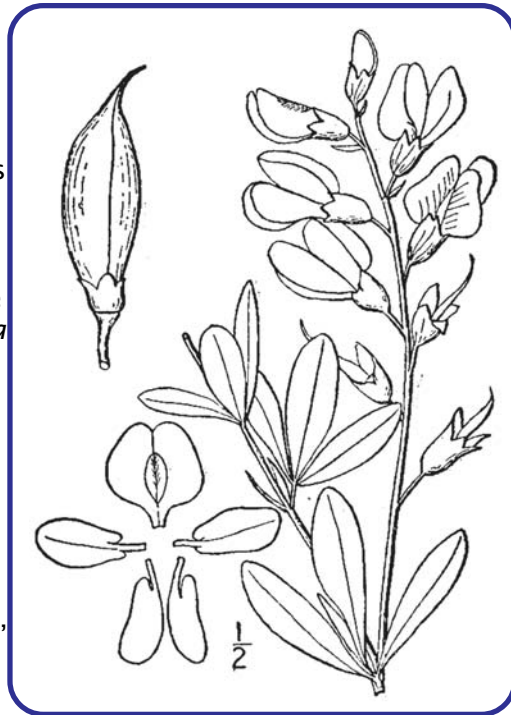
The *Wildflower of the Year* is chosen based on the number of nominations it receives and this year more wildflower enthusiasts statewide voted than ever before!! They have chosen Blue False Indigo (*Baptisia australis*) as the Salato Native Plant Program *Wildflower of the Year* for 2009. Additional common names of this plant exist such as Indigo Weed, Rattleweed, Rattlebush, Wild Blue Indigo, and Horse Fly Weed.

The genus name *Baptisia* comes from the Greek *bapto*, which means "to dye". These blue flowering plants were used as a substitute for the blue dye that, since ancient times, has been extracted from the roots of the Asian Indigo (*Indigofera tinctoria*). If the stems of the Blue False Indigo are broken, a sap will be secreted that turns a dark blue upon contact to the air.

Blue False Indigo is an erect perennial herb that grows to a height of 4-5' and is highly branched. The leaves are alternate, trifoliolate with obovate leaflets that are 1-3 inches long and are a grey-green color. The stipules are 0.3-0.8 inches long and may persist until flowering. The flowers are a beautiful deep blue-violet and pea-like. They are sometimes close to an inch long, but usually a little less, and are borne in a long raceme that extends above the leaves. They bloom fairly early in the season—May-June, and then form a wonderful dry, woody legume that is dark brown and brittle—thus the name, Rattleweed or Rattlebush. This wildflower is found in wet barrens, rocky woods, and stream banks in the Appalachian Plateau and the Interior Lower Plateau of Kentucky but they are found infrequently here. They do not grow well in shaded habitats and prefer gravelly, sandy or well-drained loamy soils.

Even though Blue False Indigo is fairly rare in Kentucky and the variety, *Baptisia australis* var. *minor*, is currently listed as Special Concern in Kentucky, *Baptisia australis* is grown by many gardeners as an ornamental in outdoor flower gardens or as a decorative border. It has become so popular for many reasons. It grows

outside its native range when planted, does well without watering, requires no fertilizer or pesticides—not to mention that it is absolutely knock-out gorgeous. It grows well in rain gardens and it is good for dryer places, as it is quite drought tolerant because the roots themselves are branched and deep. Blue False Indigo attracts butterflies but is deer and rabbit resistant. It is the only known food of the larval stage of the Wild Indigo Duskywing, a small eastern butterfly. The pods have been used in dried flower arrangements, but the fresh cut flowers do not last very long. It is a legume and fixes nitrogen in the soil and can also be part of a good wildlife seed mixture when native grasses and forbs are seeded.



Some Native Americans used False Blue Indigo as a source of blue dye for their clothes as did early pioneer settlers. Some tribes used it for medicinal purposes—as an eyewash, as a hot tea taken as a purgative and as a cold tea to prevent vomiting. A pulverized root or hot tea was held over a sore tooth to relieve pain. Native American children used the dried pods with the loose seeds inside as rattle. Recent German research indicates that some *Baptisia* species may act as stimulants to the human immune system. Current uses for this plant include treatment for upper

respiratory infections, common cold, tonsillitis, stomatitis, and inflammation of mucous membranes, fever and painless ulcers. Do not try this without consulting an herbalist or medical doctor!

Previous year's winners: 1997 Butterfly Milkweed (*Asclepias tuberosa*), 1998 Cardinal Flower (*Lobelia cardinalis*), 1999 Purple Coneflower (*Echinacea purpurea*), 2000 Wild Columbine (*Aquilegia canadensis*), 2001 Wild Bergamot (*Monarda fistulosa*), 2002 Great Blue Lobelia (*Lobelia siphilitica*), 2003 Spiked Blazing Star (*Liatris spicata*), 2004 Joe-Pye Weed (*Eupatorium maculatum*), 2005 Showy Goldenrod (*Solidago speciosa*), 2006 Orange Coneflower (*Rudbeckia fulgida*), 2007, Black-eyed Susan (*Rudbeckia hirta*) and 2008, Cup Plant (*Silphium perfoliatum*).

Packets of free seeds will be available at the Salato Wildlife Education Center after Derby Day.

Invasive Aliens, continued from page 4

(b) Species common locally, increasing but not yet widespread; some locally problematic in natural areas

Species name	Common name	First report in Ky.	Type of invasion
<i>Acer platanoides</i>	Norway maple	?Gunn (1959); M	EU horticultural escape
<i>Alliaria petiolata</i>	Garlic mustard	Braun (1943); M	EU thicket/garden weed
<i>Arthraxon hispidus</i>	Japanese carpet-grass	Medley & al. (1983)	AS thicket/garden weed
<i>Arundo donax</i>	Giant reed	Radford & al. (1964)	EU riparian weed
<i>Cruciata pedemontana</i>	Piedmont bedstraw	Bartholomew (1941)	EU pasture weed
<i>Elaeagnus umbellata</i>	Autumn olive	Cranfill & T. (1981)	AS reclamation escape; F
<i>Euonymus kiautschovica</i>	Shrubby winter-creeper	Browne (1974)	AS horticultural escape
<i>Hedera helix</i>	English ivy	Browne (1974)	EU horticultural escape
<i>Helianthus maximiliani</i>	Maxmillian sunflower	Beckett (1956)	Nw reclamation escape
<i>Heterotheca camporum</i> *	Prairie golden-aster	?Braun (1943); M	Ne pasture weed?
<i>Humulus japonicus</i>	Japanese hops	Gunn (1968b)	AS riparian weed
<i>Ligustrum sinense</i>	Chinese privet	Browne (1967)	AS horticultural escape
<i>Ligustrum vulgare</i>	European privet	Wharton (1945)	EU horticultural escape
<i>Lythrum salicaria</i>	Purple loosestrife	Browne & A. (1976)	EU wetland weed
<i>Malus baccata</i>	Siberian crabapple	Funk (1975)	AS horticultural escape
<i>Miscanthus sinensis</i>	Plume grass	Braun (1943)	AS horticultural escape
<i>Mosla dianthera</i>	Japanese wood-mint	Fosberg (1942)	AS thicket/garden weed
<i>Myriophyllum spicatum</i>	Spike watermilfoil	Seargent (1942)	EU water weed
<i>Najas minor</i>	Brittle waternymph	Greenwell (1935)	EU water weed
<i>Paulownia tomentosa</i>	Princess tree	Price (1893)	AS horticultural escape
<i>Pyrus calleryana</i>	Bradford pear	Vincent (2005)	AS horticultural escape
<i>Rubus phoenicolasius</i>	Wineberry	Braun (1943)	AS horticultural escape
<i>Salix alba</i>	White willow	Price (1893)	EU horticultural escape
<i>Spiraea japonica</i>	Japanese pink spiraea	Braun (1943)	AS horticultural escape
<i>Vinca minor</i>	Common periwinkle	?Braun (1943); M	EU horticultural escape



**Invasive
Plant
Ken**

Clockwise
Lamium
Elaeagnu
Ornithogalu
Helianthus
Vinc
Acer p
Hede

continued on page 10





Five Alien Plants in Kentucky

from above:
in purpurem
is umbellata
um umbellatum
s maximiliani,
a minor
latanoides
era helix



Workshop:

How to use the keys in
 “Plant Life of Kentucky, An Illustrated Guide
 to the Vascular Flora”
best techniques and shortcuts
 Led by Dr. Ron Jones

Saturday, April 18, 1:00-4:00 pm
 Natural Bridge (during Wildflower Weekend)

We may spend most of the time indoors practicing with the keys. Extra copies of the book will be available for use, but participants that have personal copies should bring them, along with a 10X handlens. In preparation for the workshop, participants should also review vegetative and reproductive terminology at these websites (or similar sites):

<http://botany.csd.tamu.edu/FLORA/tfplab/vegchar.htm>

<http://botany.csd.tamu.edu/FLORA/tfplab/reproch.htm>

It's Membership Renewal Time!

Kentucky Native Plant Society
 Membership Form

Name(s) _____

Address _____

City, State, Zip _____

KY County _____

Tel.: (home) _____

(work) _____

E-mail (please provide) _____

- I want to receive my newsletter electronically to save resources (must provide email)
- 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 \$ _____

Return form & dues (Payable to Kentucky Native Plant Society) **in enclosed envelope to:**

KNPS Membership, P.O. Box 1343, Richmond, KY 40476

Note: Annual memberships are for the January-December calendar year.

Adopt a Plant (or what do squids and plants have in common?)

by Elsie Cort, Alta Peak Chapter, *Insignis* newsletter editor, California Native Plant Society (CNPS) <http://www.cnps.org>

During the recent (fantastic) Statewide Conservation Conference I was strongly impacted by the simple question asked by Jack Laws in his keynote presentation at the banquet: *When did you first fall in love with nature?* For a long time CNPS member, this could have seemed like a rhetorical question....but maybe not. As I was driving home from Sacramento south on HWY 99 (past Turlock where I was born and where, in the 1950's, I could swing in my Grandfather's old canvas hammock from his navy days, going high up in one direction to see a large expansive view of the Sierra Nevada Mountains and swinging in the other direction to clearly see the Coastal Mountain Range, all from the backyard) I thought a lot about this question.

More about this falling in love with nature a bit later.....

I began to envision a little "project" to offer to the members of my local CNPS chapter, one where they would be encouraged to adopt a natural place, to visit it seasonally and observe its natural process, to learn about the plants growing there, to bring their kids, to take photographs and to send in reports that could be put in the Alta Peak Chapter newsletter. Even though many of our chapter members work professionally out in the field, most do it occasionally while trying to maintain busy and somewhat urbanized lives. I hoped that this idea would morph into encouraging members to have some "personal" time with the plants which have called California home longer than we have.

Then.....last week I finally took the time to look up a website that I had been directed to many months ago (this was for other endeavors in my professional life) and I found myself "Squidoo'd." Some of you may know about this, as it has been around in the cybersphere for several years. Squidoo is a free-service, people-run search engine; individuals can create their own "lens" or website, without needing any particular website software loaded on their computers. The steps are easy to use, and the modular format for developing the lens is phenomenal. The "lens" is their compilation of information about any particular subject or notion (it really is much, much more.) You can read about the people behind squidoo itself at <http://www.squidoo.com/pages/about>; it was founded by Seth Godin. (www.sethgodin.typepad.com)

So what do squids and plants have in common?

For me, this is answered with—their generosity! And, their breathing room! They are both prolific with producing seeds and exquisite diversity and beauty as they blossom and spread their roots.

And what is this Adopt a Plant notion?

The vision is for people to record and share their "personal contact" with plants, hopefully, native plants in particular. Using Squidoo, as both launching pad and home base, a lens can be created about a particular plant. Or several lenses can be created about particular plant communities and their plants.

Information can be shared that is unique to the individual's perspective, botanical, and not necessarily scientifically oriented, more about the person and the plant. I call it "giving a plant a voice."

The details about the Adopt a Plant Project are at <http://www.squidoo.com/adoptaplant>, and I have created 50 plus lenses, including one for each state.

For instance, California has its own platform for Adopt a Plant at <http://www.squidoo.com/adoptaplantCalifornia>. There is a hub lens at <http://www.squidoo.com/adoptaplantUSA>. And also a lens for native plant or wildflower loving artists at <http://www.squidoo.com/adoptaplantBotanicalArt>.

There are only two things to do to get started and join the Adopt a Plant Project:

1. Go outside and strike up a conversation with a real living native plant. Spend some time in its neighborhood.
2. Turn on your computer and go to <http://www.squidoo.com> and click on the blue button that says "Get started!"

When your plant lens is made, send it to the Adopt a Plant main lens, and it will be added to your state's Adopt a Plant list.

Better still, take a young person with you to meet the plant and create a lens with a child!

Oh, and one last thing, here is a short account about when I fell in love with nature...<http://www.edgealmanac.wordpress.com>

Check out our website at

www.knps.org

Olmsted Parks Events



Sat, April 25, 9am-Noon, Olmsted Parks Conservancy Volunteer Project: Shawnee Park. Meet at the parking lot off of Southwestern & Northwestern Parkways.

Sun, Apr 26, 1-4pm, Olmsted Parks Conservancy Walks in the Parks Series: Wildflower Walk, Cherokee Park. Meet at Baringer Hill Pavilion along the Scenic Loop. Easy to moderate hike.

Sat, May 2 and 16, 9am-Noon, Olmsted Parks Conservancy Volunteer Project: Cherokee Park. Meet in parking lot at Lexington and Ledge Roads.

Sat, May 2, 10:00am-Noon, Olmsted Parks Conservancy Walks in the Parks Series: Walk in the Woods, Cherokee Park. Meet at Baringer Hill Pavilion along the Scenic Loop. Moderate hike.

Sun, May 3, 9:00am-Noon, Olmsted Parks Conservancy Walks in the Parks Series: Woodland Delicacies, Iroquois Park. Meet at the Amphitheater. Moderate hike.

Sat, May 9, 9am-Noon, Olmsted Parks Conservancy Volunteer Project, Iroquois Park. Meet at the Amphitheater.

Sat, May 16, 10:00am-Noon, Olmsted Parks Conservancy Walks in the Parks Series: Stroll in the Park, Shawnee Park. Meet at the Pavilion near the basketball court. Easy hike.

Sat, May 23, 9am-Noon, Olmsted Parks Conservancy Volunteer Project: Shawnee Park. Meet at the parking lot off of Southwestern & Northwestern Parkways.

Sat, May 23, 8:30am-Noon, Olmsted Parks Conservancy Walks in the Parks Series: Birding Expedition, Cherokee Park. Bring binoculars. Meet at intersection of Maple Rd and Scenic Loop, park on right along Scenic Loop. Easy to moderate hike.

Sat, May 30, 10:00am-Noon, Olmsted Parks Conservancy Walks in the Parks Series: Walk in the Woods, Iroquois Park. Meet at the Amphitheater. Moderate to difficult hike.

Register online www.olmstedparks.org/events or call 456-8125.

Wildflower Hikes

May 23, 2009, time TBD Wildflower Hike at Horner Wildlife Preserve led by Jonathan White, U of L
Directions to Horner Wildlife Preserve: The preserve is located in Crestwood, KY. It was formerly the Babbit Farm, located off of Hwy 329 (Halls Hill Road). The preserve has a gated entrance, therefore we will meet in the RE-MAX parking lot off Hwy 329. If coming from Louisville, take I-71 N to Exit 14 (Crestwood), and turn right at the bottom of the ramp. RE-MAX will be the first right across from Starbucks. Same directions if travelling down I-71 S, except make a left at the bottom of the ramp and RE-MAX will be the first right.

Please reserve your space and call Jonathan for details at (502)479-7901 or by emailing rw2049@whale-mail.com.

April 25, 2009. Last Hike of Spring at Lower Howard's Creek Heritage Park and SNP (Clark County) at 10 a.m. EDT. Enjoy the last of the spring wildflowers in bloom, such as columbines, synandra and woods hyacinths.*

April 25, 2009. Wildflower Hike with Lane Linnenkohl at Brigadoon SNP (Barren County). Join the Kentucky State Nature Preserves Commission's Western Regional Preserve Manager Lane Linnenkohl to learn about the area's native wildflowers.*

April 25, 2009 and May 2, 9, and 23, 2009. Family Spring Adventure at Cumberland Falls SPNP (McCreary County). Get the family out this spring with these adventurous activities: Canoeing, archery, bird walks, wildflower walks, fire tower tours, wildlife programs, astronomy and hikes to other waterfalls and arches.*

April 26, 2009. Trees as Environmental Historians with Dr. Neil Pederson at Floracliff SNP (Fayette County) at 1 p.m. EDT. Eastern University of Kentucky Assistant Professor Dr. Neil Pederson, will lead this hike visiting the scenic highlights of Floracliff as well as the oldest documented tree in Kentucky.*



May 2, 2009. Volunteer Day at Floracliff SNP (Fayette County) at 10 a.m. EDT. Help protect and showcase the beauty of Floracliff by removing exotic and invasive plant species from the preserve. Other activities may involve trail work or general maintenance. Tools and snacks will be provided.*

*More information is available at <http://www.naturepreserves.ky.gov/events/calendar.htm>

Invasive Aliens, continued from page 6

(c) Species uncommon or local but may rapidly increase; most are potential problems in natural areas

Species name	Common name	First report in Ky.	Type of invasion
<i>Achyranthes japonica</i>	Japanese riverweed	Medley & al. (1985)	AS riparian weed
<i>Ampelopsis brevipedunculata</i>	Porcelain berry	Browne & A. (1992)	AS horticultural escape
<i>Celastrus orbiculata</i>	Oriental bittersweet	Browne (1967)	AS horticultural escape
<i>Fatoua villosa</i>	Crabweed	Heineke (1987)	AS garden/ greenhs. weed
<i>Hydrilla verticillata</i>	Indian waterweed	R. Echols (2008 pc.)	AS water weed
<i>Lonicera standishii</i>	Standish's bush-honeysuckle	Guhardja (1962)	AS horticultural escape
<i>Ranunculus ficaria</i>	Lesser celandine	Cranfill & T. (1981)	EU horticultural escape
<i>Rhamnus cathartica</i>	European buckthorn	Mathews (1962)	EU horticultural escape
<i>Rhamnus davurica</i>	Davur buckthorn	Medley (1993)	AS horticultural escape
<i>Rubus armeniacus (discolor)</i>	Himalaya-berry	?Heineke (1987); M	EU horticultural escape

The long history of botanical literature, other archives—and especially herbarium collections—provide an invaluable guide to the critical question: is a plant native or alien to the state, region or site in question? In most cases, clear answers can be reached. However, there are many uncertainties, especially at particular sites, but also at the scale of the whole state. It is important for conservation and restoration that these uncertainties become resolved where they can be with reasonable effort. In some cases, however, we will have to await detailed analysis of genetic material in order to provide the best possible answers. There is a need to continue integration of relevant information.



Ampelopsis brevipedunculata

Family level. In the clearest cases, the species in a few whole families or subfamilies or tribes are virtually all alien in Kentucky. These families have developed in other temperate regions with little or distribution into eastern North America, until the recent advent of people from across the Oceans. Examples include Asteraceae tribe Anthemideae, Elaeagnaceae (*Elaeagnus*), Nyctaginaceae (*Mirabilis*), and Simaroubaceae (with *Ailanthus*). In other families, there is a strong predominance of alien or locally adventive species within Kentucky: Amaryllidaceae, Asteraceae tribe Cynareae, Brassicaceae, Caryophyllaceae, Chenopodiaceae, Cleomaceae, Convolvulaceae, Cucurbitaceae, Geraniaceae, Hyacinthaceae, Malvaceae, Moraceae (sensu lato), Papaveraceae, Poaceae tribes Poeae and Bromeae, Polygonaceae, Solanaceae. In



Alliaria petiolata

these contexts, understanding the alien versus native status of a plant can sometimes benefit from a general assessment of the biogeography for each family. Such assessment may indicate the degree to which one can expect rapid dispersal of more weedy species into new regions.

In contrast, it is remarkable that virtually no wild alien species are known in the following large tribes, families or orders (see also Table 4): all Pteridophyte families and allies (except waifs of *Marsilea quadrifolia* and *Thelypteris dentata*); all Magnoliid families and allies (except waifs of *Magnolia grandifolia*); Fagales (except a few planted *Betula*

spp. and *Castanea* spp.); Ericales (except a few Myrsinaceae and *Impatiens balsamifera*); Asteraceae tribes Astereae, Inuleae, Eupatorieae and Vernonieae (except a few western or southern adventives, plus a few persistent from plantings); true Liliales (except cultivated *Lilium* spp.); Orchidaceae (except for very local *Epipactis helleborine* and perhaps *Bletilla striata*); Juncaceae; and Cyperaceae (with the few exceptions mostly in *Cyperus*). It is likely that further investigation into the biological and ecological differences between these native families and the largely alien ones will help us understand how plants disperse, migrate or invade new regions.



Celastrus orbiculata

“*Hieracium*” (probably distinct from most Eurasian *Hieracia*); within Poaceae tribe Triticeae, the aliens versus most true *Elymus*; within Poaceae tribe Paniceae, the largely alien *Digitaria* and *Setaria* versus the many natives. In some of these cases, the natives may be relatively tolerant of fire, in contrast to the presumed adaptation of some aliens to browsing. A detailed analysis of such trends and the varied exceptions could help us understand the “natural ecology” of this region, if it can be defined with some distinction from the European or Asian ecology where these aliens originated.

Editors note: A continuation of this article will be presented in the Summer 2009 issue of *The Lady-Slipper*.

Genus level. Within several families, there are of course some whole genera or generic sections that are entirely alien or entirely native, and further analysis of these patterns will be useful for general ecological understanding. A few examples illustrate the potential phylogenetic and biogeographic interest.

In several cases, largely alien genera appear generally adapted to intense browsing, trampling or other intense disturbance, and they can be contrasted with related native genera that may be somewhat less tolerant. Examples include: the largely alien clovers and their allies (*Trifolium*, *Melilotus*, *Medicago*, *Lotus*) versus native relatives (*Orbexilum*, *Dalea*, *Desmodium*, *Lespedeza*); true mints and their allies (most *Mentha*, *Perilla*, *Mosla*) versus native relatives (*Monarda*, *Blephilia*, *Pycnanthemum*, *Cunila*, *Lycopus*); *Malva* versus native Malvaceae; the many alien Brassicaceae versus native genera of the family (*Dentaria*, *Boechera*, *Leavenworthia*, etc.); within Asteraceae, tribes Anthemideae and Cynareae versus tribes Heliantheae and Astereae; within Asteraceae tribe Lactuceae, compare *Crepis*, *Sonchus* and *Tragopogon* versus *Prenanthes*, *Krigia* and



Heterotheca camporum



Ranunculus ficaria

Continued from page 1

In the interim please renew your membership, contact us with your concerns and help raise public awareness of the society and mission. Membership brochures are available upon request, or you may refer people to our website. Our voice as an organization has never been more important. We must strive to unify and address any issues within our organization, so we can focus on our mission and goals. I hope you will all plan to attend our spring meeting at Natural Bridge. I expect it to be a great event. I look forward to it each year and enjoy meeting and talking to other members, who are always willing to share their knowledge and experience. I joined the society because of these folks, and have learned so much from them. I look forward to seeing you all at the meeting.

Alan

KNPS Annual Wildflower Weekend April 17-19, 2009

Natural Bridge State Resort Park
See page 1 and 7 for more information

Saturday, April 18

prior to evening presentation

Vote at the General Membership Meeting on:

By-law revisions

Officers and board for 2009-2010

If you are receiving this newsletter in the mail, and would rather have it delivered via the Internet, please email amyvmcintosh@gmail.com Include in the subject line "Electronic KNPS newsletter". Thanks!

KNPS is seeking newsletter article submissions from members like you. Please submit your native-plant related articles for review or seek more information by contacting ron.jones@eku.edu. Include in the subject line "KNPS article submission"

If you have not renewed your membership for 2009, please do so soon.
Summer 2009 newsletters will only be sent to current members!

Don't miss your next issue!

(membership form and envelope are enclosed)

SEE PAGE 2 FOR CONTACT INFORMATION.

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