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Kentucky Naturalist News

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Arches of the Cumberland Chapter (Slade) meets informally, call President Dell Sasser for details, 606-666-7521 x73559 or (606) 663-9379.

Falls of the Ohio Chapter (Louisville) meets every 3rd Thursday of each month except Jan, Jul, Aug, & Dec at 7:00 PM at the Louisville Nature Center, 3745 Illinois Ave, Louisville, 40213. Call President Chris Bidwell at (502) 458-1328.

Wilderness Trail Chapter (Pineville) meets the first Thursday of each month, March through December, at 7:00 p.m., generally at Pine Mountain State Resort Park, 1050 State Park Road Pineville, KY 40977-0610 (800-325-1712).



Tetragnatha sp. ((long-jawed orb weaver) - Barry Nichols, 2008

EDITOR'S NOTES

I trust everyone has survived Brood XIV of the 17-year cicadas. Later in this issue, there is a note about our recent cicada explosion...and those yet to come.

Sixty-five people attended KSNH's 2008 Spring Conference at Kingdom Come State Park, Benham, KY. There were a good number of presentations after supper as well as numerous field trips. There were also numerous door prizes and many people walked away with loot! I had wanted to report a total taxa list combined from all the trips and activities, but I unfortunately neglected to tell people ahead of time. If you kept notes on species encountered and where, different habitat types and/or geologic formations, etc... please send them my way and I'll combine them for the next issue. I plan on doing this for all KSNH outings from this point forward so field trip leaders, coordinators, and participants please plan accordingly.

After 15 years, Berl Meyer decided to retire as webmaster for KSNH and concentrate his webmaster skills on the site for the U.S.S. Constellation which you may find at <http://www.ussconstellation.org>. Fear not though, he will still serve as KSNH's Geology Coordinator. I offer thanks to Berl for his many years of service as well as the service he extends to the society in his new role.

Inside this issue, you'll find the registration form for the 2008 Fall meeting in Natural Bridge State Resort Park. The agenda will be printed within the next newsletter due out by mid-August.

Ed Ray writes of ospreys and the KEEP osprey nest camera available online. Unfortunately they fledged just a few days after the article was received. However, you may still visit the KEEP site and look at photos.

Chris Bidwell writes about the stunning *Silene regia* Sims (royal catchfly). Don't miss it, or the stunning photo by Susan Wilson.

Zeb Weese writes of the recent cave-gating at Natural Bridge State Park to protect the federally endangered *Corynorhinus townsendii virginianus* (Virginia big-eared bat).

David Wicks introduces the Kentucky Conservation Committee and its upcoming annual meeting. Participation in this meeting may well help shape Kentucky's future conservation efforts.

Hemlock Woolly Adelgid (HWA) News: For those wishing to read more information on the HWA, there is a new book by Richard Preston entitled, "Panic In Level 4: Cannibals, Killer Viruses, And Other Journeys To The Edge Of Science" (Random House \$26). The book contains a chapter named, "A Death in the Forest" which describes the decline of previously healthy hemlock trees in the Great Smoky Mountains National Park.

The Fall 2008 newsletter deadline is August 1, and Winter 2008 deadline is November 1. I plan on getting them out shortly thereafter so if you have anything of a timely nature, please plan accordingly. Please note that all regular newsletter dates are printed in the dark block on the back page of each newsletter. Thanks...b

Many of our members are stellar photographers. Please consider this a request. The KSNH newsletter and especially the website can BOTH use your photographs. We can use any format you prefer to send. Send all you like, we can figure out how to use them! Do you have an article or picture in you? We welcome them at any time. As always, please mail any articles, news, photos, etc to kyfauna@iglou.com –ed

President's Corner

by Joe Settles



Welcome to the lazy days of summer! It has been a fantastic spring and summer for me and my family. The kids are growing like joe pye weed, and we got the chance to take a vacation in sunny Florida. It has been very busy since the last newsletter, and there have been some exciting things happening for KSNH.

First things first - what a great meeting in Benham! We had a great turnout, and I thought the meeting's events went fantastic. I want to send a special thanks to all of the speakers and people that worked so hard to get the event together. The meeting provided many wonderful things for me, and there are a few things that merit special attention. I have to thank John MacGregor and Allen Risk for their presentations at the meeting. John gave the society another wonderful talk, and this

time his focus was on reptiles and amphibians in the region. Incredible photography and wonderful stories can always be counted on in one of John's talks, and he did it again. Allen brought those tiny mosses to life with his stunning photos and amazing talk. I want to thank him again for sharing his gifted ability to make the life history of those non-vascular plants come to life on screen.

We also added two different aspects to the meeting with talks from our grant recipients and a photo presentation from our Junior Naturalists. Lindsay Rohrbaugh and Christine Lattin gave presentations on their graduate research and both did an outstanding job. I really appreciate their efforts. I have received so many positive comments from members on their programs. Their presentations added faces to our grant program, further proving its value.

Jeff Foster was the brainchild of one of the best things we did in Benham. The kids carried their digital cameras during the hikes, and at Saturday night's event they stood up and talked about their five favorite photographs of the weekend. Celya and Cyndol Kiser, J.T. Settles, and Adam Foster gave us a look at a society meeting through their eyes. It was fun to hear them explain their photos, and I think Celya stole the show with her view of Pine Mountain through the bars of the overlook. Wonderful stuff!

My favorite part of the weekend, though, was getting to experience the falls at Bad Branch State Nature Preserves with my son, J.T. I will never forget the look on his face as we crested the boulders and he saw the waterfall. He scrambled to get to the bottom, and he was just giddy when he got to walk under the waterfall and experience the spectacular display. I can't thank the society enough for creating the opportunity for me and my son to experience that together. With today's crazy schedules and the constant list of things to do, I don't know if that moment happens without the KSNH.

Now on to the things ahead - the conference at Natural Bridge State Park is right around the corner. I hope to see all of you there for what I know will be another great event. We get to present the KSNH Naturalist of the Year Award to another deserving recipient. Nominations for the award are due to Wally or me by August 15th. I'm also excited because I get to spend some time again with Brian Gasdorf, the Park Naturalist. I used to work with Brian on a daily basis, and I can't wait to get out in the field with him again. We are planning on two student speakers and the Junior Naturalists photo shoot for the meeting again. Get your registration in today! Click here for the registration form.

The other cool thing that has happened in my neck of the woods (Clark County) was the emergence of the cicadas. My neighbors and coworkers continually complained about the noise. I constantly reminded them how wonderful the opportunity to hear them truly is. I won't get to do that again until 2025. My youngest will be heading to college then! I do understand they can be loud at times, but my neighbor, Fred, put it best when he said "If I was stuck in the ground for 17 years and suddenly realized I could have been flying all that time, I would scream like he**, too!!". Please email me if you had the emergence in your area of the state. Include your locality information, and I will pass it along to those folks that track that data.

Lastly, some of you may not be aware, but Berl Meyer has decided to work on the website for the U.S.S. Constellation and retire as the KSNH webmaster. Berl dedicated 15 years to the KSNH as our webmaster, and he is currently serving as our geology coordinator. Please drop Berl a note of thanks for all of his hard work over the years. You can catch him at geology@ksnh.org. Dave Luzader is picking up where Berl left off. If you have any comments or suggestions for the website, please drop Dave an email at webmaster@ksnh.org. Please be sure to drop both of these guys a note to thank them for everything they have done and will continue to do.

As always, if you have any questions, comments, or suggestions regarding our organization please do not hesitate to call me at (859) 745-9256 or drop me an email at joe.settles@ekpc.coop.

I look forward to seeing you in September!

Kentucky Proud,
Joe Settles

Joe Settles is the Kentucky Society of Natural History's President for the 2008-2010 term.

NOTES FROM THE NATURE NUT

By W. H. (Wally) Roberts



There is an award winning, short, children's movie entitled "A Stranger in the Woods" with a story-line that revolves around secretive deer that visit the children's snowman. This goes on for some time until the children finally become observant enough to catch the deer eating on the vegetables the children used for the snowman's nose, eyes, mouth, etc. This movie reminds me of other strangers in our woods that many people never notice, much less, understand their impacts on our native habitat.

I am speaking about invasive non-native plant species that have been introduced to Kentucky's natural environment and continue to change and overwhelm our native plants. In this article, I have

chosen four non-native species that I consider especially significant. These are garlic mustard, bush and Japanese honeysuckles, and Japanese stiltgrass.

Alliaria petiolata (M. Bieb.) Cavara & Grande (garlic mustard) is thought to have been brought over from Europe in the mid-1800s, presumably as a food or medicinal herb. It occurs mostly in upland and flood plain forests and along roadsides in partial shade. Garlic mustard will invade woodland edges first then proceed via streams, roads, and trails to other undisturbed areas. It can produce as many as 900 seeds per plant, has an extremely long tap root, and the seeds can remain viable for up to five years. This plant will crowd out native species with its high seed production and can quickly turn a native wildflower area into a garlic garden. This plant must be pulled, cut, or treated to be eliminated; and this is a very labor intensive situation. Since it is a member of the garlic family (Brassicaceae), perhaps chefs should consider incorporating the plant into their native Kentucky greens and salads and advertise it as "Kentucky Grown".

Lonicera maackii (Rupr.) Herder (Amur honeysuckle or bush honeysuckle) is native to Asia and Western Europe. It is a deciduous bush that was brought to our country for backyard landscaping because of its sweet-smelling white and yellow flowers. *Lonicera japonica* Thunb. (Japanese honeysuckle, Chinese honeysuckle) is a trailing and twining wood vine originally brought to the United States in 1806 as a horticultural ground cover. Both bush honeysuckle and Japanese honeysuckle are very adaptive to a variety of ecosystems and crowd and shade out native species. Both species may be hand-pulled when young, but older plants must be cut and treated with herbicides. Problem plantings of both of these species continue to occur in the landscape business.

Microstegium vimineum (Trin.) A. Camus (Japanese stiltgrass, Nepalese browntop) is an annual shade-loving plant in the Grass family (Poaceae). It is native to Asia and easily adapts to native habitats. Japanese stiltgrass may be mistaken for cutgrass or knotweed. Japanese stiltgrass can crowd out native plants in as little as 3-5 years and, with a seed bank that can remain viable for up to seven years, it is a formidable invasive. Pulling is an acceptable control for small areas, but larger areas need to be weed-eated close to the ground and treated with an herbicide.

All four of these species represent unwanted strangers in our Kentucky woods. Please do all you can to help eliminate them. Remember that many small acts rolled into one can result in a much larger outcome. Also, if and when you consider some new landscaping, please choose species native to Kentucky and they will reward you with minimum care and extreme hardiness.

Partial information for this article was taken from "Invasive Species Fact Sheets" prepared by the Kentucky State Nature Preserves Commission.

Wally Roberts was Kentucky Naturalist of the Year 2002. He is a long-time biology instructor, interpretive naturalist, and nature photographer. He graduated with a BS in Biology from Morehead State University, and MEd in Biological Education from the University of Louisville. He's been president of KSNH (3 times), former president of the Falls of the Ohio Chapter, and past president of the Board of the Louisville Nature Center. He's currently the Grant Coordinator for KSNH.

OSPREYS ON LAKE BARKLEY

by Ed Ray



Pandion haliaetus (osprey) – Ed Ray, KEEP, Inc 2008

Kentucky Environmental Education Projects, Inc. (KEEP), a non-profit organization, is happy to announce that our osprey family, presently featured live on camera at Lake Barkley, will be fledging soon! This is no surprise to those who have been viewing the huge nest at KEEP's new web site at <http://keepky.org/>. Since April, over sixty-six thousand visits to the site have been recorded. The first osprey egg arrived on April 3 and hatched on May 10, 2008. For the first time KEEP is able to "zoom in" on an osprey family for close viewing. A new state of the art camera was added this nesting season. As a result of different hatching dates and ages, even though just a few days apart, the chicks' size differences have been apparent as they grew very quickly. The osprey chicks are almost as large as their parents and will be flying soon. Young ospreys hatching in Kentucky will stay in their

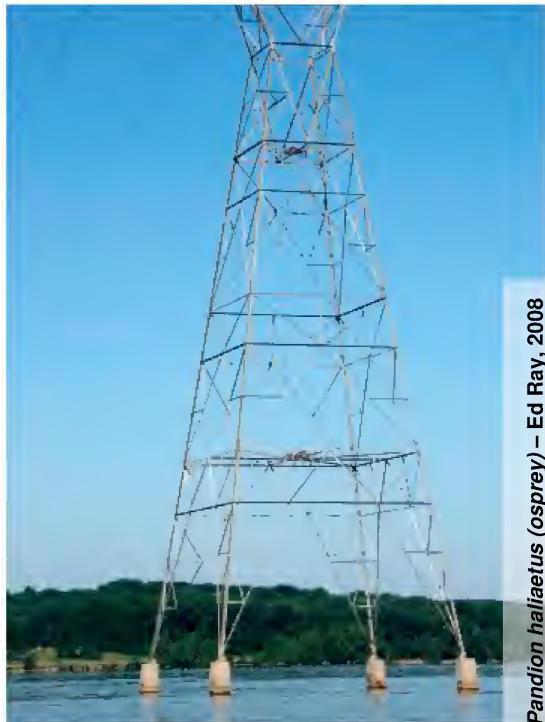
wintering area until they are adults returning to the area where they learned to fly their third spring. Ospreys migrate to southern Florida or perhaps as far as South America to spend the winter.

KEEP was established to help *Pandion haliaetus* (Linnaeus, 1758), also known as ospreys, while involving area schools and the public with hands on osprey nesting projects. Since many schools cannot visit Lake Barkley or the other few Kentucky osprey nesting locations, KEEP and partners have worked to develop osprey live cams for six years. Now Internet viewers including school students can see and learn about this majestic wildlife species once again nesting in Kentucky. KEEP osprey cam viewers are stating that the KEEP site is providing the best quality images of any osprey cam site in the world! The most recent project includes a new state of the art camera. KEEP volunteers, with advanced technical expertise, have produced outstanding results. KEEP and an elementary school began the project sending the first live



Pandion haliaetus (osprey) – Ed Ray, KEEP, Inc 2008

bird image from Kentucky (an Eastern bluebird that flew under an osprey cam) to Cornell University's Laboratory of Ornithology (CLO) to be shown on CLO's web site. Thousands of osprey images followed and were sent to CLO throughout four nesting seasons. This year KEEP has its own new web site. Conservation organizations are invited to contact KEEP for a possible free link to KEEP's web site for live osprey viewing and more. Many of our osprey nest cam site viewers are stating that KEEP's osprey cam is the best and fastest cam site in the world! New images at the Lake Barkley osprey nest are available every twelve seconds. The saved video sequences are also very popular. Over 66,000 visits have been recorded to date at KEEP's osprey cam web site since April, 2008 with viewers located world-wide. Recently KEEP adjusted the image refresh feature making the KEEP cam the fastest refreshing cam site available for viewing. A new image is available about every 12 seconds during daylight hours instead of the more typical 30 seconds. Exciting video action sequences are available at the KEEP web site. So far the background sounds are generic and not nest specific.



Pandion haliaetus (osprey) – Ed Ray, 2008

Why all the interest in ospreys? Ospreys are an excellent environmental quality indicator species. Ospreys did not nest in Kentucky for about fifty years due to harmful pesticides. Ospreys add a global perspective. The Lake Barkley osprey nest count was only one nest in 1986. This was the first year that ospreys were known to successfully nest anywhere in Kentucky in roughly fifty years due primarily to DDT. Following the US ban on DDT and later successful reintroduction programs for bald eagles and ospreys, in 1996 twelve osprey nests were counted at Lake Barkley in the Kentucky portion. Additionally, osprey nests were blocking navigation lights until the Kentucky Department of Fish & Wildlife Resources donated a dozen osprey-nesting platforms to the US Coast Guard in the mid 90s. As the osprey population greatly increased, more assistance was needed. KEEP invited Caldwell County Elementary School (CCES) to help. Together KEEP and CCES provided and participated in placing twenty-four osprey-nesting platforms at Lake Barkley most with the US Coast Guard aboard a USCG cutter. KEEP/CCES donated an osprey-nesting platform for every USCG navigation light where a platform was needed. As a result all the navigation lights now work on Lake Barkley and Kentucky Lakes preventing possible accidents, which could have included spilling toxic chemicals into the lakes from commercial barges if the navigation lights were not working due to osprey nests on the lights. By 1999, there were 26 osprey nests (young ospreys were counted at 14 of these nests during

the survey).

The preliminary nest count completed on July 3, 2008 shows 63 Lake Barkley osprey nests. Young ospreys were counted at 34 of these nests. Only 5-10 minutes is spent at each nest due to the large area to be surveyed. Not all of the young ospreys are the same age during any count. Smaller chicks may not be visible during relatively brief stops at each nest since younger/smaller chicks tend to be lower in the nest and may be resting. An effort is made to conduct the survey when most young ospreys are nearing adult size but have not fledged. Delay too long and ospreys will have fledged. The survey this year appears to have been on the early side by perhaps a week for many nests. The survey documents over-all population trends over time for the same Lake Barkley area. Additionally, the survey monitors osprey needs such as additional osprey platforms and platform maintenance. Osprey nesting platforms provide the safest nesting sites for ospreys. The platforms are placed away from shore where raccoons and great horned owls are more common. The vertical upright steel posts surrounding the steel platform base holds the nest in place during high winds. It is heartening to see the rebound of osprey populations not only on Lake Barkley but other areas of Kentucky as well.



Pandion haliaetus (osprey) – Ed Ray, 2008

Ed Ray is the Founder and Director of Kentucky Environmental Education Projects (KEEP, Inc.) as well as being the current President and Education Director of the Kentucky Bluebird Society (<http://www.biology.uky.edu/kbs/>). He also currently gives guided boat tours (Lake Barkley Eco Cruises) at Lake Barkley State Park. He was the Chief Naturalist at Land Between the Lakes for 20 years.

SILENE REGIA SIMS – ROYAL CATCHFLY (CARYOPHYLLACEAE)

by Chris Bidwell

This beautiful prairie plant is one of summer's most attractive but elusive wildflowers of the Kentucky and Midwest landscapes. It has been observed in the wild in only 2 counties in Kentucky – Hardin and Hart – and has historic observation in 3 counties – McCreary, Warren, and Christian. It is on the endangered list in Kentucky but one can buy plants and they will do well in full or partial sun in slightly dry to moist soil. It will not tolerate drought or excessive shading. Royal Catchfly does take several years to reach full flowering maturity. If starting plants by seed they must undergo cold treatment stratification.

Royal Catchfly is in the Caryophyllaceae family (Pink family). It is a perennial dicot which blooms in late June to late July in dry open woods, glades, barrens, and calcareous prairies. It has been seen along roadsides, dry rocky areas, and in mowed power lines. It does prefer/need rich, well-drained soil in a sunny location. The showy 5-petaled crimson red flowers can be up to 2 inches in diameter. Flowers are star-shaped with narrow petals that flare out from the 1- inch calyx. There is no floral scent. Mature plants can produce flowers near the apex at one time, but not all flowers will produce fruit or seed. Those flowers which do produce fruit can have capsules containing up to 40-plus tiny black seeds which have shown to have a high germination rate. Royal Catchfly can reach up to 4 feet in height and usually has several sticky stems. The sticky-hairy calyx and stems do catch insects. The slightly fuzzy, light green leaves are in opposite pairs that rotate 90 degrees along the stems. The plant has a central taproot and short rhizomes which allow vegetative spread development. More seedlings are produced when its habitat is burned as the seeds/sprouts need little to no leaf litter/duff to germinate and develop.

The scientific name for Silene's family (Pink family) – Caryophyllaceae – is derived from a Greek word meaning Carnation, one of the showiest members of this family. The Pink family has approximately 2000 species in 80 genera. Most plants have 5 sepals, 5 petals, 5-10 stamens, 1-5 pistils and the fruit is usually a capsule. Pink family refers to the deep pink color a lot of the plants in this family possess. The "Pink" has nothing to do with the notched petals which appear to have been snipped with "pinking" scissors. It does help however to remember the family name.

Silene, the genus of Royal Catchfly, can be traced to Silenus (Latin), who was the attendant of Bacchus, the Roman god of wine and intoxication. Dionysus was the Greek god of wine who had drunken followers known as Silenoi, who were usually bald, fat, had thick lips, and squat noses. Eventually Silenoi went out of use and references were made to only one individual drunkard – Silenus, the teacher and faithful companion of Dionysus. *Silene* can also be traced to the Greek word *Sialon* meaning “saliva”, referring to stickiness of the plant’s calyx and stems. *Silene* may also be from a Latin term of an abusive person called Silenus, a term being used around 211 BC in Platus’ *Rudens* to describe Labrax. Labrax was a treacherous pimp or leno – “a pot-bellied old Silenus, bald head, beefy, bushy eyebrows, scowling, twister, God-forsaken criminal.”

Saint George and the slaying of the dragon also have ties to *Silene*. According to legend St. George slayed the dragon in a region of Lybia that St. George called *Silene*. He slayed the dragon to save the villagers and, in return, they promised to convert to Christianity. 1500 men were baptized and the king built a church where the dragon was slain and from its altar a spring arose whose waters cured all diseases.



Silene regia Sims (royal catchfly) – Susan Wilson, 2006

The specific epithet, *regia*, is Latin for royal/kingly, as the plant’s deep crimson color is one of the official “kingly” colors. It may also refer to the kingly overall appearance of the plant as it stands out in a prairie setting. Catchfly comes from the plant’s sticky stems and calyx which do trap “flies” and many other insects. The trapping of climbing insects serves to protect the plant’s nectar for non-pollinating visitors.

This Pink family is quite remarkable in that it contains *Colobanthus quitensis*, the world’s most southern dicot – one of only 2 flowering plants in Antarctica.

Royal Catchfly’s nectar attracts large butterflies such as *Papilio polyxenes* Fabricius, 1775 (black swallowtail). It also attracts *Archilochus colubris* (Linnaeus, 1758) (ruby-throated hummingbird) and some authors cite that unless hummingbirds visit the catchfly no seeds will be produced. Very little data on this plant’s relationship to birds or animals exists. No medicinal usages of not have been documented. It is interesting in that red is an uncommon color among prairie plants as many pollinators are insensitive to this range of the light spectrum. However some butterflies do prefer and are attracted to royal catchfly as well as our 2 other red silenes (fire-pinks) – *S. virginica* and *S. rotundifolia*, neither of which is found in a prairie setting.

Royal catchfly is endangered in Kentucky. It is threatened by: overgrowth of woody species, picking, digging by wildflower gardeners, invasives (such as brome grasses), fire suppression, habitat loss to farming, and urban development. I remember one of the most beautiful specimens of royal catchfly stood in the meadow every summer at the Louisville Nature Center. It reached well over 3 feet tall and had many flowers. Someone decided to take it for their own and dug it up. We at the Nature Center felt as if an old friend had died. I only hope the plant survived such a selfish act.

As you get out this summer keep your eyes peeled for this one-of-a-kind rare Kentucky prairie plant.

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Chris Bidwell is an amateur naturalist and the current President of the Falls of the Ohio Chapter of KSNH.

Gating Project Protects Endangered Bats at Natural Bridge State Park

by Zeb Weese



Roy Powers works on gate - Brian Gasdorf, 2008

The Kentucky State Nature Preserves Commission and the Kentucky Department of Parks have completed the gating of Natural Bridge Cave at Natural Bridge State Park Nature Preserve, home to the federally endangered Virginia big-eared bat, *Corynorhinus townsendii virginianus*.

This small cave has been a popular attraction at the park for well over 100 years, but increased tourist traffic resulted in a severe degradation of the cave resources. Long time residents reported large numbers of “mule eared” bats in this cave many years ago, and in 1952 Virginia big-eared bats were first officially recorded in Kentucky from this small cave (Barbour 1974; MacGregor 1996). However, by the 1990s only an occasional solitary male was found in the summer months. The almost continuous human presence and associated noise in the summer and fall greatly reduced the suitability of this cave for sleeping bats. Since Virginia big-eared bats have a worldwide population of less than 20,000 individuals and are very selective in hibernacula and roost sites selection, as well as extremely sensitive to disturbance, the protection of any cave known to have suitable habitat is critical (NatureServe 2008).



Setting the cave gate bar - Brian Gasdorf, 2008



Zeb Weese (L) & Jerry Fant (R) at cave entrance - Brian Gasdorf, 2008



Finished bat gate at cave entrance - Brian Gasdorf, 2008

It has long been known that properly designed gates can greatly increase bat populations when the main limiting factor is human disturbance (Houghton 1995). Grant funding from the Governor's Office for Local Development and the Slade Chapter of the Kentucky Society of Natural History was secured in 2007, and in May 2008 Roy Powers and Jerry Fant from the American Cave Conservation Association came to Natural Bridge to design and build bat friendly gates at the cave's two entrances, with assistance from KSNPC and Natural Bridge staff. Similar ACCA gates have been very successful at increasing bat populations at Carter Caves State Park and Mammoth Cave National Park. These gates are designed to prevent unauthorized human access without altering air flow or impeding movement of the bats. It is hoped that this gating will protect and expand the population of Virginia big-eared bats, and potentially other rare species such as Indiana bats and small-footed bats,

while also provide a safer and more educational experience for people (MacGregor 2007). A lockable entry was constructed in the larger opening to allow access to guided tours and researchers to ensure that Natural Bridge Cave will provide memorable experiences to park visitors for years to come along with improving habitat for cave dwelling species.

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Zeb Weese is Vice President of KSNH and a regional nature preserves manager for the Kentucky State Nature Preserves Commission.

ANNOUNCEMENT OF A NEW STATEWIDE EFFORT: THE KENTUCKY SPIDER SURVEY

by Barry Nichols

I'd like to take a moment to announce the start of a long-term statewide Kentucky Spider Survey. There are few statewide surveys nationally and Kentucky has never had a thorough survey of its spider fauna. The mission of the Kentucky Spider Survey is to describe the complex spider community of Kentucky and augment our understanding of the roles of these important predators. In addition, the survey seeks to provide a foundation for spinning off further spider taxonomy, ecology and natural history projects. Though the focus is spiders, the survey will also document and describe the populations of several other arachnid orders

Organizational issues and funding are the current priority. More information will be available by this winter at the KSS website <http://www.spiderstudy.com>. Later in 2009 I will be working on opportunities to get other interested parties involved in the survey. This will include but not be limited to presentations, survey assistance, workshops, and field walks. More details will be available via the website at that time.



Unidentified pisaurid spider - Barry Nichols, 2008

Barry Nichols is a biologist for state government and the current editor of the Kentucky Naturalist News. In his "spare time" he can be found ogling spiders, plants, herps, birds, mammals, or just about anything else he finds.

New Software Brings the Universe to Your Computer

via National Aeronautics and Space Administration (NASA) Jet Propulsion Laboratory (JPL) News Release



Earth's moon – NASA (public domain)

The incredible images from NASA's "Great Observatories" and many other NASA space- and ground-based telescopes are now available to the public in an educational and innovative manner through the release of the **free** WorldWide Telescope software from Microsoft.

Views of the cosmos from such observatories as NASA's Hubble Space Telescope, Spitzer Space Telescope, and Chandra X-ray Observatory can all be accessed through the same intuitive interface of exploring the night sky. Several all-sky surveys are also available through the WorldWide Telescope, including the Two Micron All-Sky Survey and the Infrared Astronomical Satellite survey. The rich multimedia software enables browsing through the visible, infrared, x-ray and other views of the universe, allowing for direct comparison of multi-wavelength observations that reveal surprising contrasts.

Other innovative features include guided tours created by scientists and educators. These tours guide users through various aspects of astronomy with narration, music, text and graphics. Members of the public, including children, will also be able to make their own

tours to share with others.

The Two Micron All-Sky Survey is a collaborative effort between the University of Massachusetts, Amherst, and the Infrared Processing and Analysis Center in Pasadena, Calif., operated by NASA's Jet Propulsion Laboratory and the California Institute of Technology, both in Pasadena.

The Infrared Astronomical Satellite is a joint project between NASA, the Netherlands and the United Kingdom. Its data are archived at the Infrared Processing and Analysis Center.

The WorldWide Telescope has been available since May 13, 2008, at <http://www.worldwidetelescope.org>. Info: info@jpl.nasa.gov.

The National Aeronautics and Space Administration's Jet Propulsion Lab manages the Spitzer Space Telescope mission for NASA's Science Mission Directorate, Washington. Science operations are conducted at the Spitzer Science Center at Caltech, which manages JPL for NASA.



KENTUCKY CONSERVATION COMMITTEE ANNUAL MEETING

by David Wicks

Kentucky Conservation Committee Annual Meeting: Saturday September 20, 2008 (10:00 am to 3:30 pm) with a post-conference tour of Floyds Fork (3:30 to 6:30 pm).

The mission of the Kentucky Conservation Committee (KCC) is to work for sustainable use of renewable natural resources, prudent use of non-renewable resources, conservation and preservation of critical and unique areas, and a healthful environment for all Kentuckians. We accomplish our mission by working with a coalition of environmental organizations and individuals to influence public environmental policy and legislation.

Blackacre State Nature Preserve will be the site of the KCC's 2008 annual meeting. The theme of the meeting will be "Conserve Kentucky". The Conserve Kentucky initiative began two years ago with a Legislative Research Commission (LRC) sponsored task force, charged with studying:

"The Commonwealth's strategy for the protection of natural areas, farmlands, habitats and forests and produce recommendations for a comprehensive land stewardship and conservation program."
<http://www.lrc.ky.gov/Committee/Special/Conserv%20TF/home.htm>

The annual meeting will provide participants with an update of the Task Force's progress, and involve them in discussions of where to go from here, regarding proposed legislation for the 2009 session. Five panels, comprised of legislators, state agency, environmental organizations, educators and research scientists, will participate. The meeting will close with a discussion of KCC's environmental legislative priorities for the upcoming session.

Blackacre State Nature Preserve is an ideal location to hold such discussions, as it is our Commonwealth's first nature preserve in the Kentucky State Nature Preserve system. Since 1982, The Blackacre Conservancy, (<http://www.blackacreconservancy.org>), our host, has been actively protecting and interpreting the 180 acre Nature Preserve. Recently, the Conservancy has purchased 100 acres of land adjacent to the preserve which will be the site of a new nature and administrative center. Since the establishment of the preserve, Jefferson County Public Schools, (<http://www.icpsky.net/ee>), has led ecological investigations at Blackacre; these investigations focus on understanding the value of conserving Kentucky.

The annual meeting will conclude with a tour of the Floyds Fork Corridor project in Jefferson County, Kentucky. This is the largest new park project in the United States. The tour, led by Dr. Dan Jones, CEO and president of the 21st Century Parks (<http://www.21cparks.org/>), will be an up-close and personal view of the ecology, planning, challenges and opportunities of land conservation in an urban/suburban center. The tour will also provide the participant with an overview of the 105-mile Louisville Loop Trail, (http://www.louisvilleky.gov/MetroParks/cityofparks/metro_loop_trail.htm), clarifying Floyds Fork in its context as a cornerstone of the Loop project.

Dr. David Wicks (dwick@bellsouth.net), is Local Arrangements Chair, and Russ Barnett (r.barnett@louisville.edu), is Program Chair for the meeting. Contact them if you want to volunteer to help organize the annual meeting. Registration information, update meeting agendas/schedules and local housing options will be available soon at KCC new website, www.kyconservation.org.

We hope all the readers will join KCC and help shape future environmental policy in Kentucky and ensure that we Conserve Kentucky!

David Wicks, Ph.D., is a Kentucky Conservation Committee Board member, and in his paid life he is Director of Environmental Education for Jefferson County Public Schools and an Adjunct Professor at the University of Louisville.

BROOD: A BRIEF NOTE ON CICADAS

by Barry Nichols

The last of Brood XIV of the 17-year cicadas have died. The forests seem eerily quiet even though the annual cicadas, tree crickets, katydids, and other beasts have started to make their own music. Whether the 17-year cicadas formed a symphony or cacophony is left to the listener. There isn't much physical evidence left that they even existed other than the flagging on trees. Flagging is the term for the dead, broken twig-ends left on the trees after the females. While the damage is noticeable on many trees, it really is minor in the long-term. Closer inspection of these twig-ends may show some small slits in which the females laid eggs.

What you may not know is that the 17-year cicada broods are actually composed of three species:

Magicicada cassini (Fisher 1851)
Magicicada septendecim (L. 1758)
Magicicada septendecula Alexander and Moore 1962.

Many of you were able to find all three species at most locations this year.

For those of you who wish to experience more in the way of periodical cicadas, you'll get your chance soon enough. In 2011, Kentucky will see the 13-year cicada brood, Brood XIX. Just four short years later, we'll see another 13-year cicada brood, Brood XXIII (2015). The species making up the 13-year cicada broods are:

Magicicada neotredecim Marshall and Cooley 2000
Magicicada tredecassini Alexander and Moore 1962
Magicicada tredecim (Walsh and Riley 1868)
Magicicada tredecula Alexander and Moore 1962.

So, if you missed them this time, or just like to see cicadas, fear not as it won't be much longer until we see another brood. It truly is a marvel that so long a lifespan forms so fleeting a celebration. I hope everyone enjoyed them while they were here. Mark your calendar.



Magicicada septendecim- Barry Nichols, 2008

References:

Century, D. 2008. Cicada Mania: Dedicated to cicadas, the most amazing insects in the world. [Internet]. [cited 2008 Jul 15]. Available from <http://www.cicadamania.com>.

Cooley J.R. 2008. Magicicada.org. [Internet]. Storrs, CT. [cited 2008 Jul 15]. Available from <http://www.magicicada.org>.

Cooley, J.R., D. Marshall, and M. O'Brien. 2008. Periodical Cicada Page. [Internet]. The University of Michigan Museum of Zoology, Ann Arbor, Michigan. [cited 2008 Jul 15]. Available from http://insects.ummz.lsa.umich.edu/fauna/Michigan_Cicadas/Index.html.

Simon, C. 2008. Cicada Central. [Internet]. University of Connecticut, Storrs, CT. [cited 2008 Jul 15]. Available from <http://hydrodictyon.eeb.uconn.edu/projects/cicada/>.

Zyla, J. 2008. Cicadas of the Mid-Atlantic. [Internet]. Ridge, MD. [cited 2008 Jul 15]. Available from <http://www.cicadas.info/>.

Barry Nichols is a biologist for state government and the current editor of the Kentucky Naturalist News. In his "spare time" he can be found ogling spiders, plants, herps, birds, mammals, or just about anything else he finds.

CHAPTER NEWS

Falls of the Ohio Chapter News- Summer 2008 - Chris Bidwell:

Summer 2008 – gas prices \$4.00 a gallon. Lots of long distance driving vacations will be shortened or cancelled this year as gasoline prices skyrocket. I know my wildflower hunting has been curtailed due to economic/ecological reasons. The days of just jumping into the car and driving to far away places will force all of us to reconsider/refocus our budget to see and admire nature and at the same time conserve fuel and money. It is a fine balance. We, as Americans, cannot sit idly back and hope/count on technology to save us. We keep hoping for a more efficient, cheaper way to power our vehicles and the answer simply is not forth coming. I have bought a fuel efficient vehicle but I still have my SUV for pulling my trailer and for trips where 4-wheel drive is a must. But such trips are few and far between as gas/ecology/economic issues surface.

We in Kentucky are fortunate, however, as we have many beautiful natural places close by that can reasonably be reached. I could cite every State Park, our local National Parks, and such forests as Jefferson County Memorial, Bernheim, and Blanton, to name a few of the many attractions here in Kentucky. One does not have to leave the state to fully enjoy our natural world. We're all going to have to sacrifice in these crazy economic times. Its unfortunate but it is reality. We must learn to conserve. Be thankful our state has such wonderful and accessible areas that can be traveled to and enjoyed. Also 2008-2009 are the bicentennial anniversaries of Jefferson Davis' and Abraham Lincoln's births. There are many activities, plays, and historical lectures going on now and continuing into 2009 documenting the lives of these two historic Kentuckians throughout the state.

Have a great summer and get out as much as you reasonably can to enjoy our natural world. Remember, carpooling is a great way to save, conserve, and have a great time with fellow naturalists.

KENTUCKY NATURALISTS' CALENDAR

(added as space allows)

August 9, 2008: "Meteor Showers" Presented by Joe Caruso @ John James Audubon State Park - Audubon Museum. 8:00 p.m.–10:00 p.m. (Rain/Cloud Date is Sunday, Aug. 10). Learn about the small bodies of the solar system, including meteors, comets and asteroids. Meet at the museum for a peek into basic astronomy. After dark, we'll drive to the Audubon Park Golf Course to "scope" out the wonders of the universe with telescopes & binoculars. Participants are

welcome to bring red flashlights (or small enough regular flashlights that we can rubber band a red filter onto it). Dress appropriately for the weather. Staff Contact: Julie McDonald at 270-826-2247 or juliea.mcdonald@ky.gov Program Fee: Free.

August 9, 2008: Reptiles and Amphibians of Otter Creek Park @ the Nature Center, Otter Creek Park, 850 Otter Creek Park Road, Brandenburg, KY 40108. 11 a.m. - Noon. Meet the lizards, snakes, turtles, salamanders, frogs and toads that call Otter Creek Park home. The program is free. For more information contact Park Naturalist Bryan Lewis (a KSNH member!) at (502) 942-3211 or visit the website at <http://www.louisvilleky.gov/MetroParks/parks/ottercreek/>.

August 12, 2008: Perseid Meteor Shower Viewing @ Cumberland Falls State Park. The annual Perseid Meteor Shower, which is visible from earth, will hit its peak on the morning of Tuesday Aug. 12, 2008. Cumberland Falls will provide a special night of stargazing with a park naturalist's guidance. For more information contact Cumberland Falls State Park, 7351 Highway 90, Corbin, KY 40701-8857 or call them at (606) 528-4121.

August 13-17, 2008: In the Footsteps of Lucy Braun @ The Pine Mountain Settlement School. This four-day forest study workshop is named in honor of one of the first and foremost conservationists of the 20th century, Dr. Lucy Braun. It combines lectures and field trips in the study of different forest types found in Eastern Kentucky. Daily field trips will include four-to-eight mile hikes. The workshop is geared toward adults. Cost for the workshop is \$275 which covers lodging for 4 nights, meals (Wednesday supper through Sunday lunch), and all workshop activities. Pine Mountain Settlement School (36 Highway 510, Pine Mountain, KY 40810) may be reached by phone at 606-558-3571 or 606-558-3542, or via their website at <http://www.pinemountainsettlementschool.com/workshops.php?view=details&id=38>.

Saturday, August 16, 2008: Insect Safari @ The Arboretum, State Botanical Garden of Kentucky. 9 a.m. Join entomologist Blake Newton for a morning hike in search of insects and their allies. Come face-to-face with butterflies, beetles, and more! Cost: \$1. For more information contact The Arboretum, 500 Alumni Drive, Lexington, KY 40503, or by phone at (859) 257-6955 or go to their website at <http://www.ca.uky.edu/arboretum>.

August 16, 2008: Turtle Trek @ John James Audubon State Park - Audubon Museum. 10:00 a.m.-11:30 a.m. Learn about one of nature's most unique reptiles – an animal that has been around since before the dinosaurs – the turtle. Activities include a visit from some live turtles and a hike to look for wild turtles. Outdoor portion of program is weather dependent. Staff Contact: Julie McDonald at 270-826-2247 or juliea.mcdonald@ky.gov. Program Fee: Free.

August 25–28, 2008: The Art of Botanical Illustration @ Arboretum, State Botanical Garden of Kentucky. 9 a.m.–4 p.m (daily). Certified Botanical Artists O.M. Braida-Chiusano and Leslie Ramsey present this in-depth, 4-day course on botanical illustration and watercolor painting in the French Court Tradition of pre-20th century master artists. Cost for four-day course: \$475 (\$450 for FOA) plus \$45 materials fee. For more information contact The Arboretum, 500 Alumni Drive, Lexington, KY 40503, or by phone at 859/257-9339 or go to their website at <http://www.ca.uky.edu/arboretum>.

September 5, 2008: Volunteer Day @ Floracliff Nature Sanctuary. 10:00 a.m. Volunteer activities usually involve removing exotic plants from the preserve as part of an ongoing effort to protect our native species. Other activities may involve trail work or general maintenance. Tools and snacks will be provided. For more information contact Floracliff Nature Sanctuary, P.O. Box Box 4006, Lexington, KY 40544, via phone at (859) 351-7770, via email at floracliff@aol.com, or visit the website at <http://www.floracliff.org>.

September 6, 2008: Canoeing and Birdwatching at the Falls of the Ohio. Organized by the Jefferson Memorial Forest (event held at the Falls of the Ohio just minutes from downtown Louisville). 9:00 a.m. - 2:30 p.m. Explore islands, look for shore birds and paddle the protected waters at Falls of the Ohio. All equipment will be provided. Bring a sack lunch. For ages 7 and up (children must be accompanied by a parent or guardian). Program meets at the Welcome Center. There is space for 18 participants, with a maximum of 12 adults. Reservations are required in advance. No space will be available for individuals showing up on the day of the program. Canoe programs are subject to change of dates or venues due to water conditions. Fee: \$10. For more information contact Jefferson Memorial Forest at (502) 368-5404 or via email at forest@louisvilleky.gov.

September 8, 2008: Senior Bird Watching Program. Organized by the Jefferson Memorial Forest (JMF) in Louisville. The Shawnee Park Program meets at the JMF Welcome Center. Participants may choose to meet at Shawnee Park. Please let us know when making your reservation so that you receive directions to the location. 8:30 a.m. - 12:30 p.m. Free program teaching bird identification by sight as well as sound. program is guided by a JMF naturalist and consists of transportation to the various sites, and some short easy hikes. After you work up an appetite, participants are taken to

lunch at local eateries. Participants are responsible for purchasing their own lunch. For more information contact Jefferson Memorial Forest at (502) 368-5404 or via email at forest@louisvilleky.gov.

September 12, 2008: Evening Canoeing @ the Jefferson Memorial Forest (JMF) Welcome Center in Louisville. 7 - 10:30 p.m. By the light of the full moon, experience the tranquility of the evening as you drift on 46-acre McNeely Lake. See animals as they emerge and begin foraging for food along the lake's edge. Be sure to wear bug repellent. Program meets at the Welcome Center. There is space for 18 participants with a maximum of 12 adults. For ages 7 and up. All children must be accompanied by a parent or guardian. Reservations are required in advance. No space will be available for individuals showing up on the day of the program. Fee: \$10 per person.

September 12-13, 2008: The Kentucky Association for Environmental Education (KAEE) Conference: "The Rhythm of Nature" @ Cumberland Falls State Park. For more information write them at KAEE, PO Box 17494, Louisville, KY 40217-0494, or go to their website at <http://kentuckyassociationforenvironmentaleducation.org/>.

September 13, 2008: Monarch Butterfly Migration Mysteries @ John James Audubon State Park - Audubon Museum. 8:00 a.m. and 1:00 p.m. Bid a farewell to the Monarch Butterflies migrating south for the winter. Meet at the Museum for a 45-minute indoor presentation. Next, carpool to the Sloughs Wildlife Management Area for some outdoor Monarch tagging on their migration to Mexico. The outdoor portion (2-3 hours) is weather dependent. Please dress for potentially marshy conditions. Although Monarch Tags and nets will be provided, bring your net if you would like. Staff Contact: Julie McDonald at 270-826-2247 or juliea.mcdonald@ky.gov Program Fee: \$3.00 per person.

Saturday, September 13, 2008: Native Alternatives to Invasive Plants @ Floracliff Nature Sanctuary. 1:00 p.m. Hike to Elk Lick Creek and discussion of ornamental plants that have become invasive in central Kentucky and a look at some natives that would make great alternatives in the garden. Fee is \$4 per person or \$10 per family. For more information contact Floracliff Nature Sanctuary, P.O. Box Box 4006, Lexington, KY 40544, via phone at (859) 351-7770, via email at floracliff@aol.com, or visit the website at <http://www.floracliff.org>.

September 19-20, 2008: 19th Annual Living Archaeology Weekend @ the Gladie Historic Site, Red River Gorge, Daniel Boone National Forest near Slade, KY. United States Forest Service. 9 a.m. to 5 p.m. Friday; 10 p.m. to 5 p.m. Saturday. Native American Technology Demonstrations include atlatl and spear throwing, bow and arrow making, cooking, fire-building, baskets, potter, tanning, flint knapping, blowguns, and more! For more information contact Hope Crosbie via email at hcrosbie@fs.fed.us, by phone at (606) 663-8100 or go to the website at <http://www.fs.fed.us/r8/boone/heritage/livingarch.shtml>. Also of interest is http://www.fs.fed.us/r8/boone/districts/london/cliff_palace.shtml.

September 20, 2008: Monarch Butterfly Migration Mysteries @ John James Audubon State Park - Audubon Museum. 8:00 a.m. and 1:00 p.m. Bid a farewell to the Monarch Butterflies migrating south for the winter. Meet at the Museum for a 45-minute indoor presentation. Next, we'll carpool to the Sloughs Wildlife Management Area for some outdoor Monarch tagging on their migration to Mexico. The outdoor portion (2-3 hours) is weather dependent. Please dress for potentially marshy conditions. Although Monarch Tags and nets will be provided, bring your net if you would like. Staff Contact: Julie McDonald at 270-826-2247 or juliea.mcdonald@ky.gov Program Fee: \$3.00 per person.

September 20-21, 2008: Falls Fossil Festival at the Falls of the Ohio State Park in Clarksville, IN (right across the river from Louisville). Sat: 0900 – 1800, Sun: 1000 – 1700. For more information go to their website at: <http://www.fallsoftheohio.org> or contact Alan Goldstein, 201 West Riverside Drive, Clarksville, IN 47129, (812) 280-9970, park@fallsoftheohio.org.

September 26-27, 2008: Kentucky Society of Natural History (KSNH) 2008 Fall Meeting @ Natural Bridge State Resort Park, Slade, Kentucky. For more information see the KSNH website at <http://www.ksnh.org> or email

September 26-28, 2008: Kentucky Ornithological Society's Fall Meeting. Dale Hollow Lake State Resort Park. For more information contact KOS at P.O. Box 463, Burlington, KY 41005 or via their website at <http://www.biology.eku.edu/kos/default.htm>.

Saturday, September 27, 2008: Aromatic Plants of Floracliff @ Floracliff Nature Sanctuary. 1:00 p.m. We'll use our sense of smell to discover fragrant plants along the trail and talk about why they have these characteristics. Fee is \$4 per person or \$10 per family. For more information contact Floracliff Nature Sanctuary, P.O. Box Box 4006, Lexington, KY 40544, via phone at (859) 351-7770, via email at floracliff@aol.com, or visit the website at <http://www.floracliff.org>.

November 2-3, 2008: The 2008 Annual Meeting of the Society of Kentucky Lepidopterists (SKL) @ the University of Kentucky Department of Entomology, Lexington, KY. For more information contact Jeffrey Marcus, Department of Biology, Western Kentucky University, 1906 College Heights Blvd #11080, Bowling Green KY 42101-1080 or via phone at (270) 745-2043 or viw the SKL website at <http://bioweb.wku.edu/faculty/Marcus/KYLeps.html>.

Nov. 10, 2008: Reptiles and Amphibians of Otter Creek Park @ the Nature Center, Otter Creek Park, 850 Otter Creek Park Road, Brandenburg, KY 40108. 11 a.m. - Noon. Meet the lizards, snakes, turtles, salamanders, frogs and toads that call Otter Creek Park home. The program is free. For more information contact KSNH member and Park Naturalist Bryan Lewis at (502) 942-3211.

November 14-15: KENTUCKY NATIVE PLANT SOCIETY 2008 FALL CONFERENCE @ Rotunda Room in Mammoth Cave National Park Hotel. Join KNPS for lectures by botanist and author Randy Seymour (WILDFLOWERS OF MAMMOTH CAVE NATIONAL PARK) about the field work for his book, by botanist Dwayne Estes, Ph.D. on "Connections between the Kentucky and Tennessee Flora: species that occur near the Kentucky border in Tennessee that Kentuckians should watch out for", and for Saturday field trips. For more information, contact KNPS at P.O. Box 1343, Richmond, KY 40476, or on their website at <http://www.knps.org/>. You may need to call the MCNP Hotel for reservations at 270-758-2225.

2009:

April 4, 2009: The 2009 Annual Meeting of the Kentucky Bluebird Society @ Shakertown, KY (near Harrodsburg).

April 24-26, 2009: Kentucky Society of Natural History (KSNH) 2009 Spring Meeting @ Pine Mountain Settlement School, 36 Highway 510, Pine Mountain, KY 40810

September 25-27, 2009: Kentucky Ornithological Society's Fall Meeting. Mammoth Cave National Park. For more information contact KOS at P.O. Box 463, Burlington, KY 41005 or via their website at <http://www.biology.eku.edu/kos/default.htm>.

Fall 2009 TBA: Kentucky Society of Natural History 2009 Fall Meeting @ Reelfoot Lake.

2010:

April 23-25, 2010: Kentucky Ornithological Society's Fall Meeting. Jenny Wiley State Resort Park. For more information contact KOS at P.O. Box 463, Burlington, KY 41005 or via their website at <http://www.biology.eku.edu/kos/default.htm>.

Spring 2010 TBA: Kentucky Society of Natural History 2010 Spring Meeting @ Shawnee State Park, Ohio.

Fall 2010 TBA: Kentucky Society of Natural History 2010 Fall Meeting @ Shakertown National Historic Landmark

2011:

Spring 2010 TBA: Kentucky Society of Natural History 2011 Spring Meeting @ ShawnCarter Caves State Park

Fall 2010 TBA: Kentucky Society of Natural History 2011 Fall Meeting @ Cumberland Falls State Resort Park

NOTICES

Olmsted Parks Conservancy Seeks Volunteers

The Olmsted Parks touch each of us in different ways. And each of us can give something special in return to keep our parks healthy and vital. Our volunteer program, Park Champions, is a fun and interesting way to get involved. Whether it's one day a year or once a week, you can make a difference by volunteering your time. It's a great way to learn about the

environment, make new friends, get some exercise, and have fun—all while making a positive difference in our Olmsted Parks.

Restoring health to woodlands, ponds, meadows and other natural areas takes a lot of hands-on effort. Individuals, families and groups can take part in projects that will root out invasive plants, rebuild trails, and restore native plants. Volunteers are needed during the week, and on the weekends. Contact the Olmsted Parks (contact information below) for specifics as well as important notices regarding special events.

CHEROKEE PARK, Every 1st & 3rd Saturday of each month: 9:00 AM - 1200 PM, Aug 2 & 16, Sep 6 & 20, Oct 4 & 18, Nov 1 & 15, Dec 6 & 20,

IROQUOIS PARK, Every 2nd Saturday of each month: 9:00 AM - 1200 PM: Meet in the Amphitheater parking lot.

SHAWNEE PARK, Every 4th Saturday of each month: 9:00 AM - 1200 PM: Meet at the South Concourse near the Lily Pond.

Contact: Sarah Wolff, Volunteer & Outreach Coordinator, Olmsted Parks Conservancy: 502.432.2677.
<http://www.olmstedparks.org/conservancy/calendar.html>

BUY STUFF & SUPPORT KSNH!!!

Merchandise: KSNH has a number of items ranging from window clings, stickers, and apparel. Plan now for the people on your Christmas list! We have many t-shirts available. Due to the popularity of Dan Dourson's "Kentucky's Own" design, it is once again available in short and long sleeve versions. For those who like fall colors, we have shirts with leaves showing their autumn glory. These are priced reasonably at \$11 for the short sleeve version and \$13 for the long sleeve shirts. There are still a few of the popular ball caps (\$14) that have our logo embroidered on them and the sweatshirt jackets (\$27) that also have the embroidered logo and the fall leaf design. These items available for purchase at the regular Falls of the Ohio Chapter meetings and at our statewide conferences.



Pictures from the KSNH 2008 Spring Meeting at Kingdom Come State Park (Location is Big Black Mountain):

LEFT: Dr. Allen Risk leaves the discussion on lichens to talk to a group about acorns and oak growth. Photo: Barry Nichols, 2008.



Pictures from the KSNH 2008 Spring Meeting at Kingdom Come State Park (Location is Big Black Mountain):
TOP-RIGHT: J.T. Settles and Celya Kiser examine a *Diadophis punctatus edwardsii* (Merrem 1820) - (northern ring-necked snake). Photo: Barry Nichols, 2008. **TOP-LEFT:** Cyndol Kiser examines a *Peromyscus leucopus* (Rafinesque 1818) (white-footed mouse) being discussed by her father James Kiser. Photo: Barry Nichols, 2008. **BOTTOM:** John MacGregor shows a group a *Plethodon richmondi* Netting and Mittleman, 1938 (Ravine Salamander). Photo: Barry Nichols, 2008



KENTUCKY SOCIETY OF NATURAL HISTORY REGISTRATION FORM
FALL CONFERENCE AT NATURAL BRIDGE STATE RESORT PARK: SEPTEMBER 26 – 28, 2008
Payment is due at the time of registration

Your Name: Last: _____ First: _____

Street Address: _____

City: _____ State: _____ Zip: _____

E-mail: _____@_____ Phone # _____

Names (In your group, please print): _____, _____

_____, _____, _____

General Registration:

| | Number | Cost | Amount |
|---------------------------------------|--------|--------|----------|
| Individuals (over 18) Member..... | _____ | X \$25 | \$ _____ |
| Individuals (over 18) Non-member..... | _____ | X \$30 | \$ _____ |

***Accommodations: Natural Bridge State Resort Park, Slade, KY (Children 16 and under stay free in parents' room)**

Two nights lodging and 2 dinner buffets for 1 adult.....\$190 \$ _____

Two nights lodging and 2 dinner buffets for 2 adults in same room.....\$222 \$ _____

Extra adult in room (includes dinner buffet for 2 nights).....\$ 52 \$ _____

Child's buffet (12 and under) for two nights.....\$ 16 \$ _____

Handicapped Smoking Non-Smoking Natural Bridge only has double beds.

* Cabins: 1 bedroom cottage (for 2 nights, includes Fri and Sat buffet for 2 people)...\$26 \$ _____

Note: Please make your own reservation for the pre-conference date of September 25 by calling 800-325-0143 and mention KSNH. You will be responsible for payment for any additional night(s).

None - I'll make my own elsewhere (please check the box)

Waiver of Liability for the Fall Conference
Member and/or Participant (Must be executed by All Registrants)

EVENT: Natural Bridge Fall Conference

DATE: September 26–28, 2008

I understand that I am a participant in this field trip/event. I release the Kentucky Society of Natural History and/or its officers from all liability for accident, injury, illness, or loss of property for myself and/or my dependent(s) and agree to indemnify and save harmless the sponsors from accident, illness, or injury to others or loss of their property caused partly or wholly by me and/or my dependent(s) while engaged in any voluntary activity supported by the sponsors.

Please note: In Kentucky and most other states an individual may accept a particular risk of harm resulting from another party's conduct. An express release by which one party agrees to assume the risk of harm arising from another party's negligent conduct will be enforced by the courts so long as it does not release liability for willful or gross negligence and does not otherwise offend public policy. By signing this release, you are not only agreeing that you will not sue the Kentucky Society of Natural History or its officers should one or more of its members or officers cause you harm; you are also protected from being held liable as long as your conduct is not grossly negligent or intentional.

Signatures: _____

_____ Date: _____

Make Checks Payable to KSNH **no later than August 15, 2008** and send this form with payment to Cindy Payne, KSNH treasurer, 9109 Hawthorne Point Dr., Louisville, KY 40272-2576. **Payment is due at the time of registration.**

The mission of the **Kentucky Society of Natural History** is to actively promote study and interest in Kentucky's rich natural heritage throughout the Commonwealth. Members are typically interested in a broad spectrum of natural sciences and related fields. Among the more prominent activities of the society, are the annual Spring and Fall Conferences, selection of a "Naturalist of the Year", nature photography contests, and a variety of knowledgeable speakers and field trips. We invite anyone who shares our interests to join us. For membership information or the address of the nearest affiliated chapter, please contact:

KSNH, P.O. Box 72777, Louisville, KY 40272-0777, or visit our website <<http://www.ksnh.org>> for the membership form.

Membership dues are: Individual \$15, Family \$25, Full Time Student \$5, Life: \$300.

The Kentucky Society of Natural History is an official 501(c) (3) tax-exempt nonprofit organization which was formed in 1939, and incorporated in 1943 in Louisville, Kentucky. All contributions to THE KENTUCKY SOCIETY OF NATURAL HISTORY are tax-deductible to the full extent of income tax laws.

Published Quarterly, The Kentucky Naturalist News is the official newsletter of KSNH. Unsolicited contributions are encouraged. Please send articles to: Barry Nichols, KNN Editor, P. O. Box 21182, Louisville, KY 40221. You can also email newsletter submissions by sending them to news@ksnh.org.

Kentucky Naturalist News Deadlines (plan on at least 4 weeks from deadline for newsletter):

Spring newsletter submissions are due February 1. KNN will be sent in March.

Summer newsletter submissions are due May 1. KNN will be sent in June.

Fall newsletter submissions are due August 1. KNN will be sent in September.

Winter newsletter submissions are due November 1. KNN will be sent in December.

Citation builder at: <http://www.lib.ncsu.edu/lobo2/citationbuilder/citationbuilder.php>.



**Kentucky Society of Natural History,
PO Box 72777,
Louisville, Kentucky 40272-0777.**

Formed 1939,



Incorporated 1943

Kentucky Naturalist News

Official Newsletter of the Kentucky Society of Natural History

Volume 66, Number 3, Fall 2008

Website: <http://www.ksnh.org>

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Affiliated Chapters

Arches of the Cumberland Chapter (Slade) meets informally, call President Dell Sasser for details, 606-666-7521 x73559 or (606) 663-9379.

Falls of the Ohio Chapter (Louisville) meets every 3rd Thursday of each month except Jan, Jul, Aug, & Dec at 7:00 PM at the Louisville Nature Center, 3745 Illinois Ave, Louisville, 40213. Call President Chris Bidwell at (502) 458-1328.

Wilderness Trail Chapter (Pineville) meets the first Thursday of each month, March through December, at 7:00 p.m., generally at Pine Mountain State Resort Park, 1050 State Park Road Pineville, KY 40977-0610 (800-325-1712).



Parthenocissus quinquefolia (L.) Planch. (Virginia creeper) - Barry Nichols, 2006

EDITOR'S NOTES

I just got back from the mountains in southwestern North Carolina. I had not been there since 1991. During the two weeks I poked around the mountains, I was amazed at the extent of the damage to hemlocks the hemlock wooly adelgid (HWA) has done. I saw them all over every tree I inspected...this isn't an exaggeration...EVERY tree. It was disheartening to say the least. You may wish to go and experience the hemlock forests while you can. The sheer scale of the damage is astonishing. Keep your hopes up for a solution.

Natural Bridge State Park Naturalist Noelle Grunwald has left her position as of August 15, 2008. We have lost a hard worker for the state and a great ambassador for the park. We wish her well in her next position.

The agenda for the 2008 fall meeting of KSNH at Natural Bridge State Park is contained in this issue. There is quite a variety of topics and opportunities for field walks. I hope to see you all there!

KSNH President Joe Settles notes a chance meeting and mentions the new "Rare Wildflowers of Kentucky" book by Tom Barnes, Deborah White, and Marc Evans.

Wally Roberts announces the awarding of \$4,250 in KSNH grants and scholarships for 2008!!! The generosity of the membership is

astounding. These selfless acts of giving further natural history research in Kentucky. In these tough times, research money is even more important than ever.

Wally Roberts also discusses the hardships wrought by our climate this year on plants as well as the use of native plants.

Right on time for the fall meeting, Geology Coordinator Berl Meyer writes about natural arches and bridges and the geology of both.

For you photographers out there, let me introduce a new feature...a newsletter photo "competition"...well...more of a gallery in the newsletter. Much like the photo topics at the various meetings we have, each newsletter will run a topic for the next newsletter. Any format will be fine, we'll make the necessary conversions. You may submit photos via email or regular mail. Please include name, description, location, and year. The topic for the Winter 2008 issue of the Kentucky Naturalist News is **SNOW**. We would also like to take the winners from each issue and create a desktop photo with KSNH logo and the photographer credit and make them available for free download off of the KSNH website. This will only be done if the photographer gives permission after their photo is judged. All rights will still be held by the photographer.

The Winter 2008 deadline is November 1. I plan on getting it out a few short weeks later so if you have anything of a timely nature, please plan accordingly. I want to get the newsletter in your hands before the holiday swamping of the mail and the seasonal crunch on your time. Please note that all regular newsletter dates for the year are printed in the shaded box on the back page of each newsletter.

As always, please mail any articles, news, photos, etc to kyfauna@iglou.com –ed

GEOLOGY OF NATURAL ARCHES AND BRIDGES

by Berl Meyer

Another geologic landform has passed into "geologic history", that being Wall Arch in Arches National Park. I was leisurely sitting around the tube August 10 listening to CBS Sunday Morning when I heard about this beloved arch's demise. Wall Arch, located along the popular Devil's Garden Trail at Arches National Park collapsed sometime during the night of August 4, 2008. Rock has continued to fall from the arms of the remaining portion of the arch necessitating the closure of the Devil's Garden Trail just beyond Landscape Arch. I certainly thought that Landscape Arch would surely fall before Wall Arch because it (Landscape) looks so fragile. Not be the case so says Mother Nature.



Even though this arch was easy to get to, boy was it hard to photograph. I know that when I tried to photograph this thing, I had to almost lay down on the trail and shoot up toward the sky hoping no hiker would come along and step on me thinking I was just "trail kill" as opposed to "road kill."

Never mind about that above stuff, the important thing was that this phenomenon brought to mind the KSNH Fall Conference at Natural Bridge State Resort Park in September.

Now what has always bugged me about “Natural Bridge (Kentucky)” was why the heck it was ever called that in the first place. When it was called that, did we have any geologists in the state? Why of course we did, but they were definitely not at the naming ceremony. If I was there at that ceremony, I would have protested and asked these folks if they had ever heard of “No child left behind.” --Natural Bridge is a Natural Arch-hello!

What is a natural arch?

Definition: A natural arch is a rock exposure that has a hole completely through it formed by the natural, selective removal of rock, leaving a relatively intact frame.

This seems simple enough, but there are some subtleties in this definition that should be examined further.

1. A natural arch must be made of rock. A feature made of compacted soil, ice, or organic matter (e.g., a tree trunk, unless it has turned into rock via petrification) may exhibit all the other attributes of the definition, but is still not a natural arch.
2. The rock must be exposed. It must be substantially surrounded by air. It may be partially embedded in soil or water, but must not be completely encased in either. The rock must be sufficiently exposed to observe that it exhibits the other attributes of the definition.
3. The hole through the rock must conform to the mathematical, or topological, definition of a hole which in this case, at least a meter across.
4. The hole must have formed from natural, selective removal of rock. Typically this removal is the result of erosional processes.
5. The frame of rock that remains to surround the hole must still be relatively intact. Fractures and joints may be present. Even some slippage along these may have occurred, as long as it is clear that this has happened subsequent to hole formation. Of course, no air gaps can exist in the frame of rock.

Now let's look at a natural bridge.

Definition: A natural bridge is a type of natural arch. In general, a natural bridge is distinguished from other types of natural arches by having one or more of the following attributes:

1. A current of water, such as a stream, clearly was a major agent in the formation of the opening.
2. A current of water, such as a stream, flows through the opening it is being, or has been, used by man as a bridge supporting a portion of a road
3. It has the general appearance of a man-made bridge, e.g., a flat, level top over an arched opening.

Regardless of the attributes used, however, it is important to note that there is no fundamental difference between a natural arch and a natural bridge. A natural bridge is just one of many types of natural arch. The definition of what a natural arch is applies to natural bridges in the same way it applies to all other types of natural arch. The set of attributes that distinguish a natural bridge from other types of natural arch depends on the classification scheme being used. So I guess, the “namers” of Natural Bridge State Resort Park were not educated in the field of geology, so they simply thought what the heck, an arch is an arch even through water never flowed beneath Kentucky's Natural Bridge. You call it as you see it, bless your hearts.

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Berl Meyer is the current Geology Coordinator for KSNH, the former KSNH webmaster, and the current webmaster of the [U.S. Constitution CVA/CV 64 website](#). Berl was stationed on this Naval Aircraft Carrier during the Vietnam War as an Aerographer (weather guesser).

FIRE ON THE MOUNTAIN – *Euphorbia cyathophora* (Murray)

by Chris Bidwell

It would seem like Christmas in August when finding the plant fire of the mountain. Its beautiful holly-like upper or bracteal green leaves are blotched a deep red at their bases, reminding us of Christmas colors. This introduced weed from the tropics, South America, or Mexico into the southwest United States, is rare in Kentucky. By August and well into September, these plants, that emerged in May, display the brilliant red and green coloration which explains the common names given to this plant: Mexican fire plant, false poinsettia, Christmas plant, summer poinsettia, wild poinsettia, cruel plant, hypocrite plant, painted euphorbia, Christmas bush, painted spurge, painted leaf, and various-leaved spurge.



The synonymy in scientific names for fire on the mountain (the official name) is great – a total of 12 different ones are cited. The four most commonly referenced are *Euphorbia cyanthophora*, *E. heterophylla*, *Poinsettia cyanthophora*, and *P. heterophylla*.

The plant is in the Euphorbiaceae, or Spurge family. Spurge comes from several sources. It is derived from Old French – *Espurge/epurge*; Latin- *Expurgare*; and French – *Espurgier*. All of these sources mean to purge or to empty the bowels. We get the word purgative from these base words. The generic epithet comes from a Greek surgeon Euphorbus, who used the milky latex sap in his potions.

Euphorbus was the official physician for Juba II, king of Mauritania who was married to a daughter of Antony and Cleopatra (23 AD). Mauritania was originally an independent Berber kingdom on the Mediterranean coast of North Africa. This area is now parts of Libya, western Algeria, and northern Morocco. The Romans placed Juba II of Numida (Libya) in charge of Mauritania. He was interested in botany and had written about a cactus-like plant he had found and was used by Euphorbus as a powerful laxative. That plant today may be *Euphorbia resinifera*. Juba II gave the plant the name *Euphorbia* to honor his trusted physician. Euphorbus is derived from EU = good and PHORBE = pasture or fodder, giving the doctor Euphorbus the meaning well-fed! Sources suggest that Euphorbus was quite corpulent and Juba II may have selected the plant's name as a play on words, as the plant is succulent similar to Euphorbus' physique. Linnaeus officially established the genus commemorating Euphorbus. It is interesting in that Euphorbus was not as distinguished or famous as his physician brother, Antonus Musa, who was the personal doctor for Augustus Caesar. Caesar rewarded Antonus Musa by erecting a bronze statue in Rome to honor him. Euphorbus is remembered by his association with an inconspicuous plant from Africa. Linnaeus was intrigued by the irony in the contrast between fame based on a bronze statue and fame associated with a plant. Linnaeus wrote in 1737 : "*Ubi nam Musae Statua? Perit, evanuit! Euphorbii autem perdurat, perenati, nec unquam destrui protest.*" ("Where now is the statue of Musa? It has perished, vanished, but that of Euphorbus is perdurable, perennial, nor can it ever be destroyed.") No statue to Musa remains.

The specific epithet of fire on the mountain, *cyathophora*, comes from Greek *Kyathos*, meaning cup or ladle and refers to the flowering structure called cyathia. *Phonos*, also from the Greek, means bearing. Thus *cyathophora* means flower bearing a cup or ladle. These flowers are unisexual. The numerous male flowers with a single stamen occupy the cyathia (cup-shaped structure). But there is never more than one tasseled female flower in the cyathia. The fire on the mountain cyathia also bears one greenish yellow nectar gland to help attract insect pollinators, such as bees and flies. Seed capsules usually consist of 3 cells which, when mature, express the seeds with some force to aid in distribution.

Fire on the mountain is an annual (self-seeding) herbaceous plant which can reach 2 feet in height. The milky sap is present primarily in leaves and stems and can be quite irritating to the skin. Forty percent of people who are allergic to latex will be allergic to euphorbias. The leaves can vary considerably in size and shape – oblanceolate to lanceolate to linear with varying degrees lobes and toothed margins. The upper leaves/bracts are tinged at the base with a beautiful orange/red hue. The colored leaves are showier than the flower groupings. The actual flowers are very difficult to see without the aid of a magnifying lens. Fire on the mountain blooms from mid-summer to late fall. This euphorbia grows well in disturbed sites and in either partial shade to full sun. It tolerates drought well. It invades garden soil especially well and even though rare in Kentucky it can become weedy and invasive once established. The seeds have a very high germination rate as well. As a member of the Euphorbiaceae family, fire on the mountain has several famous related cousins: *E. marginata* (Snow on the Mountain – found in Kentucky), *Hevea brasiliensis* (the rubber tree), *Manihot esculenta* (cassava plant, which gives us tapioca), and *Ricinus communis* (castor bean, which gives us castor oil). The most recognizable euphorbia is *E. pulcherrima* (the Christmas poinsettia), which was named in honor of R. J. Poinsett, the first United States diplomat to Mexico (1825-1829). He was an amateur botanist who sent some plants to his home in South Carolina for further horticultural development.

Fire on the mountain medicinal/folklore uses include treatment of corns, warts, and as an emetic/cathartic. The "poison" milky latex has been used by various indigenous peoples to kill fish when shot by arrows whose tips have been dipped with the latex sap. Eating any euphorbia can cause nausea, vomiting, and/or diarrhea. There are no human deaths associated with euphorbias.

This late summer/early fall, keep an eye out for this rare introduced plant. Fire on the Mountain is truly a plant to behold.

---Thanks to Mary Alice Bidwell for her typing skills.

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Euphorbia cyathophora (Murray) - Chris Bidwell, 2008

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Chris Bidwell is an amateur naturalist, the current President of the Falls of the Ohio Chapter, and the Photography Coordinator of KSNH.

**KENTUCKY SOCIETY OF NATURAL HISTORY ANNUAL FALL CONFERENCE
NATURAL BRIDGE STATE RESORT PARK
SEPTEMBER 26 - 28, 2008**

The 2008 fall meeting of the Kentucky Society of Natural History will be held at the Natural Bridge State Resort Park in Powell County near Slade, KY September 26 - 28, 2008. Please use the registration form from the last issue of the newsletter (KNN 66:2) or on the society webpage at <http://www.ksnh.org>.

- Natural Bridge State Park is in Eastern Time Zone
- All field trips will originate in the lobby of Hemlock Lodge
- All drive times are estimated for one way, starting from Hemlock Lodge, Natural Bridge State Park

Field Trip Ratings:

Easy: Hiking short distances usually on trails with little slope.

Moderate: Generally easy with a comfortable pace.

Participants must be able to negotiate occasional steep slope and/or rough trail.

Strenuous: More endurance required to negotiate longer stretches of steep slopes and rough trail.

*** Be careful on all of the field trips and watch your step. Also, watch above your head for dead trees that could fall. Many field trips may occur in locations where high cliffs are present and participants should not wander off trails or walk near edges of cliffs.



Cliff in Red River Gorge, Powell Co. – James Kiser, 2003

Friday, September 26, 2008

Field Trips for Early Arrivals (Early Bird Special)

- 2:00 – 5:00 P.M.** **Whittleton Branch Trail at Natural Bridge State Park** – Join Natural Bridge State Park’s Naturalist and enjoy an easy, educational hike along one of many small streams in the park. This trail follows along Whittleton Branch and contains numerous small mesic rock outcrops that provide habitat for bryophytes (mosses and liverworts) and ferns. Participants may search underneath rocks along the stream for salamanders and scan the landscape for migrant and resident birds. Highlights may include autumn coral root, diverse bryophyte and mushroom communities, and stream dwelling salamanders.
Drive Time – < 5 minutes **Rating – easy/moderate** **Trip Leader – Brian Gasdorf**
- 2:30 – 5:00 P.M.** **Non-native and Invasive Plants along Lower Rock Garden Trail** – Join former park naturalist and current Kentucky State Nature Preserves Commission biologist on one of the park’s most popular trails to learn how to identify non-native and invasive (exotic) plants. On this trip participants will learn how KSNH is helping the park to remove non-native plants, so natural flora can re-establish.
Drive Time – N/A **Rating – easy/moderate** **Trip Leader – Zeb Weese**
- 6:00 P.M.** **Dinner (on your own)**
- 7:00 P.M.** **Registration Begins in Activities Center**
- 7:30 P.M.** **Evening Program Starts:**
- Welcome and Introductions** – Joe Settles
- Children’s Program Topics** – TBD
- Photography Program Topic** – Topic for fall meeting will be “Favorite Nature Photo”. Photos must be nature related without any man-made objects and can be from any where.
 – Chris Bidwell
- General Topics** – Open to All



Student Presentation #1 – “Crevice Characteristics of Green Salamander (*Aneides aeneus*)” – Jason Ritzert

Featured Presentation – “Geologic influences on Red River Gorge’s Flora” – Dr. Wilson Francis



9:30 – 11:00 P.M.

Going Batty at Natural Bridge – Bring your flashlights and enjoy the diverse bat fauna inhabiting Natural Bridge State Park. Eleven species of bats occur in or adjacent to Natural Bridge State Park. Several of these hibernate and/or swarm at the cave where our field trip will be conducted. This cave is also the first place where the federally endangered Virginia big-eared bat was observed in Kentucky. Participants will learn how to capture and identify bats, and learn how to mark bats for future identification. Highlights may include as many as eight species of bat, including the federally endangered Virginia big-eared bat and Indiana bat, and state listed eastern small-footed bat.

Drive Time – N/A

Rating – easy

Trip Leaders – John MacGregor, James Kiser, and others

Saturday, April 3, 2004

7:00 – 8:00 A.M.

Early Morning Bird Walk at Natural Bridge State Park – This trip is for all of the

society's hard-core birders. One of KSNH's past Naturalist of the Year will lead this outing in search for both resident and neo-tropical migrant birds. Weather dependent, highlights may include as many as thirty species of birds.

Drive Time – N/A Rating – easy Trip Leaders – Ben Begley

7:00 – 9:00 A.M. Breakfast (on your own)

Morning Field Trips

9:00 – 12:00 P.M. Powell County Eco-farm - This privately owned farm on upper Cane Creek is a nature lovers dream. Nestled at the base of a sandstone capped knob along a small stream, this 100 acre tract of land has been converted from traditional farmland to a mosaic of wildflower gardens, oldfield and wetland communities, forested uplands, and wildlife ponds. During the fall, randomly placed cover boards and vernal ponds attract reptiles, and provide tadpoles and salamander larvae a place to develop, respectively. Bat boxes erected in oldfields provide roosting habitat for the northern bat. Nature lovers on this trip will learn how to improve floral and wildlife habitat on previously modified landscapes. Highlights will include numerous reptiles (northern watersnake, black racer, northern copperhead, brown snake, northern fence lizard, and ground skink), and interesting plants.

Drive Time – 20 minutes Rating – easy Trip Leader – Dan Dourson



Villosa iris, Scott Co., VA - James Kiser, 1997

9:00 – 12:00 P.M. Red River Aquatic Ecosystem Trip – This excursion will focus on freshwater mussels and small, often overlooked aquatic macroinvertebrates that provide the foundation for a healthy stream. Unlike many eastern Kentucky streams, the Red River still contains a healthy and diverse freshwater mussel population, totaling 26 species. Bring your hand lens and be prepared to get your hands wet as we view freshwater mussels, caddisflies, mayflies, stoneflies, and other small invertebrates. Learn how presence and absence of certain Orders of aquatic invertebrates indicate water quality and health of aquatic ecosystems. Highlights may include 8 species of native freshwater mussel, and a diverse assemblage of aquatic macroinvertebrates.

Drive Time – 20 minutes Rating – easy Trip Leader – Dr. Guenter Schuster

9:00 – 12:00 P.M. Mill Creek Lake Canoe Trip (limited to 12 participants) – This trip will allow participants the opportunity to relax and test their paddling ability. Participants will quietly paddle their way along the forested banks of Mill Creek Lake searching for beaver, fall blooming wildflowers, and basking water snakes and turtles. Highlights may include red-eared slider, spiny softshell turtle, northern water snake, beaver and their engineering works,

and several species of wading birds.

Drive Time – 5 minutes

Rating – easy

Trip Leaders – Joe Settles,
Josh Young, and Seth Bishop

12:00 – 1:30 P.M. Lunch (on your own)

Afternoon Field Trips

1:30 – 5:00 P.M. **Edward Branch Herpetology Walk** – Search for and learn about some of Red River Gorge’s amphibians (salamanders, and frogs), and reptiles (snakes, lizards, and turtles) in Edward Branch with KSNH’s president. Due to reptile and amphibian diversity, the Edward Branch trip is Herpetology Weekend participant’s favorite trip. On this trip participants will search for salamanders under rocks in the stream, flip tin for snakes and lizards. Highlights may include 8 species of amphibians, including seal, northern slimy, northern dusky, and southern two-lined salamanders, and 6 species of snakes and lizards.

Drive Time – 30 minutes

Rating – easy/moderate

Trip Leader – Joe
Settles

1:30 – 5:00 P.M. **Red River Aquatic Ecosystem Trip** – This excursion will focus on freshwater mussels and small, often overlooked aquatic macroinvertebrates that provide the foundation for a healthy stream. Unlike many eastern Kentucky streams, the Red River still contains a healthy and diverse freshwater mussel population, totaling 26 species. Bring your hand lens and be prepared to get your hands wet as we view freshwater mussels, caddisflies, mayflies, stoneflies, and other small invertebrates. Learn how presence and absence of certain Orders of aquatic invertebrates indicate water quality and health of aquatic ecosystems. Highlights may include 8 species of native freshwater mussel, and a diverse assemblage of aquatic macroinvertebrates.

Drive Time – 20 minutes

Rating – easy

Trip Leader – Dr. Guenter
Schuster



Calostoma cinnabarina, Wise Co., VA - James Kiser, 2001

1:30 – 5:00 P.M. **Mushroom Foray along Whittleton Branch in Natural Bridge State Park** – Search for and learn about some of Red River Gorge’s mushrooms with one of Kentucky’s best naturalist. Whittleton Branch contains numerous small mesic rock outcrops, and both coniferous and deciduous trees, which provides excellent habitat for fall mushrooms. Participants will learn how to identify the deadly destroying angel (*Amanita virosa*) and enjoy the beautiful waxy cup mushrooms (*Hygrocybe* sp.) and hot lips mushroom (*Calostoma cinnabarina*) on this trip. Highlights may include as many as 30 species of mushrooms

Drive Time – < 5 minutes

Rating – easy/moderate

Trip Leader – John MacGregor

6:00 – 7:30 P.M.

Dinner (on your own)

7:30 P.M.

Evening Program Starts:

Welcome and Introductions – Joe Settles

Review of Saturday Field Trips – Moderator – James Kiser

Children’s Program and Awards - “Review of Junior Naturalist’s Photographs Taken on Fall Conference Field Trips” – TBD

Student Presentation #2 – “Tail Wagging Behavior of Eastern Phoebes” – Michelle Carder

Featured Presentation – “Flora and Fauna of Belize’s’ Rainforest through the Eyes of a Kentucky Naturalist” – Dan Dourson

Photography Competition & Awards – Chris Bidwell

Presentation of Kentucky Naturalists of the Year Award – Joe Settles & James Kiser

General Topics – Open to All

Door Prizes – Cherry Baker

9:30 - 11:00 P.M.

Amphibian Foray at Natural Bridge State Park – Bring your flashlights, search for and learn about some of the parks salamanders and frogs. Trip will be along trails near the cave entrances and will be weather dependent because dry, cold conditions reduce amphibian activity. Highlights may include cave salamander, long-tail salamander, spring salamander, and pickerel frog.

Drive Time – N/A Rating – moderate Trip Leader – James Kiser

Sunday, April 4, 2004

7:00 – 8:00 A.M

Early Morning Bird Walk at Natural Bridge State Park – This trip is for all of the society’s hard-core birders. One of KSNH’s past Naturalist of the Year will lead this outing in search for both resident and neo-tropical migrant birds. Weather dependent, highlights may include as many as thirty species of birds.

Drive Time – N/A Rating – easy Trip Leaders – Ben Begley

8:00 - 9:30 A.M.

Board Meeting/Breakfast in Private Dining Room in Hemlock Lodge – All board members are encouraged to attend and general members are welcomed.

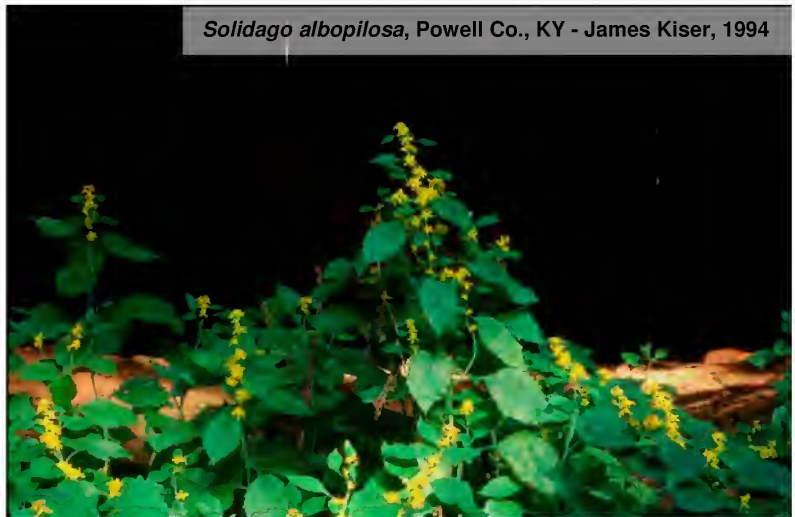
7:00 – 9:00 A.M.

Breakfast (on your own)

9:30 – 5:00 P.M.

Whittleton Branch Trail at Natural Bridge State Park – Join Kentucky Society of Natural History’s own botanist and enjoy an easy, educational hike along one of many small streams in the park. This trail follows along Whittleton Branch and contains numerous small mesic rock outcrops that provide habitat for bryophytes (mosses and liverworts) and ferns. Participants will learn how to identify fall blooming wildflowers, and many trees and shrubs. Highlights may include autumn coral root, and as many as 12 fall blooming members of the Asteraceae family.

Drive Time – < 5 minutes Rating – easy/moderate Trip Leader – Chris Bidwell



Solidago albopilosa, Powell Co., KY - James Kiser, 1994

9:30 – 1:00 P.M.

In Search of Creepy Crawlers and Fall Wildflowers in Indian Creek (Carpool) –

Participants on this trip will search for reptiles (snakes and lizards) and amphibians (salamanders and frogs) while flipping rocks on hillsides, road cuts, and in intermittent streams. Learn how to identify different species of dusky salamanders (*Desmognathus* sp.) apart by using morphological characters. If participants are lucky, they may encounter the mountain dusky salamander, which occurs in Indian Creek as a glacial relict population. Numerous species of asters, goldenrods, and other members of the Asteraceae family will be encountered and identified along the road sides. Highlights may include as many as 12 species of herpetofauna, and a diverse fall wildflower assemblage.

Drive Time – 30 minutes

Rating – easy

Trip Leaders – James Kiser

9:30 – 1:00 P.M.

Non-native and Invasive Plants along Lower Rock Garden Trail – Join former park

naturalist and current Kentucky State Nature Preserves Commission biologist on one of the park's most popular trails to learn how to identify non-native and invasive (exotic) plants. On this trip participants will learn how KSNH is helping the park to remove non-native plants, so natural flora can re-establish.

Drive Time – N/A

Rating – easy/moderate

Trip Leader – Zeb Weese

The Kentucky Society of Natural History would like to thank the following field trip leaders/speakers and their respective employers.

Ben Begley
Chris Bidwell
Seth Bishop
Michelle Carder
Dan Dourson
Dr. Wilson Francis
Brian Gasdorf
James Kiser
John MacGregor
Jason Ritzert
Dr. Guenter Schuster
Joe Settles
Zeb Weese
Josh Young

[Pine Mountain Settlement School](#)
[Kentucky Society of Natural History](#)
[East Kentucky Power Cooperative](#)
[Eastern Kentucky University](#)
Biologist and Artist at Large
[Hazard Community & Technical College](#)
[Kentucky Department of Parks](#)
[Stantec Consulting Services](#)
[Kentucky Department Fish and Wildlife Resources](#)
[Eastern Kentucky University](#)
[Eastern Kentucky University](#)
[East Kentucky Power Cooperative](#)
[Kentucky State Nature Preserves Commission](#)
[East Kentucky Power Cooperative](#)

Thanks for attending Kentucky Society of Natural History's 2008 Fall Conference and mark your calendars for the Spring Conference at [Pine Mountain Settlement School](#) on April 24–26, 2009. Continue to check the [Kentucky Naturalist News](#) and the KSNH [web page](#) for 2009 Spring Conference registration information.

A MESSAGE FROM THE PRESIDENT

by Joe Settles



I hope you have enjoyed your summer. It has definitely been a busy and eventful time for me and my family, and we are looking forward to this transition into fall. The fall meeting is just around the corner at Natural Bridge State Resort Park. The meeting begins Friday, September 26th and runs through the weekend.

Please get your reservation forms filled out and submitted to Cindy for the Fall Conference. We have a great set of field trips and speakers lined up for the event. I would encourage you to mention the weekend to your friends, coworkers, or relatives that have an interest in Kentucky's natural history. It would be great to share all of the things the KSNH has to offer with more people.

I was in Washington D.C. for a meeting in early August, and our group stopped to have lunch at the Sculpture Garden just off of the mall. I was just finishing my sandwich when I heard a familiar voice. I turned around and it was the one and only Dr. Charles Covell (1984 KSNH Naturalist of the Year)!! I rudely interrupted his lunch because I had to say hello.

Dr. Covell is doing great! I told him he was greatly missed in Kentucky, and we hope he will visit again soon. I hope he will be able to complete a "Butterflies of Kentucky" book someday. It would be another great work that would highlight our state.

I would also recommend everyone pick up a copy of "**Rare Wildflowers of Kentucky**" by Tom Barnes, Deborah White, and Marc Evans. I was looking at the book recently, and it is great to see Kentucky's treasures captured and represented in such wonderful fashion. My hat goes off to Tom, Deb, and Marc. Thanks for the hard work!

I hope to see everyone in Slade in a few weeks at the fall meeting. Get in your forms, and join us for another great meeting. As always, if you have any questions, comments, or suggestions regarding our organization please do not hesitate to call me at 859-745-9256 or drop me an email at joe.settles@ekpc.coop.

I look forward to seeing you in September!

Kentucky Proud,
Joe Settles

Joe Settles is the Kentucky Society of Natural History's President for the 2008-2010 term.

NOTES FROM THE NATURE NUT

By W. H. (Wally) Roberts



As the seasons pass from the "Dog Days" of summer into the early days of autumn, many homeowners start to contemplate needed improvements to their landscapes. These improvements usually range from establishing a new lawn to a total landscape restoration. Before starting any landscape projects, everyone should remember the growing conditions that occurred in 2007.

As far as I am concerned, 2007 was the hardest year on plant life that I can remember. The year started off with an extremely warm January and part of February. As a result many flowers, shrubs, and trees, not only flowered, but produced full foliage. March and April brought extreme cold conditions with freezes and accumulating snows. Most all plant foliage was destroyed by these extremes in temperature. Plants were forced to use up their emergency reserves of stored foods in their root systems in order to produce new foliage and conduct photosynthesis during the growing season. On top of all of these early problems, July through October were some of the driest and hottest months on record.

At this time, you may be asking yourself, “What does this have to do with my landscape projects during the fall and winter of 2008”. Well, the answer is that here at Hawthorne Pointe, we have had to spend extra money replacing everything from grass to trees due to last year’s weather. We are taking a long hard look every time we replant; and I assume you, as a homeowner, would also need to make the most informed decisions possible.

I believe the first step in landscaping is to use native plants. Not only are these plants hardy, but they have adapted to the extremes of Kentucky’s growing seasons. Hopefully, when chosen with informed decision-making, these native plants will not only survive, but thrive in your landscape. These natives are easy to maintain, attract native wildlife for pollination, provide good nesting habitats for native birds and mammals, and usually produce desirable fall fruit and foliage color. As a naturalist, I believe your best overall source for information on native plantings and landscape designs is “**Gardening for the Birds**” by Thomas G. Barnes and published by the University Press of Kentucky. Many of you most likely already own this book; but, if not, “Gardening for the Birds” is available through any reputable book seller.

Tom’s book provides the basics on wildlife conservation, urban landscaping, attracting butterflies and birds, and managing pests. His book also includes informational lists of desirable native species and source locations. “Gardening for the Birds” is not only well written, but also includes many diagrams, drawings, and colored photographs that help to ease your landscaping chores.

In closing, please let me infuse a few words of wisdom: Plant more-mow less, buy natives from local supplies, and a poor plant specimen will thrive when planted in a great hole. Also, please remember that even under optimum conditions, a newly planted shrub or tree takes a minimum of three years to become fully established.

Best of luck with your fall and winter plantings. Karen and I hope to see you at Natural Bridge during our KSNH Fall Conference on September 27, 28, & 29th.

Wally Roberts was Kentucky Naturalist of the Year 2002. He is a long-time biology instructor, interpretive naturalist, and nature photographer. He graduated with a BS in Biology from Morehead State University, and MEd in Biological Education from the University of Louisville. He's been president of KSNH (3 times), former president of the Falls of the Ohio Chapter, and past president of the Board of the Louisville Nature Center. He's currently the Grant Coordinator for KSNH.

KSNH 2008 GRANT RECIPIENTS

by W. H. (Wally) Roberts

The Kentucky Society of Natural History is proud to announce the following 2008 KSNH Grant recipients in the fields of Kentucky’s natural history and biodiversity.

The **Bernadine Meyer Memorial Scholarship** grant in the amount of \$800 goes to Robert C. Johnson, a doctoral candidate at the University of Louisville. Robert’s research is entitled “**Consequences of Food Choice in a Dominant Stream Invertebrate Isopod**”. This proposal builds on some previous work partially funded through KSNH.

The **Woody Boebinger Memorial Scholarship** grant in the amount of \$750 goes to Tara Trammell, another doctoral candidate at the University of Louisville. Tara’s research is entitled “**Modeling Ecosystem Services Provided by Wood Plant Communities Along Interstate Corridors in Louisville, Kentucky**”

KSNH Research Grants were also awarded to the following master’s research students at **Eastern Kentucky University**:

- Julie Clark received \$450 toward her research entitled “**Vascular Flora at Breaks Interstate Park**”.
- Michelle Guidugli received \$450 toward her research entitled “**Orientation and Timing Patterns of Ephemeral Pond-Breeding Amphibians**”.

KSNH Research Grants were awarded to the following research students at the **University of Kentucky**:

- Anna Thomas, a masters candidate received \$450 toward her research entitled “**Faunistic Survey of Native**

and Invasive Slugs in Kentucky using Morphological and Molecular Techniques”.

- Tim Sesterhenn, a doctoral candidate received \$450 towards his research entitled “**Impacts of Non-lethal Injury on the Damselfly *Ischnura posita***”.

KSNH Research Grants were awarded to the following research students at the **University of Louisville**:

- Tyler Kilgore, an undergraduate biology major, received \$450 toward his research entitled “**In Situ Growth Experiments of Isopods Along an Urbanization Gradient in Louisville, Kentucky**”.
- Rodney Jonathan White, a doctoral candidate received \$450 toward his research entitled “**Riparian Soil Functions Along an Urban-rural and Groundwater Depth Gradient and Potential Impacts on Stream water Quality**”.

Congratulations to all of our KSNH 2008 grant recipients. KSNH can only proudly award these very important grants with your continued financial support. If you are interested in helping with the continued funding for our KSNH grants, please consider making a generous contribution to the **Bernadine Meyer, Woody Boebinger, or KSNH General Scholarship Funds**. Some contributors may wish to make arrangements through estates, trusts, or wills. KSNH will happily work with your attorney if this is your preferred method of giving. Regardless of the amount and how you wish to donate, please donate...KSNH depends on your generosity to continue this very important program.

TODD COUNTY RESIDENT SENTENCED TO SIX MONTHS HOME INCARCERATION FOR POISONING DOGS, HAWKS, OWLS AND OTHER ANIMALS

From a United States Department of Justice Press Release from August 21, 2008

DEPARTMENT OF JUSTICE
United States Attorney David L. Huber
Western District of Kentucky

FOR IMMEDIATE RELEASE
THURSDAY, AUGUST 21, 2008
www.usdoj.gov/usao/kyw

CONTACT: SANDY FOCKEN
PHONE: (502) 582-5911
FAX: (502) 582-5097

TODD COUNTY RESIDENT SENTENCED TO SIX MONTHS HOME INCARCERATION FOR POISONING DOGS, HAWKS, OWLS AND OTHER ANIMALS

BOWLING GREEN, KY - Donnie Halcomb, age 56, of 3634 Russellville Road, Allensville, Kentucky, in Todd County, was sentenced on August 20, 2008, to 6 months home incarceration in United States District Court, Bowling Green, Kentucky, for misdemeanor violations of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA Title 7, United States Code, Sections 136j and 1361) (4 counts) and the National Migratory Bird Treaty Act (MBTA -title 16, United States Code, Sections 703 and 707), U.S. Attorney David L. Huber of the Western District of Kentucky announced today. E. Robert Goebel, Magistrate Judge, United States District Court, also sentenced Halcomb to 5 years probation following home incarceration. **There is no parole in the federal judicial system.** In addition, a fine of \$50,000 was imposed,

Halcomb had plead guilty to the charges on April 30, 2008, Both the FIFRA and MBTA charges embrace the same conduct; namely, lacing deer carcasses with a deadly pesticide (Carbofuran), not for use on crops as it was intended, but 10 poison coyotes. The result was the poisoning, of an area trafficked by neighboring farmers and hunters, of coyotes and dozens of other animals including dogs, opossums and migratory birds such as owls, hawks, and vultures. Dr. Chris Weis, a toxicologist for the U.S. Environmental Protection Agency, testified that Furadan was used in concentrations much greater than those recommended by the manufacturer and can cause nausea, headaches, vomiting and death in humans who come in to contact with the substance, even by touch.

The case was prosecuted by Assistant United States Attorney Randy Ream, and it was investigated by the U.S. Fish & Wildlife Service, U.S. Environmental Protection Agency and the Kentucky Department of Fish & Wildlife Resources.

CHAPTER NEWS

Falls of the Ohio Chapter News- Summer 2008 - Chris Bidwell, Chapter President:

September – Our Fall Conference at Natural Bridge State Resort Park promises to be another great get-together for nature lovers. A lot of work and phone calls have been made to make it a great experience. Please support our organization by attending. The President and his contacts/assistants have put much effort into this project to make it attractive, informative, and interesting. Natural Bridge and the Red River Gorge area is a gem of a locale. Late September usually provides some very wonderful early fall scenics and wildflowers are still around. Bring your cameras and binoculars as birding is also fantastic. These State Conferences are a great way to meet other KSNH members and to share the fellowship that ties us all to the natural world. Besides our conferences, the state is blessed with many fall festivals and places to go to see the fall color changes. Mammoth Cave, Blanton Forest, Pine Mountain area, Rockcastle River area, Daniel Boone Forest, Pennyryle Forest, Big South Fork area, Land Between the Lakes, Carter Caves, and Jefferson County Forest are just a few places to see fall colors. You don't have to drive all day to see the wonder of fall. Enjoy our own back yard!

KENTUCKY NATURALISTS' CALENDAR
(added as space allows)

August 25–28, 2008: The Art of Botanical Illustration @ Arboretum, State Botanical Garden of Kentucky. 9 a.m.–4 p.m (daily). Certified Botanical Artists O.M. Braida-Chiusano and Leslie Ramsey present this in-depth, 4-day course on botanical illustration and watercolor painting in the French Court Tradition of pre-20th century master artists. Cost for four-day course: \$475 (\$450 for FOA) plus \$45 materials fee. For more information contact The Arboretum, 500 Alumni Drive, Lexington, KY 40503, or by phone at 859/257-9339 or go to their website at <http://www.ca.uky.edu/arboretum>.

September 5, 2008: Volunteer Day @ Floracliff Nature Sanctuary. 10:00 a.m. Volunteer activities usually involve removing exotic plants from the preserve as part of an ongoing effort to protect our native species. Other activities may involve trail work or general maintenance. Tools and snacks will be provided. For more information contact Floracliff Nature Sanctuary, P.O. Box Box 4006, Lexington, KY 40544, via phone at (859) 351-7770, via email at floracliff@aol.com, or visit the website at <http://www.floracliff.org>.

September 6, 2008: Canoeing and Birdwatching at the Falls of the Ohio. Organized by the Jefferson Memorial Forest (event held at the Falls of the Ohio just minutes from downtown Louisville). 9:00 a.m. - 2:30 p.m. Explore islands, look for shore birds and paddle the protected waters at Falls of the Ohio. All equipment will be provided. Bring a sack lunch. For ages 7 and up (children must be accompanied by a parent or guardian). Program meets at the Welcome Center. There is space for 18 participants, with a maximum of 12 adults. Reservations are required in advance. No space will be available for individuals showing up on the day of the program. Canoe programs are subject to change of dates or venues due to water conditions. Fee: \$10. For more information contact Jefferson Memorial Forest at (502) 368-5404 or via email at forest@louisvilleky.gov.

September 6, 2008: Cherokee Park Volunteer Day - Cherokee Park, Louisville, KY. 9:00 AM - 1200 PM. Olmsted Parks restoration activities. For more information contact Sarah Wolff, Volunteer & Outreach Coordinator, Olmsted Parks Conservancy at 502.432.2677 or on their website at <http://www.olmstedparks.org/conservancy/calendar.html>.

September 8, 2008: Senior Bird Watching Program. Organized by the Jefferson Memorial Forest (JMF) in Louisville. The Shawnee Park Program meets at the JMF Welcome Center. Participants may choose to meet at Shawnee Park. Please let us know when making your reservation so that you receive directions to the location. 8:30 a.m. - 12:30 p.m. Free program teaching bird identification by sight as well as sound. program is guided by a JMF naturalist and consists of transportation to the various sites, and some short easy hikes. After you work up an appetite, participants are taken to lunch at local eateries. Participants are responsible for purchasing their own lunch. For more information contact Jefferson Memorial Forest at (502) 368-5404 or via email at forest@louisvilleky.gov.

September 12, 2008: Evening Canoeing @ the Jefferson Memorial Forest (JMF) Welcome Center in Louisville. 7 - 10:30 p.m. By the light of the full moon, experience the tranquility of the evening as you drift on 46-acre McNeely Lake. See animals as they emerge and begin foraging for food along the lake's edge. Be sure to wear bug repellent. Program

meets at the Welcome Center. There is space for 18 participants with a maximum of 12 adults. For ages 7 and up. All children must be accompanied by a parent or guardian. Reservations are required in advance. No space will be available for individuals showing up on the day of the program. Fee: \$10 per person.

September 12-13, 2008: The Kentucky Association for Environmental Education (KAEE) Conference: "The Rhythm of Nature" @ Cumberland Falls State Park. For more information write them at KAEE, PO Box 17494, Louisville, KY 40217-0494, or go to their website at <http://kentuckyassociationforenvironmentaleducation.org/>.

September 13, 2008: Monarch Butterfly Migration Mysteries @ John James Audubon State Park - Audubon Museum. 8:00 a.m. and 1:00 p.m. Bid a farewell to the Monarch Butterflies migrating south for the winter. Meet at the Museum for a 45-minute indoor presentation. Next, carpool to the Sloughs Wildlife Management Area for some outdoor Monarch tagging on their migration to Mexico. The outdoor portion (2-3 hours) is weather dependent. Please dress for potentially marshy conditions. Although Monarch Tags and nets will be provided, bring your net if you would like. Staff Contact: Julie McDonald at 270-826-2247 or juliea.mcdonald@ky.gov Program Fee: \$3.00 per person.

Saturday, September 13, 2008: Native Alternatives to Invasive Plants @ Floracliff Nature Sanctuary. 1:00 p.m. Hike to Elk Lick Creek and discussion of ornamental plants that have become invasive in central Kentucky and a look at some natives that would make great alternatives in the garden. Fee is \$4 per person or \$10 per family. For more information contact Floracliff Nature Sanctuary, P.O. Box Box 4006, Lexington, KY 40544, via phone at (859) 351-7770, via email at floracliff@aol.com, or visit the website at <http://www.floracliff.org>.

September 19-20, 2008: 19th Annual Living Archaeology Weekend @ the Gladie Historic Site, Red River Gorge, Daniel Boone National Forest near Slade, KY. United States Forest Service. 9 a.m. to 5 p.m. Friday; 10 p.m. to 5 p.m. Saturday. Native American Technology Demonstrations include atlatl and spear throwing, bow and arrow making, cooking, fire-building, baskets, potter, tanning, flint knapping, blowguns, and more! For more information contact Hope Crosbie via email at hcrosbie@fs.fed.us, by phone at (606) 663-8100 or go to the website at <http://www.fs.fed.us/r8/boone/heritage/livingarch.shtml>. Also of interest is http://www.fs.fed.us/r8/boone/districts/london/cliff_palace.shtml.

September 20, 2008: Monarch Butterfly Migration Mysteries @ John James Audubon State Park - Audubon Museum. 8:00 a.m. and 1:00 p.m. Bid a farewell to the Monarch Butterflies migrating south for the winter. Meet at the Museum for a 45-minute indoor presentation. Next, we'll carpool to the Sloughs Wildlife Management Area for some outdoor Monarch tagging on their migration to Mexico. The outdoor portion (2-3 hours) is weather dependent. Please dress for potentially marshy conditions. Although Monarch Tags and nets will be provided, bring your net if you would like. Staff Contact: Julie McDonald at 270-826-2247 or juliea.mcdonald@ky.gov Program Fee: \$3.00 per person.

September 20, 2008: Kentucky Conservation Committee Annual Meeting @ Blackacre Nature Preserve, Louisville, KY. 10:00 AM - 3:30 PM with a post-conference tour of the Floyds Fork Corridor project from 3:30 PM - 6:30 PM. Coalition of environmental groups as well as individuals meet to work for sustainable use of renewable natural resources, prudent use of non-renewable resources, conservation and preservation of critical and unique areas, and a healthful environment for all Kentuckians. The theme of the meeting will be "Conserve Kentucky". For more information contact KCC via phone at (859) 539-5231, email David Wicks at wicks@bellsouth.net, visit the [KCC website](#) or write to them at Kentucky Conservation Committee, P.O. Box 1152, Frankfort, KY 40602.

September 20, 2008: Cherokee Park Volunteer Day - Cherokee Park, Louisville, KY. 9:00 AM - 1200 PM. Olmsted Parks restoration activities. For more information contact Sarah Wolff, Volunteer & Outreach Coordinator, Olmsted Parks Conservancy at 502.432.2677 or on their website at <http://www.olmstedparks.org/conservancy/calendar.html>.

September 20-21, 2008: Falls Fossil Festival @ the Falls of the Ohio State Park in Clarksville, IN (right across the river from Louisville). Sat: 0900 – 1800, Sun: 1000 – 1700. For more information go to their website at: <http://www.fallsoftheohio.org> or contact Alan Goldstein, 201 West Riverside Drive, Clarksville, IN 47129, (812) 280-9970, park@fallsoftheohio.org.

September 26-28, 2008: Kentucky Society of Natural History (KSNH) 2008 Fall Meeting @ Natural Bridge State Resort Park, Slade, Kentucky. For more information see the agenda in this issue.

September 26-28, 2008: Kentucky Ornithological Society's Fall Meeting. Dale Hollow Lake State Resort Park. For more information contact KOS at P.O. Box 463, Burlington, KY 41005 or via their website at <http://www.biology.eku.edu/kos/default.htm>.

Saturday, September 27, 2008: Aromatic Plants of Floracliff @ Floracliff Nature Sanctuary. 1:00 p.m. We'll use our sense of smell to discover fragrant plants along the trail and talk about why they have these characteristics. Fee is \$4 per person or \$10 per family. For more information contact Floracliff Nature Sanctuary, P.O. Box 4006, Lexington, KY 40544, via phone at (859) 351-7770, via email at floracliff@aol.com, or visit the website at <http://www.floracliff.org>.

October 4, 2008: Cherokee Park Volunteer Day - Cherokee Park, Louisville, KY. 9:00 AM - 1200 PM. Olmsted Parks restoration activities. For more information contact Sarah Wolff, Volunteer & Outreach Coordinator, Olmsted Parks Conservancy at 502.432.2677 or on their website at <http://www.olmstedparks.org/conservancy/calendar.html>.

October 18, 2008: Cherokee Park Volunteer Day - Cherokee Park, Louisville, KY. 9:00 AM - 1200 PM. Olmsted Parks restoration activities. For more information contact Sarah Wolff, Volunteer & Outreach Coordinator, Olmsted Parks Conservancy at 502.432.2677 or on their website at <http://www.olmstedparks.org/conservancy/calendar.html>.

October 31-November 1, 2008: The 2008 Annual Meeting of the Kentucky Academy of Science @ the University of Kentucky Campus in Lexington, KY. For more information call 859-227-2837, write them at KAS, PO Box 22579, Lexington, KY 40522-2579, or visit their website at <http://www.kyacademyofscience.org>.

November 1, 2008: Cherokee Park Volunteer Day - Cherokee Park, Louisville, KY. 9:00 AM - 1200 PM. Olmsted Parks restoration activities. For more information contact Sarah Wolff, Volunteer & Outreach Coordinator, Olmsted Parks Conservancy at 502.432.2677 or on their website at <http://www.olmstedparks.org/conservancy/calendar.html>.

November 2-3, 2008: The 2008 Annual Meeting of the Society of Kentucky Lepidopterists (SKL) @ the University of Kentucky Department of Entomology, Lexington, KY. For more information contact Jeffrey Marcus, Department of Biology, Western Kentucky University, 1906 College Heights Blvd #11080, Bowling Green KY 42101-1080 or via phone at (270) 745-2043 or viw the SKL website at <http://bioweb.wku.edu/faculty/Marcus/KYLeps.html>.

November 10, 2008: Reptiles and Amphibians of Otter Creek Park @ the Nature Center, Otter Creek Park, 850 Otter Creek Park Road, Brandenburg, KY 40108. 11 a.m. - Noon. Meet the lizards, snakes, turtles, salamanders, frogs and toads that call Otter Creek Park home. The program is free. For more information contact KSNH member and Park Naturalist Bryan Lewis at (502) 942-3211.

November 14-15: KENTUCKY NATIVE PLANT SOCIETY 2008 FALL CONFERENCE @ Rotunda Room in Mammoth Cave National Park Hotel. Join KNPS for lectures by botanist and author Randy Seymour (WILDFLOWERS OF MAMMOTH CAVE NATIONAL PARK) about the field work for his book, by botanist Dwayne Estes, Ph.D. on "Connections between the Kentucky and Tennessee Flora: species that occur near the Kentucky border in Tennessee that Kentuckians should watch out for", and for Saturday field trips. For more information, contact KNPS at P.O. Box 1343, Richmond, KY 40476, or on their website at <http://www.knps.org/>. You may need to call the MCNP Hotel for reservations at 270-758-2225.

November 15, 2008: Cherokee Park Volunteer Day - Cherokee Park, Louisville, KY. 9:00 AM - 1200 PM. Olmsted Parks restoration activities. For more information contact Sarah Wolff, Volunteer & Outreach Coordinator, Olmsted Parks Conservancy at 502.432.2677 or on their website at <http://www.olmstedparks.org/conservancy/calendar.html>.

November 29, 2008: Shawnee Park Volunteer Day @ Shawnee Park, Louisville, KY. 9:00 AM - 1200 PM. Olmsted Parks restoration activities. Meet at the South Concourse near the Lily Pond. For more information contact Sarah Wolff, Volunteer & Outreach Coordinator, Olmsted Parks Conservancy at 502.432.2677 or on their website at <http://www.olmstedparks.org/conservancy/calendar.html>.

December 6, 2008: Cherokee Park Volunteer Day - Cherokee Park, Louisville, KY. 9:00 AM - 1200 PM. Olmsted Parks restoration activities. For more information contact Sarah Wolff, Volunteer & Outreach Coordinator, Olmsted Parks Conservancy at 502.432.2677 or on their website at <http://www.olmstedparks.org/conservancy/calendar.html>.

December 13, 2008: Shawnee Park Volunteer Day @ Shawnee Park, Louisville, KY. 9:00 AM - 1200 PM. Olmsted Parks restoration activities. Meet at the South Concourse near the Lily Pond. For more information contact Sarah Wolff,

Volunteer & Outreach Coordinator, Olmsted Parks Conservancy at 502.432.2677 or on their website at <http://www.olmstedparks.org/conservancy/calendar.html>.

December 20, 2008: Cherokee Park Volunteer Day - Cherokee Park, Louisville, KY. 9:00 AM - 1200 PM. Olmsted Parks restoration activities. For more information contact Sarah Wolff, Volunteer & Outreach Coordinator, Olmsted Parks Conservancy at 502.432.2677 or on their website at <http://www.olmstedparks.org/conservancy/calendar.html>.

2009:

February 26-27, 2009: The 2009 Annual Meeting of the Kentucky Chapter of The Wildlife Society (KCTWS) @ Barren River State Park. The Keynote Speaker for the meeting is Dr. Bruce Leopold, President of The Wildlife Society. Additional Guest Speakers are Dr. Virginia Burkett, US Geological Survey (USGS) Chief Scientist for Global Change Research, and Charles Baxter, USGS Senior Advisor for Strategic Habitat Conservation. For more information see their website at <http://joomla.wildlife.org/Kentucky/?CFID=15031982&CFTOKEN=65676678>, or by phone at 502-695-0468 (President Brent Harrel).

April 4, 2009: The 2009 Annual Meeting of the Kentucky Bluebird Society @ Shakertown, KY (near Harrodsburg).

April 24-26, 2009: Kentucky Society of Natural History (KSNH) 2009 Spring Meeting @ Pine Mountain Settlement School, 36 Highway 510, Pine Mountain, KY 40810

September 25-27, 2009: Kentucky Ornithological Society's Fall Meeting. Mammoth Cave National Park. For more information contact KOS at P.O. Box 463, Burlington, KY 41005 or via their website at <http://www.biology.eku.edu/kos/default.htm>.

Fall 2009 TBA: Kentucky Society of Natural History 2009 Fall Meeting @ Reelfoot Lake.

2010:

April 23-25, 2010: Kentucky Ornithological Society's Fall Meeting. Jenny Wiley State Resort Park. For more information contact KOS at P.O. Box 463, Burlington, KY 41005 or via their website at <http://www.biology.eku.edu/kos/default.htm>.

Spring 2010 TBA: Kentucky Society of Natural History 2010 Spring Meeting @ Shawnee State Park, Ohio.

Fall 2010 TBA: Kentucky Society of Natural History 2010 Fall Meeting @ Shakertown National Historic Landmark

2011:

Spring 2010 TBA: Kentucky Society of Natural History 2011 Spring Meeting @ Shawn Carter Caves State Park

Fall 2010 TBA: Kentucky Society of Natural History 2011 Fall Meeting @ Cumberland Falls State Resort Park

BUY STUFF & SUPPORT KSNH!!!

Merchandise: KSNH has a number of items ranging from window clings, stickers, and apparel. Plan now for the people on your Christmas list! We have many t-shirts available. Due to the popularity of Dan Dourson's "Kentucky's Own" design, it is once again available in short and long sleeve versions. For those who like fall colors, we have shirts with leaves showing their autumn glory. These are priced reasonably at \$11 for the short sleeve version and \$13 for the long sleeve shirts. There are still a few of the popular ball caps (\$14) that have our logo embroidered on them and the sweatshirt jackets (\$27) that also have the embroidered logo and the fall leaf design. These items available for purchase at the regular Falls of the Ohio Chapter meetings and at our statewide conferences.

The mission of the **Kentucky Society of Natural History** is to actively promote study and interest in Kentucky's rich natural heritage throughout the Commonwealth. Members are typically interested in a broad spectrum of natural sciences and related fields. Among the more prominent activities of the society, are the annual Spring and Fall Conferences, selection of a "Naturalist of the Year", nature photography contests, and a variety of knowledgeable speakers and field trips. We invite anyone who shares our interests to join us. For membership information or the address of the nearest affiliated chapter, please contact:

KSNH, P.O. Box 72777, Louisville, KY 40272-0777, or visit our website <<http://www.ksnh.org>> for the membership form.

Membership dues are: Individual \$15, Family \$25, Full Time Student \$5, Life: \$300.

The Kentucky Society of Natural History is an official 501(c) (3) tax-exempt nonprofit organization which was formed in 1939, and incorporated in 1943 in Louisville, Kentucky. All contributions to THE KENTUCKY SOCIETY OF NATURAL HISTORY are tax-deductible to the full extent of income tax laws.

Published Quarterly, The Kentucky Naturalist News is the official newsletter of KSNH. Unsolicited contributions are encouraged. Please send articles to: Barry Nichols, KNN Editor, P. O. Box 21182, Louisville, KY 40221. You can also email newsletter submissions by sending them to news@ksnh.org.

Kentucky Naturalist News Deadlines (plan on at least 4 weeks from deadline for newsletter):

Spring newsletter submissions are due February 1. KNN will be sent in March.

Summer newsletter submissions are due May 1. KNN will be sent in June.

Fall newsletter submissions are due August 1. KNN will be sent in September.

Winter newsletter submissions are due November 1. KNN will be sent in December.

Citation builder at: <http://www.lib.ncsu.edu/lobo2/citationbuilder/citationbuilder.php>.



**Kentucky Society of Natural History,
PO Box 72777,
Louisville, Kentucky 40272-0777.**

Formed 1939,



Incorporated 1943

Kentucky Naturalist News

Official Newsletter of the Kentucky Society of Natural History

Volume 66, Number 4, Winter 2008

Website: <http://www.ksnh.org>

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Affiliated Chapters

Arches of the Cumberland Chapter (Slade) meets informally, call President Dell Sasser for details, 606-666-7521 x73559 or (606) 663-9379.

Falls of the Ohio Chapter (Louisville) meets every 3rd Thursday of each month except Jan, Jul, Aug, & Dec at 7:00 PM at the Louisville Nature Center, 3745 Illinois Ave, Louisville, 40213. Call President Chris Bidwell at (502) 458-1328.

Wilderness Trail Chapter (Pineville) meets the first Thursday of each month, March through December, at 7:00 p.m., generally at Pine Mountain State Resort Park, 1050 State Park Road Pineville, KY 40977-0610 (800-325-1712).



Chroicocephalus philadelphia (Ord, 1815) (Bonaparte's gull) in winter plumage at Kentucky Lake State Park - Barry Nichols, 2009

EDITOR'S NOTES

Inside you'll find the entries for the newsletter photo contest. The topic was "snow". Make your selections and send them to me for tallying (email is fine if you prefer). The winners will be announced in the next newsletter. The topics for all of the 2009 newsletters are in the photo section.

Conservation in Kentucky has suffered a loss with the recent retirements from state government of Botanist Marc Evans and Zoologist Brainard Palmer-Ball from the Kentucky State Nature Preserves. While both will be quite active in "retirement", state government will be much poorer for them having moved on. Together they represent about 50+ highly accomplished years of pure dedication to the natural history of Kentucky. We owe much to these two selfless champions of biodiversity and conservation. I had the opportunity to be in the field often with Brainard for a few years (roughly 26 years ago!!!). It was a total pleasure and of personal value to have been able to do so. Brainard, I'm eternally grateful. Gratitude is also extended to both Brainard and Marc for all of their years of service.

The Kentucky Herpetological Society has placed the 2008 Herp Conservation Report on their website at <http://www.kyherpsoc.org/2008research>. It is a fantastic testament to how a few people can really make a difference.

A new \$46,000 *Cryptobranchus alleganiensis* (Daudin, 1803) (hellbender) exhibit will open at the Louisville Zoo this Spring. For those who have never witnessed these amazing and HUGE salamanders in-person, they really are special. This is timely as the 4th Hellbender Symposium is scheduled for June 21-24, 2009 at Cumberland Falls State Park, in Corbin, Kentucky.

The Spring 2009 deadline is being extended to February 15. I'd like to get the next issue out by the end of February. If you've been slowly cobbling something together for the newsletter, now really is the time of need! Please note that all regular newsletter dates for the year are printed in the shaded block on the back page of each newsletter.

As always, please mail any articles, news, photos, etc to kyfauna@iglou.com –ed

12th Annual Great Backyard Bird Count

by Louisville Audubon Society Press Release

Our annual program on the [Great Backyard Bird Count \(GBBC\)](#), “How to Participate and What Birds You Can Expect to See”, will be presented on Saturday, February 7th at 1:00 p.m. at the [Louisville Nature Center \(LNC\)](#), 3745 Illinois Ave., across from the [Louisville Zoo](#). Joan Brown, retired Conservation and Education Officer with [Kentucky Department of Fish & Wildlife Resources \(KDFWR\)](#) will walk us through the basics, while both educating us and entertaining us with her bird stories.

Louisville Audubon Society is here to help you become a Citizen Scientist. From beginners to experts, everyone can count birds, reporting their sightings on one or each of the four count days (February 13-16, 2009) online at: <http://www.birdcount.org>. The web site also allows participants to explore what birds others folks are finding in their backyards—whether in their own neighborhood or thousands of miles away. Additional online resources include tips to help identify birds, a photo gallery, and a special section for educators. Last February, 85,000 checklists were submitted—reporting 9.8 million birds of 635 species—a new record count!

“The GBBC has become a vital link in the arsenal of continent-wide bird-monitoring projects,” said [Cornell Lab of Ornithology](#) director, John Fitzpatrick. “With more than a decade of data now in hand, the GBBC has documented the fine-grained details of late-winter bird distributions better than any project in history, including some truly striking changes just over the past decade.”

As an added feature this year, Louisville Audubon Society will have several leaders lined up on the actual GBBC weekend that you may join to tally a count for a specified area. Walks will be suitable for all ages. Check back for details to be posted in January on our website at the following link: www.louisvilleaudubon.org ... or call the Louisville Nature Center at (502) 458-1328.

MEMBERSHIP UPDATE

As 2008 comes to a close, it comes time for current members to renew for the 2009 year. It would be a good time to encourage friends and family to explore our website (www.ksnh.org) and to consider becoming members.

Our current rates are \$15 single, \$25 family, \$7.50 student and \$300 life membership. Please send your check, payable to KSNH, to PO Box 72777, Louisville, KY 40272.

Participants Needed for the Rusty Blackbird Hot Spot Blitz!

By Kate Heyden



Euphagus carolinus (Statius Muller, 1776) (rusty blackbird) - Kate Hayden

Euphagus carolinus (Statius Muller, 1776), the rusty blackbird, has been steeply declining with estimates of an 85-99% population drop over the past 40 years. The cause for this alarming decline is not known and the increasingly sparse and patchy winter distribution of the rusty blackbird is making it more difficult to learn more about distribution, abundance, and ecology as a basis for conservation efforts. Collaborating with Cornell Laboratory of Ornithology's and National Audubon Society's e-Bird project, the Rusty Blackbird Technical Working Group (RBTWG) needs your help to find local, but predictable wintering concentrations of rusty blackbirds by participating in the Rusty Blackbird Hot Spot Blitz.

The Rusty Blackbird Hot Spot Blitz will occur, February 7-15, 2009, throughout the rusty blackbird winter range in over 20 Midwestern and southeastern states. Participants will simply be asked to visit locations where they have previously sighted or would expect to encounter rusty blackbirds and submit their observations via e-Bird. There are no datasheets or daily time restrictions. You can go wherever you like, whenever you like, and as

often as you like anytime between the dates of February 7-15, 2009. We are simply seeking observations on the number of birds present at each location visited, along with very basic habitat information. If you are unfamiliar with areas which may support rusty blackbirds in your region, contact the Blitz coordinator for a list of areas of interest. As a result of these

efforts, the RBTWG is hoping to create maps of wintering rusty blackbird "hot spots" that will help direct research, monitoring and conservation attention.

The Kentucky Department of Fish and Wildlife Resources encourages participation in this event. The rusty blackbird is a Species of Greatest Conservation Need as listed in our State Wildlife Action Plan and the information gained from this effort may provide focus to local conservation efforts. Please contact Kate Heyden, the Blitz coordinator for Kentucky at kathryn.heyden@ky.gov if you are interested in participating.

If you don't use eBird regularly, please consider entering all your observations of rusty blackbirds (even outside the Blitz period). Your observations will be used by researchers currently studying their steep long-term population decline.

Additional instructions and information on identification, habitat preferences, etc., have been posted on the Smithsonian Migratory Bird Center's rusty blackbird website:

http://nationalzoo.si.edu/ConservationAndScience/MigratoryBirds/Research/Rusty_Blackbird/

Information and instructions are also available on Cornell Laboratory of Ornithology's e-Bird site:

<http://ebird.org/content/ebird/news/bird-watchers-urgently-needed-to-track-rusty>

Kate Heyden is an avian biologist for the Kentucky Department of Fish & Wildlife Resources. She specializes in raptors and songbirds. She previously worked on red-cockaded woodpeckers in Louisiana before moving to KY to work with the state about a year ago.

LINCOLN BICENTENNIAL GEOLOGICALLY

by Berl Meyer

The Old Marble Mill in Marble, CO - Colorado Historical Society



Most, but not all, Kentuckians know that we are in the midst of the Abraham Lincoln Bicentennial, and I was trying to think of something of a geologic link to this celebration. Well low and behold, Pat and I took a little excursion to Marble, Colorado this past summer, where the marble from which the Lincoln Memorial in Washington D.C. was quarried. That's the link that I wanted even though some folks out there might think it's a true stretch.

The marble deposits surrounding Marble are estimated to be fifty to sixty million years old. Any history dealing with the stone and its production must, therefore, be but a small grain of sand on the beach of the little known past. The rarity and beauty of the stone makes the geological history essential

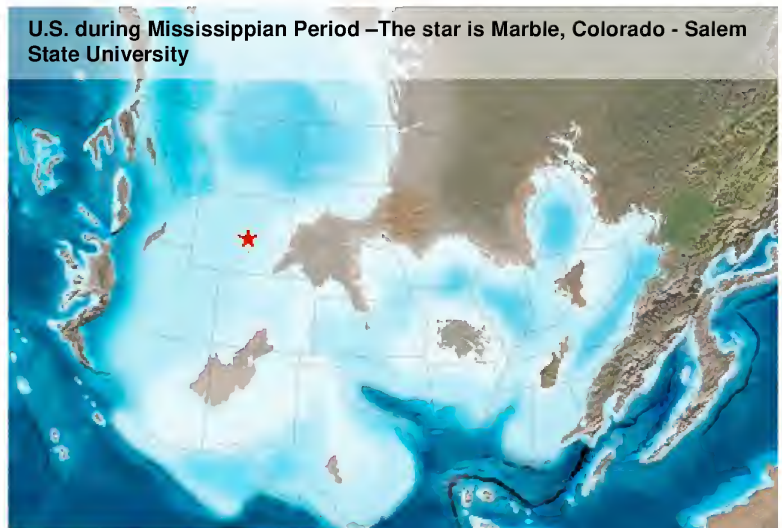
to the understanding of the known history and future of the town of Marble, high in the Colorado Rockies.

Marble is a relatively rare rock in the earth's crust and at the same time one of the most beautiful. The Yule Creek deposits around the town of Marble were formed by the metamorphism of limestone because of heat within the crust of the earth. The heat caused a recrystallization of the rock from the very fine grained calcite making up the limestone to larger sparkling crystals which gave this marble its unique luster. At the same time, organic matter, which might have caused the limestone to become black, was destroyed by the heat. The result was the pure white marble of Yule Creek.

The geological history of the marble deposits of Marble, Colorado begins with the formation of the original limestone from which it was derived. The limestone formation is widespread in the mountains of central Colorado and has been given the name of 'Leadville Limestone', a name derived from its occurrence at Leadville, Colorado. The formation at Leadville is of even greater commercial value than that at Marble because it is highly susceptible replacement by ores.

The silver-lead-zinc deposits of the Leadville district are found in this limestone. As a matter of fact, this limestone formed during the same time that our Mammoth Cave limestones in Kentucky were formed.

Limestone deposits are formed in shallow, warm, marine waters from calcite precipitated by countless marine organisms. Some of these organisms precipitated the calcite as shells and the remains, called fossils, can be found in the Leadville Limestone. However, all fossils in the Marble area were destroyed when the formation was recrystallized to form marble. All limestones are deposited in warm marine waters. Central Colorado during the Mississippian Period of the Paleozoic Era was below sea level and covered by a shallow sea when the Leadville Limestone was deposited. Thus, this limestone which we now find high in the Colorado Rockies was formed long before these mountains were present.



After the deposition of the Leadville Limestone, approximately 200 million years elapsed before it was uplifted into the present Colorado Rockies and was metamorphosed into marble. During the Pennsylvanian Period of the Paleozoic Era, soon after the Leadville Limestone had been deposited, a major mountain system developed in central Colorado. These mountains, which have long since been entirely eroded away, are referred to by geologists as the Ancestral Rockies. The site of the present town of Marble located at the very edge of this mountain range in what was then a basin at the foot of the mountains. This is significant to the present marble deposits because the Leadville Limestone was completely stripped off the mountain range by erosion and many pebbles derived from it can be found in the sediments deposited at the base of the mountains. What was left of the original Leadville Limestone lay buried for the next 165 million years of the Mesozoic Era. During this time Colorado was a flat coastal plain over which dinosaurs roamed, and during the latter part of the Mesozoic Era, was covered by another shallow seaway.

The present Colorado Rockies were built following the Mesozoic Era along with most of the rest of the mountains of the Western United States with the collision between the North American Plate and the Pacific Plate. Accompanying the elevation of the area and folding of the rock strata, masses of molten rock called “magma” tended to rise or intrude into the overlying rocks. Such a mass molten rock was responsible for heating the Leadville Limestone and recrystallizing it into the famed marble deposits of the Crystal River Valley. This magma cooled and crystallized to form the granite found in the Marble area. Leadville Limestone, which is black dense rock elsewhere in Colorado, is a sparkling, pure white marble in the vicinity of this mass of granite. Other rocks in the area have also been metamorphosed—shales into slates, sandstones to quartzites, and other limestone beds to marble, although none of the other limestone units are as pure or thick as the Leadville limestone.

Blocks of Marble in the Yule Quarry - Scott Leutenegger



Memorial Basics

Groundbreaking ceremony—February 12, 1914
 Cornerstone laying ceremony—February 12, 1915
 Dedication ceremony—May 30, 1922
 Cost of building--\$2,957,000.

Construction of the memorial

The Lincoln Memorial construction took place between 1914 and 1922. Work crews had completed most of the memorial architectural elements by April 1917 when the United States entered into the First World War, but work slowed as a result. Steady progress nonetheless was maintained on the interior decorations, granite terrace, approach plaza, and grounds landscaping.

The Lincoln Memorial, Washington, DC - National Park Service



From the chamber of the memorial, one can appreciate the different stones used in its construction. The terrace walls and lower steps comprise granite blocks from Massachusetts - the upper steps, outside façade, and columns contain marble blocks from Colorado* - the interior walls and columns are Indiana limestone - the floor is pink Tennessee marble - the ceiling tiles are Alabama marble – and the Lincoln statue comprises 28 pieces of Georgia marble. These building materials may seem random, but Henry Bacon specifically chose each one to tell a very specific story. A country torn apart by war can come together, not only to build something beautiful, but also explain the reunification of the states.

*Gold from the Colorado gold fields helped finance the Union during the Civil War.

Dedication Ceremony

On May 30, 1922, the Lincoln Memorial formally was dedicated, during an event witnessed by approximately 50,000 people. Leading the ceremony was the Chief Justice of the Supreme Court of the United States, William Howard Taft. Providing remarks and accepting the memorial on behalf of the nation was President Warren G. Harding. Dr. Robert Moton, president of the Tuskegee Institute, delivered the keynote address. Ironically, Moton spoke at the memorial for the Great Emancipator to a largely segregated audience.

References:

1. Dr. Lindley S. Hanson, Dept of Geologic Sciences, Salem State University
2. Colorado Geologic Survey
3. [Marble, Colorado-City of Stone](#), Duane Vandenbusche and Rex Myers, 1970
4. Colorado Historical Society
5. Lincoln Memorial, National Park Service, U.S. Department of the Interior

Berl Meyer is the current Geology Coordinator for KSNH, the former KSNH webmaster, and the current webmaster of the [U.S.S. Constitution CVA/CV 64 website](#). Berl was stationed on this Naval Aircraft Carrier during the Vietnam War as an Aerographer (weather guesser).

GALAX (POIR.) BRUMMITT

by Chris Bidwell

Pronounced *GAY-laks*, the evergreen plant has the species name *Galax urceolata* with *Galax rotundifolia* and *G. aphylla* as older synonyms. Galax is in the plant family Diapensiaceae (formerly diapiensia).

The generic epithet *Galax* is from the Greek word *Gala* meaning stream of milk – or just milk and refers to the plants beautiful small white blossoms. The specific epithet stems from *urceolus* meaning “little pitcher” and *urceus* meaning “pitcher”. The term literally means shaped like an urn or pitcher and describes the plant’s corolla which is ovoid-cylindrical in shape with a small opening. The Diapensiaceae are low-lying evergreen shrubs/flowers native to cold and arctic regions of the northern hemisphere. The galax in the New World is limited to the Eastern United States only. The family Diapensia was coined by Linnaeus. The name is from the Greek language for arctic dwelling plants. Common names for galax are cold’s foot, coltsfoot, galaxy, beetleweed, wand plant, and wand flower.

Galax is an herbaceous, perennial evergreen that grows up to 36” tall. It ranges from New York, to Alabama and Georgia, and its western most extension being western Kentucky and Tennessee. The tiny white flowers, about 1/16 of an inch across, bloom from late spring to early summer. The flowers are borne on a single spike-like raceme 15-25 cm

long. Each flower has 5 petals and the fruit is a small capsule that contains numerous seeds. The flowers are hermaphroditic (having both male and female organs). The beautiful, thick, leathery round-heart shaped shiny leaves grow up to 4 inches across and are borne on a petiole up to 10 inches long. The leaves turn a brilliant, spectacular red bronze in the fall and into the winter. The plant is in leaf year round and leaves last about 18 months. Galax has grown up in altitudes of over 1800 meters. Galax prefers an acidic, sandy, medium loamy and heavy clay soil that is lime free. In Kentucky it is found in pine-oak-hickory-kalmia-rhododendron mesic forests. Galax spreads by seed and by rhizomes. New plants/leaves begin to emerge in early spring. Numerous flying insects, spiders, and beetles pollinate the flowers. Under dry conditions the withered winter plants are highly flammable and forest fires will top-kill the plants. Recovery is quite good if rainfall is sufficient after the fires.

Medicinal usages have been limited to treatment of wounds and cuts of all sizes. Based on the doctrine of signatures, an infusion of leaves has been used to treat kidney diseases. Galax has also been used to treat nervous disorders. None of the medical usages of this plant have any proven success however.

A commercial use for galax has been in the floral industry. The beautiful, shiny leaves of green and red-bronze are used in wreaths and bouquets. The leaves are sewn together to form tablecloths for weddings and casket coverings. Plants, leaves, and seeds can be purchased from many distributors. People living in the Appalachians have harvested galax since before the 20th century for floral usages. Today, however, 90% of the harvesters are Hispanic and an experienced harvester can collect 5000 leaves a day with a market value of \$120. Many states have now enacted laws to limit harvesting times and amounts as poaching and over-harvesting have virtually eliminated huge populations. In 2001 poachers in the Pisgah area of the Blue Ridge Parkway were caught with 18,000 leaves worth a retail value of \$4000. These poachers received a 45 day jail term and a 2 year probation sentence. The beautiful shiny green red-bronze foliage has led to its use as a Christmas decoration in wreaths for decades. It is this same beauty however which is causing its very demise in areas not protected from over-harvesting and poaching. The independent city of Galax, VA (1906), is named after this wonderful plant and has a [Galax Leaf and String Festival](#) each June.

This winter look for galax and its beautiful foliage and dried-up flower racemes. Its aesthetic value far surpasses any medicinal or commercial usages. If you examine the dried flower spikes you may notice a small resident spider which makes this plant its home year round. Quite often you will find a web strung between successive flower stalks. As you examine the beauty of galax you may notice however the only negative aspect of this plant. The older, decaying leaves can emit a skunk or strong mold odor due to sulfur chemicals as mercaptan and butylthiols being broken down and released through the leaves stomata. Have a great winter and holidays.

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Chris Bidwell is an amateur naturalist and the current President of the Falls of the Ohio Chapter of KSNH.

PROJECT FEEDERWATCH BENEFITS BIRDS AND PEOPLE CONNECTION WITH NATURE PROMOTES WELLNESS

October 2008 Project FeederWatch Press Release, David Bonter, Cornell Lab of Ornithology

Ithaca, NY—More than 100 studies have shown that getting closer to nature reduces stress and promotes a feeling of well-being in children and adults. So, filling feeders and counting the birds that visit may be just what the doctor ordered! For more than 20 years, that's what participants in the Cornell Lab of Ornithology's [Project FeederWatch](#) have been doing—benefiting themselves and the birds.

"It is a great winter time activity for the whole family," says Alaska FeederWatcher Nancy Darnell. "If you have children, they will come to love watching the birds. All of this is fun and a chance to contribute to scientific studies, too!"

The 2008-09 season of Project FeederWatch gets underway November 8 and runs through April 3. Participants count the numbers and kinds of birds at their feeders each week and send the information to the Cornell Lab of Ornithology. Participants submitted more than 115,000 checklists during the 2007-08 FeederWatch season, documenting unusual bird sightings, winter movements, and shifting ranges—a treasure-trove of information that scientists use to monitor the health of the birds and of the environment.



Sitta canadensis Linnaeus, 1766 (Red-breasted Nuthatch) - Lyn Winans



Coccothraustes vespertinus (W. Cooper, 1825) (Evening Grosbeak) - Tammie Haché

"Being a FeederWatcher is easy and fun, and at the same time helps generate the world's largest database on feeder-bird populations," says project leader David Bonter. "We are grateful for the contributions our participants have made for the birds and are proud of the joy they say it brings to their busy lives. Since we started in 1987, more than 40,000 people have submitted observations, engaging with the wildlife beyond their windows."

"Project FeederWatch opened up a whole new world for me," says participant Cheri Ryan of Lockport, Kentucky. "It's so interesting to watch the activities of the birds. I learn something new every time I participate."

Scientists learn something new from the data each year, too, whether it's about the movements of common backyard birds or unusual sightings of rarely-seen species. Highlights of the project—part of an expected influx of northern birds that fly farther south when their food supplies run short. Other northern species showing up in record numbers included Common Redpolls and Pine Siskins. Among the rare birds reported was a Streak-backed Oriole in Loveland, Colorado—the state's first report of this bird, native to Mexico. A

December nor'easter deposited a Dovekie in Newton, Massachusetts, the first time this North Atlantic seabird has ever been reported to Project FeederWatch.

Long-term data show some species increasing in number, such as the Lesser Goldfinch in the Southwest. Other populations continue a downward trend, such as the Evening Grosbeak throughout their range. Once one of the most common species seen at feeders in the northern half of the continent, the grosbeaks are declining for unknown reasons.

Beyond the benefits to birds and science, however, is the benefit to participants. "Nature is not merely an amenity; it is critical to healthy human development and functioning," says Nancy Wells, Cornell University assistant professor of design and environmental analysis. Her studies find that a view of nature through the window or access to the environment in any way improves a child's cognitive functioning and reduces the negative effects of stress on the child's psychological well-being. Wells also notes that when children spent time with nature early in life it carries over to their adult attitudes and behavior toward the environment.



Carduelis pinus (A. Wilson, 1810) (Pine Siskin) - Errol Taskin

Project FeederWatch welcomes participants of all ages and skill levels, from scout troops and retirees to classrooms and nature center visitors. To learn more and to sign up, visit www.feederwatch.org or call the Lab toll-free at (800) 843-2473. In return for the \$15 fee (\$12 for Lab members) participants receive the FeederWatcher's Handbook, an identification poster of the most common feeder birds in their area, a calendar, complete instructions, and the FeederWatch annual report, Winter Bird Highlights.

Many FeederWatchers echo this comment from Mary Strasser of Wisconsin: "The greatest reward for me as a participant in Project FeederWatch these many years has been observing birds and behavior that I might have missed had I not been part of this project."

After each season, FeederWatch scientists merge all the data submitted over the Internet and on paper data forms. After the reports are run through a series of editing programs, the data are summarized into two variables for each species: percentage of feeders visited and mean group size. The Top 25 lists are based on these two variables.



Carduelis psaltria (Say, 1823) (Lesser Goldfinch) - David F. Smith

Kentucky's Top 25 Most Frequently Reported Feeder Birds for Winter 2007-2008 (reported by 91 FeederWatchers)

| Rank within Kentucky | Common Name | Scientific name | Percentage of feeders visited | Mean group size (when seen) | FeederWatch Abundance Index |
|----------------------|-------------------|--|-------------------------------|-----------------------------|-----------------------------|
| 1 | Northern Cardinal | Cardinalis cardinalis (Linnaeus, 1758) | 100.00 | 5.43 | 4.87 |
| 2 | Mourning Dove | Zenaida macroura (Linnaeus, 1758) | 96.70 | 4.66 | 3.11 |

| | | | | | |
|----|-------------------------|---|-------|------|------|
| 3 | American Goldfinch | Carduelis tristis (Linnaeus, 1758) | 94.51 | 6.85 | 4.63 |
| 4 | Dark-eyed Junco | Junco hyemalis (Linnaeus, 1758) | 94.51 | 3.69 | 2.01 |
| 5 | Downy Woodpecker | Picoides pubescens (Linnaeus, 1766) | 93.41 | 1.64 | 1.19 |
| 6 | Blue Jay | Cyanocitta cristata (Linnaeus, 1758) | 92.31 | 2.63 | 1.22 |
| 7 | Tufted Titmouse | Baeolophus bicolor (Linnaeus, 1766) | 92.31 | 2.08 | 1.53 |
| 8 | Carolina Wren | Thryothorus ludovicianus (Latham, 1790) | 86.81 | 1.28 | 0.57 |
| 9 | House Finch | Carpodacus mexicanus (Statius Muller, 1776) | 85.71 | 4.48 | 2.30 |
| 10 | Red-bellied Woodpecker | Melanerpes carolinus (Linnaeus, 1758) | 85.71 | 1.17 | 0.58 |
| 11 | White-breasted Nuthatch | Sitta carolinensis Latham, 1790 | 83.52 | 1.36 | 0.65 |
| 12 | White-throated Sparrow | Zonotrichia albicollis (Gmelin, 1789) | 78.02 | 2.75 | 1.00 |
| 13 | European Starling | Sturnus vulgaris Linnaeus, 1758 | 75.82 | 4.61 | 1.03 |
| 14 | American Robin | Turdus migratorius Linnaeus, 1766 | 74.73 | 2.45 | 0.31 |
| 15 | Carolina Chickadee | Poecile carolinensis (Audubon, 1834) | 72.53 | 2.56 | 1.21 |
| 16 | Song Sparrow | Melospiza melodia (A. Wilson, 1810) | 70.33 | 1.45 | 0.34 |
| 17 | Common Grackle | Quiscalus quiscula (Linnaeus, 1758) | 68.13 | 5.19 | 0.36 |
| 18 | House Sparrow | Passer domesticus (Linnaeus, 1758) | 65.93 | 5.28 | 1.21 |
| 19 | Northern Mockingbird | Mimus polyglottos (Linnaeus, 175) | 57.14 | 1.07 | 0.23 |
| 20 | Purple Finch | Carpodacus purpureus (Gmelin, 1789) | 56.04 | 2.31 | 0.28 |
| 21 | Red-winged Blackbird | Agelaius phoeniceus (Linnaeus, 1766) | 53.85 | 3.55 | 0.23 |
| 22 | Brown-headed Cowbird | Molothrus ater (Boddaert, 1783) | 48.35 | 3.74 | 0.17 |
| 23 | Hairy Woodpecker | Picoides villosus (Linnaeus, 1766) | 47.25 | 1.20 | 0.19 |
| 24 | Cooper's Hawk | Accipiter cooperii (Bonaparte, 1828) | 43.96 | 1.01 | 0.05 |
| 25 | Red-breasted Nuthatch | Sitta canadensis Linnaeus, 1766 | 41.76 | 1.27 | 0.20 |

The [Cornell Lab of Ornithology](#) is a nonprofit membership institution interpreting and conserving the earth's biological diversity through research, education, and citizen science focused on birds.

CHAPTER NEWS

Falls of the Ohio Chapter News-Chris Bidwell, Chapter President:

Yes, it is cold, windy, and harsh but if not for winter we would have no spring. Things in nature, like man, must have time to rest and rejuvenate. Seeds need time to undergo scarification so they may open and bloom in spring – only winter's freezing, watery conditions can do this vital part in awakening plants. Winter is a great time to get out and see what has been hidden by leaves. Dried plants, naked trees, and wildlife still needing to forage for food to survive are all now more visible. To see wildlife surviving some of the harshest conditions is extremely reflective and makes us appreciate what we have. This late November, a group of us nature lovers from the [Falls of the Ohio Chapter](#) had one of the most exciting outings at [Muscatatuck National Wildlife Refuge](#) in southern Indiana. The temperature was right at 30 degrees. On this cold, gray, wintry day we saw Trumpeter swans, a screech owl, and were rewarded with a view of a family of 5 river otters playing and eating fish on one of the iced over lakes. None of us would have rather been anywhere else. Nature has surprises every season. Winter is no exception. All seasons have their special something to contribute to life and share their wonders with man if we only get out in nature and use our senses to grasp the big picture. Don't forget to winterize and enjoy this winter's gift of beauty to man.

WINTER 2009 NEWSLETTER PHOTO CONTEST – TOPIC IS SNOW





**WINTER 2009 Newsletter Photo Contest –
Topic = Snow**

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)
- 7)

Newsletter Photo Contest Topics for 2009:

Spring 2009 – Clouds

**Summer 2009 - Kentucky Amphibians
and/or Reptiles**

Fall 2009 – Fall Color

Winter 2009 – Kentucky Winter Bird Residents



KENTUCKY NATURALISTS' CALENDAR
(added as space allows)

2009:

January 24, 2009: Lake Barkley Trail Days @ Lake Barkley State Park. Volunteers will assist in maintaining old trails and creating new ones for hiking, mountain biking, and wildlife watching. Lake Barkley State Resort Park is 29 miles west of Hopkinsville. Take U.S. 68W to KY 1489. For more information contact Park Naturalist Jenny Howard at (800) 325-1708 or see the Lake Barkley State Park website at <http://parks.ky.gov/findparks/resortparks/lb/>.

January 30, 2009: Writing Grant Proposals for Teachers and Environmental Educators @ Perkins Center, Eastern Kentucky University. The day-long workshop will focus on matching programs to grants, proper budgeting, proposal writing as well as finding free resources from community organizations and business partners. Participants will develop an idea and work through the grant proposal writing process using that idea. Registration will be limited to 25 participants. For more information contact Karen Pratt of Eastern Kentucky University's Division of Natural Areas by phone at (859) 622-1476, or visit the EKU-DNA website at <http://www.naturalareas.eku.edu/currentevents/default.php>.

February 6-7, 2009: Arches Hiking Weekend @ Natural Bridge State Resort Park, 2135 Natural Bridge Road, Slade, KY 40376-9701. There are hundreds of natural arches and bridges within a few miles of Kentucky's Natural Bridge, and winter is the best time to see them! Join experienced guides for a day of hikes throughout the area ranging from short easy walks to long treks in the back country. Evening speakers will focus on the geology and history of the area. On site registration fee is \$8 per adult and \$3 per child ages 2-12. Call the park at (606) 663-2214 or visit their website at <http://parks.ky.gov/findparks/resortparks/nb/> for details.

February 21, 2009: Geo-scavenger Hunt @ Floracliff Nature Sanctuary, P.O. Box 4006, Lexington, KY 40544. If you are a fan of geocaching and own a GPS, this hike is for you. It will be a great way to learn more about the preserve and provide fun for the entire family. For more information contact Floracliff Nature Sanctuary by phone at (859) 351-7770, via email at floracliff@aol.com, or check the website at <http://www.floracliff.org>.

February 26-27, 2009: The 2009 Annual Meeting of the Kentucky Chapter of The Wildlife Society (KCTWS) @ Barren River State Park. The Keynote Speaker for the meeting is Dr. Bruce Leopold, President of The Wildlife Society. Additional Guest Speakers are Dr. Virginia Burkett, US Geological Survey (USGS) Chief Scientist for Global Change Research, Charles Baxter, USGS Senior Advisor for Strategic Habitat Conservation, and Lee Andrews, Kentucky Field Office Supervisor, United States Fish & Wildlife Service (USFWS). For more information see their website at <http://joomla.wildlife.org/Kentucky/?CFID=15031982&CFTOKEN=65676678>, by phone at 502-695-0468 (President Brent Harrel)

February 28, 2009: Lake Barkley Trail Days @ Lake Barkley State Park. Volunteers will assist in maintaining old trails and creating new ones for hiking, mountain biking, and wildlife watching. Lake Barkley State Resort Park is 29 miles west of Hopkinsville. Take U.S. 68W to KY 1489. For more information contact Park Naturalist Jenny Howard at (800) 325-1708 or see the Lake Barkley State Park website at <http://parks.ky.gov/findparks/resortparks/lb/>.

February 28, 2009: 5th Annual Ohio Natural History Conference @ the Ohio Historical Society, 1982 Velma Avenue (intersection of I-71 and E. 17th Avenue), Columbus, OH. This conference encompasses the broad range of topics inherent in the term "natural history". The keynote speaker, Gary Meszaros, will present "Endangered Species of Ohio". Mr. Meszaros is a resident of northeast Ohio and a renowned nature photographer. Sponsored by the [Ohio Biological Survey](#) & the [Ohio Division of Wildlife](#). For more information contact the Ohio Biological Survey by phone at (614) 457-6005, by email at Ohiobiosurvey@rroho.com, or on the OBS website at <http://www.ohiobiologicalsurvey.org/>.

March 4, 2009: Wildlife Diversity Conference 2009: Wildlife in Full Color @ Aladdin Shrine Center, 3850 Stelzer Road just south of Morse Road, Columbus, OH. Conference is sponsored by the Ohio Department of Natural Resources Wildlife Diversity and Endangered Species Program. Topics will include ecotourism, eastern red bats, federally endangered American burying beetles, honeybees, smooth & rough green snakes, cerulean warblers, indigo buntings, and violets. For more information contact them at their website <http://www.wildlifediversity.com/>, or please call 1.800.WILDLIFE (945-3543), or watch for information on <http://www.ohiodnr.com/wildlife>.

March 7, 2009: Mushrooms for Beginners @ Floracliff Nature Sanctuary, P.O. Box 4006, Lexington, KY 40544. Beverly James will lead this hike to search for spring mushrooms and discuss their basic identifying characteristics. For more information contact Floracliff Nature Sanctuary by phone at (859) 351-7770, via email at floracliff@aol.com, or check the website at <http://www.floracliff.org>.

March 14, 2009: Lake Barkley Trail Days @ Lake Barkley State Park. Volunteers will assist in maintaining old trails and creating new ones for hiking, mountain biking, and wildlife watching. Lake Barkley State Resort Park is 29 miles west of Hopkinsville. Take U.S. 68W to KY 1489. For more information contact Park Naturalist Jenny Howard at (800) 325-1708 or see the Lake Barkley State Park website at <http://parks.ky.gov/findparks/resortparks/lb/>.

March 14, 2009: Wilderness Survival @ Audubon Museum, John James Audubon State Park, 3100 US 41 North, Henderson, KY 42420 (Noon – 3:00 p.m.). Have you ever tried to make a fire without matches, find your way in the forest, or build a temporary shelter? Youths ages 10-16 will study and practice these survival skills while learning how to make use of the surrounding resources. Please call to register. Contact Julie McDonald at (270) 826-2247 or by email at juliea.mcdonald@ky.gov, or visit the park website at <http://parks.ky.gov/findparks/recparks/au/> for more. Program fee: \$5.00 per person

March 21, 2009: Signs of Spring @ Floracliff Nature Sanctuary, P.O. Box 4006, Lexington, KY 40544. Join us on this hike to Elk Lick Creek for a chance to see the first wildflowers of spring. It should be a great time to catch trout lilies and bloodroot in bloom. For more information contact Floracliff Nature Sanctuary by phone at (859) 351-7770, via email at floracliff@aol.com, or check the website at <http://www.floracliff.org>.

March 28, 2009: Pollinators with Blake Newton @ Floracliff Nature Sanctuary, P.O. Box 4006, Lexington, KY 40544. Join Blake Newton, UK Extension Specialist for 4H and Youth Entomology, for a program about pollinators and their relationships with the spring wildflowers. For more information contact Floracliff Nature Sanctuary by phone at (859) 351-7770, via email at floracliff@aol.com, or check the website at <http://www.floracliff.org>.

April 1, 2009: Mid-week Wildflower Hike @ Floracliff Nature Sanctuary, P.O. Box 4006, Lexington, KY 40544. This hike will provide an opportunity to catch the spring wildflowers for those with some free time during the week. For more information contact Floracliff Nature Sanctuary by phone at (859) 351-7770, via email at floracliff@aol.com, or check the website at <http://www.floracliff.org>.

April 3, 2009: 9th Annual Ohio Botanical Symposium @ Villa Milano (villamilano.com), 1630 Schrock Road Columbus, Ohio, 43229. Symposium is sponsored by [Ohio Division of Natural Areas & Preserves \(DNAP\)](http://ohiodnr.com), [The Cleveland Museum of Natural History](http://clevelandmuseum.com), [The Nature Conservancy](http://natureconservancy.org), and the [Ohio State University Herbarium](http://ohioherbarium.org). Award-winning and world-renowned botanist and conservationist Dr. W. Hardy Eshbaugh will give our keynote address, "The Challenges to Biodiversity Conservation in the 21st Century: Where does Ohio fit in the Equation?" There will be additional talks, posters, vendors, and exhibits from non-profit environmental and conservation groups, park districts, federal and state agencies, and universities. For more information see the Natural Areas & Preserves website at <http://www.ohiodnr.com/tabid/20259/Default.aspx> or call them at (614) 265-6453.

April 4, 2009: The 2009 Annual Meeting of the Kentucky Bluebird Society @ Shakertown, KY (near Harrodsburg). More info to come. See their website at <http://www.biology.eku.edu/kbs/>.

April 4, 2009: Medicinal Wildflowers with Ciara Lockstadt @ Floracliff Nature Sanctuary, P.O. Box 4006, Lexington, KY 40544. Experience the spring wildflowers of the Inner Bluegrass during this hike. The hike is focused on the historical and present day medicinal and useful traits of plants. For more information contact Floracliff Nature Sanctuary by phone at (859) 351-7770, via email at floracliff@aol.com, or check the website at <http://www.floracliff.org>.

April 4, 2009: Wildflower Extravaganza @ John James Audubon State Park, 3100 US 41 North, Henderson, KY 42420. Join us for three leisurely hikes to see the vibrant forest flora as well as participate in programs for all ages. We'll also learn about "problem" plants and how they affect the native plant species during an outdoor invasive species removal. Contact Julie McDonald at (270) 826-2247 or by email at juliea.mcdonald@ky.gov, or visit the park website at <http://parks.ky.gov/findparks/recparks/au/> for more.

April 10-12 or April 17-19, 2009: The Society of Kentucky Lepidopterists (SKL) Spring Field Trip @ Somerset, KY. For details see the SKL website at <http://bioweb.wku.edu/faculty/Marcus/KYLeps.html> or contact trip leader Loran Gibson via email at kymothman@fuse.net, or call President Bill Black

April 17-19, 2009: Wildflower Weekend @ Natural Bridge State Resort Park, 2135 Natural Bridge Road, Slade, KY 40376-9701. The park area is home to hundreds of native plant species; enjoy them this weekend with other botanists, gardeners, and nature lovers. Our field trips are for all levels of participation, and from short, easy walks to longer hikes at Natural Bridge State Park and the Red River Gorge National Geologic Area! Evening speakers will focus on the native plants in the region. Registration fee upon arrival. For more information, contact park naturalist Brian Gasdorf at brian.gasdorf@ky.gov or call 1-800-325-1710, ext 2104. Call the park at (606) 663-2214 or visit their website at <http://parks.ky.gov/findparks/resortparks/nb/> for details.

April 17-19, 2009: Wildflower Weekend @ Pine Mountain Settlement School, 36 Highway 510, Pine Mountain, KY 40810. For over thirty years, Pine Mountain Settlement School has invited the public to enjoy the impressive display of spring wildflowers found on its campus on the north side of Pine Mountain and at other special natural areas close by. You'll enjoy hikes to see wildflowers and other spring phenomenon, interesting evening presentations on natural or cultural topics, great meals and the comradeship of others interested in nature! Fee based. Contact the Pine Mountain Settlement School at 606-558-3571 or 606-558-3542 for details. You can also visit their website at <http://www.pinemountainsettlementschool.com/>.

April 24-26, 2009: Kentucky Society of Natural History (KSNH) 2009 Spring Meeting @ Pine Mountain Settlement School, 36 Highway 510, Pine Mountain, KY 40810. See upcoming newsletter for details or go to the website at <http://www.ksnh.org>.

April 24-26, 2009: Kentucky Ornithological Society (KOS) Annual Spring Meeting @ Mammoth Cave National Park. The featured speaker for the weekend will be Ted Floyd (<http://www.aba.org/birding/editor.html>) who is editor of Birding, the primary publication of the American Birding Association. For more information contact KOS at P.O. Box 463, Burlington, KY 41005 or via their website at <http://www.biology.eku.edu/kos/default.htm>.

May 1-2, 2009: Herpetology Weekend @ Natural Bridge State Resort Park, 2135 Natural Bridge Road, Slade, KY 40376-9701. Discover nature's most misunderstood critters! Experienced herpetologists will lead field trips into the Red River Gorge National Geologic Area to observe reptiles and amphibians in their native habitat. Most Saturday fieldtrips will be offered at 9 a.m. and 1:30 p.m. Collection is prohibited. Friday and Saturday evening presentations will focus on reptile and amphibian natural history and conservation. Some demonstrations will include live venomous snakes! Registration fee upon arrival. For more information contact park naturalist Brian Gasdorf at brian.gasdorf@ky.gov or call 1-800-325-1710, ext. 2104. Call the park at (606) 663-2214 or visit their website at <http://parks.ky.gov/findparks/resortparks/nb/> for details.

May 1-3, 2009: Ohio Valley Birding Festival @ John James Audubon State Park, 3100 US 41 North, Henderson, KY 42420. Join birders and educators from throughout the region at the Tri-State Bird Festival. Learn about birds, birding, and bird habitat through seminars, workshops, hikes and crafts. All ages. This festival is sponsored by Audubon State Park, Wesselman Nature Society, Evansville Audubon Society, and Evansville Wild Birds Unlimited. Contact Julie McDonald at (270) 826-2247 or by email at juliea.mcdonald@ky.gov, or Susan Haislip at (812) 479-0771 (ext 100). or visit the festival website at <http://www.ohiovalleybirdingfestival.org> for more.

May 1-3, 2009: Black Mountain Weekend @ Pine Mountain Settlement School, 36 Highway 510, Pine Mountain, KY 40810. Wildflower lovers will enjoy visiting Black Mountain where wildflowers are abundant and some Kentucky wildflowers are only found there, such as the painted trillium. As with the Wildflower Weekend, you'll have the opportunity to appreciate spring in the mountains, enjoy presentations by experts in natural and cultural topics, eat good food, and visit with other folks who love nature! Fee based. Contact the Pine Mountain Settlement School at 606-558-3571 or 606-558-3542 for details. You can also visit their website at <http://www.pinemountainsettlementschool.com/>.

May 1-3, 2009: Flora-Quest '09 - Shawnee and the Edge @ at the Shawnee State Park resort, Shawnee Lodge and Conference Center, 4404 State Route 125, Portsmouth, Ohio 45663-9003. Flora-Quest is a hands-on learning adventure focusing on wild plants centered at the 65,000-acre Shawnee State Park, Ohio's largest contiguous forest. Just to the west of Shawnee State forest is the sprawling Edge of Appalachia preserve, filled with unusual habitats and possessing one of the state's highest concentrations of rare plants. For more information call (800) 282-7275 or go to the website at <http://www.flora-quest.com>.

June 2-16, 2009: Junior Naturalist Programs @ John James Audubon State Park, 3100 US 41 North, Henderson, KY 42420.

June 2, 2009; 9:00 a.m.-12:00 p.m. Junior Naturalist Programs Ages 10-12; Audubon Museum

June 9, 2009; 9:00 a.m.-12:00 p.m. Ages 8-9; Audubon Museum

June 16, 2009; 9:00 a.m.-12:00 p.m. Ages 6-7; Audubon Museum

June 16, 2009; 7:00 p.m. S'mores Celebration and Awards Ceremony for all Junior Naturalists and their families (Audubon Campground Shelter).

Open your eyes to the amazing wonders in your own back yard. Learn about how we protect these beautiful resources. Programs meet at the Audubon Museum. Kids who attend any one of these dates will receive a patch and certificate. Children ages 10-12 will meet on June 2, Children ages 8-9 will meet on June 9. Children ages 6-7 will meet on June 16. Pre-registration is required. Maximum 20 attendees per date. Contact Julie McDonald at (270) 826-2247 or by email at juliea.mcdonald@ky.gov, or visit the park website at <http://parks.ky.gov/findparks/recparks/au/> for more. Program Fee: \$10.00



Eurycea lucifuga Rafinesque, Cave salamander - Barry Nichols, 2009

June 6, 2009: Creatures of the Night Adventure Trek/National Trails Day @ Audubon Museum, John James Audubon State Park, 3100 US 41 North, Henderson, KY 42420 (6:00 p.m. – 9:00 p.m.). Venture out with our Interpretation staff on National Trails Day and discover the mysticism of nighttime creatures. Dress for the weather and bring a flashlight. Contact Julie McDonald at (270) 826-2247 or by email at juliea.mcdonald@ky.gov, or visit the park website at <http://parks.ky.gov/findparks/recparks/au/> for more.

June 10-14, 2009: In the Footsteps of Lucy Braun @ Pine Mountain Settlement School, 36 Highway 510, Pine Mountain, KY 40810. This four-day forest study workshop is named in honor of one of the first and foremost conservationists of the 20th century, E. Lucy Braun. Dr. Lucy, as she was called by her colleagues, devoted her life to the study of plants and to conservation campaigns to save wilderness areas and other natural sites. The four-day workshop will combine field trips, lectures, and slide presentations in the study of forest types found in Eastern Kentucky. Daily field trips will include four- to eight-mile hikes. The workshop is geared toward adults. Fee based. Contact the Pine Mountain Settlement School at 606-558-3571 or 606-558-3542 for details. You can also visit their website at <http://www.pinemountainsettlementschool.com/>.

June 21-24, 2009: 4th Hellbender Symposium @ Cumberland Falls State Park, in Corbin, Kentucky. More details to follow.

July 24-26, 2009: Midwest Native Plant Conference @ Hope Hotel at Wright-Patterson Air Force Base in Dayton, OH. This event is hosted by the newly formed Midwest Native Plant Society, [Flora-Quest](#) and the [Greater Cincinnati Wild Ones](#). This conference will include educational programs and field trips designed to connect people and nature. The focus will be on native prairies and wetlands with emphasis on the importance of native plant communities. For more information see their website at http://cincinnatiwildones.com/MWNP_Society/preregister.php or call (513) 941-6497.

June 27, 2009: The Society of Kentucky Lepidopterists (SKL) Annual 4th of July Oldham County Butterfly Count @ Horner Wildlife Sanctuary. For details see the SKL website at <http://bioweb.wku.edu/faculty/Marcus/KYLeps.html> or contact trip Leader Charlie Covell via email at covell@louisville.edu.

August 12-16, 2009: In the Footsteps of Lucy Braun @ Pine Mountain Settlement School, 36 Highway 510, Pine Mountain, KY 40810. This four-day forest study workshop is named in honor of one of the first and foremost conservationists of the 20th century, E. Lucy Braun. Dr. Lucy, as she was called by her colleagues, devoted her life to the study of plants and to conservation campaigns to save wilderness areas and other natural sites. The four-day workshop will combine field trips, lectures, and slide presentations in the study of forest types found in Eastern Kentucky. Daily field trips will include four- to eight-mile hikes. The workshop is geared toward adults. Fee based. Contact the Pine Mountain Settlement School at 606-558-3571 or 606-558-3542 for details. You can also visit their website at <http://www.pinemountainsettlementschool.com/>.

August 28-30 or September 12-14, 2009: The Society of Kentucky Lepidopterists (SKL) Summer Field Trip @ Jackson Purchase (Western Kentucky). For details see the SKL website at <http://bioweb.wku.edu/faculty/Marcus/KYLeps.html> or contact trip leader: [Gerald Burnett gdburnett@brtc.net](mailto:Gerald.Burnett@brtc.net).

September 12 & 19, 2009: Monarch Butterfly Migration Mysteries @ Audubon Museum, John James Audubon State Park, 3100 US 41 North, Henderson, KY 42420 (8:00 a.m. and 1:00 p.m. - both days). Bid a farewell to the Monarch Butterflies migrating south for the winter. We will meet at the Audubon Museum for a 45-minute introductory indoor presentation. Next, we will carpool to the Sloughs Wildlife Management Area for some outdoor Monarch tagging. The outdoor portion (2-3 hours) is weather dependent. Please dress for potentially marshy conditions. We will meet at the Audubon Museum for an introduction into these extraordinary insects and carpool to the Sloughs Wildlife Management Area to capture and tag them on their way to Mexico. Tags and nets will be provided. Contact Julie McDonald at (270) 826-2247 or by email at juliea.mcdonald@ky.gov, or visit the park website at <http://parks.ky.gov/findparks/recparks/au/> for more. Program Fee: \$5.00 per person, Family rate (up to five members, extra members \$2.50 each) - \$13.00; FOA Members - \$4.00 per person

September 17-20, 2009: Midwest Birding Symposium @ Lakeside, OH. This event is hosted by [Bird Watcher's Digest](#), [The Ohio Ornithological Society](#), and the [Lakeside Association](#). For more information see their website at <http://www.midwestbirding.org> or call (888) 896-6927.

September 18-19, 2009: Kentucky Association for Environmental Education (KAEE) Annual Meeting @ General Butler State Resort Park, 1608 Us Highway 227, Carrollton, KY 41008. The confluence of the Kentucky and Ohio Rivers provides opportunities to figuratively and literally explore this year's theme, Currents in Environmental Education. For more information, contact Jennifer Adler by phone at (859) 707-7421, or visit the KAEE website at <http://kentuckyassociationforenvironmentaleducation.org>.

September 25-27, 2009: Kentucky Ornithological Society's Fall Meeting @ Lake Barkley State Resort Park. For more information contact KOS at P.O. Box 463, Burlington, KY 41005 or via their website at <http://www.biology.eku.edu/kos/default.htm>.

October 16-18, 2009: Fall Color Weekend @ Pine Mountain Settlement School, 36 Highway 510, Pine Mountain, KY 40810. Fall Color Weekend at Pine Mountain Settlement School offers activities for people of all ages. Features include hikes, multi-media presentations, and the opportunity to enjoy some of Kentucky's most beautiful natural areas and stunning autumn foliage. Fee based. Contact the Pine Mountain Settlement School at 606-558-3571 or 606-558-3542 for details. You can also visit their website at <http://www.pinemountainsettlementschool.com/>.

October 18, 2009: 12th Annual Indiana Bluebird Society Meeting @ Quaker Haven Camp, 111 Ems D16c Lane, Syracuse, IN. There will be two featured speakers, Jerry Sweeten, Director of Environmental Studies at Manchester College and Dena Purcell with Wild Birds Unlimited in Fort Wayne, Indiana. Jerry will be speaking about birds native to Indiana and demonstrating the use of mist-netting to show how birds are captured to study and band. Dena will be presenting a program on the basic needs of birds and how to make your garden and yard more enticing to birds. In addition, there will be a panel discussion and question & answer session concerning bluebirds with time to hear from district coordinators with news from their districts. For more information, see the IBS website at <http://indianabluebirdsociety.org/> or contact Ted Vesa by phone at 260-248-8636 or via email at tjvesa@embarqmail.com.

November 7, 2009: Fall Foliage Fiesta @ Audubon Museum, John James Audubon State Park, 3100 US 41 North, Henderson, KY 42420 (1:00 p.m. – 2:00 p.m.). How does nature transition from sunny, warm summer days to crisp and wintry conditions? During this PowerPoint presentation, visitors will peek inside nature's bag of seasonal tricks that allow for life to exist in seemingly unbearable conditions. Afterwards, take a walk outside and soak in the colors and

sounds of Audubon State Park's most colorful season. Contact Julie McDonald at (270) 826-2247 or by email at juliea.mcdonald@ky.gov, or visit the park website at <http://parks.ky.gov/findparks/recparks/au/> for more.

Fall 2009 TBA: Kentucky Society of Natural History 2009 Fall Meeting @ Reelfoot Lake.

Fall 2009: The Society of Kentucky Lepidopterists (SKL) 2009 Annual Meeting @ Entomology Department, University of Kentucky, Lexington, Kentucky. For details see the SKL website at <http://bioweb.wku.edu/faculty/Marcus/KYLeps.html>.

2010:

April 23-25, 2010: Kentucky Ornithological Society's Fall Meeting. Jenny Wiley State Resort Park. For more information contact the Kentucky Ornithological Society at P.O. Box 463, Burlington, KY 41005, or via their website at <http://www.biology.eku.edu/kos/default.htm>.

Spring 2010 TBA: Kentucky Society of Natural History 2010 Spring Meeting @ Shawnee State Park, Ohio.

Fall 2010: Kentucky Ornithological Society's Fall Meeting @ Paducah/Ballard Wildlife Management Area (dates to be announced). For more information contact KOS at P.O. Box 463, Burlington, KY 41005 or via their website at <http://www.biology.eku.edu/kos/default.htm>.

Fall 2010 TBA: Kentucky Society of Natural History 2010 Fall Meeting @ Shakertown National Historic Landmark

2011:

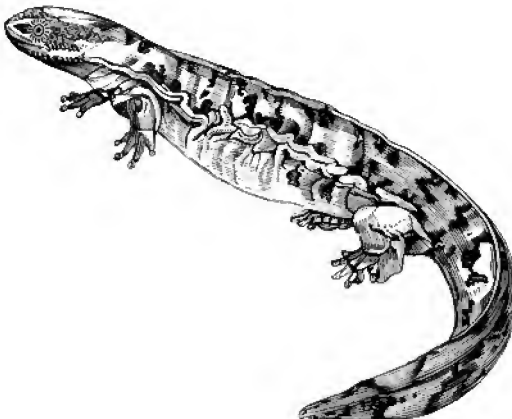
April 29-May 1, 2011: Kentucky Ornithological Society (KOS) Annual Spring Meeting @ Barren River State Resort Park. For more information contact KOS at P.O. Box 463, Burlington, KY 41005 or via their website at <http://www.biology.eku.edu/kos/default.htm>.

Spring 2010 TBA: Kentucky Society of Natural History 2011 Spring Meeting @ Shawn Carter Caves State Park

Fall 2010 TBA: Kentucky Society of Natural History 2011 Fall Meeting @ Cumberland Falls State Resort Park

BUY STUFF & SUPPORT KSNH!!!

Merchandise: KSNH has a number of items ranging from window clings, stickers, and apparel. Plan now for the people on your Christmas list! We have many t-shirts available. Due to the popularity of Dan Dourson's "Kentucky's Own" design, it is once again available in short and long sleeve versions. For those who like fall colors, we have shirts with leaves showing their autumn glory. These are priced reasonably at \$11 for the short sleeve version and \$13 for the long sleeve shirts. There are still a few of the popular ball caps (\$14) that have our logo embroidered on them and the sweatshirt jackets (\$27) that also have the embroidered logo and the fall leaf design. These items available for purchase at the regular Falls of the Ohio Chapter meetings and at our statewide conferences.



"Two feet long, black above and dusky beneath. It is of an eel-like form, lives in the muddy water of the rice swamps, and feeds on worms and insects."

— S. G. Goodrich describes *Cryptobranchus alleganiensis alleganiensis* (Daudin, 1803) (Eastern Hellbender) in *Animal Kingdom Illustrated*, Volume 2 (New York: Derby & Jackson, 1859).

KSNH SPRING CONFERENCE: PINE MOUNTAIN SETTLEMENT SCHOOL APRIL 24-26, 2009

Your Name: Last: _____ First: _____

Street Address: _____

City: _____ State: _____ Zip: _____

E-mail: _____ @ _____ Phone # _____

Names (In your group, please print): _____, _____
 _____, _____, _____

All inclusive package prices include Friday and Saturday nights lodging, 6 meals (Friday supper through Sunday noon dinner) and KSNH registration. Prices below are Per Person.

| | | # Attending | Total |
|--------------------------------------|---|-------------|-------|
| <u>Westwind</u> (25 Rooms) | \$116.00 - Adults | x _____ = | _____ |
| | \$ 85.00 - Children (13-18yrs.) | x _____ = | _____ |
| | \$ 75.00 - Children (5-12 yrs.) | x _____ = | _____ |
| | Children 4 and Under - Free | | |

| | | | |
|---|--|-----------|-------|
| <u>Hill House</u> (4 Rooms/Living Room) | \$122.00 - Adults | x _____ = | _____ |
| | \$ 85.00 - Children (13-18 yrs.) | x _____ = | _____ |
| | \$ 75.00 - Children (5-12 yrs.) | x _____ = | _____ |
| | Children 4 and Under - Free | | |

| | | | |
|---|-----------------------------|-----------|-------|
| <u>Laurel House</u> (6 Rooms) | \$122.00 - Adults | x _____ = | _____ |
|---|-----------------------------|-----------|-------|

| | | | |
|--|-----------------------------|-----------|-------|
| <u>Big Log</u> (4 Rooms/Living Room) | \$132.00 - Adults | x _____ = | _____ |
|--|-----------------------------|-----------|-------|

Total Due _____

None-I'll make my own elsewhere (please check the box)

Waiver of Liability for the Spring Conference (Must be executed by All Registrants)

EVENT: Pine Mountain Settlement School Conference

DATE: April 24 – 26, 2009

I understand that I am a participant in this field trip/event. I release the Kentucky Society of Natural History and/or its officers from all liability for accident, injury, illness, or loss of property for myself and/or my dependent(s) and agree to indemnify and save harmless the sponsors from accident, illness, or injury to others or loss of their property caused partly or wholly by me and/or my dependent(s) while engaged in any voluntary activity supported by the sponsors.

Please note: In Kentucky and most other states an individual may accept a particular risk of harm resulting from another party's conduct. An express release by which one party agrees to assume the risk of harm arising from another party's negligent conduct will be enforced by the courts so long as it does not release liability for willful or gross negligence and does not otherwise offend public policy.

By signing this release, you are not only agreeing that you will not sue the Kentucky Society of Natural History or its officers should one or more of its members or officers cause you harm; you are also protected from being held liable as long as your conduct is not grossly negligent or intentional.

Signatures: _____

Date: _____

Make Checks Payable to KSNH **no later than April 13, 2009** and send this form with payment to Cindy Payne, KSNH treasurer, 9109 Hawthorne Pointe Dr., Louisville, KY 40272-2576. **Payment is due at the time of registration.**

The mission of the Kentucky Society of Natural History is to actively promote study and interest in Kentucky's rich natural heritage throughout the Commonwealth. Members are typically interested in a broad spectrum of natural sciences and related fields. Among the more prominent activities of the society, are the annual Spring and Fall Conferences, selection of a "Naturalist of the Year", nature photography contests, and a variety of knowledgeable speakers and field trips. We invite anyone who shares our interests to join us. For membership information or the address of the nearest affiliated chapter, please contact:

KSNH, P.O. Box 72777, Louisville, KY 40272-0777, or visit our website <<http://www.ksnh.org>> for the membership form. Membership dues are: Individual \$15, Family \$25, Full Time Student \$5, Life: \$300.

The Kentucky Society of Natural History is an official 501(c) (3) tax-exempt nonprofit organization which was formed in 1939, and incorporated in 1943 in Louisville, Kentucky. All contributions to THE KENTUCKY SOCIETY OF NATURAL HISTORY are tax-deductible to the full extent of income tax laws.

Published Quarterly, The Kentucky Naturalist News is the official newsletter of KSNH. Unsolicited contributions are encouraged. Please send articles to: Barry Nichols, KNN Editor, P. O. Box 21182, Louisville, KY 40221. You can also email newsletter submissions by sending them to kyfauna@iglou.com.

Kentucky Naturalist News Deadlines:

| <u>Issue</u> | <u>Deadline</u> | <u>Newsletter to be Published</u> |
|--------------|-------------------|-----------------------------------|
| Spring Issue | February 15, 2009 | March 7, 2009 |
| Summer Issue | May 1, 2009 | June 1, 2009 |
| Fall Issue | August 1, 2009 | September 1, 2009 |
| Winter Issue | November 1, 2009 | December 1, 2009 |

For submissions, please cite references. To assist, you may use: <http://www.lib.ncsu.edu/lobo2/citationbuilder/citationbuilder.php>.



**Kentucky Society of Natural History,
PO Box 72777,
Louisville, Kentucky 40272-0777.**