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**Arches of the Cumberland Chapter** (Slade) meets informally, call President Dell Sasser for details, 606-666-7521 x73559, or (606) 233-8938, or via email ([dell.sasser@kctcs.edu](mailto:dell.sasser@kctcs.edu))

**Falls of the Ohio Chapter** (Louisville) meets every 3<sup>rd</sup> 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, or via email ([mabteacher1@yahoo.com](mailto:mabteacher1@yahoo.com)).

**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 in the Ray Harm Room, 1050 State Park Road Pineville, KY 40977-0610 (800-325-1712). Call President Tom Toole at (606) 248-3078, or via email ([tom.tdoole@gmail.com](mailto:tom.tdoole@gmail.com)).



*Diospyros virginiana* (common persimmon) - Barry Nichols, 2006

## EDITOR'S NOTES

Greetings all! As you gear up for the fall meeting at Reelfoot Lake, I hope you're anticipating fall as much as do I. This issue contains the fall 2009 agenda as well as the registration form. We'll be back to the normal schedule with the winter 2009 issue (KSNH-KNN-2009-4). The deadline for submissions for the next issue is November 1, 2009. That deadline isn't terribly far away!

Folks have really outdone themselves with fantastic articles, KSNH activity reports, photos, and a great agenda for the upcoming meeting. By the way, don't forget we'll be holding elections at the Reelfoot Lake meeting. We can always use energetic folks such as yourselves.

As always, please mail any articles, news, topical requests, photos, etc to [kyfauna@iglou.com](mailto:kyfauna@iglou.com) or by postal mail via the KSNH address on the back cover. Also, please include contact information. I'll see **you** at Reelfoot!

--Barry

## THE NEW MADRID SEISMIC ZONE

by Berl Meyer



Our next Fall Conference will be held at [Reelfoot Lake](#) mostly in northwestern Tennessee (but a little bit extends up into Kentucky). I thought that I would give some geology of the area that might influence you to join me on a [fault](#) finding expedition on Friday October 9th.

In spite of his rude awakening, [Mathias Speed](#) was one of the [luckiest travelers](#) tied up along the [Mississippi River](#) on the fateful night of Feb. 7, 1812. After coming to his senses, he cut his boat loose from the collapsing riverbank and moved out into the middle of the channel to avoid being crushed by falling trees. In the darkness, he rode out the great swells that threatened to sink his craft ([Feldman 2005](#)).

An untold number of other boatmen perished that night, but Speed and his companion found themselves still alive as the morning sun illuminated the devastation around them. Just after daybreak, the two men finally landed at the town of [New Madrid, Missouri](#), where “there was scarcely a house left entire” in the former [settlement](#) of 2,000 people.

The [earthquake](#) that nearly killed Speed capped a [tremulous 8-week period](#) in the history of the early United States. Starting on [December 16, 1811](#), the region around [New Madrid](#) suffered three great jolts, more than a dozen large [aftershocks](#), and thousands of small, but unnerving, tremors that kept the ground shaking like Jell-O.

The [New Madrid](#) quakes ranked as the largest series of shocks in North America’s recorded history. They [rattled people](#) as far away as New York City, nearly 1,500 kilometers to the northeast. Yet because the [earthquakes](#) originated in a sparsely inhabited region well before the time of modern [seismometers](#), they inhabit a netherworld between myth and fact. According to some tales, the [quakes](#) created waterfalls in the Mississippi and caused the great river to [run backward](#) for 3 days.

Although no [instruments](#) recorded the [New Madrid](#) quakes, [seismologists](#) can [estimate their size](#) by mapping the extent of damage and the area over which people could feel the vibrations. Such calculations set the [three principal shocks](#), on [December 16, 1811](#), January 23, 1812, and [February 7, 1812](#) at about [magnitude](#) 8.0, qualifying them as [great quakes](#). Ten of the aftershocks equaled or exceeded magnitude 6.0, with three reaching magnitude 7.0 major shakes in their own right. The greatest occurred Feb 7,

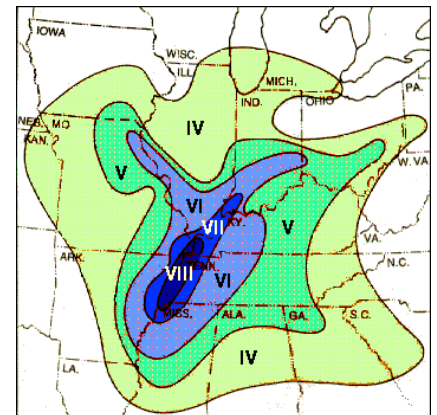
1812 and was estimated to be 8.8 (I plan to visit this epicenter on our tour). Now that will definitely knock your socks off.

Placing these jolts on a map has proved more difficult. Ever since the early part of this century, when geologists first started studying the [New Madrid quakes](#), they have [struggled to identify the guilty faults](#). Unlike the western United States, where many faults reach up to the surface, the eastern states hide most [quake-generating](#) structures beneath thick [blankets of sediment](#).

[Networks of seismometers](#) set up in the [Missouri bootheel](#) and surrounding areas beginning in 1974 provided the first clues about the [invisible faults](#) in the region. Thousands of [microearthquakes](#) detected in the crust revealed a zigzag fault pattern roughly paralleling the course of the [Mississippi River](#) at the junction of Kentucky, Missouri, Tennessee, and Arkansas.

Only one of these faults is known to continue up to the surface, where it creates a steep slope, or [scarp](#) (the [Chickasaw Bluff](#)), alongside Tennessee’s [Reelfoot Lake](#). But at just 11 kilometers in length, the Reelfoot fault was always considered too puny to shoulder the blame for any of the major [New Madrid](#) earthquakes, says [Arch Johnston](#) of the [University of Memphis Center for Earthquake Research and Information \(CERI\)](#) (1996).

His Memphis colleague [Roy Van Arsdale](#) found evidence that the [Reelfoot fault](#) actually continues for at least three times its previously mapped length. While working in a region where the [Mississippi River](#) makes a loop called the [Kentucky Bend](#), Van Arsdale found a [surface scarp](#) and subsurface warping that line up with the Reelfoot fault across the river. If the two scarps represent pieces of the same structure, the fault must stretch 32 km and possibly longer.



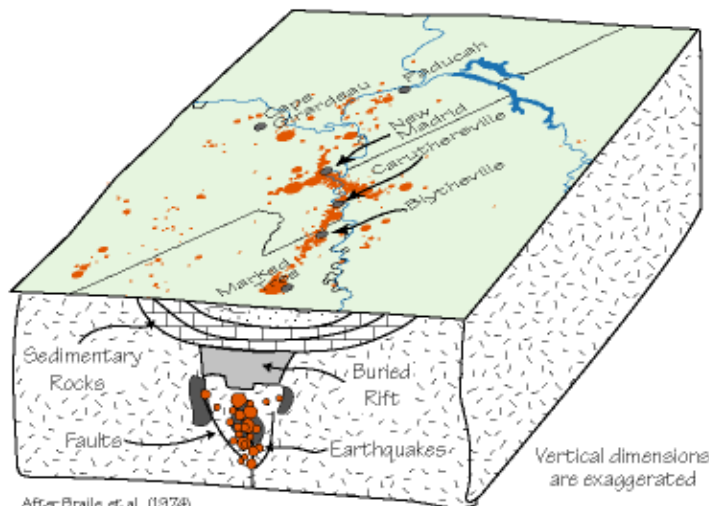
Based on maps in W. Atkinson, 1989, *The Next New Madrid Earthquake*,

The sinuous [Kentucky Bend](#) crosses the Reelfoot fault at least two and probably three times. So when the fault [sprang to life](#), it created different kinds of disruptions at several points along the river.

During the third great quake, on [February 7, 1812](#) land to the southwest of the fault rose several meters relative to the land to the northeast. In one place where the river crossed the fault, the sudden vertical shift created an instant waterfall. At the two other crossings, the shift created barriers, causing the water to pool.

In some places, the [river flowed backward](#) (We will visit where this event occurred) and surged over its banks, with a great wave heading upstream. Although modern legends about the [quakes](#) say the river ran backward for days, contemporary accounts suggest the reverse flow continued for only a few hours. By daylight, the [Mississippi River](#) had worn through its barriers and reclaimed its former course.

Because the Feb. 7, 1812 quake reshaped the river so dramatically, [Johnston](#) and [Schweig](#) (1996) had little trouble linking that event with the Reelfoot fault. The matching game gets harder with the first and second great quakes, however, because they involved an unknown combination of perhaps six other faults.



After Brails, et al., (1974),  
U. S. Geological Survey  
Open File Report 84-770.

The [general progression of the earthquake sequence](#) is coming together, however, enabling scientists to distinguish actual events from apocryphal ones. That's important, says Johnston, because New Madrid's eight wild weeks are unique in recorded history. Great earthquakes typically strike along coastlines or within growing mountain belts, where two of Earth's surface plates collide. But the flat heartlands of continents tend to remain geologically quiet.

"This was the [greatest sequence of earthquakes](#) in a continental interior in the world, and so we want to understand it," says Johnston.

Only by [probing the past](#) can geoscientists hope to [forecast](#) when a New Madrid quake [will strike again](#).

A tremor in the [Louisville](#) area was felt in the early morning hours of [April 18, 2008](#), and was directly related to the [New Madrid Fault Seismic Zone](#). There are fissures that snake up from the water line of the Wabash

River, looking to the untutored eye like gaps where erosion accelerated. But they tell a story of ancient cataclysmic events that rumbled into what is now Kentucky with a force not seen here in recorded history. The discovery of these cracks by a [U.S. Geological Survey](#) scientist in the mid-1980s changed ideas about a [fault system](#) that can resonate all the way to [Louisville](#) (and farther) as evidenced by the [April 18, 2008](#) jostle from a 5.2 magnitude quake and more than 150 aftershocks. The [Wabash Valley Seismic Zone](#), a loosely defined region of quake activity in southern Indiana and Illinois, could be [Louisville's](#) biggest earthquake threat, erupting every decade or two with magnitude 5 quakes, and capable of tremors 1,000 times more energetic, like the ones that produced these cracks in the riverbank.

The riverbank cracks that reveal the [Wabash Valley](#) to be a major [quake](#) zone are born of movement deep in the earth: Picture giant slabs of rock miles below us, butting against each other like bulls battling for dominance until, finally, one begins to give way. Its mass grinds against its counterpart, sliding along its stony flanks for inches and then feet in a rumbling heave. The movement triggers turbulent shifting of the stone above. Miles of rock slide and shuffle to accommodate this changing basement. Nearer the surface, growing pressure forces water-saturated sand into a roiling slurry that squirts through every crack and crevice. Some of this [liquefied sand](#) discovers paths through the clay above and shoots through the earth. Across the landscape [sand geysers](#) jet skyward, sometimes 20-30 feet.

In addition, seismic waves amplify in some soils, and parts of [Louisville](#), where water-saturated sand, silt, or gravel make for an unstable foundation, are vulnerable, especially along the Ohio River and, to a lesser degree, in the [1937 floodplain](#) west of Interstate 65.

But [mid-continent earthquakes](#) big enough to shake buildings are rare. Since 1900, the U.S. Geological Survey has recorded five [quakes](#) of magnitude 4 or 5 from the vicinity of [Wabash Valley](#). Compare that to the West Coast, with some 20 [quakes](#) of

magnitude 6 or greater since 2000. The reason for this disparity is simple: The West Coast is the leading edge of one [tectonic plate](#) ramming into another.

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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.S. Constitution CVA/CV 64 website](#). Berl was stationed on this Naval Aircraft Carrier during the Vietnam War as an Aerographer (weather guesser).*

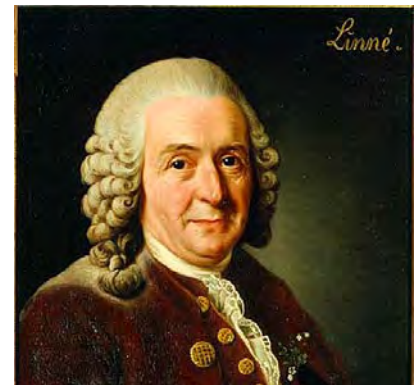
## MONOTROPA UNIFLORA L., 1753 (INDIAN PIPE)

by Chris Bidwell

Although often mistaken for a [fungus](#) because it is white, has a waxy feeling, has no [chlorophyll](#), and grows in dark/damp woods, *Monotropa uniflora* L., 1753 ([Indian pipe](#)) is really a flowering plant. It is a non-green, [herbaceous perennial](#) in the [Monotropaceae](#) family of plants. Some texts treat it in the [Ericaceae](#) (Heath) family. *Monotropa hypopithys* L., 1753 ([pine sap](#)) and *Monotropis odorata* Schwein. ex Ell., 1817 ([sweet pinesap](#) or [pygmypipes](#)) are the only other representatives in this family in Kentucky. Indian pipe grows in shady, rich, dry to mesic woods usually arising out of decayed wood and leaves across Kentucky from June into August. It has a wider range of distribution than most any modern plant, indicating that it evolved during the [Jurassic Period](#) before the [supercontinent \(Laurasia\) separated](#). [Indian pipe](#) is found in South America, Japan, China, India, and southern Asia and therefore qualifies as a transcontinental plant.

The plant, whitish in color, with an occasional pink tinge and/or black specks stands 3-10 inches tall. Small [sessile](#), linear, fleshy scales/leaves dot the stem. The single five-petaled [flower](#) is hermaphroditic (having both male and female organs). The 1-inch long flower nods at first and becomes upright with maturity to better disperse its seeds. The seed capsule/pod that forms is 5-celled and 5-valved and splits open in late summer to release hundreds of miniscule seeds that are wind and insect dispersed. Small bumble bees, being the primary pollinator/disperser are attracted to the plant's nectar and pollen. Indian pipe's roots are a dark colored fibrous mass about as large as a chestnut bur. Depending on the plant's stage of development it possesses no odor, a sweet-earthy aroma, or a rank, pungent/rotting odor. The plant turns black with age and can remain standing into the next spring.

[Indian pipe](#) is known by [many common names](#): bird's nest plant, convulsion plant, [corpse plant](#), death plant, eye bright, fairy smoke, fit plant, [ghost of the forest](#), [ghost plant](#), ice plant, ova-ova, pipe plant, [wax flower](#), and white horse/knight. Based on the plant's color, medicinal usage, how its seeds are dispersed, its Indian names, how it reacts when handled (it tends to dissolve); its shape, texture, and structure give credence to these common names.



Carl von Linné a.k.a. Carolus Linnaeus as painted by Alexander Roslin in 1775 (from Wikipedia).

The generic epithet *Monotropa* comes from the Greek *monos*, “one”, and *tropos*, “direction”, in reference to the flowers which turn to only one side. The specific epithet, *uniflora*, is from Latin, “one flower”, and refers to the plant’s having only one flower per stem. [Carolus Linnaeus](#) gave Indian pipe its current [binomial name](#).

**[Cherokee Indians](#) give an interesting origin of Indian pipe:**

“Before selfishness crept into the world – that was a long time ago – the Cherokee people were happy and peaceable. They used the same hunting grounds and fishing grounds as their neighbors. They fished in the same streams and hunted in the same stands of forest. There were no arguments about boundaries and there were no arguments about fishing rights. But this was before Man became greedy. All this changed when Man learned to quarrel.



Monotropa uniflora L., 1753 (Indian pipe) - Susan Wilson

The first quarrel that arose was between the Cherokee and a neighboring tribe. It was a long and bitter quarrel, so bitter that the chiefs of the two tribes decided to meet in council to try and settle their trouble. And so they met, one day, and they smoked the peace pipe in solemn council, but they did not stop quarreling. A puff on the peace pipe and a bitter word was the way it went. Days passed and still the council sat and smoked and quarreled.

Now the Great Spirit was much displeased that the Indians should quarrel while smoking the pipe of peace. And the Great Spirit said, ‘I shall have to do something to you men that will show you that People should live together in peace, and that when Indians smoke the pipe, it must be done in peace.’

The Great Spirit looked down at the old Men sitting in all that smoke. And he saw how gray they looked and how their heads hung down in weariness because it had been many nights since they had slept. And so he turned the old Men who smoked there in the council into small silvery gray flowers, their heads bent over and their petals hoary.

If you should find one in the woods and turn it so that the head is down and the stem up, you will see that it looks like an Indian pipe, and so it is called to this day. But in the woods where they are often seen clustered together, they appear to be little gray people sitting in long council.

Now after the Great Spirit had changed the quarreling Indians into flowers and set them out in the forest, he noticed that the smoke from their pipes still hung heavy in the air above the place where the council had been. So he gathered up the smoke and draped it over the mountains as a reminder. And he left it there until such time as all Men shall learn to live peace together.”

[Indian pipe](#) is referred to by some authorities as a [saprophyte](#) (feeding off decayed matter). It is now known that Indian pipe is one of some 3000 non-photosynthetic plants. It is heterotrophic. A [saprophyte](#) must be able to directly absorb nutrients from the decaying matter and Indian pipe cannot do so. Indian pipe absorbs nutrients, water, and minerals from the [mycorrhizal](#) fungi that are attached to roots of beech, oak, and pine trees. This obligate fungus/plant relationship is [termed](#) as a [mycorrhizal](#), [epiparasitic](#), [mycoheterotrophic](#), [mycotrophic](#), or [mycoparasitic](#) relationship. The fungus takes nutrients from the tree roots and the Indian pipe, in turn, takes its nutrients from the fungus. As both the fungus and Indian pipe may contribute phosphorus back to the tree, it is not considered a pure [parasitic relationship](#). The [fungi](#) that form this plant/fungal symbiosis are primarily in the [Russula](#) and [Lactarius](#) species of mushrooms. Because of Indian pipe’s [mycorrhizal host dependence](#), it is difficult to propagate or transplant.

[Indian pipe](#) had or has many usages. The poet [Emily Dickinson](#) called Indian pipe “[the preferred flower of life](#)”. The whole plant can be cooked and supposedly tastes like asparagus. It is tasteless if eaten raw. Medicinal usages are: antibacterial, antispasmodic, fever reducer, hypnotic, sedative, for toothaches, eye sores, and warts. Root infusions were used as an antispasmodic, hypnotic, and/or sedative. It was also used to treat seizures (“fits”), fainting spells, and various “nervous” conditions. Native Americans used Indian pipe for eye problems - the stem was crushed and the clear sap was applied to the eye. The clear sap/stem juice also was used to treat convulsions and muscle spasms. It has been suggested that Indian pipe may have been used as an opium-like substitute. The entire crushed plant was rubbed on warts and bunions. Fever and colds were treated with an infusion of the delicate leaves. A poultice was used on difficult to heal sores. Chewed flowers were used to treat toothaches. The clear, watery sap/stem juice is said to be bactericidal. Lastly, mixed with fennel, Indian pipe was used as a douche! As always never use a plant for culinary or medicinal usage unless absolutely sure it is safe. Besides, a native plant as pretty and distinguished as Indian pipe should be admired and not disturbed.

This summer while hiking, look for our [Indian pipe](#) in the shadows of our forests. The “Ghost of the Forest” (my favorite name for [Indian pipe](#)) is always a treat to see and to photograph. Have a great summer!

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

## NOTES FROM THE HORNER WILDLIFE SANCTUARY ODONATE TRIP

by Paul Florence

On Saturday June 6th 2009, twelve people participated in the KSNH Odonate Field Trip to [Horner Wildlife Sanctuary](#) in Oldham County, Kentucky to observe and collect [dragonflies and damselflies](#). Those in attendance were Ethel Wilkerson, Hannah Helm, Kay Harker, Deb White, Margarette Perkins, Chris Knopf, Kathy Dennis, Dorothy Danak, Barry Nichols, Anissa Florence, Paul Florence, and Emma Wilson. The weather cooperated nicely, it was sunny and in the low to mid 80's.



Paul Florence addresses the attendees of the odonate field trip - Barry Nichols, 2009



Some of the group catches dragonflies and damselflies at the lowland pond at the Horner Wildlife Sanctuary in Oldham County, KY - Barry Nichols, 2009

There were three habitats at Horner that were searched for odonates (dragonflies and damselflies). The first was a small, shallow pond that is heavily guarded by plants. The surface of the pond is mostly covered by water lilies and there is a lot of plant growth within the pond itself. At this pond we observed a few damselfly adults. These were members of the pond



*Pachydiplax longipennis* (Burmeister, 1839) (blue dasher) male - Chris Knopf, 2009



*Pachydiplax longipennis* (Burmeister, 1839) (blue dasher) female - Chris Knopf, 2009

damselfly family, [Coenagrionidae](#). It would have required collection and lab identification on my part to get a complete identification on these damsels. We also collected and identified female and male [Pachydiplax longipennis](#) (Burmeister, 1839) (blue dasher) dragonflies at this pond. The first female that was netted began laying eggs in my hand. Also at the small pond we dredged up a few dragonfly naiads (larvae) and damselfly naiads. Of special, non-odonate interest, we also dredged up a large aquatic beetle ([Dytiscidae](#)) larva. This beetle larva was about 3 inches long with very large, strong mandibles as a couple of us found out quickly!

On the way to a trail we needed to use to get to the next habitat, someone caught a male [Libellula lydia](#) Drury, 1773 ([common whitetail](#)). This species shows sexual dimorphism, males and females have unique color patterns and wing markings. The males, including the one we caught, have a white abdomen while the females do not.



*Tramea lacerata* Hagen, 1861 (black saddlebags) - Chris Knopf, 2009

The second habitat we studied was a large lowland pond. This pond is much more open, consequently there were many more adult dragonflies flying around. In addition to seeing more common whitetails we caught and/or observed [Libellula pulchella](#) Drury, 1773 ([twelve spotted skimmers](#)), [Libellula luctuosa](#) Burmeister, 1839 ([widow skimmers](#)), [Tramea lacerata](#) Hagen, 1861 ([black saddlebags](#)), [Anax junius](#) (Drury, 1773) ([common green darners](#)), and another pond damselfly ([Coenagrionidae](#)). A few of us saw a pair of black saddlebags flying in a mating tandem.

While poking around a field in between this pond and our next habitat, a branch of Harrods Creek, Barry found an [Hetaerina americana](#) (Fabricius, 1798) ([American rubyspot](#)) damselfly. At the stream we saw [Calopteryx maculata](#) (Beauvois, 1805) ([ebony jewelwing](#)) damselflies and a few pond damsels flying around but did not see any dragonflies. Also at the stream, Barry caught a small [Nerodia sipedon](#) (Linnaeus, 1758) ([northern water snake](#)) and Kathy Dennis caught a real nice [Elaphe obsoleta](#) (Say in James, 1823) ([black rat snake](#)) that was 6.5 feet long.

Overall the trip was a great time. It was a little early in the year to see lots of adult odonates, but it was fun trying to catch and observe the ones that were flying.

**Paul Florence** is an Associate Professor of Biology at [Jefferson Community & Technical College](#). He worked on habitat preferences of dragonflies at [Bernheim Forest](#) for his MS thesis research at the [University of Louisville Biology Department](#) and is the current Invertebrate Coordinator for KSNH.



The crew was visited by a 6.5 foot *Elaphe obsoleta* (black rat snake) - Barry Nichols, 2009

**FALLS OF THE OHIO CHAPTER NEWS by Chris Bidwell - Falls of the Ohio Chapter President**

**Falls of the Ohio Chapter Events** (see front cover for regular meeting times and place, field trip times may be found below or are to be determined. Contact Chris Bidwell for more information.)

2009 Dates	Event/Speaker	Topic / Outing	Photo Contest Topic
September 17	Meeting: <a href="#">Dr. Mark Wourms</a>	Tentative Topic: <a href="#">Bernheim Forest</a>	Moths & Butterflies
September 19	Field Trip: TBD	TBD	
October 15	Meeting: <a href="#">Dr. Art Parola</a>	Stream Restoration	Halloween's Patterns & Colors in Nature
October 17	Field Trip: Carl Suk	<a href="#">Jefferson County Memorial Forest</a> & Non-Native Invasive Plants	
November 19	Meeting: TBD	TBD	A Fall Leaf (single leaf)
November 21	Field Trip: TBD	<a href="#">Muscatatuck National Wildlife Refuge</a>	
December 17	Annual Dinner:	TBD	none

FALL 2009 NEWSLETTER PHOTO CONTEST:  
THE TOPIC IS "FALL COLOR"



Pine Mountain Settlement School -  
Chris Bidwell



Red River Gorge - David Becker, 2006



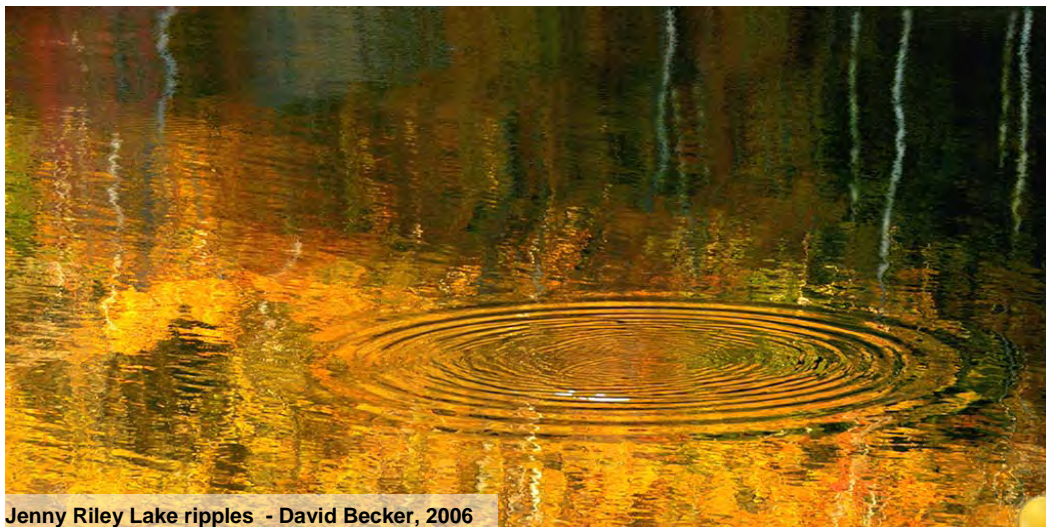
Leaves on aster - David Becker, 2006



The Fall 2009 Newsletter Photo Contest had 10 judges.

Newsletter Photo Contest Topic for Winter 2009

Kentucky Winter Bird Residents,



Jenny Riley Lake ripples - David Becker, 2006



...Newsletter Photo Contest, continued from page 79...

KENTUCKY SOCIETY OF NATURAL HISTORY ANNUAL FALL CONFERENCE  
REELFOOT LAKE, TIPTONVILLE, TENNESSEE  
OCTOBER 8 - 11, 2009

- Reelfoot Lake is located within the Central Time Zone
- All drive times are estimated and for one way, starting from [Cypress Point Resort](#)

**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, sections of rough and/or no trail.

\*\*\* **Be careful** on all of the field trips and watch your step. **Watch out** for venomous snakes and poison ivy, and soft muddy surfaces in and around wetlands. **Be safe** and have a great fall Conference.

**Thursday, October 8, 2009**

**5:00 Dinner** – Lakeview Dining Room (across the street from Cypress Point Resort)

**7:30 Evening Presentation** – “Introduction to the New Madrid Seismic Area” – Berl Meyer

**Friday, October 9, 2009**

**9:00 – 4:30 Earthquake Alley Motorcade** – Participants on this trip will carpool for 89 miles through the Mississippi River basin with stops at various sites of interest, including Earthquake landforms, [New Madrid Historical Museum](#), and [Big Oak Tree State Park](#). The [New Madrid Historical Museum](#) reflects the history of this river town from the Mississippian period up through the early 20th century, including the great earthquakes of 1811 and 1812. After lunch participants will stop at [Big Oak Tree State Park](#) which is an island of trees within the expansive farmland of southeastern Missouri. Trees within the park are unsurpassed in the state for size, with five qualifying as state champions of their species and two registered as national champions. A boardwalk traverses through the park, providing access to the park's unique landscape. An interpretive center near the boardwalk provides educational displays explaining the natural history of the park. With more than 150 species of birds, several considered rare in the state, the park is a favorite with bird watchers.

**Drive Time – 90 minutes (carpooling) Rating – easy Trip Leader – Berl Meyer**

**5:00 Dinner** – Lakeview Dining Room (across the street from Cypress Point Resort)

**6:00 – 7:30 Sunset Pontoon Boat Trip on Reelfoot Lake** (An additional cost of \$6.00/person is required for boat rental) – Experience beautiful Reelfoot Lake during sunset (approx. 6:30 p.m. CT) while relaxing on guided pontoon boat trips. According to Tennessee State Park’s Regional Naturalist, this trip provides a great opportunity to see some of the lake’s diverse bird fauna and shoreline vegetation.

**Drive Time – < 15 minutes**

**Rating – easy**

**Trip Leader – David Haggard**

**8:00 Evening Program Starts: Cypress Point Conference Room**

**Welcome and Introductions – Joe Settles**

**Children’s Program Topics – Jeff Foster**

**Photography Program Topic – Topic for fall meeting will be “Kentuckiana Lakes” – Chris Bidwell**

**Featured Presentation – “Reptiles and Amphibians of Western Kentucky” – John MacGregor, or James Kiser**

## **Saturday, October 10, 2009**

### **Morning Field Trips**

**9:00 – 12:00 New Madrid Loop Tour and Reelfoot Lake State Park’s R.C. Donaldson Memorial Museum –** Participants on this trip will drive the New Madrid Loop and visit Reelfoot Lake State Park’s Museum with KSNH’s Geology Coordinator. The museum features natural and cultural exhibits of the area, audio visual programs, and a cypress boardwalk. The park’s nature center houses various non-releasable raptors, some snakes, and other wildlife of the area. The New Madrid Loop will provide opportunities to see earthquake landforms, location where the Mississippi River ran backwards, sites of temporary waterfalls, Tiptonville Horst, Island #10 Civil War battle site, and Bessie’s Point.



Mississippi Green Water Snake  
(*Nerodia cyclopion*), Fulton Co., KY –  
J. Kiser

**Drive Time – 30 minutes**

**Rating – easy**

**Trip Leader – Berl Meyer**

**9:00 – 12:00 Reelfoot Lake National Wildlife Refuge Area – Reptiles, Amphibians, Plants, and Other Organisms at Long Point –** Visit one of Kentucky’s unique natural wetlands and search for rare snakes and plants. Cover boards and other reptile and amphibian traps will be checked at the site in attempt to locate the rare [western ribbon snake](#) (*Thamnophis proximus proximus*), [Mississippi green water snake](#) (*Nerodia cyclopion*), and [broad-banded water snake](#) (*Nerodia fasciata confluens*). Participants will need to be prepared to wade through shallow water while looking for wetland plants, including the rare [supple-jack](#) (*Berchemia scandens*) and [American frog’s-bit](#) (*Limnobium spongia*).

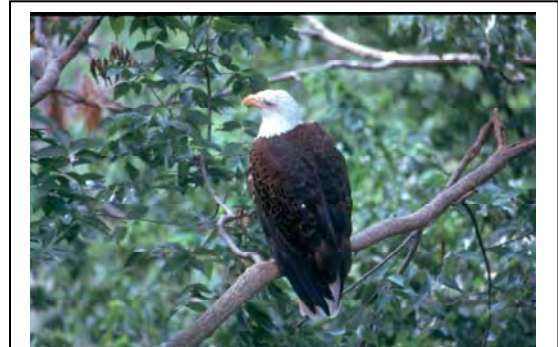
Highlights may include a diverse fall wetland wildflower assemblage, snakes, turtles, and wetland birds.

**Drive Time – 30 minutes**

**Rating – moderate**

**Trip Leader – James Kiser**

**9:00 – 12:00 Reelfoot Lake State Park’s Keystone Trail** – Participants on this trip will traverse a level trail along the shoreline of Reelfoot Lake while learning about the lake and associated wetlands. This trail provides a great opportunity to view some of the fall blooming plants and birds that inhabit the aquatic environments. Highlights may include [osprey](#) (*Pandion haliaetus*), [bald eagle](#) (*Haliaeetus leucocephalus*), various waterfowl, and shore birds.



Bald Eagle (*Haliaeetus leucocephalus*), Hamilton Co., OH – J. Kiser

**Drive Time – <15 minutes**

**Rating – moderate**

**Trip Leader – David Haggard**

**12:00 – 1:00 Lunch**

### Afternoon Field Trips

**1:00 – 4:30 Reelfoot Lake State Park’s Black Bayou Trail** -This trail extends through some of the region’s nicest cypress forest. Participants on this trip will learn about the birds, reptiles and plants that call these wetlands their home. Highlights will include a diverse fall flora and bird community.

**Drive Time < 15 minutes**

**Rating – moderate**

**Trip Leader – David Haggard**

**1:00 – 4:30 Reelfoot Lake National Wildlife Refuge Area – Walnut Log Botanical Excursion** – This trip will focus on the fall blooming wetland plants of the forest and openings in the [Walnut Log](#) portion of the refuge. Participants may want to be prepared to get their feet wet. Much of this trip will be along the old road bed and ditches but some off road/trail hiking may be required to observe various plants.

**Drive Time – <15 minutes**

**Rating – easy/moderate**

**Trip Leader – Chris Bidwell**

**1:00 – 4:30 Fish Pond [Herping](#) Trip & Indian Mound** – This excursion will focus on the reptiles and amphibians that occur in small isolated natural wetlands along the Mississippi River. Participants will need to be prepared to get their feet wet because this site has no trails and much of the searching will occur along the edges of water. Discarded metal and other unnatural cover will be flipped while searching for reptiles and amphibians. Participants will be able to view a large Indian mound located on a farm adjacent to Fish Pond. Highlights may include the [western mud snake](#) (*Farancia abacura reinwardtii*), [broad-banded water snake](#) (*Nerodia fasciata confluens*), and various other snake, turtle, frog, and salamander species.

**Drive Time – 30 minutes**

**Rating – easy/moderate**

**Trip Leader – Joe Settles**

**5:00 Dinner**– Lakeview Dining Room (across the street from Cypress Point Resort)

**6:30 Evening Program:**

**Welcome and Introductions** – Joe Settles

**Review of Saturday Field Trips** – Moderator – James Kiser

**Children’s Program Awards** – Jeff Foster

**Student Presentation - “Assessment of Carabid Beetles in Various Seed Mixture Plantings Along a Disturbance Corridor in Lawrence County, Kentucky”** - Michelle Staley

**Featured Presentation – “Rare and Uncommon Invertebrates of Western Kentucky”**  
– Ellis Laudermilk

**Naturalist of the Year Presentation** – Joe Settles & Wally Roberts

**Preview of 2010 Spring Conference at Shawnee State Park in Southern Ohio** – Jeff Foster

**Photography Competition & Awards** – Chris Bidwell

**Business Meeting & General Topics** – Open to All

**Door Prizes** – Cherry Baker

## **Sunday, October 11, 2009**

**7:00 Board Meeting** – All board members are encouraged to attend

**9:00 – 12:00 Black Bayou Refuge Birding/Herping** – Participants will join past Naturalist of the Year on a trip to a large wetland complex in search of birds, reptiles, and amphibians. This area contains a variety of wetland environments, a board walk, and mud-flats allowing excellent views of a variety of wetland dependent birds. Participants will see a variety of birds, reptiles, and amphibians.

**Drive Time – 15 minutes**

**Rating – moderate**

**Trip Leader – Scott Shupe**

**9:00 – 12:00 Reelfoot Lake National Wildlife Refuge Area** – Reptiles, Amphibians, Plants, and Other Organisms at Long Point – Visit one of Kentucky’s unique natural wetlands and search for rare snakes and plants. Cover boards and other reptile and amphibian traps will be checked at the site in attempt to locate the rare [Western ribbon snake](#) (*Thamnophis proximus proximus*), [Mississippi green](#)



Western Mud Snake (*Farancia abacura reinwardtii*), Fulton Co., KY – J. Kiser



Broad-banded Water Snake (*Nerodia fasciata confluens*), Fulton Co., KY – J. Kiser

[water snake](#) (*Nerodia cyclopion*), and [broad-banded water snake](#) (*Nerodia fasciata confluens*). Participants will need to be prepared to wade through shallow water while looking for wetland plants, including the rare [supple-jack](#) (*Berchemia scandens*) and [American frog's-bit](#) (*Limnobium spongia*). Highlights may include a diverse fall wetland wildflower assemblage, snakes, turtles, and wetland birds.

Drive Time – 30 minutes

Rating – moderate

Trip Leader – James Kiser

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

Chris Bidwell	<a href="#">Kentucky Society of Natural History</a>
David Haggard	<a href="#">Tennessee State Parks</a>
James Kiser	<a href="#">Stantec Consulting Services</a>
Ellis Laudermilk	<a href="#">Kentucky State Nature Preserves Commission</a>
John MacGregor	<a href="#">Kentucky Department of Fish and Wildlife Resources</a>
Berl Meyer	<a href="#">Kentucky Society of Natural History</a>
Joe Settles	<a href="#">East Kentucky Power Cooperative</a>
Scott Shupe	<a href="#">Consulting Environmental Educator/Author</a>
Michelle Staley	<a href="#">Morehead State University</a>

Thanks for attending Kentucky Society of Natural History's Fall Conference and mark your calendars for the Spring Conference at Shawnee State Park, Southern Ohio on April 23 - 25, 2010.

## NOTES FROM THE NATURE NUT

### **"Special Moments in Time: Memories of Thomas Divide & Kanati Fork Trails (October Photography and June Boars and Bears)**

by W. H. (Wally) Roberts

Unless you are a nature photographer, you probably have never heard of it...more or less know its location. [Thomas Divide](#) is located in the Great Smoky Mountains National Park about three miles south of Newfound Gap off US 441 on the right.

Thomas Divide is widely renowned for its brilliant fall color which intensifies just before sunset in mid October. It is not uncommon to be caught in a "photography jam" if driving US 441 at this time. As many as 50 photographers often frequent this spot near a guardrail, with no paved parking, causing a dangerous traffic situation. Because of these "photography jams", the park service has begun a no-trim policy at this site blocking much of the previous view-shed.

Thomas Divide offers much more than fall color. It is also a great one-way hiking trail when combined with the [Kanati Fork Trail](#). Two vehicles are required...one being left near [Smokemont](#) on US 441 and one being used to drive to the top of the mountain making this a downhill hike of about 6 miles. [The Thomas Divide](#) section of this hike is known for its high elevation plants, trees, and wildlife while the [Kanati Fork](#) section of the trail is known for its wildflowers.

A few years before I met Karen, Berl Meyer, Larry Houston, and I were camping at [Smokemont Campground](#). We had asked Berl to also bring along his vehicle for the sole purpose of taking downhill hikes.

The night before our hike, it had rained steadily and the next morning, as we reached the trailhead, white puffy clouds were just rising above the ridge tops and it seemed as if you could reach out and touch them. The wind was out of the north -brisk but not too cool, and with much lower humidity.

We gathered our gear and headed down the trail amidst [yellow birch](#) and [hemlock](#) trees that were still dripping from the previous night's rain. Less than one hundred yards down the trail, we noticed our first [wild boar](#) tracks among the downed logs of ancient [chestnut trees](#). Shortly afterwards, we began to hear snorting and smelling the scents of hog-like stench. As we rounded a curve in the trail, there they were not more than a few yards in front of us. As soon as the boars noticed our intrusion, they were gone into the green of the Smokies, as if they were never there, leaving only footprints, smells, and rustling brush.

As we hiked along the upper portion of the trail, there were several opportunities to stop and enjoy views on both sides toward Smokemont and [Bryson City](#). At 1.8 miles, we reached the [Kaneti Fork Trail](#) and descended 2.9 miles through a steep valley filled with wildflowers and many large specimens of various native trees.

The closer we got to US 441, the highway sounds increased in volume until, suddenly, we stepped from the forest into a grassy opening near the parking space where Berl had left his Bronco II. We decided to forego our trail lunch until we reached my vehicle at the top of the mountain.

Upon arrival at the top, I grabbed my gear and headed to my vehicle where we planned to eat our lunch at a nearby picnic table. I removed my lunch from the backpack, leaned back against my vehicle's hood, and opened my water bottle. Berl and Larry were sorting their lunches several yards away. As I took a long drink, I spotted some [umbrella leaf](#) and [cow parsnip](#) growing about five yards away.

It was then that I heard rustling noises and swaying of plants. I knew it was an animal but never suspected what I saw next. First out of the bushes emerged a [wild boar piglet](#) not weighing twenty pounds. Within seconds, out jumped a mature [black bear](#) weighing about 250 pounds. Neither the predator nor hog prey noticed me and it occurred quickly and ghostly. The piglet was focused on survival and the bear on his next meal. Both were gone in an instant and neither Larry nor Berl noticed anything out of the ordinary.

This unique moment in time is burned into my memory as though it happened yesterday, not thirty years ago. Time passes and things change, but special memories are like blessings that we carry with us forever. Hope to see you at Reelfoot Lake in October. Until then, continue to enjoy the many beauties of nature.

## BIRDING REPORT FROM THE KSNH 2009 SPRING MEETING AT PINE MOUNTAIN SETTLEMENT SCHOOL

by Pat Meyer

An enthusiastic group of about 30 members, from novice to experienced, met field trip leader, Ben Begley, early in the morning on April 24 to bird about the Pine Mountain Settlement School campus. The following bird list also includes birds that were reported from other field trips during the conference (Order: Family, Species).

### Ciconiiformes: Ardeidae

*Ardea herodias* L., 1758 (great blue heron)

*Sayornis phoebe* (Latham, 1790) (eastern phoebe)

### Columbiformes: Columbidae

*Zenaidura macroura* L., 1758 (mourning dove)

### Passeriformes: Vireonidae

*Vireo solitarius* (Wilson, 1810) (blue-headed vireo)

*Vireo olivaceus* (L., 1766) (red-eyed vireo)

### Strigiformes: Strigidae

*Strix varia* Barton, 1799 (barred owl)

### Passeriformes: Hirundinidae

*Stelgidopteryx serripennis* (Audubon, 1838) (northern rough-winged swallow)

### Caprimulgiformes: Caprimulgidae

*Caprimulgus vociferus* A. Wilson, 1812 (whip-poor-will)

### Passeriformes: Paridae

*Poecile carolinensis* (Audubon, 1834) (Carolina chickadee)

*Baeolophus bicolor* (L., 1766) (tufted titmouse)

### Apodiformes: Apodidae

*Chaetura pelagica* (L., 1758) (chimney swift)

### Passeriformes: Troglodytidae

*Thryothorus ludovicianus* (Latham, 1790) (Carolina wren)

### Piciformes: Picidae

*Melanerpes carolinus* (L., 1758) (red-bellied woodpecker)

*Picoides pubescens* (L., 1766) (downy woodpecker)

### Passeriformes: Regulidae

*Regulus satrapa* Lichtenstein, 1823 (golden-crowned kinglet)

### Passeriformes: Tyrannidae

**Passeriformes: Turdidae**

*Sialia sialis* (L., 1758) (eastern bluebird)  
*Turdus migratorius* L., 1766 (American robin)

**Passeriformes: Parulidae**

*Parula americana* (L., 1758) (northern parula)  
*Dendroica petechia* (L., 1766) (yellow warbler)  
*Dendroica pensylvanica* (L., 1766) (chestnut-sided warbler)  
*Dendroica caerulescens* (Gmelin, 1789) (black-throated blue warbler)  
*Dendroica virens* (Gmelin, 1789) (black-throated green warbler)  
*Dendroica castanea* (A. Wilson, 1810) (bay-breasted warbler)  
*Mniotilta varia* (L., 1766) (black-and-white warbler)  
*Helmitheros vermivorus* (Gmelin, 1789) (worm-eating warbler)  
*Seiurus motacilla* (Vieillot, 1809) (Louisiana waterthrush)  
*Wilsonia citrina* (Boddaert, 1783) (hooded warbler)

**Passeriformes: Thraupidae**

*Piranga olivacea* (Gmelin, 1789) (scarlet tanager)

**Passeriformes: Emberizidae**

*Pipilo erythrophthalmus* (L., 1758) (eastern towhee)  
*Spizella passerina* (Bechstein, 1798) (chipping sparrow)  
*Melospiza melodia* (A. Wilson, 1810) (song sparrow)

**Passeriformes: Cardinalidae**

*Cardinalis cardinalis* (L., 1758) (northern cardinal)  
*Pheucticus ludovicianus* (L., 1766) (rose-breasted grosbeak)

**Passeriformes: Fringillidae**

*Carduelis pinus* (A. Wilson, 1810) (pine siskin)

*Pat Meyer has been a resident of Louisville her entire life. She retired from the Postal Service as a branch manager in 1999. She has been interested in nature her entire life and says KSNH, 'was a "natural" place for me'.*

**KENTUCKY NATURALISTS' CALENDAR**

(added as space and time allow)

**September 30, 2009: Fossil Bed Hikes @ Falls of the Ohio State Park, 201 W. Riverside Drive, Clarksville, Indiana 47129 (12:30 a.m.).** Restricted to ages 12 and up. Paul Olliges leads a strenuous three-hour hike to the outer fossil beds at the Falls. Access depends upon river level. Therefore, please call the Falls of the Ohio office the day before. Groups meet on the Interpretive Center deck. Contact the park at (812) 280-9970, or via email at [park@fallsoftheohio.org](mailto:park@fallsoftheohio.org), or visit their website at <http://www.fallsoftheohio.org>.

**August 12, 2009: Perseid Meteor Shower @ Cumberland Falls State Park, 7351 Highway 90, Corbin, KY 40701-8857.** Contact Naturalist Steve Gilbert via email at [steve.gilbert@ky.gov](mailto:steve.gilbert@ky.gov) or Naturalist Bret Smitley via email at [breta.smitley@ky.gov](mailto:breta.smitley@ky.gov). You can also reach them at [Cumberland Falls State Park](http://www.cumberlandfallsstatepark.com) via phone at (606) 528-4121.

**October 3, 2009: Fossil Bed Hikes @ Falls of the Ohio State Park, 201 W. Riverside Drive, Clarksville, Indiana 47129 (10:00 a.m.).** Restricted to ages 12 and up. Paul Olliges leads a strenuous three-hour hike to the outer fossil beds at the Falls. Access depends upon river level. Therefore, please call the Falls of the Ohio office the day before. Groups meet on the Interpretive Center deck. Contact the park at (812) 280-9970, or via email at [park@fallsoftheohio.org](mailto:park@fallsoftheohio.org), or visit their website at <http://www.fallsoftheohio.org>.

**October 3, 2009: Canoe Hikes @ Falls of the Ohio State Park, 201 W. Riverside Drive, Clarksville, Indiana 47129 (9:30 a.m. - 12:00 p.m.).** Paddle the Falls of the Ohio area with interpretive naturalists while discovering wildlife and seldom-seen fossils. Rent a canoe or kayak from <http://www.canoeky.com>. Contact the park for current information at (812) 280-9970, or via email at [park@fallsoftheohio.org](mailto:park@fallsoftheohio.org), or visit their website at <http://www.fallsoftheohio.org>.

**October 8-11, 2009: Kentucky Society of Natural History 2009 Fall Meeting @ Reelfoot Lake. See meeting agenda on page 70. Registration form included in this newsletter and available online at [http://www.ksnh.org/reelfoot\\_reg.tiff](http://www.ksnh.org/reelfoot_reg.tiff).**

**October 10, 2009: Raptor Day @ Falls of the Ohio State Park, 201 W. Riverside Drive, Clarksville, Indiana 47129 (10:00 a.m.-4:00 p.m.).** Learn about birds of prey at the annual Raptor Day at the Falls. Activities include live raptor viewing and programs (10:00 a.m. and 1:00 p.m.), wild bird watching with interpreters, and owl pellet investigations, and hikes in the National Wildlife Conservation Area. Sponsored by the Falls of the Ohio Archaeology Society. Free with regular admission to the Interpretive Center (\$4/adults, \$1/children Monday-Thursday; \$5/adults, \$2/children Friday-Sunday and major holidays). Contact the park at (812) 280-9970, or via email at [park@fallsoftheohio.org](mailto:park@fallsoftheohio.org), or visit their website at <http://www.fallsoftheohio.org>.

**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 17-18, 2009: Clark Festival @ Falls of the Ohio State Park, 201 W. Riverside Drive, Clarksville, Indiana 47129 (10:00 a.m.-4:00 p.m.).** Features include an early 1800's reenactment commemorating the life of George Rogers Clark. The event will be held at the George Rogers Clark Home site of the Falls of the Ohio State Park on Harrison Avenue. There will also be demonstrations by period craftsmen, historic games and music. Free with regular admission to the Interpretive Center (\$4/adults, \$1/children Monday-

Thursday; \$5/adults, \$2/children Friday-Sunday and major holidays). Contact the park at (812) 280-9970, or via email at [park@fallssoftheohio.org](mailto:park@fallssoftheohio.org), or visit their website at <http://www.fallssoftheohio.org>.

**October 17, 2009: Canoe Hikes @ Falls of the Ohio State Park, 201 W. Riverside Drive, Clarksville, Indiana 47129 (9:30 a.m. - 12:00 p.m.).** Paddle the Falls of the Ohio area with interpretive naturalists while discovering wildlife and seldom-seen fossils. Rent a canoe or kayak from <http://www.canoeky.com>. Contact the park for current information at (812) 280-9970, or via email at [park@fallssoftheohio.org](mailto:park@fallssoftheohio.org), or visit their website at <http://www.fallssoftheohio.org>.

**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](mailto:tjvesa@embarqmail.com).

**November 6-8, 2009: Environmental Education Association of Indiana Annual Conference. 2009 Theme is "Fading Your Carbon Footprint: Living Sustainably in a Modern World."** The conference will be held at Camp Alexander Mack, Milford, Indiana. There will be speakers, breakout sessions, field trips, entertainment, awards, and more. For more information contact Krista Daniels at (574) 875-7422 or via email at [krista@elkhartcountyparks.org](mailto:krista@elkhartcountyparks.org). You can also get additional details from the Environmental Education Association of Indiana (EEAI) website at <http://www.eeai.org>.

**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](mailto:juliea.mcdonald@ky.gov), or visit the park website at <http://parks.ky.gov/findparks/recparks/au/> for more.

**November 13-14, 2009: The 35<sup>th</sup> Annual Meeting of the Society of Kentucky Lepidopterists (SKL) @ Entomology Department, University of Kentucky, Lexington, Kentucky.** For details see the SKL website at <http://bioweb.wku.edu/faculty/Marcus/KYLeps.html>.

## **2010:**

**January 29-30, 2010: Sandhill Crane Weekend Event @ the Stonehaven Room at Barren River Lake State Resort Park lodge, 1149 State Park Road; Lucas KY 42156.** Call (270) 646-2151.

**February 12-15, 2009: Great Backyard Bird Count.** For details, see the GBBC website at <http://www.birdsource.org/gbbc/>, or contact the Cornell Lab of Ornithology at <http://www.birds.cornell.edu/> or by phone at (800) 843-BIRD, (800) 843-2473.

**February 19-20, 2010: Sandhill Crane Weekend Event @ the Stonehaven Room at Barren River Lake State Resort Park lodge, 1149 State Park Road; Lucas KY 42156.** Call (270) 646-2151.

**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>.

**April 2010 TBA: Kentucky Society of Natural History 2010 Spring Meeting @ Shawnee State Park, Ohio.** See upcoming newsletter for details or go to the website at <http://www.ksnh.org>.

**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.** See upcoming newsletter for details or go to the website at <http://www.ksnh.org>.

## **2011:**

**April 15-17, 2011: Kentucky Society of Natural History 2009 Spring Meeting @ Carter Caves State Resort Park, 344 Caveland Dr, Olive Hill, KY 41164, [(606) 286-4411].** See upcoming newsletter for details or go to the website at <http://www.ksnh.org>.

**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>.

Fall 2011 TBA: Kentucky Society of Natural History 2011 Fall Meeting @ Cumberland Falls State Resort Park. See upcoming newsletter for details or go to the website at <http://www.ksnh.org>.

**2012:**

April 2012 TBA: Kentucky Society of Natural History 2010 Spring Meeting @ Great Smoky Mountains National Park. See upcoming newsletter for details or go to the website at <http://www.ksnh.org>.

Fall 2011 TBA: Kentucky Society of Natural History 2011 Fall Meeting @Green River area of Kentucky. See upcoming newsletter for details or go to the website at <http://www.ksnh.org>.

**KENTUCKY NATURALISTS' CALENDAR OF REGULAR MEETINGS & TEMPORARY EXHIBITS**

(added as space and time allow)

**Meetings:**

[Beckham Bird Club](#) (BBC) – 2<sup>nd</sup> Tuesday of each month (except March & June) at 7:00 p.m. @ the [Clifton Center](#), 2117 Payne Street, off of Frankfort Avenue in Louisville, KY. e-mail: [beckhambirdclub@gmail.com](mailto:beckhambirdclub@gmail.com)

[Falls of the Ohio Archaeological Society](#) (FOAS) – 2<sup>nd</sup> Saturday of every month at 2-4:00 p.m. @ the Falls of the Ohio State Park Interpretive Center in Clarksville, Indiana (right across the Ohio River from Louisville).

[Greater Cincinnati Herpetological Society](#) (GCHS) - 1st Wednesday of each month at 7:00 p.m. @ the [Cincinnati Nature Center/Rowe Woods](#), 4949 Tealtown Road • Milford, OH. GCHS, P.O. Box 14783, Cincinnati, OH 45250, phone: (513) 956-7536, email: [info@cincyherps.com](mailto:info@cincyherps.com).

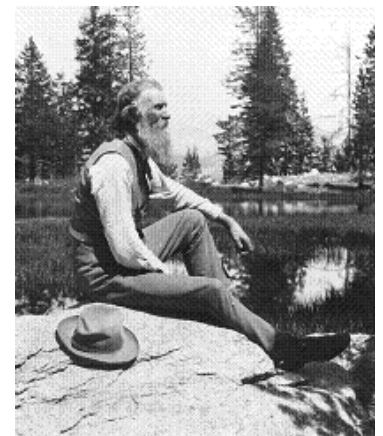
[Kentucky Herpetological Society](#) (KHS) - 2nd Sunday of each month at 6:00 p.m. @ [Louisville Nature Center](#), 3745 Illinois Ave. in Louisville, KY

[Davies County Audubon Society](#) (DCAS) – 2<sup>nd</sup> Monday of each month at 7:00 p.m. @ [First Christian Church](#), 700 JR Miller Blvd, Intersection of JR Miller Blvd and 7th Street, Owensboro, KY

**Exhibits:**

August 15-November 29, 2009: “Green Planet: The History of Plants” @ [Falls of the Ohio State Park](#), 201 W. Riverside Drive, Clarksville, Indiana 47129.

“September 9 [1867]. Another day in the most favored province of bird and flower. Many rapid streams, flowing in beautiful flower-bordered canons embosomed in dense woods. Am seated on a grand hill-slope that leans back against the sky like a picture. Amid the wide waves of green wood there are spots of autumnal yellow and the atmosphere, too, has the dawns of autumn in colors and sounds. The soft light of morning falls upon ripening forests of oak and elm, walnut and hickory and all Nature is thoughtful and calm. Kentucky is the greenest, leafiest State I have yet seen. The sea of soft temperate plant-green is deepest here. Comparing volumes of vegetable verdure in different countries to a wedge, the thick end would be in the forests of Kentucky, the other in the lichens and mosses of the North. This verdure wedge would not be perfect in its lines. From Kentucky it would maintain its thickness long and well in passing the level forests of Indiana and Canada. From the maples and pines of Canada it would slope rapidly to the bleak Arctic hills with dwarf birches and alders; thence it would thin out in a long edge among hardy lichens and liverworts and mosses to the dwelling-places of everlasting frost. Far the grandest of all Kentucky plants are her noble oaks. They are the master existences of her exuberant forests. Here is the Eden, the paradise of oaks. Passed the Kentucky line towards evening and obtained food and shelter from a thrifty Tennessee farmer, after he had made use of all the ordinary anti-hospitable arguments of cautious comfortable families.” –John Muir, 1867



**John Muir** (April 21, 1838 – December 24, 1914) was a Scottish-born American naturalist, author, and early advocate of conservation of U.S. wilderness. Graphic Source: Library of Congress. Quote Source: 1916. Muir, John. A Thousand-Mile Walk to the Gulf. Boston And New York: Houghton Mifflin Company.

...Newsletter Photo Contest, continued from page 69...



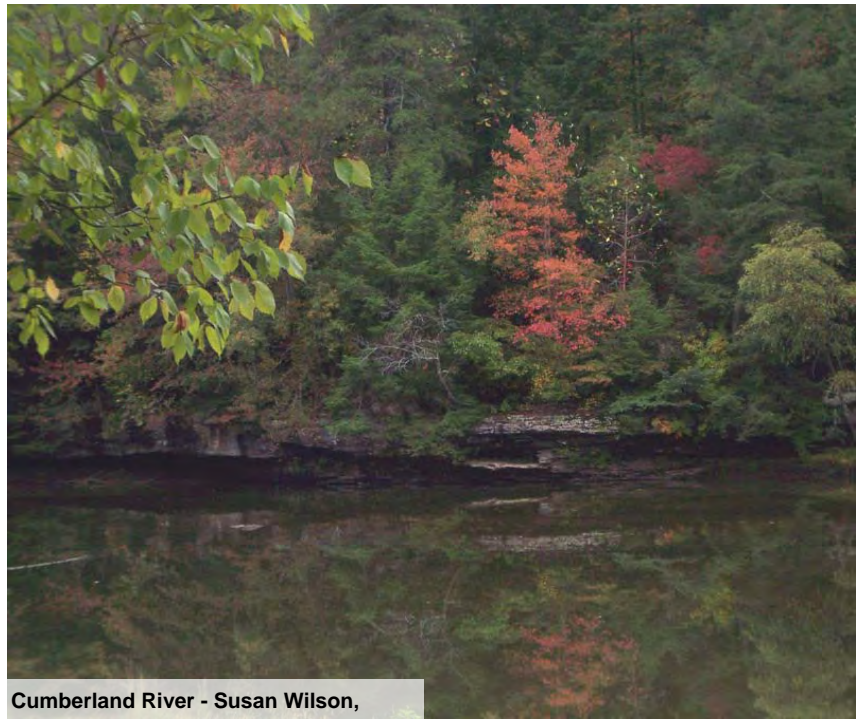
*Parthenocissus quinquefolia* (L.) Planch., 1887 (Virginia Creeper) berries - Susan Wilson



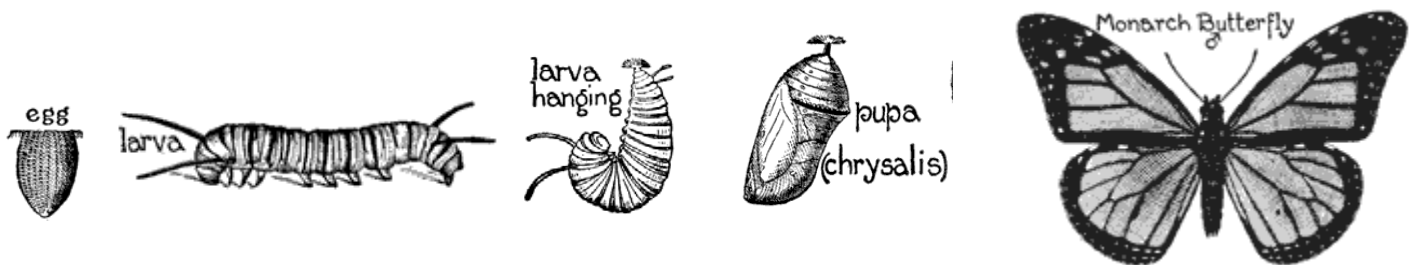
*Toxicodendron radicans* (L.) Kuntze, 1891 (eastern poison ivy) and *Limenitis arthemis astyanax* (Fabricius, 1775) (red-spotted purple) - Susan Wilson



*Lobelia siphilitica* L., 1753 (great blue lobelia) and *Ageratina altissima* (L.) R.M.King & H.Rob., 1970 (white snakeroot) - Chris Bidwell



Cumberland River - Susan Wilson,



Depictions of the life cycle of *Danaus plexippus* (Linnaeus, 1758) (monarch butterfly) in: 1903. Colton, Buel P. Zoology: Descriptive and Practical. Boston: D.C. Heath & Co. p26

The mission of the Kentucky Society of Natural History (KSNH) 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 KSNH, are the annual Spring and Fall Conferences, selection of a "Naturalist of the Year", nature photography contests, research grants, 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 \$7.50, 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 federal and state 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](mailto:kyfauna@iglou.com).

**Kentucky Naturalist News Deadlines:**

<u>Issue</u>	<u>Deadline</u>	<u>Tentative Publish Date</u>
Winter Issue	November 1, 2009	December 1, 2009
Spring Issue	February 1, 2010	March 1, 2010
Summer Issue	May 1, 2010	June 1, 2010
Fall Issue	August 1, 2010	September 1, 2010

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



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