

Kentucky Naturalist News

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Falls of the Ohio Chapter (Louisville), 9109 Hawthorne Drive, Louisville, KY 40272, meets every third Thursday of each month except Jan, Jul, Aug, & Dec at at the Louisville Nature Center, 3745 Illinois Ave, Louisville, 40213. Call President Chris Bidwell at (502) 458-1328 or via email (mach5049@gmail.com).

A Word from the Editor:

Dear Fellow KSNH Members,

I am thrilled to be working on the KSNH quarterly newsletter, and I hope that I will be able to provide you all with an enjoyable read. This will be my first editing endeavor, but I believe that it will be an excellent means of reaching out to current KSNH members and to a new generation of nature lovers. My main goal for this year's newsletter is to have all of you veteran members submit material to me for publication. I would love to see what you guys have to say. I want all KSNH members to feel that this is their newsletter, and that they too can contribute valuable reading material to the group at large. I have had two new and very brave contributors submit their nature poetry to me and I want to encourage all of you to try your hand at writing for the newsletter. I will accept research articles, relevant personal reflections, photos, and even Haikus!

In the spirit of rookie contribution, I'll tell you all a bit about myself. My family and I have been tromping around the beautiful Bluegrass Region for as long as I can remember. I first attended Pine Mountain Settlement School when I was two years old, and ever since that initial night hike Pine Mountain has been my second home. My sister and I had countless secret hideouts along the creeks, and from these fortresses we explored all that we could before dinner time. I am sure that we were infamous among the local crowdad and salamander populations for our insatiable curiosity. It has been far too long since I have splashed through those creeks. I spent the last four years away from Kentucky studying English Literature at Warren Wilson College in Asheville, North Carolina. Come to think of it, I learned about my future Alma Mater at a Fall Colors Weekend at the Settlement School. After receiving my BA from Warren Wilson, I married my high school sweetheart, the wonderful and supportive James Tooill. We recently moved back to Louisville Kentucky to be closer to our families, and I was able to finally re-connect with the KSNH at their Fall Meeting. Pat Meyer asked for a volunteer to captain the newsletter, and the rest is history. In my spare time I enjoy taking our recently-adopted Beagle mix, Beans, for long walks around Cherokee Park. Please feel free to email me your submissions to the newsletter at: gretchfitzgerald@gmail.com

Thank you all so much for the support!
Gretchen Fitzgerald



Above is a photo of a young Elk that I took while on my honeymoon this summer in Yellowstone National Park. Please send in your nature pictures to me if you would like to see them in the newsletter!

A Few Words from the President



By Jeff D. Foster

Greetings from the Southern Ohio! It seems winter keeps teasing us; giving us brief glimpses of spring time weather, then coming back to remind us it's still winter time. I shouldn't complain, for this is the first winter quarter

in a long time that I have not had any class cancellations because of snow. The blooming of crocuses in our flower beds has me longing for days of spring wildflowers. I couldn't resist the temptation the other day, and I roamed into one of my favorite spots in search of snow trilliums (*Trillium nivale*). Unfortunately, none were popping up yet; however, they should be blooming within the next couple weeks. The snow trilliums and the night-time songs of Spring Peepers (*Pseudacris crucifer*) are always my true signs that spring is rapidly approaching. Soon, the boys and I will be out on the roads during spring rains "frogging" as they have called it over the years. It has become a family tradition to go out on the first warm rainy nights of spring in search of frogs, toads, and salamanders. We collect specimens that I will use in my classes at the college. After a couple weeks, enough time for students to observe and learn their various characteristics, they will be returned to the road ditches where they were found.

Many of you are aware that each year, KSNH awards scholarships and grants to students conducting research in natural history. When you look at the Mission Statement for the Society it clearly states:

- A. To promote study and interest in natural history and related branches of science.
- B. To encourage research in the field, in the laboratory, and through book, periodicals, monographs and other literature.

An issue that has concerned me over the past few years is the reduction in interest in natural history related degrees. It seems that the "hot topics" in biology today are Molecular Biology and Genetic Engineering. I feel that our scholarships and grants program is one of the greatest ways that we fulfill our mission statement and potentially increase interest in natural history related research. As an individual who pursued degrees in Ecology and Field Biology, I know the impact that grants like ours can make for students. Recently it has been getting difficult to fully fund our grants program due to a number of different issues. I would like to urge all members of KSNH to consider making a donation to our scholarships/grants program. Check out the Grants Program area of the KSNH website to see information concerning past recipients and their research topics. KSNH is a fully non-profit 501-C3 corporation and all donations to the scholarship/grant fund are fully tax deductible under law. Please consider making a donation and truly supporting natural history research in Kentucky!

Our Spring Conference in the Shepherdsville area is rapidly approaching (April 20 – 22) and an incredible agenda for the weekend is now available for review. Our officers and board members have put together a great list of field trips to various areas of Bernheim Forest, Pine Creek Barrens Preserve, Fort Duffield, Jefferson Memorial Forest, and Knobs State Forest. It will be a challenge to decide which of the trips to attend. I want to go on them all. If you have not registered for the conference yet, or made your hotel reservations, please do so soon!! It is going to be a great weekend and I am looking forward to seeing all of you there!!

Falls of the Ohio Chapter News:

By Chris Bidwell

The Spring Conference will be here before you know it. A lot of hard work and planning has been undertaken to make this a great event. There will be lots of speakers to hear and activities to attend. With this conference in our backyard I hope for a great turnout. Concerning the Falls Chapter monthly meetings, there are some great topics, speakers, and outings already up on our web page. Speakers and topics will also be placed in the Courier Journal in hopes of attracting new faces and potential members. Thanks to Barry for his great work the last five years. Welcome to Gretchen and thanks for assuming such an under-appreciated role in our organization. Please email me at mach5049@gmail.com or call me at [502-896-4834](tel:502-896-4834) if you have suggestions, questions or know of any of our KSNH family who is ill or injured and needs our best wishes and prayers. Let's make 2012 a banner KSNH year. Chris Bidwell, President Falls of the Ohio Chapter



Here, our very own Chapter President, Chris Bidwell, leads the Spring Nature Outing in Cherokee Park. On this well-attended walk, nature enthusiasts learned how to identify trees during the winter months. It was a great hike. Thanks Chris!

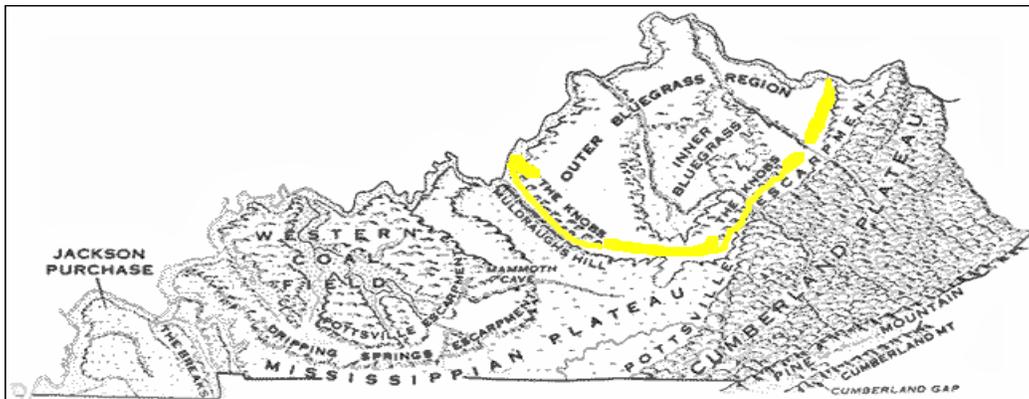
Photo courtesy of Susan Wilson

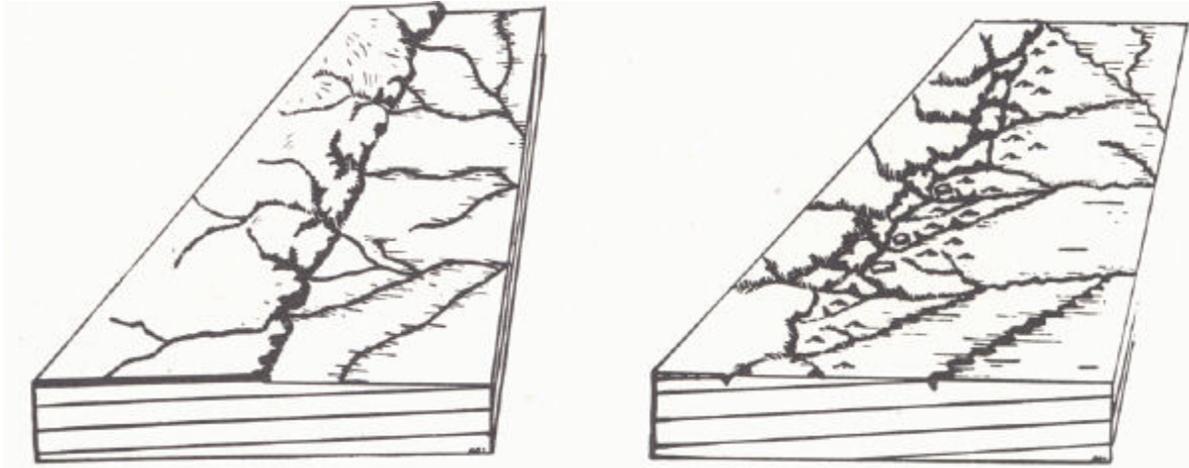
The Knobs of Kentucky

By Berl Meyer

Much of our KSNH spring conference will be held the physiographic province of Kentucky called the Knobs.

The Knobs region in its typical development is a narrow belt of country surrounding the Blue Grass. It is characterized by the presence of conical knobs, which are erosion remnants of the upland behind Muldraugh's Hill on the west and south, and the Pottsville Escarpment on the east. The region of the dissected border of these uplands is commonly included in the Knobs until a definite upland has been attained. In their characteristic development they rise from the level of the Lexington plain. Similar knob-like erosion remnants, which front the other escarpments in the state, have not received recognition as distinct physiographic units. Geologically it is the region of the shale country between the limestone country of the Blue Grass and the bordering Pennyroyal and Cumberland Plateaus. Where the Silurian-Mid-Devonian section is mainly limestone the region is included in the Blue Grass. Where largely shale, as east of the Cincinnati Arch, it is allied with the Knobs.





FIGS. 1,2. Diagrams illustrating the formation of Knobs (Pauline Young).

FIG. 1 (left). Muldraugh's Hill (or Pottsville Escarpment) with portions of the upland partly isolated by valley development.

FIG. 2 (right). Knobs in the various stages of development, from flat-topped portions of the upland recently isolated from the main area, to typical conical knobs, earlier isolated and with the cap rock gone.

Rocks

The geologic story of the area around Paroquet Springs Conference Center began more than 400 million years ago when the area was covered by great bodies of water or seas which lasted more than 100 million years. During this period various muds, sands, shell fragments, and lime oozes accumulated on the ocean bottoms much as they do today. Mud became clay and shale. Loose sand and silt became sandstone and siltstone. Shells, shell fragments, lime oozes, and chemical lime precipitates became limestone.

Rocks in this area are layered, like a cake. The lowest layer is the oldest (Ordovician) whereas younger rocks (Mississippian) cap the hills and ridges. Ordovician limestones are found only in a few spots in remote areas on the eastern edge of the Bernheim Area. Silurian limestones and dolomites are the oldest rocks visible in the areas most frequently visited.

The variety of rock types found in the Area suggests that the sediments were deposited under different conditions or environments. The limestones in the valleys and near the base of the hills were formed when warm, shallow sea water covered the region. The ocean bottom was inhabited by myriads of sea clams, corals, snails, and other critters. Some of the shell and skeletal remains are preserved in the limestone rocks for us to see today.

Later the sea floor became covered with an organic, black muck. This muck is now a hard black shale which geologists call "New Albany Shale" for the excellent exposures along the Ohio River near that Indiana city. In the vicinity of Bernheim Area, it can be seen in numerous road cuts and also in the bed of Slate Run in the Area itself. Fossil remains of the earliest known trees are found in this formation.

Layers of shale and siltstone over the black shale formation tell us that the sea in which these sediments were deposited was muddy. Some geologists consider these rocks to have been part of a great delta, formed by sediment carried by ancient rivers and streams from uplands many miles to the northeast and deposited in the Mississippian Sea. Peculiar markings on some of the slabs of siltstones are indications of water currents and sea-bottom life.

These are not "just rocks" because several of them have special significance. For example, the Laurel Dolomite (Silurian), which was formed during the same geologic period as many of the ancient coral reefs, possesses characteristics which make it an excellent reservoir rock for some of nature's fluids. In the Bardstown area many wells which tap this geologic formation yield ground water for domestic and livestock purposes, whereas in Green County, Kentucky, where it is much deeper and in a different geologic situation, the Laurel Dolomite was the "pay zone" for the prolific Greensburg oil pool which yielded more than 18 million barrels of crude oil between 1958 and 1962. The stone is also quarried for use in road construction. A conspicuous spring zone occurs near the base of this

formation throughout the outcrop area. The presence of these springs was one of the reasons the distilling industry was originally attracted to this part of Kentucky.

The black New Albany Shale, where deeply buried, has produced natural gas in several areas in Kentucky and southern Indiana. Experimental work has indicated that this same shale when "cooked" yields 10 to 20 gallons of oil per ton of shale. While this is not a sufficient quantity of oil to be considered commercial at the present time, it may represent a reserve of an important mineral fuel for some time in the future.

The soft gray and green shales overlying the New Albany Shale are used in several localities for the manufacture of structural clay products. A plant in northern Bullitt County subjects the raw shale to rapid heating to produce a lightweight aggregate for use in concrete blocks and other construction purposes and as a mulch. A plant in Jefferson County uses a similar deposit of shale for the manufacture of bricks used for facing buildings and homes. Those hard, globular bodies of silica called geodes are of interest to many rock and mineral collectors, amateur and professional alike. They are commonly found embedded in Mississippian limestone ledges or accumulated in stream beds in and near the Knobs areas. Usually well-formed clear quartz crystals line the inside of the hollow geodes, but they may contain a variety of minerals. More than a dozen different minerals have been reported from Kentucky geodes; geodes filled with gypsum are common in adjacent Hardin County. Of historic interest are the old iron ore "diggings" on the hillside northeast of the mouth of Wildcat Hollow. The ore obtained from this small mining operation occurs in the lower Mississippian shales as siderite (an iron carbonate mineral) which weathers out as limonite. The siderite concretions were probably formed by water which soaked through the rock and deposited lime and iron compounds in concentric layers around a fossil or mineral fragment. The reddish-brown concretions or nodules were exposed when streams cut through the layers of rock containing them. The ore from the locality was hauled to Bellemont (Belmont) furnace which was situated about a mile east of the present community of Belmont, southwest of Bernheim Area. Limonite is a very low grade ore. For this reason, and because it is present only in small tonnages in the area, it could not support much of an iron industry. Only an inconspicuous scar on a hillside indicates that mining took place in Shepherdsville Area approximately a century ago.

Suggested References:

Browne, R. C., 1958, The geology of Bernheim Forest: The Kentucky Naturalist, vol. XII, no- 2, p. 27-53, plates

Kepferle, R. C., 1968, Geologic map of the Samuels quadrangle: U. S. Geol. Survey Geol. Quad. Map, in preparation

Kepferle, B. C., 1968, Geologic map of the Shepherdsville quadrangle: U. S. Geol. Survey Geol. Quad. Map, in preparation

McFarlan, A. C., 1943, Geology of Kentucky: Lexington, Univ. Kentucky, 531 p.

McFarlan, A. C., 1958, Behind the scenery in Kentucky: Kentucky Geol. Survey, 9, Special Pub. 10, 144 p.

Miller, A. M., 1919, The geology of Kentucky: Kentucky Dept. Geol. and Forestry, ser. 5, Bull. 2, 392 p.

Peterson, W. L., 1968, Geologic map of the Cravens quadrangle: U. S. Geol. Survey Geol. Quad. Map, in preparation

Peterson, W. L., 1968, Geologic map of the Lebanon Junction quadrangle:



SHUMARD OAK – *Quercus shumardii* (Buckley)

By Chris Bidwell

This stately oak was named in honor of Dr. Benjamin Franklin Shumard (1820-1869) by Samuel Botsford Buckley (1809-1884), a Texas state geologist and naturalist. Buckley has a mountain in North Carolina, a genus (*Buckleya*) and ironically a variant of the Shumard oak (*Shumard texana-buckleyi*) (Ashe) that Buckley discovered in central Texas all named in his honor. Dr. Benjamin Shumard, born in Pennsylvania, had several Kentucky connections. He received his medical degree in Louisville in 1843 and practiced for about a year in Hodgenville where his interests in nature, paleontology, and geology developed. Having moved back to Louisville by 1846, he gave up medicine to devote his time completely to geology and natural history. In 1847 Dr. Shumard and another famous doctor/naturalist Lunsford Yandell (father of famous Kentucky sculptor Enid Yandell) published “The Geology of Kentucky”. In 1852 Dr. Shumard married a Louisville girl, Miss E. M. Allen.

The native perennial Shumard oak is a member of the red oak group having pointed lobes much like arrow heads. It is monoecious with tiny, almost unnoticeable, yellow female flowers that develop in March and April and small male flowers that are quite showy in catkins of up to 6 inches long on the same tree. The fertilized female flowers develop into acorns around September to October. It takes at least 2 years to fully develop the mature acorn. Shumards do not produce acorns until they are 25 years old, and full nut production does not occur until 50 years old plus. Shumard acorns, 1-2 on a stalk, are brown, dry, hard, oval-shaped, 0.5-1 inch long with a flattened-shallow cup that covers about 1/4th of the acorn body. Excellent crop production occurs every 2-3 years. They have an outstanding germination rate, and they are one of the faster growing oaks. Shumard leaves are elliptical, alternate, simple, and deciduous and up to 8 inches long and 5 inches wide and have 5-9 pointed lobes which are often bristle tipped. Sinuses, the spaces between the lobes, are cut up to 3/4 the distance to the midrib. Sinuses are rounded at the opening and at the bottom. Lovely dark green color prevails during most of the year. By fall Shumard leaves can be a wide range of colors: brown, tan, various shades of shiny yellow, gold, and orange, and occasionally red to maroon colors that add a vibrant fall/winter display. The widest part of the leaf is across the middle lobes. Brown to red hairy tufts, which are a key tree identifier, are present on the leaves’ underneath vein axils.

As a member of the red oak group, Shumards can reach over 90 feet in height typically with a single trunk. An open, rounded canopy can reach over 60 feet across. Younger Shumards have smooth, light gray bark which is highly reflective. As the tree matures the bark turns dark gray and becomes furrowed. Buttresses may form on larger trees especially near water. White blotches may also canvass the bark. Lower branches are horizontal while upper branches become vertical – Shumard branches do not droop. The bark, relatively thin, is easily damaged by mechanical trauma.

Shumards prefer full sun, well-drained, moist, acidic, limestone soils which can be made up of clay, loam and sand – usually found under 500 feet in elevation. A lowland tree, they will tolerate alkaline-wet soils for short periods. Older trees are tolerant of drought, ozone, fire, salt, cold, and high winds. They are hardy in zones 5-9. Associated with bottom lands and small streams, Shumards tend to be scattered sparsely among other hardwoods – it adapts to most soils that are well drained. Shumards are found throughout the Commonwealth.

The red oak group can be difficult to identify species by leaf pattern but also due to their hybridization. Shumards, which are often mingled in with the black and the red oak, frequently hybridize with them and develop leaf and bark characteristics which overlap. A pure Shumard can be identified by examining the base of the limb where the trunk bark pattern will flow/merge seamlessly through these junction nodes. Both the black and the red oak have raised bark circling the limb/trunk junctions. Two other Shumard oak identifiers are the red to brown hairy tufts in the leaf's underside leaf axils and the gray/white to yellow/reddish bronze leaf buds. Most species in the red oak group have reddish buds. Shumard buds have small projecting hairs that are not present in other red oak species. By examining leaf, bark, acorns, buds, and habitat one should find Shumards one of the easier red oaks to identify.

Common names are Shumard oak, Shumard's oak, Shumard Red Oak, southern red oak, swamp oak, swamp red oak, schneck oak, and spotted oak. Propagation is by seeding especially by the stashing habits of squirrels and blue jays. Shumard oak has many uses. Planted on 30-40 centers it will form a closed canopy over a 2-lane avenue in about 20 years. Being shade, disease, pest, salt, high wind, heat, and cold intolerant it is a great shade and landscaping tree. A durable, closed grained flexible wood, it is used for furniture, flooring, trim, decorative molding, cabinetry, ship building, and whiskey or wine barrels. An early ink was made from the bark's tannin. Its use as an ornamental tree is increasing due to its low maintenance and durability. The acorns are a food source to numerous songbirds, turkeys, quail, wood ducks, waterfowl, deer, squirrels, raccoons, opossums, various rodents, chipmunks, gophers, feral hogs, and kiwis! Leaves and twigs serve as browse for deer and elk. Shumard is an excellent shelter for numerous birds, mammals, and insects. It is a host tree for several lepidoptera: Peigler's buck moth, several species of hairstreaks and Horace's dusky wing butterflies.

The acorns, once leached (boiled several times) of their bitter tannin content, can be ground into flour or roasted as a coffee substitute, or eaten whole. Acorns can be frozen and stored. Shumard's acorns and leaves have a low toxicity, however if eaten raw or not properly leached prior to consumption – stomach pain, cramps, constipation, bloody diarrhea, excessive thirst and urination may develop.

The Shumard oak is fairly resistant to diseases and pests. Usually no diseases are serious. Canker, leaf blisters, numerous fungi causing leaf spots, powdery mildew are common minor ailments. Oak wilt, however, is a fatal fungal disease that requires affected oaks to be cut down and destroyed as it is readily spread by roots, insects, and pruning tools. In Kentucky red oak is most susceptible to oak wilt while rare in Shumards. Oak wilt invades the water conducting vessels and plugs the trees to such an extent that the oak literally dehydrates. Young oaks and severely infected older oaks can die in as little as 3 months. Another fatal fungal disease is shoestring root rot which attacks the roots and spreads upward killing the cambium growth layers resulting in the tree's death. As with oak wilt, affected trees must be downed and destroyed. There is no practical cure for either of the fatal fungal diseases.

Pests are usually not a serious threat to Shumards. Galls from several insects, scales, aphids, various caterpillars, twig pruners, lace bugs, and leaf miners are common nuisances that pose no serious threat except for cosmetic concerns. Tree borers can, however, severely stress newly planted or younger trees. The eastern tent caterpillars can cause considerable foliage loss resulting in tree weakening and death. Pruning while infestation is small, is a very effective control. The asian or gypsy moth caterpillar, introduced to the United States in 1868 to start silk farms, are particularly destructive to all oaks – again by causing severe defoliation.

Shumard oak is in the Fagus (Fagaceae or beech) family which includes beech, oaks, and some chestnuts. Fagus is from the Greek Phegos or Phagos meaning “to eat” – referring to the edible nuts/acorns of these trees. The

Shumards Genus name, *Quercus*, is Latin for oak. The species name, *Shumardii*, is in honor of Dr. Benjamin Shumard previously mentioned. Incidentally the word acorn is not derived from oak and corn. It comes from Old English “aecern” meaning berry or fruit. The genus *Acer* (maples) is derived from this same Old English root. The word oak origin is somewhat debatable. Most texts cite the Old English “ac” or Middle English “ook” as its source.

The “oak” tree is our national tree. Just as the “goldenrod” is the Kentucky state flower with no one species taking the sole honor, so it is with the “oak” being our national tree. The largest Shumard oak currently is in the Overton Park Forest in Memphis, TN. It is 190 feet tall with an eighty-eight foot canopy spread. It has a 249 inch circumference. Shumard oak is threatened in Maryland and endangered in Pennsylvania primarily due to habitat loss to development.

Oaks are noted for their historical, mythical, ritual, and folklore usages and beliefs. Shumard oak was one of the oaks that the Druids of Europe used to gather under to hold their many secret rituals. Idols from oak were used for their magic ceremonies. Witches also are supposed to perform rituals beneath oaks. It is believed, ironically, that since oaks are so durable, long-lived, and strong that they offer protection from evil magic. Two oak twigs bound together by a red cord in the form of a cross is hung in the house as a safeguard. Crucifixes are often made of oak - possibly a connection to this belief. Acorns placed in a window sill are believed to protect a home/dwelling from lightning strikes. Since oak was dedicated to Thor, the god of thunder, it is believed that oaks could not be struck by lightning. Acorn shaped wooden knobs may have also been created to protect a building from natural disaster/lightning. An acorn or a piece of one carried on you protects the bearer from harm. Immortality, youthfulness, protection from disease/pain can also be guaranteed by carrying an acorn on your person. Need money? Planting an acorn in the dark of the moon will ensure riches in the near future. Lastly, suffering from erectile dysfunction or having trouble getting pregnant? Carry an acorn with you - you never know! The list of folklore beliefs concerning oaks fills volumes. Any season is a great time to get out to view the Shumard oak. A great specimen of this wonderful tree can be found on the summit of Iroquois Park. It is a great hike to get up there to see this tree and get a wonderful clear view of Louisville.

BIBLIOGRAPHY:

- 1) Jones, Ron L. Plant Life of Kentucky: An Illustrated Guide to Vascular Flora. 2005. University Press of Kentucky. Lexington, KY. 834 pp.
- 2) Wharton, Mary E. and Barbour, Roger W. Trees and Shrubs of Kentucky. 1973. University Press of Kentucky. Lexington, KY. 582 pp.
- 3) Williams, Michael D. Identifying Trees: An All Season Guide to Eastern North America. 2007. Stackpole Books. Mechanicsville, PA. 406 pp.
- 4) *Quercus shumardii*: Shumard Oak. <http://edis.ifas.ufl.edu/st561>
- 5) What is a Shumard Red Oak? <http://www.wisegeek.com/what-is-a-shumard-red-oak.htm>
- 6) Benjamin Franklin Shumard. <http://www.findagrave.com/cgi-bin/fg.cgi?page=gr&GRid=9321788>
- 7) Shumard, Benjamin Franklin. <http://www.tshaonline.org/handbook/online/articles/fsh33>
- 8) Benjamin Franklin Shumard. <http://books.google.com/books?id=1PgCAAAAYAAJ&pg=PA738&lpg=PA738&dq=benj...>
- 9) Global Ant Project – World Ant Taxonomists: Samuel Bostford Buckley (1809-1884) <http://gap.entclub.org/taxonomists/Buckley/index.html>
- 10) Shumard Oak. http://creationwiki.org/Shumard_oak
- 11) *Quercus shumardii*. http://en.wikipedia.org/wiki/Quercus_shumardii
- 12) *Quercus shumardii* (Shumard oak). http://www.wildflower.org/plants/result.php?id_plant=QUSH
- 13) What butterflies lay eggs on oak trees? http://www.ehow.com/info_8199339_butterflies-lay-eggs-oak-trees.html
- 14) Shumard's Oak. <http://plant-materials.nrcs.usda.gov/>
- 15) Tent Caterpillar. http://en.wikipedia.org/wiki/Tent_caterpillar
- 16) Gypsy Moth. http://en.wikipedia.org/wiki/Gypsy_moth
- 17) Fall Webworm. http://en.wikipedia.org/wiki/Fall_webworm
- 18) Mighty oaks from little acorns grow. <http://www.phrases.org.uk/meanings/247100.html>
- 19) Shumard Oak – *Quercus shumardii*. http://volusia.org/arboretum/Trees/shumard_oak.htm

- 20) Profile for Quercus shumardii (Shumard's oak). <http://plants.usda.gov/java/profile?symbol=QUSH>
- 21) Herbs, Trees, and Fungi. <http://www.shee-eire.com/Herbs.Trees&Fungi/Trees/Oak?factsheet1.htm>
- 22) Trees for Life – Mythology and Folklore of the Oak. <http://www.treesforlife.uk/forest/mythfolk/oak.html>
- 23) Tree Shumard Red Oak – Quercus shumardii.
http://www.cityoforlando.net/planning/nature/trees_schmar.htm
- 24) Key of Oaks. <http://www.cas.vanderbilt.edu/bioimages/tree-key/oak-key.htm>
- 25) Shumard Oaks. http://www.naturehills.com/product/shumard_oak.aspx
- 26) Detailed information on Shumard Red Oak, Shumard's Oak, Quercus shumardii.
<http://davesgarden.com/guides/pf/pg/61688/>

Notes from the Nature Nut

By: W.H. (Wally) Roberts

“Special Moments in Time: The Woodcock Walk”

In December of 1986, Karen and I moved from my old home place in Fern Creek to Illinois Avenue about 200 yards east of the Louisville Nature Center. The Beargrass Creek State Nature Preserve (BCSNP) had been established years before, but the Louisville Nature Center (LNC) was in its infancy. We stumbled upon our new home quite by accident and its proximity to LNC helped us decide to make the move. For the next 17 years we never regretted the decision and our lives centered around activities at LNC and the Louisville Zoo. The special friends and memories we made continue to enrich our lives. “The Woodcock Walk”, as I refer to it, is a unique memory that truly represents a special moment in time.

One early warm spring in the late 1980's, Karen and I and our black lab, Coal, started taking hikes after supper. On one especially nice evening, we were sitting on a swing at the edge of Joe Creason Park when we first noticed strange sounds coming from the woodland edge at BCSNP. The sounds were peent...peent...peent followed by a whirling sound. An investigation revealed Woodcocks silhouetted against the western twilight doing their mating display flights. It was a first for Karen, and I had previously observed the birds only a few times.

While sharing a description of our experience with Ken and Margie Conard and Len and Jan Stahlgren, they became excited about the possibility of hearing and seeing the birds at close range. Karen and I watched the weather forecasts and invited both couples over to our house on what we thought would be a perfect evening for a Woodcock walk. We left our house a little before sunset and walked the short distance down the road into Joe Creason Park near the tennis courts.

As all of us wanted a close view of Woodcocks, I reminded everyone to be as quiet and patient as possible. When we reached the open field near the old quonset hut that LNC used as a nature center, we heard the first calls and were treated to mating flight displays about 50 yards away to the west. As darkness closed in, the calling and flights subsided. I mentioned that the birds usually return to the edge of the woods in a small group about that time of day. We decided to approach the area slowly and quietly. The old quonset hut had a security light on the north side of the building that we feared would reveal our position to the Woodcocks. In reality, the security light provided enough illumination to create special memories for us. As we stood quietly, we could hear several birds coming toward us on the ground. We finally saw them, ten to twelve in number, and so interested in finding and impressing a mate that they never noticed us. When they were within flushing range, I kicked with my foot and all took flight around us...one so close that its wing beats knocked my cap off. All of us were startled, but Margie squealed with glee as she jumped up and down with her hands planted on my shoulders. After our unique venture, we returned to our house for refreshments.

This special experience led me to initiate two Woodcock walks each spring at LNC. Although we occasionally encountered a few Woodcocks on the walks, we were never again able to find the large numbers at such close range that made that first Woodcock walk “A Special Moment in Time”.

Brave New Contributors to the KSNH Newsletter:

I would like to extend a huge thank you to Nathan Wilson, Pat Berla, and Jamie Tooill for their amazing contributions to this season's newsletter. Keep the good stuff coming you guys!



Above is a photo from first-time contributor **Nathan Wilson**! Thank you Nathan for such a lovely picture, and thank you for showing us all what you see in the great outdoors!

Pat Berla decided to share her poetry with us this month. After seeing Sandhill Cranes on our February outing, I found this Haiku to be just perfect for the spring edition. Thank you so much Pat for your beautiful words.

*Wide-winged shadows darken upturned eyes:
three Sandhill Cranes
sail windswept skies.*



<http://richardsbirdblog.com/2010/08/05/sandhill-crane-festival/>

James Tooill wrote a wonderful poem after learning how to identify the Kentucky Coffee Tree on the February Tree Identification Hike.

Gymnocladus Dioicus: An Impression

The Kentucky Coffee Tree
Stood about 19 meters high (in the typical range)
In this Kentucky boy's backyard
Its 6-9 seeds in every pod once brewed by pioneers as a coffee substitute
A dangerous switch, as it was poisonous

The Genus Gymnocladus is of Greek origin
Naked branches in the early fall
Apparently recalling naked Greek gymnasts
Socrates might have enjoyed the new philosophy of Parisian coffeehouses
And being no stranger to poisonous drink
Could have had a cup of the dangerous Kentucky java

Leguminous pods six to ten inches long
With sickly-sweet pulp and reddish brown exterior
Littering the ground just a little too close
Too close to the football game taking place
A young Mr. fakes right then left
And ducks right out of his dad's grasp
Only to find a tall dark defender
Ash-gray fissured bark halting the action
For an injury timeout: boy out cold on the grass and pods

Impressions aren't always immediate
Spring is slow to change the Kentucky Coffee Tree
Known to remain leafless until late in the season
Winter Buds being fully there, but barely perceptible
And it'll be 8 years before I start learning Greek
12 before I make a living roasting coffee
And 15 before I make it back to Kentucky.

Welcome New KSNH Members!

Sean Murphy

Bill Franck

Alyssa Underwood

Ray Eaton

KSNH SPRING CONFERENCE 2012

Shepherdsville, KY – Paroquet Springs Conference Center and Comfort Inn and Suites

Field trips and events all start at Paroquet Springs Conference Center unless otherwise noted. If you are going into Bernheim for an event, tell them at the entrance gate that you are a member of Kentucky Society of Natural History to get in FREE.

Registration – 3 to 5 pm at the Paroquet Springs Conference Center and again from 6:30 to 7:30.

AGENDA

Friday, April 20

- 7:30 pm Wren Smith, Bernheim Naturalist/Interpreter, KSNH Naturalist of the Year 2010 will speak on **“Foraging for Food and Fun – Eat a Weed!”**
- Susan Wilson, KSNH Photography Coordinator will present **KSNH Photos**

Saturday, April 21

- 9 am – 4 pm Berl Meyer, Board Member at Large KSNH, Geologist will lead an expedition: **“Civil War – Nature Adventure to Fort Duffield and Elizabethtown”** - The group will car pool to Fort Duffield (West Point, KY), the state’s largest and best preserved Civil War earthen fortification. A history of the fort and viewing of common wildflowers of the Knobs will be discussed. Lunch will be at Back Home Restaurant in Elizabethtown, KY. The next stop will be E-Town Nature Park where Freeman Creek flows into Freeman Lake. The Lincoln Heritage House, crafted in part by Abraham Lincoln’s father, Thomas, and a viewing of wildflowers and waterfowl will be discussed there. A final stop will be at the Helm Cemetery – also in E-Town- to pay respects to the Helms, in particular Ben Hardin Helm. **Rated – Easy**
- 9 am – noon Tara Littlefield, botanist Kentucky State Nature Preserves will lead an expedition: **Field trip to Pine Creek Barrens Preserve in Bullitt County**, which is the site of several threatened wildflowers and plants including: Northern Dropseed, glade cress, and Eggleston’s or glade violet. **Rated – Easy**
- 9am – noon Larry Hilton, Senior Naturalist for Metro Parks, head of the volunteer trail ranger group and trails, and assistant on the natural areas management team will lead an expedition: **Car-pool Trip to Jefferson County Memorial Forest Selected Sites**. An overall history and viewing will be undertaken. Frequent short stops and easy trail walks to discuss the forest will also be employed. **Rated – Easy**

OPEN TO KSNH MEMBERS

- 9 am – 1 pm Wren Smith will be leading a Bernheim Public Program called **“Picnic With the Wildflowers”**. Cost is \$10.00. Advanced registration is required if you desire to attend this program (502-955-8512). It is capped at 25 participants. Pack a lunch. **Rated – Easy**

Lunch 12:00 – 1:30 on your own

- 1:30 – 4:30 pm Andrew Berry, Bernheim Forest Manager will be leading an expedition: **Field Trip to Wilson Creek and Other Restoration Sites at Bernheim Forest**. Spring wildflowers and seldom-visited portions of the forest will be seen. Meet at Bernheim’s Visitor Center. **Rated – Moderate**
- 1:30 – 4:30 pm Robert Bridges, Bernheim Volunteer Naturalist/hiker will lead an expedition: **Field Trip on the Sun and Shade Trail and to Parts of Nevin Lake at Bernheim Forest**. Flora and local history and interesting trees/shrubs will be discussed. **Rated – Easy to Slightly Moderate**
- 1:30 – 4:30 pm Chris Bidwell, VP KSNH and President of Falls of the Ohio chapter and Susan Wilson, Photography coordinator for KSNH – both amateur naturalists and nature photographers will lead an expedition: **Field Trip to the Knobs State Forest Adjacent to Bernheim**. A leisurely stroll with flora identification, history of the area, and nature photography tips/discussions/demonstrations will be included on this walk through the state’s latest preserved forest of 1500 acres. **Rated – Easy to Slightly Moderate**

Dinner on your own

7:30 pm **Saturday night program** - Recap of Saturday's events

Joyce Bender, Nature Preserves and Natural Areas Branch Manager, Kentucky State Nature Preserves Commission will speak on **“Stories from a Kentucky Land Steward”**.

Wally Roberts will present the Naturalist of the Year award for 2011.

Sunday, April 22

9 – 11 am Chris Bidwell and Susan Wilson will lead an expedition: **A Stroll Along Rocky Run Trail at Bernheim Forest**. This is one of the most spectacular trails for Spring wildflowers. Nature photography tips will be part of the stroll. **Rated – Easy to Slightly Moderate**

9 – 11 am Chris Knopf, Bernheim Volunteer Naturalist will lead an expedition: **A “Dragonfly/Damselfly Search” at Lake Nevin in Bernheim Forest**. Participants will view, discuss, and identify numerous Odonata members. **Rated - Easy**

Remember: Bring a camera, binoculars, water to all outings. Bring your KSNH green wallets to the Conference. Most events will address many nature topics/sightings. Be prepared for Fun and Facts!

Any questions or comments please contact Chris Bidwell (502-896-4834) or e-mail mach5049@gmail.com Please make every effort to attend and show your support for KSNH.



Earthworks located at Fort Duffield
Photo: <http://www.armchairgeneral.com>