



Naturally Kentucky


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KSNPC Latest News: It is with deep regret that we inform you of the passing of Commissioner O.D. Hawkins on Monday, October 9, 2006. He was 92 and passed away at his farm in Owenton. Beginning in 1982, Commissioner Hawkins served KSNPC for a total of 21 years as a representative of the Farm Bureau Association. During that time, he steadfastly supported our mission and was instrumental in moving the Commission forward. His public service and dedication are greatly appreciated. A life well lived, he is survived by his wife of 64 years, the former Bessie Campbell; one son, daughter-in-law and two grandchildren.

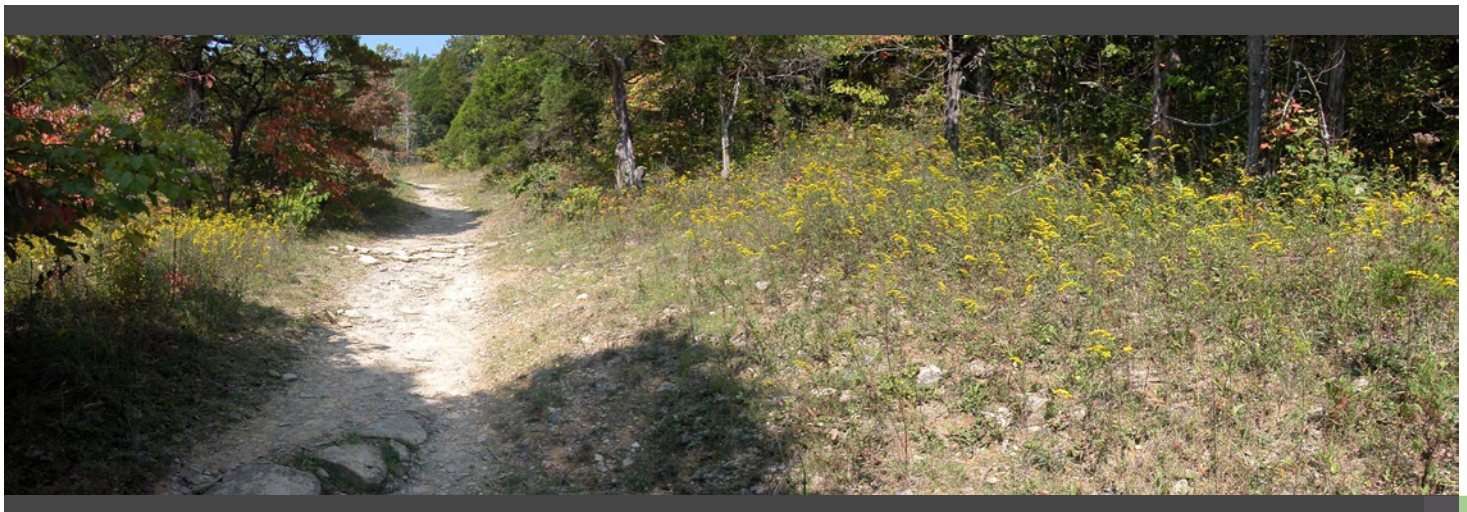
 Brainard Palmer-Ball reflects on a 20-year career with the Commission in his article on page 2.

 Land acquisition efforts have resulted in the protection of bat caves in Christian and Barren Counties and the dedication of additional acreage at John James Audubon SPNP in Henderson County and Thompson Creek Glades SNP in LaRue County. (Complete story on page 10).

 Several personnel changes have taken place recently. Late this past spring Tara Littlefield filled our botanist vacancy. Ryan Evans filled the aquatic zoologist position left vacant by the retired Ron Cicerello. Our new administrative assistant is Felisha Hubbard and eastern preserve manager, Dave Skinner has moved on to northwestern climes. Read about the imprint he made in the state on page 11.

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Bison trail & goldenrod at Blue Licks SPNP ~ Greg Abernathy, KSNPC

REFLECTIONS ON 20 YEARS OF BIODIVERSITY PROTECTION IN KENTUCKY

By Brainard Palmer-Ball, Jr., Terrestrial Vertebrate Zoologist

I came to the Kentucky State Nature Preserves Commission (KSNPC) in January of 1985. Fresh out of graduate school, I was somewhat familiar with nearly a decade of efforts by KSNPC and the Kentucky Chapter of The Nature Conservancy (TNC) to protect “the best of what’s left” in the Commonwealth. At first, I thought the pace of activity was impressive, but within a couple of years it was apparent this noble effort was in no way growing by leaps and bounds. However, despite insufficient levels of funding and what has seemed like a host of insurmountable obstacles, through sheer determination the Commission has slowly but surely compiled an admirable list of accomplishments as it celebrates its 30-year anniversary.

Yes, the face of biodiversity protection in Kentucky has changed dramatically since 1985. When I arrived at KSNPC there was but *one* computer in our office at 407 Broadway in Frankfort, *one* agency vehicle parked outside on the street, and the full complement of staff members was a mere six. At that time there was even room to house TNC’s Kentucky Chapter office staff through a Memorandum of Understanding. In 1985 there were only 14 state nature preserves covering just over 5,600 acres. Nearly half of the preserves and a majority of the acreage had been dedicated in cooperation with the Department of Parks. Now staffed with 22 full-time employees and owning and/or managing over 23,000 acres of land in 57 preserves, natural areas and conservation easements, KSNPC has made great strides in protecting the Commonwealth’s biological treasures.

Back in 1985 I had no idea that 20 years later I’d still be here, but it truly has been a blessing to be associated with this effort. As the years have moved along, I have been mentored by many individuals. In fact, one of the most rewarding aspects has been interacting with a myriad of the state’s “authorities” on everything from mosses and mussels to cave beetles and bats. It is no coincidence that of all the impressions I have formed while traveling across this state for two decades, the ones resulting from the people I have met will be the most lasting. Most folks around these parts are decent people. Of the hundreds of landowners I have encountered in my travels, only a handful of times have I run into someone so distrusting of government or downright bitter that I couldn’t have a civil conversation. I have come to realize that most folks are interested in conservation of plants and animals if you can just tell them about it. However, conservation can be a hard sell in the hustle and bustle of the

global economy, especially for those who make their living off the land. I cannot count the number of times I have wished our society could ratchet back to a simpler level of existence. I believe most people would welcome it, but fewer and fewer seem to have any say in the matter.

Most of the Kentuckians I have met have been rural folk, and most of them have been farmers. I grew up on a dairy farm in Jefferson County and continue to foster a connection to those in agriculture. Kentucky farmers are a unique lot, typically bonded closely to a conservative family heritage of working the land, respectful of common courtesy and guided by the golden rule. Today’s economy, however, has left many of them behind. Farmers believe – rightly so in my mind – that agriculture should be a respectable and profitable manner in which to make a living and

support their families. The combination of global connectivity and the desire of most Americans to pay as little as possible for commodities has made it more and more difficult for the average Kentucky farmer to make ends meet. I suspect many are resentful that such a wonderful way of life is no longer possible in today’s corporate-driven world. Unfortunately, the pressure to remain profitable has reduced the ability of most farm families to consider doing more for conservation.



Black-crowned night-heron ~ Thomas G. Barnes

That said, landowners are our most critical partners in achieving success to protect our plants and animals because so many rare species occur on private land. If I’ve realized one thing in 20 years, it is that significant contributions to biodiversity conservation can come from seemingly the most insignificant of actions. Little things such as allowing a perennially troublesome wet spot along a field edge to revert back to marsh or swamp; leaving a dead tree standing so that a colony of bats can raise young behind the flaking bark; mowing idle areas only once a year after nesting season or in early spring instead of twice or more a year, or retaining a buffer strip of vegetation along a stream. All can have a positive impact in the long run. When pooled together, many small actions can make a big difference.

Other partners KSNPC could not do without are our sister agencies in state and federal government. Twenty years ago it was a lot more difficult to bolster support for orchids and salamanders from most other natural resource agencies. However, today the Commission has more partners than ever in biodiversity conservation. With help from expanded federal funding initiatives, our friends at the Kentucky Department of Fish



and Wildlife Resources are able to place more and more emphasis on cooperative projects that benefit not only native game species but non-game wildlife, plants and natural communities as well. There is certainly a bright future for expanded cooperation on many fronts between our agencies with goals that become more similar with the passing of every year.

While some members of the staff toil with details of budgets, databases, and property deeds, like other KSNPC biologists my main responsibilities in biodiversity conservation have focused on determining the ranges and monitoring the status of various organisms. For most of my 21 years I have been responsible for the terrestrial vertebrate groups (amphibians, reptiles, birds and mammals), but anything in my path that flowers, flies, swims, or

sings has been a target of my attention. The beauty and diversity of life all around us will never cease to amaze me.

I will close with some reflections on my 20 years at KSNPC. These experiences comprise, of course, only a tiny slice of the memories one takes away from such a stimulating and rewarding endeavor. For everyone involved in biodiversity conservation, no matter how actively or passively, both the high points and the challenges enrich our lives and keep us motivated. Unfortunately, the issues that today are impacting the earth's creatures the most are the same ones that may eventually threaten *our* very existence as well, and yet they seem to spread faster and farther across the globe with the passing of every day. It is incumbent on all of us to stay involved as much as we can.

A few of my favorite places in Kentucky:

High Rock, Bad Branch State Nature Preserve, Letcher County:

The view is not the most impressive in Kentucky, but to get there you've hiked through 3.5 miles of Appalachian forest. If you can filter out the whine of the coal trucks and look away from the abandoned coal mines to the north and south, and sit there on the warm sandstone watching flocks of broad-winged hawks (*Buteo platypterus*) float by overhead on their way south to Central and South America on a sunny day in late September, it's pretty darned close to perfect.

McElroy Lake, near Woodburn, Warren County: This area is usually nothing more than a corn or soybean field, but at the time of European settlement it was in the heart of the "big barrens" of Kentucky and was likely covered in native prairie grasses. Every few years it is filled with water by overflow from the great underground karst cave systems of southern Warren County. During such times it covers several hundred acres and hosts thousands of waterbirds, sometimes for months at a time. Standing there watching great flocks of sandpipers and waterfowl wheel in unison as a peregrine falcon (*Falco peregrinus*) cuts through them in search of the weak individual, I am always struck with the impression that it is an instinctual attraction handed down through many generations that draws so many birds to this place. Several million dollars will be needed in the next 20 years to keep this wonderful spot from being lost to development.

Deep inside a cave on Pine Mountain, Letcher County:

There are several caves on Pine Mountain that I have visited every two years since the late 1980s to conduct a census of hibernating Indiana bats. Deep inside one is a small passage that has always captured my imagination. I and a small party of biologists have roped our way down a large portion of the north slope of Pine Mountain, scampered over frozen waterfalls, and tip-toed along narrow ledges to reach the entrance. Upon entering this special place we have spiraled our way down through a maze of small passages, several times crawling or shuffling through crevices seemingly too narrow to accommodate our torsos. Having visited this cave on several occasions, I can now accurately navigate my way to a small cavity near the floor of a cramped, moist room. As you wedge your way down through the hole there always seems to be an annoying trickle of water that patters in your face. However, this narrow opening is the gateway to a larger, drier and more horizontally aligned passage that serves as the hibernaculum for more than 2,000 Indiana bats. There deep in the mountain, hundreds of feet and a couple of dozen twists and turns from the entrance, and always in this same little room, are several randomly arranged clusters of tightly packed, sleeping bats perfectly hidden away from the harsh winter weather and disturbance from humans (other than for the 10 minutes we share their space with them every other year).

(Continued on page 4)



High Rock, Bad Branch State Nature Preserve ~ Barry Howard



Broad-winged hawk kettle ~ Paul Cypher, SMRR



And finally...

A few of the “best” days as a KSNPC biologist:

June 14, 1986: Former KSNPC employee Wendell Haag and I are hiking in Letcher County. We deviate up a side trail and come upon a scattered patch of some of the most beautiful pink orchids we have ever seen growing in a wet patch of sedges. Knowing just enough to be dangerous and thinking this is something that must be special, we return to the main trail to summon our friends and orchid experts, John MacGregor and Richard Cassell, to tell us what it is that we have discovered. Their oohs and ahhs soon confirm this is something extraordinary, indeed ... the first rose pogonia orchids (*Pogonia ophioglossoides*) observed in Kentucky in more than 150 years! The camaraderie associated with the sharing of such discoveries always leaves a lasting impression.

May 25, 1989: My friend, Alan Barron, and I had watched a pair of northern harriers (*Circus cyaneus*) fly in and out from the same point on a broad grassland slope in Muhlenberg County until we felt certain they must be involved in nesting. Upon walking up to the spot, I came upon a shallow saucer of neatly arranged dead grasses that held two relatively large, light blue eggs. At that moment I realized I was knowingly setting eyes on the first northern harrier nest in Kentucky since John James Audubon had seen them in the native prairies in the early 1800s.

June 5, 1997: While doing surveys for amphibians in southern Christian County, I found a female northern shoveler (*Anas clypeata*) with a brood of nine small ducklings on a wet-weather pond near Oak Grove. This was the first confirmed breeding record for the species in Kentucky.



Rose pogonia orchid ~ Marc Evans



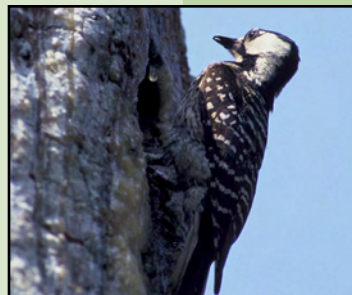
Northern harrier nest ~ Brainard Palmer-Ball



Northern shoveler ~ Dave Menke



Indiana Bat ~ John MacGregor



Red-cockaded woodpecker ~ J&K Hollingsworth

A few of the “worst” days as a KSNPC biologist:

Sept. 18, 1997: The pond where I had found the family of northern shovelers just three months earlier is completely filled in with dirt as a bulldozer puts the finishing touches on what will soon become the parking lot for a new truck stop along Interstate 24. I had been totally unaware of the proposed land use for the site when I had discovered the shovelers and on this day I was completely shocked to see what had happened.

Feb. 9, 1998: This was the date of my first visit to a certain Breckinridge County cave since the March 1997 flood. Two years earlier, I had counted more than 1,900 federally endangered Indiana bats (*Myotis sodalis*) in a large underground room which I thought at the time must be as fine and safe a hibernaculum as any bat could find. Alas, that day I counted only six; the rest had certainly drowned in the high water, which I could tell had reached all the way to the ceiling.

March 23, 2001: The last Kentucky-native red-cockaded woodpecker (*Picoides borealis*) is trapped in Laurel County by the U.S. Forest Service for relocation to the Carolina Sandhills National Wildlife Refuge in South Carolina. The devastation of the 1999-2000 southern pine beetle (*Dendroctonus frontalis*) outbreak has broken the back of the mixed pine-hardwood forests of the southern Cumberland Plateau and federal officials decided not to allow the red-cockaded to decide for itself if it can still survive here. I know I will never see another in Kentucky.



DANGEROUS TIMES FOR OUR FOREST CATHEDRALS

By Kyle Napier, Southeastern Regional Nature Preserve Manager

I have to say that I find this line of work rewarding; it leaves me with a feeling of truly making a difference. However, occasionally things occur that make me want to throw my hands up and simply ask, "What's the use?" Invasive species have been steadily impacting more habitat and taking up more time each year. The latest is also one of the worst – a tiny insect, the Hemlock woolly adelgid (HWA) (*Adelges tsugae*).

HWA is from Asia and was first discovered in the United States in Oregon in 1924. The western hemlock (*Tsuga heterophylla*) was not damaged by the HWA. The insect was found in Virginia in 1951 and has been spread by wind, birds, mammals (including humans) and infested landscaping material. It continues to spread and has become a serious threat to both the eastern hemlock (*Tsuga canadensis*) and Carolina hemlock (*Tsuga caroliniana*). In Kentucky we expected the invasion, but I hoped that something would stop this pest before it reached our state.



Hemlock woolly adelgid ~ Connecticut Agricultural Experiment Station Archives

Unfortunately, this spring the inevitable became a reality when it was discovered this spring on Pine Mountain in Harlan County. In June it was seen at our James E. Bickford State Nature Preserve and later was found at Pine Mountain State Park in Bell County, next door to Pine Mountain State Park Nature Preserve.

HWA is a small, aphid-like insect that feeds by sucking sap from the young growth on hemlock twigs. The insects reproduce at an exponential rate due to the female's ability to reproduce asexually. The ability to quickly multiply leads to infestation levels that prevent new tree growth. Infestations left untreated can kill mature trees in three to seven years. In other states it has killed up to 80 percent of the hemlocks. An infestation can be easily identified in late fall to late spring by the white, wool-like egg masses on hemlock needles.

Hemlock may be the most shade-tolerant tree species in

the country, and it can survive in the forest understory for hundreds of years. Given the opportunity, hemlocks can reach heights of 100 feet or more. Hemlock stands create a variety of microclimates within the forest. These dark, cooler "cathedrals" provide important habitat for a variety of flora and fauna. Many bird species use hemlock forests and several have been found to rely significantly on them, including the Acadian flycatcher (*Empidonax virescens*), Blackburnian warbler (*Dendroica fusca*) and black-throated green warbler (*Dendroica virens*). Streams sheltered by hemlock are more likely to harbor a wide variety of aquatic species than hardwood-sheltered streams. They

also maintain aquatic habitat integrity by controlling stream flow and keeping water temperatures cool. Streams shaded by hemlock have lower summer temperatures and are less likely to dry up. Hemlocks also provide winter forage and shelter to a variety of species. HWA threatens more than hemlock trees; it threatens entire natural communities.

A number of insecticidal sprays can be effective in controlling HWA, but inaccessibility of most hemlock stands and high cost of treatment limit their use. To prevent HWA reinfestations, these insecticides must be applied twice a year. Soil injections with imidacloprid provide the longest lasting protection, but impacts to soil and aquatic organisms are not completely understood. Thus far the best hope for large scale HWA control appears to be a ladybug beetle from Japan, *Pseudoscytmus tsugae*, that feeds heavily on HWA. However, these beetles cannot be produced in mass quantities in a cost efficient manner at this time and may not be for several years. This fall and winter we plan on surveying our southeastern preserves for HWA infestations. We will also be developing a plan to prioritize sites for potential future treatments. There is no doubt that the long term control of this alien invader will require a cooperative effort from state, federal and private organizations as well as private individuals.



KSNPC HOSTS FIRST SHORT'S GOLDENROD FESTIVAL

By Alice Mandt, Environmental Technologist

The weather could not have been better this past September for the Commission's first attempt at hosting a large-scale outdoor event. The Short's Goldenrod Festival, a partnership between KSNPC and Blue Licks Battlefield State Resort Park, was not just about one of Kentucky's rarest plants. It was also an open invitation to get outside and celebrate the natural beauty around Blue Licks, the uniqueness of the land and the people living in the surrounding communities. The park's nature preserve was dedicated in 1981, and we wanted to look back over 25 years of successful restoration efforts and thank the many people who have helped. Past and present park employees, neighbors who have protected the Short's goldenrod growing on their lands and all the volunteers who have helped with habitat restoration at Blue Licks deserve recognition for their efforts.

We don't have an official count, but there was a steady flow of visitors to the festival all day long. The morning began with 54 people participating in a 5K run and one-mile walk. Tim Brett, of Georgetown, finished first with a time of 18:09. We were all impressed with his time, but even more so by the fact that he ran the course a second time. Just as the final walkers crossed the finish line, the farmers' market was beginning to set up. There were mums, pumpkins, salsa and buffalo burgers intertwined with fossil art, chair caning and wool spinning. Thanks to all the vendors, especially Sandy Marshall of the River Valley Agritourism Alliance for coordinating the vendors and her help in getting the word out about the festival.

The nature walks and canoe rides were more popular than we anticipated. Hikers got views of the festival's namesake as well as other late blooming plants. Canoeists were able to see some of the animals that make the Licking River their home. We were very lucky to have wonderful trip leaders. Another



popular event was the pie-eating contest. Overall, there were 12 competitors in two categories, children and adults. There was no question about the winner for the children's group, but the adults were a different story. The pie pans were empty, but as you can see it was difficult to determine the amount of pie eaten versus the amount of pie stuck to the contestants' faces. We declared a tie! Thank you to Magee's Bakery Farm for providing the delicious pies.

During the day, several workshops were offered for anyone who wanted to learn more about what local groups are doing to address environmental issues. Thank you to all the presenters. We thank Kentucky author George Ella Lyon for her wonderful storytelling including the reading of her book – *Who Came Down That Road?* – about the bison trace at Blue Licks. The Reel World String Band closed out the day with their exceptional music (we wish they could have played all day). Last but not least, thanks also to our partners at Blue Licks and to the park staff who worked hard to help plan and carry out this event so smoothly. The Short's Goldenrod Festival was so much fun, thank you to everyone who made this a great experience.

Park manager Stefanie Gaither has already asked about next year and so did a number of attendees. It looks like there will be a second annual festival, so watch our Web site for more details in 2007!



Pie eating contest winners!





Flower booth



Sara, Keenan and Logan (5k runners)



Connor bobbing for apples



Short's goldenrod



Mira and Bridget (Kid's crafts)



Chair caning demonstration



River Valley Agritourism Alliance members



IN THE SPOTLIGHT: KENTUCKY'S RARE SPECIES AND COMMUNITIES

Etheostoma chienense

Relict Darter

KSNPC STATUS: Endangered

USFWS STATUS: Endangered

GENERAL DESCRIPTION: A 2-3 inch long fish that is a member of the perch family (Percidae).

HABITAT: Small streams in pools with mixed gravel and sand and cover from fallen trees, undercut banks, and riparian vegetation.

RANGE: Restricted to Bayou de Chien in western Kentucky.

REASON FOR PROTECTION STATUS: Habitat degradation and loss associated with agriculture.



Photo by KSNPC Staff

Calephelis muticum

Swamp Metalmark

KSNPC STATUS: Threatened

USFWS STATUS: None

GENERAL DESCRIPTION: Butterfly, reddish to orange-brown color on upperside of wings and brighter orange underside. Black dashes and spots on both sides of the wings with silver-colored dashes (metalmarks) on the upperside.

HABITAT: Bogs, marshes, swamps and wet meadows.

LARVAL FOODPLANT: Swamp thistle (*Cirsium muticum*) and tall thistle (*Cirsium altissimum*).

FLIGHT SEASON: In Kentucky, two broods in June and late August/early September.

RANGE: Isolated populations in southern Michigan and Wisconsin, northern Arkansas, Kentucky, Missouri, and Ohio.

REASON FOR PROTECTION STATUS: Globally rare with isolated populations in a very limited geographic area. Most of the Kentucky populations have apparently disappeared in recent years.

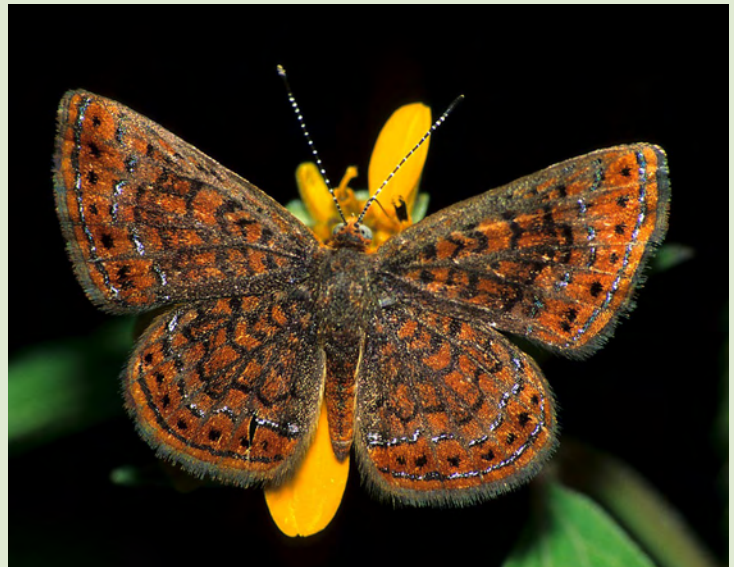


Photo by Ellis Lauder milk, KSNPC

KEY TO KSNPC STATUS CATEGORIES:

ENDANGERED: A taxon in danger of extirpation and/or extinction throughout all or a significant part of its range in Kentucky.

THREATENED: A taxon likely to become endangered within the foreseeable future throughout all or a significant part of its range in Kentucky.

SPECIAL CONCERN: A taxon that should be monitored because (1) it exists in a limited geographic area in Kentucky, (2) it may become threatened or endangered due to modification or destruction of habitat, (3) certain characteristics or requirements make it especially vulnerable to specific pressures, (4) experienced researchers have identified other factors that may jeopardize it, or (5) it is thought to be rare or declining in Kentucky but insufficient information exists for assignment to the threatened or endangered status categories.

HISTORIC: A taxon documented from Kentucky but not observed reliably since 1980 but is not considered extinct or extirpated.



Cimicifuga rubifolia Appalachian Bugbane

KSNPC STATUS: Threatened

USFWS STATUS: None

GENERAL DESCRIPTION: Perennial herb 1.5 meters or more in height. Leaflets are reminiscent of maple leaves in outline and the inflorescence is a long cylinder of whitish flowers at the top of the plant.

HABITAT: Cool mountain woods, river bluffs, and ravines.

FLOWERING PERIOD: Early August to late October.

RANGE: Primarily concentrated in eastern Tennessee and southwestern Virginia, with isolated populations dotted around the Southeast and lower Midwest, including western Kentucky.

REASON FOR PROTECTION STATUS: Few known occurrences.



Photo by Dennis H. Horn

Tallgrass prairie

KSNPC STATUS: Threatened

GENERAL DESCRIPTION: Tallgrass prairie occurs over fertile soils where disturbance such as fire and grazing prevents forest canopy from developing. It is unclear if these fires were primarily started by lightning or initiated by Native Americans, but we know these extensive grasslands attracted large herds of ungulates including bison and elk. Tallgrass prairies in Kentucky were dominated by Indian grass, big bluestem, little bluestem and a number of forbs including many species that are now very rare in the state.

RANGE: Much of the Pennyriple Plain and some adjacent areas used to be covered by a mix of shortgrass and tallgrass prairie where, due to well-developed karst topography, natural firebreaks are rare and fires could spread over large areas. One early traveler reported "riding through grass all day taller than a man on horseback." Because of high soil fertility and gentle topography these prairies are prime agricultural lands and today have been nearly completely replaced by row crops. Small, degraded remnants now represent tiny little specks in a landscape that in the mid 1800s supported millions of acres of prairie. The largest remnant of tallgrass prairie east of the Mississippi with circa 20,000 acres is located in a firing range of the Fort Campbell military reservation.

REASON FOR PROTECTION STATUS: Few isolated tracts remain of the original prairie.



Photo by Martina Hines, KSNPC

ADDITIONAL RESOURCES:

KSNPC Species and Community Information ~ www.naturepreserves.ky.gov/inforesources/SpeciesCommunityInfo.htm

NatureServe Explorer ~ www.natureserve.org/explorer/

USFWS Endangered Species Program ~ <http://endangered.fws.gov>

KEY TO USFWS STATUS CATEGORIES:

(US) ENDANGERED SPECIES ACT OF 1973

ENDANGERED: "... any species ... in danger of extinction throughout all or a significant portion of its range ..." (USFWS 1992).

THREATENED: "... any species ... likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range" (USFWS 1992).

CANDIDATE: Taxa for which the USFWS has "... sufficient information on biological vulnerability and threats to support proposals to list them as endangered or threatened" (USFWS 1999).

SPECIES OF MANAGEMENT CONCERN: Species the USFWS believes are in need of conservation management.



LAND PROTECTION REPORT

By Ron Scott, Land Protection Specialist

Two new parcels of land were formally dedicated as additions to the state nature preserves system at the recent meeting of the Kentucky State Nature Preserves Commission at Blue Licks State Resort Park. A small, privately owned tract of land adjoining the John James Audubon State Park Nature Preserve in Henderson County that was at risk of being developed was purchased by the Kentucky Department of Parks earlier this year. The Commission, which provided financial support for the acquisition effort, will co-manage 13.28 acres of the new property. We would like to express our appreciation to the Beckham Bird Club of Louisville which contributed \$2,000 from its annual Birdathon fund raiser toward purchase of this valuable addition to the state park and nature preserve. An addition to an existing preserve in LaRue County also was dedicated. Located adjacent to the Thompson Creek Glades State Nature Preserve and fronting along Cissal Hill Road, the 14.7-acre tract will provide important buffer and enhanced access to the preserve.

After many months of effort, we have acquired a perpetual conservation easement covering 55 acres of forested land around a cave in northeastern Christian County. The cave constitutes a summer colony site for federally endangered gray bats (*Myotis grisescens*) and state endangered southeastern

bats (*Myotis austroriparius*). It also provides a significant hibernaculum for federally endangered Indiana bats (*Myotis sodalis*) and southeastern bats. Although the land remains in private ownership, the conservation easement will ensure that the property is protected and managed for the benefit of the three bat species inhabiting the cave.

The summer was especially rewarding for the Commission's efforts to preserve and protect bat caves. On July 28, 2006, we purchased a 109-acre property in Barren County that contains one of the most significant unprotected gray bat maternity caves in the Commonwealth. The bats use the cave to give birth and raise their young. They can be found in the cave from early spring until early autumn, during which visitation to the cave is prohibited to avoid disturbing the maternity colony.

We are continuing to work diligently on a number of other land protection projects that are at various stages in the acquisition process. It is hoped that most if not all of these efforts will be fruitful, and you will be reading about a few new preserves and ecologically significant additions to existing preserves in coming issues of the newsletter.

THE TROUBLE WITH TIRES...

By Byron Brooks, Environmental Technologist

One of the greatest challenges created by our convenience-driven lifestyle is dealing responsibly with the ever-increasing volume of waste we produce. The tires that transport us pose an acutely frustrating problem when they are no longer fit for service. Unscrupulous people may resort to illegal dumping, but the only legal and environmentally responsible way to deal with used tires is to recycle them.

Illegal dumping of tires is not only unsightly; it is a public health hazard. A pile of abandoned tires is like free high-rise housing for mosquitoes that spread eastern equine encephalitis (EEV), West Nile virus (WNV) and other diseases harmful to humans. Water collected in a single tire can produce as many as 1,000 adult mosquitoes. How serious is the threat posed by mosquitoes? In 2002, 34 counties in Kentucky had reported cases of West Nile virus in humans.

Most people consider it common sense to properly recycle used tires, but a nefarious few seem to believe used tires make a welcome addition to a state natural area. In August 2006, we discovered a quantity of tires dumped at Tom Dorman State

Nature Preserve in Garrard County. The tires were full of rotting leaves and rainwater but fortunately had not been there long enough to harbor mosquitoes.

The tires were loaded up and hauled back to the KSNPC office in Frankfort. S&S Tire in Frankfort agreed to accept and recycle them for the Commission. Many thanks to Joe Durkin at S&S Tire for taking them and for waiving the fee charged to recycle each tire. Businesses like S&S Tire make it easy for everyone to do the right thing, legally and environmentally.

For more information about health concerns caused by mosquitoes, please visit the following Web sites:

KY Cabinet for Health & Family Services

<http://chfs.ky.gov/dph/epi/westnile.htm>

Illinois Natural History Survey

www.inhs.uiuc.edu/inhsreports/nov-dec96/mosquit.html

Ohio State University Extension

<http://ohioline.osu.edu/hyg-fact/2000/2148.html>

Centers for Disease Control and Prevention

www.cdc.gov/ncidod/dvbid/arboreeefact.htm



HAPPY TRAILS, DAVE

By Joyce Bender, Branch Manager for Nature Preserves and Natural Areas

Our eastern regional preserve manager Dave Skinner recently departed from the Commission to work in natural areas protection in Wyoming.

Dave Skinner started work at the Commission in January 1996. He was one of the two full time regional preserve managers hired by the Commission that year. These positions were my first permanent staff after 10 years of managing the state nature preserves with interim staffing. Dave's arrival coincided with the advent of preserve acquisition funding through the Kentucky Heritage Land Conservation Fund. The Commission added a considerable number of acres to the preserve system in 1996 and it has grown rapidly since.

Dave was responsible for 20 preserves covering 8,512 acres in 1996. When he departed this summer, he had 23 preserves and 6,058 acres (an additional hire allowed us to divide his region in 1998). Even though that was a drop in acreage, Dave's responsibilities grew. Dave hired, trained and scheduled our seasonal employees, helped develop our prescribed fire program, set up and ran a bird banding station to collect data on breeding birds, wrote contracts and MOAs for construction projects and research studies, developed and implemented maintenance schedules for all of our equipment and vehicles, and looked after the 23 preserves in his region. He was also the one who got the "other duties as assigned" because his office was right across the hall, not out in Bowling Green or Whitesburg, where our two other regional preserve managers are located.

A look back over the decade of Dave's time here reveals great accomplishments and evokes fond memories. There are a few things he put into motion that he has asked to be updated on,



Dave Skinner preparing for a prescribed burn.

so I know his preserves have left their mark on him. Right now, there are 23 preserves that need attention. The new Eastern Regional Preserves Manager will have plenty to do the minute she or he walks in the door. One thing going in their favor, Dave left a solid foundation to build on.

PRESCRIBED FIRE PHOTO

Spiked blazing star (*Liatris spicata*) responded well to the spring burn at Log House Prairie Registered Natural Area (Logan County).



Spiked blazing stars ~ Mike Hossom



DIRECTOR'S NOTES

By Don Dott, Executive Director

It has been a hectic summer at the Commission, and as fall officially began with the autumn equinox on Sept. 23, it looks like the calendar's pages will continue to rapidly peel away. The Short's Goldenrod Festival at Blue Licks State Resort Park was the first large-scale event of this kind the Commission has undertaken, and it was quite a success, particularly for its first year. If you were not able to attend, please mark your calendar to watch for the second annual festival in September 2007. This summer we have had several staff changes. Tara Littlefield has filled a botanist vacancy and has been a great boost to our work with state and federally listed plants. Tara is well equipped with a master's in forest ecology from the University of Kentucky. We were also able to restore the aquatic zoologist position that was lost about a year ago due to the rules of the state government budgeting process. Ryan Evans is our new aquatic biologist, and he has strong interests in freshwater mussels, fishes, snails and crayfish. He comes to the Commission from the Pennsylvania Natural Heritage Program, which means he is already familiar with natural heritage program methodology and the BIOTICS data system – a real advantage. If you have phoned the office recently you have already met another new staff person, Felisha Hubbard, administrative assistant, who is rapidly becoming adept at applying the administrative "grease" needed to keep the office wheels turning smoothly. We sadly parted with Dave Skinner, our eastern regional preserve manager for the past decade, who left to do conservation work in the West.

I am also happy to report that

two of our Commissioners have been reappointed to succeeding terms. Clara Wheatley, Commission chairperson and representative of the National Farmers Organization, and Gayle Horn, representative of the Association of Soil Conservation Districts, have been reappointed by Governor Ernie Fletcher. They will serve new three-year terms through 2009. These reappointments provide continuity for the Commission and will enable us to move forward with their continued strong support.

The Commission also is working on an update to the state-listed rare plant regulations. It's hoped that the proposed revisions will have been published by the time you read this newsletter. They can be found in the Kentucky Administrative Regulations, at 400 KAR 3:020 and 3:040. We are directed by statute to update this list every four years, and this is the first update. Deborah White, senior botanist, oversees the rare plant list, and with input from other staff and botanists around the state she has compiled the revisions for 2006. I also plan to work toward introducing legislation in the 2007 session of the General Assembly to provide basic protections for state-listed plants. This would include provisions to make it illegal to collect state-listed plants from public lands, and to license or register nurseries selling state-listed rare plants. This will provide data on what impact the commercial trade may be having on wild populations of these species. The proposed legislation would also offer certification to those nurseries which sell nursery propagated plants. This would be a good way to gain some basic protections for our state-threatened and -endangered plant species.

KENTUCKY STATE NATURE PRESERVES COMMISSION

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Kentucky State Nature Preserves Commission Quarterly Public Meeting

December 13, 2006

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801 Schenkel Lane, Frankfort, KY 40601-1403

10:00 AM EST

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It is the mission of the Kentucky State Nature Preserves Commission to protect Kentucky's natural heritage by: (1) identifying, acquiring and managing natural areas that represent the best known occurrences of rare native species, natural communities and significant natural features in a statewide nature preserves system; (2) working with others to protect biological diversity; and (3) educating Kentuckians as to the value and purpose of nature preserves and biodiversity.

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