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KSNPC Latest News: An unimproved road that runs along the boundary of Natural Bridge State Park Nature Preserve is closed to off-road vehicle traffic through a joint effort with Kentucky Department of Parks, Daniel Boone National Forest and Powell County Fiscal Court. (Complete story on page 2)

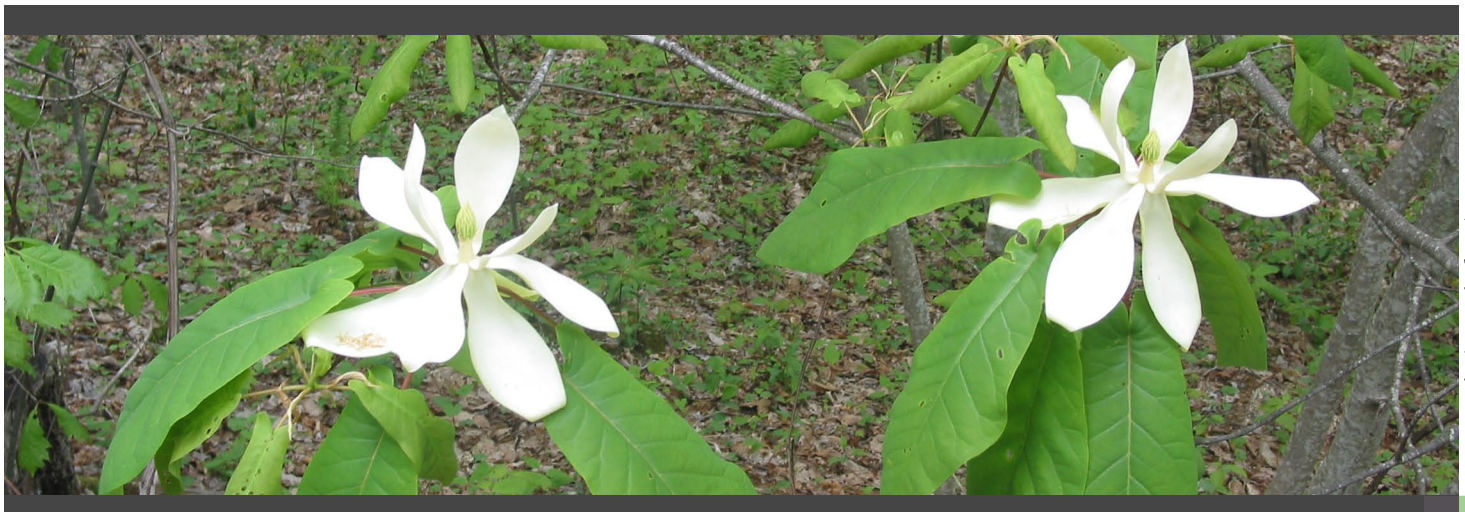
 The power of partnerships continues to help KSNPC in our efforts to permanently protect some of the Commonwealth's most ecologically significant lands. (Complete story on page 6).

 On September 16th the Commission will co-host the Short's Goldenrod Festival. The festival is a celebration of one of the rarest plants in Kentucky and the United States. The festival is being held at Blue Licks Battlefield State Resort Park in Robertson County. Events include a 5K run and one-mile walk, nature hikes, canoe trips, free workshops, lunch featuring Kentucky Proud produce, farmers' market, live music and activities for children. (Complete story on page 3)

 On June 14th, the hemlock wooly adelgid (*Adelges tsugae*) was discovered at the James E. Bickford State Nature Preserve in Harlan County. This aphid-like insect pest was found on hemlock trees along a trail running through the preserve located within the Pine Mountain Settlement School property. The adelgid causes death to hemlock trees, usually within 6-10 years of infestation. Chemical control methods can reduce the rate of spread of the adelgid and can protect individual trees, but are not feasible on a large scale. Biological control methods are being explored but have not been established region wide. For more information on the adelgid visit <http://na.fs.fed.us/fhp/hwa/>.

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Fraser Magnolia (*Magnolia fraseri*) ~ Marc Evans, KSNPC

NATURAL BRIDGE STATE PARK NATURE PRESERVE IMPACTED BY OFF-ROAD VEHICLES

By Dave Skinner, Eastern Regional Nature Preserve Manager

In 1981, 994 acres of Natural Bridge State Park became a dedicated state nature preserve. It is a significant natural area with populations of six state-listed species. The rare species include three plants, one snake and two bats. One of the bat species, the Virginia big-eared bat (*Corynorhinus townsendii*), is also a federally endangered species. In 2003, the Kentucky Department of Parks approached the Kentucky State Nature Preserves Commission (Commission) about adding two of their recent acquisitions, the Edwards and Fuller tracts, to the state park nature preserve. These tracts adjoin the original park preserve on the south side. Commission staff inspected them and determined that natural qualities were comparable to the nature preserve and recommended these tracts be dedicated. In December 2003, the Edwards and Fuller tracts were dedicated enlarging the park preserve to 1,188 acres.

Any land acquisition brings on additional management responsibilities but this new property presented quite an unexpected challenge. The Daniel Boone National Forest (DBNF) surrounds this addition on three sides. One would think that having a national forest as a next-door neighbor would be a good thing and under most circumstances it would be. However, in this particular situation, the U.S. Forest Service's multiple use policy created an atypical management problem for the Commission and the Kentucky Department of Parks (Parks). This problem became apparent when Commission and Parks' staff began posting boundary signs on the preserve addition. On the western boundary of the park preserve, there is a ridge known as "the Narrows" and part of this ridge system includes White's Branch Arch. An unimproved road that is popular with Jeep and other off-road vehicle (ORV) enthusiasts runs along this ridge. It was determined that this road crisscrosses the park preserve boundary several times and there are some segments of the road that are entirely on the park preserve. Commission and Parks' rules and regulations clearly do not provide for this activity. Because of the amount of use the area was receiving from ORVs, worsening environmental degradation was readily apparent from one month to the next. The drivers were widening the road by cutting trees to go around areas too damaged to negotiate, creating braids to the road and deep mud-filled pits. Soil and even sandstone bedrock were eroding at an

unbelievable rate. It is estimated that some of the more fragile areas lost three feet of soil to these destructive acts.

As soon as the Commission and Parks determined that much of this activity was on the park preserve, wheels were put into motion to curb the vehicle traffic. It was apparent that without the cooperation of the DBNF, it would be impossible to fix this problem. Several joint meetings took place with DBNF, Parks, Powell County Fiscal Court and the Commission. All parties quickly agreed that something had to be done. After two years of vigilance on the issue by Commission and Parks' staff, a solution to the problem seemed to miraculously congeal early this year. The DBNF obtained the authority and funding to close the road at points beyond the park preserve boundary. Also, Parks requested additional funding from the Kentucky Heritage Land Conservation Fund to assist with the road closure within the park preserve.

This summer the roadway will be obliterated making it impassable even to off-road vehicles. Boulders will be strategically placed to block vehicular traffic and the area will be remediated and re-vegetated to stabilize the remaining soil, restore its scenic value and its ability to function as part of the surrounding natural landscape. This area will still be open to foot traffic since it is part of the Sheltoewe Trace, a hiking trail that traverses most of the DBNF in a north-south direction. Soon the sound of roaring engines and spinning tires in this desert-like landscape will be replaced by the subtle scuffle of the hiker's boot on the trail. Once again, it will be a place where pines and oaks are important driving forces in the ecology of this ridge top. Because of the resiliency of nature, this area will once again become a place of solitude and beauty for those who need and want wild places.

Success stories like this are not isolated events. Because of the persistence and dedication of Commission employees, 55 state nature preserves and natural areas have been protected and are being managed to enhance their biological resources. Currently, the state nature preserve system protects 23,190 acres of land across the Commonwealth.



Off-Road Vehicle impacts at Natural Bridge State Park Nature Preserve ~ Zeb Weese, Kentucky State Parks



SHORT'S GOLDENROD FESTIVAL

By Alice Mandt, Environmental Technologist

On September 16, 2006, the Kentucky State Nature Preserves Commission will be continuing its 30th anniversary celebration by co-hosting the Short's Goldenrod Festival with Blue Licks Battlefield State Resort Park. Short's goldenrod (*Solidago shortii*) has been listed as endangered by the U.S. Fish and Wildlife Service since 1985. Until a recent discovery of the species in southern Indiana, the only population in the world existed within 2 square miles of Blue Licks, Kentucky. It is one of the rarest plants protected by the Commission and is an example of Kentucky's uniqueness.



The day's events will begin with a 5K run and one mile walk followed by nature hikes, canoe trips, a lunch featuring Kentucky Proud products and a farmers' market filled with local artists, musicians, and produce. Free workshops will be offered during the day to discuss local and global environmental issues. Activities for children include leaf rubbings, apple bobbing, live animal presentations by East Kentucky Power and the Natural History Education Program, and storytelling by Kentucky author George Ella Lyon. There is a lot to do so plan on staying all day! More details available on our Web site www.naturepreserves.ky.gov/newsevents/goldenrodfestival.htm.

GOODBYE AND GOOD LUCK TO PRESERVE MANAGEMENT PARTNERS

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

The Commission is fortunate to have partnerships with several organizations that can afford to retain preserve management staff. With 55 properties scattered across Kentucky and only three managers, we are grateful for the help. Unfortunately, two very dedicated and talented people are leaving us this summer and their departures are being felt as deeply here at the Commission as within their own organizations. The Floracliff Board and the Blackacre Foundation, our partners in protecting Floracliff State Nature Preserve and Blackacre State Nature Preserve, are losing their highly valued management staff as both women move on to other opportunities.

Carey Ruff has been the manager of the privately owned Floracliff State Nature Preserve since January 2000. We will miss Carey's expertise, enthusiasm and good humor. She has been a tireless and determined protector of the preserve as well as a wonderful educator. With all of the other preserves to look after, we rested easier knowing Carey had the best interests of Floracliff at heart. She cared deeply for the property and could be counted on to uphold the regulations outlined in the articles of dedication that govern the preserve's management. Carey worked diligently since her first day to get a handle on the exotic pest plants that are invading Floracliff. She definitely put bush honeysuckle on notice at the 287-acre preserve in Fayette County. With



Carey Ruff

help from seasonal employees and volunteers, Carey treated over 150,000 stems of this very invasive pest. The preserve has responded well in the treated areas and many native wildflowers put forth their colorful blooms once again on the slopes where honeysuckle no longer chokes them out. Carey was instrumental in developing environmental education programming for the general public and various

school groups in the area. She promoted research on the preserve and was very supportive of the graduate students and professors who have worked at Floracliff. We wish her every success.

Carolyn Cromer has been the president of the Blackacre Foundation since November 2003. During her time with our Jefferson County partner she initiated and ably led an on-site land management program, which freed KSNPC Preserve Manager Dave Skinner to work on other preserves in his region. Carolyn worked to document the characteristics of the small limestone glades that occur on the 170-acre preserve and helped with developing a prescribed burn plan for the area. She



Carolyn Cromer

began the fight to control bush honeysuckle, privet and a host of other invasives that are spreading across the preserve and recruited a group of volunteers to carry out the work alongside her. Carolyn was a very effective communicator when working with KSNPC and the Jefferson County Public School System, our other partner at Blackacre. Carolyn was very successful at reaching out to the local community as well. She was very creative with the Foundation's newsletter and built up a strong volunteer base for the preserve. Looking beyond the confines of the preserve and the buffer land the Foundation owns, Carolyn advocated for the entire neighborhood regarding planning the future development of this fast-growing corner of the county. We will miss her calm, logical approach to the issues that arise around Blackacre and her wonderful sense of humor. We wish her all of the best.

Good luck and thank you for all you have done, Carey and Carolyn.



Obovaria retusa *Ring pink*

KSNPC STATUS: Endangered

USFWS STATUS: Endangered

GENERAL DESCRIPTION: A 2-3 inch circular freshwater mussel, one of more than 100 kinds known from Kentucky.

HABITAT: Stream bottoms of medium to large-size rivers in sand and gravel.

RANGE: Formerly widely distributed in Kentucky; now restricted to the upper Green River.

REASON FOR PROTECTION STATUS: Habitat degradation and loss.



Photo by KSNPC Staff

Eurycea guttolineata *Three-lined salamander*

KSNPC STATUS: Special Concern

USFWS STATUS: None

GENERAL DESCRIPTION: A medium-sized salamander belonging to the family Plethodontidae, or lungless salamanders.

HABITAT: Breeds in slow-moving streams, swamps and springs.

RANGE: Southeastern United States.

REASON FOR PROTECTION STATUS: Aquatic habitats used by this salamander have been degraded (channelized and drained) and are now relatively limited in extent within its western Kentucky range.



Photo by James D. Kiser

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.



Oenothera triloba

Stemless evening-primrose

KSNPC STATUS: Threatened

USFWS STATUS: None

GENERAL DESCRIPTION: Winter annual or biennial herb that is stemless and has yellow flowers at the level of the basal leaves.

HABITAT: Dry woods, barrens and prairies, often calcareous; in Kentucky, glades, dry limestone soil and rock outcrops in fields.

FLOWERING PERIOD: Early May to mid July.

RANGE: Throughout the southern and midwestern U.S.

REASON FOR PROTECTION STATUS: There have been few recent reports of this species and it may be habitat limited.



Photo by Daniel Reed

Deep Soil Mesophytic Forest

KSNPC STATUS: Threatened

GENERAL DESCRIPTION: The deep soil mesophytic forest is a unique natural community type that is characterized by having deep, rich and moist soils, usually made up of loess deposits. Loess is wind-blown particles derived from muddy soils left behind by receding glaciers and can typically be found covering the bluffs along large rivers and adjacent areas. This community is usually found in upland areas and on old terraces and is best developed on north and east slopes. The canopy is characterized by the occurrence of beech, white oak, red oak, sugar maple, sugarberry, tulip tree and basswood. The understory is often composed of sugar maple, spicebush and pawpaw. A rich herb and fern layer is present with an abundance of spring wildflowers such as appendaged waterleaf, cutleaf toothwort, toadshade, blue phacelia and squirrel corn .

RANGE: Occurs primarily in the north and western part of the state along and somewhat inland of the Ohio and Mississippi Rivers.

REASON FOR PROTECTION STATUS: High-quality examples of this community are rare in the state, due in part to limited areas where loess soils occur. Logging, cattle grazing and urbanization have also reduced the occurrence of high-quality communities, due in part to the highly erodible nature of loess when disturbed. A good example of this community can be seen at John James Audubon SPNP in Henderson County.



Photo by Brian Yahn, 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

In the last several years, one of the most common buzz words in the field of natural resources conservation has been partnership. Resource management agencies, private non-profit groups and funding institutions alike have all recognized the efficiency, synergy and increased effectiveness that can be achieved when multiple entities combine their resources to accomplish mutually beneficial objectives. Sometimes a particular property or landscape that needs to be protected or conserved is simply too large and expensive for any one agency or organization to take on alone. Often there are unique capabilities that different partners can bring to bear, such as when the Commission partners with a private organization or another state agency to formally dedicate their land into the nature preserves system. Dedication affords the property the highest form of legal protection available under state law and Commission stewardship staff can then assist in managing the property to insure perpetuation of its natural character and ecological integrity. Although partnerships are

inherently more complex than unilateral conservation efforts, they often can mean the difference between success and failure in protecting important natural areas.

The Kentucky State Nature Preserves Commission has long recognized the value of working with partners to help permanently protect some of the Commonwealth's most ecologically significant lands. Sometimes this effort is driven by a lack of available funding to purchase land that is at immediate risk or situations in which the Commission was unable to purchase the property directly due to rules governing the state land acquisition process. Other examples include working with private and public landowners to institute permanent legal protections of their property or cooperatively managing preserves after they have been established. Listed below are partner agencies and private organizations with which the Commission has worked to protect, in whole or in part, various state nature preserves:

Preserve Name	Partner	Type of Assistance
Axe Lake Swamp SNP	TNC	Acquisition and resale to state
Bad Branch SNP	TNC	Dedication as state nature preserve
Bat Cave SNP/Cascade Caverns SNP	KDOP	Dedication as state nature preserve
Beargrass Creek SNP	LNC	Co-management
Blackacre SNP	Blackacre Foundation	Co-management/building maintenance
	Jefferson Co. Public Schools	Environmental education program
Blanton Forest SNP	KNLT	Acquisition and resale to state; management assistance
	KDF	Transfer of property
Blue Licks SPNP	KDOP	Dedication as state nature preserve
Boone County Cliffs SNP	TNC	Dedication as state nature preserve
Brigadoon SNP	TNC	Acquisition and resale to state
Chaney Lake SNP	TNC	Acquisition and resale to state
Cumberland Falls SPNP	KDOP	Dedication as state nature preserve
Dinsmore Woods SNP	TNC	Dedication as state nature preserve
Eastview Barrens SNP	TNC	Dedication as state nature preserve
Flat Rock Glade SNP	TNC	Acquisition and resale to state
Floracliff SNP	Floracliff Board	Dedication as state nature preserve; management
Frances Johnson Palk SNP	EKP	Acquisition funding
Hi Lewis Pine Barrens SNP	TNC	Acquisition and resale to state
	SEEF	Dedication as state nature preserve
James E. Bickford SNP	PMSS	Dedication as state nature preserve; co-management
Jim Scudder SNP	Hardin Co. Fiscal Court	Dedication as state nature preserve
John B. Stephenson Memorial Forest SNP	Berea College	Dedication as state nature preserve; management
Kingdom Come SPNP	KDOP	Dedication as state nature preserve
Livingston County SNAs\WMAs	Livingston Co. Fiscal Court	Dedication as state nature preserve
	KDFWR	Co-management



Logan County Glade SNP	Logan Co. Fiscal Court	Dedication as state nature preserve
Lower Howard's Creek SNP	Clark Co. Fiscal Court	Dedication as state nature preserve
	Friends of Lower Howard's Creek	Management
Martin's Fork SNA\WMA	KDOW	Dedication as state nature preserve; co-management
	KDFWR	Co-management
Metropolis Lake SNP	TNC	Acquisition and resale to state
Natural Bridge SPNP	KDOP	Dedication as state nature preserve
Obion Creek SNP	Murray State University	Dedication as state nature preserve; co-management
Pilot Knob SNP	Powell Co. Fiscal Court	Dedication as state nature preserve
Pine Mountain SPNP	KDOP	Dedication as state nature preserve
Raymond Athey Barrens SNP	TNC	Acquisition and resale to state
Stone Mountain SNA\WMA	KDFWR	Co-management
Terrapin Creek SNP	TNC	Acquisition and resale to state
Thompson Creek Glade SNP	TNC	Acquisition and resale to state
Tom Dorman SNP	TNC	Acquisition and resale to state
Woodburn Glade SNP	TNC	Acquisition and resale to state

Note: SNP (State Nature Preserve); SPNP (State Park Nature Preserve); SNA (State Natural Area); WMA (Wildlife Management Area).
Note: EKP (East KY Power Cooperative); KDF (KY Division of Forestry); KDFWR (KY Department of Fish and Wildlife Resources);
KDOP (KY Department of Parks); KDOW (KY Division of Water); KNLT (KY Natural Lands Trust); LNC (Louisville Nature Center);
PMSS (Pine Mountain Settlement School); SEEF (Southeast Education Foundation); TNC (The Nature Conservancy).

PRESCRIBED FIRE PHOTOS

Late spring photos at Log House Prairie Registered Natural Area (Logan County). The burn units have been greening up; take note of the scorched trees along the tree line one-month post burn.



Note: This photo is the same view as picture on the right in spring newsletter, one month later.



Log House Prairie greening up. ~ Mike Hossum



DIRECTOR'S NOTES

By Don Dott, Executive Director

In my last column I spoke of a primary conservation need in Kentucky - to increase the amount of protected natural lands. I discussed the Heritage Land Conservation Fund Board, which uses the revenue from the sale of the popular Nature's Finest license plates to help fund land purchases. I spoke of the nearly unanimous vote by the General Assembly to create a task force to investigate methods by which funds for land conservation can be increased. I also spoke of widespread support nationally among voters to raise revenues, often via tax increases, to fund land conservation. I now want to take that spirit of conservation and focus it on a backyard perspective.

Conservation is a task, really an opportunity, for everyone. It is not only for the experts, government agencies or non-profits. It is not a task just for big landowners. Approximately 93 percent of Kentucky's 25 million acres are privately owned. Conservation will not be successful without the participation of private landowners. This reality has been recognized for some time as the federal Farm Bill has provided cost share funds and other incentives to farm owners for years to engage in practices that are more wildlife friendly, reduce erosion and protect water quality. But you don't have to own a farm or live near wild lands to protect our natural heritage.

The Environmental and Public Protection Cabinet recently launched a public education campaign to address the pervasive problem of non-point source, or runoff, pollution. Lawn fertilizers, herbicides, pesticides, used motor oil and other chemicals that hit the ground, whether on a farm or in a suburban backyard, are

picked up by rain water and washed into ditches, channels, sewers and eventually into our streams and rivers. As the slogan says, "If it's on the ground, it's in your water!"

The aquatic systems of the southeastern U.S. are a global center of diversity – particularly for fishes, mussels and amphibians. One of the biggest threats to these species is non-point source pollution. Just this month the U.S. EPA released a report stating that southern Appalachian streams are among the most stressed in the nation. In Kentucky approximately 55 percent of stream and small-river miles scored poorly in their ability to support aquatic life. The main culprits are too much nitrogen and phosphorous -- nutrients that increase the growth of algae, which leads to a decrease in oxygen. Sediment was also identified as a primary pollutant. Not only do these pollutants adversely impact aquatic life in Kentucky streams, they add to a cumulative tragedy in the Gulf of Mexico in an area known as the dead zone. Varying from 5,000 to 8,000 square miles is an area depleted of oxygen caused by nutrients washing from lawns and farms through ditches and sewers into streams, into the Ohio and Mississippi Rivers and finally into the Gulf. Our failure to practice good conservation at home, literally in our own backyards, causes biological damage, not only here, but also afar.

I firmly believe when the public is educated and armed with the facts they will respond and change behaviors that were once thought harmless or even good, and stop the practices that pollute our streams and destroy aquatic life within them. Degraded streams unsafe for fishing or swimming and a dead zone in the Gulf are too high a price to pay for a weed-free lawn or cornfield. We can change our practices and reduce, or in some cases completely eliminate, the chemicals we put on the ground thereby improving the quality of life for ourselves and those around us.

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Kentucky State Nature Preserves Commission
Quarterly Public Meeting
September 13, 2006
Blue Licks State Resort Park in the Arlington Room
Highway 68, Mt. Olivet, KY
10:00 AM EDT

How to contact the Kentucky State Nature Preserves Commission:

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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.

The Environmental and Public Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, age, religion or disability and provides, upon request, reasonable accommodations including auxiliary aids and services necessary to afford an individual with a disability an equal opportunity to participate in all services, programs and activities. To request materials in an alternative format, contact the Kentucky State Nature Preserves Commission at 801 Schenkel Lane, Frankfort, KY 40601-1403 or call 502-573-2886. Hearing-impaired and speech-impaired persons may contact the agency by using the Kentucky Relay Service, a toll-free telecommunication device for the deaf (TDD). For voice to TDD, call 800-648-6057. For TDD to voice, call 800-648-6065.

