

NATURALLY KENTUCKY



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Emilie Strong Smith: a lesson on giving

by Teresa Prather
Executive Assistant

A few days before a tract of land was to be bought and a subdivision built, Mrs. Emilie "Emmy" Strong Smith donated (against the better judgement of her financial advisors) \$1.5 million - approximately three-fourths of her assets--to purchase land adjacent to Blackacre State Nature Preserve. The 68-acre tract was slated for urban development as a subdivision that would have bordered the preserve--that is, until Mrs. Smith got wind of the news. Mrs. Smith, who turns 89 in July, is quoted as saying "I don't know what money is for if it isn't for doing something like this."

In March of 1979, Mrs. Smith and her late husband, Jefferson Circuit Judge Macauley Smith, donated 170 acres in Jefferson County to the Kentucky State Nature Preserves Commission to become Kentucky's first state nature preserve. This land was originally settled by the Tyler family in 1783 and Judge and Mrs. Smith lived at Blackacre from 1950 until the early 1980's. Blackacre State Nature Preserve was donated to the state for use as a nature preserve and an environmental education facility. Today, the Blackacre Foundation, Inc., serves as the preserve custodian,

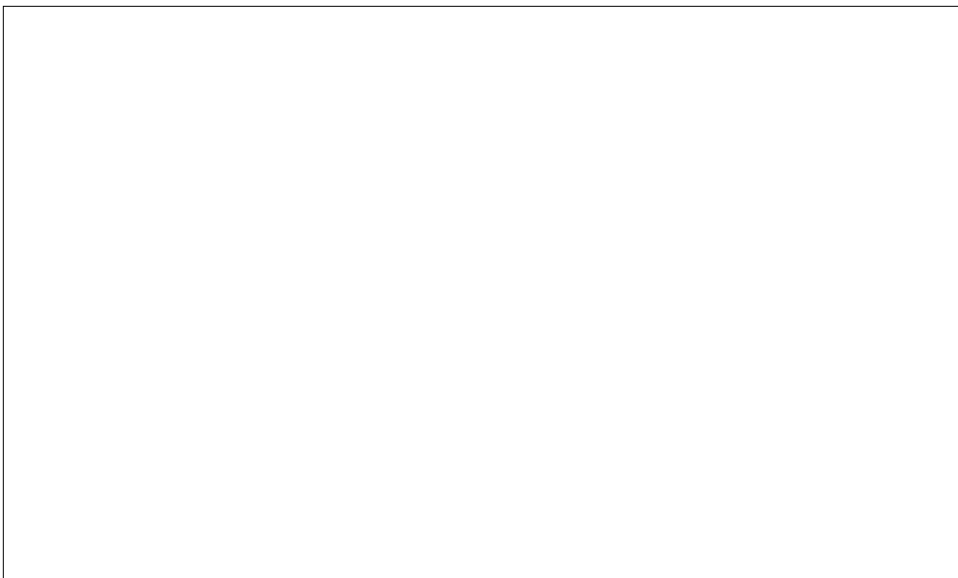
maintaining the buildings and the daily operations of the preserve, and the Jefferson County Public School system manages the environmental education program.

Blackacre State Nature Preserve is located approximately one mile east of Jeffersontown in Jefferson County. The historic buildings at Blackacre include a two-story Federal style brick house built in 1844; a stone cottage, springhouse, and a double crib barn all dating from the late 1790's to the early 1800's. The historical example of people working closely with the land emphasizes Blackacre's present day message.

raising vegetables and studying the preserve's flora and fauna. The majority of the property is used to demonstrate ecological concepts such as succession, competition, and nutrient cycling. The goal of Blackacre's environmental education program is to awaken or strengthen an attitude of respect of the land for visitors. Most of the wooded land at Blackacre is protected from disturbance and will be allowed to mature.

Because of Mrs. Smith's outstanding commitment to Kentucky's environment, she was one of fourteen recipi-

"I don't know what money is for if it isn't for doing something like this."



Left to right: EQC Commissioner, Aloma Dew, Mrs. Smith, and Lt. Gov. Stephen Henry

The Jefferson County Public School System has developed an outstanding curriculum that enables school children to participate in such activities as

ents of the Kentucky Environmental Quality Commission's (EQC) Earth Day Awards on April 22, 1997. Recipients of this award are recognized

Hi Lewis Pine Barrens dedicated as Kentucky's 36th nature preserve

by Barry Howard
Land Protection Specialist

Kentucky officially received the newest addition to its statewide system of nature preserves at a regularly scheduled quarterly meeting of the Kentucky State Nature Preserves Commission (KSNPC), which was held at Whitesburg, Kentucky on June 4. All Commissioners present voted to approve the Articles of Dedication for a 164-acre tract of land on the south face of Pine Mountain in Harlan County near Cumberland, Kentucky. This tract was recently purchased by KSNPC from The Nature Conservancy and is a core parcel at the site known as Hi Lewis Pine Barrens. Consequently, this new preserve has been named the Hi Lewis Pine Barrens State Nature Preserve.

This is the first new nature preserve to be dedicated this year and the 36th overall. It also becomes the fifth nature preserve located on Pine Mountain, which is one of Kentucky's most outstanding and significant natural features. (The other Pine Mountain preserves are at Pine Mountain State Resort Park, Kingdom Come State Park, Blanton Forest, and Bad Branch.)

Hi Lewis Pine Barrens is the best and possibly the only remaining example of a pine savanna/woodland community in the state of Kentucky. This unique area is characterized by an open to partially closed canopy of pine and oak trees, which in the more open areas are associated with native grasses and other plants more typical of

prairie vegetation. Several rare plants are known to occur here, including Canadian frostweed (*Helianthemum canadense*), yellow wild indigo (*Baptisia tinctoria*), and screwstem (*Bartonia virginica*). The community type at this site is so rare that KSNPC staff biologists have given it a biodiversity ranking of "B-1", which is the highest ranking available and reserved only for sites that have outstanding biodiversity significance. (For a more in-depth biological account of this site, see the article on Hi Lewis Pine Barrens by Marc Evans in the December 1996 issue of *Naturally Kentucky*.)

This rare pine barrens community is thought to be dependent on fire for its survival. KSNPC staff will be studying the fire history of this area in order to develop and implement management strategies that will protect the natural integrity of this rare community. It is likely that at some point in the future, controlled burning will be necessary to preserve the pine barrens habitat. In the complete absence of fire, it is likely that many of the open and semi-open areas will become overgrown with woody plants.

Due to the rare nature of the plant community found at Hi Lewis Pine Barrens and because fire may be necessary as a management tool, it is not likely that this site will ever be managed for extensive visitor use. There currently are no trails leading to this site and access is only by means of off-trail mountain hiking. It is likely that scientific study and research will prove to be the most important use of this preserve.

KSNPC hopes to add additional land to the Hi Lewis Pine Barrens State Nature Preserve. Though the recently purchased and dedicated tract comprises a very important part of the pine

barrens habitat, there is also valuable habitat outside of what is currently owned by KSNPC. Some additional acreage will be required to serve as buffer to the pine barrens community.

The preservation of this highly unusual natural area was made possible through funding provided by Kentucky's Heritage Land Conservation Fund. The 1994 General Assembly allocated funds to the board for the purchase and maintenance of heritage lands in Kentucky by state agencies, colleges and universities, and local governments. The fund receives proceeds from the state's portion of the unmined minerals tax, from environmental fines paid to the Natural Resources and Environmental Protection Cabinet and from the sale of nature license plates.

"Emmy" Smith
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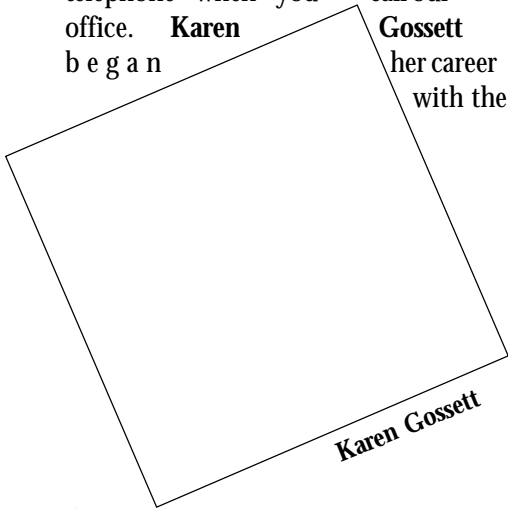
for their outstanding service, commitment, and dedication to protecting the environment and whose actions exemplify the heart and spirit of Earth Day.

But watch out, Mrs. Smith isn't finished yet. She is currently in the process of acquiring additional acreage to prevent even further encroachment on the preserve. Mrs. Smith didn't want the area named for her and sometimes it seems an "award" can be insignificant, but "Emmy" Smith's thoughtfulness and generosity is an outstanding reflection of her vision, morals and sincere dedication. She is truly a woman worth recognizing and a hero in our time.

KSNPC Staff Update

by Teresa Prather

The Commission is proud to introduce you to our new voice behind the telephone when you call our office. **Karen Gossett** began her career with the



Commission on May 1. Karen comes to us after working for Kentucky State University for several years. We're so glad to have her here!

Allison Lile has been hired to assist our Land Protection Specialist with the collection of land ownership data at county court houses and the Department of Revenue office. She will also help with the development of maps and other materials for nature preserve design documents as well as the acquisition of aerial photos for all staff. Ms. Lile is a graduate of the University of Kentucky with a bachelor's degree in mathematics.

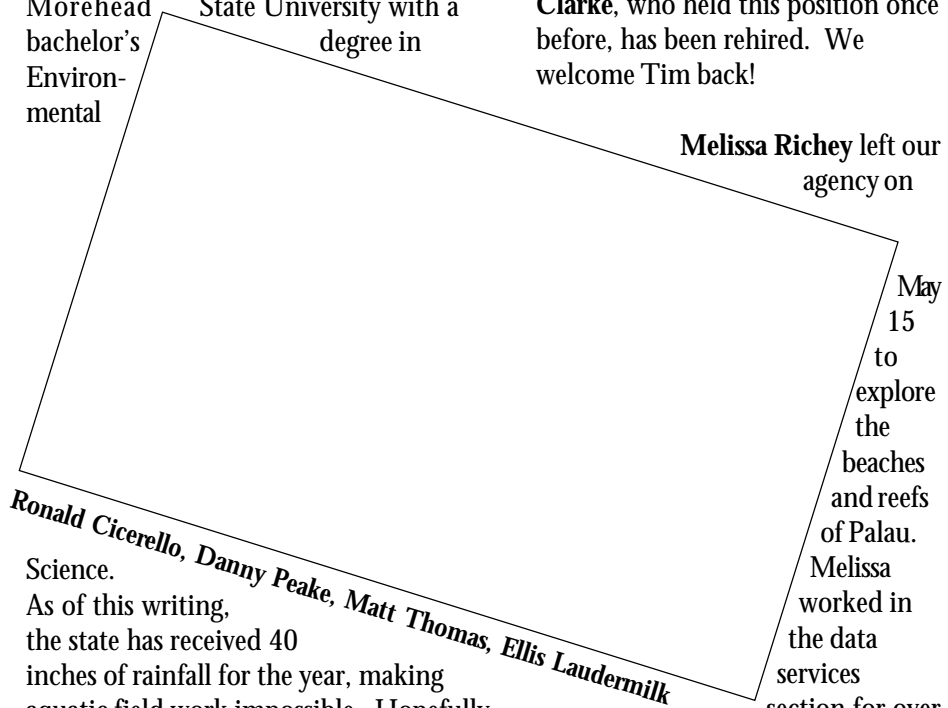
The Stewardship crew has the largest growth of all. **Pam Snyder** returns to serve another 11-month term to compile information on natural communities on all state nature preserves. Pam has hired an assistant, **Kevin Caldwell**, to assist her in gathering this information. Kevin graduated from the University of North Carolina at Asheville with a bachelor's degree in Environmental Studies.

KSNPC's western regional nature preserves manager, Rick Remington, recently hired another nature preserves management worker, **Julia James**, to

assist in the management of the western preserves. Julia graduated from Luther College with a bachelor's degree in Biology. **Kyle Napier** was off for two weeks but has now returned to serve as Pine Mountain's steward once again for another 11 months.

Martina Hines was recently promoted to Nature Preserves Field Representative/Ecologist for the Commission. Martina has worked for the Commission since October 1994 working in the data services section. Martina will be conducting natural community inventory throughout the coal-bearing regions. **Aissa Feldmann** has also returned to work another 11-month term. Aissa will be working with Martina and Marc Evans in natural community inventory.

Danny Peake and **Matt Thomas** are working with aquatic biologists, Ronald Cicerello and Ellis Laudermilk. Danny graduated from Eastern Kentucky University with a bachelor's degree in Wildlife Management. Matt is working his second summer with us. Matt graduated from Morehead State University with a bachelor's degree in Environmental



Science. As of this writing, the state has received 40 inches of rainfall for the year, making aquatic field work impossible. Hopefully the weather will cooperate soon and field work can begin.

Our Data Services section also has a few changes. **Amy Covert** was hired as an Environmental Biologist filling the

position that Martina vacated. Amy will be filling data requests for endangered species, transcribing, mapping, and performing quality control on endangered species, natural areas, and managed area data. Amy has previously worked for the Commission on a seasonal basis and we're finally glad to have her on board full-time. **Bryce Fields** was recently hired as an 11-month seasonal to also fill data requests, transcribe, map and perform quality control.

Domingo Delgado probably wins the award for the shortest length of service. Domingo was hired March 1 to serve as a Systems Support Technician Principal in the data services section, but because of a family illness, resigned his position May 15 to move back to his home state of Florida.

But, there is a silver lining behind that cloud as we have already filled Domingo's vacated position. **Tim Clarke**, who held this position once before, has been rehired. We welcome Tim back!

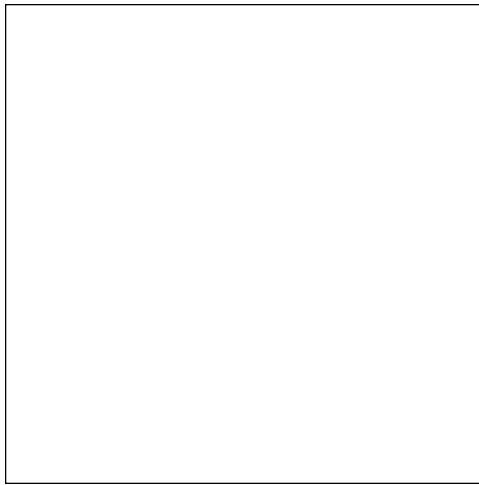
Melissa Richey left our agency on May 15 to explore the beaches and reefs of Palau. Melissa worked in the data services section for over two years. When you access our homepage, you can thank Melissa for all of her hard work in putting the information together. Her smiling face and sunny disposition is greatly missed.

Land Acquisition Update

by Barry Howard
Land Protection Specialist

The state Division of Real Properties has recently closed on the purchase of two tracts of land on behalf of the Kentucky State Nature Preserves Commission (KSNPC). Both of these tracts were purchased from The Nature Conservancy-- an important conservation partner that for years has played a critical role in protecting important natural areas in Kentucky. The entire interest was purchased in a 164-acre tract at Hi Lewis Pine Barrens in Harlan county, and a 50% undivided interest was purchased at a 119-acre tract at Eastview Barrens in Hardin county. Both of these properties were purchased through funding provided by the Kentucky Heritage Land Conservation Fund.

The tract at Hi Lewis Pine Barrens was dedicated as our newest state nature preserve at the recent KSNPC quarterly meeting and is described elsewhere in this newsletter. The land at Eastview Barrens will be jointly owned and managed by KSNPC and the Kentucky Chapter of The Nature Conservancy. A proposal to dedicate this newly acquired land has already been submitted to The Nature Conservancy. We are hopeful that sometime later this year we will be able to present Articles of Dedication to our Commissioners, and that Eastview Barrens will become another of the high quality natural areas in Kentucky that have received the highest degree of protec-



Barry Howard

tion legally available for land in Kentucky-- dedication as a state nature preserve. By the time this newsletter is published, the state will have closed on a 56 acre tract of land adjacent to the Quiet Trails State Nature Preserve in Harrison county. A proposal to dedicate this additional acreage at Quiet Trails will be presented to our Commissioners later this year.

A land contract has recently been signed for a 28-acre tract of land that is within the preserve design for Terrapin Creek in Graves county. KSNPC already owns four tracts at this site. These presently-owned tracts, which total 140 acres, have already been dedicated as part of the Terrapin Creek State Nature Preserve.

A survey of three additional tracts of land adjacent to the Bad Branch State Nature Preserve has recently been completed. The title opinions for this land are now under way. Once this is done, the state should be able to close on the purchase of these additional tracts at Bad Branch. We are hopeful that within the year we will be able to add up to 940 acres of land to our existing Bad Branch preserve (bringing its total size to over 2400 acres).

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By the time this newsletter is pub-

Volunteers Needed!

by Brad Nyholm
Stewardship Volunteer Coordinator

Some of the most important work of the Commission is performed by volunteers. One of these critical and highly responsible positions is the Volunteer Preserve Monitor. This job requires a dedicated and motivated individual who is willing to visit a preserve at least twice each month. Volunteer Preserve Monitors are needed at the following State Nature Preserves: Kentucky River Authority Palisades SNP, Garrard and Jessamine counties; Metropolis Lake SNP, McCracken County; Quiet Trails SNP, Harrison County; Raymond Athey Barrens SNP, Logan County; Thompson Creek Glades SNP, Larue County.

Also needed:

Amateur birders needed to assist with the creation and maintenance of ornithological species lists for each preserve.

Amateur historian needed to research county records and interview long time residents to develop land use histories for the state nature preserves.

If you have these skills and are willing to contribute time and services to the Commission, please contact Brad Nyholm, Stewardship Volunteer Coordinator.

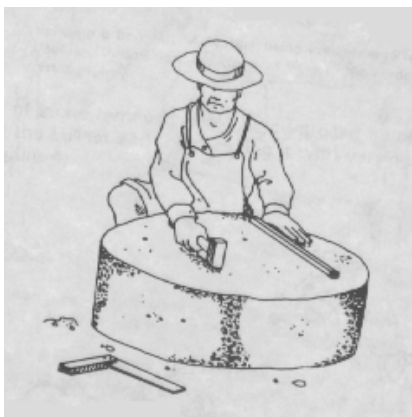
Kentucky's history is written on the land

by Brad Nyholm
Stewardship Planning Assistant

Pilot Knob State Nature Preserve in Powell County has a rich natural and cultural history which tells the story of the people who have inhabited the land and used its resources for centuries. Today, the preserve provides Kentuckians the opportunity to learn local history and to refresh their senses of the natural world. Planning the management of this valuable natural area focuses on the relationships between the two through the recent past.

The known human history in this region dates to the early-1700's. A level area near Pilot Knob is known to be the location of a Native American village called Eskippakithiki, an important link along a trade route stretching from the Great Lakes to the Gulf of Mexico. A European named John Finley found his way to this culture and established a trading post in the village. Nearly two decades later, he guided Daniel Boone to the area where it is thought to be the place where the famous pioneer first looked upon the Blue Grass region in 1769.

Later in the 1700's, millstone workers were attracted to the conglomerate sandstones capping the knobs. Many millstones were abandoned at various stages of production and several of these are visible from the interpretive trail within the preserve. Other land uses include the mining of hematitic ore from the local sandstone throughout the early- to late-1800's, and in the early- to mid-1900's there



were at least two eras of logging which kept a local sawmill busy. Pilot Knob was also a favorite place to picnic during that time where as many as 1500 people might visit on a Sunday



afternoon. If you look to read the history of the land closely enough, you will see evidence of the preserve's natural legacy in the form of gnarled and stunted old-growth chestnut oak and pitch pine on the narrow and dry ridges. These treasures were spared the fate of the commercially profitable red and white oaks.

The land gained legal protection in 1976, when it was purchased by The Nature Conservancy. The Kentucky State Nature Preserves Commission purchased the land from TNC in 1985. Our chapter of history is both the final chapter and a new beginning. The woods will mature, the footpaths

will remain unpaved, and the land will be reserved as place of learning and renewal.

Pilot Knob SNP is open sunrise to sunset throughout the year. To visit the preserve: From the

Mountain Parkway at Clay City, take KY 15 north for 2.7 miles. Turn right on Brush Creek Road; follow it for 1.5 miles to the gravel parking area near the trailhead.

KSNPC Quarterly Commission Meeting

DATE: September 17, 1997
PLACE: Western Kentucky University, Jones Jagers Hall
University Boulevard
Bowling Green, Kentucky
TIME: 9:00 a.m.

Nature and Wildlife Fund

The Nature and Wildlife Fund is used to protect and manage Kentucky's finest natural areas as state nature preserves and to care for all wildlife not taken by hunting or fishing. The Kentucky State Nature Preserves Commission and the Kentucky Department for Fish and Wildlife Resources cooperate on programs that protect Kentucky's rare plants and animals; acquire and protect the most important and threatened forests, wetlands, and prairies; and provide management to our diverse wildlife heritage.

Less than 1 percent of Kentucky's land and water remains undeveloped or unmodified by humankind. The small natural areas that remain are being destroyed much faster than we can protect them. The checkoff program is the most convenient way many Kentuckians can participate in the protection of the natural heritage we leave future generations.

Your tax deductible donations play a critical role in protecting and managing the best examples of Kentucky's natural environment for our future. If you missed the opportunity to make a donation on your income tax return, you may contribute by sending a check directly to the Nature and Wildlife Fund, P.O. Box 311, Frankfort, KY 40602.

Classification and inventory of natural communities

by Martina Hines
Ecologist

If you look over the Kentucky State Nature Preserves Commission's (KSNPC) rare and endangered species list, you will find a section attached that might strike you as curious! Under the heading of Monitored Natural Communities you will discover items such as Bluegrass Savannah-Woodland, Appalachian Mesophytic Forest, and Limestone Flat Rock Glade. While these items can not be considered "rare species" in the ordinary sense of the word there is good justification to include them in our list. They represent examples of natural communities which are monitored by KSNPC.

A natural community can be loosely defined as a group of species that are known to occur together based on either similar requirements of the physical environment, a common natural history or ecological dependence on one another. Only a small portion of Kentucky's surface is covered with reasonably intact natural communities, the largest bulk of which are located in the rugged hills and mountains of eastern Kentucky. Kentucky, like most other states, has lost nearly all of its natural communities. Much of the land surface is now covered with cultivars, most of which are dominated by non-native species. For example circa 50 percent of the total land surface of this

state is dominated by Ky 31 fescue, a cultivar which was developed from a grass species native to Europe. This grass became popular in the 1940s as a means for erosion control and for use as pasture. Unfortunately it has replaced nearly all native grasslands that were still present in Kentucky at the time.

Why should we worry about natural communities? Natural communities harbor most of Kentucky's biodiversity in terms of both animal and plant species. Experience has shown that protection efforts for most species only work if a sufficient amount of suitable

(*Platanthera integrilabia*), grows in seepy streamheads in southeastern Kentucky. By protecting a community in which a rare species occur it is possible to also provide protection for the species itself. In most cases, complete species lists for any one community are lacking, but by protecting the most endangered communities, we can assume that we are protecting many vulnerable species. In addition, by knowing where certain plant communities are found it is sometimes possible to predict where a rare species might occur and how vulnerable the species is.

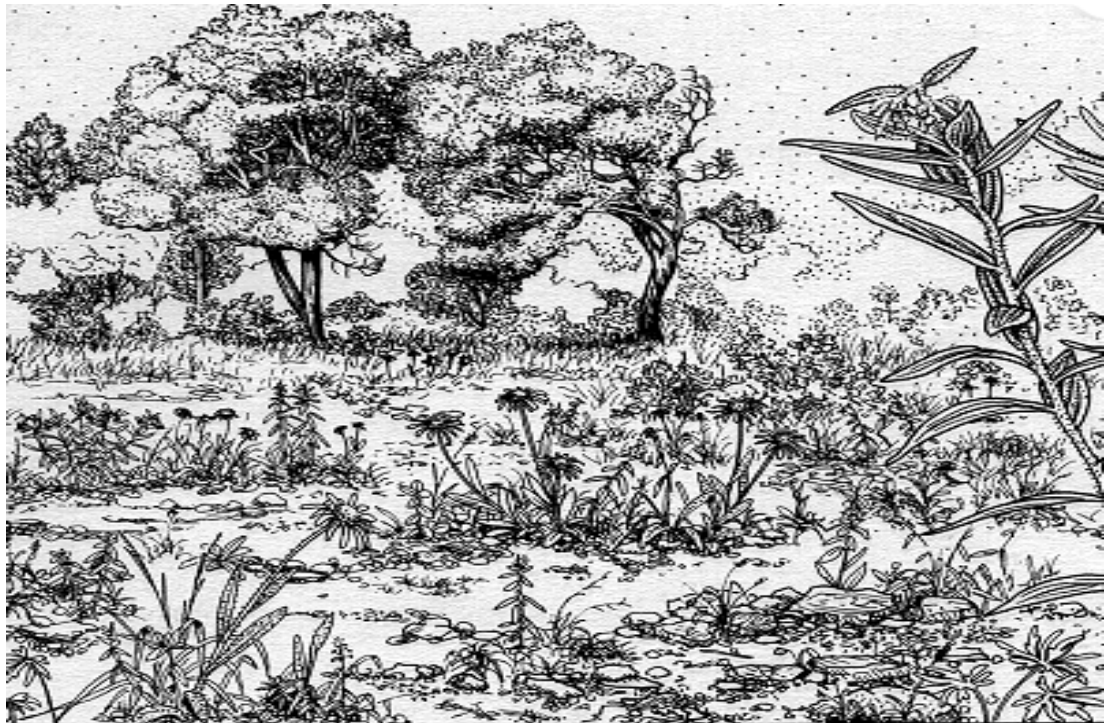


Illustration by Paul W. Nelson (copied with permission from Natural Areas Journal)

habitat can be provided, an important component of which is natural communities. Interestingly, many of Kentucky's rare species are associated with rare natural communities. Red-cockaded woodpeckers (*Picoides borealis*), for example, are only found in very mature pine-oak forest, the small white lady's-slipper (*Cypripedium candidum*), is restricted to limestone glades in northern and central Kentucky and the white fringeless orchid

KSNPC defines exemplary examples of natural communities as those that are relatively undisturbed or have recovered sufficiently from previous disturbances and have the flora and fauna that represent, to the best of our knowledge, the natural communities that existed in Kentucky at the time of European colonization. Unfortunately these truly natural communities are very rare in Kentucky. For example less than one percent of the forest is old-

growth. Only a few prairie patches remain that harbor large numbers of native species and have not been invaded by exotics or degraded by agricultural use. Some of the most endangered communities have been so degraded that they are barely recognizable, yet still exhibit characteristics that make them unique in the world, such as the Bluegrass Savannah-Woodland. Records of high quality examples of natural communities are maintained in the Commission's Biological and Conservation Database (BCD).

Most natural communities in Kentucky are poorly understood. In addition, much of Kentucky has never been systematically surveyed for natural communities. A survey, which began many years ago, will still take many years to complete because of its enormous proportion.

In the late 1800s, Lucy Braun, a renowned botanist, undertook many arduous journeys throughout the eastern United States studying plant communities. Hers is the best record of the status of natural communities in the 19th century in Kentucky. In more recent times other ecologists have continued this effort and provided valuable information for the understanding of Kentucky's natural communities.

Only a few years ago The Nature Conservancy (TNC) started to assemble data regarding natural communities from throughout the country. In an effort to define communities, and determine the distinctness, distribution, range, and relatedness of communities, TNC ecologists compare data from every available source, including TNC field offices, state heritage programs, various other state and federal agencies, and academia. Communities are fit into a hierarchy

based mainly on physiognomic characters on the higher levels and floristic characters on the finer levels. This process is called community classification. This effort will result in a comprehensive document including descriptions and ranges of all natural communities in this country. Whereas this information has been available in Europe for several decades, Kentucky can still be considered a frontier in this field. The list of known communities is still incomplete; the range and degree of vulnerability and rarity of many communities is still unknown. For the next several years to come, ecologists will continue to inventory Kentucky, mapping and describing as many natural communities as possible. This work requires systematic collection of qualitative and quantitative data which enable ecologists to compare information from various sites and other states. Recently, as part of this effort, TNC in cooperation with the US Forest Service, and the Natural Resources Conservation Service have inventoried natural communities on the Daniel Boone National Forest (DBNF). The project included collection of quantitative and qualitative vegetation data, and information regarding physiography, geology and soils in more than 300 plots. The data were compared with TNC's draft classification to determine which plots represented known or new communities. The goal of this project was to generate a complete list of communities on the DBNF and to develop an understanding of the relationships between land forms and plant communities on the Forest. At KSNPC ecologists are in the process of converting existing community data into the TNC classification format. In 1996 KSNPC ecologists also started to systematically inventory natural communities on Kentucky's State Nature Preserves. The data will be used to improve TNC's draft classification.

But just as importantly, these data will guide management on the preserves, will form a basis for long-term monitoring of vegetation, and will be used as a tool for measuring responses of some communities to active management.

Another practical application for all community data will be their integration in the Gap Analysis Project (GAP). This GIS mapping project, which is cooperatively coordinated by the Kentucky Department of Fish and Wildlife Resources and Murray State University with significant assistance from KSNPC, is aimed at identifying areas in need of protection because of their high biodiversity. A map outlining natural communities in Kentucky will form one of the data layers for this project.

With more and more information available regarding our natural communities, their role as a basis for conservation efforts will likely increase in the years to come. The importance of knowing the characteristics and distribution of soils, geology and other natural features has long been recognized in Kentucky. Natural communities are just another piece in this puzzle. Detailed information regarding the characteristics, range, and significance of natural communities in this state allows us to make educated and landscape-based decisions regarding management and preservation of Kentucky's rare species and communities.

A goal of the Commission is to protect excellent examples of each natural community within a state nature preserve. We hope that achieving this goal will assist in protecting all rare species, including those that are unknown. We clearly have a long way to go since we have yet to determine what communities exist within our borders!

The view from Pine Mountain

by Kyle Napier

Pine Mountain Preserves Steward

Pine Mountain is located in the far southeastern part of the state. Extending for about 120 miles along the Virginia and Tennessee borders, Pine Mountain is covered by a large area of contiguous forest and offers some of the most scenic and rugged terrain found anywhere. From its steep north slope to its more gentle south slope the mountain supports a wide array of both plant and animal life, along with an abundance of pristine streams and massive rock outcrops. Within this area there are currently five state nature preserves. These five areas consist of nearly 4,200 acres and make up 32% of the total preserve system acreage. I became a member of the staff in July 1996 as the Pine Mountain Steward. This position comes with a variety of duties, all boiling down to caretaker of the Pine Mountain preserves. It's a job I really enjoy and I'm sure you'll understand why after you've read this.

Our largest preserve, Bad Branch, is located in Letcher County near the town of Whitesburg. Situated on the mountain's south face, its current size is 1523 acres, with an additional 940 acres to be added very soon. The rugged Bad Branch gorge and surrounding forests supports one of the state's highest concentrations of rare species. The stream (Bad Branch) is of the highest quality, and one of the nine designated State Wild Rivers. Bad Branch Falls, a 60' waterfall, and High Rock, a massive sandstone exposure on the mountain's crest, are two of the most showy spots on the preserve. This preserve is open to the public and is highly visited. KSNPC and The Nature Conservancy (TNC) jointly own and manage Bad Branch. In addition to maintaining nearly 7.5 miles of foot trail, I am conducting a small mammal and amphibian inven-

tory and a rare plant inventory. I also patrol and maintain the boundary and lead hikes.

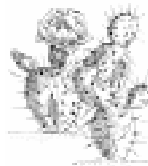
Blanton Forest State Nature Preserve is located in Harlan County near the town of Harlan. Currently consisting of 1,401 acres, the preserve is part of a 2,300 acre old-growth forest. It is Kentucky's largest remaining old-growth forest and one of the thirteen largest in the eastern U.S. With many of the larger trees near 300 years of age, one can gain a great sense of Kentucky's past. Several notable landmarks in the area are Knobby Rock, The Maze, Sand Cave and several unique acid seeps. The highlights of the past year have been conducting a small mammal and amphibian inventory, posting boundaries, repairing erosion damage from unauthorized ORV (off-road vehicle) usage, maintaining relations with adjoining land owners and controlling kudzu with help from a llama named Tiko.

Hi Lewis Pine Barrens State nature Preserve is located in Harlan County near the town of Cumberland. The pine barren community extends across several ridges and ravines on the mountain's south face, and KSNPC currently owns 164 acres. This unique natural community has been naturally maintained by fire. Several unique rock outcrops occur in the barrens where one can find Prickly Pear Cactus (*Opuntia humifusa*) and the rare Frostweed (*Helianthemum canadense*). Watch your step though, Timber Rattlesnakes also love these outcrops. A maintained road, the Little Shepherd's Trail, passes through the upper portion of the preserve along the mountain's crest. This area in Harlan County is a favorite for illegal dumping and we have a dump site problem that will be addressed this year. In order to learn more about fire's role in this natural

community, I have completed a land use history study. The abundant signs of wildfire provide evidence that fire will become an important management tool here. I continued my small mammal and amphibian inventory here and also posted the boundaries, constructed a foot trail, and assisted with ecological community inventory.

Kingdom Come State Park Nature Preserve is located in Letcher County near the town of Cumberland. This preserve currently consists of 225 acres on the steep north face of the mountain. Within the preserve lies Linefork Cave, the state's third largest hibernaculum for the federally endangered Indiana bat (*Myotis sodalis*). The rugged rock talus areas above the cave have also been found to support several interesting mammals, most notably Long-tailed Shrew (*Sorex dispar*) and Redback Vole (*Clethrionomys gapperi maurus*). There is also a nice waterfall cascading down the cliff just below the cave entrance. Work during the past year has included the following: small mammal and amphibian inventory, cave gate painting, and boundary maintenance.

Pine Mountain State Park Nature Preserve is located in Bell County near the town of Pineville. Many well maintained hiking trails can be found on the 868 acres of dedicated state park property. A trace of old growth can be found when hiking the Hemlock Garden Trail. Hiking along the Laurel Cove Trail and the Rock Hotel Trail can take your breath away in more ways than one, especially if you hike from the bottom of the mountain to the top! We have been working to eradicate kudzu from the nature preserve portion of the park and we are finally close to achieving this goal. I will complete my small mammal and amphibian inventory this year. We spend time each year helping the park naturalist with trail maintenance in the dedicated portion of the preserve.



The view from the West

by Rick Remington
Western Regional Preserves Manager

Almost a half a year has gone by since my move to Bowling Green and I am finally starting to feel organized enough to adequately care for the western preserves. The most significant advantage I have noticed with this change in location is the decrease in travel time. Eleven of the sixteen preserves I manage are now located within about an hour of Bowling Green. Even the furthest reaches of the Jackson Purchase are only about three hours away.

Spring has brought the addition of two new seasonal Preserve Management Workers to the west. Franklin Voorhes and Julie James have joined me in Bowling Green to help be the eyes and ears (and hands) on the preserves. I have greatly appreciated their hard work, diligence, and patience as I work through the rough edges of opening a regional office. The staff in Frankfort has also been more than helpful in providing me with the necessary assistance and expertise when needed.

With summer upon us, a wide array of exotic species have taken their “unwanted” place in the western preserves. We’ve already begun round one of the fight with musk thistle, sweet clover, oxeye daisy, and princess tree. Round two is coming soon with kudzu, field bindweed, and Queen Anne’s lace on the list of undesirables. Balancing the proper means to rid the preserves of these species while still protecting the native and sometimes rare species can become quite a challenge. Timing is everything!

Trail maintenance, firebreak construction, boundary posting, species monitoring, and community restora-

tion will also be on the list of priorities this summer. With this in mind, I am looking forward to a productive field season. If anyone has any problems, questions or concerns regarding the western preserves, I can be reached in Bowling Green at (502)777-1982.

Spring surprise at Jim Scudder State Nature Preserve

by Joyce Bender
Stewardship Coordinator

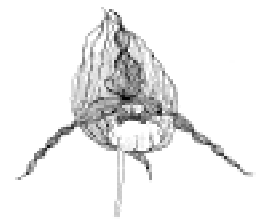
On May 5 Rick Remington, Franklin Voorhes and I went to Jim Scudder SNP in Hardin County to census the two populations of Small White Lady’s-slipper orchids (*Cypripedium candidum*) that occur on the preserve. Instead of heading right to the orchids, we stopped in an area that we have been actively managing since 1989. We wanted to show Franklin, one of our nine-month seasonals, some of the projects he would be working on this summer. Each year I tell new staff the story of our efforts to restore this limestone slope glade from an overgrown glade/cedar thicket. I talk about the vegetation’s response to our previous years of effort in the hope that our new staff get a sense of what’s been accomplished and how their hard work will advance us that much more. In the middle of this discussion, Rick suddenly stopped and stared at a spot behind me. At first unable to speak, he raised his hand and pointed, finally uttering “Look!”

I turned around to see what had rendered him speechless and saw a small patch of white lady’s-slippers scattered on the slope. I was just as dumbfounded as Rick had been. When staff botanist Marc Evans first discovered the orchids at this site in

1985, he spent a considerable amount of time searching each glade opening and had not found any lady’s-slippers in this area. In subsequent years, with regular visitation, none have ever been observed in this glade. To say we were overjoyed is putting it mildly. After the requisite cheering and dancing, we counted and mapped this new population and wondered about its “sudden” appearance.

In graduate school, I wrote my thesis on *Cypripedium candidum*. I later conducted a demographic study on another species of *Cypripedium* for seven years. From personal observations and the literature I learned that lady’s-slippers may take a decade to bloom for the first time. The first years of life are subterranean, with a vegetative shoot developing in the third or fourth year. It is possible that the plants at our “new” location may have been present as small, vegetative shoots for a few years now, hidden from view by the taller prairie grasses. Our efforts to increase sunlight through canopy removal, and to recycle nutrients and reduce litter through prescribed fire, coupled with the unseasonably wet summers of the past several years have undoubtedly contributed to the plants’ flowering response.

One of the perks of staying in a job for eleven years is that you develop a wonderful perspective on the history of a place. I consider myself very lucky to have been here long enough to savor the fruits of a labor that began eight years ago. The intervening years of impatience and anticipation melted away when I saw that we had indeed made a difference at Jim Scudder State Nature Preserve.



KSNPC 1997 Field Trips

Raymond Athey Barrens SNP

Logan County - September 13

9:00 a.m. - 12 noon (central)

See barrens restoration and early fall wildflowers with KSNPC Western Regional Nature Preserves Manager, Rick Remington. Limit 15; moderate hike.

Blue Licks SPNP

Robertson County - October 4

9:00 a.m. - 11:00 a.m. (eastern)

Perfect time of the year to see Short's goldenrod and Great Plains Ladies-tresses! Tour guide is KSNPC Botanist, Deborah White. Limit 15; easy hike.

Jim Scudder SNP

Hardin County - October 11

9:00 a.m. - 12 noon (central)

See dry, rocky glade openings that provide habitat for several rare plant species including the small white lady's-slipper (*Cypripedium candidum*) and silky aster (*Aster sericeus*), and the best remaining examples of a limestone glade in Kentucky. Tour guide is Western Regional Nature Preserves Manager, Rick Remington. Limit 15; moderate hike.

Tours are limited and reservations will be taken on a first come, first-served basis. Contact Teresa Prather at 502/573-2886 for reservations.

Field Trip Ratings

easy. Hiking short distance on trails with little or no slope.

moderate. Generally easy with a comfortable pace. Must be able to negotiate occasional steep slope or rough trail.

difficult More endurance required to negotiate longer distances and longer stretches of steep slopes and rough trail.

strenuous Long hike, brisk pace, sometimes off-trail, steep slopes and/or steps involved.

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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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Commission**
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