

Naturally Kentucky

Summer 2007

Number 55



KSNPC Latest News: Pine Mountain State Resort Park was the setting for the June Commission meeting in which two new preserves and four additions to existing preserves were approved. More than 1,000 acres were preserved as a result. (Complete story on page 7)

☞ September 29 is the date for the Second Annual Short's Goldenrod Festival in Robertson County. The festival is a chance to celebrate the story of the successful preservation of a very rare plant. (Complete story on page 2)

☞ KSNPC Stewardship staff attended EDDMapS training in Chattanooga, TN on June 29, 2007. EDDMapS (Early Detection and Distribution Mapping System) is a project of the Southeast Exotic Pest Plant Council (SE-EPPC) to catalog the spread of invasive plants. This system is dependent upon information provided by professional as well as volunteer weed watchers. The commission has begun entering invasive plant data into the system to improve our understanding of the distribution of these plants in KY. Visit the SE-EPPC Web site (<http://se-eppc.org>) to learn more about the project and how you can help.

☞ Land Acquisition Specialist Ron Scott has left for a new career. During his tenure Ron helped in the creation of 16 new preserves and four conservation easements on private land. He will be sorely missed. Read more on his accomplishments on page 6.

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Three-lined Salamander (*Eurycea guttolineata*) ~ John MacGregor

SECOND ANNUAL SHORT'S GOLDENROD FESTIVAL

By Alice Mandt, Environmental Technologist

On Sept. 29, 2007, the Kentucky State Nature Preserves Commission (KSNPC) and the Kentucky Department of Parks will host the second annual Short's Goldenrod Festival at Blue Licks Battlefield State Resort Park. The Short's Goldenrod Festival is a chance for us to celebrate the story of the successful preservation of a very rare plant. We hope this event will help people renew their commitment to protecting Kentucky's biodiversity and encourage others to do the same. Please join us Sept. 29th for a day of celebrating and learning about Kentucky's unique natural heritage.

Short's goldenrod (*Solidago shortii*) was discovered in 1840 at the Falls of the Ohio River by Charles W. Short, a Louisville physician and botanist. Dr. Short's love of nature led him to collect and study the plants of Kentucky. He is known in botanical science for his notable contributions to the *Flora of North America* by John Torrey and Asa Gray. In recognition of his contributions to the advancement of botany in America, Short's goldenrod was named in his honor.

In the 1920s, dam construction flooded and eradicated the goldenrod population at the Falls. The species was thought to be extinct until 1939, when E. Lucy Braun rediscovered it near Blue Licks. Fortunately, some of these plants were on land that became Blue Licks State Park. Today there are two occurrences on public land and one on land owned by The Nature Conservancy. There are fewer than ten unprotected populations on private properties in Robertson, Fleming and Nicholas counties. Prior to its rediscovery in 2001 in Indiana, a two square mile area around Blue Licks State Park harbored the only known populations in the world.

In 1981, the KSNPC and the Department of Parks moved to protect this globally rare plant by dedicating a portion of the

park as a state nature preserve. To encourage private landowners to protect Short's goldenrod, the KSNPC and the Kentucky chapter of The Nature Conservancy in 1983 established a registry program. This cooperative effort has been crucial in developing important working relationships with private landowners whose property contains viable populations. The goldenrod received federal protection when it was listed as endangered by the U.S. Fish and Wildlife Service in 1985.

Federal and state protection alone is often not enough to recover a rare species. Life history and ecology studies must be conducted to determine best management practices. Ongoing restoration work will be required for the long term to reverse the effects of years of

habitat alteration and destruction. This is especially true with Short's goldenrod because it grows best in open glade-like habitat. To reduce competition for light, KSNPC conducts prescribed burning in the spring. The fires reduce shrubs and small to medium trees, enhancing conditions that stimulate growth and increase flowering of the goldenrod. With the help of the Sierra Club and the Kentucky Native Plant Society, more of a suitable habitat overgrown by cedar trees is cleared every year. This is done in the winter to avoid damage to the goldenrod plants.

To prevent further harm, active management is needed to offset threats to the goldenrod from invasive species and human activities. Mechanical methods (such as mowing or pulling) and judicious use of herbicides help reduce or eliminate exotic plants. Educational events are designed to reach out to communities for support and to help foster pride in the local environment. Long-term research and biological monitoring allow the commission to track the effects of restorations



A celebration of one of the rarest plants in Kentucky and the U.S.



Pie Eating Contest



Author George Ella



efforts and learn from them. We are pleased to report that since 1999 the population on the preserve at the state park has increased by at least tenfold! Generous assistance from many partners, individuals and organizations has made this success possible.

There is no better way to express our thanks and celebrate that success than with a fall festival! This year's festival will start with a 5K run and one-mile walk. Nature hikes through the preserve, canoe trips on the Licking River and a lunch featuring Kentucky Proud products also are planned. There will be a market area showcasing local artists, musicians and farmers. Free workshops will be offered during the day, including a live animal presentation by East Kentucky Power Cooperative, storytelling by Kentucky author George Ella Lyon and a class on botanical drawing by Amy McIntosh. We will be repeating

the pie-eating contest and adding a cornhole tournament to the list of activities.

Kentucky Life, the KET program celebrating the people and places of Kentucky, will be on hand preparing a story on the history and status of Short's goldenrod. Look for the film crew on the day of the festival. When it is completed we will announce the program's airtime on the KSNPC website calendar.

Thank you to everyone who makes this event possible. Last year was a great day for all those who attended and for the goldenrod. We look forward to beautiful weather and a lawn full of friends. All proceeds from the festival go towards supporting management efforts on the nature preserve and continued protection of Short's goldenrod.

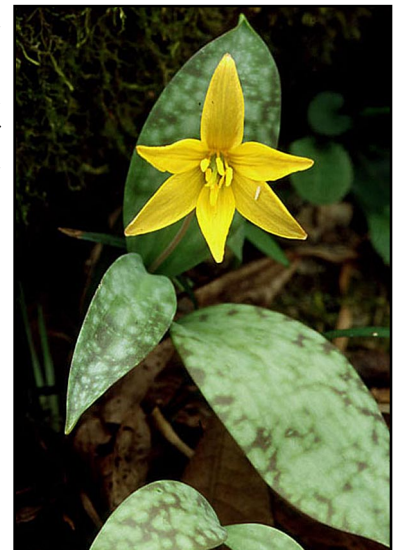
WEST VIRGINIA NATIVE PLANT SOCIETY INVENTORIES RARE PLANT AT JENNY WILEY STATE PARK

By Chad Kirschbaum, West Virginia Native Plant Society

Why would five apparently sane people be walking around a hill on a snowy, cold day in Jenny Wiley State Park calling out numbers and strange names? Saturday, April 7th, just before Easter, that is what members of the Tri-state Chapter of the West Virginia Native Plant Society were doing. The goal was to see if the populations of the rare yellow troutlily (*Erythronium rostratum*) still existed at the Park. And if so, were the populations healthy and what, if anything, might damage the population? The group was pleased to find that the plants were in abundance. Only a small percentage of the plants had bore the distinctive fruit, some were just not reproducing, perhaps because they were too young or maybe they had spent their fruiting energy in another year and were sitting 2007 out, other plants had a stalk but no fruit. Threat one was recorded; Something was eating the flowers or the fruit so there would be no new plants from those plants. The probable diner was deer, who are known to love the flowers of plants in the lily family. An additional threat was the occurrence of rampant non-native weeds which, if left uncontrolled, could over run the habitat and leave these lovely native plants with no place to call home. Tree of Heaven, multiflora rose, Japanese Honeysuckle, Asiatic stilt grass, *Miscanthus* and autumn olive were plants the group would like to see targeted for removal from the site.

And the results, at one site there were 553 fertile plants, 111 of which had been nibbled off and 442 had the characteristic beak on the fruit. At the other locations the known size of the patch

was extended and the population found to be vigorous. None of the participants had serious physical damage or froze so the trip was considered to be a success.



Yellow Troutlily (*Erythronium rostratum*)
Dennis D. Horn



West Virginia Native Plant Society Members



IN THE SPOTLIGHT: KENTUCKY'S RARE SPECIES AND COMMUNITIES

Pleurobema clava Clubshell

KSNPC STATUS: Endangered

USFWS STATUS: Endangered

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

HABITAT: Stream bottoms of small to large rivers in sand and gravel.

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

REASON FOR PROTECTION STATUS: Habitat degradation and loss.



Photo by KSNPC Staff

Clethrionomys gapperi maurus Kentucky Red-backed Vole

KSNPC STATUS: Special Concern

USFWS STATUS: None

GENERAL DESCRIPTION: A small rodent with short tail and grizzled, grayish fur with a strong reddish-brown tint down the middle of the back.

HABITAT: Inhabits moist, high elevation deciduous forest.

RANGE: Widespread across much of Canada, the northern tier of states in the U.S., and south through the Rocky and Appalachian mountains. However, the subspecies *C. g. maurus* is found only in the Cumberland Mountains of southeastern Kentucky, western Virginia, and northeastern Tennessee.

REASON FOR PROTECTION STATUS: This small mammal is very restricted in range. The forested areas where it is found are being reduced by surface mining.



Photo by John R. MacGregor

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.



Boykinia aconitifolia *Brook Saxifrage*

KSNPC STATUS: Threatened

USFWS STATUS: None

GENERAL DESCRIPTION: A perennial herb with deeply palmately lobed leaves.

HABITAT: Occurs exclusively on rocky stream banks in Kentucky, but moist mountain woods elsewhere.

FLOWERING PERIOD: Early June to late July.

RANGE: Throughout the southeastern United States; rare in several of these states. Kentucky is at the northwestern limit of its range.

REASON FOR PROTECTION STATUS: Narrow distribution and few known occurrences.



Photo by Richard, Hamman, KSNPC

Cumberland Highlands Forest

KSNPC STATUS: Endangered

GENERAL DESCRIPTION: This rare type of northern hardwood forest occurs only on the highest mountain ridges in the Cumberland Mountains of southeast Kentucky. Rich mesic conditions prevail with a cooler climate and as much as 60 inches of precipitation per year. The canopy is dominated by black cherry, yellow birch, and sugar maple, with basswood, mountain magnolia, yellow buckeye and beech also present. Understory species include witch hazel, striped maple, mountain holly and alternate-leaved dogwood. A very rich herb and fern layer is present with several species that do not occur elsewhere in Kentucky. Dense beds of large white trillium, false solomon's-seal, wild geranium and many other species cover the ground. Rare species that are characteristic include rosy twisted stalk, mountain angelica, Turk's cap lily and small flowered false hellebore.

RANGE: Occurs primarily on Black Mountain in Harlan and Letcher Counties at elevations above 3,400 feet ASL. Small areas occur scattered on the high north slopes of other nearby mountains.

REASON FOR PROTECTION STATUS: This community occupies a very limited area in Kentucky. High-quality examples of this community are extremely rare due to destruction by extensive mining, logging, oil and gas drilling, and road and power line rights-of-way.



Photo by Marc Evans, 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.



FAREWELL TO RON SCOTT

By Don Dott, Executive Director

To our regret, Land Protection Specialist Ron Scott has moved on to a new career in the legal profession in Breckinridge County.

Ron started with the commission in January 2001. It is testimony to his effectiveness in land acquisition that the state nature preserve system grew by 9,585 acres during his time at the KSNPC. This acreage included rare natural communities and habitat for many rare species. Ron helped in the creation of 16 new preserves and four conservation easements on private land.

As a land protection specialist, Ron was required to have a delicate touch and enough savvy to know when to press forward, and when to back away. The substantial increase in acres under protection is evidence of Ron's skill. Ron's motivation, dedication and perseverance set a high standard for his successor to match.

The land acquisition process involves preparing detailed legal applications for funding through the Heritage Land Conservation Fund and the Finance Cabinet. It also requires artful negotiation skills when dealing with landowners and asking them to help protect Kentucky's natural heritage by dedicating their ecologically significant lands. Ron was very adept at both these tasks. He also facilitated the commission's biennial Natural Lands Protection Conference, a networking event for the many state, federal and non-government entities that own or manage natural areas in Kentucky.

Ron is a committed conservationist. Kentucky's rare, threatened and endangered species and the places that harbor them in our commonwealth have benefited from his dedication and hard work. We certainly wish him all the best in his new career. We fully expect to see him active in conservation in the future.



One of the many properties Ron played a role in protecting, Pine Mountain Trail State Park Nature Preserve ~ Marc Evans, KSNPC



DIRECTOR'S NOTES

By Don Dott, Executive Director

In the spring 2007 newsletter, I reported on House Concurrent Resolution 120, passed by the 2006 General Assembly, which created the Land Conservation and Stewardship Task Force. Its directive was to assess the need for increasing the scale of land conservation in Kentucky and to investigate ways to finance any increase. The task force had its third and final meeting on June 6. The Kentucky Heritage Council made a presentation that showed how culturally important sites, such as Native American archeological sites and Civil War sites, often overlap with natural or fairly undeveloped areas that are important for both cultural and ecological purposes. Due to time constraints and a limited number of meetings, the task force expressed a need to renew its charter. Further investigation is needed into funding mechanisms employed around the country to underwrite conservation initiatives. This would enable the task force to determine which options might work best in Kentucky, or whether we need a different approach that can garner the necessary political and popular support to gain approval of the General Assembly.

Two southeastern states have recently undertaken very ambitious conservation programs. Virginia's Governor Tim Kaine announced an initiative to protect an additional 400,000 acres of land by the year 2010. Governor Mike Easley of North Carolina is challenging his state with the *Million Acre Plan*, which would protect an additional million acres of open space and farmland by the end of 2009. Florida is another southeastern state that is a national leader in conservation. The *Florida Forever* program - a \$3 billion fund built by annual \$300 million infusions over a 10-year period - is one of the most ambitious and best-funded programs in the country. It is my hope to move Kentucky in a similar direction and for the commission to lead in this effort. Success will require forward thinking, coordination among stakeholders and strong public support for a well-funded program in Kentucky.

The task force's final report of June 30, 2007, will be public

record. There appeared to be strong sentiment in favor of renewing the task force in the next General Assembly, which would enable the crafting of a substantially expanded conservation initiative for Kentucky. If a measure is introduced, it will need your support to gain passage. Phone calls, letters or personal visits to your state representative and senator will be critical.

The commission had its summer quarterly meeting on June 13 at Pine Mountain State Resort Park, Kentucky's oldest state park and certainly one of the most beautiful. The Ray Harm conference room was an appropriate location for dedicating six additions to our preserve system. The largest was a tract in Harlan County, acquired by the Department of Parks for the Pine Mountain Trail State Park. The commission dedicated 609 acres



Three Ponds State Nature Preserve ~ Heather Housman, KSNPC

of this tract as a new state nature preserve. This preserve is home to a state endangered plant, northern bog clubmoss, (*Lycopodium inundatum*) and to a rare mountain bog where we sighted the fresh paw print of a black bear (*Ursus americanus*) during a field trip the day after our meeting. Pine Mountain State Park was a great host to our commission. I would like to thank the park manager, John Brock, for his extra efforts to welcome us to this

beautiful resort. Part of the acreage surrounding the park facilities is dedicated as a state nature preserve as well, and John Brock and his staff have been great partners in providing the extra attention needed to protect these special places.

Five other additions to the state nature preserves system were officially dedicated at this meeting. They included two 12-acre tracts near Murphy Pond in Hickman County, which became part of the Obion Creek State Nature Preserve (SNP). Sixty-five acres in Franklin County, acquired to protect Braun's rockcress (*Arabis perstellata*) and globe bladderpod (*Lesquerella globosa*), became the Rockcress Hills SNP. An 11-acre addition

(Continued on page 8)



to Blanton Forest SNP in Harlan County provides important buffer for the state's largest old-growth forest. A major 312-acre addition to Three Ponds SNP in Hickman County will further protect the hydrology of the bald cypress ponds in a bottomland hardwood forest near the Mississippi River.

We were also pleased to welcome our newest commissioner, Patrick Henderson of Breckinridge County, to his first meeting with the Kentucky State Nature Preserves Commission. Commissioner Henderson is the new representative for the Kentucky Farm Bureau. He has been a strong advocate for conservation in the farming community in Kentucky. He will be a great addition to the commission and I look forward to working with him to help advance our programs.

Last, but certainly not least, we were honored at our June meeting by a visit from Kentucky Secretary of State Trey Grayson. Secretary Grayson's wife Nancy Grayson is one of our commissioners, representing the public at large. Secretary Grayson was able to join us after the meeting for a presentation describing our mission to find and protect Kentucky's best natural areas. He also joined us the following day for a field trip to the newly dedicated Pine Mountain Trail State Park Nature Preserve and had a first-hand look at one of Kentucky's most beautiful landscape features. We were fortunate to have Secretary Grayson with us and to introduce him to the work of the Kentucky State Nature Preserves Commission.

IN THE FOOTSTEPS OF LUCY BRAUN

The Pine Mountain Settlement School is offering a four-day forest study workshop titled "IN THE FOOTSTEPS OF LUCY BRAUN." The program discusses the work of the eminent ecologist and retraces her visits to eastern Kentucky. Her theory was that the Mixed Mesophytic Forest is a remnant of the great Tertiary Forest and the originator of all eastern North American deciduous forests that exist today. The workshop includes outings to Blanton Forest State Nature Preserve and Bad Branch State Nature Preserve. The second offering of the workshop will be August 15-19. For more info visit www.pinemountainsettlementschool.com or 606-558-3571 / 558-3542

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Kentucky State Nature Preserves Commission
 Quarterly Public Meeting
 September 12, 2007
 Time and Location : To be announced

How to contact the Kentucky State Nature Preserves Commission:

Mail: 801 Schenkel Lane, Frankfort KY 40601-1403

Phone: (502)573-2886 Fax: (502)573-2355

E-mail: naturepreserves@ky.gov

Visit us online @ www.naturepreserves.ky.gov

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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