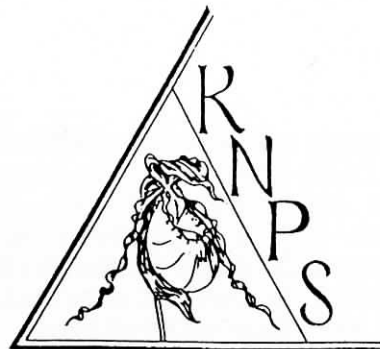


# The Kentucky Native Plant Society



Newletter: Volume 4, Number 3

August 1989

## SCHEDULE OF EVENTS

9-10 September. Fall Meeting at Kenlake State Resort Park. See May, 1989 newsletter for complete details. PLEASE TRY TO ATTEND, ESPECIALLY IF YOU ARE ONE OF OUR WESTERN KENTUCKY MEMBERS.

9 September (Saturday): 1 pm. Hike around Hematite Lake. Meet at Woodlands Nature Center near the Lyon-Trigg County line in LAND BETWEEN THE LAKES. Led by Dr. Wayne Chester (615-648-7781). Take the HW 453 exit of I-24 and drive south on The Trace about 15 miles into LBL to get to the nature center. Several rare plants will be looked for as described in May newsletter.

9 September (Saturday): 7 pm. KNPS Business Meeting and Slide Show on Murphy's Pond at Kenlake Meeting room A. Speakers: Drs. Harold Eversmeyer and C. D. Wilder of Murray State University.

10 September (Sunday): 8:30 am. Field Trip to Murphy's Pond. Meet at Kenlake Parking lot. Drs. Eversmeyer and Wilder (502-762-2786) will lead a trip to the pond, about one hour's driving distance. This will be an easy walking hike so that participants can view and photograph one of the few remaining cypress-swamplands in western Kentucky.

30 September (Saturday): 10 am. Mrs. Baylor O. Hickman Memorial Preserve (Pulaski County). Led by Julian Campbell (606-271-4392). Take HW 80 to bridge across Rockcastle River, go short distance westward (less than 1 mile) to gravel road on south side of HW (there is a small grocery store nearby). This Preserve was recently purchased by the Nature Conservancy, and consists of a considerable tract of land along the Rockcastle River. This excursion will involve some moderate hiking along the river to see the newly described Aster saxicastelli, big blue stem grass, filmy ferns, and mature beech-forest along the river.

21 October (Saturday): PLANT TAXONOMY WORKSHOP II. WETLAND SEDGES AND RUSHES. 9 am. At ECU Herbarium (Memorial Science 170) in Richmond. This workshop will last until about 4 pm, and will involve lecture and lab instruction on ID techniques for wetland sedges (Cyperaceae) and rushes (Juncaceae). Limit is 15 participants, so please call 606-622-6257, or send a postcard to Ron Jones, Dept. Biology, ECU, Richmond, KY 40475, to reserve a place. No previous botanical training is needed. To locate the herbarium enter the front doors of the Moore Building off University Drive, walk down the left corridor, through the double doors, into Memorial Science.

## THE KENTUCKY RIVERS ASSESSMENT

by Ron Jones

Kentucky rivers and stream are in the news! The beach at Daniel Boone State Park is closed because of bacterial pollution in the Kentucky River; chemicals drain into Elk Lick Creek on Mary Wharton's property in Fayette County and kill virtually all life in the stream; pollution in the many streams of eastern Kentucky remains uncontrolled, from trash disposal, to septic tanks, to salts from oil wells to spoils from strip mines; public meetings are held in Lexington to discuss the future of the Kentucky River. The many recent newspaper articles, TV reports, and public meetings attest to the increased public awareness of the many problems facing our river systems.

To help address the problem of balancing our economic needs with conserving our natural river resources, Kentucky has now joined several states in initiating a systematic study of our river systems. It is called the Kentucky Rivers Assessment, and its goals are to 1) compile, interpret, and evaluate information on the natural, cultural, and recreational resources that reflect the multiple uses of Kentucky rivers and streams, and 2) comparatively evaluate selected rivers and streams according to the significance of the resources they possess.

Nine resource categories have been identified: fish and wildlife, ecological, recreational boating and related uses, geologic/hydrologic/scenic, corridor character, cultural, agricultural, water resources, and water quality. The study is being guided by an Advisory Committee of representatives from government agencies, industries, and research/conservation groups. The actual coordination is provided by a team of key staff members from the Kentucky Division of Water and the National Park Service. The study process is now underway, begun in Spring, 1989 with the establishment of teams of knowledgeable persons in each resource category. These teams have now decided which rivers to include in their preliminary draft lists.

Of major interest to KNPS members is the assessment being carried out by the Ecological Resources Team, of which I am a member. The goal in this category is to identify rivers and streams (without regard to size), that contain within their drainages (both bottomlands and adjacent uplands) significant populations of rare plants or unique plant communities. A list of 67 rivers and streams segments has been prepared by this team, and along with the lists in the other categories, will soon (mid-September) be published by the Kentucky Division of Water, in brochure form, and mailed to several thousand people for public comment. The lists will then be modified based on the public comment, and the final draft of rivers will be evaluated based on a point system developed by each team, and each river assigned to value classes of Superior, Outstanding, or Significant. In early 1990 a series of public meetings will be held across the state to obtain more input from the public. The final product will be a book that will provide an overall assessment of the state's rivers in the nine resource categories. In the case of Ecological

Resources, there will a listing of rivers and streams that possess important plant communities and populations, and that will be recognized as worthy of protection. Maps may be prepared with endangered species sites plotted along the rivers. Color-coded maps may also be prepared to show the location of the Superior, Outstanding, and Significant rivers of Kentucky.

How can you help? Write me and I will send you a copy of the brochure. Go over the list and see if you have personal knowledge of certain rivers and streams that would help us in the evaluation; perhaps you know of rare plant populations, or old-growth forest in your vicinity. We need to know exact segments, with upstream and downstream locations, for the river sections to be included in the study.

Many agencies have collected a wealth of information of the rivers of Kentucky, but this is the first effort to systematically compile the information, and to evaluate the rivers based on their varying resources. Kentucky has a remarkable system of rivers and streams, from the eastern regions with the spectacular geological formations and deep forests to the wide expanses of bottomlands in the western regions. Our rivers are important not only as habitat for plants and animals, many of which are very rare, but also as recreational areas and as a source of the water which is so vital to every citizen. We should all be concerned about the future of our water resources, and this Rivers Assessment Project is a very good step in the right direction, and should provide a framework for a more effective river management program on a statewide basis.

#### THE KENTUCKY CONSERVATIONISTS PROJECT

by Louise Chawla  
Kentucky State University  
Frankfort, KY 40601

The Special Collections division of King Libray at the University of Kentucky now stores a set of tape-recorded interviews with people active in environmental protection and conservation, primarily in northern and central Kentucky. Contributors include the botanists and plant ecologists Bill Martin of the E.K.U. Division of Natural Areas, Richard Hannan of the Nature Preserves Commission, Wilson Francis of Natural Bridge State Resort Park, Kathy Wilson of The Nature Conservancy, Mary Rogers of the Pine Mountain Settlement School, and Mary Wharton. Each interview explores 4 main areas. The major part is a history of the narrator's personal involvement in efforts to protect Kentucky resources. Three additional topics are the sources of the narrator's commitment to environmental work, his or her vision for wise development in Kentucky, and advise to young Kentuckians who would like to enter the environmental field. The interviews have been sponsored by the Kentucky Oral History Commission to document government and citizen involvement in a range of Kentucky issues: air and water quality, waste management, agriculture, wildlife habitats, scenic resources, urban green space, and environmental

education. To examine the collection or to receive copies of any interview, contact Terry Birdwhistell or Jeff Suchanek at Special Collections, King Library, University of Kentucky, 606-257-9421.

#### FREE FORESTRY DEPARTMENT NEWSLETTER

A little known service is available from the Forestry Department, University of Kentucky, Cooperative Extension Service. The Department publishes a quarterly newsletter which is free to any interested individual. The newsletter is dedicated to the improved management and enjoyment of Kentucky's natural resources. Previous editions have contained articles on bats, butterflies, waterfowl, and a plethora of other subjects. If you wish to receive this free service please send your name and address to: Dr. Tom Barnes, Department of Forestry, UK, Lexington, KY 40546-0073 or phone Dr. Barnes at 606-257-8633.

#### CORALS, BALLS, STARS, AND BIRD'S NESTS

BY

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Most of the Kentucky fungus fauna is poorly known, principally because of inadequate study. Relatively few species have been reported in the journal literature. This is true even in the case of some of our most interesting and attractive species, the Clavariaceae, Lycoperdales, Sclerodermatales, and the Niçulariales. Most of these are very common during the spring, summer, and early fall, adding much aesthetic pleasure to walks in the woodlands (see Figure 1 for representative types).

#### CLAVARIACEAE (Coral and Club Fungi)

These terrestrial to wood-dwelling fungi are usually fleshy, upright, repeatedly branched and, often, brightly colored. In shape, they are strongly reminiscent of marine corals, hence their common name. They may be as much as 30 cm wide, although a few of them are small and unbranched. The spores are white to yellowish-orange and are borne on the upper surface of the fruiting body. Most of the species are found growing on lignin-rich soil or on decaying wood in late spring through the summer months. Although common in Kentucky, most of the species below have not been formally reported.

Clavicornona pyxidata (Fr.) Doty (crown-tipped coral). This clear yellow to whitish fungus usually grows on decaying logs, particularly tulip poplar. The much-branched mass is often large (up to 12 cm tall), and the ends of the branches are expanded into small cups encircled by branchlets, giving the appearance of minute crowns. The seed-shaped spores are pure white. The species has



been reported from western Kentucky (Sundberg and Richardson, 1980) and from Ohio near Kentucky (Coker, 1923). This fungus was very abundant on 9 June 1987 on decaying logs in Red River Gorge near the Nada Tunnel, Powell County, Kentucky.

Clavariadelphus pistillaris (Fr.) Donk (pestle coral). As the common implies, this fungus is club- or pestle-shaped, narrow at the attachment end, thickened distally. Up to 20 cm in length (Coker, 1923), this species is yellowish-orange to dark brown in color; the white spores are elliptical. Typically, the fungus fruits during cool weather (Arora, 1986). The flesh turns brown upon being bruised. I found several specimens growing on leaf-littered, heavily shaded soil at the Big Hill, 16.4 km south of Kingston (U.S. 421), Madison County, Kentucky, 2 July 1987.

Clavaria vermicularis Fr. (worm coral). This pure white, and often brittle (Coker, 1923) fungus is easily identified by its curving, "worm-like" (Lincoff, 1981) growth habits. The stalk may rise as much as 6.0 cm but is usually shorter. Typically, the habitat is on lignin-rich soil, although the colony I found on 9 June 1987 in Red River Gorge was growing on a much-decayed coniferous log that was covered by moss.

Ramaria cf. gelatinosa (Cok.) Cor. (jelly base coral). Heavy bodied and much branched, this large fungus (10 cm tall, 13.6 cm wide) has no distinct stem and is creamy white to pale yellowish. The elliptical spores are buff-yellow with numerous small wart-like protuberances. The flesh has the consistency of "tough jelly" (Coker, 1923). Several large specimens were found growing on much-decayed wood near Rock Bridge, Natural Bridge State Park, Powell County, 16 March 1982.

Ramaria stricta (Fr.) Quel. (straight-branched coral). Ramaria stricta is probably the most common wood-dwelling coral fungus in eastern Kentucky. The fruiting body is yellowish with many compact branches with brownish-white flesh that turns brown upon being bruised. The spores are similar to those of the last species but the spore print is golden-yellow; individual spores appear colorless. It grows on both coniferous and deciduous wood (Lincoff, 1981). On 22 October 1986, the species was very common on logs 1.3 km south of Nada Tunnel, Red River Gorge, Powell County.

#### LYCOPERDALES (Puffballs and Earthstars)

These delightful fungi have the disconcerting habit of showing up in unexpected places, places where they have never been seen previously. Some of them are eagerly sought as edibles.

Geastrum fimbriatum Fr. (Fimbriated Earthstar). This 2-3 cm wide earthstar is usually rather dark brown and sessile with a bowl-shaped base. The outer peridium frequently splits into 5-8 lobes. The flesh is whitish to tan. The apical pore is not surrounded by an obvious circular zone. The species is relatively common throughout the eastern United States (Coker and Couch, 1928; Johnson, 1929). I found abundant specimens in decaying leaves at the S-tree Recreation Area, Jackson County, on 11 June 1987, and under the mixed hardwood-pine woods at Berea, Madison County on 23 September 1987.

Geastrum saccatum (Fr. (Rounded Earthstar). Easily distinguished from the last species by the circular depression around the apical pore, the fruiting body of this earthstar is about 2.5 cm wide with a 1-2 cm wide spore case. The outer peridium splits into 4-8 rays that are apparently not hygrosopic (Arora, 1986). The color is pale pink to brownish and smooth. The spore print is brown. This is probably the most commonly encountered earthstar in Kentucky. Abundant specimens were found among decaying leaves at Levi Jackson State Park, Laurel County, 3 December 1978; on lignin-rich soil in Deacon Hills Estates, Richmond, Madison County, 19 June 1977; and beneath beeches above Indian Fort Theatre, Berea, Madison County, 15 July 1987.

Lycoperdon pyriforme Schaeff. and Pers. (pear-shaped Puffball). This is one of the most common puffballs among the many that occur in the eastern United States (Johnson, 1929). Usually about 4-5 cm wide, the species is often found growing in groups on decaying logs and at the base stumps. Mature individuals are usually reddish-brown in color and minutely warty and cracked. The connecting mycelium is pure white; the glebula is greenish-yellow to olivaceous-brown. The apical pore forms late in development, hence is often not observed in younger specimens. It is common in Ohio (Johnson, 1929) and surrounding states (Lincoff, 1981). I found it abundantly at the base of a dying ash tree on the Eastern Kentucky University campus, Madison County, 3 July 1987, and in the oak-hickory forest near Indian Fort Theatre, Berea, Madison County, 15 July 1987.

Lycoperdon perlatum (Pers. (Gem-studded Puffball). This small (5-6 cm), whitish puffball is often covered by small, detachable spines and has white to greenish-brown flesh. It has a stalk-like base and a small apical pore. Discussed as L. gemmatum Batsch in Coker and Couch (1928) and Johnson (1929), this beautiful little fungus is very common in Kentucky. Care must be exercised, however not to confuse it with L. echinatum Pers. (Sunberg and Richardson, 1980), a species with long, soft, and often fused spines. Lycoperdon perlatum was very abundant on 15 July 1987 in the oak-hickory woods near Berea, Madison County.

Calvatia rubroflava (Cragin) Morg. (Orange-staining Puffball). This distinctive, somewhat flattened sphere puffball is usually pinkish-white but stains bright orangish-yellow upon being bruised. The sides appear pleated and the spore mass is white but not powdery. I found a single specimen in rich soil of a wooded hillside above Nada Tunnel, Red River Gorge, Powell County, 9 June 1987.

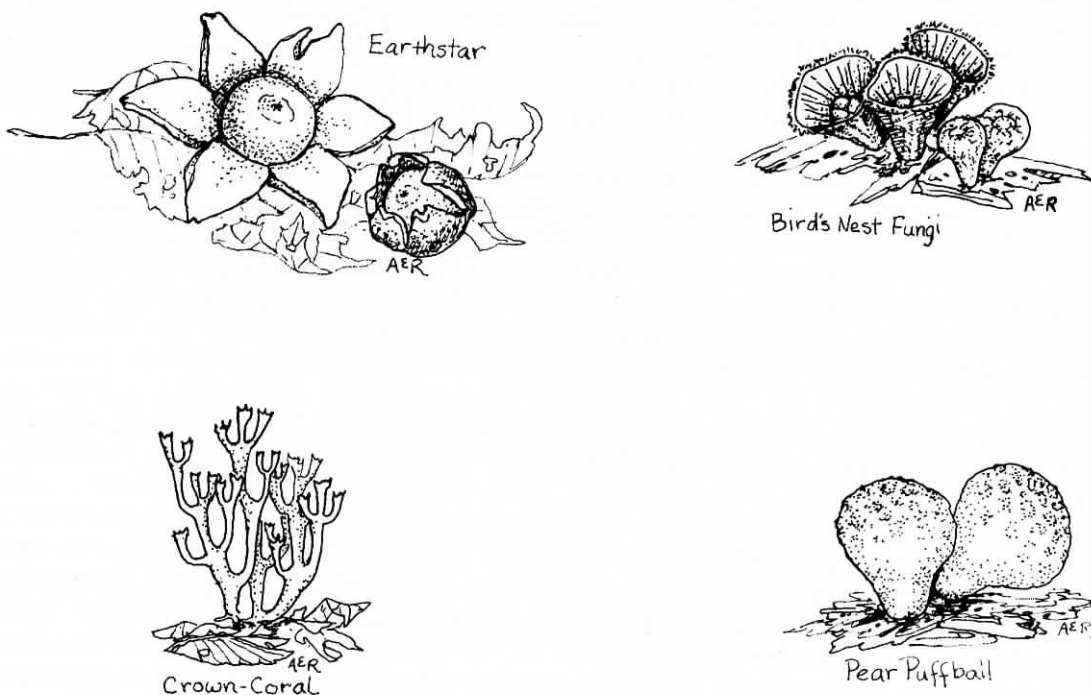
#### SCLERODERMATALES (False Puffballs)

These odd fungi bear a superficial resemblance to regular puffballs (Lincoff, 1981) but they lack a hymenium. The basidia develop throughout the fruiting body (Johnson, 1929). The gleba (spore mass) becomes very powdery at maturity and is often purple to nearly black in color.

Scleroderma citrinum Pers. (Poison Pigskin Puffball). Varying from 2.5 to 10 cm in width, this peculiar fungus is round and covered by rough protuberances. It is yellowish-brown in color

with white flesh and a dark purple to black glebula at maturity. The spores are nearly black. It is discussed as *S. aurantium* (Vaill.) Pers. by Coker (1928) and Johnson (1929). I found single large specimens in leaf litter near Sky Bridge, Powell County, 11 September 1974, and in the marginal woods opposite Fort Boonesboro State Park, Clark County, 26 July 1986.

Figure 1. Typical forms of earthstar, bird's nest, coral, and puffball fungi. Illustrations by Ann Rehtin.



#### NIDULARIALES (Bird's-Nest Fungi)

Bird's-nest fungi are among some of the most curious fungi encountered in the wild, always stimulating admiration when encountered. Several species are doubtless common in Kentucky, including the ones discussed here.

*Crucibulum laeve* (Huds.) Kamb. (White-egg Bird's Nest). This delightful little mushroom is tawny in color and deeply cup-shaped; the inner walls of the cup are smooth and contain white spore cases ("eggs") that are attached by coiled cords. The cup measures 0.5-1.0 cm in height and the eggs about 1.5 mm in diameter, although they are variable in size, even within the same cup (Brodie, 1975). The typical habitat is on dead wood. I found many specimens on dead hardwood limbs 3.6 km west of Richmond (Barnesmill Road), Madison County, 11 April 1987, and in a similar habitat at Deacon Hills Estates, Richmond, 6 July 1987.

Cythus striatus (Huds.) Wild. (Splash Cup or Striate Bird's Nest). Narrowly conical (6-8 mm wide, 7-10 mm high), the splash cup is distinctively marked. Externally it is dark gray to rich brown and densely hairy, the hairs fringing the lip of the cup. The inner surface of the cup is distinctly striated and the peridioles ("eggs") are grayish to silvery in color. It grows on dead wood. The species has been reported from Land Between the Lakes (Sundberg and Richardson, 1980) and I found it abundantly on dead hackberry limbs at Deacon Hills Estates, Richmond, 2 July 1987.

Cythus stercoreus (Schw.) de Toni in Sacc. (Dung Cup). The small (0.5-1.5 high, 4.8 mm wide) fruiting bodies are usually golden brown, funnel-shaped, and shaggy externally. The inside of the cup is dark-gray to nearly black, and the eggs are black. It is world-wide in distribution (Brodie, 1975), the principal habitat being manure. I found abundant specimens on 27 July 1987 on meadow muffins at the Eastern Kentucky University farm, Richmond.

Although all these interesting fungi are common in Kentucky, as previously indicated, there are few published reports dealing with them. But, of course, teleological exercises are not the only reason to involve oneself with nature. The discovery of things that are new to the individual, whether to science or not, is worth a good deal on an aesthetically oriented scale.

A very good deal, indeed.

#### LITERATURE CITED

- Arora, D. 1986. Mushrooms demystified. Ten Speed Press, Berkely, California, 959 pages.
- Brodie, H. J. 1975. The bird's nest fungi. University of Toronto Press, Toronto, 199 pages.
- Coker, W. C. 1923. The clavarias of the United States and Canada. University of North Carolina Press, Chapel Hill, 209 pages + 92 plates.
- Coker, W.C. and J. N. Couch. 1928. The Gastromycetes of the eastern United States and Canada. University of North Carolina Press, Chapel Hill, 201 pages.
- Johnson, M. M. 1929. The Gasteromycetae of Ohio. Ohio Biol. Surv. 4: 273-352.
- Lincoff, G. H. 1981. The Audubon Society field guide to North American mushrooms. A. F. Knopf, Inc., New York, 926 pages.
- Sundberg, W. J. and J. A. Richardson. 1980. Mushrooms and other fungi of Land between the Lakes. Tennessee Valley Authority Handbook, Golden Pond, Kentucky, 60 pages.



## MY COOPERATIVE EXPERIENCE WITH THE KENTUCKY NATURE PRESERVES

by Bruce Hoagland

EKU, Richmond, KY 40475

My summer work experience was with the Kentucky Nature Preserves Commission (KNPC). The KNPC is affiliated with the Kentucky Department of Natural Resources and Environmental Protection. In 1976 the Kentucky state legislature brought KNPC into existence, though a staffed agency did not emerge until 1978. KNPC's current staff consists of the director, a botanist, a zoologist, a stewardship coordinator, and an executive secretary. Another zoologist and data manager/botanist are temporarily on staff. The KNPC botanist, Marc Evans, was my immediate supervisor.

It is the function of the KNPC to identify and acquire natural areas within the states boundaries. A natural area is defined by Kentucky statute as "any area of land, water or both which retains or has reestablished to some degree in the judgement of the Commission its natural character, though it need not be completely natural or undisturbed, or which has natural flora, fauna, biological, ecological, geological, scenic or archaeological features of scientific, aesthetic, cultural or educational interest (Commonwealth of Kentucky, 1976, Statutes 146.410 - 146.535)." At this time the KNPC manages eighteen such areas. It is hoped that this system will act as noted in the above statutes as "living museums of the native landscape where people may observe nature's web of life and our natural heritage, as places of historic and natural interest and scenic beauty, and as reminders of the vital human dependence upon fresh air, clean water, and unspoiled natural areas."

Natural heritage is the key phrase for my work experience. The Commission functions within the Natural Heritage Program (NHP) established by The Nature Conservancy (TNC). The Natural Heritage Program is initiated for a given state by TNC and operated by them for the first five years. After this time the state assumes operation. With Alaska entering the network this year, all fifty states in the union have adopted this system.

The Natural Heritage Program addresses the question of recognizing species which are threatened and endangered species. Data compiled from the literature and current inventory work have been compiled into an extensive data base. When a listed species (that is, listed as endangered, threatened or of special concern by the Kentucky Academy of Sciences and the KNPC) is reported, by field investigators, it is recorded by the Commission as an element occurrence (EO). This involves mapping, on 7.5 min. topographic quadrangles, the occurrence of that species based on location information provided by the investigator. Such information is referred to as an element occurrence record (EOR). Locational data is then entered into an Eolog. Finally, the species binomial, EO code, latitude, and longitude are entered into the quad book. The quad book contains a record of every EO occurring on particular 7.5 minute quadrangles. These data are then entered into the computer data base.

The number of occurrences for an element, along with range information and threat of disturbance, are considered when assigning a rank to species of concern. Ranks are assigned as a

number between 1 and 5, with 5 being least threatened and 1 being greatly threatened. An element is ranked at two levels, state and global. This helps to balance considerations of wide ranging species on the edge of their distribution in a given state, with those that are narrow endemics.

One of my assignments at the Commission was to map and record data, obtained from field workers and the literature, for listed species. Also, I helped to quality control (QC) information mapped and recorded by other workers. This is information mapped and recorded by other work to assure accuracy in our data.

Along with the office work, I had the opportunity to gain field experience. The KNPC currently has a grant from the U.S. Fish and Wildlife Service to locate extant populations of Running Buffalo Clover (Trifolium stoloniferum). A plant that was prevalent at the time of settlement, running buffalo clover was thought to be extinct. Prior to conversion of the Bluegrass region of Kentucky to pasturage, the area was described as the land of cane and clover. Running buffalo clover was described by early settlers as growing waste high. It was fed on by roaming herds of buffalo in the area at that time. However, when large areas were fenced in and intensively grazed, the plant began to disappear (Campbell, et al., 1988, Rhodora 90: 399-418).

Earlier in this decade a population was found in West Virginia and Indiana, and in 1987 Marc Evans encountered a population in Boone County, Kentucky. This would prove to be the largest known stand. University of Kentucky agricultural scientists have determined that running buffalo clover has a higher palatability, for domestic livestock, than introduced forage clovers (i.e. T. pratense, T. repens and T. dubium).

The search plan for running buffalo clover was to visit old cemeteries and historic sites. Prairie remnants are often searched for in this manner. Also, populations that were later discovered were found near old homes on lawns that were not intensively manicured. Since it had existed in open tracts grazed by buffalo, some disturbance is obviously necessary to maintain the plant. So light mowing, which can be considered as simulated grazing, will not harm a population.

It was quite sometime before another population was found. Morale was low for the principle investigator, Tom Bloom. Oddly enough, while mowing her lawn, the stewardship coordinator, Joyce Bender, discovered a population in her yard. Her home fit the criteria. It had been built at the turn of this century and the lawn was not intensively maintained. The hunt was on.

We returned to the field and searched the Bluegrass region intensively. Soon another population was found in downtown Lexington, I was rushed to Ashland, the home of Henry Clay. Again, the plant had been found at an old home site. It did not take long for me to discover a new patch on the lawn at Ashland. The plant is more robust than the other clovers and has a thicker stolon, making it readily identifiable. I only saw one senescing flower head which is also larger than that of white clover.

A final population has been found along the proposed runway extension for Bluegrass Field airport. Running buffalo clover is a federally listed endangered species. This patch of clover will

lead to the redesign of the airport authorities expansion plan.

In June two other co-op students and I were dispatched to Bad Branch Nature Preserve in Letcher County, Kentucky. Our job was to reroute a trail beneath a cliff line which houses the only pair of nesting Ravens in the State. I had previous trail-building experience in the Rocky Mountains, and it felt good to swing ax and mattock again.

My final venture into the field was to ecologically sample cedar glade vegetation. Cedar glades are plant communities with shallow soil and exposed bedrock. They are stressful environments being typically hot and dry. Many species of prairie plants are typically found here, along with a host of endemics. Cedar glades occur in greatest size and number in Tennessee, Alabama and Missouri. In Kentucky, cedar glades are found on south to southwest facing slopes.

Marc Evans and I met two botanists, Doug Lad and Tim Nigh, of the Missouri TNC office and the Missouri Department of Conservation, respectively. The Nature Conservancy is attempting to develop a classification of natural communities. Doug and Tim were specifically sampling cedar glades in the states of Missouri, Kentucky and Tennessee.

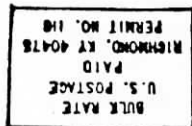
There are several cedar glades in Bullitt, Hardin and several other western Kentucky Counties. Lewis County, along the Ohio River in eastern Kentucky, also boasts a few cedar glades. An interesting feature of some of these glades is the presence of Cypripedium candidum, the White Lady's Slipper. This plant occurs most abundantly in moist prairies in the west. Yet in Kentucky it has only been found in the hot, dry environment of a few glades in central part of the state.

This particular field experience was both fun and very interesting. The men I was with were accomplished and informative botanists. I did, however, wonder about their sampling technique of using a hybridized releve method and compiling a floristic list and cover value for plants within a 100-m<sup>2</sup> plot. I felt that such a large plot, without subsampling, would yield inaccurate data. They explained to me that it suited stewardship needs and was not meant to be an academic exercise, that it was a workable system as long as they stayed within the assumptions they had established.

The greatest benefit I gained from this co-op experience was the exercise and application of what I have learned in college. In my particular field of endeavor there is no better teacher than hands on exposure. Although the field time was not as extensive as I had hoped, it was still very educational.

I would highly recommend to students of field biology to take a cooperative position with the KNPC. All the employees are well versed in their fields and are eager to answer questions. The work atmosphere is congenial and conducive to accomplishment. It was truly a summer and tuition dollars well spent.

The Kentucky Native Plant Society Newsletter is published quarterly (February, May, August, November). Please notify us four weeks in advance of any changes of address. Back issues of the Newsletter are available for \$.50 each.



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