Kentucky Native Plant Society

Newsletter



Volume 10, Number 4

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November 1995

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Deadline for February Newsletter is January 10. Please be prompt!

The Kentucky Native Plant Society, Inc. was founded in 1986 as a botanical organization for all persons interested in the native flora and vegetation of Kentucky. The goals of the KNPS are to serve as a medium of information exchange, and to promote native plant conservation and public education in botany and botanical research in Kentucky. Annual does of \$5.00 (\$7.00 family) may be sent to: KNPS Membership, o'e Department of Biological Sciences, Eastern Kentucky University, Richmond, KY 40475.

The KNPS Newsletter is printed Feb., May, Ang., & Nov. Deedlines for submissions are the 10th of the mouth preceding printing month. Send articles and correspondence to : KNPS Newsletter Editor, c/o Department of Biological Sciences, Eastern Kentucky University, Richmond, KY 40475.

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Message from Interim President Wilson Francis

Most of you already know that Landon McKinney has stepped down from the role of President for personal reasons. Landon brought a great deal of enthusiasm to the job and made a significant contribution to keeping KNPS on track as a viable organization. Landon was a big help to me in planning the annual Wildflower Weekend, and I wish he could have stayed on as President a while longer.

The 1996 spring general meeting will coincide as usual with the Wildflower Weekend at Natural Bridge. This will be May 3-5, and an election of officers will be held. In the meantime, I have agreed to act as Interim President. I'm happy to help out KNPS and I'll try to maintain our momentum over the winter.

I don't think it is necessary to initiate any big changes or new programs. We've got several good things going with the certification program, some good field trips, and the plans for our 10-year celebration underway. There is something all of us could do this winter to help KNPS. Why don't we all give some thought to our native plants and natural environments in Kentucky, and think of ways in which KNPS could play a role in increasing public awareness of the values we associate with native plants. While you're at it, maybe you'd like to run for KNPS President!



PLANT PLACES...

The Best in Public Access Sites for Viewing and Studying our Native Flora

Remnant Prairies at West Kentucky Wildlife Management Area

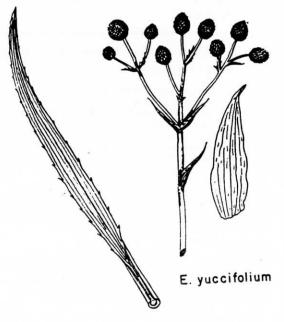
Charlie Logsdon

The history of the land and people that have inhabited the area of what is now West Kentucky Wildlife Management Area (WKWMA) would be suitable for a Michenor novel. West Kentucky Wildlife Management Area is about 6,700 acres in size and is located about 12 miles north west of Paducah. Long before European contact the area was frequented by mound builders, Chickasaws and other native Americans. During European contact, the adjacent Ohio river provided access for explorers, traders and adventurers. The subsequent settlement changed the area from frontier, to one of agricultural and river based economy. In the 1940's the Department of Defense purchased 16,000 acres, (including the lands that are today WKWMA) for the construction of the Kentucky Ordinance Works. After the second World War, the land was redistributed to private individuals, the Atomic Energy Commission, and the Tennessee Valley Authority. In the late 1950's and early 1960's some of these lands were deeded and or licenced to the Kentucky Department of Fish and Wildlife Resources (KDFWR), for wildlife management and wildlife related activities.

At each stage of human involvement with the land, the plant communities were affected.

Most of western McCracken, and central and

eastern Ballard counties were an island of tall grass prairie prior to European settlement. This was a portion of the 2.5 million acre prairie that existed in Kentucky prior to settlement. These prairie communities were fire dependant for their persistence. Fires were either started by lightning or by the Native Americans. The dominant vegetation were the tall grasses, such as Indian grass (Sorghastrum nutans), big bluestem (Andropogon gerardii), prairie cordgrass (Spartina pectinata), little bluestem (Schizachyrium scoparium), and eastern gama grass (Tripsacum dactyloides). A number of forbs were also associated with this tallgrass prairie. A number of Silphium species (compass plant, cutleaf prairie dock, cup plant), blazing stars (Liatris sp.), wild indigos (Baptisia sp.), sunflowers (Helianthus sp.), and rattlesnake master (Eryngium yuccifolium) were all found in this region, as well as many others.



During this period the Ohio River bottom land was almost entirely forested. Numerous

bottom land hardwoods such as oaks, hickories, cottonwoods, hackberries and others could be found, as well as tupelo swamps and cypress dominated lakes. A rich herbaceous layer was present with a profusion of wildflowers such as spiderwort, trillium and Indian pink.

With European settlement, major land use changes occurred. Fire was suppressed and grasslands were converted to croplands. European plants were introduced intentionally as livestock forage and inadvertently as weed seed contaminants. Bottomland hardwood forests were cleared and the associated wetlands were drained and converted to agriculture. In modern times as industry moved into the region, land was further converted and covered with buildings, roads, parking lots, etc. However, remnants of the past plant communities are still present in the WKWMA.

The area contains some of the larger tracts of remnant tallgrass prairie remaining in Kentucky. These prairie remnants are maintained through active management and the use of prescribed burning. Annually, 200 to 400 acres of grasslands are burned. All of the prairie species mentioned earlier can be found in the managed grasslands. Some areas of particular interest are large colonies of compass plant (Silphium laciniatum), white and cream colored wild indigo (Baptisia leucantha and B. leucophea) and dense blazing star (Liatris spicata). Total prairie acreage is difficult to judge due to its being in various stages of restoration. Approximately 1,500 acres of grassland are present with prairie plants being found in most of the stands.



Bayou Ridge Natural Area is also contained within WKWMA. This area is considered to be one of the few best remaining examples of an old-growth bottom land forest in Kentucky. Twenty-six species have been identified in the canopy. Included in the stand is the states largest cottonwood. An excellent tupelo (Nyssa aquatica) swamp is nearby, as well as water hickory (Carya aquatica).

Although WKWMA is one of the most heavily used KDFWR areas, it is managed as a multiple use area. In order to make the most of your visit, contact the WMA Supervisor's office. I can provide you with a drive-through tour guide for the area and direct you to some of the more accessible sites. A teacher's study guide is also available for the driving tour. Controlled burn seminars are held annually to educate the public in the use of fire to manage wildlife and restore and maintain the tallgrass prairie.

Several other unique areas are present in the vicinity including Metropolis Lake, and Ballard County WMA. If you are coming from a great distance, plan to visit as many of these areas as possible!

Charlie Logsdon is the West Kentucky Wildlife Management Area Supervisor, and may be reached at (502) 488-3233.

Pat's Weed Patch

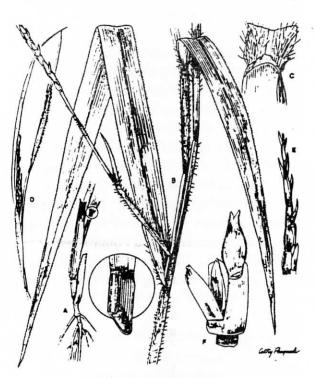
Patricia D. Haragan

Itchgrass Alert!

Itchgrass, Rottboellia cochinchinensis, is an annual grass native to tropical Asia that infests croplands, thickets and forests throughout the world. It is a vigorous competitor and is spreading to areas beyond its range at an alarming rate.

In the United States, itchgrass was first observed in Louisiana in 1927 along a railroad track following a flood. By 1951, it

was observed growing in sugarcane fields. Since then, it has become a troublesome weed in sugarcane, corn, and abandoned fields in the Gulf Coast States, lower Midwest, and south Atlantic states.



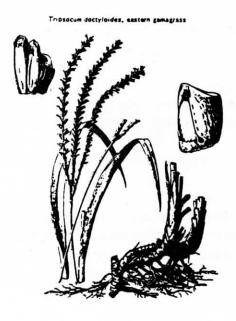
Rottboellie cochinchinansia. A. Lower portion of culm, showing annual nature (with inset showing solid stem) (8.75s); B. Upper portion of culm, showing pubescence and spikelike receme (8.75s); C. Sheath/blade joint, showing ligule (4.5s); D. Young llowering branch (0.75s); E. Top portion of inflorescence (1.5s); F. Floral unit (semal spikelet, pedicellate spikelet, and internode (9x).

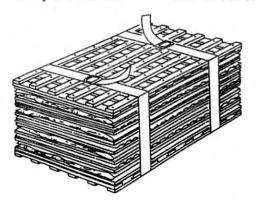
Like many weedy species, itchgrass is a prolific seed producer. The seeds spread by water, birds, poorly cleaned crops and harvesting machines. Once a field becomes infested, it is difficult to work in because of the fiberglass-like needles on the sheath. These needles easily penetrate the skin and break off, causing painful infections...hence the name itchgrass.

Currently, this species is not known from Kentucky. However, in 1990, a farmer in Warrick County, Indiana (near Evansville), discovered this grass in his corn field. The plant was brought to the attention of Dr. Hennen, Curator of the Purdue University Herbarium for verification. Indeed, this tropical grass was itchgrass. (A new record for Indiana). Since 1990, it has spread to other sites in that state including roadsides and abandoned fields despite efforts to control this weed.

Botanists and agronomists conducting research on R. cochinchinensis, believe that it is likely to be found in Kentucky, especially on bottom land soils in the western part of the state. If itchgrass is observed in the field, please contact a botanist with the Kentucky Native Plant Society or a County Agent with the location.

Pat Haragan is Associate Curator of the Davies Herbarium at the University of Louisville and is a frequent contributor to the KNPS Newsletter. She may be reached at (502) 852-0868.





CURATORS' CORNER New Home for UK Herbarium

Rob Paratley

The herbarium at the University of Kentucky, the state's largest collection of vascular plants, has moved from the Funkhouser Building to the Thomas Poe Cooper Building on Rose Street in Lexington. It has also changed custodians, from the School of Biological Sciences to the Forestry Department at UK.

History

In 1934, the University of Kentucky officially organized the UK Herbarium as part of a "museum on paper" consisting of several collections throughout the University. The herbarium was the responsibility of the School of Biological Sciences. Of course botanical collecting had gone on long before that time, and many specimens held in private herbaria were eventually donated to UK, including collections of C.W. Short from the mid 19th century.

In 1948, tragedy struck when a growing collection of 30,000 specimens was destroyed by a fire. The only collections now in the herbarium predating the fire are

those that were out on loan at the time. A user of the herbarium today will find a number of early 20th century specimens. These represent duplicates assembled and donated by sister institutions which helped to rebuild the collection after the fire. The majority of today's more than 50,000 specimens were collected after 1948. Important collectors include E.T. Brown, Ray Cranfill, Mary Wharton, Willem Meijer, and Julian Campbell.

New Plans for an Old Space

In 1992 (well before I arrived on the scene) a committee was formed to decide the fate of the University's botanical collections. Dr. Meijer, curator for over 20 years, was nearing retirement. Very little of the Biology department remained in the Funkhouser Building, but the School of Biology was at a loss for space within the Hunt Morgan Building. A number of concerned parties were less than enthusiastic about alternatives like packing the herbarium away to a remote storage site, or giving up the collection to another institution.

Dr. Robert Muller, chairman of the Forestry Department, stepped forward with a proposal to house the Herbarium in the Cooper Building, rather than see it mothballed or shipped out. A search for a new curator was conducted and I was hired to curate the collection and teach plant taxonomy. I initially had two goals—to initiate the conversion of old lab space in Forestry and to get the Herbarium ready to be moved.

A Tale of Two Elevators

A University Vice President set a June 30, 1995, evacuation deadline and this had two immediate results. First, I set aside any academic or long range activities and put all of my efforts into writing requisitions, measuring and mapping cabinets and assorted furniture, sifting through the contents of cartons that had not seen the light of day in a millennium, locating and separating the useful and valuable from the ... well, from all the rest. Second, the University's Physical Plant Division folks shifted into high gear and descended upon me in a rush of enthusiasm to convert the Forestry space after nine months of deafening silence. The gutting, sealing, and cosmetic make over took less than two weeks once cruising speed was reached by the tradesmen. Then came the move of nearly fifty specimen cabinets-- down an elevator as big as the trunk of a subcompact car and up another elevator old enough to be the Otis prototype displayed at the Smithsonian. Nevertheless, five goodspirited Mayflower movers weathered the tight quarters of the one elevator, the stalling and sputtering of the other, and the sheer bulk of the specimen cabinets. They accomplished the task with considerable aplomb in two days, with not even a label lost or a mount messed.

Setting Up in the New Home

At this writing I'm still waiting for the final renovations of my own office space (the same University tradesmen are no longer at cruising speed now that the Vice-President's space has been evacuated). The collection is

alive and well in a brightly lit, freshly painted and well ventilated suite of two and a half rooms. We will soon remove the last of the old lab equipment, leaving lots of bench and desk space for specimen processing and analysis. There's a lot of work to be done-remounting labels and specimens, cataloging backlogged material, reorganizing and computerizing, and getting records in order. I look forward to working with students and faculty here at UK and elsewhere on plant ID's, field botany, and helping folks use the collection. I also look forward to meeting a number of you-- doing research, needing identifications, or just curious to look at a group of plants you'd like to understand better.

Rob Paratley is the Curator of the Herbarium at the University of Kentucky. He can be reached at (606) 257-1824



Field Report: Eastview Barrens

Charlie Lapham Amateur Botanist (not quite KNPS certified)

Eastview Barrens, known since Ray Cranfill's discovery in the late 70's, was recently acquired by The Nature Conservancy. It is a very special place, as was demonstrated when the author took a Tennessee Native Plant Society (TNPS) group from the Nashville area there on the way home from the joint KNPS/TNPS fall meeting in early September of this year. This TNPS group was not a bunch of neophytes! The author knows from personal experience that at least two of them are regular trip leaders on the annual Wildflower Pilgrimage in The Smokies.

All were properly impressed with Eastview! The absence of alien grasses was promptly noted. They found a rare pink milkwort, Polygala incarnata, in the parking lot! A few feet away was Agalimus gattingeri, one some of you may know under the old genus name Gerardia. Long haired hawkweed, Hieracium longipilum, which is as rare in Tennessee as it is in Kentucky, was the next discovery the author heard about, but things were happening everywhere. While the guide was stumbling around trying to find the road to the burn area we came across blue curls, Trichostema dichotomum. This caused the author extra work because he's not sure now whether his Trichostema setaceum is a depauperate group of T. dichotomum or really T. setaceum. They're awfully close which means he has to get to a herbarium.

Eventually the lost guide found the road to the burn area. Milo Pyne noted that the sandstone was turning to limestone which indicated we should find another group of species which he considered highly unusual in a rich native site like this. Jack Carman was the first to find a prairie gentian. Gentiana puberulenta. Pandemonium ensued! There is only one site known in Tennessee and it was only recently discovered. In a couple of minutes several dozen blooming plants were found. Camera's appeared from everywhere! If you are not familiar with the prairie gentian, the flowers are showy and unique. There is no need to key it; the pictures in the guidebooks are quite sufficient. It is listed as endangered in Kentucky and Tennessee. It was particularly exciting because none of us knew it was there.



Many of us didn't realize it but we had a distinguished guest, Jessie Harris, a wildlife photographer from Washington, DC, at the fall meeting. She also came south with the Nashville group on Sunday. She has been working since 1978 on plant photographs and her goal is to photograph all species in the northeastern US. The prairie gentian was one she had never seen. We also stopped at the *Helianthus eggertii* site at Mammoth Cave National Park, a pond with American Lotus, *Nelumbo lutea*, just south of Cave City where we also found two species of meadow beauty, *Rhexia interior* and *R. virginica*. We finished up at the bluecurls, *Tricostema setaceum* (or *T. dichotomum*) site south of Glasgow.

The official KNPS trip to Eastview took place on October 15, and on this occasion we had a leader instead of a guide who got lost. We also had not one but two botanists who were thoroughly familiar with the site. Besides one of our former KNPS Presidents. Dr. Julian Campbell of the Nature Conservancy who led the trip, we also were lucky enough to have Julian's friend, Dr. Max Medley, who came along to assist. Julian told us about how Ray Cranfill found the site while working on the flora of Hardin County when UK was still active in field botany, plus some of the large amount of work that went into acquiring the site. Part of it may eventually be transferred to the Kentucky Nature Preserves Commission. The gentians were still in bloom. If you haven't seen them, you really should! Julian reported that the Nature Conservancy's burns have done wonders for the gentians. If you're willing to help with burns or want to learn about them contact Margaret Shea at the Nature Conservancy, 642 N. Main St., Lexington, Ky. 40508. There is still a lot more that needs burning at Eastview.



COMPASS-PLANT

Thanks to Julian and Max we discovered a lot more than we had found earlier. If they'd only been along on the September trip!

There were lots of opportunities to learn as the following examples indicate: if you're having trouble with mountain mints: Pycnanthemum pilosum, P. torrei & P. tenuifolium are all there. If grasses are your nemesis, Big Bluestem (Andropogon gerardii), Broomsedge (A. gyrans), Little Bluestem (Schizachyrium scoparium), Indian Grass (Sorghastrum nutans), Arrowfeather (Aristida purpurascens), Hairgrass (Muhlenbergia capillaris), Forest Muhly (M. sylvatica), and a host of others are at Eastview. (It would make a great field trip site for the long awaited KNPS grass class.)

If sunflowers baffle you, Helianthus mollis, H. eggertii, H. hirsutus, and H. microcephalus are at Eastview. Helianthus eggertii is a Federal Candidate known only from a few sites in Kentucky and Tennessee.

If liatris species are confusing, you could have compared Liatrus aspera and L. squarrosa. Seeing L. aspera is much more helpful than the manuals. If the only dogwoods you know are Cormus florida and C. canadensis, you could have doubled your dogwoods with C. racemosa and C. stricta. If all your tick trefoils are nasty, weedy aliens that stick to your jeans and dog, you should know there are nice (comparatively) native lespedezas at Eastview including Lespedeza capitata, L. hirta, and L. virginica. If Cistaceae (Rock Rose family) doesn't ring a bell, you could have seen two: Lechea tennufolia & Helianthemum bicknelli. We also identified: 2 Asters (Aster patens &, A. dumosus), Rattlesnake master (Eryngium yuccafolium), 2 Throughworts (Eupatorium aromaticum & E. serotinium), Copperleaf (Acalypha virginica), Sneezeweed (Helenium autumnalis), Blue Wax Weed (Cuphea petiola), and Bluehearts (Buchnera americana). We were also fortunate enough to find, for Clara Wieland our dedicated coordinator of field trips, Nodding Ladies Tresses, Spiranthes cermia. It was a great day for a pilgrim in search of the truth.

Charlie Lapham is a member of the Board Of Directors of the KNPS, a dedicated organizer and attendee of field trips and a non-neophyte.

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KNPS Certification Program in Native Plant Studies

Winter - Spring 1996 Course Offerings

These courses are offered by the KNPS as part of a curriculum developed to educate KNPS members in native plant studies. Courses are not limited to KNPS members. For more information on the KNPS, please contact Dr. Ron Jones, Eastern Kentucky University, Biology Department, Richmond, KY 40475. (606) 622-3056, or EKU Herbarium (606) 622-6257.

Basic Botany for the Amateur Naturalist Dr. William Bryant, Professor of Biology, Thomas More College, Crestview Hills, KY.

This course is for the amateur naturalist, and no previous background in botany or science is expected. If you have ever wondered why and how plants are put together so differently than animals (both inside and out), then you will discover a new world of exciting information from this study. Hands-on learning will include lab and microscope exercises. You will learn how plants function in ecosystems as photosynthetic machines; and why none of us could exist on this planet without them. This course is required for KNPS certification in Native Plant Studies, and should be taken by those interested in beginning the certification process.

Tuition approximately \$90. Thomas More College, Crestview Hills, KY. Saturdays, February 17, 24, March 2 and 9, 1996. 9:00 am - Noon Contact: Ms. Joyce Emery, Continuing Education Programs Coordinator. (606) 344-3304, or Dr. Bryant (606) 344-3370.

(This course will be taught at Thomas More)

Grasses and Grasslands Gary Janicke, Agronomist, EKU Agriculture Department

More than 60% of the United States is rangeland or land dominated by grasses. Many of these unique plants within the United States, as well as in Kentucky, are in the grass family. During four Saturdays in February, you can explore the grass tribes. These sessions will primarily focus the taxonomy of native grasses and some improved grass species, with additional information related to ecology, physiology, uses and management. One main objective is to visit all grass tribes during February. Required text, "How to Know the Grasses", Pohl. (Available at EKU bookstore at \$18.75).

Tuition \$76.00 EKU Campus, Moore Building, Rm 202. Saturdays, February 3, 10, 17 and 24, 1996. 1:00 - 4:00pm. Registration through EKU Community Education, (606) 622-1228.

Introduction to Spring Wildflowers in Kentucky Tim Weckman, Biological Sciences Department, Eastern Kentucky University. Richmond, KY.

This beginning course will focus on Kentucky's spring ephemerals. Students will learn to identify our spring herbs through use of keys and manuals. An introduction to the use of plant keys and the basic terminology needed for identification of unknown wildflowers will be provided. The major families most likely to be encountered in Kentucky will be emphasized. Course will consist of lab work and one field trip.

Tuition \$76.00 EKU Campus, Moore Building, Rm 202. Saturdays, April 6, 13, 20 and 27,1996. 9:00 am - Noon. Registration through EKU Community Education, (606) 622-1228.

Bonsai for Beginners: KNPS Special Topics Course. Dr. Ross Clark, Biological Sciences Department, Eastern Kentucky University, Richmond, KY

(Additional course information in Feb. Newsletter.)

Tuition \$76.00, plus self selected plant material. 5 Saturdays, April 27 through May 25, 1996 2 to 5 pm. EKU, Richmond, Moore Building, Rm 202. Registration through EKU Community Education, (606) 622-1228.

Field Trips 1996 Clara Wieland, KNPS Field Trip Coordinator

January 13, 1996. A Winter Foray in Berea Woods. Saturday 10:30 a.m. EST.

For the hail and hearty (or those with cabin fever), David Taylor, Botanist with the U. S. Forest Service will lead us up the hill and back in Berea Woods. We will view trees, shrubs, vines, mosses and whatever other botanicals we may find. Bring a snack, a drink, wear appropriate clothing and BOOTS. Meet at 10:30 a.m. EST in Berea, at the Indian Fort Theater parking lot. To get to the lot take Rt 21 East out of downtown Berea (past the Boone Tavern Hotel). Drive about 3.5 miles east of town on Rt 21 and look for a white board fence on your left. Turn left into the parking lot surrounded by this fence. Afterwards, you can explore the craft shops or restaurants in the college town of Berea (BOOTS optional). Note: David promises to walk at a comfortable pace, so do not let the word "hill" keep you from enjoying this winter outing. Limit 15, please call Clara Wieland to register and for weather and road condition questions. (606) 266-5548.

Look for an informational flyer and article in the February 1996 issue about a KNPS sponsored Exotic Plant Seminar. Which exotic plants are most troublesome? How can they be controlled in our gardens, roadsides, woodlots and natural areas? Also in the February issue look for the complete listings of the KNPS 1996 educational course offerings, Field Trips and meetings.

The field trips of 1995 were well attended, enjoyable and informative. Many thanks to our trip leaders who gave their time, expertise, and patience to lead us, and to the individuals and group owners of the lands we visit. Kentucky is a special place and the natural ecosystems are a gift for which we are all grateful. They deserve our care and protection. Please, if you have ideas for field trips or events contact me. This is YOUR Kentucky Native Plant Society and the Society wants to be responsive to you, the members.

Kentucky Native Plant Society Membership Form

Memberships are for calender y expiration is listed at the top of	your mailing label.		r membersnip current. Membe	rsnip
Name	Address	·		
City	State	Zip	KY County	_
Please mark membership and remit to: KNPS Men Richmond, KY 40475		10 77		PS",
Membership Renew	ral N	lew Membership		
Annual Individual	Membership (\$5.00)	Annual Fa	amily Membership (\$7.00))

Lifetime Family (\$140.00)

Lifetime Individual (\$100.00)

ACTIVITY CALENDAR 1996

January 13, 1996: Winter Foray in Berea Woods

February 1996: KNPS Grasses and Grasslands Course at EKU

February /March 1996: KNPS Basic Botany Course at Thomas More College

April 1996: KNPS Introduction to Wildflowers Course at EKU

April/May 1996: KNPS Special Topics Course: Bonsai for Beginners at EKU

April 25-28, 1996: Annual Wildflower Pilgrimage at GSM National Park

May 3-5, 1996: Annual Wildflower Weekend at Natural Bridge State Resort Park

The Kentucky
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Richmond, KY 40475

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