RKC NEWS

Rockcastle Karst Conservancy
www.rkci.org

Winter/Spring 2006
Volume 11, Issue 1
March 13, 2006

Caves Of Rockcastle County

James R. Rebmann and Gary O'Dell

PURPOSE

This research report is the result of years of hard work by people spending their recreational time doing something a little different, perhaps a little strange. It deals with the underground; the dark silent world, where humans do not belong. They are intruders, unwelcome strangers in perhaps the last wilderness. The purpose of this paper is to combine the speleological knowledge of Rockcastle County into one book so that the information will be recorded enabling others to use what some have gained. This book is to be for the Speleologist, the serious explorer; it is for those who value caves and understand the need for their preservation. This is not intended to be a "seed catalogue" cave publication, a listing and guidebook to Rockcastle caves. It is not for the vandal, the thrill-seeker, the casual explorer. This is not to degrade those who enter caves for the sake of exploration alone. The explorer has a very valuable place in speleology. The difference between the serious explorer and the thrill seeker can be seen by visiting some popular "wild" cave and seeing the rape of the cave by those who do not care.

The choice of Rockcastle County for a publication of this type is that the county has had little public exposure, especially in the speleological field, and it is close at hand so that it is easy to get to the field. Time is important as weekends are short.

continued on page 6

RKC recieved 501(c)3 tax exempt status from the IRS on January 20, 2006!

- see letter from the IRS on page 5 -

Inside This Issue:

RKC Quicknews

Membership:
88 individual members
6 organization members

RKC Meeting

Sunday, April 23
2:00pm ET
Library Meeting Room
Kenton County Public Library
Erlanger Branch
401 Kenton Lands Road
Erlanger, KY 41018
859-962-4000

Officers and Directors

Rockcastle Karst Conservancy

Officers

Chairman	Andy Niekamp	andyniekamp@gmail.com
Vice Chairman	Pat Hutson	caver723@aol.com
Treasurer	Werner Jud	orion@one.net
Secretary	Lisa Pruitt-Thorner	batscout@aol.com

Directors

Werner Jud	orion@one.net
Andy Niekamp	andyniekamp@gmail.com
Pat Hutson	caver723@aol.com
Lisa Pruitt-Thorner	batscout@aol.com

Committees

Membership	Andy Niekamp	andyniekamp@gmail.com
Newsletter Editor	Richard VanArsdel	rvanarsdel@earthlink.net
Karst Monitoring Coordinator	Deb Bledsoe	debcaves@yahoo.com
Community Liaison	Deb Bledsoe	debcaves@yahoo.com
Education Coordinator	Tammy Otten	tammyotten@yahoo.com
Fund Raising	Jo Hutson	joettarn2000@aol.com

Report of Activities Since the Last Meeting on August 31, 2005

Life Member T-Shirt: 30 life member t-shirts were printed at Identity Sportswear in October 2005 for a cost of $188.00. Each life member was given a free shirt. Several life members opted to purchase a second shirt for $10 each. Both short sleeve and long sleeve were printed.

Cave Clean Up: An RKC sponsored trash removal project was held at the Sinks of The Roundstone Cave in Rockcastle County on October 29, 2005. Forty cavers participated. The dumpster cost $175.00 and the sand (trash) bags cost $54.00. Virtual bags of cave trash were sold online and raised $239.00. This covered the cost of the project.

Media Coverage: A media advisory (press release) for the trash removal project was written by Allen Blair. Andy sent it to the Lexington Herald-Leader, Richmond Register and Mount Vernon Signal. We received good press coverage from the event. The Mount Vernon Signal published our media advisory on October 27. The Lexington Herald-Leader sent a photographer to the clean up project. Three photos and a paragraph about the project were printed in the October 30 paper. On December 22 the Mount Vernon Signal printed the names of the cave clean up participants in an article about the Kentucky Pride project. The cave clean up was mentioned in the January edition of the NSS News in the "In The Media" column.

Display Case: In November 2005 we purchased a portable, table top display case for $245.00 The model we purchased was Prezenta Show Style. Rob Coomer created the graphic layout for the display and Roger June printed the layout at no cost. Many thanks to Rob and Roger for their help. The display case and banner were set up at the Carter Caves Crawlathon in January 2006. Many RKC and NSS brochures were handed out.

Tax Exempt Status: In November 2005 we received a letter from the IRS asking for clarification on seven points in our application for tax exempt status. We responded promptly and thoroughly. On January 20, 2006 we received a letter from the IRS stating we have been granted tax exempt, 501(c)3 status.

continued on next page

(report on activities, continued from previous page)

RKC News Newsletter: In December 2005 Richard Van Arsdel produced the Summer/Fall edition of the RKC News. The newsletter is available on the RKC web site. The 2006 Winter RKC news is being developed.

Notable Contributions:

- September 2005 – $500.00 from the Dayton Underground Grotto for final payment towards a Benefactor Membership.
- September 2005 – $250.00 from the Dayton Underground Grotto for a memorial donation in the name of Maynard "Joe" Windows.
- September 2005 – $500.00 donation from the Huntsville Grotto.
- March 2006 – Ralph Mann donated a T-shirt Quilt from the 1981 International Congress of Speleology at Mammoth Cave, A framed Thomas Culverwell print of the 1941 Expedition into School House Cave a collection of caving t-shirts and two caving books.
- January 2006 – $300.00 life membership payment from Mike Wuerth

February 2006 - $1,000.00 donation from Dick Blenz.

Greetings RKC Members!

Just a friendly reminder that April is membership renewal time for the Rockcastle Karst Conservancy.

A Regular individual membership is $15/year, and a supporting individual membership is $50/year.

You may renew your membership in two ways:

- *Mail a check payable to "RKC" to: Andy Niekamp, 1515 Cordell Dr, Dayton, OH 45439*
- *Renew online using PayPal at <http://www.rkci.org/joinpaypal.htm>*

Tired of annual memberships? A Lifetime Membership is only $300! No more pesky email reminders like this and no annual checks to write!

As a caver you know that caves and karst areas are being threatened in most parts of the United States. The Rockcastle region is no different. The threats to our caves include groundwater pollution, mining, road development, landowner closure, and wildlife habit destruction. RKC is leading the way in protecting caves and karst.

We look forward to your continued support!

Andy Niekamp, RKC Chairman

www.rkci.org

RKC Financial Report

Prepared by Werner Jud

	Dec 31, 05
ASSETS	
Current Assets	
Checking/Savings	
1000 · Checking Bank One	2,134.86
1010 · Bank One CD's	6,040.90
Total Checking/Savings	8,175.76
Accounts Receivable	
1110 · Accounts receivable	-4.75
Total Accounts Receivable	-4.75
Other Current Assets	
1120 · Inventory Asset	110.40
1299 · Undeposited Funds	50.00
Total Other Current Assets	160.40
Total Current Assets	8,331.41
Other Assets	
1130 · RKC Equipment	245.00
Total Other Assets	245.00
TOTAL ASSETS	**8,576.41**
LIABILITIES & EQUITY	
Equity	
3010 · Unrestrict (retained earnings)	870.13
Net Income	7,706.28
Total Equity	8,576.41
TOTAL LIABILITIES & EQUITY	**8,576.41**

RKC has educational material for lending. See the website: http://rkci.org/library/index.htm or contact Tammy Otten: tammyotten@yahoo.com

RKC T-Shirts!

Price: $15.00, RKC member price $10.00
100% Pre-shrunk Heavy Weight Cotton, Navy Blue / Gold
Designed by Robert Coomer

Sizes: M, L, XL, (sorry no XXL or S). Quantities are limited.

All proceeds benefit The RKC. Order on line: http://www.rkci.org/tshirt.htm

RKC Life Member T-Shirt

Green with RKC logo

See membership details for more information

INTERNAL REVENUE SERVICE
P. O. BOX 2508
CINCINNATI, OH 45201

DEPARTMENT OF THE TREASURY

Date: JAN 20 2005

ROCKCASTLE KARST CONSERVANCY INC
C/O ANDY NIEKAMP
1515 CORDELL DR
KETTERING, OH 45439

Employer Identification Number:
20-1169061
DLN:
17053123085015
Contact Person:
ALETHA BOLT ID# 75501
Contact Telephone Number:
(877) 829-5500
Accounting Period Ending:
DECEMBER 31
Public Charity Status:
170(b)(1)(A)(vi)
Form 990 Required:
YES
Effective Date of Exemption:
MAY 26, 2004
Contribution Deductibility:
YES
Advance Ruling Ending Date:
DECEMBER 31, 2008

Dear Applicant:

We are pleased to inform you that upon review of your application for tax exempt status we have determined that you are exempt from Federal income tax under section 501(c)(3) of the Internal Revenue Code. Contributions to you are deductible under section 170 of the Code. You are also qualified to receive tax deductible bequests, devises, transfers or gifts under section 2055, 2106 or 2522 of the Code. Because this letter could help resolve any questions regarding your exempt status, you should keep it in your permanent records.

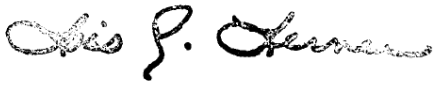
Organizations exempt under section 501(c)(3) of the Code are further classified as either public charities or private foundations. During your advance ruling period, you will be treated as a public charity. Your advance ruling period begins with the effective date of your exemption and ends with advance ruling ending date shown in the heading of the letter.

Shortly before the end of your advance ruling period, we will send you Form 8734, Support Schedule for Advance Ruling Period. You will have 90 days after the end of your advance ruling period to return the completed form. We will then notify you, in writing, about your public charity status.

Please see enclosed Information for Exempt Organizations Under Section 501(c)(3) for some helpful information about your responsibilities as an exempt organization.

ROCKCASTLE KARST CONSERVANCY INC

Sincerely,



(DO/CG)

Lois G. Lerner
Director, Exempt Organizations
Rulings and Agreements

Enclosures: Information for Organizations Exempt Under Section 501(c)(3)
Statute Extension

Caves of Rockcastle County, *continued from front page*

Rockcastle County was formed in 1810 and comprises 311 square miles. It was formed from parts of Lincoln, Madison, Pulaski and Knox Counties. The geographic location of this county is between longitude 840 08'N and 840 30'N; and latitude 370 09'W and 370 32'W. The county boundaries today include Garrard and Madison to the north, Lincoln to the west, Pulaski to the southwest, Laurel on the southeast and Jackson County to the east.

The overall topography of the county is such that the county can be divided into two distinct parts. To the east lies the sandstone hills with abrupt sandstone cliffs in many places. This is the outer edge of the Cumberland escarpment. Here elevations over 1,5001 can be found, such as Scaffold Cane Knob, Climax Knob, Wolf Branch Knob, etc. The terrain is rugged, the roads follow the hilltops or the river bottoms. To the west, the land is more gentle; we get out of the escarpment and the sandstone cliffs into a rolling landscape. The land is limestone and is more susceptible to erosion. Occasional knobs are found such as Copper Knob, Brushy Mountain, and Sutton Knob. The land is more congenial to habitation and so travel is easier due to more and better roads in the area.

The main cave or karst region is to be found in a northeast-southwest trend across the county. Here the Mississippian Limestone rocks are found which are conducive to cave formation. On top of the Mississippian rocks to the east are the Pennsylvanian sandstone and shales which form the cliffs and high places. To the west and under the cave forming limestones are found rocks which do not favor cave formation. Thus we have the greatest selection and variety of caves following this N.E.-S.W. trend.

It is inevitable that the publication of this will bring about an increase in the spelean traffic. This is an unfortunate side effect of publication. In every area that has published speleological material, the caves have suffered. Nevertheless, people are going to visit caves. It comes to the choice between two evils; to let our Information become public or to keep it hidden and locked up. There will always be cave explorers, but if they are careful and considerate, future spelunkers will have something to look at. A formation is hardly more impressive in someone's rock garden than hanging in its natural place. If one wants to see litter and garbage and polluted water, they may as well remain above ground. There is more of it there.

Background

Cave Development

Karst forms in Kentucky depend on the presence of soluble limestone and the degree of solubility of the limestone. This solubility varies from place to place due to the structure and quality of the limestone. The presence of limestone alone will not be the determining factor for cave development. Adequate rainfall and sufficient gradiant must also exist. Both of these conditions are present in Rockcastle County.

Limestone in itself is impermeable to water, though it is soluble in water. The permeability of the limestone is achieved through an inter connecting network of bedding plane, and joint fracture patterns produced secondarily in the limestone by diastrophic forces. Together these joints and bedding planes form a network by which water is transported subsurface and along which solution takes place. A perfect example of this in Rockcastle County is found in Joint Cave.

One of the properties of Limestone is that it is slightly soluble in pure water due to the mineral calcium carbonate of which it is composed. Acids or acid water dissolve it at an accelerated speed; in pure acid the process is very rapid and visible. Rainwater before contact with the ground has a very slight acidity content derived from the presence of carbon dioxide in the atmosphere. Once the water enters the ground a large amount of carbon dioxide from organic material in the soil goes into solution. The acid content of the water is then sufficient to dissolve limestone in quantities enough to form caverns. Most of the dissolving action takes place in the saturated area under the water table known as the phreatic zone. Lateral movement of the weak acid-bearing water enlarges the cracks and thus starts the beginning of cave passages.

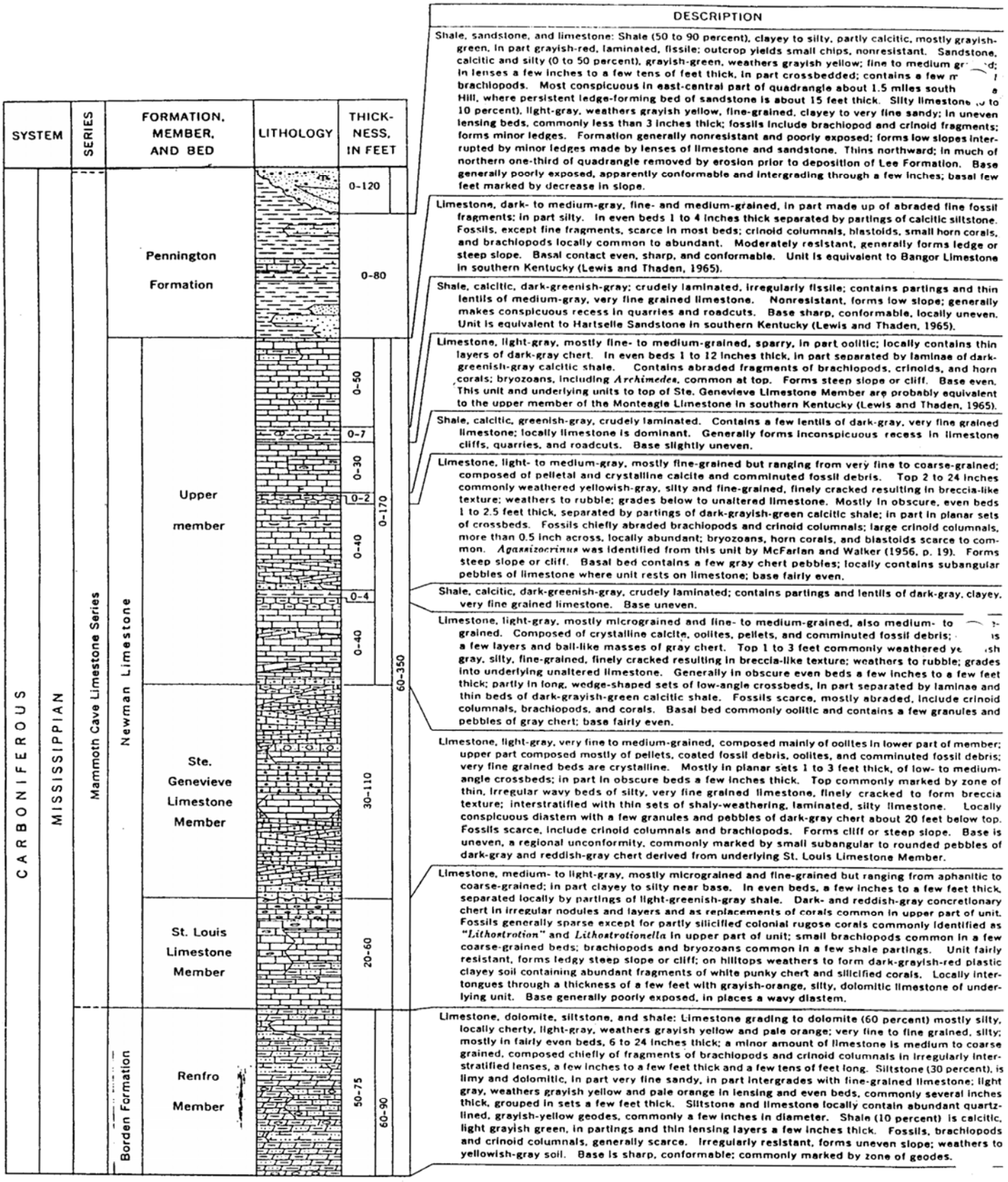


Figure 5. Geologic Column of Central Rockcastle County, Ky.

(After S. O. Schlanger & G. W. Weir 1971)

Caves of Rockcastle County, *continued from previous page*

Growth Of Speleothems

The caves of Rockcastle County are not known for their Speleothems. To date no cave has been found with an abundance of formations, except for flowstone. Some of the caves that had formations now lack them due to wanton vandalism.

The term speleothem refers to "formation" which commonly means stalactite, stalagmite or column.

These speleothems are formed by a chemical solution or by the solidification of a fluid Calcite is the main ingredient. Calcite is dissolved from the limestone by acid water percolating downward. Upon reaching the interior of the cave the water deposits the calcite and holds it in solution forming a speleothem. The calcite is precipitated due to the air being saturated with water vapor. The loss of carbon dioxide from dripping water makes the dissolved calcite precipitate out of solution. The loss of carbon dioxide, rather than evaporation of water, is the chief means by which calcite speleothems are formed.

The size and shape of the formations are related to the rate of the loss of carbon dioxide and the rate of flow of the water.

Erosional Features Of Caves

Along with the progress of chemical aggradation in the making of speleothems and the chemical dissolving by the acid solution of the limestone to make the formations there is also some mechanical weathering of the limestone rock. In Rockcastle County two of the largest features that can be seen with regard to this process are the formation of dome pits and recessional waterfalls. The dome pit is formed through seepage in a joint, which allows water to attain a lower level. The passage is enlarged with water eroding away the sides of the pit until a balance is achieved between the angle of water flowing over the sides of the pit and the angle of drop. Once the water is allowed to fall free off the sides lateral erosion ceases and the dome pit stops growth in a lateral direction. A dome pit can exist in three different forms. A dome with a pit can exist, a pit alone or just a dome depending on conditions. An example of a dome over one hundred feet high can be found in Millers Pit 2. Almost all the caves in Rockcastle County have examples of this feature as it is almost a basic development with regard to caves.

Recessional waterfalls usually form large spectacular rooms with a canyon effect. Mullen Springs Cave has some good examples of this feature. The erosional qualities of the waterfalls are similar to their surface counterparts. Other erosional features include cusps, good examples of which can be found in Sinks of the Roundstone Cave. Natural arches also are found in caves and especially around the entrances. The entrance arch of Goochland Cave is some sixty feet high by a hundred wide, formed by massive collapse due to weakened structural support. The collapse relieves the tension and forms a more stable structure. The entrance of Millers Pit 2 was formed in this manner, aided by solution.

Most of the caves that have been mapped and plotted in Rockcastle County are closely related to the contours of the land, as can be seen in Figure.4. The two caves, Goochland and Smokehole, have a combined length of over 22,000 feet. They parallel closely the structure of their ridges in the alignment of their passageways. This tendency is exhibited to some extent by nearly all of the caves of the county. Some deviate considerably from this general rule, however, Millers Pit 2 initially follows the ridge outline but then crosses through, forming a domepit, and then returns to the opposite side, gradually becoming too small for exploration.

Geology Of The Cave Belt

The caves of Rockcastle County are found in the Newman limestone of Mississippian age, which contains a unit also found in the Mammoth Cave region and other cavernous areas of the state. This member is the St. Louis limestone which together with the Ste. Genevieve limestone form the basic rocks in which Rockcastle cavern development takes place. In the eastern portion of the county the escarpment is composed of the Lee conglomerate which forms most of the high ridges and cliffs. The Pennington formation is the top of the Newman and contains a few caves, most of which tend to penetrate downward into other more suitable limestones. Figure 5 is

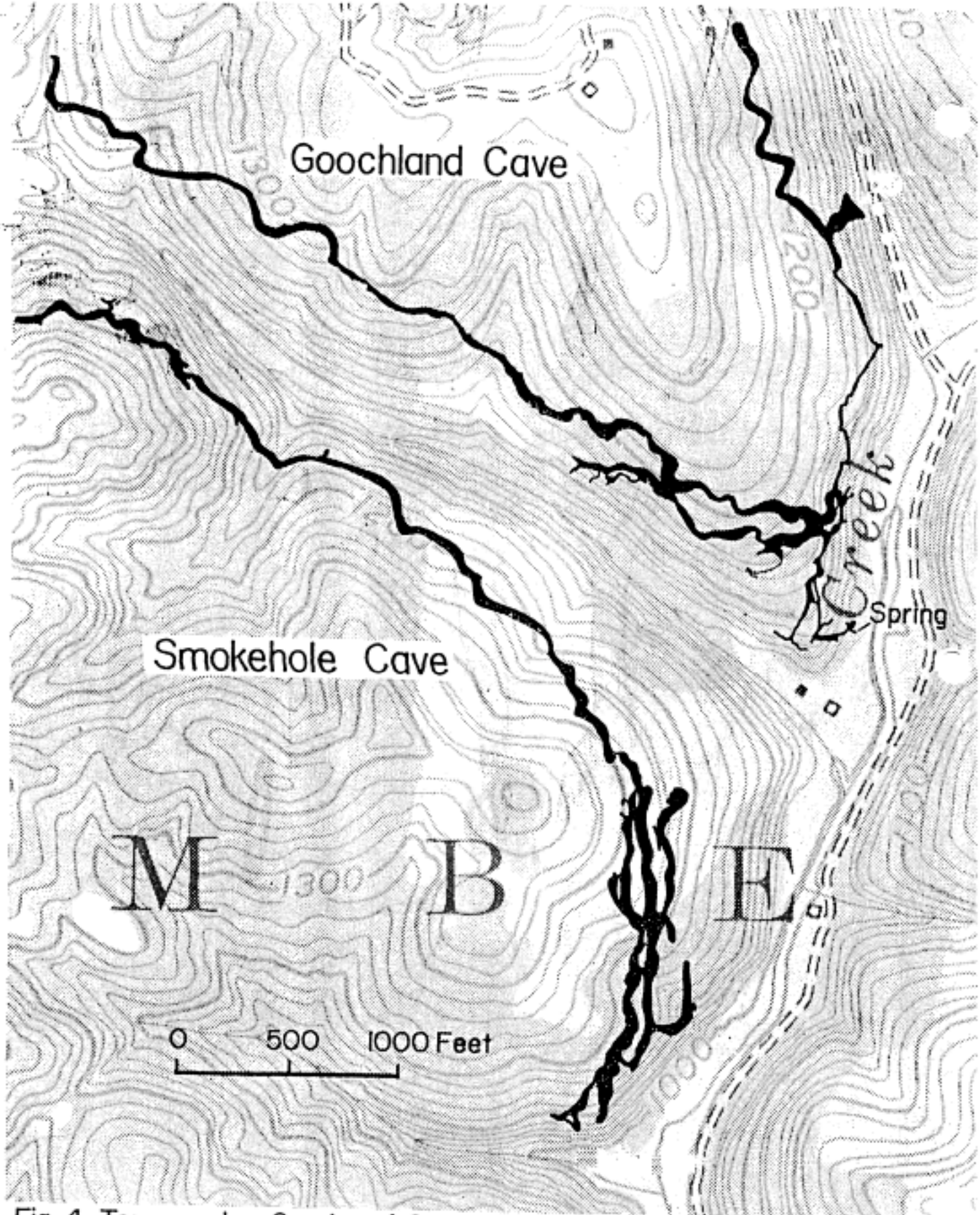


Fig. 4 Topographic Overlay of Goochland and Smokehole Cave Systems.

Caves of Rockcastle County, *continued from previous page*

a geologic column of the central part of Rockcastle County, adapted from the Mount Vernon 7 1/2 minute geologic quadrangle.

The rocks of the county are slightly tilted, dipping to the southeast. As a result the major cave development is confined to a belt along the eastern and southeastern edge of the county where the Newman is exposed at its greatest thickness. East of this belt the Newman is deeply buried with only the Pennington remaining exposed which contains numerous shale and clay beds, effectively limiting cave development. To the west of the cave area the less resistant limestone of the Ste. Genevieve and St. Louis are more exposed and as a result most of the soluble rock has long since been eroded away. As one leaves the "cave belt" the caves become smaller in all dimensions until they can only rarely be found. Some of the knobs may contain caves or pits as the Lee in that area forms a protective cap, preventing erosion of the underlying limestone.

Hydrology And Topography

No study of the caves of any county can be complete without a look at the hydrology of that area. Water is the most important factor in the shaping of caves. This is intended to be a brief summary.

Limestone terrains are unstable in comparison with other types of bedrock due to their solubility. This, along with the relative impermeability of limestone, comprises the basis for cavern development. Together with surface and subsurface features limestone terranes are called karst areas.

The nonpermeability of these rocks presents an unusual sort of aquifer in areas underlain by limestones. Water cannot penetrate the rock itself so it is forced to seek spaces between the rocks. This sort of "permeability" is typical of the Kentucky-Tennessee region and is achieved through the interconnecting network of a joint-fracture pattern. Faults play so insignificant a role in the cave development of the county that they may be totally disregarded. One notable exception to this is Up and Down Cave which is aligned along a small strike-slip fault. Joints are vertical cracks in the limestone occurring every few feet. They are subject to some stress and slight movement and are significant to the development of cave geometry. Partings are parallel to the bedding plane. Together joints and partings comprise the network along which solution takes place.

The acid chiefly responsible for dissolving the limestone around these joints and partings is carbonic acid, produced from carbon dioxide and water. Water, usually in the form of precipitation, enters the ground and comes in contact with carbon dioxide formed from decaying organic matter in the soil. The carbon dioxide is dissolved under subsurface pressure into the water.

After initial production the carbonic acid enters the fractures and begins dissolving away at an extremely slow rate. Most of this solution takes place in the saturated area under the water table known as the phreatic zone. Lateral movement of the weak acid bearing water enlarges the horizontal cracks, the earliest beginnings of cave passages.

When any particular fracture reaches a critical diameter-about a quarter of an inch, the water flow becomes turbulent and the rate of solution increases. The channel enlarges at an accelerating speed, robbing its slower neighbors, so that eventually it may become a full fledged cave passage.5 Solution channels of advanced development may be seen on the Interstate 75 roadcuts near the Mount Vernon exits.

In addition to the chemical dissolving by the acid solution there is also some mechanical "weathering" of the passage. Clastic sediment carried by the channel is constantly abrading the walls.

Sulfuric acid, as a by-product of strip mining operation and naturally formed in areas containing sufficient quantities of pyrite or marcasite, also plays a part in cavern development. Sulfuric acid in contact with limestone forms gypsum, CaSO4. The rate of solution does not vary seasonally as does the carbonic acid reaction.

Caves of Rockcastle County, *continued from previous page*

The last major step of cave development, preceding stream piracy, is the lowering of the water table. Up to this point, large cavities may have been dissolved out of the limestone that are structurally sound as long as they are entirely filled by water. Upon the draining of that water the passage is no longer supported by the dense medium and is unstable. This results in ceiling and some wall collapse. A sink hole entrance may develop in the new ceiling, depending upon the thickness of the overlying rock.

The rainfall over the south central portion of Kentucky averages between. forty-six and fifty inches annually. Evaporation and plant growth return twenty-nine inches of the total back into the hydrological cycle before it is assimilated into the ground water system.7 Exact figures for runoff are not available but assuming thirty percent of the water remaining after evapotranspiration enters the ground immediately after falling, this allows for 2.14 x 10^9 gallons or 2.89 x 109 cubic feet to join the ground water annually.

A cubic foot of water exposed, until the reaction ceases, to limestone and air containing ten percent carbon dioxide will dissolve about a quarter of an ounce of limestone. Twenty-one billion gallons of acid water is capable of dissolving roughly forty-three million pounds of limestone in a year. In more easily pictured terms, this could produce a cave five feet squared by thirty feet long under every square mile in the county every year.

In Rockcastle County the divide between the Kentucky and Cumberland River drainages crosses in a north-easterly direction. The Kentucky River drainage is represented by the head waters of Dix River and its branches, while the Rockcastle River with its branches represents the Cumberland River drainage. The Cumberland River drainage covers about three-fourths of the county. The largest stream within the county is Roundstone Creek. The chief branches of this creek are Renfro, Clear, Brush and Crooked Creeks. The two creeks with the most influence on karst formation are Crooked Creek and Roundstone Creek. Figure 6 shows the relationship of hydrology and topography and the location of caves in central Rockcastle County. The blue exposure in the figure represents the area of Newman Limestone that is exposed to the surface. This is the cave forming limestone. The county can be divided into three physiographic regions with respect to rock exposure and hydrology. Starting from the east along the Cumberland escarpment one would expect to find caves.

One finds youthful caves in the Crooked Creek drainage area. The limestone is the thickest here and here the caves are the longest and most numerous. As one goes west in the county the limestone becomes thinner as the topography becomes less rugged through prolonged erosion. As one proceeds west the caves go from youthful to mature and finally to old age in the western part. Here the Newman limestone has been eroded away to the bottom of the St. Louis Limestone and Renfro Member of the Borden Formation, where cave formation can not take place as readily as before.

The pattern of drainage is of a normal dendritic type in the county except for the part located in the youthful karst region. Here the streams exhibit the normal sequence of a karst landscape. A short surface exposure and then underground to later reappear at some other place. As the escarpment retreats and the topography is eroded away the streams will reappear as surface streams.

Biology

Most of the cave biota observed in Rockcastle County is of the transitory animal type, or trogioxenes. This includes diverse anthropod species, small mammals, some reptiles, and occasional birds.

Cave rats (Neotoma) similar to pack rats are found in most caves of the area.. Direct observation has been made of these in Neotoma's Nest Cave and Rat Run Cave. Evidences of rat inhabitation, such as acorns far from any surface inlet, nesting materials, and rat excrement, are common in many caves. Goochland, Smokehole and Owens Saltpeter all show signs of extensive rat populations.

Caves of Rockcastle County, *continued from previous page*

Snakes have been found in and about entrances, notably copperheads in the lower areas and black-snakes higher in the ridges. The presence of snakes and turtles (Turtle Pit) at the bottom of some pits can be assumed to be accidental.

Amphibians are often inhabitors of the entrance zone, and occasionally have been found deep within caves in wet, muddy passages.

Troglobitic insects are primarily inhabitors of the entrance and twilight zones, although some, such as cave crickets are found throughout the caves. Both Jadenoecus Subterraneous and Ceuthophilus Styglus crickets have been found in Rockcastle, often both together. Plate I shows two mating crickets of the tan variety. Spiders are common cave dwellers, the most frequently found are the common wolf spider and the tannish, shiny web weaving Meta Manardii (Web In Plate 2). Other anthropods include mud-dauber wasps who build their tubular nests at the entrances; earthworms; millipedes; centipedes; crayfish, both normal brown and white eyeless (a brown crayfish was found 8,000 feet inside Goochland); and numerous small species who seldom travel past the twilight zone.

Bats are perhaps the most frequently observed life forms In Rockcastle County caves. There are many species found in the county but the only two so far identified are the small solitary pipistrels and the Indiana cluster bats. Several thousand of the latter may be seen inside Smokehole Cave for they cluster close to the entrance during the day. Birds are sometimes seen nesting in cave entrances.

True troglobitic forms are best represented in the county by several species of beetles. A list of identified specimens and their collection locales appears in Appendix S.

Plants do not occur naturally in the caves except for some varieties of fungus which grow on the excrement of foxes and raccoons.

Any other plants seen are accidental transports and are short lived. Micro-organisms were collected only inadvertently and studied not at all.

The gathering of information is always a long hard task. Needless to say, this work was completed only after countless hours of work. For several years now people have been working in Rockcastle County gathering information on the caves as to location, maps and whatever else is pertinent to the caves. After so much work had been done it was decided to get it together and create something to justify the amount of work that had already been done.

One of the first works on the caves of Rockcastle County came from a report by W. Russell and T. Costello from the Texas Speleological Survey and was printed in 1962. It contained about twenty caves and had write-ups and a few maps of the caves. Today we have over one hundred and thirty caves in the county and work is still going on. It will probably never stop. The average for the past six months has been a new cave being found each weekend. In time perhaps another one hundred caves may be added to the list.

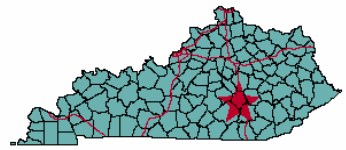
Through the use of topographic, geologic maps and sometimes aerial photographs we were able to locate the karst areas and have a plan as to which areas to investigate.

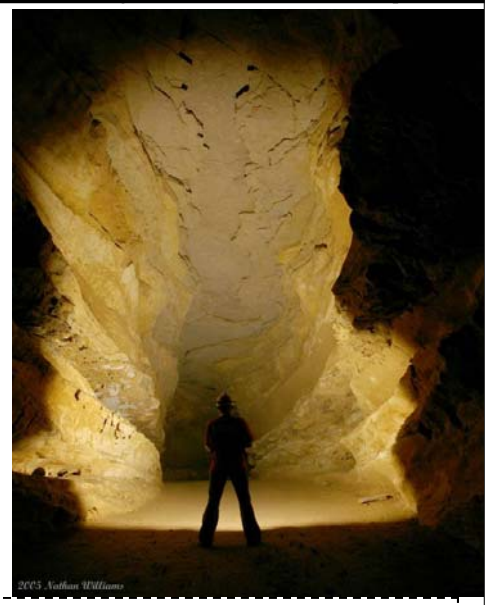
Winter time is especially conclusive to cave location as the vegetation is stripped from the trees. The ideal time to locate caves is on a cold day about 5 F or less. The moisture from the cave entrance creates a frost cover on the surrounding vegetation and this produces a virtual signpost as to the location of a cave.

Originally printed in the book "Cave of Rockcastle County", 1972

Newest RKC Members *as of this publication.*

Mike Wuerth, Cincinnati OH (Life Member)
Dan Collins, Cincinnati OH (Individual)
Horton Hobbs III (Individual)
Richard Hand (Individual)
Ralph Mann (Individual)
Robert Yuellig (Sustaining)
Pat Yuellig (Sustaining)
Jonathon Lewis (Individual)
Richard VanArsdel (Individual)





Become a Member of RKC

Join RKC and help preserve caves and cave access in the Rockcastle County, Kentucky region! Your membership dues go directly to efforts to purchase and manage caves.

_____
Date

_____
Name - Please print clearly

_____
Street

_____
City, State & ZIP

_____
Email Address

_____
Telephone

Memberships For Individuals - Voting

_____ Individual Member $15/year

_____ Sustaining Member $75/year (After five consecutive years a sustaining member becomes a Life Member (along with a special T-shirt).

_____ Life Member $300/one time

Memberships for Organizations or Individuals - Non Voting

_____ Supporting Member—Non-profit, grottos, and youth organizations $25/year

_____ Supporting Member—All other organizations $50/year

_____ Benefactor Member: $1,000 (one time)

Dues expire on January 1 of each year. Individual and Supporting Member dues are half the amount after June 30.

Membership Amount $ _____

Additional Donation $ _____

Total $ _____

Makes checks payable to the Rockcastle Karst Conservancy.

Mail completed form and payment to: Rockcastle Karst Conservancy, 1515 Cordell Drive, Dayton, Ohio 45439.

RKC Meeting Location:

Kenton County Public Library
Erlanger Branch
401 Kenton Lands Road
Erlanger, KY 41018

Directions:

From Buttermilk Pike
Take Anderson/Crescent Springs Road
(turns into Kenton Lands Road)
south 1.9 miles; library is on right

From Dixie Highway
Take Kenton Lands Road .7 mile library is on left

I-75 Going South
Take exit 186 (Buttermilk Pike) and turn right off exit onto Buttermilk Pike
Turn left at third light (Anderson/Crescent Springs Rd)
Proceed 1.9 mile; library is on right, just after the stop sign

I-75 Going North
Take exit 184 (Erlanger) and turn right off exit onto Commonwealth Ave.
Proceed .8 mile and turn left at 4th light onto Dixie Highway
Proceed .6 mile and turn left at 4th light onto Kenton Lands Road
Proceed .7 mile library is on left

From I-275
Take exit 83 (Dixie Highway) and turn right off exit onto Dixie Highway
Proceed .8 mile and turn right on Kenton Lands Rd.
Proceed .7 mile; library is on left.

Rockcastle Karst Conservancy

Rockcastle Karst Conservancy

1515 Cordell Dr

Dayton, Ohio 45439

FIRST CLASS

Deliver To:

RKC is a 501(c)3 tax-exempt non-profit corporation.