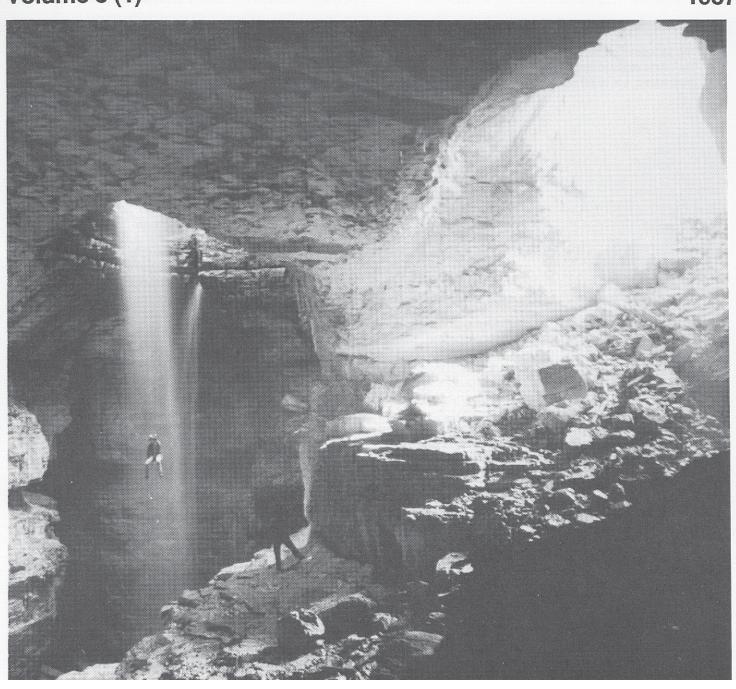
# PHOLEOS

WITTENBERG UNIVERSITY
SPELEOLOGICAL SOCIETY



Volume 8 (1)

1987





### The Wittenberg University Speleological Society

The Wittenberg University Sepeleological Society is a chartered internal organization of the National Speleological Society, Inc. The Grotto received its charter in April 1980 and is dedicated to the advancement of speleology, to cave conservation and preservation, and to the safety of all persons entering the spelean domain.



### **PHOLEOS**

### THE WITTENBERG UNIVERSITY SPELEOLOGICAL SOCIETY NEWSLETTER

Volume 8, Number 1

20 November 1987

### **GROTTO ADDRESS**

c/o H.H. Hobbs III Department of Biology P.O. Box 720 Wittenberg University Springfield, Ohio 45501 (513) 327-6484

### SUBSCRIPTION RATE

1 Volume \$4.00 (2 issues) Single issue \$2.00 Send to Grotto Address

### **EXCHANGES**

Exchanges with other grottoes and caving groups are encouraged. Please mail to Grotto address.

### **MEETINGS**

Wedensday evening, 7:00 p.m., Room 206, Science Wittenberg University Springfield, Ohio.

### **GROTTO OFFICERS 1987-88**

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[This issue proofread, organized, additionally editted, and

completed by Martin R. Trent and W. Luther]

Cover Photo: Stephens Gap Cave in Northeastern Alabama

### **EDITOR'S NOTE**

### **Timothy Hopkin**

Once again it's time for Pholeos. Since the last issue the club has had its annual officers elections. The previous editor of the club magazine, Martin Trent, has been voted in as the club's new chairman, and the other new officers are as follows: vice chairman Teressa Keenan, secretary Heidi Murry, treasurer Monika Palunas. editor Timothy Hopkin, and assistant editor Terri Ruben. After a few changes the Ohio Cave Protection Bill (SB 177) was resubmitted for hearing by the State Senate. The Bill received a lot of coverage by the local press this time round with a story in the Sunday edition of the Springfield News-Sun, and a television report filmed in one of Ohio's trashed caves. At the present moment the bill is waiting to be voted on by the Senate. All cavers are encouraged to write to their local senators asking for their support for the bill; all it takes is a few hand-written lines explaining that you're a caver and feel that the caves of Ohio should be protected.

The club was well represented at both of the past two caving festivals; a fun time was had by all at both the MVOR in southern Indiana and Speleofest in Kentucky. Now that the term is over the club's activities will be limited till next term; however, if things work out a week might be spent at Carter Caves in Kentucky surveying and mapping the local caves in the park. I hope you enjoy this issue of *Pholeos* and please feel free to write with any questions, comments, or suggestions you might have.

### **EDITORIAL**

Welcome to *Pholeos* and this the first issue of the term. The club has gained a number of new members this term with the arrival of the new Freshman class. It is always nice to have new members wanting to share in our enthusiasm for caving. The club has gone on several trips during the fall and held various climbing clinics. The big event for this winter holiday is a trip down to Ellisons Cave in Georgia. Ellisons contains the two deepest pits in the U.S. There will also be trips to pits in Alabama while the group is down south. In addition, this Febuary 19-21, 1988, WUSS is holding the BOG meeting for the NSS. The club members are looking forward to an exciting couple of days with those who run the NSS.

The club hopes to get the Cave Bill that was mentioned in the last issue going again. In January an attempt will be made to get the bill out of Committee. Once again we will be urging all our readers to write to their Ohio senators asking for their support for the bill. I hope you enjoy this issue and all have a Merry Christmas and Happy New Year. I would also like to Chris Wick for her help typing much of this issue.

### **BOG MEETING**

WUSS is holding the BOG (Board Of Governors) meeting for the NSS at Wittenberg University on Febuary 19, 20, and 21, 1988. All persons are welcome to attend and listen to the meetings. On the 20th there will be trips to both commercial and wild caves in the area.

# INDIANA BAT HIBERNACULA PUBLIC ANNOUNCEMENT

[From the Indiana Karst Conservancy, INC.]

The Indiana Karst Conservancy, in cooperation with the Indiana Department of Natural Resources, would like to ask the organized caving community to participate by honoring and supporting the seasonal closing (September 1 thru March 31) of certain Indiana caves that serve as important winter hibernacula for the endangered Indiana Bat (Myotis sodalis). These caves (in order of significant populations) are Twin Domes (Harrison Co.), Ray's (Green),Batwing (Crawford), Jug Hole (Harrison), Grotto (Monroe), Coon (Monroe), Parker's Pit (Harrison), Saltpeter (Crawford), and Clyfty(Green).

Each of the nine above caves have had large warning signs placed near their entrances. Four of the caves, Twin Domes, Batwing, Jughole, and Saltpeter are located on State Forest properties and the seasonal closures are mandated by the IDNR (Twin Domes and Batwing are federally classified as Priority I hibernacula and thus are closed year around). The remaining five caves are on private properties with all the owners directly or indirectly supporting the seasonal closure policy.

The population decrease for the Indiana Bat has been significant and does not indicate a very bright future for this species' long term survival. While an exact picture of this declining trend is unknown because of a lack of long term census data, it has been documented that the total population in seven (of the eight nationally known) Priority I caves has dropped to approximately one half of what it was twenty-five years ago. The only positive signs of hope are the recent "discovery" of several additional significant hibernacula, and the population increases reported in several Priority I and III caves in Indiana and Kentucky (although it is too soon to tell if this is a true trend reversal or just a short anomaly).

This species is very discriminating in their hibernacula sites, relying exclusively on a select few caves for their winter survival. And it is the opinion of most bat experts that the major reason for this species' decline has been human disturbance in these caves. This perception depicts a very poor image for cavers (or "spelunkers" as we are labeled by most). The organized, conservative minded caving community needs to reverse this conception by acting responsibly in honoring this seasonal closure policy and by publicly supporting it. Furthermore, as organized cavers, we need to do everything we can to educate the less informed cavers; discouraging them from visiting these caves during the hibernation season.

Trip Report—

#### **ROBINSON'S CAVE**

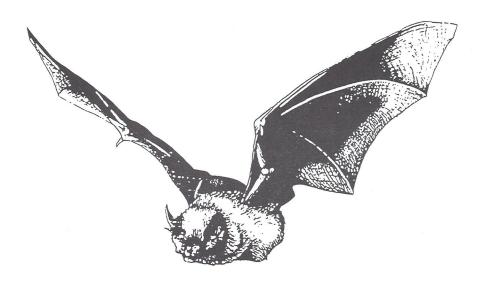
by Emie Payne 4996

[Reprinted from THE PETROGLYPH, Vol. 23, No. 1.]

After waiting one year to try again to find the landowner's home, Roger Snider, Ted Hartman, and Ernie Payne were successful on July 9, 1987 and were given the OK to take a look at Robinson's Cave by the owner's son. Not only is it correct to obtain permission before entering another person's land/cave, but another reason to be sure

# WARNING

# INDIANA BAT HIBERNATING COLONY



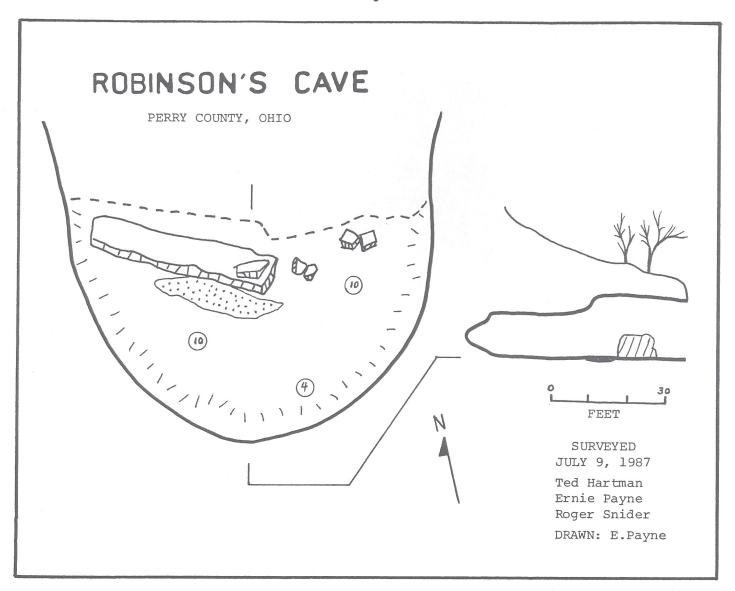
Indiana bats hibernate in this cave and are protected under provisions of the Federal Endangered Species Act (Public Law 93-205), the Indiana Nongame and Endangered Species Conservation Act (IC 14-2-8.5-7) and the State Cave Law (IC 35-43-1-3). Entering this cave when bats are present from Sept. 1 to March 30 is a violation of these acts and punishable by arrest, fine and possible imprisonment.

Hibernating bats must survive through the winter on a limited supply of stored fat. Any disturbance that may arouse the bats will deplete this finite food supply and could result in death.

U.S. Department of the Interior Fish and Wildlife Service Indiana Department of Natural Resources
Division of Fish and Wildlife







to get permission when near New Straitsville, Ohio, is that outsiders may not be welcome wandering the woods at the "Wet Capital of Ohio".

In the 1930's, STRAITSVILLE SPECIAL was known from coast to coast. More recently the 17th Annual Moonshine Festival was held in this Perry County town for six days ending on Memorial Day According to the 52-page festival program (1), one of Ohio's largest stills was seized here in 1974. It was running 40 to 50 gallons of whiskey per week. The program further boasted that 37 of 42 stills brought to Perry County Court were from New Straitsville. The program also briefly mentioned Robinson's Cave and Shep Tinker's Cave (see PETROGLYPH, August, 1985)

Now with permission, the trio stepped over the foot bridge across a small creek and walked south about 100 yards up a ravine to a clearing between the rock hillsides. Robinson's Cave, a sandstone shelter, was found at the base of a rock face. The dripline measured 103 feet long. Behind this wide entrance was a rather uniform semicircular back wall where the ceiling lowered and the floor rose to meet about 3 or 4 feet above the floor of the open cave. Generally the ceiling of the cave was 10 to 15 feet high except near the back wall. One long pile of rock and mud about 5 feet wide and 4 feet high

extended from near one side of the entrance to over half of the way across the cave floor. The distance from a point near the center of the dripline to the back wall measured 59 feet. A puddle of water was found behind the long pile of rock. Physical description aside, the real story of Robinson's Cave has been recorded in the history of New Straitsville and the lives of its people.

According to a story about the famous coal mine fires at New Straitsville found in a HISTORY OF PERRY COUNTY, OHIO, ILLUSTRATED 1980 (2), LARGE SCALE UNDERGROUND COAL MINING BEGAN AROUND 1870. BY 1884, great problems and uprisings were starting over the working conditions, long hours, and low pay of the miners both men and boys. "Labor unions were being talked of by the men who began to meet in secret places to see what could be done. One place was in Robinson's Cave back of Main Street; this is said to be the birthplace of the U.M.W."

Late in 1884, men opposed to a strike called by the miners set several of the mines on fire. ( According to the book, some fire continued as late as 1980, when the book was published.) The miners continued to meet at Robinson's Cave and later with miners in other towns which resulted in the United Mine Workers being organized in 1890 in Columbus, Ohio.

### SOURCES:

- "1987 17th Annual Moonshine Festival" program. Published by New Straitsville Betterment Association.
- HISTORY OF PERRY COUNTY OHIO, ILLUSTRATED 1980. Published by Perry County Historical Society, 1980. p.8.
   Other References:

1875 ATLAS OF PERRY COUNTY, OHIO.
Howe, Henry, L.L.D., HISTORICAL COLLECTIONS OF OHIO IN TWO VOLUMES, 1900, VOL. I., p.932.

### NOTES ON A WYANDOT COUNTY, OHIO CAVERN

by H. H. Hobbs III and Martin R. Trent

Hendricks Cave, a small cavern located northwest of Carey, Ohio, in Wyandot County, is developed in Niagaran (Silurian) dolomite. That this rock was an ancient reef is quite apparent when viewing the bedrock and noting the massive reef structure. The entrance to this cave was excavated from a shallow sinkhole, one of many in this region of the state; most of these karst features are situated on or near the tops of small ridges. Winchell (1873) noted the occurence of sinkholes in the area (one reportedly 20m in depth) and local individuals talked of interconnecting cave passages formely linking the sinks (most now blocked with surface fill). The reader is referred to Winchell (1873) and Hall and Alkire (1956) for additional information on the geoglogy of Wyandot County.

McKenzie and Prufer (1967) reported that Richard Hendricks of Vanlue, Ohio cleared and partially excavated a sinkhole on his property in December 1964. The sinkhole was filled with glacial drift and no large boulders were discovered in the sinkhole. Two open, north-south trending passages were intersected at a depth of approximately four meters, and in one of these (Bone Chamber - see map) he discovered fragments of human bones. He contacted McKenzie and Prufer and the site was visitedby them later that month. They mapped the cave and found 56 human bones, including skull fragments and two mandibles. Based on these remains, they estimated no fewer than six and no greater than 10 individuals were represented, with ages ranging from about 15 years to a maximum of at least 50 years. The bones were undisturbed and were scattered randomly, covered with small ceiling rocks, or buried slightly in the sandy clay floor and some were heavily encrusted with calcite deposits. No stone artifacts, including flint chips and worked pieces of local dolomite, were present: however, a shallow, circular hearth. 0.16m in diameter, ringed with stones and containing charcoal, firehardened earth, and a small pile of unburned human bones was discovered about 1.5m from the entrance to the Bone Chamber. In addition to the remains of humans, the bones of many small animals were uncovered, most of which were probably not connected directly with the human occupation [see McKenzie and Prufer (1967:134) for a list of these animal remains].

Although highly speculative, McKenzie and Prufer suggested that the human remains are those of Wyandot (Huron) Indians (Hendricks Cave is located approximately 500m outside of a Wyandot reservation that existed from 1817 to 1832 and that prior to the reservation's inception). They postulated that the bones could have been associated with Wyandot ceremonialism and speculated that, "during the existence of the reservation, Hendricks Cave was the site of clandestine ceremonial burial, its use necessitated by White opposition...and...that, fearing interference from missionaries and administrators, the more conservative Wyandots attempted to

maintain a vestige of their traditional customs by using Hendricks Cave as a place of burial" (p. 136). Because of the lack of artifacts, McKenzie and Prufer suggested that no elaborate ritual accompanied the burial.

Hendricks Cave was known to us only as a cave name in a card file (only published reference to this cave other than that of McKenzie and Prufer was by Simpson, 1975) until 20 December 1978 when the senior author visited Richard Hendricks to see the commercial Indian Trail Caverns (Wyandot Caverns, Wyandot Indian Cave), also located on his property. Discussion with Mr. Hendricks yielded the story of the Hendricks Cave discovery and subsequent site excavation. At that time he did not want the cave disturbed since some additional archeological investigations were being conducted. Indian Trail Caverns was open and the small group from WUSS was given the grand tour. On July 1980 Indian Trail Caverns was surveyed (see Tarulli 1982) and the mapping party indicated to Mr. Hendricks that he would be contacted at a later date concerning the survey of Hendricks Cave. As is too often the case, a number of years passed and it was not until 11 April 1987 that the cave was mapped; Mr. Hendricks and his son, Keith, aided in the survey and we would like to thank them for their assistance and kind hospitality.

The cave is entered through a 6.3m deep vertical pit and separate passages extend to the north and to the south for a total horizontal distance of 56.5m. The passages are floored with mud and rock and range in size from crawl spaces to 5m high rooms. In the south passage a one meter deep trench (see map - archaeological dig) is encountered about 4m from the entrance pit and is oriented perpendicular to the main cave. Immediately south of the trench is the remainder of "Bone Chamber" where most of the Wyandot Indian remains were found. The chamber leads down a slope with a small drip pool at its low point. The tunnel continues for about 5m and slopes steeply upward to the terminal "room."

The northern part of the cave must be entered by climbing up the steep side of the entrance pit and by scrambling into the adjacent rock-floored chamber. A crawl over a drip pool leads to a stoopway passage which continues in a northwesterly direction for approximately 10m where the floor slopes down steeply. A belly crawl through another drip pool leads to the "end" of the cave but potential for more cave is quite good.

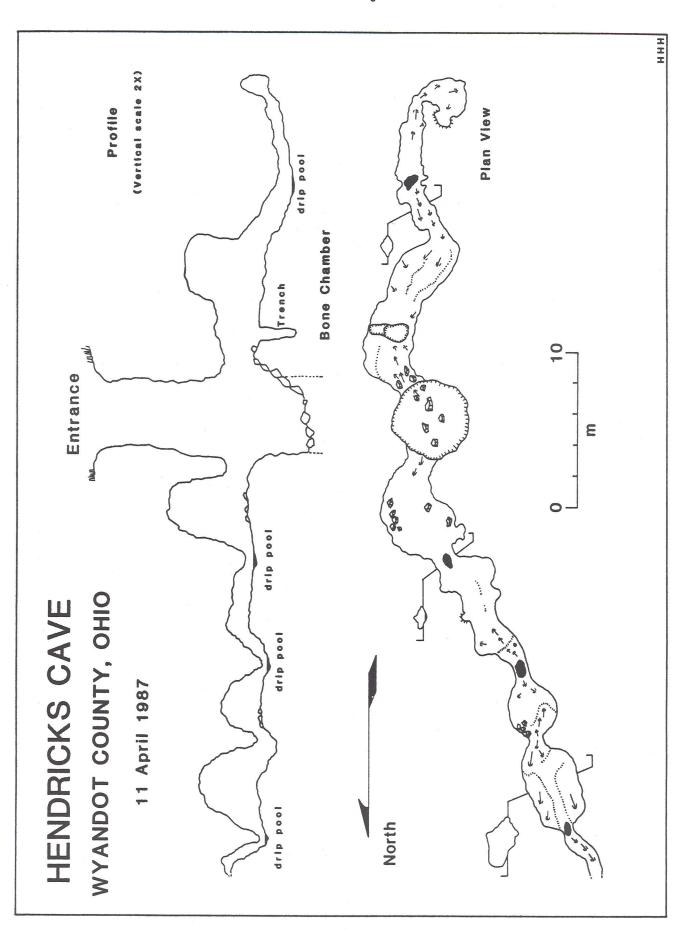
### Literature Cited

Hall, J. F. and R. L. Alkire. 1956. The economic geology of Crawford, Marion, Morrow, and Wyandot counties. Columbus, Ohio Division of Geological Survey, Report of Investig., 28.

McKenzie, Douglas H. and Olaf H. Prufer. 1967. Indian skeletons from a sinkhole cavern in Wyandot County, northwestern Ohio. Ohio Archeol., 17(4):129-138.

Simpson, Louis. 1975. İndian Trail Caverns. COG Squeaks, 18(3):24-25.

Tarulli, Laura. 1982. Ohio cave survey. Pholeos, 2(2):9-12. Winchell, N. H. 1873. Geology of Wyandot County. Geol. Surv. Ohio, 1(1): 625-639.



### DEVELOPMENT OF THE BEDDING-PLANE/BREAKDOWN/SEPARATION CHAMBERS IN OHIO CAVERNS

by Donald L. Peters, NSS #2153

The upper or "commercial" level in Ohio Caverns consists of a network maze of joint-controlled phreatic passages intersecting a series of wide, low breakdown chambers at a slightly higher elevation; the latter contain most of the pure-white/highly-colored speleothems for which the Caverns are noted. The development of these "bedding-plane" rooms is believed to be controlled by stylolite veins in the Columbus limestone. The relatively thin breakdown slabs are of surprisingly large horizontal dimensions; both the breakdown itself and the pure-white speleothems formed on top of it ae believed to be of relatively recent origin, geologically.

Possible explanations for these breakdown rooms have included: (i) The chambers are of "separation" origin, owing to expansion (via hydration) of an underlying evaporite formation (anhydrite), followed by its subsequent removal by solution. [This is the suggested origin of several northwestern Ohio caves, most notably the island caves at Put-in-Bay; in the case of Ohio Caverns, however, the explanation fails to relate the breakdown chambers to the underlying and presumably pre-existing solution maze.]; (ii) The large breakdown slabs "settled" rather than fell (presumably onto clay fill deposits which were subsequently washed away); (iii) The breakdown slabs fell while the bedding-plane chambers were under water; thus, the cushioning effect of the water prevented the detached slabs from fracturing as they descended.

All of these explanations appear to contain a "grain of truth." It is the postulate of the present paper that the "separation" chambers in Ohio Caverns were indeed formed by expansion (due to "hydration") of a mineral deposit, followed by its subsequent removal by "solution." However, the "mineral" involved in this case was not anhydrite/gypsum.

Consider the state of development of Ohio Cavens during the waning stages of the last glaciation. At this time, Mt. Tabor [the hill in which Ohio Caverns is formed: an isolated remnant of the Bellefontaine Outliar (sic)] stood above the surrounding stagnant ice sheet (or semi-permanently-frozen "ice lake"). The average climate then was still quite cold, so that within Mt. Tabor there existed at the time a zone of permafrost. It is well known that during "summertime" (relatively speaking) permafrost thaws down to a certain depth and then refreezes, based on an annual cycle. Less well known is that permafrost also has a lower boundary which fluctuates hardly at all on an annual cycle, but which moves very slowly in response to long-term heat balance variations between the surface and the Earth's crust.

Postulate a condition where the lower permafrost boundary coincided (more or less) with the bedding-plane (stylolite) "level" within Ohio Caverns. Under these circumstances, the "mineral" in question (water ice, which expands appreciably upon freezing) was deposited both above and below the large, soon-to-be-detached breakdown slabs, causing them to separate from the ceiling. These slabs, however, were not free to fall, as they were fully supported by the underlying ice layer. As the ice slowly melted (in response to slowly warming climatic conditions), the breakdown slabs gradually settled without fracturing\*, and came to rest in their present positions. Subsequently, the pure-white speleothems were deposited on top of these slabs.

Indeed, the Creator of Ohio Caverns may have provided us with an

obvious "clue" as to the true origin of these "formation" rooms. Consider as a whole the various white speleothems and, in particular, the "Crystal King" (the largest, most perfectly-shaped stalactite in the cave). What does it more closely resemble than a pendant (well-rounded by ablation) of ancient, pure, milky-white glacial ice?

\*This method is sometime used in engineering even today, when it is desired to lower a large, heavy, potentially-fragile stucture a short distance without risk of fracture.

# A FAULT CONTROLLED CAVE IN ONTARIO CANADA

By Terence J. Madigan

During the recent 1987 NSS convention in Saulte Ste. Marie Michigan, I had the opportunity to see one of Ontario's few caves, a 100 meter THC feature in "Puddingstones". The cave was formed by wave erosion along a zone of weakness where one and probably several fault planes intersected in the "Puddingstone", a Precambrian metamorphic sandstone conglomerate. The source of the waves was prehistoric Lake Huron, which at the time of cave formation (during the glacial periods not too long ago) had a water level several hundred feet higher than at the present. The result is a cave that tapers to a close that has a collapse enhanced entrance at the top of a hill. This affords a spectacular view of the forests around Des Barats, Ontario, the lower St. Mary's River and Upper Lake Huron. The cave forms in an area purported to be the northern range limit of deer in North America. Geologically, the area is in the Grenville age Precambrian metamorphic units and is less than ten kilometers north of the disconformity with the Cambrian sedimentary sequence which is exposed on St. Joseph Island in the Lower St. Mary's River, a nice place to visit on the drive back to the SOO.

NOTE: Access is strictly controlled and either landowner permission or an arrangement through the district ranger of the Ministry of Natural Resources is encourged.

### SRT in England

by Tim Hopkin

Over the summer I was fortunate enough to take Dave Elliot's SRT (Single Rope Technique) course. Dave is a leading authority on SRT in England and runs Lizard Speleo-Systems in the north of England. The two day course consisted of learning to prusik and ascend up a single rope and past obstacles such as knots and rebelays. We also practiced change overs from climbing to descending. The equipment used consisted of two Petzl ascenders, a Petzl STOP descender, and safety cords (cows tails). To climb a "sit/stand" method is used with an ascender connected to a foot stirrup and a chest ascender. We practiced these techniques in a converted mill strung with ropes which were rigged as they would be in a cave.

The following day I put the techniques I had learned to use when we visited two of the local pots (cave) in North Yorkshire. The first

pot we tackeled was Bull Pot a cave consisting of several pitches which lead to a sump. Dave lead and rigged the pit as he went.

Unlike America, where vertical caving consists of single drops, English caves are multi-pitched. This requires that the rope must be rebelayed and redirected down the various shafts. The first drop of 15 meters lead to a narrow passage with a fast flowing stream flowing through it. From this point a set of three pitches were negotiated which required traversing with the cows tails and passing rebelays.

The cave was relatively young compared to those caves found in America and no cave formations were seen on the walls. The walls of the cave were smooth by the rushing water and left some interesting grooves. The pot eventually sumped out, however; we did not drop the last pitch to see the sump.

Once we had returned to the surface we collected our gear and walked along the side of the ridge we were on to another pot. After a quick bite to eat Dave rigged Jingling Pot with two ropes. One rope dropped from a tree overhanging the lip went to the bottom of the 50 meter pit. Dave rigged the second rope down a set of pitches that ran down next to the main shaft. These pitches eventually came out at the bottom of the main shaft. The view from below was impressive with the bright sunlight streaming down into the pit. As Dave unrigged the pitches we had descended, I prussiked up the main rope to the top.

The experience was quite unlike anything I have done in America. I learned a great deal from Dave and regret not having the time to explore more of the pots in the area. Maybe on my next trip home I will have more time.

### Article review:

### "The Rap on Bats" by Bill Monaghan

(Springfield, Ohio News-Sun, Sunday, August 23, 1987)

In the article "The Rap On Bats" Bill Monaghan interviews Ted Spellmire of the Columbus Zoo. Spellmire helps dispell some popular misconceptions about bats. The mammalian order *Chiropteras* reputation in the Western world was brought about by Pagan and Christian superstition.

In Europe, because bats fly during the night, they are associated with evil spirits, such as witches and vampires. Aside from the spiritual myth about bats--common beliefs that bats are blind and drink blood are incorrect. The three species that drink blood, the blood being only of other bats or of insects, do not inhabit the United States. This reputation, however, is not world wide. Bats are considered a sign of good luck in China and are eaten in some parts of Africa and Australia. Spellmire notes that the most fascinating and unique quality about bats is their ability to fly.

Despite misconceptions about bats they serve to be quite beneficial to the environment. Bats aid in the pollenation of fruit bearing plants and control the night-flying population of insects.

Bats also have sonar-like signals used to locate insects, which make the species very successful life forms. However, there are now many species of bats that are in danger of extinction due to human aggression and the man-made environmental problems that threaten all life forms. "Uncontrolled use of pesticides and lead fumes, from automotive traffic, harm insectivorous bats by lacing poison in their food supply." One of these species is the Ohio bat which is endangered because of the uncontrollable destruction of trees and caves.

# REVIEW OF "UNDERGROUND BESTIARY" BY JOHN PFEIFFER

by Jane Eno

Artistic Cavers:

What has France's Ministry of Culture to do with Speleology? Simply that some of the world's finest artists were also cavers. That's right, about 17,000 years ago a bunch of cavers climbed down into a hole in the ground and started painting. In western Europe, about 200 art caves can be found, decorated by more then 80 paintings and 1,500 engravings. The most spectacular of these works is the cave of Lascaux, discovered by four boys with homemade lanterns. France's Ministry of Culture hired Rupoli to photograph, and later make a movie of this fantastic piece of natural architecture and man-made art. Now the work has come out as a book. What's down there? Pfeiffer describes the entrance as "a special frieze..., a sweeping panorama of animals painted high on the chamber's curving limestone walls." There are bulls reaching eighteen feet high, a dozen horses, deer, and a beast often called the unicorn. There's a smaller room with a 26 foot drop down the Shaft of the Dead Man, containing a painting of a mythical bird-headed hero, falling before the charge of an injured bison.

Are you ready to cave? Ready to go down into the ground with your artistic friends, mingling culture with mud and bat guano? Sorry, this cave's been closed. The rush of cave and art enthusiasts caused a green mold to grow on these paintings, devouring and damaging them. The French government moved quickly, and intelligently. Now the visitors have a new cave, totally artificial, to explore. In Ruspoli's book, Brigitte and Guy Delluc tell how a quarry becomes converted into a Lascaux II. The main hall and right branch were made, then the artist Monique Peytral used natural pigments to copy the works of the old masters. They now boast some 300,000 visitors a year. Ruspoli's book tells about the theories of this prehistoric Renaissance. The time of the upper paleolithic period (35,000-10,000) was an explosion of new ideas. Art came about after two million years of artistic silence. Mass hunting, with bows and arrows, harpoons, and spear-throwers, sprouted out of these ancient times. Fossils or rope prove that nets, snares, and thread were possible. These artists lived in a time of long-distance trading. tailored clothes, and ceremonial burials. This was a time when speleology flourished as an artistic endeavor. If your curiosity has been touched, you can go to France and cave with the rest, just down the mine, and don't touch the paintings. But then, if like me, your money is short, you might want to read two books instead:

The Cave of Lascaux: The Final Photographs, by Mario Ruspoli. Harry N. Abrams, Inc, \$45.00: 208pp., illus.

Lascoux Inconnu(The Unknown Lascaux), by Arlette Leroi-Gourhandard and J. Allain.

Article in Natural History Magazine Vol. 96, No.10, October, 1987.

### **Critique of Cliff Notes**

by Suzy Bauer

Archeologists, geologists, and ecologists are forever seeking evidence to verify or disprove the theory that people entered the New World by the Bering land bridge just before 12,000 years ago. In 1963, the mayor of Sao Raimundo Nonato (north-eastern Brazil) notified Niede Guidon of the Paulista Museum of the University of Sao Paulo about rock shelters covered with paintings. After several surveys, Guidon began his excavation in 1978.

Sao Raimundo Nonato makes up a border between two geological zones—a plain in the southeast and jagged mountains in the northwest. Erosion hollowed out the canyons and valleys and the remaining cliff house shelters contain the paintings.

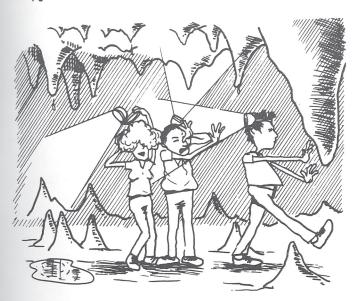
Most of the figures are drawn in red; other colors included yellow, black, gray, and white. Animals, people, and trees were depicted in scenes representing hunting, sexual intercourse, or childbirth. The carbon 14 method was used to test vegetables and charcoal from the hearths on the site. The styles were dated as far back as 30,000 years ago (challenging the accepted theory of Bering land bridge). The excavations started out covering an area of 10 by 23 feet and expanded to 2,700 square feet and 15 feet in depth.

Stone artifacts were found beneath the surface. The shelters were believed to have been temporary because few finished tools were found, only flaking waste was retrieved. It was concluded that these sites were used as sources of raw materials, and the villages were probably located on the plain. The author hopes one day to uncover the bones of an early Brazilian hunter.

After reading this article I realized that the graffiti that is destroying the beauty of the caves today might be used to describe our life styles years from now. Unfortunately, the words written on the walls won't have any significant meaning, and spelunkers of the future will be missing out on the true beauty of some caves.

### SOURCE:

Guidon, Niede. "Cliff Notes", Natural History, August 1987, pg.6-12



### MATTIMORE IN THE DOLOMITE GORGES \*

(by Warren Luther)

Above a din of rockbound waters I said to him,
My breath is
tinged with frost,
the sun
has set behind these
crazed hills—

but whither into this November dusk shall we wander now?

(the fermenting herbage is a scent made pungent by keen cold air)

Through it he stepped cursing (Whither, indeed!) Indeed! and he said,

He said-

UP YOURS!!!

(AUTHOR'S NOTE: Caves are an infrequent subject for serious poetry. Even less frequently are cave-hunting excursions a subject for unserious poetry. Therefore, I offer this little poem, written in 1966, which describes an attempt made several years earlier to locate the legendary Hermit's Cave on Baker Fork, Highland County, Ohio. It was a cold day and we had to wade down the middle of a creek to avoid falling in when the stream banks gave way to sheer rock walls. We never found the cave. It is somewhere in the gorge of Baker Fork, across from Fort Hill State Memorial.)

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