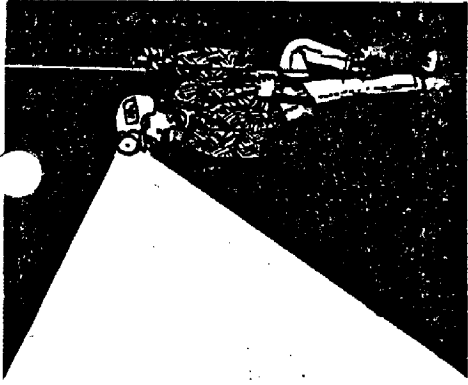


BIRMINGHAM GROTTO NEWSLETTER

NATIONAL SPELEOLOGICAL SOCIETY

MAY, 1983



The Birmingham Grotto Newsletter is published approximately twelve times a year by the Birmingham Grotto of the National Speleological Society.

Subscription and Membership fees are now due. Annual subscription rates are included in the \$4 membership fee. Outside of the Birmingham area, the subscription rate is only \$2. All are prorated from October.

Editors: Lynn McGill & Nancy Boice
P.O. Box 55102
Birmingham, Al. 35255

The officers for the 1982-83 year:

President - Mike McEachern

Vice Pres. - Jay Clark

Secretary - Nancy Boice

Treasurer - Edna Caudle

The grotto meets the first Monday of each month at 7:30 pm at the Avondale Library.

The meeting after the meeting is at Burly Earl's around 9:00.

*******NOTICE*******

All Grotto and ACS mail should be sent to our new P.O. Box 55102

Calendar :

May 21 - B'ham Grotto 25th Anniversary party. Contact Gary Barnes 956-0806

May 6-8 - CAVES 83. Contact Bill Bussey, P.O. Box 311, Stanley, NC 28164.

June 27-July 1 - NSS Convention, Elkins, W. Va.

Aug. 5-7 - SERA Cave Carnival. Contact Jeanne Fridmore at 205-852-9549 or the NSS Office at 205-852-1300.

May 28 - Stevens Trip - Stevens Trip
Krysfel in Tarrant 7:00

25th ANN. PARTY ~~5:30 PM~~ 5:30 PM
~~Reedwood Community Center~~ FRI
MAY 20, 1983 \$5.00/person
20
HOMewood ELKS CLUB

Minutes of April 4, 1983

Mike McEachern began the meeting by recognizing guests Carlton Reddon and Raymond Wielding. There were 26 members present. Edna then gave the treasurers report.

Old Business:

Jay reported on plans for the 25th Anniversary party. Plans continue to be made. Jay has neared completion of the anniversary publication. He is looking for any old slides, old photos or any interesting stories or ideas.

Greg reported that the t-shirt design is ready. They plan to make 5 doz. shirts. Anyone wanting odd sizes or different styles should contact Greg.

New Business:

Myrna Jordon of the Chatanooga Grotto explained that they have no newsletter on a regular basis and grotto members are interested in getting the B'ham newsletter. A motion was passed to allow as many as 50 members of the Chatanooga Grotto to get the B'ham news by paying a fee of \$6.00/month (1/2 of our monthly postage rate). This will be on a trial basis of 3 months pending approval of the Chatanooga Grotto.

Trip Reports:

Eric and James reported on Polecat, as did Mike.

Dave Caudle reported on taking some kids to Bryant Cave, and on a well known grotto member who got stuck without light in Andersons.

Nancy reported on taking Frank's boyscout troop to Ledbedders Cave.

Dave Howell reported on the grotto trip on which nobody showed up due to bad weather. Dave is willing to reschedule the trip next fall.

Announcements:

Greg reported on the ACS meeting and on the SERA winter business meeting. At SERA Gerald Momy will be president and Charles Clark will be V.P.

Grotto Trip:

David Wright will be leader on the grotto trip to Yudi Cave, leaving the Drystal in Tarrant at 7:00 on Sunday April 17.

No program was given due to the length of the business meeting.

Nancy Boice

EQUIPMENT NOTE: MORE ON CAVING FLASHLIGHTS

MIKE DYAS

In my recent series on carbide lamps and accessories in this publication, unkind remarks were made about the "Tekna II" penlight, which has been enjoying considerable vogue among cavers. My findings were that it isn't quite as foolproof and indestructible as claimed and--having no reflector--puts out too little illumination for more than changing carbide or other minimal purposes. I stand by this evaluation and also recently noticed a remark in another caving newsletter concerning the unreliable spring design of the Tekna (presumably the "II" model)--something I also found to be the case.

Notwithstanding, I purchased another Tekna flashlight several months ago, the "IV," a larger, more all-purpose version of the "II." Unlike the latter, the "IV" has a very large (disproportionately so?) reflector and definitely puts out a healthy beam--approximating a six-volt lantern. It's powered by four "AA" batteries, on which it's rated to operate 1½ hours (rechargeable Ni-Cad cells are nice to have for best value, of course). By contract, the Tekna II uses two "AA" cells. Construction of both lights is similar: tough ABS/Lexan shell, waterproof (supposedly to minus 620 meters)², and with a screw-down switch which is pretty much impossible to turn on accidentally in your pack. The aforementioned problem spring of the Tekna II is a big thing which encloses the batteries inside the shell. In the IV, the batteries are inserted in a removable plastic holder; the spring which sits on top of this is small and protected, and seems to be very reliable (the II's spring must be neither too compacted nor too stretched or the light won't work).

I've now used my Tekna IV during six months of generally severe caving (lots of water, mud, crawling and/or vertical) and am impressed by its strength and reliability. The only damage it seems

¹4800 candlepower (?).

²It also floats in the water, beam up.

to sustain is the lens getting so scratched as to somewhat mute the beam, but not to a significant degree.

At roughly \$17.00 apiece, the Tekna IV is considerably more expensive than the light-weight, waterproof Eveready "Skipper" flashlights also favored by cavers. But the Tekna is a good deal heavier than the Skippers and will certainly outlast several.

The IV is not a penlight; it's substantially fatter than the II, particularly in the bulging business end, although of about the same length (i.e., shorter than the standard flashlight). It's slightly bulkier than my ideal but still compact enough to carry in a jacket pocket (my usual preference). A nice extra feature is the nylon lanyard, handy for slipping on your wrist for instant availability in a place where you wouldn't want your headlamp to fail (e.g., waterfalls).

In summary, I've found the Tekna IV to be much superior to the penlight version; as cave-proof a moderately priced flashlight as could be reasonably expected; and generally a good bargain.

There are at least three other Tekna flashlights available (i.e., most readily through mail order outfitters such as REI, Early Winters, and Yak Works). One is an even larger version of the IV which takes eight "AA" cells (you guessed it: it's the Tekna VIII). They claim it puts out a 12 volt beam and is the "brightest handlight made" (with the exception of the quartz-halogen models mentioned below?). The VIII retails for \$25 or \$30 and is something less than twice as big as the IV, so some cavers may like it. . . . There's also an amber-flashing, fifty-buck strobe version of the Tekna II intended for night cyclists. And the latest REI catalog offers the new "Tekna III Micro-Lith." It's even smaller than the II and is said to put out "extraordinarily bright illumination" by virtue of a "subminiature krypton bulb" and lithium battery. Note

Out of the Mouths of Caves

by Irene Preston Dortch

A cave is not the place most people go for fun.

If the humidity and the relentless darkness don't discourage them, then the maneuvers required to get around in a cave usually do—maneuvers like rappelling down a sheer rock wall or mimicking the undulating ooze of a slug through a two-foot high passage.

"Sometimes you crawl on your belly," says Dr. Gary Barnes, professor of radiology at UAB. "Other times, you travel in cold water that's anywhere from six inches deep to over your head.

"On the last expedition," he notes, "I had to swim 50 feet through 58° water to exit the cave. The ceiling was only two feet above my head and there wasn't much air space.

"I don't know why people do it. Something catches your attention," Dr. Barnes muses. "Perhaps there's an addictive potential in the sheer challenge involved—in going someplace no one has ever been, in discovering and traveling passages, in penetrating deeper and deeper into the world waiting beneath the surface of the earth."

"It's a very personal challenge," explains Les Buryn, UAB assistant vice-president for health affairs and, like Dr. Barnes, an avid spelunker. "You can go into a cave with 10 people and do things none of the others do.

"You may choose to explore a crack that meanders off the trail. Or you may climb a shelf and trace the passageway behind it—back where, possibly, no other human has ever stood or crawled. It's strenuous, with an air of adventure, but you set your own limits based on how much of the challenge you wish to relish and explore."

Caving etiquette is such that people don't automatically help others in caves. "You might come upon a climb, no higher than an office desk but made treacherous by the slope and the slick rock," Buryn explains. "Somebody may decide to attempt the climb freehand, and he'll work at it for five minutes while everybody else stands by and waits. Suggestions as to procedure are acceptable, but no one gives a boost unless asked."



Les Buryn

Because the weather in caves is constant, spelunkers see things not visible on the outside. These include geological formations normally eroded by wind and rain.

"Eons ago, limestone was formed on the bottom of the ocean that covered most of Alabama," says Dr. Barnes. "When raised above sea level, the limestone along faults and bedding planes dissolved, forming caves. Often, less soluble fossilized coral formations remain and are visible in the walls or ceilings of the caves.

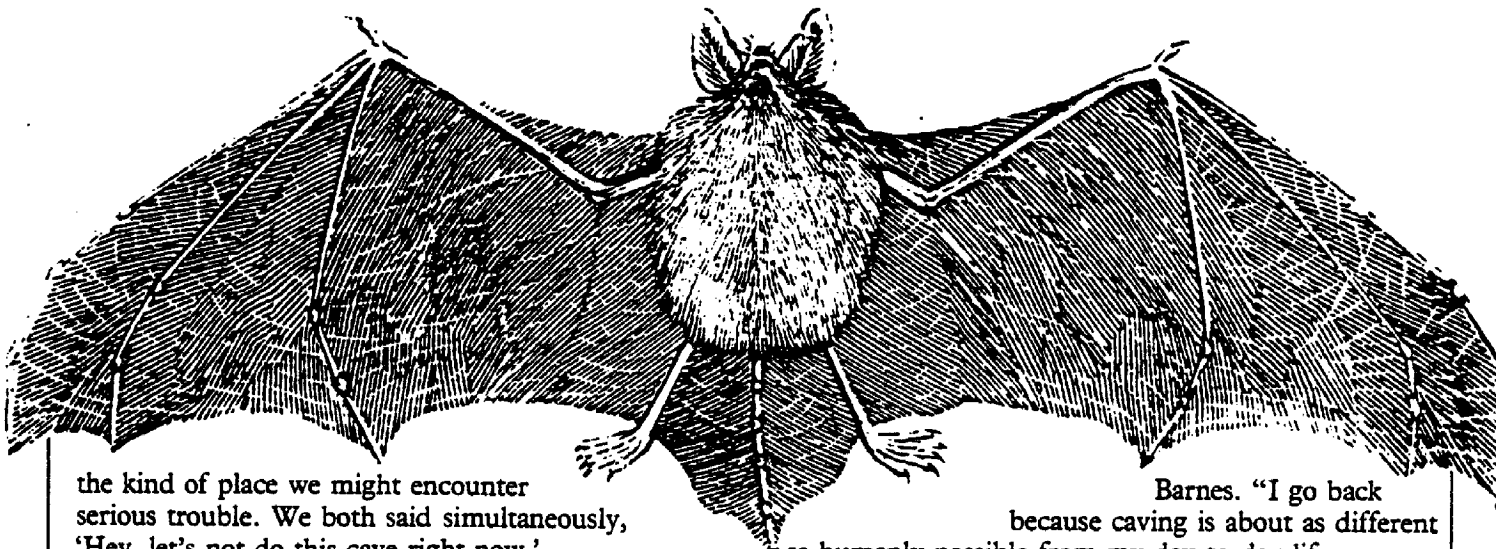
"If you break one of these 100-million-year-old formations, it would be gone forever. Other formations would take at least 100 years to grow back. And anything you leave in a cave—a bit of ash, a footprint—will remain there for the next 100 years unless something obliterates it. Nothing is going to wash it away."

For this reason, cavers tend to be concerned and possessive about their favorite caverns and passages.

"Some you might share and some you might not—they have distinct personalities," says Buryn. "Some caves appear friendly and non-foreboding. Others seem stagnant and dead, with dark walls, constricted passages, salamanders, bats and unusual noises. Caves affect different people in different ways."

Several years ago, Buryn and another member of the Birmingham Grotto, the caving club (to which Dr. Barnes also belongs), crawled a few feet into the entrance of a cave, which opened into a dark hole, yawning down around a ledge.

"It was a frightening feeling," says Buryn. "Neither of us had ever been in that cave before. There was a sheer vertical drop and we didn't have rappelling gear. We had told no one else that we planned to explore that particular cave that day and it felt like



the kind of place we might encounter serious trouble. We both said simultaneously, 'Hey, let's not do this cave right now.'

"Today, it's one of my favorite caves, and nothing about it seems foreboding. So much depends on the psychology of the moment!"

"At first, everything in a cave fools you," Dr. Barnes comments. "Intersections, for instance, appear different on the way out, so you learn to look backwards at every crossroads to see how it appears. You learn instinctively to note key places where a wrong turn could be made. You also learn to watch for flooding." A heavy rainstorm outside — unperceived by the spelunkers below ground — could turn an exit into a river, trapping cavers without air.

"I've taken many people caving who enjoyed the experience but had no real desire to return," says Dr.



Barnes. "I go back because caving is about as different as humanly possible from my day-to-day life.

"I'm not a very adventurous person," he adds. "Being challenged has developed my confidence and broadened my life."

Buryn agrees:

"The connection with my work is largely opposite. At UAB, I sit with a phone and a calculator, working on long-term projects.



Dr. Gary Barnes with his children

With caving, you can go out and get your kicks right away. It's physical, demanding, tiring."

As a teenager, Gary Barnes once crawled from the bottom to the top of the gorge below Niagara Falls through an underground drainage tube so narrow he couldn't stand. "That was my first experience in the dark underground," he states.

"I think most people wouldn't enjoy caving and probably shouldn't try it," says Les Buryn. "It's a sport for those willing to take time to enjoy the experience, not goal-oriented people, and for those who don't abhor mud, bats and tight surroundings.

"The beauty of a cave is often miniaturized. Some of the most gorgeous things — crystal flowers, soda straws, fossils and animal life — are no bigger than your thumbnail. I've spent an entire day within 100 yards of the entrance to a cave, poking around looking at some of the fascinating aspects of it.

"Caving could become an addiction with me. I admit I think about it a lot. It's always the season to go caving: cool air beckons you in on a summer day and warm winds lure you in from the winter chill."

LAST TWO BATS OF THE MONTH-- By John Marshall

Pipistrellus subflavus: Eastern pipestrelle

Description: Forearm, 31-35 mm; wingspread, 208-258 (Barbour & Davis, 1969). This is a small bat with tricolored fur. The base of the hair is dark, the middle light, and the tip dark. The color is usually yellow, but varies from pale yellow to orange to gray and even brown or black. The calcar is not keeled and the front third of the interfemoral membrane is furred.

Distribution: It is found throughout Alabama. Pipestrelles are resident of Alabama all year (Barbour & Davis).

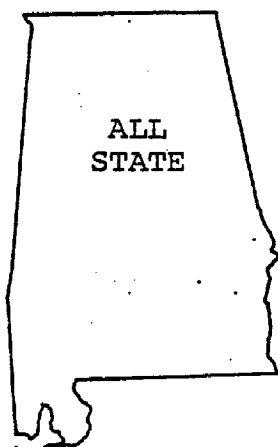
Habitat: Its summer daytime roosts are not very well known. It probably roosts in trees, through, since it is often seen early in the evening at treetops. It is commonly found hanging in Spanish moss in the southern part of its range. Most individuals of this species do not inhabit buildings. Occasionally maternity colonies are found in abandoned buildings. Winter habitats are in mines and caves which are used for hibernation.

Nycticeius humeralis: Evening bat

Description: Forearm, 33-39 mm wingspread, 260-280 mm (Barbour & Davis, 1969). This is a small brown bat that lacks any distinctive external features. The calcar is not keeled and the tragus is short and rounded (Barbour & Davis). The females are larger than the males.

Distribution: This species is found state wide in Alabama; at least in the summer. Its exact winter range is unknown, although Barbour & Davis site specimens being collected in Florida in February.

Habitat: The summer habitat of N. humeralis includes buildings and tree cavities. Maternity colonies inhabit houses and often consist of hundreds of animals. The winter habitat of this species is unknown. They are known to accumulate large fat reserves in autumn. which are sufficient for long migrations or hibernation (Barbour & Davis, 1969).



Eastern pipestrelle & Evening bat

BOOK REVIEW -- By Lee Stubbs

Subterranean Climbers: Twelve Years in the Worlds Deepest Chasm,
By Pierre Chevalier.

Subterranean Climbers by Pierre Chevalier is the chronicle of the exploration of the Trou du Glaz/Guiers Mort System on the Dent de Crolles near Grenoble, France. The author, a chemist by profession, logged 960 hours on 59 trips into the system between 1934 and 1946. Exploration continued year in and year out even through the hardships of the German occupation during World War II. The author and friends spent as many as 30 hours at a time underground negotiating dozens of pits, water falls, stream passages, and canyons in the 39 degrees atmosphere. They managed to climb, crawl, squeeze, dig, swim for a total depth of 658 meters (2,157 feet) and a total distance of 17 meters (10.5 miles) using unusual techniques, without the aide of modern equipment.

I highly recommend Subterranean Climbers. The book can be obtained for \$5.00 for paper back or \$9.00 hard bound from Bob and Bob, Speleobooks, or the Nss; or you could borrow it from a friend.

Flashlights-Con't

that most of this unit's cost is for the special bulb (\$6.95 for replacement) and battery (\$5.95). Also remember that lithium batteries are long-lasting but non-rechargeable, and can possibly leak a noxious gas. I don't plan to be the first caver on my block to test the Micro-Lith but would be interested to hear from whoever does.

Might as well mention several other new-fangled flashlights which seem suited to caving. Two of these have been tried by an associate of mine, so second-hand impressions are offered. One is the "Super QXL-Light," sold by Yak Works (and various dive shops, I believe). It has essentially the same design as the Teknas (waterproof ABS, screwdown switch) but features a "very special" quartz-halogen bulb and integral (special optical reflector for optimal focus). It's claimed to deliver "four foot-candles" (?) under three meters of water. Three "C" batteries provide power, and there's a standard \$19.95 version or \$27.95 g-in-the-dark option. The extra bulb/reflector package is \$6.95. My initial impression is that this is a great back-up light for divers but may be overkill for general caving compared with the smaller and somewhat cheaper Tekna IV.

Early Winters sells (for \$29.95) a similar quartz-halogen flashlight, with a belt clip; it accepts standard bulbs if desired. (Incidentally, Early Winters mentions "spelunkings" (plural) as a potential application for this model.) Early Winters also promotes the "Moonlight," yet another Tekna-style mini-flashlight (a transparent one for what that's worth), with lithium cell and "custom-made gas-filled bulb" (\$4.95 apiece). My friend hasn't been all that impressed with the Moonlight for caving; it's probably most competitive with the Tekna II or III. Finally, Early Winters carries the "Lightning Bug," \$2.95, the "world's smallest flashlight". It's activated by squeezing, then's supposed to afterglow.

Oh, yes: Yak Works lists a \$6.95 krypton bulb for Tekna lights which are stated to double candlepower. I wouldn't know how long these bulbs might last, but imagine that battery life will be substantially shortened by them. . . . And the Tekna IV is also known as

the Tekna I; ditto the "IV" a.k.a. the "III."

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