CAVE SHERPAS Local #2

TECH TROG

SPRING 1985

THE TECH TROGLODYTE

A JOURNAL OF THE VIRGINIA TECH GROTTO OF THE
NATIONAL SPELEOLOGICAL SOCIETY

SPRING QUARTER 1985

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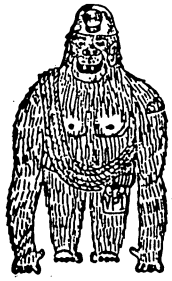


The Tech Troglodyte is published on a quarterly basis, pending the availability of material. All materials submitted and subscriptions should be sent to Box 558, Blacksburg, VA 24060.

President's Column

Greetings fellow cavers!

Although the end of the year is quickly closing in on us, I'd like to interject my feelings concerning future quarters.

How about some more involvement? Let's show some morale! Serve on a committee. It's rare to have too much help. Have an idea for a new committee or a money making scheme? Let's hear it. The worst thing that could happen is that people will laugh and throw things at you. Even if no one else wants to hear your opinion, I do.

All of this is secondary to caving, of course. If you are taking a trip and have room, by all means, announce it. There are trainees begging for the Belly Flop.

One last reminder-try not to stagnate on the same old trip to the same old cave. Explore! Find a new hole and get in it!!

Cave tough,
Craig Ferguson

ONE THING IS CERTAIN WE'RE UNDERGROUND

Editor's Space

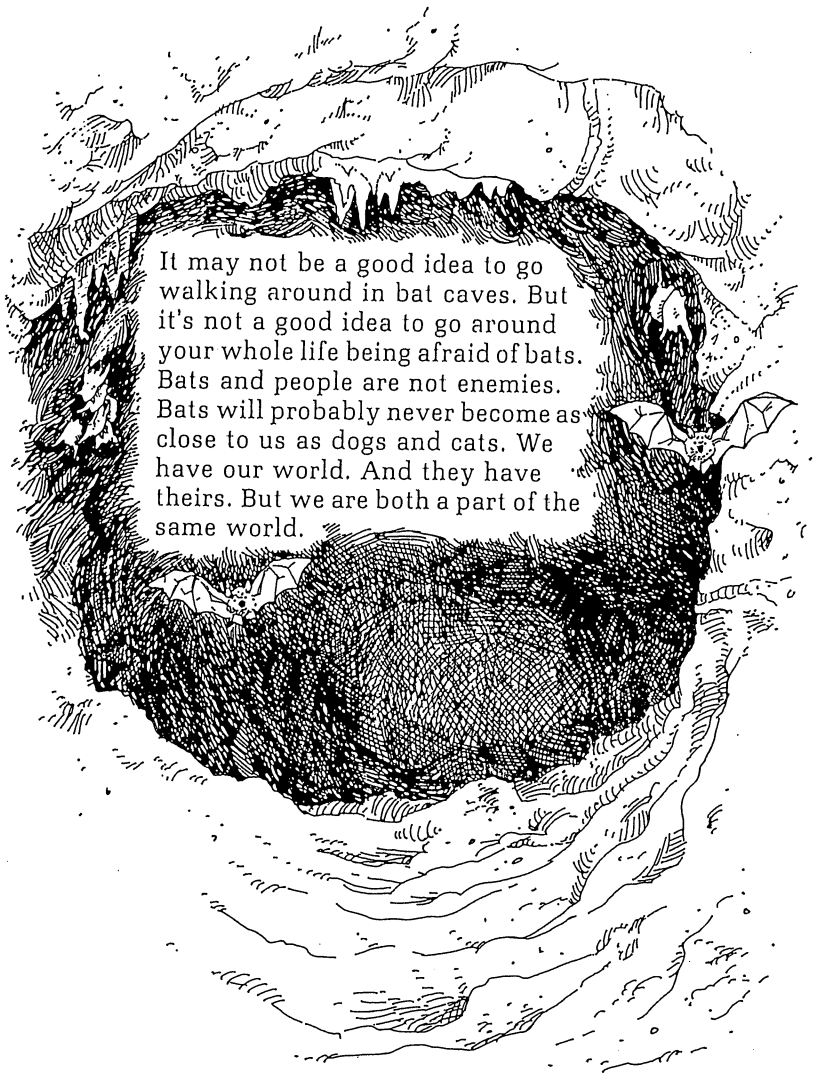
I would like to thank everyone who helped in giving me a TROG to print. I would especially like to thank Joe Saunders who allowed me to reprint his sinking creek article which was presented at the 1981 International Congress of Speleology and which may appear in a future copy of the NSS Bulletin.

Due to the amount of work required to publish the Trog, I find that this will be my last issue. Anyone who is interested in taking over talk to Craig. I hope you all enjoy this issue. Keep up the safe caving.

***Note to Blue Ridge and Tidewater Grottos, stop worrying about whether you are wimps or not, go caving and find out!!

Maureen Handler

Editor
Mailbag



Once again it's time to get down and dirty. Now you can read all about it. All the dirt that's fit to print and even some that isn't. Is your name mentioned? Did you do something worth talking about? Yes it's time once more for the infamous, funny and you'll never live it down, the....

Grotto Grapevine

Events and happenings have been going on left and right since the last TROG. First of major proportions was Banquet with a record setting turnout of 140 people celebrating our 20th Banquet. Bob and Jean Simonds definitely deserve a 21 water pistol salute for their efforts in organizing the event. Awards were presented after dinner to all who were deserving and they all got what they deserved. Instead of Guano Clusters, (*note, Ed Day arrived wearing the first Guano Cluster ever awarded) recognition plaques were awarded to Ed Fortney for his unending tolerance of trainees, Ed Devine for his continuing work in Paul Penley's Cave, Buddy Penley for being our A#1 land owner and to Hillary Minich for her skydusky hollow survey and topo map. Craig Ferguson received flame-out, AI Cartwright went to Glen Davis and our most obnoxious member and trainee awards went to Frank Gibson and Paul Soboleski irrespectively. Trainee of the Year was Rob Hills and Joey Fagen was elected Armchair caver. On the home front, Chicken wing discovered sex and was awarded for it, Psycho had been seen with a number of different girls and therefore rated a chastity belt. Phillip is somewhat PW'd by Jean and Mike & Ignatz were the cutest couple there. Due to very safe caving this year, there were no candidates for the Brain Bucket. Jerry welcomed Trex and Stymie to the old Farts Club. Linda Oxenrider was recognized for always being there and Lee Little was commended for taking thousands of trainees caving. Fatito was burned for having to be hauled out of the same pit two weekends in a row, Carolzo was the least changed mama and Dave Cinsavich was the perpetual trainee. The banquet was topped off by a slide show by Chip Clark on his recent 'expeditions' to Mammoth Cave. Banquet was followed by a great party at Turner Beach.

After banquet, the weather started turning fair and our minds were drawn to bigger and better things, such as picnic and float trip. Picnic was once again held Mother's Day weekend out in Buddy's field below Newberry's entrance along with the usual sixpack. With Psycho in charge, we knew we didn't have anything to worry about, or did we? Picnic was great with such show ups as the Koeshners & Whitehursts from Texas and the McQueary's. Bill Stringfellow provided plenty of firework and explosive displays and there were rumors of nudity and a citation with velour seats. Diddly did a pole trip to Coon and Chip showed up with his new wife. Danny Wright broke his arm in a drunken act.

The last and most recent event was Float Trip. The river was flowing and we were ready. Over 100 persons and rafts of all sizes and shapes appeared early (?) Saturday morning. Lee did a great job as admiral. Fatito showed up attached to a keg and a number of people lost their clothes for the duration of the trip. Except for Win's dog getting carried away by the current, there were no reported incidents. There was, however, a rescue call by Buddy at 2am and just when the rescuers got their gear together and sobered up, the cavers showed up and the rescue was cancelled.

Other dirt worth talking about is Capn Ed has been taking kids caving for pay. WVACS weekends are going strong the 3rd weekend of each month and the club donated $100 to help them purchase their new fieldhouse. Monroe County weekends are on the 2nd weekend of the month with the likes of Jack Kehoe and Garrie Rouse showing up. Garrie has also mapped over a mile of passage in Stompbottoms cave. Surveying is continuing as ever in Newberrys. On the lighter side, Sue and Rick LaCourse are going to Ireland this summer and are looking for cavers to rent their town house, which by the way as had cavers in it longer than anyother dwelling in the town of Blacksburg. Laureen is practicing for heart throb for next year, Rob 'Belushi' was picked up for Drunk in Public and had to spend the night in Christiansburg as punishment. We had a practice rescue and Fatito was 'rescued' from Tawneys smoothly with the radio operators 'hamming it up'. There was also a recent raid on a large bridge in a nearby state, the names are with held to protect the guilty.

On the club business side of things, we have had plenty of new members come up. Congrats to Craig Roberts, Paul Hess, Dave Bennet, Paul Sobaleski, Jean Simonds, Joan Johnson, Dave Cinsavich, Hank Heidt and Rob Hills and if I forgot anyone, sorry. Jim Washington got a job at Radford Arsenal in the Industrial Engineering department. Garrie Rouse is working as a biologist for the state in Elkins WVa. Graduates: Becky Himmelman is out and will be working in Baltimore, Eric Anderson will go out to Yellowstone for the summer, Mike Gaydosh will be out in July and may go somewhere. Sue LaCourse is leaving us for bigger and better (?) things. And will Dave Cinsavich ever graduate? Carol Surowiec got a job in CS. New Officers emerged from the mudslinging as Craig Fergusson, President; Mark Honosky, VP; Joan Johnson, secretary; and Rob Hills, tres.

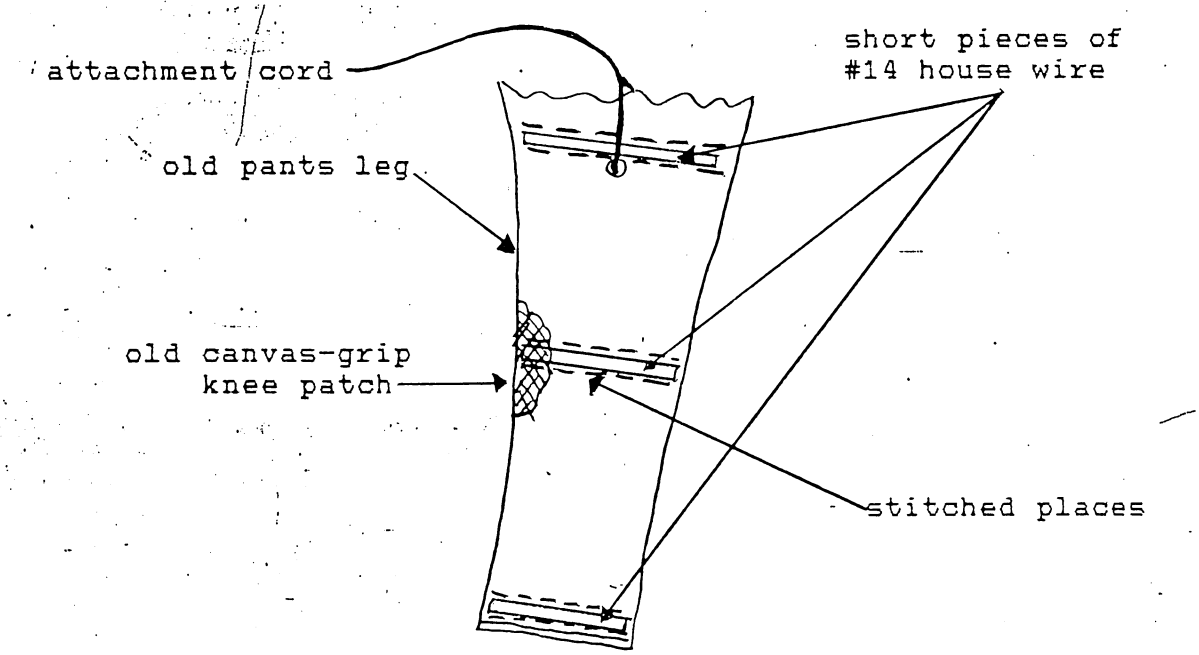
Cavers crash ring dance, familiar faces were Becky & Dave C.; Linda O. & Kent; and Kay & John Detreich. JMU's Spring Fling was a wild time with caving, sauna and naked dancing around the fire. Attending were Jim W., Becky, Chicken wing, Steve L., Eric, Garrie, Fatito, Linda O., Bill Shipman and others. VAR was held at Massanutten caverns, VPI made a showing with Jim Washington, Mike Fiore, Joan Johnson, Eric Anderson, Bill Shipman and Maureen Haneler. Bluegrass and beer was the entertainment, and if you haven't heard, VPI has been railroaded into hosting the Fall Var, Possibly at the biological testing station near Mountain Lake.

A CHEAP, SIMPLE ROPE PAD THAT STAYS IN PLACE

How often have you carefully padded a drop only to find later that your rope has found its own abrasive route somewhere other than on the ropepad? Isn't that pad also likely to be a heavy, cumbersome section of somebody's old carpet, your cavepack or your spare shirt? The following description presents a cheap, simple rope pad that stays in place, is easy to secure around the rope AND is easy to rappel and climb past.

The primary component is a cut-off pants leg (from your last pair of cutoffs or that pair of caving jeans you finally retired). If this is not availible, a tube of material can be sewn, but that gets too involved. The next componènt is some short sections of flat, house wiring (I used no. 14), cut to lengths which just fill the width of the cloth tube. Strong cord for attaching the pad to something is also required. A needle and thread (or a sewing machine) are the only other required items.

Insert the wire pieces into the tube of cloth as shown in the figure, and sew in place. I used three pieces for a pants leg, and sewed across the leg on either side of the wire, holding it securely in place. Finally, punch a hole through the tube just below the uppermost section of wire, tie your attachment cord on and voilá, a great rope pad is born!



Another idea that might be worth trying is turning the pants leg inside out, coating both sides with canvas grip, positioning the wire pieces, then returning it to inside-in. Pile books on top of it until dry, or use a steam iron to set the canvas grip. I haven't tried this one, but it might make a stiffer, more waterproof pad (thus less weight to drag back out of the cave).

In use, the wire inserts can be form-fitted to either a U-shape or they may be completely wrapped around the rope. It's relatively simple to unbend them as you pass by the pad, reforming them when you get above or below. This system is a lot easier than velcro straps, shoestrings or snaps, and cheaper too. When you pack them up, simply stretch the wire pieces straight, roll the tube and attachment cord up and away you go!

Chuck Shorten Chuck

Well Guys.... What do we do with Phillipe this time.

Bandanna Mania

Many, many years ago, when Marco Polo brought to Venice tales of Cathay and wonders of the Orient, explorers of many nationalities ventured forth, across the seven seas, to find fortune, adventure and sight to 'ooh' and 'aah' at. We are especially indebted to the anonymous Portuguese traders who 'discovered' India, for they were responsible for the importation to Europe of that most marvelous and useful creation, the bandanna.

When, early in the fourteenth century, these Portuguese traders first landed, they were intrigued by the customs and colorful clothing of the Indian peoples. Of particular interest were the small squares of colored cloth the Indians called 'bandhnu' (to tie-dye). Their extraordinary usefullness was not lost on the traders. They saw bandannas used for diapers, scarves, handkerchiefs and secret homosexual codes. Bandanas went to Europe on the first boat out, and gained instant popularity.

Over the centuries, bandannas (or bandanas; you can spell it either way) have been associated closely with various cultural groups. First, pirates wrapped them tightly around the necks of unpopular comrades, purportedly because they misspelled the term 'tie-die'. Cowboys of the American West used them to keep dust out of their beards so sheep wouldn't mind kissing and housewives have recently found them useful for covering up home permanents.

The decline of the genuine Indian bandanna has been traced to the publication of the secret of tie-dying in the mid-1960's. It is said that India made up for the loss of revenue by exporting Hari Krishnas and Rajneeshis.

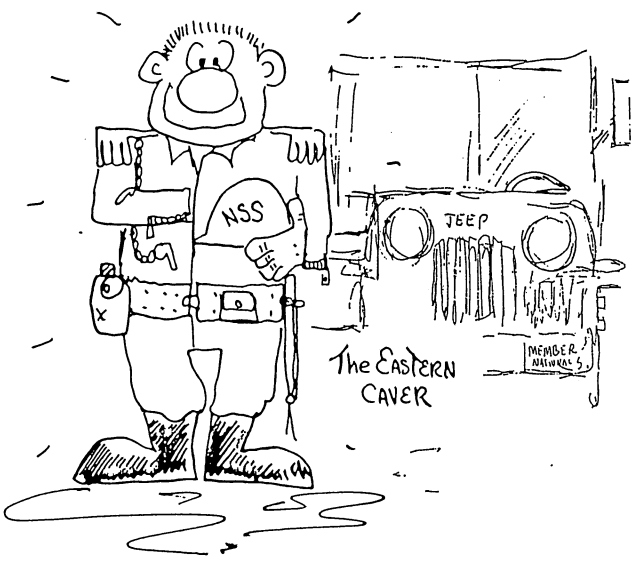
Now, the time has come for cavers to take up the bandanna banner. Wear a bandanna around you neck when caving. It is stylish (Springsteen can't be wrong), protects your neck from cold, and keeps the bandanna relatively clean (if your neck doesn't sweat too much) for things you need a clean bandanna for. The number of bandanna uses in caving is only equaled by the uses of the 30-foot sling. With a bandanna, you have a snot rag, eyeglass cleaner, bandage, tourniquet, helmet sizer, blindfold, chicken loop, pack strap, dog collar, dust mask, flag, trail marker material, camera rag and toilet paper. Some of these uses are admittedly for emergencies only, so use good sense, remember the history of that piece of cloth, and cave softly.

Jim Washington

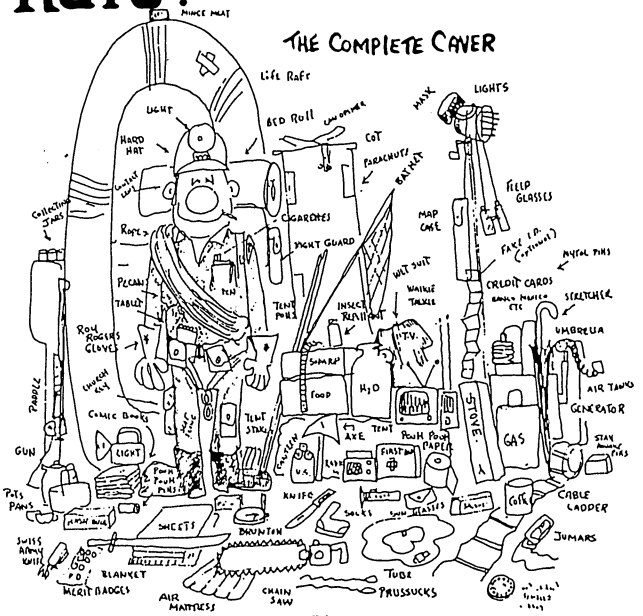
"Quotable Quote"

My favorite cave? Why, Cloverhollow, it has vertical drops and pornography and everything!! Kay Jacobson

How Do You Rate?

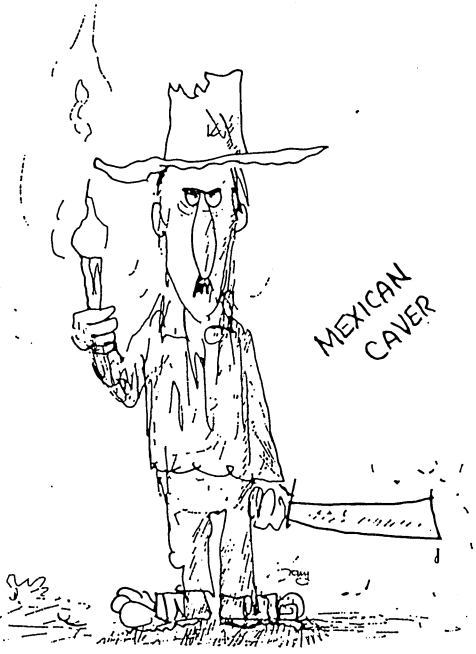


The Eastern Caver



Texas Caver

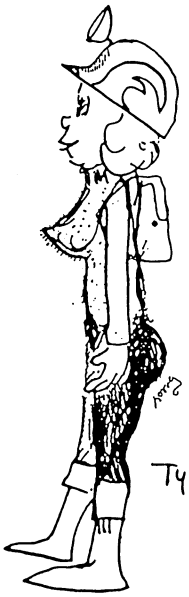
California Caver



Mexican Caver

Female Cavers

Type A



Type B

Federal Cave Protection Act

The Federal Cave Law Project needs the assistance of as many cavers and grottos across the country as possible.

Needed are campaign chairpersons for grottos and other National Speleological Society internal organizations. The jobs for volunteers consist simply of interesting grottos in supporting the Cave Protection Act, and organizing one or two letter writing sessions.

We also need more volunteers to present our cause to non-caving organizations, to perhaps meet with legislators, and to coordinate activities at the state level.

George Huppert, chair of the NSS Conservation and Management Section, has volunteered to be our campaign chairman.

Dave Allured is campaign coordinator.

What follows are excerpts from the new NSS brocure entitled, "This unique and fragile resource needs your help..."

"America's caves are being destroyed. Vandalism, pollution, unregulated use and increasing pressures threaten thousands of our finest cave resources. The proposed Federal Cave Resources Protection Act offers an inexpensive and effective solution to providing better protection and management of these resources."

"Why is the Federal Cave Resources Protection Act Needed? Extremely fragile and totally nonrenewable, thousands of wild caves, along with the unusual life forms found in these totally dark environments; the scientifically valuable geological paleontological and cultural deposits, are being destroyed at an alarming rate."

"The destruction of caves also means the loss of one of America's mose unique wilderness resources...one where man is truly in touch with his environment, unable to depend upon modern technology, limited only by his own personal skills and endurance in seeking out and discovering lightless corridors where the sun never shines; where the rain never falls."

"Due to a number of grey areas in current laws and regulations, cave management is hindered by inconsistent and arbitrary interpretation and applications of those statutes and rules. Although extremely fragile and nonrenewable, thousands of wild caves located on the public domain cannot be properly protected--even though a number of agencies are trying.

How will the Federal Cave Resources Protection Act help?

It will give caves and their contents a legal definition, removing the grey areas surrounding their status; require that caves be considered in land use planning; place a major portion of the burden for management on users by emphasizing the use of volunteer contracts and cooperative management programs; allow Federal Land Managers to withhold sensitive caves location information; increase protection for cultural and paleontological resources; protect taxpayers from expensive liability suits and subsequent settlements against the government arising from recreational use of public wildlands;

statutorily exempt speleothems from mining claims; protect unique cave life and habitat; require that money collected for special use fees or civil penalties be returned to the agency for use in administering management programs and for restoration projects.

The legislation will apply only to federally owned caves and lands, primarily those administered by the Fish and Wildlife service; the Bureau of Land Management; the National Park service and the Forest Service. It will not affect state or privately owned property or caves.

You can help! (1) Please write your federal representatives and ssk them to help sponsor the introduction and support the passage of the Federal Cave Resources Protection Act. (2) Encourage your friends, fellow cavers and other conservation organizations to write letters encouraging your state's federal delegation to support the act.

We presently anticipate the simultaneous introduction of the Federal Cave Resources Protection Act in both the House and Senate during either Februrary or March 1995. If you have the inclination, additional letters to the committee on Interior and Insular Affairs, U.S. House of Representatives, Room 1234, Longworth House Office Building, Washington, D.C., 20515 and to the Committee on Energy and Natural Resources, Room 3106 Dirksen Building, Washington D.C. 20510, will be especially helpful.

How can I get more information? Write: Al Trbovich, director; information/educational division; NSS Conservation Committee; 3496 Terrace View Drive; Salt Lake City, UT 84109.

Your help is absolutely essential to the success of this legislation's introduction and passage. All we are asking for are a few moments of your time to write and mail a couple of letters supporting a resource protection bill that finally makes sense.

Additional people to whom copies of your letters should be sent:

U.S. Sen James McClure, Idaho; U.S. Sen Steve Syms, Idaho; Sens. Thomas Eagleton, Missouri; Robert Stafford, Vermont; Pete V. Domenici, New Mexico. Letters to these senators at the following address: United States Senate, Washington D.C. 20510.

Also letters could be sent to U.S. Congressmen Morris K. Udall, Arizona; John F. Seiberling, Ohio; Larry Craig, Idaho; Harold L. Volkmer, Missouri; Frederick C. Boucher, Virginia. Letters to U.S. Congressmen should be sent to the following address: U.S. House of Representatives, Washington D.C. 20515.

by Dave Allured
copied from The Newsletter of
Cave Conservation & Management

DTC Report

by Doug Perkins

YOU'RE GOING TO GET SCREWED AGAIN!!

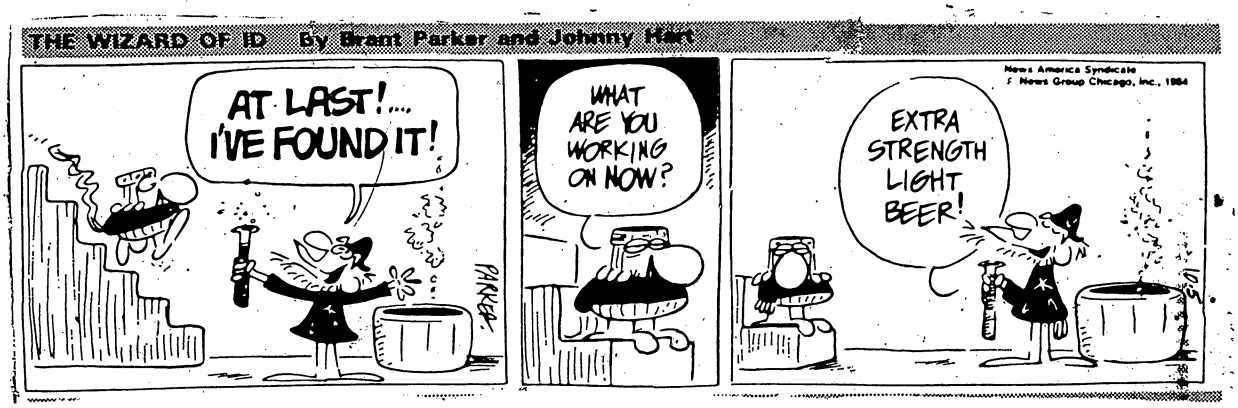
By the time this is published, the State of Virginia, with not a little Federal prodding, will have set up the mechanisms to raise the legal drinking age to 21 by the Fall of 1986. Now I know that this is not going to stop you guzzlers from buying or 'obtaining' whatever you need to drink (it never stopped us back before they lowered the age limit), but we would like to point out a fascinating alternative --- brewing your own beer.

Now I know that you have probably tasted the results of some local home-brews and have found the quality lacking. Don't be discouraged! Some reasonably good beers can be made. IF YOU DON'T HURRY!! I have no intention of presenting a detailed "How to do it" article here, but there are several good publications on this subject. Buy one if you're interested. I would recommend "Home Brewed Beers & Stouts" by CJJ Berry. You will find instructions here for making beer from kits and malt extracts as well as beginning from the basic malt. EATS Natural Food Co-op in Blacksburg is a good place to start shopping. They have books and brewing supplies at reasonable prices. I will only emphasize two things that are of extreme importance in brewing. Keep your equipment sterile and don't be in a hurry to sample the results. Just follow the instructions and be patient. If a slower brewing method is offered as an option, use it! The pleasure will come when you sample the results knowing you have screwed some tax money from the people who screwed you out of your rights.
Note: The DTC does not advocate violating the law-but we won't stop you.

DTC Tips

When preparing for a big party, Bill Koerschner would pre-mix his drinks in resealable bottles, making the first drinks strongest, the last weak. Then he could flame out early but sober up by the time to leave.

When driving tired or...(well we don't do that, do we), Don Anderson suggests holding an empty bottle over your head. If you start to doze off, the bottle will fall, hit your head and wake you up.



Kaluha

Here's a recipe you may want to try...

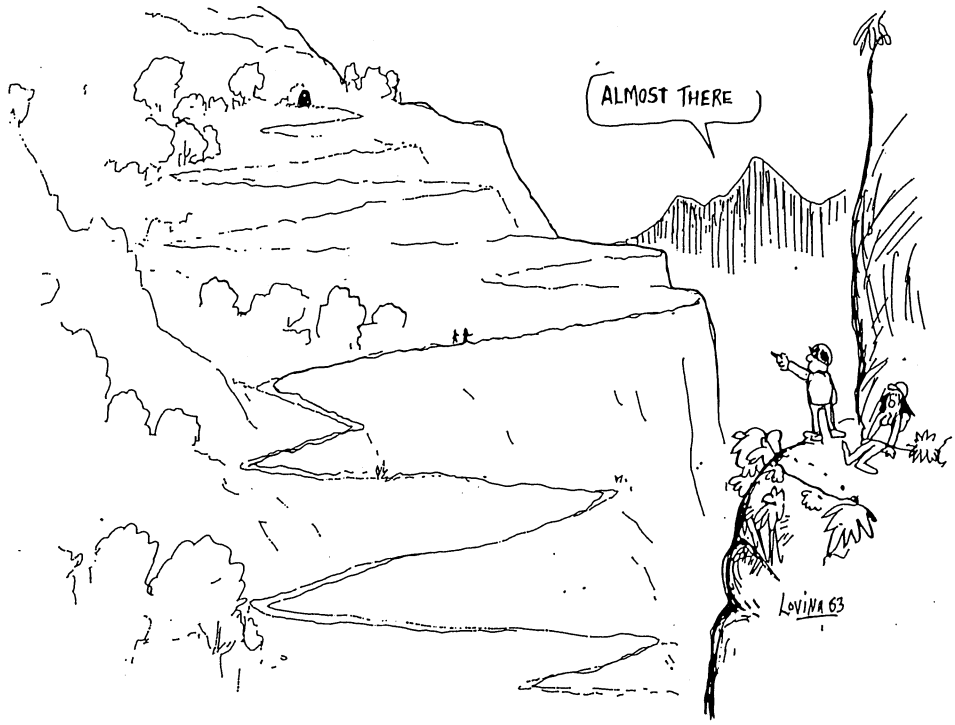
3 cups water
3 cups sugar (brown preferably)
3 Tbl spn vanilla
3 Tbl spn coffee, instant
3 cups Vodka, 80 proof

Boil everything except for the vodka and let it cool. now youve got a couple of hours so go call a friend. If it is long distance you have money and need not make your own Kaluha. When cool, add the Vodka. Bottle in brown bottles and hide for 4 weeks. Makes about 4 16oz. bottles. Resealable Grolsch beer bottles work well

Floyd Collins

or here's another

Mix 50/50 in a glass with ice Jack Daniels and Cave Water.



MAJOR GROUNDWATER FLOW DIRECTIONS IN THE SINKING CREEK AND MEADOW CREEK DRAINAGE BASINS OF GILES AND CRAIG COUNTIES, VIRGINIA, USA

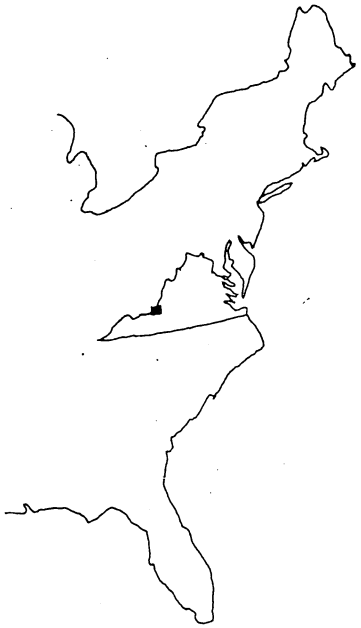
Joseph W. Saunders, R. Keith Ortiz, and William F. Koerschner III

In the central Appalachian mountains of the eastern United States, two of the major structural settings in which karst has developed are the long mountains and the anticlinal valleys. Both settings are characterized by topographic orientations along the trends of regional folding and faulting. Anticlinal valleys where narrow are typically floored with limestone or dolomite, whereas underlying clastic units commonly have been exposed in the wider anticlinal valleys, leaving the carbonates in strips on either side of the valley. Most of the anticlinal valleys maintain a relatively uniform width, and several terminate in distinct valley heads where the carbonates or underlying clastics on the floor plunge beneath the sandstones which typically form the rims of the valleys. Where faults are found on the valley floor, they are usually associated with cross-sectional asymmetry of the valley.

The two anticlinal valleys studied here contain two major surface streams. Meadow Creek leaves the eastern valley head through a gap after rising at two large springs nearby. Westward flowing Sinking Creek heads at a spring complex 10 km from the end of the eastern valley, which has been made somewhat asymmetric by the Saltville Fault that enters the western end of the valley near Newport and runs the entire length of the valley. North of Newport, Sinking Creek crosses the fault complex and flows northward into a second valley. Clover Hollow at the eastern end of this second valley has a simple anticlinal structure. Westward to the New River the valley is wider with more complex structure.

Stratigraphically, both valleys are rimmed with Silurian sandstones. Cambro-Ordovician dolomites form the central floor of Clover Hollow and the eastern valley, with Ordovician limestones on the floor and lower slopes on either side of the dolomitic core. The dolomite is more resistant to weathering and tends to form a central ridge down the middle of Clover Hollow and the eastern valley, bordered on both sides by

GROUNDWATER TRACING IN THE SINKING CREEK VALLEY
GILES AND CRAIG COUNTIES, VIRGINIA



o SPRING

• DYE RELEASE LOCATION

EASTERN CONTINENTAL DIVIDE

INFERRED STRAIGHT LINE DYE ROUTE

NEWCASTLE

Meadow Creek

Sinking Creek

PEARISBURG

New River

NEWPORT

BLACKSBURG

flood only

0 4 8
k m

N

SPRINGS

1. BELL SPRING
2. RISE OF SINKING CREEK
3. TAWNEY SPRING
4. LINK SPRING
5. SMOKEHOLE SPRING
6. TRAVERTINE SPRING
7. SLOVENSKY & EARLY SPRINGS
8. COVE CAVE & DUDDING SPRING
9. FISH HATCHERY SPRING

c. CLOVER HOLLOW CAVE

d. DOE RUN

w. WILLIAMS CAVE

parallel talwegs on limestone. Westward from Clover Hollow both the valley and the limestone exposures on either side of the dolomitic core widen.

Surface drainage in the two valleys consists of small mountainside streams and the two master streams Sinking Creek and Meadow Creek. Most if not all mountainside streams heading near the rims of the valleys sink upon encountering the limestone. Flow from some of these sinking streams resurfaces at springs along Sinking Creek or Meadow Creek, with flow from the remainder resurging at either of the two rises of Meadow Creek or along the New River. Both Sinking Creek and Meadow Creek sink completely for much of the year.

Methodology Sodium fluorescein in quantities of ¼ to 8 kg was applied to sinking streams in the period 1974-1978. Fresh activated charcoal granules contained in 5 cm square staple-bound envelopes of nylon screening was used to adsorb the fluorescein. Elution was accomplished with 10% KOH in 95% ethanol, with an ultraviolet lamp used to aid in visualization if necessary. With few exceptions, the charcoal traps were collected only once from each location for each test. Duplicate traps were usually placed in different spots at each spring to minimize risk of theft or chance contamination.

Results of Water Tracing and Descriptions of Major Groundwater Basins

Thirteen fluorescein dye tests were made from eleven locations in the two valleys to a total of ten springs from the New River in the west to the Meadow Creek Gap in the east. The sink-to-spring straight lines shown on the map indicate that multiple outlets for groundwater are not unusual in the structural settings encountered there. Four of the six major groundwater systems studied discharge from more than one outlet.

MEADOW CREEK DRAINAGE Meadow Creek waters reach the Roanoke River and the Atlantic Ocean after leaving the anticlinal valley at Meadow Creek Gap. The eastern anticlinal valley is actually a hanging valley, surrounded on both sides by Atlantic-bound streams at 400-450 m elevation, which is at least 150 m below the lowest elevation in the

anticlinal valley. Meadow Creek rises at two large springs near the gap through the sandstone rim. Local base level in the eastern end of the anticlinal valley, as well as the elevation of the springs, is determined by the elevation at which Meadow Creek spills over the lowest point of the rim. Meadow Creek has no doubt grown immensely from a small mountainside stream on the outer rim wall of the anticlinal valley to a major karst-headed stream by the continuing process of headward drainage capture to the west. Fractures in the valley head associated with the anticlinal plunge provided the weaknesses needed by the early mountainside predecessor of Meadow Creek to breach the sandstone rim and initiate piracy of the headwaters of the Gulf of Mexico bound Sinking Creek. Because of the steeper drainage gradient through the Meadow Creek Gap than westward along Sinking Creek to the New River, the Eastern Continental Divide (between the Atlantic Ocean and the Gulf of Mexico) has been moving westward.

Fluorescein dye tracing has established that there are two branches of Meadow Creek, with drainage being roughly divided by the central dolomitic core in the anticlinal valley. The northern branch is predominantly a surface stream fed by several small springs. After a surface route of four kilometers it sinks in all flow stages into a large closed depression known as the Sinks of Meadow Creek. The north branch of Meadow Creek resurges at Dudding Spring 2 km from the Sinks. A portion of subterranean Meadow Creek can be seen at Cove Cave 500 m west of Dudding Spring. Cove Cave ends downstream in collapse, whereas upstream sumps. Most of the 60 m length of Cove Cave appears to be developed along or near the Saltville Fault. At high flow stages water discharges from the cave entrance. Thus the north branch of Meadow Creek has both a perennial and an intermittent rise.

The south branch of Meadow Creek rises from an impounded spring at the fish hatchery. In contrast to the north side of the anticlinal valley, drainage to the fish hatchery spring on the south side is entirely underground, excepting the sinking streams along 9 km of mountainside. Like the resurgences on the north side of the valley, the fish Hatchery spring is developed in the limestone. It is the only major limestone spring in the study area that does not have a major associate distributary

outlet, although there are two small flood outlets located within 30 m. It is likely that the difference in mass wasting which has kept drainage on the south side of the Meadow Creek valley well underground whereas the surface of the north side of the valley is lower with predominantly surface drainage is due to the much higher dip and the Saltville Fault on the north side.

Head of Sinking Creek Sinking Creek upstream from Newport is fed by numerous small to moderate sized springs in dolomite and limestone. The creek there is draining land with a low doline density. 1500 m west of the topographic divide with Meadow Creek, Sinking Creek rises at Early Spring on the south side of the valley. In higher flow stages an intermittent spring 100 m away becomes the surface head of Sinking Creek. A fluorescein trace in high flow from a mountainside sinking stream just west of the surface drainage divide tested positive in Early Spring and the intermittent spring, as well as at Slovensky Spring 300 m to the northwest. Considering that a sinking stream just east of the topographic divide had been traced to the fish hatchery spring, it would appear that the Eastern Continental Divide, known locally as "the Allegheny", coincides approximately with the groundwater divide.

Travertine Spring on Sinking Creek at Saltville Fault Complex near Newport. There is a conspicuous travertine deposit 2 m high, 10 m wide and 6 m long associated with a small spring along Sinking Creek where the Saltville Fault complex crosses the creek.

Subterranean Meander Cutoffs at Link's Bend Dye dropped in Sinking Creek upstream of Link's Bend was detected in charcoal traps in Link Spring on the west (downstream) side of the bend the following day, and was thought to be visible in the spring at dusk forty minutes after the drop. No intake point is visible along the creek bank at the bend, so the waters that reappear at Link Spring after cutting under the neck of the meander must sink into the floor of the creek. There is a 30 m crawlway cave just above creek level on the upstream side of Link's Bend almost directly upstrike

from Link Spring. This small cave probably originated as a meander cutoff, and may still function as such during very high creek levels. To the south and out on the bend is Link's Cave, with about 300 m of passage and major trend along the strike. Link's Cave most likely is an abandoned subterranean meander cutoff route.

Clover Hollow Drainage Most mountainside drainage in Clover Hollow sinks soon after encountering the limestone; only during very heavy runoff does surface drainage flow directly into Sinking Creek. Dye placed in Clover Hollow Cave and two sinking streams on the north side of Clover Hollow in separate traces was recovered in both Smokehole Spring and Tawney Spring on Sinking Creek, indicating a flow split. A careful examination of the main stream in Smokehole Cave behind the spring revealed a location where the cave stream split, with a major proportion entering a humanly impassable crevice while the remainder continued on out to Smokehole Spring. Subsequent in-cave dye drops from both just upstream and just downstream of the stream fork in Smokehole Cave, with traps at Smokehole Spring and the upstream reaches in Tawney's Cave behind Tawney Spring, indicated that all flow entering the crevice at the stream fork in Smokehole Cave resurged only at Tawney's Cave and Tawney Spring, whereas flow not entering the crevice resurged at Smokehole Spring. Together, these traces indicated that a single flow split existed.

Surveys of Tawney's Cave and Smokehole Cave indicate that the two caves are closely situated and represent major conduits for past and present drainage from Clover Hollow. It is clear that during the evolution of Smokehole Cave flow shifted direction from a westerly strike parallel trend to a southerly trend across the strike to the present Smokehole entrances, leaving large passage abandoned on the west side of the cave.

A dye trace from a sinking stream 1500 m north of the Smokehole-Tawney spring complex indicates that drainage from the far side of the dolomitic core is being transmitted across the strike and through the core rather than along the strike to a more distant spring. The next logical step in a study of the Clover Hollow karst

hydrology would be the identification of cave stream branches corresponding to the traced sinking streams in Clover Hollow, and subsequent analysis of waters from these tributaries of likely contrasting transmission routes.

The Rise of Sinking Creek For about half the year the entire surface course of Sinking Creek down to the junction with the New River contains flowing water. At the lower flow stages the total flow of the creek is swallowed by several sink points, the first visible one at a distance of 5 km from the New River. No passable openings are visible along the creek in the vicinity of the sinkpoints.

Despite being one of the largest springs in Virginia, the rise of Sinking Creek on the New River has a noticeably unimpressive appearance. Water discharges from a 30 m stretch of rubble forming part of a railroad embankment at the foot of a cliff.

Besides the trace of Sinking Creek to the rise on the New River, only one other sink point was traced to that rise. The stream sinking into Williams Cave 1500 m northwest of Tawney's Cave was traced in low flow stage to the rise of Sinking Creek only. Two traces in high flow stage, however, were detected both at the Sinking Creek rise and at Bell Spring, another from-under-the-railroad-rubble spring on the New River 1500 m to the north. The area from Williams cave and the sinks of Sinking Creek to the New River is one of high doline density with very little flowing water, precluding an easy trace to define the low flow divide between Bell Spring and the rise of Sinking Creek.

Bell Spring Drainage Doe Run was traced to Bell Spring from an upstream sink point, one of several along the stream course. A considerable portion of the doline field east and south of Doe Run probably drains to Bell Spring as well, as do areas within a mile of Sinking Creek during high flow stages, as the traces from Williams Cave demonstrated.

How To Screw Your Boots

Soles blowing out on your boots is a common occurance among cavers. Besides being a pain, it is a safety hazard. A little preventative action can add weeks to the life of your boots.

Screw in 5/8" flathead screws between the lugs or tread about ½" in from the edge (any closer to the edge or on top of the lugs will cause them to kick out quickly). Do this when the edges of your boots are first starting to peel. It probably won't hold a sole that is completely off.

If you aren't to lazy there are other things you can do to make your boots last longer.

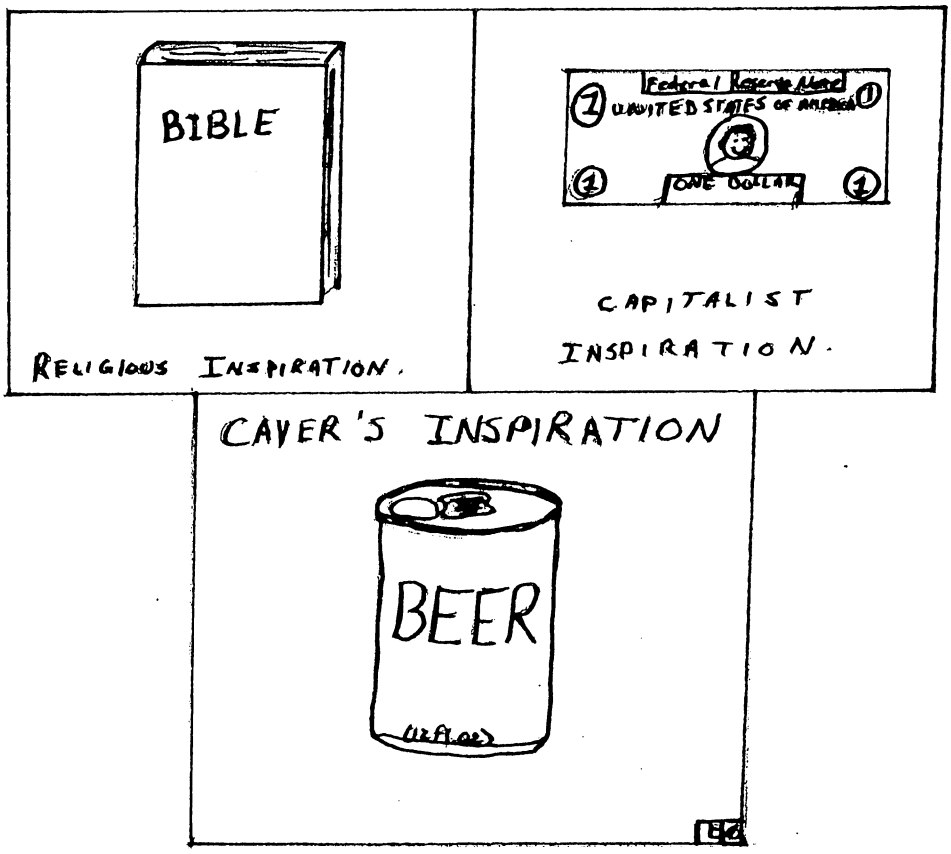
-Don't let mud dry on your boots. Wash them off.

-Don't dry wet leather by a fire or heater. Stuff boots with newspaper and let air dry.

-Wax them occasionally. Melt Snowsealer or Beeswax on a stove or hotpot and smear on generously.

-You can save the toes of your boots by canvasgripping them with patches of denim. Do this before you wear a hole in them (this doesn't last long in really wet conditions).

Mark Honosky



Atonement At 100 Fathoms

Descent into the yawning chasm
darker, green and cool
another world, a feeling
of time eternal.
Deeper, out of the sun's daily influence
just a hint of surface air left
man's own light
enters the concealing gloom
and reveals to human eyes
those which have none
all around, squeaking, flapping.
A new feeling of peace there
as I hang to a thin lifeline, dangling
an intruder in the clammy eeriness.
Down, down, into the lightless depths
seemingly alone, yet in the home of
the unseen and unknown creatures of darkness.
Mind races, groping with imagination
of what lies below and beyond
a thrilling anticipation of discovery of, what?
A tuned ear perceives the slow, steady
dripping of single droplets
echoing from a hidden pool, far below
just as they did yesterday, an eternity ago.
A strange peace here. Hanging on to life
as a spider at the end of it's silken thread
peering into perfect darkness
unseen, unknown, alone
in the massive inner space
I become one with the living earth.

Bill Ramsel '84

Spring Break

This past spring break saw a large contingent from VPI down in Alabama. The group consisted of Jerry Redder, Doug Perkins, Walt Pirie, Craig Roberts, Maureen Handler, Lee Little, Hank Heidt, Bob & Jean Simonds, and Bob Alderson. We were joined by Chuck and Pat Shorten and Hillary Minich. After driving for 8 hours and guzzling more than a couple of beers, we arrived at the camping area. Now, when Jerry told us we would be camping in a dump, we just assumed that the place was kind of trashed. But we were wrong!! We camped in a DUMP, trash, dead cows and all.

Saturday morning rolled around early and we got all geared up to bounce Stephens Gap. The pit is a 130' free drop with 2 waterfalls and a walk out second entrance. Everyone had a great time except for Pat and I, who had to go into Scottsboro for a new radiator hose for the van. That afternoon found us at Neversink. At 160' deep, it is probably the most picturesque pit in all of Alabama. Unfortunately, some vandals have painted a large skull and crossbones on the cliff next to the pit. Next time we may want to carry some acid and/or wire brushes up to the pit for a little de-Grafitting. That night while enjoying a little well deserved relaxing back at camp, some cavers from Huntsville Grotto showed up and gave us the locations to a couple of new pits, which we decided to try out. Our first pit Sunday was Pretty Well, a 193' drop with beautiful formations all the way down. Then we drove to Hall's pit, but the trip was cut short due to lots of loose debris at the top and no where to get out of the rockfall zone. Sunday night provided more partying and good times to be had by all.

Monday we all went to Valhalla, (minus Chuck, Pat and Hillary who had to work). The weather couldn't have been better and the pit was awesome. A 220' free drop of mind blowing proportions. Lee and Hank decided to hike cross country to the pit and never showed up due to a lack of a good sense of direction. Half of us took off for home after Valhalla while the rest went to Monsanto state park and bounced Natural Well Tuesday before heading home. The trip was great with no major incidents. I'm certainly looking forward to next year's trip.

Maureen Handler

Caver Trivia

What cartoon character was billed as the 'Worlds First Superhero'?

Answer: Captain Caveman

Source: Prof. Hoyle's T.V. Trivia
No. 7031 1984
Hoyle Products; St. Paul, MN 55164

From The Sign-out Sheet

The club has logged nearly 3400 man hours since December which comes out to be over 150 man hours every weekend. Keep up the great caving. Here are some of the highlights.

1/2/85	Pighole	Mark Honosky David Washington	Looks like bat shit. Tastes like bat shit. Good thing we didn't step in it.
1/12	Nerdberry-Banes	Jozo, Carolzo & Davezo	63 shots in the main subway.
1/19	Newberry-Banes	Redder, Cinsonofabitch, Laureen Brennan, Joan Johnson, Rob Hills	If it can go wrong, it did!
2/26	Tawneys	AR & 53 Boyscouts	Is it time to change batteries yet? Just get back in line!!
4/6	Starnes	Maureen Handler, Fatito, Kenny Yasnowsky	3 shots in the dark.
4/20	Thompsons	Mike Futrell, Mike Fiore	Fondled Bertha's big boobs!!
4/27	Stompbottoms	Garrie Rouse, Joan Johnson, Mike Fiore	Mapped 600 +, saw another 1000'... goes & goes & goes.....
5/6	Tawneys	Cap'n Ed, Becky and 9 grade schoolers	we had 9 KIDS, time for planned parenthood.