

THE TECH TROGLODYTE

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

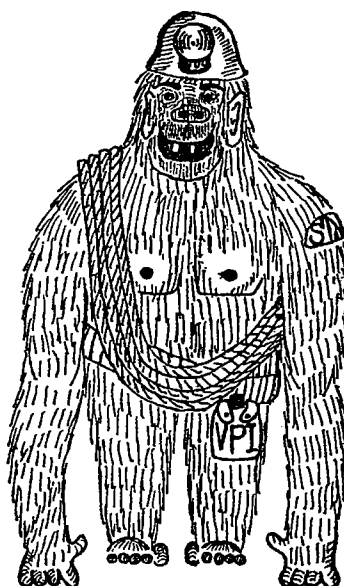
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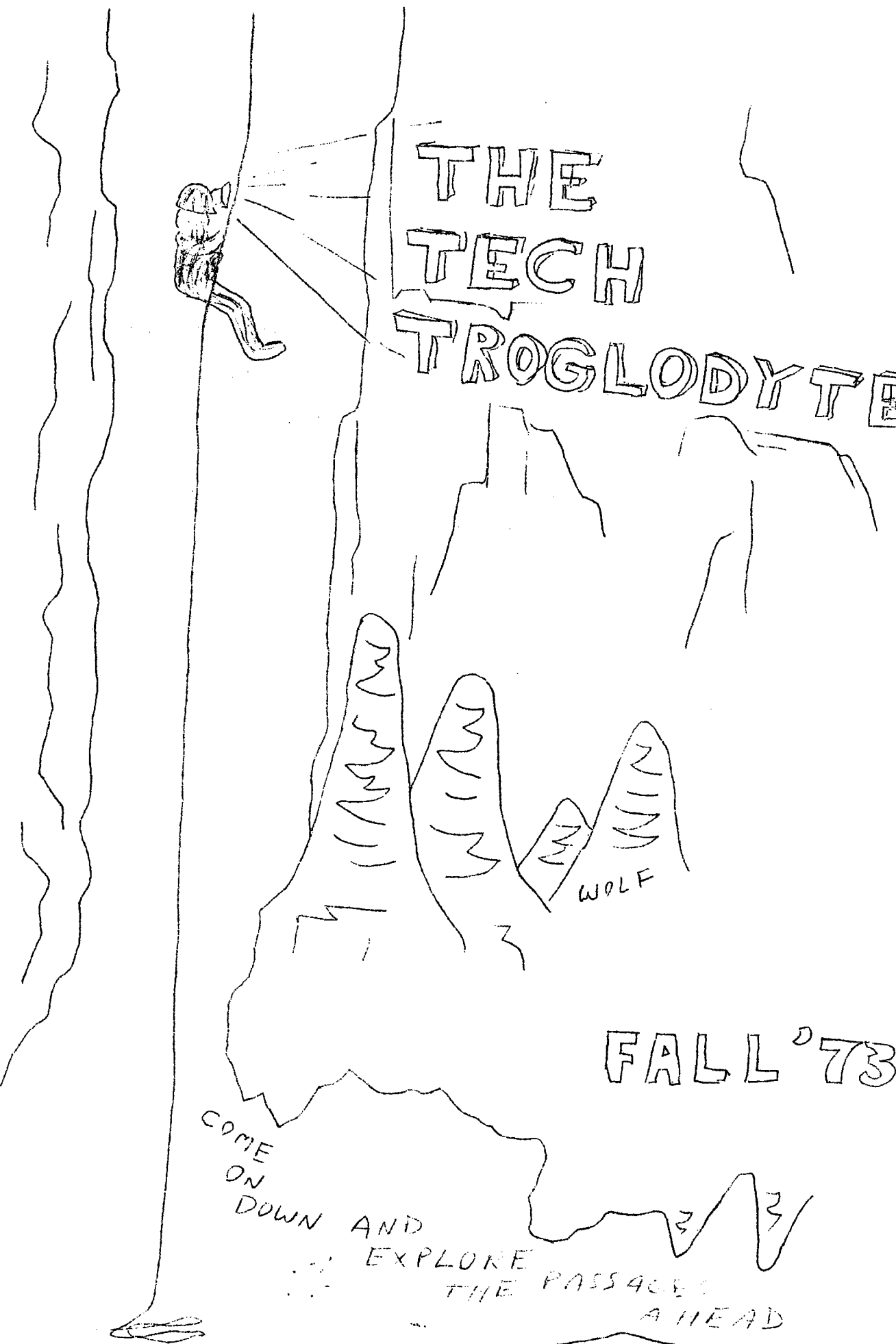


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TREASURER Randy Wood

TROGLODYTE EDITOR:

Tom Calhoun



THE TECH TROGLODYTE

FALL '73

COME
ON
DOWN AND
EXPLORE
THE PASSAGES
AHEAD

In spite of the bumbling, but dedicated,
efforts of these people, the Trog was
published. Whew!!

Lor Windle
Carol Godla
Janice Goad
Mike Wolf
Cherly Jones

These people will get extra consideration and
Christmas goodies from Santa Claus!

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THE PRESIDENT SPEAKS:

Tuna Johnson

I would like to take this opportunity to express some thoughts to the new people we have within the club. First of all welcome, and I'm glad to see that you've stuck with the club. You've all been around a quarter now and have been exposed to the basics of vertical and horizontal caving along with obtaining some idea of how the club operates. Now it time to look towards the rest of the year.

One of the things that you might be asking yourself is where do we go from here. By this I mean, "what else does caving have to offer or what else can I do besides just going caving." Undoubtably if you've been around the club at all you've heard some things said about cave surveying and mapping. Possibly you've been on a mapping trip and have gathered some insight to the rudiments of mapping. If you haven't and like everyone else have a thousand and one questions, such as how to map, why map, what equipment to use, etc., then all I can say for the time-being is to be patient. Next quarter I hope to see some programs given on mapping along with some mapping sessions in order to acquaint people with some of the methods and equipment.

Intertwined with these programs will be programs by various people as to certain pet projects in which they are involved. As to why to map, you can only answer that for yourself. The reason I can't answer this for you is because it leads to other areas of caving about which you must formulate you own philosophies. An example is the area of conservation, and today the questions are coming thick and fast. Such questions as, "why map, why publish maps, and how do we limit the output of published material" are being hotly debated throughout the region. This is a major problem today and rightly so since the future of caves and caving rests on how we handle the problems of vandalism, landowner relations and other conservation oriented problems in retrospect to ourselves and rebel cavers. I have my own views. Other people in the club have their own views. I think it would be worth your while to talk to various members and search out their views with regard to this subject since it would give you a broader background with which to approach this problem. I also recommend that if you can, borrow a member's or the club's copy of the last issue of the Region Record since it has an excellent survey done by Annie Whittemore on some ideas of conservation.

If the idea of mapping doesn't particularly interest you, there are still other aspects to explore. Various people in the club are well experienced in the areas of

cave photography, the cave sciences (for example, if you like creepy crawlers), first aid, and rescue work just to mention a few. Whichever path you choose to follow now is up to you. All I can say is I, along with the rest of the members, will try to expose you to the different possibilities. But you, in turn, have to come up to us and ask us questions, prompt us, and hound us until you get a question answered.

I just want to add one thing. This year we have a good bunch of trainies. The future of the club is up to you and I think you can really help the club. Right now, the best way you can help the club is to study and pull good grades. You're up here for an education and you sure aren't going to help the club if you flunk out. If you have to pass up a trip or miss a night of drinking to get something done, do it. Contrary to what some people might say, grades and studies are important.

In closing, I just want to say keep up the good work and good luck.

* * * * *

CONFERRED AND ARRIVE

Where do we go from here? Hell, where were we to start with? Approximately 38% of the regular members have been caving more than twice this quarter, and three-fourths of the officers are not in this category. How can we expect trainees to be enthusiastic cavers when they see as many of the club's members just hanging on and contributing so very little to the club as a caving organization? With such poor examples, no wonder we have some trainees who seem to be here for the partying and shy away from caving. Trainees see this as an activity accepted by other "cavers".

Other negative aspects result from this caving stagnation. Many trainees want to cave, but can find no one to take them. So we have trainees that have been caving only two or three times. And we wonder why there are so many "rebel" cavers? What are YOU offering a new caver? Sure, studying is important, but I wonder if there is any curriculum that requires the constant attention as some people claim to give.

Our reputation within (and outside) the region and rumors bad mouthing the grotto are a favorite topic of conversation, and raises some blood pressure. But what have we done to disprove these claims? What impression of the club have YOU given at a gathering of cavers? Were you able to talk about a recent cave trip, or a recent party? Think about it.

Yes, there are skills such as mapping for trainees to learn, but who will teach them? We have new caves to check out, leads to push and ridges to walk. So let's see some activity in the grotto next quarter. Drag out those old clothes and polish up the reflector. Take a trainee caving. Don't just sit and call yourself a caver, go out and be one. Let's

get the grotto back on its feet as a respectable caving group.

The question isn't "Where do we go from here?", but
"Where will the new cavers go from here?"

It's up to us.

Cheryl Jones

THE EDITOR'S 2nd WORK

How would you respond to the question:

"Do you want to go caving?"

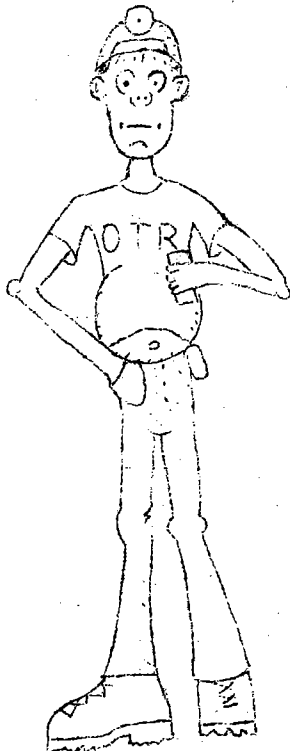
- No, there is a party tonight; besides I have a hangover from last night's party.
- Not me, I don't cave, I just like hanging around the cave club.
- I don't cave any more, I am too old for that now, just remember, someday you will be like me.

Your answer, I hope, would be affirmative; if not, I hope your excuse is not any of the above.

Also, look at the people who helped me put this Trog together and notice how many of them cave. They are more than just cavers. Thanks for the help.

Tom Calhoun

MEET JOE "CAVER"



Color the lamp shiny. Used once to find his way home after a party.

Color the helmet with old prestige mud.

Color the eyes blood shot red...and that's not from guano, either.

Color the elbows scarred. From a rough party, not a rough cave.

Color the buldge jelly belly. Couldn't fit through that crawl now if he tried.

Color the carabiner shiny from carrying only six packs. Intact color code...fill in your favorite "caver's" colors.

Color the pants dirty, from the times spent in the gutter.

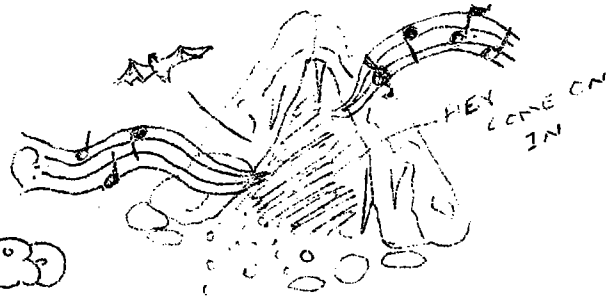
Color the boots concrete white. They haven't felt a cave floor in months...maybe years.

NOW THAT COLOR HAS BEEN ADDED, DOES HE LOOK FAMILIAR?

TRIP REPORT:

ORRY AT

GROUND ZERO

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So there I was, all prepared to freeze myself by going with Denton to see ageless Jim Hixon. I had heard enough rumors about this sage to truly whet my curiosity. But the fates were against me as Denton developed a passionate urge to try to pass his calculus course by studying over the weekend.

At the meeting, Mike Wolf announced that he and Denton were going to Spruce Mountain Run (also called Spruce Run Mountain: and I don't care which is right) and I leapt at the opportunity to go with this dynamic duo and see them in action.

The trip started off rather slowly with the gathering of participants and gear the most time consuming. Once on the road everything was dandy with various exciting events occurring; singing all the songs we could, and coasting down all the hills to conserve gas (and, in the process, to block traffic). As we neared the cave, we rolled merrily along; turned around and rolled merrily back (we missed the cave). Not seeing it on our pass back, we turned again and gallantly dashed forward, only to miss it again. On the next try we found the road (which had been marked for us as being on the other side of the road) and Denton roared right up the hill with all the precision of a finely tuned pogo-stick. It was then that we learned that Mike Wolf had been there before but forgot how to get there (in the words of the trip-meister: "G'damn it, Wolf.").

After a brisk walk up the road, and a brisk search to find the cave (a search in which one member was temporarily briskly lost from us), we plunged into the depth. I, of course, prayed to the Great God of Caving to see us through and allow us the pleasures of his vast depths. Looking back now, I can see that it was in vain that I should have asked for guidance. Had I known what pains and degradations lay ahead I would have cursed him and left the cave then and there. But that is looking back and at the time I was looking ahead--to make sure that I didn't smash my face into some fool overhanging rock that was waiting for me. I knew that the God was against this trip very quickly. My initial realization came when, going down the first incline to the first room, a rock jumped at my foot and bit it.

Well, it was all down hill from there. The cave started throwing things at us from above and tried to suck us down from below. As the roof closed in from above to crush us, the little piles of rat-turds that were scattered all about scuttled around beneath our hands trying

to jump on us and asphyxiate us. It was only through sheer determination that our party kept going. We crawled through a slim, muddy crawlway into the room where the chain-gate was put up and it was here that our first tragedy almost occurred. The victim was Jim Denton. He was the last one through the crawlway and as he was nearing the end both Lynn and Carol started singing:

"I'm Hen-er-y the eighth I am, Hen-er-y the eighth I am, I am, etc., etc..."

It was apparent that Denton was riled. He had stopped crawling along and was now huddled in abject terror of the sounds issuing forth from in front.

"Second verse-same as the first"

"I'm Hen-er-y the eighth I am, Hen-er-y the eighth I am, I am..."

"S-H-U-T--U-P..." bellows from out of the hole (Note: the duration of time that the words "shut-up" engulfed would have been enough to allow a normal person to recite all the names of the people in the cave club who are currently flunking at least one course).

Peace is restored to the subterranean depths and somehow I got the impression that the Great God of Caving was grateful for the restored silence. My suspicions were confirmed when I noted that the chain did not try to grab anybody when we crawled by it. Thus, the journey continues. Stepping into the cold water of the run, I couldn't help feeling some impending incident of importance concerning the stream yet to be faced. So everyone started on down the stream (everyone except Denton, Lynn, and Carol: I wonder what they were doing back there?). Eventually, they caught up with the rest of us and we quickly reached our final destination--the back room. Mike Wolf had said that there were no other passages out of the room, but that we could look around and enjoy ourselves. I found one little crawl that went from in front of the stream at one end of the room, around behind a mob of mud, and emerged at the other end of the room. I enjoyed this crawl so much that I went through it three times.

Carol and Lynn went off exploring down a little passage and I followed out of curiosity (about the cave). We reached the end of that crawl and Wolf came down after us, followed by another trainee. We sat around and sang songs for ten minutes. The most fascinating item we saw in this sewerish (in shape only) passage was a spider first noticed by Wolf. This particular spider was clinging upside down to the stalactites and seemed to be performing some sort of ritual over (or rather, under) one small nodule. The spider was moving up and down in a rhythmic manner that was not dissimilar to the rutting

motion of mammals. Wolf didn't quite use that expression; rather, he described it as if the spider was performing a solitary self-sexual act upon itself. In a flash, everyone else in the passage was craning their necks to see this fascinating phenomena. I thought it was in rather poor taste for the male members to watch, in as much as this was a female spider. Carol, after having satiated her curiosity, crawled over the three other cavers who were blocking her exit and led us out.

Then came the big event. Several people were crawling around in a hole in the cave floor and I jumped down to look around. I found a small crawl where the stream flowed and I splashed into it. Wolf came down to see what I had found and was really thrilled ("Gee," he said, "It really goes"). We decided it should be explored, but we debated about seriously going further; for neither one of us had enough of an aquatic nature to go get soaked. We called for someone small to push it, but all we got was Denton. Our noble trip-meister felt it was his duty to explore all routes. Not wanting to get his clothes wet, he removed them. One of the male trainees did likewise. I felt it was safer to leave and did so. When Denton crawled into the crawlway, Mike Wolf was heard to utter something to the effect of "My God! What is this?" I had had the sense to get out of that den of damnation early and was not really surprised when Carol, goaded on by her partner, also removed her clothing. Denton pushed until the cave pushed back and emerged from the hole he had pushed to see, sitting serenely on a rock, giggling, Carol. Wolf, too, emerged to a similar scene, but he was coaxed out by the same people above. From above it was really an (uh) interesting scene. Three naked bodies moving and contorting below in the half-light of our distant carbide lamps.

Well, so much for fun and games, I said to myself. I started to put my shirt and pants back on (having taken them off to wring them out) only to find that the cave was still trying to kill me. This time it tried to give me pneumonia by dripping all over my almost dry clothing. I had Lynn cook my feet with her carbide lamp, but the people below didn't know this. I said (concerning her lamp): "Don't move it back and forth, hold it still". I was asked what she was doing and replied: "She's warming my toes." This was greeted with many jeers and shouts.

But that was it. We went back. Wolf and I tried to go upstream only to have the cave throw mud at us and stick our noses in the dirt. We got slopped and came back. Leaving was an anti-climax except for my finding a flowstone slide board. I crawled out through the hard way and the cave pulled its foothold out from under me (that little devil) and sent me sprawling. With a last drive of effort I pulled my foot from the cave's tenacious grasp and crawled free. We got out--all present and accounted for after spending two and a half hours battling Chernobog and his demons in their own realm. What a feat.

Halloween

Party

'73

AN UNBIASED REPORT BY

MIKE WOLF



It was a dark, dead night. The lonely farm house of Bob Page, Steve Kark and Joe Yeats sat on the fog enshrouded hillside. There was evil in the air. Something strange was going on inside the house, whatever it was, it was loud enough to wake the dead.

It was Halloween, the V.P.I. Cave Club was celebrating the pagan holiday with an equally pagan party the likes of which had never before been seen on the face of the earth. The party was attended by the usual horde of ghosts, goblins, rednecks, dirty old men and Dennis Webb. Among the more unusual costumes was that of Bill Stringfellow who came as a hooker. Many a guy had to take a second look to make sure it was Bill under the blond wig, make-up and custom-made G-string. Mark Slusarski, one of our distinguished graduates, made an appearance as a Polish gladiator, wearing a suit of armor made from empty beer cans. Nancy Coleman and Jean McCarthy however made an ass of themselves. They came together as the front and tail ends of a donkey, which turned out to be one of the best costumes at the party.

The Ladies Auxiliary awarded prizes for the best of the costumes and ran a contest to guess the number of seeds in Cheryl's pumpkin. They also auctioned off Bill "Madame X" Stringfellow. During the week before Halloween everyone had been putting money on their favorite guy, in the hope that he would be the one with the most money on his name by party time and thus win Bill as a date for the night. Needless to say, everybodys' "favorite" guy turned out to be our own President, Tuna Johnson.

The party was not without some unusual entertainment. In a quick one round fight, slugger Pam Douty won a victory for womens' lib against trainee Tom Doyle with a quick right to the stomach. Toms' stomach did the rest by bringing up what he had been drinking for the last few hours. He spent the next few minutes hanging from the front porch, looking kind of green. Steve Kark did a fine job as disc jockey with the '73 Panquet Party Tape. Steve kept the party going between songs with witty remarks, nasty jokes and interviews with such personalities as Ed Loud and Doug Perkins.

The party lasted well into the morning hours with everyone having a great time. About 3 a.m. people started dropping like flies. Some found their way to a cozy corner, others

just lay where they fell. Just a few hours after the last die-hard party goer fell in his tracks, the sound of people opening their breakfast beers could be heard. A few people were going caving that weekend, others were going to work and study, most just picked up where they left off the night before. Just as with any cave, the farm house was left in better condition than we found it, after a major clean-up operation. The Halloween Party was a huge success thanks to all involved.

* * * * *

SAVE THE BATS



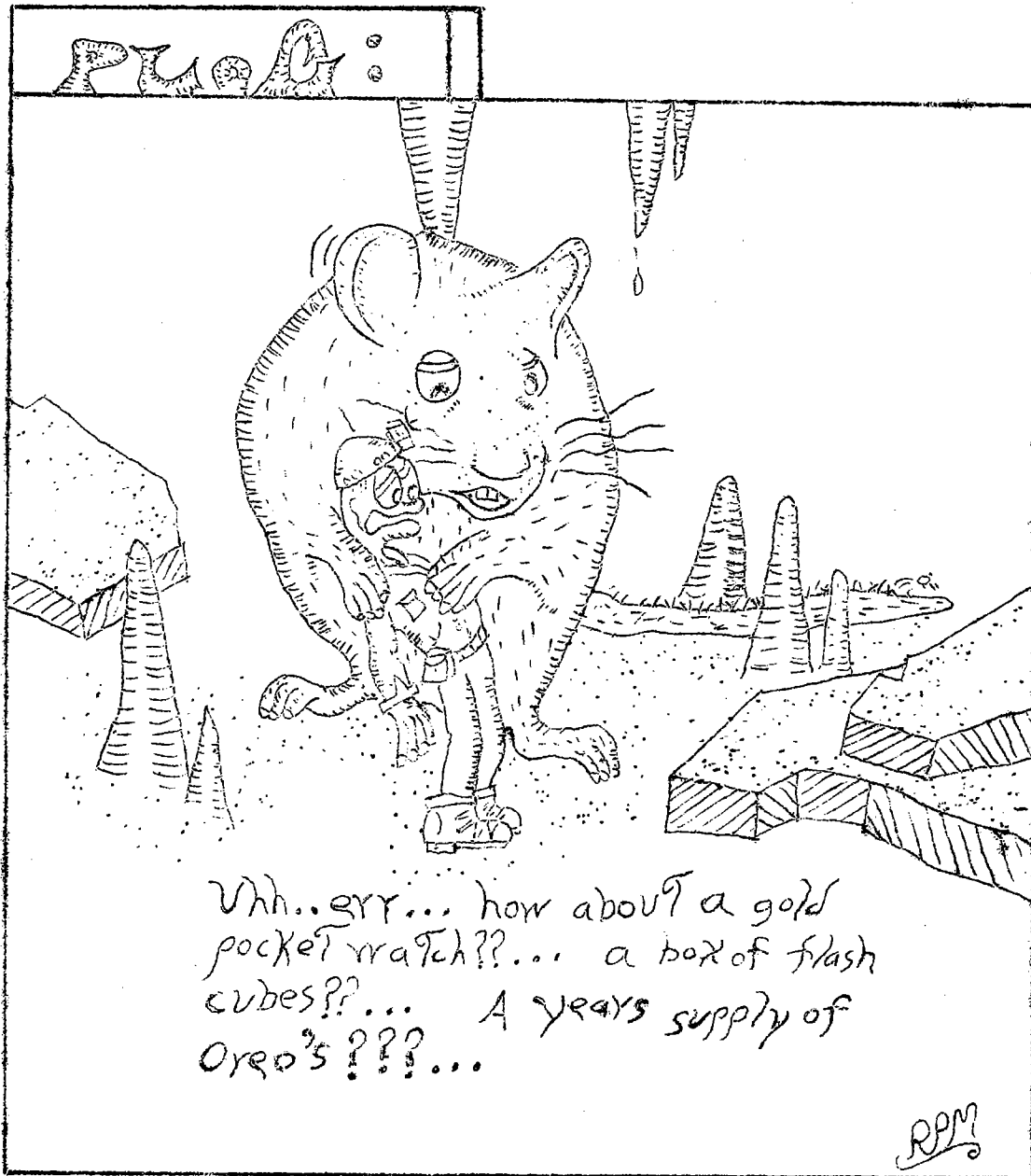
In providing for the protection of bats using West Virginia caves, the Greenbrier Grotto requests all cavers to stay out of the following caves during the specified times each year. Any questions or comments should be directed to Jerry Kyle, 910 Pocahontas Avenue, Ronceverte, West Virginia 24970

<u>COUNTY</u>	<u>CAVE</u>	<u>DATES</u>
Monroe	Greenville Saltbeter	Oct. 1 to May 1
Pendleton	Cave Mountain	April 15 to July 15
Pendleton	Hellhole	Year 'Round
Pendleton	Hoffman School	Oct. 1 to May 1
Pendleton	Minor Rexrode	Oct. 1 to May 1
Pendleton	Mystic	Oct. 1 to May 1
Pendleton	Schoolhouse	Oct. 1 to May 1
Randolph	Sinks of Gandy	Oct. 1 to May 1
Tucker	Cave Hollow-Arbogast	Oct. 1 to July 15

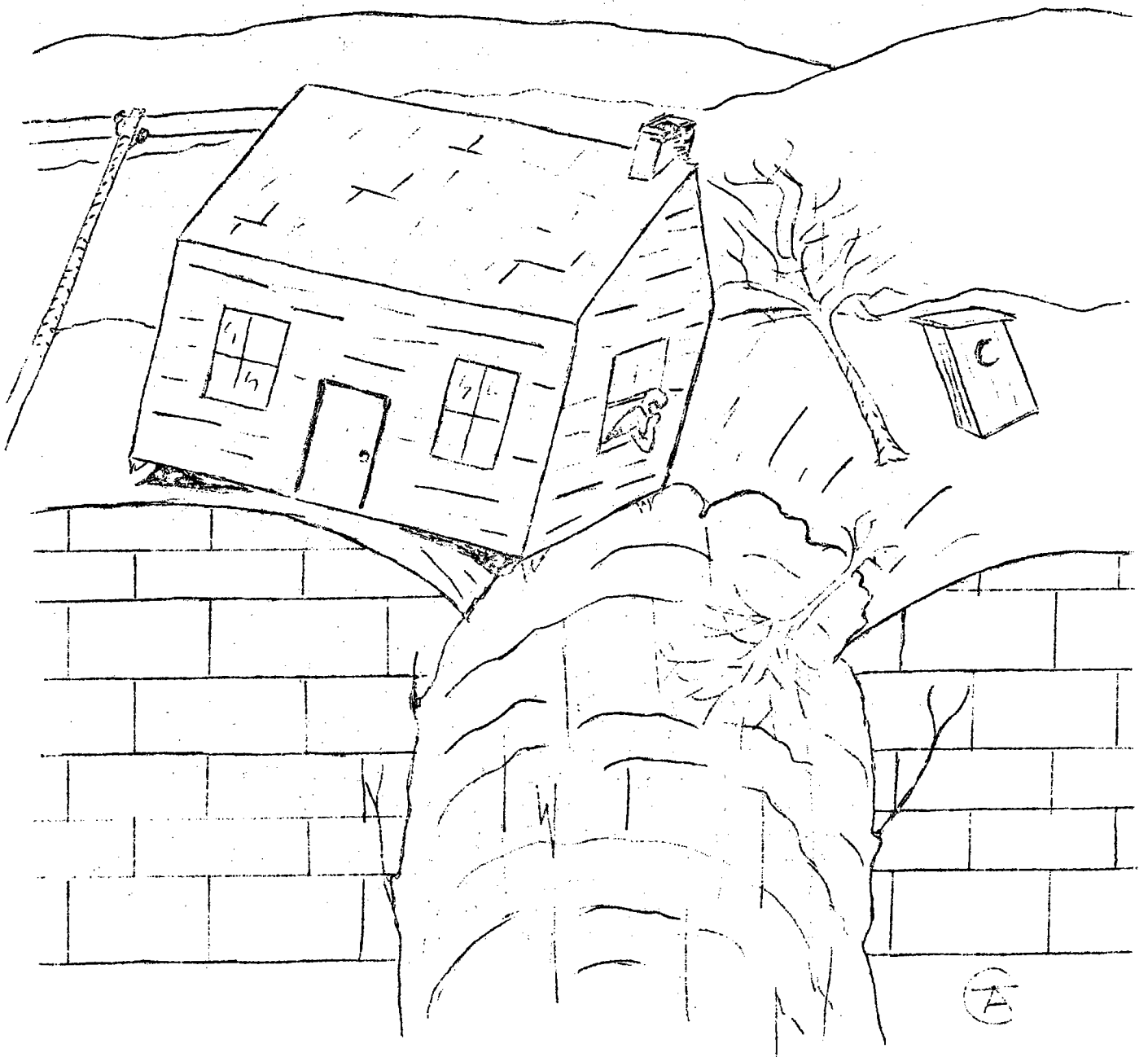
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TUPA: "I went caving today and had a great time-----I'll have to go more often."

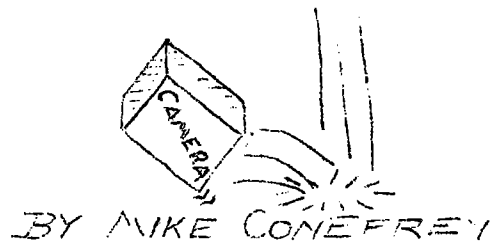
SLUSARSKI (POLOCK) : "This is my last beer--- until I open another one."



HELLO VPI CAVE CLUB? REMEMBER Y'LL
VIANTED ME TO KEEP AN EYE OPEN FOR
ANY CAVES? V/ELL 000



THE CAMERA BOX FOR CAVERS



Recently, articles have appeared in several grotto publications discussing the choice of a camera for speleo-photography. These articles have dealt mainly with the rangefinder 35 m.m. cameras which are small, and relatively inexpensive (\$60-\$200). The main point of these articles was that these cameras were just the thing to buy for speleo-photography since they could be stuck in a cave pack without crowding and be adequately protected from moisture by a plastic bag. Now, for the most part, this is true, but I contend that other considerations may make this approach distasteful, if not impossible, to the average caver. Here's why:

1. "How many cameras do you own?" For most people, the answer is "one." Most people are unwilling or unable to buy a camera just for caving, and instead buy an all-purpose camera, usually a 35 m.m. single lens reflex. Most cameras in this category are bulkier, heavier, and more expensive than the rangefinder 35's and their owners are not likely to trust them to the questionable protection of a canvas cave pack and a plastic bag.

2. "How close can you focus?" If you want to look a bat in the eye, or get a really good shot of those tiny gypsum needles, you need to get really close. The rangefinder 35's, with a few expensive exceptions, have permanently mounted lenses. This, coupled with the inevitable parallax problem, makes difficult or impossible the use of accessories such as close-up lenses, extension tubes, or bellows. Also Wide-angle and telephoto lenses, etc. are impossible.

For these reasons, if you own, or are planning to own, a 35 m.m. S2R or a larger-format camera, you will sooner or later wind up carrying it in an ammo box.

Now, there are many disadvantages to an ammo box as a camera case; weight, bulk, and the fact that most people find them hard to pack. The overwhelming advantages are that an ammo box is water and dust proof and virtually indestructible. To get around that "hard to pack" angle, here's how to custom-fit your ammo box to your camera and accessories.

First, start with a 5.56 m.m. ammo box rather than the smaller 30 cal. box. This will allow more generous use of padding around the camera and still leave room for plenty of extra goodies.

In addition to an ammo box, you will need corrugated cardboard, $\frac{1}{2}$ " foam, glue, and tape. The $\frac{1}{2}$ " foam is the easiest size to work with and is most easily cut with an electric carving knife or a ripple-edged bread knife. Corrugated cardboard is used here because it is cheap, absorbs shock, and will help soak up any water that might get into the case.

First, cut a piece of cardboard to fit the bottom of the box. Then cut a piece for each side, making these pieces slightly oversize. Put the bottom piece in and then jam the side pieces in so that all five pieces are held firmly in place by friction.

Now place your camera (without leather case) into the box with the largest body dimension up. On 35 SLR's, this means standing the camera up on its side with the back parallel to the sides of the box. Cut and place across the box a partition to divide the camera half from the accessory half of the box. When doing this positioning, allow for an extra layer of cardboard at the bottom and top of the camera.

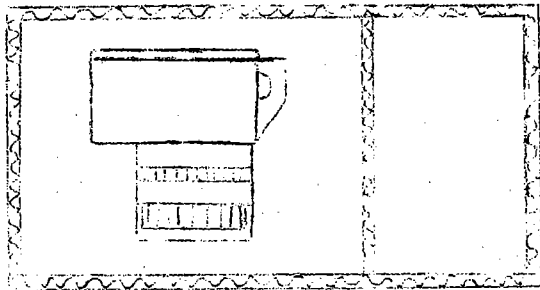
Now you should have the box lined with cardboard (fig. 1) and divided into two parts. The object now is to add strips of cardboard to the camera section to take up the space unused by the camera so as to leave the camera in a snug fitting slot, supported by the body, not the lens. Those strips of cardboard can be cut to shape and then glued or taped together, then glued or taped into place.

The camera is now taken out, and a piece of foam is cut to fit the bottom of this space. After putting the foam in, the camera is replaced. The upper side of the camera should now be within $\frac{1}{2}$ " of the top of the box; if not, add more foam or cardboard on the bottom. It should be noted that the space under the lens should be filled so that the body is snugly held, but the cardboard should not touch the lens; instead a piece of foam should be glued here to support the lens. The space between the lens and the side of the box should be filled with cardboard, but the lens should not quite touch it. This is to avoid damaging the lens if the box is dropped. Now the box should resemble fig. 2 and 2a. Note that the foam is used only in a horizontal position. Vertical pieces of foam tend to catch on camera corners and contacts and make the camera a bitch to get in and out of the box. Cut cardboard edges may be covered with electrical tape to give a smoother surface.

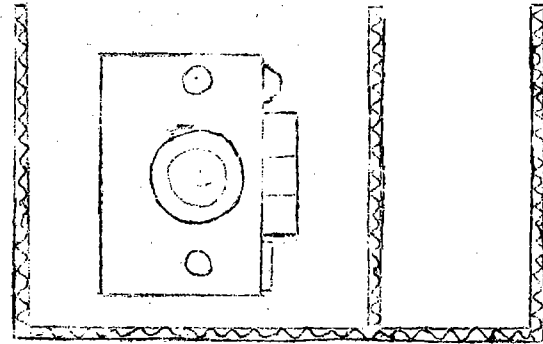
The accessory half of the box may now be divided up in the same way, with separate compartments for each accessory. Build up the bottom so that each accessory is $\frac{1}{2}$ " from the top of the box.

A piece of cardboard is now cut to fit the top of the box and built up with strips of cardboard and foam to take up the space above the camera and accessories. This top should fit snugly into the box and a handle of avalanche cord may be fitted to the top of it to facilitate removal (see fig. 3)

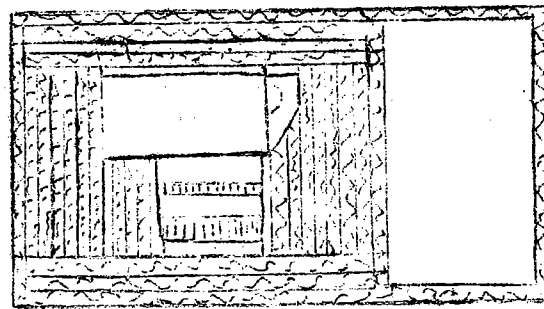
TOP VIEW



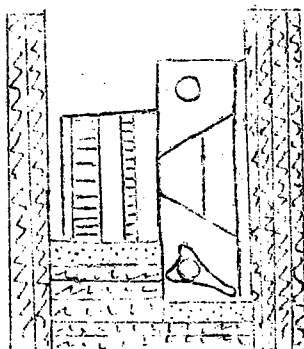
SIDE VIEW



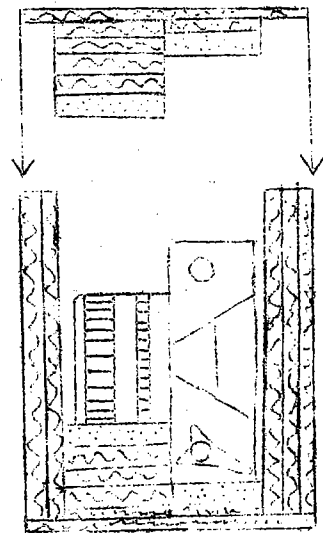
TOP VIEW



END VIEWS



$$1/4" = 1"$$



You should now have a compartmental case which will allow you easy and quick access to all your equipment while protecting it from all but the most severe shock. I have dropped a camera packed like this 15 feet in a cave, onto rock, with no damage at all.

In closing, a few helpful hints for living with a camera in a case:

- Use a 2" strap for carrying your ammo box. Eight hours of hard caving with a 15 pound box on a 1" strap on your shoulder is enough to make anyone give up speleo-photography.

- In all but the cleanest of caves, a lensbrush, lens tissue, and lens cleaner are not merely useful, but vital; at least, if you like your camera they are.

- Most cave shots are ruined by under-exposure. When in doubt, open up another f-stop.

- Remember, just because your camera is in a padded ammo box, this does not mean it will survive a fall down the entrance of Pig Hole. Spare it all the bumps you can and don't let others carry it for you unless they realize how delicate it is.

- Lastly, take your time. Caves like to have their pictures taken and are usually willing to wait until you get set up for a good shot, so do it up right, and use your imagination.

* * * * *

When your rope gets even a little dirty, wash it in a machinewasher using handwarm water. The reason for using hand-warm water (not over 110°F) is not that a higher temperature is harmful but that nylon becomes stiff while it is at higher temperatures and the rope needs to flex the dirt out.

From: Mountain Safety Research Newsletter
Issue 6, May 1972
"Life of Climbing Ropes"
pg. 14.

* * * * *

BANQUET '73

FEBRUARY 9, 1973

SQUIRES STUDENT CENTER

WRITE FOR RESERVATIONS IF YOU DON'T
RECEIVE AN INVITATION.



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The Framework and Purpose of this article:
This resume of salt in sweat is intended for the city dweller who goes climbing/hiking on weekends and perhaps for a week. He eats a normal balanced diet and is in good health. His job does not include hard work with sweating. There is no profuse sweating over more than two hours on the climb. He is not taking diuretic or heart medicine.

We are writing this article as a matter of mountaineering enjoyment and sometimes party safety. A climber whose physical ability is impaired by salt deficiency isn't having much fun and may even subject the party to hazard if he gets a cramp or becomes exhausted and can't move.

The particular stimulus for this article is the consequence that befell me last summer after reading somewhere that taking salt tablets was somehow inadvisable. Accordingly, during and after a long hot dry day of climbing, I drank five quarts of water for rehydrating and took only one salt tablet. That evening, my leg muscle cramped severely following a sudden motion. I relieved the cramp immediately by lying down and relaxing, but then I began to wonder why. Wondering led me to ask the experts and study the references they provided. Here is a summary of the findings.

How to Judge Sweat Quantity: Profuse sweating is the condition in which the entire skin is moist and drops of sweat run down the face. The rate is roughly one quart per hour. It is best measured by weight loss but since you don't have scales with you, keep track of the total amount of fluid you drink per day, including the rehydration period in the evening. Roughly two quarts of this was lost in respiration and excretion and the balance was lost in sweat.

Remember that a dry breeze (hot or cold) can evaporate sweat quickly. Your sweat rate may be up but you may not notice it. Short-term thirst is not a measure of sweat loss. If you don't take in enough salt to replace losses, you probably will not take in enough water (at the time of sweating) even though it is available, and you will become dehydrated without being aware of it.

Salt Content of Sweat: Sweat varies in salt content according to how profuse the sweating is. At low rates, salt is reabsorbed into the sweat ducts, and salt supplement is not needed. At high rates, this recapture is less effective and the salt content can easily reach the equal of six salt tablets per quart. (0.5 grams or 8 grains sodium chloride per tablet.)

Thus, when I took in a total of five quarts of water during and after a climb, I should have taken in salt equal to 30 tablets. I had taken in the equal of say 10 tablets in my food, leaving a deficit of 20 tablets, which I should have taken as I drank the water.

In the event this quantity of salt seems large to you, let us look at some direct quotations from the medical literature:

Newbungh: Physiology of Heat Regulation, Chapter 5, by Robinson, p.218: High rates of sweating in unacclimated men may result in the loss of considerable salt (20 grams or 40 tablets daily) and leads to deficiency. Salt deficiency frequently leads to heat cramps. Even moderate deficiencies contribute to disturbances of heart-blood vessel functions and may lead to heat exhaustion. Heat cramps may develop when large volumes of sweat are produced and the water loss is restored without replacing the salt loss.

Wilkerson: Medicine for mountaineering, p.135: Recurrence of muscle cramps (heat cramps) can be prevented by providing a daily supplement of 10 to 20 grams (20 to 40 tablets of 0.5 grams each) of salt and a generous fluid intake.

Ruch & Patton: Physiology & Biophysics, Chapter 45 by Woodbury, p.893-4: Sweating rates as high as 1.5 quarts per hour over several hours have been reported although such high rates are not maintained. The salt concentration in the sweat is about 3.5 grams (7 salt tablets) per quart.

Practical Comments: The first quart of sweat gets its salt from food.

Don't take salt if you don't have water. Concentrated salt in the digestive system will pull water from the blood stream and make you even more dehydrated.

Conversely, don't take lots of water if you don't take a proportionate amount of salt. Plain water in the digestive system will pull salt from the blood stream and make your muscles even more salt deficient, leading to muscle cramp.

Anticipate your need for water and salt. If the day is going to be hot, start to take salt tablets as soon as you start to sweat. Don't wait for a party-delaying emergency to occur.

Ome Daiber has told us that headache is often a symptom of salt deficiency.

One salt tablet per cup full of water is about right to supplement the salt obtained from food. You can guess close enough because the kidneys will adjust the ratio for you by excreting water or salt, whichever is in excess.

Use wax-impregnated salt tablets to avoid gastric distress. The plain tablets (Thermotabs) dissolve a bit too fast and can be upsetting. Morton Salt makes wax-impregnated tablets, which dissolve slower, but only in 1,000 tablet packages. To fill the need, we are repackaging in 60 tablet vials. If you want waxed tablets to dissolve faster, crush the tablet before swallowing (with water).

Normal urinary output should be an ounce an hour while hiking or climbing. If less than that, there is risk of dehydration with reduced physical performance. In other words, make it a habit to drink more water than thirst indicates (taking salt also if sweating or rehydrating from sweating).

Remember that salt loss on a Saturday on the approach march which is not made up that night can lead to cramps, heat exhaustion and reduced performance the next day on the climb.

General Comments: What about POTASSIUM? It is a fad, just now, to lace beverages with potassium because Gatorade did it. But potassium loss in sweat is low, and potassium is plentiful in foods such as fruits (including dates, and raisins), rice, potatoes, nuts, lentils, peas, meat, chocolate, and many others. A normal diet has enough potassium to provide for 6-8 quarts of sweat. So you don't normally need to be concerned about potassium deficit.

Exception: If you are not taking food normally, as in the case of lack of appetite, vomiting or diarrhea, large amounts of both sodium and potassium will be lost and a doctor may wish to advise supplements. Conditions like this are beyond the scope of this article.

"Electrolyte" Beverages: Dilute orange juice, made from frozen concentrate, is an excellent climbing beverage. Add 1/3 level teaspoon salt (2 grams) per quart, if you have been sweating, and then you have an electrolyte drink." You do not take salt tablets with this beverage. Similarly with Kool-Aid, etc.

Gatorade, by contrast, has only 0.6 grams of salt per quart. If you need 10 grams of supplemental salt, you have to drink 16 quarts of Gatorade to get it. This is not easy.

Many powdered drink mixes are available. Read the labels and do your arithmetic. If the label does not tell you the salt and calorie content, write to the manufacturer. If you don't know these numbers, you don't know where you are in salt management. Include calorie calculations, because you don't want to displace a balanced diet by pure sugar. Suppose you do drink six quarts of the stuff, and the calorie content is 400 per quart. You would then be getting 2,400 calories from sugar alone. This is not good food management.

Acclimatization: The body adjusts gradually over 10-20 days of daily profuse sweating to conserve salt. Accordingly, supplemental salt need starts to decrease after the first few days. You probably won't need more than just salty food after acclimatization.

Our gratitude to the following doctors who have patiently guided us in preparing this article:

Dr. Frank Lawrence, Maine Medical Center, who is writing a full report which will be published by us as a pamphlet later.

Dr. James Burnell, Kidney specialist, Seattle, who has researched sodium and potassium metabolism for 20 years.

Dr. Joseph Bell, Calimesa, who researched water and electrolyte management in volume loss shock.

Dr. Stephan Elek, heart specialist, Beverly Hills, who supplied data on potassium in foods.

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* * * * *

ON RELIGION:

Billboard: God is the Answer.

Wolf: What was the question?

BumperSticker: Death is the wages of sin.

Wolf: What if you're working over time?

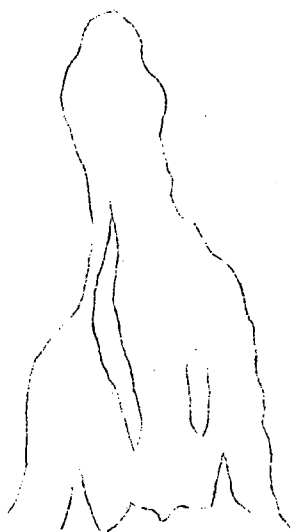
Lor: Christ died for your sins... So make it worthwhile.
Don't let Him die in vain.

Ed Eoud: If Jesus lived, I guess I must.

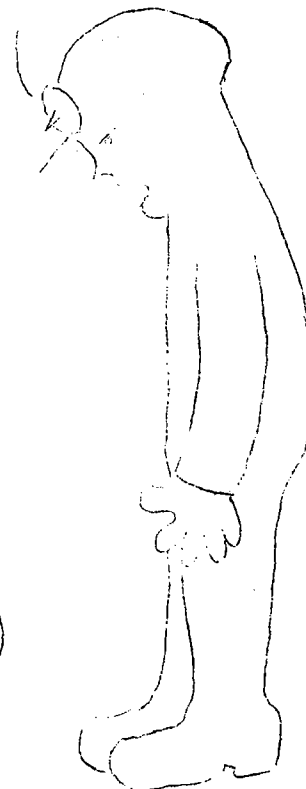
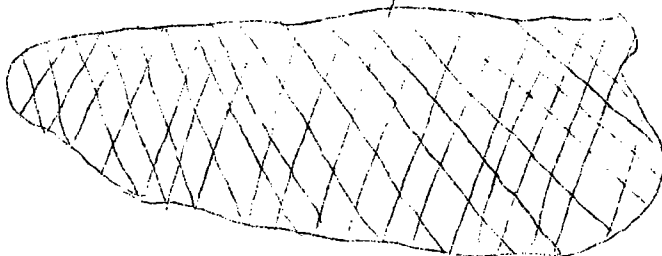
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THAT'S ONE OF THE
PIT FALLS OF CAVING.



THU-SPLAT!



MR/MOORE

Reurgence

ROLF McQUEARY

Eyes open... dusty beams pour in
and a maelstrom of colors, haize,
and thought fragments slow and
disperse into a white plaster cracked sky.
The old timer awakens.

He lays there at first, finding it
a bit difficult to move, a feeling
he has been all too familiar with
ever since that time. His head
pounds slighty and fleeting images
of the past force him to be still.
He finds it difficult to separate
dreams from reality. He knows no
one now... They are all dead... No
one to share tales or illusions or
anything. He is looked upon as senile;
an eccentric, fading also into distant
atmosphere. By his side a tarnished
lamp sits. Its flame grows dim...

Color code list: Fall, 1973

Black bk	Green g	Purple p	Yellow y
Blue b	Grey gr	Red r	
Brown br	Orange o	Silver s	
Gold gd	Pink pk	White w	

Equipment: White followed by two other colors.
 Cannot start or finish a color code with white.

Bob Alderson b-w	Doug Perkins bk-w-r
Jim Altman o	Russ Peterson b
Bob Amundson r-w-r	Doug Olson bk-r-gd
Susan Arnold br-g-y	Keith Ortiz p
Bob Barlow y	Janet Queisser g-b
Buddy Bundy bk-b-bk	Rabbit y-b-y
Bruce Byrd r-g-bk	Jerry Redder r-b-r
Tom Calhoun r-y	Ed Richardson
Ned Coleman b-g-r	Lynn Richardson g-y-g
Mike Conefrey g-bk-g	Mike Richardson r-br-r
Rick Cooper bk-o-bk	Tom Roehr r-o-r
Kathy Cronau r-g-r	Herb Safford bk-g-bk
Howard Dame bk-r-y	Mark Slusarski bk-w-bk
Jan Davis br-y-br	Pete Schnaars r-w-b
Glen Davis b-g-b	Bill Stringfellow r-b-y
Don Davison bk-s-bk	Randy Stoutenburgh b-bk-g
Moose Dawson w-b-w	Guy Turenne bk-r-bk
Richard Day br-w-r	Dennis Webb b-w-b
Jim Denton bk-o-s	Rick Whitt w-bk-w-bk-w
Bill Douty g-w-g	Annie Whittemore r-g
Pam Douty b-gr-b	Whitt Whittemore w-bk-y
Mike Frieders y-r-y	Polly Wick br
Twila Frieders b-r-w	Mike Wolf g-gr
Carol Godla br-y	Randy Wood g-o-b
Kevin Gross r on y zia	Boots Yeatts bk-pk-bk
Larry Grubbe r-y-b	Doug Yeatts
Steve Hall r	Lor Windle s-bk-gd
Karl Hamm r-bk-r	Scott Anderson bk-g-bk
Nancy Hamm b-bk-b	
Gens Harrison g-r-g	
Jim Hixson r-gr-r	
Tuna Johnson g-y-b	
Cheryl Jones b-o-b	
Joe Kimak	
Caroline Lewis r-pk-r	
Ed Loud b-r-b	
Robyn Loud b-r-bk	
Jean McCarthy g	
Rolf McQueary gd-bk-gd	
Nancy Moore w with r circle	
Ed Morgan g	
Gary Moss r-b	
Bob Page b-y	
Bill Park r-y-bk	
Dale Parrott bk	
Cathy Parrott bk-b	

MISCALCULATIONS

In June of 1944, Hitler stubbornly concentrated all his Panzers in the wrong place at the wrong time; he lost the war.

In December of 1973, certain members of the VPI Cave Club stubbornly concentrated all their vertical gear in the wrong place at the wrong time; it was only through the magnificent efforts of four who challenged that a particular cave was not lost. This is their story:

Starting around 0900 hours, two bold trainees, one at the Aux. Dump and one at his dorm, started preparing for their journey. While the former met with resistance organizing the rest of the recon group, the latter found out that the departure would be detained from 1000 to 1100 hours. Eventually, the group got organized. In a frenzy of activity, each member separated to perform his function. By 1115 hours, our group re-united to obtain sustenance. We were approaching zero hour.

While preparing to push off, circa 1200 hours, we encountered the opposition: The Clover Hollow Clan. It was they who had taken all the vertical gear that we so desperately needed. Despite our pleas and threats, they resolutely withheld our necessary gear. They departed and left us helpless.

Dejected and demoralized, we sullenly departed on our voyage. While enroute, we decided on a mode of revenge on the Clover Hollow Clan. We would intercept them at their destination and replace their ladder with a rope. We altered our route accordingly and came upon the members of the evil Clover Hollow Clan procrastinating at the entrance. With the element of surprise on our side (even though we had been somewhat taken back by the slowness of our adversary) we approached recklessly. With fear in their putrid hearts, the greedy enemy cavers retreated in disorder. It was only when they were rallied by fearless Perkins (the arbeiter) and fearfull Jones (the ersatz-fuhrer) that we had a challenge.

Going quickly into action, our co-captain raced to the fore to face the foe. The enemy, thus confronted, tried peaceful means as a solution. While they engaged our co-captain in heated debate, the remaining members of our party, due to attrition, suffered. I, taking on my responsibilities, joined in the discussion.

When we learned that the opposition needed rope and carbide, we decided to be kind (for the initiative was now ours) and deal with them. In a quick action, led by myself acting for my side, and Perkins acting for the other, we made a deal. We gave up a heap of carbide and an immensely long rope and two packs of lucky crackers in turn for two dirty, grubby cable ladders. Though successful in our mission, we felt cheated; but we conquered our cave and that's what counts. A magnificent finish.

Wolf & Windle

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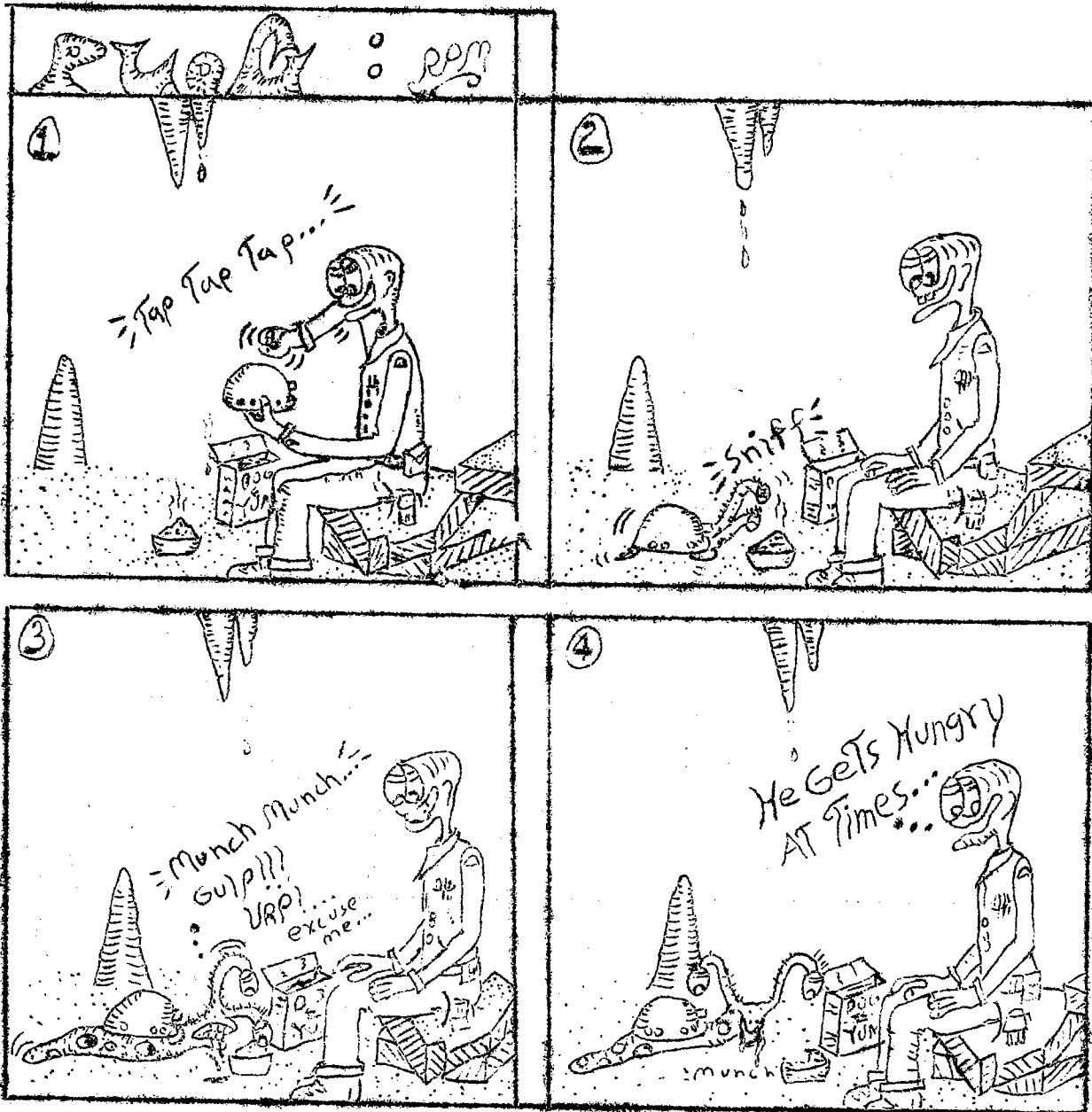
Mike Wolf: I don't think there is anything that Ior
can do to gross me out.

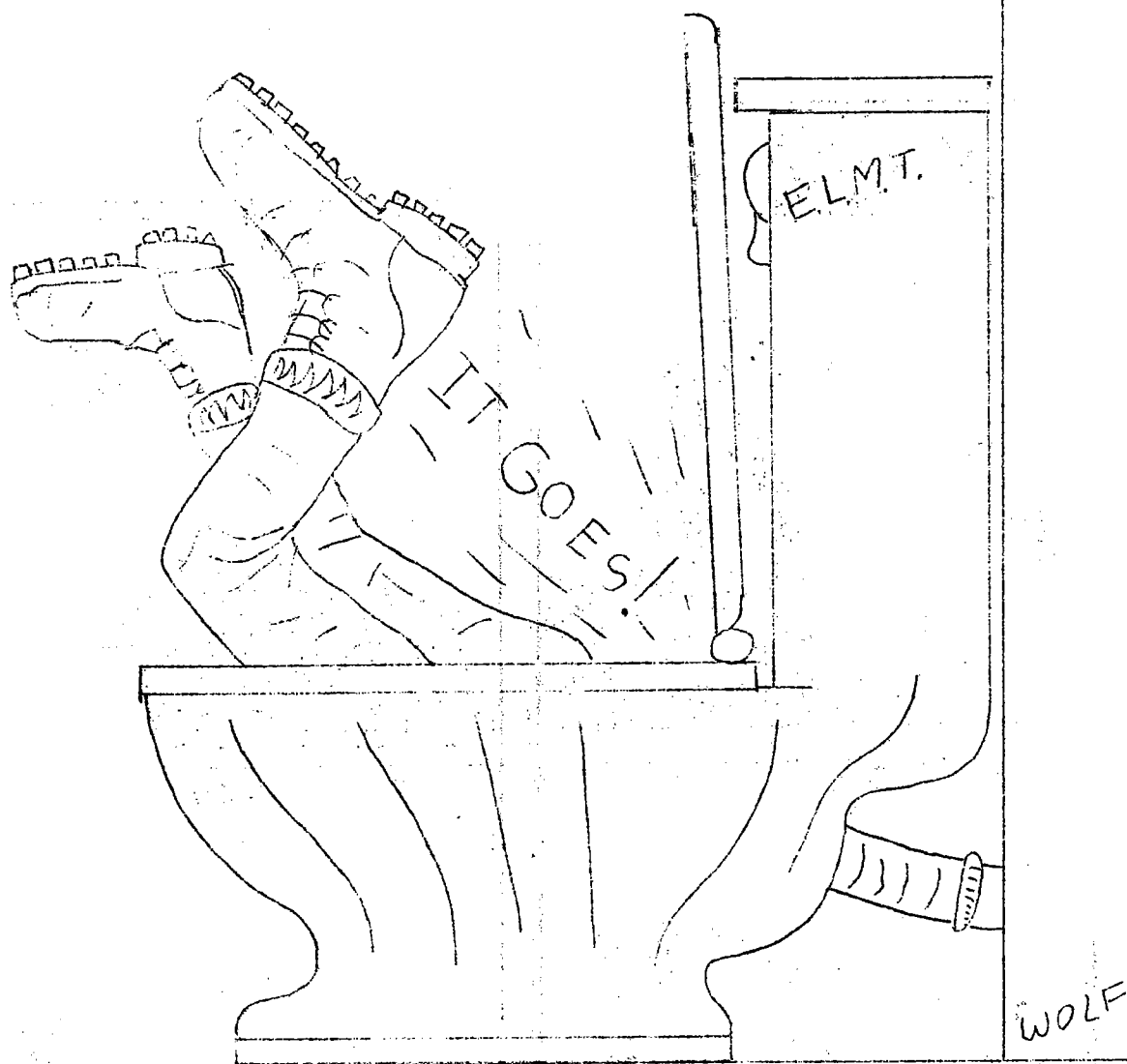
Ior: E-I-E-C-Y-Y (sounds of throwing up on plate)

Mike Wolf: I take that back!



MR MOORE
IDEA BY LINDA
MOORE





SEE YAWL IN THE
WINTER