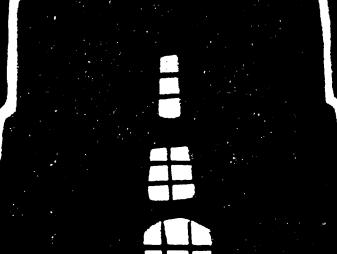


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AMUNDSONS



**FALL 1982**

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**Volume XXII. Number 1**

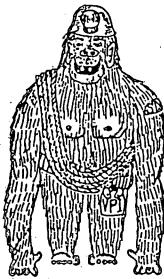
# THE TECH TROGLODYTE

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

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FALL QUARTER 1982

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VOL. XXII, NO. 1

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President's Column.....	Steve Conner.....	1
Editor's Column.....	M. Handler and J. Washington.....	2
Grotto Grapevine.....		3
A Tribute to Tommy Watts.....	Jean Simonds.....	5
Cartoon.....	Bob Ulfers.....	6
Identify the Caver.....		7
Stalking the Big Shot.....	Chip Clark.....	9
Starnes Goes.....	Lawrence Britt.....	16
How to Tie a Butterfly Knot.....	Keith Smith.....	18
Backing Off a Bowline.....	Keith Smith.....	21
Double Fisherman's Knot.....	Keith Smith.....	21
Recipee for a Rope Litter.....		22
Stimey & Stimeyette.....	Keith Smith.....	25
Strength Tests of Longitudinal Versus Lateral Sewing in 1"		
Tubular Nylon Webbing.....	John Mummery.....	26
From the Sign-Out Sheet.....		28
Virginia Cave Protection Act.....		29

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. The subscription rate is \$1.50 per copy or on an exchange basis. All letters to the editors should also be sent to this address.

# STYMIC SPEAKS!

With the onset of Fall quarter, the VPI cave club found itself suffering the wrath of the college of Agriculture. We were booted out of Smyth 146 by Assoc. Dean Boyd, who contended that we had 'been a problem for 13 years.' Though we offered as much resistance as possible, we were forced to move our meetings across campus to Pamplin 16. However, the relocation appears to have had little adverse effect on the drive to acquire prospective members. At the time of this writing, the club has an all time high of 47 prospective members! President-of-Vice, Keith Smith, with the help of Capt. Ed Fortney, held vertical training sessions on the Ag-E bridge every Friday afternoon throughout the fall. They also initiated many Wednesday night drinking sessions at the Hokie House to allow members and trainees to socialize and discuss caving activities. Without a doubt, Keith's and Ed's efforts are largely responsible for this fall's successful recruitment of prospective members. In addition to the Friday vertical sessions, Lawrence Britt supervised a rescue rigging session at Pighole to allow new cavers to learn and practice rigging techniques.

In the summer and early fall, the club boosted landowner relations when we undertook a fence building project in Skydusky Hollow. We constructed a 1500 foot long fence between Buddy Penley's property and Mrs. H. A. Banes' property to show our appreciation for their letting us, as well as cavers from other areas and grottos, use their land and caves.

Another highlight of the fall was the cave club's involvement in the Miller Recycling Campaign. Many thanks to Kent Thompson for all of the time and effort he spent to bring a first place prize to the club, along with the satisfaction of beating all of the frats.

And of course, as usual, we did lots of caving this fall. This winter, I expect, we'll do even more caving! There is going to be a practice rescue in January. We are also going to make a concentrated effort to boost interest in cave surveying. When we have our ridge walk in February, hopefully many club cavers will become involved in the mapping of the caves we find. Afterall, the reason for having the ridgewalk is to find and survey new caves and to get VPI cavers involved in a project that we can work on together.

So it looks like we are going to have a good winter to top off a great fall! I'm really looking forward to working with everyone on the practice rescue and the ridgewalk, and I think everyone who gets involved will enjoy their experiences.

Keep On Caving!

Steve 'Stymie' Conner

# FROM THE EDITORS

If you're wondering why your TROG seems lighter than usual, don't worry that we went to much expense to get space-age, ultra-thin paper at the printshop. We didn't. Despite our incessant pleading for articles and actual threats of bodily harm to anyone who refused to write, well, we think we did the best we could with what we got. Enjoy.

Much thanks, as usual, goes to those who did help us out with artwork and articles, and also to the TROG party staff. We probably could have done it without you, but it wouldn't have been as much fun.

Um, our topic for discussion this quarter is cave conservation, eh, beauty! There are some very wealthy and prominent caving organizations in Virginia who seem to feel that the only way to preserve any cave worth going into is to limit access with a gate. We have a vehement objection to this philosophy.

First is the problem of access. Gates serve to keep out the riff-raff, the wildlife, and even the occasional competent caver who just doesn't happen to have a key. Many of us fit in the latter category. We respect and admire the people who gate caves with rare and fragile formations in heavy traffic areas. Also the people who genuinely believe that their gates protect endangered species and historical or palaeontological artifacts.

But there are caves in Virginia for which we can't figure out why the gates are there. So that the landowner isn't bothered? Fear of injury? Spite? Power? Come on, this is serious.

Gates on unnecessarily gated caves serve two purposes: to harrass and infuriate responsible cavers and to tantalize those who are not so responsible. Put yourself in the boots of a non-organized caver or an unenlightened organized caver who encounters a gate for the first time in a cave he has been to before. Then put yourself in the tennis shoes of the local nerd cavers who find a breeched gate for the first time. Add to this the fact that the responsible cavers don't have a key or don't go to the cave very often, due to access problems.

The result? Disaster, most probably. One solution would be to give keys to the grottoes, but our favorite is simply to stop the gating of sport caves.

Maneer  
Randall

Jim  
Washington

The New River Valley, situated in the remote mountainous zone of Southwest Virginia, had remained isolated from the evolution of the rest of the planet. The rough, steep, and arid karst zone had created a distinctive fauna. The homo sapiens left their above ground environment ages ago in favor of a better lifestyle underground. They evolved into troglodytes, perusers of the miles of cave passages found in the area. This mysterious group of creatures, after centuries devoid of contact with the outside world, now have a chance to unravel their story...buckle up and hold onto your teeth...Oh No!! Its the...

## GROTTO GRAPEVINE

Our story this issue starts with VPI troglodytes at Richard Cobb's house for the 4th of July party. Unfortunately, 25% of the cavers remaining in Blacksburg that weekend separated their ankle. Another successful summer party was Russ Peterson's annual August orgy.

Bernie gave a bar-busting party in September and gave his liquor stash away to the hungry wolves. He's now in Germany.

Quiche Smith had an "On Belay" party where everyone had to wear a rappelling seat and be firmly attached to an anchor point in his apartment. Entrance to his balcony was via cable ladder. Jim Jones got confused and went up the ladder upside-down. Glen Davis had the evil "belay hook."

OTR was once again a good weekend (every body told me I had a good time). Taking awards in the Speleo Olympics was Dennis Vaders (2nd overall), Chuck Shorten (3rd overall, PRP, Combination Climb, bowline tie), Don Anderson (cave pack), Maureen Handler (women's overall), Sue Haezel (2nd on women's mechanical climb). All won attractive plaques which were designed and made by Chris Amundson and Pat Shorten. Friday afternoon was the first annual "More liquor" party. Sunday's infamous "more wine" party resulted in a battle field of dead soldiers, dead cavers, and Ben Keller and Philip Balister, who drank wine spiked with moonshine and Red Lady 21. Everyone enjoyed seeing each other puke their guts out. Far from the smell of vomit around the VPI canopy, was the sauna, where even Hugh "least likely to get laid" Beard couldn't score. During sober moments that weekend, Buckwheat and Co. were at Seneca Rocks, the Shorten's and Co. were hiking along Otter Creek, and Gary Rouse and Ed Devine went exploring "unusual holes". Jerry Redder took all the young rug rats caving and was thanked by being bombarded by Water balloons. Maureen, Vikki, and friends started a chaotic mud-wrestling bout and Don Anderson was thrown into the horrible mire by some 'friends' that he hadn't seen in 15 years. Not to be out done, Dave Cinsavich and Ben Keller went glass wrestling. Don Davidson and Cheryl Jones came all the way from Oman for this? Jim Jones, alias Steve Smith, made an entrance into the campground with his ruthless two man motorcycle gang.

Other events this quarter: Pete and Linda Sauvigne bundled up their kids and dog into their urban assault vehicle and moved to Rockhill, SC. Mike and Susan Moore moved to Richmond. Wayne Burstein got married. Glen Davis has a case of champagne (dwindling) from

his wedding. Ken and Brenda Bonenberger are expecting a munchkin in May. Joe and Carolzo had a house warming party, as did Bob and Jean Simonds and Karen and Moose Dawson.

Eric Anderson and Co. went climbing at Yosemite this summer, Maureen went caving in Massachusetts, and Janet Queisser and the Sauvigne's made it to Convention in Bend, OR.

Halloween party this year was held at Joe and Carolzo's new place. Some of the better costumes were Kent Thompson as the Hulk, Reese Little as Chicken Little, Keith as a Gibbs cam, Richard Cobb as a redneck beer joint. The Peterson's went as a pack of Lucky Strikes, Carol and Joe went as Ma and Pa Kettle. Hugh shaved his beard and went New Wave. Gary Rouse was a nerd caver with a collander hard hat, flashlights and kite string. Joey Fagan was an Ol' Nigga. John Mummersy and Danny Wright were Tylenol capsules. Redder, in true character, went as a preppie. Sue and her flame went as the Blues Brothers. John Kline went as a Jawa. Chip Clark showed up with out a costume.

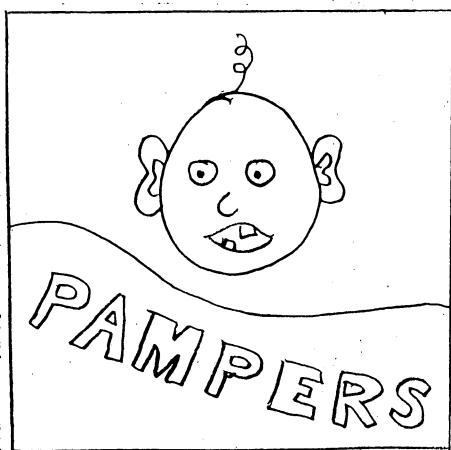
On the lighter side, Capt. Ed Fortney traded his Datsun junker for a Rambling wreck. Rouse bought a ghetto cruiser caving vehicle. Lawrence Britt is selling four of his vehicles and is getting out of the 4WD business. Dave and Chucks Jeeps refuse to die. Jackie Redder became a paramedic. Rumor has it that Cobb will be back in town.

A sacrificial prussik knot was burned while Perkins lead everyone in Amazing Grace at this year's first Party on the Mountain. So far its worked---no rescues.

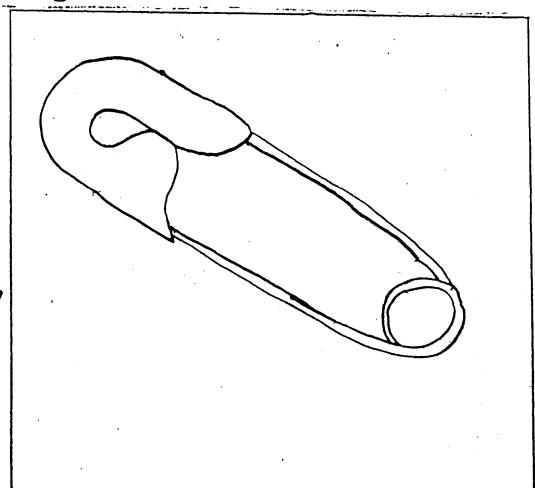
Finally, caving scoops: Starnes is progressing; the Zokaites' finished the upper level of Newberry's and the Devil's Staircase. Diddley Dip Devine, after a duo of dud diddley pole trips, has "officially" finished Paul Penley's Cave. He left an open invitation for anyone to try Diddley's UnDone Dome.

Frank Gibson and Steve Connor each led trips to Ellison's this summer. 5 to 6 weekends was all it took to put up Buddy's fence, where the tractor powered beer can crusher was perfected. It was also found that you could launch fence posts into the air when pulling fence. Stymie Connor, Ed Devine, Bill Koerschner, Bill Stephens and Ben Keller mapped in Roppel over Thanksgiving. Maureen went to the Dirty Ole Man's Convention and into Unthank Cave with John Holsinger, Phil Lucas and the Easter Pig. A possible second entrance was found.

Again I would like to thank Kent Thompson and all the people who picked up cans and went dumpster diving for helping us win the Miller Six-Pack Pick-Up again this quarter. Congratulations to all for a job well done.



BOX OF  
READY  
MADE SEATS.



CARABINER

# A Tribute To Tommy Watts

The bellow of deep laughter, the sea captain's hat nested atop his head, and a heart-warming smile---who else but Tommy Watts. All who knew him treasured his friendship.

Richard T. (Tommy) Watts III did not recover from his from cancer surgery in January 1981, and died on December 18, 1981. He had his wish not to return to the hospital. His death is a great loss to the caving community and his many friends.

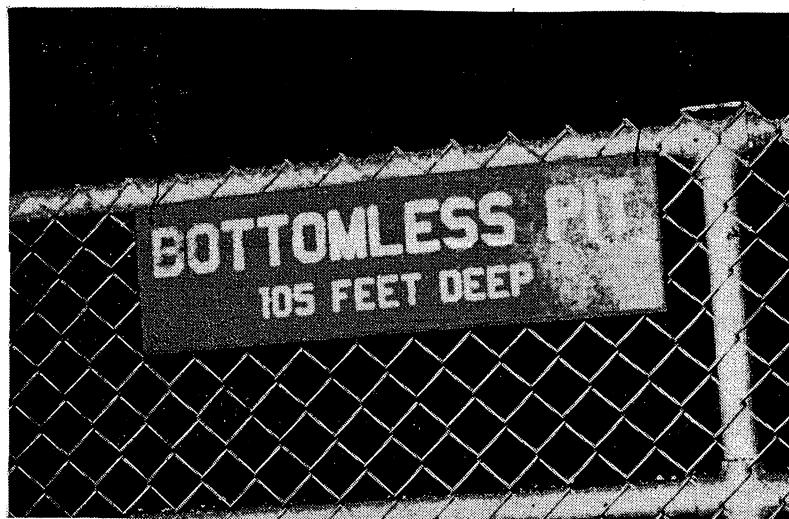
Tommy was a NSS fellow and life member. In 1941, he helped organize the VPI student grotto in Blacksburg, Va. and served as the first president. He was already an NSS member in 1942, when he and several others started the wheels turning to affiliate the VPI student grotto with the National Speleological Society. All these efforts led to a national meeting of the NSS at VPI on September 5-6, 1942.

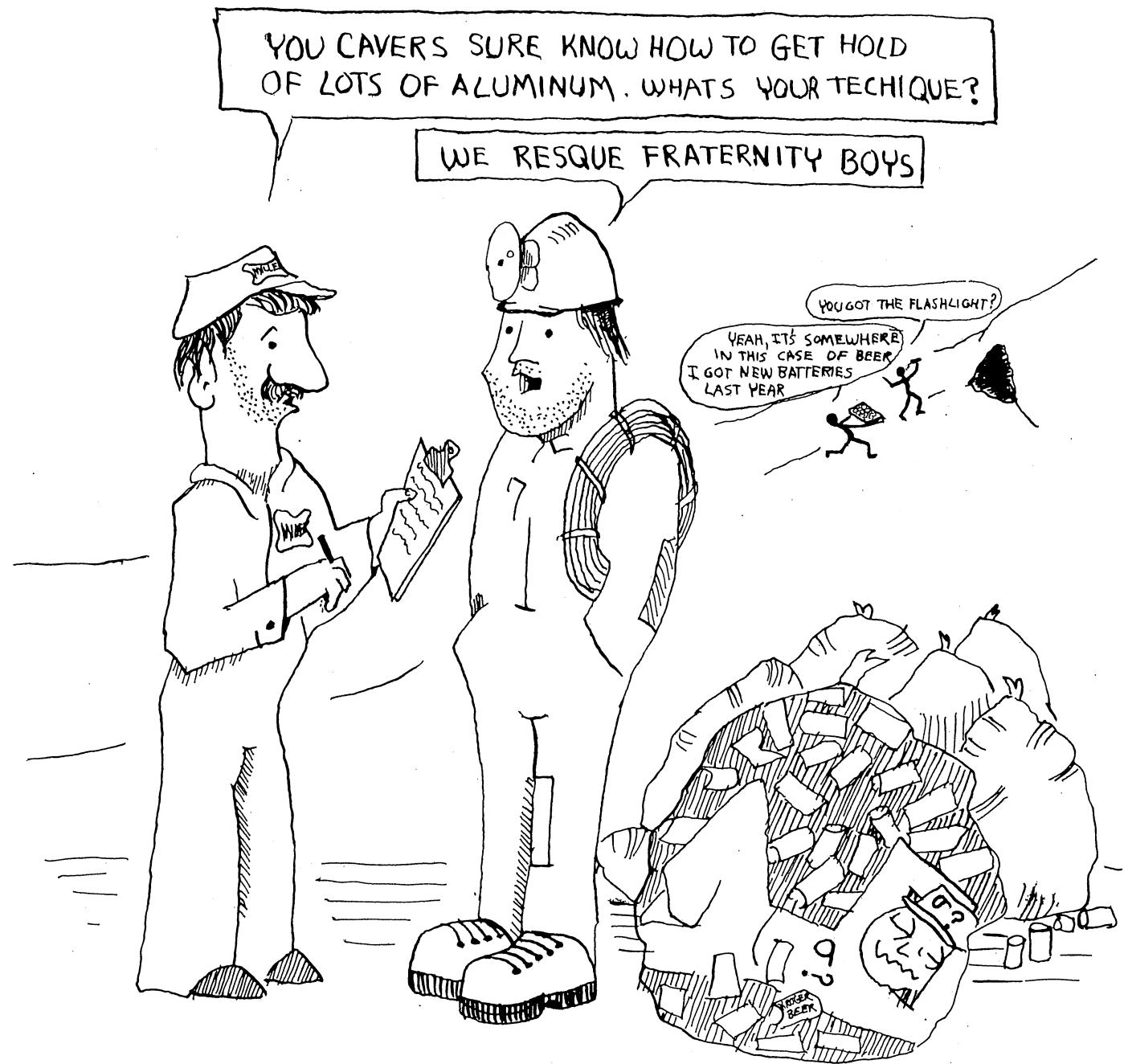
Tommy sparked interest in underground exploration and is credited with the invention of Watt's Corset, a bosun's chair used with a capstan and winch to raise and lower cavers in vertical pits. He was involved in the exploration and mapping of Clover Hollow Cave, Pig Hole, and other area caves. He is also remembered for the "old fashioned" hayride on his eighteen-wheeler flatbed truck at the 1954 Old Timers Reunion in Franklin, W.Va.

Later years found Tommy busy with his company, Roanoke Hauling and Rigging, making jewelry, discussing the merits of the family pet rabbit, George; and at work in his house boat, Hazel, which was docked at Smith Mountain Lake. For years Tommy dreamed of building a yacht made of slate steel, and his dream was at last realized in the Mountain Queen in 1979.

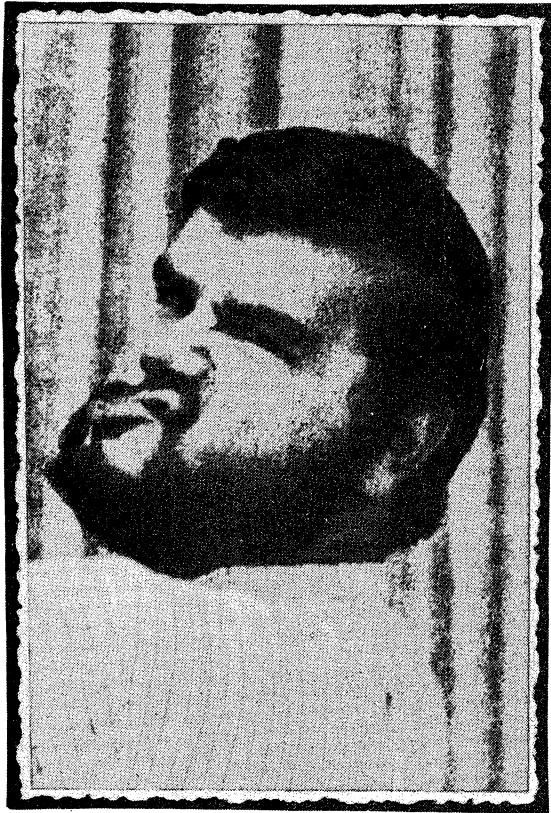
No words can capture the impact of a big man with an equally big heart. Tommy Watts touched each of our lives in different ways, but we all share the loss of a dear friend.

Jean Simonds

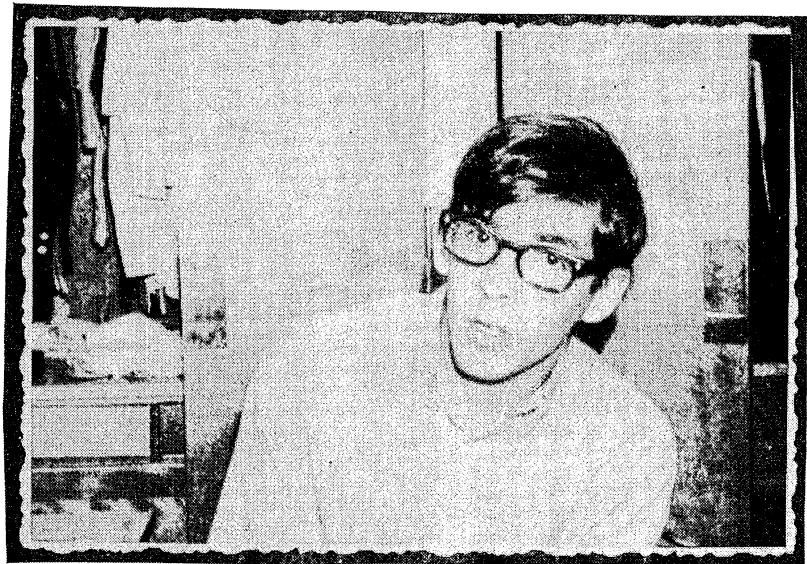




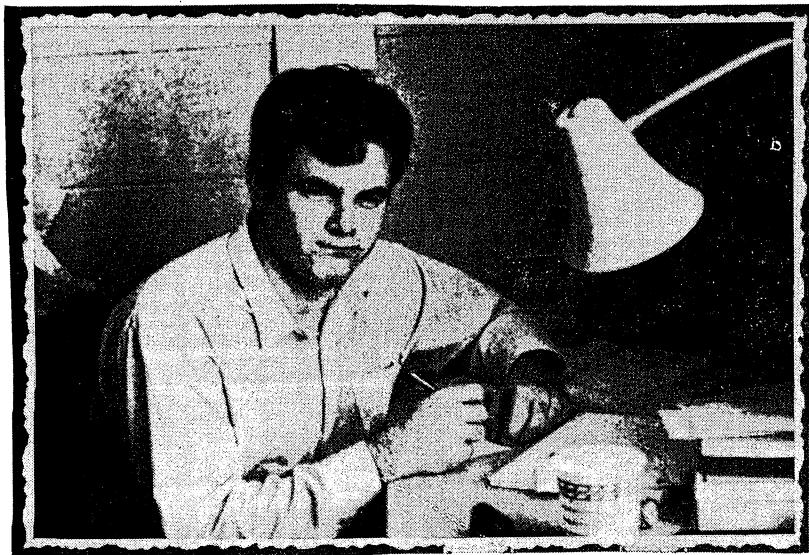
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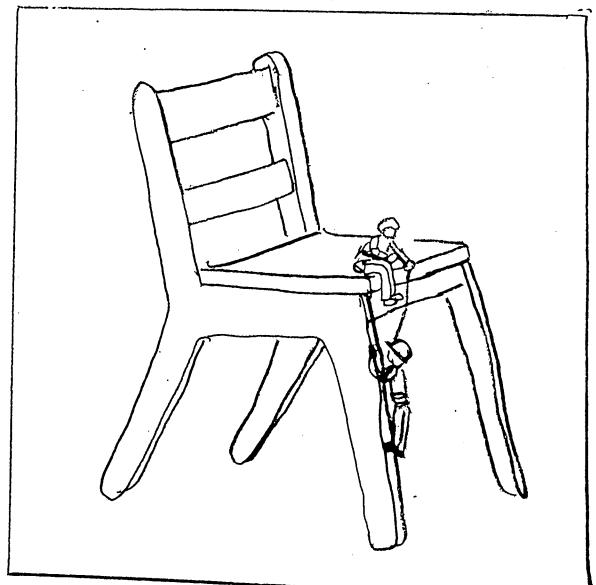
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CLIMBING SEAT



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BEE-LAY



7

# Stalking The Big Shot

A minor treatise in which several fundamental laws of Cave Photography are ennumerated.

By Chip Clark

Encouraged by some past successes in (mostly horizontal) cave photography, I began to contemplate the virtues of a big, beautiful pit shot; one that would elicit excited grunts from my fellow cavers, and scare the pants off of my insurance agent.

My quest took me to Blacksburg Va. where my faithful caving companion Glen 'Rubberlegs' Davis, his sidekick Jette Feduska, and I descended upon the previously serene household of Gary 'The Yo-Yo' Moss.<sup>1</sup>

Our arrival was greeted with the usual shocked dismay, animated threats, and curses, but Gary eventually resigned himself to his fate. A lengthy alcoholic discussion followed: I wanted a deep drop with a sharply defined lip which would enable me to shoot vertically down the pit. In addition, the pit should be relatively accessible from the surface...because nobody would particularly enjoy spending most of their caving time dragging bags, boxes, and crates of equipment to and from the drop.<sup>2</sup> Past photo trips had taught me (and my friends) that it took hours to set up and shoot a good series of cave pictures; and being both cowardly<sup>3</sup> and lazy, I had no desire to push the limits of patience or endurance. Besides, I was rapidly running out of friends.

Gary, the experienced vertical-type among us, thought of several spectacular drops in nearby caves, but, recalling our levels of competence, wisely rejected them. At last we decided upon Bill's Rappel,<sup>4</sup> a nifty 160-foot drop in the Newberry's section of the Newberry-Banes cave system north of Dublin, Va. It was a clean drop along one vertical wall and could be reached in less than an hour from the surface. We set off amid dreams of fame and fortune, and Gary's grumblings.

The cave formed along a series of fissures, and, as we entered, the passages formed a twisting, sloping descent on a talus floor. Soon, the passage ended in a keyway 15 feet above the floor of the Balcony Room. Gary rummaged in one of our packs and produced a cable ladder. After rigging the ladder and a piece of Bluewater, we rappelled the drop into the Balcony Room.

The Balcony Room is roughly cylindrical; 40 feet high and 50 feet in diameter. The keyway we had entered from occupied the center of one wall; the opposite wall was climbable all the way to the ceiling, and several flat ledges lay along the route. These ledges were splendid vantage points to view the entire room, people descending the cable ladder, and the drop of Bill's Rappel itself, which occupied easily half of the floor area. The talus and breakdown floor of the room stretched up to the edge of the drop. The loose consistency of the floor material kept us from venturing close to the edge.

Glen and Gary rigged the drop from a hidden corner of the room, behind several large boulders where the floor was free of debris. I scampered around the room taking pictures of the cable ladder, the key way, etc. I managed to induce Gary<sup>5</sup> to climb the ladder for a few action shots. He was magnificent, but the photographic results were dismal.

On this first trip, I was carrying minimal camera gear, since I didn't expect to get perfect results the first time out with standard equipment. I was carrying one 50 caliber ammo box (the standard of most cave photographers) with my Alpa 35mm camera, its 50mm macro lens, a trusty Gitzo tripod, and two flash units; a Honeywell 770 for a main light, and a Vivitar 102 with a photocell slave as a fill light.<sup>6</sup>

We all rappelled the 160, did a brief bit of sightseeing in the lower passages, then ascended to the surface and sought food and strong drink.

The photographs from the first foray were dull and dark; reflecting, in my learned opinion, a general lack of planning and an over-enthusiasm in my trigger finger. Even so, the first trip was invaluable in teaching us the layout of the drop, difficulties to be encountered, etc. It was a learning experience. Next time we would be ready.

Several weekends later I reported on the failure of the first pictures and reappeared on Gary's doorstep with several extra, weighty sacks of equipment. To the original ammo box had been added a second box with a Cannon Ft camera with a 28mm wide angle lens, a Graflex flash gun, and five dozen flashbulbs.



The Abyss

Before beginning our journey we sought the company, expertise, and carrying capacity of Don Anderson<sup>7</sup>, who had, in a moment of deranged murmuring, asked to participate in a cave photo trip. Since he was the most enthusiastic (i.e. least familiar with this sort of foolishness) member of the trip, we gave him most of the equipment to carry.<sup>8</sup>

With Don, but without Jette, we returned to the Balcony Room, rigged the drop, and began taking pictures.

One shot involved someone (Gary) standing at the edge of the drop, rigged onto the rope as if beginning the rappel. This was staged in the beginning with Glen and Don, on different ledges of the far wall, firing the Honeywell and Graflex flashes. The distances from the flashers to Gary averaged 50 feet so it took several flashes from each person to properly illuminate the scene. It was a good try.

The results were good, but not salon material. In the 15 seconds that it took for the light men to recharge and reload, Gary's helmet lamp had moved an inch or so and left a smear on the negative instead of a sharp point.

This trip I ignored the Balcony Room itself and concentrated on the drop. Since I sought a picture looking straight down the drop, the camera would have to be somewhere over the drop, and over the rope. The edge of the pit where the rope went over was a ledge varying between 6 inches and 2 feet wide. I would, of necessity, have to be sitting on this ledge operating the camera as the others in the party clambered over my frightened cadaver and descended to be photographed.

These plans are easily concocted on paper at home, beer-in-hand. But there on the ledge, problems arose:

1. I have a fear of heights, inspired by a driving ambition to reach a Ripe Old Age.

2. Being dead is no fun.<sup>9</sup> And,

3. My eternal resting place (where all cavers will be reunited in one great Old Timers Reunion) is saving me a warm place by the Fire, and although my trip there is assured, I have no desire to commence my journey at  $32 \text{ ft/sec}^2$ .

Gary and Glen rigged a safety line (two separate lines, really) which I tied into using a seat sling and a cam. Then I crawled down onto the ledge and cautiously nosed over the edge...there was a slight bulge to the wall below me, so I would have to extend the camera outward away from the wall in order to get a clear shot of the drop.

I used my tripod as a boom, extending the legs and center column and keeping the legs together. To brace this boom I discovered that I had to 'sandbag' the legs with some large, heavy mass...so I lay down across it. I adjusted the camera so that it was aimed downward, picked up a good aperture (f. 4.0), set the shutter on 'B' (Bulb, for time exposure) and Gary climbed over me and rappelled into the pit.

When Gary reached bottom he unpacked a bag containing the Graflex flash gun and several quarts of flashbulbs and prepared to illuminate Don, who would be the next person down.

Don rigged in and rappelled down about 50 feet, stopped, and got comfortable. Several shouted messages later, we knew that Gary was ready at the bottom, so I opened the shutter with a long cable release and yelled "Fire!" Gary fired several bulbs aimed to

illuminate the walls of the drop and one bulb aimed upward to silhouette Don on the rope. Several variations of this set up were tried for as long as Don could remain suspended in mid-rappel. When he finished his descent, Gary rappelled down and took up his old position.

Eventually Glen, too, became tired and finished his rappel. I had shot a dozen slides or so (Kodachrome 25 film), so I packed up my cameras and stuff and rappelled down to meet the others. Once at the bottom, we convinced Gary to prussik back up carrying the Honeywell strobe, and to stop every 20 feet or so and flash the walls. I would take a single time exposure of the entire ascent. I also shot several pictures of him as he began his climb, and after the successful ascent, I tried to light the entire drop from below by firing a dozen bulbs in succession. (The picture didn't work, but I did have a flashbulb explode—a real thrill! It blew incandescent glass 40 feet in all directions. I'm glad I wasn't shooting someone's portrait. I never trusted those bulbs again, and I have since had two more explode.)

Gary, at the top of the drop, began to pack up the ropes while the rest of us climbed the twisting Devil's Staricase, a nasty little path that leads to the topmost ledge overlooking the Balcony Room. Once there, we packed up and headed for the surface. We had been under for 13 hours.

Back home in the Big City, I gave my precious film to Kodak and held my breath. But the slides were useless...even with the multiple flashes, too little light had been used. And the pit shots were all blurred: While lying on the tripod, my breathing, heartbeat, and nervous tremors had shaken the camera. I was not happy.

Since everything that could have gone wrong had gone wrong, I decided that the next (final) trip would be flawless.

For the last trip, I decided to be totally prepared. I tested the flashbulbs by shooting a test roll of black and white outside my apartment building one night, and found that my estimates of distances were horribly inaccurate. Furthermore, the FP flashbulbs were only as powerful as the Honeywell strobe. (ASA 25 guide number 80). I remedied that at my friendly neighborhood photo store: the biggest flashbulb made is number 3, the size of a 200-watt screw in light bulb...in a reflector, it has the ASA 25 guide number of 280! SHAZAM! I bought a dozen.

With limited number of flashes available, I set up a shooting schedule (just like Hollywood) of what shots would require what equipment, and who would be needed



The photo crew: Gary Moss, Don Anderson  
Glen Davis

where.

At last, one of the real Cosmic Truths of Cave Photography had been graphically illustrated in two trips of useless pictures: Through practice, I can hold still for fairly long periods, but People Invariably Move. All exposures containing people would have to be done in a single shot: the super flashbulbs would help in this regard, since a single bulb would reach the distances involved, and there would be no delay for reloading a bulb or waiting for the strobe to recycle.

Once again Glen and I descended upon Blacksburg. We dragged Gary, kicking and screaming, from his apartment: his roommate, Skip Whitehurst, came along to watch the fun. We were joined by Jim Hammil and his buddy George. What a crew! Half a dozen native bearers laden with camera gear, ropes, rations... just like in National Geographic. Wow!

We didn't waste any time: we rigged the main drop (Bill's Rappel), my two safety lines, and this time a fourth line to support the camera and tripod. I had discovered that I could extend and spread two legs of the tripod and, by tying a light rope at the point where the camera attached to the tripod, have a stable, three point suspension.

Soon all was in readiness; the Alpa (loaded with Pantaomic-X film..this time if it was a poor image I would try to save it in the darkroom) was prefocused at infinity, aimed down the drop, and stable on its two legs and nylon line. I was settled on the ledge with a rubber bulb type pneumatic cable release and a flashbulb socket stuck on the end of a piece of coat hanger wire.

Gary, as usual, was the first man over the side. He was carrying a pack full of flashbulbs, bulb sockets, batteries and connection wires. Dangling from his belt was the Graflex flashgun loaded with a number 3 bulb. He rappelled down 40 feet, steadied himself against the wall and announced that he was ready. He aimed the flash down; in its reflector it would illuminate the walls and floor of the drop. My bare flashbulb from above would illuminate him and the upper parts of the drop.

Gary had never seen one of the bulbs go off and he was a little scared of the thing. I opened the shutter and yelled "Fire."

Gary closed his eyes and pushed the button.

...The whole world lit up!

It was beautiful! I fired my bulb when I saw the light from his bulb, closed the shutter and grinned like Hell. . called it "Moss' Long Shot."

That was just the beginning. Once on the bottom, Gary loaded two bulbs and positioned himself directly below Skip Whitehurst, his roommate, who was the next to descent. With his Wheat lamp, Gary could see the camera's position at the top of the drop and placed the flash so that its light would be eclipsed by Skip's body, resulting in a silhouette. Two bulbs were used, one aimed upward in the reflector to illuminate the upper walls, the other open bulb to light up the floor and lower walls. I called the shot "The Whitehurst Variation on Bill's Rappel."

When Jim Hammil was rappelling, Gary and Skip fired bare bulbs from opposite ends of the floor, and I added a third from above with my socket-on-a-wire. This shot showed off the drop to its best...I

called it "Pretty 160."

Reunited at the top of the Balcony Room a while later, we did a repeat shot of Gary at the top of the drop, beginning the rappel. This time it worked; two big bulbs did the trick, there was no blur. I called the shot "Abyss."

With the last of the superbulbs exhausted, we beat a path back to the surface. The final trip had taken just over ten hours.

We all parted company: the others returned to their dull lives of drinking and debauchery, and I returned to the spine-tingling excitement of the darkroom. Several weeks later I had cranked out a batch of prints to be distributed to the people on the trips, interested bystanders, and the NSS Photo Salon Judges.

The finished prints were good. They had required over 30 hours of caving time on my part alone, a lot of grunting and groaning from a bunch of kind-hearted, patient friends. I was sure the judges would like "Pretty 160" the best, with "Moss' Long Shot" running a close second. As usual, I had misjudged the Judges; they liked that damned arachnid "Daddy-Long-Legs"<sup>12</sup> which had taken about two minutes to set up and shoot.<sup>13</sup>

So that's the story of how I got the Big Shots...A lengthy tale, I must confess, but nonetheless a lot of fun.

I have, of late, begun to think of some of the other pits that I might apply my techniques to; and I'm sure that I can recruit some of my good old caving buddies to help me out...again.

Unfortunately Gary suddenly left town for Antarctica, Glen hasn't been seen in several months...left his job rather suddenly. Most Curious.

#### Footnotes:

1. Gary received the title Yo-YO not so much for his intellect, but rather for his caving style. He had recently tried to pass through the infamous "Pinch" connection between the Bone and Norman's caves and had been unable to negotiate the passage due to some extra poundage acquired at the local pizza parlor. This amused the VPI cavers so much that they awarded Gary the Yo-Yo caver of the year award in hopes that he would stick to big drops (at which he is quite proficient) and keep out of tight squeezeways (in which he is not).
2. Phantom's First Law of Cave Photography: The weight of camera equipment is directly proportional to the time it must be carried.
3. Phantom's Second Law of Cave Photography: (Self-Preservation). The value of the equipment, the proposed photographs, and the photographer's life decreases rapidly over the duration of the trip.
4. Named after Bill Cuddington.
5. Ethyl Alcohol is quite good for this purpose; in extreme cases offers of food or threats of bodily harm will suffice. In this instance I offered to buy him a beer or two when (and if) we got out alive.
6. Phantom's Third Law: (This probably overlaps one of Murphy's Laws). In any cave photographic situation, the most expensive piece of apparatus will break down first, the least expensive piece will never break down. My camera has been repaired three times in six years. I'm on my third tripod, the Honeywell was rebuilt once and the crummy \$15 Vivitar flash has never failed once.
7. Misery Loves Company. This is blatantly plagiarised, but is just too appropriate to leave out. The genius who first uttered these great words must have accompanied some cave photographer in the recent past.

8. Phantom's Fourth Law: The cumbersome quotient (grunt factor, a unitless measure combining the qualities of mass, volume, awkward shape, and fragility of the equipment and degree of difficulty of the passage) of equipment is inversely proportional to the enthusiasm of its bearer.

9. I have it on the best authority that being dead is no fun. Once in my college days I had a roommate who was dead. He later joined a fraternity and was resurrected (but at tremendous cost to his academic standing).

10. These bulbs were focal plane (FP) class bulbs which have no metal wire mass inside, but rather generate light by detonation of a small blob of chemicals located on the filament. The bulbs were very old and apparently cracked, allowing oxygen and moisture to enter the envelope.

11. I maintain that I have suffered more than the others. Not only did I have to tell the other cavers that the pictures were failures twice, but I had to face my wife and her well-worn fungo bat at my doorstep at the end of each weekend..."So you've been out with those gross cavers again..."

12. The other shots didn't do so badly: "Abyss" got a merit award, "Pretty 160" go an honorable mention, "Moss' Long Shot" and "The Whitehurst Variation" were shown.

13. Phantom's Fifth Law: There's No Accounting For Some People's Tastes.

## Berry's World



© 1982 by NEA, Inc.

9-B

"You realize, of course, sir — REAL MEN  
DON'T EAT QUICHE!"

# STARNES GOES

Since my last report on Starnes, we've found a lot more virgin passage. One of the thirty foot high leads at the end of the main trunk yielded almost 300'. Ed Devine once again brought in his infamous scaling pole. While Jean Simonds and I continued mapping a fifteen foot high lead nearby, Ed, John Lohner, Donnie Carter and Diane Dlugos went up the virgin lead.

The scaling pole was made up of three foot long aluminum angle bolted together with brackets. A cable ladder, belay line and two tag lines were connected to the top of the pole before it was raised and braced. After the tag lines were secured, a two man test on the then vertical cable ladder readied it for use. The first man up was on bottom belay through a pulley and once up, he top belayed everyone else.

They found a ten foot square passage disappearing upslope over large active limestone dams and flowstone terraces. While Jean and I were squeezing through tight miserable crawl and getting mud up our noses, they were running up this virgin lead like crazy people. The passage continued up about two hundred feet before it hit the top of the limestone layer and became breakdown. A single crawl through the boulders brought them over a fifteen foot blind pit. Forty feet further on they came to the top of a twenty five foot pit. Having no further rigging they had to turn around. The high lead Jean and I were in finally ended with about 300' of passage. It had been previously explored.

A few weeks later, I went back with John Lohner, Dave Cinsavich, and Scott Poole to do the virgin pit. John had left the drop rigged with a loop of sling so after pulling up a ladder, I went up and top belayed everyone else. After stepping carefully around the rimstone dams and webbing, climbing, and crawling, we got to the top of the drop. I rigged a ladder to a projection on a ledge and John descended. A single crawlway was found, tight and sharp with popcorn. Ten minutes later, John emerged from the hole with clothes ripped, skin bleeding, and language regressing (why do you think I sent him!). It didn't go.

In the middle of July, I took Kenny Bonenberger and a very hung over Ed Fortney in to do the thirty five foot drop with a thirty foot cable ladder in a lower section of the cave. During the course of mapping one stream crawl, Ed named it the 'Birth Canal.' It perfectly recreated the wet, slippery, tight sensation of what birth must have felt like. At the end of it was the 'Womb Room' with the stream dropping out of a fifteen foot high lead. Since Wilburn Valley (where Starnes is located) has very little surface drainage, there may well be a main trunk stream yet undiscovered. The 'Womb Room' stream may be the best lead to that main trunk.

Another passage was found, the 'Belly Flop'. A body size crawl several inches deep in mud went downhill and around a corner. The passage had standing water half filling it and the air flow was almost violent, but we decided to save it for later on when we were already cold. So far it hasn't been pushed. It took me five minutes to slip and slide backwards and uphill out of the twenty foot crawl.

The next weekend, John Lohner and Pam Neiser went with me to attempt to finish all the entrance leads. While still in sight of entrance light, we took a side passage which led to a twenty five foot drop. After descending a ladder I rigged and sliding down a steep slope. I found myself in a forty foot diameter room with a sixty foot ceiling. I was then fifty feet below the top of the drop. A stream coming from one wall, around the room and back into the same wall explained the dubbed name, the 'Horseshoe Stream' room.

The stream entered the room through breakdown and definitely looked virgin! After prolonged conning, Pam finally agreed to do it. The chute, later named the Ascending Colon, went up at a 45° angle, was body sized, had numerous loos rocks, and was half filled with the chilling stream. Twenty feet later, Pam yelled down for us. After waiting for John to enlarge it for himself (and me), we joined Pam in virgin passage. The next room after the first twenty foot diameter one, had the stream coming out of a two inch by twenty foot slot in the ceiling. Bummer! However, to make things interesting, at the top of the opposite slope sat a perfectly round five foot diameter rock that looked, for all the world, like it would come crashing down. This room became of course, the 'Temple of the Sun' room from Raiders of the Lost Ark. Two more rooms and a small fissure remained to be mapped and we were finished.

The first week in August, Kenny Bonenberger and Mike Futrell joined me to finish all the entrance leads. One of these was 'Pack Rat Run' on the east side of the entrance slope. Another was a tie in for a 350' loop. The rest of the trip was finishing miscellaneous leads.

The total number of mapping trips is now twelve. The passage length is up to 1.43 miles and still going. Six virgin high-leads, a whole section beneath a sixty foot waterfall drop, and one or two dozen crawls remain to be explored and mapped. The cave goes on!!

Lawrence Britt

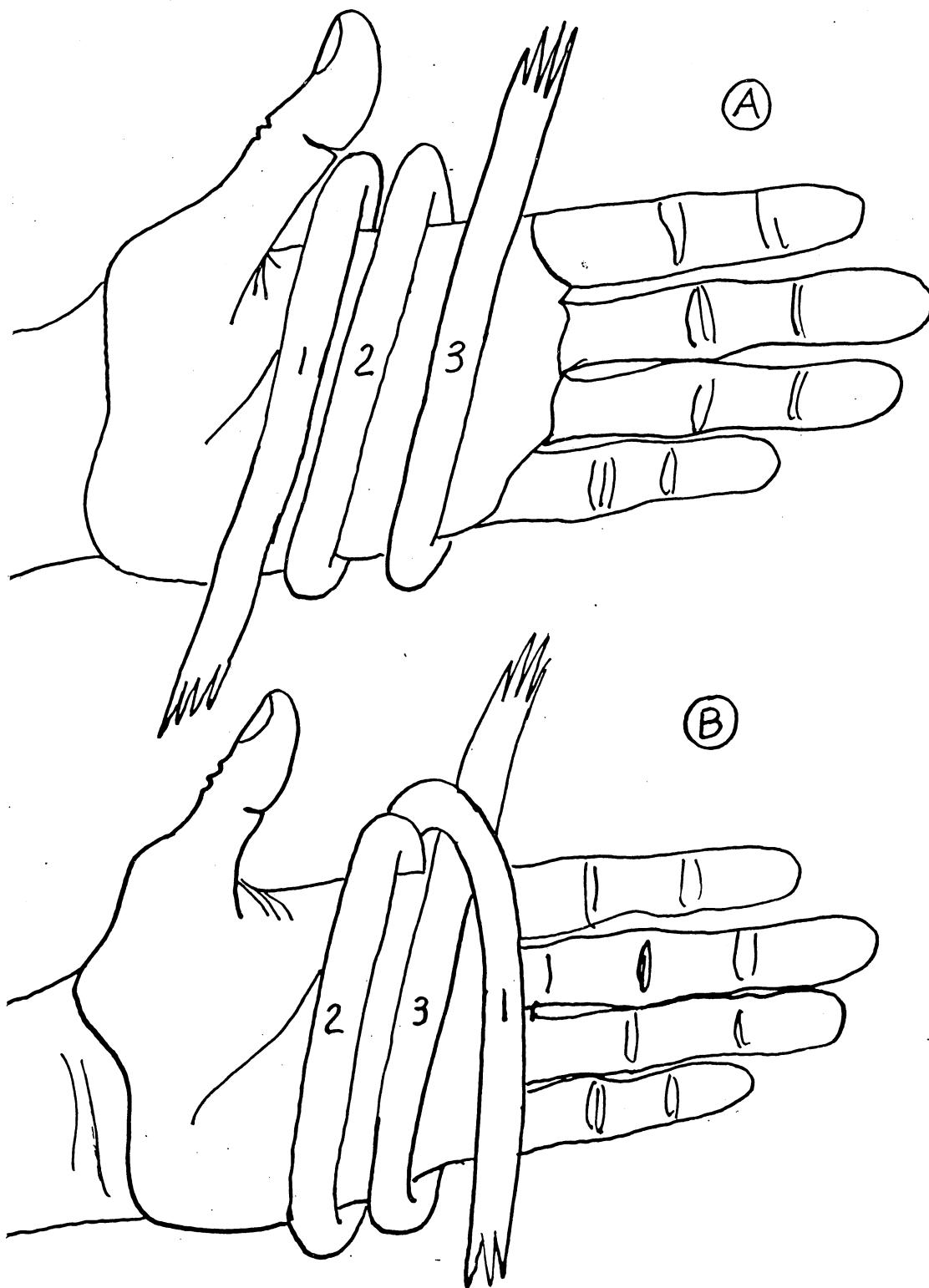
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**CAVE CLUB**  
**You're Number One!**

#1            Nov. 3

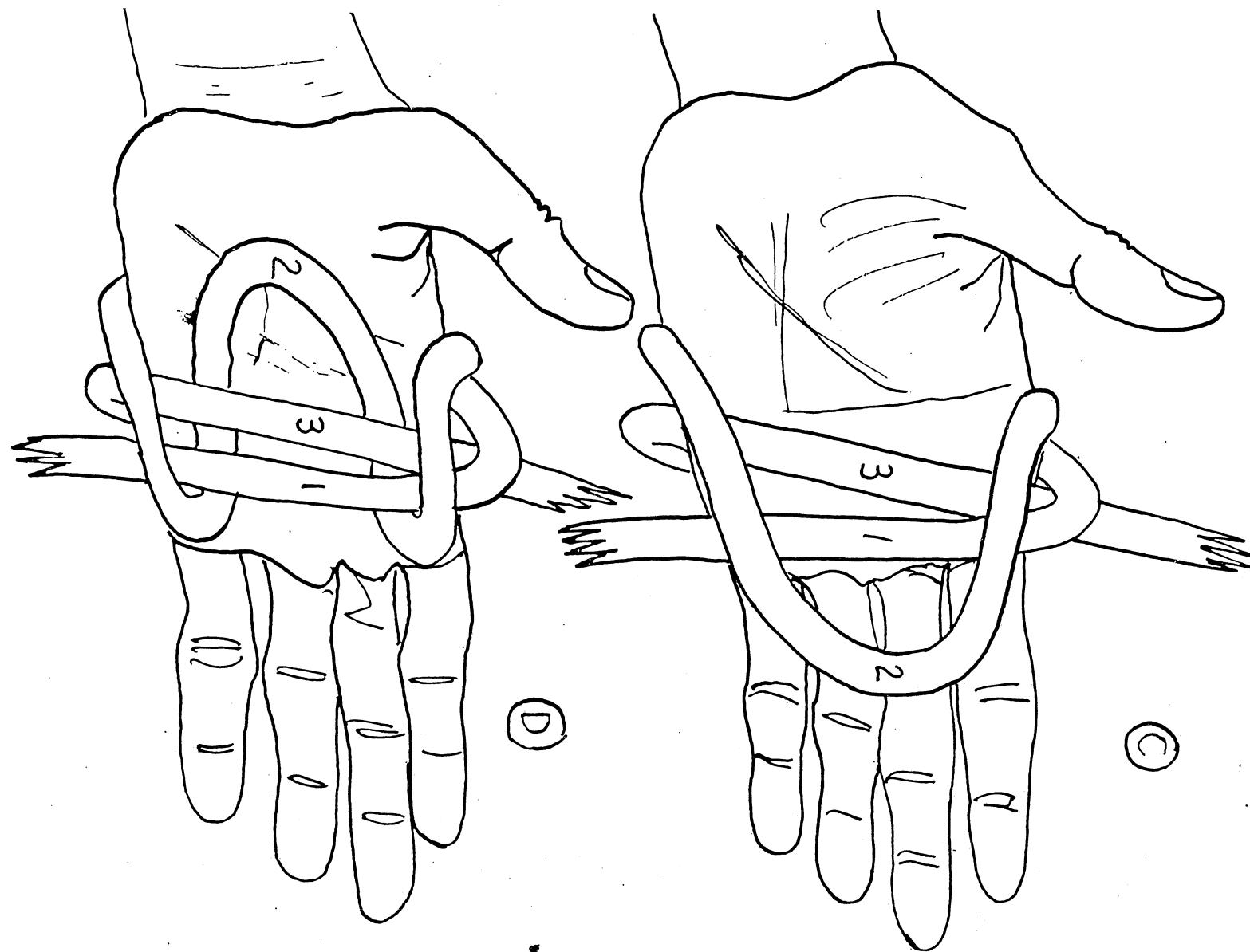
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**Six-Pak Pick-Up**  
*For Info Call Pete 951-7359*

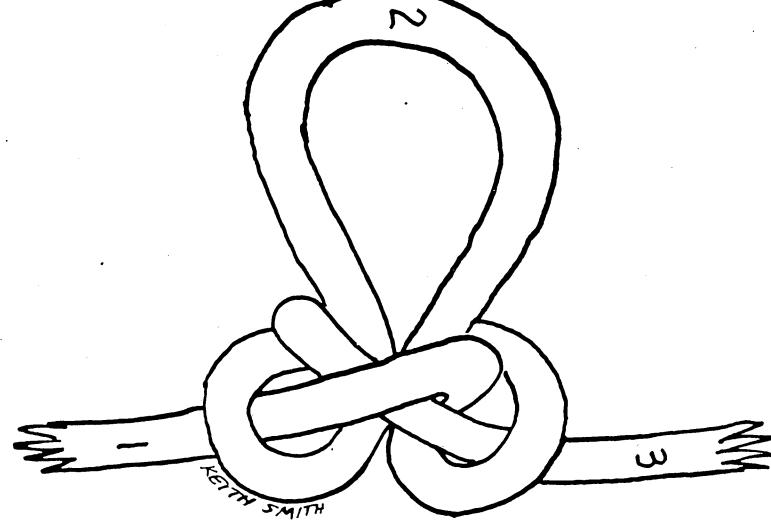
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## How To Tie A Butterfly Knot\*

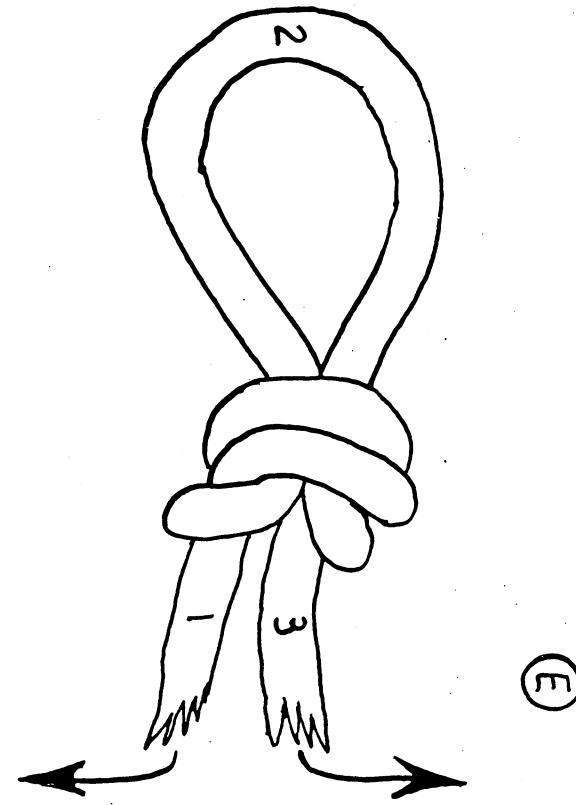


\*Alternate Method





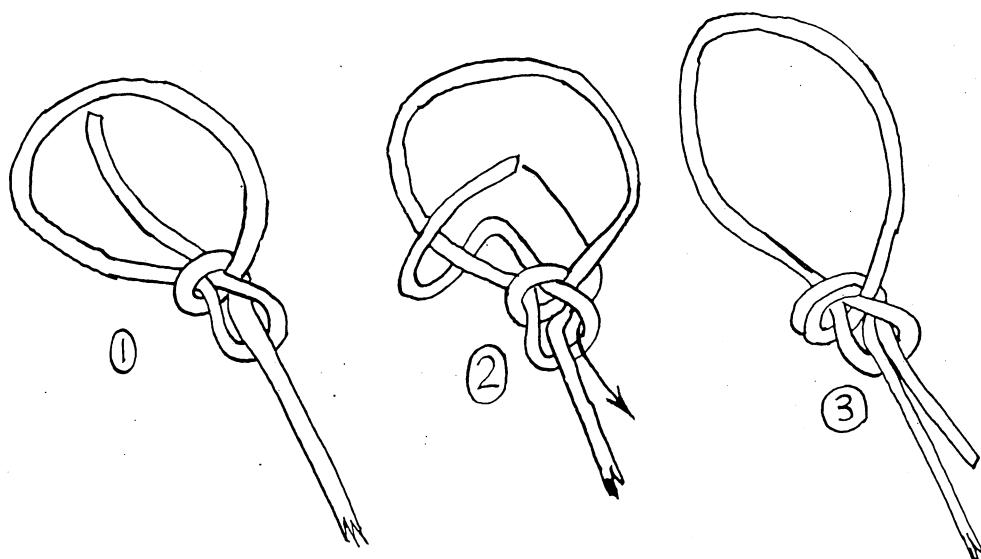
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E

# BACKING OFF A BOWLINE

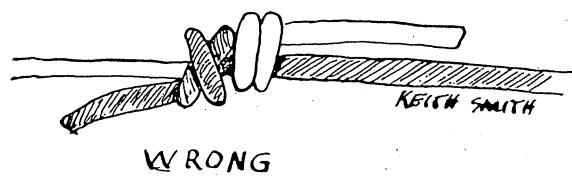
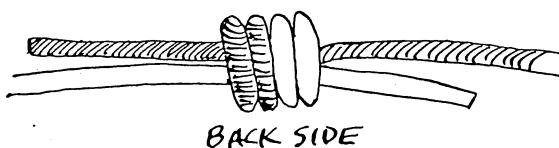
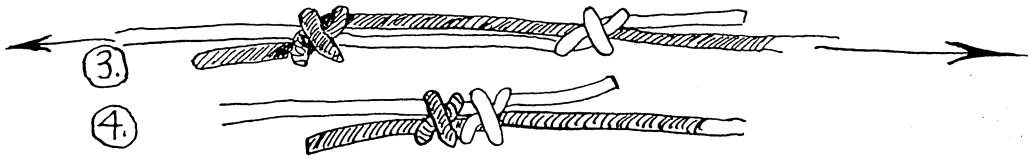
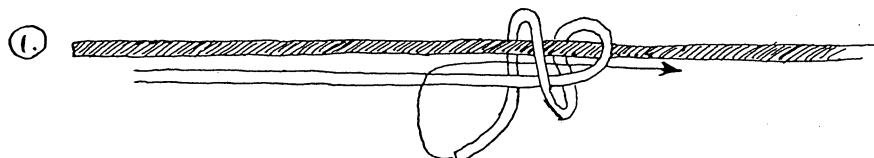
WITHOUT AN OVERHAND KNOT



\*Works very well on a helical knot tied with tenstrom.

KEITH SMITH

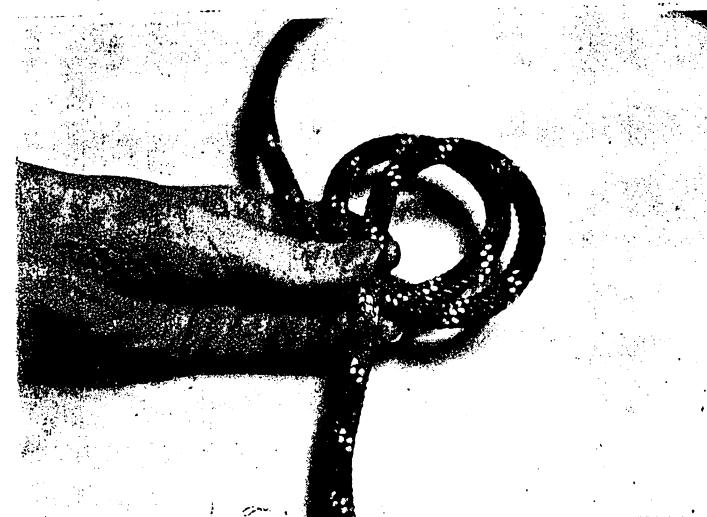
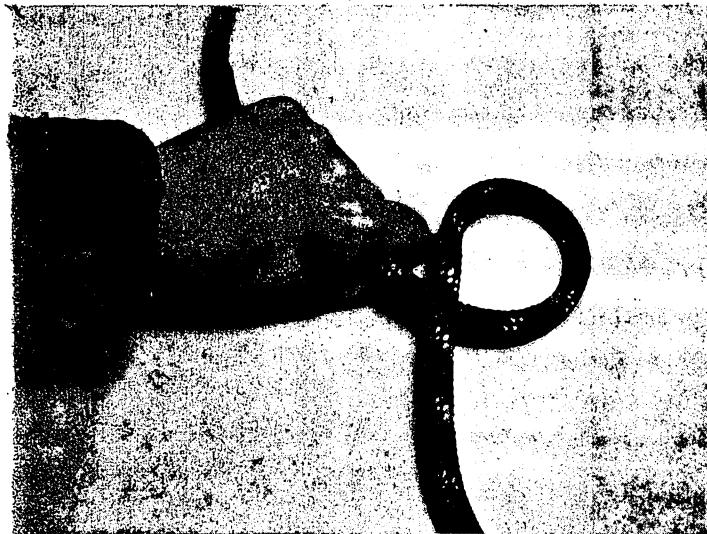
## DOUBLE FISHERMANS KNOT



KEITH SMITH

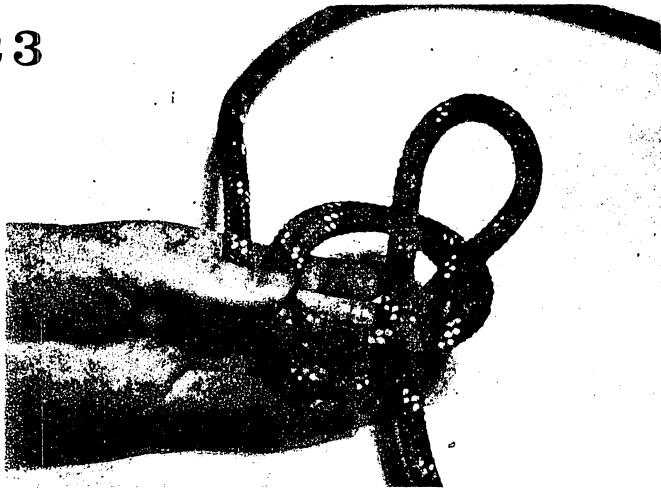
## *Recipe for a Rope Litter*

Have you ever been in the situation where you need to carry your friend around and just can't think of how you are going to do it? Well, if you just happen to have 160' of rope lying around, here is a neat little recipe for making a rope litter. An advantage is that the knots can be made while you are standing up and in a crowded spot. A big flat area is not required for laying out the litter. The Olympia Mountaineers have used this litter in their leadership practices for the past three years and have found it simple and fast to make.

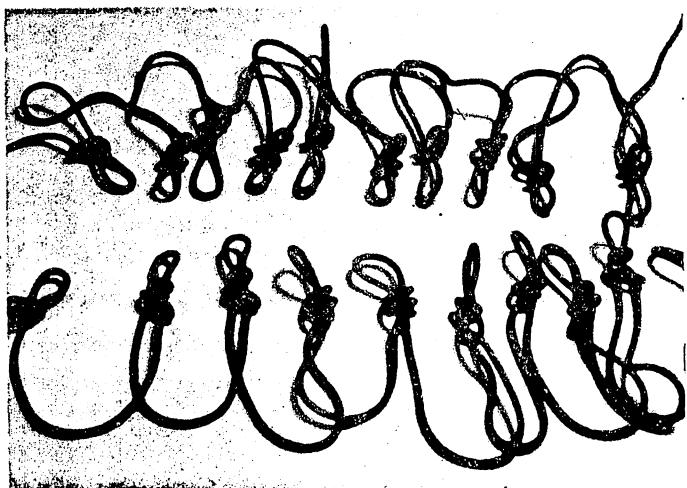


1. Begin with a rope and find the middle or nearly so. Make a loop like a letter 'e' one fist length away from the center of the rope.
2. Make a second loop like a letter 'e' over top of the first loop.
3. Stick the bight of the rope up through the loops.
4. Tighten the knot by pulling toward the center of the rope.
5. Two fist lengths away from the first knot, repeat the knot.
6. This should make your knots about 20 inches apart. Vary the fist length or the size of the loops to get 20 inches.
7. Make 10 knots down one side of the rope, and another 10 knots down the other side of the rope. If you are working with a partner, he can be making the knots on the second side at the same time. If he is right-handed, it helps to have him stand inside the bight of the rope while he ties the knots.
8. Starting with the middle of the rope, criss-cross the knots.
9. When all of the knots have been crossed, thread the ends of the rope down the knots. How close knots are together is determined by the height of the victim. The stretcher should be slightly longer than victim.

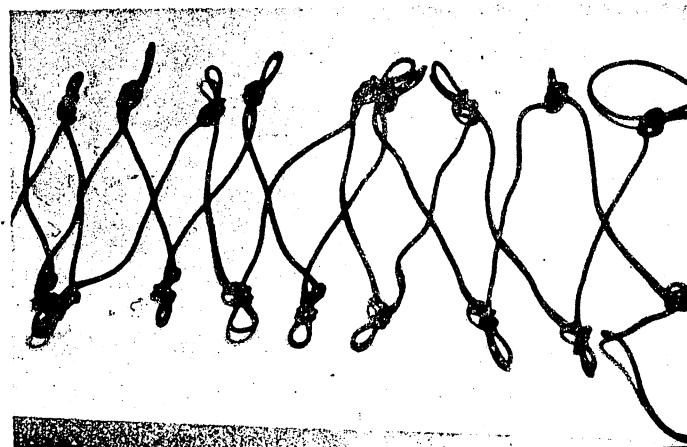
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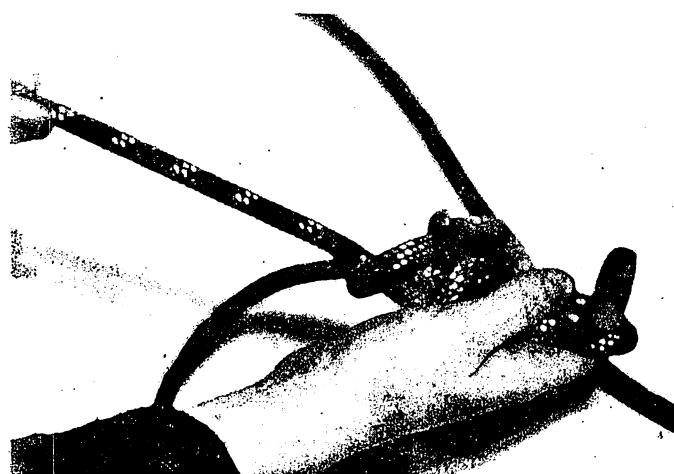
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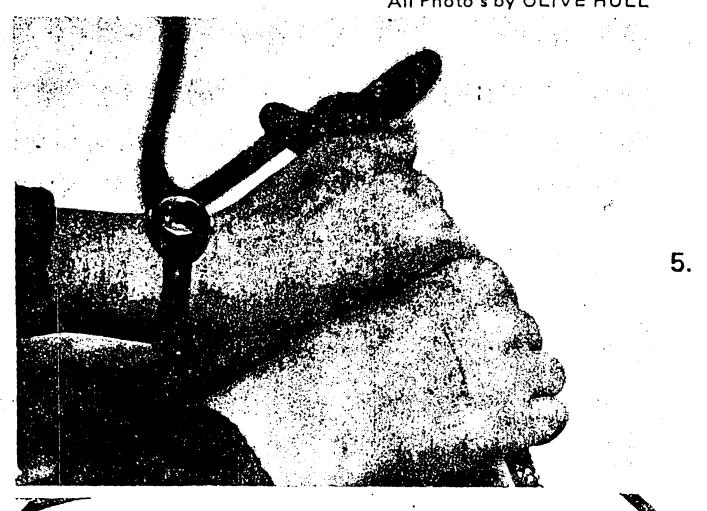
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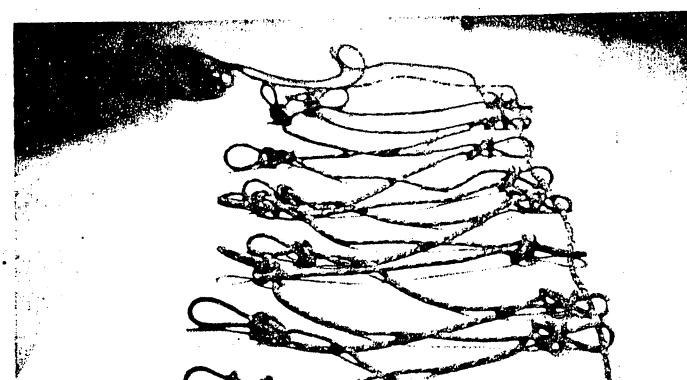
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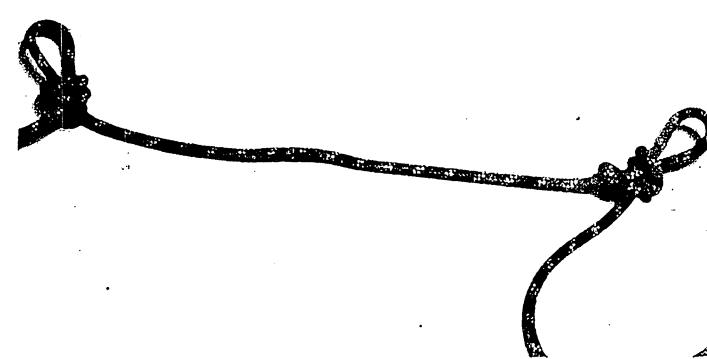
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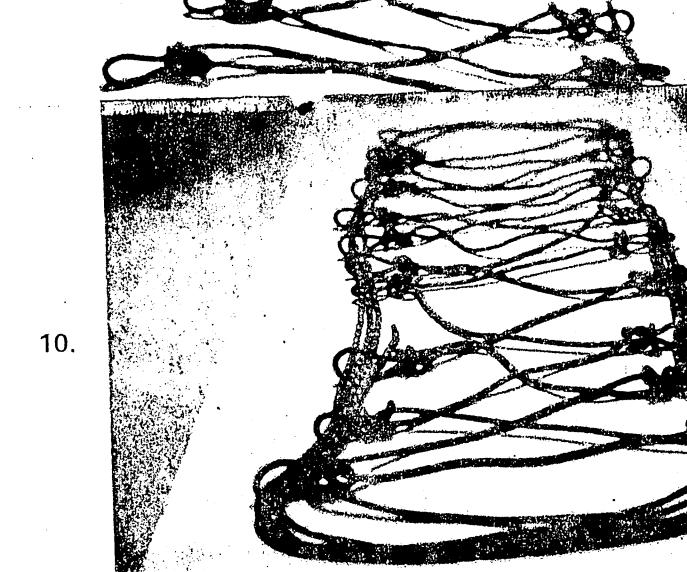
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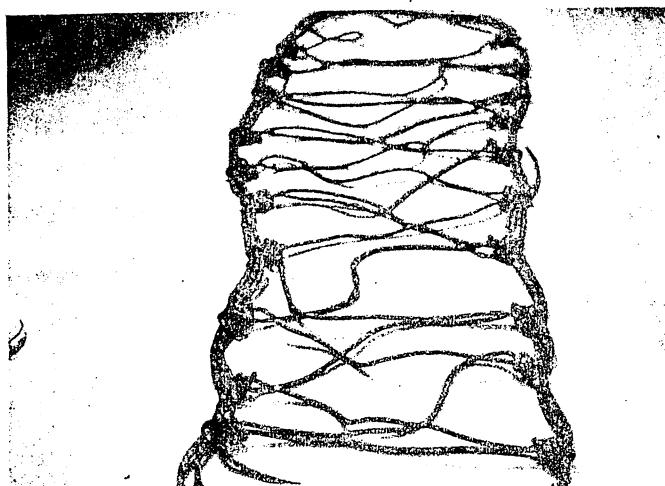
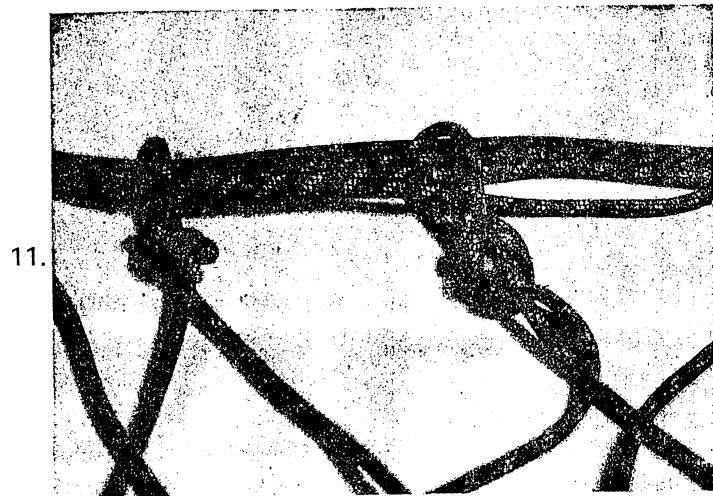
9.



6.



10.



10. Continue threading the ropes until all of the rope is used up.

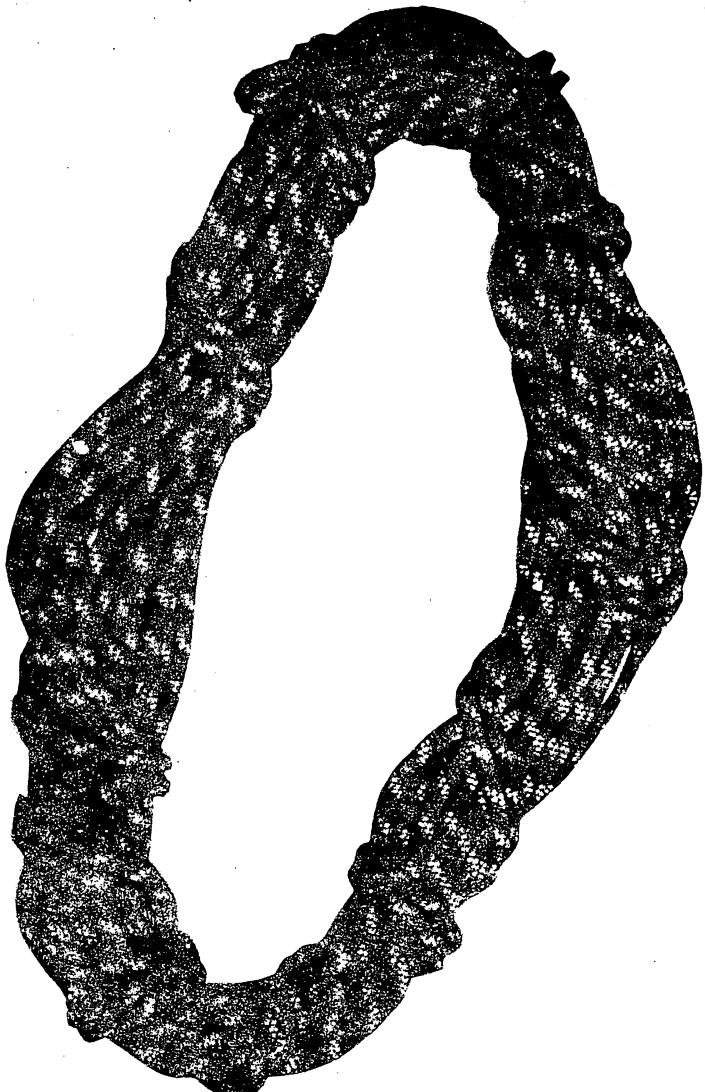
11. It is unnecessary to tie off the ends since the rope can't go anywhere.

12. Cinch up on all the knots.

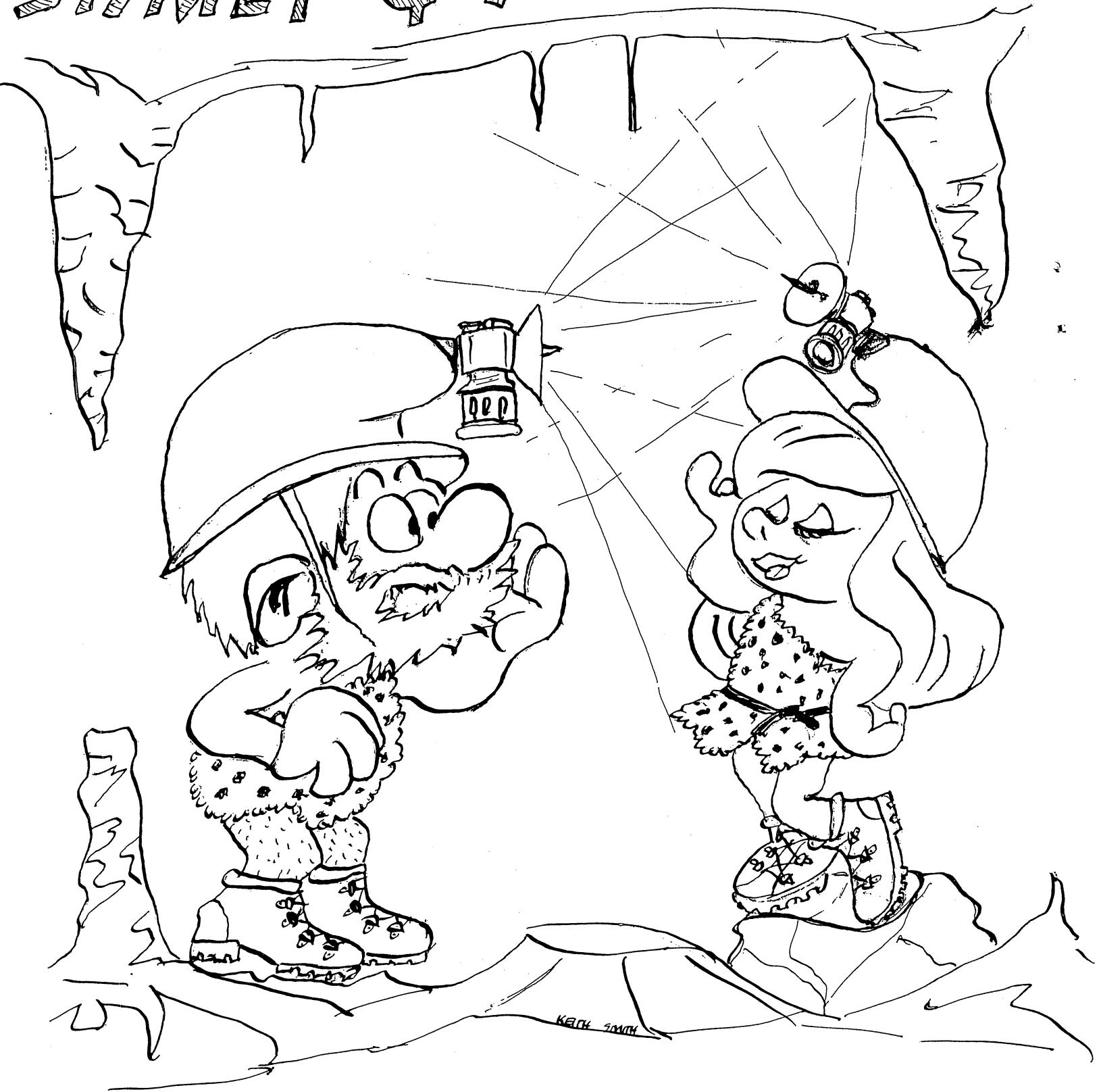
13. The finished product is now ready for use. The litter can be padded with clothing, pack frames, etc., and can be carried by four to six people.

This article is reproduced courtesy of Olive Hull, Olympia Washington, from the book, Mountain Rescue Techniques by Wastl Mariner.

This rope litter was demonstrated at a recent cave club meeting by Steve Uzmann and Steve Lancaster.



# 25 STUMER & STIMEYETTE



# STRENGTH TESTS OF LONGITUDINAL VERSUS LATERAL SEWING IN 1" TUBULAR NYLON WEBBING

A subject of debate amongst cavers who like to hand sew their caving gear with awl and heavy nylon thread is the matter of which direction or pattern of sewing is the strongest. The following tests actually developed out of another common argument which is the relative strength of a knot verses sewing in tubular webbing. The desire to test these runners came about after one Bill Stephens refused to use my sewn runners in lieu of supposedly stronger knotted runners. The specimens tested are known in the climbing community as "quick-draws" or "rabbit runners" (the commercial name used by Forrest Mountaineering Inc.). Their popularity is due to the fact that they can easily be removed quickly from the "rack" when hanging precariously, they can be used either doubled over or stretched out completely, and they cut down on the amount of sling needed to produce a runner. The use of webbing in this configuration does not have much application in SRT directly but it provides a nice test specimen for the kinds of sewing that is used in vertical caving equipment.

With the gracious help of Bob Simonds who provided lab assistance and the master craftsmen John Lohner who sewed the specimens, the following results were found.

## Longitudinal Sewing (Stitching Parallel to Applied Load)

amount of sewing	breaking strength (lbs)	breaking strength as * % of ultimate strength
3"	3500	88%
2"	3400	85%
1"	2625	66%

## Lateral Sewing (Stitching Perpendicular to applied Load)

amount of sewing	breaking strength (lbs)	breaking strength as * % of ultimate strength
3"	2500	63%
2"	1950	49%
1"	1495	37%

## Overhand Loop (Overhand on a bight) in place of Sewing

breaking strength (lbs)	breaking strength as * % of ultimate strength
2500	63%

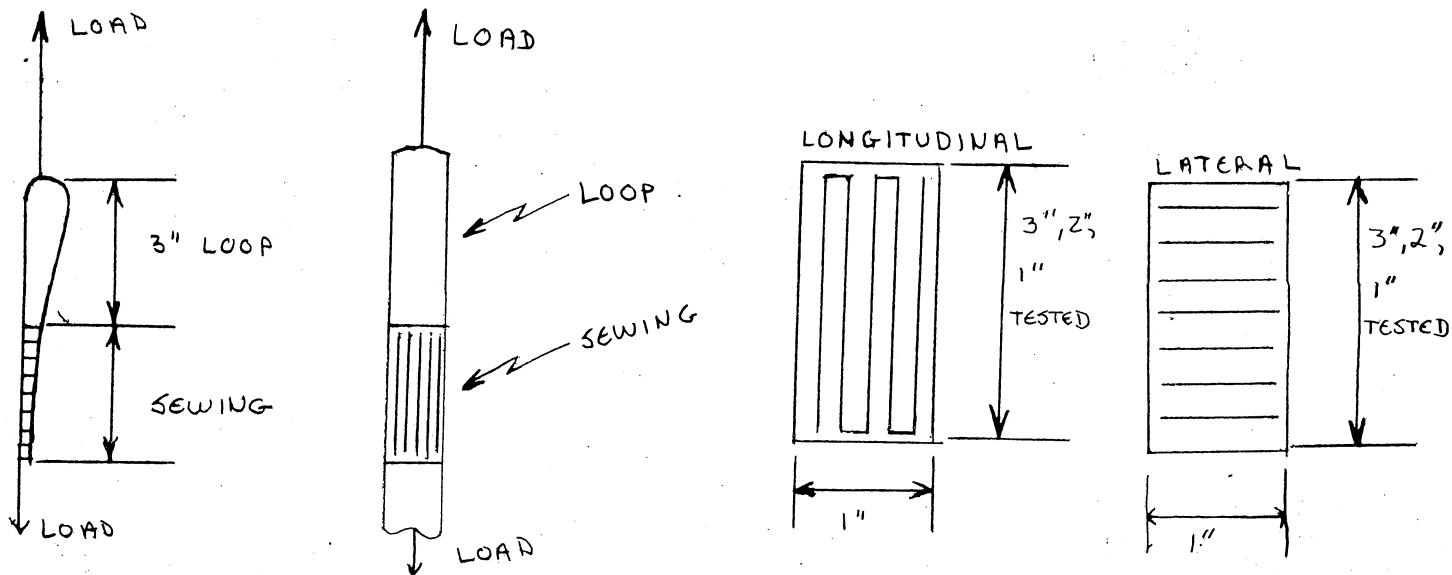
\* Assumes manufacturer's suggested ultimate strength of unknotted, unsewn webbing as 4000 lbs.

As can be seen, sewing parallel to the load direction is stronger in all cases than sewing perpendicular to load application. Even the bare minimum of 1 inch of longitudinal sewing. The only commercially sewn runner is the so called "rabbit runner" sold by Forrest. The Forrest runner uses perpendicular sewing with a very thin nylon thread sewn extremely tightly packed. The manufacturer claims a strength of 3000 lbs. for this type of lateral sewing which is probably accurate considering the higher stitch density of commercial sewing. Considering the exorbitant price of commercially sewn runners, and considering that 3 inches of longitudinal sewing are still very applicable to climbing and caving use. The important point is not to duplicate the lateral sewing pattern used commercially with your hand awl; you simply can't get the stitches dense enough to imitate the commercial job.

Out of curiosity we also tested the strength of the eye splice in tenstron as commonly used to make prussik knots. As expected, the splice did not fail; being stronger than the tenstron itself which failed at 1950 lbs. The specimens were all connected to the testing machine with Bonaiti steel non-backing oval carabiers to obtain a realistic bend in the sling loop. During the first test however one of the carabiners failed at a load not much higher than stamped on the carabiner as the factory test value! The carabiner failed where the gate clips into the frame (the opposite end of the gate from the gate hinge) by shearing out of the frame.

For those who still may be paranoid about sewing your own runners, a suggestion by Richard Cobb is the sewing in zig-zag patterns  $45^{\circ}$  to load direction. This should be stronger than even longitudinal sewing but of course will take much more time and effort.

John Mummery



# From the Sign-Out Sheet

Since the last printing of the TROG in the Spring, the VPI cave club has logged 3963 man hours underground through 11/21/82. This gives us approximately 660 man hours a month again making us one of the most active grottoes in the world. Keep up the good caving and remember---safety first.

6/13/82	Ellisons	Walt Pirie, Steve Lancaster Keith Smith, Dave Coakley Frank Gibson, Maureen Handler + 1 JMU Caver	586 feet--bust ass--what a cave
9/11/82	Smokehole	Capt. Ed Fortney, Dave Cinsavich, Bill Ekhaml Hugh Beard, Karen Michelson	Cave Sheep Stew: 1 dead sheep, add to 54° water let set for 1½ months. Crawl through passage with open mouth consume at leisure... Bacteria optional
10/9/82	Sam Hancocks	Jim Washington Garrie Rouse	10' dug All virgin
10/16/82	Giant Caverns	Jim Washington, Lyle Tefft Laura Madden, Karl Heck Garrie Rouse, Maureen Handler Vikki Liddle, Johnny Johnson RH Phillips,	Ghost Caverns!! Haunted...00000!
10/17/82	Clover Hollow	Keith Smith, Karen Michelson Honor Fede, Doug Cosby Capt. Ed, Marie Schall Mark Whitis, Dave ?	Where the Hell is the Library???
10/30/82	Pighole	Al Ostrowski, John Mac Dowall Capt. Ed, Bill Ekhaml Kay Jacobsen, Jack Kehoe	<u>Pigs in Space!!</u>
10/31/82	Links	Keith Smith, Moose Dawson Chad Dawson, Brian O'Donnell Mark Whitis, Chris Smith Ledlie Klosky, John Mac Dowall Meg Mayers	LOST AGAIN!!!
11/6/82	New Castle Murder Hole	Stymie, Stephen Lancaster Scott Poole, Al Who? Kent Thompson, Mike Gaydosh	Murderhole 6 Us 0

Answers to Identify the Cavers: 1) Moose Dawson 2) Bob Simonds  
 3) Chip Clark 4) Alan Armstrong 5) Steve Kark 6) Glen Davis  
 7) 1967 Cave Club Yearbook Photo

# VIRGINIA CAVE PROTECTION ACT

## CHAPTER 252

*An Act to amend the Code of Virginia by adding in Title 10 a chapter numbered 12.2, consisting of sections numbered 10-150.11 through 10-150.18, and to repeal § 18.2-142 of the Code of Virginia, the added and repealed sections relating to the conservation and protection of caves; penalty.*

[H 1220]

Approved MAR 15 1979

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding in Title 10 a chapter numbered 12.2, consisting of sections numbered 10-150.11 through 10-150.18, as follows:

### CHAPTER 12.2.

#### VIRGINIA CAVE PROTECTION ACT.

*§ 10-150.11. Findings and policy.—The General Assembly hereby finds that caves are uncommon geologic phenomena, and that the minerals deposited therein may be rare and occur in unique forms of great beauty which are irreplaceable if destroyed. Also irreplaceable are the archeological resources in caves which are of great scientific and historic value. It is further found that the organisms which live in caves are unusual and of limited numbers; that many are rare and endangered species; and that caves are a natural conduit for groundwater flow and are highly subject to water pollution, thus having far-reaching effects transcending man's property boundaries. It is therefore declared to be the policy of the General Assembly and the intent of this chapter to protect these unique natural and cultural resources.*

*§ 10-150.12. Definitions.—As used in this chapter, the following words shall have the meanings stated unless the context requires otherwise:*

A. "Cave" means any naturally occurring void, cavity, recess, or system of interconnecting passages beneath the surface of the earth or within a cliff or ledge including natural subsurface water and drainage systems, but not including any mine, tunnel, aqueduct, or other man-made excavation, which is large enough to permit a person to enter. The word "cave" includes or is synonymous with cavern, sinkhole, natural pit, grotto, and rock shelter.

B. "Commercial cave" means any cave utilized by the owner for the purposes of exhibition to the general public as a profit or nonprofit enterprise, wherein a fee is collected for entry.

C. "Gale" means any structure or device located to limit or prohibit access or entry to any cave.

D. "Sinkhole" means a closed topographic depression or basin, generally draining underground, including, but not restricted to, a doline, uvala, blind valley, or sink.

E. "Person" or "persons" means any individual, partnership, firm, association, trust, or corporation or other legal entity.

F. "Owner" means a person who owns title to land where a cave is located, including a person who owns title to a leasehold estate in such land, and specifically including the Commonwealth and any of its agencies, departments, boards, bureaus, commissions, or authorities, as well as counties, municipalities, and other political subdivisions of the Commonwealth.

G. "Speleothem" means a natural mineral formation or deposit occurring in a cave. This includes or is synonymous with stalagmite, stalactite, helictite, shield, anthodite, gypsum flower and needle, angel's hair, soda straw, drapery, bacon, cave pearl, popcorn (coral), rimstone dam, column, palette, flowstone, et cetera. Speleothems are commonly composed of calcite, epsomite, gypsum, aragonite, celestite, and other similar minerals.

H. "Speleogen" means an erosional feature of the cave boundary and includes or is synonymous with anastomoses, scallops, rills, flutes, spongework, and pendants.

I. "Material" means all or any part of any archeological, paleontological, biological, or historical item including, but not limited to, any petroglyph, pictograph, basketry, human remains, tool, beads, pottery, projectile point, remains of historical mining activity or any other occupation, found in any cave.

J. "Cave life" means any life form which normally occurs in, uses, visits, or inhabits any cave or subterranean water system, excepting those animals and species covered by any of the game laws of the Commonwealth.

*§ 10-150.13. Vandalism; penalties.—A. It shall be unlawful for any person, without express, prior, written permission of the owner, to:*

1. Break, break off, crack, carve upon, write, burn, or otherwise mark upon, remove, or in any manner destroy, disturb, deface, mar, or harm the surfaces of any cave or any natural material which may be found therein, whether attached or broken, including speleothems, speleogens, and sedimentary deposits. The provisions of this section shall not prohibit minimal disturbance for scientific exploration.

2. Break, force, tamper with, or otherwise disturb a lock, gate, door, or other obstruction designed to control or prevent access to any cave, even though entrance thereto may not be gained.

3. Remove, deface, or tamper with a sign stating that a cave is posted or citing provisions of this chapter.

B. The entering or remaining in a cave which has not been posted by the owner shall not by itself constitute a violation of this section.

C. Any violation of this section shall be punished as a Class 3 misdemeanor.

§ 10-150.14. Pollution unlawful; penalties.—A. It shall be unlawful for any person, without express, prior, written permission of the owner, to store, dump, litter, dispose of or otherwise place any refuse, garbage, dead animals, sewage, toxic substances harmful to cave life or humans in any cave or sinkhole. It shall also be unlawful to burn within a cave or sinkhole any material which produces any smoke or gas which is harmful to any naturally occurring organism in any cave:

B. Any violation of this section shall be punished as a Class 3 misdemeanor.

§ 10-150.15. Biological policy; penalties for violation.—A. It shall be unlawful to remove, kill, harm, or otherwise disturb any naturally occurring organisms within any cave, except for safety or health reasons; provided, however, scientific collecting permits may be obtained from any cave commission established for such purpose or from the appropriate State agency.

B. Any violation of this section shall be punished as a Class 3 misdemeanor.

§ 10-150.16. Archeology; permits for excavation; how obtained; penalties for violation.—A. In order to protect the archeological resources not covered by the Virginia Antiquities Act (§ 10-150.1 et seq.), it shall be unlawful to excavate, remove, destroy, injure, deface, or in any manner disturb any burial grounds, historic or prehistoric resources, archeological or paleontological site or any part thereof, including relics, inscriptions, saltpetre workings, fossils, bones, remains of historical human activity, or any other such features which may be found in any cave, except those caves owned by the Commonwealth or designated as Commonwealth archeological sites or zones, and which are subject to the provisions of the Virginia Antiquities Act. Any violation of this subsection shall be punished as a Class 3 misdemeanor.

B. Notwithstanding the provisions of subsection A. hereof, a permit to excavate or remove archeological, paleontological prehistoric, and historic features may be obtained from the Virginia Historic Landmarks Commission. The Commission may issue a permit to conduct field investigations if the Commission finds that it is in the best interest of the Commonwealth, that the applicant meets the criteria of this section and the applicant is an historic, scientific, or educational institution, professional archeologist or amateur, who is qualified and recognized in the areas of field investigations or archeology. Such permit shall be issued for a period of two years and may be renewed upon expiration. Such permit shall not be transferrable; provided, however, the provisions of this section shall not preclude any person from working under the direct supervision of the permittee.

C. All field investigations, explorations, or recovery operations undertaken under this section shall be carried out under the general supervision of the Commissioner of Archeology of the Virginia Research Center for Archeology and the Virginia Historic Landmarks Commission and in a manner to insure that the maximum amount of historic, scientific, archeologic, and educational information may be recovered and preserved in addition to the physical recovery of objects.

D. A person applying for a permit pursuant to this section shall:

1. Have knowledge of archeology or history as qualified in subsection B. hereof.

2. Provide a detailed statement to the Commission giving the reasons and objectives for excavation or removal and the benefits expected to be obtained from the contemplated work.

3. Provide data and results of any completed excavation, study, or collection at the first of each calendar year.

4. Obtain the prior written permission of the owner if the site of the proposed excavation is on privately owned land.

5. Carry the permit while exercising the privileges granted.

E. Any violation of subsection A. hereof shall be punished as a Class 3 misdemeanor. Any violation of subsection D. hereof shall be punished as a Class 4 misdemeanor, and the permit shall be revoked.

F. The provisions of this section shall not apply to any person in any cave located on his own property.

§ 10-150.17. Sale of speleothems unlawful; penalties.—It shall be unlawful for any person to sell or offer for sale any speleothems in this Commonwealth, or to export them for sale outside the Commonwealth. Any violation of this section shall be punished as a Class 3 misdemeanor.

§ 10-150.18. Liability of owners and agents limited.—Neither the owner of a cave nor his authorized agents acting within the scope of their authority are liable for injuries sustained by any person using the cave for recreational or scientific purposes if no charge has been made for the use of the cave, notwithstanding that an inquiry as to the experience or expertise of the individual seeking consent may have been made.

Nothing in this section shall be construed to constitute a waiver of the sovereign immunity of the Commonwealth or any of its boards, departments, bureaus, or agencies.

2. That § 18.2-142 of the Code of Virginia is repealed.