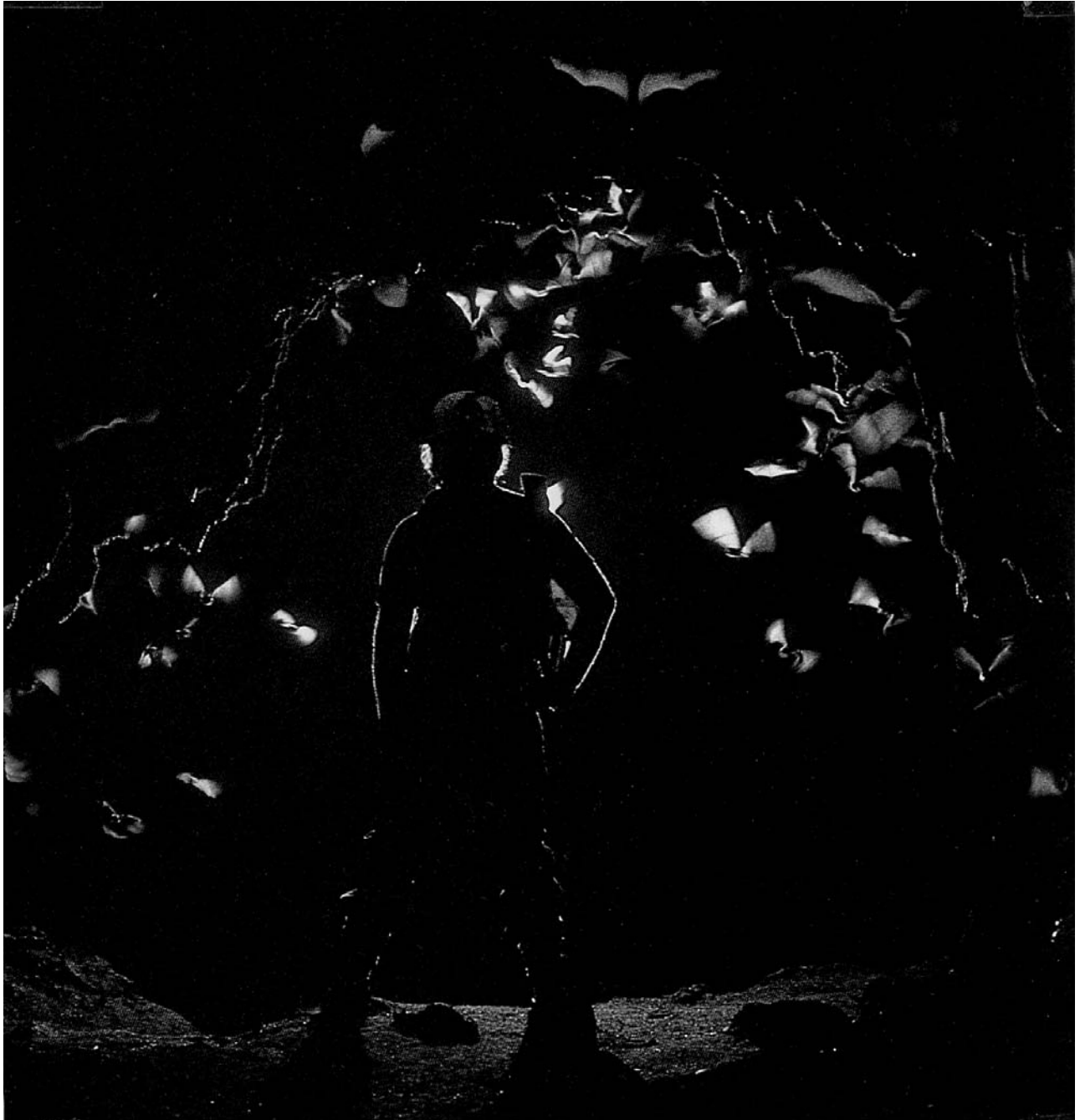


SAG RAG

VOLUME 13
NUMBER 2
MAR-APR '94

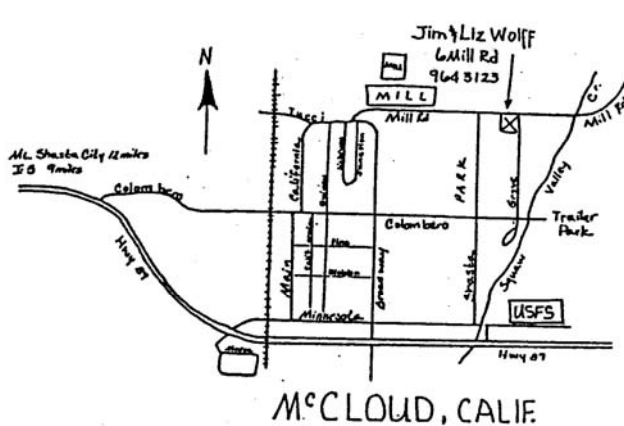


The SAG RAG is published by the Shasta Area Grotto of the National Speleological Society, Grotto meetings are held at different locations the fourth Friday of each month at 7:30 p.m. Meeting locations are announced in the SAG RAG, Membership dues are \$6 dollars per year and include newsletter subscription. Original material not otherwise noted is copyright to the SAG RAG. Such material may be copied with credit given to the author and the SAG RAG. For use outside of the caving community, please seek the permission of the author or editor first. Send material for publication any time to Bighorn Broeckel, 2916 Deer Meadows Road, Yreka, CA 96097. Material intended for the next newsletter is due by the 10th of the even month.

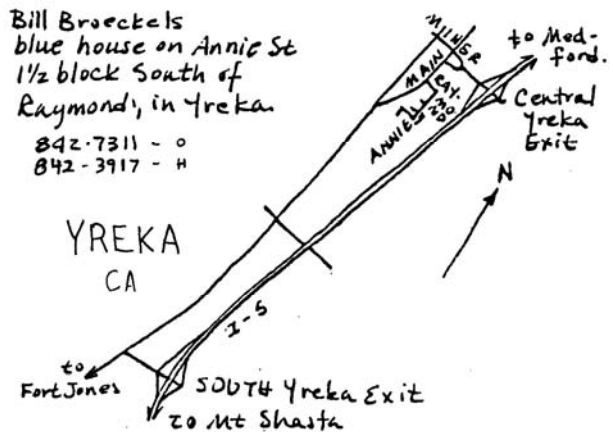
TABLE OF CONTENTS

Page 2	Calendar	Page 8	<u>Newsletter Review</u>
Page 3	SAG Meeting Notes	Page 10	Recent Discoveries in Hawaii
Page 4	Grotto News	Page 12	Bend Area Cave Bolting
Page 5	Cave Bolting	Page 13	WVG Cave Stereogram
Page 6	All About Bats	Page 14	New Zealand Caving Trip
Page 7	Millipede Cave	Page 17	French Creek Trip Report
		Page 19	NSS Vertical Techniques Workshop

CALENDAR



SAG Meeting May 13, 1994
7:30 PM at Wolffs in McCloud



SAG Meeting June 10, 1994
7:30 PM at Broeckels in Yreka

<p>May 14-15, 1994 Vertical Meet Foster City See page 19</p>	June 20-24, 1994	NSS Convention in Texas Cave the Republic! Armadillos beware!
	July 16-23, 1994	NCRC Seminar in Virginia Cave Rescue operations and management.
	?	Western regional – Watch this space.

COVER: The cover and the picture on page 6 are reprinted with permission from the National Wildlife Federation which publishes National Wildlife magazine. Peter Nelson and (photographer) Kevin Downey prepared an article that appeared in the Apr-May 1994 issue of National Wildlife. Shown are fruit bats in the Cave of the Boas. This cave contains a large population of the bats. A group of boa constrictors has learned to hang from vines at the cave entrance and snatch bats out of the air.

SAG MEETING NOTES

March 11, 1994; at Jim & Bea Kottinger's home in Mt. Shasta, Jim Wolff called the meeting to order at 7:53 PM. Present were Bill Broeckel, Melanie Jackson, Richard Stewart, Bill Kenney, Jim & Bea Kottinger, Ray Miller, Neils Smith, Ben Sutton, and Jim & Liz Wolff. Ron Osborne and Jennifer Gould visited from Jefferson State Grotto, and Francis Mangells, wildlife biologist from the McCloud District of S-TNF was a special guest. This was not an official visit by the USFS.

Treasurer: Neils reported a balance of \$538.48. Bill Broeckel presented SAG RAG bills totaling \$52.10. Payment was approved.

Communication: Jim Wolff received letters from John Wilson about cave registers and software, and a letter from George & Dorothy Reel.

Old Business: Bill B. received the cave register special use permit ready to be signed. PLUTO CAVE discussed with nothing concrete yet from KNF. Tax exempt status on hold. BAT CAVE letter from Dixie Pierson supporting closure of the man-made entrance sent to USFS.

New Business: Jim Wolff read a letter regarding a USFS meeting in Bend, OR, about bolting of cave ceilings by sport climbers. Bill K. attended the meeting and reported, with follow-up discussion on same. Ray Miller requests making notes of all bat sightings. Cave leads from "Caves of Shasta County" by Roseanna Gill were mentioned.

Special features: Francis Mangells gave a talk on the fauna of ADAMS HOMESTEAD and HARRIS MOUNTAIN CAVES. Cave mapping class by Liz Wolff started at 10:10 PM. Mapping class continued the next morning with a remap of Barnum Cave with Jennifer Gould, Melanie Jackson, Bill Kenney, Ron Osborne, Neils Smith, and Jim & Liz Wolff (teaching). Later in the afternoon, they were visited at the cave by Jim Kottinger and Ray Miller. The meeting was never formally adjourned.

April 15, 1994, at home of Mark Fritzke & Linda Villatore in Arcata. Chairman Jim Wolff called the meeting to order at 9 PM, after Nathan Jones showed a B&W film taken in SAMWEL CAVE for a cinematography class. The title was "Lights in Dark Places". Also present at the meeting were John Bair, Dick & Kathy LaForge, Liz Wolff, Bill Broeckel, Neils Smith, Jim Dancy (Shascade Caving Society), and 7 visitors.

Correspondence: Applications for a vertical workshop were passed around (see P.19). Dr. Dixie Pierson wrote a letter supporting the closure of the man-made entrance to BAT CAVE. An ad for SMAPS 5.2 was passed. Cave management and implementation plans for Forest Service Region 6 were reviewed and circulated.

Old Business: Rescue – Mark Fritzke reports that Northwest Cave Rescue has been certified in Clackamas County (OR) and would like to be certified in Siskiyou County (CA). Mark described the pre-plan and personnel list that NCR has produced for searching for lost or injured cavers, and for doing initial situation assessments, including medical, technical and cave travel requirements. NCR would like to introduce themselves and their skills to Siskiyou Co. SAR as a trained, viable cave rescue unit, with a practice rescue at a local site. SAR also needs to see Marble Mountain caves firsthand. Mark proposes contacting Mark Bowers (Mother Lode) and Eric Mortensen (NCR) to set a date in late September with SAR in a cave to be named. Mark attended rescue training in the Mother Lode area. They covered finding lost cavers and litter handling in an actual cave, with two scenarios. Finally, Dick LaForge proposed a focused task rescue practice for KMCTF this season.

New Business: Bill B. reviewed the Klamath NF watershed analysis pilot project for the Upper South Fork Salmon River, including the proposed French Creek Research Natural Area. Mark showed a new LED "flashlight" that gives 80 hours of light on two AA batteries.

The meeting adjourned at 9:52 PM, to dessert and a dueling slide show of LECHUGUILLA CAVE by Mark and Dick that mesmerized the audience.

GROTTO NEWS

SHASTA VALLEY: Somebody dug out a new opening to SAND CAVE. I took some young people to Sand Cave the other day, and we were able to put a hand through the new opening at the eastern end of the cave.

Regarding TEETER ROCK and DANCEHALL CAVES, Ray Miller offers the following update and reminder: "(These) caves are located in a subdivision served by private roads. The roads are posted, and entry is restricted to property owners and others with permission. The property owner I talked to was most emphatic that he would not grant permission for recreational caving, and to the best of my knowledge no other owner has granted permission for recreational caving in this subdivision. To date SAG has maintained excellent relations with property owners. Please help continue this relationship by respecting property rights of others, and enter posted property only after receiving written permission."

PLUTO CAVE is nearby, and Klamath National Forest has taken an interest in acquiring the cave and managing it for recreational caving. Barbara Williams is a good KNF contact person regarding Pluto Cave. She was mis-identified as Barbara Holder in the last SAG RAG. (Ed. Sorry). Barbara Holder is the Forest Supervisor.

KLAMATH MOUNTAINS: Research Natural Area (RNA) status is up for consideration in both Marble Valley and French Creek. Juan De La Fuentes, KNF geologist, has made multiple trips up French Creek getting a feel for the extent of the karst and the potential boundaries of the RNA. Regarding Marble Valley, the contact person is District Ranger Bob Lindsay. He can make recommendations to the forest Land Management Plan (LMP) which is coming up very soon. In addition to certain protections, another aspect of RNA status is that recreational use is not encouraged. Therefore, Marble Valley is considered for something very unique – an underground RNA. Traditional recreational uses, along the Pacific Crest Trail, for example, could continue. Also, certain caves could be excluded from the RNA. Do you have some thoughts about this? Both Juan and Bob would welcome input and ideas from cavers at this time.

KLAMATH MOUNTAINS: Research Natural Area (RNA) status is up for consideration in both Marble Valley and French Creek. Juan De La Fuentes, KNF geologist, has made multiple trips up French Creek getting a feel for the extent of the karst and the potential boundaries of the RNA. Regarding Marble Valley, the contact person is District Ranger Bob Lindsay. He can make recommendations to the forest Land Management Plan (LMP) which is coming up very soon. In addition to certain protections, another aspect of RNA status is that recreational use is not encouraged. Therefore, Marble Valley is considered for something very unique – an underground RNA. Traditional recreational uses, along the Pacific Crest Trail, for example, could continue. Also, certain caves could be excluded from the RNA. Do you have some thoughts about this? Both Juan and Bob would welcome input and ideas from cavers at this time.

CARPAL CAVE: Jim Wolff may name his next new cave passage the "Carpal Tunnel". Good luck Jim!

HANTIVIRUS: Medically speaking, here is a fearful item you will be hearing more about. Hantavirus is the germ responsible for killing people in the Four-Corners region a year ago. By October there were 42 reported cases with a 62% mortality. Death was by Adult Respiratory Distress Syndrome (ARDS) in spite of intensive care. Carried by rodents, the virus has moved up the eastern side of the Sierra Nevada, skipped into Modoc County, and has now been identified in eastern Siskiyou County. Rodents involved include Deer mice (*Peromyscus maniculatus*), Pinon mice (*P. truei*), Brush mice (*P. boylii*), and western chipmunks (*Tamias spp*). Noticeably absent is our-old cave friend *Neotoma* (packrat). However, both Deer mice & Brush mice are known to be troglomorphic and inhabit cave entrances.

Humans are infected by inhaling aerosolized saliva or excreta produced by the rodents. Arthropod vectors are not involved. Long term exposure seems to facilitate infection, but it can happen quickly, and also by bite. The CDC says "most usual tourist activities pose little or no risk". Hmmm. My advice: don't breath in mouse fumes!

CLIMBING IN CAVES

"Message: An unusual cave management issue is developing on the Deschutes National Forest in Oregon. World class climbers from nearby Smith Rocks State Park have discovered the entrances of lava tubes and are establishing bolt protected routes up the walls and across the ceiling. In this case the caves are important archeological sites which the activity is impacting. One cave entrance has had over 130 bolts and hangers placed, with webbing loop quick-draws with two carabiners left hanging from some. Cavers in the Northwest have taken issue with the activity and claim it violates Section 7 (a) (1) of the Federal Cave Resources Protection Act, which prohibits marring or defacement of significant caves. The climbers are using battery powered hammer-drills to bore holes for the bolts. Articles describing this type of climbing have appeared in at least one national magazine.

"If any of you have heard of this activity taking place elsewhere I would appreciate hearing from you. We suspect the activity may spread to other cave areas due to the national publicity it has received. Any reports I receive will be shared with those of you on the caves mailing list."

Ed. Comment B. Broeckel

Even cavers are known to put in halts when needed to proceed further along the cave passage. This whole issue reminds me of some legendary events that happened in Yosemite over 20 years ago. In the fall of 1970, Warren Harding and Dean Caldwell established a route straight up the middle of El Capitan. This was a media event, but they used many more bolts (some say 300) than was customary on new El Cap routes and thus some of the other climbers were offended. Later that winter Royal Robbins and Don Laurie repeated the route and "chopped" the first 300 feet of the bolt ladder. This was viewed as a protest climb. The main difference was a matter of ethical and stylistic sensitivity. Cavers are right to object to vandalism such as drilling many holes in the cave, leaving stuff in caves, marking with chalk, bothering beleaguered bats, and disturbing arch sites. But let's also remember that these climbers are caving recreationally, albeit differently from traditional caving. Rules for the climbers will also be rules for us. I can think of some caves that bear watching on this and so can you. Would you like to officially comment? Write to:

Bill Queen, Fort Rock RD, USFS
1230 NE 3rd St., Bend OR 97701



- "CAVER JOE, what is that?"
- "Its one of those 'bolt' routes."

All About Bats

POPULATIONS

People sometimes ask if bats are rare. The answer is no one knows. Even in areas where bats are intensively studied no one has ever found all the roosts, or been able to capture all the animals. A species captured abundantly in a mist net may be quite uncommon. The net may have been placed in the only area that species frequents, and that particular species may be very inept at avoiding nets. A bat rarely encountered may be common, but it forages too high to be netted, and its roosts have never been located.

Not all bats look like the drawings we see at Halloween. In the local area we probably have somewhere between 15 and 20 species, but the differences in the various species is not apparent to the casual observer watching bats forage under a street light or roosting in a dimly lighted alcove. For this reason placing a label on a species such as "Rare" or "Species of Special Concern" is meaningless to the general public.

Bats take advantage of manmade structures suitable for roosts. Some species prefer caves, and a couple of local species roost in crevices in bark or among the leaves of trees. The colonial nature of most bats makes them very vulnerable to their only real predator – man. Unknowing or uncaring vandals can destroy an entire bat population in just a few minutes.

Ray Miller



MILLIPEDE CAVE

SHASTA COUNTY, CALIFORNIA

Sistecos & Tape Survey

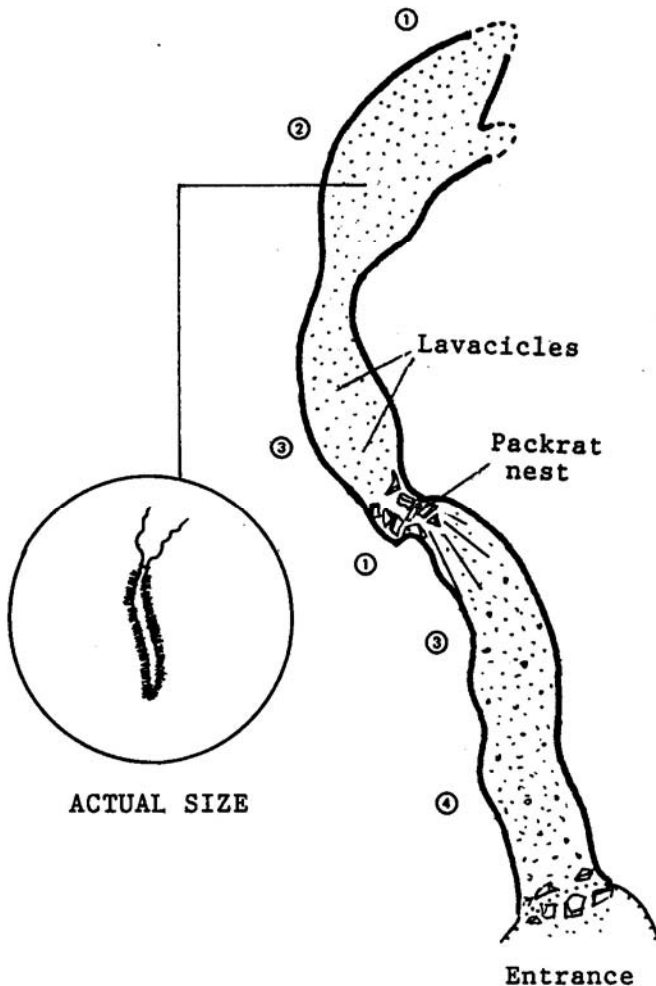
B. Broeckel

Bj Broeckel

3-22-94 SAG

Length 157 feet

Depth 4 feet



Map: Millipede Cave

MILLIPEDE CAVE by Bill Broeckel

Millipede Cave is a surface tube located in the Hat Creek lava flow of Shasta County, California. We first noticed the entrance on Oct. 23, 1992. At this time we removed a small amount of trash from the first part of the cave. On March 22, 1994 we finally got back to push the cave to its end, and to survey it. There was a snow storm that day, but my son Benjamin was a good sport and held the end of the tape for the survey. He was the one that found the millipede. It was non-pigmented and had long antennae. We decided that it was a significant millipede because it was an actual example of how even a surface tube can support a small and fragile population of cave adapted invertebrates.

In October this cave was stale and dusty. But in March, it was cool and damp with a dripping ceiling. Just past the 1.5 foot crawl through a patch of breakdown, there was a nice display of lavacicles. The cross sections of the cave were typical of surface tubes, with low arched ceilings and flat floors. The floor material was mostly compacted grit with some drip holes. The cave ended as a dirt fill.

The greatest ceiling height was about four feet, and this was near the entrance. Even Benjamin had to do some crawling towards the back of the cave. It was most enjoyable to sit together in the shelter of the entrance, and watch the blizzard blowing by outside. Just a thin roof of lava made such a difference on the conditions of the immediate area. How helpless the millipedes without the caves.

NEWSLETTER REVIEW 4/17/94

It is a quiet Sunday evening and Kathy and I are relaxing after a very nice visit by Wolffs, Neils Smith, Shascade caver Jim Dancy, and Bill Broeckel. The excuse was a SAG meeting and party/BBQ with local cavers at Mark and Linda Fritzke's house last night. This morning, Mark led a tide-pool and sea cave trip just south of Trinidad Head. This reminds me of past years (quite past) when the Shasta folks would come over and camp on the South Spit. Those were some cold and windy days! Anyway, Bill had to remind me to come up with a newsletter review pronto, as it had been due to him on the 10th. OOPS, that was tax time and I forgot, even though it is on my calendar. I have learned to keep a calendar, but not to look at it.

The party was a fine one with lots of good slides and a short artistic movie by local caver Nathan Jones made in Samwel Cave. Mark Fritzke and myself outlined a proposal for the next step in cave rescue training. Mark proposed a rescue practice this summer or early fall, not in the Marbles, and involving Eric Mortensen's Oregon cave rescue group, ourselves, and the Shasta/Klamath Mts. S&R/Sherries departments and possibly Mark Bowers. Eric's group has been classified as "OK for cave rescue" by its local Oregon sheriff's dept and the idea is that we might be able to achieve the same status here by extension. Mark is going to work on it. Dick suggested another rescue practice at the Marble Mts. this year, to continue the tradition of last year's successful session. This one would be less ambitious and comprehensive, and would focus on a single but crucial real-life rescue task, such as getting someone out of the Bigfoot entrance. It would be not so much a class as an experiment by a smaller number of cavers to get a feel for the equipment and difficulties involved. There may be a more detailed report of the meeting in this issue.

NEWSLETTER REVIEWS

There is an unusual amount of good writing for us to steal for this issue, so let's get started.

First on the list just has to be an account by Dave Bunnell of recent discoveries in Hawaii. You will see this information in the NSS News, but the day-by-day account from the SFBC Newsletter, March 1994, is just too exciting. It has to be when the new deepest cave in the US (surpassing Lechuguilla) and the deepest pit in the US are both discovered in the same week. You may hear some debate on whether a 400 ft open-air crater counts as part of the depth of a pit (by current definition the start of a cave is the overflow point of its sinkhole entrance), but you may after this hear less about lava tubes not being "real" caves.

As you may be aware, there is a serious problem in Oregon with rock climbers cluttering up lava tube entrances with bolts and other climbing hardware. They like to climb the overhangs found in the entrances. From the March 1994 issue of The Speleograph (Oregon Grotto.) there is an update on the current state of negotiations between the USFS, the cavers, and the climbers. This followed the February issue which has great detail on the problem and includes correspondence between the USFS and the Oregon Grotto, and is too lengthy to be reprinted. The Oregon Grotto is to be commended for attacking this problem.

The Underground Express has to be commended for its "random dot stereogram" on the cover. It neatly illustrates the fact that caves cannot be seen merely by looking at the surface. Bill will reprint it if there is room.

There are too many more good articles to print them all. I will save some for a time when our writers are less inspired. Remember that you can get all these newsletters from Jim and Liz Wolff. He keeps them all in the SAG library, which is meant to be used. He has quite a few interesting books also, many of which I have borrowed.

The Devil's Advocate (April 1994) has a really terrific account by Vivian Loftin of her caving trip to New Zealand. It was a solo, low budget, relatively unplanned trip; not part of an expedition. She just went, met cavers, and went caving, and of course with such spontaneity had a wonderful time. Her descriptions make the New Zealand caves seem (as I am sure they are) extremely enticing.

The Valley Caver (Mother Lode Grotto), Winter 1993, takes the Reviewer's Prize for the most interesting articles in one newsletter. First there is a trip report by Karole Ward describing her first visit to Crystal Snail Cave and the trials and dilemmas she encountered. Next is another report on a gritty trip to Avalanche Cave, by Martin Hays. Not last, and not least, is another trip report by Dennis Worthington describing an expedition to the French Creek area in October 1993. That is our territory and involves new discoveries. Also, the area is being made a Natural Study Area, which means it and its karst and caves will receive some protection, with the input of Rich Sundquist, Mark Fritzke, et al. I am asking that this article be reprinted.

Cavingly, *Dick*

WINDLER'S WARNING

*Feast your eyes upon my treasures.
Sparkling bits of calcite pleasures.
Dance like nymphs before your eyes.
They steal your soul and hypnotize.*

*Your mind wiped clean of all you knew
For you have drunken of my brew.
Aged with love within my walls,
Stored in my corridors and halls.*

*All You who dare drink from my chalice
Tread lightly in my limestone palace.
Take care that you don't love too much
Or I shall wither 'neath your touch.*

*By Karole Ward
The Valley Caver, Winter 1993*

REPRINT REPRINT REPRINT REPRINT

From the SFBC Newsletter, March 1994, vol. 37, no. 3

Trip Report

Caving in Hawaii, Part 2:

Two for the record books

by Dave Bunnell

Adventure on Hualalai

Bill Halliday had made arrangements with the Bishop Estate to gain access to Hualalai, third highest of the island's volcanoes. It was last active in the early 1800s and is still considered a "dangerous" volcano by the USGS. Don Coons, Dave Doyle (a caver from Kentucky who joined us this second week), Kevin Allred (Alaskan caver here in Hawaii for an extended vacation), Carol Vesely and I accompanied Bill on a four-wheel drive adventure upon the cratered landscape atop the volcano. The weather was rainy and miserable, so we were glad for the comfort of the cars. Bill had been up here before and had a specific pit he wanted us to drop. There was quite a maze of roads on the top and we were soon lost turned around. Hopping out in the rain with a GPS, I figured out our position and we trundled on. It was about a 12 mile drive to the edge of the pit - quite literally. In fact, the vehicles were used as backup anchors.

All of us were impressed with Bill's find. It had the appearance of a massive Mexican sotano, some 500' x 600' across at the top, with walls of reddish cinder and basalt. We circled it a few times looking for the best rig point. There were a number of trees to rig to, but the main consideration was rockfall. A point was finally agreed on and a 500' rope tossed over the edge. Don descended first, pausing

halfway down to place a pad on an overhanging edge. The rope just reached, and Don was on the bottom! Now, what had made this pit particularly impressive was the obvious pit entrance at the bottom. Though it was up off the floor and appeared difficult to reach from our topside viewpoint, Don was able to scramble over. Soon Kevin descended and joined him. There were no rocks to drop, as the area around the pit was surrounded by cinders. So with a short rope he'd brought along, Kevin dropped about 50' down for a closed look. His anchor - Don! Once in the pit, Kevin found a chunk of rock in the wall to drop and was rewarded by a resounding boom 5 seconds later! Obviously, this was no small time pit!

We didn't have enough rope or time to do more- Bill wanted to be out by nightfall and it was all we could do to pack up and get out. While the others were below, the rest of us did a perimeter survey around the top of the pit. As the rain poured and the cold wind howled, we kept asking ourselves: Is this really Hawaii? We all decided we had to return, so as soon as we were down we made arrangements to have another 600' of rope FedExed to us from the mainland!

The Kazumura story

Kazumura is a cave in the Kilauea flows that was mapped by the British some 15 years ago. At 11 km in length and 262 m in depth, it held the record as the world's longest and deepest lava tube for a number of years. It had been surpassed by Cueva La Viento in the Canary Islands a few years ago but now we were aiming to take that record back. All this was made possible by the determined effort of Kevin and Charlene Allred, who'd been to the cave years ago and were interested in extending it during their prolonged vacation to the Big Island. Kevin had had the good

fortune to hear of a Caterpillar machine breaking a hole in the roof of a tube just upflow of Kazumura. By the time we arrived in Hawaii, Kevin & Charlene had already mapped 4.5 miles in this tube and had connected it to Kazumura by breaking the thin crust of a "tube-within-tube". They had stopped at a nice entrance deep in the rain forest and it was to that entrance that several of us returned. At this point, Kevin speculated that only an additional 20-30' of vertical extent would be needed to capture the U.S. deep cave record from Lechuguilla. Needless to say, spirits were high as we began a leapfrog survey upflow, knowing that the next known cave upflow in this region (Olaa) was still miles away. Carol, Dave & I formed one team and Don & Charlene another. We began by scaling a 10' high lava falls. It was nice passage much of the way beyond but at one point we had to get on our knees (ugh!). Alas, after half a mile we came to an abrupt end, where a secondary flow had invaded the cave and plugged it up. We backtracked a couple hundred feet to a bizarre bubble in the ceiling, with a 2' wide hole in it. It sort of looked big through there, but did it go? It was some 10' up, and despite some comical efforts boosting Carol on our shoulders for a better look, we couldn't tell if it was any kind of lead.

While this ended the day's survey efforts, our team decided to go downflow a short ways to photograph some bizarre formations noted by the Allreds. We climbed down through a fissure into nice open passage which soon gave way to an area with orange walls - picture time! Beyond was our goal - a set of truly bizarre directional lava "whatsits" - not like lavacicles at all, but pointed blades jutting out at right angles from a corner. Then there was this other thing that looked like a strange scallop shell with ridges hanging from an underhang - even more bizarre!

REPRINT REPRINT REPRINT REPRINT

From the SFBC Newsletter, (continued)

Downflow Kazumura (?)

There was still hope of adding more cave at the downflow end of the system. Kevin had been to a breadown choke in the lower end of Kazumura and felt good air. The most likely cave to connect would be "Paradise Park" cave in the Puna district. I was familiar with this cave as the site of the infamous "flying vagina", an appropriately shaped natural lava feature revered by some local religious groups. The latter actually use the site regularly for ceremonies, a practice which had gone on for some time owing to the presence of scattered human remains in the area. This section of the cave is gated.

We entered beyond the gate and proceeded to map upflow, towards Kazumura. Kevin and Charlene had already mapped a few miles in here so we trundled through nice-sized passage to the last survey station. We split into a men's (Don Coons, Dale Pate, and I) and a women's (Charlene Allred, Carol Vesely, and Cyndie Walck) and mapped in a leap-frog fashion. We went through some large passage, in many places littered with large limpet shells - obviously a cave which had seen extensive use by ancient Hawaiians. The walls were covered with white tube-slime, but otherwise there were few formations. We hit a nice entrance with a large pillar dividing the exits, but easily stayed under a dripline as we continued. After about 1500' our pahoehoe-floored passage gave way to breakdown floors, and another 800' or so brought us an apparent choke. Some determined poking failed to produce a way on, and both teams together got about 4500' of new survey.

About a week after I returned home, I heard the news from Bill Halliday, who was still on the

island: Kevin had managed to get through this breakdown choke and connect into Kazumura! While the figures aren't all in yet, it seems certain that the vertical extent of the cave should be well over 1600', exceeding the depth of Lechuguilla and making Kazumura America's deepest cave.

Return to Hualalai

We had just one day left before several of us were due to leave, so we decided to make another shot at the big pit. Our 600' of additional rope had arrived, and we now had two 4WD vehicles available for our excursion. The area now presented a pleasant contrast: the storm had broken, and it was a crisp Kodachrome type of day. We were treated to fine panoramas of the Kona coast, and to good views of Mauna Kea and Mauna Loa, both capped with fresh snow. We arrived at the pit about 12:30 p.m.

Our plan was ambitious: rig a tyrolean across the pit, using "tag" lines to position it over the inner pit, and then drop from the tyrolean. There was some concern about the angle of the rope required, but we didn't have a lot of extra to play with. It took us several hours to string a 600' rope across the pit and anchor it securely to both sides, on trees backed up to jeeps. Kevin received the honor (?) of the first descent. With 1100' of rope stuffed in a large duffel, he moved out on the line, attached by a pulley. We had a tag line attached to him to help pull him back and to slow his movement on the steeper portion of the traverse. Once above the inner pit, he moved to switch over for rappel. It was here that he ran into major problems, as the 1100' of rope were attached to him rather than the traverse line. It took him some time to detach himself from it and rig it. By this time the sun had set, so no pictures were possible. We couldn't see much of what was

going on until Kevin gave a whoop a couple of hours later - he had emerged from the throat of the inner pit. We eagerly crowded around the lip as he returned to hear the story of the inner pit. Fantastic, said Kevin, huge! The lower pit had belled out into a huge chamber over 400' long, and itself was over 400' deep!

It was already fairly late in the evening and Don was raring to go. His plan was to do a solo survey at the bottom unless someone else planned to do the drop. Carol and I both thought about it, but in light of our planned 7 a.m. departure (and never having switched from tyrolean to descent) we deemed it inadvisable. As it turned out, even Don, with all his vertical experience, had quite some trouble with the changeover. The problem was that the main line hung far enough below the traverse (what with a figure 8 and attaching 'biner) that it was impossible to get your rack on to it. Don had to be creative, and did something on the order of attaching a jumar to lift up the main line while he got his rack on to it; somehow this involved being upside down and having to flip himself over the tyrolean to get started. I think I'll practice that one in an easier spot for the first time, thank you!

Both Don and Kevin commented on how eerie it was climbing out at night, looking up and seeing nothing but stars - as if on an infinite ascent. Once they were out, the real work began: hauling up all that rope. In addition, we

had to measure the rope to get the drop length. We came up with 810' of rope from the low point to the tyrolean to the bottom of the inner pit. Based on surveys from the top of the pit and down the tyrolean, we figure its low point was 57' down, so the pit is 867' deep, 269' deeper than El Capitan pit in Alaska and a new U.S. depth record.

REPRINT REPRINT REPRINT REPRINT

From The Speleograph (OR Grotto), March 1994

CLIMBING IN CAVES - BEND AREA UPDATE

A joint meeting was held March 5th, concerning climbing in Bend area caves. About 60 people showed up, including representatives from Northwest grottos, the American Cave Conservation Association, Mazamas, local climbers, the Forest Service, Bureau of Land Management and Warm Springs Confederated Tribes.

Carolyn Wisdom extended a welcome to those present, followed by everyone briefly introducing themselves, and their interests related to the caves. Carolyn discussed the need for the meeting, and the desire of the Forest Service and BLM to hear the concerns of those present, and the desire to foster cooperation and exchange of information between those interested in the caves.

Harry Hoogestenger acted as meeting facilitator, establishing ground rules for discussions, and allowing all participants an opportunity to speak, uninterrupted. Those present agreed to focus their discussion strictly on caves in the Bend area, and to refrain from personal attacks.

Paul Claeysens, Forest Service archaeologist, next described the geological context of area caves, and their cultural, significance, and importance to Native Americans as religious sites. Lew Becker, Wildlife Biologist, explained usage of caves by bats, and their sensitivity to disturbance. Jim Nieland, Region-6 Cave Management Specialist, discussed invertebrate biology, sensitivity of cave entrances, microclimates, and cave ecology. Jim gave examples of cave entrance acting as refugium, hosting plants and animals which can't survive conditions on the surface, and which may be found hundreds of miles outside their present range. Other examples of cave-adapted organisms evolving in a single cave were cited, and their sensitivity to minute changes in food supply, or disturbance.

Bill Queen, with the Forest Service, discussed the "state of the caves" on the Fort Rock Ranger District, and the Forest Service concern for their management. He indicated the Forest Service was moving to develop interim management direction for the caves, which recognizing their various resource values, sensitivity to disturbance, and the laws and regulations which guide management.

Jim Nieland next gave a history of Forest Service cave management policies, and the Federal Cave Resources Protection Act. He cited the Forest Service Manual policy requirement to: "Manage caves as a nonrenewable resource to maintain their geological, scenic, educational, cultural, biological, hydrological, paleontological, and recreational values."

The Cave Resources Protection Act is in the process of being implemented with new regulations. Regulations for the Department of Interior have been published, and those for the Department of Agriculture are expected soon. The purpose of the Act is "to secure, protect, and preserve significant caves on Federal lands for the perpetual use, enjoyment and benefit of all people"; and "to foster increased cooperation and exchange of information between governmental authorities and those who utilize caves located on Federal lands for scientific, educational, or recreational purposes". The group also learned that the law makes it "the policy of the United States that Federal lands be managed in a manner which protects and maintains to the extent practical, significant caves."

Both the Bureau and Forest Service will soon be taking nominations, and making determinations of cave significance. It is expected that most true caves will be determined "significant". Significant caves will come under full protection of the law. Agencies are also required to take "management measures to assure that caves under consideration for the [significant cave] list are protected during the period of consideration."

Representatives discussed agency responsibilities. It was pointed out that agencies must follow the "intent" of the law, and policies, when making management decisions, and must take into account all cave resource values, including recreation. Decisions will be based upon cave resources presence, and compatibility with management policies, and the law.

Starting just before noon, and then continuing after lunch was a discussion period where both cavers and climbers expressed their interests and concerns related to the caves. Cavers were concerned about the impact caused to cave resources by climbing activity, while climbers viewed the entrances as an exciting place to practice their sport. Through the discussions, a greater awareness of the interests of both groups developed, and it was apparent that there was a shared interest in protecting the caves. In many ways the interests of climbers and cavers is much closer than would be expected. An increased presence, at certain caves, by climbers has reduced partying, littering and related vandalism.

The general view of those attending was that the use of cave entrances for climbing was a poor choice of resource use. The climbers volunteered to impose a self-moratorium on new bolted climbing routes. With a promise of no increase in bolted routes, the agencies will collaborate on development of interim measures for management of the caves. These will be superseded by permanent cave management plans once the new FCRPA regulations are out.

Both climbers and cavers indicated a willingness to work together to resolve their concerns. Libby, representing the ACCA, offered to meet with climbers and put on a program concerning cave resources, and how to recognize those which are sensitive.

REPRINT REPRINT REPRINT REPRINT

From Underground Express (WVG), vol. 13, no. 4

At first glance, you'll say "Boy, this issue's pictures are REALLY bad! Withhold your judgment for just a moment, and I think I'll change your mind.

Most of us have seen a stereo 3-D slide show, complete with the funky glasses. Our brain perceives depth by comparing the two slightly offset images it gets from both eyes. That's the reason for the glasses, they are polarized, so one eye gets one image, and the other eye gets a second image.

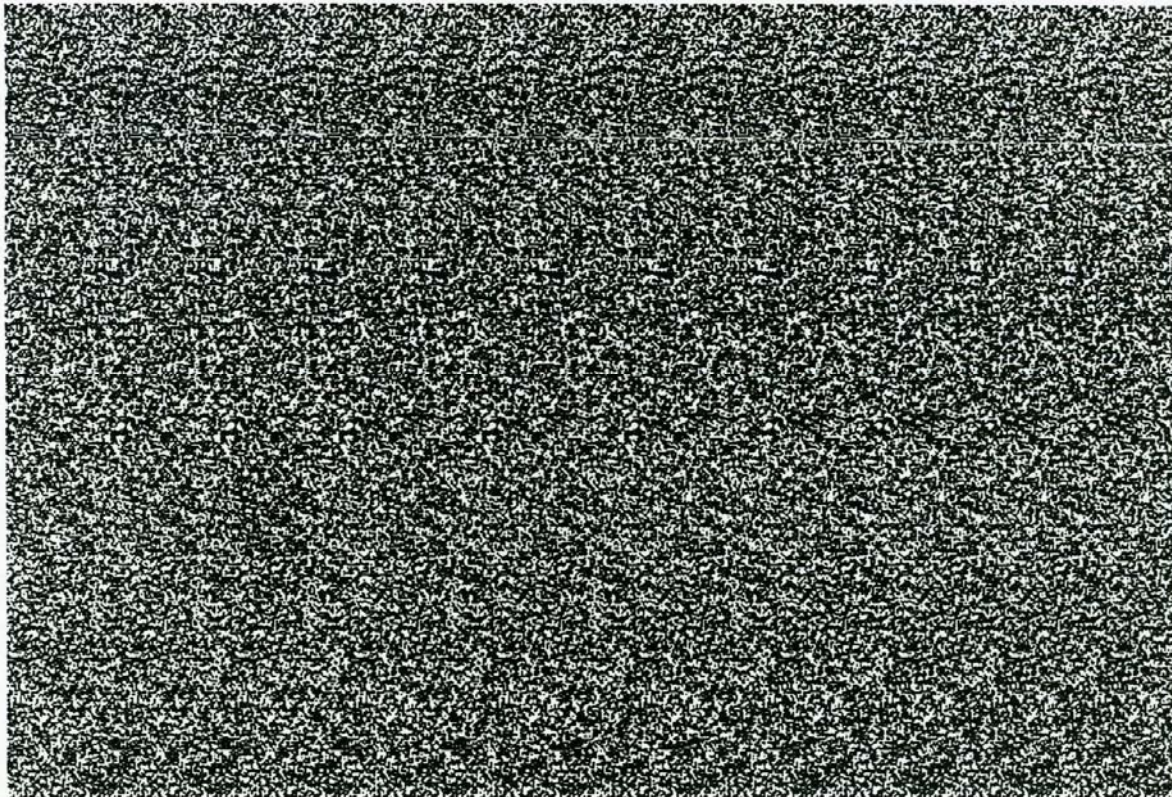
This is a single image, random dot stereogram, where the information relating to depth perception is coded in a pattern of "random" dots. However, it is really anything but random.

To see the stereogram, hold this page about 8 to 16 inches from your eyes. Relax your eyes, and focus approximately 2 feet behind the printed image.

The two large dots just above the image can be used to help adjust your focus. When gazing through the image, you will see one set of dots with each eye. When these sets merge to form three dots -- a strong central dot and two weak outside dots -- you have the correct focus.

Hold your focus and slowly look down at the image. It will take your brain anywhere from 5 seconds to several minutes to decode the 3 dimensional information.

Another approach is to just stare at the picture, and let your eyes relax. The picture will go blurry, but don't focus on the dots, just let your eyes relax. Your brain will interpret the dots and begin forming the 3-d image. Once you are "in" the picture, it is very easy to keep the correct focus. Have Fun!



REPRINT REPRINT REPRINT REPRINT

From Devil's Advocate (Diablo Grotto), April 1994, vol. 27, no. 4, pages 34-36

By Vivian Loftin

Caving Down Under
A New Zealand Experience PART I

It's a rare opportunity for a caver to get 3 summers of caving in one year. I managed to pull it off with 2 trips to New Zealand where January is the height of summer. Since I failed to write a trip report on my first trip, I decided to make this a two part trip report.

My first trip to New Zealand happened suddenly and fast. I had all of 2 weeks to plan, prepare and pack for my trip. During this time I got all the information I could find on New Zealand caving potential. I got lots of helpful information from Bob Ehr who had been there in 1980 and also from Ernie Coffman and Karen Rusiniak.

I landed at the Auckland international airport early Friday morning March 26th 1993. I was 7,000 miles from anyone I knew, had a budget of US\$28.00 a day for food, shelter, travel and entertainment, and had no plan for where I would go first. But, being an adventurous spirited caver, I knew it could only be great! I would be carrying everything I had with me on my back for the next month, so I brought only the essentials of survival. This included caving helmet, headlamp, camera, harness, Prussik loops for ascenders, figure 8 descender, and a few extraneous items such as a sleeping bag, tent and clothing.

I got a bunk at a youth hostel in Auckland and spent day 1 recovering from a serious case of jet lag. I was feeling a little lost and alone in the big city. I decided right away the thing to do was head for the Hamilton-Tomo Group caver hut in Waitomo that Bob Ehr had told me about. I took the 8:00am bus the next day to Waitomo.

Waitomo is located about 1/2 days drive south east of Auckland in the heart of the North Islands Main Karst area. Tomo is the native Maori name for hole or pit and Wai is water, so Waitomo is basically Wet Cave. That is pretty accurate too. What there cavers call a hut, I soon learned, is a 30 bunk hostel with a complete kitchen (including dishes), hot showers, big steel sinks for washing cave gear and a drying room for gear in case it rains (which it does a lot in New Zealand). All this costs an NSS member NZ\$3.00 a day which amounts to about US\$1.75. Things were looking up.

A caver named Sean from a nearby town came in about dusk. We talked about caving for a while and he graciously offered to take me the following day in a

cave called the Rumbling Gut. He then invited me to tag along to an engagement party for a friend of his. It was great. My second day in New Zealand and I was hob

nobbing with the locals eating roast pig drinking fine local beer, discussing plans for the caving trip the next day. This is when I decided this trip was going to work out just fine.

The entrance to Rumbling Gut cave is located on a deer farm (Yes, a deer farm. Venison is big business in New Zealand). We scrambled down a breakdown slope for a bit then the formations began. There was a very impressive side passage that reminded me of the decorated canyon in Church cave, only it was longer and had a great variety of formations. From these it just kept getting better. The main route continued through mostly walking passage, down one long crawlway, over and under, etc. There were several somewhat tricky climbs and chimneys.

After a bit we met up with a stream which contained quite a few crayfish. We traversed, climbed and generally followed the stream quite a ways. One particularly exhilarating spot was an up and over traverse approximately 60 feet above a waterfall. Rumbling Gut does indeed rumble. The whole cave reverberates with the sound of an airplane engine.

I couldn't have had a better guide. Sean was knowledgeable about fossils and pointed out one place where we were actually passing through the gut of a 33 million year old whale skeleton. There were also bones from ancient penguins and multitudes of oyster shells. He has counted something like 23 skeletons protruding from passage walls, including one he hadn't noticed before that day.

We visited an upper chamber of purest white formations. There were several soda straws in the cave 4 feet and more in length, all undisturbed. This upper room in particular was virtually pristine with flagging tape marking the path through.

The final passages were a blast. We chimneyed down the stream, up and down waterfalls, across a chain bridge, down a slide into the water, soaking ourselves just before completing the trip.

Sean showed me how to get to some other caves in the area before talking off after the weekend. He also made plans to come back to the hut Tuesday night and take me caving again Wednesday.

Since the caving hut is a functioning youth hostel, I met several other international travelers while staying

REPRINT REPRINT REPRINT REPRINT

From Devil's Advocate, (continued)

there. Some of them expressed interest in caving. Since I then had cave locations but no caving partner, I was more than happy to oblige.

Monday, I took an Israeli named Tomer, who had not been caving before, to Gardener's Gut cave. It is an 11 km cave within hiking distance of the Hut. The cave has several entrances. The most popular, exit 7, had been closed as a result of excessive traffic through delicate areas. We went looking for the resurgence entrance. We spent a couple of hours walking through some gorgeous heavily vegetated tree fern laden bush land in the rain. Just as we were about to give up on finding it, we came across a well trodden trail leading in the appropriate direction. We found the entrance presently and started caving. It was here that I saw my first glow worms. They were truly moving! They looked just like stars. I found myself looking for constellations. The amazing part was that I found some. These celestial points of light are actually a type of fly larvae. They lay a line of sticky silk hanging beneath themselves then set about glowing. This spot of light in the dark attracts insects which get caught in the line and become fly larva fodder.

The most memorable aspect of this cave to me other than the glow worms was the beauty of the passage. The sounds of the water combined with the water carved stonework were marvelous. We followed the water upstream wading most of the way in depths up to 3 feet, through canyons and towers of stacked limestone. Tomer really seemed to have a great time.

There I was, an American, in New Zealand acting as a tour guide for an Israeli, underground. He said that he liked it even better than he expected to. He went very slowly, inspecting every detail, trying to lock in the images and experiences to take home with him.

I got another chance the following day to be an international speleo-ambassador when I took Tomer again, plus an Irishman named Joe into another local cave. This time we went into Urenui cave. For those of you interested in the Maori language, that's Uri, meaning penis and Nui meaning big. We three foreigners spent the day frolicking in the Maori big penis. It was tighter, smaller and more decorated than the parts of Gardner's Gut Tomer and I visited the previous day. The stream was fairly small, but we were forced to belly crawl in it in quite a few places, so we still managed to get pretty wet. The cave branched into two passages. One, an upper level beautifully decorated passage and the other an upstream - up waterfall tight

crawlway terminating in a flowstone choke. It was really fun doing such a tight wet beautiful cave with two keen novices from distant lands.

Sean returned that evening and treated me to a guided walk up the local stream trail that is strewn with natural bridges, resurgences and interesting karst. I got a terrific local history lesson. He knew about lots of Maori burial caves and caves containing the bones of extinct Moa birds in the area. Many right on the main tourist track. He told me about the closing of one gated show cave because of disputes with Maoris. As we sat escaping the rain in a shelter where Maoris used to live, he told me about the cave above us where Maori chiefs were entombed. They would plane a particular kind of tree beneath the entrance in the cliff above. When a Maori chief died, they would climb the tree, lay the body to rest, chop down the tree and then plant another one.

I spent the next morning doing vertical practice on a rope they have for that purpose hanging from the high ceiling in the main living area of the hut. We got everyone in the hut on rope including Joe the Irishman, Tomer the Israeli and a couple of Canadians.

When Sean was convinced that I could do the cave on my figure 8 and prussik loops, off we went to Burr Cave. A couple of miles hiking over sheep and cattle paddocks in the rain took us to the entrance. Quite an impressive entrance it was, too. I really enjoyed bushwhacking through all the tree ferns and various other New Zealand Bush flora. It felt like a real rain forest adventure to me.

The entrance was down in a canyon of sorts with a waterfall flowing down about a 60 foot cliff on one end. We followed a stream almost all the way through the cave, rappelling down 2 waterfalls. The stream corridor was festooned with remarkable gypsum flowers much of the way. We passed by many beckoning leads above that had obviously never been tried. We were running late, so we had to skip a side passage full of what I hear are some amazing gypsum formations. The ones I saw were quite nice, but the cave is known for the ones down the side passage.

The main route diverged from the stream near the exit. We went through some totally amazing rooms filled with fantastic mud formations. Water dripping from the calcite formations above carved huge spires and mounds of mud into pipe organs and whimsical sculptures. Five to six foot soda straws were everywhere. If I hadn't been rushing and tired from an already long day of caving I would have loved to spend hours in these rooms. But

REPRINT REPRINT REPRINT REPRINT

From Devil's Advocate, (continued)

we had to hurry back before the other cavers at the hut got worried and came looking for us.

It was dark when we emerged, but the rain had stopped and the moon and stars were out to guide our way back. There was some type of swallow nesting in this second entrance. They were very unafraid and let us get quite close. That is common with native birds in New Zealand as a result of their evolution in a land with no predators.

Waitomo is a fabulous caver playground, but I had a lot more of New Zealand to see so I set off hitching down the road. Hitchhiking on the North Island was a breeze. The very first passerby after I stuck out my thumb stopped. My luck wasn't always so good, but it was encouraging this time.

After some hiking and sightseeing for a few days I found myself in the second major caving ground. I visited near Nelson on the North part of the south island. I had a couple of very frustrating days in Nelson knowing I was in caving paradise, but unable to get underground. I was finally able to get in touch with Kevin Pearce, a former Diablo Grotto member who is a New Zealander. He got me in touch with some local cavers in Nelson who were extremely helpful. They gave me the key to another caver hut located on Talala hill, a major marble karst area. The deepest pit in the southern hemisphere is Harwoods Hole, (1500') located about 15K from the hut.

I had the place to myself when I arrived. I had plans to go caving the following day with John and Hugh, a couple of cavers who were in town from Christchurch. So I was feeling better about things.

That evening a couple from England arrived. The fellow, Mark, was a caver also and as keen as me to get underground. He asked if I wanted to go caving. That's

all I ever need to hear to get me underground. We went to a cave called Greenlink. I was told that it's called Greenlink because of a dye trace that got out of hand. They did confirm a hydrological connection to another major cave in the area named Middle Earth by this trace (they have since made the connection by diving two sumps). However, they used too much dye and the town in the valley had green tap water for a while: the officials who investigated this strangely tinted water concluded it was caused by a harmless algal bloom. No cavers disputed the officials.

Greenlink is a wet, vertical, cold marble cave. The water polished, sculpted marble passages were beautifully

distinctive. Mark and I went in at 9:00pm, exited at 9:00am and saw less than half of the cave. We did 5 vertical drops. Most were waterfalls. One drop was right off the end of a long wet crawlway so you have to attach to the rope in the crawl then swing around over the lip into the waterfall. Very exhilarating! These pitches have names like Watergate (39'), Whitefall pitch (56') and Deep Breath Cascade (20'). It was a really challenging, fun cave.

We still managed to be up, dry and rarin' to go caving again when John and Hugh arrived about 10am the next day. Our destination: Ed's Cellar. This is another "sporting" cave. It is developed along a 30 degree bedding plane so it involved lots of climbing. I learned when I returned to New Zealand in January this year that I had made a name for myself on the 131' waterfall drop in this cave. "So you're the woman who did Ed's Cellar on a figure 8 and prussik loops!" Apparently neither system gets much use in New Zealand.

As usual it was pissing down rain when we got out, but the double rainbow that guided us back to the car was worth it. I was treated to a hot shower, warm bed and good conversation along with John and Hugh at the home of two other local cavers Mike and Sierra Brewer.

The next morning I hitched back up to the hut. Having an entire afternoon with no plans and hating to waste a sunny day. I hiked the 18 mile round trip to Harwoods Hole. I figured no self-respecting caver could come this close to the deepest pit in the southern hemisphere and not take a gander. Yup, it's a big hole alright.

I very much wanted to visit Paparoa National Park and backpack the Inland pack track when I read this in my guidebook:

"Trampers should not wander off the actual track as this is a karst, limestone country and there are a number of hidden sink holes and underground streams in the area, some quite near the track."

Sean, from Waitomo was coming to the south island over the Easter holiday and we planned to hike this trail together. However, this trail goes through a narrow limestone gorge where you must walk right in the river which is highly susceptible to flooding. It rained far too much to make this trip, so we had to settle for other sights.

I did make it back to Paparoa in January this year, which you can read about in the next month's Devil's Advocate.

-Vivian Loftin

REPRINT REPRINT REPRINT REPRINT

From Valley Cover (MLG), Winter 1993, vol. 13, no. 2

French Creek Expedition-- October 1993

by Dennis Worthington

From October 6-9, 1993 Rich Sundquist, Paul Greaves, Mark Fritzke and Dennis Worthington returned to French Creek in the Trinity Wilderness to continue exploration and mapping of caves as reported in an earlier article (Ed. VC Spring 1993) this year. Their primary mission was to map a cave discovered on their way out, and it looked like a really promising lead.

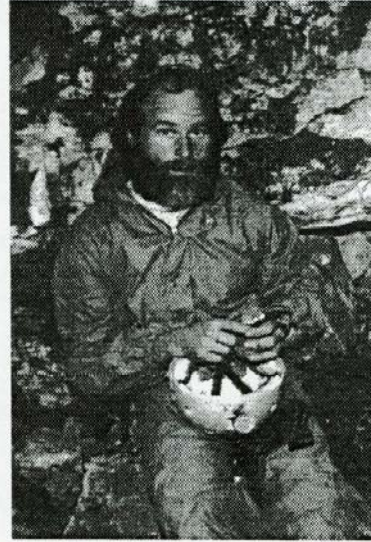


Paul and Rich discuss video techniques.

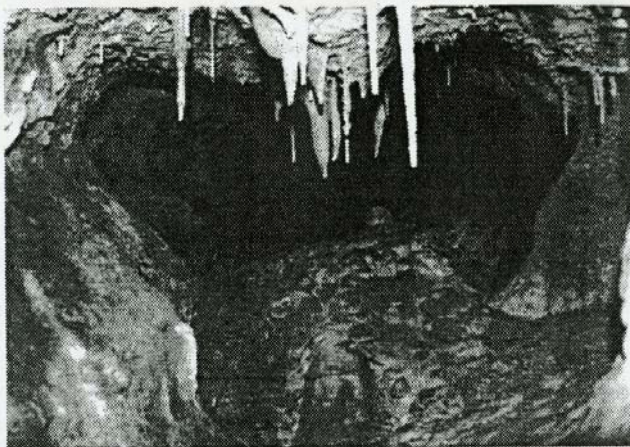
Rich, Paul, and Dennis got a late start hiking in, and reached the ridge above French Creek at nightfall. They camped there over night and awoke the next morning to a

cold fog. Paul noticed an old telegraph line along the ridge with old insulators still attached to it in places, so they walked the ridge following it for several hundred yards. As the fog began to melt away, it gave ever changing spectacular views of the opposite ridges and adjoining canyons! After breaking camp, they hiked down the steep 1,300 foot slope and set up camp in the dry bed of French Creek. The dry weather of this trip was a very welcome change from the constant drenching rains they endured on the previous trip.

The small cave in which they camped on Labor Day was then photographed and video taped. A small room which no one had been able to enter previously was penetrated



Mark Fritzke prepares to cave.



Dennis' view of a tight crawl.

with some difficulty by Paul (who else?!), but due to formations he was unable to follow the passage more than ten feet. Hopefully another way will be found beyond that point, since the echo of his voice indicated the possibility of much more passage ahead.

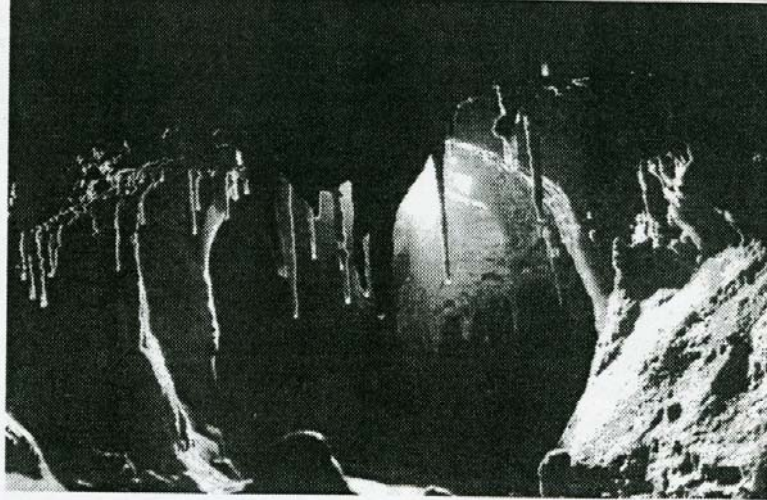
They then entered the main French Creek Cave to set invertebrate traps in several locations, and show the cave to Paul, who had not yet been there. Unfortunately, Paul was having some flu symptoms and wasn't able to get to the furthest reaches of the cave. Rich and Dennis explored a few leads but none of them went more than 10-15 feet before becoming humanly impassable. Several pictures were taken of a pure white bacon strip, some soda straws, and a beautiful bouquet of fungal hyphae growing from a mouse dropping.

REPRINT REPRINT REPRINT REPRINT

From Valley Caver, (continued)

Late that afternoon they were joined by Mark, and the next morning they all went a short way down stream to the site of Mark's cave. He named it Memorial Cave, in memory of Bob Richardson, and the fact that it was discovered, appropriately, on Memorial Day weekend.

After digging through the opening, they surveyed 117.5 feet of cave passage before ending in a mud, gravel, and charcoal choke. The charcoal bits were apparently the result of a forest fire in the area about eight years ago, as still evidenced by many burned stumps on the hill side. They tried digging through it but without success. It appeared that all the water they had seen flowing through the cave on



The view Dennis had crawling out of the tight passage.

Memorial Day seeped through numerous tiny passages in the sides of the choke. As far as they could see down the narrow passage there were no more than a few inches between stone walls on each side, so further attempts at digging were abandoned.

While entering and exploring the cave, Rich was video taping the event with his new video camera. (Ed. Sony Tr101 Hi8) While at the bottom of the cave near the beginning of the choked passage, Paul fell off the wall when rocks he was holding onto broke loose and crashed down six feet, nearly landing on Rich head and video camera. Rich had been taping Paul's climb but unfortunately as Rich recoiled, the video camera was inadvertently turned off, (Ed. Easy to do I know!) and the rock-fall and ensuing conversation wasn't recorded for posterity. Paul made it on the second try, but the passage that went above the lower choked one went only a short distance before it narrowed and Paul was unable to push it any further. And if it's too small for Paul, it's too small for anybody!

After exiting Memorial Cave, Rich and Paul went upstream doing a surface survey to connect the various caves with survey points for mapping. Mark and Dennis did the same downstream to locate the stream resurgence. After Mark and Dennis finished their survey, they continued downstream ridge walking, and Dennis came across the find of the trip. At the base of a large limestone outcropping was a small cave entrance lined with small twigs, and a large dug out depression about eight feet in, an obvious bear den. It then opened up to a large 8 x 8 foot passage for about 30 feet, and then split up into several other passages.

The next day they all returned and Dennis carefully crawled through a terminal passage with special guidance from the rear by Rich in order to avoid the soda straws that were just an inch above his shoulders and buttocks. The four foot tube beyond went about 15 feet and turned right, but unfortunately from there it narrowed quickly and

was impassable. The passage was photographed with both still and video cameras, mapped, and then Dennis carefully crawled out, with even one broken soda straw! Paul found another passage, but it, too, closed off. There

was not enough time to map the entire cave, but it's estimated to be about 200-250 feet. Dennis name the cave Soda Straw Squeeze Cave.

After exiting the cave, they broke camp and made the tough hike out, reaching their vehicles by nightfall. They were all pretty tired, so over-nighting at Rich's parent's home in Redding was a welcome invitation on their way home.

This Spring, 1994, they plan to return to French Creek again and map the remainder of Soda Straw Squeeze Cave, (Ed. How about S'C for short?) and continue their search for more virgin caves.



Dennis exiting the Bear's Lair.

NATIONAL SPELEOLOGICAL SOCIETY, INC.
VERTICAL SECTION

Weekend Vertical Techniques Workshop
May 14 and 15, 1994
Foster City, California

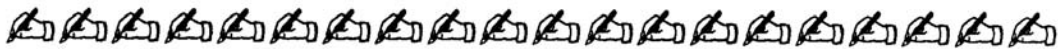
by David McClurg, Workshop Coordinator

On May 14 and 15, the NSS Vertical Section will conduct its first West Coast weekend workshop on vertical techniques. This workshop is intended both for beginners just starting out and also for experienced cavers who want to brush up on basics, fine tune existing gear, or try out a new system.

It uses the same tested methods proven in our popular techniques workshops given for 11 years at NSS Conventions. It will also use a new Vertical Section curriculum, which combines lectures, demos, and intensive learn-by-doing training, fully supervised by experienced practitioners. You'll get on-rope to try out four prusiking and three rappelling systems, plus knot tying, rigging, cable ladder and more.

If you haven't been able to attend one of the convention workshops—or if you'd like an updated review—here's your chance to participate in a full weekend of vertical training held in a central location on the west coast. It will be a lot of work—and a lot of fun. Please be sure to sign up early since our previous workshops have always filled up quickly. Minimum age is 15.

- Dates** May 14 and 15, 1994. Approximately 13 hours of total instruction.
- Location** Telegen, Inc., 353 Vintage Park Drive, Foster City, California 94404.
- Subjects** Safety: Techniques and Attitudes, Basic Knots, Rigging, Helmets, Frog System, Gibbs Ropewalker, Mitchell System, Knot Prusiking, Cable Ladder, Rappel Rack, Figure 8 and Petzl Descender.
- Who Should Attend** Both beginners just starting out, plus experienced cavers who want to brush up on basics, fine tune their system or try out a new system.
- What to Bring** A comfortable sewn-seat harness. If you have other vertical gear, by all means bring it along for use and fine tuning. If not, don't worry—we have fully adjustable rigs for each system being taught.
- Course Fee** The \$40 fee covers a one-year Vertical Section membership, printed workshop outline, two rigging slings, and cost of liability insurance. Final insurance cost may cause the fee to be adjusted in May by ± \$5 to \$10.
- Students** Our limit is 36 students maximum. Please sign up early assure a place.
- Banquet** On Saturday evening we will have a banquet and a slide program on European versus U.S. Single Rope Techniques.
- Staying Over** In this area, motels in all price ranges abound Also, limited sleeping bag space may be available if you let us know beforehand.
- Register Now** To register, fill out the form below and send with check for \$40 to Vertical Section Workshop, c/o D.McClurg, 104 Graves Ct. Vallejo, CA 94591. For more information call 707 642-5528.



Registration for Vertical Techniques Workshop—May 14 and 15, 1994

Send with check made out for \$40.00 to: Vertical Section Workshop,
c/o D.McClurg, 104 Graves Ct. Vallejo, CA 94591

Name _____

Address _____

City, State, Zip _____ Phone (____) _____

- Please send information on nearby motels. I also enclose \$7.00 for the banquet.
- I need sleeping bag space for Friday night Saturday night





Mark Fritzke on rope.

This photo is from Dennis Worthington's article on French Creek (See page 17).

Only Two Fingers?



FRITZKE ALPINE BOX
Redefining the State of the Art

Press spring and swing gate open with just two fingers, even with your weight on roller!

Only one finger is needed to lock gate with a "Click!"

Superior Features:

- **Comfort**—8" wide chest plate
- **Low profile**—slides over snags
- **Lightweight**—10.4 ozs.
- **Precision machined**—stainless steel and anodized aluminum
- **Engraved Serial Number**
- **Self-lubricating rollers**

\$105

Optional Harness \$22
(yellow, blue, black)

Shipping/Handling \$5
CA residents please add tax

ALPINE ASCENT
P.O. Box 4836 Arcata, CA 95521
(707) 822-8566 or FAX (707) 822-4454

SAG RAG
524 Annie Street
Yreka CA 96097

STAMP

TO:



Remove Staple For Inspection