

# The Cascade Caver



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## UPCOMING EVENTS

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| Feb 20   | Grotto meeting at the University of Washington.                               |
| Feb 21   | Meeting at Mark Wilson's to discuss grotto activities and trips for the year. |
| Mar 20   | Grotto meeting at the University of Washington.                               |
| Apr 17   | Grotto meeting at the University of Washington.                               |
| May 15   | Grotto meeting at the University of Washington.                               |
| Aug 8-16 | Bighorn Project work session #3. See Bob Brown or Mark Sherman for details.   |
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## DECEMBER MEETING

Mark Sherman

The December 16th grotto meeting was the last Tuesday night meeting. Starting in January the meetings will be held on the third Friday of the month. There were 23 people in attendance.

Ed Crawford stated that since he did not regularly attend the grotto meetings, he was not familiar with all the nominees for grotto officers. He asked if it would be possible for next years nominees to submit their qualifications to the Caver, so the members would have a better idea who they are electing.

Mark Wilson has volunteered to be the Grotto Trip Coordinator. There will be planning session February 21 at Mark's house (1910 12th Ave W Seattle) to schedule Grotto trips and trip leaders.

There were complaints about the NSS slide programs from Larry McTigue. Larry, who is the Grotto Program Chairman, said that the programs never arrive or arrive late for the monthly meetings. He has written letters to the NSS Audio-Visual Chairman but hasn't had any response. His next step is to write to the NSS Vice President.

There were several trip reports given. John Clardy talked about his trips to Church Mt. Cave and Red Mt. Cave in Whatcom County. Dick Garnick discussed his trip to Jackman Creek Cave.

## JANUARY MEETING

Ben Tompkins

The January meeting was a video sandwich. By the time I arrived a TV projector had been set up and tapes by Dick Garnick of the Dock Butte / Windy Creek area were already running. After the meeting we watched another 60 minutes of tapes on cave exploration in Mexico and some incredible caverns in Borneo. The baloney and mayonnaise in the middle was provided by Jim Harp who, all kidding aside, did an enthusiastic job on his first day as the new grotto chairman.

Larry McTigue takes over the grotto quill and moneybag while Al Lundberg, after 5

years in office, retaliated by taking over the grotto store. Jeff Forbes remains Vice Chairman and yours truly remains Regional Representative.

Following Jim's plans-for-the-year speech we established a time for the safety review meeting the following day. My notes from that meeting follow later in this issue. It was also noted, in grudging admission that Mr. Brown may have had a good point in insisting that we move the meeting night to Friday, that a number of people had come to the meeting from farther away who would not have come on week days.

Jeff Forbes passed around a copy of the latest Canadian Caver which has a revolving editorship and was published in Vancouver B.C. this time.

Many thanks to the gent from Olympia, whose name I didn't write down in time, for bringing the video equipment. Dick's telescopic scans of some of the remote sink-filled areas in Whatcom County are probably untitled but the other two videos were called "Elusive Depths of Mexico" and "Hollow Mountain of Mulu".

## NEW ADDRESS

Ben Tompkins

Shades of the Grotto Mailbox! A few years ago we got our post office box for the Grotto, bought a rubber stamp, sent out change notices, and within a week the post office decided to renumber all the boxes and we had to start over. Now, after 6 months in my new house the county has decided that the house has the wrong number on it. So as of Valentine's Day my new address will be: 18002 - 1st Ave N.W., Seattle, WA 98177.

## CAVE RESCUE PLANNING

Ben Tompkins

At the first grotto meeting following the accident at Thanksgiving Cave on Vancouver Island, Gerry Thompson and Jim Harp formed a committee to look into our own readiness for such an accident occurring locally. They did some preliminary research and then called for a meeting of any interested grotto members to discuss it further.

This meeting was held on January 17, 1987 at the home of Mark Wilson in Seattle. Present were Dick Garnick (Bellingham), Bob Brown (Elbe), Larry McTigue (Renton), Gerry Thompson (Everett), Jim Harp (Lynnwood), and Ben Tompkins (Seattle).

Discussion began with a brief history lesson. A cave rescue organization was established in 1969 after a cave-related death on Mt. Rainier but the group has long since faded away for lack of cave rescues to keep things exciting. It must be realized that the caving opportunities in Washington State have not fostered a caving community of enough size and enthusiasm to support a cave rescue organization of its own. Any improvement of regional rescue capabilities must therefore be achieved by combining the cave knowledge of the local cavers with the organization, skills, equipment, and manpower of local non-caving rescue agencies.

Quite a few issues were discussed but they divided into four major areas:

1. Developing an inventory of people, skills, and equipment available in the immediate area. This will be determined in two ways beginning with a questionnaire sent out to all Washington cavers soliciting information about their experiences, equipment, and willingness to be available for rescue operations. This information will begin the process of developing a local emergency call-out network for mobilizing a response to a caving emergency.

2. Assessing the capabilities of the local rescue agencies including the various county sheriffs and mountain rescue organizations in the region. We need to know things like how aware are they of the problems peculiar to a cave rescue, how prepared are they to deal with one, and how willing they are to work with people from outside the established community of rescue workers. Part of the initial contact with local agencies should include providing them with information about the established cave rescue resources in British Columbia and with the National Cave Rescue Commission.

3. Improving the rescue readiness of the local cavers. This includes establishing recommended personal equipment inventories,

first aid and rescue training, and purchase of critical rescue equipment that would not otherwise be available in the area. We also discussed establishing caches of emergency supplies in places that are especially remote, hazardous, and popular such as at Windy Creek and on Cave Ridge.

4. Preventing accidents and reducing the need for rescues. The best cave accident is the one that doesn't happen. This opened a much larger issue of a grotto education program to include: a) Caving basics, equipment, clothing, and lighting systems; b) preparedness, fitness, hypothermia, food, trip planning; c) vertical techniques and equipment; d) cave sciences, surveying, photography, and cave appreciation; and e) rescue skills and organization.

Where to start! The following tasks were selected.

- a. Gather information about cave rescue organizations and cave problems peculiar to cave rescue. This is to be used in discussions with local non-caving rescue organizations.

- b. Develop questionnaire about cave rescue capabilities and distribute to cavers.

- c. Begin planning a grotto education program.

- d. Develop minimum personal equipment recommendations plus extra stuff for particular caves. Also plan emergency caches.

The "pizza hour" following the February 20 grotto meeting was picked for getting together again to discuss these efforts. Anyone else interested in local cave rescue preparedness is welcome and urged to attend.

Meanwhile, in the event of a serious accident or rescue here are a few numbers to call or provide to the authorities:

Bob Brown	(H) (206) 569-2724
Elbe, WA. Chm, NW Caving Assoc.	
Phil Whitfield	(H) (604) 372-5079
Kamloops, BC.	(W) (604) 828-4501
Provincial Coord. B.C. Cave Rescue.	
Rick Rigg	(H) (208) 524-5688
Idaho Falls, ID	(W) (208) 526-7816
NW Regional Coord. National Cave Rescue Commission.	

## 1987 GROTTO ACTIVITIES

Mark Wilson

I'm looking forward to working with all of you this year to get our grotto out caving and doing things together. We get together at the monthly meetings which is fine but of little help to many of us if it is only a place to discuss where we went caving on our own last month.

I'd like to start a regular column on upcoming grotto activities here in the Cascade Caver if there is enough interest. This month it is mostly to announce an open meeting to plan a series of grotto sponsored activities for the coming season. It will be at my place, Saturday, February 21, at 1:00 p.m. I hope most of you will attend so we can get lots of input as to where, when, what kinds of caves, and what kinds of other activities you would like to see the grotto offer you this year. Being relatively new to the Northwest, I really need your help gathering ideas.

If you need a place to stay on Friday night in order to attend this meeting then let me know at the grotto meeting or give me a call and my floor is yours.

For those of you who can't attend, I'd appreciate it if you'd take a few minutes and jot down three things you'd like to see the grotto do this year. That way we'll have your input also.

I want to see the grotto be active and am willing to put forth an effort. Are you willing to help?

### TROUT LAKE CAVES

Oct 10-12, 1986

Roger Cole

This was supposed to be Bob Brown's trip but he had other things cooking. It turned out to be an excellent weekend of caving with nothing but clear blue sky. I met Jim Harp, his daughter Amanda, and Gerry Thompson at Puyallup on Friday afternoon and we proceeded in Gerry's VW camper through Randle towards Trout Lake. It was decided enroute that we would camp at Dead Horse Cave and check out the cave after dinner, which we did.

We crawled in through the upper entrance and out the lower end in about 2 hours. We noticed that the plastic cap on the register tube is broken and needs replacing. Mice have been gnawing on the book inside. We also saw several field mice scampering into the cave as we exited.

After a cold, windy night under the stars, I was ready to jump up at first light and get moving but the rest of the party was in no hurry. Gerry made some interesting pancakes with whole wheat batter generously flavored with Allspice. I won't comment on them except to say that the vote was 3 to 1 in favor of regular pancakes the next morning.

We then drove to Dynamited Cave and entered about 10:30. We rigged protection at the 15-foot ledge, rappelled the 40-foot pit with a belay rope, and walked to the 55-foot pit. The return was without incident and we were out by 3:30. I found the lava falls interesting and it is easy to visualize moving lava tumbling over the cliffs. The register in this cave is in good shape.

After lunch we drove to Ice Cave Campground and discovered that we had it all to ourselves. Locating JaR Cave was tricky even though the directions supplied by Mark Sherman were correct. We found Resurrection Cave and several other suspicious-looking holes then finally discovered the right cave after an hour of bushwhacking. We decided to postpone the caving until the following morning and carefully marked the way back to camp.

After dinner, we walked down the stairs into Ice Cave. About 40 feet to the left was a beautiful big stalagmite with a "castle" next to it. In the crystal grotto was a massive chandelier draped over the smooth rock. The clear, sparkling formations looked lovely, the more so in contrast to the dark, drab passages visited earlier.

It turned into another cold night and I was grateful for the invitation to sleep in the camper with Jim and Amanda. Gerry made regular pancakes Sunday morning but he produced so many that we fed all the camp robbers and chipmunks as well.

After an aborted attempt to drive to JaR Cave via logging "road", we ended up hiking.

I found this lava tube the interesting. The floor is quite flat but very rough and hard on the knees. The ceiling is a graceful arch that comes almost down to the floor in many sections. Breakdown is relatively scarce so the original shape of the tube is evident in most sections. There is a lot of stooping interspersed with knee crawling and walking. The two broad lava falls can be walked down. The most striking formation is a 4-foot high stalagmite called a strandline on the map. It is very fragile and had already been broken then stood back up.

A low passage at the back of the cave which blows strongly, according to the nap, wasn't blowing at all. The 1985 map by the Oregon Grotto is good but the numbers are a bit small. Jim got so close trying to read them that he singed his hair on my carbide lamp.

Our tour lasted about 2 hours. In the early afternoon we started home, passing lots of deer hunters on the way. Gerry insisted at Elbe that we detour to Ashford and have some wild blackberry pie at the Copper Creek Inn. It turned out to be a 25-mile detour but no one complained, especially since Gerry picked up the tab.

#### **SANTA CRUZ COUNTY TRIP REPORT**

John A. Clardy

On December 20, 1986, I visited the University of California at Santa Cruz (UCSC) and as an alumnus it was both a sentimental journey and another look at California attractions. You may recall our Washington weather was cold and gray but only a breath of coolness was blowing inshore from Monterey Bay and I enjoyed the warm, sunny winter day.

Spelunkers thinking about attending an institute of higher learning will find UCSC distracting due to the numerous limestone caves and sinkholes underfoot. UCSC limestone is a couple hundred feet thick, extends over most of section 32 on the Santa Cruz Quadrangle, and has great discovery potential. It backs up to granite and slopes downward to Monterey shale. About two thirds of its exposure is meadowland of scrub oak with dense redwood forest uplands. The University grounds are extensive and struc-

tures are often so distant from one another that the municipal bus system is available to be used between caves to speed things along. Asphalt footpaths, naked co-eds, juice bars are also available to assist speleological conquest. Is anyone safe from decadence?

In 1872 a Santa Cruz County newspaper first acknowledged the presence of Limestone Cave although section 32 lime kiln operations dated back to the gold rush era. Eight caverns were found or rediscovered in the 1950's in what is now known as Cave Gulch. During this period W. R. Halliday listed county caves in his Caves of California.

Cave Gulch marked the western border of UCSC when it was built in the early 1960's. Regional speleological lore includes unconfirmed reports of deep, gaping voids uncovered during construction of what are now tennis courts and an earth science building. Assisting in Cave Gulch excavation between 1964 and 1967, I helped discover two new caves and add 500 feet to the previously explored Ixl Cave. It was announced in 1980 that a new research and development center would be constructed just west of Cave Gulch. It is not known what the total impact of this new construction will be on nearby caves.

At 2 p.m. on a warm and sunny December 20, I entered Empire Cave. Empire Cave and I are old friends having been introduced in 1964 after reading Caves of California.

Passing through the massive concrete portal one descends a fixed twenty-foot iron ladder to stand in the large twilight grotto amid one-hundred and fourteen years of accumulated Homo Sapiens detritus. I scampered up a mud slope into a small passageway that crept downward to become a hallway averaging fifteen feet wide and twenty feet high. Walking around breakdown I located a thirty-foot dome and remembered finding cave pearls within a hidden alcove at its top in 1966. As the clay floor began to slant upwards several shallow excavations by curious pot throwers are found. The large hallway floods after prolonged rainfall making raft or cave diving trips possible. Two hundred feet from the iron ladder the passage ends in a small chamber floored with gours.

After thirty minutes in Empire Cave I walked southbound on the Empire Grade Road through the dense redwood forest that borders UCSC. With the excellent karst topography at UCSC and other portions of the county I had weeks of spelunking all around me.

Having only two hours available for caving I climbed down a limestone precipice to Cliff Cave. It is currently quite well known although it escaped Halliday's book by having an entrance that is not visible from above or below. I elected to join a party of three flashlight cavers about to enter. They were John Haupeman and Art Farnsworth of Milpitas and Roland Frank from Santa Clara. I let them lead.

We entered about 3 p.m. climbing down seven feet of rock face into a descending canyon that was still in daylight and had twenty-five feet of chimney overhead plus one tight side crawl. My new companions ignored the excellent cream flowstone walls and were intent only on the growing darkness ahead. They stampeded past another bit of dusty crawl to stop, braying with alarm, at a ten-foot pit. I slid past the corralled yahoos and climbed down.

When they joined me in the room below I felt obliged to explain certain unusual cave features. The four-foot high wood walls faced with colorful metal signs were installed in 1980 by myself to contain soil removed from an adjacent dig that had excavated twenty-five feet of vertical passage. The trio peered down the shaft but didn't try to climb down.

"Well," said Farnsworth, "if these walls hold soil from your digging then what is the half-buried steel drum with a lid that reads: 'Danger, Keep Out, Collapse Hazard, NSS Grotto Key'?"

"That," I explained brightly, "is a gate limiting entry to another passageway laced with marine fossils that I didn't want excavation debris blocking access to."

I talked about how local caves were being vandalized and about conservation techniques. They listened to me in silence until Farnsworth lifted open the gate door, fingered a jimmied locking mechanism, and snickered.

"It's been three years since I've serviced this gate." I growled. It was funny to them, I guess, and they wanted to see the fossil area for themselves.

My gate construction challenged them. It was a thirty-six inch tube dropping vertically five feet then making a slippery 50-degree turn for another seven feet. The cave passage itself then makes a horizontal 45-degree bend and shrinks into the worst crawl in the cave. My only advice was that there was plenty of room to turn around at the other end of the passage. The Three Amigos laughed and joked down the tunnel and were well into the meatgrinder before they realized what was happening.

I led a chastened group out, sober and respectful in their attitude toward spelunking. The careless air was gone. At the last side crawl I explained about the NSS and collected addresses for mailings.

As the three cavers cautiously tried another crawlway, I parted company. The mid-winter sunshine at 4:30 p.m. must seem miraculous to a Cascade caver.

#### **BLACK MOUNTAIN TRIP REPORT**

Dick Garnick

Cavers present were John Clardy, Dick Garnick, and Mark Garnick of Bellingham; Jeff Forbes, Dave Nitsch, and Larry McTigue of Seattle; Ed James and Ben Johnson of Surrey B.C.; and Mike and Rob Lewis of Tacoma.

The Black Mountain area of Whatcom County was the focal point for the 10 of us on September 18, 1986. Our goal for the day was to further check three sinks and one pit on the northwest side of Black Mountain. This area is described in Danners's Book Limestone of Western Washington. One map in the book shows three sinks, two of which capture streams and one which did not. As it turned out there were four sinks of which three captured streams.

The hike up to Shaft Cave took half an hour. Jeff, Dave, and Dick were the only ones to descend the pit. Larry and Jeff measured the pit at 67 feet.

The others in the party went to Elephant Hide Cave to the south. This cave is at the bottom of a large sink and is one of those



that captures a stream. The cave consists of stream passage downward for 80 feet or so into a branching room. There are a few small speleothems around this room but you have to look carefully for them. The cave continues downward for another 40 or 50 feet. We were hoping that this was the 1,200 foot cave that Ben Johnson recalled that the Xanadu Grotto surveyed but we're not sure.

There were some small, one-inch long, very small diameter white worms in the stream plus some brown, 6-legged earwig-looking water insects. The latter had large, round, flat heads with very prominent dark eyes.

The third sink turned out to be filled and the last sink in the series had a stream in it but is only open for 20 feet. The interesting find in this sink was a maxillary jaw bone that Larry brought out for later identification.

When finished with this area we went around to an area on the west side of Black Mountain that I had found on March 22, 1986, called the Apit area. This is a series of sinks above a cliff. It is a limestone area but the sinks and caves are fissure types and not solution caves. Rob Lewis found a new passage in the lower cave. These were not as wet and cold as the caves earlier in the day and they appeared to support more life. The biology seen included gnats, moths, harvestman spiders, and two salamanders but probably the most exciting were the four bats seen in the last series of caves.

#### RECENT NEWS FROM EAST AFRICA

From a letter to Bill Halliday from Simon Peal, Nairobi, Kenya:

"Bill Tanner and Jim Simon were involved in a serious motor accident at the beginning of this year. Jim is pretty well healed although still a bit stiff and aching in the joints, but Bill has had to go to England to be worked on."

"In addition to the bad news about Jim and Bill, we have some good news regarding Leviathan Cave. Recent may-poling activities have brought us to within 200m. of the world record (we hope) with a current length of 12.2km including side passages. Our latest find is a series of braided passages feeding

seemingly into and out of the main tube. We only have just started to explore and survey these passages so the 12.4km looks pretty hopeful. In addition to this, Jim and I did a top-to-bottom trip through the main tube. This was not nearly as strenuous or difficult as expected. The through trip was done with considerable logistic support from the rest of the club, feeding us at various collapses along the way. The next stage will have to be to complete the trip while remaining self-sufficient."

"The potential in the Chyulus seems to be virtually unlimited. So far we have surveyed approximately 2km of another system, Pango ya Moshi, which is tantalizingly close to Leviathan! We have found numerous other holes, some of which look promising."

#### NEW AND OLD LAVA TUBES IN HAWAII, 1986

W.R. Halliday, M.D.

In mid-December 1986 Marcia and I flew to Hawaii to work with Frank Howarth and Fred Stone on the proposed Hawaii Caves Conservancy. We reached Honolulu on Thursday to find that Frank had just returned from an entomology meeting in Reno and was still disorganized while Fred was unexpectedly tied up with classes until Friday evening. So we spent Friday morning flying to Hilo, driving to Kilauea, making contacts, and learning how to reach the location of skylights in the 1986 flows. The tube and skylight, however, were said to be plugged but we went to have a look anyway.

Once we made the right connections, directions were good and we reached the 1986 flow with a hike of about 75 minutes. The last part was on aa several years old; less than ideal going. Long before we left the road, however, we could see the smoke of smoldering trees and the occasional sound of falling limbs and trunks broke the silence. No one else was anywhere around except for an occasional plane or helicopter.

We came to the new lava and the smoldering trees at a cut-around that apparently represented an overflow a few hours old. Where the wood was completely consumed it was possible to look down the red-hot tree casts (orange-hot actually). A typical rop

pahoehoe crust about 1/4 inch thick hid the color of hot lava nearly everywhere else. At one small point the lava continued to glow through a thin section of crust the entire time I was observing it. About 50 feet distant from the edge of the old lava, two defects in the wall of a sizeable surface tube allowed a beautiful view of what looked like orange-red water quietly running along just like water in a gutter.

I took a couple of photos and wondered what to do next; should I walk out to the surface tube and get some closeups? I put a boot on the lava alongside a red-hot tree cast. It held me fine, but thrummed underfoot. Another step, just the same. Darned hot, and quite smokey from the burning wood.

Finally I backed off and went to have a look at the main flow. I didn't find much. Evidently the window had closed, just as reported. At the approach to the surface tube again it was still flowing, just as before. I got ready, for safety in case I fell, with leather gloves and more clothes than I really wanted to wear on this natural oven.

Suddenly something or somebody, maybe Madam Pele, the Hawaiian goddess of fire, opened a trap door right where I was headed, a few meters from the surface tube. A bright orange tongue of lava surged down-slope from beneath the newly-tilted slab. While I shot picture after picture it grew in size, complexity and velocity until there was a wide creek of bright flowing lava. It was viscous at first but became increasingly fluid until below a fairly gentle cascade it formed intermittent low fountains perhaps a foot high. Bubbles several centimeters in diameter came to the surface intermittently and burned briefly in bright orange. Eventually the trap door itself floated down slope, and I noted a long bright-orange trail up-flow where previously there had been only grey pahoehoe.

The bright lava spilled laterally into the surface tube and I expected it to be filled and buried. One of the two lateral openings did close but the other remained open as long as we could remain. The level of the flowing lava within the tube appeared

to rise, the velocity appeared to increase, and more crusted material appeared to be transported on the surface within the tube. Otherwise spelean conditions appeared unchanged by the swallowing of considerable volumes of invasive lava. The bulk of the new outflow disappeared into a swallet at the edge of the 1986 flow, in a jumbled area which I could not safely approach.

We spent about two hours photographing the event before reluctantly turning back. We had an evening meeting in Hilo with Fred Stone to thrash out the articles of incorporation of the conservancy.

The next morning we visited three caves in "the subdivisions" south and west of Hilo. The threat to the biological, cultural, geological, and other values of the caves is greatest here. One cave was especially notable for a lava curtain at the up-tube end of its entrance sink. Here a tongue of lava like that we had just witnessed once poured into the skylight of a medium-sized tube system, leaving a wide, thin lavafall in place as it congealed. Another was notable for the

presence of a keg and bottles of a reject batch of the beer brewed by the owner of one part of the cave. With his permission we sampled it and noted why it was a reject batch. Nobody finished their bottle. The third cave is a large braid system with sections that are of especially valuable for its biology and thus may a priority for the conservancy. It was very hot and mucky, however, and we had to rush back to Hilo with barely enough time to shower and catch a plane for Honolulu to meet with Frank Howarth between planes. It may seem ridiculous to go to Hawaii for barely more than 48 hours, but sometimes it's worth it.