



# THE CASCADE CAVER

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Vulcanospeleology



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Assistant Editor: Ben Tompkins



NOW ACCORDING TO THE SURVEY ...

IN BIGHORN CAVE

LINDA C. HESLOP '85

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The CASCADE CAVER

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The CASCADE CAVER is published 10 times a year by the Cascade Grotto, a member of the National Speleological Society. Annual dues for the Grotto are \$7.50, which can be sent to the Grotto Treasurer, Al Lundberg, at: 19221 38th Place N.E., Seattle, WA 98155. Other correspondence should be made to: The Cascade Grotto, P.O. Box 75663, Seattle, WA 98125-0663.

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Sec/Treasurer:	Al Lundberg	365-7255	Regional Rep:	Ben Tompkins	524-9526
Grotto Store:	Jim Harp	745-1010	Editor:	Mark Sherman	524-8780

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COVER

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This month's cover shows Don Kleuver (Colorado), Steve Sprague (Cascade Grotto), and Todd Whitcombe (VICEG) working in Bighorn Cave during the Bighorn Project last Spring.

We're just about out of material for covers. Anyone with photographs, drawings, or cartoons of caves, caving, or grotto events, please help us out. Also much thanks to Linda Heslop for providing so many fine drawings this last year.

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UPCOMING EVENTS

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- MARCH 1 OPEN HOUSE at Bob Brown's place in Elbe to celebrate his remodeling. Potluck dinner at 6pm. Contact Bob at 569-2724.
- MARCH 8-9 McLAUGHLIN CANYON. Call Al Lundberg at 365-7255.
- MARCH 18 GROTTO MEETING 7:00
- MARCH 29-30 THANKSGIVING CAVE on Vancouver Island. Contact Jeff Forbes at 524-2443.
- APRIL 15 GROTTO MEETING 7:00
- JUNE 14-22 BIGHORN CAVE, Montana. Call Mark Sherman at 524-8780 or Ben Tompkins at 524-9526 for more information.
- JUNE 22-28 NSS CONVENTION, New Mexico. Contact Bob Brown for more information at 569-2724.

JANUARY, 1986 MEETING

The meeting started with the announcement of new officers for the coming year. They are Chairman: Mark Sherman, Vice Chairman: Jeff Forbes, Sec/Treas: Al Lundberg.

Next there was some discussion about the search for a new meeting place. A couple people had called places such as libraries and community centers. Ekhart Schmidt has offered to let us use his basement. The discussion will be continued at the next meeting.

The highlight of the meeting was Jeff Forbes' slide show. He showed slides of caving trips to Puerto Rico, Indiana, and Vancouver Island, as well as some cave diving trips in Indiana and Kentucky. Jeff also announced that he has got a copy of the Castleguard movie to show at the February meeting.

The meeting ended at 9:00 with most of the members heading to the U. District for Pizza.

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MEMBERSHIP DUES

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The following Grotto members or subscribers are overdue or will be coming due soon. Please note your dues date on your mailing label.

Crawford, Ed  
Ehli, Lynn  
McFigue, Larry  
Smith, Dr. Floyd  
Cebell, Wayne  
Brannon, David  
McCauley, William  
Tasker, Art  
Halliday, Dr. Wm  
Riste, Tad

Crawford, Rod  
Enochs, Kelly  
Richardson, Jed  
Balsdon, Sheila  
Gillard, Jeff  
Martin, Robert  
Roberts, Jan  
Bosshart, Walter  
Klinger, David

The Cascade Caver would like to exchange issues for the publications of other caving organizations, especially in the Western U.S. and Canada. We have begun an informal policy of including other caving publications on our regular mailing list for one year at a time rather than relying on a piecemeal scheme. These exchange subscriptions are renewed automatically each January as long as the Cascade Caver staff receives what seems to be a reasonable number of your issues in return during the preceding year.

We would like to thank the following organizations which have been on our mailing list in 1985 and sent publications to us. If you have been sending stuff and are not on this list or would like to exchange publications with us, please contact us at the Grotto address: P.O. Box 75663, Seattle, WA 98125-0663.

D. C. Grotto:	D.C. Speleograph
Gem State Grotto:	Gem Caver
Boston Grotto:	Massachusetts Caver
Nittany Grotto:	Nittany Grotto News
Oregon Grotto:	The Speleograph
Salt Lake Grotto	
Timpanogos Grotto:	The Underground News
VICEG:	VICEG News
Windy City Grotto:	Windy City Speleonews

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PAPOOSE TRIP REPORT

By Jeff Forbes

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Date: Dec 14-15, 1985. Personnel: Pete Crecelius, Tim Hull, Terry Dockett, and Jeff Forbes.

A winter trip to Papoose Cave is by definition a challenge. I knew this. What I hadn't realized was that most of the challenge involved getting to the cave. Suffice it to say that the deep snow made the 3-mile ski slog interesting.

Once through the tight entrance culvert, we were treated to a nice display of hoar

frost and meter-tall ice stalagmites. The 15-foot drop just inside is permanently rigged with a rickety aluminum extension ladder which became the object of many obscenities. Thankfully, the 40-foot shaft that followed was nearly dry. After a quick side trip to see the formations in the Valhalla, we travelled through the Sand Room and rappelled down the 70-foot pit against a pretty flowstone wall. The 70 foot figure marked on the map seemed to be an exaggeration to me. Perhaps 50 feet would be more like it. A pair of eyeglasses and a carabiner were found at the base of this drop.

Proceeding down cave we encountered a significant volume of water entering at the Millrace Room. This we followed to the top of the "Rotten Fifty", which was very wet. By traversing across the pit, we were able to rig our rope on the far side, out of harm's way. A clear pool of water several feet deep lies at the base of this drop but we could pendulum to dry land. Only a few feet further, we reached an even deeper pool which could not be bypassed. We had hoped to examine the terminal sump a couple hundred feet ahead, but it was bitter cold outside and wading was out of the question.

Hightailing it for the entrance, we emerged about 2 a.m. in bone-chilling starlight. Terry found that the leather straps on both ski poles had been neatly chewed off by some unseen rodent. Thus ended a memorable 8 hour cave trip.

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A CHRISTMAS CORRAL AT THANKSGIVING CAVE  
By Tom Miller

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December 22, Saturday [Probably 1984, Ed.]

Olivia Whitwell and Steve Grundy (VICEG), Shiela Balsdon (Cascade Grotto), and I drove north from Campbell River after spending the night in Bill Bourdillon's warm trailer. We stopped in for a visit with Paul Griffiths in Gold River then headed north into the gathering gloom towards Head Bay.

It was well after dark when we arrived, and after an attempt to drive through deep

snow to the cabin by the cave, we decided to spend the evening at a pub in the nearby town of Tahsis. Steve, after his third beer, produced the clever idea of asking Paul Griffiths to lend a hand with his pair of snowmobiles the following day. A quick call made the arrangements.

December 23 was spent in hauling enough food and gear to the cabin to last 8 or 9 days. The cabin had to be dug open because the snow was more than a meter deep. We did have a dim electric light, a small wood stove, and a propane heater.

December 24, Monday. The first day began as do all good caving trips: we were unable to locate the new Pillar Pit entrance to Thanksgiving Cave. We found numerous dolines and depressions everywhere we looked, as well as two shafts. Steve descended the first, about 20 meters deep, but the bottom was blind. I dropped into the second, an impressive oval pit perhaps 35 meters deep, to a steep slope followed quickly by a short 5m pitch and another slope dropping into a third pit. Unfortunately, at this point I came to the end of the two connected ropes.

By now it was dark and we were tired of post holing in the deep show. We returned to the cabin.

December 25, Thanksgiving Cave. Personnel: Steve Grundy, Sheila Balsdon, Tom Miller, Olivia Whitwell. Time underground: 9 hours.

In the morning the air had warmed considerably and the sun had softened the snow. After a brief aborted attempt to trudge overland to the Staircase Entrance, a pit series, we were forced to use the Main Entrance. Although very near the cabin, the Main Entrance had the disadvantage of being downstream of an unriggered waterfall. We elected to see if the waterfall could be climbed from below.

Our luck had not yet turned. Steve and Oli spent an hour wallowing in the show trying to locate the entrance. Finally, at about 13:00 we entered, descended to the streamway, and headed upwards. The cave had a mapped depth of 219 meters and a length of 4 kilometers, the longest cave on the island. Many leads were known as well as hundreds of meters of explored but un-surveyed passage.



We quickly reached the April Pole Aven, a crucial obstacle which had been first ascended with a maypole. We had no such implement but a slick ledge ran around the right side of the room. Aided by convenient solution holes and a collection of webbing, I worked my way up to the ledge belayed by Steve. Eventually a cramp in my back forced me down and I belayed Steve as he finished the traverse across to the top of the waterfall.

Sheila returned to the cabin at this point while the other three of us continued. From here the passage was generally a slick muddy collection of stoops, crawls, chimneys, and some easy walks. We rested beneath the Staircase Entrance pit then continued through the tight Soprano Squeeze to the Tubes.

The Tubes are an interesting section of roller-coaster phreatic tunnels. Large scallops showed that they had been formed by slow water flowing uphill all the way from at least the April Pole Aven, a surprising vertical rise of at least 100 meters. Two knee-deep pools halfway through the Tubes were the only places where anyone would have gotten wet.

At the end of the Tubes we emerged into a low junction. To the right was the 30-meter-deep Birthday Pot and a lengthy pit series. Airflow from this area joined with a breeze from the Tubes and headed to our left in the direction we were taking. Our objective was the Omnivorous Series, a previously explored but unsurveyed passage trending westward. The name apparently came from a section of "velcro" dolomite with a startling resemblance to the rock at Great X cave in Wyoming. A narrow slot led down a set of climbable pitches for at least 30 vertical meters. At the top of a 5m drop we began surveying. Like nearly all of the passage I had seen so far in Thanksgiving, this was developed along the strike of the rock bedding with occasional direction changes along the dip. I say along the dip but the interesting thing about this passage is that it had originated as a filled phreatic tube formed by water flowing uphill, up the rock dip. Later it became vadose, a passage with a stream having an air surface, as water flowing in the opposite direction cut

trenches down the dip. This is an identical situation to that in the section from April Pole Aven through the Tubes.

Here we noted that the wind we had been following since leaving Birthday Pot now blew more gently and up passage into our faces.

After surveying 180 meters we ended for the day at the top of a 15 meter pit and exited at 22:30. Back at the cabin we found that Brian Bischoff of the B.C. Speleological Federation had arrived and had chopped an enormous quantity of firewood, a Tahsis Chain saw Massacre.

December 26. My coveralls had developed a large tear along a seam so I spent the day fetching a new pair from the truck and generally washing up. Steve had cleverly gotten up a 1:30 pm and made various loud disclaimers to give the impression that he was not going caving. However, as soon as everyone was off guard, he and Brian headed to Pillar Pit to rig it seeking an un-sportsman-like head start in the annual competition to gain the coveted VICEG "Silver Carbide" award.

Three more cavers, Jim and Mark, and Mike Evans, showed up to fill the cabin to bursting. The cabin, by the way, was heartily appreciated. Thanks to Bill West-Sells and the others who had constructed it.

December 27. While Steve lolled unconcernedly in the sun, Oli, Mike Evans, and I entered the Thanksgiving Main Entrance about 15:30 intending to map in the Omnivorous Series. Mike, recently recovered from a bout of flu, gave it a game try through the cave to the Staircase Aven. At that point he routed and headed out. This relieved Oli and myself of our promise to Steve to map. We again went left and Birthday Pot and after a brief search at the head of the slot dropping into the Omnivorous Series located a large streamway leading upward with the entire wind flow of the cave. For the first 100 meters a single set of tracks guided us then stopped. We explored in a narrow meandering canyon to a waterfall. While Oli waited, I pushed briefly ahead and up a rift to a slick phreatic roof tube. We headed out at 18:30 and exited at 20:00 meeting Brian, Jim, and Mark heading in.

December 28, Friday. Once again Oli, Steve, and I scrambled from the Main Entrance through the lower section, which was by now thoroughly boring, reaching Birthday Pot in one and a half hours. We dropped down to Whit's Well where we had ended the survey on Tuesday. The passage continued as various vadose rift and phreatic roof tubes below the 15-meter pit. The wind blew gently out toward us for perhaps 100 meters then vanished at the same time as the roof tube. Mid way along the vadose rift to Whit's End (clever names, these), an inactive sump, we passed a beautiful display of white stal called the Portcullis. The sump is likely to be short but none of us had wetsuits to try it. It is also apparently at a lower elevation than the source sump of the April Pole Aven streamway. Thus the sumps are not connected as was believed before this section of cave was mapped. If it is lower then a new section of cave may lie beyond.

We returned to the site of the vanishing wind and roof tube then followed the passage upwards to a sudden vertical rise noticeably lacking in hand holds. A single pair of footprints ended at the bottom. An audible roar beckoned Steve and myself up the wide unclimbed chimney but we were able to get only teasingly close to the small hole at the top through which a large waterfall could be heard. Roaring air also blasted out of this hole with a velocity capable of extinguishing a carbide lamp. This was the "Maw of the Frigid Dragon." The stream beyond is probably that of April Pole Aven and the wind may indicate yet another entrance.

Our survey here finished, we headed to the section that Oli and I had explored the previous day and mapped to the 3-meter waterfall. From there, Steve and I scooped through a very slippery rift tube above a treacherous and narrowing slot named Dr. Grundgy's Sleazorium. My lamp chose this moment to fall off and tumble into the rift, miraculously catching in a crevice. The irrepressible Grundy had already snatched the lead leaving me in the gloom.

We were able to return to the streamway which suddenly became quite large then forked. The left fork led to a high room containing a deep pool with a small watery

crawl continuing on the other side. The right passage led quickly to a high aven. Both of these and an earlier crawl contained upward flowing air. The scallops in this section showed that its formative flow had been downwards to join up with the upward flow from the Omniverous Series and the Tubes. All of the original flow in the cave then went out into the Birthday Pot and Meandering Corridor section of the cave.

It took about 70 minutes out from Birthday Pot and we exited at 22:15, having been underground 9 hours.

December 29. Saturday was another clean-up day but Mike, Sheila, and Mark braved the disgusting, muddy depths of Grueling Cave.

December 30. At about 13:00 Oily, Grundgy, and I entered the Main Entrance, which was thoroughly antipathetic by now. This trip was made possible by the knowledge that Brian and Mike were entering at the Pillar Pot entrance so both parties could make through trips.

At the waterfall in the Sleazorium streamway we continued the survey to the high aven in the right-hand passage fork. The wind led upward 20 to 30 meters but some rope aid will be needed to follow it.

Back in the left lead where we thought that the passage ended in the tiny stream crawl on the other side of a pool we now noted a high hole. Using some cord I had brought for such exigencies I waded the pool and managed to lasso a sturdy-looking projection with which to haul myself up to the hole. Just as I painfully crawled to apparent safety the "hold" broke through and plunged resoundingly into the pool below. I left the scene rapidly, found more muddy rift passage ahead, and located an easier way for Steve to join me. We were now at the highest surveyed point in the cave following the wind toward some undiscovered upper entrance. Unfortunately, the European majority of the party declined to continue, most likely plotting to sneak and scoop some other day. But it was also time to return to the through trip.

We met the other party at the bottom of Birthday Pot. Past it the cave continued along the geologic strike to Echo Pot.

From there it appeared to pass through the rock against the dip although this is not certain. In any case, the entire ancient phreatic flow that initiated the cave passed through into this section from Birthday Pot. It is quite likely that major discoveries of extensive passage remain to be found in the upper levels of this area, perhaps in the Pillar Pit complex.

We exited into the deep snow from Pillar Pit at about 22:30, a fine through trip courtesy of Bill Bourdillon and his multi-year effort to open this entrance. It took another hour to trudge back to the cabin.

It should be noted that half of the 800+ meters of new survey had already been explored but not surveyed. These two major leads, one leading into the probable upstream source of the April Pole Aven stream, and the other to the present high point of the cave, were never recorded. They could have been pushed four years ago. If making trip reports, surveys, or sketches is ignored then valuable information is lost and regained only at considerable effort.

Another lesson is that noting geologic and meteorologic phenomena such as scallop direction, wind flow, sediments, etc. can make a final map considerably more valuable even for such practical considerations as guiding future cave exploration. This information should be learned and considered a standard part of a notebook person's job and entered on every cave map.

December 31. We packed up and got out, spending New Year's Eve at Campbell River.

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TRIP REPORT IDEAS  
By Ben Tompkins

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While reading the exchange newsletters that we received last year I started thinking about how few trip reports we publish in the Cascade Caver by comparison. I hear tell of lots of cave trips but they are not getting written up and published.

The obvious solution is to berate everyone for not writing more reports. But why haven't I written up more of my own trips? The answer is that nothing exciting

happened, everybody else has been there before, I've forgotten the details already, It's hard to get started, and everybody will laugh at my novice caving endeavors and illiterate writing style. Plus I haven't got time.

Those seemed like good enough reasons to me.

Also, it looks like reports in the Cascade Caver range from 2/3 of a page to three pages long. This may be an intimidating amount of writing. Now look at all of the one and two paragraph reports in other publications. It seemed to me that most of them provided bits of valuable information even though short.

What should a trip report say? First of all, every trip report just by existing, no matter how short, tells the readers that there are cavers here and that they go caving. I think this is very important as it helps maintain the caving enthusiasm in the area.

The minimum report should document times, dates, people, and places. This tells the reader what the trip was about and who to contact for more detailed information. A few more words could be added to describe the weather and any effects of the weather on access to the cave or conditions inside. These might prove very helpful in planning future trips.

At this point the trip report could still only be a paragraph or two long. Most trip reports tell the events of the trip in chronological order but depending on the level of detail you want to add this usually means writing a much longer trip report. Make sure in a chronological report that the minimum information above is blended in along the way.

Trip reports can also be used to record observations and ask questions. We have all seen things in caves that made us pause and wonder how it got that way. If you suspect that everyone but you already knows the answer remember that there are cavers of all levels of experience here and few of us are professional geologists, biologists, hydrologists, or professional cavers.

As for forgetting the details, a log book would be very helpful at times to briefly jot down the who, what, where, and

when immediately after each trip. These entries can help keep all your trips in perspective and jog your memory for the details when you sit down to write a report.

When it comes time to write the report and you find the blank sheet of paper staring up at you in defiance then glance at the following list of questions to help get started. Jot down answers to as many as seem to apply to your trip and by the time you finish there should be more than enough bits and pieces to write a couple of paragraphs or maybe even a couple of pages.

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What cave or cave area did you go to?

What was the date and time?

Who went with you?

What was your main reason for going? (Recreational outing, surveying, cave hunting, push a particular lead, etc.)

Anything interesting happen on the way to the cave? What route did you take to get

there?

Was the cave easy to find?

Where did you go in the cave?

Have you been to the cave before? How long ago?

Was the cave or the area like you expected? Was there anything that especially surprised you about the cave?

Were there any changes in the cave or area since you were there last? (Water levels, erosion patterns, road signs changed, grafitti on the walls, etc.)

Did you meet other cavers at the cave?

Is there anything you would you do different next time? Is there any equipment or supplies you wish you'd brought along?

Would you recommend this cave or area for a particular kind of caver or party?

Was there anything in the area or along the way that would be of interest to non-cavers in a party?

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The Next Grotto Meeting is at 7:00 on Tuesday March 18th

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