

THE CASCADE CAVER

Official Publication of the CASCADE GROTTO N. S. S.





READ THIS PAGE FIRST! How can you go on trips or attend meetings if you don't know when they are? Lots of people seem to just glance at this page before going on to the rest of the <u>Caver</u>. Then, when I call them the night after the meeting (or a trip or whatever)———"Oh, it was <u>this Monday?"</u> Trust me——I wouldn't write it if it weren't important for you to read it.

The Editor

COMING EVENTS

April 4, Sunday. Dock Butte Task Force meeting at the Hallidays', 5:00 P.M. April 17-19, Easter Weekend. Papoose Cave, Idaho. Call Curt Black, (206) 832-6352 in Eatonville.

April 19, Monday. Regular meeting at the Hallidays', 1117 36th Ave. E, 8:00 P.M. Program: Bill Halliday's presentation and slide show on speleophilately (caves on stamps, etc.).

April 24-25. Official trip to McLoughlin Canyon Caves, Eastern Washington. A fascinating area with numerous unchecked pits as well as some good horizontal caving. Contact Chuck Coughlin, 772-1170.

May 1. DEADLINE FOR MAY CASCADE CAVER.

Vol. 15 #

May 17. Regular monthly meeting. Program: Russ Turner's slide show on Caves of Pennsylvania.

May 29-31, Memorial Day Weekend. Deadhorse Cave area, Trout Lake, Washington. There are some likely-looking new caves to check out. Contact Rod Crawford, 543-4486 evenings.

[Note: several people are now thinking of visiting Vancouver Island this weekend. However, if anyone wants to go with me, the official trip will still occur as planned.]

NEWS AND NOTES

THE MARCH MEETING was attended by only nine people. Where, we might well ask, were you??? Anyway, the Oregon Grotto's letter (printed on p. 35) was discussed and the secretary instructed to write to the Forest Service confirming that we are relinquishing our use permit on Dynamited Cave. Bob Brown reported that we made about \$60 on our last woodcutting trip. He specially requests that more people show up for the next such trip.

Yr editor has learned that Just a Rumor Cave, reported in the October '75 Brand \underline{X} as being near Colville and 1000' long, is really SE of Republic and only about 200' long. The previous information was just a rumor.

NEW ADDRESSES

Curt Black c/o A.Ruggles, NW Trek, Eatonville WA 98328 (206) 832-6352 Robert Richardson Box 23 2nd GEN HOSP, APO New York, NY 09180

Our Cover: Yr editor apologizes for using another cartoon. I had intended to use an artist-rendered illustration for the lead article, but the artist I had in mind seems to have skipped town.

FEATURES

THE USE OF EXPLOSIVES IN CAVE EXPLORATION.

by Steve Knutson (taken from the Speleograph, 6 (11) 81, Nov. 1970)

: year sik In recent years there have been several instances, in our region, of attempts to further cave exploration using explosives to open passages and/or entrances. Everyone will agree that this is the age of the shovel and/or hammer and chisel or what-have-you and that these tools are accepted in the quest for new caves and cave passages. However, the use of explosives is considerably more drastic and merits some discussion.

The first application of explosives to cave exploration by the Oregon Grotto was slightly half-baked, and is a good example of things not to do. The occasion was several years ago and the subject was the "end" of Dynamited Cave, which was blocked by breakdown. On one of our trips to the cave, we succeeded in opening a passage through the breakdown but found that this led to only about 30' more cave, ending in another breakdown, a very unstablelooking affair with shattered walls and ceiling...not a situation for explosives! Those in my party decided this was indeed the end but a less rational element of the Grotto decided they would be able to go further with help from a little dynamite. On a subsequent trip they drilled a hole in an offending breakdown block, filled it with dynamite (with their bare hands, which is bad since the poisonous nitroglycerin is absorbed through the skin), applied some ignition fuse and cap, lit it, and made tracks down the passage. The explosive, fortunately, refused to detonate, leaving the would-be sappers pondering how best to find out what had gone wrong. They would not decide and in fact left the cave and the problem to others. Such a situation is very bad due to the possibility that the dynamite burned instead of detonating. If this occured, poisonous fumes ould result and later explorers might be harmed due to lack of warning. If the dynamite had detonated, it would take a very brave (or foolhardy) caver to crawl into that breakdown, made more unstable by the explosion.

In 1969 a promising karst area (Spring Creek Karst) was discovered in Hells' Canyon and some 36 sticks of 40% dynamite were expended in an effort to open a small sink and a blowing hole. We were unsuccessful but the attempt was worth the work because of the potential of that area. The explosive was used in amounts of 2 to 10 sticks via mud-packing or snake-holing in gumbo clay and broken rock.

A similar area of good potential at Kangaroo Mountain in Northern California has received less attention but mud-packing of several sticks was used in an attempt to open a large sink.

Projects for the future include more work at Kangaroo Mountain, penetrating further into the pit sequence in the pit cave near Scorpion Cave, southern Oregon, and perhaps a stream sink that Jerry Thornton has found in Idaho.

At present [1970] Jim Nieland, Ben Rust and I are the only grotto members I know of who are willing and able to do simple blasting. But I'm sure there are others in the grotto who are competent and responsible -- I mention this because I have a stock of more than 50 sticks of DuPont 40% special geletin and I will gladly donate some plus fuse and caps, plus the use of cap crimpers for any worthy project. 20 2.2

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The cost of getting involved is not high but the responsibility of owning and using explosives is great. Basic needs include, DuPont 40% Special Gelatin, caps, ignition fuse, and cap crimpers. Common sense is also a basic ingredient but cannot, unfortunately, be purchased. Another handy item is the Blaster's Handbook (DuPont Co.) or a comparable text. If one gets involved, as I have, he must never forget that he is ultimately responsible for the use to which the explosives he has purchased are put.

HISTORICAL FEATURE

VISIT TO A WASHINGTON LAVA TUBE IN 1852?

The following account, translated from the French of M. de Saint-Amant's 1854 book <u>Voyages en Californie et dans l'Oregon</u>, appeared originally in the Journal of Spelean History <u>5</u> (2) 39-42, 1972. The account is circumstantial enough to suggest that perhaps the author actually did visit a lava tube. However, such details as multicolored stalactites, blind fish, and a temperature of 15° C., indicate that the story has been considerably embroidered. The original text gives the locality as Mt. Adams, but possibly the geographically ignorant writer was actually referring to Mt. St. Helens.

"From the Yakima River, where I obtained two select Indians to accompany me, allowing my Multnomahs to rest, I set out for a cavern extending into the eastern Cascade Range, several miles from Mount Adams. The Indians showed some reluctance about this trip, simultaneously superstition and a lack of resolution. I carried few provisions, for we were all mounted and I expected to be back at the Yakima in 5 or 6 days, or to return by striking the right bank of the Columbia River by another route. I had not understood the Indians properly; after two days of travel we were almost at an end; as bad luck would have it, our little bag of oats and salt was lost crossing a creek where the horse tangled with his baggage. We--at least I--had eaten nothing since morning and the Indians, although having nibbled camas, which they pulled up by the roots as we loped along, appeared unhappy and inclined to turn around. By luck an elk appeared almost under our feet and I fired quickly, breaking one of his forefeet. He jumped along but could not run; the Indians soon despatched him and carried him into camp which we set up immediately. [A long section about problems in motivating the Indians omitted.] ...we arrived at the entrance of the cave about noon, by horrible trails. Happily, despite a blizzardy spell, the weather was dry and the barometer high. With cold and rain, I do not know how we would have been able to go on. Having set up a sort of tent, I cut the most resinous pine branches in the vicinity for torches. I had taken the precaution of providing myself with candles and a lantern so as not to be surprised by shades in the depths of the unknown labyrinth. I had several boxes of phosphorous matches and two loaded six-shooters.

"Only one of my Indians entered, preceding me with a burning branch and spares under each arm. This was all he carried; I carried the lantern and the candles; my revolvers hung at my belt and I had a reasonable appearance of a brigand chief in action.

"But I needed no Ariane [prob. a variant of <u>araignee</u>, spider—ed.] to suggest the thought of a "fatal thread". The other Indian, who was to keep burning a large fire at the main entrance, was ordered not to leave for a single second, and to listen carefully for our progress and keep a sharp watch outside. I worried about the horses and gear right up to the moment we entered the <u>gouffre</u>. When everything was readied, I commended myself to divine grace and gave a farewell thought to the wife and daughter I was leaving on the earth as I began to sonder les abimes.

"We advanced hesitantly in a ddep silence and a darkness which soon was complete. The vault, at first high and wide, drew in upon us to the point where we had to proceed bent and almost on all fours; once we even had to crawl, which was very inconvenient for our equipage, the light threatening to go out at every moment. The floor was miserable, being infiltrated with sharp lumps disagreeable to our backbones. The floor and the walls were speckled with nitre and saltpeter. We advanced rather slowly, and in the moments when we were flat on our stomachs I was constantly afraid that our guide would announce that the way ahead was completely closed. If we had had to

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reverse our course, it would have had to have been done backwards, for it would have been impossible to turn around as the passage was so low and so jagged. For a moment the space became so tight that only after supreme effort and suffocating compression of my abdomen that I could convince my Indian. [Sic]. I could not avoid congratulating myself that my program of the last few weeks had made me as lean as the young native. At that cursed moment my string broke, and rather than re-enter the crevice to retie it, I preferred to tie my end to a sharp point and we continued on.

"By the size of my ball of twine, which was 300 meters long, with about half strung out, we could appreciate our distance from the entrance. Because of the difficult going, this had been a long expedition, on which we had expended our vigor and skill for two hours.

"The thermometer climbed instead of falling and it rose to 14° C; we were panting. By the light of our torches, which began to throw less light, we could spot stalactites hanging everywhere and reflecting the most brilliant colors of the rainbow. This would have been beautiful to contemplate at some other moment. We breathed less easily; the air seemed to become more and more inadequate for the function of our lungs. Everything appeared the same, everywhere, as we advanced on slow steps into the cavern.

"Suddenly I heard my guide cry, 'Cush! Cush!' I knew enough Chinook jargon to understand that he had encountered water. I caught up with him just as he stepped back out of the pool into which he had strode up to the ankle.

"The route was effectively blocked by a cold, clear pond and the ceiling lowered to a point where it was no more than 60 cm above the pond, which had no perceptible current.

"In following the bank to find the best crossing I noticed an unmistakeable dry area on the far side, which I pointed out to my guide. As the water was a bit deep and more than 5 meters across, I encouraged the unhappy, reluctant enfant to cross it, promising him a pretty blanket for his efforts. He lay down in the water almost as if swimming and crossed easily. But he could not protect his light, and gave me to understand, shaking with fear and cold, that I was not to budge until he returned. It would have been impossible to take anything to the other side without wetting it and perhaps lose our lives through risking the loss of our lights. I again regretted the lack of a small rubber boat with which we could have carried fire and light across.

"Iturged him to look about him and to bring to me what he could wrench off the ceiling or collect as specimens from the floor. He returned shivering and with nothing which we did not have already. We could see the bottom of the pool perfectly; it was similar to the dry spots along the bank. Not the least trace of flora. The noise which my savage made crossing the water, which probably had never been troubled by so large a body, momentarily interruped the frightening silence of this solitude. We could hear the different echoes for a long time; they lasted much longer than those on terra firma. We attributed this effect to the water which is an auxilliary conductor.

"When all returned to normal, we noticed little ripples produced by the fall of drops coalesced from the humidity above the water. Such droplets, capable of eroding rock, are also capable of forming the lake, whose course and length we could not determine. The water is tasty and very cold.

"To revitalize my Indian, I gave him a piece of elk, which he devoured as enthusiastically as under the sun. I fried to do the same, but every fiber ... of my stomach seemed paralyzed. I felt unreal, as in a vision or dream. It seemed as if we were glimpsing a descent into the realm of Pluto and I knew I was close to fainting.

"We began the retreat, for which I was now more impatient than my Indian, when he pointed out to me an effect of water different from those of the round ripples produced by droplets of water. Having waved to me to remain silent and motionless, he nimbly trapped by hand a fish some 6 inches long, something gist v 👬

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like a nice little sardine. It had small fins, and was no stranger to my savage, for at once he showed me that the fish had no eyes. That astonished me and I felt that I had discovered a marvel of nature unknown to the most knowledgeable icthyologists. What matter that it was already known to the brute who accompanied me, if this knowledge remained obscured in his ignorance! We tried in every possible way to catch a second.

"My Indian, although he was not starving, wanted us to eat it at once, as much for gluttony as for not having to carry it back. The barbarian! He should have realized that between himself and that blind fish I would not have hesitated a moment...atrocious sentiment which I have hardly dared admit to myself, and which I scarcely dare publish... That which he saw only as a matter of food, I saw as immortality for myself. Ah, I would have starved a hundred times; I would have cooked and eaten my Indian rather than permit his cannibalistic meal. How I was repaid for my curiosity, and how great a remuneration for the discomforts and dangers of the descent in the cavern! I could only think of getting out as rapidly as possible to get to safety the precious phenomenon which I had received; in my eyes it was more precious than all the whales; I certainly would not have traded my minnow for the largest cetacean. After these delirious moments one can judge my poignant sadness on the day I exhibited this marvel at Vancouver, and heard a Yankee calmly announce, "It is the same species as those of Mammoth Cave." "What? But don't you see that it has no eyes, and that total lack is a unique natural phenomenon. Having spent all its life in total darkness, it has lost its useless eyes." "Oh yes, quite the same in Kentucky."

"Ah, I would happily have clobbered the lout. What he said was only too true, and that species is known not only in his Kentucky and other parts of America, but even in Europe, the stalactite caves of Carinthia have the same blind fish. Enfin, little was lacking for this rarest marvel to sink little

by little to the commonness of the herring.

"Me, who had taken such extreme care and who at the risk of wounding myself had kept it in the sheath of my knife, I almost repented not having turned it over raw to the voracity of my Indian; the blow perhaps would have been less. More, when its carcass was stolen from me in Panama, I cursed the thieves less for that blind fish than for the various specimens of crystal which I planned to have analyzed at the natural history collection of Paris.

"Our retreat was much more rapid than our advance, and my thread, which I had unrolled almost 300 meters, faithfully led us to the narrow passage where it had broken. How I longed to get there! My battered spirit several times was convinced that the roof, shaken by our passage, was about to collapse. What a tomb! The monks of the Palause and Yakima would spread a legend on their return to Europe. For everyone else, our deaths would be a mystery, and less happily than Dufavel and Giraud, no one would have to make the least effort to come and recover our bodies. The anguish of the young painter in the Catacombs of Rome assailed me momentarily and gave me cold chills. My broken thread was not as indispensible to me as to him. However I expected to find it on the other side of the passage where it had broken. It was impossible for me to comprehend how it could have contracted, disappearing completely.

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"With it impossible to find the least trace, it was necessary for us to look carefully for our footprints, often very faint, so as not to go off to the right or left. There was surely sufficient danger of losing our way. Only one entrance to this cavern was known, and no local interior indication could guide any unfortunate lost soul lost in this vast sepulcher. My savage, who was not impressed with the string, but was impressed about getting out as rapidly as possible, did not appear to share my fear and unease. It was

he who, from the least traces, sometimes, I am inclined to believe, from some always found the signs of our passage. He marched from instinct and his nose to the wind. Finally we saw a glimmer; oh, that beautiful light. The sun was about to set and my second savage had so wholly absurd an appearance that I will always believe that he did not expect to see us again and had already counted up his inheritance of my effects. Not having seen us return as soon as he had expected, he had tried signalling us with the thread. He had pulled a little, then more, and it ended up entirely in his hand.

"He did not doubt at all that we had vanished forever, whether by falling over a precipice or down the gullet of ferocious beasts. It was pure generosity that kept him waiting for us; his concern was not sufficient for him to get up to look for us. He expected to be leaving next morning, providing us with the shortest funeral oration of his tribe, whose superstition would conclude that providence had only inflicted appropriate chastening upon us for having dared to penetrate mysteries which were better uninvestigated.

"Men of science should come here. In indicating some of the natural marvels of Oregon, I only wish to encourage their coming. If there is to be recognition for he who was first, I claim the privilege pure and simple, seeing that one never is first on unknown paths without pain and difficulty.

BOOK REVIEW-----Bill Halliday

Guide des Grottes d'Europe Occidentale, by Villy Aellen & Pierre Strinati.
Published by Delachaux & Niestle, Neuchatel & Paris, 1975. 316 pp., 68 color & 29 b&w photos, maps, glossary, index, 27-page bibliography, etc.

This is a magnificent book, well worth the unsettling price. Moreover, cavers with anything more than local interests would even find learning French worthwhile merely to be able to read it. In a surprisingly compact volume it provides a truly remarkable overview of the caves, the karst, the cave biology, and the spelean anthropology of that portion of the heartland of Western civilization which it covers: the British Isles, France, the Iberian Peninsula and its Atlantic islands, Italy and the Karst of Jugoslavia, Austria, Switzerland, Belgium and West Germany. Each is discussed on the basis of the face of the countryside, its karstic regions and their caves, primarily on the basis of those which have been commercialized. With few exceptions the quality of the illustrations matches the excellence of the text. The writers are celebrated speleobiologists, and their grasp of European speleology is impressive.

The book is no less subject to trivial errors than any other comprehensive work. I was thoroughly puzzled by the map of the underground course of the karstic rivers of the Postojna region of the Karst until I realized that Tkalka Jama (Cave of Tisserand) had been omitted entirely. There is no mention of the strict controls on caving by foreigners in Jugoslavia, which might well get unwarned visitors into serious trouble. It was prepared just a little too soon to include more than bare mention of the forthcoming commercialization of la Grotte Grande del Viento, one of the three most beautiful caves I have ever seen (it was opened to the public in 1974). & speleobiologists the writers accept uncritically the traditional view that the Blue Grotto of Capri is a littoral cave "lost" from Roman times to the 18th Century (to me it looks phreatic, and with the rises and falls of much of the shores of the Bay of Naples, the entrance may even have been submerged for long periods of time). But such matters are trivia in comparison to the overall importance of this contribution. - 1

Every American caver travelling to Europe, or even concerned with the place of American caves and caving in the world picture should have a copy. Let us all hope for an English edition soon!

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TRIP REPORTS

Field Trip Report: VICEG Cave, Snohomish County by Bill Halliday

On Sunday, March 7, John Torkelson, Ed Messerly, Patricia Halliday and I had a look at WCEG Cave. It was the first time there for all of us, so we made the mistake of going the obvious route and trying to dig our way into the main room instead of going the reasonable route. That's going to be a fun cave to map. It's a more interesting little cave than I had expected. The metamorphosed bedrock shows the most complex structure I've yet seen in a North Cascades cave, and the moonmilk was beautiful. We spotted a coupla moths, lots of harvestmen, and a few insects; too bad Rod wasn't along. A beautiful day, with six inches of puffy snow, bright sun in the afternoon, and just enough glare ice on the road to make things interesting.

Skagit County Trip, March 20 by Rod Crawford

Hank Ramsey, David Ridley, and the writer left Seattle at 9:00 and soon arrived at the Beckley house near La Conner. This was as far as the previous trip to Beckley's Cave had penetrated. This time, fortunately, Mrs. Beckley was home and readily gave us permission to visit the cave. We drove up the hill, climbed down the ancient sea cliff (now a mile from the coast) and sure enough, there was the cave.

Though small, the cave is interesting enough to qualify for further visits. A partly-crawlway route leads past three side passages in talus to the main room of the cave, which has a few tiny stalactites and visible evidence of sea-sculpturing on the ceiling.

The cave had several distinct porcupine-den areas, one of them with a porcupine in residence, who turned the other way and pointedly ignored us. Other biota included <u>Triphosa</u> moths and many small gnats. The mandible (jawbone) of an opossum was found in one of the older den areas.

We then headed north for Clayton Bay, south of Larrabee State Park on Chuckanut Drive, to look for a supposed littoral cave reported—with map—in the <u>Caver</u> for January 1967. The road was washed out south of the bay, exposing some fresh fossils and a seam of coal. After hiking the remaining distance, we reached the beach at a satisfactorily low tide, and quickly found the "cave". This is not a real littoral cave, but a talus cave in a railroad—grade rockpile, of no significance whatever.

Having a couple of hours left, we went to look for Bat Cave--herein renamed Blanchard Bat Cave to distinguish it from the one at Mt. St. Helens--a block creep cave NE of Blanchard. Clyde Senger's directions to the cave proved satisfactory once we allowed for several new roads, and after a good deal of brush-beating and hill-climbing Dave found the cave. The penetrable portion of this cave totals about 25 feet, and it is thus almost as insignificant as last year's Jefferson Ridge Cave. It is saved from being even more insignificant by a deep, but tight, crevice leading down from the south end.

We got back to the car about dusk, having done cavers of the future the great favor of having completely checked out two long standing cave reports. Now that the truth is known, no caver need visit either Clayton Bay Cave or Blanchard Bat Cave ever again.

HICTOLIC TRIP REPORT

The following material mouldered unprinted in the files of the last editor but one for five years before it was discovered. It is here reprinted for the useful information it contains. The trip concerned occurred about June, 1970----ed.

Soda Springs Trip and Miscellaneous Rumors by Jan Roberts

Near the Soda Springs limestone quarry in Chelan Co., I and two friends found Danner's Fissure. A picture of it is in <u>Caves of Washington</u>. It's exactly where he said it was. It is a very small cave, apparently solutional.

Also noted was a new discovered sinkhole (filled with debris, of course) just above and about 150 yards north of the Little Wenatchee River; and a stream resurgence (?) near the toe of a long low limestone ridge, an unquarried remnant of limestone just below the Soda Springs quarry. Incidentally, the stream and the newly found sink are diagonally separated only about 700 feet from each other. An old road leading SE from the quarry to the river provides easy access to Danner's fissure and the stream resurgence and sink.

We also investigated the limestone cliffs in the Rainy Creek Canyon. A few openings were noted, nothing impressive. We couldn't investigate too closely because of the high water level of the creek (really a river then).

On other fronts:

Tom Miller has informed me of a fissure cave in the vicinity of the Salmon Le Sac River (?) that has iron pyrite on its walls and a stream flowing through it. [There is no Salmon Le Sac River. Salmon Le Sac is on the Cle Elum River. Move this to the Naches River and take away the iron pyrite (fool's gold), and it would be Boulder Cave---ed.]

A cave near the Squaw Rock Resort on the Naches River was reported to me by a friend. The resort is located on State Highway 410 between Cliffdale and Naches, Washington, east of Chinook Pass. The cave is reached by hiking north from the resort. The cave is said to be known to the owners of the resort, local forest rangers, and Mr. Bob Bonham, who lives in Moxee, Washington, a small town just outside of Naches, Washington. Mr. Bonham is the former owner of Squaw Rock Resort.

Ted Danner has reported to me that he noticed several large sinks in the Ridley Creek limestone in Whatcom Co. He visited the area last September [1969] in the pouring rain, so he didn't see too much, nor did he inform me of the location of the sinks he saw. [This area has been checked out several times since without result---ed.]

Additional notè:

A small cave about fifty feet long with two entrances was found many years ago by one of W. "Eddie" Clark's brothers. The cave was described as formed by a lime or calcite leach very close to Ross Dam on the Skagit. Location 200 feet from high water mark on the dam road east of the dam and above the dam road between it and the old forest service trail. [This rumor has been circulating in one form or another since the grotto was first formed in 1951. So far as yr editor knows, no one has ever checked it out. Sounds interesting. How about it?]

EXCERPTS FROM RECENT CORRESPONDENCE

From Newell Campbell (to Bill Halliday):

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12 March Yakima

Remember the "Albino fish" over by Mossyrock? Well, I passed through the area last weekend and discovered that I gave you the wrong bridge. The Corn Creek bridge is only a few hundred yards west of the dam face and you can see the waterfalls about 300 yards upstream. I walked over to the bridge and you can climb down (handline?) to the creek and work upstream to the base of the falls and the cave easily. Water is too high now, but next fall it should be easy to find the cave under the waterfalls. From a geological standpoint there is a good chance that the cave exists. You might tell Black the next time you see him—I think he looked for it before.

[Sorry, Newell, but this sounds exactly like the one Larry McTigue, Jan Roberts, and I checked out in August 1974. It didn't go. However, it's difficult to be quite certain since maps of the area don't show the dam or the lake or the new highway.——ed.]

From Robert Richardson, to the Chairman:

Frankfurt Feb. 17, 1976

How goes it in Washington?

I went to the first caving meeting here Fri. & Sat.---It was nice--an overnighter with a buffet dinner, breakfast, and more booze...We started the preliminary planning for the Pierre Ste. Martin trip.

You'll be glad to hear that the cave is now a horizontal cave and you can bottom the world without a single rope. The French dug a tunnel to connect with the river and run a hydro-electric turbine, but the French engineers weren't such hot cave mappers and the tunnel missed the river; so now PSM has a front and back door and a sidewalk entrance. The trip should be really neat—I'm going to buy a VW van and we're going to meander down there via Switzerland, Monaco, French Riviera, and Spain. The cave is partly in France and partly in Spain and as far as I know there is no customs stop in the cave. How wonderful it will be not to be hassled at the border...

We had snow on the ground for the past month and it was near zero for a week. No sun for over a month—one year they only had 2 weeks of sun here...[see—things could be worse.—ed.]

I got a really neat old carbide lamp at a bazaar for \$14. It is really thick brass with a tank about 4 times as big as a Justrite, with the reflector built into the water tank. It is really made of heavy gauge brass...

-----Robert.

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AND ANOTHER NEW RUMOR: The 1975 Washington Environmental Atlas, published by the Army Corps of Engineers, records the approximate location of a number of caves on their state geologic map. Most of these are already known to the grotto and most of the rest appear to be rockshelters. However, there is a completely unfamiliar "Twin Falls Natural Caves" reported as being near Twin Falls Lake, Snohomish County. This tiny lake with spectacular waterfalls at inlet and outlet is in S2, T29N R8E. It is accessible from a logging road to the NE, by about a mile of level cross-country hiking. Anyone interested?

—ed.

Cougar, WA 98616

Bill Halliday 1117-36 Ave. E. Seattle, WA 98112

Dear Bill,

Thanks for the letter, it arrived just in time for the grotto meeting. The Oregon Grotto is interested in studying Dynamited Cave and entering into an agreement with the Forest Service. Ellen Benedict wants to shift her studies from Southeastern Oregon to the Portland area. She is quite interested in studying the micro-climate of Dynamited Cave.

Neil Paulson and I met Saturday and discussed the use permit situation. We both concluded that a use permit was not the proper tool to manage the cave. It turns out that the Forest Service is hard pressed to use its powers to protect a cave which is under permit. When a use permit is issued the government is placed in a position of protecting the permitee's improvements while at the same time relinquishing jurisdiction over the area covered by the permit. The area under permit (cave) and the improvements (cave gate) are the sole responsability of the permitee. Taken to an extreme this can make the permitee legally liable for any accidents which occure on the permit area even through unauthorized entry. It is easy to imagine the implications!

A better solution seemed to be a cooperative agreement between the grotto and the Forest Service for the study period. This allows the Forest Service full authority to protect the cave and eliminates the liability factor.

Neil was also receptive to the idea of placing signs near the cave entrance warning of potential danger and carrying a conservation message. The signing would be provided by the Forest Service and in exchange the Oregon Grotto would make all its findings available.

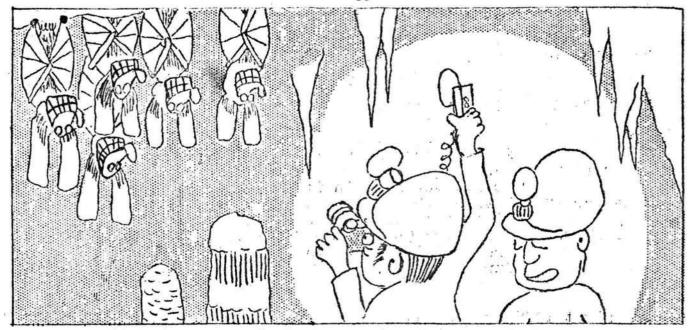
There is no problem in arranging a cooperative agreement since the Cascade Grotto has voted to turn its interests in the cave over to the Oregon Grotto. The Grotto did feel, however, since we would be responsable for the new agreement, we should be named exclusivly to prevent confusion while dealing with the Forest Service.

The cooperative agreement would in no way limit access to the cave by any interested group. If the Cascade Grotto or Western Region are interested in studies of their own or wish to participate with the Oregon Grotto and its projects the door is allways open.

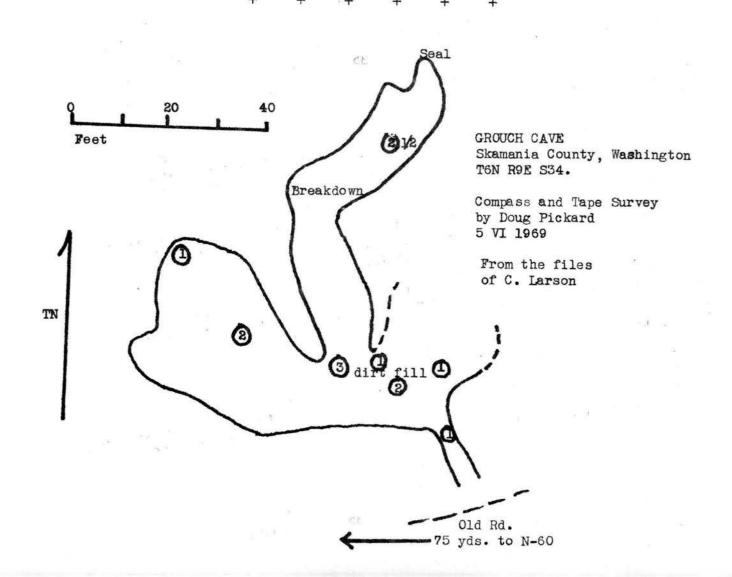
Sincerely, Miland

Jim Nieland, Chairman Oregon Grotto, NSS

cc: Neil Paulson, USFS Trout Lake, WA



I GUESS IT'S SAFE TO ASSUME THAT THESE BATS HAVE BEEN PHOTOGRAPHED BEFORE
From: The Explorer, November 1975



VULCANOSPELEOLOGICAL ABSTRACTS

from Lyman, _____. 1841. Grand Description of the Volcano of Kilauea.

The Missionary Herald, Boston, Volume XXXVII, pages 283-285. W. R. H.

For several years past the great crater of Kilauca has been rapidly filling up, by the rising of the superincumbent crust, and by the frequent gushing forth of the molten sea below. In this manner the great basin below the black ledge, which has been computed from three to five hundred feet deep, was long since filled up by the ejection and cooling of successive masses of the fiery fluid. These silent eruptions continued to occur at intervals, until the black ledge was repeatedly overflowed, each cooling, and forming a new layer from two feet thick and upwards, until the whole area of the crater was filled up, at least fifty feet above the original black ledge, and thus reducing the whole depth of the crater to less than nine hundred feet. This process of filling up continued till the htter part of May, 1840, when, as many natives testify, the whole area of the crater became one entire sea of ignifluous matter, raging like old ocean when lashed into fury by a tempest. For several days the fires raged with fearful intensity, exhibiting a scene awfully terrific.
The infuriated waves sent up infernal sounds, and dashed with such maddening carryy against the sides of the awful coldron, as to shake the solid earth above, to detach huge masses of overhangbelow.

Every thing within the caldron is new. Not a particle of lava remains as it was when I last visited it. All has been inclted down and re-cast. All is new. The whole appears like a raging sea, whose waves had been suddenly solidified while in the most violent agitation.

But I will return to the source of the eruption. This is in a forest, and in the bottom of an ancient wooded crater, about four hundred feet deep, and probably eight miles east from Kilauea. The region being uninhabited and covered with a thicket, it was some time before the place was discovered, and up to this time, though several foreigners have attempted it, no one, except myself, has reached the spot. From Kilauea te this

place the lava flows in a subterranean gallery, probably at the depth of a thousand feet, but its course can be distinctly traced all the way, by the rending of the crust of the earth into innumerable fissures, and by the emission of smoke, steam, and gases. The cruption in this old crater is small, and from this place the stream disappears again for the distance of a mile or two, when the lava again gushed up and spread over an area of about fifty acres. Again it passes under ground for two or three miles,

when it re-appears in another old wooded crater, consuming the forest, and partly filling up the basin. Once more it disappears, and flowing in a subterranean channel, cracks and breaks the earth, opening fissures from six inches to ten or twelve feet in width, and sometimes splitting the trunk of a tree so exactly that its legs stand astride at the fissure.

At some places it is impossible to trace the subterranean stream, on account of the impenetrable thicket under which it passes. After flowing under ground several miles, perhaps six or eight, it again broke out like an overwhelming flood, and sweeping forest, hamlet, plan-tation, and every thing before it, rolled down with resistless energy to the sea, where, leaping a precipice of forty or fifty feet, it poured itself in one vast cataract of fire into the deep below, with loud detonations, fearful hissings, and a thousand uncarthly and indescribable sounds. Imagine to yourself a river of fused minerals, of the breadth and depth of Niagara, and of a deep gory red, falling, in one emblazoned sheet, one raging torrent, into the ocean! The scene, as described by eye witnesses, was terribly subline. Two mighty agencies in collision! Two antagonist and gigantic forces in contact, and producing effects on a scale inconceivably grand! The atmosphere in all directions was filled with ashes, spray, gases, etc.; while the burning lava, as it fell into the water, was shivered into millions of minute particles, and, being thrown back into the air, fell in showers of sand on all the surrounding country. The coast was extended into the sea for a quarter of a mile, and a pretty sand-beach and a new cape were formed. Three hills of scoria and sand were also formed in the sea, the lowest about two hundred and the highest about three hundred feet.

The depth of the stream will probably vary from ten to two hundred feet, according to the inequalities of the surface over which it passed. During the flow, night was converted into day on all eastern Hawaii. The light rose and spread like the morning upon the mountains, and its glare was seen on the opposite side of the island. It was also distinctly visible for more than one hundred miles at sea; and at the distance of forty miles fine print could be read at midnight. The brilliancy of the light was like a blazing firmament, and the scene is said to have been one of unrivalled sublimity.

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The whole course of the stream from Kilauca to the sca is about forty miles. Its mouth is about twenty-five miles from Hilo station. The ground over which it flowed descends at the rate of one hundred feet to the mile. The crust is now cooled, and may be traversed with care, though scalding steam, pungent gases, and smoke are still emitted in many

In pursuing my way for nearly two days over this mighty smouldering mass, I was more and more impressed at every step with the wonderful scene. Hills had been melted down like wax; ravines and deep valleys had been filled; and majestic forests had disappeared like a feather in the flames. In some places the molten stream parted and flowed in separate channels for a considerable distance, and then reuniting, formed islands of various sizes, from one to fifty acres, with trees still standing, but seared and blighted by the intense heat.

During the flow of this eruption, the great crater of Kilauea sunk about three hundred feet, and her fires became nearly extinct, one lake only out of many, being left active in this mighty caldron. This, with other facts which have been named, demonstrates that the cruption was the disgorgement of the fires of Kilauea. The open lake in the old crater is at present intensely active, and the fires are increasing, as is evident from the glare visible at our station and from the testimony of visiters.

I will just remark here, that while the stream was flowing, it might be approached within a few yards on the windward side, while at the leeward no one could live within the distance of many miles, on account of the smoke, the impregnation of the atmosphere with pungent and deadly gases, and the fiery showers which were constantly descending, and destroying all vegetable life. During the progress of the descending stream, it would often fall into some fissure, and forcing itself into apertures and under massive rocks, and even hillocks and extended plats of ground, and lifting them from their ancient beds, bear them with all their superincumbent mass of soil, trees, etc., on its viscous and livid bosom, like a raft on the water. When the fused mass was sluggish, it had a gory appearance like clotted blood, and when it was active, it resembled fresh and clotted blood mingled and thrown into violent agitation. Sometimes the flowing lava would find a subterranean gallery, diverging at right angles from the main channel, and pressing into it would flow off unobserved, till meeting with some obstruction in its dark passage, when, by its expansive force, it would raise the crust of the earth into a dome-like hill of fiftéen or twenty feet in height, and then bursting this shell, pour itself out in a fiery torrent around. A man who was standing at a considerable distance from the main stream, and intensely gazing on the absorbing scene before him, found himself suddenly raised to the height of ten or fifteen feet above the common level around him, and ho had but just time to escape from his dangerous position, when the earth opened where he had stood, and a stream of fire gushed out.

CASCADE GROTTO STORE Bill Capron, Keeper, Phone 525-2260 Price List: April 1976

Cave Packs	\$1.50
Carbide	*
Helmets	*
Chin Straps	.85
Premier Carbide Lamps	8.50
Lamp Brackets	*
Lamp Felts	2/15c
Lamp Tips	.20
Lamp Flints	3/25c
Lamp Gaskets	.10
Miners' Nickel-Iron	
Headlamps	*
Gibbs Ascenders (Spring)	8.50
Gibbs (Quick Release)	10.50
Bonaiti D Carabiners	2.75
Bonaiti Locking D	3.75
Cascade Grotto Patches	1.50
Cascade Grotto Decals	.25
NSS Decals	.20
Plastic Bags	3/10¢
*Contact storekeeper	for

information.

Quantities are limited in some cases. If you want any caving-related equipment not listed here, please ask me for it. The store is here to serve you, so take advantage of it.——B. C.

CASCADE GROTTO OFFICIAL AND TRADITIONAL TRIPS--1976

All cavers are invited to join these tripsespecially those who don't go caving very often!
April 17-19, Easter Weekend. Papoose Cave, Idaho. Contact Curt
Black, (206) 832-6352.
April 24-25. Official trip to McLoughlin Canyon Caves, Eastern
Washington. Contact Chuck Coughlin, 772-1170 (Seattle).
May 29-31 Mamardal Day Washard Day the street Congress of the
May 29-31, Memorial Day Weekend. Deadhorse Cave area, Trout
Lake, Washington. Contact Rod Crawford, 543-4486 eves. (Seattle
June 19-20. Official trip to Vancouver Island limestone caves,
B.C. Contact Bob Brown in Elbe, (206) 569-2724.
July 3-5, Independence Day Weekend. Windy Creek Cave, North
Cascades. Contact Chuck Coughlin, 772-1170.
August 28-29. Official trip to Cave Ridge (Snoqualmie Pass)
limestone caves. Contact Coughlin.
September 4-6, Labor Day Weekend. NWRA Convention at Nakimu
Caves, B.C., Canada. Contact Bob Brown.
October 23-25, Veterans Day Weekend. Official cave-hunting
trip to Colville area, E. Washington. Contact Dave Walker,
232-1698 in Seattle.
Speleobiological trip to Trout Lake lava tubes. Contact
Clyde Senger in Bellingham, (206) 734-1360.
November 25 or 26-28, Thanksgiving Weekend. Speleobiological
trip to Mt. St. Helens lava tubes. Contact Clyde Senger.
Hells Canyon limestone caves, Eastern Oregon. Contact
Dave Walker, 232-1698, or Bill Capron, 525-2260, in Seattle

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