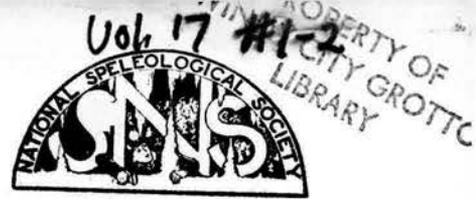




THE CASCADE CAVER

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

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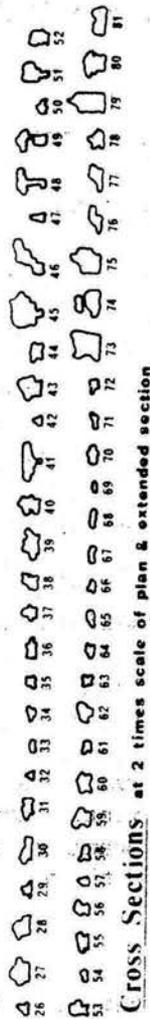


Volume 17 No. 1-2

Editor: Rod Crawford

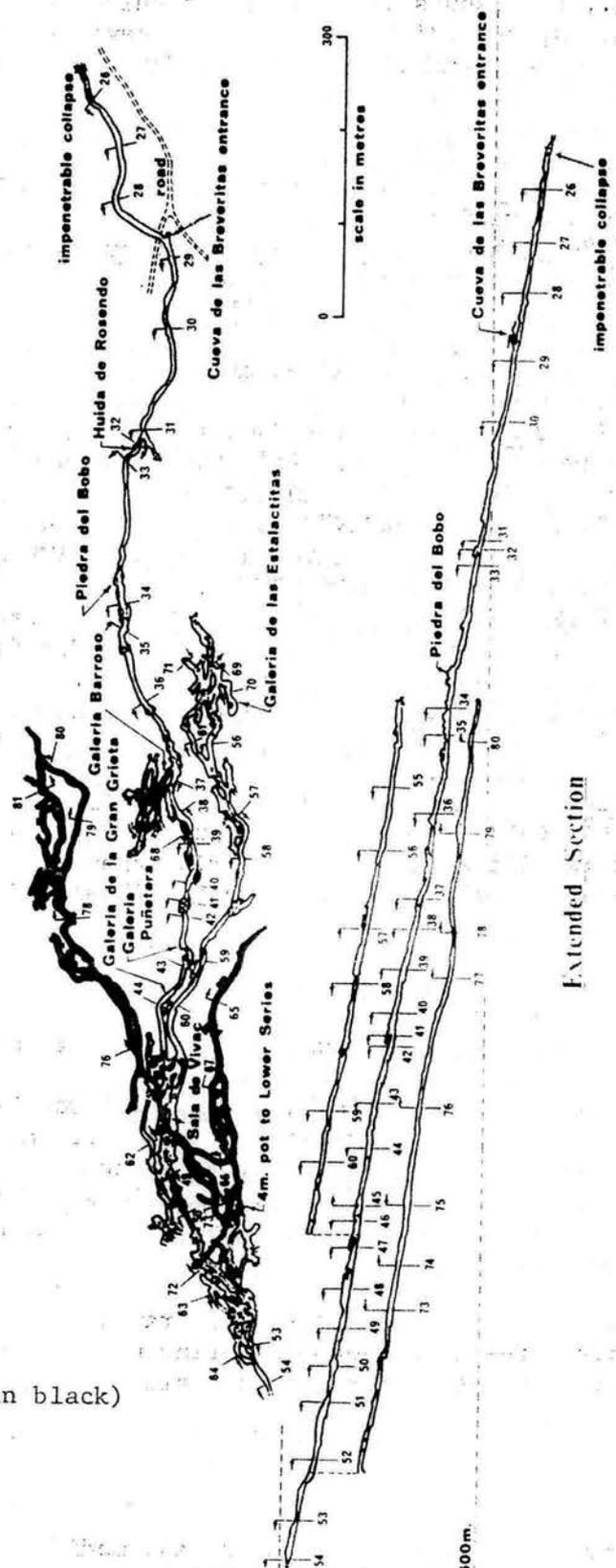
"January-February 1978"

Published October 1978



Cross Sections: at 2 times scale of plan & extended section

magnetic north (1975/4)
at every station



Extended Section

CUEVA DE LAS BREVERITAS
Tenerife, Canary Islands

1973 Survey by Shepton
Mallet Caving Club
Total traverse: 7922 meters
(Lower Series passages shown in black)

In theory, THE CASCADE CAVER is published ten times a year by the Cascade Grotto of the National Speleological Society. Subscription rate is \$4.00 per year (i.e., ten issues). Full grotto dues are \$4.50, and family memberships (not including subscription) 50¢. All payments should be made to the Grotto treasurer, Chuck Coughlin, 6433 S. 127th Pl., Seattle, Washington 98178.

COMING EVENTS

October 5th, evening. Bob Brown leaving for Deadhorse Cave from Elbe, on his way to the regional meet.

October 7-8-9 (changed from 14-16) Columbus Day. Regional Meet at Hells' Canyon, Idaho. By now you've missed it.

October 9-10-11. The regional will be followed by a visit to Papoose Cave, Idaho.

October 15, Sunday. Special meeting to put together the grotto slide show, at the Hallidays', 7:00 PM.

October 17, Tuesday. Regular Monthly Meeting, 8:00 PM, at the Hallidays', 1117 36th Ave. E., Seattle. It's the first house on the right side, going south from E Madison. OUR PROGRAM WILL BE THE NEW GROTTA SLIDE SHOW, WELL WORTH SEEING. IF YOU HAVEN'T BEEN TO MANY (OR ANY) MEETINGS LATELY, MAKE THIS THE ONE. AND IF YOU HAVE FRIENDS WHO HAVE GONE CAVING OR ANRE INTERESTED, BRING THEM ALONG. (SEE BACK COVER).

October 21-22. Followup trip to Mt St Helens lava tubes, to sustain the interest we've drummed up at the meeting. For further information, come to the meeting or call Bill Halliday, 324-7474.

November 10-13. Gordon River, Vancouver Island. There is a chalet there to sleep in, so you can be comfortable between caves. Call Bob Brown in Elbe, (206) 569-2724.

November 20, Tuesday. Regular meeting, time and place as above. NOMINATIONS FOR 1979 OFFICERS (if you don't want to be nominated, you'd better come).

And there will surely be more trips than these, so if you want to go caving, call someone. Call someone. Anyone. Please, don't just sit there wishing.

NEWS AND NOTES

Bill Capron reports that he wants to turn the Grotto store over to someone else. Anyone interested, come to the meeting and make yourself known.

* * * * *

Recent VICEG exploration in Thanksgiving Cave, Vancouver Island, produced four new deep pits in succession: 30 m Birthday Pot, 35 m Echo Pot, 20 m Tusk Pot, and a fourth not named. Ongoing survey of the cave had reached, at last report, 1623.3 m (over a mile) length and 200.08 m depth. There is a rumor that the survey has now reached two miles.

* * * * *

Aglarond reports that Little Mountain, Wyoming/Montana, home of the Bighorn-Horsethief system, is now safe from uranium miners. It is not safe from cavers, however--their photomonitoring project shows enough deterioration in beautifully decorated areas to be easily observed from year to year.

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COVER: Map of Cueva de las Breveritas, modified from BCRA Transactions, December 1977. See our feature article.

FEATURE ARTICLE

MAJOR LAVA TUBES OF THE CANARY ISLANDS

An Update

by Rod Crawford

Washington vulcanospeleologists first became aware of the existence of major lava tube caves in the Canary Islands when an National Geographic article by Dinkins (1969) mentioned the Cueva de los Verdes and the Jameo del Agua on the island of Lanzarote. The Cueva de los Verdes was listed as being "four miles long", which caused a little consternation among North-westerners; up to that time Ape Cave was thought to be the world's longest (Halliday, 1971).

Anxiety was relieved, however, by a Spanish publication which appeared later the same year (Montoriol-Pous and de Mier, 1969). This was an exemplary and detailed study of the Cueva de los Verdes which shows it to be a cave system, divided by collapse trench into four separate caves. The total lengths of these caves are given as respectively 65, 1170, 2565, and 1630 meters. This, along with 430 m of unspecified side passages and 240 m of collapse trench, gave a total of 6100 m for the Cueva de Los Verdes system; these figures have not yet been superseded. The authors stated that the Cueva de Los Verdes was therefore "the greatest volcanic cavern explored up to the present" (p. 563). Obviously there is a discrepancy between the Spanish and American concepts of what constitutes an individual cave. The policy of this journal is and has always been that a lava tube is segmented into separate caves when an explorer must pass through daylight to get from one portion to another. Thus, a collapse occupying the full width of a passage segments it, but a small skylight entrance which leaves the area below in twilight does not.

The longest cave in the Cueva de los Verdes System, at 2565 m, was no match for the 3418 m known for Ape Cave at that time, let alone the 3904 m of the latest survey.

Our interest in the area having been aroused, a Cascade Grotto expedition visited the Canary Islands in November, 1971. Shortly before departure from Seattle, Bill Halliday had received a letter from Montoriol-Pous reporting that he now believed Cueva del Viento, on the island of Tenerife, to be the world's longest. Through Montoriol's assistance, Halliday was able "to visit and study that cave...and found it to be a magnificent and very extensive lava labyrinth". He later wrote that "...it is clear that the system has more footage than Ape Cave. It is divided into two, perhaps three parts by sinks, but my initial impression is that the longest cavernous portion may well have more footage than Ape Cave." (Halliday, 1972a).

The first detailed report on the Cueva del Viento was that of Montoriol-Pous and de Mier (1974). Their map and description depict an intricately complex cave, with some sections reminiscent of Deadhorse Cave in Washington. Two entrances are shown: the uptube "Cueva de las Breveritas", which is located in a side chamber and does not segment the cave; and the downtube "Cueva de los Piquetes" which plainly does segment it, being described as a "typical jameo" or collapse trench, 9 m long. Montoriol-Pous and de Mier quoted the total length as 6200 m, and the depth as 580 m, and considered it the "greatest volcanic cave in the world". They did not state how much of this 6200 m was below the Cueva de los Piquetes collapse and how much above it. Between the

two entrances the map shows a lagar (wine-press), which is not mentioned in the text. It remained for a later expedition to report that the subterranean foundations of this wine-vat are responsible for an impenetrable collapse, further segmenting the cave.

Wood and Mills (1977) report on British expeditions to the Cueva del Viento System during 1973 and 1974 which yielded considerable information. The first project of the British team was to survey the upper segment, the Cueva de las Breveritas, which includes all of the cave uptube from the wine-vat collapse. "On the 6th day in the cave the total surveyed length exceeded 5.500 km [already greater than the 4406 m shown on the Spanish map] and one insignificant draughting passage was reluctantly left to be surveyed the next day. To our great surprise (and dismay!) this passage eventually led to a 4 m deep hole and lava-fall and into an extensive lower cave which, after an exhausting 8th day of surveying, was found to possess a length of 2.340 km. The total length of the cave at the end of that day amounted to 7.922 km, which exceeded the variously quoted 6.181 km for the whole of the Cueva del Viento, and this fact, together with the lack of evidence of previous visits by other people to the lower cave, led us to believe that the lower cave was a new discovery." (p. 454).

The British later surveyed 2080 m in the Cueva de los Piquetes, that portion of the Cueva del Viento below the wine-vat. However, this is segmented by the entrance into two caves of 229 m and 1851 m.

The Spanish report gave 580 m as the total depth of the system, but stated that this figure was approximate only. The British survey revises this downward to 478 m, 261 in Cueva de las Breveritas and 217 in Cueva de los Piquetes.

Wood and Mills state (p. 459) that "...with a length of 10 km [the Cueva del Viento] ranks only after Leviathan Cave, Kenya, and possibly Kazumura Cave, Hawaii, in the list of the world's longest lava tube caves." This shows that even the British share the usual misconception of what constitutes a lava tube cave. The Cueva del Viento is not a single cave of 10 km, but three caves of 7922, 229, and 1851 m.

The Cueva de San Marcos, also on the island of Tenerife, is of unusual interest because the entrance is exposed in a sea cliff. Halliday visited this cave in 1971 and was told that Carlos Teigell and the other members of the Grupo Vulcanospeleologica de La Guancha had mapped 2200 m of passages therein (Halliday, 1972b). However, when the Spanish technical report on this cave came out (Montserrat i Nebot, 1977) it included an apparently complete map with only 1512 m of passages. Wood and Mills (1977) mapped this cave in 1974 and give its length as 2130 m. Their map (reproduced on facing page) shows a few side passages not on the Spanish map, but not nearly enough to account for the discrepancy of 618 m. Their wording (on p. 454) provides an important clue to the mystery: "The survey of the Cueva de San Marcos and neighbor [*italics mine*] in the cliff at Puerto de San Marcos was successfully accomplished...and was found to possess a length of 2.130 km..."

Rough measurements on Woods and Mills' map confirmed my awful suspicion-- the 2130 m they quote is the total of Cueva de San Marcos and "Cave B", another cave with entrance nearby on the same cliff. Surely these are two separate caves by any man's definition. They do not even come close to connecting, they have separate entrances, and do not open on the same collapse trench. The statement elsewhere in Woods and Mills' paper that the Cueva de San Marcos is "over 2 km long" is misleading at best. In no sense does the Cueva de San Marcos have more than about 1880 m of passage.

Montoriol-Pous and de Mier (1974, p. 6) mention that the largest of the "minor" caves near the Cueva del Viento is the Cueva de Felipe Reventon, with more than 2 km of passages. Wood and Mills (1977) were unable to find this cave. Because of the strong likelihood that the cave is segmented, I have omitted it from the list of lava tubes over 2000 m long, pending further information.

Montoriol-Pous and de Mier (1977) state that the Cueva de Don Justo on the island of Hierro is 5500 m long. This paper is concerned with a particular feature of the cave and gives no further details on the cave as a whole. It seems likely that at least one segment of so long a cave system would be more than 2000 m long, so I am including it in the list as an "unconfirmed" length, pending publication of the map.

Lava Tube Caves of the Canary Islands
with Published Lengths

	<u>Cave</u>	<u>Length, m</u>	<u>Depth, m</u>
1.	Cueva de las Breveritas (Cueva del Viento system, Tenerife)	7922	261
2.	Cueva de Don Justo (Hierro, may be segmented)	5500?	---
3.	Cueva de los Verdes (Lanzarote; main segment)	2565	29
4.	Cueva de Felipe Reventon (Tenerife; may be segmented)	2000?	---
5.	Cueva de San Marcos (Tenerife)	1880 (approx.)	69
6.	Cueva de los Piquetes, main segment (Cueva del Viento system, Tenerife)	1851	157
7.	Cueva de los Verdes (Lanzarote; lower, commercial segment)	1630	115
8.	Jameo de la Gente (Cueva de los Verdes System, Lanzarote)	1170	86
9.	Cave B (Tenerife, near Cueva de San Marcos)	250 (approx.)	24 (approx.)
10.	Cueva de los Piquetes, upper segment (Cueva del Viento system, Tenerife)	229	60
11.	Jameo de Prendes (Cueva de los Verdes System, Lanzarote)	65	---

I omit the Jameo del Agua, Lanzarote, of which no cavernous segment is as much as 100 m long. No doubt there are many other significant lava tube caves in the Canary Islands, but few if any others seem to have published lengths.

ADDENDUM: Montoriol-Pous (1972, in *Speleon* v. 19 p. 16) mentions that La Cueva, on the island of Fuerteventura, is more than 2 km long. My comments (above) on the Cueva de Felipe Reventon apply to this cave also.

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- 1972a. Vulcanospeleological abstract. Cascade Caver 11 (1) 1.
- 1972b. Lava tube opening on cliff. Cascade Caver 11 (2) 12.
- Montoriol-Pous, Joaquin, and Jorge de Mier, 1969. Estudio morfogenico de las cavidades volcanicas desarrolladas en el malpais de la Corona (Isla de Lanzarote, Canarias). "Karst", Revista de Espeleologia (Barcelona), 6 (22): 1-23, 2 foldout maps.
- 1974. Estudio vulcanoespeleologico de la Cueva del Viento (Icod de los Vinos, Isla de Tenerife, Canarias). Speleon, 21: 5-24 (reprint paged 1-20), 1 foldout map.
- 1977. Estudio de un caso de captura subterranea de una corriente de lava, observado en la Cueva de Don Justo (Isla de el Hierro, Canarias). Atti del Seminario sulle Grotte Laviche: Catania, 27-28 Aug. 1975, Gruppo Grotte Catania. Pp. 169-174.
- Montserrat i Nebot, Alfred, 1977. Contribucion al conocimiento vulcanoespeleologico de la isla de Tenerife (Islas Canarias). La Cueva de San Marcos. Speleon, 23: 93-102, 1 foldout map.
- Wood, Christopher, and M. T. Mills, 1977. Geology of the lava tube caves around Icod de los Vinos, Tenerife. Trans. British Cave Research Assoc. 4 (4) 453-469, 1 foldout map.

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VULCANOSPELEOLOGICAL ABSTRACTS

- Montoriol-Pous, Joaquin, and Francisco Chavarria, 1975-76. Estudio vulcanoespeleogenico de la Budahshellir (Snaefellsnes, Islandia). Speleon, 22: 109-113.

This latest report by Montoriol and co-workers on vulcanospeleology in Iceland describes a comparatively short tube system but one of special interest because it is one of the few in the world which can be entered from inside the crater--presuming that the "crater" described is not a hornito nor a tubal blowout plus subsidence. According to Montoriol's classification system, it is a syngenetic cave of the underground reogenetic type with a short section of subaerial reogenetic type and some small zones of the cutaneous pneumatogenic type (the latter sounds like surface blister). The map is confusing in that only the section shows that the cave roof is missing in at least one area.---W. R. Halliday.

- Geze, B., 1939-43. Grottes et tunnels de lave du Mont Cameroun. Spelunca, 10: 1-7.

The longest lava tube cave on Mount Cameroun in central West Africa is only 180 meters long. It is the "grotte Gaskin". --paraphrased from a letter from Claude Chabert to Bill Halliday, who is trying to get a xerox of the entire article.

TRIP REPORTS

Quick Caving in Puerto Rico

by William R. Halliday

On Nov. 8, 1977, Len and I flew into Puerto Rico to meet the Larsons (who were flying in from Boston; we were coming in from Trinidad) prior to caving in Jamaica. The Sociedad Espeleologica de Puerto Rico had planned a special evening meeting in honor of the Larsons' visit (evidently the first time an N.S.S. President had visited Puerto Rico, at least in recent years), and as we arrived early in the day, they did us the honor of meeting us at the airport for a quick look at the fantastic Rio Camuy country about 90 minutes from San Juan; maybe 2 1/2 hours from the airport, however. Chief guide and driver was the fabulous Lazaro Diaz de Tuesta, a Cuban caver in pre-Castro days, with whom we could have talked for weeks. Accompanying us were Kike and Kiko, otherwise known as Enrique Rodriguez and Jose Ayala, plus Felipe Basco, who we picked up at work and who lives a few miles from the caves.

Even before we left San Juan, the signs were all around us; haystack hills, flowstone-draped vertical limestone walls. Sure enough, it turned out that there are three or four caves right in San Juan and one of them (Cueva de San Patricio) to the left of the freeway in a towering tropical karstic cone is a practice cave for the local group. Along the way beautiful conical and haystack hills provided far better examples of tropical karstic denudation than I had ever seen, or expected to see here.

Much of the distance to the caves was taken up with discussions of recent discoveries in the island. Particularly exciting is the Rio Encantado, discovered by Felipe, which looks like it may turn out to be larger than the Camuy system, especially if it can be connected to El Escalero, a nearby cave containing a dam and a metal ladder 150 feet long, still used as a local water source. Originally the plan had been for me to see the new Ensueno Cave, especially beautiful for helictites, and another fairly recent discovery, but comparatively small. Before long, however, we found ourselves at the junction of new road 129 and 455, with a gaping entrance right alongside the latter: Cueva de las Golondrinas, with a single semi-vertical room but nothing much else, other than termite trails and a curious coral-like bees' nest on the ceiling. Here we met another member of the group, who had been waiting patiently since 10:30 as a result of a misunderstanding of the schedule instead of making the stream measurements nearby for which he was there: the only goof of the venture.

Then on along highway 455, past huge gaping depressions and still finer karstic hills, to the junction of old 129 and the vast but inconspicuous Empalme (Crossroads) sink entrance to the Camuy system. 400 feet deep and 1/2 mile long and yet it is difficult to find a place to see more than a little of it. At one point we did see the red-brown Rio Camuy itself in flood, about to vanish underground. Original explorations began by descending a steep, difficult trail into this chasm but now there is a quicker, easier way down through a small tributary cave. Just across the road is a water purification plant which draws its supply from the system. Artifacts of the work here are still evident on the edge of the pit.

A little farther down the road, then a hike of about 1/2 mile through partially cleared subtropical vegetation, some wild, some reverted (we had a very good grapefruit at the site of an old farm). Off to the left, a shallow looking sink that is the Espiral Entrance; not much farther to the vast Tres

Pueblos entrance, an incredible near-circular vertical sink dropping sheer 400 feet from the gentle limestone plateau, more hundreds of feet in diameter than I would care to guess. In the green depths, the red-brown river again. Here and there on the walls, still-virgin orifices with enormous weathered speleothems: a fantastic site indeed.

Time was running out for the meeting back in San Juan, but we took a few minutes for the Espiral entrance: a steepening funnel leading obliquely into deep darkness 155 feet above the underground river. We halted at a platform above a 20-foot free pitch, massive stalactites above, nothing ahead but resounding nothingness, then reluctantly headed back to San Juan with more tales of vast caves, the connection of the Cueva del Humo and the Angeles entrance into the farflung system, the giant rimstones of Angeles, the nuisance of hortigas (the tree nettle, of which I acquired a sample accidentally in the Espiral sink), the hopes and aspirations of some really fine cavers, and some tragedies here, too well publicized to require further mention now. We looked at slides of Puerto Rican caves far into the night, and I showed a few of the U.S. since Charlie and Jo had not brought any; we were well fed and wined, housed for the night, and duly deposited at the airport, determined to return at low water, to see for ourselves what we could only learn about in so short a visit.

Field Trip Report--Deception Pass

by W. R. Halliday

On Saturday May 13, 1978, Len and I (with the assistance of Frank and Martha King and Sally Straathof) relocated what might as well be called Postcard Cave, previously known only from turn-of-the-century postcards. Actually some of the staff at Deception Pass State Park had located what they thought was the proper cave, and on the basis of a marine reconnaissance, we concluded that they were correct. The cave is about 50 yards north of the "lighthouse" (it's really some kind of a navigational device) at the extreme SW end of the point southwest of Bowman Bay. From the sea, it didn't look like there was much cave beyond the arch shown on the postcards, but one never knows. A low tide will be helpful in actual checking.

Senger's Talus Cave Mapping
February 26 and May 7, 1978

by Rod Crawford

On Sunday, February 26, Bill Halliday, Mike Dyas, Clyde Senger, Tim Holland and yr editor hiked up to Washington's largest known talus cave, to finally do some mapping. Bill took notes, Mike made good use of his Suunto compass and clinometer, Clyde acted as guide and Tim and I held the tape. A complete Grade 5 traverse was completed between the main upper and main lower entrances (through the hidden crawlway and the Lake Room), as well as between two of the lesser entrances and the main passage. The day proved fine, despite ominous weather reports, and we lolled on the rocks in the sunshine eating our lunch between survey traverses. I placed a cave register at the end of the main upper passage.

What with one thing and another, it wasn't until May 7 (I think) that Mike, Clyde, Tim, Ron McMenimen, and I returned to continue the map. Mike accidentally left his Suunto compass and clinometer in Tacoma, so we had to use Clyde's

Brunton. Mike swears he'll never make that mistake again! Aside from that, everything went smoothly. (Did I say smoothly? I thought I wouldn't need my kneepads. Ouch!) We mapped several more side passages and I sketched in the walls for some of the previous survey; we also re-mapped one connecting passage that didn't connect properly on the previous survey. Several cave register forms had been filled out by local residents since the February trip.

Results to date: 895' of passage mapped (slope length) plus 59' estimated in short blind leads. Total relief in survey to date is 64.6', which brings it down to lake level. The survey to date includes three closed loops (with a surface traverse connecting the entrances Mike, Clyde and I did on the first trip). Horizontal closure errors are: 1.45' in 160.6; 4.67' in 201.9; and 5.95' in 468.0. Respectively 1%, 2%, and 1%. If our arms were long enough, we'd pat ourselves on the back. There are at least 16 unmapped leads shown on my sketch and some of these are known to lead to extensive areas. WHO'S FOR GOING BACK THERE THIS FALL?

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L E T T E R S

From ROBERT W. CARROLL, JR., Potsdam, New York, April 27: "...There is some chance that the 1979 NSS Convention will be held at Pittsfield, Mass., a location too far from the Adirondack talus/tectonic caves for one-day trips (if enough interest is expressed, a two-day or three-day field trip to these caves during NSS week may be conducted), but nearby Vermont has some lesser fault caves and marble karst, pits, and caves that may interest you. I hope to check a reported talus slope in Bennington County this summer; whether it is big enough to substitute for TSOD or MBDATHS as a field trip objective is not certain.

"I have word from Dave Allured of a monstrous talus pseudokarst in Colorado, complete with underground streams and "pseudo-dolines" with 200-foot reliefs! Most Colorado cavers have no interest in talus systems, but this thing--if patiently explored and mapped--sounds like a potential rival to TSOD, maybe superior to it. In any event, I encourage Cascade Grotto and anyone else with any interest in talus caves to proceed full speed ahead with their exploration/mapping efforts this summer. If the 1979 NSS Convention is at Pittsfield, I hope we have a good pile of material for a talus/tectonic symposium. Keep working on Senger's Talus Cave; if it is one of Washington's best, has an unusual morphology, or has any curious biota or formations, it should be discussed at any talus/tectonic symposium.

We received this further word from Bob Carroll on July 31st: "More developments at TSOD! On July 29-30, Dave and Vi Allured, Tom Sywedko (who had driven over 400 miles from Pennsylvania), and I finished exploring and measuring W. H. Lyman Cave, and this talus system has topped off at 2450+ feet and has large rooms and a 60-foot deep multi-level crevasse through a huge boulder. We then poked around TSOD, and Dave (conqueror of the Purgatory Room #4 narrows in Vermont in 1974) managed to "hide-rip-grate" a link between the Cyclops Sector and Henodoawda Megalith Cave. Results: one lost 900+ footer; one 13,000+ foot talus monstrosity! After a miserably rainy night, we toured other parts of TSOD, noting ice conditions in some leads the worst ever. Labor Day, Tom Sywedko and I hope to do some work at Eagle Cave."

Letters, continued...

From DALE GREEN, Salt Lake City, Utah: [in response to my query about the vertical range (depth) of Duck Creek Lava Tube] "The depth of Duck Creek Lava Tube??? Good question. It was mapped at 337 feet deep BUT there were surveying errors in the upper part. The person reading the inclinometer on the Brunton assumed all vertical angles were down while several of them were actually up. The map shows the correct horizontal projections but only the lower two-thirds shows correct elevation differences. We were unable to resurvey and have been refused entry to the cave since then. I estimate the correct depth to be around 250 feet (based on surface contour lines).

"By the way, your post card used the correct name, Duck Creek Lava Tube. Some recent Grotto publications have used Duck Creek Cave. Duck Creek Cave applies to another nearby, very well known cave (sometimes also known as Duck Creek Ice Cave). This cave is on most maps and even has road signs to it. When we arrived on the scene to map the lava tube, the Forest Service was already referring to it as Duck Creek Lava Tube although we strongly dislike the idea of naming caves after geographical features. Anyway, Duck Creek Lava Tube is correct and Duck Creek Cave refers to something else." [Many thanks, Dale, for your prompt response. You're the only person so far to respond to my queries for additional lava tube statistics.]

From MILUTIN VELJKOVIC, Oak Park, Illinois: "Thank you for the September 1978 edition of your publication The Cascade Caver. I noted the inclusion of the article from Enterprise Science News which resulted from my March 3, 1977 news conference held in New York. After three years of preparation by myself and nine scientific institutions, this program has been cancelled for lack of funds.

"I am now a United States resident and am planning a new experiment [on underground isolation] which will last several months. It is my hope that much information can be gained to be used by the space program. After my fifteen month experiment and analysis of the results a great deal was learned about man's natural biological rhythms and the psychological effects of isolation. I have written and published two books in Yugoslavia related to my fifteen month experiment. They are presently being translated into the English language. I hope to have them published during 1979."

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FURTHER NOTE ON WASHINGTON TALUS CAVES
by Rod Crawford

I brought samples of the talus back to the U. of W. after the second mapping trip to Senger's Talus Cave, and the rock proved to be phyllite. So far, nearly all significant talus caves investigated in Washington have been in the phyllite and sandstone of the hills in the Bellingham area. There are enormous amounts of talus in Eastern Washington, but nearly all of it is basalt, the rocks too small to form caves. I have investigated several talus slopes in various parts of the Cascades without finding any with the right kind of rocks. The talus caves on West Tiger Mountain, King County, are not very significant, and one reported in Spokane County is evidently also small. The best possibilities seem to be in the Olympic Mountains, where at least one major system has been reported (at Lower Lena Lake) but has not yet been checked out. Anyone interested in talus scouting??

THE SEPTEMBER MEETING was very productive. There were 11 attendees including Jan Utterstrom and wife, former members. Bob Brown moved (seconded) that we spend \$20 to print up some new Grotto business cards. This was tabled pending more information at the next meeting. We resolved to change our meeting format by moving the program up to 8:15, to be followed by the business meeting. In future, the hour 8:15-9:15 will be allocated to the program chairman (Russ Turner). If you have slides or any kind of show for the November or December meetings, contact Russ. His work phone is (206) 582-8440, ext. 380. In future, last minute additions will not be allowed to disrupt the planned program.

We also discussed the problem of slumping activity among our members. In general (with some exceptions), revitalizing inactive members seems to be a lost cause. They may say they'll reform, but still always have other plans the day of the trip (or meeting). The only solution seems to be selective recruitment. There are lots of cavers out there who don't belong to the Grotto or the NSS. I'm sure we all know some. That is the purpose of the special program at this month's meeting.

So,

TO EVERY MEMBER WHO CARES ABOUT THE FUTURE OF THE CASCADE GROTTTO: IF YOU REALLY DO CARE, MAKE A POSITIVE EFFORT TO TRACK DOWN ONE OR MORE FRIENDS & ACQUAINTANCES (NON-GROTTTO, NON-NSS) YOU'VE GONE CAVING WITH, OR WHO ARE INTERESTED IN CAVING, AND TAKE THEM TO THE MEETING (HALLIDAYS', TUESDAY OCTOBER 17TH). Starting promptly at 8:15, they (and you) will see the new grotto slide show, an introduction to caving in the Pacific Northwest. I'm sure everyone will enjoy it, and we might just gain some valuable new members.

THE CASCADE CAVER
207 HUB (FK-10) Box 98
University of Washington
Seattle, WA 98195

Take
Nothing
But
Pictures
Leave
Nothing
But
Footprints

COME TO THE OCTOBER MEETING (& BRING A FRIEND)