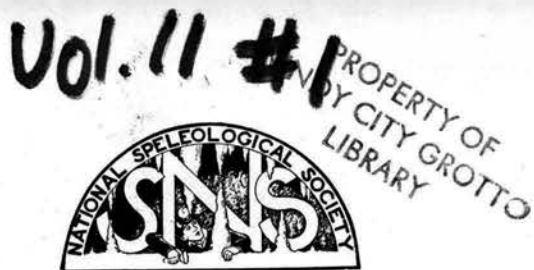




# The Cascade Caver

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



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Volume 11 no. 1      Editor: Dr. William R. Halliday      January 1972

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## COMING EVENTS

- December 31. Northwest Regional Association Executive Board meeting  
6 PM, Larson's, 13402 NE Clark Road, Vancouver, Wash. 695-4143.
- December 31, 8 PM or thereabouts. The Larson's famous cavers'  
New Year's Eve party. Enough said?
- December 32 or 33 or thereabouts. The Larsons' famous post-party annual  
snoeshoe cave trip to Trout Lake or thereabouts.
- January 17, 8 PM. Regular grotto meeting, 8 PM, Hallidays. ELECTIONS.  
And slides of the world's largest lava labyrinth cave.
- March 11-12. Gem State Grotto trip to Papoose. Contact Vern Blalack.
- May 27-29. Probable Papoose Cave trip.
- June 10. Gem State Grotto Crystal Ice Cave trip. Contact Kirk Freeze.  
(This may be Crystal Falls Cave instead, as the Speleograph says  
("St. Anthony"))
- July 1-4. Northwest Regional Convention, Vancouver Island.
- August 12-20. NSS CONVENTION.
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## VULCANOSPELEOLOGICAL ABSTRACT

Halliday, William R. 1971. Ape Cave, still the world's longest lava tube .  
Seattle Times Pictorial Sec. Nov. 21, pp. 20-24.

This lavishly illustrated popular article asserts that Ape Cave is the world's longest lava tube cave, based on Montoriol's report in *Speleon* that Lanzarote's Cueva de Los Verdes system is segmented into several short cavernous segments (see Vulcanospeleological abstract, July 1970, p. 44). It was published while we were on Lanzarote, doublechecking this exceptional system (detailed report anon), and in condensation, it omitted the fact that we were going to do this field work doublechecking.

Shortly before we left, Montoriol wrote me that he had visited a longer lava cave, on the island of Tenerife, also in the Canary Islands, and that that cave, he believed, is the world's longest lava cave - rather than Cueva de Los Verdes. Through his assistance, I was also able to visit and study that cave - Cueva del Viento (Wind Cave) and found it to be a magnificent and very extensive lava labyrinth. D. Carlos Teigell and other Tenerife vulcanospeleologists have been studying the cave and kindly provided me with much important information thereon. I have not had an opportunity to study this in proper detail as yet but 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 largest cavernous portion may well have more footage than Ape Cave. It appears that we will need separate categories for unitary and labyrinthine lava caves. (Incidentally, I tried to get a change made in the text of the Times article on receipt of Dr. Montoriol's letter, but it had gone to press).

W.R.H.

1# 11.10U

### THIRD ANNUAL CASCADE GROTTO SUMMIT FIRN CAVES TRIP

-- Mike Kaczmarek

The objectives of the 1971 summer field trip to the Summit Firn Caves on Mount Rainier, Washington, were threefold. The first objective was to establish that with proper physical conditioning and prior organization of activities, a small group of individuals could sustain efficient performance such that accurate and meaningful data could be collected over a three day trip period, including ascent and descent of the mountain. The second objective was to resurvey a portion of the passage surveyed by Dr. Eugene Kiver's party in 1970 in order to detect changes in passage dimensions and locations that might be used as indicators of fluctuating geothermal activity. The third objective was to enter the firn caves in the western summit crater and to initiate preliminary mapping and reconnaissance there. An incidental goal was to locate and examine the condition of the Nimbus 4 satellite relay equipment on the summit.

Prior to the final ascent, conditioning trips were conducted on Mount St. Helens, Mount Baker and in Papoose Cave in Idaho. Participation varied. However each member of the final Rainier party attended at least two conditioning trips.

One week prior to the three-day Fourth of July weekend, the final Rainier ascent group was forced down from 11,500 feet on the Ingraham route by zero visibility during an attempt to cache supplies on the summit. 18 to 20 inches of new snow added to the difficulty of this attempt. On the following Tuesday, Rad West, an independent climber who joined the Cascade Grotto party, reached the summit with two other climbers after 15 hours of climbing in up to 36 inches of new snow on this route.

On the Fourth of July weekend, the four Cascade Grotto party, including Rad West, reached the east summit crater after 8 hours of climbing from Camp Muir, via the Gibraltar route. An additional member had become ill at Camp Muir, possibly due to a conditioning hiatus of two weeks prior to the climb. The average weight carried was 56 pounds. Snow and weather conditions were good.

A camp was established in the crater and after a three hour rest period, search for an open cave entrance began. A navigable orifice was found almost 120 meters due east (based on true north) of the entrance marked "1" in Kiver and Mumma's article (Kiver and Mumma, 1971). This opening corresponds with the first unsurveyed entrance on Kiver and Mumma's map travelling clockwise from the number "1" entrance. The number "1" entrance and its mapped branch were blocked by snow, possibly due to the earliness of the season and the snowfall (more than twice normal). Some openings six to twelve inches high and 10 to 15 feet wide were found in the approximate location of number "1" entrance but appeared to be due to local fumaroles. It could not be determined if they connected to the main cave system. Subsequent observations from inside the cave revealed that similar low, wide openings on the east side of the crater were connected to the main peripheral crater passage.

The cave system was entered about 4:30 PM. Surveying was accomplished to a point just past the passage leading to the lowest accessible point in the cave, a total distance of 630 linear feet. This ended at about 7:45 PM due to fatigue and chill. Some exploration was conducted in the main horizontal passage. The party left the cave entrance about 9:00 PM, emerging in a complete whiteout and had some difficulty in locating the tents which were a scant 125 to 150 meters from the cave entrance.

The features observed in the firn caves were as observed by Kiver and Mumma. Active steam fumaroles made surveying and photography difficult. Ridges of downslope rock debris were observed both in contact with the downslope ice wall and toward the center of the passage. A preliminary plot of the survey data shows no significant change in passage dimension or location since 1970. No temperature data was obtained as the only unbroken thermometer was inadvertently left at Camp Muir.

Following the Cascade Grotto party's exit from the cave at 9:00 PM, high winds and blowing snow made visibility impossibly beyond 5 to 6 meters. At 9:30 PM, one tent collapsed with a shredded rainfly. The frame in the second tent failed about 4:00 next morning. The wind and blowing snow conditions continued into the next morning, with visibility rising to 10 to 15 meters by 9:30 AM as daylight increased. Since the party had not placed wands into the crater from the wand trail extending down the Ingraham route from the crater lip, it was effectively isolated but at about 10:00 AM a connection was established and the descent begun. Good weather was encountered at about 13,500 feet and persisted as far as Camp Muir, reached about 3:30 PM.

The grotto party of four was the last group to leave Camp Muir that day, departing at about 4:15 PM. The ranger had returned to Paradise Center before the party reached Camp Muir. Visibility below Camp Muir was limited to 10 to 20 meters by low clouds, heavy wet pellet snow and steady wind. As no wands were emplaced below Camp Muir, the group attempted to follow the snow trail. Within a mile, the party had veered east and was under Anvil Rock, at which point it realized they were lost. Examination of a compass at this point brought consternation when it was found that the party was moving north above Paradise Glacier instead of south above Nisqually glacier. Doubts of the accuracy of the compass and the correctness of the party's reasoning were dispelled by a momentary break in the bad weather which allowed visual orientation and rejoining of one member of the party who had forged ahead from Camp Muir and become visually separated while remaining in voice contact. Beyond this point the compass was used extensively and only slight route finding problems developed from Anvil Rock down to Paradise. The party passed below the usual trail at Pebble Creek but immediately recognized the error.

As the party climbed back up to the main trail below Pebble Creek, they made voice contact with two day hikers who were lost in the rocks north of Pebble Creek, and then with three other climbers who had strayed onto the Nisqually Glacier returning from Camp Muir, and were lost. It was necessary to run a wand trail down to the Nisqually Glacier along the Pebble Creek drainage to recover the second group, as contact was by voice only. The party of nine then continued to Paradise Ranger Station without incident, arriving just minutes ahead of darkness, at approximately 8:30 PM.



National Park Service rangers were organizing a search team for the two day hikers who were registered at the ranger station. The other party of three had not signed the register and were not known to be on the mountain. The Cascade Grotto party had registered for three members to return that evening (Monday, July 5) and two to return the next evening (Tuesday). All five cards had been filed inadvertently for a Tuesday return and the rangers were not aware that the grotto party was returning on Monday until they arrived with the lost day hikers.

Although reconnaissance work is more suited to a trip of short duration, the 1971 Cascade Grotto trip did demonstrate that with prior physical conditioning and organization of tasks for a specific mission, a three day summit trip can result in collection of worthwhile data. A more suitable time frame for summit trips with less potential for adverse weather conditions might be mid-July to mid-August. A two-day trip for the purpose of caching supplies on the summit would familiarize cavers with the general route conditions, would further acclimate the cavers and would substantially reduce the drain upon their endurance and productivity the following weekend. A longer trip period, perhaps preceded by a short reconnaissance trip would be more desirable from the standpoint of acquirement of useful scientific data. The possibility of using one of the chambers at the entrances to the cave system for shelter or as a sheltered tent position should be seriously considered by future parties. More extensive training in snowclimbing techniques is desirable. All efforts, whether reconnaissance or prolonged investigation, should be coordinated with Dr. Eugene Kiver of the Geology Department at Eastern Washington State College to insure maximum benefit from the collective efforts of everyone studying the Summit Firn Caves.

The preliminary physical and altitude conditioning trips have proven fruitful in conditioning and as vehicles for practice of snow and ice climbing techniques. More training emphasis is required in route finding, particularly regarding the value of compass and topographic map techniques, and in the importance of insuring a properly marked route for the event of limited visibility. Each caver must be intimately familiar with proper ice axe belays and when to use them, and emphasis should be placed on the importance of concentration on proper use of ice axe and other belays especially during periods of fatigue. Such training may well prevent injury or death resulting from habituation to improper belay positions and failure to use belays in technically easy but potentially hazardous movements.

#### SUMMARY

The first two objectives of the 1971 Cascade Grotto Summit Firn Caves trip were accomplished successfully. Sufficient time remained for further mapping and for investigation of the west crater caves to some extent had not adverse weather conditions prevailed. The 1971 field trip has proved the feasibility of the limited summit trip as a means of gathering significant data.

\* \* \* \*

Tom Miller at EWSC reports that in early November, he and Bruce Ainslie scouted John Day Creek by car after it broke down on a Papoose Cave trip. "A short way upstream in back of a trailer on the south side of the creek is a small (30-foot) natural cave." 4

## FURTHER SCOUTING NEAR PAPOOSE CAVE

by Tom Miller

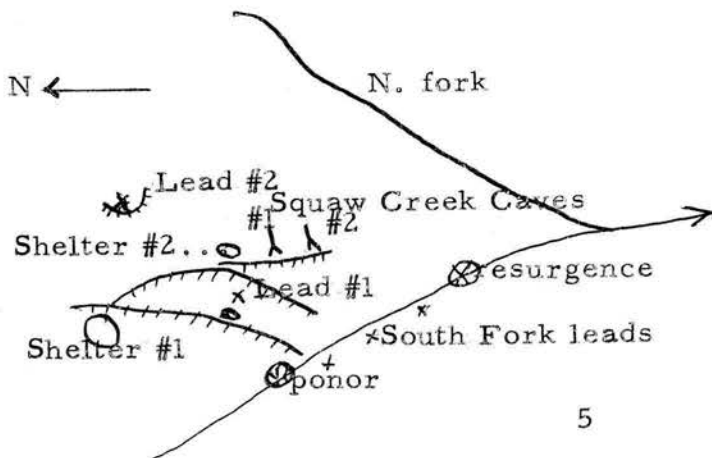
In mid-September I did some solo searching for caves up Squaw Creek and hiked into the Seven Devils area for a couple of days. On the NE side of He Devil Paak, by Sheep Lake, was a large patch of snow with a melt channel running through it. Not having a light, I refrained from exploring it, but obviously it is not too large.

Up Squaw Creek, acting on information from Ranger Dale Astele, I located a ponor and a couple of resurgences of the south fork, all impenetrable. There are a number of holes in the limestone south of the creek. These I did not check as I was concentrating on some leads on then north. One turned out to be a very large shelter (#1). After climbing to the top of the cliff by that shelter I spotted a hole in the cliff nearby (Lead #1), reachable only by a rope.

Nearby I spotted an even more promising lead, also unreachable save by rope, high in a large outcrop further up the hill. I then climbed "all over" Blue Mountain, checking out cliffs and finding nothing. I managed to explore the other portion of Blue Mountain Cave, but as expected, it led nowhere.

One large lead at the top of a cliff on the north side of Blue Mountain also proved unreachable without a rope; I had a rope along but was hesitant to try them alone.

On top of Blue Mountain, I spotted a large lead across Squaw Creek from me. It turned out to be the remnant of a large room, abundant with flowstone and other speleothems, all dry and decaying. It was at the base of a small cliff about 100 yards long. Nearby were two caves - the first, a tight tube some 90-100 feet long. The second was a complex with perhaps 40-50 feet of passage. A narrow tube led from the cliff face to a small room, in the center of which was a narrow opening leading to a crawl below. On the left hand side of the first was a "doorway" to a larger room containing a single large rock. A small passage led out and back under the opening in the first room to a crawl too tight to negotiate. The second cave housed a bat. Both were rather bare of speleothems.



Sketch of  
Cave #2



## HAIL AND FAREWELL

J. ROBERT KELLER --- ex-NSS 2360  
Charter member ----- Salt Lake Grotto of the N.S.S.

In late December came the news of Bob Keller's tragic death in a Los Angeles hospital on October 31 - at the age of 44, of a stroke.

Bob was one of the great pioneers of speleology of Utah, western Nevada and southeastern Idaho. In the early explorations of Neff Canyon Cave, he played so vigorous a role that on at least one occasion he had to be hospitalized. Possessor of advanced degrees in biology, he presented the results of an initial biological survey of Utah caves at an annual meeting of the Utah Academy of Science.

Quietly but fervidly dedicated alike to the scientific method, conservation, and the brotherhood of cavers, Bob tragically never became active in West Coast caving after moving from Utah. Upon moving to California some years ago and contacting local cavers, he was dismayed by encounters with the arrogance of "supercaverism". He turned instead to such activities as scuba diving and gliding, but continued to cave occasionally and kept promising himself and others that someday he would finish writing up his biological survey of Utah caves. And now he never will.

Those of us who were privileged to work with Bob know how great is our loss - and in how many ways. W.R.H.

\* \* \* \* \*

### LETTER TO THE EDITOR:

I've been informed that some people have been telling other people we leave trash and spent carbide in Papoose Cave. In addition, we've been accused of "bragging" about our "exploits". I don't know who started this and I don't care. It can only hurt caving. I've noticed lately certain comments in the cave register at Papoose with regard to "amateurs". We here at EWSC don't want to become involved in any petty feuds that threaten the good will of caving in the Northwest. I can say in good faith that we here have done everything within our power to maintain and build a good image for caving. We have all taken care to preserve the cave, removing our own carbide and the trash of others from the cave. We have always been friendly and helpful to anyone seeking our assistance. We have been more than willing to share our joy of new discoveries to others and are sorry if, in attempting to communicate our own enthusiasm, we have come across as braggards. Silly jealousies and backbiting among cavers must stop - now - before caving relations in the NW are irreparably damaged. We must avoid the situations of harmful competition evident in some parts of the USA. Let's all pull together. We have nothing against any other NSS member or group, and we'd like to stay that way. Please write us if you have any questions or suggestions - we're more than happy to respond.

GOOD CAVING!  
Tom Miller

## CHANGE OF ADDRESS

Mr. and Mrs. Charles Anderson 9029 35th Avenue SW, Apt. 302, Seattle  
Phone: 938-3575. Mailing address: Box 12659, Seattle 98111.

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## VULCANOSPELEOMUSICOLOGICAL DEPARTMENT

The fourth concert of the Circulo de Amigos de la Musica de Arrecife, in the spacious auditorium of Cueva de Los Verdes was a gala evening, attended by much of the youth and beauty of Lanzarote and a few visitors, including this music critic. Held at 11 PM on November 20, about 500 attended. Much of the audience was splendidly dressed, with long formal evening gowns much in evidence. Seating was delayed by gales of mercuri- ment resulting from the cave's strong updrafts at narrow descents en route to the auditorium.

The program was in three parts, the first purely orchestral, the second, a special production of the "gran cantante internacional MICHEL", a Spanish-style rock artist with a great, flexible voice, and the third, mixed orchestral and chorale.

I had never previously attended a concert in a lava tube cavern, and when the brasses sounded thin and flat in the opening "La Leyenda del Beso", I was concerned about the acoustics thereof. However this proved to be momentary stagefright, with later pieces such as "El Sitio de Zaragoza" with its intricate brass themes performed very credibly under the direction of Sr. Jose Sabina. However some tonalities consistently seemed to provide better resonance than others, and this appears to be a phenomenon worthy of studying.

Michel proved to have a fine operatic baritone voice, and was at his best when accompanying himself with only his guitar, performing such perennial crowd-pleasers as "Valencia" and "Grenada". He showed more than a hint of the vitality of a Humperdinck, but much of the effect was spoiled by his lisping Castilian which contrasted sharply with the local speech, and by his efforts to demonstrate the versatility of his voice which was not quite equal to his demands. His use of an amplifying microphone revealed a particular limitation of vulcano-speleomusicology, the overwhelming volume of which created annoying multi-phasic echoes reflected from distant parts of the cave.

El Excmo. Ayuntamiento de Arrecife and el Excmo. Cabildo Insular de Lanzarote are to be complimented on their sponsorship of this notable event.

--W.R.H.

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## WARNING TO CAVE EXPLORERS VISITING THE CANARY ISLANDS

Do not visit the Jameo del Agua on Lanzarote until you have completed all your other planned investigations. The spelean restaurant, bars, swimming pool etc are so delightful that otherwise you might well not get anything else accomplished.



Papoose Cave: The Wet Way to the Millrace Room - and beyond  
by Tom Miller

In early October, Denny Andrews, Greg Harpe and I returned to Papoose Cave with the objective of reaching the Millrace Room through The Wet Way. The first trip was spent placing two bolts over the 20-foot pit in The Wet Way. We planned to travel thence down the passaget o The Millrace Room and return. Unfortunately, while crossing one of The Bathtubs, just prior to reaching the pit, Greg trusted a bad foothold and wound up sailing into the pond - up to his armpits(axillae - W.R.H.). He was shaken but unhurt, but only sat by as Denny and I placed the bolts. We cut the trip short to avoid risking hypothermia. For a few days, Greg was reluctant to return, so Denny and I tried it alone, not optimistic, but loaded with rope on the off chance, re-entering the cave at 1:15 AM. Beyond the Wet Way Pit was new territory to both of us, and we were properly enchanted. By the cave, that is, not the second bolt, where a flake of rock came off, exposing half the bolt - BEWARE!

We reached the Millrace Room uneventfully, climbed down and through the hole in the large flake of rock, then left for the last pit in the cave. When we reached the pit we decided it was too risky to rappel through the waterfall and prusik out, so we crept around the pit on a narrow ledge. Beyond it was all an easy chimney down except for one bad spot. At 3:30 we reached what we thought was the siphon, then explored all the side passages and found our way around to the real siphon. For lack of a register we burnt our initials on the yellow bottle and left.

By the time we reached the Wet Way Pit we were quite tired. We didn't check the ceiling of The West Way, but looked at all the other leads. At the 40-foot pit we took the Keyhole Extension to bypass the rope, picked up our equipment, passed the Keyhole and arrived back at the entrance at 7:45 AM. We were too tired to use the 50 feet of goldline we had brought to retie the ladder so we left it hid there. Anyone who has time is welcome to use it to retie the ladder. Using the ledge at the last pt, the new bolts, and the Keyhole Extension, it is now possible to go all the way from the bottom to the entrance without prusiking, which saves a lot of time. The new culvert, when completed, certainly looks like it will do the job. The last gate made it impossible for short people to work the lock (under 5'9").

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#### EWSC SPELUNKING CLUB FORMALIZED

Tom Miller also writes that the Eastern Washington State College Spelunking Club is now formalized sufficiently to have a formal address:

EWSC Spelunking Club  
Box 779, EWSC  
Cheney, Wash. 99004.

Congratulations, and we hope to see another NSS grotto and unit of the NWRA soon!



## CAVES IN KOREA

--Larry Peterson

Most of the caving activity in Korea is done by a small group of Korean spelunkers, about 18 in number. Also some work is done by the university alpine club here in Seoul. I recently met with the leader of the former group, who provided me with a lot of information about caves in Korea.

There are two caving areas in south Korea. One is on its eastern coast and the other is on Cheju-do Island at the southern tip of the Korean Peninsula. Nobody knows how many caves exist in Korea, but a fair guess would be over a thousand. The largest on the mainland is Hwanseon-gul (or Whansum) which has been surveyed for 6 km and shows no signs of ending. It may be part of a complex system including several other caves nearby.

On Cheju-do Island are two caves of special interest. This island is a volcanic peak which at 1,950 meters is the highest peak in south Korea. Here, a lava cave named Manjang-gul is reported to be 7,865 meters long. The other, called Hwanggum-gul is reported to be a combination limestone-lava cave.

Today, Korea is a largely unknown caving area. Nobody knows what will be found, but sampling has shown large caves with beautiful formations (several are open to the public), and a number of unusual caves. I am planning my first caving trip on the Christmas weekend and as soon as I get back and get more information, I will write a more detailed report. Although the leader of the local cavers does not speak English, they have several publications in English and would like to exchange. I will act as a go-between until I can find someone who does understand English.

\* \* \* \* \*

Dave Mischke reports that he is unhappy with misquotations in the recent article in the Tacoma News-Tribune about Cave Ridge (Erickson, Jsmes. 1971. Cave men, 1971-style. TNT, Sunday Mag. Sec., pp. 1-4, Nov. 28. For example, one of the photos showed the Cascade Grotto Newton Cave sign in sufficient detail that it could be read, yet the article erroneously stated that Xanadu has the agreement with Alpentel. Oh, well. One more good example of why it's better for cavers to write the articles (and books) about caves.... Yr editor hopes to see Dave do the next one himself.

\* \* \* \* \*

## BIG THINGS UNDER INDIANA

Lewis Lamon, patriarch of Indiana cavers, writes that the Binkley system is now 22 miles long, and that a new, virgin system is over 5 miles long and still going. From another source I hear that Blue Spring Cave is up to 20 miles and part is being commercialized. So is Squire Boone Mill Cave.

MORE ALASKA CAVES

-- Jay Rockwell

We may have some good glacier caves in the Castner Glacier near the Richardson Highway in the Alaska Range. It would be well to check them in the winter. I hope to look into them on foot after Christmas.

There are a number of sea caves on the raised south coast of Hinchbrook Island in Prince William Sound near Cordova. I have photos from the air. Time is a problem. That should be a summer trip.

\* \* \* \* \*

AND A HAPPY NEW YEAR, FULL OF THE BEST CAVING EVER, TO  
ALL READERS OF THE CAVER

Cascade Grotto of the  
National Speleological Society  
1117 36th Avenue East  
Seattle, Wash. 98102