

Vol. 15 #3



# THE CASCADE CAVER

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



Vol. 15 no. 3

Editor: Rod Crawford

March 1976

# The Cascade Grotto



PROPERTY OF  
WINDY CITY GROTTO  
LIBRARY

PROUDLY CELEBRATES ITS

# 25th

# Anniversary

# 1951-1976

COMING EVENTS

Monday, March 15. Regular meeting at the Hallidays', 1117 36th Ave E, 8:00.  
 March 13-14. Third grotto moneymaking woodcutting trip in the Elbe area.  
 All able bodies contact Capron, 525-2260.  
 Sunday, March 21. Beckley's Cave, Skagit Co. Contact Hank Ramsey, TA4-1807.  
 April 1. Deadline for the April Caver.  
 April 17-19, Easter Weekend. Papoose Cave, Idaho. Contact Curt Black, 525-2260.  
 April 19. Regular monthly meeting.  
 April 24-25. Official trip to McLoughlin Canyon Caves, Eastern Washington. Contact Chuck Coughlin, 772-1170.

NEWS AND NOTES

Members due this month: Newell Campbell, W. R. Halliday, Stan Pugh, Julius Rockwell.

\*\*\*\*\*

THE FEBRUARY MEETING was very small. No business matters of any significance were discussed. Russ Turner reported on his trip to Alabama. The program featured two films: "Wilderness Below", which won an award at the last NSS Salon; and "...By Nature's Rules," a film on hypothermia.

\*\*\*\*\*

Dr. Halliday would very much like to know who has his bound volume of the Cascade Caver. It contains the only extant copies of certain issues...

\*\*\*\*\*

Please, someone volunteer! The Caver has its new press and it needs a new home. It is presently competing for space with three to four people in the Caprons' apartment.

OBITUARY

On February 9th, Jasper, cave dog extraordinary, was accidentally killed in the woods near Elbe. Our condolences to Bob Brown and everyone else who knew and appreciated Jasper.

NEW ADDRESSES AND PHONE NUMBERS

Luurt Nieuwenhuis (NSS 6708) 27403 118th SE, Kent WA 98031 631-4768.  
 John Torkelson 228-6094

REMEMBER MEETING  
THIS MONDAY  
 THE 15TH!

Cover credit: Photography by Ye Ed., arrangement by Hank Ramsey.

## FEATURES

### DISCOVERY OF THE TROUT LAKE LAVA TUBES IN 1853

In July through November 1853, then-Brevet Captain George B. McClellan led the first exploring party through the southern Cascade Mountains of Washington. Although the party travelled past and perhaps over the toe of the cave-bearing lava flow south of Mt. St. Helens in the Lewis River Canyon, it apparently did not penetrate the Mt. St. Helens cave area, nor the lesser cave area on Falls and Curly creeks. Passing east from Goose Lake at the north end of the Big Lava Beds, however, it followed an Indian trail through the heart of the Mt. Adams cave area; parts of this trail were still in use as a main forest road in the last decade in the cave area and parts of Forest Service road N73 near Goose Lake still follow it. It is even probable that the McClellan party passed directly across Lava Bridge. --WRH

Summaries of the expedition were published in the report of the railroad survey of which it was a part. However, McClellan's personal journal has never been published in any form. Last summer, yr editor and Hank Ramsey consulted a microfilm copy of this journal, and, with some difficulty, transcribed the archaic handwriting of the relevant portions. The following is an unedited copy of the journal for August 11 and 12, 1853.

---

Thursday, Aug. 11th -- Camp No. 15 -- holch-holch-he-lis.

Left camp with the whole command together at 10 1/2. The trail passed over some rather uneven ground, through a moderately thick growth (generally descending) until we reached a very pretty lake, surrounded by lava. [Goose Lake.--ed.] Indeed we passed thus an extensive bed of lava before reaching this lake. Three bold streams empty into this little lake, yet it has no visible outlet whatever. The circular valley of the lake is green and pretty--an abundance of horse mint grows there. The trail now ascends & passes over a couple of ridges--covered by a quite thick growth. At last we entered upon a gradual descent that continued during the rest of the march. While in the rough ground we met 3 or 4 parties of Indians, who were suffering terribly from the small pox. Yet here they were, travelling like spirits of evil, urged by a feeling of rottenness & despair to spread the slayer still further among their brethren. Some of them looked horribly, & I heard more than one muttered remark from the party, that brushing thro' the bushes on the same trail was a fine way to catch the disease. It would have been charity to the tribe to have shot these poor devils. When we entered upon this gradual descent the country became quite open--fine pine timber, with some post oak & little or no underbrush--you could ride at a gallop in any direction. Grass good--found here the blue bunch grass of the plains. The soil is sandy light & shallow--the whole country underlaid by a sheet of lava. Thro' this a subterranean stream has found its course, & the vault falling in at intervals has left a succession of caves or tunnels that are very interesting. Some of these are 80' to 90' wide and high. The Indians have various traditions about their origin. --one is that they were made by a preceding race of very strong men called Sheyennes (Grizzly bears). Another tradition is that there once lived on the Columbia a very strong man & wife. The man finally fell in love with another woman (called Mouse) & with her ran away to this region & lived with her in a hole in the ground. The wife found out their retreat, & pursued them; they made this subterranean passage in their flight, & finally emerged in a lake, he saw her below & begged her to content herself with killing her rival; she

consented to that, killed the woman, but then her anger overcame her & she killed her husband also. The wife is still alive & resides in a deep hole near this subterranean passage--if you throw stones down she will talk. [Marginal note: "crossed one fine stream".] About 300 yds. from the trail, just after passing the 1st prairie beyond the large creek, there is a deep hole, or natural well, in it there is snow, thro' which you must penetrate to reach the water. [I. e., Ice Cave.--ed.] The soil in this vicinity is poor. The grass good, but very thinly scattered over the surface--the stratum of soil is very shallow. The whole underlaid by a bed of lava. The general appearance of the country is extremely pretty.

The Dr. lost his horse today--carrying [?] his kit & cartridge box. X  
[Saturn] dim last night. Distance 14 1/2 miles.

Friday, Aug. 12th. Camp No. 16 -- Tank -- Camash Prairie.

Left camp at about 8 1/2 am--whole command together. The trail passed for about 3 1/2 miles through a country similar to the last part of yesterday's journey. An open country almost destitute of underbrush. White & yellow pine--oak--fir & spruce &c.--the whole country underlaid by lava which crops out very often. Soil light, sandy, & firm. The blue bunch grass still is found. Our camp of last night was on a rather small, but very fine stream. [marginal note: Nik-e-pun. Probably Trout Lake Creek--ed.] Between the chills & fever & a decided pain in the jaw the cmdg officer slept very little last night. The Dr's horse came in just before we started. About 3 1/2 <sup>m</sup> from camp we crossed a fine bold stream--water not so clear as usual. Soon after crossing this creek [the White Salmon River--ed.] the trail ascended a quite steep hill--it passed 'en bryaux' & was the best Indian trail by far that I ever saw--no engineer could have constructed it to more advantage...

The following is a facsimile from part of the original journal.

Little or no underbrush - you could ride at a gallop in any direction. Grass good - found here the blue bunch grass of the plains. The soil is sandy, light & shallow - the whole country underlaid by a sheet of lava. Now there is a subterranean stream has formed its course & the water falling in at intervals has left a succession of caves or tunnels that are very interesting. Many of these are 80' to 90' wide & high. The Indians have given traditions about their origin - one is that they were made by a volcanic eruption of very strong force called 'Sagwintine' (Sagwintine, Oreg.).



SPECIAL FEATURE:  
THE FIRST DISCOVERIES ON CAVE RIDGE

by William R. Halliday, M.D.

During the 1940's, cave exploration as a sport and speleology (the study of caves and their contents) began a period of mushrooming growth throughout America. Initiated in eastern United States, interest in cave exploration reached the northwest in 1950. During that year, several Mountaineers and other northwesterners, aroused to the lure of the underground, organized the Cascade Grotto of the National Speleological Society. This group located, explored and carried out preliminary studies of almost every major cave then known in Washington and several in Oregon. Unfortunately the cavers' enthusiasm exceeded the supply of caves known at that time and even though they succeeded in discovering additional caves, interest soon slackened.

Entered upon the scene a hero, as a classicist would say, in the person of a Mountaineer, Tom Steinburn, fresh from his conquest of Mount McKinley. Learning from Bob Clark that there was a tiny cave in the saddle between Guye Peak and Mount Snoqualmie, Tom and his wife, Ann decided on an exploratory trip. Much to their amazement, sinkholes and cave entrances were scattered throughout an area ranging almost half a mile across. The more they searched, the more they found. None were really large, but at least three were more than they could safely tackle alone.

One of these newly found caves was a slanting crack, too narrow for Tom. Ann squeezed into it feet first for several yards, but could not turn around to see what was ahead--or rather behind. [Not until 1964 was this entrance forced by Don Dilley, Luurt Nieuwenhuis and others. It is now known as Cascade Cave. --ed.] Another opening led downward a few feet to a broad, low chamber, partly choked with breakdown. At its far end was a deep, broad pit, extending deeper into the mountain and clearly no place for a novice. The third was most impressive of all. A depression, almost hidden in heather, had a small hole at the bottom. It looked large enough for a person to wriggle through, but the beam of the flashlight indicated the hole opened straight down into the vault of a large, deep chamber. Rocks dropped into its maw floated downward until they shattered at the bottom far below.

The experiences of the first competent party to visit the Snoqualmie Pass caves gives a good idea of what can be anticipated of cave exploration in the northwest. Loaded with packs bulging with ladders, rope and camera equipment, Tom Steinburn, Bob Clark, Bob Spring, Joan Webster and the writer made the long ascent on September 15, 1956, stopping first at Clark's Cave. With some difficulty, Bob Clark backed full length into the tiny cavern to pose for the party's photographers. These were historic photos for it was Bob's discovery of this tiny limestone cavern which led to the discovery of all the other caves in the immediate area.

After pacifying the photographers, the party continued along the hanging valley on the south side of Mount Snoqualmie and scrambled to the entrance of Prospector's Cave. Bob Spring took one look at the inches-wide slit of the opening and gave up all hope of getting more than the nose of his camera inside. As titular leader, I tried to force the entrance and found it less tight than it appeared. Most of the party succeeded in following, and we set about exploring each of a complex of narrow passages and crawlways, mapping each passage in detail. The result was the recording of the largest limestone cavern known at the time in western Washington, totaling approximately 200 feet of passages. But the rock was rotten and the roof crumbly near the rear. It was not at all a pretty cave.

**CAVE RIDGE SYSTEM**

SURVEY BY CASCADE GROTTO NSS  
MAP BY F. FRESE D. MISCHKE R. STITT  
B. BROWN

CARTOGRAPHY BY CHARLES ANDERSON  
SEPT 1966

**NEWTON  
CAVE**

ENT.

**RED  
CAVE**

**HUCKLEBERRY  
CAVE**

**HELL HOLE  
CAVE**

ENT.

**CASCADE  
CAVE**

ENT.

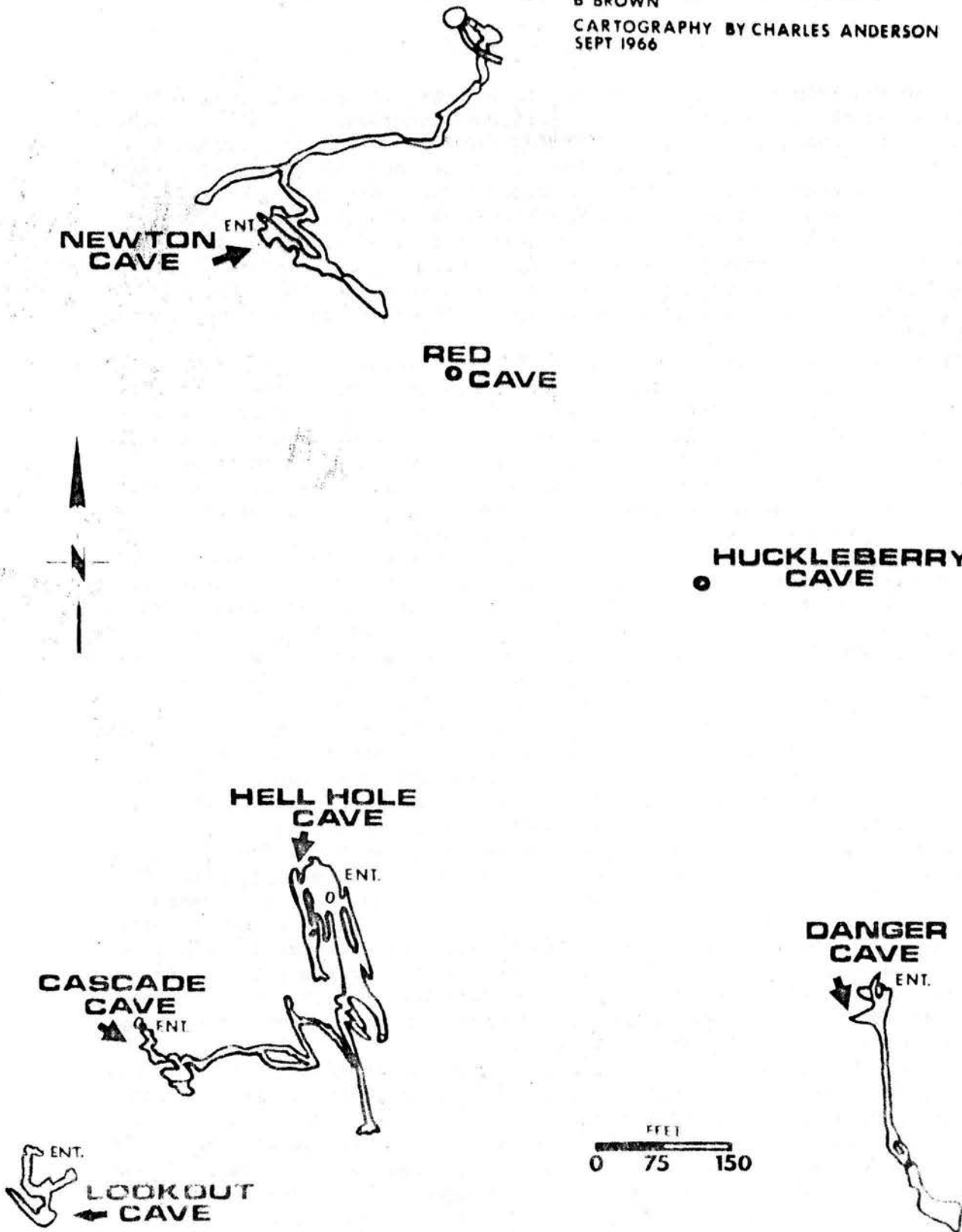
**DANGER  
CAVE**

ENT.

**LOOKOUT  
CAVE**

ENT.

FEET  
0 75 150



At the upper end of the valley, Tom directed us towards the south and over the rim. Below us lay a tiny valley in the form of a trough between glacier-polished limestone outcrops with a number of sinkholes arranged in a row. At the bottom of one of the sinkholes was a narrow opening which slanted downward into a sizable chamber. Red flowstone in an obscure chimney fostered the name "Red Cave". Fortunately, this particular cave opening was of sufficient breadth that Bob Spring could squeeze through and make up for lost time photographically. One of his photos later adorned the cover of the Seattle Times Pictorial.

At the south edge of this little amphitheatre, pitted with sinkholes and ribbed with long limestone outcrops, still another opening appeared--this cave soon to become known as "Danger Cave". Sliding beneath a chockstone and down a steep muddy slope, we arrived in a broad, low chamber which seemed stable in spite of the presence of considerable breakdown. At the far end was a pit. Two 35-foot lengths of rope ladder, lashed together and tied to a convenient rock, reached bottom with many feet to spare. Tom assumed a satisfactory belay position as I tied in. Then, just as I was about to reach for the ladder, someone called "Wait a minute!" As we clustered around the pit, we could see freshly gouged scratches on one of the jumbled rocks at the top of the pit. It looked well wedged, but . . . we left. A year later Tom Steinburn returned to Danger Cave. Ascertaining that the rocks had stabilized, his explorations proved that the pit continued into the mountain and led to a stream passage, beyond which was a chamber of considerable size.

There was one more cavern to be visited. Not far away was Tom Steinburn's prize hole--opening into the top of a large chamber. We took turns being convinced, shining our flashlights into what seemed like an immense abyss, with the floor miles away. Rocks dropped, however, struck bottom in less than two seconds so we knew it was not beyond our grasp. "Hellhole Cave," we dubbed it.

Tom dragged up a log. Two sections of rope ladder were tied together and lashed to the log. As the ladder was lowered, we hoped it would reach the bottom. It did, with one rung to spare. Now to start the 68-foot descent on a flimsy, swinging ladder, entirely free of the walls of the cave. The narrowest part of the entrance was roughly triangular and about one foot wide on each side. Fortunately cavers are characteristically narrow of beam. I had to remove my pack and assume the position of minimum width--one arm at the side and the other arm pointed forward. I slipped through without much difficulty. The room widened around me as I climbed down the swaying ladder. The bottom was an ugly mass of great, unstable blocks of breakdown. I untied the nylon rope, called "Off belay", and gingerly started making my way around the room while I waited for Bob Spring to follow.

Time dragged on and on. Confused noises echoed from the top of the ladder. I guessed that Bob was having a tight squeeze. Then, finally, I could see the bulky body capped with a carbide light starting down the ladder. It was Tom, not Bob. Bob simply didn't fit. By the time Tom reached bottom it was so late that we had almost no time left for exploration. After emerging from the cave, we watched the sun cast pink hues on the eternal snows of distant Mount Rainier. Hurriedly we packed the gear and began the descent in dusk which soon gave way to nightfall. For cavers this is almost a normal situation and our headlamps served as well above ground as below.

```

+ + + + + + + + + + + + + + + + + +
+ + + + + + + + + +
+ + + + + +
+ + + + +
+ + + +

```

The above is edited from an article, "Inside the Mountains," in the 1960 Mountaineer Annual.

THE FOLLOWING HISTORIC DOCUMENT IS PUBLISHED IN COMMEMORATION OF  
THE GROTTOS ANNIVERSARY

1229 DEXTER HORTON BLDG.  
SEATTLE, 4, WASHINGTON  
FEBRUARY 24, 1951

THE NATIONAL SPELEOLOGICAL SOCIETY  
1770 COLUMBIA ROAD, N.W.  
WASHINGTON, 9, D. C.

GENTLEMEN:

THIS IS TO INFORM YOU THAT AN ORGANIZATION WHICH WE HOPE  
WILL QUALIFY AS THE CASCADE GROTTO OF THE N.S.S. IS NOW IN EXISTENCE  
HERE IN SEATTLE. OUR APPLICATION FOR GROTTO STATUS AND A COPY OF OUR  
CONSTITUTION ARE ENCLOSED.

AS BILL HALLIDAY MAY HAVE WRITTEN YOU ALREADY, UP TO THE  
PRESENT WASHINGTON GAVES APPEAR TO BE NOTED LARGELY FOR THEIR SCARCITY.  
HOWEVER, WE HAVE HELD ONLY TWO MEETINGS AND AS TIME GOES ON WE UN-  
DOUBTEDLY WILL UNCOVER MORE AND MORE CLUES.

BY NAMING OUR GROUP CASCADE GROTTO WE HAVE OPENED THE DOOR  
FOR OREGON AS WELL AS WASHINGTON CAVERS. THORNTON SARGENT OF PORTLAND IS  
THE FIRST OF THE OREGONIAN N.S.S. MEMBERS TO ACCEPT OUR INVITATION.  
WILLIAM E. HANSON OF VANCOUVER, WASH., WHO IS ALSO ON YOUR ROLLS, HAS  
THROWN IN WITH US TOO.

AS SOON AS IT IS CONVENIENT, PLEASE WRITE ME AS TO  
WHETHER OUR APPLICATION IS ACCEPTABLE. I'LL BE HAPPY TO PASS YOUR  
SUGGESTIONS AND OTHER IDEAS ON TO OUR MEMBERS.

VERY SINCERELY YOURS,

DELFORD M. NEELY



## TRIP REPORT SECTION

### For \$50 You'd Think I Could Find The Cave by Chas. Coughlin

Participants: Alan and Andy Rabinowitz, son Eric and friends David, Charlie and Susan Stillman with Chuck Coughlin.

Last fall, in a weak moment, I had agreed to participate in a fund raising project for Pacific Search magazine. The annual event is a posh auction (which I couldn't afford to attend) where the attendees bid on a variety of trips, tours, and other "experiences".

And so it happened that a certain Mr. & Mrs. Alan Rabinowitz bought what was advertised as a snowshoing trip to a lava cave. Of course I couldn't have known when I wrote the trip description that this year there would be little or no snow at the elevation of Ole's Cave--our intended destination. So the snowshoing was out before we started.

We set out on Sunday, Feb. 15. As we approached Reese's Store, the rain was coming down hard, but turned into snow as we approached the cave area. By the time we had parked at what I figured was 1/2 mile due east of the upper entrance, there was 6" of snow on the road. Snow is more pleasant than rain and the seven of us weren't too uncomfortable as we followed the compass due west to where the recent lava flow and entrance sinks had to be. It was six years since I'd visited the cave, but I was sure I could still find it. After an hour of hiking we still hadn't reached the clear flow area. Nothing looked right and I had to admit I was lost. As an inducement to turn back I promised to tour another cave of comparable length nearer the road which I was "certain" I could find. And so we turned around and headed for the car. I was glad it wasn't raining.

We all piled into Charlie's VW bus. While the rest of the party enjoyed hot soup and coffee, Charlie and I struggled with the chains. When at last they were on and tightened we started up the road toward Ape Cave. Fortunately we were able to get as far as the picnic area near Lake Cave before becoming hopelessly bogged down in the snow. Now my notes on locating Lake said simply "follow path past outhouse for a hundred yards or so." Of course the trail was completely covered with snow, but after wandering around for a half hour or so I finally stumbled onto the entrance sink. I think the rest were beginning to despair of ever getting underground.

After suiting up, we checked out the small north passage and Red Passage before negotiating the drop into the main tube. Everyone was impressed with the passage size--even more so I'm sure after the long hours spent looking for the entrance. It was a memorable experience for all of us.

Official Littoral Caves Trip, March 6  
by Rod Crawford

The participants: Bill and Ruthie Capron, Curt Black, Annie Ruggles, Bob Brown, Marlene something, Rod Crawford, Ed Crawford and his family.

We finally left Seattle at 10 A.M. Saturday morning. The trip to our first stop, Beckley's Cave, was uneventful. We found the Beckley place without trouble, but the Beckleys weren't home. So many "No Trespassing" signs were around that we took the better part of valor and headed for Deception Pass.

The caves north of Deception Pass were discovered between 1958 and 1962 by a group of young boatmen and divers called the San Juan Reef Raiders, under the leadership of Jan Utterstrom of Utterstrom's Cave fame. No one had visited them since, so we didn't know just what to expect. Unfortunately, we found that they can be reached only by boat; they are at the base of sheer cliffs with no beach to walk on. I managed to scramble down to where I could see one small one on Rosario Head; it was half-full of water even at low tide--not too inviting.

So everyone "bozoed around" at Rosario Beach for a while. Curt was collected by a small tick (Ixodes sp.) which upon later examination proved to be covered with dog hair.

We finally parted, I and Ed and his family heading south, the rest north to Birch Bay State Park for camping and clamdigging.

The group with me stopped briefly at Deception Pass itself for a visit to Pass Island Cave, a tiny block-creep cave whereof the roofed portion is about one and a half people long, and very tight. Some of Ed's kids explored it also, to the incredulity of a woman who looked down and asked in a shocked tone of voice, "Do you have a child down there?"

On the 7th Bill Halliday and John Torkelson are said to have reached VICEG Cave. Perhaps a report will be in the next issue.

#### H I S T O R I C A L   N O T E S

Excerpts from the 1951 Edition of the NSS Grotto Manual  
(Printed for their historical interest)

"Effective newspaper publicity is the best way to attract a good audience. Speleology has proven to be a very glamorous subject to editors, so there should be no difficulty in securing assistance from local newspapers... Local radio stations are also a good source of publicity... Radio and newspaper publicity should be supplemented by posters in store windows, libraries, museums, etc."

"Generally, the officers will consist of: Chairman, Vice-Chairman, and ...publicity director."

"The Grotto Publicity Director should report activities and special accomplishments of the grotto to the local newspapers."

"In purchasing rope, care should be taken to secure pure manila rather than sisal, "sea grass", etc."

"Some type of head protection, such as helmet or cap, is necessary... Ladies should not wear high-heeled shoes... light such as a flashlight or carbide lamp and candles in addition."

#### 1915 Flake-fall Death

The 1915 issue of Mazama (annual bulletin of the Mazamas, Portland mountaineering club) mentions a death from flake-fall in the Paradise Ice Caves, occurring that summer. It was specifically pointed out that the fatality befell an inexperienced visitor.

There are rumors of other flake-fall deaths on Mt. Rainier, but this is the first authentic reference I have encountered to any such fatalities. Other references would be appreciated. One other death, which occurred about 20 years ago, happened when a visitor broke through the roof of a neve section of the system low on the section of the Paradise River above Sluiskin Falls.

-----W. R. Halliday

# Caves in New Zealand cast a glow

(Steve Raymond, assistant city editor, recently spent a month traveling in New Zealand, in part on his own and in part as a guest of the New Zealand government. This is the first of a series of articles.)

By STEVE RAYMOND  
Assistant City Editor

There are a few things I've always wanted to do: Search for the Lost Dutchman gold mine. Visit the ancient city of Machu Picchu in South America. Explore the famous glowworm caves of New Zealand.

Now, at last, I've done one of them. And my trip through the New Zealand glowworm caves was everything I always had imagined it would be.

After hatching, the adult insect survives only a couple of days, during which it breeds and sews the seeds of the next generation.

There are no seasons in the darkness of the cave, so the cycle continues throughout the year. Glowworms sometimes may be seen shining outside the cave on humid evenings in the native bush, but never in the numbers, brightness or splendor of the Waitomo Cave.

Surely the glowworm cave is one of the most spectacular sights on earth, and a "must" for anyone fortunate enough to visit this fresh and beautiful country called New Zealand.

OLD AS it is, the Waitomo Hotel has been remodeled to make it as modern as possible. An added touch is a bold-relief crest of Queen Elizabeth on each door knob, commemorating her visit to Waitomo years ago.

We arrived late in the afternoon and enjoyed excellent outlets of spring lamb for dinner. It was dark by the time we headed down the walkway leading from the hotel to the cave entrance.

In the language of the native Maori people, Waitomo means "water entering a hole," and the name stems from the abrupt disappearance of the Waitomo River, which flows under a limestone cliff near the entrance to the cave.

The Maoris feared the place and would not enter, but Fred Mace, a curious European, finally inveigled a local Maori to enter the cave with him in 1887. As far as is known, they were the first to behold the wondrous sight of the glowworm grotto. What a moment that must have been!

At the cave entrance we met our Maori guide, who went by the name of Wally (his Maori name I could never hope to remember or pronounce). He was a jovial character who had spent 12 years guiding visitors through the caves.

The traditional Maori word for a white person is pakeha, but Wally was a thoroughly modern Maori: He greeted us in jest as "white honkies."

Carrying an electric lantern, Wally led us down into the silence of the limestone cavern with the dark river flowing softly at its bottom. Light bothers the glowworms, so lighting fixtures are purposely kept few and faint in the cave.

The cavern, an estimated 12 million years old, is a showcase of stalactites and stalagmites, formed over eons by the slow drip and evaporation of water containing dissolved limestone. Here and there were spots of turquoise and aquamarine moss, which has begun to grow in the cavern as a result of the few lights that have been placed there.

In the dark crevices of the cavern roof we soon began to see the strange, cold spots of light cast by the glowworm larvae. In the slender shaft of light from Wally's lantern we saw the threads woven by the worms, hanging from the limestone roof to snare unwary prey.

IN THE GLOW of the lantern, the threads seemed like tiny silver chains of

beads, but the beads actually were globules of acid to paralyze insects carried into the cavern on the surface of the slowly moving stream.

Attracted by the light of the glowworms, the insects fly toward the cavern ceiling where they are caught and paralyzed in the hanging threads. The larvae then draw up the threads, much as a clever angler reels in his prey, and the insects are consumed.

The better-fed the glowworm larva, the brighter it glows. And it is the purest light known to man, a cold, blue-green shine that has been measured as 88 per cent light and only 12 per cent heat.

We descended farther into the cavern until we reached the river at its base.

And there, in the dancing shadows cast by the lantern, we boarded a flat-bottomed boat as if in preparation for a mysterious journey across the River Styx.

Then the lantern was extinguished, and we were cautioned to be quiet as Wally poled the boat deeper into the darkness of the vast grotto.

Suddenly the darkness overhead was exploded by the sight of thousands of weird, cold particles of light, reflected vividly in the still water of the underground stream like a maze of unfamiliar constellations passing overhead.

What a spectacle! I caught my breath and stared with open mouth at the splendor of it.

For what seemed much too short a time, we gazed at the silent beauty of the scene, and then Wally slowly poled the boat back to our starting point and we climbed out of the cave. But the sight of that startling myriad of lights glowing on the cavern roof always will remain well-etched in my memory.

There is, of course, a scientific explanation for it all. The glowworm is the larva of an insect (*Arachnocampa luminosa*) that in its adult stage closely resembles the crane fly or "daddy long legs" familiar to Northwest residents.

The female adult attracts the male fly by a sort of Morse code, using a muscular membrane to blink her luminescence on and off in the darkness of the cave. When fertilization has taken place, the female lays eggs in deposits of about 20 each, and the first larva to hatch immediately eats up all the other eggs in the batch. The typical female lays about 100 eggs in all, so only five of the total may survive.

The survivors grow into larvae, each an inch or more long, producing their peculiar light and spinning their deadly chains. The larval stage lasts about five months, followed by a two-week pupal stage in which the worm changes into the insect.

OUR ORIGINAL INTENTION WAS TO HAVE THIS PAGE DUPLICATE THE BACK PAGE OF THE PREVIOUS ISSUE. HOWEVER, DUE TO AN UNFORESEEN COMPLICATION (THE STENCIL RIPPED) THIS TEMPORARY SUBSTITUTE HAD TO BE MADE AT THE LAST MINUTE. WE APPEND BELOW A LIST OF A FEW OF THE UPCOMING OFFICIAL GROTTO TRIPS. FOR A MORE COMPLETE LIST SEE THE PREVIOUS ISSUE.----- ED.

OFFICIAL CASCADE GROTTO TRIPS, APRIL-JULY

April 17-19, Easter Weekend. Papoose Cave, Idaho. Contact Curt Black, 525-2260 in Seattle.

April 24-25. Official trip to McLoughlin Canyon Caves, Eastern Washington. Contact Chuck Coughlin, 772-1170 in Seattle.

May 29-31, Memorial Day Weekend. Deadhorse Cave area, Trout Lake, Washington. Contact Rod Crawford, 543-4486 evenings, in 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 in Seattle.

SUBSCRIBE TO NORTHWEST CAVING, QUARTERLY PUBLICATION OF THE NORTHWEST REGIONAL ASSOCIATION OF THE NSS. SEND \$2.50 (OR \$2.00 FOR BULK SUBSCRIPTION) TO BOB BROWN, EDITOR, PO BOX 2, ELBE, WASHINGTON 98330. MATERIAL IS NEEDED DESPERATELY!

THE CASCADE CAVER  
300 Hub (FK-10) Box 98  
University of Washington  
Seattle, Washington 98195