

The Cascade Caver BRARY

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

May 1973

Volume 12, no.5

Editor: Dr. William R. Halliday

COMING EVENTS

May 6-7. B.C. Speleo-research Boundary scouting trip. Call Hronek. (604)-936-6450.

May 6. Cave Ridge; including ice-axe practice. Brown, RO3-9094.

May 7. First aid session, Brown's, 7920 8th SW, Seattle. 7 PM. RO3-9094.

speleomountaineering session, Brown's 7 miles E. of May 12. Potluck and Pass Highway. 6 PM. RO3-9094 or 498-5279. Morton on White

May 13. 7 AM. Paradise Ranger Station for practice possibly above Camp Muir. Call Brown, same numbers.

May 19 &/or 20. Paradise Ice Caves. Call Anderson, 938-2074.

May 21. Regular grotto meeting, 8 PM, Hallidays, 1117 36th E. @.E. Madison.

May 25. Regular meeting, Washington Division of Internatio nal Glaciological 35th SW, "pt.4. 938-2074. Survey. 8 PM, 9043

Memorial Day weekend. Papoose Cave miniconvention. Call Brown, RO 3-9094.

Memorial Day weekend plus possible extension. Blue Glacier and Mt. Olympus. Call Anderson, (938-2074).

June 2-3. Paradise Ice Caves. Call Anderson, 938-2074.

June 9-10. ditto.

June 16-17. Mt. St. Helens climb. Call Brown, RO 3-9094.

June 16-17. Possible Mt. Adams-Bird Creek Meadows trip. Call Anderson.

June 16-24. NSS Convention and Kentucky Speleofest. Call Halliday, EA4-7474.

June 18. Regular grotto meeting will be postponed one week to:

June 25. Regular grotto meeting, same time, same station.

June 23-24. Dock Butte-Washington Monument. Call Anderson.

June 30-July 1. Diamond Head. Call Anderson.

June 30-July 1. Mt. Hood climb. Call Brown.

August 11-19. Summit Steam Caves. July 28-29. Mt. Baker steam Vol. 12 #5

The Encounter of the Long Count Keeper by Barbara MacLeod

Old the dust that sifts upon the altar older still; A thousand years since man stood here or walked beneath this hill; Above, the tangled forest wild where once the temples stood, But here the tendrils never reach, nor falls the rotting wood.

Old the bowls where incense burned, and older yet the stones; They whisper, warn to not disturb the endless sleep of bones; Deep and black, the river calls; the Mayas answered then; The water spirits beckon still to those who venture in.

I chose this cave where spirits dwell to find the finest thread That takes me to the edge of things where wisdom lies ahead; For this place I could not prepare; by unperceived design I stood before the altar there and waited for a sign.

The writing on the mossy stone the ancients did incise; It danced and faded, and it touched somewhere behind my eyes; Above the glowing coals I raised my trembling fingers high, And there let fall the white copal which calls the spirits nigh.

The pungent smoke curled upward, casting shadows on the wall; My shadow, solitary, stood--but I was not alone at all! I could not breathe; the air was thick with breath that reeked of slime; "I've come," said he, "and now with me you'll cross the edge of Time."

My hardhat and my carbide lamp he made me leave behind; With pitch-pine torch I stumbled down to where the stream does wind; Chill and black, the water stood; I shuddered but stepped in; From rock to rock I waded as he drew me from within...

The powdered marble stalagmites before me seemed to grow; Behind me silently they moved—but this I did not know; The vampires bared their angry teeth and fluttered past my head; "Behold, the bat god welcomes you," my unseen guide then said.

"Take head, do not be frightened here; you know these caverns well; Your eyes have marked the way back out; you'll have a tale to tell;" I'd told myself these words before; I grappled with them now, But terror seized the moment and I turned—I know not how.

The cave behind looked strange to me, as strange as that ahead. "They look the same exactly," my guide, then laughing, said; "The way in is the way back out, outside your mind or in; It's just another way to go back where we all begin."

I'd had enough; I started back—it seemed to matter then,
But every lead I followed only took me deeper in;
"And so, the joke; (he laughed aloud) you're here, you're where you are;
For once you've let go of the past, you cannot go too far.

"But come, let's hurry on," he called; "you said you came to learn;" The torch I carried flickered low; it hadn't long to burn;
On and on-- my mind adrift on seas of fallen stones
That broke on shores of oozing mud which hungered for my bones.

"But what about the sun o'erhead, the great and mossy trees,
The moon, the wind, the stars, the rain--why can't Illearn from these?"
"You shall meet them all," he said, "you'll come to know them well,
But hurry, for your torch burns low, and with it ends the spell."

The shadows rose, and with me travelled now the taunting phantom, fear; The torch became too short to hold; he said, "I leave you here.

Perhaps you'll find a vaulted room where daylight trickles in;
The damp green moss and songs of birds could guide your footsteps then."

I watched the scattered embers fade -- the dying of the light; And now my silent universe was filled with starless night; But through my resignation came the challenge of his words; Perhaps I'd find the sunlit room, perhaps I'd hear the birds...

Now plunged in total darkness, on I groped along the ground, But suddenly I saw the crack where sunlight filtered down! I cried for joy and scrmbled on; the rocks below me rolled, The air was thick with mist, the sun a flash of cherished gold.

Before me now a narrow path around the breakdown wound, Where tracks of many unshod feet impressed in dust I found; And rows of jars in shadow waited catching water clear Collected for the month Muan, the fifteenth of the year.

I climbed to meet the tangled vines with birdsong overhead; Ecstatic as I found the trail which through the forest led; But when I'd reached the ridge beyond, my unbelieving eyes Across the emerald valley saw the gleaming temples rise...

So now at last, the play unfolds; I've crossed the edge of Time; It's counted out by twenties now, in cycles sung to rhyme; So many things to ask of them: how did the world begin? And what do all these pictures say? How will the katun end?

For this I'd learned their words for wind, and stars and rain as well; I wonder will these Mayas old their secrets to me tall?

I've journeyed from beneath the earth, a stranger strayed afar;

Perhaps I'll learn to count the days in pictures, as they are.

The dusty lamp and hardhat speak a muted mystery; How came I then to leave them there, and where then can I be? Old the dust that sifts upon the altar older still, But how long since I stood there, or walked beneath this hill?

CASCADE GROTTO SPELEOARCHAEOLOGICAL FIELD TRIP

The long-heralded February British Honduras field trip surpassed all expectations.

As most readers of this rag know, the Peace Corps assigned Barb MacLeod (Cascade Grotto) to British Hondruras or Belize (the new name for the emerging nation). She is living in Belmopan while working with the Department of Archaeology. When Carol Jo Rushin of Missoula (Shining Mountains Grotto) recently joined the Peace Corpe, she was promptly sent to work with Barb. Belizean apeleoarchaeology made rapid progress until December, when their jeep was caught in a flash flood while they were underground. Subsequently they had to rely on hitchhiking - which slowed progress to a virtual standstill. A major gain in this period, however, was recruitment of Seattle's Peter Stark (unaffiliated).

En route to a survey of the caves of South America, Tom Miller (EWSC) was next to arrive, a couple of weeks ahead of schedule. Despite the transportation problem, the enlarging team tackled Buck's Bypass and proved that it was a particularly nasty segment of St. Herman's Cave. The latter is the most noted in Belize, and was well underway to development as the central feature of a new national park until the generator turned up stolen. (Belize is such an impoverished country that a single loss like this is well nigh insuperable.)

Then came a three-day trip to fine Mountain Cow Cave, in which Tom properly celebrated his 21st birthday.

As the official date neared, Bill Zarwell telephoned Seattle, hoping to be able to join the trip. Although enthusiastically encouraged, he finally had to cancel.

Len and I arrived in Belize City on schedule, by Cessna 180 (Maya Airways), on Feb. 16. By the time we had rented a jeep (necessary for even the main jungle highways, we found ourselves setting out for base camp, 100 miles away in the Pine Ridges of the Maya Mountains on a side road, after dark with no road map. Four bouncy hours later, we were surprised to see our target right where we were told it would be.

Phones being essentially non-existent, the only way to find the others was to drive back down to Belmopan (50 miles) and start inquiring. (If anyone else gets into this position when the Department of Archaeology offices are closed, her current street address is 21 Stann Creek Street. It was too late for any caving that day, but we planned to hit the famous Rio Frio Cave group next morning. (Perhaps calling Rio Frio "famous" is hyperbole, but at least it's shown on a current postcard!)

But enroute to Rio Frio, we made a mistake: a "quick look" at a couple of unnamed caves Barb had previously scouted briefly. The first wasn't much: a large single room with some pretty flowstone, hardly worth the two hours' thrashing around in the jungle. The other changed our plans considerably. Level, beautifully decorated and with some pleasant complexities, it turned up after hardly another 30 minutes' jungle- whacking. Quite a bit of broken Mayan pottery scattered around, and a test pile Barb had left some months earlier was intact.

A =3

While the rest of us were admiring and photographing, Tom and CJ had vanished, checking out a nasty, impossibly muddly lead, obsessed with the odd idea that some ancient charcoal marks on the wall nearby probably meant something. As the rest of us surfaced, a breathless, starry-eyed T. Miller panted up, insisting that we come back, down his rathole. And we did, for Tom had hit the Jackpot: a ceremonial Mayan pit burial, undisturbed for perhaps a thousand years. Amid a welter of bones, a classical pyrite-slate disc was unmistakeable. To the side were beautifully fashioned ornamental obsidian blades, not much thicker than a leaf. Just beyond were once-strung jaguar teeth amid countless smaller beads. Nearby was a superb bone needle, point and eye looking as if they had been fashioned the day before.

What else lies among the bones must await patient archeological unlayering. We disturbed nothing. I tried a couple of photos, but the burial was in a small, low alcove sloping steaply away from the base of the pit and I wasn't too optimistic about the outcome of a single #5. Fortunately, I was pleasantly surprised when the slides came back.

Inevitably the rest of the day was anticlimactic. Rio Frio Cave "C" is indeed an enormous, impressive stream passage several hundred feet long with huge gours terracing one side of its immense corridor. But there were names and inscriptions, and any remaining traces of Mayans must be in virtually inaccessible pockets high on the walls. Barb says that when it was first "found", many pots were present, but no more. Its main interest is its location on a limestone-granitic contact, its huge lower entramce and its curving course under a typical "haystack hill" of tropical karst. By the time we arrived, it was too late for good entrance photos. As dusk settled further, we briefly visited Rio Frio Cave "A" - a maze-type cave with vampire excreta atop Mayan potsherds and "B" - a smaller cave nearby, most noted for fine orange flowstone in the entrance room, and huge, photogenic spiders.

Next day being spent in recuperative caving, we went sightseeing in St. Herman's Cave, mostly a large stream passage with two large, splendid rooms (as far as the public is concerned - the system is still going in obscure passages). Mayan shards are still profuse in some areas, but are rapidly being removed - fortunately, mostly to the museum in Belmopan. We brought a load back for the Department of Archaeology, but first stopped off for a swim and demudding at the Blue Hole just off the Hummingbird Highway. Here the St. Herman's Cave stream resurges from beneath a natural diving platform, funs perhaps 100 yards along the cliff bottom of a sink, then siphons some 40 or 50 feet back in a beautifully arched blue grotto with magnificent resonance and fluttering bats. The water temperature everywhere was about 75°F, and the water level the lowest ever recorded by the Belize Speleological Survey. Just as we had requested.

After this pleasantly lazy day, the real target of the field trip was tackled a day later: Petroglyph Cave. This is the only known cave in Belize with Mayan petroglyphs and the only other such cave known to me is the famous Loltun Cave in central Yucatan.

When previously visited by the Peace Corps team, four hours' machete-hacking up and down jungle hillsides had been necessary. This time, however, just an hour after we started up the steep haystack hillside, we burst out at the edge of an incredible vertical sink several hundred feet across and perhaps 100 feet deep. At each end, gaping blacknesses angled downward beneath the white limestone cliffs. Enormous stalactites were silhouetted far back under the overhangs. Barb spoke of the possibility of a 185-foot rappel, but we rigged a much shorter drop. All perspective was lost as we would through jungle threatening to overwhelm live stalagmites dozens of yards into the enormous cave.

Camp was pitched in some huge gours about halfway down to the stream level, perhaps 400 feet into the cave. This is the site of the petroglyphs which give the cave its modern name. Also carved in the gours are toeholds at intervals designed to fit Mayans, not taller Caucasians.

Tucked in a beautiful alcove, the campsite is in deep twilight, with only primitive plants rendering the area of the petroglyphs faintly green. Returning toward the entrance, Barb set about an age-old copal ceremony to honor the spirits of the cave (clearly, such caves have spirits instead of personalities!), while a hummingbird with a huge curved bill watched interestedly. Then we were off, clambering deeper and deeper along a well-worn Mayan trail, yet more and more into the light and finally into full sunlight before we reached the stream nearly a hundred feet lower than the campsite.

Along the trail we noted ancient masonry, several curious piles of hundreds of shells of tiny snails (boiled for soup centuries ago?), a few shards, a whip scorpion or two and a flat spot under a huge rock that may well have been a Mayan habitation - the archeologists will soon know.

The stream passage extends far in both directions. We headed downstream in delightful warm water. Periodically, vast chambers opened overhead. We concentrated on one where Barb had begun preliminary work - a room that in size and decor would be a credit to Carlsbad Cavern, even without its Mayan significance. In a few hours, we perhaps doubled the known number of surface burials (none with artifacts, however) and ancient pots tucked away in dramatic speleothemic recesses. Perhaps most dramatic of all was an adolescent's skeleton with a sizeable stalagmite atop the disintegrating skull.

Reluctantly we proceded downstream to another assighment. An earlier archeologist had found his way into a muddy section of what he called Satibe Cave #3, to a point where it seemed he was just above the stream passage of Petroglyph. (Satibe means "way out", and these three caves are really way out in the jungle.) Barb thought she had been to the same place from below. Even at low water, this part of the stream passage involved a short swim, so we lightened our packs, laid side camera gear, pushed on and clambered up into magnificent mud - and on out to the surface, just as predicted. (Tom was still running wild, finding another beautiful chamber along the way.)

A -5

Feeling very pleased with ourselves, we headed back to camp and a hot dinner. Two weeks later, however, a letter brought bad news. We had connected Satibe C ave #1, not #3; the latter is still way out somewhere.

Fascinating noises enlivened the great black void around our sleeping bags that night. Occasional sharp cracks were pretty definitely the contraction of sun-warmed rock deep in the cave. Down the slopes toward the st ream, rocks rolled frequently, and in curious sequences suggesting that something or somebody was going up and down the Mayan trail - almost certainly mere natural compaction. But at the time it seemed a bit less certain. Other noises just couldn't be identified, or even described. In retrospect they were probably hurtling bats, murmuring swallows and other birds, or the few small animals agile enough to climb where humans cannot. But it was a fascinating night.

A bit groggy, we awoke at dim day to a whirrr of steady rain - presumably too much copal, beloved by the Mayan water god. After breakfast, we separated, Barb, Pete and myself investigating the cave at the other end of the jungle-floored sink while Tom and C.J. hoped to extend Tom's phenomenal string of successes along the water passage. Alas! Petroglyph Annex teemed with animal life but didn't go, being almost entirely breakdown-walled. Tom and C.J. similarly returned without further triumphs. So, hampered more than a little by the unseasonal jungle downpour, we climbed out and fought newly-slick jungle slopes interminably, learning all about such delightful botanical features as guano palms (a species with thin trunks densely covered with thickets of natural darning needles. They grow exactly where you need to grab a tree to slow down on steep, rain-slicked Belizean jungle hillsides. End of botany lesson.) Actually, with the temperature nearly 80°F, the rain otherwise was quite comfortable, but we were glad to hear the jeep honk in response to our over-noisy descent.

As night fell, the rains continued. Len and I dropped the others at Belmopan where they based around Barb's and C.J.'s tiny houses, then bounced splashily off toward the Pine Ridge 1 1/2 hours away. 3 miles short of camp, the road deteriorated into a gumbo just as we started up a long, steep hill. As we plowed uncertainly uphill, our headlights showed a truck mired ahead. So back to Belmopan, 1 1/2 hours away, and a hospitable bivouac.

By noon next day, the road was passable, but we had lost our planned day of caving on the Pine Ridge with Ford Young, father of Belizean speleology. Flying up to meet us, Ford got there on time but we didn't, and no means of communication existed. All that remained was time for a quick flight in his Cessna over the areas we had explored on foot - truly an impressive spectacle of ever-changing microclimates, and of innumerable haystack hills and a few vanishing rivers below a broad erosion surface. Then it was time to pack up and drive down to Belize City to prepare for an early start next morning. We turned the jeep over to Tom at the border, and he dove back south for a few more days' Belizean caving before heading on to Guatemala, Costa Rica and points south. We took a taxi on to Chetumal and headed on home by air: truly one of the most notable cave trips ever by northwesterners.

BOULDER CAVE, YAKIMA COUNTY, WASHINGTON -- Newell Campbell

Boulder Cave was developed in rocks of the Yakima Basalt Formation, a series of lava flows and interflow sediments that were deposited in this area about 10 to 15 million years ago (late Eocene). The cave is much younger than the rocks in which it was formed and is probably less than 25,000 years old. Boulder Cave is not a "true" cave in terms of how caves are usually formed. Most caves are dissolved in limestone from downward flowing rainwater or are formed as lava tubes. Boulder cave was created by Boulder Creek as it down cut into the Yakima Basalt (Figure 1). As the stream eroded through the first flow it encountered a soft interflow layer of soil, gravel, and loose rock (Figure 2). The stream undercut the overlying basalt (Figure 3) causing it to collapse into the canyon, partially damming the canyon and creating a cave (Figure 4). The same process can be seen taking place presently about 200 yards downstream from Boulder Cave. Undercutting by the stream may eventually collapse the overlying rock and create a second cave. The white stain coating parts of the cave walls is silica and calcite dissolved from the overlying rock by ground water seeping down into the cave.

Idealized cross-sections:

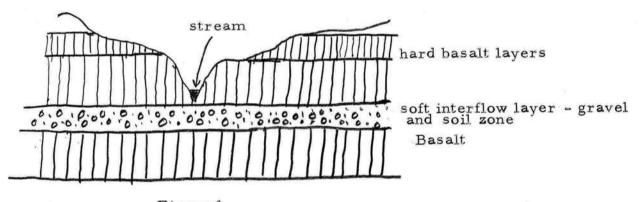
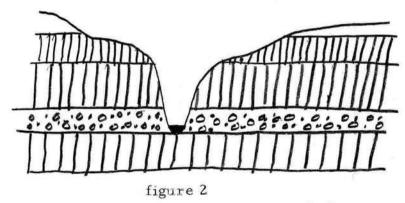


Figure 1



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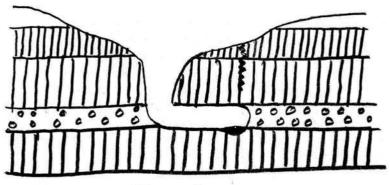


Figure 3

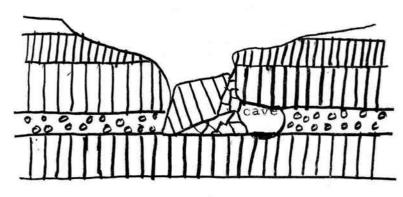


Figure 4

(further note from Newell Campbell)

I've heard several stories about that big, big cave on Naches Pass but I just can't pin down locations or find anyone who's seen it. Will keep trying.

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VULCANOSPELEOLOGICAL ABSTRACT ABSTRACT

The October 1972 issue of Speleologia Emiliana (Rivista e notizario di Speleologia editi dall'Unione Speleologica Bolognese), Series II, 4th Year, no. 5 contains on page 4 an abstract of Publ. no. 5 of the Sociedade portuguesa de espeleologia. The Italians consider it a curious account of "caves" (quotation marks theirs) of volcanic nature on the island Do Pico in the Azores. It seems that the Portuguese speleologists described several lava tubes (and pits, if my Italian holds up) containing lava stalactites and stalagmites. Either my Italian is worse than I think, or the excellent Bolognese calcareospeleologists are a bit incredulous.

-- W.R.H.

EWSC CAVING IN EARLY 1972 -- Tom Miller

Harold Parks and I, accompanied by two Spokane mountain climbers - Tom Dodson, Dr. Jim Stotes - went to French Creek Cave over Spring vacation. We arrived at the cave March 18, Friday, hiked over the crust Saturday morning and descended to the lower levels. The mountain climbers soon returned to Spokane and Harold and I explored to the start of the infamous sump and looked at the "Red Slab", a very interesting and large slickenslides, all in the cave's northwest section. The next day we looked in the west section to the Big Room and the Turnip Room, losing our way several times.

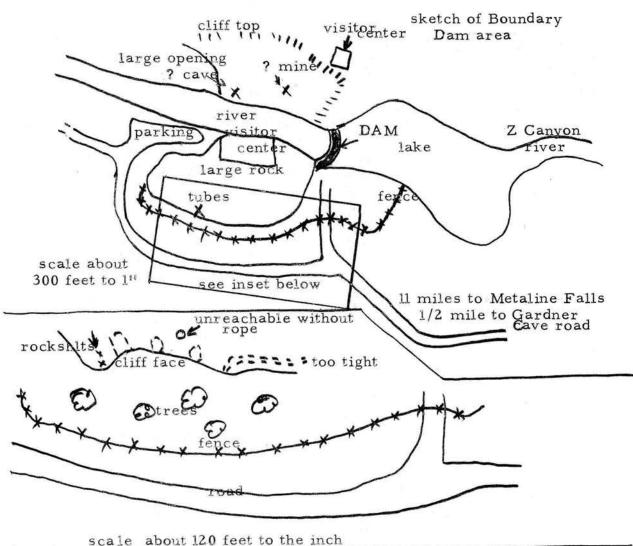
On our last day, we did some exploring in the northwest section again, getting into several hundred feet of virgin passage and saw two cave pearls in a known section nearby. There was such a multitude of leads that most of them went unchecked.

The cave is furnished in early modern breakdown, complete with miserable crawls meant to please the most demanding masochist. Its one saving grace is that any hole, large or small, can go to a large passage. Every lead must be checked. The possibility of further large discoveries seems quite inevitable. Any attempt to place bolts is faced with certain heartbreak - the rock is much too poor. I found out, much to my sorrow.

In spite of the fact that over two miles of passage are known, only 17 people, including ourselves, had ever descended the two pits to the register in the lower level.

After hiking out Tuesday, Harold drove home while I hitchhiked to Salt Lake City and back. I visited Crystal and Neff Canyon caves. Neff was rather wet and sloppy, with poor footholds, but generally much easier than Papoose (Tom should have seen it before all the loose rock was taken care of - ed.) The entire trip took only 6 1/2 hours and I was surprised at the large number of unexplored leads towards the bottom. The cave is held in rather low esteem down there, a condition not helped by their recent tremendous progress in Little Brush Creek Cave.

Early in April, Denny and I took a look up north at the possibility of snow-shoeing into Cody Caves, but decided to bag it. On the way back, we stopped at Gardner Cave and found the water quite high, as expected. The same lake at the bottom, only deeper. Nearby, at Boundary Dam, we checked out a number of solution tubes in a rock face. Most ended shortly. One had an entrance 8 by 10 feet, but the floor was slumping into the far extension, plugging it up. Denny wormed into one small slot which soon became a 20 foot tube; the end was not reached as it pinched in too much. We learned that government photo surveys of Z-Canyon showed numerous caves, most of which are now covered by water. Pend Oreille Mining Co, is rumored to have one of two existing copies. Air photos of Slate Creek (a limestone area) are purported to show closed basins, but my informant said he had never noticed any caves but they could be quite easy to miss in the dense underbrush. Do you have any information on caves near Sullivan Lake in the Metaline area?



GLACIOSPELEOLOGICAL ABSTRACT

Anon., n.d. (ca. 1870) Wonderful things. Vol. II. London: Houlston & Stoneman, pp. 78-79. 180-181.

"One of the choice exploits of travellers who do not shrink from the fatigue is to visit the source of the Arveiron, which issues from the Glacier des Bois, through a large arch of snow. An immense cavern, cut by the hand of nature in the middle of an enormous rock of ice... The entrance to the cavern is an arch of snow more than 100 feet in height...Some persons have entered the cavern, but it is a rash attempt, as large fragments of ic e are constantly falling from the roof ... " The account proceeds to recount a story of someone who fired a pistol and brought down a flake which dammed the stream temporarily, causing a sudden flood when the dam let go, killing the responsible individual and fracturing both legs of his father. "In the winter the stream is either very small or altogether ceases flowing... The heat of the earth is always melting the snow or ice, and the water flowing away, often in such quantities as to inundate the valleys, and with sufficient force to sweep away whole villages, leaves behind it icy caverns sometimes a hundred feet high and 80 feet wide. The interior of these caverns is exceedingly picturesque... When a great change in the temperature of the air takes place, these caverns sometimes fall in. and the imprisoned air. expands and bursts from its bondage with a violence which hakes the ground like an earthquake."

From The Signpost: (Feb. 14, 1973)

PROPRIETORSHIP- It has been said that at least one club which adopted a trail to maintain it became very posessive of it. They acted as if it were THEIR trail. For this reason some authorities here in Washington do not favor encouraging clubs to undertake serious trail maintenance. (And none does.) Your editor has hiked with the Horse Shoe Trail Club, and of course they seemed to know every slope and bend of the trail. I did not hear them voice disapproval of others using it, however. Does any SP (Signposter) have information on this matter? Those of you who have hiked or worked on governmentally-maintained trails - does the club's feeling of proprietorship interfere with the trail's use by others?

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Editor's note: subscription to Signpost is well worthwhile. 16 issues per year for \$5 \text{w}. \quad 16812 \quad 36 th Ave. \text{W}., Lynnwood, Wash. 98036. Where else can you find that cavers aren't the only nuts?

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RECENT CORRESPONDANCE

From the Coughlins: "The babies are doing great... Chuck is enjoying his harem and hopes that all of them will enjoy a little bit of caving with him... He missed the last (Southern California Grotto) meeting because we were in the hospital, but he wrote to Bill Zarwell asking to be a judge in the Cave Ballad Competition for this year's convention..."

—Chuck, Mary, Katie, Molly & Bridgit Coughlin!

1826 8th St., Manhatt an Beach, Calif. 90266

From Clarence Hronek: "Regarding Cave of Bears (Caver, Vol. 10, no. 11)
I am now sure that it is not in B.C. but Alaska. I looked up the name Porcupine River in the Gazetteer of B.C. 1966. Porcupine River flows NW into Stikine River south of Aruk River, Cassiar Dist., B.C., about 570
1310 SW. We have contacted all names you supplied, without success."

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Cave reported in Olym pic Mountains

(This report is a little old now, but should be checked - it was contributed by Joanne Williams at the Department of Botany, University of Washington, 543-1986.) There is said to be a "sort of a cave" at Dodger Point on the Elwha River where there is an old lookout, some 5000 feet above the river trail. In the basin below the lookout are two small lakes. About 100 yards NW of the larger lake, the topography starts sharply downward into another valley. At this point a large hole is visible in shaley rock. The person reporting this said that it looked like a cave; one of the party went down and in some 15 feet on belay and it still went. They tossed rocks in and thought theywent 20 feet around a corner, to a flat. The hole is perpendicular to hillside slump and goes into the hillside, possibly at right angles to a fault. The initial slope is about 40°.

GLACIOSPELEOLOGICAL ABSTRACT

Seppa'lä, Matti. 1972. Glacier cave observations on Llewellyn Glacier, British Columbia. Acta Geographica 27, Helsinki, pp. 1-15.

The aim of this paper is to report some morphological, glaciological and sedimentological observations made in a glacier cave on Llewellyn Glacier British Columbia. The part of the cave investigated was about 700 meters long. The temperature in the cave was measured and the speleogenesis of the cave is discussed. Finally some suggestions are put forward as to further investigation that might be undertaken. (M.S.)

FOR THE GLACIOSPELEOLOGICAL RECORDS - ALASKA

Photos of sizeable caves in ash-covered snowdrifts in Katmai National Monument appear in:

Griggs, Robert F. 1918. The Valley of the Ten Thousand Smokes. Nat. Geog. Mag. Vol. 33 no. 2, Feb., p. 124. (also some fumarole caves in the article)

ibid, 1921. Our greatest national monument. ibid, Vol. 40, no. 3, Sept., p. 245. Same photo in Encyclopedia Brittanica, 1958, Vol. 22, p. 956 opp. Also likely to be in NSG book on the monument.

* * * *

ALMOSTA GLACIOSPELEOLOGICAL ABSTRACT

Kosa, Attila. 1973. A tuz es a fagy barlangjai. Elet es Tudomany. XXVIII Efv. 4 Sz., 176-181.

At which point yr editor must confess that his Hungarian is virtually limited to the word barlang. Three nice photos of the Paradise Ice Cave system and one of the Red Passage in Lake Cave plus a map of Ape Cave. Here and there, words like Paradise-gleccser, St evens-gleccer, pahoehoe lava, Subway Cave ("Metro-barlang"!) show that the author speaks with authority. WRH

BOOK REVIEW

Brown, Vinson, Allan, David and Stark, James. 1972 edition. Rocks and Minerals of California. Naturegraph Publishers, 200 pages.

This book is a dramatic example of missed conservation education opportunities. It is a beautifully illustrated book, telling rockhounds not only where to look, but what to look for. Including a photograph and an index heading for stalactites. Fortunately the authors don't seem to know much about caves. The worst listing is for opal stalactites in Inskip Hill Cave. If those brave California cavers who talk so much about conservation yet denigrate other cavers who quietly live and do conservation, would take a rational stance with publishers of such books, it would do a hundredfold good for California caves. And those of other states.

CAMP 17 CAVE, ALASKA (from a letter from Clark Petrie, Whitman College)

I was one of three people who worked on mapping an englacial cave last summer. The cave is approximately 450 meters long and connects the bottom of a glacial lake (Lake Linda) to a waterfall (Lynn Falls). This reservoir system is located near Camp 17 along the headwall moraine of the Lemon Glacier in Alaska's Juneau Icefield. The cave acts as a drainage channel for the lake. In the spring, the lake and cave fill with water as the excess is carried away over the falls. It is not known why, but sometimes in the summer (last summer it was around August 13) the lake will suddenly drain through the cave. Moulins in the floor of the cave carry this water down into the Lemmon Glacier.

The size of the cave varies from 1 meter high by 1 m wide to 8 meters high by 15m wide. It averages about 3 m by 8 m. The walls are made up mostly of clear glacier ice with crystals as large as 25 cm across. There are also several large ice columns.

This was the only cave I saw while I was there, but I know there is one in the Llewellyn Glacier near Camp 26.

NEW CAVE ON MOUNT ISSAQUAH?

John Warth has reported a cave on Mt. Issaquah which doesn't sound like Don's Cave or the others in the group nearby. Warth's Cave is just below a rocky ridge with several unchecked holes on the way to the summit of Mt. Issaquah. He sent a location map for the file, and would be willing to lead a party there given reasonable notice.

Key references on Nakimu Caves

Clarence Hronek, president of B.C. Speleo Research, sends the following references on Nakimu Caves:

The Selkirk Range, B.C. Volumes I and II, by A.O. Wheeler, 1905. (Volume II contains mostly maps and photographs of surrounding area.)

Guide to the Selkirk Mountains, by A.O. Wheeler, 1911. (Small Handbook) Chapter III, pp. 106-117, with small fold-out map of The Caves of Cheops (Nakimu Caves).

Clarence notes that A.O. Wheeler of the Geological Survey of Canada made the first survey and map of the caves in 1905. He mapped 5550 feet of rooms and passages, and named nearly every feature.

Wayne Smith, M.D., of Chehalis, says he knows of the existence of two cave systems near Camp 26 in the Lewellyn Glacier, reached by hiking from Atlin, B.C.

A -13

GLACIOSPELEOLOGICAL ABSTRACT

Mixon, Wm. 1972. Mt. Rainier snow cave. Windy City Speleonews, Vol. 12, no. 5., Oct., p. 62. With 4 photos.

A particularly sprightly limey's view of the post-convention field trip of Aug. 20, 1972. The trip, the cave and the glaciospeleological history of the Paracise Ice Caves system are presented briefly but neatly, the only possible critisism being the writer's attribution of enlargement of the caves to melting, not ablation.

--W.R.H.

* * * *

PLAGIARIZED BOOK REVIEW

(from the same issue of the Windy City Speleonews, p. 66)

The Paradise Ice Caves. Mount Rainier National Park Washington. William Halliday and Charles Anderson, Jr. 1972. 27 pp. \$1.10 postpaid from William Halliday, 1117 36th Avenue East, Seattle, Washington, 98112. (60¢ each in lots of ten.)

A nice little publication, though the printing is pretty amateurish. Bill Halliday reports, thought, that the next edition will be extensively revised and corrected, so the first edition may turn into a collector's item. It contains over two dozen photographs. -- Bill Mixon. (Thanks! - ed.)

* * * *

Glaciospeleological Abstract

Earlandson, Ralph. 1972. Riverhend Cave, Vancouver Island, British Columbia. same issue of Windy City Speleonews, pp. 65-66.

After a pleasant postconvention trip to Vancouver Island, the Chicago contingent visited the Big Four Ice Caves, entering two of them (not specified). They considered the "vertical entrance with waterfalls at the ice-rock interface at the back of each cave - a very impressive sight."

(Quite a few grotto publications around the U.S. similarly recorded trips to the Paradise Ice Caves and elsewhere in the Pacific Northwest after the convention in White Salmon last August. The above are listed here as samples.)

* * *

Recent correspondance

From Bill Zarwell: "Am still contemplating the Washington Boards (exams that must be passed before licensure as a dentist in this state - editor). Wisconsin is such a bland state compared to Washington."

(Hurry Back, Bill!)

Notes on glacier caves in the Alps

"The Rhone (River) itself issues as a gray torrent of snow-water from an ice-cavern at the foot of the great Rhone-glacier, above which rises the Galenstock to the height of nearly twelve thousand feet. In the language of the ancients, this river was said to issue "from the gates of eternal night, at the foot of the pillar of the sun."

-- Winchell, Alexander. 1882. Sparks from a geologist's hammer. Chicago, S.C. Griggs & Co., 2nd Ed., p. 23.

"The white water of the rushing stream, which deafens us with its din, pours out from beneath a dark, majestic vault of ice in the terminal wall of the (Mer de Glace) glacier. This is the source of the Arveiron, - an insignificant though noisy river, blending, in the course of a mile, with the equally turbulent Arve. But how magnificent is its cradle!"

-- ibid, p. 51.

"I have only once seen anything (outside the magic-world of a pantomine) to equal these effects of blue and silver (in the Blue Grotto of Capri); and that was when I made my way into an ice-cave in the Great Aletsch glacier - not an artificial gallery such as they cut at Grindelwald, but a natural cavern, arched, hollowed into fanciful recesses, and hung with stalactites of pendent ice. The difference between the glacier-cavern and the sea-grotto was that in the former all the light was transmitted through transparent sides, so that the whole was one uniform azure, except in rare places where little chinks opened upwards to the air, and the light of day came glancing with a roseate flush. In the latter the light sent from beneath through the water played upon a roof of rock; reflections intermingled with translucence; and a greater variety of light and shadow compensated the lack of that strange sense of being shut within a solid gem."

--Anon. Amalfi, Paestum, Capri. Cornhill Mag., Vol. 36, 1877, p. 166.

"I heard the roar of what appeared to be a descending avalanche, but the duration of the sound surprised me. I looked through my opera glass in the direction from which the sound proceded, and saw issuing from the end of one of the secondary glaciers on the side of Mont Tacul a torrent of what appeared to me to be stones and mud. I could see the rocks and debris jumping down the declivities, and forming singular cascades. The noise continued for a quarter of an hour, when the descending torrent diminished until the ordinary stream, due to the melting of the glacier, alone remained. A sub-glacial lake had evidently burst its bounds, and carried the debris along with it in its rush downward."

-- Tyndall, John. 1897. Hours of exercise in the Alps. NY, Appleton, p. 327.

31 July 1973

William R. Halliday Charles Larson NSS Mt. St. Helens Cave Area GTF 1117 36th Avenue East, Seattle WA 98112

Dear Bill,

This letter is your official designation as a Conservation Task Force of the NSS. This designation is, of course, subject to approval by the Board at its August Meeting, but I anticipate no problems there. I must apologize for the delay in getting this to you-but I just discovered your application in a pile of unopened mail down in Rose Creek when I was there this weekend. I still may be missing a couple of things-but I think I'm finally getting everything straightened out and caught up - at least it's now all under one roof.

As you know, I would expect to have quarterly progress reports to me on your activities, progress, etc. They need not be long- in fact a short letter will do if not much happened.

Which address would you like to have listed as your primary one? I have had a problem with the XXX Task Force- it has co-chairmen who don't write one another, and thus I find I continually have to write to both of them. I am sending this to Bill because I assume he will be doing most of the work.

Please note that the TF does not have to be a democratic operation - in fact, I would actually prefer that it not be in regard to the leadership, as it has been my basis that leaders are born, not made. The TF has been chartered mainly on the basis of its leadership. Please feel free to recruit additional members as you need, to, and not necessarily inform me specifically. If the leadership of the TF changes, I would ask that a reapplication for designation be re-submitted, so that I may determine the qualifications of the new leadership to carry on.

I would also appreciate your permission to edit slightly your Task Force application and include it as a "model application" in the Conservation Handbook which I am currently writing.

Good luck on your Task Force. See you at Convention.

Sincerely, Robert R. Stitt, Conservation Chn.

75 75 26 26 X

Co-Chairman's letter - 4-2-73

By invitation of Bob Werner, who is Chairman of the Mt. St. Helens Protective Association as well as a member of this task force, I was able to attend the March 30, 1973 meeting of that organization. It is a non-profit

corporation which expects to become a membership organization in the comparatively near future. As you will see from the enclosed prospectus (sent to the task force members - ed.), it has recommended a national monument which would include the caves area, but is in the process of rethinking its recommendation and is also working on several immediate land management problems posed by the present leadership of the Portland Regional Office of the U.S. Forest Service. The prospectus, incidentally, contains some erroneous statements which will be corrected in future publications, Bob notes.

The U.S. Forest Service has proposed a management plan for the caves area which is considerably better than that for some of the other portions of the Mt.St. Helens area. However, to date it shows no sign of halting the dangerous permittance of snowmobiling on the Ape Cave road, nor the logging roads around Gremlin Cave. Nor did it even include the Cinnamon Peak-Lava Caves area in its de facto wilderness study although it qualifies for such inclusion. The boundaries drawn by the USFS are adequate in the caves area but not optimum, and the USFS has no way of including such caves as Powerline Cave in its management area under any circumstances since the national forest boundary does not go far enough south.

Further, it appears that Weyerhaueser has wholly dropped the proposed land exchange which would have brought its holdings in the cave area under USFS management.

It therefore appears that we should push as rapidly as possible for a national monument with land condemnation provisions, which would include the caves area as bounded by the USFS but also the drainages of Lost Creek and Cougar Creek and the part of the flows south of the national forest boundary.

We can do this either as a Lava Caves National Monument, or as part of a Mt. St. Helens National Monument drive. The history of conservation, especially in the Northwest, strongly suggests that unification of many groups around related objects is an especially effective route to preservation, so my personal feelings are that we should work with the Protective Association, Sierra Club and others in seeking a large Mt. St. Helens National Monument rather than a small Lava Caves National Monument.

This is provided an effective effort is implemented within a very few months. The cave values are too threatened to permit indefinite postponement for the sake of a unified effort at some indefinite date.

The Protective Association is reorganizing itself to spearhead a definitive drive, hopefully in the near future. When it becomes a membership organization, this task force should try to get virtually all northwest cavers to join it (dues will be very small). In the meantime, we need some funds of our own efforts like buying copies of pertinent material for distribution. And a treasurer to handle them.

Right now, LOTS of letters are needed on the way the USFS has been mishandling the de facto wilderness area studies, violating its own guidelines. Write the Chief, U.S. Forest Service, Washington, DC., and/or your senators and congressman. Also mention that the recent Environmental Impact Statements seem very poorly done. Also the Sierra Club's Seattle office needs slides of the caves and cave area, showing beauty - or desecration.

RECENT FIELD TRIPS

Big Four Ice Caves, March 18, 1973. Chris Miller reports that a grotto team found two to three feet of snow on the last 1/2 mile of the road and on the trail, much of it new. Avalanches were occurring at a rate of not quite one per minute. Getting to Middle Cave was a real misery trip with only Charley Anderson able to stay on top of the soft snow, the rest falling into holes and fighting their way out. The entrance of Middle Cave had undergone considerable collapse since the last visit when it was some 40 feet wide and 20 feet high and rectangular in section despite obvious sagging. Now it was necessary to enter through a slit between breakdown and glacier. The two large pillars were just beginning to melt and the cave was quite dry. The larger pillar was estimated at 15 feet high and 3 feet minimum diameter.

While part of the group was in the Middle Cave, others watched a dramatic large avalanche cascade over the East Cave. A white cloud shot the entire width of the glacier and onto the trail beyond. It was not audible inside the Middle Cave.

Among those present were Mark Vining and the Balzerini brothers.

Same, March 11, 1973. Truman Sherk reported that access had been much easier. The group entered only the West Cave where they noted no hazards. The entrance was wide open and clear, and a stream was running out. The waterfall entrance was also open and very impressive. The upper entrances of the other caves also appeared to be open. There was no sign of flakefall during the winter but one flake was beginning to form. He noted fascinating layering exposed in the walls and ceiling. In a cold side passage he found a nice pillar. This side passage is about 4 feet high.

* * *

Paradise Ice Caves, Feb. 17-18. Truman Sherk reports that he, Mark Vining and Charley Anderson found a very low snow pack. The day was beautiful and openings were observed near the head of the Paradise River, high on the wall. In the rejuvenated cave now about 2 years old, he noted that liverworts and other primitive plants appeared remarkably healthy. No abrasion is evident. Apparently they are supported by ultraviolet "bounce", and at the cave temperature are well preserved. Part of the investigations were about a half-mile from the Honeycomb Room. Down-sloping passages were followed until they dropped off.

* * *

Truman Sherk has reported locating but not yet visiting several probable glacier cave orifices within one to two miles of the Big Four Ice Caves. Most of these are situated much like the latter, but at least one which he and others have noted is in what appears to be a hanging glacier.

* * *

Big Four Ice Caves, Dec. 24, 1972. Charley Anderson reports that the Middle Cave had two fine pillars 15 to 20 feet high, 40 to 50 feet apart, and 4' and 9' in diameter respectively. Nice moulins noted in the West Cave.

MORE FIELD TRIPS, SOME RECENT

At the February meeting, Chris Miller reported that on the weekend of Feb. 17-19, he, Ron Long, and Richard Karkoff joined a VICEG party for a fine Vancouver Island trip, visiting both the Skutz Falls and Gordon River areas. Procrastination Pit is enlarging, into the Gordon River road. When hunting for a hub cap guard, the party found one new cave and saw a sink 60' deep in the Gordon River area. Included were Miller, Main Skutz, Roadside, Trap and Natural Well caves in the Skutz Falls area, and Hourglass.

On the same weekend, Truman Sherk, Mark Vining and Charley Anderson entered the Suicide Falls entrance of the Paradise Ice Caves system and went through (I think they said) to the Surprise Entrance, which was open. Only about 8' of snow was present at the Paradise Visitor Center.

On March 25 and 26, 1972, Bob Brown, Faith Gardner, Greg Thomson, Judy Anderson and Jay Schneider also joined VICEG in a battle against 4th of new snow in reaching Cascade Cave. They also presented a NSS slide show at Ken Sinkiewicz's house en rout e. On Saturday they were in Cascade Cave maybe 15 hours. Found was a new passage some 300 to 400 feet long, much like the rest of the cave: cracks and walking passage. This one includes an old stream passage. It contains a bacon strip about 7' long and 14" wide, and many straws. It was still going when they turned back. The Canadians were planning to investigate 3000'-foot Marble Mountain, with sinks known atop it and resurgences at the base. This is in the Campbell River area.

Some vital statistics

Charley Anderson's address: Box 12659, Seattle, 98111. 938-2074. or 9034 35th SW, Seattle.

Jack Charleston: EX 2-5918.

Chris Miller, PO Box 80413, Georgetown Sta., Seattle 98108

Truman Sherk 543-1620 days.

Ron Pflum 1-509-422-4620. General Delivery, Okanogan, Wash.

Bob Werner Rt. 1, Box 347, Chehalis 98532

Julius Rockwell (Chairman, Alaskan Cave Areas Conservation Task Force of the NSSO 2944 Emory St., Anchorage, Alaska.

Steve Knutson 18190 Shawnee Trail, Tualatin, Ore.

And the backlog remains huge! Watch for the next BIG issue.

EPILOGUE TO THE BELIZE FIELD TRIP

Included in this issue of the Caver is the revised version of Barbara MacLeod's famous ballad, based on Petroglyph and other Belizean caves. On reading thus, it scans poorly, and many of the terms are alien to those unfamiliar with modern and ancient Maxan culture. Yet its power seeps through even these obstacles.

Perhaps I am over-influenced by the spell of these caves and their cultural wealth, for the kinship we felt there to the equally caverevering Mayans may well be ill-founded. Further, I am undoubtedly overinfluenced by the experience of hearing Barb herself sing her heart out in this ballad, and the yearning of her voice haunts me still.

All this my intellect reminds me, yet I disagree. I believe this song to be the first great literary work of American caving. We are honored to be authorized to publish it here and in the Journal of Spelean History.

-- W.R.H.

The Cascade Caver 1117 36th Avenue East Seattle, Wash. 98112



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