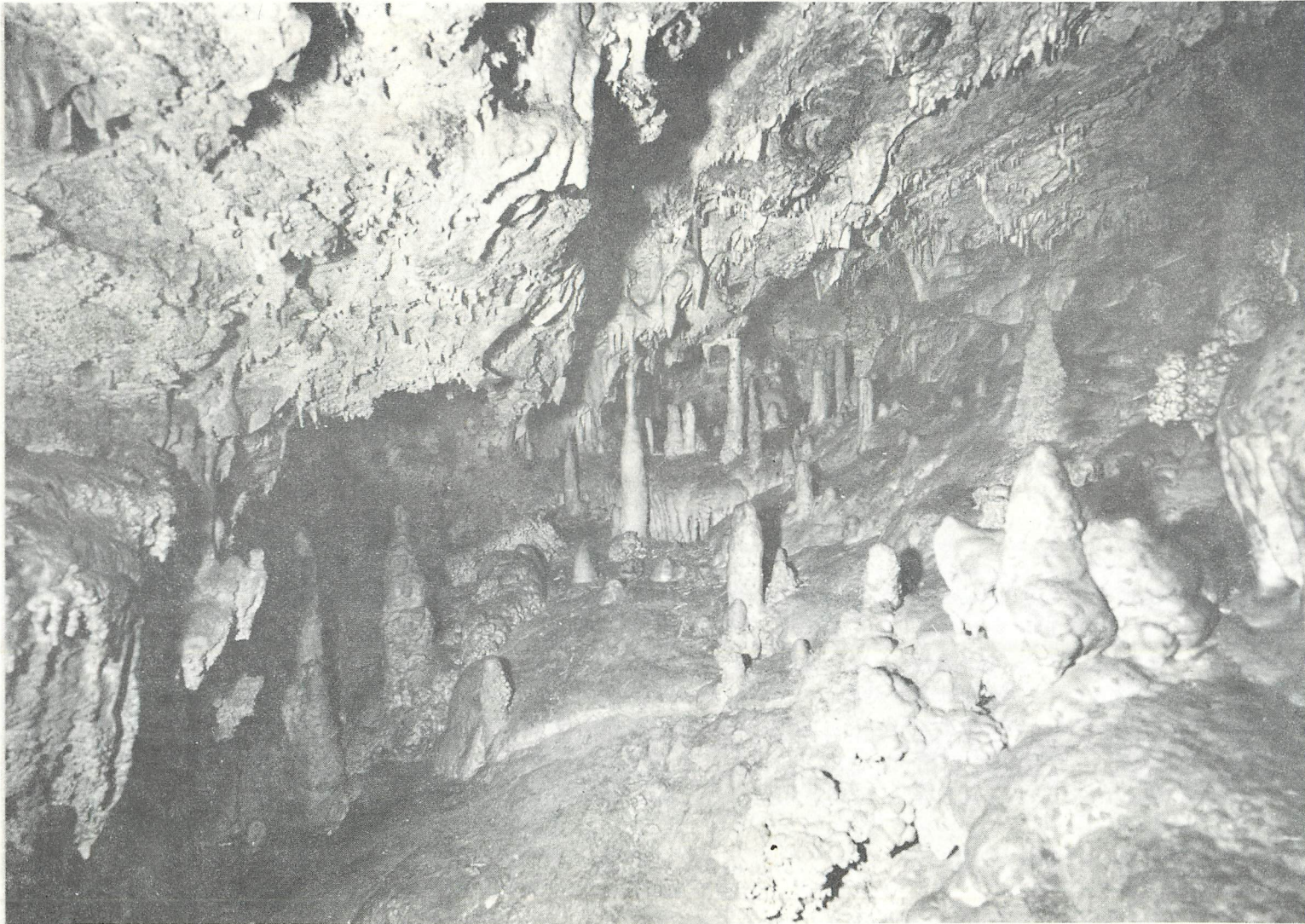


THE SPELEOGRAPH

PUBLISHED BY THE OREGON GROTTO
OF THE
NATIONAL SPELEOLOGICAL SOCIETY

vol. 19, no. 7 & 8 August 1983

PUBLISHED BY THE OREGON GROTTO OF THE NATIONAL SPELEOLOGICAL SOCIETY



The **SPELEOGRAPH** is a monthly publication of the **OREGON GROTTTO** (a local chapter) of the **NATIONAL SPELEOLOGICAL SOCIETY**.

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O.G.Pressman: Roger H. Silver
Assistant: Patty Silver

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Oregon Grotto general **MEETINGS** are held on the 3rd Friday of every month, at 7:30 P.M., and until further notice, will be held at the Southwest Washington Research Unit, 1918 N.E. 78th St., Vancouver, Washington. (¼ mile east of Interstate-5 on 78th St.)

OREGON GROTTTO OFFICERS

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Bob Baker (206) 892-9359

1983	AUGUST	1983	1983	SEPTEMBER	1983								
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7	1	2	3	4	5	6	7
8	9	10	11	12	13	14	8	9	10	11	12	13	14
15	16	17	18	19	20	21	15	16	17	18	19	20	21
22	23	24	25	26	27	28	22	23	24	25	26	27	28
29	30	31					29	30					

Cavers Calendar

1983	OCTOBER	1983	1983	NOVEMBER	1983								
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7	1	2	3	4	5	6	7
8	9	10	11	12	13	14	8	9	10	11	12	13	14
15	16	17	18	19	20	21	15	16	17	18	19	20	21
22	23	24	25	26	27	28	22	23	24	25	26	27	28
29	30	31					29	30					

AUGUST 19: Oregon Grotto General Meeting, 7:30 p.m. at the Southwest Washington Research Unit, 1918 N.E.78th Street, Vancouver, Washington (¼ mile east of I-5 on 78th Street).

AUGUST 21: Red Cave System, Trout Lake. See article in this issue.

LABOR DAY WEEKEND: (Sept. 3,4,5)
Grotto trip to China Hat; see article in this issue.
N.W.C.A. Regional Meet, tentatively at or near Lehman Cave, Nevada. More details at Grotto meet.
Western Region Meet, McCloud, California. Details, contact Wolffs, 516 Mill Rd., McCloud, California 96057

YOUR HELP NEEDED TO FINANCE PURCHASE OF TROUT ROCK CAVE PROPERTY

The NSS has acquired an option to purchase a historic parcel of land in Pendleton County, West Virginia. The property contains the entrances to three well known caves; Hamilton, Trout and New Trout.

The sale price of the 42 acre tract is \$40,000. Included in the sale price is all of the above mentioned acreage, the three cave entrances and the timber rights surrounding the the caves on the 27 eastern acres. The Moyers family, from whom the property is being purchased, will retain the timber rights to the 20 acre western part of tract for 7 years.

The NSS will hold title; stewardship will be placed with a permanent NSS committee composed of NSS members from nearby regions and grottos.

The Trout Rock Conservation Task Force has already raised \$30,120 in cash or pledges and has promises of \$12,800 in bridge loans. Hower, the bridge loans need

to be repaid and initial management costs met. We need your generous financial support now. If you have already contributed, you have our sincere thanks. We must settle on the property by March 16, 1983. Please make a contribution to this effort. Send checks, made out to NSS Trout Rock CTF at address below.

NSS TROUT ROCK CTF
c/o Ricketts
6404 Caryhurst Drive
Oxon Hill, Maryland 20744

Money Wrench

REINSTATED
Davis, Bob

DROPPED
Chevalier, Roy
Nelson, Bob

Stevens, Charles

DUES /SUBSCRIPTIONS DUE MAY
Baker, Bob, Lea
Benedict, Earl
Eide, Stuart

Perkins, Mark
Smith, Dave, Dianne
White, Mary, & J.R.

DUES/SUBSCRIPTIONS DUE JUNE
Foster, Sue
Long, George & Cathy(1st notice-sorry)

DUES /SUBSCRIPTIONS DUE JULY
Childress Landchild, Terry
Gilson, Leland & David

Hixon, Jim
Mosser, Jim & Cynthia Ream

DUES/SUBSCRIPTIONS DUE AUGUST
Conrad, Steven
Herdman, Cindy
LeDoux, Denny & Debbie

Scarl, Ethan
Wiley, Chris

DUES/SUBSCRIPTION DUE SEPTEMBER
Benedict, Ellen & Ben
Howarth, Frank
Jenkinson, Doug

Lonergan, Richard
Schoonover, Wayne
Slabic, John & Vada

NEW MEMBERS

Allen, Jon Paul Hemrick, Jerald R.
Grover, Chris Speers, Paul

June issue listed a new member, Nontchalin, Matthew—
should have been—Montchalin, Matthew

MEMBERSHIP DUES are: Individual, \$6.00/yr. Family of two, \$7.00/yr. Family of three or more, \$8.00/yr. Please make checks payable to Oregon Grotto and mail or give to Jo Larson, Membership Chairman, 13402 N.E. Clark Road, Vancouver, Washington 98665. If you wish a receipt or membership card mailed to you, please include a stamped, self-addressed envelope.

Lavacicle Cave Guided Tours



[The following is the latest schedule of guided tours for Lavacicle Cave, as posted at Lavalands Visitor Center.]

“Lavacicle Cave is set aside as a Geologic Site. No other lava tube has been discovered which contains the unique stalagmite and stalactite lava formations of the size and number found in Lavacicle Cave. The entrance to the cave is locked and can be viewed on the third Saturday of the summer months.

- June 18
- July 16
- August 20
- September 17

- † By Reservation Only —*Limit of 20 People.*
- † Phone Lava Lands Visitor Center early in the week for reservations; (503) 382-5668 between 8:30 a.m. and 6:00 p.m.
- † Meet at 8:30 a.m. Saturday at the Deschutes National Forest Headquarters in Bend (211 N.E. Revere).

IMPORTANT

- † Wear a warm coat and long pants which can get dirty.
- † You must be able to crawl through a narrow opening and move on hands and knees down a 150-foot passage.
- † Helmets must be worn and will be provided. Flashlights are necessary and you must bring your own.
- † The ride out to the cave is 40 miles and will take about one hour. Twenty miles of this will be on dirt roads. The ride is slow and dusty. Car pooling is strongly suggested. We will return to Bend by 1:00 p.m.”

COVER

The Petrified Forest in Oregon Cave, Oregon Caves National Monument. From a black & white by Charlie & Jo Larson.

NSS OUTSTANDING SERVICE AWARD FOR 1983: RIGHT ON!

We are confident that this year's NSS Outstanding Service Award will be viewed by Western cavers as exceedingly appropriate and timely. Even if we had not been privy to the awards process, it would have been no surprise to us that Dave McClurg was in line to receive one of the highest awards the NSS gives (which includes Life Membership in the Society). For those readers who may not know of Dave personally the following resume, part of the awards presentation address by Jeanne Gurnee, will explain Dave's contribution to caving, nationally as well as on the west coast. The Editors.

David R. McClurg, NSS4608OF

Dave McClurg has been a steady worker for speleology and the NSS since the late '50s when he joined the Society. As with many of these early members, much of what they have done cannot be remembered—as they are the ones who were at every regional and national meeting doing some phase of the event that made the whole thing work.

David McClurg began by editing the *California Caver*, 1960 to 1966, meanwhile serving as Chairman of the Black Chasm Cave Preserve Committee, 1965–1981.

He was NSS Administrative Vice-President from 1966 to 1970 and a member of the Board of Governors from 1970 to 1973. He was Chairman of the Program and Activities Committee from 1973 to 1975.

Dave was Chairman of the 25th Anniversary NSS Convention at Sequoia National Park in 1966 (an outstanding convention including the annual banquet in the middle of the Sequoia forest). Later he co-chaired the Frogtown National Convention in 1975. [Few ever knew, and fewer will remember, that the very successful Frogtown Convention began as heroic, last minute rescue of an ill-fated convention originally planned for a site in Nevada. —Eds.] He has also chaired the Vertical Section at the 1982 and '83 conventions.

He served as Advertising Manager of the *NSS News* from 1972 to 1976 and authored the first detailed report and recommendations, in 1976, for the NSS Cave Ownership Committee.

He organized and coordinated six speleo-educational seminars in five California locations and one in Portland, Oregon, from 1971 to 1976. In addition he also organized the Lilburn Speleocamp in 1972. From 1976 to present he is primary coordinator of exploration and mapping of Gaping Holes lavatube system in northern California.

He has authored two popular books: *Amateur's Guide to Caves and Caving*, 1972, the first published book on caving techniques in the U.S., and *Exploring Caves: A Guide to the Underground Wilderness*, 1978. His work for the NSS and speleology continues, and he was the organizer of the first Convention Short Course in Caving Techniques in Bend, Oregon, in 1982.

APE CAVE SIGN-UP

The following people have signed as Ape Cave volunteers for the dates indicated:

Aug.	6	.....	Dave Foes
	7	.....	Dennis Glasby
	13	.....	Dave Foes
	14	.....	Terry Childress Landchild
	20	.....	Dennis Glasby
	21	.....
	27	.....	Steven Peters
	28	.....
Sept.	3	.....
	4	.....	Claudia Van Gee
Labor Day		.....

UPCOMING CAVE TRIPS

AUGUST 21, 1983

This month's caving trip will be to a large cave system just to the east of Troutlake, Washington, called the Red Cave System (A.K.A. Poacher's Cave System). The main cave in this system we'll be exploring is Poacher's Cave, so named for its history of use by poachers. This cave's entrance is a multi-level, complex system of main and surface tubes all interconnected.

The main stem of the cave has a series of very nice skylights and wall flow formations. Also, we'll be doing the upper section of the Red System which has one of the largest backflow formations.

We'll meet at the Troutlake Ranger Station on the western outskirts of the town at 10:30 a.m. (two hours from Portland). Easiest way there is I-84 to Hood River, cross Columbia River, left to White Salmon River, then north to Trout Lake. Transportation: carpool. Contact Dennis Glasby for a ride. (503) 644-1066.

SEPTEMBER 3,4,5 – Labor Day Weekend.

Labor Day weekend we'll be camped at China Hat Campground, near South Ice Cave in Deschutes National Forest (Bend). This campground is shown on the newer Deschutes Nat'l Forest maps. It is centrally located for many nice caves including South Ice Cave, Lee's Cave, Derrick Cave, and many more. Also, there are many hot cave leads in this area for wild, unexplored caves.

This campground has primitive rating and sometimes is out of water by September, but it does have tables, fire pits and pit toilets. Contact Dennis Glasby for more details.

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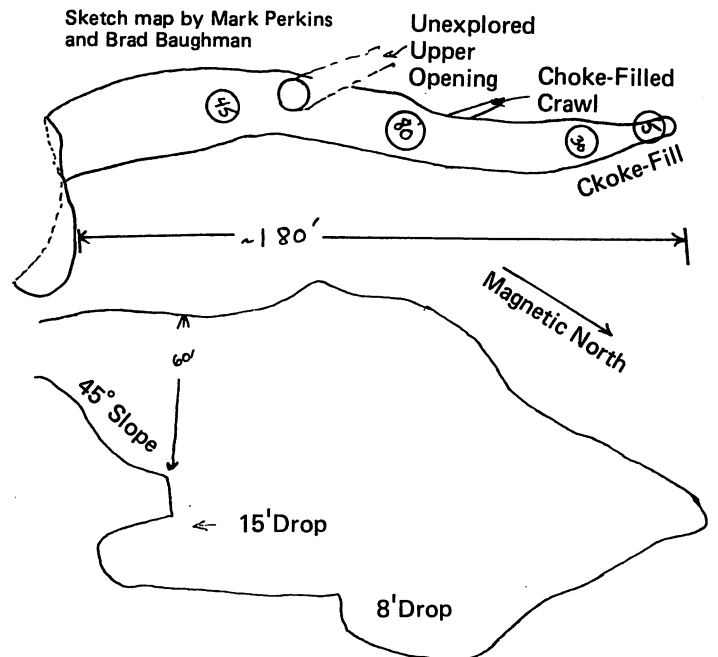
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10-MILE MOUNTAIN CAVE

Sketch map by Mark Perkins and Brad Baughman



[This map appears in this issue with apologies to Mark Perkins. It was overlooked when his story about the cave appeared on page 34 of the April 1983 issue—Eds.]

CULTURAL RESOURCES OF YOUNG'S CAVE ASSESSED

The following article is part of a survey made by Alexy Simmons, archeologist for the Corvallis office of CH2M Hill, entitled Cultural Resources Reconnaissance and Assessment within the Bend Sewage Disposal and Effluent Pond Areas. It was sent in to The Speleograph by the Grotto's man at the Oregon Historic Preservation Office, Leland Gilson. Some of the soil profiles were omitted in the interest of economy.

SITE 35DS115

Youngs Cave (35DS115) (Figure 1, Figure 10-a, and Figure 10b) was recommended for assessment during a survey of the Bend Sewage Treatment Facility project area by Follansbee (1980c). She noted one flake at the lava tube opening and recommended the site for archeological assessment, "since lava tubes in this area are well known as archeological sites." (Follansbee, 1980c:8).

Youngs Cave is part of the Horse Lava Tube System. This system is described as a relatively wide, band-like complex, made up of shallow sinks and short lava tubes. It has a recorded length of 7.5 miles. Also in the project area, north of Youngs Cave, are Roadside Cave, Stepladder Cave and Hidden Cave.

Youngs Cave is in the northern part of the system. A traverse length of 1,312 meters has been recorded for Youngs Cave. The main entrance faces a large collapsed trench or pond section of tube. A skylight opening is located north of the main entrance adjacent to the unimproved road (see Fig.20, Auger Sample Map, and Fig. 11a). The area surrounding this entrance and the main entrance were surveyed to locate any cultural material not evident during the 1980 survey. No cultural material was located. The east and west passage of Youngs Cave were traversed by the work crew and augered to obtain soil profile data. No cultural material was located during these activities either. A drip area was noted underlying the unimproved road.

A variety of cultural debris was evident inside and outside the entrance to Youngs Cave. Most of the debris appeared to be recent to circa 1960. The entrances to Roadside Cave (Figure 11b) and Stepladder Cave (Figures 12a and 12b) were photographed and the area surrounding the cave entrances was surveyed. One flake was located approximately 10 metres east of the entrance to Stepladder Cave. In the Speleological Society handbook on Stepladder Cave (Larson 1982:40) it is noted, "...There are pot hunter's holes throughout and one massive excavation just north of the entrance." Suzanne Crowley (1982 personal communication), Prineville District BLM archaeologist, noted in a phone conversation that when she went through Stepladder Cave she noted no evident cultural material.

ASSESSMENT STRATEGY

Two 2x2 metre test units were placed in the entrance of Youngs Cave (Figure 13). The test units were located in a grid north and south of an existing path in areas adjacent to the entrance that appeared to have a high proba-

bility for use by aboriginal people. A hypothesis that naturally light areas adjacent to the entrance overhang would be the most intensively used for food preparation and tool manufacture dictated the placement of test units. Two x two metre test units were employed based on the potential that large rocks emplaced as roof fall would preclude excavations in a 1x2 metre test unit.

A single flake outside the lava tube entrance and the structural nature of the entrance, which is broken from the wind by the surrounding terrain, were the only evident indicators of the existence of a potential archaeological site in Youngs Cave. Thus, the principal considerations in the testing of the cave were to substantiate its use by aboriginal peoples, and to test the parameters, nature, and chronology of occupation. The areas surrounding both entrances and above the tube were surveyed to identify any related activity area.

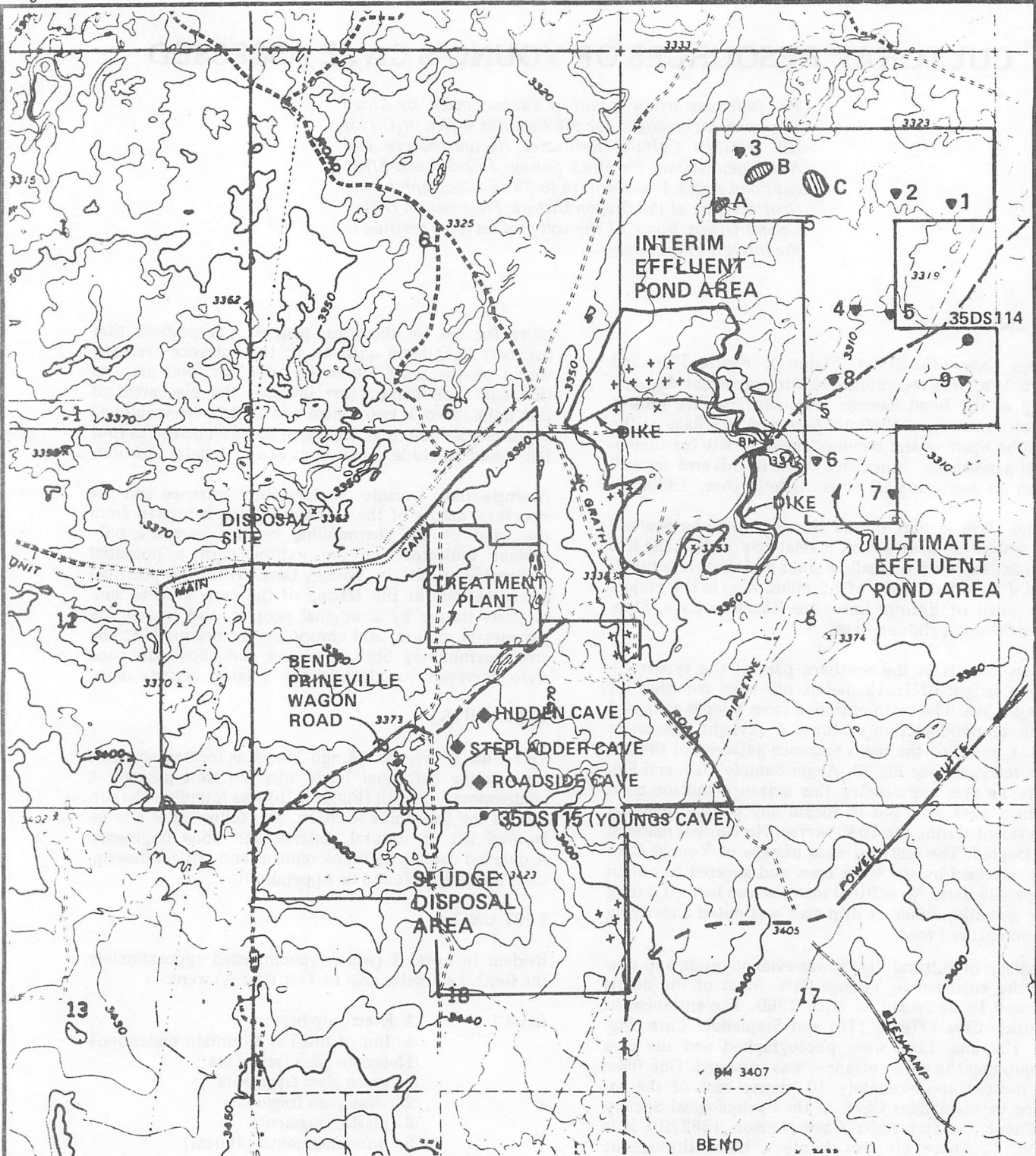
TEST UNITS

Test Unit A (Figures 14 and 15a) was located south of the existing path that leads into the west passage. A contemporary hearth (Figure 14b) was found on the surface in the test unit's location. The following is a level-by-level list of cultural material and bone fragments. A detailed catalog of fauna remains and artifact descriptions located are found in Appendix B.

TEST UNIT A

Evident in Level 1 (which encompassed approximately the south 1x2 metre area of Test Unit A) were:

Level 1	1 Everready battery
	1 Inn of the 7th Mountain matchbook
	15 brown glass fragments
	2 green glass fragments
	2 clear glass fragments
	3 plastic fragments
	5 bone fragments, (3burnt)
Level 2	2 plastic fragments
	1 pen clip
	1 light bulb
	3 shell casings
	22 brown glass fragments
	44 bone fragments (some burnt)
	1 obsidian flake
	1 grey chert flake
Level 3	1 Plastic fragment
	1 foil fragment



ISOLATED FIND NUMBER	SURVEY
1	BOTTLE LODGED IN A JUNIPER TREE
2	K RATION CAN
3	HISTORIC DEBRIS SCATTER
4	TIN CAN 4" X 4-3/8" SIDE
5	RECENT CAN SCATTER
6	BROWN OBSIDIAN FLAKE
7	RECENT DEBRIS SCATTER
8	OBSIDIAN POINT BASE
9	GRAY/BLACK OBSIDIAN FLAKE

KEY
♥ ISOLATED FIND
● SITE
⊕ ROCK FEATURES
+ MACHINE GUN IMPLACEMENTS

T17S R13E WM



FIGURE 1
LOCATIONAL MAP



	1 lead shot
	1 beer bottle base
	1 beer bottle
	8 clear glass fragments
	26 brown glass fragments
	1 green glass fragment
	80 bone fragments
	2 obsidian flakes
Level 4	7 brown glass fragments
	9 clear glass fragments
	1 Heidelberg beer bottle cap
	71 bone fragments
	3 obsidian flakes
	(noncultural material: sand lenses and pockets of pumice mixed with silt and sand)
Level 5	2 brown glass fragments
	49 bone fragments (some burnt)
Level 6	2 shell cartridges
	1 foil fragment
	21 bone fragments
	(noncultural material—coarse pumice and sand becoming more apparent)
Level 7	11 bone fragments
Level 8	21 bone fragments
	1 obsidian flake
	1 chunk charcoal
	Note: By this level, large rocks precluded excavation in the NE and SW corners of the pits for 1x1 metre areas.)
Level 9	31 bone fragments
Level 10	13 bone fragments
	Note: At this level, an area 1x1 metres in size, roughly in the center of the unit, was the only area not encompassed by rocks.)
Level 11	No cultural material
	(Noncultural material—coarse pumice lumps and pebbles make up the fill)
Level 12	No cultural material
Level 13	No cultural material
Level 14	No cultural material
	(Course pumice fill is still apparent.)

An auger sample was taken in the floor of Test Unit A to sample the soil profile. At 60 cm below the 140-cm floor (200 cm), a dark, moist silty soil was located similar to that evident in the floor and lower levels of Test Unit B.

Test Unit B was opened when it became apparent that rocks in Test Unit A would prevent the archaeologist from gathering an adequate sample of potential cultural material. Test Unit B was located north of the path and west of Test Unit A (Figure 15b and c). A hearth, less developed than that apparent on the surface of Test Unit A was apparent along with a Christmas ornament, a gun cartridge, glass fragments, and an obsidian flake.

TEST UNIT B

Evident in Level 1, which encompassed only a 40x50 cm area in the SE corner of the unit, were:

Level 1	42 brown glass fragments
	2 clear glass fragments
	3 green glass fragments
	1 plastic fragment
	1 "Christmas" bulb
	1 cigarette butt
Level 2	81 brown glass fragments
	13 green glass fragments
	1 fire cracker
	3 "Christmas"bulb fragments
	1 lead fragment
	2 beer label fragments
	1 white translucent cryptocrystalline core fragment (see Artifact Descriptions, Appendix B)
Level 3	128 brown glass fragments
	6 clear glass fragments
	44 green glass fragments
	10 label fragments
	1 pull tab
	1 paper match
	3 "Christmas" bulb fragments
	1 plastic fragment
	1 gun cartridge
	4 foil fragments
	1 shot gun wad
	2 paper fragments
	1 tinsel strand
	2 "Christmas" ornament hangers
	1 lead fragment
	10 bone fragments
	1 obsidian flake
Level 4	76 brown glass fragments
	47 green glass fragments
	4 clear glass fragments
	7 beer label fragments
	5 bone fragments
	1 match
	1 macaroni noodle
	1 gun cartridge
	1 shoe eyelet
Level 5	6 paper labels
	2 cigarette butts
	1 wooden match
	18 green glass fragments
	15 bone fragments
	28 brown glass fragments
	1 clear glass fragment
	1 porcupine quill
	1 hammer stone, made from a river cobble (see Artifact Descriptions, Appendix B)
	1 paper matchbook fragment

Level 6	<ul style="list-style-type: none"> 1 paper fragment 1 paper match 1 gun shell 14 bone fragments 8 green glass fragments 17 brown glass fragments 1 obsidian flake <p>(Noncultural material: coarse pumice pebbles and soil mix evident in the southeast corner)</p>
Level 7	<ul style="list-style-type: none"> 4 brown glass fragments 2 paper matches 4 green glass fragments 1 cigarette butt 1 utilized obsidian flake 1 obsidian flake 2 cryptocrystalline flakes 1 porcupine quill 8 bone fragments
Level 8	<ul style="list-style-type: none"> 1 obsidian flake 3 match book fragments 11 bone fragments 1 paper match
Level 9	<ul style="list-style-type: none"> 1 obsidian flake 26 bone fragments <p>(Note: No cultural material evident, except in areas where pumice-silty-sandy soils are not evident.)</p>
Level 10	No cultural material
Level 11	1 burnt bone fragment
Level 12	No cultural material
Level 13	7 bone fragments
Level 14	10 bone fragments
Level 15	No cultural material
Level 16	<p>Bone concentration under large rock in the NE corner of the pit (Figures 18a and 18b). Near this concentration several artifacts were located:</p> <ul style="list-style-type: none"> 1 utilized, coarse-grained basalt cobble 1 utilized cryptocrystalline flake 1 utilized basalt flake 3 obsidian flakes 600 bone fragments <p>(See Appendix B, Bone Catalog and Artifact Descriptions.)</p>
Level 17	<p>(See Appendix B, Figure 1 and Artifact Descriptions.)</p> <ul style="list-style-type: none"> 2 utilized obsidian flakes 1 utilized cryptocrystalline flake 3 obsidian flakes 1 lanceolate projectile point, obsidian 1 cryptocrystalline knife 87 bone fragments some burned)

Level 18	<ul style="list-style-type: none"> 5 bone fragments 2 charred wood fragments 1 charcoal chunk
----------	--

Level 19 18 bone fragments

Level 20 15 bone fragments

The south and west walls of Test Unit B were difficult to maintain. Wall slumping occurred throughout the excavation period. Material from slumps was screened and recorded separately from material located by level. Material found in the sequence of wall slumps that occurred are listed by the level being excavated when the slump occurred. Slumpage usually occurred after excavations ceased, during breaks or overnight.

Level 9 (N1.25-N3.25 of E1.9 wall)

- 1 nail
- 1 green glass fragment
- 3 brown glass fragments

Level 10 2 green glass fragments

Level 11 1 green glass fragment

Level 12

- 2 green glass fragments
- 6 brown glass fragments
- 1 piece of wax
- 6 bone fragments
- 1 tooth fragment

Level 13

- 13 bone fragments
- 1 green glass fragment
- 1 brown glass fragment
- 1 porcupine quill
- 1 paper fragment
- 1 gun cartridge
- 1 painted (green) wood fragment
- 1 piece of wax

Level 16

(south wall)

- 15 bone fragments
- 19 brown glass fragments
- 5 green glass fragments
- 1 clear glass fragment
- 1 rubber fragment
- 1 small triangular shaped projectile point (See Appendix B, Figure 1 and Artifact Descriptions.)

(north wall)

- 4 brown glass fragments
- 1 green glass fragment

(southwest corner)

- 1 green glass fragment
- 1 obsidian flake
- 8 bone fragments

(nonlocational slumped material)

- 1 brown glass fragment
- 10 bone fragments

Level 17

- 1 obsidian flake
- 1 green glass fragment
- 38 bone fragments

STRATIGRAPHY

The soil deposits evident at 35DS115 are colluvial and eolian deposits, the latter appearing to be the principal deposition type. Little precipitation is recorded in this area contemporarily, historically, or prehistorically, thus supporting this hypothesis. Test Units A and B is underlaid by basaltic flow from the flanks of Newberry Crater. Above this flow is a dark silty soil which has probably developed over a substantial length of time. This is followed by eolian deposition of pumice from the eruption of Mt. Mazama, approximately 6,800 B.P. See Figure 19, Test Unit B, and Figures 16a and 16c, Test Unit A, for examples. The initial deposit of pumice soil, type E, contains no sand or silt; evident instead is pumice varying in size from pebbles to particles, charcoal, and ash. This deposit is overlaid by what appears to be colluvial implaced sandy silt, intermixed with pumice particles. Layer D is a consistent mix of soil and pumice (see Test Unit B). The lack of stratigraphic variation in D as found in upper levels of Test Units B and A suggest a single colluvial action or emplacement. Two soil color and makeup variations (B and C) are seen in Test Unit A. The pattern of these emplacements stratigraphically lends additional support to a hypothesis of rapid alluvial implacement of soils (Figure 17a and 17d, Test Unit A). Very evident in the upper levels of both test units are strata that appear to be eolian. Colluvial deposition has probably also occurred in the upper levels along with redeposition through human and animal activities.

Auger soil samples were taken to compare soil types and to estimate the depth of soils in the lava tube (see Figure 20). A 90-cm-long, 2.4-cm-diameter siphon auger was utilized. Samples in the lava tube were taken from areas that were not compacted through recreational use of the tube. All depth measurements were based on the depth the auger could be pushed into the subsurface without substantial obstruction (rock).

A total of eight areas were sampled. Two sample locations are not illustrated on the map. These are the NW quad of Test Unit A and the center of the skylight entrance to Youngs Cave.

An auger core in the northwest 1x1 metre quad of Test Unit A, located at 200 cm below the test unit datum, revealed soils similar to those evident at 160 cm to 200 cm in Test Unit B. Discovery of this soil type at 200 cm is consistent with the downgrading deposition of soil in the lava tube.

The auger sample taken in the skylight entrance was taken from the center of that entrance. At 90 cm below the surface, soils of a sand-silt pumice mix were encountered, like the D type soils evident in the main entrance of the lava tube. This core sample correlates with the depth at which D type soils were evident in the main entrance. A test unit placed in the skylight entrance could provide substantive data on soil deposition in the area. Augered soil samples taken from the six locations shown on Figure 20 are discussed below:

Auger Sample 1. Rock was encountered at 79 cm. The first two cores from the hole were similar in soil types to those evident in the upper levels of Test Units A and B. The last core sample was of a

soil type similar to the lower matrix of Test Unit B.

Auger Sample 2. Rock was encountered at 38 cm. The first core sample was similar to soils evident in the upper and mid-levels of Test Unit B. The later core was similar to mid-and lower-level soils in B.

Auger Sample 3. Rock was encountered at 41 cm. Core 1 was similar to the mid-level soil F, in the test units. Core 2 was more moist than 2, and contained few pumice particles.

Auger Sample 4. Rock was encountered at 30 cm. Soil that was very similar to types H and I in color and silt content was evident in the core.

Auger Sample 5. Rock was encountered at 31 cm. The core from this location was similar to that found at Area 4, but more moist.

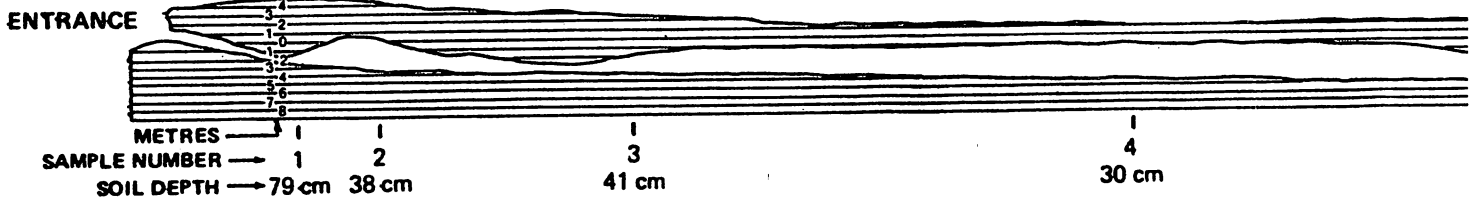
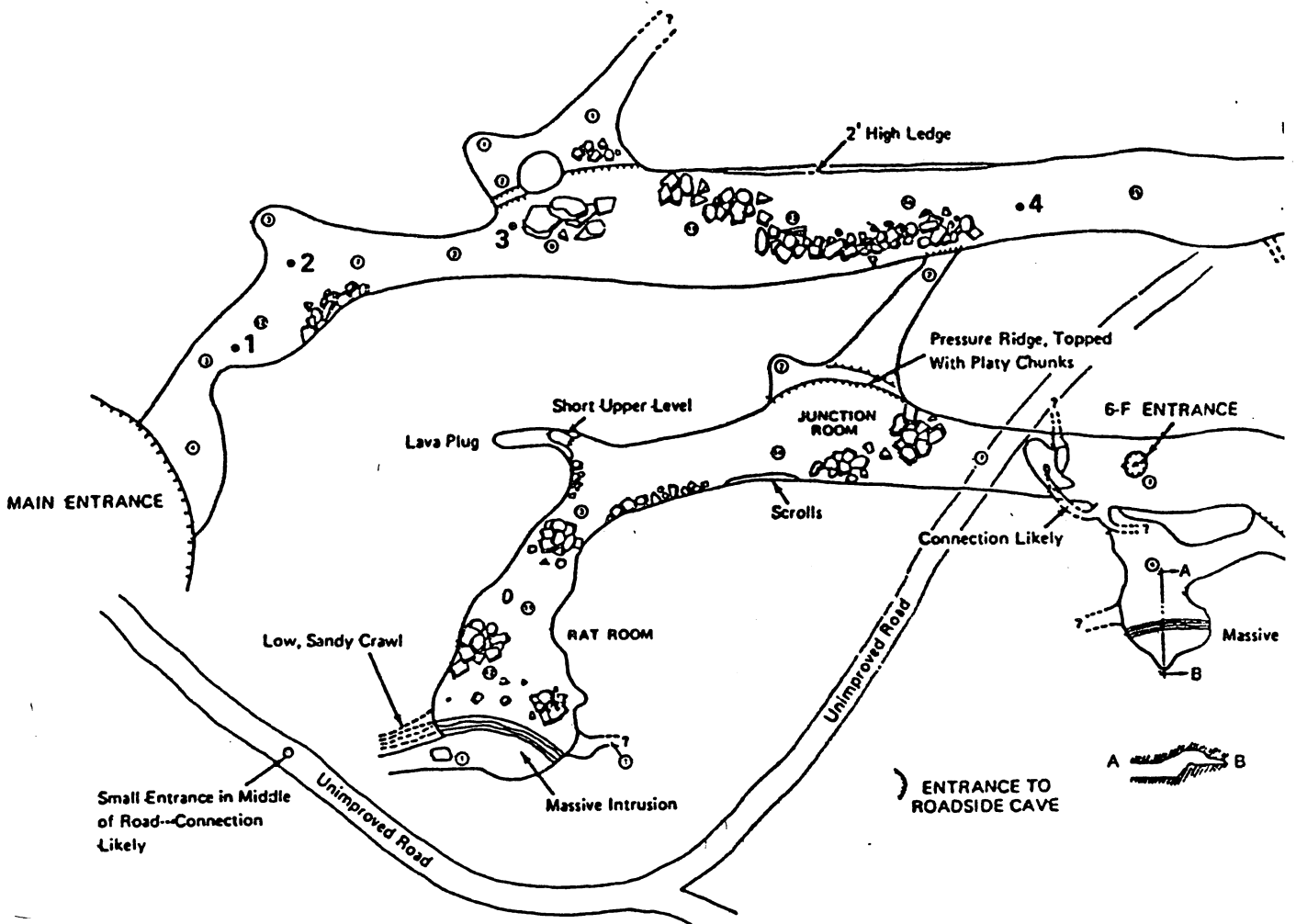
Auger Sample 6. Rock was encountered at 42 cm. Soils from Core 1 were similar to those evident in Sample Area 4, but with more pumice particles evident. Core 2 was more moist and contained less pumice and finer silt.

In general the soils evident in the core samples right above rock are similar to those evident in the lowest levels of Test Unit B. No yellow-brown or orangish pumice particles were noted in the samples. (Substantially more leaching adjacent to the cave entrance would have resulted in this mineral discoloration.) In Test Unit B, the original floor of the tube may be quite near 200 cm below the surface. Augering was attempted in Test Unit B, but was obstructed by the immediate encounter of rock.

CULTURAL MATERIAL AND FAUNAL REMAINS

Cultural material evident in the upper levels of the test units suggests use of the lava tube from about 2,000 years ago to pre-contact. No historic trade goods such as beads were located to suggest use during the historic period. The only datable artifact found in the upper levels (in a side-wall slide) was a small triangular-shaped point made of gray obsidian. The point was finely made on a thin flake and resembles Type P27 (Bedwell 1973:96 & 145) evident on the surface in the Fort Rock area and Type P25 from 3SLK54 (B-O/1). The point is stylistically like the Rose Spring corner-notched type, which has an associated date of 2000 to 200 B.P.

Other cultural material roughly associated with the projectile point were a hammerstone, a core fragment, a utilized flake, and numerous waste flakes. The cultural mixing of contemporary debris with prehistoric materials does not allow discernment of occupation sequences in the upper levels of the site. An undisturbed perspective on occupation of these levels may be available from areas that have been less disturbed by recreational and animal activities—along the cave walls, under roof fall, or deeper in the entrance cavity. In general, additional impacts to the upper levels are not anticipated from continued recreational and animal activities (rodent burrowing and coyote nesting) in the cave.



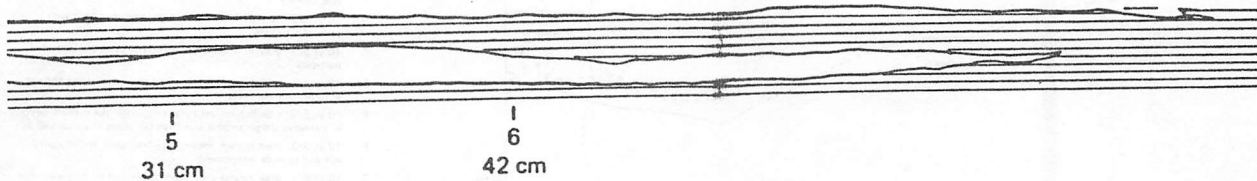
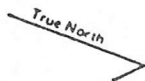
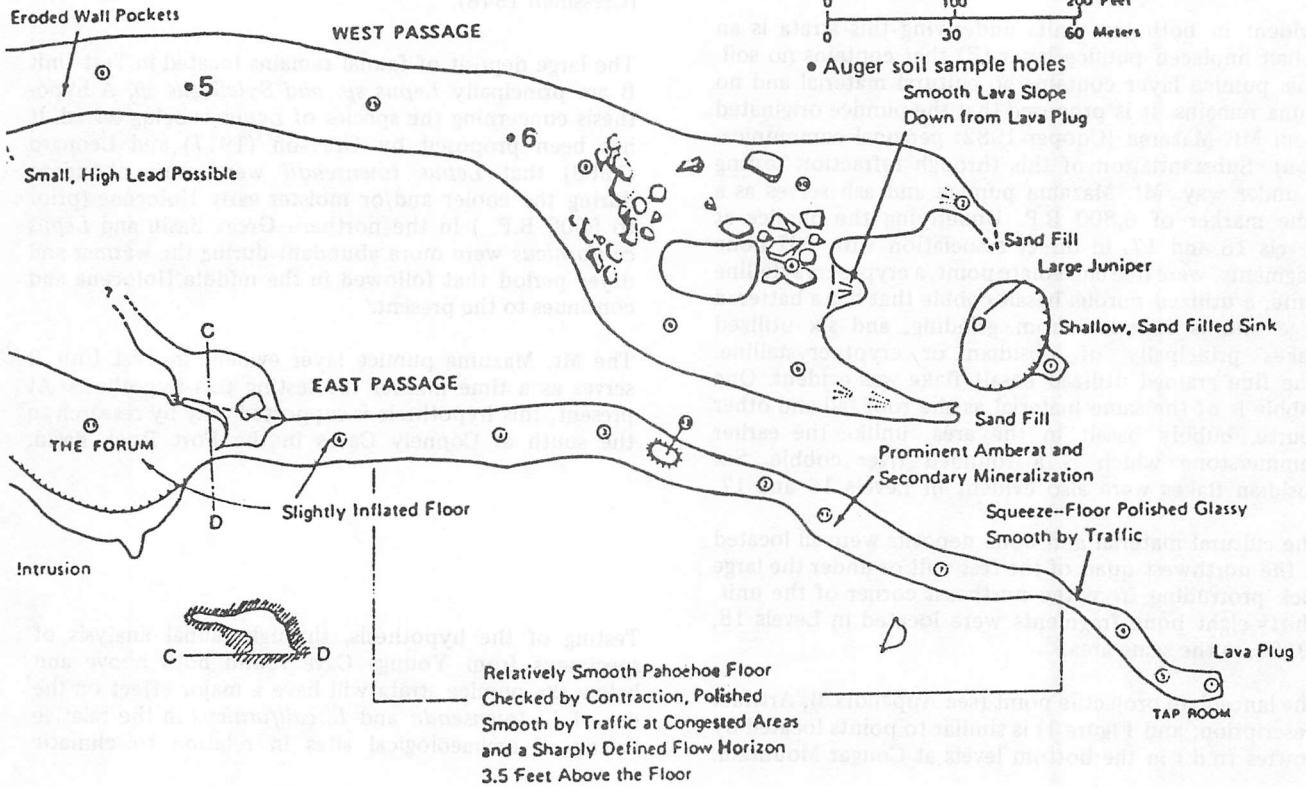
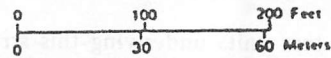
SECTION ALONG APPROXIMATE CEN

SAMPLE NUMBER	DISTANCE FROM ENTRANCE (metres)	DEPTH (centimetres)	MUNSELL SOIL COLOR AND SOIL DESCRIPTION	SAMPLE NUMBER	DISTANCE FROM ENTRANCE (metres)	DEPTH (centimetres)	MUNSELL SOIL COLOR AND SOIL DESCRIPTION	S. NI
1	20 m	23 cm	10 yr 5/3 brown, silty sand mixed with small pumice and basalt particles	2	40 m	31 cm	10 yr 4/2 dark grayish brown, moist silty sand with organic material and pumice particles	
		54 cm	10 yr 5/3 brown, silty sand mixed with small pumice and basalt particles			38 cm	10 yr 3/3 dark brown, moist sandy silt with organic material and pumice particles (few)	
		79 cm	10 yr 4/3 dark brown, fine silt with small particles of pumice, charcoal, and organic material	3	100 m	30 cm	10 yr 3/3 dark brown, silty sand with a few pumice particles	

YOUNGS CAVE

Brunton Compass and Tape Survey, July 2 and 3, 1978, by Charlie and Jo Larson

Total Traverse Length: 3632 Feet (1107m)



INTERLINE OF WEST PASSAGE

SAMPLE NUMBER	DISTANCE FROM ENTRANCE (metres)	DEPTH (centimetres)	MUNSELL SOIL COLOR AND SOIL DESCRIPTION	SAMPLE NUMBER	DISTANCE FROM ENTRANCE (metres)	DEPTH (centimetres)	MUNSELL SOIL COLOR AND SOIL DESCRIPTION
		41 cm	10 yr 3/3 dark brown, moist, fine silty sand and very few pumice particles	6	460 m	30 cm	10 yr 4/3 dark brown, very fine silt, very small basalt and pumice particles, some sand
4	240 m	30 cm	10 yr 4/3 brown to dark brown, very fine silt with sand and few pumice particles			42 cm	10 yr 5/3 brown, very fine silt, some small pumice particles
5	360 m	31 cm	10 yr 3/2 very dark grayish brown, moist very fine silt, with few small pumice particles				

FIGURE 20
AUGER SOIL SAMPLES
YOUNGS CAVE



The cultural material found in Levels 16 and 17 is more clearly defined than that in the upper levels. Cultural material in these levels are located below a layer of culturally sterile sand-silt-pumice (see stratigraphic profiles, Figures 19a, 19b, 19c, and 19d). The pumice layer is approximately 50 cm deep and appears to have been implaced through colluvial action.

Evident in both test units underlying this strata is an eolian implaced pumice layer (E) that contains no soil. This pumice layer contains no cultural material and no fauna remains. It is proposed that the pumice originated from Mt. Mazama (Cooper 1982: personal communication). Substantiation of this through refraction testing is under way. Mt. Mazama pumice and ash serves as a time marker of 6,800 B.P. Underlying the pumice at Levels 16 and 17, in direct association with 687 bone fragments, were one lanceolate point, a cryptocrystalline knife, a utilized porous basalt cobble that has a battered edge and is rounded from grinding, and six utilized flakes principally of obsidian or cryptocrystalline. One fine grained utilized basalt flake was evident. One cobble is of the same material as the roof fall and other course, bubbly basalt in the area, unlike the earlier hammerstone which is a rounded river cobble. Six obsidian flakes were also evident in Levels 16 and 17.

The cultural material and bone deposits were all located in the northwest quad of the test unit or under the large rock protruding from the northeast corner of the unit. Thirty-eight bone fragments were located in Levels 18, 19, 20, in the same area.

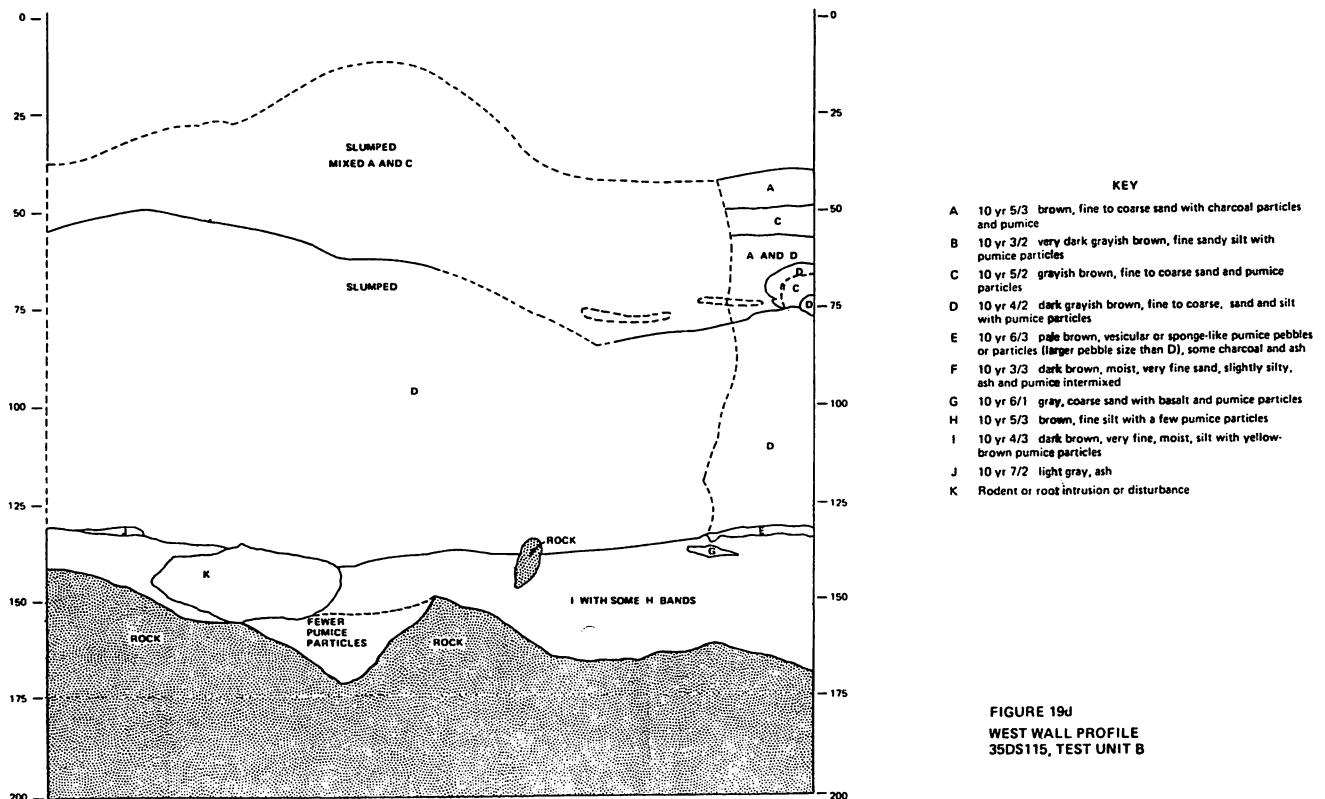
The lanceolate projectile point (see Appendix B, Artifact Description, and Figure 1) is similar to points located by Cowles (n.d.) in the bottom levels at Cougar Mountain.

The point is of the general lanceolate type dated between 11,000-7,000 B.P. in the Columbia Plateau and Great Basin. Regionally, points of this type have been found at Lava Island Rock Shelter (Minor and Toepel 1981), Lava Butte (Ice 1982), Benham Falls (Osborne 1950), Coffeepot Flat (Aikens and Minor 1977), The Fort Rock Basin sites (Bedwell 1973), and Odell Lake (Cressman 1948).

The large deposit of faunal remains located in Test Unit B are principally *Lepus sp.* and *Sylvilagus sp.* A hypothesis concerning the species of *Lepus* is being tested. It has been proposed by Grayson (1977) and Leonard (1980) that *Lepus townsendii* were more abundant during the cooler and/or moister early Holocene (prior to 5000 B.P.) in the northern Great Basin and *Lepus californicus* were more abundant during the warmer and dryer period that followed in the middle Holocene and continues to the present.

The Mt. Mazama pumice layer evident in Test Unit B serves as a time marker for testing this hypothesis. At present, this hypothesis is supported only by research to the south at Connelly Caves in the Fort Rock Basin.

Testing of the hypothesis, through faunal analysis of specimens from Youngs Cave found both above and below the pumice strata will have a major effect on the use of *L. townsendii* and *L. californicus* in the relative dating of archaeological sites in relation to climatic



events in the Northern Great Basin. (Data relating to this hypothesis is being analyzed by Lori Maurer of the OSU Anthropology Department and will be included in the final draft).

CONCLUSIONS AND RECOMMENDATIONS

Youngs Cave, 35DS115, is a significant site. Data provided by Test Unit B suggests occupation of the area prior to 6,800 B.P. and occupation approximately 2,000-500 B.P., based on a Rose Spring corner-notched type point. Archaeological data relating to the later occupation period has been severely impacted (in the areas tested) by the recreational use of the cave. Data from the earlier occupation period has not been disturbed, probably due to its depth and the intervening sterile layer of pumice. During the earlier occupation of the site, *Lepus sp.* and *Sylvilagus sp.* were a food source. Charcoal flecks in association with the faunal remains and the burnt appearance of many would suggest the potential for features such as hearths, food preparation areas, and other distinct areas of human activity. Little data on the use of the high lava plains and lava tubes in central Oregon exists. The Youngs Cave site is thus of value in eliciting a perspective on indigenous populations prior to 6,800 B.P.

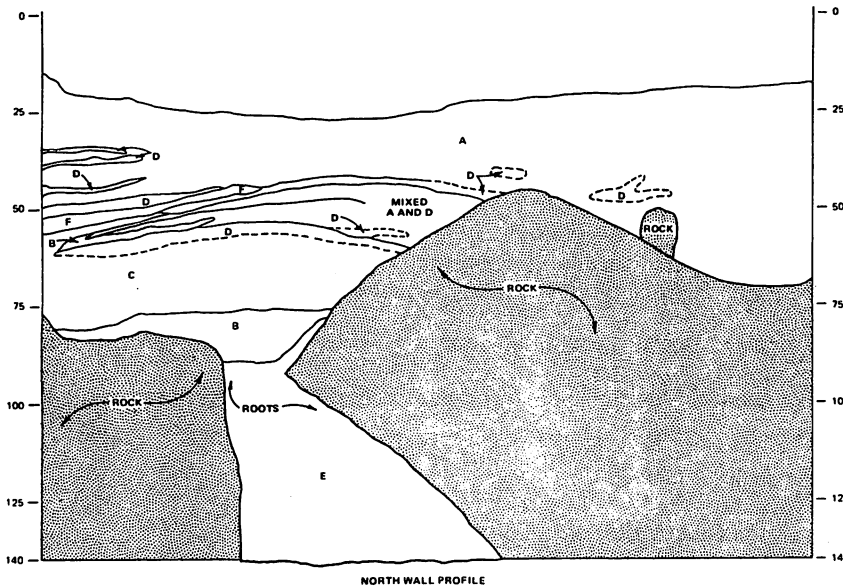
The abundant faunal remains throughout the strata of the cave provide a perspective on economic resources available to human populations and climatic condition. The faunal remains of Leproids in the lower levels of the cave matrix provide a test of the proposed hypothesis correlating Leproid species with the environmental and climatic chronology of the Great Basin. Testing of this

hypothesis is of importance in zoo-archaeology and archaeology in general.

Youngs Cave, 35DS115, meets the criteria for National Register nomination. The site is significant because it provides information important in the understanding of prehistory in the region. (36 CFR 60.4 Criteria for Evaluation: "...that have yielded, or may be likely to yield information important in prehistory or history.") The site appears to contain substantial data relating to the lifeway of indigenous peoples and the prehistoric environment.

It is recommended that 35DS115 be conserved, or kept in a safe or intact state, protected from destruction. Since management of this resource will remain under the BLM Prineville District's jurisdiction, it is suggested that that agency monitor Youngs Cave to the extent they deem necessary to protect the resource. Since the upper levels of the site have previously been disturbed, the exclusion of recreational activities such as spelunking at Youngs Cave is not recommended. The BLM may, in fact, be able to utilize the local speleological group as an aid in monitoring the site.

If impact to the site cannot be mitigated through conservation of the resource, then controlled archaeological excavation is recommended. Mitigation through excavation should involve the complete recovery of archaeological data contained in the site matrix. Open block excavation, paired with test excavations to determine site parameters east and west and to test the potential use of areas located in the lava tube passages and the skylight entrance, are recommended.



OREGON GROTTO CONSTITUTION

As of August, 1983

- I. The name of this organization shall be the Oregon Grotto of the National Speleological Society (NSS).
- II. The purposes of the Oregon Grotto shall be to organize NSS members in the Oregon area and to further the purposes of the NSS:
- A. To promote the conservation of caves and their natural contents.
 - B. To advance in any and all ways the study and science of speleology.
 - C. To promote fellowship among those interested in caves.
- III. Executive Committee:
- A. The Grotto shall be governed by an Executive Committee of not less than four nor more than nine members. The Executive Committee shall consist of the Grotto Chairman, Vice-Chairman, Treasurer and Secretary; and three to five other members, three of whom are to be appointed by the officers at the first Executive Committee meeting following the election. The remaining positions may be filled later by selection, election, or left vacant, at Executive Committee option.
 - B. The Executive Committee shall have the responsibility to manage the Grotto; to conduct General and Executive Committee meetings; to propose to the membership changes in the Constitution and Bylaws; to appoint chairmen of special committees; to raise funds in any manner not inconsistent with the policies of the NSS Board of Governors; and to perform all other necessary functions.
 - C. An Executive Committee member may appoint a temporary proxy, with voting privileges specified by the appointor in advance and in writing to the Executive Committee.
 - D. A permanent vacancy among the officers shall be filled by the Executive Committee through selection from members duly qualified to be elected (see By-laws, Article I, A and B).
 - E. An officer may be recalled by a two-thirds vote of the Voting Members present at two consecutive General meetings. A "Voting Member" shall be defined as any Oregon Grotto member who holds a membership category other than Provisional or Subscribing and who is sixteen years of age or over, and is not holding a voting membership in any other grotto in Oregon, Washington, Idaho or California.
 - F. The Grotto members shall be informed at the General meetings of the decisions of the Executive Committee.
 - G. Decisions or actions of the Executive Committee may be overruled by a two-thirds vote of the Voting Members present at a General meeting where there is a quorum.
- IV. Meetings:
- A. Executive Committee meetings and General meetings shall be held at such a time and place as are determined by the Executive Committee.
 - B. A petition signed by one half of the Grotto membership shall be mandatory upon the Executive Committee to call a special meeting for the purpose stated in the petition.
 - C. A quorum for Executive Committee meetings shall be at least two-thirds, and no less than four, of the total Executive Committee members, with proxies to count toward the quorum.
 - D. A quorum for General meetings shall be a number of Voting Members equal to or greater than one-seventh of the total Grotto membership.
 - E. Robert's Rules of Order, as revised, shall govern all procedural questions arising at meetings of this Grotto.
- V. The Oregon Grotto shall not engage in actions that are detrimental to the purposes of the NSS, as stated in the NSS Constitution.
- VI. Amendments to this constitution and bylaws shall:
- A. Be read at two General meetings prior to the vote by the general membership.
 - B. Be mailed to all Voting Members at least two weeks prior to the vote by the general membership.
 - C. Require a two-thirds affirmative vote of those Voting Members present at a General meeting (votes mailed will be treated as if in attendance).
- VII. No part of the net earnings of this organization shall be used for the benefit of, or be distributed to, its members, officers, or any other private persons, except that the organization shall be authorized and empowered to pay reasonable debts incurred in the furtherance of the purposes set forth in Article II. No substantial part of the activities of the organization shall be the carrying on of propaganda, lobbying, or otherwise attempting to influence legislation, and the organization shall not participate in, or intervene in (including the publication or distribution of political statements) any political campaign on behalf of any candidate for public office. Notwithstanding any other provisions of these articles, this organization shall not, except to an insubstantial degree, engage in any activities or exercise any powers that are not in furtherance of the organization.

- VIII. Funds for the publication of informational, conservational, and educational materials shall be secured through donations, primarily from members of the organization, and membership dues. The results of scientific research conducted by the organization shall be published and distributed as directed by the Executive Committee. Upon dissolution of the organization, all funds and assets remaining after payment of all liabilities shall be donated to the National Speleological Society, Inc. or other non-profit organization dedicated to the conservation and preservation of caves and other features of nature.
- IX. The publications of this organization, in furtherance of the purposes set forth in Article II, shall be distributed without charge to members of the Organization, to the National Speleological Society, to the United States Geological Survey Library, and to any other library, or to any branch of the Oregon State Park Service, the Washington State Park Service, the United States Forest Service, or the United States Bureau of Land Management, as directed by the Executive Committee.

BYLAWS

I. Elections:

- A. Who may vote: Any Voting Member of the Oregon Grotto (See Constitution, Article III, E).
- B. Who may be elected: Any member of the Oregon Grotto who is eligible to vote in Grotto elections.
- C. Election procedure:
1. Nominations for officers may be made by any member eligible to vote in a Grotto election:
 - a. In person at the November General meeting.
 - b. In writing if received by an executive Committee member prior to the November General meeting.
 2. The order of nominations and voting shall be: Chairman, Vice-Chairman, Secretary, and Treasurer.
 3. The Executive Committee shall mail ballots to the eligible Voting Members in reasonable time for a mailed return to any Executive Committee member prior to the December General meeting.
 4. The counting of votes shall take place at the December General meeting, using the ballots received by mail, and those ballots submitted in person at the December meeting.
 5. The candidates receiving a plurality of votes are elected. In the event of a tie, it is the responsibility of the Executive Committee to cast the deciding vote.
 6. The election results are to be announced at the December General meeting.
- D. Term of office: Elected officers will start their term of office on January 1, following the election, and will end their terms on the following December 31.

II. Dues:

- A. Dues in the Oregon Grotto are paid in advance and shall apply for a period of one year.
- B. Membership dues shall be payable on each anniversary of the date the chairman signs a member's application form, following its ratification by the Executive Committee.
- C. Members in arrears more than ninety days after their anniversary date (due date) will be dropped from the Grotto.
- D. Former members in arrears less than one year will be reinstated upon payment of dues, however:
1. Their original due date will apply.
 2. Dues will not be pro-rated.
 3. Exceptions to these rules must be arranged with the Executive Committee in advance (Armed Forces, etc.).
- E. Former members in arrears more than one year may only be reinstated as new members.
- F. Dues rates shall be determined by the Executive Committee, with any changes to be announced at a General meeting.

III. Membership requirements:

- A. Applicant must submit to the Executive Committee a completed Oregon Grotto Membership Application Form, endorsed by any Voting Member of the Grotto. The Executive Committee will announce the application at the first subsequent Executive and General meetings.
- B. To obtain Regular membership status from Provisional, an applicant must attend at least four functions of the Oregon Grotto, two of which must be General meetings, and one of which must be a cave trip with a minimum of three Oregon Grotto members in any voting membership category.
- C. When Bylaw III, B is fulfilled, the Executive Committee shall vote on the application. If it is approved the applicant becomes a Regular Member or Associate Member.

IV. Membership Categories:

- A. Provisional Membership may be granted to a new applicant upon payment of dues and receipt of his application. The membership status may be kept indefinitely upon payment of dues annually. Applicant may apply for regular membership status upon fulfillment of the requirements and review and acceptance by the Executive Committee after remaining in the Provisional Status for six months. The Provisional Membership requirements

may be waived by a unanimous vote of the Executive Committee.

- B. Regular Membership may be granted by the Executive Committee to members of the NSS who have completed their Provisional Membership and fulfilled Bylaw article III, B.
- C. Associate Membership may be granted by the Executive Committee to applicants who are not NSS members and who have completed their Provisional Membership.
- D. Family Membership may be granted to applicants when a member of their immediate family is an Associate or Regular Member, and when they have completed their Provisional Membership.
- E. Subscribing Membership may be granted to applicants who wish to receive publications, but who are unable to attend meetings. This category carries no voting privileges and may be chosen instead of Provisional Membership.
- F. Honorary Membership may be granted to nominees who have been approved by the Executive Committee.

V. Expulsion of a member:

- A. Members may be dropped or expelled from the Grotto by a two-thirds vote of the Executive Committee for the following reasons:
 - 1. Wilful misuse of Grotto property.
 - 2. Wilful disregard of his own or the safety of others on Grotto sponsored trips.
 - 3. Conduct detrimental to the Grotto and its purposes.
- B. Any member subject to expulsion may demand and will be granted a personal hearing before the Executive Committee.
- C. Voting membership will automatically be changed to Provisional when the member holds or accepts a voting membership status in any other grotto in Washington, Oregon, Idaho or California.

SAFETY NOTES: CHEST HARNESS FAILURE, OR, HOW NOT TO DESIGN A CHEST HARNESS

by Dean Paul Kenty NSS 19944

In early July I was in Grueling Cave, Vancouver Island. While negotiating the lip of a pit my chest harness, a homemade job, ripped apart. I was not in immediate danger, though I took assistance in getting up.

This cave will probably soon become infamous for its muddy crawls between the pits as well as for its formidable lips. It was on the third pit, a mere 17-footer, that I put my stitching to the test. The rope was rigged low, contacting the rocks for quite a length before turning downwards, at which point it hung free. There is limited space to thrash about near the lip, as the passage constricts immediately to a crawl, and the ceiling is spotted with soda straws. Getting my chest box, a Bluewater box, a rather bulky type, over the lip proved next to impossible for me. I found out that in the struggle between the rocks and my leg and back muscles, the chest harness was clearly the loser.

I immediately realized that my harness design (see fig.1) allows such stress to be transmitted to the stitched joint because the chest straps cross in the back and become shoulder straps. I think a better design would be a continuous strap encircling the torso, and shoulder straps separate, functioning only to hold the chest strap in place, with appropriate buckles. I was also using a Gibbs ropewalker system, so I avoided the problems experienced by one other member of the party. He had difficulty in sliding his Jumars up the rope as it lay pressed to the rocks of the lip. Of course all you Jumar cavers out there have to learn to put up with this kind of inconvenience, while we Gibbs ropewalkers just step right up. I exited the cave without incident, ascending two more pits handily enough with 1 inch tubular webbing and a carabiner for a chest harness. My design

might have held up if I had used heavier thread and/or rivets at the joint.

USING A DOUBLE ROPE TO NEGOTIATE A LIP

This lip would have been a piece of cake (yep, that mud is downright tasty after a long hard day grunting and

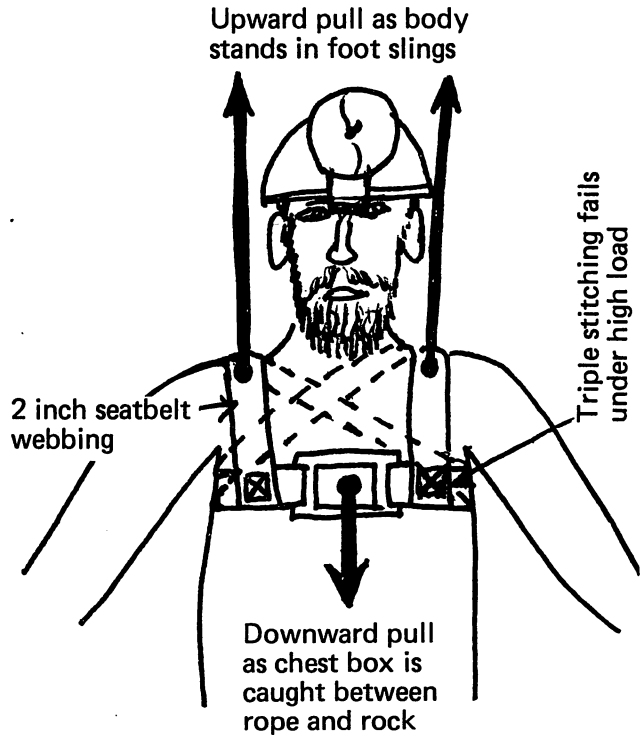


FIGURE 1

groaning—like frosting on the cake) had a double rope been used. A short second length, tied to the same anchor, or simply the top end of the main rope, can be dropped just a few feet over the lip; you can clip one ascender into the second rope (don't unclip your safety) and step onto that one. Then move up your ascender on the first rope, now unweighted. Now you step back to the first rope while you move up your ascender on the second rope, etc. This technique of switching from one rope to another could be a bit 'airy, as they say, 180 feet

off the bottom, and is better suited to Jumars than to Gibbs, which are harder to attach and detach. If there is ample rope, the entire drop could be rigged double, thus eliminating the need to dumble around with your ascender near the top. However, on a drop over 50 feet or so, the stretch differential between the two ropes would probably be too bothersome to make full-length double rigging worthwhile. Ideally, this could be practiced in a more benign environment, say, on a warm, dry cliff with blue sky above.

SMITH'S PIT: SPELUNKING ON THE RIFT ZONE

by Craig Skinner

The Northwest Rift Zone of Newberry Volcano is a narrow, 20-mile long zone of *en echelon* faulting and fissure eruptions on the northwest flanks of this massive volcano. The Rift Zone stretches from the shore of East Lake to Lava Butte near Bend.

Lying nearly parallel to one of the basaltic andesite flows of the Northwest Rift Zone is an alignment of two spatter cones and two spatter-rimmed cinder cones. These are found not too far from the Lava Cast Forest Flow and house a nice example of a vertical volcanic conduit, Smith's Pit.

This pit, first described briefly by Larson (1973), consist of a one and one-half by three-foot oval conduit entrance that quickly bells out into a small chamber at the center of the spatter cone. Vertical gear is issential for the easy vertical drop. The floor of the chamber, about 10 feet below the outside ground level, lies 23 feet below the entrance. Inside, there are numerous faint horizontal bench marks, remnants of different magma stands inside the spatter cone. The open conduit that leads to the chamber was clearly a chimney-like vent during the final stages of activity here.

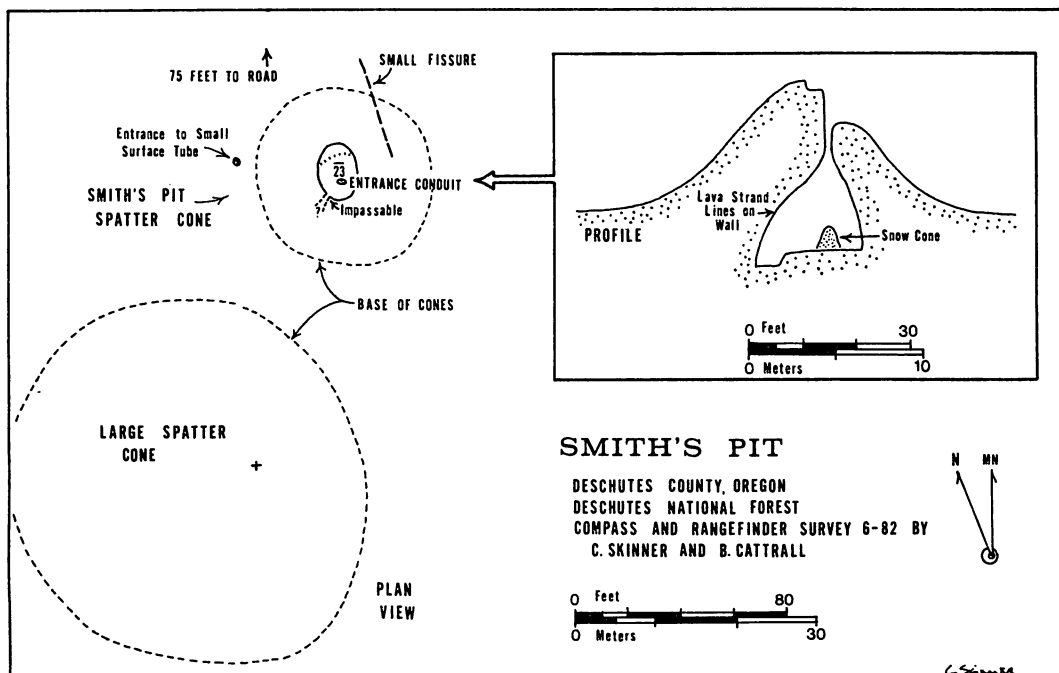
When I dropped by in June, below the entrance conduit was a four-foot high cone of snow. The snow was literally crawling with what looked like two species of crickets, many small beetles and spiders and a number of wasp-like insects about 2 cm long.

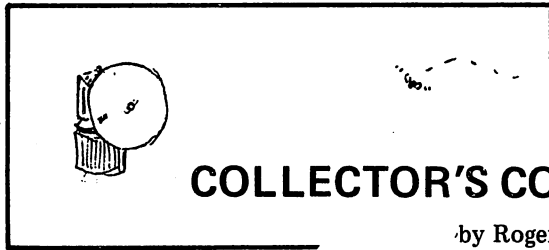
It's hard to tell if the activity at Smith's Pit is actually related to that of the Rift Zone, but my guess is that it probably was. The cones appear to be post-Mazama (younger than 7,000 radiocarbon years in age), but even that's a bit questionable. The lava flows at the Lava Cast Forest and elsewhere along the Northwest Rift Zone have been well-dated at about 6,000 radiocarbon years, which would certainly seem reasonable for the Smith's Pit alignment (Peterson and Groh, 1969).

References

Larson, Charles V. 1973. Bend Area, April 14-15. *Speleograph* 9:94.

Peterson, Norman V. and Edward A. Groh. 1969. Ages of Some Holocene Volcanic Eruptions in the Newberry Volcano Area. *Ore Bin* 31:73-87.





COLLECTOR'S CORNER

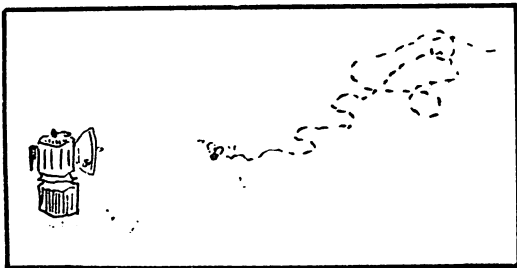
by Roger Silver

"It's a pipe for smoking dope." I let the man at the flea market say and think what he wanted because he was offering it to me for just \$3.00. But in fact, the gas it produced was a lot less exotic and far more useful. I found it in a box of junk under a table, and it was hard to keep a straight face as I intently listened to the man's misconception of a BRILLIANT SEARCHLIGHT side generator. As he talked I continued to fumble through the box until I found the head lamp unit, paid him his \$3.00, then told him that both pieces were one.

In the same flea market, sometime later, I noticed a Butterfly cap lamp top in *bad* condition for \$5.00 (\$4.95 more than it was worth). I explained to the man that Butterflies were not antiques and that piece of scrap brass did not hold any value. Once a week I would stop at his table, FONDLE the lamp, then explain why it was worthless. After 2 to 3 months of visiting his table, one day I arrived, picked up the lamp and looked at it. The man behind the counter immediately snatched it out of my hands, threw it into a paper sack, handed it back and said he never wanted to see another carbide lamp again. PERSISTENCE PAYS OFF AGAIN!!!

There was the time in Tombstone, Arizona that I bought a carbide bicycle lamp. After making my purchase the man laughed and told me I drove 1,400 miles to buy a lamp he acquired in Portland, Oregon.

The situations I just described are not unique to lamp collecting. In fact, each lamp has its own story, and on occasion it could affect its value. I once saw a lamp go at a highly inflated price; not because of the rarity of the lamp, but who owned it. I especially like lamps that have been altered to fit a special need. I have a Guy's Dropper with a Model A reflector on it, and another Dropper with a neat little homemade handle soldered on the back.



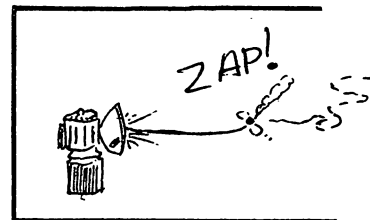
Now let's suppose you find a little treasure at some flea market; now what do you do? First examine the lamp carefully to see it has all the working parts. The chances are good that there will be carbide in it. DON'T dump it out on the table, it just might not be appreciated. After

getting home you should dump the carbide. Dean Paul Kenty designed a really neat tool for removing stubborn carbide without damaging the bottom (see *The Speleograph*, Nov. '82, page 137).

If the bottom will not remove there are several things you can do. You could spray penetrating oil at the threads, wait a few minutes then attempt to remove the bottom. If that doesn't work you could attempt to remove the gasket with a sharp instrument, being careful not to damage the lamp or your fingers. No luck yet? Spray penetrating oil again on the threads then place the lamp in your home freezer for a few days and that should do it. Now you can unscrew the bottom while it is still cold. If all that fails try liberally smearing the entire bottom with Vaseline Petroleum Jelly, then stick it in a 1/2 pint milk carton, then fill the milk carton with plaster of paris. After it's hard, you should be able to remove it by unscrewing the top from bottom. After you unscrew it, carefully chip away the plaster. If it doesn't unscrew then you've been, "and you can still throw it in the garbage," or sell it to me.

Miners had a unique way of getting stubborn bottoms off lamps, they just closed a door on the bottom, then twisted the top off. I have a few bottoms that have seen a door jamb or two. You can repair them with special tools you can make, but I like square bottoms; I think they have character.

With the bottom off you can clean up the lamp with soap and water and a soft brush. Then check the bottom by holding it up to a light and look through it, if you don't see any holes or cracks the bottom is most likely good. Fill the top with water and check the valve to see if it works. Can you turn the water on to a stream? Can you shut it off? If the water won't shut off ask me some time how to fix it; maybe I'll tell you. Cleaning out the gas tube is easy; then ream the tip, replace the felt and gasket, and you have a carbide lamp that WORKS, and just for a few dollars.



Now what do you do with it? Well you could use it; that would be nice. Or if you intend to collect them you might give it some kind of number, that may be important if you have say 300 of them (in which case you don't need to read this because you know more than me). Don't engrave on the lamps. Some collectors have and they all have been sorry ever since. I used to use those sticky labels, but after awhile they become hard to remove, and they leave a mark. I now use little tags connected to strings. If I decide to remove them the lamp is never damaged. One thing never, NO NEVER put a carbide lamp in a box!! Carbide lamps like to be out in the open where you can look at and admire them, and maybe wonder how anyone could ever smoke anything in them. And remember, it's better to light a single carbide lamp than to curse the darkness.

SKELETON CAVE No.2

Initial survey, June 29, 1982 by Vi Allured, Corraine Smith, Dennis Glasby.
 Follow-Up, May, 1983 by Chuck O'Donnell, Julia Volmer.
 Drawn by Dennis Glasby, July 8, 1983.

This cave is a large surface tube whose floors are covered with 2-3 feet of sand. The roof thickness varies between 3 and 10 feet. The cave is downslope to the north-west and follows the slightly sloping contour of the land. Total tube length is about 500 feet.

The second Skeleton Cave has been known for a while, so during the 1982 NSS Convention, one of the field trips stopped at this small cave—about four miles from its bigger brother. After a little digging and exploring, a member of the group found a new side passage. It has been missed all these years because you have to crawl through a rat's nest, then down a crawlway; to walking passage. Other digging combined with this new passage almost doubled the cave's length. The survey work was started by members of the convention field trip and finished in May of 1983.

Dennis Glasby
 15 July, 1983

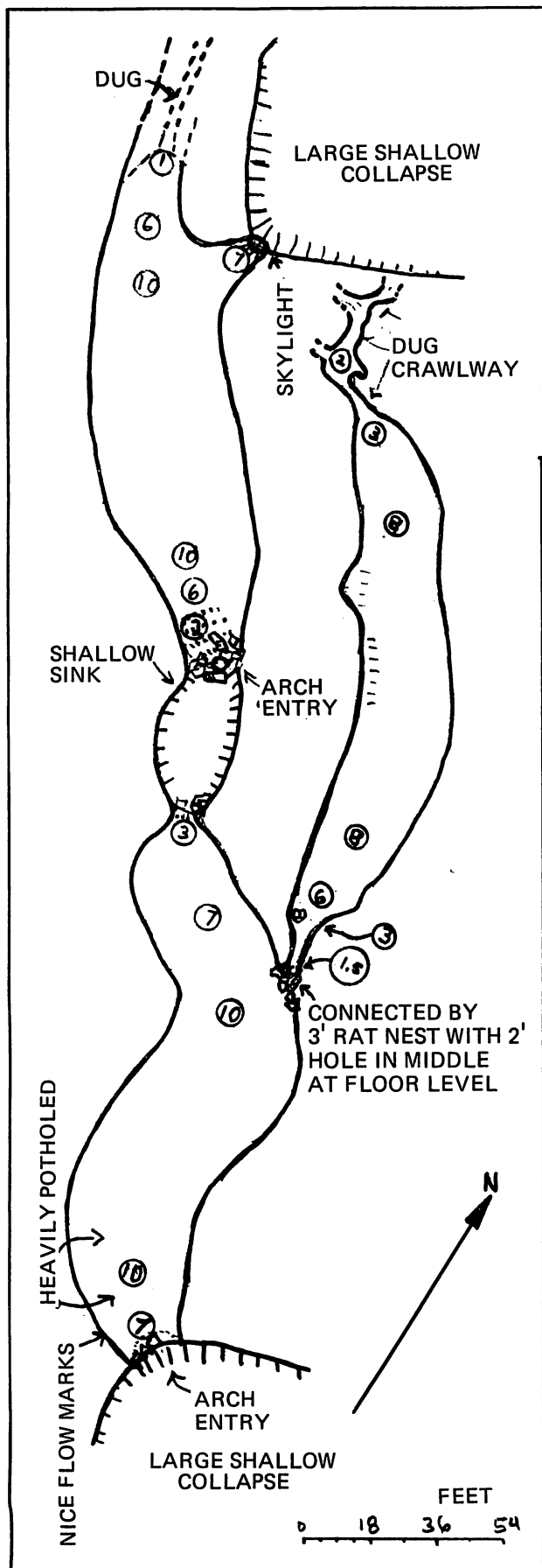
NORTH SIAH CAVES REVISITED

by Charlie Larson

Two caving "functions" in less than a month has to be some sort of record for Jo and I recently. Nevertheless there we were, a week after the NSS Convention, on a caving trip west of Bend, near the North Siah Caves. We met Ed and Kathy Block, who had arrived a day earlier, at the infamous "Siah Camp." This was about midday Wednesday and together we set off for Cleveland Ice Cave. Unfortunately, we lacked Rick Pope's instructions for finding the cave and the landscape and roads had changed so much in the ten years since we were last there that we were unable to find it.

Next day (Thursday) we visited the lower Siah caves; in the process noting that there was more ice in Icebox Cave than was reported last Labor Day. Ed discovered that the low crawl off the cave north of the collapsed pond (see "C" on map) led to an astonishingly large but low, sandy floored cave. Later that day we spent some time looking for an "Ice Cave" under one of the many red Xs on our copy of a cave location map. We didn't find it. Dennis Glasby and Chuck O'Donnell arrived Thursday evening.

Blocks had to return to Portland Friday and after they left we went with Dennis and Chuck to Wuksi Butte and



Parker Cave; they to dig, we to survey the ice. Both endeavors were moderately successful. The perennial ice in Parker Cave is in recession, but there is not enough data as yet to determine if it is a long or short term phenomena. On the way back to camp we stopped to look for the Super-Rat Tube reported by Lee Gilson. We didn't find it but by then it had clouded over and we had a first class thundershower of hailstones up to ½ inch in diameter and larger.

By Saturday Chuck had decided that the entire red X thing was a gigantic hoax. Nevertheless, we set off in search of another red X north of Sheridan Mountain. We gave it a good try but turned up nothing more than a disappointingly small series of surface tubes. On the way back to camp we visited Cleveland Ice Cave (Dennis

knew how to find it. Because of the threat of another thunder storm we visited Cleveland only briefly, but nevertheless long enough to note that yesterday's hailstones were perfectly preserved on the ice floor of the cave where they rolled after falling through the entrance.

John and Vada Slabic arrived Saturday evening and we spent a leisurely Sunday morning with them while Chuck and Dennis visited the lower Siah caves. Later we visited Lavalands, then the High Desert Museum where Dennis and Chuck caught up with us. Later we all did our best to insure a profitless day for the Shakeys Salad Bar in Bend before going our separate ways. Jo and I stopped for the evening at Santiam Pass where we took a quick look at the McKenzie Pits (Impressive!).

TRIP REPORT: VANCOUVER ISLAND

by Dean Paul Kenty NSS 1994

Lopez Island, in the San Juans, the Banana Belt of Washington State, was the jumping-off point for a very pleasant vacation for me. I had been working for five weeks within view of the Olympic Mountains and Vancouver Island, doing finish carpentry on a "Summer cottage." Finding myself with an itch to see some of the caves across the strait, I wasted no time getting nostalgic about my erstwhile home/job site. I hot-footed it down the ferry landing with just five minutes to spare to catch the boat to Sydney, Vancouver Island. I arrived in Victoria in mid-afternoon, my NSS Members' Manual, that Michelin Guide of traveling cavers, in hand. Within hours, I had arranged a trip to Cascade Cave and initiated friendships with a couple of other cavers. A good resource, that manual.

Sunday 26 June, Brad Vogler, of Victoria, and I drove northward, towards Port Alberni, to Cascade Cave, a popular, moderately decorated cave gated by the Vancouver Island Cave Exploration Group (VICEG). We rappelled down two pits, continued through small passage, free-climbed down Prospector Pit and Double Trouble, and came upon Bastard Crawl. "An aptly named passage," I thought at the time; but it paled in comparison to the crawls I encountered the next weekend. We rested briefly in a room full of 'tites and 'mites, which was once the focus of a VICEG project to clean mud off the formations. A bucket of water and a brush remain. Most of the cave passage is stooping or crawling size; there are a few two-or-three-grunt squeezes. We halted our sightseeing at the Sand Room, though I did nose around a bit more. I climbed up one waterfall to where it pinched out; I explored downstream also to the point where I would have had to take a bath to proceed farther. Beyond this lies Thunder Pit and a sump. Quite a sporting cave. I was surprised to hear that many novice groups are led through this cave, not an easy one.

Well, my Cascade tour was small potatoes compared to our exploits the following weekend.

During the week, though, I returned to the mainland for some above-ground recreation. I got my first look at the Coast Mountains of British Columbia, spectacular as

they rise from the sea. In Garibaldi Provincial Park, near Whistler Ski Resort, I hiked in and climbed Overlord Mountain, a snow slog most of the way to its 8,641-foot summit. I was climbing in considerably on compass bearings. A pleasant climb, nonetheless.

I headed back to Vancouver Island via the Nanaimo ferry. I must say, I found ferry travel in B.C., as well as the San Juans, very enjoyable and relaxing. I was lucky enough to have calm seas and sparkling weather on every crossing. What a pleasure to sit on the sun deck and watch the magnificent scenery!

I met up with a group of Victoria cavers at Bill Bourdillon's in Campbell River for a two-day trip to the Thanksgiving Cave area in the far northern part of the island. Present were: Richard Baldwin and Pat Shaw, my hosts from the previous weekend, Betsy Day, a complete novice who sailed through the cave's rigors as if she ate six of them every morning before breakfast, and Trevor Van Atta, all from Victoria; Bill B.; and myself. Pat's plans to dive the probable resurgence of Thanksgiving Cave were ditched when the other divers cancelled. Bill led us to another cave nearby, as yet unnamed, with potential for hooking up with Thanksgiving. It's now a 4-6 hour trip into the going part of Thanksgiving and they need a new entrance badly. This new cave, though, proved to be definitely *not* the type of back door they were looking for. After we got out, one of them characterized it as "the grungiest cave on the island." Lucky me. Lucky Betsy, for her first cave. Read on...

FRIDAY 1 July 1983, Canada Day

A thirty minute bushwhack up steep karren, covered by old-growth forest replete with nasty devil's club, brought us to a small limestone outcropping. The entrance pit is a pleasant, clean, 90-or-so-foot drop. At the bottom we split into two survey teams. Bill told us what he knew of the cave and sent Pat, Richard, and myself, with three ropes, in the purported direction of the pit series. Bill led Betsy and Trevor down the other passage to survey. Our party became suspicious of Bill's directions when we noticed we were going upstream, but we continued

surveying in consistently low, muddy passage. We did encounter a series of domes 20–60 feet high. I climbed two of them and found no leads; they weren't taking wind anyway. We managed to get about two or three hundred feet of this ghastly route surveyed before turning back, after four hours. We found no pits, but we sure got lots of exercise pushing those damned ropes through the crawls.

Back at the entrance pit, the other party regaled us with stories of more nasty muddy crawls, and—you guessed it pits. I said jokingly, "Well, Bill, we had a rope long enough, but there ain't no passage high enough ta hang ya!" So our destiny was clearly to return the next day and survey down the pit series. We exited and headed for the VICEG cabin.

Betsy and Trevor had gone ahead and lit the wood cookstove, and as we walked in the door we were blinded by an eye-watering haze of wood smoke. Later, after the stove had heated up and drew a proper draft, the smoke cleared, but we had another eye-watering experience, some delicious chili with hot red peppers. *Ja*, pass the "i Ahua!" hot sauce! Our eyes were moistened for the final time as I played some very sad tunes on the accordion.

SATURDAY 2 July 1983

Next morning we spruced up the cabin, suffering from months of abuse and neglect, and once more trundled up the mountain side. Once in the cave we soon found the correct passage leading to the pits. Pat, Richard, and I pushed ahead and rigged while the others mapped. We discovered that the crawls between the pits were possibly even more grim than those of the day before. At the lip of one of the pits you had to slither out of the crawl, feet first, to get on rappel, staying low to avoid several soda straws. I felt honored to be the first one to drop the fourth pit, the previous limit of exploration. Here, at the bottom, I found a nice area of rare sand castles. Pat and I found the continuation of the passage and I led on through a long rift squeeze, with helictite obstacles; up the rift's muddy wall using a lower-leg jam; into a packs-off squeeze (I'd rate it 5 1/2 grunts); thence into larger crawlways, all mud-coated. We were encouraged, though, that the passage was taking air. Finally I popped out into clean canyon passage big enough to walk in. I hollered to Pat, "get out your stopwatch; I'm going to do the hundred-yard dash!" The cave was getting bigger, and my excitement translated itself into whoops and hollers, which soon led to laryngitis; A few more grunts and we soon found ourselves at the lip of another good-sized pit.

We called a halt to exploration and rejoined the others. I found out just how muddy a caver and gear can get: after all available surfaces are coated they reach a stasis, or balance with the environment, and cannot pick up any more mud. The ropes were so muddy that my floating Gibbs had to be coaxed up the rope each step; Richard had to set the cam on his Jumars each step. After a while I simply got used to the taste of mud and the feel of mud all over. At the lip of the third pit my chest harness ripped apart (see article elsewhere in this issue), but otherwise the trip up and out was uneventful, just

grueling. A fine workout. It's a grungy cave indeed, but at least it shows promise and still goes. I wish luck to the VICEG folks in connecting with Thanksgiving Cave.

We all returned to Bill's in Campbell River that night; I rode with an old VICEG stalwart, Larry Tuttle, who dropped in on us to say hello. Next morning I cruised back south to Victoria to catch the Port Angeles ferry. Back in the U.S.A., I was just in time to cap a wonderful vacation by hearing the final evening's performances at the Festival of American Fiddle Tunes in Port Townsend. There was even an impromptu contra-dance which went till six in the morning (whew!) Ask me about it anytime and I will rave about the music there!

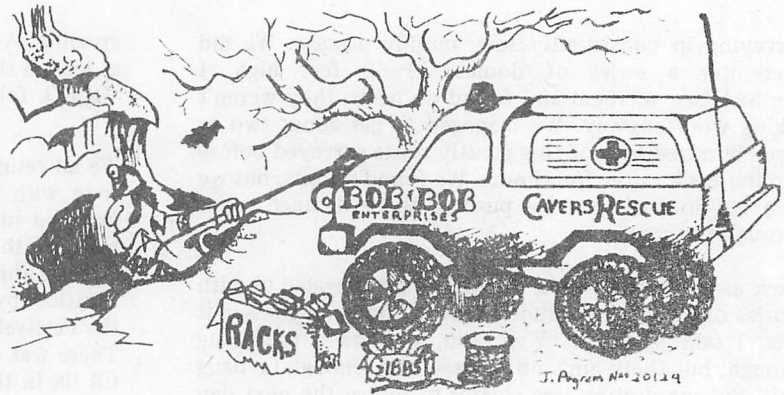
I was quite warmly received by the Vancouver Island cavers. They were very hospitable and eager to share their caves. Many thanks to all. I hope to return. A through trip of Thanksgiving, anyone?

UPDATE

I have recently been informed that this new cave is now 217.1 feet deep; we managed to get all of 686.5 feet of passage mapped. The passage is heading not toward, but parallel to, Thanksgiving Cave, it is heading farther down the mountainside. Its name is now Grueling Cave.

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