

February 1991

Alaskan Caver, Volume 11, No. 1, February 1991

Curvin Metzler

Follow this and additional works at: https://digitalcommons.usf.edu/alaskan_caver

Recommended Citation

Metzler, Curvin, "Alaskan Caver, Volume 11, No. 1, February 1991" (1991). *Alaskan Caver*. 80.
https://digitalcommons.usf.edu/alaskan_caver/80

This Book is brought to you for free and open access by the Newsletters and Periodicals at Digital Commons @ University of South Florida. It has been accepted for inclusion in Alaskan Caver by an authorized administrator of Digital Commons @ University of South Florida. For more information, please contact digitalcommons@usf.edu.

The **ALASKAN CAVER**

VOLUME 11

NUMBER 1

FEBRUARY 1991



The Alaskan Caver [ISSN 0735-0481] is the intermittent publication of the Glacier Grotto of the National Speleological Society. Copyright © 1991 by the Glacier Grotto. Materials not copyrighted by individuals or by other groups may be copied by other NSS Publications provided credit is given to the author and The Alaskan Caver and a copy is sent to the Editor (address below). Back issues are available from the President for \$1.00 each. Send articles, letters, news items, announcements, trip reports, cave surveys, drawings, photographs, and so forth directly to the Editor. Opinions expressed within are not necessarily those of The Alaskan Caver, the Glacier Grotto, or the NSS.

Membership is open to all interested in Alaskan cave discovery, exploration, description, survey, mapping, photography, hydrology, morphology, biology, geology, history, speleogenesis and other speleological processes, conservation, management, adventures, and the fellowship of Alaskan cavers. Dues are \$7.50 per year for the first member at a mailing address and \$1.00 for additional persons at the same address. If air mail is desired by overseas members, an additional \$10.00 is required.

Dues are due on January 1 and are sent to the Treasurer (address below) with the application/renewal form. Those paying for the first time after October 1 will be considered paid up for the following year. The year through which each member is paid is indicated on the mailing label. Meetings are held in the Anchorage area at 7:30pm on the second Wednesday of each month. Anyone wanting to have a local or special meeting for any reason should notify the President or a regional Vice President.

Officers	Name	Address	City	St	Zip	Home	Work
President	J Rockwell, Jr	2944 Emory St	Anchorage	AK	99508	277-7150	564-8267
V P North	David M Moll	P O Box 82044	Fairbanks	AK	99701	455-6578	474-6318
V P SCent	W Harvey Bowers	305 S Bartlett Cr	Wasilla	AK	99687	376-2294	373-2247
V P SEast	Kevin Allred	P O Box 376	Haines	AK	99827	via KHNS*	via KHNS*
Secretary	Sharon Dunaway	3440 W 86th Av #8	Anchorage	AK	99502	248-4037	248-4037
Treasurer	Sam Dunaway	3440 W 86th Av #8	Anchorage	AK	99502	248-4037	762-2171
Editor	Curvin Metzler	P O Box 100738	Anchorage	AK	99510	333-8766	333-8766
Asst Ed	W Harvey Bowers	305 S Bartlett Cr	Wasilla	AK	99687	376-2294	373-2247
NW Reg Rep	Dave Klinger	P O Box 537	Leavenworth	WA	98826	548-5480†	548-5880†
Prgm CoCh	P King & R Mays	1813 Bannister St	Anchorage	AK	99508	276-0138	564-5220
Pr Ch Asst	Mary Rose Clark	P O Box 2725	Palmer	AK	99645	746-3206	745-4813

* Messages may be announced to Kevin daily via radio station KHNS at (907) 766-2020

† The area code for Dave Klinger in Leavenworth, Washington is (509) (both numbers)

Cover: Rachael Mays and Philip King at Fern Grotto. Photo by Curvin Metzler.

Table of Contents

Spelunkers Tie the Knot at Fern Grotto	3
Technical Preliminary Report #9: Salmon Fry Cave (addn)	4
Technical Preliminary Report #10: Snow Hole	4
Technical Preliminary Report #11: Blowing in the Wind Cave	6
Technical Preliminary Report #13: Frost Pocket Cave	8
Technical Preliminary Report #14: Window Well	9
Technical Preliminary Report #21: Belittled Pit	12
Technical Preliminary Report #22: Pit on the Cutting Edge	13
Technical Preliminary Report #23: El Capitan Cave (addn)	14
POWIE V: A Note to Potential Participants	19

Spelunkers Tie the Knot at Fern Grotto

In mid-December, most of Alaska lies still, hibernating beneath a white blanket of snow in the cold, dark arctic. Meanwhile, in the 50th state, much of the Garden Island of Kauai hurries about, scurrying through the green canopy of vegetation in the warm, sunny tropics. The chain of volcanic islands of Hawaii makes a great hot spot, and not just in the geological sense.

During this past winter, a couple of members of the Glacier Grotto managed to escape some of the long Alaskan winter. They were fortunate to travel a few thousand miles due south from Anchorage, to the paradise of Hawaii. But for them this was not just another vacation, for it was also a very special time in their lives.

On Tuesday, December 18, 1990, Philip King and Rachael Mays were married at the Fern Grotto, near Wailua on the island of Kauai. The wedding ceremony was in both English and Hawaiian,

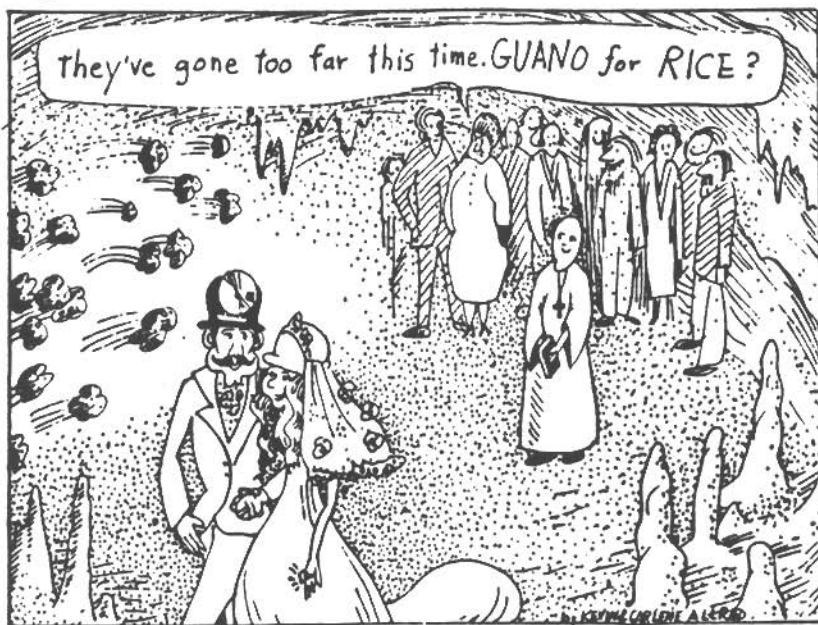
accompanied by music and song performed by the Smith Family.

Everything looked nice, and all seemed to go very well--the flowers, the costumes, the music, the photography, and the whole ceremony. But the following is an unconfirmed rumor concerning an episode where a few wedding arrangement details were not quite carried out to the fullest extent allowed by law.

[It is said that Rachael is quite fond of a certain pretty little white flower of the name anemone. Now although this type of flower is rather common here in Alaska, this is apparently not the case in the Islands--though there are certainly lots of beautiful flower species.

Philip was even thoughtful enough to request special floral arrangements which would include the favored white flowers. But between the lack of the desired flower and the abundance of more exotic Hawaiian species such as anthuriums, he had to settle for less-preferred options.

Being fairly sensitive to the desires of his new bride, Philip was rather apologetic about the incident. But Rachael was very understanding and not even a bit disturbed by the failed attempts. She simply looked around, noticed the showy ferns hanging from the grotto walls, and (pointing to them) responded with: "Oh, it's okay... with fronds like these, who needs anemonies?"] □



Salmon Fry Cave
Prince of Wales Island
Technical Preliminary Report #9
Addendum to Report #3
by Kevin Allred
November 13, 1989

Salmon Fry Cave was entered again in the 1989 season by Rick Bridges (Boulder, Colorado), who continued 30 feet beyond the previous sump of last year because of this year's low water drought conditions. It finally sumped again.

Julius Rockwell (Anchorage, Alaska) apparently took temperature readings both in El Capitan

Creek and the resurgence of the cave. He detected only a slight temperature difference, indicating a short travel underground.

It was then discovered that a portion of El Capitan Creek disappears just upstream from the cave. Thus, Salmon Fry Cave contains an underground portion of El Capitan Creek. The cave is located on private property. □

Snow Hole
Prince of Wales Island
Technical Preliminary Report #10
by Kevin Allred
November 13, 1989

Description

Snow Hole begins as a two-foot-wide grike (solution crack) located on El Capitan Peak in a largely bare and karsted Heceta Limestone slope. It was first discovered by Winfield Wright (Richmond, Virginia) and Evan Gehring (Casper, Wyoming) on July 27, 1989, while searching for caves during the cave inventory. They dismissed the grike as just another shallow one, not over perhaps seventy feet deep, as did several more of us in the cave inventory team as we later noted it along a main travel route to Blowing in the Wind Cave.

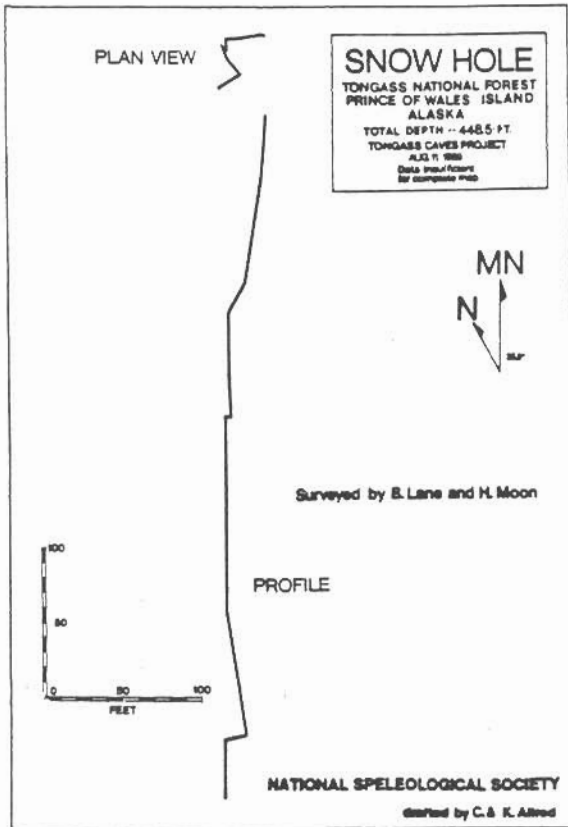
It was not until August 10, when Rick Bridges, believing it to be more like 150 feet deep, persuaded Buddy Lane (Signal Mountain, Tennessee), Neeld Messler (Chattanooga, Tennessee), and Hank Moon (Chattanooga, Tennessee) to

explore it. To all concerned, it turned out to be astonishingly deep and, when surveyed by Buddy and Hank on August 11, became the third deepest pit in the United States, at -448.5 feet.

The pit is cold and contains some snow. Partway down is a division of the fissure-shaped drop, with one branch continuing unexplored. More survey work is necessary to complete mapping.

Management Recommendations

Like El Capitan Pit and other shafts in the area, Snow Hole is a potentially dangerous cave and should only be entered by trained and properly-equipped people. Because of the hazardous nature of the cave, its location should be restricted from the general public. Otherwise, this cave is not within a potential logging area and is remote to travel. □



New Monthly Meeting Place for the Glacier Grotto Southcentral Region

The Southcentral Region of the Glacier Grotto has voted to hold regular monthly meetings, open to all grotto members and visitors as well. These meetings will be held at 7:30pm on the second Wednesday of each month.

The meetings will be held at the offices of Stewart Title, Suite 110, Calais I building, 3201 "C" Street, Anchorage. The building is located on the corner of 32nd and "C" streets; it is the northernmost of the Calais buildings.

Each region of the Glacier Grotto is encouraged to organize regional meetings; contact your regional vice-president for local information.

The NSS News 48(8), August 1990, carried the names of more Glacier Grotto members than ever before. On page 203, Carlene Allred received an Honorable Mention in the Cartographic Salon for her map of "Kicking Horse Glacier Cave, Garrison Glacier, Southeastern Alaska" (The Alaskan Caver 9(2), April 1989, cover); Ann Strait was one of the judges. In the Graphic Arts Salon, the cover of The Alaskan Caver 9(3), June 1989, won a Merit Award in the photographic category, for the striking photograph "Looking out from Tidewater Sea Cave" by Mike Mauser. On the next page, in the Slide Division of the Photo Salon, Norm Thompson received three Merit Awards, an Honorable Mention, and had thirteen slides accepted for showing. On page 206, Buddy Lane was made a Fellow of the Society. On page 208, it was pointed out that Marion O. Smith holds the Climbing Contest World Record for both the 30-39 and the 40-49 age groups of the Men's Classic 3-Knot 120 Meter category. This year Miles Hecker came in third in the 40-49 age group of the Men's 120-Meter Mechanical category.

On page 213 is mention of the discovery and exploration of Macho Peekaboo Cave by Kevin Allred, Steve Lewis, and Curvin Metzler. Carlene Allred's map of the cave and the issue of The Alaskan Caver 10(2), April 1990, in which the map and articles appeared are also mentioned. And finally, on page 216, we see that Educational Funds for Speleological Research may be available from Winfield G. Wright.

If not already receiving this publication, the reader is urged to join the NSS and find out what is going on in the world of caving!

Blowing in the Wind Cave
Prince of Wales Island
Technical Preliminary Report #11
by Kevin Allred
November 13, 1989

Description and Speleogenesis

This cave was discovered on July 27, 1989, by Evan Gehring and Winfield Wright, as they were searching for caves during the cave inventory. The entrance begins from a horizontal boulder-choked ravine which appears to be a remnant of a cave passage long since eroded away by glacial action, weathering, and solution. The first portion of the cave follows along the lower contacts of noncarbonate, apparently basaltic sills, which are typically some two feet thick but sometimes more or less than this. There can be no question as to the determination of cave passage by these sills. In many parts of the cave, the floors are littered with breakdown blocks from sills which collapsed after solution of the limestone cavities. There were two different ideas expressed by members of the cave inventory team as to the speleogenesis of these initial passages:

1. The sills may contain iron pyrite which can produce sulfuric acid, thus increasing the rate of corrosion in the adjacent limestone. (Wright)

2. Water high in carbon dioxide percolates down through interstices to the nonpervious sill and flows along the top surface until reaching a fault or joint where major leakage through the sill takes place. Close inspection of the upper contact surface of the sill and Heceta Limestone within the cave revealed several tiny drain holes, each about one millimeter in diameter in the

limestone at one location. These holes would serve as conduits for drain water into the cave system. Cave passage would tend to follow along major drain areas where phreatic mixing corrosion results from incoming water. (Allred)

Other interesting features of this cave are the pits which plummet below the sill-controlled horizontal levels. The first pit is located through entries fifty and 100 feet from the cave entrance. This pit could have been formed by fluctuating water levels or have some other origin. It is only partially explored and estimated to be at least 200 feet deep. Further in the cave, past several small ten- to thirty-foot-deep pits, the horizontal passage intersects a steeply-sloping canyon containing a small stream, which seems to extend all the way to the surface some 200 feet above judging from air flow. It is possible to get some forty feet upwards into this breakdown-clogged canyon before access becomes impossible because of the boulders. But downstream, the canyon is clear, though muddy, and has been surveyed for 250 vertical feet. It continues on with some additional small tributaries of water entering. This was named "Goes Canyon", and extensive vadose features abound here, such as the canyon shape itself, fluting, and stream slots.

Wind in the Cave

It has not been determined if the horizontal portion of the cave continues beyond the canyon. But near this intersection at the

BLOWING IN THE WIND CAVE

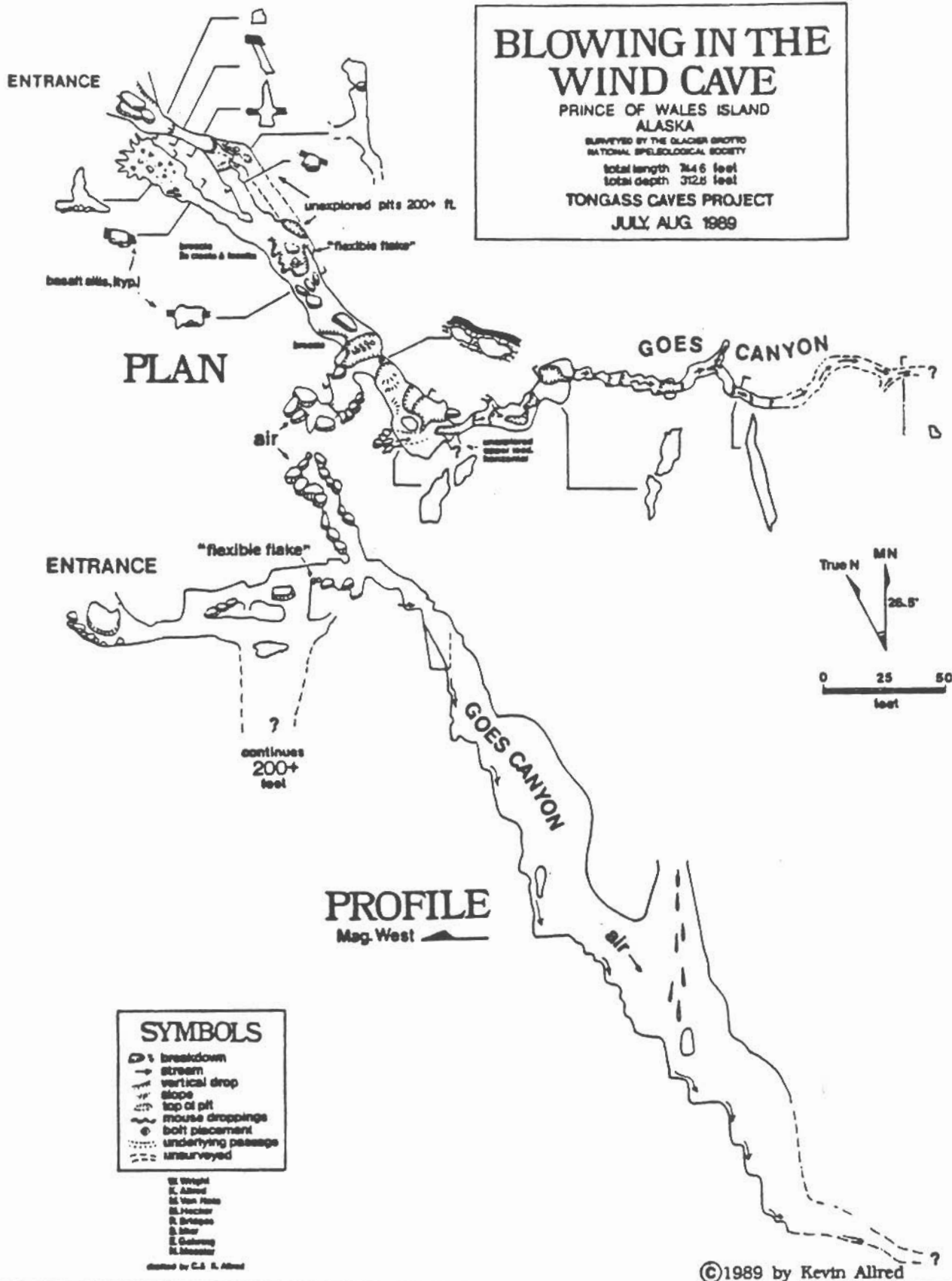
PRINCE OF WALES ISLAND
ALASKA

SURVEYED BY THE GLACIER GROTTO
NATIONAL SPELEOLOGICAL SOCIETY

total length 7446 feet
total depth 3125 feet

TONGASS CAVES PROJECT

JULY, AUG. 1989



bolt placement (see map), the cave was found to breathe in and out in a sporadic manner. At one point the breeze cycled in about ten minutes, but then did not change again for some time. The breathing here could be due to an interchange between a chimney effect from the upper choked canyon and the separate dynamics of Goes Canyon. It was suggested by some that wind direction outside the cave may cause the breathing, or this part of the cave could experience mere eddying between a downward draft of Goes Canyon and the chimney draft between the upper canyon and the entrance.

Dye Tracing

On July 30, Winfield dumped a red dye into the stream of Goes Canyon. On August 24, Kevin collected dye traps at the Turn Creek bridge and below a large resurgence on the east side of El Capitan Peak. It appeared that there was a trace of dye from the Turn Creek trap but nothing is certain until the traps are tested by Winfield, who promised a personal report to the Forest Service.

Biology

A gnat-like insect was collected near the entrance of the cave, but it was unfortunately lost down Goes Canyon. Winfield reported mouse droppings from a side passage near the entrance.

Safety

In addition to the usual hazards associated with caving in a subalpine area, this cave contains more than the normal amounts of unstable breakdown. Goes Canyon has many short drops, requiring 500 to 600 feet of rope to reach its furthest explorations. A twenty-foot safety rope was rigged in a chimney near the entrance for use as a handline.

Management Recommendations

The location of this cave should be restricted from the general public for safety purposes. Since it is subalpine, there can not be any logging impact, unless the resurgence is damaged in some way. □

Frost Pocket Cave
Prince of Wales Island
Technical Preliminary Report #13
by Kevin Allred
November 14, 1989

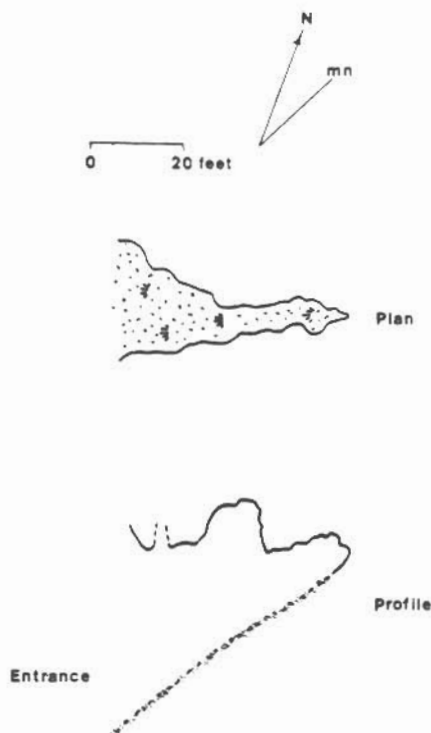
Description

Easily seen from the road (1598 300) on the west side of El Capitan Peak, Frost Pocket Cave is an obvious hole in the base of a cliff of Heceta Limestone. Investigated because of its size, this cave was formed by frost action. It contains a very small

seep at the end some 35 feet in. The cave contains nothing of interest and no sign of bones or anything else.

Management Recommendations

There is no need for any special management or location restrictions for this cave. □



FROST POCKET CAVE

EL CAPITAN PEAK
TONGASS NATIONAL FOREST, ALASKA
Sistecos & tape survey Aug. 15, 1989 K. Allred
TONGASS CAVES PROJECT

Depth Calculations

The table below gives depth estimates in feet from soundings in seconds, correcting for the delay of sound at 1100 feet per second but not air resistance.

1.0	16	4.6	300
1.2	22	4.8	325
1.4	30	5.0	351
1.6	39	5.2	377
1.8	49	5.4	405
2.0	61	5.6	434
2.2	73	5.8	463
2.4	86	6.0	493
2.6	101	6.2	524
2.8	116	6.4	556
3.0	133	6.6	589
3.2	150	6.8	622
3.4	169	7.0	656
3.6	188	7.2	691
3.8	209	7.4	727
4.0	230	7.6	763
4.2	252	7.8	800
4.4	275	8.0	838

Window Well

Prince of Wales Island
Technical Preliminary Report #14
by Kevin Allred
November 13, 1989

Description

Located on El Capitan Peak, the entrance to Window Well was first noticed by Evan Gehring and Mike Van Note on August 10, 1989. It was surveyed later in the day by Mike and Kevin Allred. In Heceta Limestone, Window Well is one of many similar shafts and fissures in the vicinity and is just up-slope from 450-foot-deep Snow Hole.

The top of Window Well's main shaft is clogged by large, unstable-looking boulders; but a different horizontal passage intersects the shaft some 25 feet

down and is accessible from an adjoining pit forty feet deep.

Eighty feet down the initial drop, the first snow and ice is encountered. Another drop of some sixty feet may be reached by carefully working along the sharp crust of snow to the east. Here the exploration and survey ended because of extremely cold and wet conditions. There is a potential danger of falling and becoming hopelessly wedged in the narrow gaps between ice and limestone walls deep into the cave.

Over many years, snow has built up from unknown depths and

become compressed to form firn ice. It is possible that the firn ice has developed flowing glacial properties further down, but this is speculation. The cold air trapped each winter must be able to keep contact with the ice and rock to hold them below freezing. Thus, Window Well is a cold trap with no air drafts to remove the cold, heavy air of each winter. Total explored and surveyed depth is 194.6 feet. Surveyed length is 278.9 feet.

Safety Considerations

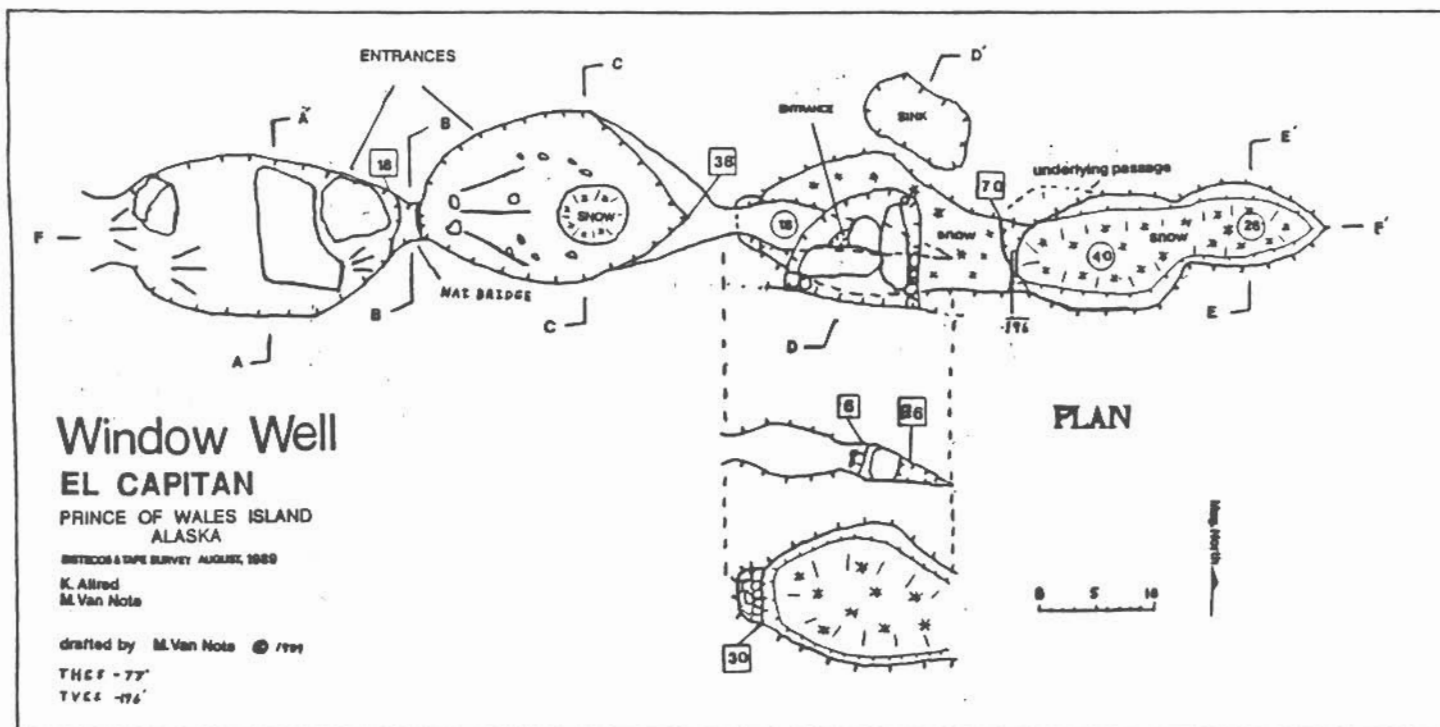
Pile clothing and water-resistant coveralls or dry suit should be used in this cave, along with other standard equipment and skills, to safely negotiate the drops. Cavers should be attached with a safety to the rope whenever on snow. Access through the boulder choke at the top of the main shaft should be avoided.

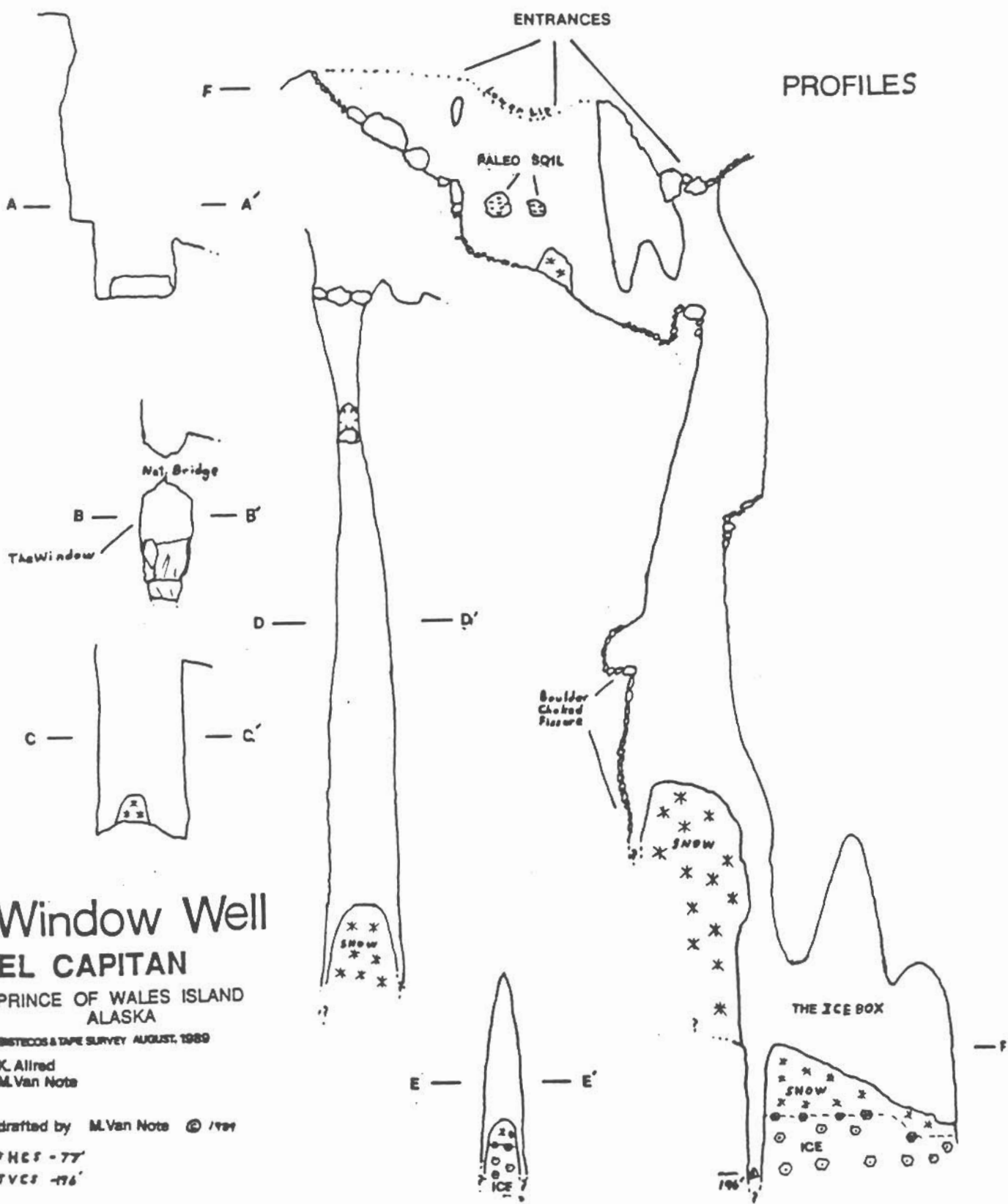
Management Recommendations

Potential value of Window Well is in studying the deposits to determine the paleoclimate of the area. First, the tremendous amount of ice in the cave could possibly be core drilled for its age and rate of deposition. This would obviously prove very difficult. Also, any animals falling into the shaft would have a good chance of being entombed within the ice and preserved.

Second, in the exploration of the cave, an interesting deposit was discovered just outside on a wall of the adjacent pit (see map). It appears to be the remnant of an old fill level of the pit which had become cemented with an unknown material.

It would be wise to restrict the location of this cave from the general public for safety reasons. In its subalpine location, no logging will occur. □





Window Well EL CAPITAN

PRINCE OF WALES ISLAND
ALASKA

SONOTECOS & TAPE SURVEY AUGUST, 1989

K. Allred
M. Van Note

drafted by M. Van Note © 1991

PHCS - 77'
TVCS - 176'

Belittled Pit
Prince of Wales Island
Technical Preliminary Report #21
by Kevin Allred
November 15, 1989

Description

Noted in a clearcut area on aerial photos by the Allreds, Belittled Pit was first found in the field by David Klinger on August 15, 1988. Located in Heceta Limestone, it is a total of 57 feet deep and appears to be joint-controlled, trending north-south. The pit is partially choked with logging slash, but much of the debris can be avoided by descending the northern end.

Some ten feet from the north side of the pit entrance is an adjoining sink containing standing water much of the year. There is some kind of resistant rock protruding up and separating the sink from the pit. David

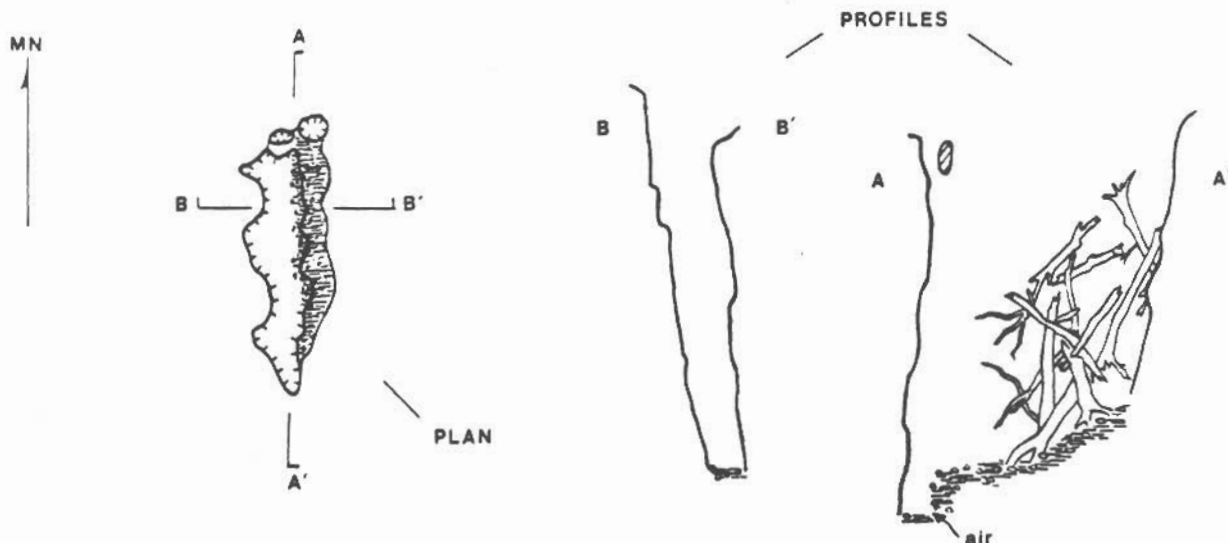
Klinger tested this rock in 1988 and found it to be carbonate. Belittled Pit was first explored and surveyed by Steve Lewis, Curvin Metzler, and Kevin Allred on August 16, 1989. The pit is plugged with wood and dirt, but does issue forth a slight draft.

Biology

A rough-skinned newt was found clinging to a wall near the bottom of the pit by Steve.

Management Recommendations

For safety reasons, the location of this cave should be restricted from the general public. □

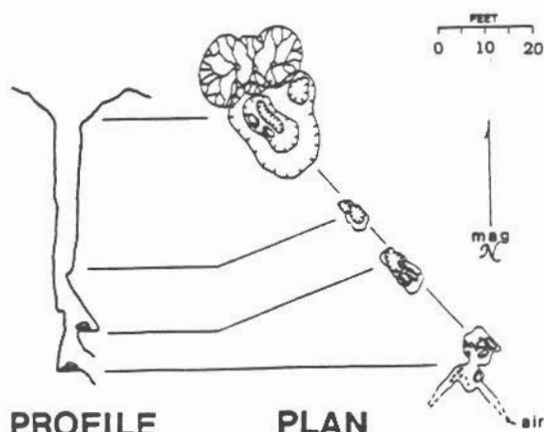


BELITTLED PIT

TONGASS NATIONAL FOREST, ALASKA
TONGASS CAVES PROJECT, NSS
sistecos & tape survey Aug 16, 1989 by
S. Lewis, C. Metzler, K. Allred

PIT ON THE CUTTING EDGE

NORTHERN PRINCE OF WALES ISLAND
ALASKA



TONGASS CAVES PROJECT
JULY 1989
surveyed by Jim Nicholls and Miles Hecker
map by Kevin Allred

Northwest Caving Association 1991 Annual Convention and Rendezvous of Cavers

Hosted by the Cascade Grotto of Seattle, the NCA 1991 Annual Convention will be held on May 24 through May 27 (Memorial Day Weekend). The location of this event is the Peterson Prairie Group Campground in Trout Lake, Washington.

Registration is \$6 (\$4 pre-registered), including campsite; guidebook \$8 (\$6 prepaid); barbecue banquet \$7 (\$5 prepaid). Contact: Jim Harp, 1731 S Lake Stickney Dr, Lynnwood, WA 98037; or telephone (206) 745-1010.

The agenda includes:

- a newly-updated guidebook of lava tube country
- guided trips (novices/pros)
- vertical contest
- bat-house clinic
- Oregon Grotto store
- Saturday Banquet dinner
- tailgate flea market

Pit on the Cutting Edge Prince of Wales Island Technical Preliminary Report #22 by Kevin Allred November 15, 1989

Description

First discovered by members of the POWIE III expedition on July 26, 1989, Pit on the Cutting Edge is on the north edge of a meadow area in a large sink. It was surveyed and explored on July 28 by Jim Nicholls and Miles Hecker. Its total depth is 50.2 feet. There is an initial vertical drop of 38 feet to a ledge and then another twelve-foot drop to a muddy-sloping twelve-inch wide crack. A strong breeze

blows from this crack. There are certainly many other shafts in the area as deep or deeper than this one, but it was surveyed to provide more data since it was near at hand to the cavers' camp.

Management Recommendations

For safety reasons, the location of this cave should be withheld from the general public. Due to marginal slow-growing timber, logging is impractical in the area. □

El Capitan Cave
Prince of Wales Island
Technical Preliminary Report #23
Addendum to Report #6
by Kevin Allred
November 17, 1989

New Discoveries

During the 1989 month-long cave inventory, there were twelve survey trips into new and unexplored parts of El Capitan Cave. In addition, there were also some photography trips.

A few hundred feet of stream passage (the Rockwell River) was discovered off of the Twin Pits. The stream was dyed with fluorescein by Bob Bastasz on July 25. Approximately twenty hours later, the dye appeared in the resurgence near El Capitan Forest Service Work Camp, proving that the resurgence comes from the cave. What was curious, though, is the long time taken for the dye to appear. Some members of the expedition felt the delay was due to a sand fill in the cave, but others thought it was due to the large reservoir of water along the way. I prefer the reservoir idea, since sand in the passage would only speed up the velocity of water in a given space because of the mass of the sand itself.

The following is an estimation of how large a water reservoir would need to be for the dye to take twenty hours to appear. Then, the average cross-section of underwater passage can be estimated. First, it must be supposed that the total passage length in relationship to the actual distance between the cave sump and the resurgence is 2:1 because of ups, downs, and meanders. (This assumption is based on the stream passage which is accessible and already surveyed.) Since the straight dis-

tance (d) is about 820 feet, then the estimated length of actual water course is (2d) 1640 feet. At an estimated flow rate of 500 gallons per minute (estimated by Winfield Wright), the reservoir volume would be at least 600,000 gallons. Since there is bound to be a certain amount of eddying and friction, a reasonable increase of twenty percent would give a total of 720,000 gallons in 1640 feet. This comes out to an average passage (all underwater) of 8.6 feet in diameter. The formula follows:

$$\frac{600,000 * 1.2}{1640} = 439 \frac{\text{gallons}}{\text{linear foot}}$$

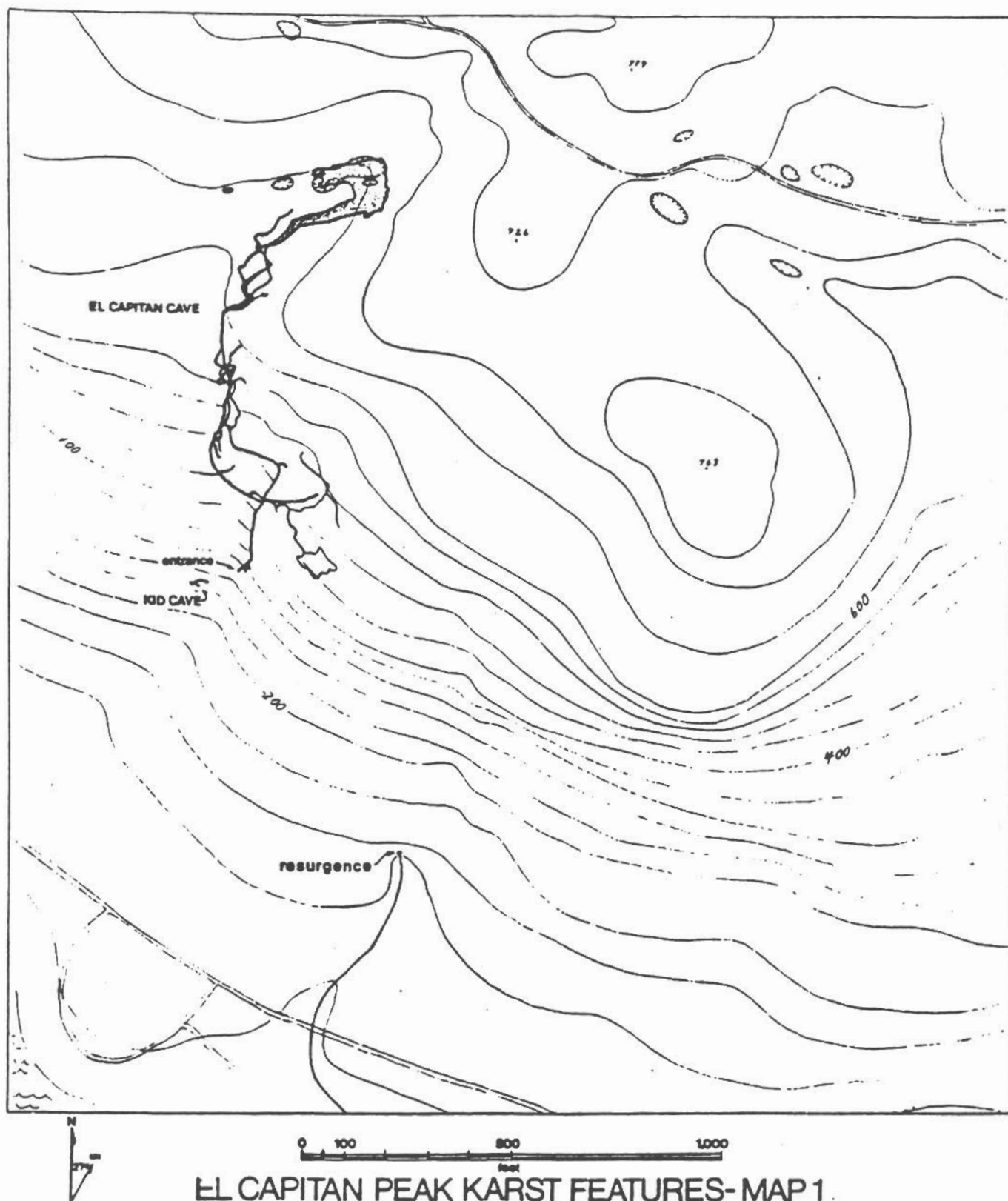
$$\frac{439}{7.48} = 58.6 \frac{\text{square foot}}{\text{linear foot}}$$

$$\frac{58.6}{3.14} = \text{radius}^2 \quad \text{radius} = 4.31$$

$$\begin{array}{l} \text{cross-section} \\ \text{diameter} \end{array} = 2 * 4.31 = 8.6 \text{ (feet)}$$

Water velocity is estimated at 82 feet per hour or 1.36 feet per minute. Since there is about seventy vertical feet between the last sump and the resurgence, there must be air-filled passages containing waterfalls and rapids. This would increase the cross-section of the reservoir dramatically. Regardless of the average size of the cross-section, the reservoir is pretty large, and would fill a cube over 45 feet to a side! More detailed dye tracing studies would be interesting.

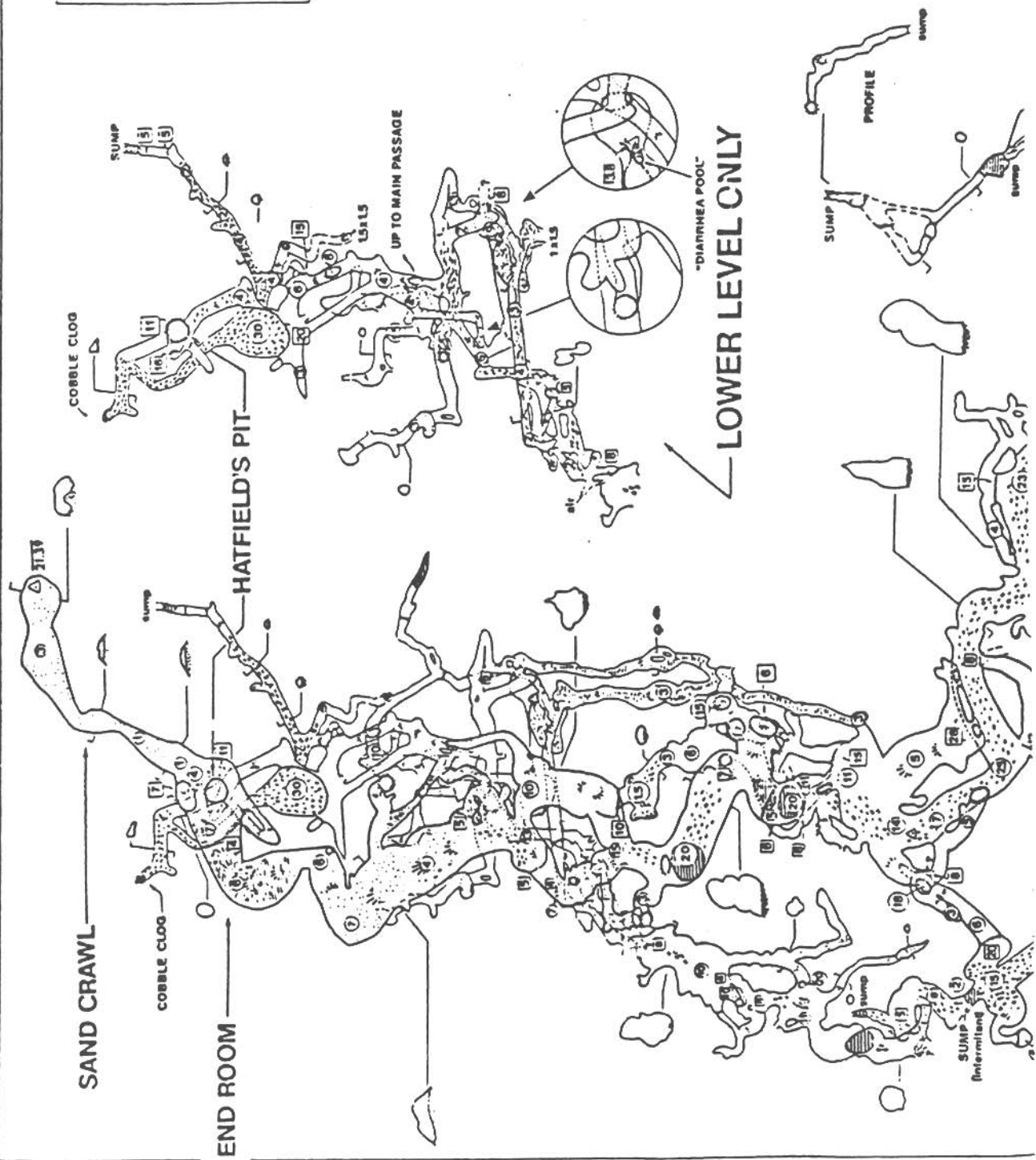
In a number of places in El Capitan Cave, last year's survey

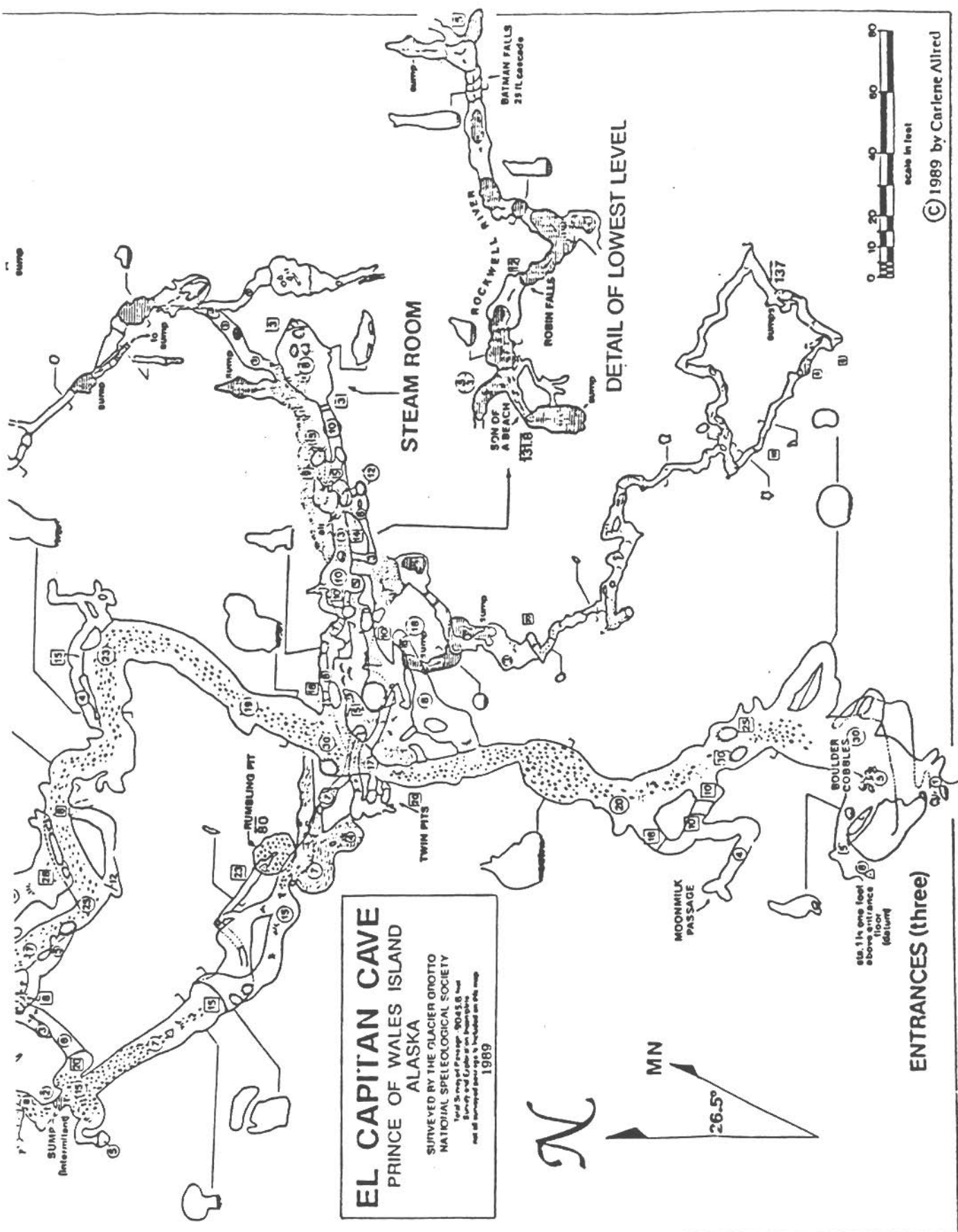


© 1989 by Kevin Alfred

- LEGEND**
- UNDERGROUND PASSAGE
 - UNEXPOSED PASSAGE
 - SURVEY STATION
 - 100-FT. AND DEPTH INDICATOR
 - 40-FOOT AND DEPTH DISTANCE
 - OPENING BETWEEN UPPER AND LOWER PASSAGES
 - CHIMNEY
 - CELLAR DOOR
 - CELLAR DOOR CONNECTING PIT IN UNDERGROUND PASSAGE
 - POOL OR LAKE
 - SLOPE
 - BREAKDOWN
 - COBBLE FILL
 - SAND FILL
 - SILT OR CLAY FILL

drafted by C. & K. Allred





© 1989 by Carlene Allred

stations made of rock cairns had been washed away without a trace. Some lower maze passages were also speckled with fresh-looking impact marks; evidence of rattling cobbles in tremendous water velocities. Whether the annual flooding is this violent every year is not known. Possible landslide damage from last season was mentioned in Report #19.

In the lower maze areas near the entrance, virtually all the exploration and survey was completed this season.

The Alaska Room was explored and surveyed; it was found to be up to 85 feet wide and 230 feet long. The ceiling was measured by using balloons filled with some helium supplied by Rick Bridges. On August 1, a cluster of balloons was raised, and the strings were then measured giving ceiling heights of up to 116.5 feet. The floor of the room is covered with sediments and breakdown. There are hoodoos in great numbers, up to eighteen inches high, formed from dripping water eroding away silt that is not protected by pebbles or small bits of wood. Three logs were found partially embedded in the fill on the floor, and their entryway was probably a chimney extending some 250 feet to sinks directly above the Alaska Room. The room contains a lake during high water, judging from the discovery of growing seedlings found washed into an alcove located partially up the wall. El Camino Real passage also floods, as evidenced by the washing away of our survey cairns there.

In exploring and surveying the leads off El Camino Real, two discoveries were made. The first was a high chimney found by Mike Van Note and Kelly Kelstedt, called "The Coffee Passage", which is the highest point surveyed in the cave. Next was

several hundred feet of descending passage to "Shelob's Lair", discovered by Carlene Allred and Steve Lewis. Shelob's Lair leads to the Rockwell River again, but further upstream than previous explorations. Work in these areas is incomplete.

As of this date, total surveyed passage in El Capitan Cave is 9045.6 feet, and total depth is 356 feet.

Management Recommendations

As mentioned before, a sign and register should be placed in this cave. The main entry into the unvandalized part of the cave is presently reburied with the fill that was originally excavated in 1988. Presently, there is a second route that is more remote and difficult to find. This passage should serve as future thoroughfare into the pristine areas, thereby limiting the traffic and impact there. It should be noted that all parts of the cave are in danger of flooding except the main passage to Hatfield Pit and also upper branches along the way. Visitors should be careful when entering the flood-prone regions.

Future work needs to be done in studying the radon levels of El Capitan Cave. This season Harvey Bowers left a radon tester in the cave and came up with apparently dangerous levels. Specific results are not known at this time. □

[Editor's Note: Results of the radon analysis have been received since the writing of this report, and appeared in The Alaskan Caver 10(1):12-14. Results indicated that the radon level in the cave is of concern. But a single test is not conclusive, and follow-up studies need to be performed to fully evaluate the risk level.]

POWIE V

A Note to Potential Participants by Kevin Allred, Expedition Leader

This year's main expedition (POWIE V) is to be held July 15 through August 15, 1991. Our main center of operations will be the Forest Service (FS) El Capitan Work Camp.

Cat Woods of the Thorne Bay Ranger District is our new FS contact person. Cat has already worked with some of us in mapping caves and with biological cave surveys. She has a sincere interest in properly managing the cave resources.

FS Ketchikan area geologist Jim Baichtal has become increasingly fascinated by the incredible cave potential on Prince of Wales and Dall Islands. Jim plans to work with us during the expedition and intends to support increased scientific knowledge in the region.

This winter Cat and Jim flew over and photographed several alpine and subalpine karst areas on Prince of Wales Island, including the Exchange Cove and El Capitan Peak areas. Many melted-out holes were enthusiastically noted, including some new features which we had earlier felt were insignificant or of which we were not aware. Jim is planning another foray soon to take stereo photographs. He estimates there is fifteen to twenty feet of snow on El Capitan.

Incidentally, we have an excellent vertical pit lead with wrist-watch-timed soundings of seven to eight seconds. Unfortunately, the rocks glanced off of walls in two places and the site is on Dall Island. But the area could still have some potential if someone is interested in getting involved in a trek down that way.

Closer at hand, we have several "going" caves, both alpine

and forested. Some of our activities of last year have resulted in the forest preservation around (at least) Captain Soup Cave. "Thanks!" goes to all help who were involved in the Captain Soup and other inventories of last year.

On January 27th I returned from a research trip to Juneau, where rendezvous was made with Cat and Jim. Besides having great success in grasping more aerial leads, we developed the following preliminary itinerary for POWIE V:

7/15 El Capitan Work Camp. Orientation and safety meeting.

7/15 Calder Bay boat recon.
thru Targets: subalpine karst
7/19 to the east and the flanks
of Perue Peak.

7/19 El Capitan Work Camp with
thru limited wheeled transportation.
7/28 Targets: subalpine and
alpine karst with helicopter
support. Snow Hole, Blowing
in the Wind, other goodies.
Vertical cave north of Neck
Lake and leads north of Twin
Island Lake. El Capitan Cave
mapping. Exchange Cove cave.
Checking any new reported
caves. Lower priority work
in unfinished Slate Cave.

7/29 Flicker Ridge with wheeled
thru transportation. Targets:
8/09 major karst in subalpine and
alpine mediums. Perue Peak
or Mount Calder, if time.
Salmon Bay leads.

8/09 El Capitan Work Camp. Time
thru left open for aborted or
8/15 unfinished areas and karsted
long-term logging units.

You can now plan your time slot, if you cannot attend for the entire month. Remember to prepare for cold and wet, both above and below ground.

We hope to be joined, this year, by University of South Dakota paleontologist Dr. Timothy Heaton. He is interested in studying the bear bones discovered in El Capitan Cave, which were initially investigated by Steve Lewis and Joyce Whitney last fall. The plans of Dr. Heaton are dependent on possible support from National Geographic.

As usual, participants of the expedition need to be NSS and Glacier Grotto members and have paid the one-time forty dollar project rope fee. There will be limited lodging available at El Capitan Work Camp, with food supplied and shower and laundry facilities available. If there are any specific food requests (yes, Steve, even Twinkies and Ding Dongs), let me know within a few months before the first order is made. Refrigerators and freezers at the camp may be used. Children are not to ride in the FS vehicles nor stay in the work camp, although there is a nearby camping site for families, complete with a rope swing and picnic table. (The Allreds plan on being there with their four children.)

Three hours of helicopter time is available for POWIE V. The Forest Service is supplying some size AA and D batteries. A supply of coarse carbide is already on the island, along with many of the supplies belonging to the project. The Forest Service is also offering both film and developing services to us to assure them copies of photographs which we take. The exposed film needs to be left with them and they will send us a set of slides or photographs with negatives.

Those using the FS facilities and food will be asked to work on FS cave inventory-related activities forty hours per week (seven days). The forty-hour schedule is completely flexible but necessary as our part of the agreement. More-detailed information is forthcoming to grotto members in The Alaskan Caver. All other interested parties should contact me with questions soon and/or join the Glacier Grotto. I may be reached at: Kevin Allred, Box 376, Haines, AK 99827.

On other related matters, a FS Biological Cave Survey PAYING job is available again this year around May or June. This opening is from ten to thirty days, depending on employee availability, and includes two to three cave conservation and slide presentations within the district and possibly Ketchikan city. This may also include searching for caves in planned logging units; weekends are off. Persons previously involved and knowledgeable in the area caves are desired, if possible, but not absolutely necessary. Pay rate is GS3 to GS4, depending on qualifications. For more information on this job, contact: Cat Woods, Thorne Bay Ranger District, P.O. Box 1, Thorne Bay, AK 99919. Phone: (907) 828-3304. Contact her as soon as possible; whoever gets the job please contact me to use some slides.

The Forest Service needs to find specialists willing to identify the biological specimens collected in El Capitan Cave last season. If anyone knows of someone interested, please contact Cat Woods. The specimens include unknown segmented worms and flatworms, various nymphs, gnats, millipedes, spiders, and one centipede. Two bat skulls are as yet unidentified as well. □

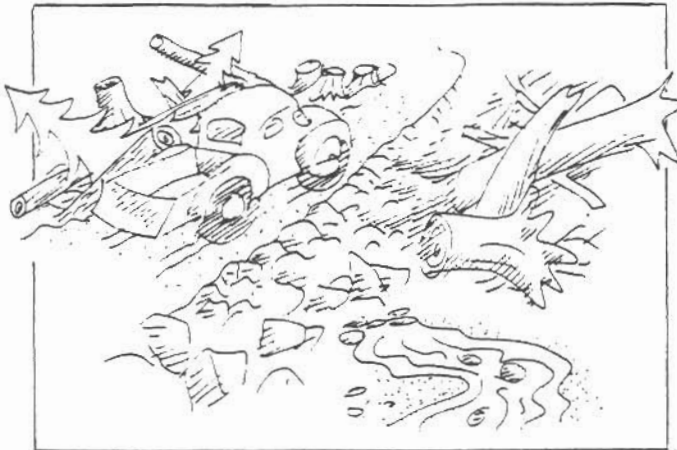


Kicking Horse Glacier Cave Filmed in "White Fang" by Kevin Allred

Last winter a short segment of the file "White Fang" was shot inside Kicking Horse Glacier Cave near Haines. It appears that the first half of the cave had collapsed during the previous summer leaving a smaller-sized passage to film. The section of cave looked to be between cross-sections B and C on the earlier map on the cover of The Alaskan Caver 9(2) (April 1989).

Apparently, a six-foot-diameter icicle in the new entrance was deemed too dangerous by the Hollywood staff, and it was duly blasted away by a flown-in demolition expert. The footage shows a wolf cub scampering down the icy passage.

The movie is highly entertaining and contains beautiful scenery. Both Mike Van Note and I were involved in the production at other sites.



THIS ?



or THIS ?

Do your part to make a difference!
Join POWIE V in 1991
July 15 to August 15
Tongass Caves Project
Prince of Wales Island Expedition

Proposed Trips

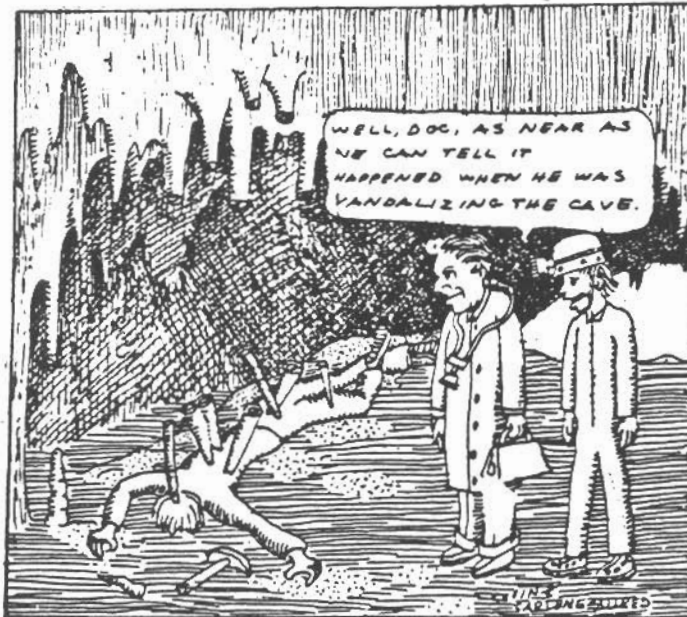
The following is a list of potential expeditions for the summer of 1991. Each contains the name of the cave or caving region, the expedition purpose, and the tentative time period. Contact Curvin Metzler for more details, at: (907) 333-8766.

Wishbone Hill	search	May
Steep Canyon	locate	May
Pribilof Is	survey	May
Chitina	search	May/June
Sheep Mt	search	May/June
White Mts	search	May/June
Wrangell Mts	survey	May..Aug
Anaktuvuk Pass	survey	June
Firth River	search	July
Pr of Wales Is	varies	July/Aug

• • • • •
 • Regional Meeting •
 • • • • •

at 7:30pm on Wednesday, March 13
 in the offices of Stewart Title
 Suite 110 of Calais I (3201 "C" St)

trip planning; brief business meeting
 NSS Show on Wind Cave, South Dakota



Trip Planning

Lots of exciting trips are being planned for this summer. Don't miss out! For information on POWIE V, read pages 19 and 20. For other trips, see page 21 and attend the regional meetings. Contact trip leaders to voice interest and for more details.

Glacier Grotto
 2944 Emory Street
 Anchorage, Alaska 99508-4466

Address Correction Requested

