

September 1991

Alaskan Caver, Volume 11, No. 3, September 1991

Curvin Metzler

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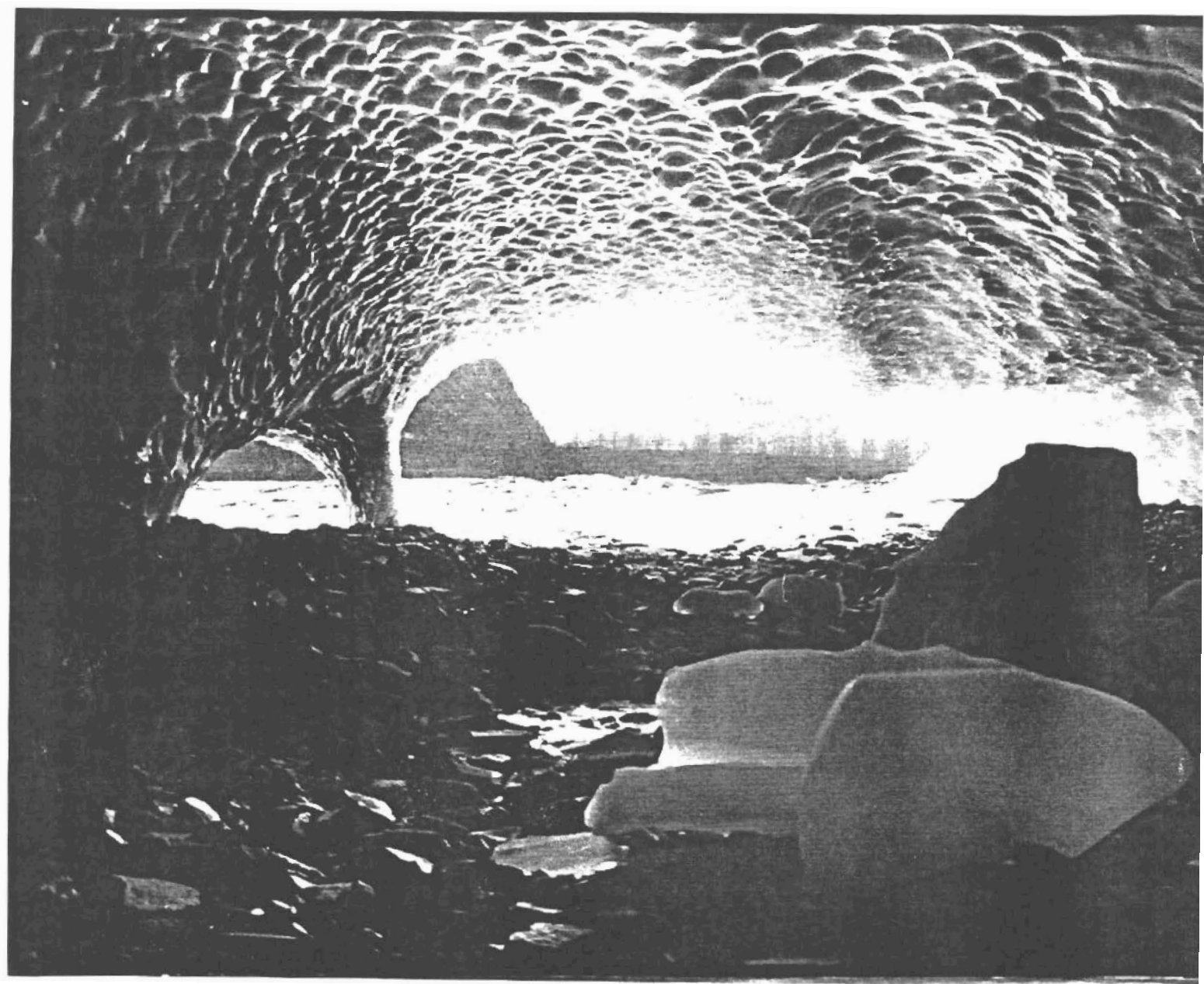
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The ALASKAN CAVER

VOLUME 11

NUMBER 3

SEPTEMBER 1991



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Membership is open to all interested in Alaskan cave discovery, exploration, description, survey, mapping, photography, hydrology, morphology, biology, geology, history, speleogenesis and other speleean processes, conservation, management, adventures, and the fellowship of Alaskan cavers. Annual dues are \$15 for individual or \$20 for family membership. Add \$8 to dues if overseas and airmail postage is preferred over surface. Institutional subscriptions are \$20 per volume (6 issues).

Dues are due on January 1 and are sent to the Treasurer (address below), payable to Glacier Grotto. Those joining for the first time between October 1 and December 31 will be considered paid through the following year. Dues status is indicated on the mailing label. Anchorage meetings are held at 7:30pm on the second Wednesday of each month (location information on back cover). Meetings held in other areas are not regularly scheduled, and may be arranged through the appropriate Vice President.

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* 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: Looking out from a glacier cave in Byron Valley. Photo by Jack Massie.

Table of Contents

Occurrences of Carbonate Rock in the Ketchikan Area	4
1990 Glacier Cave Explorations in Byron Valley	5
Technical Preliminary Report #24: Old One-Eye Cave	10
Technical Preliminary Report #26: Captain Soup Cave	12
Technical Preliminary Report #27: Raven Cave	15
Technical Preliminary Report #28: The Real McCoy Cave	16
Technical Preliminary Report #29: Four Corners Cave	17
Technical Preliminary Report #30: Maiden Hair Cave	18
Technical Preliminary Report #31: Marble Cave	19
Technical Preliminary Report #32: Calder Cave	21

Upcoming Events

Termination dust can be seen from Anchorage on the neighboring mountains of the Chugach Range. This traditionally signals the end of summer and that winter is only around the corner. But it can also be a sign that the glacier caving season is just about to begin.

Last year's glacier caving season turned out to be a really good one which was over a month long. The article and photographs which follow (pages 5 thru 9) summarize the seven trips from last fall. This year the caves should be even larger, as their cycle has not yet reached its peak.

The potential season for glacier caving in Byron Valley is from early to mid October until early to mid November. For safety reasons, trips are planned for after freeze-up and are cancelled if there is any fresh snow or potential avalanche danger. But glacier caving is a wonderful way to fill the seasonal gap between summer and winter outdoor activities.

Since glacier caving has its risks, it is highly recommended that any person interested in this activity contact our organization and accompany us on one of our trips. Along with an enjoyable day of spelunking, we attempt to educate participants concerning safety issues. We point out the dangers and potential hazards which are to be avoided, and we give advice on where and how to explore.

Anyone interested in speleology or speleogenesis or the development of cave features and speleothems might consider the opportunities provided in glacier caving. Many of the same forms which are common in limestone solution caves are also found in glacier caves, though the solute/precipitate is water/ice and the fluid is air.

If anyone would like to join in on one of the Glacier Grotto excursions to the glacier caves of Byron Valley this fall, please contact Curvin Metzler at 272-8766. This is also a chance to see a glacier from the inside--a view and a perspective which few people ever get to experience.

Credit where Credit is Due

On the bottom of page 10 of our last issue, The Alaskan Caver 11(2):10, were a pair of photographs entitled "Formations in El Capitan Cave". These were both credited to Norm Thompson; but actually only the one on the right was his work. The one on the left was, instead, taken by Carlene Allred.

Election Results

The ballots have been counted and the new officers stand as nominated:

President	Jay Rockwell, Jr.
VP: Northern	Mike Mauser
VP: Southcentral	Curvin Metzler
VP: Southeast	Kevin Allred
Secretary	Jack Massie
Treasurer	W. Harvey Bowers

News from POWIE V (1991)

Some old bones found in El Capitan Cave have been identified as those of Arctopus simus, a gigantic extinct bear. Other bones in the same chamber belong to black bear; there were also salmon bones, assumed to be from black bear stomach contents. Some old bones found in Blowing in the Wind Cave have been identified as those of a large extinct wolverine.

El Capitan Cave has been extended to 10,190 feet. In the "over-2000-foot" class, Blowing in the Wind Cave has been extended to 2923.9 feet, and Bridal Veil Cave has been surveyed to 2128.3 feet.

Caves in the "over-1000-foot" class now include River's End Cave at 1029.1 feet, Eagle's Roost Cave at 1103 feet, Dragon's Breath Cave at 1275.9 feet, and El Capitan Pit at 1208.6 feet.

There were a total of 35 new caves surveyed to completion and twelve new caves started but not finished.

Minutes of Glacier Grotto Meeting Anchorage Area, June 12, 1991

The meeting was called to order at 7:40pm on June 12, 1991. Sam Dunaway, treasurer, gave the treasurer's report; this was followed by the reading of the minutes of the previous meeting by Jack Massie, secretary.

Paul Sandhofer then presented information on the possibility of using National Guard planes with regards to shuttling people and/or equipment to Juneau for POWIE V this July. He said that he would bring an update to the grotto meeting in July.

Jay Rockwell sent the video about the El Capitano cave system (in Mexico) on to the Fairbanks grotto members for their viewing. It had been obtained from NSS and had already been viewed in Anchorage.

The subject of a grotto picnic was raised; it was approved by the group. The date of Saturday, September 7 was selected, as was the location of the Clark's homestead in Palmer. Fliers will be mailed out; they will contain a map indicating directions from Palmer.

The production of Glacier Grotto t-shirts, sweatshirts, and/or hats, with some sort of club logo printed on them, was discussed. The idea was for these items to be on sale, advertised through the newsletter, to bring in a little

more money for the grotto. The idea of having a contest where members submit designs for the new grotto logo was also brought up and seconded.

Curvin Metzler gave a brief report on some of his recent trips; he also outlined some upcoming trips that he was organizing, in case any other members might be able to go along.

Jay Rockwell said he had talked to Jim Baichtal and was informed that Kevin Allred was going around recording cave openings on Prince of Wales Island. This was being done so that the local loggers would not fall trees or brush that might cover their openings.

A number of new caves were said to have been discovered recently on Prince of Wales Island, which is generating quite a bit of excitement and anticipation among our local grotto membership.

Kevin also acquired a post office box on Prince of Wales Island to be used to ship equipment and supplies prior to the trip.

The meeting was adjourned at 9:15pm.

For the program, Jay presented a slide show of last year's trip to Prince of Wales Island; the slide show ended at 10:20pm.

Occurrence of Carbonate Rocks in the Ketchikan Area

by Jim Baichtal

Prince of Wales Island	576,500 acres	900 square miles
Revillagigedo	16,215 acres	25 square miles

Of the 925 square miles of carbonate rocks, karst topography has developed on at least 75% of the area, or roughly 700 square miles! Of this 700 square miles, 30% of the area, or approximately 200 square miles, displays well-developed karst topography! All areas have well-developed sub-surface drainage.

The areas where well-developed

karst topography is present have ten to fifty features per square mile. Of all areas which display well-developed karst topography, 20% have greater than fifty karst features per square mile. Many of these areas have hundreds of sinkholes, collapsed channels, and other solution features per square mile. Most are found in sub-alpine and alpine regions.✕

1990 Glacier Cave Explorations in Byron Valley

by Curvin Metzler

After doing a few slide shows talks for the University of Alaska, Anchorage, (UAA) and a couple of local clubs, I was asked by UAA's Student Life program to guide a group of students on the exploration of some glacier caves. Only one excursion was planned, but the response was so great that there ended up being three different university trips. And after adding an excursion with a local scout troop and three separate Glacier Grotto trips, the total number of trips last season reached seven.

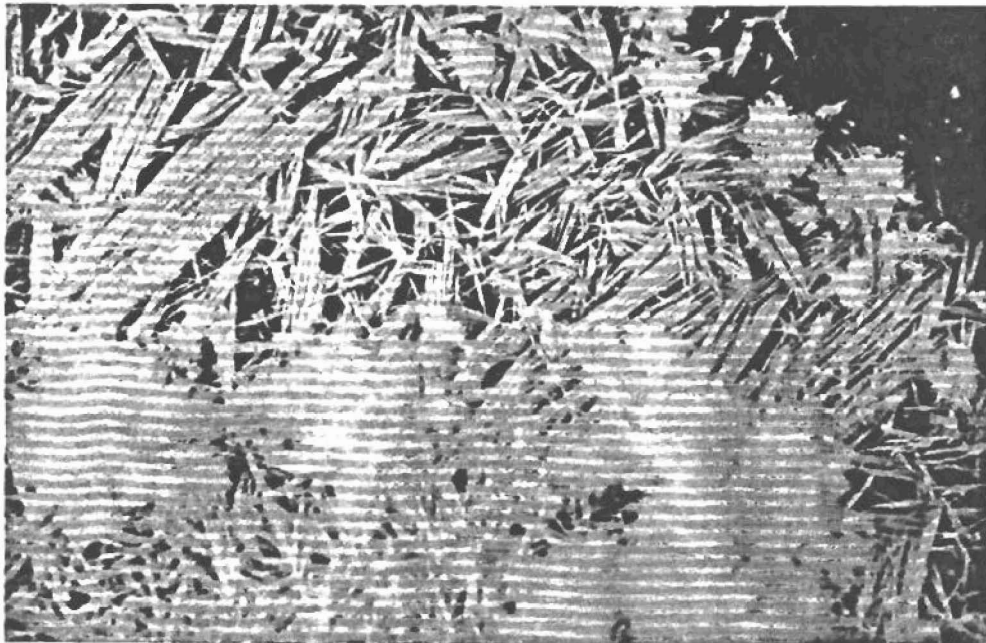
An early reconnaissance trip of the Glacier Grotto showed the caves to be open, but their exploration during that particular trip was not attempted due to rainy weather. The first university trip took place two weekends later, on October 20. Along with the group who signed up through Student Life were a few members of the UAA Photography Club out getting some dramatic shots.

The first UAA trip was successful, as we were able to get into both of the lower snowfield cave systems. Members

of the Photography Club did a little bit of exploring on their own; they were not present for my guided walk. They caught Jay Rockwell's lecture on safety at the U.S. Forest Service Visitor Center--but not until after they had been in some fairly risky cave passages.

A group from Alaska Pacific University (APU) joined me through the same caves in another trip on the following day. This time we were able to reach the Byron Glacier, too, and found some snow hoodoos down in one of the entrance pits. We could not go far into the main passage of the Byron Glacier itself as the stream was still flowing rapidly. But we did explore a passage located to the right of the main passage, looking up the valley. It was entered from its upper end and ran mostly eastward and perpendicular to the main passage.

A week later, I guided Scout Troop 209 through the lower snowfield system and up again to the same side passage in the Byron Glacier. Some of the advanced scouts surveyed the side passage and



Frost Patterns on the Ice Covering the Stream from the Byron Glacier.
Photo by Curvin Metzler.



Scout Troup 209 Entering the West Side Passage of the Byron Glacier Cave.
Photo by Scout Troup 209.

found it to be about 400 feet in length before intersecting the main passage. There was a short side passage, too; see the accompanying survey map.

On the following day, another group from UAA planned to explore the caves; they were all full of excitement after hearing about the trips of the previous weekend. But upon our arrival in Byron Valley, we found a foot of freshly fallen snow covering the valley floor. We went far enough down the trail to look at the caves from a safe distance, but did not dare go closer to them during this time of high avalanche danger. We chose to watch the film about glaciers instead--"Voices from the Ice", being shown at the U.S. Forest Service Visitor Center.

A week later, a small group from the Glacier Grotto paid the caves yet another visit. We were able to enter the lower snowfield cave, but found the main passage heading up the gully filled with snow that had avalanched into the cave since the week before. Anyone who might have thought that our decision not to enter the caves the week before was unjustified certainly would have been sufficiently convinced otherwise.

The number and size of ice formations, or "cryospeleothems" as they are probably called, varied from visit to visit. In the final trip of the season, another one arranged through the Glacier Grotto, there were less ice formations than during the week before. However, one of the formations turned out to be the most unusual ice formations that we have ever seen.

On the previous trip, we had seen a pretty ice ribbon which connected to an ice column, as shown in one of the photographs accompanying this article. But after that photograph was taken, air flows eroded away at the ribbon until it no longer had contact with the passage ceiling along its entire length. Oddly enough, the eroding did not take place along the lower edge of the ribbon as rapidly as along the upper contact with the passage ceiling.

When the ribbon was examined on this trip, it was hanging by only one of the ends of the ribbon. But it was not hanging still--it was blowing lightly with the flow of air through the cave! For lack of another name, I called the formation ice mylar, since it was very

thin and could blow in the wind. And unfortunately, I did not have my camera and flash along on this final trip of the season--but I hope I have learned my lesson, not to leave them behind.

The ribbon mentioned above formed in a small chamber along a side passage off of the main horizontal route. The chamber has a chimney which appears to connect to a crack in the surface of the snowfield above. The walls in this chamber should be examined carefully, as they usually contain many iceworms, which look like black hairs.

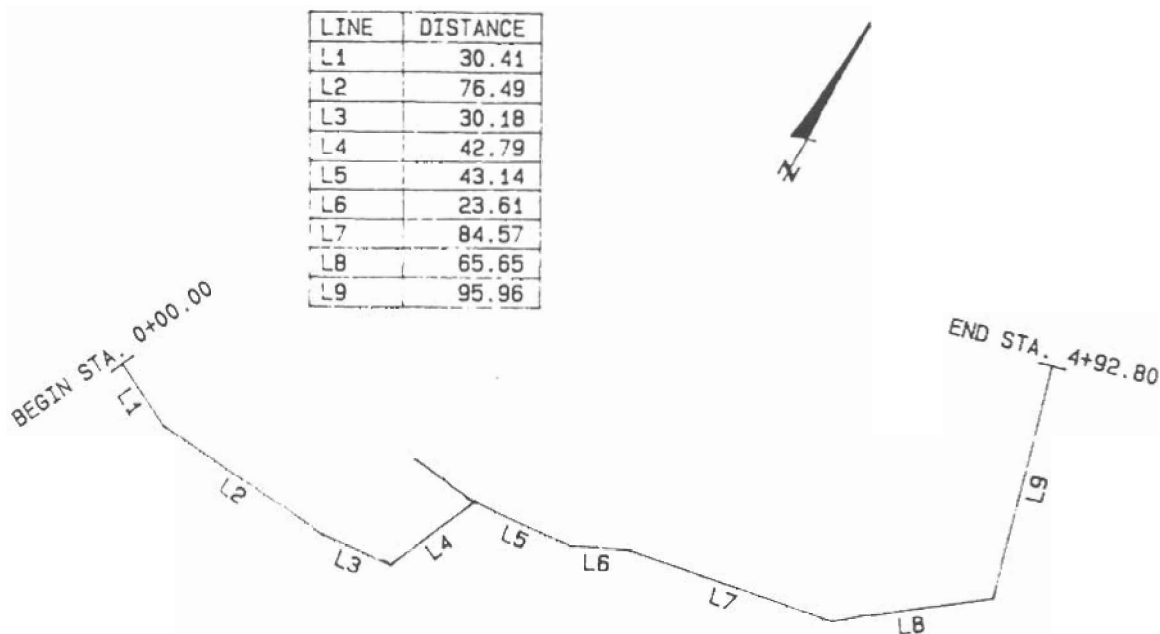
I should mention that there were other interesting sightings on these seven trips, besides the glacier caves and their contents. Beluga (white) whales were spotted just off shore from along the highway on most of the trips down to the caves. Dall sheep and bald eagles were often spotted as well, as we enjoyed the beautiful drive to Byron Valley. And the tracks of a large wild canid, most likely a wolf, were clearly visible on the edge of the top of the upper snowfield.

The 1990 glacier caving season was good one, and some of us got a chance

to get into the same caves a number of different times. As a result, we were able to see changes take place in the cave passages and features and observe these changes in progress week after week. This is very educational, and after years of exploring and observing such changes, one learns a lot about stability trends within glacier caves.

Though the changes observed had taken place in caverns made of ice, they seemed to closely parallel the changes which occur in limestone solution caves. Whereas in limestone caves the calcium carbonate is suspended in and deposited by water, in glacier caves water/ice is suspended in and deposited by air/water. Both fluids cause scalloping or fluting along the passage walls.

Both solutes precipitate out to form stalactites, stalagmites, columns, ribbons, draperies, and flowstone. But whereas it might take thousands of years to form significant speleothems in limestone, it takes only a matter of weeks to form similar objects in ice. Often the same formations can be found to grow in the same locations year after year in glacier caves. ■



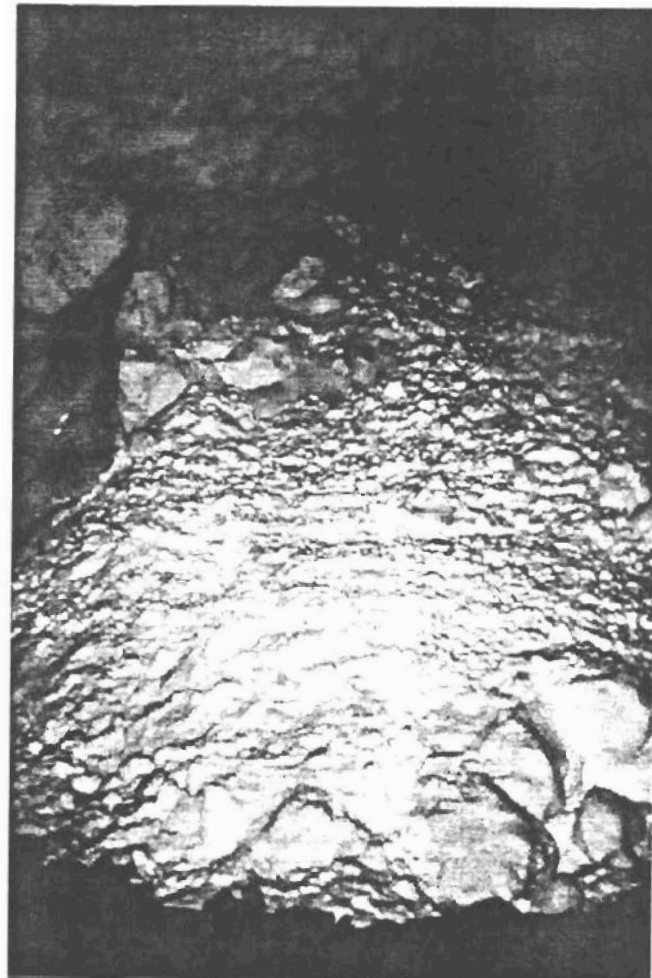
Map of the West Side Passage of the Byron Glacier Cave.
Surveyed by Advanced Scouts in Troop 209.

Ice Ribbon, Column and Stalactites
in the Iceworm Chamber of the
Lower Snowfield Cave of Byron Valley.
Photo by Curvin Metzler.



Small Tube Passage in Wall of
the Entrance Pit to a Lateral Cave
Along the West Side of the Byron Glacier.
Photo by Curvin Metzler.

Snow Hoodoos Found in
the Entrance Pit to a Lateral Cave
Along the West Side of the Byron Glacier.
Photo by Curvin Metzler.



Snow from an Avalanche Fills
the Main "Vertical" Passage of the
Lower Snowfield Cave of Byron Valley.
Photo by Curvin Metzler.

Old One-Eye Cave
Prince of Wales Island
Technical Preliminary Report #24
by David Klinger
September 24, 1990

Discovery

The locations of two pits were reported by U.S. Forest Service employees Jim Brainard and Cass Klee while marking the boundary of a timber sale in the Exchange Cove area of Prince of Wales Island. David Klinger elected to check out these leads as well as look for other leads within the sale area.

On July 30, 1990, after checking the north end of the sale area, he found the western boundary and followed the markers to a hilltop covered with a dense thicket. At this time "Momma Bear", who he had never seen, sent her whimpering cub up a nearby tree. David carefully backed up and took a detour around the area. Back on the boundary he continued and found one of the two reported pits. It contained a very small, twenty-foot-long cave of no significance named Nemo Pit.

On August 1, David returned to find the other reported pit which, as it turned out, contained "Old One-Eye" Cave. It was not too far from the area where the whimpering cub had been sent up the tree.

Location

The cave is located on a flat, karsted bench next to a ten- to fifteen-year-old clear-cut. Lying in old-growth timber, it is surrounded by brush, which makes it invisible from just a few yards away.

Survey

The survey was conducted using a Silva Ranger Compass for both horizontal and vertical angles. Distances were measured using a fifty-foot survey tape.

The horizontal portions of the cave were surveyed on August 1. On August 13, David returned with Bob Bastasz and

Kathy Tonnessen. Bob and David dropped the pit and completed the survey.

Description

The entrance is found below a rock face at the bottom of the west side of the pit. It is possible to climb down the other three sides, with the north side being the preferred route. The cave is in Heceta limestone. Many non-carbonate cobblestones, along with some breakdown, cover the entire floor of the cave.

As one enters the cave, one finds oneself in a wide, low room (Kathy's Hall) which slopes sharply to the west. At the back of the room is a cobble-filled passage. While water could be heard dripping from this area, no wind was detected. In fact, there was no real air movement anywhere in the cave.

To the south is a passage, Robert's Route, which leaves the main room and leads to a twenty-foot pit, Whimpering Cub Pit. To descend the pit it was necessary to tie the rope to a large block of breakdown in the main room and run the line down the passage. Padding of the rope was necessary at and near the lip of the pit. At the bottom of the pit, the floor slopes to the west and then drops another ten feet to a sump. This latter drop can be negotiated without rope. To the left is a large crack trending upward at about sixty degrees. While the crack appeared to pinch out, time precluded its further exploration.

Water enters the cave from several sources. There was much more water in the cave on the second visit, which occurred on August 13. There had been a great deal of rainfall during the intervening period. Very few speleothems were observed--just some small soda straws. No animal or insect life was observed.

Safety

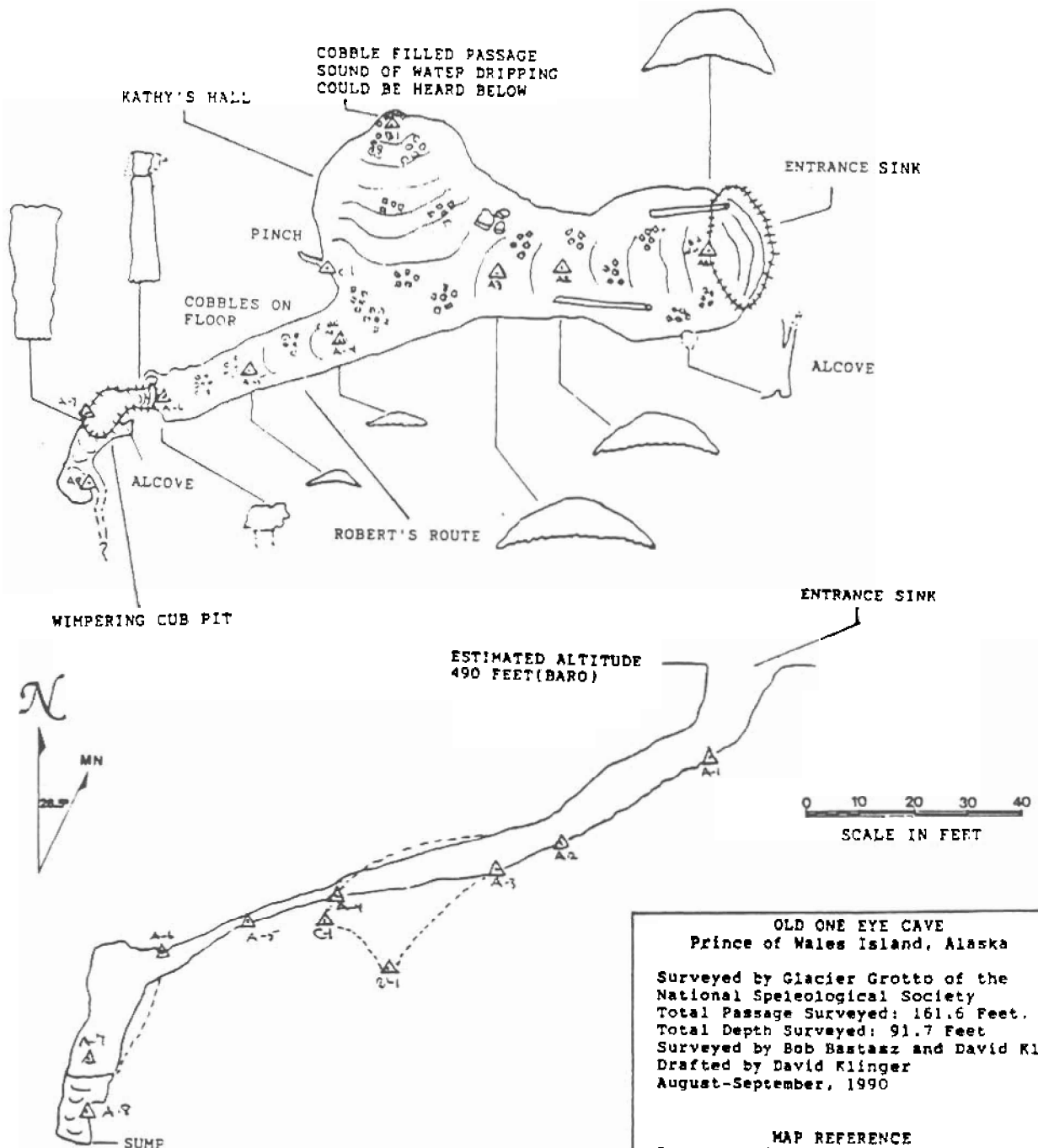
There were a number of loose rocks at the lip of the pit; they had to be kicked down before it was safe to descend. This hazard should be considered on any future trip into the pit.

Management Recommendations

This is a nice cave which may have

future potential for extension as far as the cobblestone choke is concerned. The southward-trending crack should also be checked. The entire cave needs to be photographed and checked for biological specimens.

Since this cave is located on the edge of a timber sale area, the boundary should be adjusted to protect the cave. This cave should have an NSS reward poster mounted inside the entrance. ▣



© 1990 BY DAVID M. KLINGER

Captain Soup Cave
Prince of Wales Island
Technical Preliminary Report #26
by Kevin Allred
October 8, 1990

Description

Captain Soup Cave was discovered on July 19, 1990, by Bruce Campbell and Kevin Allred while searching for cave entrances for the U.S. Forest Service cave inventory. Kevin named it for Bruce's CB radio "handle".

Located in Heceta limestone, near a contact between Heceta on the east and Polymictic conglomerate on the west, the entrance begins with a twenty-foot drop. A sloping bedrock floor then slants to the top of a thirty-foot drop. The main passage continues down a slope into "Dumpling Hall", a spacious room mostly covered with silt.

A stoopway containing a bat skeleton and also a nearby climbing ramp, "Manhandler", join in a forty-foot-high room. "Alphabet Soup", a side passage further east, ends in ever-present mud and silt after 35 feet.

To the west, in Dumpling Hall and near the bottom of the entrance access slope, a deer skeleton lies on a low bench of silt. It was identified by Steve Lewis as a three-year-old doe. It is not known how long the skeleton has been there, but the deer apparently must have had enough strength to get upon the somewhat drier bank. A low, muddy passage, "Vegetable Beef", heads easterly from the deer skeleton and ends in fill.

"Split Pea" is a steeply climbing passage which leads north from Dumpling Hall. It contains another bat skeleton and especially gummy mud; the mud is common in other parts of the cave.

"Chicken Noodle" extends west from Dumpling Hall and contains some of the most beautiful formations yet known in Alaska. Besides some fine examples of stalactites, stalagmites, and soda straws, there are tiny, intricate white helictites. At the helictites is a bi-colored soda straw, partly transparent and partly white. This nicely decorated

branch of the cave contains about 100 feet of passage.

At the beginning of Chicken Noodle, a canyon named "Chicken Gumbo" leads downward to the north a few hundred feet and ends in fill. A small flowing stream has deposited black rimstone dams along much of the way down the canyon. The rimstone is easily crushed by walking, so one upstream section has been flagged off to protect it.

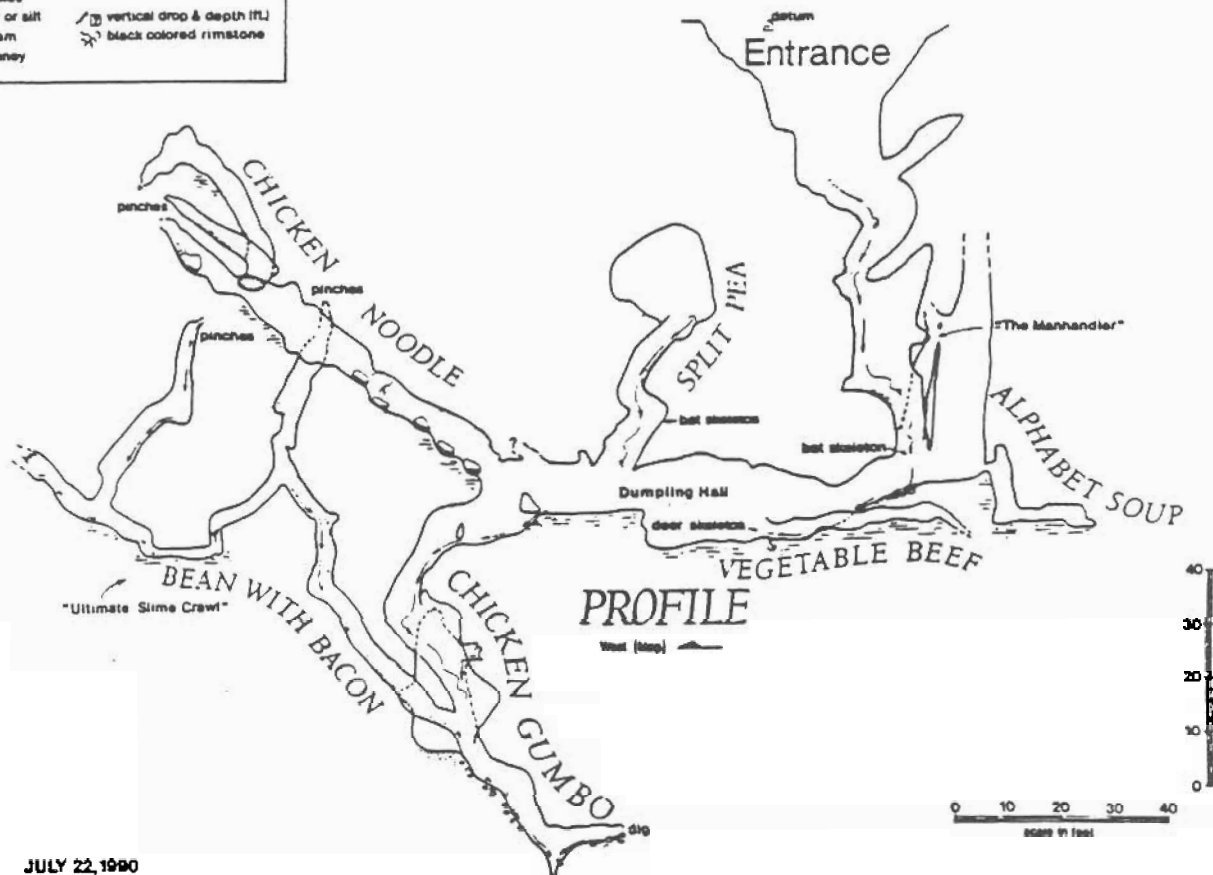
Partway along Chicken Gumbo are some beautiful low-hanging, translucent draperies (bacon rinds). Kevin found them to be photoluminescent in blue for six seconds using an electronic flash. Here is another side passage, "Bean with Bacon", is a complex of chimneys and muddy crawlways. Many parts are well-decorated with stalactites, helictites, and soda straws.

There are also some crystals in the bedrock resembling those found in Macho Peekaboo Cave on Perue Peak (see report #15) and a bed of crystals in a nearby quarry. A two-foot-long soda straw column with helictites growing from it bars ethical explorers from continuing in the crawlway. The total passage surveyed in Captain Soup is 1152.7 feet; it is 159.6 feet deep.

Management Recommendations

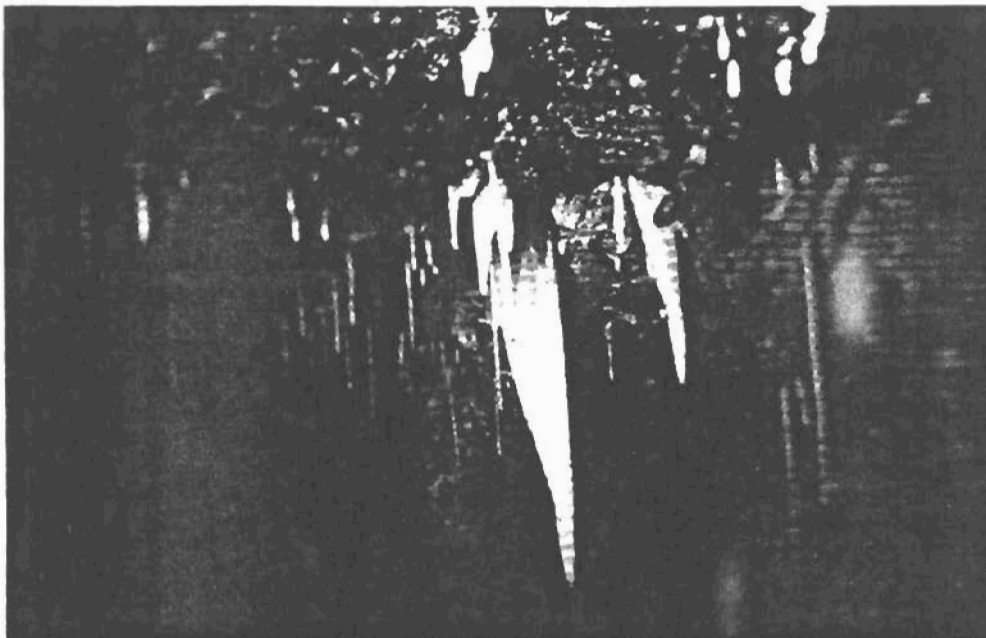
Captain Soup lies within a cutting unit; it is recommended that the unit boundary be changed to give the underlying cave at least a 300-foot buffer zone. This spot of trees would also be utilized for wildlife habitat.

Captain Soup is the most beautiful cave in the state, but could be heavily damaged by vandals and even accidental impacts, since many formations are in constricted areas where they are easily broken or soiled with the widespread mud. Therefore, the location of this cave should be restricted. x



JULY 22, 1990
 Sistacose and Tape Survey by Kevin Allred and Steve Lewis
 Drawn by Carlene Allred
 CLACIER CROTT
 NATIONAL SPELEOLOGICAL SOCIETY

© 1990 by Kevin Allred



Stalactites and soda straws in Captain Soup Cave. Photo by Carlene Allred.



Helictites in Captain Soup Cave.
Photo by Kevin Allred.

Stalactite, helictites and soda straws in
Captain Soup Cave. Photo by Kevin Allred.

Raven Cave
 Prince of Wales Island
 Technical Preliminary Report #27
 by Kevin Allred
 October 8, 1990

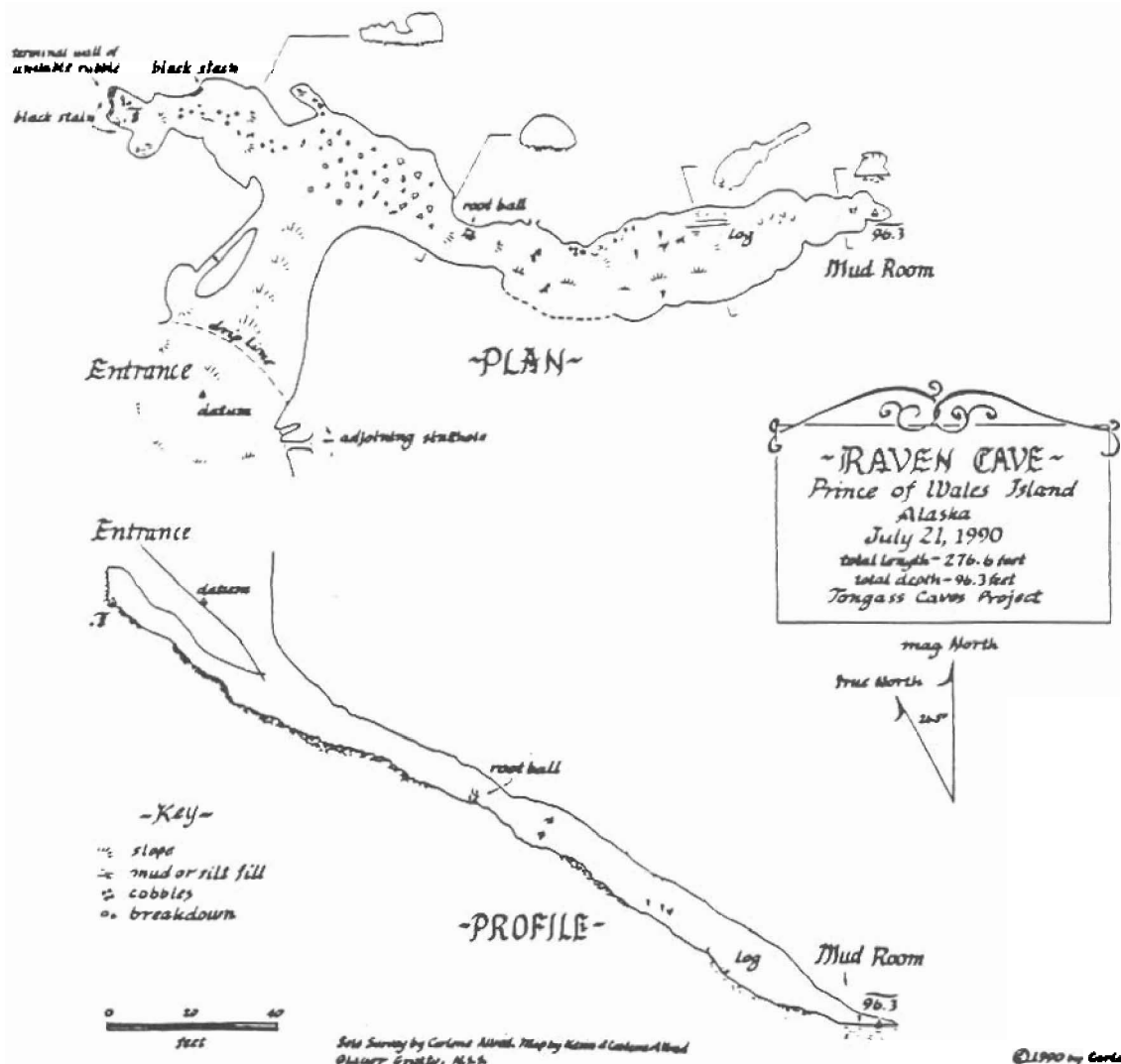
Located in Heceta limestone near the contact with Polymictic conglomerate to the west, Raven Cave was discovered by Stan McCoy of the U.S. Forest Service as he walked the boundary of a cutting unit. The cave begins as a large sink-hole, with access via a steep slope down to the north. The main east-west-trending passage appears to be developed along the strike of beds dipping north.

The main body of the cave lies east of the entrance and contains soda straws, stalactites, and some fine examples of bacon rinds up to three inches wide and six feet long. This direction ends in silt fill after 150 feet.

West of the entrance, a sixty-foot-long passage contains moonmilk popcorn, moonmilk stalactites, black deposits and small folia-like rim formations on the walls and under overhangs. The total length of the cave is 276.6 feet; its depth is 96.3 feet.

Management Recommendations

It is recommended that the boundary of the unit be moved to provide at least a 300-foot buffer zone for the underlying cave to prevent vandalism and logging impacts. The location of this cave should be restricted. ▢



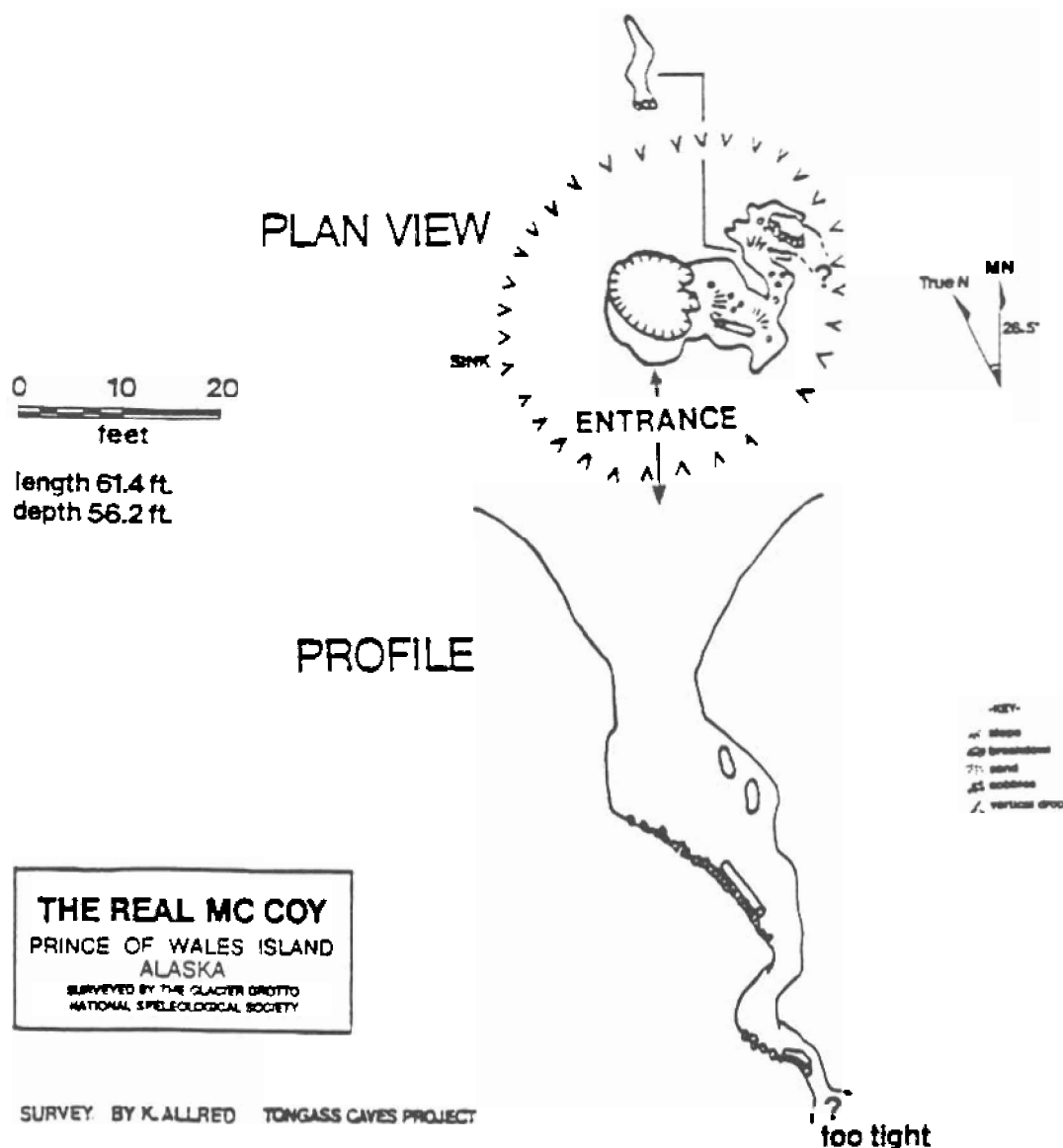
The Real McCoy Cave
 Prince of Wales Island
 Technical Preliminary Report #28
 by Kevin Allred
 October 8, 1990

The Real McCoy is a small pit located in Heceta limestone near the contact of the Polymictic conglomerate to the west. The initial twenty-foot drop is slightly overhanging to a steep slope unstable with organic debris and rubble. A narrow canyon-like passage continues thirty feet to a choke of cobbles and dirt. A void below issues the echoing sound of dripping water, so digging with a trowel for a few hours could extend the cave. The temperature

at the bottom of the drop is 47 degrees, indicating possible downward-flowing air rather than a sealed-off cold trap. Total surveyed passage is 61.4 feet and the depth is 56.2 feet.

Management Recommendations

Within the boundary of a cutting unit, this pit should have a 300-foot buffer around its entrance to prevent further filling by logging activities. x



Four Corners Cave
 Prince of Wales Island
 Technical Preliminary Report #29
 by Kevin Allred
 October 8, 1990

Discovered and reported by Earl Ritter of Labouchers Bay, Four Corners Cave is named after its location on four section corners. Joel Hanson of Wrangell reported a cave in the same location this year. It is not known if the two are the same cave.

Kevin Allred investigated and surveyed Four Corners on August 5, 1990. The cave entrance is near the base of a cliffy bluff of Heceta limestone on the north slope of Mount Calder. The ten-foot-by-ten-foot entrance is accessible by a narrow diagonal ledge.

Four Corners has phreatic origins with some vadose modification. It con-

stricts soon beyond the entrance to a stoopway canyon being halfway filled with rocks and boulders. The cave ends abruptly in fill after 60 feet. Passages contain some scallops and the walls are covered in tiny white popcorn. Total surveyed passage is 65.5 feet and the depth is 18.7 feet.

Management Recommendations

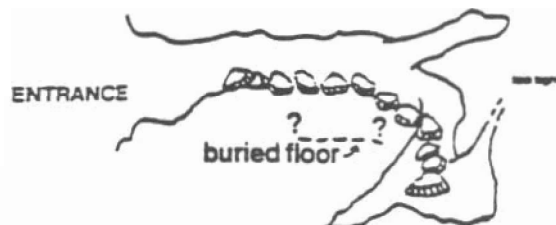
There is no reason to restrict the location of this cave since it is minor and has no significant formations. There may be other significant caves in the area. □



- KEY-**
- ↗ slope
 - ⬢ breakdown
 - ⋯ sand
 - ⬢ cobbles
 - mud or silt



FOUR CORNERS CAVE
 TONGASS NATIONAL FOREST
 PRINCE OF WALES ISLAND
 ALASKA



PROFILE

SISTECOS & TAPE SURVEY, AUGUST 5, 1990 BY K. ALLRED
 GLACIER GROTTO •• NATIONAL SPELEOLOGICAL SOCIETY

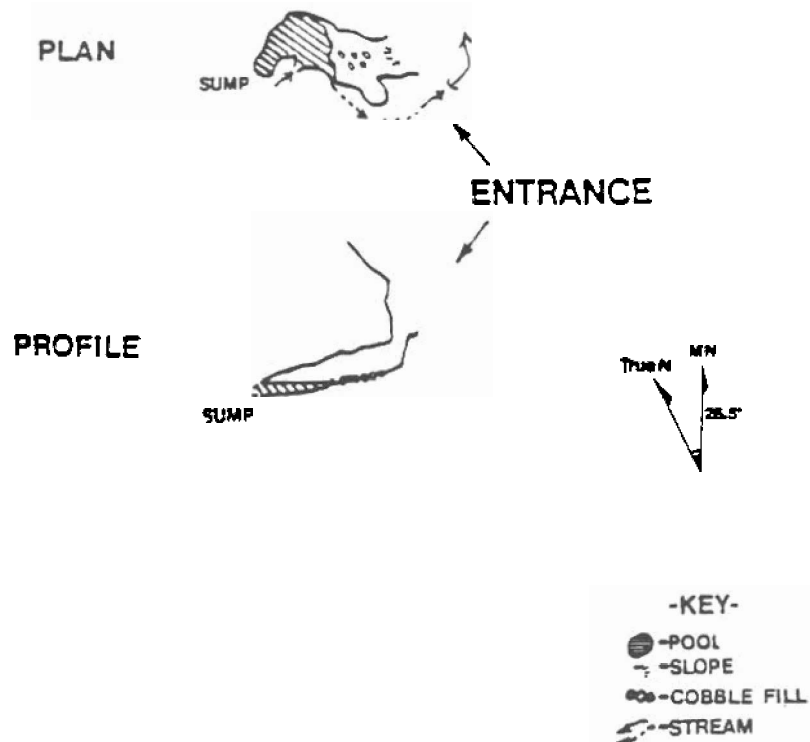
TOTAL DEPTH - 18.7 FT.
 TOTAL LENGTH - 65.5 FT

Maiden Hair Cave
Prince of Wales Island
Technical Preliminary Report #30
by Kevin Allred
October 8, 1990

Kevin Allred discovered Maiden Hair Cave on August 2, 1990. The entrance lies near the base of a small steephead. The small bedrock ledge above the steephead can be seen by looking west about 300 feet through a clearcut from a nearby logging road. The cave was inaccessible until Kevin widened it enough to get in.

The water, having an estimated

volume of 37 gallons per minute, issues forth through a tiny hole above a pool in the cave. It then disappears, only to emerge again at the spring outside. This tiny cave has little chance of continuing beyond the sump. There is no need to restrict the location of this cave, as it does not contain any speleothems. ✕



MAIDEN HAIR CAVE
PRINCE OF WALES ISLAND
ALASKA

TONGASS CAVES PROJECT
SISTECOS & TAPE SURVEY
by Kevin Allred
August 2, 1990

Marble Cave
Prince of Wales Island
Technical Preliminary Report #31
by Kevin Allred
October 8, 1990

Kevin Allred found Marble Cave on July 24, 1990, after investigating "resurgences" reported by Cole Mullis and Mike Shafer of the U.S. Forest Service. Marble Cave is located one-half mile west of Marble Creek in a prominent steep-walled water course. The stream comes from the mountain above, which is intrusive diorite, and disappears soon after reaching the Heceta limestone, which has been metamorphosed into marble.

About 75 feet down the now-dry gully is the double cave entrance just above a large stagnant pool. The gully has periods of intensive flooding, judging from the logs and rock movement. The entrances are situated in a vertical portion of the ravine which allows debris to fall past it; thus the cave is saved from much filling of clastic material.

Just inside, the entrances join to form "Surprise Canyon" and the first drop (fifteen feet) in the cave. A side passage then heads to the northwest, to "Birdwing Fissure", 48.1 feet above the entrance. As Kevin was mapping, strange fluttering noises came from a narrow diagonal crack connecting to the outside. A tiny bird flitted about in the green vegetation just outside and the mystery sound was solved.

Back at Surprise Canyon, at the bottom of the first drop, one encounters other drops of twenty and thirty feet. A rope of 100 to 150 feet in length is recommended for this series of drops. Surprise Canyon leads to a complex of tubes and chimneys to the east. Here are stalactites, stalagmites and soda straws; some of the few speleothems in the cave.

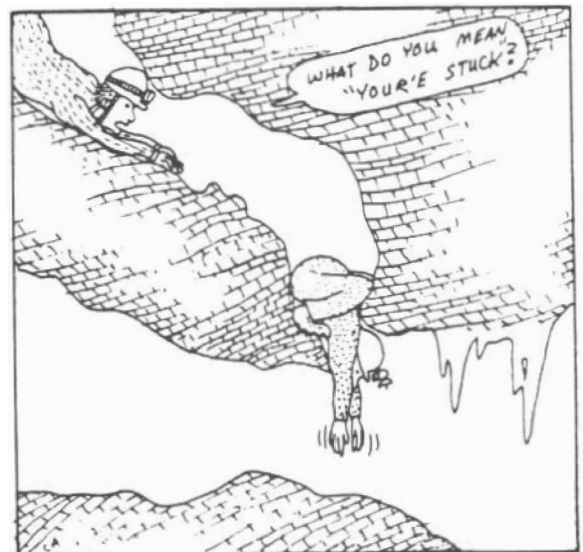
Rather than go up into the tube complex, a way down leads from Surprise Canyon. Some handlines could be used in "Tub Gulch", a steep canyon containing pools and spectacular brecciated marble. Tub Gulch becomes clogged with organic and clastic fill which makes it a poten-

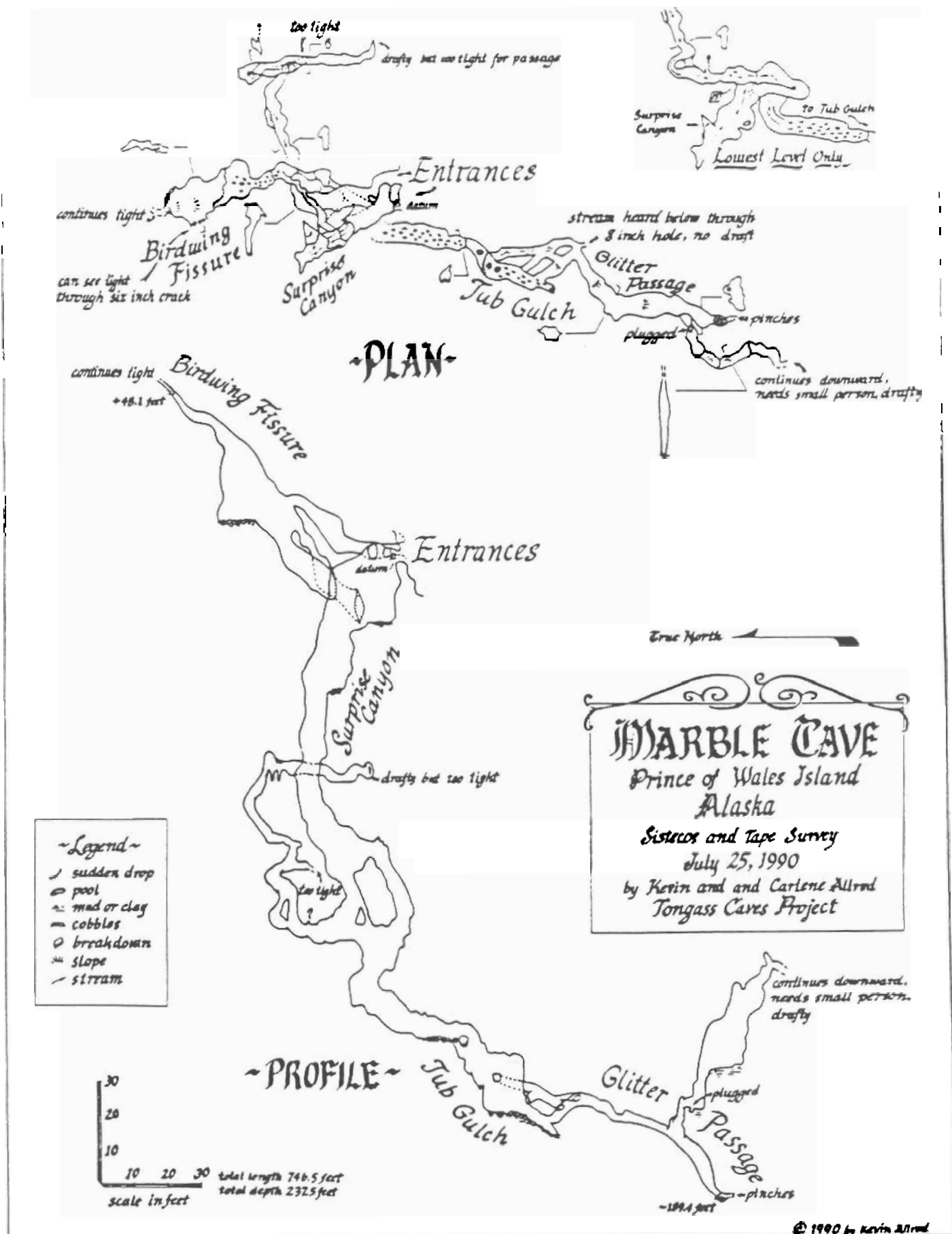
tial digging site. A bypass leads around this area; in a small eight-inch diameter hole off to the side, a large volume of water can be heard close by. Continuing along the bypass, "Glittering Passage" is a beautiful, pure white, scalloped tube which pinches at 189.4 vertical feet below the entrance. Near the bottom, a side passage heads steeply upwards and continues beyond an unexplored constriction needing a small person to continue.

Marble cave is the first known cave in Alaska to be entirely in marble. The marble is often impure and contains non-carbonate sharp nodules. Total surveyed passage is 746.5 feet, and total depth is 237.5 feet.

Management Recommendations

Because of its vertical nature, Marble Cave should only be entered by those having vertical skills and equipment. Very warm clothing should be worn, and the cave should be entered during dry periods as it could easily flood unexpectedly during rainstorms. The locations should be restricted from the general public. ■





Calder Cave
Prince of Wales Island
Technical Preliminary Report #32
by Kevin Allred
October 8, 1990

Calder Cave was named by Mike Shafer after the nearby old townsite of Calder. It was located on July 25, 1990, by Kevin Allred, while on his way to Marble Cave. Kevin mistook its entrance for an upstream part of a resurgence system which dumps out into the deep ravine about 300 vertical feet below the entrance to Marble Cave.

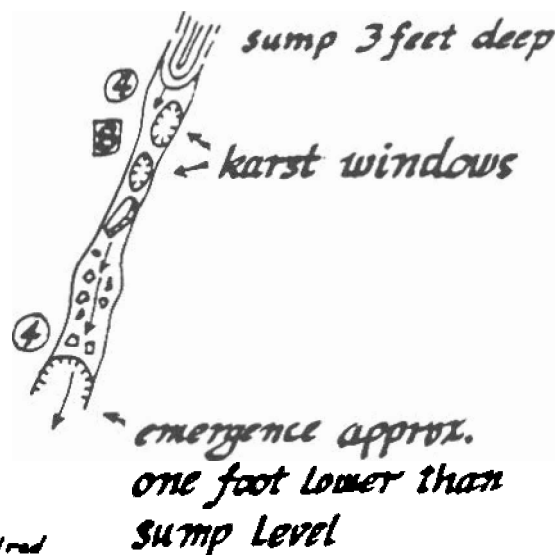
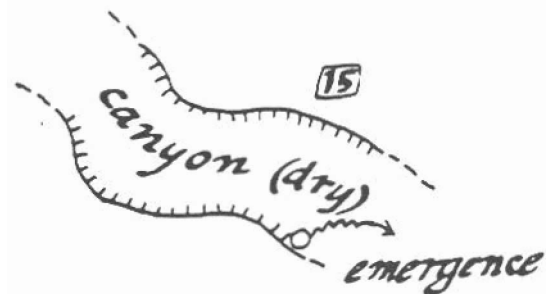
The next day, Carlene Allred entered and investigated Calder Cave. She surveyed the forty-foot passage to a sump. The cave contains two karst

windows. Carlene found that the cave resurgence was separate from the one in the ravine to the east. It is not known which (if not both) of these resurgences is associated with the Marble Cave system.

Management Recommendations

There is no need to restrict the location of Calder Cave. It is an interesting site and would make an excellent hydrological study. □

CALDER CAVE
Prince of Wales Island
Alaska
Pace and Compass Survey
July 26, 1990



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Glacier Grotto
Area Meeting

Meeting of the Glacier Grotto
for the SouthCentral Alaska Area
at 7:30pm on Wednesday, October 9

in the offices of Stewart Title
Suite 110 of the Calais I Bldg
3201 "C" Street (32nd and "C")

everyone is welcome
both members and nonmembers
from Anchorage or elsewhere

brief business meeting
plan glacier caving trip
discussion of future trips

reports on summer trips
slides of Alaskan caves
information from POWIE V



Patches Still Available

Glacier Grotto patches, designed
by Carlene Allred and shown above, are
in limited stock but still available.
They cost \$5 each, payable to "Glacier
Grotto"; write to Voytek Wito, 8720
Beachwood Circle, Anchorage, AK 99502.

Glacier Grotto

2944 Emory Street
Anchorage, Alaska 99508-4466

Address Correction Requested

