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Curvin Metzler

The ALASKAN CAVER

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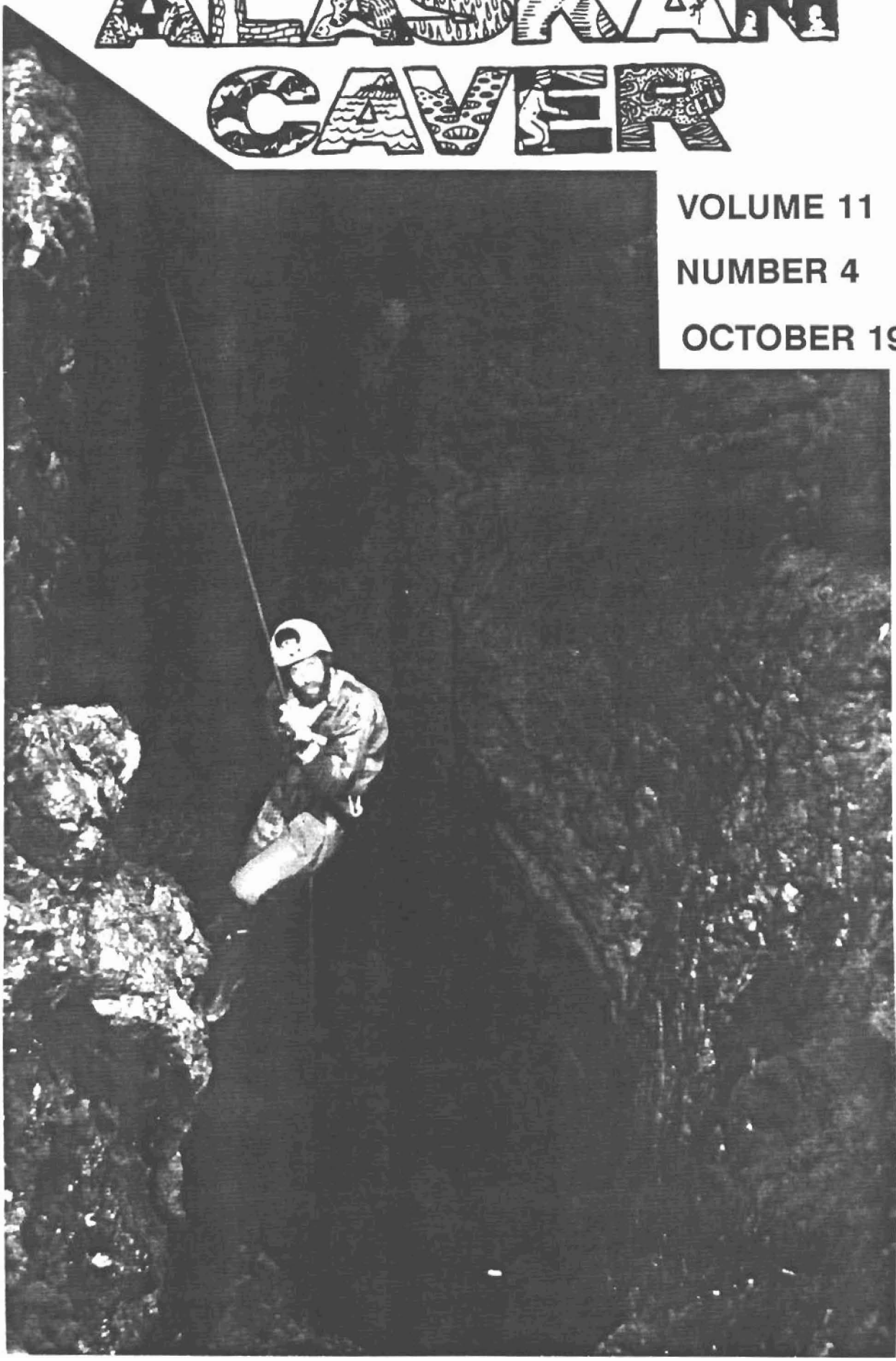

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Membership is open to all interested in Alaskan cave discovery, exploration, description, survey, mapping, photography, hydrology, morphology, biology, geology, history, speleogenesis and other speleaen processes, conservation, management, adventures, 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: Steve Lewis descending into Slate Cave, July 1990. Photo by Kevin Allred.

Table of Contents

Byron Glacier Caves

The glacier caves are open! In the past four weeks, some of us have been to the Byron Valley and into the caves under the snowfields and also the Byron Glacier itself. So far this season I have been down five different times, and have been into the caves on four of the five trips. I plan to return at least once a weekend until the snow starts to fly.

Lots of different caves are open! In the first snowfield, there is at least one large system and two or three other smaller systems. The large system looks very much like it did two years ago (see The Alaskan Caver 10(1), February 1990). The second snowfield is very unstable, except for a hundred-foot-long tunnel with a very symmetrical arched ceiling.

On the way to the Byron Glacier, there is a large rock pile which spans the valley. Underneath the rocks is snow which has been packed into ice, and which contains a number of caves. At the Byron Glacier, the side passage mapped by Boy Scout Troop 209 last year (see our last issue, The Alaskan Caver 11(3), September 1991) was again open.

This year's glacier caving season proves to be another good one, so don't miss out on all the adventure! Call Curvin Metzler at 272-8766 to express interest and join in on some trips.

Search for Limestone Caves

Glacier caves are not the only type of caves which can be explored during the winter season in Alaska. Two other trips are being planned, both of which involve caving in limestone, not ice.

The first proposal is to ski or four-wheel in to the east fork of the Kings River and search for the thousand-foot cliff of limestone which is rumored to possess caves. This trip could be planned for any time, such as perhaps in November, and would be a day trip, although a rather long one.

The second proposal is to fly and ski in to the Chitistone Mountains of the Wrangells during spring break. This would of course be a longer trip, such as at least a week in duration. Kevin Allred was in last winter and had some exciting reports of a large cave there. Spring break will be from March 6 until March 15 of 1992.

Anyone interested in any of these trips should contact Curvin Metzler at 272-8766 as soon as possible. These two trips and any other suggestions will be discussed at the next meeting of the Glacier Grotto. The next meeting in the southcentral area will be held on Wednesday, November 13, 1991, at 7:30pm, at the office of Stewart Title, Suite 110, 3201 "C" Street--see note on last page.

Nadahini Glacier Caves

by Carlene Allred

The glacier selected for our cave investigation this past spring was the Nadahihi Glacier in British Columbia. On April 20, 1991, Jeannie Henry and I headed up the Haines Highway and skied the several miles up Nadahini Creek (all above treeline) to the large peak-rimmed cirque at its head. It was a bright, sunny day, and the deep snow had been sculpted by wind to form gracefully winding drifts and cornices that were interesting to ski in and around. There were several glacier terminals in the area, and the one we went to was the lowest, where there had reportedly once been a fabulous glacier cave. A number of years ago Kevin and I had visited this place and found the cave in a state of collapse. The glacier has retreated quite a bit since then, so Jeannie and I searched for new systems. After carefully probing the glacier's snout, we found nothing open; but the solitude, scenery, and skiing were unsurpassable. It was a typical "old-style" Alaskan caving trip. ¤

1989 Glacier Grotto Financial Report

For the Year Ending December 31, 1989
by W. Harvey Bowers, Treasurer

Income and Expense Statement

Income		
	Dues	420.50
	Alaskan Caver	12.00
	Patches	120.00
	Miscellaneous	28.50
	POWIE III	400.00
	Total income	981.00
Expenses		
	Alaskan Caver	558.92
	Patches	69.60
	Supplies	9.53
	Bank charges	14.75
	POWIE III	400.00
	Total expenses	1,052.80
	Net income (loss)	(71.80)

Balance Sheet (12-31-89)

Assets		
	Cash	424.31
	POWIE cash	140.00
	Patches-76	220.40
	Total assets	784.71
Liabilities		
	Allred loan	140.00
	Total liabilities	140.00
Net worth		
	Balance 123188	716.51
	Less 1989 loss	(71.80)
	Total net worth	644.71

1990 Glacier Grotto Financial Report

For the Year Ending December 31, 1990
by W. Harvey Bowers, Treasurer

Income and Expense Statement

Income		
	Dues	529.00
	Alaskan Caver	147.50
	Patches	65.00
	POWIE IV	207.70
	Total income	949.20
Expenses		
	Alaskan Caver	655.52
	Patches	43.50
	NSS	25.00
	Supplies	10.22
	Bank charges	10.65
	POWIE IV (rope)	400.07
	Total expenses	1,144.96
	Net income (loss)	(195.76)

Balance Sheet (12-31-90)

Assets		
	Cash	464.42
	POWIE cash	363.40
	Patches-61	176.90
	Rope	400.07
	Total assets	1,404.79
Liabilities		
	Rockwell loan	935.84
	Allred loan	20.00
	Total liabilities	955.84
Net worth		
	Balance 123189	644.71
	Less 1990 loss	(195.76)
	Total net worth	448.95

Log of POWIE IV Events (1990)

Compiled by Kevin Allred

7/15 Kevin Allred, Carlene Allred, Steve Lewis, Susan DeLisa arrive at El Capitan Work Camp (11am). Steve, Susan, Kevin enter El Capitan Cave to the Upper Rockwell River and survey (255.1 feet) to choke; area needs more work. (30 man-hours)

7/16 Meeting and orientation with Bruce Campbell. (24 man-hours)

7/17 Carlene, Susan, Steve survey and explore entrance portions of Slate Cave; Kevin takes Carlene's place, pushes past first two main drops. Three more separate pit complexes remain. The cave (812.1 feet of passage so far) is clean going and looks major. **(36 man-hours)**

7/18 Susan, Kevin, Steve along with Jim Brainard and Cole Mullis do cave reconnaissance north of Whale Pass. They check out a unit and part of another but find only plugged sinks with no potential. The limestone appears to be a thin broken layer. (36 man-hours)

7/19 Bruce and Kevin check two resurgences which empty into Twin Island Lake. One emerges from the creek bed gravel and the other from a grim crack; both just above lake level. Both have steep slotted ravines above; the easternmost shows signs of major flooding--enough to wash out the road. Kevin follows the larger, easternmost resurgence up about 500 feet; it continues with limestone bedrock. On the way to the resurgences from Whale Pass road, there is a plugged sinkhole on the uphill side of the road.

Kevin and Bruce continue on to the logging unit as planned, checking two leads from Stan McCoy. One is a large sinkhole containing a cave about 200 or more feet long with formations and moonmilk. There is a bacon rind which is three inches wide and six or seven feet long. The other lead is a twenty-foot-deep sinkhole requiring rope. A third sinkhole drops twenty feet and requires a rope or handline. Susan and Steve survey and explore in the Upper Rockwell River in El Capitan Cave (another 122.1 feet). (30 man-hours)

7/20 Steve, Susan, Kevin leave for Slate Cave (7:30am) and survey all known lower areas. Two high leads remain and more photographs are desired. (45 man-hours)

7/21 After two hours of preparation, all leave work camp (8:30am). The Allred family drops off Steve and Susan near Blanket Cave and heads to the Exchange Cove entrances yet unnamed. Carlene maps the larger cave (276.6 feet) and Kevin the smaller one (61.4 feet). Kevin enters partway into the pit he and Bruce had found and find lots of passage, mud, formations, and a deer skeleton. They set survey stations in the entrance area and leave it rigged. Susan and Steve map Blanket Cave (172.6 feet); it sumps and is very miserable. Everyone returns to camp (7pm). (32 man-hours)

7/22 All leave camp (7am); Carlene, Susan drop Steve, Kevin off at Exchange Cove, near the cave with the deer skeleton. Kevin names the cave Captain Soup Cave, after Campbell's CB radio handle. They map (1152.7 feet); the cave is very muddy and the name fits--it is truly soupy. It has some spectacular formations: beautiful helictites, a two-foot-long soda straw with helictites, some nearly transparent draperies, and black organic-looking rimstone. It is said to be the most beautiful cave yet known in Alaska. Susan leaves. (34 man-hours)

7/23 Steve leaves (7am); Allreds prepare for a trip to the Calder Bay area to hunt for caves. They arrive at Marble Creek (Calder Spike Camp); Carlene flags route into cutting unit to be cut in 1990 and reports bleak cave outlook. Kevin walks (in evening) to Marble Cave to get a feel of the "karstability" of the marble. Beautiful scalloped marble surrounds the creek; old quarries with machinery are found near saltwater. (8 man-hours)

7/24 Kevin leaves (7am) to check out a unit of poor timber on mostly noncarbonate igneous diorite. On the way to another unit a mile west, he passes a muskeg meadow with trees cut to allow helicopter landings at about 1000 feet in elevation. He cannot locate the proposed road route between the units. He does notice that where marble is present drainages form slots rather than valleys. Sinks are very few and tiny; most if not all of the unit is in carbonate; timber is of good quality. Kevin heads over to the creek marked "resurgences" on the Forest Service map. Instead of resurgences, he finds that water from noncarbonates sinks there when it hits the marble. The streambed is dry but shows signs of heavy seasonal flow. Kevin continues downstream about 75 feet, until he spots two vertical entrances to a cave just upstream of a large pool of stagnant water.

The entrances join into a canyon dropping fifteen feet; another drop of twenty feet requires a rope or handline. The rock is marble, some of which is a beautiful white with noncarbonate nodules--very interesting; there are some high leads. The cave appears to have been protected from fill materials (noncarbonate rocks) by the configuration of the creekbed in allowing debris to fall past the entrances. Kevin follows the (dry) creekbed down an estimated 300 feet elevation to a resurgence equaling the swallet volume. He continues downstream to the logging road and bridge, then checks another unit of mostly muskeg and all noncarbonate, then finishes (6pm). (11 man-hours)

7/25 Kevin solo surveys (7pm until midnight) Marble Cave (746.5 feet), which ends in fill in one passage and a sump in another. He also finds another cave entrance at a potential Marble Cave resurgence location. Bruce brings supplies. (17 man-hours)

7/26 Bruce brings more water and food; he drops Kevin off to do another unit. Kevin finds small lenticular and limited marble and karst development. He cleans out a roadside spring coming from the marble; most of the unit is noncarbonate. Kevin finds a mining claim marker from 1985, hikes back to camp. Carlene maps the cave at resurgence which sumps after forty feet; it contains at least one karst window.

sketch of Marble Cave creekbed

Carlene found the resurgence at the cave, named Calder Cave, different than that at the creekbed. It runs out of the cave system and down its own stream course. It is not known which one comes from Marble Cave. (9 man-hours)

7/27 Allreds are picked up by Bruce; they reorganize. Kevin goes to map Skunk Cabbage Cave (115.2 feet), and returns (6pm). David Klinger arrives. (9 man-hours)

7/28 Allreds, Prossers (caretakers of El Capitan Work Camp), and Morgan Hamilton (age 9) go on a family outing to Dimple Cave. Kevin and Carlene take turns surveying the upper section (549.8 feet) either solo or with some help from the children. (6 man-hours)

7/29 Jay Rockwell arrives; no caving--but time to do reports (log) and reorganize with Jay Rockwell.

7/30 David Klinger checks part of a unit for sinkholes by driving to the north end of it and looking for flagged road. He follows the north boundary except for a detour around a bear cub in a tree. He finds one small twenty-foot cave, Nemo Pit, and conducts a survey (42.5 feet), then returns to the road (south end of the unit) after seven hours.

Kevin begins survey of the lower portion of Dimple Cave. He finds an unknown part of the cave and surveys it (802.1 feet), with a twelve-hour map trip. The new cave section is heading towards the blind valley cave entrance nearby. Kevin finds a twelve-foot log in Dimple Cave, and several streamlets are flowing into a new area. Cobbles are often of non-carbonate; rock is dry along course of air current. (23 man-hours)

7/31 Dave looks for leads in a unit, then joins Kevin who is solo surveying in Dimple Cave. They find more passage (451.2 feet) and are able to connect to the nearby blind valley entrance, but leave several unexplored leads. They note large amounts of organics and some small black beetles, as well as foam deposits from periods of higher water, in some areas of the cave. (23 man-hours)

8/1 Kevin and Cat Woods (of the Forest Service) survey the remainder of Dimple Cave (912.0 feet), making it the second longest in Alaska. David locates a second sinkhole lead; he hikes to the west boundary of a unit, proceeds north along the boundary past the small cave checked two days ago, and finds the sink with the cave. He surveys the cave (106.1 feet), leaving more cave below to explore, and returns to his vehicle making no other discoveries on the trip. Carlene and Jay drive to Lab Bay and check cave leads there. (35 man-hours)

8/2 Kevin looks at the remainder of a unit, which contains many areas of grikes, small sealed sinks, and a few larger sealed sinks. Below another unit, he locates and maps a tiny cave (18 feet) called Maiden Hair Cave, located in a clearcut. It is a resurgence cave and ends in a tiny waterspout, and also a low, broad sump which he digs into. The entrance has a small bedrock ledge above it which is visible from the road. David does more searching; he finds a resurgence thirty yards from the road on a dry creek bed. It is a jumble of rocks, roots, and dirt, with no visible passages. (20 man-hours)

8/3 Kevin maps solo in El Capitan Cave. In the "Windy Way" passage, rocks and ledges have popcorn on their leeward sides. Kevin finds a pool which makes a difficult and awkward 5-8 move across the wall above to walking passage containing bear bones. One complete, but scattered skeleton appears to be youngest, but is yellow from age. Others further along are mostly buried and appear much older and sometimes broken up. The skull of the complete skeleton may be a black bear, but would be a very large one. One separate, single canine tooth, partially buried in the floor silt nearby, is approximately five inches long, including the root. Further on, the passage is blocked with breakdown and

rocks. Kevin digs out a passage onward (up at an angle) and finds a few bone fragments in fill and rocks there. He enters a small room; the way onward is blocked by more rocks and boulders. He can see light above and the incoming wind is warm. He does not disturb the bear bones other than those in the dig, and recommends leaving the site as is until someone qualified and able to study them comes along.

He finishes mapping the whole area (345.6 feet) and ends up spending eleven hours on the trip, having numerous problems with mud and his carbide lamp. In "Hibernaculum" passage he finds moonmilk breakdown and other thick deposits still on the walls and ceiling. He wonders if heavier deposits of moonmilk are associated with access to outside bacteria. He guesses that numerous other bones must be buried under fill in the "Hibernaculum", but that they could have been chewed on by later occupants. (11 man-hours)

Kevin notes amazing increases in water running into various areas of El Capitan Cave following rains beginning in earnest today. There are waterfalls in points along the main passage which are normally dry. At 10pm the resurgence flow has increased from 5-5/8 below the mean to way beyond the graduations on the stick. Another guage made of a branch has been washed away. Jay estimates that the flow is 50 to 75 cubic feet per second. The water is somewhat silty in color.

8/4 Rainfall becomes sporatic during the night. In the morning the water level has dropped 25 percent or so and the color is now brown with tannin. The pressure wave must have come with only a few hours of delay, which is followed by tannin from swamps and directly from tree branches. Kevin works on the log and organizes units to be covered by cave teams. Part of Captain Soup Cave is plotted out.

David hikes another logging unit; he walks to it (1-1/2 hours) from the road (at 840 feet). There is no sign of boundaries nor roads being marked. The last quarter mile of the road has twelve to fifteen trees down across it, six at one location. His recommends that no further action be taken on the unit, which is located north of El Capitan Lake, this year. Bob Bastasz and Kathy Tonnessen arrive. (9 man-hours)

8/5 Allreds go to Lab Bay and Earl Ritter gives them the location of a cave on Mount Calder. Kevin solo surveys Four Corners Cave (65.5 feet). David and Bob walk up El Capitan Creek drainage to check out what appears to be a collapsed doline on the aerial photographs. They are stopped by bad roads and brush. (14 man-hours)

8/6 A safety meeting and planning take place in the morning. Carlene, David, Bob go into Captain Soup Cave for photography (8 hours); photographs of helictites and bacon rinds still needed. Jay and Kathy check the El Capitan Creek area and find Beaver Cave and a karst window. (39 man-hours)

8/7 Kevin attempts to map El Capitan Cave but finds it flooded at Ball Bearing Passage (1-1/2 hours). He spends some time working on reports and drafting maps (Captain Soup Cave). (2 man-hours)

8/8 David helps with the "Rain Country" filming, tending of kids, carrying items; he is accompanied by Jay, Bob, Kathy. Carlene and Kevin help photographers Skip Gray and Randy Burton all day with the filming. Steve Hopkins (caretaker) helps part of the day, and Bruce spends all day. (30 man-hours)

8/9 Bob, Kathy, David do a reconnaissance trip by kayak of Dry Pass and beyond. Jay tends kids while Steve (Hopkins), Kevin, Bruce, Carlene, Skip, Randy continue filming in El Capitan Cave. (38 man-hours)

8/10 Kevin, Carlene, Jay help with the filming of Slate Cave. Jay and Kevin map overland between Slate and Skunk Cabbage entrances and also between Slate and Cloister entrances. Carlene and Kevin map Cloister Cave (total survey for the day is 634.2 feet). David and Bob park at the south end of a unit and hike west to the boundary, flagging as they go. They find Nemo Pit and follow boundary to Old One-Eye. They tie a 200-foot line to a boulder in the main room and drop the pit and survey. The pit is 27 feet plus a ten-foot down climb; it sumps, but there is a lead going up a dry crack. There is no moving air, and the cave is wet from the rain. David and Bob map the remainder of Old One-Eye Cave (49.5 feet) and exit the cave (6:45pm). They leave the area and reach the vehicle (8:15pm) in much better time than it took going in (1 hour 5 minutes versus 3 hours 30 minutes). (82 man-hours)

8/11 Jay, Carlene, and kids go with David Matelski and Netty Phelan to see a shaft on Flicker Ridge. They map Bill's Well (63 feet), found by Bill Musser. Kevin is shown Hideaway Cave by Mike West; Kevin maps it (87.6 feet). He then goes to Captain Soup Cave and finishes photographing it. David, Kathy, Bob do a reconnaissance of Point Baker by kayak. (25 man-hours)

8/12 The Allreds look for Kim Redmond's "F Spur" cave lead as well as Bruce Roger's Staney Creek cave lead; no success. Dave and Bob look for Wolf Cave on Kosciusko Island. They kayak to the first creek on the left after passing through the narrows, hike through forest and up and down for two hours, but find no cave. They find one eight-foot pit on top, but it is clogged. It is "hot as all get out", but at least it is dry. (34 man-hours)

8/13 Kevin checks out another logging unit, but finds no caves and poor limestone. He also checks a resurgence south of Sinkhole Lake, near the main road. He digs some and does not get far, but it is blowing. David visits El Capitan Cave; he enters and gets to Hatfield's Pit, where there is no air blowing. He checks the blocked "Ball Bearing Passage", and can feel air blowing strongly. The pool which blocks the climb bypass passage is down 1-1/2 feet and passable in a wet suit. David took some pictures and returned. Bob and Kathy leave. (6 man-hours)

8/14 Kevin checks El Capitan Cave and pulls rope and one radon detector. The back part of the cave is still sumped off. Louis Bartos, Forest Service hydrologist, arrives along with Jim Baichtal, Forest Service geologist. Louis gives a very informative lecture on hydrology on Prince of Wales Island. Lyle and Dalene Perrigo arrive to do a newspaper story on El Capitan Cave. (21-1/2 man-hours)

8/15 The Perrigos and Kevin enter El Capitan Cave to photograph. David leaves. The Perrigos then go with Carlene to photograph Slate Cave.

8/16 Those remaining finish cleaning up the camp, pack, and leave. ¤

ALPINE CAVES:
Alpine Karst Systems and
Their Environmental Context
International Congress will be held in Asiago, Italy on June 12 thru 14, 1992

Slate Cave
Cloister Cave
Skunk Cabbage Cave
Prince of Wales Island
Technical Preliminary Report #33
by Kevin Allred
October 8, 1990

Since these three caves are all in one area and probably connected hydrologically, they are together in this single report.

Slate Cave

Slate Cave was first discovered on May 11, 1990, during part of the U.S. Forest Service biological cave survey by Jim Anderson and Kevin Allred. A stream, then flowing at about forty gallons per minute, flows across slate bedrock and disappears down an impressive twenty-foot-diameter shaft at the edge of the Heceta limestone.

The cave was first entered on July 17, 1990, by Steve Lewis, Carlene Allred, and Susan DeLisa. The first 38 feet of the drop is down the nearly vertical side of a sinkhole; next is a 67-foot-deep shaft. At the bottom of the drop, a side passage leads steeply upward to connect with an adjoining sinkhole. The main passage, with the stream, heads north and then east as a canyon with a minor side passage. At the edge of an eighty-foot drop, the canyon continues horizontally and remains unexplored.

The eighty-foot drop, "Pendulum Pit", ends in a large hall, called the "Troll's Bowling Alley", which heads east-west 260 feet. The upper end of the hall is plugged with fill, and the lower end pinches down into a pit series, Route III. An unclimbed waterfall lead heads south from the Troll's Bowling Alley and could come from nearby Skunk Cabbage Cave. At the top of Route III is an eccentric stalactite about a foot long and a side passage leading to "Susan's Slime Hole", a muddy crawlway and room.

Route I and Route II are also pit series. Route I captures the stream from the entrance. The water sinks into the floor cobbles about 75 feet below the Troll's Bowling Alley.

Route II is two drops of twenty feet each which join Route I in a canyon passage. The canyon evolves into a low point which shows signs of seasonal sumping. Beyond is the very high "Black Rock Fissure", named after the black-covered floor cobbles. Black Rock Fissure probably carries overflow from the entrance stream to the next two drops of about 25 feet each, where Route III joins in. At the bottom of the drops, a scalloped pressure tube five feet in diameter by fifty feet in length ends as a deep sump.

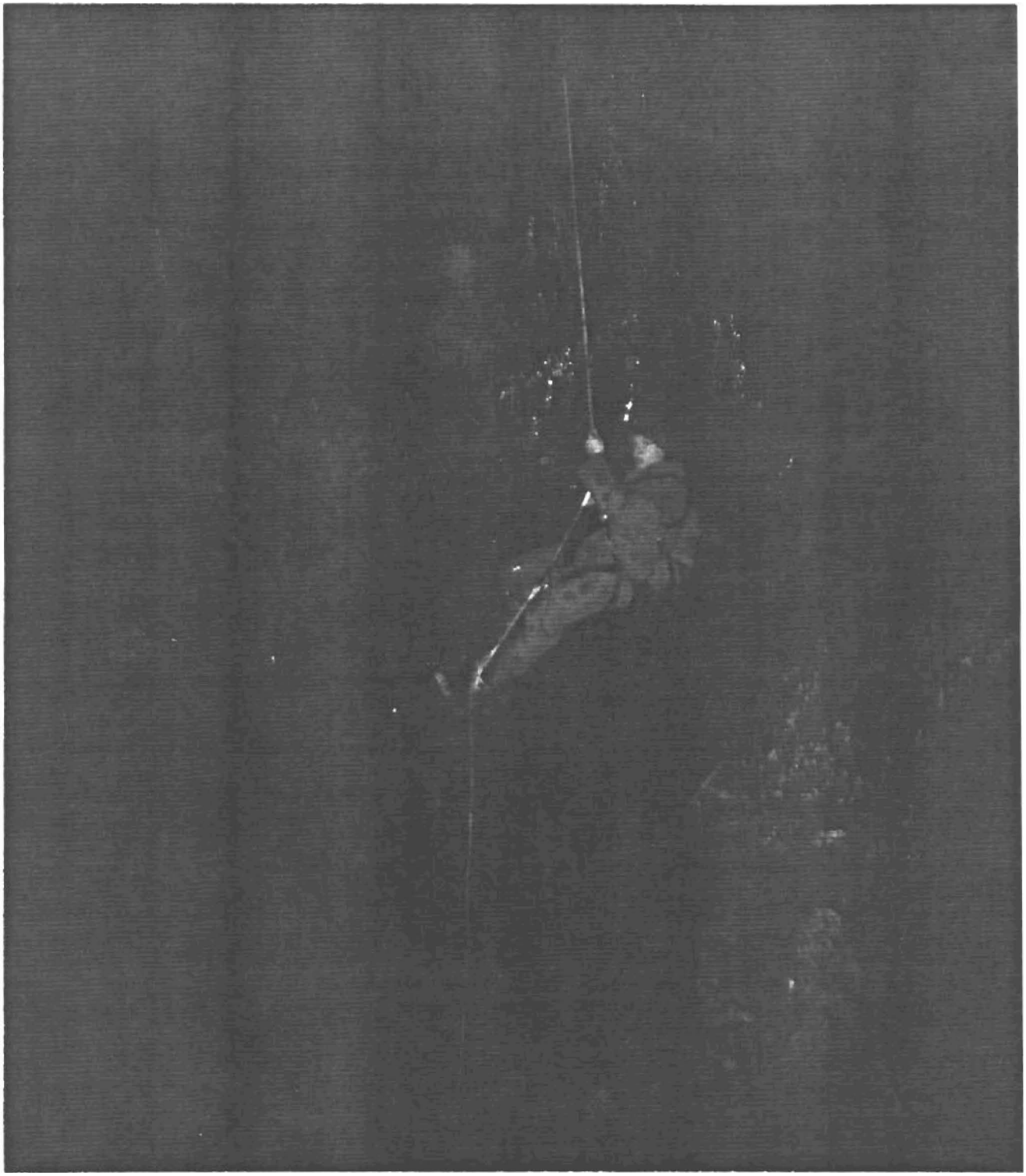
Hopes were high of connecting Slate Cave with El Capitan Cave, but it may not be possible without diving the sump. Much of the cave, especially the vertical components, are washed clean by incoming torrents. But there are areas, such as the Troll's Bowling Alley and Susan's Slime Hole, which are silty or muddy. Total surveyed passage to date in Slate Cave is 1495.9 feet; total depth so far is 386.6 feet.

Management Recommendations

Because of its vertical nature, Slate Cave's location should be restricted. The forest 300 feet around the underlying cave should not be logged, as an effort to prevent any impacts on the cave and possibly upsets in the El Capitan hydrology.

Safety Considerations

Visitors should be experienced vertically, have proper equipment, and dress warmly to spend some time on ropes in icy waterfalls. Most of the year, Slate Cave is probably not suitable for entering because of very high flow.



Susan DeLisa ascending in Slate Cave.
Photo by Kevin Allred.

Cloister Cave

This cave was discovered by Jim Anderson and Kevin Allred on May 1, 1990. Located 75 feet southeast of Slate Cave, Cloister Cave was probably once an intake for the surface stream now swallowed by Slate Cave. However, it now receives only local water. The cave has entrances in two of a string of sinkholes which extend southeast from Slate Cave. Cloister Cave was named by Jay Rockwell for its archway passage cross section.

The cave can be entered either down a fifty-foot pit on the north side of a dividing fin or from the south side in a sinkhole with a sixty-foot pit. Both drops connect into a joint-controlled passage which leads down into more joint-controlled latticework. Some deer bones are scattered in the silt and rock fill at the bottom of the cave. Nearby are deposits of a white and finely crystalline mineral which grows from cracks and seams and has the appearance of toothpaste. Total surveyed length is 407.2 feet; total depth is 110.5 feet.

Management Recommendations

Because of its vertical nature, the location of Cloister Cave should be restricted from the general public. As with Slate Cave, no logging should occur within 300 feet of the underlying cave.

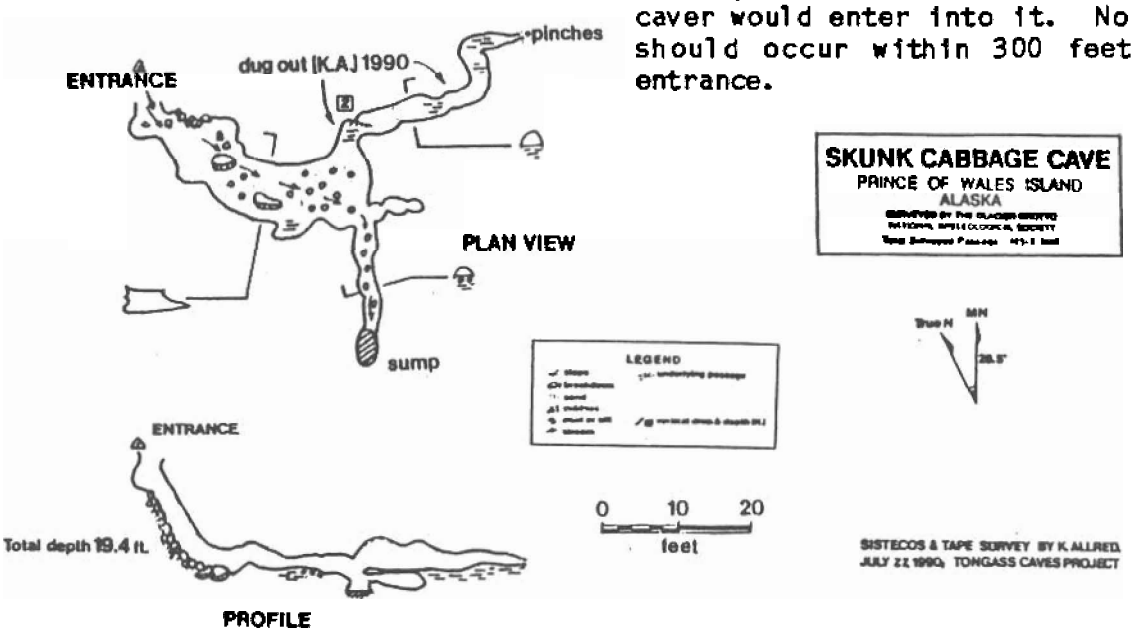
Skunk Cabbage Cave

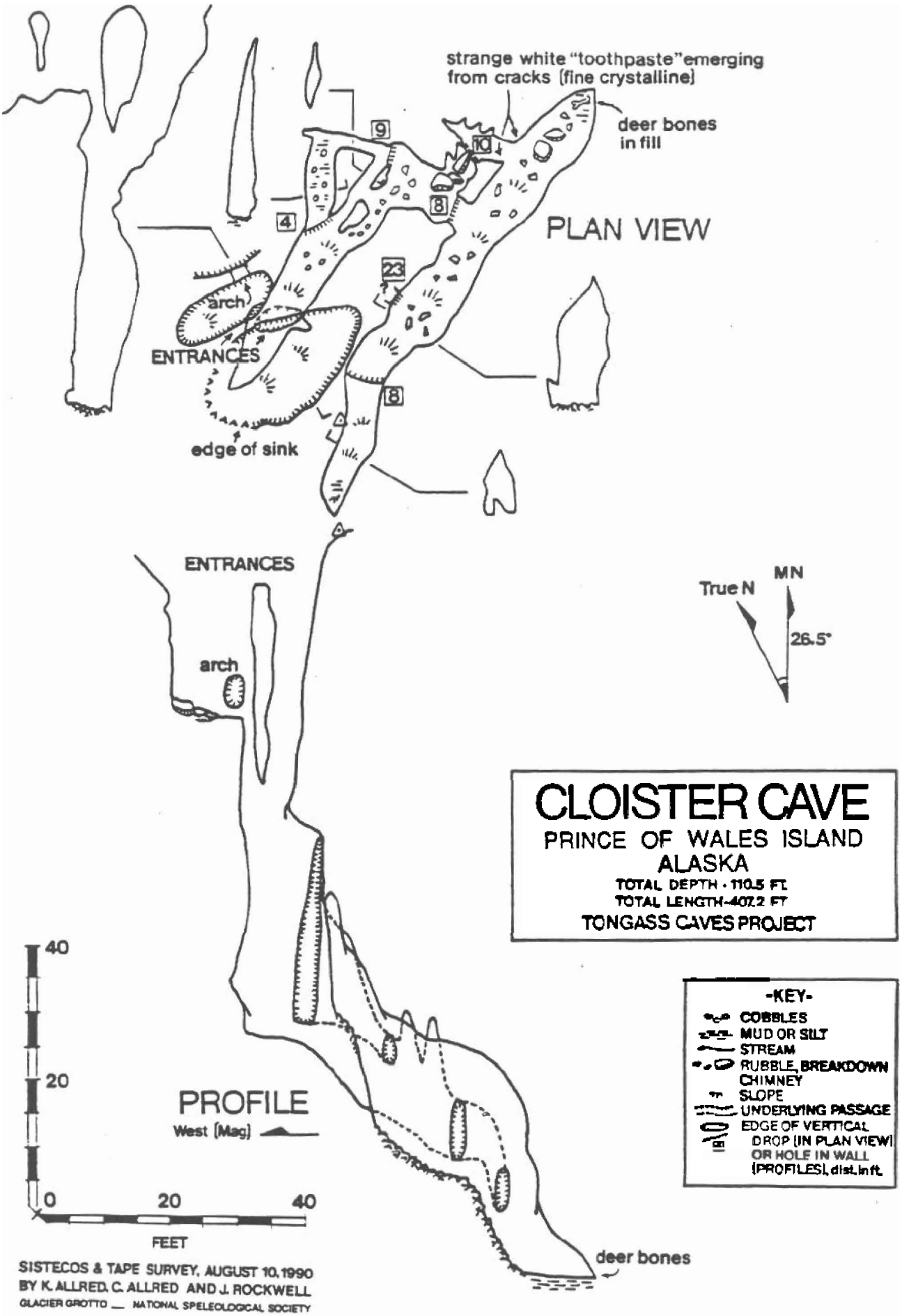
Discovered by Jim Anderson and Kevin Allred on May 11, 1990, Skunk Cabbage Cave is in a muskeg-filled sink containing lots of skunk cabbage. A stream flowing at about twenty gallons per minute was pouring into the small entrance at the south end of the sink. Another stream channel, now permanently dry, enters the sink from the nearby gully leading to Slate Cave, indicating that Skunk Cabbage Cave was once an overflow inlet.

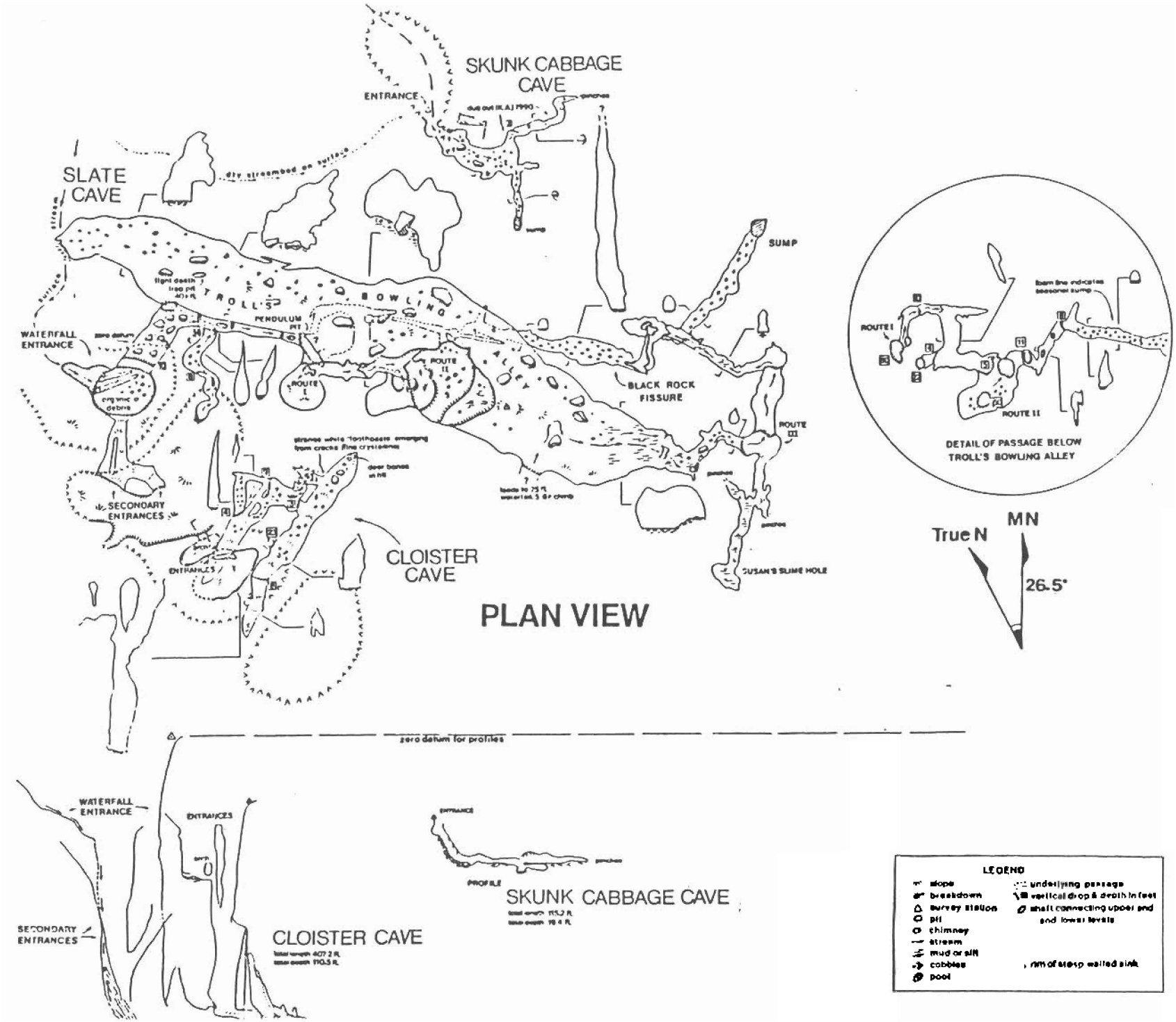
Kevin Allred explored and mapped the cave on July 27, and a drysuit was required. There were two places in the passage to the north which required digging in order to continue passing through, but the passage soon pinched. The southern passage ends in a sump. All passages contain extensive fill of silt, muskeg and cobbles. Surprisingly, the main passage is well-decorated with soda straws and stalactites. This cave could very well drain into an unexplored waterfall lead in Slate Cave. Surveyed passage total is 115.2 feet, and the depth is 19.4 feet.

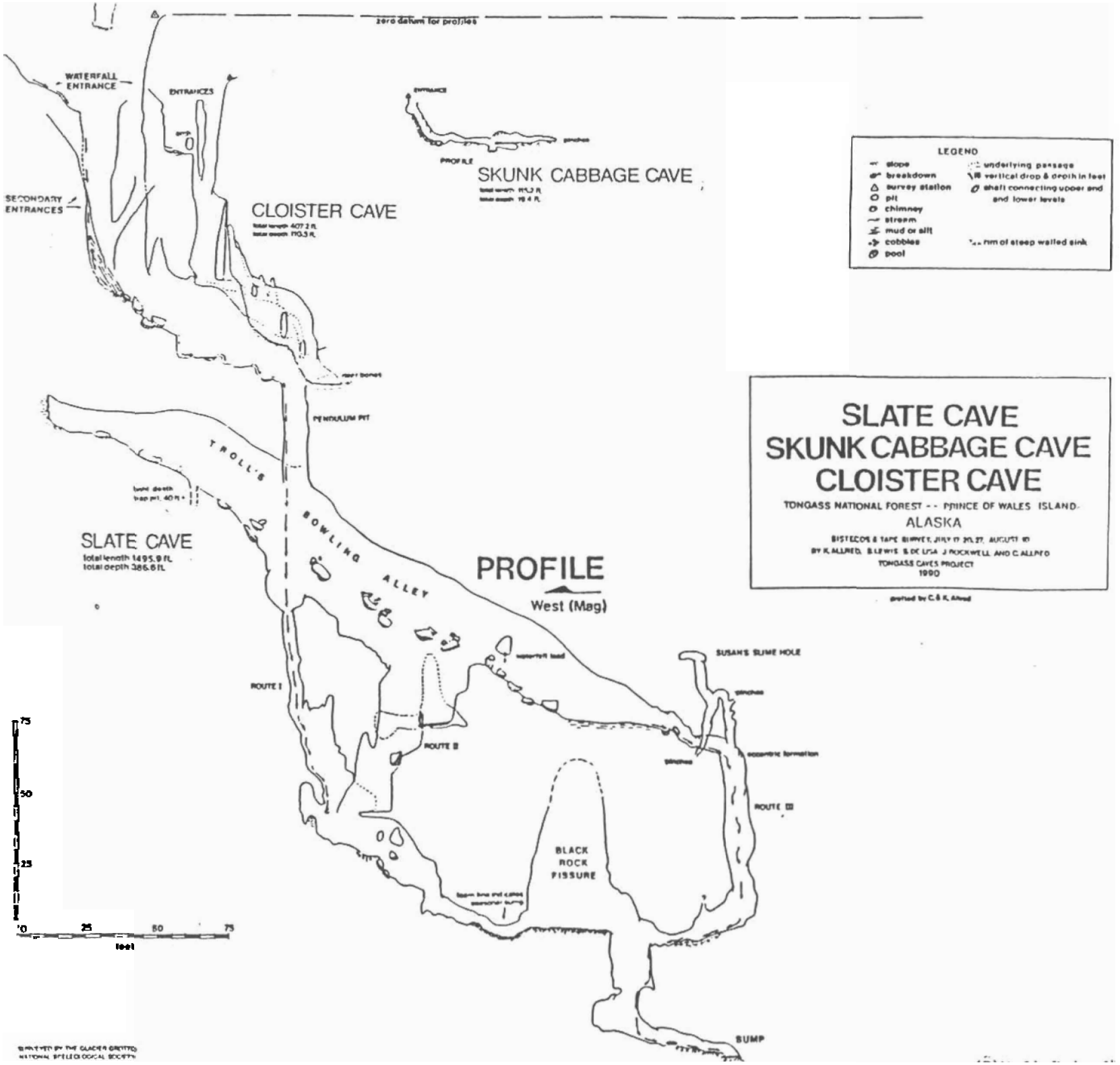
Management Recommendations

Because of its speleothems, the entrance location of the cave should be restricted from the general public, although it is not likely that a non-caver would enter into it. No logging should occur within 300 feet of the entrance. ¤




strange white "toothpaste" emerging from cracks (fine crystalline)
deer bones in fill
PLAN VIEW
arch
ENTRANCES
edge of sink
ENTRANCES
arch
True N
MN
26.5°
CLOISTER CAVE
PRINCE OF WALES ISLAND
ALASKA
TOTAL DEPTH - 110.5 FT.
TOTAL LENGTH-407.2 FT
TONGASS CAVES PROJECT
-KEY-
COBBLES
MUD OR SILT
STREAM
RUBBLE, BREAKDOWN
CHIMNEY
SLOPE
UNDERLYING PASSAGE
EDGE OF VERTICAL
DROP (IN PLAN VIEW)
OR HOLE IN WALL
(PROFILES), dist. in ft.
PROFILE
West (Mag)
40
20
0
20
40
FEET
deer bones
SISTECOS & TAPE SURVEY, AUGUST 10, 1990
BY K. ALLRED, C. ALLRED AND J. ROCKWELL
GLACIER GROTTO — NATIONAL SPELEOLOGICAL SOCIETY


SKUNK CABBAGE CAVE
ENTRANCE
SLATE CAVE
dry streambed on surface
SUMP
TROLL'S BOWLING ALLEY
PENDULUM PIT
WATERFALL ENTRANCE
ROUTE I
ROUTE II
BLACK ROCK FISSURE
SECONDARY ENTRANCES
CLOISTER CAVE
SUSAN'S SLIME HOLE
PLAN VIEW
DETAIL OF PASSAGE BELOW TROLL'S BOWLING ALLEY
True N
MN
26.5°
zero datum for profiles
WATERFALL ENTRANCE
ENTRANCES
SECONDARY ENTRANCES
CLOISTER CAVE
PROFILE
SKUNK CABBAGE CAVE
LEGEND
slope
breakdown
survey station
pit
chimney
stream
mud or silt
cobbles
pool
underlying passage
vertical drop & depth in feet
shaft connecting upper and and lower levels
rim of steep walled sink

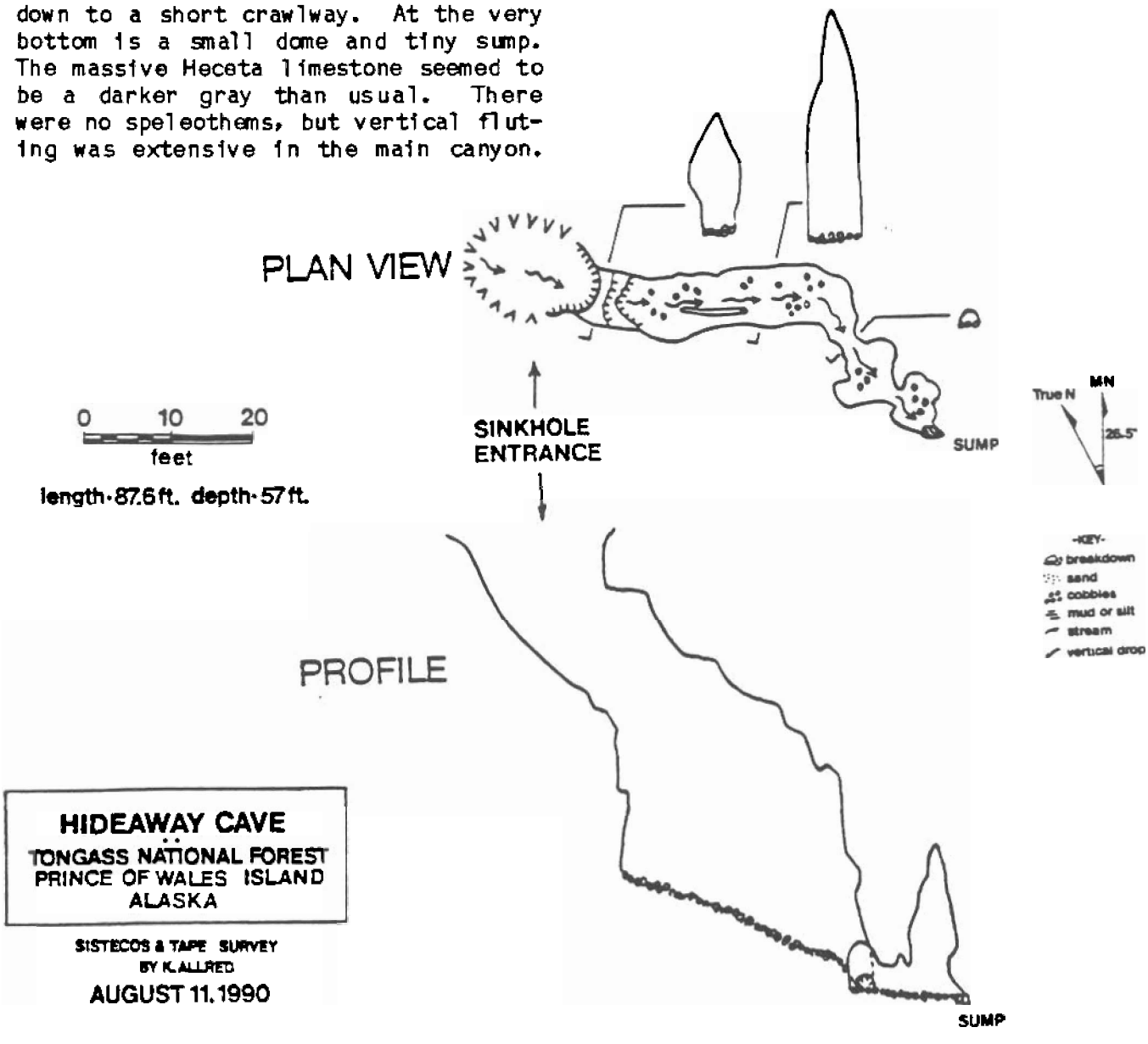

zero datum for profiles
WATERFALL ENTRANCE
ENTRANCES
SECONDARY ENTRANCES
CLOISTER CAVE
SKUNK CABBAGE CAVE
PROFILE
LEGEND
slope
breakdown
survey station
pit
chimney
stream
mud or silt
cobbles
pool
underlying passage
vertical drop & depth in feet
shaft connecting upper and and lower levels
rim of steep walled sink
SLATE CAVE
SKUNK CABBAGE CAVE
CLOISTER CAVE
TONGASS NATIONAL FOREST -- PRINCE OF WALES ISLAND
ALASKA
TONGASS CAVES PROJECT
1990
PENDULUM PIT
TROLL'S
BOWLING ALLEY
SLATE CAVE
total length 1495.9 ft.
total depth 386.6 ft.
PROFILE
West (Mag)
SUSAN'S SLIME HOLE
ROUTE I
ROUTE II
ROUTE III
BLACK ROCK FISSURE
SUMP
0 25 50 75
feet

Hideaway Cave
Prince of Wales Island
Technical Preliminary Report #34
by Kevin Allred
October 9, 1990

Hideaway Cave was discovered by Dave and Glenda West of Whale Pass. Dave felt it could be very deep and took Kevin Allred to it on August 11, 1990, when Kevin surveyed and explored it. The cave begins as a steep-walled sinkhole in a clearcut and adjacent to a landing. The cave is basically one canyon, beginning with an eight-foot and then a ten-foot drop. After the drops, a cobble and rubble slope leads down to a short crawlway. At the very bottom is a small dome and tiny sump. The massive Hecata limestone seemed to be a darker gray than usual. There were no speleothems, but vertical fluting was extensive in the main canyon. Outside, a gully appears to overlie the cave below. Total passage surveyed is 87.6 feet, and the depth is 56.9 feet.

Management Recommendations

Both drops can easily be negotiated with ropes; but because it is potentially dangerous, the location should not be advertised to the general public. ¤



Dimple Cave
Prince of Wales Island
Technical Preliminary Report #35
by Kevin Allred
October 9, 1990

On May 19, 1990, Ken and Norma Lucas of Whale Pass showed Julia Rieber and Kevin Allred the location of Dimple Cave. The cave was named by Julia for the boxwork-like patterns on the wall of a room. Other locals apparently know of this cave as it has a noticeable walk-in entrance at the bottom of a clearcut sink next to a main logging road near the head of Lava Creek drainage. On the same day, the group discovered another nearby vertical entrance in the cleft of a blind valley. Another large sink across the road from Dimple is reported by Ken to be choked with road fill, but has a strong air current.

Dimple Cave is formed at or very near the contact between the host Heceta limestone and the polymictic conglomerate to the west. Corrosive water from muskegs on the conglomerate moves into the limestone and is developing the cave system. Dimple Cave is presently the second longest cave in the state. Some passages are not only joint-controlled, but also appear bedding-plane-controlled. Many passages are filled or nearly filled with clastic non-carbonate cobbles and extensive silt originating largely from the polymictic conglomerate. There were no speleothems in the cave, which has phreatic origin with much vadose modification.

The walk-in entrance and three nearby secondary entrances lead to the main upper 200-foot-long passage called the "Family Room". Near the end of the Family Room is a climb leading to a rather unstable-looking breakdown-filled room called the "Nervous Breakdown Room". A few other short leads take off from the Family Room.

Midway along the Family Room, a passage heads steeply down (some people may feel comfortable using a handline here) to a main junction in the cave. North from the junction, a stream pours from a complex of muddy tubes and small, winding canyons. Dimple Room is reached through a short squeeze.

Back at the main junction, southward is another incoming intermittent stream coming from a small, winding canyon. The canyon divides into two ending crawlways.

At the junction, the main joint-controlled passage continues down as a conduit to a final sump for the previously-mentioned water. Until just before the sump is reached, a good draft of air is felt blowing upstream. It was not until the third visit during the survey of this region that the wind source was found. What had appeared to be a very low alcove in the bend of the passage was, in fact, a major side passage and route to lots of new cave.

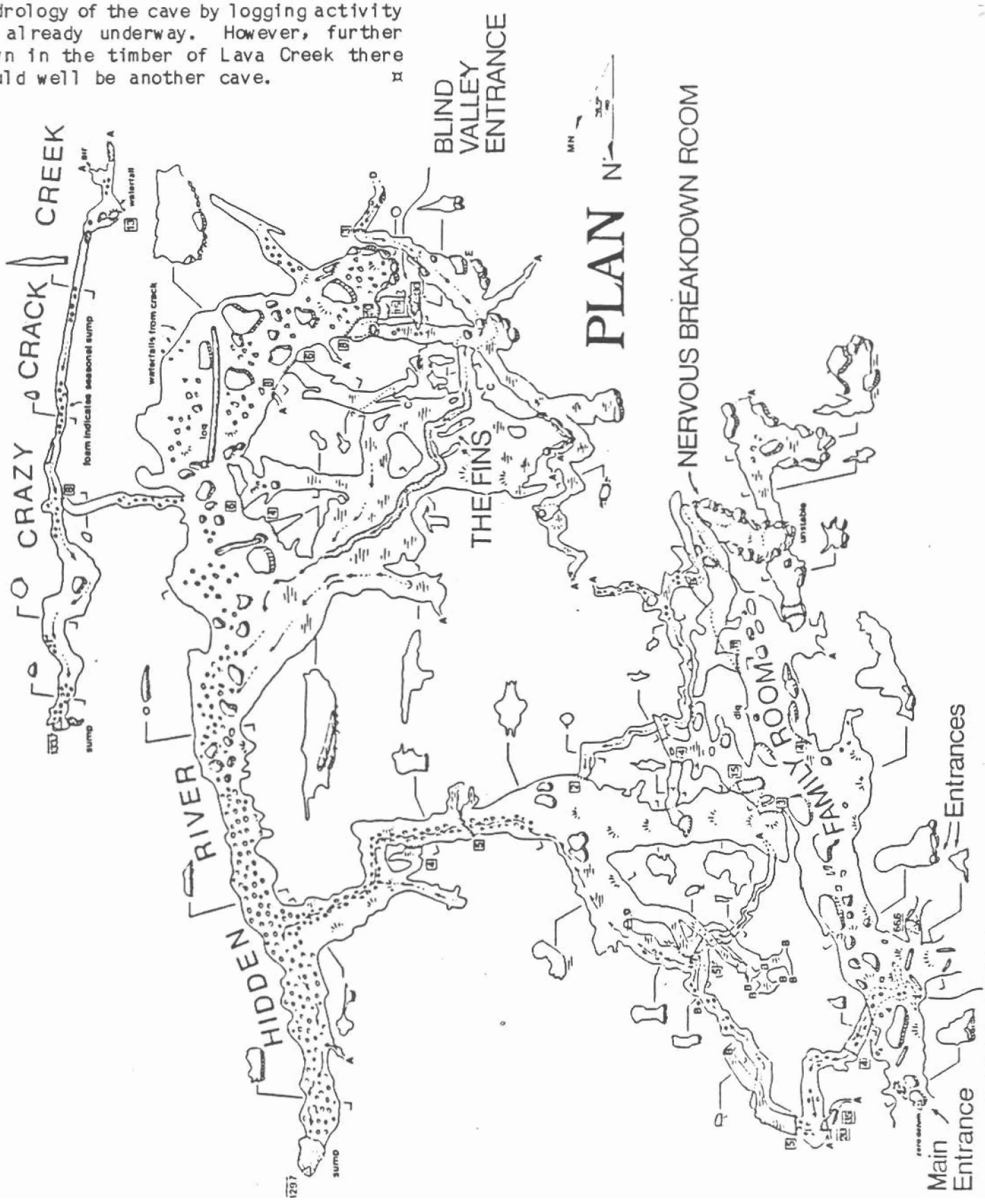
"Hidden River" comes through a low, wide, cobble-floored passage. Further on, it opens up into an interesting broad gallery and several incoming short tributaries, most of which are muddy. Of special note is a tube leaving the east wall of the gallery to drop into "Crazy Crack Creek", which is obviously joint-controlled with foam deposits from regular flooding.

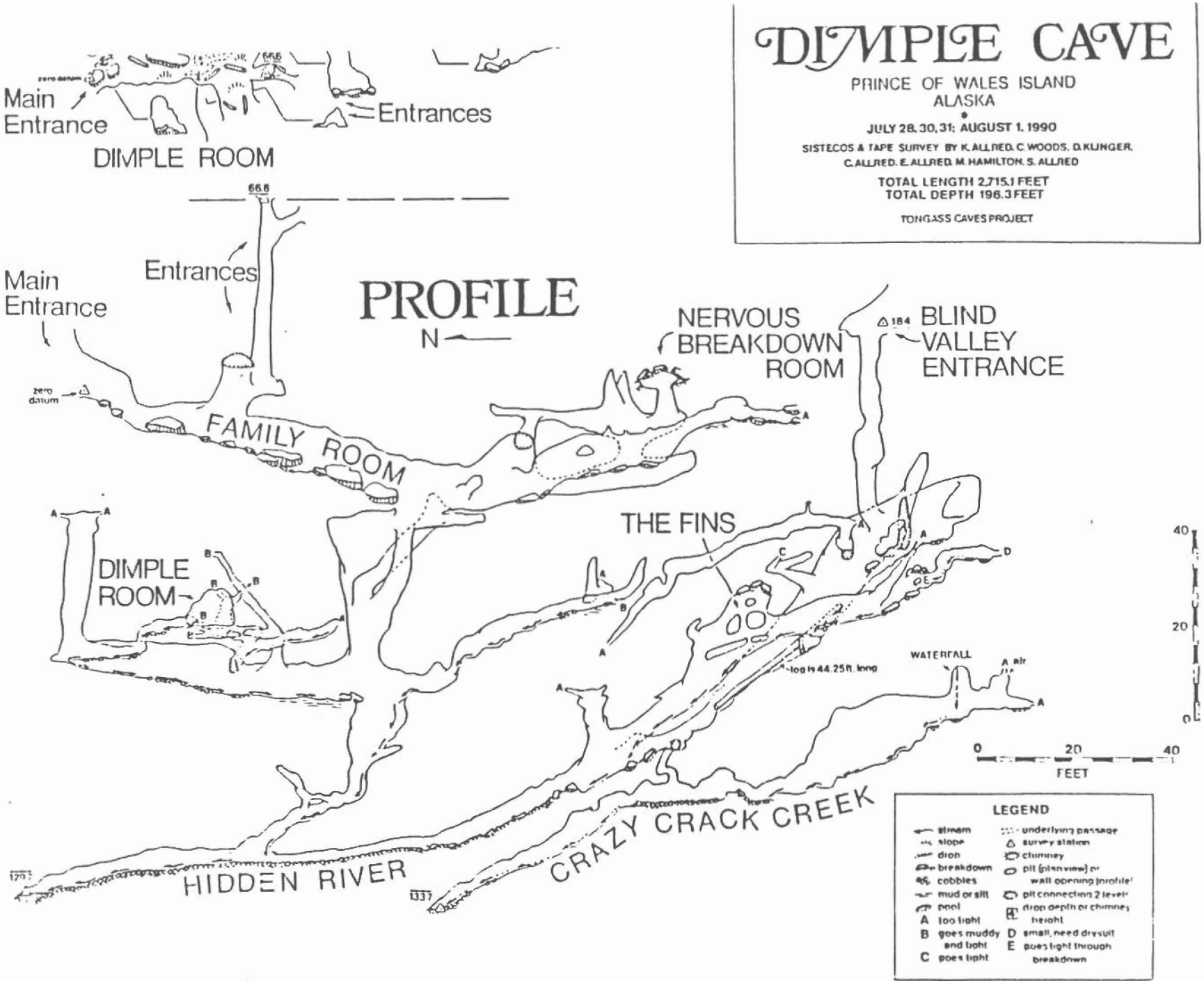
To the south of the broad gallery is a log measuring over 44 feet in length, probably originating from a hole high above which turns out to be the blind valley vertical cave entrance discovered earlier. The blind valley cave entrance needs rigging for a fifty-foot drop.

Management Recommendations

Before Dimple Cave was fully surveyed and explored, it seemed safe enough to allow a sign to be placed at the roadside. But with the finding of new easily-flooded passages, the potentially dangerous blind valley entrance, and the unstable-looking breakdown in the upper section, it would probably be wise for the U.S. Forest Service not to encourage

visitation. Any potential damage to the hydrology of the cave by logging activity is already underway. However, further down in the timber of Lava Creek there could well be another cave. ¤





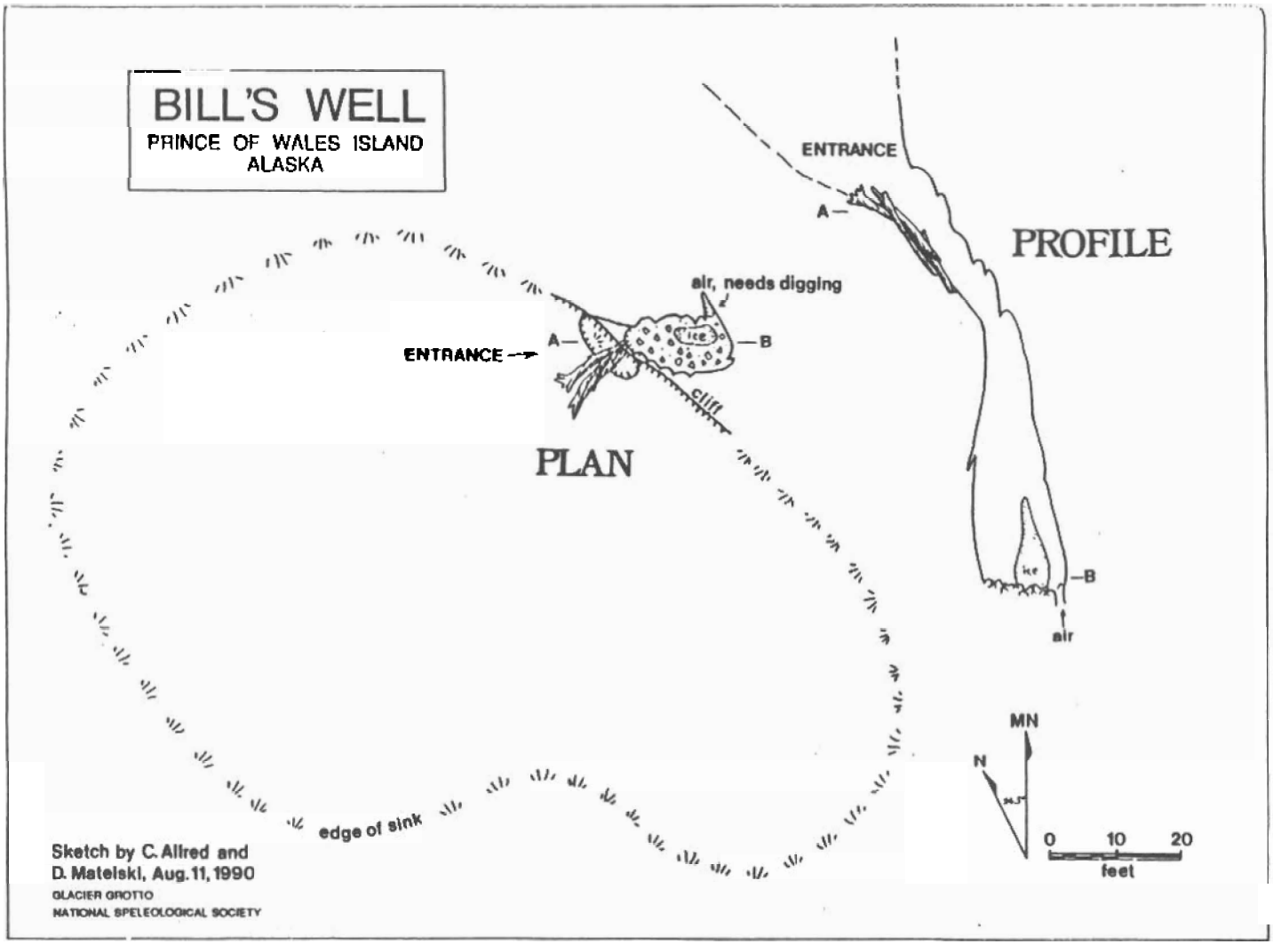
Drafted by K.& C. Allred
GLACIER GROTTO NATIONAL SPEOLOGICAL

Bill's Well
Prince of Wales Island
Technical Preliminary Report #36
by Kevin Allred
October 11, 1990

Bill's Well was discovered by Bill Musser and shown to Carlene Allred by David Matelski of Naukati on August 11, 1990. The 57-foot-deep pit is entered from a sinkhole which is south of a muskeg meadow. The meadow contains a small pond and a stream which drains into the sinkhole. The pit is vadose, clean and fluted, and contains snow at the bottom. It continues down as a narrow crack, partially plugged with rubble. A breeze issues up through this crack.

Management Recommendations

The location of Bill's Well should not be advertised because of its hazardous nature. There should be no logging or roads within 300 feet of the entrance. The entire area around Bill's Well is full of karst features and should be evaluated carefully for cave resurgences before more logging is done. ¤



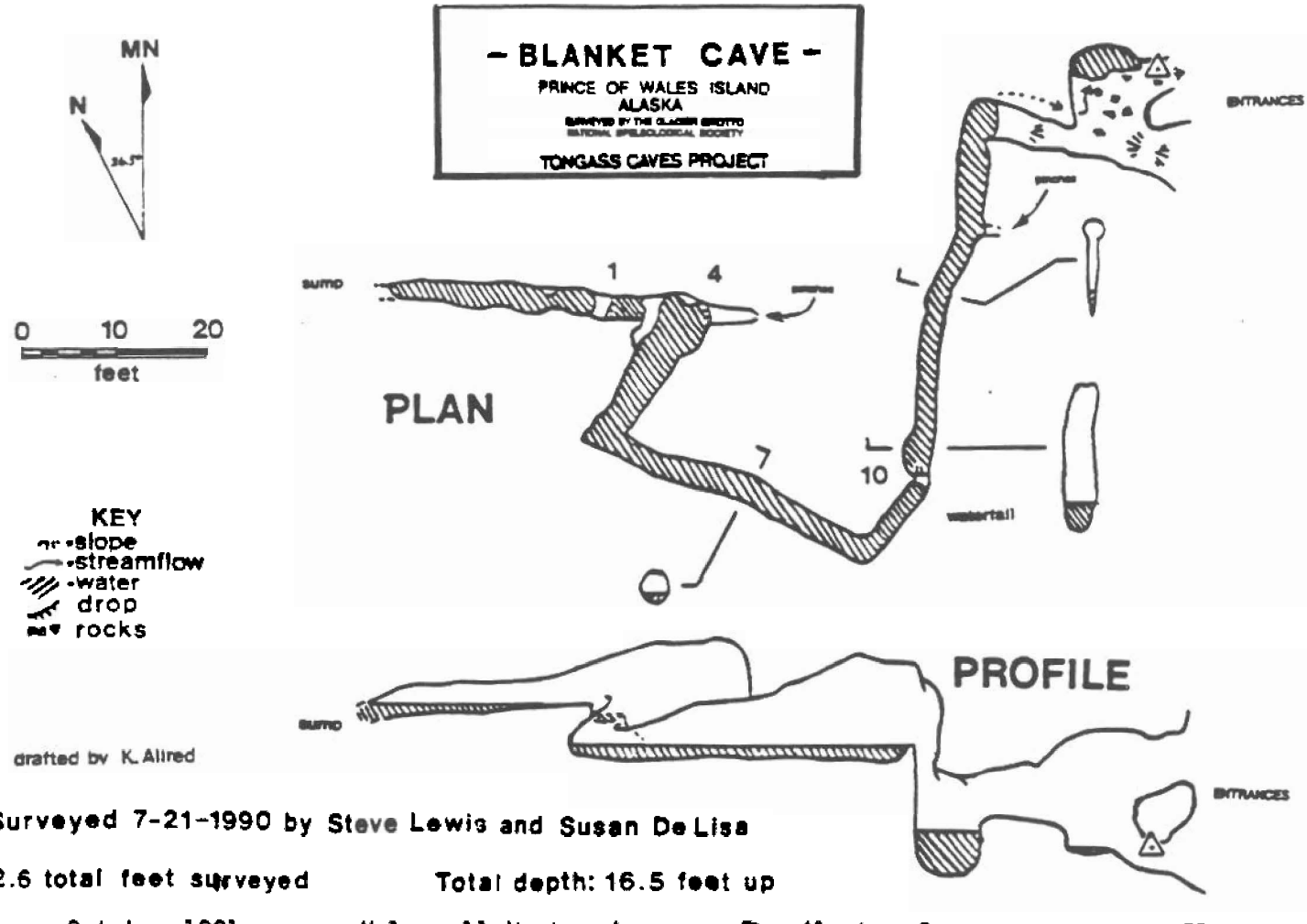
Blanket Cave
Prince of Wales Island
Technical Preliminary Report #37
by Kevin Allred
October 11, 1990

Kevin Allred discovered and named Blanket Cave on May 12, 1990. It is located high on the eastern slope of El Capitan Peak. The two entrances to the cave are situated at a cliff base. A stream, then estimated at 320 gallons per minute, pours out of the lower entrance. Between the entrances, the limestone appears to be thinly bedded and folded. The entrances connect into a room containing the stream; further access into the cave is through a higher, dry passage to the west. Here a deep, foam-covered lake is encountered, and Kevin could feel a draft of air coming out of the walking passage. He could also hear the sound of a waterfall within the cave, but turned back for lack of a wetsuit and proper gear.

On July 21, Steve Lewis and Susan DeLisa explored and mapped the cave using drysuits. Fifty feet inside, a ten-foot waterfall with a very difficult and awkward climb leads the remaining way to 100 feet of wet and tight passage. The cave ends at a terminal sump.

Management Recommendations

Because of its remoteness and wet nature, this cave is not likely to be explored except by only the most hardy and well-equipped. The location should not be advertised. Hopefully, this area will not be logged, as slopes are often steep and unstable. ¤



Surveyed 7-21-1990 by Steve Lewis and Susan DeLisa

172.6 total feet surveyed Total depth: 16.5 feet up

Glacier Grotto Area Meeting

Meeting of the Glacier Grotto
for the SouthCentral Alaska Area
at 7:30pm on Wednesday, November 13

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

Meeting Participation Survey for SouthCentral Alaska Area

Glacier Grotto members residing in SouthCentral Alaska will receive a short postcard survey to determine preference for scheduling local monthly meetings. Grotto members in other areas of Alaska are encouraged to contact their corresponding area vice-president to voice interest regarding scheduling meetings in their locality. Everyone is welcome to attend the area monthly meetings in Anchorage; they are not restricted only to residents of SouthCentral Alaska.

Dues are Soon Due

Don't miss a single issue of The Alaskan Caver; renew your Glacier Grotto membership for 1992 today; don't delay!

Glacier Grotto
2944 Emory Street
Anchorage, Alaska 99508-4466

Address Correction Requested