

April 2009

## Alaskan Caver, Volume 29, No. 2, April 2009

Carlene Allred

Follow this and additional works at: [https://digitalcommons.usf.edu/alaskan\\_caver](https://digitalcommons.usf.edu/alaskan_caver)

---

### Recommended Citation

Allred, Carlene, "Alaskan Caver, Volume 29, No. 2, April 2009" (2009). *Alaskan Caver*. 117.  
[https://digitalcommons.usf.edu/alaskan\\_caver/117](https://digitalcommons.usf.edu/alaskan_caver/117)

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](mailto:digitalcommons@usf.edu).



# THE ALASKAN CAVER

A photograph of a man standing in front of a cave entrance. The man is wearing a brown jacket, dark pants, and a black beanie. He is standing on a path covered with vibrant red and purple plants. The cave entrance is a dark, irregular opening in a light-colored, textured rock face. The overall scene is outdoors, likely in a mountainous or wilderness area.

Volume 29, Number 2

April, 2009





# WHITE NOSE SYNDROME

A letter from the NSS to its internal organizations

Keith D. Wheeland, NSS 2878, Chair NSS IO  
Committee  
2191 Mt. View Ave.  
State College, PA 16801-7214  
814-238-2057  
kwheeland@psualum.com (Use this forwarding  
address in your address book)  
IO Website - [www.caves.org/committee/i-o/](http://www.caves.org/committee/i-o/)  
Annual Report & Updates- [www.nssio.org](http://www.nssio.org)  
-----

Dear Fellow Cavers,

White Nose Syndrome has killed hundreds of thousands of bats throughout the northeastern US. This winter, it has now been confirmed in several new states: Pennsylvania, New Jersey, New Hampshire, West Virginia, and Virginia. Wildlife officials in Illinois have closed all but one of their caves to the public. Further reports are likely before the end of winter. What had been limited to the northeast is quickly becoming a far more national issue.

A year ago, the NSS Board of Governors created a White Nose Syndrome Liaison. As that person, my responsibilities have been to act as the connection between the NSS and the research and management communities. A website that is regularly updated with the latest information about the spread of WNS and the ongoing research can be found by going to the NSS homepage([www.caves.org](http://www.caves.org) <<http://www.caves.org>>) and clicking on the white-nosed bat at the bottom of the menu, or by going directly to: <http://www.caves.org/WNS/WNS%20Info.htm>.

Many people have asked about material that they can use to show at grotto meetings or to share with public groups, such as scouts, camps, churches, and other outing groups. The website above has a link to an excellent PowerPoint presentation put together and regularly updated by Al Hicks, endangered species mammalogist with the NY Department of Environmental Conservation, one of the leading WNS researchers. It is public domain and is made available to you to copy, turn into a CD, and share to help spread the word.

Below is a link to an excellent, in depth, and up-to-date report on WNS including the latest research findings. It includes photographs from West Virginia,

and interviews with several of the leading WNS researchers. Some of what they report was discussed at length in a national WNS webinar on February 20 in which over 45 university and laboratory researchers, federal and state wildlife officials, and ngos BCI and the NSS participated.

[http://www.earthfiles.com/news.php?ID=1529&category=Environment%target=\\_blank](http://www.earthfiles.com/news.php?ID=1529&category=Environment%target=_blank)  
<http://www.earthfiles.com/news.php?ID=1529&category=Environment%3E>  
<http://www.earthfiles.com/news.php?ID=1529&category=Environment><  
[http://www.earthfiles.com/news.php?ID=1529&category=Environment%target=\\_blank](http://www.earthfiles.com/news.php?ID=1529&category=Environment%target=_blank)  
<http://www.earthfiles.com/news.php?ID=1529&category=Environment%3E>  
<http://www.earthfiles.com/news.php?ID=1529&category=Environment>>

As cavers and cave conservationists across the country are unfortunately becoming more personally affected by the reach of WNS, it is important to re-emphasize the need to clean and decontaminate clothing and gear. The USFWS has protocols on this for cavers and researchers working with bats which can be found at: <http://www.fws.gov/northeast/whitenosemessage.html>.

Please know that we understand these protocols are challenging and inconvenient. They are being examined for better efficacy, and to balance the biological containment needs with safety, have been updated, and are likely to change again as more is learned about WNS. Please check the site regularly before caving.

A number of states have suspended their regular winter bat surveys in order to prevent further spread of WNS as much as possible, and to permit hibernating bat colonies under stress from being disturbed further. While it may be likely that WNS will continue to spread on its own - bat to bat - we can do our part to help slow it down, possibly buying time for the research to catch up. Cave clean, cave safely, and cave softly. Thank you. ▼

Peter Youngbaer NSS 16161  
NSS WNS Liaison  
[wnsliaison@caves.org](mailto:wnsliaison@caves.org)  
<<mailto:wnsliaison@caves.org>>



# WHITE NOSE SYNDROME UPDATES

NSS - WNS Caving Moratorium in East  
Message from Keith D. Wheeland sent March 27.

Dear Internal Organization Contacts:

At 2:00 this afternoon [March 26, 2009], the USFWS [US Fish and Wildlife Service] issued a call for a caving moratorium in all WNS-affected states and adjoining states. This includes Maine to Ohio to North Carolina to Tennessee and Kentucky and everything in between. Here is a link:  
<http://www.fws.gov/northeast/wns cave advisory.html>

Peter Youngbaer  
NSS 16161  
WNS Liaison  
[wnsliaison@caves.org](mailto:wnsliaison@caves.org)  
<<mailto:wnsliaison@caves.org>>

Messages from Keith D. Wheeland sent April 17.

Hi All Ios, Please share this with your IO. Today I have two items concerning WNS, one from the NSS President and one from the NSS Liaison for WNS. Peter Youngbaer has this to say.

Could you please forward this link to the NSS policy statement on WNS to the IOs? It's the top link under Resources on the NSS WNS website:  
<http://www.caves.org/WNS/WNS%20Info.htm>

In addition, here is one of the more moving pieces of video I've seen showing the devastation of WNS - shot at Vermont's Mt. Aeolus Bat Cave. For those outside the WNS region, this is what it's all about.  
[http://www.cbsnews.com/video/watch/?id=4920589n%3fsource=search\\_video](http://www.cbsnews.com/video/watch/?id=4920589n%3fsource=search_video)

Thank you, Peter

And this from Gordon Birkhimer our President:

## INTRODUCTION

Fellow Cavers and National Speleological Society Members,

Never in history of the NSS has any President been confronted with a situation that threatens to change caving as drastically as we used to know it. I'm certain you understand the devastation WNS has caused the bat population in caves in the North Eastern

United States. The NSS Leadership has sent a letter requesting U.S. Senate Hearings in an appeal to obtain adequate research funding.

I am now appealing to our NSS Internal Organizations and individual members to get involved and join in the fight against White Nose Syndrome (WNS). Please use my letter as a template and change the addressee to your own Senator or Congressperson. The E-mail addresses can be found at <http://www.senate.gov/> or <http://www.house.gov/> to forward your own personalized letter to your Senator or Congressional Representative. Remember, the sooner we solve WNS, the sooner we can get caving back to normal. The NSS Leadership has also recently released our Policy Statement in an attempt to contain WNS and it can be found here:

<http://www.caves.org/WNS/NSS%20WNS%20Policy%20Stmt%20090408.pdf>

Thank you for your participation,

Gordon Birkhimer  
President  
National Speleological Society

## SAMPLE LETTER

April 16, 2009

Dear ,

The National Speleological Society requests a Senate hearing with the Committee on Environment and Public Works, Subcommittee on Fish, Wildlife and Water, and requests immediate emergency funding to address the White Nose Syndrome affecting cave bats.

As the nation's largest organized caving and cave conservation organization, with nearly 12,000 members, we are deeply concerned about the loss of bats to our ecological system. Bats are our primary nocturnal insectivores, eating up to their own body weight in insects every night. The loss of bats to our ecosystem would mean a huge increase in pests that destroy agricultural crops, gardens, and carry potentially threatening diseases for humans, such as West Nile Virus.

White Nose Bat Syndrome (WNS) has already devastated the cave dwelling bat populations of the northeastern United States, causing 95% to 100% bat mortality at affected sites. This phenomenon has spread  
(continues on next page)

WHITE NOSE SYNDROME..., continued from page 4

quickly over the past two years. It is estimated that more than a million bats are known to be dead. The states currently documented as being affected are: New Hampshire, Vermont, Massachusetts, New York, Connecticut, New Jersey, Pennsylvania, Virginia, and West Virginia.

The nation's major hibernacula are west of West Virginia; if this disease is not stopped we may experience extinction of several cave dwelling bat species in a very short time period. This phenomenon was initially documented in New York in 2006 and is thought to be an introduced fungus of unknown origin. In addition, if WNS spreads to threaten bats in the western U.S., additional impacts to farmers and orchardists could face severe losses as several of these bat species are major pollinators of fruits and vegetables.

The NSS itself has raised over \$40,000 from our members in support of five different research projects, but that is a fraction of the total need. Some other private sources, such as Bat Conservation International, have also stepped forward with funding in the short term, and some USFWS funding has been able to be directed to WNS. However, the WNS situation has escalated to a crisis point where significant financial resources from Congress are urgently needed.

We can't underscore enough the critical need for research funding for this summer season. With bats ending their hibernation, follow-up activities as they emerge, as they give birth and nurse in their maternity colonies, as they consume insects over the summer and begin to put on weight for next fall's mating and hibernation season, and as they fly many miles to summer roosts, it is absolutely vital that researchers have the funds to conduct tests over the summer season. Without those resources, another year will go by, and WNS will continue to spread without information that could be obtained this year.

Following is a link to a story by Beth Daley from The Boston Globe, where researchers describe the scope of the problem, and tell of the funding issues: [\\_http://www.boston.com/business/articles/2009/04/06/sick\\_bats\\_pr\\_problem\\_could\\_prove\\_to\\_be\\_deadly/\\_](http://www.boston.com/business/articles/2009/04/06/sick_bats_pr_problem_could_prove_to_be_deadly/)

For the past year, the NSS has had a Liaison on White Nose Syndrome, who is in daily communication with the federal and state wildlife officials and scientists working on WNS. From our discussions with scientists and wildlife officials, we believe that something in the range of \$6 million in priority research funding for WNS is needed. We ask that it be spread roughly equally among several entities: the US Fish and Wildlife

Service, the US Geological Survey, and the National Science Foundation.

Those would be the three most important agencies for funding, but others, such as the United States Forest Service, the National Park Service, the Bureau of Land Management, and even the Department of Defense, are all involved.

It is important to have funding in different areas in order to keep a check and balance in the research system and to afford direct access to the parties intimately involved in the research. For the National Science Foundation, it is very important that they have a source of funds for academic researchers to apply to competitively.

We also ask that specific language be included that directs a significant portion of the money to get to the field this summer season. Timing is of the essence, and the normal internal processes are not sufficiently responsive to address the realities of the progress of this devastating illness. For example, the NSF has a "RAPID" grant program, but in actuality it takes more than nine months for funds to hit the street. We urge you to expedite that process with emergency language.

Thank you very much for attention to this major environmental concern. We are happy to offer our expertise to help in any way.

Sincerely,

E N D   O F   S A M P L E   L E T T E R

Keith D. Wheeland, NSS 2878, Chair NSS IO Committee

2191 Mt. View Ave.

State College, PA 16801-7214

814-238-2057

[kwheeland@psualum.com](mailto:kwheeland@psualum.com) (Use this forwarding address in your address book)

IO Website - [www.caves.org/committee/i-o/](http://www.caves.org/committee/i-o/)  
[Annual Report & Updates- www.nssio.org](http://www.nssio.org) ▼



Editor's note, See the NSS website for more updates on White Nose Syndrome.



# CAVING IN THE MISTY WRANGELLS

Hidden Valley and Fosse area 2008, by Kevin and Carlene Allred

Aug 25 afternoon- We all met in Anchorage airport. Jansen Cardy of Anchorage was indispensable in helping us to rent cars and find places to camp and eat along our driving part of the expedition. We drove rented vehicles part way to McCarthy and camped the night at a campground. The next day we drove to the Park headquarters where we had an informal meeting with some of the staff there. The rest of the day was spent driving to the Kennicott River where Wrangell Mountain Air shuttled our massive amounts of gear to the airstrip at McCarthy. Some of us enjoyed a welcome brisk walk since there was no room for us in the van. We slept the night at airstrip.

Aug 27- We divided into two teams of cavers; the Nizina group totaled seven, and we were six. Kevin (Ketchikan, Alaska), Carlene Allred (Ketchikan, Alaska), Josiah Huestis (Whale Pass, Alaska), Carol Vesely (Monrovia, California), Bill Farr (Monrovia, California) and Ben Tobin (Three Rivers, California) flew one-at-a-time to Hidden Valley in a super cub with balloon tires for the tiny air strip. The flights were very scenic with terrific views of the Kennicott Glacier, hole-ridden limestone cliffs, and a cloud-shrouded Mt. Blackburn, which rises to 16,390 feet above sea level.

Near the end of the extremely bumpy airstrip was a small dilapidated A-frame cabin with a bent up prop hanging above the doorway. Hidden Valley is bare



Carol Vesely and Kevin Allred at the cabin in Hidden Valley, photo by Carlene Allred.

of trees other than occasional thickets of stunted alder, cottonwood and willow. The slopes are covered with low growing vegetation interspersed with talus and high cliffs containing many black holes. The semi-braided creek that flows through the valley eventually disappears in a jumble of ice bergs left high and dry by the annual draining of Hidden Lake which is dammed off by the Kennicott Glacier.

In afternoon we split up into 3 groups and hiked around, familiarizing ourselves with stream crossings and routes into the back country. Carlene and Kevin climbed steep north slopes looking for karst features in close-by exposures of Chitistone Limestone. We discover Folded Cave, a uvula and a collapsed spring. Ben and Josiah went to a nearby area and discovered Paleo Crawl Cave and Double Spring. The caves were all very small. Mountain Goats were hanging out on slopes nearby. Carol and Bill checked out some holes in the other side of the canyon with no success, then got a gps location for a cave previously explored by locals.

Aug 28- We again split into three groups. It was cold, foggy, and rainy. Carlene and Carol checked out a big double spring up canyon, on the south side. Unfortunately it came from too tight holes, and appeared to be too young of a system to develop a significant cave. Kevin and Bill discovered Fill Cave which contains a curious dark limestone plug, indicating it is a paleo cave. We also found Talus Fan Cave and Gullet Cave. On the way down the mountain, we stumbled upon a vertical shaft in snow and fern ice that went down some fifty feet to a creek deep below. Given more time, it would have been a great thing to explore. Josiah and Ben discovered Hibernation Hole and Foggy Crawl Cave. They collected a small shard of bear bone from Hibernation Hole under a permit from the Park. We are anxiously awaiting the dating to be done on this sample.

Aug 29- Josiah, Carlene and Kevin took off with heavily loaded packs to the Fosse airstrip along the



Josiah, Carlene and Kevin begin their hike out of Hidden Valley, photo by Carol Vesely.

Kennicott Glacier. We sought a goat trail over a pass, and not being familiar with the route took the wrong way. At one point, we had to hack steps into very steep,

(continues on next page)





Carlene passing the ice boulders on our hike out of Hidden Valley, photo by Kevin Allred.

hard moraine silt to keep from falling down ledges into ice bergs below us. Josiah and I both broke our packs

two loads for a very steep section, for which we used a long handline. Josiah finally found the missing trail.

Once around the corner we slogged about two miles up west side of Kennicott Glacier between the lateral moraine and the limestone mountainside. Camp



Josiah and Kevin at our camp between the medial moraine and the mountainside, photo by Carlene Allred.

was pitched near an airstrip called Fosse. We had hoped that the Park Service could pick us up in an airplane at this longer airstrip for a couple day jaunt to another close area. This did not materialize because the strip was too wet and slick, so we decided to spend the whole time



Kevin and Josiah carrying water from the glacier in a bear container, photo by Carlene Allred.

in the Fosse area. It turned out there was more than enough to keep us busy. On the first evening just at dark, two curious owls flew circles around us



Josiah rappelling into Willow Pit, Photo by Kevin Allred.

for some time occasionally squawking and then disappeared never to return again.

Aug 30- The Foss area has even less brush than the Hidden Valley, and virtually no accessible drinking water other than directly from the glacier margins or melt water from isolated snow banks. This day we dropped and surveyed Willow Pit at about 150 feet long and 50 feet deep. We also discovered Windy Hole, a too tight vertical pit issuing a nice breeze.

Aug 31- Today was a rest day with a reconnaissance walk up valley towards Mt. Blackburn along (continues on next page)



Carlene rappels into Willow Pit while Josiah looks on, photo by Kevin Allred.





Carlene walking upvalley via the lateral moraine. On the left is the limestone mountainside and on the right is the Kennicott Glacier. The mountain in the background on the left is 16,390 foot Mt. Blackburn. Photo by Kevin Allred.

moraines. Carlene and I found Prospector Cave (a shelter with old pots and pans) and the only running stream that was not directly from glacial ice. Nearby were sinkholes, grikes, and strange bumps all over the slightly sloping tundra meadows. We attributed the formation of the bumps to be partly from frost action. We later found that these are called cryogenic earth hummocks which we believe are controlled by clints just below the thin soils.

Chert Hole (very tiny) was discovered. One very obvious large hole in a nearby cliff was black enough for us to consider checking. The scenery was spectacular with glaciers, peaks and endless moraines on this, the only completely sunny day we had on the trip.



Kevin at the Ice Palace entrance, photo by Josiah Huestis.

Sept. 1- Josiah inventoried features south of camp such as, Clubhouse Cave, Crumble Cave, Eureka Cave, Hairy Hole, Broken Cave, and Calcite Climb. Meanwhile Carlene and I surveyed Frosty Cave which we had found while packing in. Deep inside we discovered some spectacular ice formations and named them the "Drooping Doily", per request of a friend in Ketchikan.

At the end of the day as a break, Josiah and I began the survey of Ice Palace, which later connected to Fosse Pothole. This required surveying on rope in the ice-lined 150 foot deep pit. It was necessary to kick loose curtains of ice up to 200 pounds each to clear the drop for safety. Particularly intriguing was a spectacular



Josiah rappelling into Fosse Pothole, photo by Kevin Allred.

five-foot-tall ice stalagmite we passed by. Many high and difficult leads remained to be surveyed by someone with the aid of rock and ice climbing gear.

Sept. 2- Josiah and I hiked up a ridge to traverse to the top of the 200 foot cliff with a hole that we had seen two days earlier. We carried a 300 foot rope with us. On the way we discovered some sinks along with a sporting fissure-like pit (Meadow Pit). I quickly surveyed it straight down 46 feet to a constriction I did not feel comfortable pushing alone.

Carlene stayed down below in the meadows measuring the strange cryogenic earth hummocks.

(continues on next page)





*Kevin surveying Ice Palace, photo by Josiah Huestis.*

When we arrived in the vicinity above the large hole, she was able to direct us to where to rig the rope. I made a quick trip down about 30 feet the vertical 200 foot cliff to find that the cave was just another frost pocket 23 feet long. Congratulating myself for having been the first to explore it, I looked down and there in the dirt of the entrance was a fresh goat track! Thus the name, Goat Track Cave. While ascending back up I looked at the only possible way Goats could have accessed the cave and it was enough to make my hands sweat; tiny moss-covered ledges, each which looked like they would crumble with the least bit of weight.

Josiah and I then found Honeycomb Cave, and split up to cover more ground. I checked out the impenetrable swallets at the toe of an alpine glacier up the valley, and Josiah inventoried Bugger Cave.

That evening in some spare time Carlene and I began the connection survey of Ice Palace with Fosse Pothole, using crampons. It was with great trepidation that I watched Carlene ascending above me in tandem, wondering if the rope would be cut by her crampon points. But we connected the survey without incident.

Sept. 3- We were about out of time and food, so Carlene and I finished surveying Fosse pothole. Then we broke camp and hiked back towards Hidden Valley. I inventoried Chance Cave and Comfort Cave along the way. Comfort Cave was fairly extensive and contained some pretty ice formations and leads, but there was no time to survey it.

We met at a bluff where we pitched the tent and ate most of our remaining food. That afternoon Josiah and I inventoried several small caves nearby: Cranberry Cave, Iron Spike Cave (some mining artifacts were scattered around the entrance), Lakeview Cave and Trailside Cave. There were more holes to check but we could not get to them because we ran out of food and

needed the energy to get back the next day. Our camp site was very spectacular, although as with most days, it rained on us.

Sept. 4- Upon arriving at the airstrip the only food we had left to the three of us was one packet of energy C drink. After fueling up in Hidden Valley from our food cache there, Josiah and I decided to spend several hours improving the runway using a shovel and an ancient solid iron wheel barrow we found there.

The other group arrived in camp from their day of inventorying and filled us in on the caves they had discovered over the last six days. Their best cave was



*Carlene climbing out of Fosse Pothole, photo by Kevin Allred.*

Faulty Fissure Cave at over 100 feet long. It appears that cave acts as a seasonal resurgence. We porked out some more on the abundant food at the Hidden Valley camp.

Sept. 5- In the morning when the pilot landed, he commented that the runway looked like it had just been graded and was much improved. After all shuttling out, we met up with the Nizina group and had a nice meal at a restaurant in McCarthy before meeting up with Jansen at the road and starting the long drive back. We stopped at Park Headquarters to copy off our raw data for them, then spent the night in a campground part way to Anchorage. ▼



# LEGEND

- passage wall
- underlying passage wall
- unsurveyed passage wall
- rock fill
- silt fill
- ice and snow fill
- steep ice slope
- ice stalactites
- ice stalagmite
- slope (splays downward)
- vertical drop
- change in ceiling height
- depth of vertical drop
- air movement
- pool

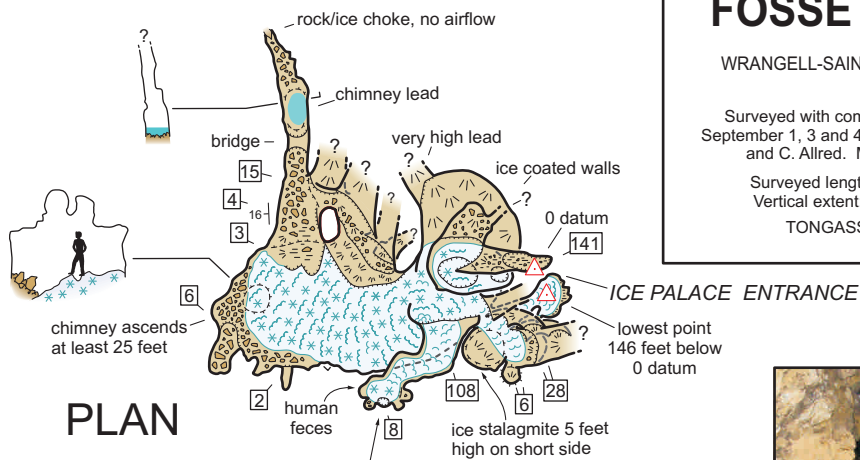
## FOSSE POTHOLE

WRANGELL-SAINT ELIAS NATIONAL PARK  
ALASKA

Surveyed with compass, clinometer and tape  
September 1, 3 and 4, 2008 by K. Allred, J. Heustis  
and C. Allred. Map by K. and C. Allred.

Surveyed length: 299 feet (98 meters)  
Vertical extent: 146 feet (47.8 meters)

TONGASS CAVE PROJECT

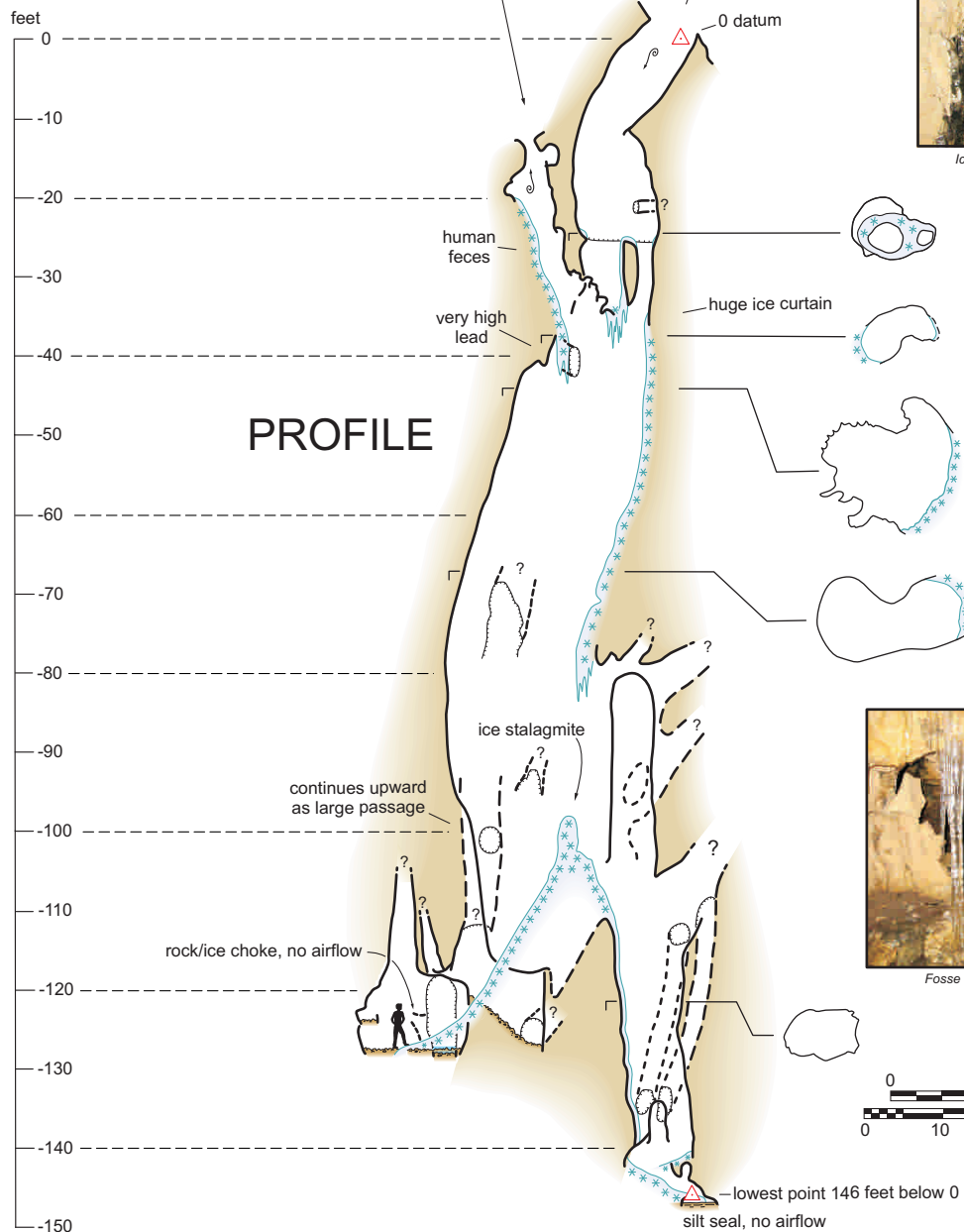


**FOSSE POTHOLE ENTRANCE**  
need 175 foot rope for drop to bottom

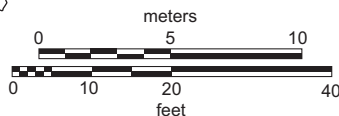
**ICE PALACE ENTRANCE**  
need 200 foot rope for drop to bottom



Ice Stalagmite, photo by Kevin Allred



Fosse Pothole, photo by Josiah Huestis



# LEGEND

- passage wall
- underlying passage
- ice stalactites and stalagmites
- slope (splays downward)
- vertical drop
- depth of vertical drop (feet)
- change in ceiling height
- bedrock floor
- rock fill
- ice fill
- airflow

N

Nm 21.9° 2008

## FROSTY CAVE

WRANGELL-SAINT ELIAS NATIONAL PARK  
ALASKA

Surveyed with compass, clinometer and tape  
August 30, 2008 by K. Allred, C. Allred and J. Huestis.  
Map by K. and C. Allred.

Surveyed length: 145.6 feet (44.4 meters)  
Vertical extent: 31.3 feet (9.54 meters)

TONGASS CAVE PROJECT

### PLAN



UPPER LEVEL

Photo by C. Allred



0 datum  
entrance

gentle talus slope

fire ashes

1. goat hair on floor
2. light tan-colored calcite coating on cave walls with scattered popcorn
3. calcite-coated boxwork, popcorn and nodules
4. six inch hole, can see daylight through
5. brown popcorn on white flowstone
6. nice popcorn on chert nodules
7. drained ice pool over rubble floor
8. too tight, can make voice connection with upper passage
9. too tight, two ceiling holes, both less than 6 inches diameter, air movement
10. dirt and frost-shattered rock fill
11. too tight with sticks, moss and rubble from above, no air movement
12. dry sticks and leaves
13. six inch hole, no air
14. too tight, no air
15. thermocline, below is frost-covered
16. protruding chert nodules
17. 2 mm long white worm and webs, dark beetle 1.5 mm long
18. frosty, sparkling walls

### PROFILE

feet

25

20

15

10

5

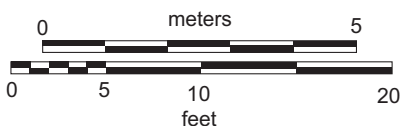
0 datum

-5

"The Drooping Doily",  
(frost-covered icicles)

small bridge

0 datum  
entrance



© 2008 by Carlene Allred

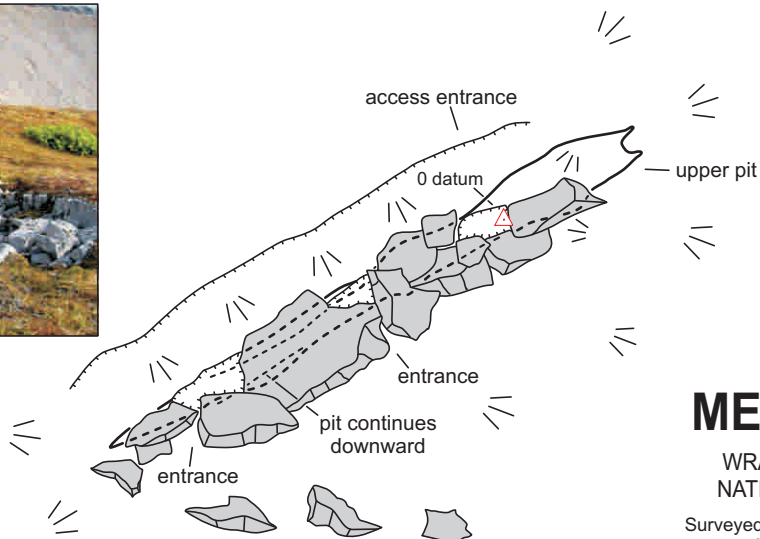




Photo by Kevin Allred

N

Nm 21.9° 2008



## PLAN

## MEADOW PIT

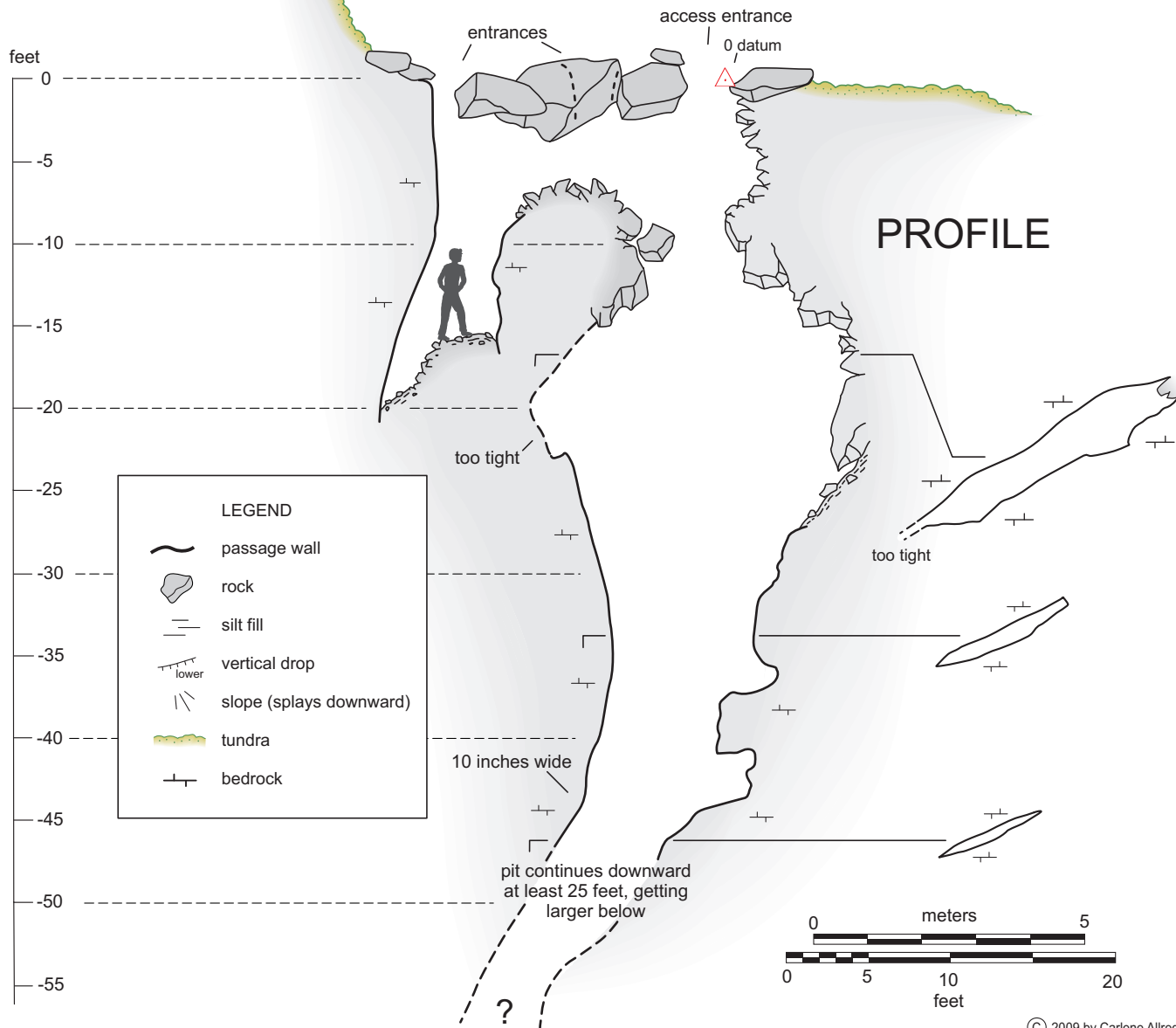
WRANGELL-SAINT ELIAS  
NATIONAL PARK, ALASKA

Surveyed with compass, clinometer and  
tape, August 28, 2008 by K. Allred.  
Map by K. and C. Allred.

Surveyed length:  
47 feet (14.3 meters)

Surveyed vertical extent:  
46.3 feet (14.1 meters)

TONGASS CAVE PROJECT



## PROFILE

# WILLOW PIT

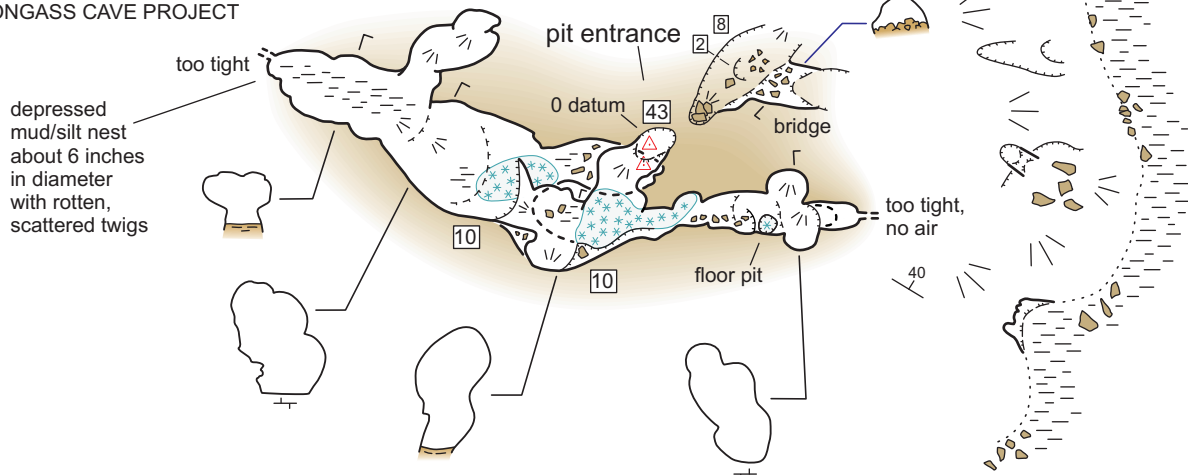
WRANGELL-SAINT ELIAS NATIONAL PARK  
ALASKA

Surveyed with compass, clinometer and tape  
August 30, 2008 by K. Allred, C. Allred and J. Huestis.  
Map by K. and C. Allred.

Surveyed length: 152.1 feet (46.4 meters)  
Vertical extent: 45.9 feet (14 meters)

TONGASS CAVE PROJECT

## PLAN



### LEGEND

- passage wall
- underlying passage
- ice stalactites and stalagmites
- slope (splays downward)
- vertical drop
- depth of vertical drop (feet)
- change in ceiling height
- entrance dripline
- bedrock
- rock fill
- ice fill
- silt fill
- survey point

N

Nm 21.9° 2008

feet  
0

-10

-20

-30

-40

-50

## PROFILE

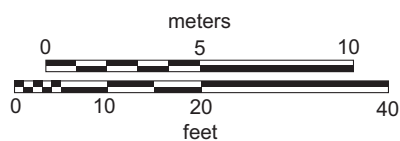


Photo by Kevin Allred

© 2008 by Carlene Allred



# GOAT TRACK CAVE

WRANGELL-SAINT ELIAS NATIONAL PARK  
ALASKA

Surveyed with compass, clinometer and  
tape September 2, 2008 by Kevin Allred.  
Map by K. and C. Allred.

Surveyed length: 23 feet (7 meters)  
TONGASS CAVE PROJECT

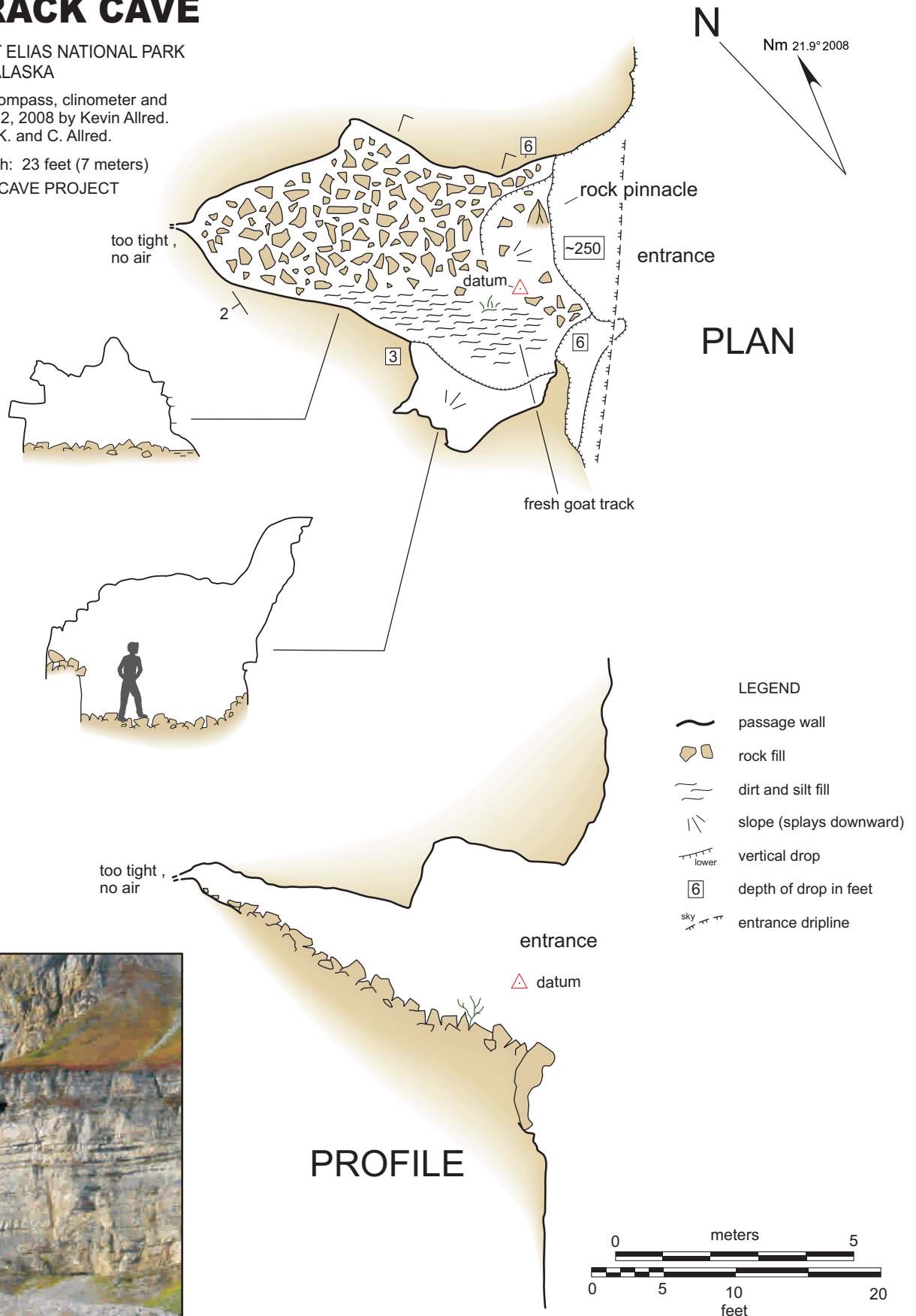


Photo by Carlene Allred

© 2009 by Carlene Allred

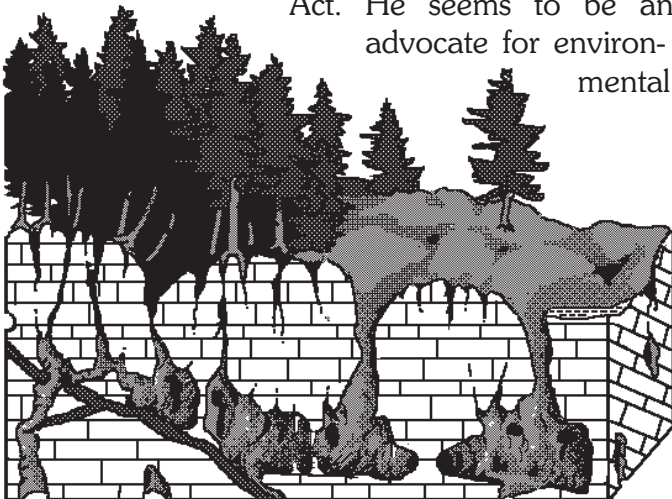
# LETTER TO GROTTO MEMBERS

Hello Glacier Grotto members,

My name is Jeff Sbonek from Port Protection, Alaska. No doubt you are aware of the legislation being introduced in to Congress wherein Sealaska Native Corporation proposes to select the north end of Prince of Wales Island, Kosciusko Island, and other lands. Sealaska would privately own these lands to be used for economic development, most likely in the form of clear-cut logging. Needless to say, we the people of Port Protection and Point Baker are unanimously opposed to and very concerned about this potential legislation, for a variety of reasons. We believe that economic development in any form that Sealaska proposes will impact our subsistence lifestyle, the esthetic quality of life here, our local economy, and the karst landscape and associated ecosystem, which predominates on the north end of Prince of Wales Island.

Myself and many others here have written letters to Congress voicing our concerns and opposition to these bills. My reason for writing to you now is about concerns in regards to the karst landscape. In the US Senate, the Senate Committee of Energy and Natural Resources will likely be the ones to decide the fate of this legislation. In doing some research about this senate committee, I learned that the chair, Senator Jeff Bingaman from New Mexico, is THE GUY, who in 1988, introduced legislation that established the Federal Cave Resource Protection

Act. He seems to be an  
advocate for environmental



as well as karst protection. He was very instrumental in establishing, in 1997, the National Cave and Karst Research Institute for which he has already introduced legislation this year that increases federal funding to that institute. Among his other environmental bills introduced this year, he has introduced legislation to set aside 16,030 acres, the Sabinoso Wilderness New Mexico (Sec. 1602 of Senate Bill-22.ES).

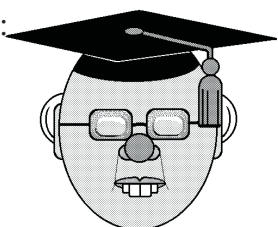
So...I had an idea and wrote to Senator Bingaman and appealed to him to introduce legislation that would set aside the north end of Prince of Wales Island, Kosciusko, and other significant karst areas in the Tongass National Forest as a National Karst Preserve. I have been writing letters to other people soliciting their support and advocating they contact senator Bingaman in regards to this concept. Which is why I'm writing to you now. If this idea/concept resonates with you, would you be interested and willing to voice support and advocacy for the preservation of the significant karst areas of Tongass National Forest, especially, but not limited to, north Prince of Wales Island and Kosciusko Island as a national karst preserve? Other people who have written to that have expressed enthusiasm and support for the idea include Southeast Alaska Conservation Council, Steve Lewis, Dave Love, Kevin Allred of Glacier Grotto and Tongass Cave Project, Tim Bristol of Trout Unlimited (Alaska chapter) advocate for habitat preservation, and William Elliott, one of the Blue Ribbon Panel members who evaluated national and international significance of the karst in Southeast.

If you are interested, please contact me, Jeff at [jfsbonttearth@gmail.com](mailto:jfsbonttearth@gmail.com), or please write a letter yourself to Senator Bingaman at [senator\\_bingaman@bingaman.senate.gov](mailto:senator_bingaman@bingaman.senate.gov).

Thank you. Sincerely,

Jeff Sbonek, Port Protection, Alaska ▼





DR. SCIENCE

## NEW CAVE SKETCHING TECHNIQUE DISCOVERED

I must apologize for not contributing any new research results for so many months in your noble newsletter. My staff and I have been busy with a truly revolutionary discovery, and are now ready to announce it to the world (through this well respected journal, of course). It all began some months ago when I was reading through my daily 20 decimeters of exciting research papers. It related that scientists have isolated a key protein (ephrin-B3) only three cells thick which runs down the spinal column. According to Dr. Henkemeyer of the University of Texas, when this barrier is removed experimental mice tended to have mirror movements in both sides of their limbs (see reference).

After much cajoling and some bribery, my colleges and I from Mud Bay Institute were able to experiment on a caver who is well known for sketching as part of surveying caves during spelunking. The following is an example of their signature which the subject drew in mirror image by suppressing the normal independent motor skills and crossing the ephrin-B3 barrier causing mirror movements simultaneously.

*Barthelme endro Carlene Albrecht*

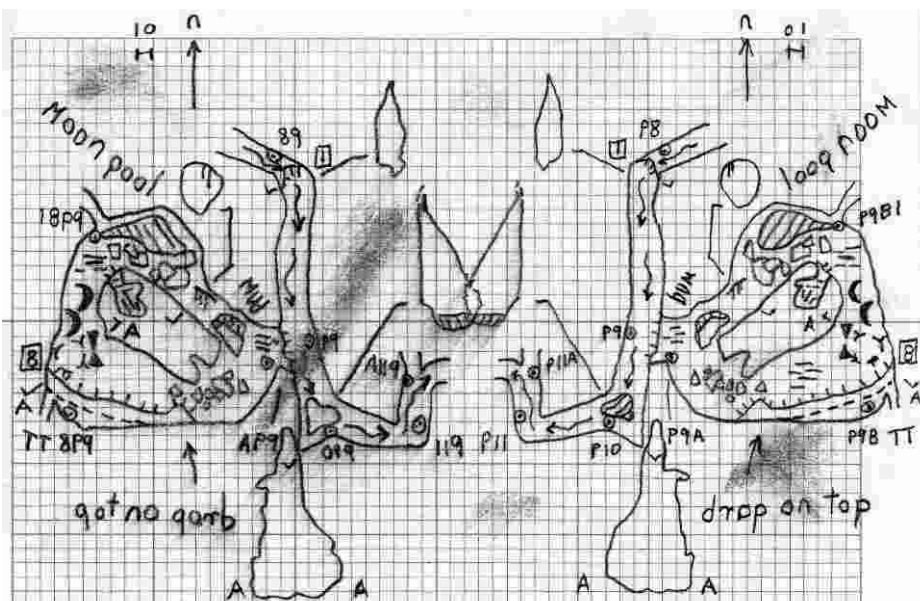
According to many reports, it is often difficult to reverse cross sections and profile views when sketching cave passages. Encouraged by our initial hypothesis, we submitted the subject to a high tech surgery of the seven cervical vertebrae.

We announce with great joy that we have finally been successful with the research which carried us so deep into the genetic building blocks of humans....even beyond our wildest dreams. The results have been abundant and impressive. After surgery the subject is able to sketch everything in perfect mirror image with both hands at once! (See example below.) This allows the cartographer to instantly select whatever view is pertinent for the finished map. Below is just one small example. Note that these examples can easily be authenticated by simply holding them up to a mirror.

A few very minor side effects have yet to be addressed such as the subjects' tendency to inch-worm down crawlways and to hop rather than walk. But, no matter. Such small details are irrelevant when considering the magnitude of this awesome discovery!

Yours Truly,  
Dr. K. A. Science ▼

Reference: BBC News, Discovery Prompts Spinal  
Cord Hope, Internet Thursday, 25 Jan. 2001.



# EARTH HUMMOCKS ON ALPINE KARST

by Carlene Allred

One day during last September (2008), while searching for caves in the Wrangell Mountains, my husband and I came upon expanses of small, regularly-spaced organic mounds formed in the tundra, having the appearance of Cryogenic earth hummocks. The area was north of the Fosse airstrip, on the sloping mountainsides west of the Kennecott Glacier. These hummocks had formed on sloping Nizina limestone surfaces that followed the bedding plane (see figure 1). By examining places with less organic growth we could tell that the bedrock surfaces were crisscrossed with grikes and clints. Kevin and I wondered if the patterns and spacing of the hummocks was controlled by the grike patterns, or if they were formed by freeze/thaw cycles, or maybe both.



Figure 1. Earth hummocks formed on a Nizina limestone bedding plane surface . Photo by C. Allred.

The next day, while Kevin and Josiah Huestis were checking a hole in a nearby cliff, I decided to do an experiment and try to determine if the spacing of the hummocks was related to the shape of the underlying epikarst surfaces. A grid was marked on the ground surface with flagging (see figure 2), and vertical depth measurements were taken every decimeter along a straight line following the strike. For each measurement I shoved a ski pole straight downward into the organic matter until it hit

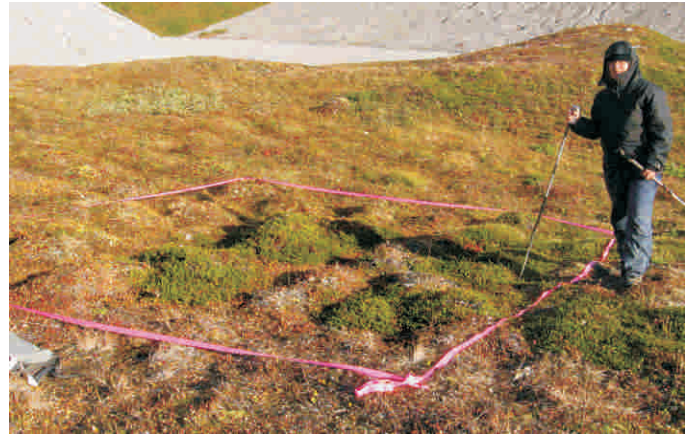


Figure 2. An area of earth hummocks is being prepared for this study. Photo by K. Allred.

bedrock. Using this method I was able to determine the depth of the organic layer at each point. Along my line of measurements I also mapped the vertical contour along the surface of the hummocks. To do this I stretched a length of flagging in a tight straight line over the tops of my hummocks line, and measured the distance from the flagging down to the hummock tops and troughs. In addition, I measured a separate, larger hummock in the same way as described above.

Figure 3 shows the comparative results. The study may not be totally accurate, for on a few measurements I was unsure that the plunged ski pole had actually hit bedrock. I simply couldn't get it to penetrate into the ground any further.

The chart indicates that the pattern of the earth hummocks is indeed influenced by the contours of the limestone surfaces below. It is possible that corrosion caused by the tundra atop the carbonate rock results in more rounded shaped ridges between the grikes. ▼

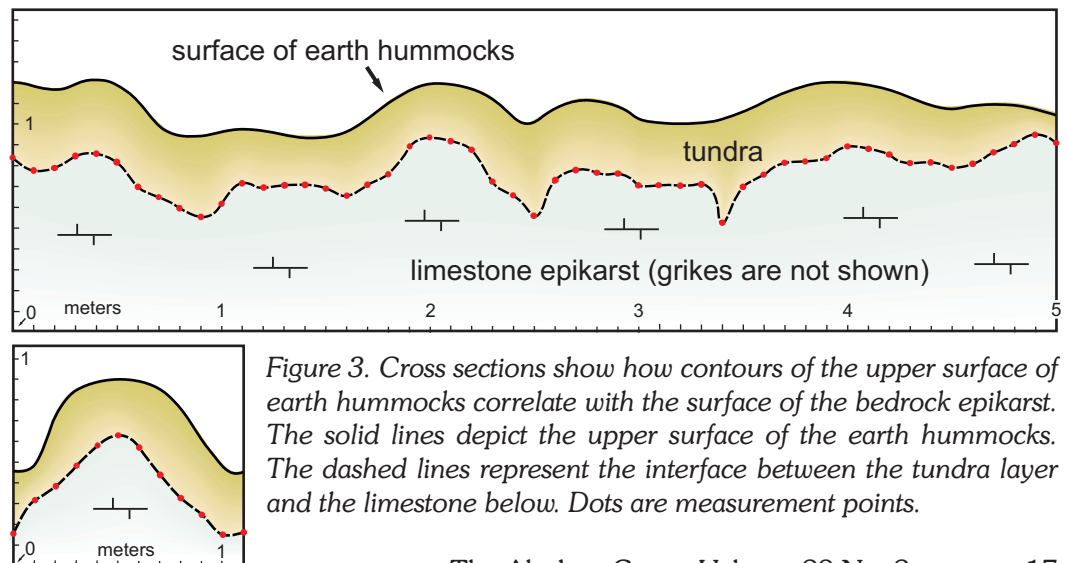


Figure 3. Cross sections show how contours of the upper surface of earth hummocks correlate with the surface of the bedrock epikarst. The solid lines depict the upper surface of the earth hummocks. The dashed lines represent the interface between the tundra layer and the limestone below. Dots are measurement points.



# GLACIER GROTTTO/UAS CAVING CLUB MEETINGS

Reported by Gwen Herrewig



*October 30, 2008, Hendrickson Building UAS,  
Juneau, AK*

*February 13, 2009 Hendrickson Building UAS,  
Juneau, AK*

Glacier Grotto members attending - David Love, Johanna Kovarik, Gwen Herrewig. UAS Caving Club coordinator Cathy Connor, president Louie Hooch and roughly 10 students from the UAS Geology course.

David Love is coordinating with UAS to create a much needed Glacier Grotto/UAS Caving Club website. Further details about the website, the timeline for completion, and person responsible for maintaining it are to come.

Members would like to schedule four grotto meetings per year (one each season) in Juneau. Next meeting TBA.

Members discussed caving options in the upcoming year, i.e. a summer caving trip to Hoonah, as well as other possible trips to the Mendenhall Glacier caves and local Juneau mines.

Johanna Kovarik presented two Tongass Cave Project expeditions in "Searching for Adventure in Alaska's Underground". She discussed project history, discoveries, and photos of the Calder Mountain expedition on the Prince of Wales in August and briefly introduced September's expedition to Wrangell St Elias National Park.

The meeting started at 7:00pm. Members present: David Love, Cathy Connor, Carlene Allred, Kevin Allred, Gwen Herrewig, Johanna Kovarik, and six nonmembers.

David Love introduced a letter written on behalf of the Glacier Grotto in response to Senator Lisa Murkowski's Senate bill 3651 introduced last year. This bill is to provide for the settlement of native claims under the Alaska Native Claims Settlement Act (ANCSA). However, 71% of additional lands selected by Sealaska are in karst areas and there is concern over whether or not those areas will continue to be protected.

Kevin and Carlene Allred spoke on the Wrangell - St. Elias National Park Cave Inventory Project. In August, 2008, a group of cavers went to Wrangell - St. Elias National Park to locate and inventory caves. Participants separated into two groups to cover more ground and ended up having two very different experiences. The Allreds shared photos from the trip, information on what they found, and maps of the caves documented.

Cathy Connor then prompted Kevin and Carlene to share a few photos and stories from caving trips to Hawaii.

The meeting ended close to 9:00pm. ▼





Scenes from the vertical practice held with the Juneau Boy Scouts on April 7, 2009. Caving instructors present included David Love, Gwen Herrewig, Rachel Myron and Johanna Kovarik. Photos by Rachel Myron.





The Alaskan Caver  
c/o Carlene Allred  
Gen. Del.  
Tenakee Springs, AK 99841

Address Service Requested

