The Alaskan Caver

A publication by and for the Glacier Grotto of Alaska

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PRESIDENT’S CORNER

Greetings from the near-North of Southeast Alaska. Although the snow has finally begun to fall in the northern temperate rainforest, cavers and fellow troglodytes take heart that the days are getting longer and the warming breezes of spring low-pressure systems will soon be on the way. Never too soon to start thinking about summer caving plans!

David Klinger, Glacier Grotto’s representative to the Northwest Caving Association (NCA), which is the NSS Region including the Pacific Northwest and Alaska, has been approved by Grotto membership to continue to represent the Grotto at the NCA meetings. Col. Klinger reports that the NCA will be holding annual meetings on Vancouver Island this year over the Memorial Day weekend, but that he will not be able to attend. Maybe be some great caving opportunities and contacts. If anyone in the membership is interested in attending and serving as designated proxy, please contact David Love at pandalid@yahoo.com or Connie LaPerriere at marcel@alaskamade.com. Glacier Grotto will provide a roundtrip airline ticket between Southeast Alaska and Victoria, BC for this event in exchange for representation and meeting notes.

Jim Baichtal, USFS Forest Geologist, reports that the USFS led expedition this year is currently scheduled for June 7th to 28th. Tentative plans include: 1) explore, map and cave the karst on the north side of Mt. Francis on Kosciusko Island from June 7 to 13, 2) explore large sinks and sinking streams discovered last summer in the Mt. Calder area on Prince of Wales Island from June 14 to 17, within walking distance of logging roads, and 3) June 18 to 28, explore and map the karst in the hills behind Ketchikan on Revillagigado Island. Kevin Casey, the cave guide at El Capitan for the past two summers, will be organizing the expedition this year and will be with the USFS starting in May. Contact Jim Baichtal at jbaichtal@fs.fed.us if you are interested in participating and want more information.

In other cave protection/land use planning news:

Chad Van Ormer, Recreation Planner, has indicated that the Craig Ranger District should have a completed draft of the Environmental Assessment on the Baker Island trail by the end of April. While several Glacier Grotto members have expressed concern that proposed tent platform campsites and a trail may increase potential for vandalism of culturally sensitive sites nearby, the community of Craig supports this project as it may provide additional recreational opportunities along the outer coast. Grotto members point out that minor vandalism has already occurred at the site and only one additional instance of misplaced graffiti could ruin the site for generations to come. Contact Chad Van Ormer at USFS, Craig (826-3271) if you wish to be included on the mailing list.

Terry Fifield, USFS archeologist and Grotto member, does not see the Baker Island trail project as potentially damaging, given the rugged terrain between the trail and the cultural sites, the widespread local knowledge of the sites in the area and an effective education process. Nevertheless, he has agreed to help Grotto members in nomination of the area to the National Historic Register. The area is already eligible for listing, but official listing is a lengthy process. If any of the membership is interested in assisting with this process please contact David Love at pandalid@yahoo.com (Continued on page 3)
Glacier Grotto member, caver extraordinaire and anthropology professor Dr. Daniel Monteith will be leading several summer field courses in Glacier Bay, Alaska, through the University of Alaska Southeast along with Cathy Connor. The purpose of the project, which is a collaboration with the National Park Service, Hoonah Tribal Association and the University of Alaska Southeast, is to perform archeological surveys in Glacier Bay National Park in order to prepare traditional cultural property nominations. Cathy Connor will be conducting field research on the glacial history of the properties.

Anthropology 493 Archeology of Glacier Bay (J01) (1-4 credits) Professor Monteith
May 7, 8, 9, 12-23

Students will be involved in archeological surveying and mapping in Glacier Bay. Basic survey methods and techniques will be taught in the field. Cultural resource management processes and laws will be emphasized and discussed. Final data and reports will provide input for traditional cultural property nominations.

President’s Corner continued

The DEIS for the Licking Creek Timber Sale (Shoal Cove Area of Revilla Island) has been published and the public comment period has closed. The USFS is reviewing the draft document now and considering public comment. Jim Baichtal mentioned that mitigation applied within various harvest units and areas adjacent to those units to protect karst features found there, for whatever reason, were not shown on the unit cards nor discussed on the road cards. The FEIS will clearly show this mitigation. Most of the karst appears to occur in well-defined bands within the sale area that were easy to follow and all well developed karstlands were excluded from the sale.

USFS analysis of the public comments concerning the Kosciusko Timber Sale is now underway. Jim Baichtal reports that ALL surveys by the TCP and Glacier Grotto will fully be considered in any alternate development of the current sale plan that may come out. Further, the more stringent standards, than the current Tongass Land Management Plan (TLMP) standards and guidelines, that the USFS applied to the Kosciusko Timber sale will be implemented and incorporated into future sale plans. Jim Baichtal cited better protection of losing streams and non-harvest buffers of a minimum of 100 feet plus two tree heights, as two examples. Both the Kosciusko FEIS and Tuxekan Island DEIS planning documents will also be reworded so that the Watershed and Karst issues are clarified and discussed separately with a likely document completion date for both proposed timber sale areas by the end of the summer.

The Glacier Grotto sincerely hopes that the USFS will take the comments presented to the USFS on the Kosciusko Timber Sale to heart. There are too many unstudied and undefined effects associated with the increasingly fragmented coastal temperate rainforest on karst, such as is found on Kosciusko Island. Watershed delineation, better understanding of diffuse recharge areas in karst, secondary effects of soil dessication, erosion and redeposition caused by logging activities, and continued study of diminished forest regeneration in some karst areas must all be studied before additional timber harvest should be allowed. Watershed change, soil erosion, and loss of soil productivity in other parts of the world stand as stark reminders of what could happen without such protections. Glacier Grotto wishes to see even more stringent guidelines applied to industrial activities on karstlands and still supports the "No Action" alternative presented in the Kosciusko Island Timber Sale Draft Environmental Impact Statement. Comments provided by the Glacier Grotto to the USFS regarding the Kosciusko Island DEIS omitted in the last issue of the Caver are included in this issue.

Finally, Jim Baichtal has provided a breakdown of the current TLMP land use designation that is protected as karst. See the included email. Currently about 391,462 acres or 84% of a total of 467,600 acres of karst lands are protected or are modeled to be. As active participants of this inventory and regulatory process over the past 15 +/- years, members of this Grotto and the TCP (As well as the USFS) should be proud of our accomplishments so far. This leaves 74,816 acres of identified karst lands for complete protection of karst on the Tongass!
GLACIER GROTTO
COMMENTS ON
KOSCIUSKO DRAFT
ENVIRONMENTAL
IMPACT STATEMENT

9/22/02
David Schmid, District Ranger
USFS, Thorne Bay Ranger District
PO Box 19001
Thorne Bay, AK 99919

Dear Mr. Schmid,

This letter is in response to the recently released DEIS for the Kosciusko Island Timber sale. This document is incomplete, inaccurate, and out-of-date. The information contained within the DEIS does not present a complete picture to the reader of the current knowledge about the karst systems on Kosciusko Island. This knowledge was gained not only through many hours of volunteer effort, but also through the use of taxpayers hard-earned money. How can someone interested in this project truly evaluate and make an informed decision as to the best alternative, if all the available information is not presented. Publication of the DEIS was premature in that it is incomplete.

It is unfortunate that the USFS decided to publish this document based on information gathered two years' ago and not on the extensive fieldwork that has occurred since. Had the USFS published this DEIS based on the best, most current knowledge available, there would be so few logging units left in the unit pool that the entire project might likely not be justified at the scale presently proposed. Since the initial layout, many proposed logging units and portions of units have been removed due to concerns about impacts to the karst landscape (Jim Batchelor, personal communication, 2002). Additional areas should also be removed based on on-the-ground reconnaissance work completed by the USFS, Glacier Grotto and Tongass Cave Project since this DEIS was written. The publication of this document in its current state is irresponsible to the public's concern with conservation management of a public resource and is not based on the best scientific knowledge currently available. The Kosciusko Island DEIS appears to those of us who have been intimately involved with evaluating the proposed sale as an incomplete attempt by the agency responsible for conservation of a public resource to "get the cut out".

We are deeply disturbed that the document does not contain the information that the Glacier Grotto and Tongass Cave Project have collected over the last 2 years' of exploration and ground-truthing of the proposed logging units. In addition to the efforts of the hired consulting firm, URS; volunteer effort, time, personal finances and expertise was spent locating, surveying and mapping more than 200 caves and karst features that exist but are not so well understood as to their actual location. We offer our input, most of the public will not understand that this proposed timber sale is flawed especially as regards to issues related to karst. Without this input, the USFS is not in compliance with the Federal Cave Resources Protection Act in terms of protecting and monitoring caves and karst features on Kosciusko Island.

The preferred option, option 3, is NOT our preferred option. This option does not accurately reflect the current knowledge and will not protect the karst ecosystem underlying these proposed units. The potential for loss of water quality, destruction of centuries old cave formations and impacts to stream ecosystems is evident to any one of us who have spent time looking into these unique geologic systems.

The preferred alternative presents the areas that the USFS considers suitable for logging, most of these areas contain more karst features than are reported to exist on the USFS' unit cards or map, based on in-the-field inspection by both Glacier Grotto(GG) and Tongass Cave Project (TCP) members. We feel that these features within these areas need to be included in this document. The following comments apply specifically to the logging units proposed to be clear-cut or selective cut (color coded red on the map labeled "Preferred alternative"), according to the Kosciusko Island Timber Sale DEIS:

Unit 546-537: two caves were surveyed in this unit, Lost Geepus, Bell Bottom cave by TCP, One cave by GG, multiple resurgences, small insuffrances and epikarst outcappings. Steep slopes bound by GG.
Units 543-580, 543-581, 543-583: Need to be removed from the unit pool for this sale based on field surveys done by TCP in 2000 and 2001 and reconnaissance work done by GG in 2002 due to High Vulnerability karst, epikarst and steep slopes within the unit and steep gikes next to the road. Cave named Humpback Hole in 543-581(TCP). Apparently, some of these units were included in the DEIS but not in the currently unit pool. Why were these units included in the DEIS, as appropriate places to log, when current knowledge has removed them from the pool. This is misinformation, and throws into question the other units proposed that might be logged without damaging the associated resources.

Unit 546-549: should be removed from the unit pool includes High vulnerability karst, Find Me Cave (GG, 1999, TCP 2000) in this unit, insuring and resurgent stream channels that flow into and out of karst bedrock which may underlie the non-carbonate glacial till. The second growth area downstream (ESE) from this unit feeds contains numerous karst features(sinks) that are fed by insipient/resurgent streams flowing through this unit.

Unit 543-546: Cave named Playpen cave, a resurgence cave (TCP), not explored due to want of ropes. Not recorded in DEIS.

Units 546-566 and 546-567 in the Battery Hill area should be removed from the unit pool until hydrologic concerns are addressed related to connection to the Carwash resurgence, a drinking water supply for most people in Edna Bay. Most people in Edna Bay have rain catchment systems but rely on this spring for water during dry spells. Total of 75 caves in the clearcuts above these units and in the area below the units, most on state land.

Unit 543-558: Broken Marble Cave(TCP), extensive epikarst development. Clearcut areas surrounding this unit contains known karst features.

Unit 543-559: shallow epikarst, but well developed and extensive throughout the unit, insipient stream near S boundary (Chain of Pools to the SE of the edge of this unit(GG). 5 caves) small caves near the stream that runs through the area, fish observed in lower reaches and pools. Clearcut areas proposed that is aplish from Chain of Pools karst system. Series of small shallow insuffrances and resurgences toward N end of 543-559 in close proximity to the area still marked in red in the DEIS for timber harvest.

Unit 545-572: contains New Netle cave(GG), areas marked as medium should be high vulnerability. This unit should be removed from the unit pool. Sink holes taking water within this unit, well developed epikarst karst (GG).

Unit 546-561) between Chain of Pools and Battery Hill. Sinks on W side of existing road, Steep slopes in places. Eastern upland side has sinks (5-7' deep) near the road that could be dug to access these systems, places this unit has well developed karst. Blowdown along the clearcut fringe, especially towards S and also E end, significant karst features, gikes, solution channels, small sinks. In windrow areas, epikarst and karst features are torn up, illustrating what could happen if an area logged near to karst features unravels further due to windrow along the newly created forest edge.

Unit 546-562: USFS plans to clearcut with reserves or single tree

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removal (selected cut) Sinks as well as insurgent sink cave (S’ee k Hidi) 10-15 m deep in middle of area currently proposed for logging. This unit should also not be cut, especially if there is the possibility that the remaining caves might windthrow.

Unit 546-568: GG walked Buggy Creek, road underlain by sinks near the N end of unit. GG not sure how hydrology works in this area, but this may be of concern. Medium to low vulnerability, has not been surveyed very well for caves and features and should be if/when a decision is made to log this area.

Unit 546-988: Contains plugged sinkholes, deep, well-developed solution channel; collapsed channels 10’ deep, exposed karst faces. This unit is proposed to be selected cut, should be rated Medium to High vulnerability karst.

Unit 546-569: Glacial till in W side of unit, many caves to W of unit. Invented in 1999 by GG. Some steep slopes in this unit, no known surface karst features in the unit.

Unit 546-990: Does the USFS plan to build roads on the long muskegs that run to this unit? Karst mostly low vulnerability here, medium in select areas, surface stream drainage in this unit. These may be wildlife related concerns in this area.

Unit 545-570: GG agrees, this area is probably medium vulnerability, however, the drainage patterns out of the area are unknown. If logged, the use of helicopter must be required as the proposed road route passes through high vulnerable karst to the N of unit.

Unit 543-555: Several small caves, small insuffrances that are not well developed, might be possible to log this area without impacting karst directly, however, this unit should be rated high vulnerability due to the close proximity to high vulnerability karst areas immediately surrounding the unit and possible inter-connection. This is essentially a low area to be logged surrounded by karst features.

Unit 544-594 Near Cape Pole: Road N of Big Daddy cave and S of Muddy Water Blues and Bittersweet caves, road crosses karst canyon-10’ high with resurgences (swimming caves) and insuffrances, sinks in clearcut to NE of unit, important hydrologically, surface disturbance would drain into 544-595 or Bittersweet. Unit itself is medium vulnerability (ok designation as per GG), but has filled-in sinks, small epikarst faces. Unit is in close proximity to karst (Bittersweet) but would likely drain in the opposite direction into surface stream. Road building, blasting has potential to impact horizontal, decorated cave, (Bittersweet) 18’ soda straw. This area should be removed from the pool due to potential for damage to surrounding well-developed, well-decorated caves named above.

Unit 544-595 Southern tip of unit has sinks, karst features, shallow solution channels (4-6’ deep) should be rated at least medium vulnerability, lower in elevation than karst canyon in 544-594, water from anywhere uphill would drain into this area. This area should be removed from the sale.

Unit 544-617 GG did not survey this unit, high probability of cultural, paleontological resources, if caves or karst features are present. Before any sort of activity were to be undertaken in this area, the area needs to be walked again by GG or TCP.

Units 546-344, 547-888, and 547-339: Non-carbonate rock not surveyed by GG, but may have carbonate rock adjacent or subsurface. Watershed of V.Sant Creek. Hydrology of the areas is not well known. Dye traces set in HotSpot area E and N, but did not drain into V.Sant Creek, but instead into an upwelling into a cove SW of V.Sant. Dye trace studies not in this DEIS/ document, further dye trace studies should be conducted to define this watershed, and GG needs to do reconnaissance before any logging were to occur.

Unit 543-528: Three resurgences to S of unit and high vulnerability below unit, but unit itself not checked by GG. If URS did not check it, this unit needs to be surveyed.

Unit 543-521 not checked by GG, bordering area that has been clearcut, ridge bluff of limestone with glacial till filling the valley floor, hydrologically complex, limestone may serve as the recharge areas for the multiple resurgences that rise to the NE of the unit. Cobb, Steelhead fry and smolt downstream from the unit, the stream drains into Trout Creek. Shallow rock shelters in bluffs, potential for cultural sites.

Overall conclusions: After reviewing the comments that members of TCP and GG have made regarding this sale, phone conversations with the Forest Geologist and 4 seasons of walking the logging units, locating and surveying caves on Kosciusko Island, Glacier Grotto feels that this sale should not proceed as suggested in the DEIS for the following reasons:

Although many areas were designated by the USFS as not having many features or rated as low vulnerability, GG and TCP found unidentified features. More reconnaissance work should be done. GG feels that the karst and watershed sections should be considered separately. Although there is a hydrologic connection between karst and watersheds having the two sections together confuses a clear picture of the possible impacts and potential mitigation for each of these separately.

Failure to include the dye tracing studies done on Kosciusko Island by Tom Aley and Ozark Underground also does not give a complete picture of the way water moves through the karst systems on Kosciusko. The dye trace findings are important information that directly affects karst management and should be part of this document. What would be the impacts of timber harvest to the volume and seasonality of water movement in these systems as well as storage capacity and high and low volume flow and how will damage to these systems be monitored and mitigated? Dye studies are particularly important when there are development activities on karst that could have a negative impact on public drinking water for residents of Egegik Bay.

Another disturbing feature of this DEIS is that the stricter cave buffers and protections applied to the layout of this timber sale were not included in this document. In no place in the DEIS was the specific buffer of 100 ft plus two tree lengths around caves and karst features included. This needs to be provided in the Final EIS for the public to review and comment on.

No mention is made of monitoring the potential effects of timber harvest on the karst systems surrounding the cuts or about any type of mitigation of potential damage. There needs to be accountability for whatever actions are taken by the USFS and ongoing monitoring to be certain that mitigation is effective.

In conclusion, Glacier Grotto feels that the additional information provided by cave expeditions during the past 4 years, the dye trace studies, stricter buffer protocols and improvements to the currently applied standards and guidelines, monitoring programs, mitigation actions, watershed delineation (especially of the Carwash Creek drainage), and input from other caving interests such as TCP needs to be incorporated into this document, so that any individual reviewing this work can make an informed decision based on the best available information. Publishing anything less is not in compliance with the NEPA process.

Given the extensive and likely interconnected karst systems underlying the forests of Kosciusko Island, within the proposed sale area, we do not believe logging should be allowed on any of the areas inventoried and found to contain karst feature. If any timber harvest were to be allowed, members of Glacier Grotto strongly feel that the scale of this project is too large for the available timber that can be harvested without impacting the karst landscape. Finally, it should be determined if there are remaining units that have not been walked by either GG or TCP, possibly during the spring or early summer of 2004. Otherwise, this sale will be let based on incomplete information and may negatively impact the karst landscape. We prefer the No Harvest alternative as providing the most good for the most people over the long-term. We sincerely hope that the USFS manages these natural resources with the same ethic.

Sincerely,

David Love, Glacier Grotto president
Daniel Monteleth, Member
Barbara Morgan, Member
Diane Raab, Editor of the Alaskan Caver
Bruce White, Member
Connie and Marcel LePerriere, Members
Steve Lewis and Rachel Myron, Members

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AXED BUT STILL GOIN’ CAVE
Preliminary Cave Report #419
Kosciusko Island, Alaska
Report by Barbara Morgan
Glacier Grotto, National Speleological Society
August 23, 2002

Description:

Dan Monteith found this cave during the 2001 Kosciusko Island expedition. It is in the New Hot Spot area and was found using LIDAR and fieldwork. Axed But Still Goin’ is in a second growth area and its entrance was covered by slash. It is in the same area as Muddin’ Hole, Franklin’s Tower, Terminal Impact and Skippy Hollow and may be part of a system that includes all of the caves in this area.

Axed But Still Goin’ is a vertical cave with several pitches and chambers that spiral down to a depth of 31 meters. There is a deposit of mineral sediments in this cave that were deposited by water and are being eroded by water, leaving a cut bank about a meter and a half high. The sediments are most likely glacial outflow.

This cave is hydrologically active, indicated by the small flow of water throughout the cave at the time of exploration and the fact that further exploration of this cave was hindered by a sump. It is also in line with a string of other caves in the area including Franklin’s Tower and Skippy Hollow so may by hydrologically or even physically linked to these caves.

Management Recommendations:

This cave is a more difficult vertical cave with a tight squeeze through an eight-inch wide crack and could be used for recreational purposes for those seeking a challenge.

HALF MOON CAVE
Preliminary Cave Report #418
Kosciusko Island, Alaska
Report by Barbara Morgan
Glacier Grotto, National Speleological Society
August 23, 2002

Description:

Gino Albert, Elizabeth Dunn and Connie LaPerriere found this cave during the 2001 Kosciusko Island expedition. Half Moon Cave is a small cave that is about 20 meters deep. It has both vertical and horizontal passage and has a stream of water flowing out of the cobbles on the floor and into the lowest portion of the cave. There is some breakdown in the entrance and some soda straws in the lower passage.

Management Recommendations:

This cave should be protected. It also has a strange kind of hydrology, which should be studied to determine where the water is entering the cave and where it exits so as to better understand the hydrology of this cave and the general area.

SAM’S CAVE
Preliminary Cave Report #436
Kosciusko Island, Alaska
Report by Barbara Morgan
Glacier Grotto, National Speleological Society
August 26, 2002

Description:

Sam’s Cave was named after the youngest member of Glacier Grotto, Samantha Rabey. It was found by Sam, Bruce White and Dan Monteith during November of 1998, while they were on a Thanksgiving caving trip to the area. The original survey notes were lost and it was resurveyed by Dan Monteith and Connie LaPerriere during the 2002 Kosciusko Island Caving Expedition. It is in the area between the Hot Spot and the New Hot Spot and in line with several other sinkholes and may be part of a larger system. Sam’s Cave is a small sinkhole with approx. 12 meters of underground passage. Even thought it is within 50 feet of the road there appears to be no damage to the cave.

Management Recommendations:

This cave and nearby karst features should be protected.
Kosciusko Island 2001
Survey by: Gino Albert
Elizabeth Dunn
Connie LaPerriere

Half Moon Cave
Length 14.1 meters
Depth 20.08 meters

Legend:
- Cobble
- Rocks
- Soda Straws
- Stream
- Steep
- Tree

Map by Connie LaPerriere

Scale
0 2.5 5
Meters per Inch
Sam's Cave

PLAN
Length: 20.21 meters

PROFILE
Depth: 15.68 meters

Scale
5 meters

Instruments:
Dan Monteith

Map & Sketch:
Connie LaPerriere

* Named After youngest Glacier Grotto Member
CEDAR CAVE
CORONATION ISLAND, ALASKA

Surveyed with compass, clinometer and tape
Map by K. and C. Allied.
Surveyed length: 147 feet (44.7 meters)
Vertical extent: 20 feet (6.1 meters)

Bedrock is Heceta limestone

ENTRANCE
grassy slope

PLAN

0 datum
Otter trail
fish, eagle and otter bones
Four foot
vertical drop

floor covered in
old, soft flowstone

PLAN

cave is apparently above the spray and tide level and
floor is littered wall-to-wall with bones of deer, bird, etc.

PROFILE

ENTRANCE

0 datum

LEGEND

entrance dripstone

passage wall
higher
change in ceiling height

rocks
silt and gravel fill
slope (splays downward)
dripstone formations
bedrock floor

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Information for the

Glacier Grotto

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