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From the Editor:

The Alaskan Caver, beginning with the April 2004 issue is also available in digital format. Some of the maps and most photos included are in color. Anyone interested in obtaining these can contact me by email.

I would like to apologize to Bruce White for getting the paragraphs in his April issue “Who’s Who in Alaskan Caving” column mixed up. And I would like to thank Kevin, my husband, for being my faithful proofreader.

10/20/04

President’s Corner,

The 2004 summer caving season has passed, with fall rains beginning early, nevertheless, this year has again been eventful for the karst systems here in Alaska and cavers involved in their exploration and preservation:

Andi Hunter, of Fairbanks, has been doing some “ridgewalking” in the White Mountain areas north of Fairbanks. She reported in April, 2004, “…Also doing some more White Mountain surveys this summer with the BLM…basically helicopter trips with a caving twist. Always looking for more volunteers for that project but they have to get their names in soon as we are doing our BLM orientation in the next couple weeks (Maybe she will need help again in the summer of 2005?…). The trips range between 2-4 days and include helicopter drop off for a max team of 4, walking through loads of tussicks and grid searching each mountain…poking our heads into every bear den and rabbit hole we see looking for cave. Last year we were successful finding 2 decent walkable caves but one requires returning with rope and bolting equipment and the other requires some fine-tuned rock maneuvering techniques…” Andi can be contacted at Hunter Environmental Associates, Inc., 3570 Basin Street, Fairbanks, AK 99709.

Tim Heaton continued paleontological exploration of caves on the Northwest coast in 2003, with excavations on Dall, at Hole 52 near Wrangell and on the Queen Charlottes. An excerpt from some of the findings of that work published in Feb, 2004 follow: “…Queen Charlotte Islands last summer, 21-year-old Christina Heaton hardly noticed the triangular piece of chipped stone she’d unearthed in a pile of muddy debris. But as her scientist father, Timothy, sifted through the mud, he realized she’d struck pay dirt. “Oh my God!” he yelled to her and the team of other researchers scouring the remote site off the coast of British Columbia. “It’s a spear point!” Bear bones found near the artifact suggested that its owner had probably speared the beast, which later retreated into the cave and eventually died with the point still lodged in its loins. Radiocarbon tests soon dated the remains at about 12,000 years old (continues on page 14)

Front cover: Rescue practice held in June of this year on Prince of Wales Island, photo by Dan Monteith
Tongass Cave Project (TCP) directors and volunteers from Greenpeace collaborated in karst inventories of 4 areas proposed for harvest on Kosciusko Island as well as in an area proposed as a Karst Research Natural Area on Prince of Wales Island. Note should be taken that this work was performed during unusually dry summer, so resurgence noted as active or even moist are almost certainly active during most or all of normal years in southeastern Alaska.

All survey was done with teams of 5-8 persons working systematically along a bearing and close enough together to see essentially all features within the transects. Features on Kosciusko Island were noted based on their significance according to the Forest Service karst standards and guidelines, while a higher standard was required for the features reported within the high vulnerability karst on Prince of Wales Island.

Work on Kosciusko Island resulted in the location of several important karst features that had not been located previously, some within areas proposed for harvest, but most in areas already excluded. We did find that most significant karst features in the units examined had been previously located. However, buffers as shown in the draft EIS for the Kosciusko Island Timber Sale(s) suggest that Forest Service and contractor have failed to properly and adequately buffer many of the features that they themselves located. We sincerely hope that this problem will have been rectified in the final EIS.

The two days spent inventorying slopes above and to the north and south of Eagle’s Roost Cave resulted in the discovery of numerous important and highly significant features. These included a pit with a free and unobstructed drop of 6 seconds as well as several other going leads and numerous choked pits. While previous cursory exploration suggests that areas to the north and west contain even more extraordinary karst, our inventory confirms that Forest Service and contractor have failed to properly and adequately buffer many of the features that they themselves located. We sincerely hope that this problem will have been rectified in the final EIS.

Following are reports on the individual units surveyed. Exact locations of features are provided to the Forest Service and should be viewed only by the Forest Geologist and other personnel on a need-to-know basis per requirements of the Federal Cave Resources Protection Act.

Kosciusko Island

Unit 543-555 Surveyed 8/19/2003: Pete Smith in lead.

Two significant features were located that affected this unit per the unit card within the DEIS.

Feature A is a resurgence in a 6 foot deep sink that emerges into a “mud wallow”. A 300 foot diameter buffer centered on the middle (in practice it should be laid out in the field and measured from the edge) of this feature eliminates a large portion of the southern section of the proposed harvest unit.

Feature B is a 20-foot deep sink located outside the unit. However, an adequate buffer of at least 300 feet should be placed around the feature. This precludes harvest in a significant section of the NW corner of the unit.

It is important to note that features previously located by URS and the Forest Service (appendix E, Final Report, Karst Vulnerability Assessment, Kosciusko Island, Tongass National Forest, Alaska, prepared by URS, November 2001) were not adequately buffered per the unit card in the DEIS. When these buffers are properly placed, Feature A will also be protected. However, Feature B will still require additional protection.

Unit 546-571 Surveyed 8/20/2003: Steve Lewis in lead.

One new resurgence (Feature A) was located above the stream on the northern end of the unit. This resurgence and another (Feature B) located by Fish Crews (D.S and D.L.) and marked on 6-8-2000, have not been adequately buffered per the Unit Card. Additionally, resurgence located along the slopes of the eastern portion of the unit have not been adequately buffered per the Unit Card. Generally the buffers are missing downslope of the resurgence and the carbonate rock. While it might be argued that streams below the resurgence are no longer part of the karst, it seems clear that the standards and guidelines and common sense suggest that the actual resurgence still needs buffering on all sides to adequately protect it.

Numerous new features were located along the upper edge of this unit. These have all been adequately protected by exclusions provided on the DEIS unit card and are provided only to provide information for the Forest Service karst database. In addition, we confirmed the locations of all the features noted on the Harvest Unit Design Card with which we were provided except as noted below.

Feature A is a resurgence (dry but with a clearly delineated channel). It is slightly higher relative to the creek below as is Feature B.

Feature B is a beautiful resurgence, running well even in this dry weather. It emerges from a rock face into a pool, then drains down towards the creek below. It was previously located by Fish Crews on 6-8-2000, and was apparently noted in Appendix E of the karst report, but not buffered on the Unit Card, nor noted in the original Harvest Unit Design Card provided to TCP.

Features C and D are a dramatic pair of insurgences associated with small caves. The stream drops into 20 to 30-foot deep slots. Feature C is located, well outside the unit, and Feature D is located 16 feet away on a bearing of 70°.

Features E and F are a large sink and associated small cave, about 10 feet deep. The Sink is 15 feet deep and 25 feet across. The cave is approximately 40 feet away on a bearing of 200°. We were unable to locate the cave shown in appendix E, which suggests the possibility that Feature E and the cave are the same. Our northing is approximately the same, but we show the feature about 1 block to the east of the location given in the appendix. Either location appears to be protected adequately by the area deferred from harvest on the unit card in the DEIS.

Feature G is a small resurgence cave approximately 13 feet long.

Feature H is an resurgence located on the contact running along the west edge of the harvest unit as originally proposed.

Feature I is a small cave associated with a grike.

Feature J is an additional resurgence adjacent to the one noted in the URS survey. They are very close and probably part of the same system. Correct downslope buffering of the originally noted (continues on page 4)

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resurgence will protect both.

Only Feature A is a newly located feature that will require additional buffering of the unit as proposed on the DEIS unit card. However, buffering is also required around Feature B and other features previously located at the northwest end of the unit. In addition, downslope buffers need to be placed below all the features located along the geological contact between the carbonate and non-carbonate bands along what shows as the western edge of the unit on the DEIS unit card.

Unit 544-691  Surveyed 8/21/2003 by 2 teams, one run by Steve Lewis, the other by Pete Smith.

This unit is a second growth unit proposed for commercial thinning. It was precommercially thinned relatively recently. Portions of the unit were difficult to inventory due to residual slash both from thinning and the original harvest. We relocated the features located in the south end of the unit along with several new features.

Feature A, dubbed the Mystery Steps, is a resurging maze of 4’ phreatic tubes extending over 100 feet before sumping. There is a heavy accumulation of silt and soil in these cave systems which most likely washed in during previous surface disturbances in the area. This is exactly the type of problem that we are working to avoid. This area is obviously a major resurgence in wet weather and would have a significant recharge area. If a second rotation of timber harvest is to be considered for this area then information needs to be gathered to delineate any future impacts to these caves. At a minimum this work would include dye tracing and searching out resurgence points even if they are way outside the unit boundaries. Even though these caves are located in second growth and have been harmed once from logging, we believe they would be even more heavily damaged the second time around. We expect that once proper studies have been performed in the area it will be clear that the whole recharge area above these caves should be deleted from future timber harvest.

Feature B & C are two other cave/resurgences that are associated with and similar to Feature A.

Feature D is a meadow/pond area with two deep pits which in wet weather would be major resurgences. Dropping rocks into these pits showed the water table to be about 20’ below the surface at the time of inventory. The recharge area for these resurgences needs to be looked at and studied before logging plans continue.

Feature E is an 8-foot deep sink with a continuing passage partially plugged. It was named Hilary’s Well of Lost Light because a light fell into the sink and disappeared into the diggable material at the bottom, never to be found again. It is the kind of a hole people would want to be on rope to pursue. This feature is located outside the proposed harvest area. However, a buffer might need to extend slightly into the proposed area in order to protect the feature.

These features may require small portions of the areas proposed for commercial thinning to be removed from the sale to provide adequate buffers. Generally we commend the Forest Service for pursuing timber harvest in second growth. This is the wave of the future and will have less impact on the systems above and beneath the Tongass than will similar harvest in old growth.

The Hot Spot entered by Pete Smith and others on 8/20/2003

Three caves were located by GPS in this area. We are providing the locations to the Forest Service just in case they are not yet in the records.

Shangra Na/DDH
Broken Stairwell

Untagged Cave with waterfall and 300’ of downsloping passage

Prince of Wales Island

These locations were made running systematic surveys approximately parallel to the band of cliffs above the road running below Eagle’s Roost Cave. Over 2 days we discovered 7 significant pits or groups of pits, 2 significant areas of grikes, and a massive sinkhole. Pits included one with a clean drop of 6 seconds, continuing beyond that with bounces. This area is clearly all high vulnerability karst, and we only made locations of highly significant features. Numerous additional high vulnerability features occurred throughout the area. Some of these features have the potential to bypass difficult sections in upper Eagle’s Roost Cave and should be pursued vigorously over the next few seasons.

The following are the features discovered in what we believe is proposed as part of the El Cap RNA.

P-1 This is a 30 foot plus deep pit, It is choked and apparently plugged with rubble.

P-2 This is a nice offset drop in a sink that definitely goes tight and clean.

P-3 This is a highly significant feature with numerous pits/sinks, 25 to 50 feet deep. They all are apparently plugged although we did not get to the bottom of all.

P-4 This is a 45 foot deep pit near muskeg sink which Steve Lewis located several years ago on a survey between Blowing in the Wind and Eagle’s Roost caves.

Muskeg Sink was located several years ago but not reported as a single feature. It is a massive sink with no openings. Much of this section of the slope consists of linear muskeg like features running up and down the slope and ending in sinks or pits at their lower ends.

P-5 This is a grike/pit combination. A pit in the grike appears to go with a 2 second drop. Two small pits to the north may go. This area needs a caver with rope.

P-6 This is an exciting find! It was named Atoma Cavatoni by the finder, Hillary Host. This is in Italian and promised to be proper for a cave name. Atoma Cavatoni is a clean pit with a free 6 second drop. Good tie offs exist on nearby trees.

G-1 This is a deep grike with 6-10 feet of passage choked with organics. The area has numerous other deep grikes, some that might go with digging.

S-1 is a massive sink below a fen, much like Muskeg Sink. There is a diggable lead at the bottom with air blowing out.

P-7/ Hillary’s Cave is surrounded by a complex of sinks/pits. The most promising was Hillary’s Cave. A map is attached. This cave consisted of an entrance sink about 20 feet deep that led to a too tight crack at the bottom. An offset pit dropped 15 feet. Steve Lewis rigged a handline and descended to a breakdown covered sloping floor that led to a 3 inch crack. The cave continued down a 10 foot pit beyond the crack, but stones tossed through dropped to a muck floor. Two GPS units gave significantly different reading for this location so both are included here.

G-2 is an insurgency/and overflow resurgence grike about 15 to 20 feet deep.
INTRODUCTION AND DESCRIPTION.

Zina Cave was discovered in the summer of 1997 by a Forest Service wildlife crew while walking a proposed “salvage sale” unit. The Area geologist had already investigated the unit and signed it off as Moderate Vulnerability karst (which meant it would be clearcut) even though there were a multitude of 10 foot deep sinkholes throughout the unit which is covered by a healthy old growth forest. Subsequently, several other smaller caves have also been located in or adjacent to this planned unit. Once Zina Cave had been found, the geologist returned to do a line survey with Pete Smith on January 18th, 1998 to see if the cave went under the harvest unit. After they found that the cave was extensive, the vulnerability rating was upgraded to High, requiring that the forest be left intact. They also noted several bone deposits in the cave, one of which had a very weird antler associated with it. The antler’s shape was similar to something like a small caribou with one main stalk with a double top. The main eyeguards were facing backwards, and the entire stalk had erratic growths on it. The date that subsequently came out of that deer skeleton was ~7800 years before present. Dates on some other bear and deer bones found in the cave range from 5,000 to 11,000 ybp. The full name of the cave is Hautlazinacantli, which is the Aztec bat god. The name was chosen because of the light carpet of bat guano spread over the entire upper section of the cave.

In the summer of 2000 the TCP began a comprehensive survey of the cave. The constriction [to the lower levels] was widened to allow easier passage to the lower levels, and the downstream section was mapped to the point where the stream reconnected to the passage after the first sump. In the summer of 2001 we mapped most of the upstream tributaries and continued the downstream Warrior River survey to the terminal sump. Several climbs above this sump were pushed to try and find a bypass, but none have gone yet. The leads above Warrior River are difficult to access, and may prove quite a challenge to survey. Total surveyed length is presently 5785.2 feet (1763.3 meters) and the depth is 391.7 feet (119.4 meters).

Zina Cave gives one the impression of being older than some other caves in Southeast Alaska. The walking size phreatic passages in the upper section of the cave, the 150 foot drop to the active stream level, and the “topless” canyons contribute to this effect. The cave is formed in Heceta Limestone, and is very fossiliferous in the lower stream passage where the bedrock is washed clean. Igneous dikes are found in several places in the active stream passages. These have formed resistant barriers to the downcutting vadose streams, and have been the cause of the terminal sump.

Speleothems include soda straws, stalactites, stalagmites, columns, flowstone, rimstone, moonmilk, and manganese formations. Gypsum flowers and strange, white cottony growths, so far unidentified have been discovered in a few dry areas.

BIOLOGY

Amphipods were discovered by Terry Brown during the 2001 survey in small pools in the upper section. The species is unknown. Steve Lewis is presently monitoring the cave for bat visitation. No recent bones have been discovered in the cave.

MANAGEMENT RECOMMENDATIONS.

Zina Cave is already one of the largest caves in Alaska, and its survey should continue. Besides the ongoing bat survey, an inventory should be done on the invertebrates. The unknown “cotton” speleothems should be studied. A dye trace study is also in order.

Because of its outstanding recreational and scientific values, Zina Cave should be protected from road building and timber harvest impacts. The cave should only be visited by experienced and well prepared cavers. Certain passages are too fragile to continue exploration, while extreme caution is required in others to pass delicate speleothems without damaging them. For these reasons, the Forest Service should discourage recreational trips beyond the 150 foot drop down to the active stream.
Dave’s Den was first discovered and explored by members of the Glacier Grotto of the National Speleological Society in 1996. Allen Murray and Dave Valentine left flagging at the entrance with a date of 4/13/96. Al notified the author of the cave location, and it was subsequently surveyed on June 28, 2001. The cave entrance is located in a spectacular and healthy old growth karst landscape amid sinkholes and solution channels. It is not yet known how this cave relates to nearby Zina Cave, but the whole area was being planned for a “salvage” logging operation a few years ago. The entrance has an impressive natural bridge and slopes steeply to the west. Canyon-like in cross section, the passage walls are frost-shattered nearer the entrance. Further in, however, after only 35 feet or so, the passage becomes plugged with rubble. The Dave’s Den appears to have once been part of a much larger cave, but without digging, the way down is impossible. Total surveyed passage is 55.5 feet and the surveyed depth is 31.7 feet.

**MANAGEMENT RECOMMENDATIONS:**

The forest around Dave’s Den should not be cut down as it meets the criteria for high vulnerability karst. In addition, there are several other caves nearby. Those discovered so far, are: Zina Cave, Spark Plug #5, Tom’s Tunnel, and Photo Ice Cave. Dave’s Den could be visited by the general public.

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**DAVE’S DEN**

**PRINCE OF WALES ISLAND, ALASKA**

**TONGASS NATIONAL FOREST**

**REPORT #230 by Kevin Allred**

**TONGASS CAVE PROJECT, NATIONAL SPELEOLOGICAL SOCIETY**

Oct. 31, 2001

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2002 Cave Rescue Seminar, photos by Dan Monteith
The 2004 caving expedition was preceded by a seminar for self-rescue/small party cave rescue put on as a joint venture between Glacier Grotto and the Forest Service. It should be noted that Alaska Cave Rescue (a separate organization in the Glacier Grotto) had dwindled to a few locals practicing once in a while before Connie and Marcel left for Sitka. With their leaving Ketchikan, Dr. Dan moving to Juneau, and Barb Morgan moving to Thorne Bay, the guts of the cave rescue squad disappeared like rain in a karst sink hole.

The rescue account had a little money left from the sale of T-shirts (now for $10 each), rock clearing in a quarry and manning a salmon weigh station in days gone by. We had all talked about getting another rescue seminar going and Kevin Casey (Fearless Leader #2) agreed to put the idea before Jim Baichtal (Grand Karster of our geological resources) and the Forest Service. Jim agreed to budget for the bulk of the seminar cost so the rescue account was closed and the money added to a generous contribution from the USFS. The BC cavers were then hired to put on a rescue seminar before the expedition. Kevin sent out e-mails to the active Alaskan cavers along with the announcement of this years expedition. Sadly, only myself (Whojigger #1), Dr. Dan, Steve (Batman) Lewis and lovely Rachel Myron represented Alaska, but participation by the whole expedition (mostly lower 48s) rounded out the numbers.

We all met up for the first time on the ferry, everyone except Fearless Leader who would meet us with transportation in Hollis. I reminded every participant that to be on the Expedition, they need to be members of the Glacier Grotto. I fleeced them all right then and there, on the ferry, collecting addresses and money from everyone. We met up with the BC cavers officially when we got to Thorne Bay. These men were here to teach us how to do that which we all hope never to have to do in real life, haul some poor soul out of the depths, up the nylon highway.

Let me describe our instructors. First of all, if I was a customs officer at the border, I'd be tearing their vehicle apart looking for suspicious contraband. I guess having a real RCMP, Don (the Chef) doing a little wink, wink, nudge, nudge made the difference. Phil Whitfield, their leader looks a bit like a fish pirate but Holy Humpies, can he cave. Cassidy, Verne and Bob rounded out the power of BC caving with one more in tow... an Aussie named Mark. Mark must have thought I was so dumb as to believe he had a job caving much less be taken in by his fake down under accent, but for sheer strength, he's who I'd pick to rescue my cat from a tree. Just looking at this crew would put you off a good dinner but as far as knowledge and caving ability, there is no finer group of cavers to be found. Another suspicious thing about these BC cavers was that they must be making a pile off us or the exchange rate is better than I thought because these guys came prepared! Top of the line room tent, all the food you could imagine, fancy new truck, bomber gear; what was I to think? Could it be that it is normal for BC cavers to have real jobs and families that support them? Naw, I found them to be real cavers, rich and affluent to say the least. I just found it hard to believe that they all took vacation time off from their jobs for our little rescue seminar. Hmmmm, maybe socialism works. These guys were ripe for the picking. I fed them my line about the Glacier Grotto and signed them up as members. Heh heh heh, Canadians are so gullible. We all camped at the new Community Youth Center next to the school in downtown Thorne Bay. I scooped the diggs, found a couch next to our sweet cave babe, Sarah. With the vast array of snoring, I had a pretty good spot. I noted that Fearless Leader and the BC cavers were nowhere to be found. I guess they couldn't stand the snoring and slept outside. We started the seminar the next morning at 9 AM sharp, right after Kevin and the instructors showed up. I liked these BC cavers, they knew better than to

(continues on page 11)
CAVE RESCUE... continued from page 10

expect anything out of cavers before a good breakfast and french pressed Ravens Brew coffee. We cleared the bones of a 4 star Thorne Bay breakfast, formed a circle with our chairs, and started the lecture part of the seminar. I cornered Kevin and got his money and membership, but he still hates me for breaking his arm. We needed a subject for the first aid part of the course anyway.

What was this? Now I am a pretty good caver and so is Dan; why all this talking instead of practicing? By afternoon it was getting hot so a little practice of these new techniques was on the menu. We messed around at the school setting anchors, passing a victim on rope, pick offs and this new counter weight haul. Next we practiced a little first aid and improvised stretchers along with a long talk on harness induced pathology and of course, hypothermia.

The next day we packed up and said goodbye to the cosmopolitan town of Thorne Bay heading for El Cap Cave. We traveled in convoy along the new super highway not noticing the sun bearing down on us until we hit the dirt road. Strict intervals were kept to keep from choking the vehicles behind with billows of dust. We arrived at the El Cap campground in the heat of the day. Bugs, heat, sunshine and extreme humidity; something was very wrong with this picture.

We met Sheila Griffin, El Cap’s tour guide coming out of the skookum trailer she and her invisible partner lived in. I went for a ride with her to get to a place where we could reach out with the radio, and stole the keys to the truck, refusing to give them back unless she joined the Grotto. Heh heh heh, I was so good, I would have gotten the bear and cloud of mosquitos signed up except they couldn’t write.

We rounded out the day sweating in the heat hanging around (literally) the bridge. We taught Sheila some rope work and competed with each other on which pair of cavers could come up with the most erotic position we could get in on rope. Steve and Rachel won but Dr. Dan and Mark came in a close second. Since I was the only person with bug dope, I was everyone’s best friend and no pictures of me were taken. If there is one thing I learned, it is to make sure you have a Canadian on future expeditions. Don and the BC crew were truly excellent chefs. We had a meal that couldn’t be beat and from that moment on, we donated all our food to the instructors to add to their larder. Take it from me, an expedition would steal the keys to the truck, refusing to give them back unless she joined the Grotto. Heh heh heh, I was so good, I would have gotten the bear and cloud of mosquitos signed up except they couldn’t write. We rounded out the day sweating in the heat hanging around (literally) the bridge. We taught Sheila some rope work and competed with each other on which pair of cavers could come up with the most erotic position we could get in on rope. Steve and Rachel won but Dr. Dan and Mark came in a close second. Since I was the only person with bug dope, I was everyone’s best friend and no pictures of me were taken. If there is one thing I learned, it is to make sure you have a Canadian on future expeditions. Don and the BC crew were truly excellent chefs. We had a meal that couldn’t be beat and from that moment on, we donated all our food to the instructors to add to their larder. Take it from me, an expedition would steal the keys to the truck, refusing to give them back unless she joined the Grotto. Heh heh heh, I was so good, I would have gotten the bear and cloud of mosquitos signed up except they couldn’t write.

The next morning after a super breakfast we finally got to the part we all came here for, cave rescue in a cave. It was about time too. The temperature hit 100 degrees but El Cap was its normal cool self. It made us all want to stay underground. Several of the participant laughed at discovering they had to come to SE Alaska to get a tan.

If we had any doubt about the value of this counterweight haul system, it was replaced by a new sense of confidence as we practiced rescuing our instructors. I couldnt believe these BC cavers. We couldn’t go 50 meters in El Cap before one of them got stuck, hurt or took a good fall. I take back all that I said about them being good cavers. The only good thing is that they heal fast. Once we had extracted them, their limbs healed miraculously, a decidedly good attribute for cavers with such accident prone tendencies.

In all honesty, this seminar was powerful, the teaching and materials excellent, the concern for delicate egos exceptional and the information invaluable. It was worth every penny the Grotto donated and was money well spent by the Forest Service. The information and practice we got will surely reduce the risk of failure to extract an injured person in a timely fashion with only the gear we carry in our cave packs. I can speak for all the participants when I say this was worth more than the money spent, a lot more than we spent together. As a teacher by profession, I can say the course and instructors were professional and complete. Practice was evaluated and additional instruction given so that all participants were competent in the techniques instructed.

Jim, Kevin and the Forest Service need to be commended for their support and gratefully thanked for this invaluable instruction. This truly shows the concern for safety the Forest Service is committed to. We local cavers know that when the call goes out for a rescue, we have only ourselves to call on. With the demise of Alaska Cave Rescue it will be up to us to make the I’ll be on it next year as long as Don is there to cook or we get another course on cave rescue by this fine group of cavers. [So important is the] difference in the critical time window we have between saving a soul and doing a recovery. We are still in need of a course on all out, full scale, labor and equipment intensive style rescue which with any luck we can get from BC Cave Rescue next year. I have it on good authority that every one of the BC cavers are excited at the prospect of joining next years expedition after that seminar.

PS. Here is a list of participants:

Tyson Lee, Gainesville, FL
Sarah Cervone, Gainesville, FL
Felicie Andersen & Bjarne Knudsen (Denmark) High Springs, FL
Ryan Eklund, Sitka, AK
Jason Lachniet, Damascus, VA
Steve Lewis & Rachel Myran, Tenakee Springs, AK
Kevin Casey, Toronto, Canada
Phil Whitfield, Kamloops BC
Bob Rutherford, Prince George, BC
Vern Richardson, Quesnel, BC
Sheila Griffin, Thorne Bay, AK
Cassidy Simpson, Kamloops, BC
Don Torry, Kamloops, BC
Dr. Dan Monteith, Juneau, AK
Whojigger #1 and Caver Barbie, Ketchikan, AK

P.P.S Glacier Grotto T-Shirts are available for $10 each (all sizes) please include shipping from Ketchikan by contacting Bruce White, 192 Raspberry Rd. Ketchikan, AK 99901 (907) 247-1979 whojigger@yahoo.com.
Digging in a dank limestone cave in Canada’s Queen Charlotte Islands last summer, 21-year-old Christina Heaton hardly noticed the triangular piece of chipped stone she’d unearthed in a pile of muddy debris. But as her scientist father, Timothy, sifted through the muck, he realized she’d struck pay dirt. “Oh my God!” he yelled to her and the team of other researchers scouring the remote site off the coast of British Columbia. “It’s a spear point!”

Bear bones found near the artifact suggested that its owner had probably speared the beast, which later retreated into the cave and eventually died with the point still lodged in its loins. Radiocarbon tests soon dated the remains at about 12,000 years old, making them among the earliest signs of human activity in the region or, for that matter, in all of the Americas.

“It’s not the smoking gun, but we’re getting closer and closer to finding one,” says Timothy Heaton, who is the director of earth sciences at the University of South Dakota. He and his colleagues are trying to rewrite prehistory and show that the people who first explored the Americas at the waning of the last Ice Age may have come earlier than archaeologists thought and by routes they neversuspected.

WALK THIS WAY. Almost from the moment the first white explorers set eyes on America’s indigenous “Indians,” people have wondered where the natives came from. Among the first to guess right was Fray Jose Acosta, a Jesuit priest who in 1590 speculated that a small group from Asia’s northernmost latitudes must have walked or floated to the New World. Indeed, since the 1930s archaeologists have taught that the first Americans were big-game hunters who walked across the Bering land bridge from Siberia, chasing woolly mammoths southward through Canada down a narrow corridor between two ice sheets. By about 11,500 years ago, they’d tromped as far south as Clovis, N.M., near where archaeologists first found their distinctive fluted spear points. The Clovis hunters didn’t stop there. Their descendants ultimately reached the tip of South America after a footslogging journey begun more than 20,000 miles away. Or so the story goes.

Yet the Heatons’ find is the latest addition to a small but increasingly weighty pile of tools and remains suggesting that the first Americans may have come from Asia not by foot down the center of the continent but along the coast in boats, centuries or millenniums before the Clovis people. The evidence, detailed in scientific articles and a new book by journalist Tom Koppel called Lost World, has turned up along the Pacific coast all the way from Alaska to southern Chile. So far it does not include any human remains of pre-Clovis age. But a woman whose bones were found on Santa Rosa Island off Santa Barbara, Calif., was only 200 to 300 years more recent. And scientists excavating Chile’s Monte Verde site, over 6,000 miles from the southernmost Clovis find, have discovered caches of medicinal herbs, twine, and other artifacts that date back 12,500 years—even older than those of the Clovis people. Still other, more controversial digs near the East Coast may even indicate pre-Clovis travel across the northern Atlantic from Europe. Such finds have dovetailed with genetic, biological, and climate research to paint a far more complex—and, many scientists believe, more realistic—picture of America’s first explorers. Rather than a single migration of Clovis people, “there were clearly several waves of human exploration,” says Douglas Wallace, a geneticist at the University of California-Irvine. Wallace’s DNA studies of American natives identify at least five genetically distinct waves, four from Asia and one possibly of European descent, the earliest of which could have arrived more than 20,000 years ago. That diversity jibes with research by linguists who argue that the Americas’ 143 native languages couldn’t possibly have all developed from a single 11,500-year-old tongue. And if they had, then the languages would be most diverse along the mainland route the Clovis people traveled.

In fact, the number of languages is greatest along the Pacific coast, adding to suspicions that at least some of the first immigrants came that way. Until recently, many geologists assumed that the Ice-Age shore was a glaciated wasteland. But new studies of fossil records and ancient climates imply a navigable coastline full of shellfish, seals, and other foods, with patches of grassy inland tundra capable of supporting big game—and perhaps seafaring humans wending their way south.

Unfortunately, looking for evidence that could clinch the coastal-migration scenario is akin to searching for the lost city of Atlantis. Warming temperatures since the last Ice Age have helped transform the ancient tundra into thick forests, rendering most signs of early human exploration all but invisible. And as Ice-Age glaciers melted, the world’s sea level has risen hundreds of feet, submerging most of the coastal campsites where the ancient mariners may have sojourned. "Most of those places are under 300 to 400 feet of water, which makes the searching a bit difficult," explains Daryl Fedje, an archaeologist with the Canadian parkservice who has overseen the decade-long search in the Queen Charlotte Islands.

Beginning in the mid-1990s, he traversed the waters off the foggy archipelago on a research vessel, mapping the ocean bottom and dredging up sediments including, in 1998, a 4-inch-long basalt blade that showed telltale flaking from use by an ancient hunter. Retrieved from a site that might have made an ideal beachside camp 10,200 years ago, it was one of the oldest human artifacts yet found in the region and the first inkling of the potential treasure-trove on the sea bottom. The find made headlines and inspired some to call for a comprehensive high-tech search of the seafloor.

CAVE Diggers. Yet the immense costs of a seafloor survey have prevented the idea from becoming more than a pipe dream. So Fedje and other researchers have instead focused on caves on the nearby islands and in Alaska, where artifacts are protected from weather and decay. "The caves have been a real windfall," says Heaton of the animal bones he has found. He’s confident that “it’s really just a matter of time” before he and his colleagues find pre-Clovis human remains, “because in almost every cave we put our shovels to, we find something new.” (Continues on page 15)
Once upon a time in Alaska, there was a caving expedition planned for the South East Panhandle where the great Heceta Limestone formation rests. Many great cavers were gathered to explore the underground reaches of Kosiusko Island and her massive karst features. Fearless Leader #1 had set up the base camp next to the school in Edna Bay. He then sent us out in pairs to a series of caves along a pirated creek bed. The creek was nearly dry and several cave entrances were discovered. Great bravado and stories were the standard as we gathered in the evening for a meatless meal and a little map making. A pair of pretty young local girls (most likely attracted by the excellent specimens of manhood found in our camp) showed up on a 3 wheeler named, for good reason, Phoenix, around supper time on the third day of exploring. Mariah (a friend of the Morgans) and Barbara, both in Xtra-Tuffs and Helly-Hansens, baseball hats on backwards got off while Barb killed the engine on the gutless wonder and said hello. They then asked us the obvious, What on earth were we doing?

Chris Esterson (Fearless Leader #1) introduced himself to Edna Bay’s local crop of young ladies and explained that we were cavers, searching for an underground paradise. They were duly impressed. As Kris talked they couldn’t help but notice all the fresh veggies scattered about the boonie barn along with the smell of another pot of beans simmering on the camp stove. Beans again! Kris must have thought we were all rabbits considering the food he brought forth. They then asked us the obvious, What on earth were we doing?

The very next day as we returned from another glorious day of caving, Barb showed up with several apple pies and a 23 pound King salmon. We wolfed down the pies and looked lovingly at the beautiful salmon. Our dilemma was what to do with the salmon? If we hacked away at it and fried it in a skillet, we would be cooking all night long! Barb suggested we come over for dinner at her parents’. Noticing our rank odor from marginal spit bathing and Cold showers in the creek, she suggested we all converge the next night and take a steam while we waited for dinner to be made. We were sad to see the salmon leave, but with another box for leafy green stuff added to the dinner we went to bed that night with dreams of a 4 star restaurant dinner, Edna Bay style.

The next evening we arrived sort of timidly at the appointed hour to the sound of a viscous declaration of TRESPASSERS by the dog. Barb dressed in a bright tie-dyed T-shirt came to the door, threw the dog off the porch and invited us in. As we sheepishly made our way up the gangway plank to the house, Lois (Barb’s mother) came out to greet us. Something was strange about this family, they all dressed the same. They all dressed in tie-dyed T-shirts, size extra large. Lois is graced by a shock of silver hair, the friendliest face and biggest smile, big enough to match her boisterous laughter. Lois is the quintessential mother confessor and councilor. She naturally draws out the best in people and helps us with her healing arts of the soul. Bob heals the body with all his herbs and native medicines. Their secrets to enriching life may come from their quiet belief in the Bahi’ faith. Between them no part of being a human goes without support from their expertise.

In the shadows near the radio sat Bob listening to a distant talk radio station fading in and out about aliens, Sasquaches or conspiracy theories. I sat down to listen quietly as Bob tweaked the tuner back and forth to bring in the reception. He was like a man studying for an exam by the way his concentration was held, teasing the radio like a micro surgeon. All at once he flicked off the radio and said, Well, thats enough, he’s got it all wrong and proceeded to punch logical holes in the argument of the whacko being interviewed. Then he stood up. If you have ever seen a brown bear stand up on his hind legs, well thats what he looked like. A Tie-dyed brown bear as big as the side of a mountain, sniffing the air and looking over his glasses at this motley crew of cavers, towels in hand and drooling at the delicious smells coming from the oven.

Lois started organizing the crew cutting up veggies for the salad, making spuds and getting out dinnerware for us all as Bob tended the fire on the wood stove smack dab in the middle of the cabin. On it sat a pot big, enough to hold 10 gallons of water, heating up for the steam bath and shower. Bob seemed to ignore us all, ambling off down the back porch stairs to tend to the sauna.

(continues on page 15)
Letter to the Editor:

Dear Editor,

I have subscribed to the Alaskan Caver for many years. Most of the articles are fairly accurate and informative. However, in the last issue [Vol.24, no.2] Dr. K. A. Science presents some data that is lacking in more explanation. He addresses the problem of large goldfish in large tanks, yet does not mention how much they are fed. Also, no statistics are given for the small size of cavers in his study. In short, I suggest all future papers in the Alaskan Caver be peer reviewed by someone with professional degrees.

Sincerely,
Anonamouse

Reply by K. A. Science:

The Alaskan Caver has graciously allowed me to answer the Peromyscus person’s concerns regarding my paper, New Evidence for Exponential Growth of Spelunkers. First, I must emphasize that this was never meant to be a complete disclosure of all my data; that is referenced in the paper. Second, I assumed the readers were aware of my own professional degrees: BS, PhDs in Hydrological Residential Plumbing, and nocturnal pinworm behavioral patterns. I also have an honorary degree from the Mud Bay Institute of Technology and an AAS degree. Of all scholars, I should not require peer reviews.

Humbly,
Dr. Science

PRESIDENT’S CORNER, continued from page 2

years old, making them among the earliest signs of human activity in the region or, for that matter, in all of the Americas….”. Can’t wait to hear the rest of this interesting story [Editor’s note, see page 12 for the complete article].

In other news: during March of 2004, the USFS’s environmental assessment of the trail proposed for Baker Island between Port San Antonio and Little Vita Bay was released. The Forest Service received 30 letters during the 30-day comment period, all of which were against despoiling the wilderness on Baker Island. No recreation development will take place on Baker Island at this time. The decision was to take No Action, meaning that the mitigation monies to be used for the project from the Black Bear Hydroelectric project will (Hopefully) be spent on POW island roadside recreation (maybe in the form of cabins), accessible to more of the locals than a trail and campsite only accessible to larger boats on an outer-coast island.

Later this year, in June, the Glacier Grotto and USFS sponsored the British Columbia Cave Rescue unit to come to Thorne Bay prior to the USFS caving expedition for training expedition participants in self-rescue techniques. By all accounts the training was well received and instructive to all who attended, including practice setting anchors, pick offs and counter weight hauling in addition to a refresher in first aid. Alaskan cavers in attendance included Steve Lewis, Rachel Myron, Dan Monteith and Bruce White. Perhaps we could convince these Alaskan cavers to share their newly gained knowledge with the rest of us prior to summer 2005? Any one of you karstophiles interested? [Editor’s note, see article on page 10]

The USFS sponsored cave expedition to Kosciusko and Heceta Island followed the cave rescue training. Steve Lewis and Kevin Casey were the only members of previous expeditions able to attend this year; however, cavers from Florida filled out the ranks. The expedition appeared to have been successful with more caves discovered on Kosciusko and additional passage accessible due to the dry conditions and low water in Icy Fate Cave on Heceta. Connie LaPerriere will be adding the additional cave passage onto the already impressive map of Icy Fate for the next draft. A number of caves and karst features in low, moderate and high vulnerability karst were GPS located during the Heceta Island portion of the expedition, in preparation for evaluating the proposed timber thinning activities described in the Heceta Commercial Thinning Study. Hopefully, USFS will ask cavers for further participation and conversation regarding this project.

On the education front, Marcel and Connie LaPerriere (they moved to Sitka last fall) are offering a new course on Caves and Caving at Sheldon Jackson College. Some of the subjects to be covered in the class include: Types of caves and how they form including dissolution caves, ash caves, lava tubes, ice caves, eolian caves; caving basics including safety equipment, clothing, lighting, technical equipment; vertical caving basics including belays, knots, anchors, descending and ascending devices, self rescue and limited and large scale rescue. A March spring break field trip is planned to visit Beaver Falls, Star Light, Roaring Road, and maybe Bear’s Plunge. Good luck and good job Connie and Marcel! I hope the snows on the north end of POW have melted sufficiently by spring…

Finally, Kevin Casey, Bruce White, Dan Monteith, Diane Raab and myself are finally finishing the trip report and maps for the USFS funded expedition to the caves in the vertically bedded marble of Carroll Inlet in the late summer of 2003. Look for the complete story of that 5-day expedition in the next issue (hopefully!) of the Caver. Happy Caving!
Rope Cutter
Dear Dr. Science,

In the last article you wrote for the Caver you mentioned something that I have always wondered about. I was thinking that the subject might be worthy of your attention. Or the subject might even be a topic for future studies, perhaps some kind of thesis. The subject has to do with the following questions: Why does it seem that only poor people are cavers? How many rich cavers do you know? Or don’t rich people have to go underground? Is the effort involved in caving too much for people who think other people should “eat cake”? Doesn’t it cost enough to draw their attention? Are there no caving adventure guided tours that would draw their attention like the bucks it costs to go up Mt. Everest? Is there some unwritten slogan that says “Republicans don’t cave”, or “capitalists don’t like the dark”? Please let me know if you, with all your scientific knowledge, can shed some “light” on these questions for me.

Yours, Phreada Phreatic

In your letter you inquired about several socio-scientific mysteries, most of which fall under one category, “Why do people go into caves?” At first this may seem like a simple question with a simple answer. But before I answer, I should let all the spelunkers be aware that some years ago yours truly was thinking that the subject might be five gallons. Bob just looked at me. It’ll be too hot. I didn’t know what to do. Needless to say, we had a great steam, but the shower was a bit too hot for us and just right for the second group.

It would have been fine if the theme song for Jesus Christ, Superstar had been playing as I emerged squeaky clean and revitalized for the steam and HOT shower. I made my way into the house to a sight I hadn’t expected. Everyone was eating big chunks of salmon, mounds of potatoes, peas, quarter pie slices of apple pie and herbal iced tea. There was plenty of food left, but not a single horizontal surface except the floor to sit on. I piled on the food and drew up a piece of rug.

The house was warm, the food was good, and the hour was getting late, but we had to wait for the third group to finish their steam. I slowly drifted in and out of blissful sleep when Bob and Lois headed for the door. They had had enough of teaming up with the others and had decided to go for a walk. They had had enough of teeming humanity, leaving with a rifle in hand to take a walk. When they returned, Bob casually mentioned that in a couple of days we would have bear burritos. He had shot a bear on the way home and already had it hanging in the woodshed. Such is the life of the Morgans. We have availed ourselves of their hospitality every summer as we search for caves. They have provided us with countless meals, saunas, the use of their phone, washing machine, kitchen and oven, rides to the caves and trips to the store. Most of all, we have enjoyed the warm friendship and stimulating conversations of our adopted mother and father of the Kos Expeditions. They have been the Alaskan emissaries of the true subsistence lifestyle that exists in Bush Alaska to many a lower 48 caver, May God bless them.

---Dr. K. A. Science

ISLAND HOPPING... continued from page 12

Archeologists working on the other side of the continent are also seeking a smoking gun, for a different migration route. Clovis-style spear points recovered from barrier islands near the Chesapeake Bay and inland in Virginia and Pennsylvania bear a striking resemblance to tools made by the ancient Solutrean people of northern Spain, leading some to speculate about a prehistoric crossing of the Atlantic.

“That could explain how DNA from ancient Europeans showed up in some of the first Americans,” says Dennis Stanford, chairman of anthropology at the Smithsonian Institution. In an upcoming book, Stanford and coauthor Bruce Bradley make the seemingly far-fetched case that an adventurous lot of Iberians walked over an ice bridge or boated across open water to Newfoundland during the last ice age.

Whether they threaded their way through Pacific archipelagos of negotiated the ice-choked Atlantic, “we need to open our minds and give these early explorers their due,” says Stanford. The first people to explore the Americas “were modern humans very much like ourselves...smart, adventurous, and very much capable of making their way in the world.”