From the Editor

Hello from Carlene, your new editor. Diane Raab did a marvelous job and will be hard to follow. At first I was very hesitant to take on this intimidating duty, but after a number of months of reasoning and begging, President Love has finally persuaded me to try my hand at it. Actually, I need to confess that this is not the first newsletter that I have been editor of. In the late 1970s Kevin and I put out the Underground News, which was then the publication of the Timpanogos Grotto. As I was just reminiscing through those old moldy volumes, I began to recall the techniques we used to produce them. In those days we typed the text out on an old fashioned black pharmacy typewriter that made only capital letters. Typing errors were devastating so we seldom dared to make them. Today I am typing this into our PC notebook computer using Corel Draw. Back in the 70s our newsletter covers were mostly drawings because we didn’t have the $ to have them done the expensive professional offset way. All the graphics in the present issue are digital. I hope you enjoy my first issue. Comments and critique are welcome.

“JED’S ESSAY”
by Jedediah Smith

I collapsed in a pile of exhaustion onto the dry edge of a silt streambed. Tilting my head far back, I glimpsed a flicker of dim orange light. There was the rest of the group, still at work surveying the remaining passage. Taking the hint from my wizened belly, I poked out from my backpack a can of juice and the squelchy remains of what used to be a sandwich. Since 8am that morning, I had been crawling, wriggling, and climbing as fast as possible to the squelchy remains of what used to be a sandwich. Since 8am that morning, I had been crawling, wriggling, and climbing as fast as possible to the

(continues on page 3)

Cover photo: Pete Smith among solution pans on the west coast of Dall Island, by Steve Lewis

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digging into his muddy coveralls, he pulled out his watch and said "7pm. We could be awhile more down here," he cast a glance upward, "you could probably head on out if you want." I readily agreed, and limped off upstream, solitary against the darkness.

The sound of voices faded into the roar of water echoing along the stygian heights of the passageway. I trudged on, my boots splashing in the stream, and eventually clambered out of the active stream passage. The roar of water beating itself ceaselessly against unseen limestone was reduced to a distant white noise. My weary brain thought my feet had lost their way a few times in the labyrinth of tubular passages, but when I came upon the mummified bat remains that served as a tiny hanging cairn, I knew I was on the right path. Rocks blurred by in my peripheral vision, water splashed and rounded gravel crunched in protest at the fatigued stomp of my boot. Eventually I came to the most dreaded portion of my journey out. I looked up to see the bottom of a thin rope, snaking upward beyond the threshold of my light. I sat for a while gathering energy, then donned my vertical gear and began climbing. I made slow progress, raising one foot after the other, and could see no ground, no destination, only the rope in my sphere of light. My endurance was running thin, and I finally collapsed against my seat-harness, swinging softly as I hung freely, some 300 vertical feet from my goal. I pondered: should I just sit here hanging like a corpse? It's only pain... my will is stronger than the limits of my muscles. I will force myself onward.

Making it out of the cave alive and un-assisted gave me confidence in my abilities, both physical and mental. This grueling 15-hour cave trip was one of the most trying ordeals I have been through. Being alone and unguided on the return trip was a test of my mental fortitude; I had only myself to rely on if I got lost or injured. Though many times on the brink of complete physical exhaustion, I never gave up, and continued pushing myself one counted unit at a time until I reached my goal: daylight. Unfortunately it was midnight when I finally did collapse at the entrance in a soggy quivering pile of gasping mitochondrial-strained flesh, but that didn't stop me from stumbling to camp, downing a whole quart of grape-juice, and falling into my sleeping bag.

I recently received a moderate grant to study the reasons behind this last century's rapid increase in size and weight of human beings. Since one of my most interesting reading journals is the widely read Alaskan Caver, I thought the spelunker readers would appreciate my recent discoveries published in Science (Vol. 84, No. 11) Exponential human size divergence: insights into environmental domical influences.

Basically, my breakthrough research has revealed that Homo Sapiens has increased in both size and weight by 22% in the last 58 years. By using computer modeling I have concluded that this growth is directly influenced by the size of the structures we now live and work in. In a population sampling of 1502 domestic goldfish, it was determined that the size of the fishes aquariums or bowls determined how big the fish were! Using a random sampling of ¼ million Alaskans, the computer showed a similar trend with humans. Those raised in trailers or small cabins averaged 23.7% smaller in both height and weight than their more privileged neighbors. When moved to a spacious, modern home, these specimens immediately became obese as a direct reaction to the enlarged environmental habitat change. One of the most dramatic cases is that of a 12 year-old boy who grew 20 centimeters in two years after moving from a cabin to a house.

I could not help but notice the statistics for spelunkers show an income much less than average, which accounts for their much smaller dwellings and physical statures. Furthermore, since spelunkers often go in small spaces, it may contribute to their stunted growth (see chart below).

Sincerely, Dr. Science, July 2002
Tim Heaton has paid my way down here to help him look for fossil bones in caves. Participants are: Tim Heaton, Fred Grady, Rachel Myron, Steve Lewis, and Kris Esterson and me. Yesterday we made an attempt to land in Diver Bay in a Beaver float plane. Fog made it impossible so we flew back to Ketchikan and hung out till 2:30 PM, then tried again. We set up camp about just inside the mouth of the bay on one of the few rocky sloping beaches on the south shoreline. Most everywhere else, the beach is cliffs or steep rock - all karst limestone. We explored a bit last night, but didn’t have much time to go far before dinner and bed.

Today we went about one mile to Enigma Cave. It has a nice breeze coming out. Just inside about 40 to 50 feet are a couple of impressive deflected stalactites about a foot and a half long. They resemble scimitars or sickles and have normal vertical stalactites hanging off. Apparently the wind which originally deflected them had decreased enough for some reason some time ago to allow normal stalactite growth. Tim and Fred dug in the cave at a site where a brown bear had already been collected.

We hauled out sediment and flagged a trail to camp. I found a 20 to 25 foot long phreatic tube which bears had used for a hibernaculum. Just below it is a narrow fissure blocked by a rock. I want to see if I can move it to get in. Most of us hiked around above camp looking for caves while Tim and Fred washed sediment.

July 10, 2002

Wow, what an incredible day! While Tim and Fred went to Enigma, Rachel, Steve, Kris and I went out towards the point at the south side of the Diver Bay entrance. We spread out and combed the hillside from the beach to about 250 feet elevation. I had the top position and the most easy terrain to walk. The others found some new littoral caves (about 30 to 50 feet above the present sea level). They also found two littoral caves which had been previously discovered and surveyed. Terra Rawee (spelling?) and St. Peters Privy Chamber.

Rachel and I got up on a saddle and the others went off for a while. I saw a deep fissure about 30 feet deep or more and less than about 10 feet wide. Finding a sloping ledge, I made my way down and back to its beginning. Sure enough it was an old littoral cave - now at least 30 feet above the present sea level.

I was amazed at how far back it went. It (I named it Abalone Cave) was of large dimensions and I estimate it has about 200 feet of passage. Most interesting was a large gorgeous display of white and brown pastel-colored stalactites. Some were soda straws with “lion tail” globs partway down them. Others were large, thickened stalactites up to 18 inches long with tiers of horizontal ridges around them. Fantastic! There were stalagmites up to 10 inches long and other sites of speleothems.

Two of the passages I was unable to explore completely because of bone deposits on the floor. I found a few other shorter littoral caves before climbing up a difficult fissure back to where Rachel waited. She had not felt comfortable coming down to see the cave.

The others finally showed up and we combed our way partway to camp before just giving up and bee-lining it for dinner.

July 11, 2002

Today Tim and I went up to Enigma Cave and planned to dig a short time in a part of the cave where otter bones were reported. Then we would go down to camp and hike out to the area most of us went to yesterday and join the others there. It didn’t work out that way.

We started finding all kinds of fossil bones from otter scat (fish bone), bears, and eagle bones. We were in “Sea Lord’s Rest”, a 20 foot pit. We hauled ~80 pound packs back to camp, and I tried unsuccessfully to dig out a large rock blocking a new cave entrance I had discovered earlier. It needs a rock hammer or chemical persuasion.

By the time we arrived at camp and cleaned off the mud from our gear and washed the collected sediment in screen bags, we did not have enough time to get to the others. They visited a cave Kris and Steve had found yesterday. They did collect some bones from another cave, but were too uncomfortable to go down into the beautiful cave (Abalone) I found. Tomorrow we have to move camp to Gold Harbor.
Starting at 11:30 AM.

July 12.

Today we got picked up soon after 12:00 noon by the float plane. Kris, Steve, and I went on the first load and had a chance to scope out the littoral karst of Diver Bay and around the point to the south. Saw also a singular mass of limestone located partway to where we landed at Gold Harbor. We also flew around Twin Peaks and saw some pits on bench areas below the summit. We are flying up that way by helicopter on Monday if all works out.

After the others flew in, we set up camp. I was searching the beach for wood to make a drying tent, and found a flawless glass ball from Japan. Later Tim found one too. I played a practical joke on the others after some of them frantically searched the beach for their own balls. I told them Tim had bought the balls we “found” in a gift shop in Ketchikan! These glass balls are nearly impossible to find anywhere, and to find flawless ones is really something.

July 13.

Today Steve, Rachel, Kris, and I hiked along the beach to the NW and then swept the slope along the mountain (above the old ocean bench level). We didn’t find any caves but found lots of non carbonate diorite. Closer to camp, a large resurgence at a contact welled up through boulders at a steephead. There are three main resurgences, each separated by diorite masses. These springs are fairly close to each other, but I think they are not hydrologically connected. Adyge trace study would show.

We then headed up the mountain to the northeast and checked out a cone-shaped hill of an elevation of 600 feet. Steve found a 40 foot long cave plugged with rock debris. I found a short cave/insurgence just northeast near the connecting saddle of the cone. The cave did not go, but could have been extended by digging. Kris found a six foot deep pit/insurgence plugged with sediment in the same area. We looked some more in a sweep, but found nothing more.

Tim and Fred collected some bird bones in Kit N Kaboodle Cave.

July 14, 2002

Today we (Steve, Rachel, Kris, and I) went up on a ridge on the south end of the harbor and found two caves. They are both resurgence related and next to a ridge/contact of shist and “dirty” marble. Kris got partway down one with handlines, but both need a minimum of 100 foot ropes. We don’t know if we will go back to explore them, for we are looking for new fossil locales for Tim, and these may be too corrosive for really old bones. On our way back down, we stopped at a lake at about 500 feet elevation and went swimming. Tim and Fred dug out a lot more bones from Kit N Kaboodle Cave.

July 15.

We are all glad we could not ride the helicopter to the alpine/subalpine around Twin Peaks. It is blowing and pouring down rain. I am getting wetter gear every day now.

July 16

Today we (Steve, Rachel, Kris, and I) went up on a ridge had to avoid the beach most of the way because of high tide. Chunks were occasionally coming loose after we had dug above them.

July 17, 2002

July 18

Well, we didn’t find anything to speak of today. We all hiked partway up a peak just about one mile east of camp. Then Tim and I went the rest of the way and lost Kris somewhere near the top. After we realized he was not around, we looked around for a while and called. We finally heard him yelling back about a mile away. I was really worried for a while that he had fallen off the very steep cliffy slopes.

Meanwhile Steve and Rachel headed down to catch Kris, but stopped at the lake for a swim. Tim and I hiked around the glacial cirque at the head of the lake basin. It was a steep brushy traverse.

Tomorrow we hopefully will get picked up to go back to Ketchikan. It has not been as nearly as productive cave-wise, but the big pit was a great find, as was the pretty littoral cave. Then there is a nice littoral cave Kris found.

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July 23, 2003

Participants for this trip were Steve Lewis, Pete Smith and Kevin Allred. We stayed last night at Mike McKimmins in Craig. We shopped this morning and then put in the water in Pete’s boat, “Goest”, in Craig. Seas were calm except on the outside with 10-15 mph chop on small swells. We dropped along the way to photograph humpback whales, as Steve is only one of four or so people in Southeast Alaska qualified to be paid to identify individuals by the underside of their tail flukes.

We dropped at Foul Bay on Dall Island and tried to reach a large lake with the boat. The stream channel was too shallow. Spectacular limestone littoral karst cliffs and crags towered above. We finally reached waterfall Bay. After anchoring the boat in the southeast nook of the bay, we set up camp at a high tide resurgence. We plan to go up and drop Mossy Abyss tomorrow. We will carry up 950 feet of rope and our caving gear, which will make for heavy loads. We will possibly rig partway down tomorrow.

July 24

It’s Pioneer Day. We left camp after a light breakfast at 6:30 am and walked 1/4 mile east on the beach and cut up the slope with approximately 60 lb packs. It took five hours to climb about 1600 feet vertically to Mossy Abyss. It was tough going, with heavy packs, steep terrain and brush/windfall. It would have been tough to locate the entrance without using a GPS. We rigged the pit on the headwall side above the gaping fissure at the bottom of a steep funnel-shaped sinkhole. The rigged rope was 700 feet long.

I dropped down the pit cleaning as I fed rope out of a rope bag. The walls were very clean and solid rock most of the way. Stopping at a rubble ledge about 300 feet down, I was able to communicate via radio with the others. The pit dimensions are huge, once past the entrance. We were able to plan what to do next. I thought we needed more rope, for it looked like there was only about 150 feet left in the rope bag (bad guess because the bag had twice that). The others came down with 250 feet more. Steve used that almost at once, and stopped below on a small ledge out of rope. Pete took the remainder of my length of rope, and this was used by Steve to bottom the pit, which ends in a rubble floor of huge dimensions.

Most of the pit is about 25 to 40 feet across, and gets bigger near the bottom. I climbed out as the other two checked out the bottom, and I discovered my old safety jumar is so worn, it will not grip the rope unless held just right. It was real scary. Later I lobbed it into the ocean to avoid the temptation of ever using it again! While waiting for the others on the surface I heard a wolf howling in the distance down towards Waterfall Bay.

After they got up we headed down the mountain to camp. Steve and I plan on surveying the pit tomorrow, and think it may be deeper than El Cap Pit if we count it as one pit, discounting the -300 foot ledge. I’m inclined to use Buddy Lane’s and Hank Moon’s definition, in that if one fell, one would go all the way down. These are subjective rulings for such pits as (continues on page 7)
Snowhole and NaOne, and I suggested to the others that we treat it as one pit. We will find out how better how deep it is tomorrow. We figure it goes close to 300 feet below the big ledge. Steve and Pete say Greenpeace may be interested in filming the pit in the next few weeks. We could use the publicity to try and stop the Forest Service from trading a whole bunch of timbered lands nearby to a native corporation for trashed out clearcuts. I would not be involved because of work. What a fantastic pit. I’m bushed. My legs and feet are cramping and I feel the years and mileage with weakness and soreness. [Editor’s note: see NSS News, vol. 61, No. 11 (Nov. 2003) for more on Mossy Abyss]

Fri. July 25
   Today we decided to take advantage of the continued dry, calm to boat about 20 miles west into the open Pacific to the Forrester Islands. I got a little sick but enjoyed it once there. Lots of sea birds nest there, as there are no predators. We beachcombed on the Northeast corner, then drove around to the west and viewed sea lions on Lawry Island and surrounding rocks. We gawked at a huge diorite sea cave on the northwest side which had numerous sea birds nesting inside. Gulls cormorants, oyster catchers and several other types of

Back at the boat we headed south some more. Stopping at a rugged beach on the south end, Pete anchored the boat. We found active gulls nests on our climbing route to the log-strewn beach. One egg had a baby pecking out of it. The hatched chicks are covered with molted black and grayish down. And the eggs are of a brown and black molted color and are bigger then goose eggs. Nests are made of grass and situated in grassy slopes or on bare rock out in the open.

After finding some neat buoys, Steve noticed that the boat was dragging anchor. He and Pete rushed back just in time to grab the bow line before the stern smashed upon nearly submerged ledges in the swells and wind. Then Pete jumped off the ledge towards the bow, his feet slipped out and he slid down the near-vertical, barnacle encrusted face into the water. The plunging bow almost pinned his head against the rock, but he pulled himself up and got aboard with some nasty scrapes on his back to plague him for the rest of the trip. He also had a goose egg on the back of his head. It is good that the boat was not destroyed, for nobody knew where we were. I visualized us having to eat baby seagulls for the rest of the summer!

We finished encircling Forrester Island, then ran back to Waterfall Bay. We had a nice dinner of lasagna and steamed California mussels, cooked on a beach fire in their shells. Tomorrow the pit!

July 27
   Yesterday was a tough go for all of us. We hiked up the mountain to Mossy Abyss in only about two hours, then while Steve and I prepared to enter the pit, pete took off to look over the mountain for suitable helicopter landing places and more caves. He spent the day with no success, and his knee got so sore he headed to camp. Steve and I began to survey up from the

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bottom, past a vertical crack lined with 6 inch long dogtooth spar. I have never seen it so huge.

The pit dimensions are monstrous; usually about 50 by 30 feet in horizontal cross section. It is inclined about 70 degrees, causing us to be working in a “lobe” of the pit much of the time. it required 17 shots to get all the way out. The survey had two splays off it. The first was some 100 to 150 feet up, and required the use of a bolt in an inclined slot, created by a four-foot thick dike falling out.

Yesterday Steve and I hiked up to Mossy Abyss one last time to carry out the rope. after having trouble re-locating the entrance, we headed down and became separated, both finding lousy routes down. Pete had returned. We packed up the boat and headed to “Hole in the Wall”, just off Divers Bay. The camp is comfortable and the day clear until evening. The rain is back.

We boated across the bay and secured the boat in a finger of water in the rugged karst. Then we hiked around the point towards Abalone Cave. The way was very difficult due to the high, jagged fins of karsted limestone. Ocean swells surged in many of the slots. I was amazed at some of the bizarre shapes the corrosion created. Solution pans were sometimes 20 feet diameter and very deep (see newsletter cover photo). Rillenkarren had developed in the upper areas where huge storm waves infrequently scoured off debris. These forms often were unlike normal rillenkarren in alpine areas. They looked like miniature mountain ranges poking up from a totally flat surface or plain. Sometimes the rillenkarren was canted outwards.

Presumably towards the prevailing winds and rain. Heelprint karren was also different, for it tended to slope up into rills rather than a smooth surface.

We got to Abalone and surveyed it. The tiered stalactites are incredible and there are also helicitites, stalagmites, soda straws and draperies. The cave is approximately 200 feet long.
DESCRIPTION:

Mossy Abyss is formed in Heceta Limestone, and was discovered by Timothy Heaton on July 17, 2002, while looking for caves containing fossil bones. Located on a steep mountain side in a dry ravine, the entrance is vertical on three walls. A steep, mossy slope leads down to a large, vertical fissure, which is the beginning of the spacious 505 foot drop to the bottom of the pit. Just inside the fissure, the ceiling projects upwards so far that it must be close to the surface somewhere above the fissure headwall. The pit is inclined at about 70 degrees, forcing those on rope into a “lobe” in one wall. The pit was bottomed first by Steve Lewis and then Pete Smith on July 24, 2003. It was surveyed on July 26, 2004 by Steve Lewis and Kevin Allred. Sixteen survey stations were required to finish the main pit because of the rope location in the fissure, which is the beginning of the spacious 505 foot drop to the bottom of the pit. The weather has cleared, making this day a most enjoyable one. Wild flowers adorn some of the most incredible and wild karst in the world! Life is good.

August 1

Yesterday we boated over to the cliffy shoreline above Enigma and tied the boat between two jutting points. We hiked up to the cave and toured past the wind-deflected “scimitar” stalactites to an upper entrance high on the cliff. Crawling through a bunch of small tubes, and then through narrow canyons, we found Steve’s blowing lead he had remembered. We rigged a handline and Steve and I surveyed about 100 feet of passage before it became too vertical to continue on. Then we rejoined Pete in the boat and went to Hole in the wall, all broke camp and drove back to Craig on choppy seas. After driving [by car] to Whale Pass we had a great dinner at the Smiths.

August 2

Last night Steve and I slept at the Allred house. I had only enough time to clean up a bit, and we left about noon and spent the next few days surveying lots of virgin passage in a cave in the area that Pete had found. We finally wrapped up the survey with 44 shots for the trip, and still going cave. Pete is driving us to the Hollis ferry a day early. He can hardly walk, and I’m very tired. I don’t know if its the age, or miles or both. 🌔

We continued along the shore southwards. I found a tiny Japanese glass float. with the twine still on it. Later Pete found more bare ones.

After a lot of climbing around, jumping across surging slots, and looking for new caves and enjoying the scenery and karst forms, we got to a place where the river otters were denning. One was there, and somehow when Steve was climbing around a cliff above the water, the otter tried to escape Pete and me. It came face to face with Steve, who was clinging onto the rock. It hissed at him, flipped off the edge of the cliff and fell eight feet down to a boulder on its back with a loud “splat”. It went into the water and dove out of sight. Steve was so startled, he almost lost his handholds.

The weather has cleared, making this day a most enjoyable one. Wild flowers adorn some of the most incredible and wild karst in the world! Life is good.
MOSSY ABYSS
DALL ISLAND, ALASKA
Surveyed with compass, clinometer and tape
Surveyed length: 753 feet (229.6 meters)
Vertical extent: 513 feet (157 meters)
Enterance drop depth: 505 feet (154 meters)
TONGASS CAVE PROJECT
Bedrock is Heceta limestone

Main pit bisects 1.2 meter thick eroded dike, its cast forming a slanting ledge to septum.

LEGEND
- passage wall
- probable passage wall
- underlying passage wall
- vertical drop, depth in feet
- rock fill
- slope, splays downward
- change in ceiling height
- entrance dripline

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DESCRIPTION:

Abalone Cave was first discovered July 10, 2002 by Kevin Allred and Rachel Myron while hunting for fossil bone deposits. The host rock is massive Heceta Limestone of Silurian age. Abalone was formed along several vertical dikes by wave action and probably some dissolution thousands of years ago. Since the active phase, isostatic rebound has raised the cave approximately 30 feet. Now the entrance is about 1000 feet from a small cove, and located in the end of a vertically-walled slot. Access to the entrance is either via a steep slope just west of the entrance, or from the spectacular and heavily karsted beach, which is exposed to the open Pacific ocean.

A large debris cone and fallen tree nearly obscures the entrance from view until right at it. Some abalone shells were noted in this debris. After scrambling down the debris and into the cave, it opens up to a horizontal walking passage up to about 20 feet wide and 30 feet high. In 100 feet, a junction is reached with some of the best speleothem displays in the State of Alaska. Here are white tiered flowstone, draperies, and stalactites. These resemble moonmilk, but are not soft. Also found are soda straws, lion tails, stalagmites, and helictites up to two inches long. A 50 foot long gallery runs south from the junction. More of the impressive speleothems are here, along with a pool. Two other 30 foot long passages run North and Northeasterly from the junction room. The northern one contains a doe deer skeleton at its beginning, and the northeasterly one has an otter trail partway along its length.

The cave was surveyed on July 29, 2003 by Pete Smith, Steve Lewis, and Kevin Allred, and is 257.9 feet long and 13 feet deep.

MANAGEMENT RECOMMENDATIONS

The location of Abalone Cave should be held confidential because of its delicate nature. Although many of the exquisite speleothems are located above head level, some, such as the stalagmites are on the floor and most of the deposits would still be vulnerable to determined vandals, who might eventually find out about the cave. There are paleontological deposits and possible cultural deposits in Abalone. This, and other nearby caves should be studied in detail by experienced archaeologists.
DESCRIPTION:
Red Lichen Cave is one of two significant inactive and isostatically raised littoral caves located on the west side of Forrester Island. They are formed in Cretaceous granodiorite. Although the entrances are very visible from a boat, because the shore is exposed to the open Pacific Ocean, access is difficult and unpredictable. The cave was named after extensive red coatings of lichen around the entrance. Most of the original igneous cobbles have become covered by breakdown since that cave was active. Small pink flowers grow on the silty floor of the twilight zone before the breakdown ensues. Midway along the passage are many bird bones strewn about, and a too tight passage jutting to the west. The cave ends after 190 feet to a tight pinch. Red lichen was surveyed on July 25, 2003 by Steve Lewis and Kevin Allred, and is 27.8 feet deep.

MANAGEMENT RECOMMENDATIONS:
Due to the remoteness of this cave, it is not likely that it will be visited, except for scientific reasons. The main concern with visitation is to avoiding disruption of the many sea birds which nest on the ground, on ledges, and even in some caves on the island. ¶
DESCRITION:

Softshell Cave is one of two isostatically raised littoral caves on the western side of Forrester Island. It is approximately 1/4 mile north of Red Lichen Cave. Although this entrance is very visible from a boat, access is difficult and unpredictable because the shore is exposed to the open Pacific Ocean. This cave was named after hatched egg shells in a nesting area (at first mistaken for an old fire pit) The shells might have become soft from the humid cave environment. The outer half of the cave had gravel and bird bone deposits. Old driftwood can be found in three places. At the time of visitation gulls were still nesting around the entrance. Soft Shell Cave was surveyed July 25, 2003 by Steve Lewis and Kevin Allred. The cave is 170 feet long and 20.9 feet deep.

MANAGEMANT RECOMMENDATIONS:

Due to the remoteness of these caves, it is not likely that they will be visited, except for scientific reasons. The main concern with visitation is to avoid disturbing the many sea birds which nest on the ground, on ledges, and even in the entrances to some caves on the island. The old logs in Soft Shell Cave could be dated to determine its latest activity.
Caving in Alaska is, in all ways difficult but the logistics just getting to Alaska from the lower 48 can be a nightmare. After you arrive in Ketchikan, you still have ferry, float planes and assorted boat rides to be arranged before you get to the FS assembly point. Most cavers from the outside are in for a real shock when they discover their bomber gear is woefully inadequate for Alaska. Even those who heed all the advise on what to bring still have Extra-Tuffs to buy. The inevitable layover in Ketchikan, where the last jet lands, in the last town on Alaska Airlines Milk run is just one of the realities to be encountered on a caving expedition in South East Alaska. Fortunately there are a few Alaskan cavers and friends to the Expeditions that support our efforts. This article is dedicated to those stalwart volunteer support individuals who Pave them up. She didn't know that she had just opened the door to dozens of cavers to mooch free meals, beg rides to town, use all the water in her cistern, and take over hers and sweet little Samantha's life. Oh yes, and they even corrupted innocent little Samantha, the fiends... and even tried to get Char hooked on caving, but Char goes no further into a cave than the dripline. She is a person who can't even cover her head with a blanket at night because she is claustrophobic.

She was conned into experiencing caving when the Whojigger said, No one is claustrophobic in a cave because there is plenty of air... She got 30 meters in, just where the last glimmer of daylight died, crawling on her belly in a streamlet. She was in a snakey little worm passage with no room to turn around when the full force of the walls closing in on her stuck fear into her heart, and a blood curdling scream to her lips. Suffice it to say, Char is now happy to watch us disappear underground taking with us her dearest little Sam, while she knits and fends off mosquitoes, waiting for us to return covered in mud and smiles.

Over the years she has come to love most of us, tolerate some of us and lay down the law with all of us. She has even come to forgive the Whojigger for his naughty fibbing about the nature of cavers. She takes delight in introducing new cavers to the wonders of Ketchikan, shopping for poly pro and Extra-Tuffs, sending care packages by float plane to the expedition and listening to all the stories when the cavers come back to civilization.

As of this writing, she and the Whojigger are still a mated pair. She looks forward to all the interesting people and strange adventures to come. God Bless Saint Char. ¶
Aerial application of pesticides is a bad idea anywhere. It is really bad in areas of Alaska where salmon spawn. It is especially bad in southeastern Alaska, where heavy rains and high winds are almost a given, and where our landscape is frequently composed of karstlands, underlain by caves and subterranean streams. I'd like to explain why this is and to ask you to let the folks at the Department of Environmental Conservation know how you feel about using pesticides in our forests.

Aerial spraying is, by its nature, imprecise. According to the National Research Council, under typical conditions approximately 60% of pesticides applied aerially land outside the targeted area. Because of this, and the fact that most of the pesticide ends up on the ground, in the water, or on non-target species, much greater amounts of pesticide must be used to reach the recommended concentrations for the target species. Under these typical conditions pesticide drift ranges from about 150 to almost 4000 feet, but under adverse conditions has reached 50 miles. Even if relatively good conditions occurred during the duration of application, it is hard to think of many places in Southeast Alaska where there is no stream, muskeg, lake, karstland or beach for nearly a mile in any direction. And it is when pesticides reach our waters that they begin to really affect our salmon, and the people whose subsistence and incomes depend on them.

Pesticides have been shown to cause major damage to salmon and other aquatic animals and plants. Studies by the EPA, Fish and Wildlife Marine Fisheries Service, and many academic institutions have shown causal links between pesticides and reduced viability of salmon stocks, including loss of swimming abilities, hormonal changes leading to deformities, feminization of males, alteration of salmon's sense of smell, and changes in schooling behaviors. These effects may occur even when pesticides are used according to the requirements on the label.

Our commercial salmon fishers are already facing stiff competition from farmed fish. One of the best marketing tools they have is the reality that our stocks of wild salmon are pure, meeting the requirements of being labeled organic. This critical tool could be quickly lost if any Alaskan stocks are determined to contain pesticides. It is ludicrous that the state of Alaska is promoting organic, pure, stocks of wild salmon for market, while at the same time, proposing to allow timber corporations to spray toxic chemicals over huge tracts of land that contain the spawning grounds for these fish.

So, aerial application of pesticides is not precise and more pesticides are needed because of this. Drift can leave residues outside the target area and adequate posting of the target area is not required under state regulations. Berries, roots and other subsistence harvest can become hazardous to consume or use. Deer may ingest toxins and then be harvested outside the target areas. If pesticides reach water, salmon and other aquatic organisms may be seriously affected, as may the people that eat them. But, why did I mention karst and caves?

Most people have a basic understanding of standard hydrology. Tiny trickles flow together to form tiny streams and these merge again and again to form bigger and bigger streams. The pattern, when mapped, looks something like a two dimensional drawing of a tree, starting with twigs, then branches, and finally the trunk of a tree which represents the biggest stream which then flows into the ocean. This is how water flows on something like 80% of Southeast Alaska.

Karst hydrology is very different. The rock substrate in karstlands (usually limestone or marble in Alaska) is soluble in water. Instead of flowing overland, water dissolves pores in the rock which merge in a complex three dimensional pattern underground. Sinkholes, caves, and karst springs are the most easily seen evidence of this pattern. Water enters the system through trillions of tiny pores in the rock and forms underground streams and lakes. These can drain in directions totally unpredictable from knowledge of the surface topography. And, once it enters the system water is (Continues on page 16)
effectively in a big pipe, with no filtration or removal of any contaminants that entered on the surface. What comes in the top comes out the bottom virtually unchanged.

Once can visualize karst hydrology as an immense colander inverted over a massive sugar cube. So, applying pesticides on karst is kind of like applying them directly into a lake. It is really bad for aquatic plants and critters. Even worse, we usually have no idea of the path that such contaminants will take in getting to the ocean through a karst system. Complex and expensive dye traces are required to even begin to understand where the water goes. We do know that karst-fed streams are among the most productive salmon streams in Alaska. That is why karst is important in this whole pesticide equation. Pesticides will get into the water on karst, no matter how they are applied. This water will get into our salmon streams.

Because the geology of Alaska is relatively poorly documented, areas with karstlands underlying forestlands are not well mapped. While we do know that vast areas of Southeast Alaska are underlain by limestone and marble, the Tongass Cave Project, the Forest Service, and others continually discover new and unmapped karstlands as we search for and research the caves and karst of Alaska.

We do know that most of Long Island is karstland. The state is considering permits for the aerial application of pesticides to remove alder on Long Island now. Nearby communities such as Hydaburg and Craig are greatly concerned about potential impacts to their residents who may hunt, fish, or pick berries near Long Island. We should all be concerned about this, and the effects to our salmon industry. Not only might pesticides reduce salmon populations, they may very well destroy the best marketing tool salmon fishers have, the wild, pure nature of Alaska salmon. I urge you to consider all this and then let the Department of Environmental Conservation know what you think.

Comments should Be Sent To:

Wasilla fax: 376-2382
Rosemarie Lombardi’s direct line: 376-1866
Pesticide program toll free number: 1-800-478-2577
Address: DEC Pesticide Program
1700 E. Bogard Rd., Bldg B Suite 202
Wasilla, AK 99654

Thanks! 

Glacier Grotto
A Grotto of the National Speleological Society

2003 Financial Statement (as of 5/15/04)

Starting Balance $1988.85

Income
Dues $445.00
Back Issues $ 5.00
Total Received: $450.00

Expenses
Caver Publication $428.39
Bank Fees $ 6.57
Postage $ 7.40
Total Received: $442.36

Ending Balance $1996.49
Some Call Hawaii Heaven

But I think its just like any other island

(This was written as a school assignment)

This last summer my mom, Dad, and I, (Flint was in high school, so he had to stay home,) went to Hawaii for a vacation. We had purchased a house [lot] on Hawaiian Acres and had built a field house on it a while back so we had a place to stay. When we got to the field house there was a lot of work to be done, all the weeds were overgrown and we had to get rid of them.

We also did lots of fun things. We went to the beach a lot. And collected lots of coconuts from a special spot we knew. Then one day a family friend came by. His name was Don Coons. He had been asked to survey a cave that lay beneath a city called Kamauna [Editor's note: this is a cave that tourists are sent down into via an advertised park entrance]. The reason it needed to be surveyed was because The city needed to know where to build roads, (they didn't want their roads to collapse). The reason he had come to our place was because the cave was too big to survey by himself, so he asked my parents if they would accompany him. Like any good friend would do, my parents accepted the job. We had no idea what horrors were in store for us. The next morning we got up early and started to get ready. Soon we were ready to go. Part of the cave had already been explored by other cavers, so we only had to survey part of it.

When we got to the entrance we saw that it was filled with junk. There were tires, broken glass, dishes, and some other things which I couldn't put names to. We found an opening and climbed into the cave. Almost immediately after entering the cave the ceiling got low so we had to crawl. There were five of us all together: Mom, Dad, Don, some guy whose name I do not know, and myself. As we crawled through the tunnels we noticed white things hanging off the ceiling of the cave. We decided that the only thing that these could be were disposable baby diapers [editor's note: this cave floods to the ceiling, and floatable objects are prone to being snagged on the ceiling]. May I mention that my dad and I had T-shirts on and were bare armed while crawling through this. We were pretty grossed out by then. The diapers were everywhere!

Then we came to a part where the tunnel got very small and Don’s friend had to go back because he was too big. As we progressed through the cave we came upon various items other than disposable diapers. My mom saw a colostomy bag (it was half full), and a hypodermic needle among the trash. By the time we were half way done we had come to the conclusion about where we were. We were in a sewer and wanted to get out as soon as possible. We split up into two teams to survey faster, Mom and Don and Dad and I. On one of our survey points Dad and I had to sit under a septic pipe for like five minutes. It was scary. The stench was so strong that I almost threw up. On the way out I was with mom and Don when we passed under a septic pipe. We were going past it when we heard a roaring sound overhead. We were paralyzed. Then Don screamed "Crawl"........ We crawled. Of course everyone escaped the splash except me. And let me tell you, you could not imagine how much "stuff" could come out of one of those pipes. When we finally got out we all went to the nearest beach and jumped into the water. I will never forget that trip and will not ever go into a cave like that again.

-Forrest Allred

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Dear Readers (or in some cases- those who must have this read to them.),

I was recently bored stiff while trapped in my seat on an airplane. In desperation I grabbed the catalog that contains such wonderful (insert useless) products for normal people. I realized that cavers are consumers too, so what follows is a list given freely* to any inventor / investor who wishes to cash in on these kind of products.

<table>
<thead>
<tr>
<th>Normal Product</th>
<th>Cave Adaptation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liposuction</td>
<td>Smaller cavers</td>
</tr>
<tr>
<td>Sleep sound generator</td>
<td>Cave Sound generator</td>
</tr>
<tr>
<td>Hydraulic Stair</td>
<td>Climber Hydraulic frog system</td>
</tr>
<tr>
<td>Handheld fish finder</td>
<td>Handheld pit finder</td>
</tr>
<tr>
<td>Cutesy Linen bed sets</td>
<td>Cave theme bed sets</td>
</tr>
<tr>
<td>CD player in the shape of a Car</td>
<td>CD player in the shape of a bat</td>
</tr>
<tr>
<td>Downspout creatures</td>
<td>Downspout Cave formations</td>
</tr>
<tr>
<td>Language courses</td>
<td>Rosetta stone for new cavers</td>
</tr>
<tr>
<td>Stop snoring aid</td>
<td>No variation but badly needed for overnight cave trips</td>
</tr>
<tr>
<td>Harvard Graduate Vocabulary in 15 min a day</td>
<td>Caver (3rd grade) vocabulary in 15 min a day</td>
</tr>
<tr>
<td>Electric Smores maker</td>
<td>Car Plug in Smores maker</td>
</tr>
<tr>
<td>Inspirations pictures of pigs flying</td>
<td>Inspirational pictures of stuck cavers</td>
</tr>
<tr>
<td>Fancy watches with moons &amp; stuff</td>
<td>Cave watches / show your rate of decent/ascent</td>
</tr>
<tr>
<td>Pop up Hot dog cooker</td>
<td>Car Plug in pop up hot dog cooker</td>
</tr>
<tr>
<td>Dog ramp (for the elderly dog to get on the couch)</td>
<td>Caver ramp (to get the caver on the couch after that grueling trip)</td>
</tr>
</tbody>
</table>

If you readers come up with any other capitalist/consumer delights, please let me know.

Yours, Phreada Phreatic
Glacier Grotto Membership List

Year indicates dues paid

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2003  SONNENBERG, GARY  1377 POND REEF RD  KETCHIKAN AK 99901
2003  Travis Kulp  PO Box 237 Ester AK 99725
2003  VALENTINE, DAVID B  11976 N TONGASS  KETCHIKAN AK 99901
2003  VAN NOTE, MICHAEL  PO BOX 26  HAINES AK 99827
2003  WHITE, BRUCE & Samantha  PO BOX 7531  KETCHIKAN AK 99901

Dall Island karst photos by Kevin Allred
Dall Island alpine karst, photo by Kevin Allred