

Hey everybody, according to this latest map, there is a Passage in Bigfoot that goes all the way to Porterville.

The SAG RAG is published by the Shasta Area Grotto of the National Speleological Society, Grotto meetings are held at different locations the fourth Friday of each month at 7:30 p.m. Meeting locations are announced in the SAG RAG, Membership dues are \$6 dollars per year and include newsletter subscription. Original material not otherwise noted is copyright to the SAG RAG. Such material may be copied with credit given to the author and the SAG RAG. For use outside of the caving community, please seek the permission of the author or editor first. Send material for publication any time to Bighorn Broeckel, 2916 Deer Meadows Road, Yreka, CA 96097 or <jbr/>procekel@snowcrest.net>. For more on SAG, check the web site at http://www.caves.org/grotto/sag>.

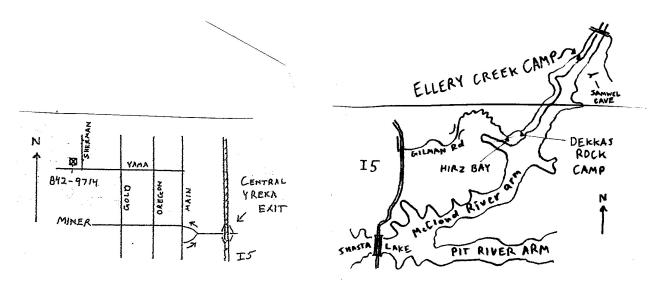
CAVERS CALENDAR 2003

Mar 6 5:30 pm Ann & Peter Bosted cave program at San Francisco Public Library. Mar 14 7:30 pm SAG meeting at Melanie Jackson home in Yreka. (530) 842-0714.

Apr 11-13 Bill Kenney to host meeting and caving campout at Ellery Creek Camp at Shasta Lake.

There will be a number of different caving possibilities this weekend and a wish list of things to get done, including an Under Earth Day clean-up at Discovery Caves. (541) 883-2781.

Aug 4-8 NSS Convention in Porterville, CALIFORNIA. (408) 356-8506.



THE CHAIR CREAKS – GRAFFITI REMOVAL IN LAVA TUBES. HELP? By Liz Wolff

SAG members and friends, a major clean-up problem still remains in Shasta Valley lava tubes: graffiti removal. There are many ways to remove paint, but in lava other problems arise. Some methods that have been considered/tried, but found wanting in either practice, destructiveness or cost effectiveness are: solvents, sandblasting, wire brushing, or painting over it to match the walls. Perhaps a combination of methods would prove effective. Graffiti breeds graffiti, and as Pluto's Cave proves, it only gets worse. Anyone out there have any ideas? If so, contact me by e-mail at dingbat@snowcrest.net or by phone at 530-964-3123. I'd be glad to hear from you.

SAG RAG SUMMARY (for convenience of CAL CAVER)

Shasta Area Grotto got that 20 year anniversary thing out of its system, what a relief. The Jan-Feb issue of the SAG RAG starts out the next twenty years with an extra long special issue that covers the entire 2002 caving season in the Marbles. Grotto members participated in continuing KMCTF project caving, led by Steve Knutson. A cartoon version of the motley crew appears on the cover. Inside, articles cover results from a heat sensing device in Bigfoot, success with radio survey and communications experiments (Bonnie Crystal), exploration in Chicken Little (Mark Fritzke) and Two Hammer Hole (Ben Miller) Caves, and the two Bills (Kenney and Broeckel) get some cave mapping done in October Pit. Don Hemphill, the early KMCTF cave biologist who died last year, is remembered in this issue. Since he retired, he has never really been replaced. Most photocopied photographs in the issue are by Bighorn.

SHASTA AREA GROTTO MEETING January 10, 2003

The meeting was called to order at 7:45 pm at Melanie Jackson's home in Yreka. Present were: Jim & Liz Wolff, Ray Miller, Melanie Jackson, Russ Yoder, Bill & Cheryl Kenney, Bill & Becky Broeckel, Robert Nixon, Arley, Sharon, and Manya Kisling, Neils Smith, and guests Bill Hirt (COS geology professor), and Dan McDonley from Ashland. Minutes were accepted as corrected. Treasurer's report: September balance is \$626.74. Web report: up and running. Still waiting for copies of old SAG RAGs to scan, hoping to get from Bill Broeckel tonight. SAG RAG report: next RAG will be out end of Feb., will hope to have some Marbles material. Ernie Coffman left positive feedback, and hopes that the keys to Sand & Barnum Caves wouldn't be given out. Ray assures us that he will be present when anyone is in the caves.

Correspondence: Liz brought the EA from the Hat Creek Radio Astronomy Observatory project. There are no caves, but there are 19 "flower pots" suitable for bats. They were not able to cover the whole area in the small amount of time given. The NSS Convention Committee for 2003 sent us a paper on the caves in the park for hikes/trips. Lynn Fielding e-mailed that the Western Region is now accepting nominations for the position of Secretary until Jan. 15. The NSS I/O reports are due Feb. 15 and SAG's was sent in today Jan. 10.

Old Business: Liz contacted the FS for an appointment to meet with the new district ranger, but they are not making any yet. She left a SAG RAG since he is mentioned in it. Will try again a little later. Russ Yoder referred Ray Miller to a fellow who has a natural citrus cleaner that may remove paint from the caves. We will wait to hear from J. Stout and J. Nieland before proceeding. We now have Disaster Service Worker registration forms for those who want to sign them to be able to work in the SAR So. Co. building with or without SAR vertical rope practices. You need to sign this form so that you are insured in the event of an accident while we are using the So. Co. building.

New Business: SAG and Cal Caver dues need to be paid. The cost of the Cal Caver has gone up to \$10.00 for the year. Make any checks for dues payable to the Shasta Area Grotto. Steve Knutson has a friend who is doing carbon dating studies and he would like to have a few already broken off pieces of stalactite or stalagmite that are not older than 20,000 years from Marble Mountain Cave. Bill B. says he has the owner Brice Campman's address.

Trip Reports: Not much due to weather and excessive whining. Bill B. went in terrible weather to Hat Creek after the last meeting. He had to move a tree with the help of a truck driver to clear at least one lane so that traffic could get through. He surveyed Wormwood Cave (35 feet) and Windows Cave (90 feet). Christmas Eve Bill and Becky Broeckel went into Red Shirt Cave and surveyed 300 feet and then found a second crawlway lead that goes for over 200 feet and still needs to be surveyed.

Trips and Meetings: Feb. 14-17 is President's Day Weekend, the annual skiing time. Meeting will be Saturday night Feb. 15 with a conservation cave clean up at Pluto's Cave on Sunday morning. March 14 – TBA (ed. Melanie's place). April 11 – TBA Bill Kenney in charge. Meeting may be in Klamath Falls. (ed. Dekkas Rock Camp at Lake Shasta).

The meeting adjourned at 8:29 pm.

Respectfully submitted, Melanie Jackson

ΜJ

SHASTA AREA GROTTO MEETING February 15, 2003

The meeting was called to order at 8:08 pm at the Wolff's home in McCloud. Present were Neils Smith, Bill & Judy Broeckel, Bill & Cheryl Kenney, Jim & Liz Wolff, Arley & Sharon Kisling, Dick & Kathy LaForge, Robert Nixon, Ray Miller, and Melanie Jackson. Minutes were accepted as read. Treasurer's Report: February balance \$716.71. Web Report: added NSS and Western Region links, and has more SAG RAGs to scan. SAG RAG: has enough bat stamps for the next two issues. Next issue due at the end of the month.

Correspondence: American Geological Institute is having Earth Science Week Oct 12-18, the S.F. Public Library is having a Caves Exhibit (Guadalupe Mountains) Mar.6-May 18, summer guide jobs available for Crystal Cave in Sequoia National Park, the NSS Vertical Section Nylon Highway publication will be coming out soon, and the final Environmental Assessment for the Allen Telescope Array Project at Hat Creek is now available.

Old Business: If you want any carbide from the grotto stash let J. Wolff know as it will soon be sifted and put in bottles or tins. Please fill out and sign a Disaster Worker Relief form if you want to work with rope practices in the So. Co. SAR building. M. Jackson has the forms.

New Business: A Kisling wants to know what the job descriptions are for each of SAG's officers. He would also like to have them written down. It has been noted that there is a need for each of our grotto events to have someone with a cell phone present for communications for possible emergency situations. It would be preferred if at least three people had them while in attendance at an event.

Trip Reports: A. Kisling and J. Wolff noted that the Shasta Lake Discovery Caves have trash in them that needs to be cleaned up. R. Miller and L. Wolff did a winter bat count in Barnum Cave noting 157 bats (2-4-03). That is an increase of 10 over last year which is insignificant statistically. On 2-15-03, L. Wolff performed a bat count at Pluto's Cave. 283 bats were present (usu. about 270). Sand Cave and Pluto's Cave had a clean-up performed by J. & L. Wolff, R. Miller, R. Nixon. A. Kisling, N. Smith, M. Jackson, and B. Broeckel. Collected were approximately 100 lbs. of trash, three pennies, one dime, a large quartz crystal, a working flashlight and three batteries. B. Broeckel at Hat Creek surveyed Jam Session Cave at 245 feet. It is two lava tubes that intersect at almost 90 degrees. 1-25-03 the whole Broeckel family did a CRF survey trip for the Modoc National Forest Project, but had to cut short when they encountered a hibernating bat. 2-8-03 they returned to work on another location. 2-8-03 B. Broeckel and sons hiked to the pigeon caves on Lovers Leap.

Meetings: March 14 at Melanie Jackson's in Yreka. April 11-13 at Shasta Lake, Bill Kenney in charge. May 9-10 at the coast at Mark Fritzke's. June 13th weekend is the Annual Hat Creek Camp Out.

The meeting adjourned at 8:58 pm.

Respectfully submitted, Melanie Jackson Sec/Treas.

MJ

MARBLES 2002

By Jim Wolff, Mark Fritzke and B. Broeckel

Independence Day Speleocamp By B. Broeckel

July 3: By evening, Mark Harder, Louise Hooven, Dominick Hooven, Roger Jones, and Bill Broeckel were in camp. Ben Miller came in later that night, a seasonal cave resource specialist from Lava Beds, with a special interest in alpine karst. Also, Tom Kline had a group hiking Wooley Creek.

July 4: In the morning, last year's latrine area was cleaned up and restored to a perfectly natural appearance. Roger hiked out for a cafe breakfast. I led a Bigfoot trip – but only to place a biological counter in the entrance. I was also able to help orient Ben Miller to the Marbles viewing the entrances to Immaculate Shaft, Bigfoot, Skunk Hollow, Wahahshun, and checking a little unnamed cave about 50 feet long. Later on Ben was able to find a new cave estimated to have at least 500 feet of unsurveyed passage. So far only Ben has been able to fit through some small spots near the entrance. I had to hike out on the afternoon of the 4th but Jim Wolff arrived and picks up the story.

Independence Day Speleocamp By Jim Wolff

I slept at the trailhead Thursday night (July 4, 2002), in order to get a good jump on the heat Friday morning. I had the pleasure of hearing fireworks in the horse packer's parking lot.

July 5: After finally reaching camp, I found nobody home, and my favorite tent site taken. I found a nice spot to camp above, near the meadow, with a terrific view of the mountains and karst. I took special care to go out of the way in order to approach the cache, since the valley had umpteen holiday campers milling about. Later, all the cavers showed up. They had been touring in the upper karst, visiting entrances. These folks include Roger Jones, Mark Harder, Louise Hooven, her son Dominick, and new to the area, Ben Miller (who works at the Lava Beds Monument).

July 6: Saturday Mark and his friends left for home, so we went on a big karst walkabout with Roger leading the procession. We stopped and showed Ben the Hissing Stream Cave entrances and the insurgence cave where the surface stream goes underground. There had been recent collapse in the sink complex, and someday a caver will enter and find ...? We were on our way to parts east that I hadn't visited before, apparently for good reason too? It became very steep? The topo map lies at this point. There are 40-80' cliffs there where the map just shows simple contours.

We made it to a place called the "Twin Towers". I don't know if it is a locally named feature, or just one that Roger made up, but it certainly is a set of towers. Two marble blocks rising out of talus piles, standing well over



80 feet high? Awesome? We visited Gooseberry Crawl, a cave nearby. This was all part of a big loop that brought us above the bluffs seen at the marble staircase just before the waterfall, a very tiring tour for an old man like me

Immaculate Shaft

July 7: Sunday, Ben and Roger went to Whiskey Creek while I looked for a longer rope to do Immaculate Shaft. About the time I came up with another rope of unknown length, my two partners arrived. It was mutually agreed upon – siesta time? After resting we decided to get another shorter rope of unknown length to help rig the main rope in the shaft. So, by late evening, we went to the big pit and rigged the rope. Ben, being young and energetic, went down by himself rigged for a change-over in case the rope didn't touch the bottom. It didn't, just 15 feet or so short, but that didn't bother Ben. He just got off a little early on a ledge, where he did a leisurely change-over above the knot, and went back up the rope. Someday I would like to do that drop...

July 8: Monday we went to double-check the cave that Ben found earlier. It'll go and it has very cold air flow. We then surface surveyed over to a known point, just to put the lead on the map. Ben left for home soon

after, so Roger and I went to look at the blowing entrance I had found two weeks ago. This one is about 8-I0 feet above the flowing creek level, and some mud is blocking it around a comer. Strong air flow also. Later that night, Roger and I went to Skunk Hollow, just to bop it. Had to get underground this trip.

July 9: Roger left early, to leave me to my miseries. I took the gear to the cache, policed and straightened up the camp, then left for the end of another wonderful and memorable time in these mountains.

Labor Day Speleocamp By B. Broeckel

Aug. 30: Benj and I hiked in Friday night after dark. There was no moon so we used flashlights on the trail. No other KMCTF people were in camp yet.

Aug 31: An unaffiliated group from Redding went to Bigfoot. They were Buster and Jonathon Klein, and Neil and Margaret Ross. A trail crew came and opened the cabin. They used lawn chairs and a large propane stove.

Benj and I did some surface survey at October Pit. Later we went to Upstairs/Downstairs for fun, and hiked the marble ledges to Marble Gap. At the gap we returned the obsidian chip that another person had picked up and given to me. Archeological evidence should be left in place.



Benj at Marble Gap.

Chicken Little Cave

Sep. 1: Mark Fritzke had arrived, and we went caving. Mark had found a new cave called Chicken Little. He was bringing a snorkel, which I recognized as a bad sign. I think Mark discovered this cave last year, right in a spot where I remember seeing Bob Richardson looking hard for a cave. During the winter, a tree had fallen over the entrance, so we had to spend an hour clearing debris such as sticks and branches. Inside we found the good news that winter floods had flushed out the passages. Benj helped at the beginning of the survey, but I told him he could go out whenever he decided. He looked at the beginning of the crawlway and decided to go out. You might say he was a little chicken. Mark and I continued the survey through the crawl way and into a bigger passage along a fault. The pool at the end of the cave was just a puddle, so the snorkel wasn't needed. We included two short shots into unexplored passage to a plug of sticks and branches. The survey total was 157 feet, and we were pretty much elated with the results of the day. Benj and I hiked out, but more on Chicken Little Cave to come in this report.

Bigfoot Radio Survey

Sep. 5: Steve Knutson was able to meet with the Scott River Ranger District (Kraus and Haupt) on his way to speleocamp. He came away encouraged that the District is sincerely ready to do their best to promote good cave management in the Marbles in the fiscal year.

Sep. 7: My return to speleocamp was delayed by some unexpected work. When I finally did arrive, Bonnie Crystal, Steve Knutson, Bill Kenney, and Midori Sundquist were off on a Bigfoot trip. I was too late to join in on the radio survey trip, and went hiking instead and saw Gate Lake cave. By the time I got back to camp everyone was already in sleeping bags and tents. Conditions were cold and there had been a recent hailstorm. Never-the-less, we were under a severe fire restriction including all elevations. Midori hiked out because her sleeping bag had been ravaged by a bear. The previous night without a sleeping bag or a fire had been a little much, even for a hardy KMCTF caver.

Sep. 8: Everybody pitched in and helped Bonnie carry the radio survey gear. Midori had left a note something like this. "Sorry I didn't help sherpa the gear. I went to a motel instead. Go ahead and sue me." The results of the radio survey, by the way, were interesting. Bonnie Crystal provides a summary later in this issue.

BB

October Speleocamp By B. Broeckel

Oct 11: Jack Herr and Charlie Kraus were just heading down the road with horse trailers when I rolled in to the trailhead. They had been doing some repair work on the cabin before the winter. Later that evening I found Bill Kenney, Steve Knutson, and an Arkansas caver named Matt Covington. The fire restrictions had been lifted, and the warmth of the campfire was welcome as always on the cool and clear October nights.



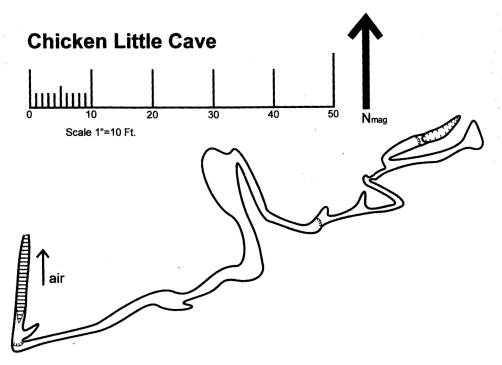
Chicken Little Cave entrance.

Oct. 12: Knutson and Covington went to Drystream to determine the walls of the Octopus Room for the auto cad map. They dropped into the room over a slab using a handline. Bill Kenney and I finished the survey of October Pit. See detailed report later in this issue. Later that evening, Mark Fritzke arrived in camp.

Oct. 13: I pulled the bio counter out of Bigfoot (see further for results). Kenney and Knutson rested in camp and worked on the cache. Two biologists from the Scott River District came by for directions to the bat study locations. I was tired and moving slow, but tried to keep up with Mark and Matt on a push trip in Drystream. We were just getting underway at the point of attack when I felt I needed to go home. I wasn't much help, but was still glad to see that part of Drystream. I hauled out the wetsuit that I borrowed from Mark. Fritzke takes up the story from here.

October Speleocamp By Mark Fritzke

On my "big push" in Drystream . . . we dug for another 2-3 hours, made a total of nine feet of progress, and finally could look left around the next corner; it looks small and muddy. Our "pulling out the plug" will hopefully allow the cave to flush itself open this winter, and I expect the situation will look much different next year. I think we're skirting the edge of a collapse zone, and we'll likely encounter open passage on the other side.



Map: Chicken Little Cave

Mark Fritzke created this sketch map on Corel Draw from memory after his initial discovery trip (Fall 2001).

Chicken Little Cave

Everyone packed up on Monday, and Matt and I parted ways at the first trail junction. I just "had to" try to pull the plug on Chicken Little before the winter runoff had a chance to mobilize our dig rubble and severely clog it up. I felt a little nervous at the entrance, going in solo, but I said a little prayer to Oztotl and the spirits of Bob Richardson and Claude Smith that I hoped would warn me of danger.

I squirmed through the now familiar body tube crawl to the "end", 157 feet from the entrance, after only 35 minutes of thrashing; the cave is getting easier? I got out a nail-puller bar, slithered around the sharp left turn into the body-sized tube that miraculously extends the cave, and stashed my pack at the last alcove not already filled with dig rubble from our September 2 trip. I took off my helmet so I could turn my head to examine the wood choking the end of the tube six feet ahead.

Crazy Inadvisable Solo Caving

For an hour I dug out the floor just to get a good angle to see it, and finally I could crawl within reach. Gingerly, I pried out a 3" diameter log and reached for my light to see what lay beyond ... blackness, an undefined void that didn't reflect my light back? After a few more logs I had to back up and drag the wood and a few large rocks down the passage and stash them where I wouldn't quite block the route. Inching forward again, I revealed a rock choke under the wood. With the pry bar I could barely move it, but just by wiggling it I could dislodge some mud cemented cobbles encasing it. Carefully, I maneuvered to stuff a cobble through my little

black hole of hope, and it rattled and fell at least 10 feet down a pit? Wow? This meant I could stuff more cobbles through the hole instead of dragging them back down the tube to stash?

Rising anticipation and glee invigorated my tiring arms, but the digging was taking a toll. I had to back up a few times just to get the circulation from cutting off in my left arm. Gradually I removed most of the cobbles, but I still had to back-up one more time with a couple of monsters that were too big for my 5x6 inch hole. I also abandoned my helmet in a recess where I hoped it would stay when I slithered forward again, but it wouldn't When I slid by, it would roll between me and the wall, until it jammed against my hip. Several times, forward, backward, forward, backward, until I was finally able to leave it behind.

Without the helmet blocking my view, I now had more room to wrestle with the big block. I had shoved most of the cobbles past a tight slot on the right, but this honker needed to be carefully slid along a ledge to the left. Twice, I nearly lost my grip as it threatened to teeter into the slot and wedge tight ... a disaster that would leave me bereft, peering into the open freedom of big passage through a permanent choke? Just a little further forward and I could use the pry bar as a diving board ... "Boom?" It's gone and so am I?

Columbus Day Extension

I extruded into a six foot wide passage that indeed plunged immediately into a pit? I turned around to retrieve my helmet; what a tight hole? Excited, I warned myself to be very careful in this virgin passage. To the left the passage appeared to narrow and come from tight

slots leading toward the surface. To the right I could see a schist block wedged at the entry to my crawl and protruding a foot into the pit I was about to try and knock it loose when I noticed it was holding up a huge block forming the ceiling of the beginning of the crawl? If I had "got rid of" the schist wedge, the ceiling could come down and either just fall into the pit or just collapse in place and block my exit?

I left it be and climbed down the 10 foot pit and around a comer to "staircase" down a 60 foot pit? At the bottom, I checked out some complex drains coalescing into a cobble crawl. I dug out a constriction and emerged into a pocket draining straight down a funnel through some large marble blades. After more wrestling I could just stuff my feet down the hole and move more large blocks. The marble walls had changed back to the mudchoked cobbles characteristic of the entrance area, and I wondered where this cave was going?

Insane Forbidden Solo Caving

Carefully I "felt" with my boots, and "smelled" void beyond my toes. Slithering down very carefully (the view up, with my displaced blocks teetering above the funnel was really spooky?), I let gravity and my toes decide where to go, and emerged into a tight pocket still diving down under precariously wedged blocks. With my senses primed by fear, I scooched forward into a larger pocket around a comer. Ugh? This three foot diameter chamber had a looming two foot diameter blade that appeared to be barely glued to the roof. I crawled directly under it to get a better view ... Careful not to bang or

vibrate anything ... Oh? It's truly a "hair trigger", and just as carefully I slid back up the passage and balled up so I could just reach it while tucking my toes out of harm's way

It took a little 10 pound push to bring it crashing down into the pocket Thanks to my angels? I slid into the slot next to the blade and bear-hugged it just to be able to grunt and wrestle it back up onto a ledge. What a monster, about 200 pounds? Sliding back down into the now safe slot, I realized how this block could have slammed down and pinned me under it ... a severely grim possibility. Solo virgin caving in the Marbles is not only forbidding, but a ridiculously high risk?

The slot got tighter, and I had to quit when my boots wedged into the crack below ... was this going to be the end of the cave? Well, maybe the winter will flush this out. When I return to survey it, I won't feel so foolishly overextended, and this will no doubt influence my opinion of "prospects".

I crawled carefully out of there and emerged into the spacious pit with a big sigh of relief, and carefully climbed back up and into my body tube. Another 40 minutes of worming brought me back to the entrance just in time to see the evening alpenglow. What a glorious relief?

With this "Columbus Day Extension" (how appropriate for our only holiday dedicated to an explorer?), Chicken Little is now twice as long with about 300 feet of passage, and is no doubt heading toward the mythic Sky High Junction, where all the caves combine before heading to Drystream Cave. The mystery of this elusive grand junction continues?

BIGFOOT PEOPLE COUNTER

By B. Broeckel

Many of you are probably curious about the results of the people counter placed in the Discovery Entrance of Bigfoot this past season. The counter was a heat detection device set for three seconds of heat within a narrow zone across the upper entrance passage. A really fast caver could zip through without being detected. The unit was operational from July 4 to July 22, then from Aug. 31 to Oct. 13. The first set of batteries must have been weak, lasting less than 3 weeks. The second set was still going strong after 6 weeks. So there was no data for the last part of July and the whole of August except for the night of the 31st.

63 days total were monitored. No activity was recorded on 11 of those days. Most of the days showed just 1-3 hits at odd times, often at 2am, consistent with animals such as rats. Six days show flurries of detections suggesting human cave trips. These were on 7/4, 8/31, 9/4, 9/7, 9/10, and 10/2. Two of these dates (7/4 and 9/7) are accounted for by known KMCTF activity. The trip by four unaffiliated cavers from Redding was on 8/31. The other dates represent three trips unknown to KMCTF. On 9/4, it appears that five people were in the cave from 9am to 6pm. On 9/10, two entered from noon to 9pm. Then on 10/2 it looks like two or three people from 8am to 6pm. However, the pattern on 10/2 is a little erratic, so it is possible that it was just animals.

Next time we do this I would suggest light detectors near the bottom of the drop. **BB**

CAVE RADIO SURVEY REPORT

By Bonnie Crystal

6-8 September 2002. We returned Sunday from our first Cave Radiolocation and Communications Tests in the Marbles. The following KMCTF members were there: Steve Knutson, Bill Kenney, Midori Sundquist, Bill Broeckel, and Bonnie Crystal.

I hired a packer and rode a mule for the uphill trip I hired a packer and rode a mule for the uphill trip from the trailhead to base camp with about 45 pounds of personal gear and 60 pounds of radio gear. A good portion of the radio gear weight was batteries. The packer was Mike Bryan who runs the pack station. His minimum charge is \$200, which gets you two mules and a one way "drop camp". Extra animals are \$100 each. It was a very pleasant ride and I recommend it for anyone considering it in the future.

Skunk Hollow Cave

Our first Cave Radio experiment Friday on 185 kHz was in Skunk Hollow Cave. Steve K. entered the cave with one radio. When we first established contact, I was excited, because this was the first time we had used cave radio in the Marbles. The radios worked fine for radiolocation using the loop antennas and depth from surface to passage was determined to be only about 80 feet We encountered a problem with one of the radios on voice transmissions, which I fixed shortly afterward.

We found the radio static noise out there in the Marbles during the day is extremely low, probably because it is very far from the nearest civilization and power lines. After testing communications in Skunk Hollow, we did some range testing on the surface using the loop antennas and found that we could easily get up to the top of the hill above the meadow near camp. This gave us encouragement for our first deep cave experiments the following day.

Bigfoot Cave

On Saturday, we did two radio locations in Bigfoot. The underground team, Steve and Midori, went down the Discovery Entrance . . . Then they took a passage from "Cave Junction" which stretches toward the uphill side of the mountain. Our objective was to try comms and radiolocation in an area of Bigfoot which we considered just about the maximum depth below surface that we could encounter anywhere in the rest of the system. If it would work OK here, it should work anywhere. We had originally estimated this location to be more than -300 feet depth below surface.

We set up a schedule for Steve to start the beacon at a particular time, two hours after entering the drop at the entrance. Bill K. and I went up the hill from the entrance and set up the surface radios near Immaculate Shaft, a pit not far from what we estimated to be our intended beacon point.

We also had a schedule to try every thirty minutes to make contact on the backup radio system (7MHz ham radio walkie talkies). We were all amazed when the first try on these radios worked perfectly the whole time. Steve, Midori, Bill and I had continuous comms at various points along the route from the entrance to the beacon point. Bill and I could easily walk anywhere in the vicinity on the surface and it was still perfect communication.

Immaculate Shaft

When Steve fired up the 185kHz cave radiolocation beacon ... it was loud and clear? I found ground zero (the point directly above them) using the loop antenna within a few minutes, but it took me a little longer to survey the 45 degree depth angles from two radials 90 degrees apart from ground zero. The depth ended up being -354ft below surface, which was the average between the two radial measurements. We marked the depth and ground zero point by painting a rock red at the spot just uphill from Immaculate Shaft. Then we made a surface traverse and tied it into Immaculate Shaft.

Then we moved to another location, which was more toward the uphill rise. It ended up being 444ft below surface? Then we tied the surface traverse into the Bigfoot Discovery Entrance, at about 240ft away and uphill. The only problem I had was moving around on the surface between trees and over big cracks and sinkholes in the karst. It's pretty rough ground, and with a lot of potential to trip and fall while walking around swinging a big loop antenna?

Also, I was surprised at how far the 185kHz cave radio went? During the radiolocation, I found that we could easily get good communication out at least 600ft

surface distance or more from ground zero, which was as far as I wanted to walk around while they were waiting and shivering downstairs?

Over and Out

I was pleasantly surprised at how well the 7MHz walkie talkies worked with simple telescopic whips. From the signal strength, I would estimate we could have talked at least a quarter of a mile, maybe half a mile, from ground zero while they were below -400ft depth. And further if we were to use wire antennas strung out on the ground. This makes it possible to have instant communications between underground teams and the surface over a wide area for exploration (and rescue if ever needed). I presently have a total of six of these 7MHz handheld radios in my personal radio cache.

I left a bunch of good batteries in our rescue cache there, since we didn't need to use all of them. That way, I probably won't need to hire pack animals next time we do the cave radio up there. On the way back on Sunday, since we distributed the radio gear among four of us on our backs, and didn't use pack animals, I ended up with a 55 pound pack on the hike out. Good thing it is mostly downhill going out ...

Everyone was quite excited about the success of the radio communications and radiolocation results. We want to organize some trips to do more of it. There are quite a few cave passages that have the possibility of connections, and also some possible new entrances that could be tried that would make it easier to push the system further with quicker access.



Doe, a deer, a female deer Ray, a man who studies bats Me, I'm mad, I'm really mad Fa, the Doe that got my bread So, I started throwing rocks Blah, I missed with every one Steve, he told me I should stop Oh how I hate that Doe A deer, a female deer. . .

MAN BITES CAVE On Survey at October Pit By B. Broeckel

In 1995, I did some ridgewalking on the way to KMCTF Speleocamp, and took a close look at a hole under a marble bridge. A round metal marker had been placed on the northern wall of the sinkhole. After the entrance was described over the campfire that night, Steve Knutson told us this was October Pit, and that it had never been surveyed. At that moment I vowed to myself to help map this cave, and furthermore, that it should be done in the month of October.

October Pit was named, explored, and tagged early on in the KMCTF investigations. Subsequently it has served as a landmark, and the round tag numbered "000" puts it among the very first caves to be marked in the Marbles. Sometimes there are reasons why a cave doesn't get surveyed right away. In this case, entry beyond the initial sinkhole was difficult, there wasn't too much cave inside, it was ugly, and there were more interesting caves to pursue in the Marbles.

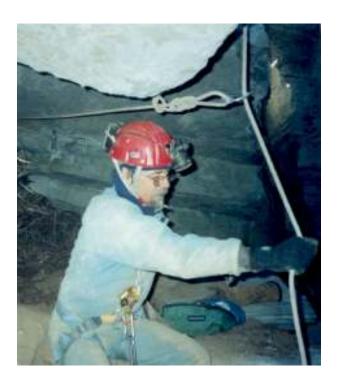
So it was on a rainy day in October 2001, we finally set out to survey October Pit. The short drop was rigged off the bridge, and one guy actually went in. We managed to get a survey down to the bottom of the pit, 60 feet below the surface. The guy was able to extricate himself from the squeeze hole, and that is where things stood until the following October. However, there was a lead down there, and Steve Knutson said it went to

another room.

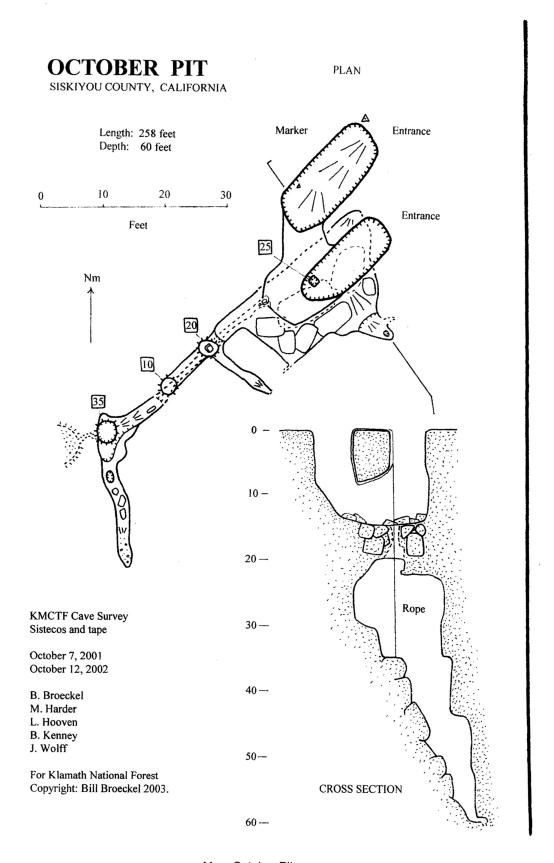
A year later, in the warm sunshine of Indian summer, we were back to give it a try. Bill Kenney and I felt confident about the cave, but we were on the tired side, so we did some ridgewalking on the way. We gradually moved toward our primary objective, casually checking for openings and caves. Once at October Pit, we made some serious final preparations. We rested, ate some food, put on warm clothes, arranged vertical gear, and rigged the rope, once again off the natural bridge. Sliding through the hole and rappelling into the room below all went smoothly. We stashed our vertical gear and moved over to the lead.

I set up the survey book while Kenney took the end of the tape and climbed the first dome. He put a station on the ceiling, and observed daylight coming through a passage from the entrance. This is partially blocked with some dirt and rocks. If the debris was cleared away, this passage could be used as a non-vertical route into the cave.

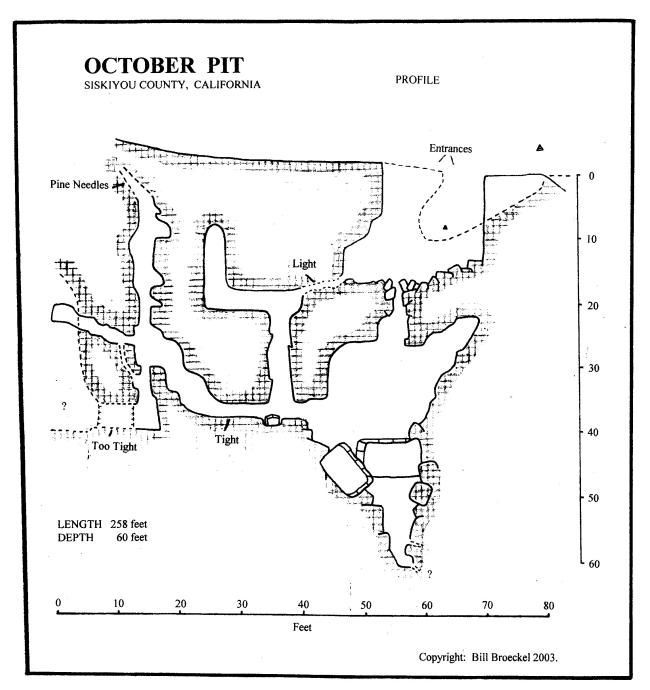
Next we were faced with the lead. My imagination had enlarged it into a spacious crawlway leading to miles and miles of unexplored boreholes. At least that was how I described it to Bill Kenney when I convinced him to go on this trip. The reality was more narrow than I remembered. However, after creating some shoulder room and making several tries, we eventually worked out the right angle and breathing pattern, and pushed through on our sides.



Rigging off the natural bridge in October Pit.



Map: October Pit



Map: October Pit

The next bit of passage seemed huge in comparison. We surveyed up a slope to intersect the next jagged domepit. There was a nice ledge to rest on. The cave was warmer this year and we were overdressed. From this pleasant spot we surveyed a horizontal crawlway several body lengths to its end. Then we dropped a shot down to the floor, noting a trace amount of boxwork and flowstone. From there we could stick our heads into a crevice, look around a comer, and see part of a large dome room just ahead. Unfortunately, the crevice was too narrow and convoluted for us to get through.

Kenney started heading out while I finished up my notes and sketching. Looking around, I saw that if I moved a couple of rocks I could climb up into the dome. In fact I was able to climb up about 20 feet without fear of falling. The dome was so narrow and full of ledges that it would have been impossible to fall more than a foot or two from any given point A very tight, sloping passage at the top was conducting surface materials (pine needles) into the cave, but I detected no penetrating daylight.

Back at the rope, Kenney was battling his way out the small hole in the ceiling and I took some pictures. Then the room became so filled with dust that I retreated further back into the cave. I climbed the first dome for fun and was surprised to find an unsurveyed passage up there. It went 10 horizontal feet and then 10 vertical feet to reach a pocket of warm air. I collected some rough survey data and added it to the rest. The grand total survey length for October Pit stands at 258 feet.

Now it was my turn to exit the cave. Up the rope I went only to find that the rope had slipped into a small crack. The proper thing to do in this situation is to go back down, reposition the rope, then try again. Being stubborn and bull-headed, I didn't do the proper drill. Instead, I put my knees up on the wall and attempted to wrestle the rope free from the crack. It sounds straight forward enough, but as It turned out, a great amount of thrashing about was required to accomplish this foolish feat. Luckily there were no spectators. Bill Kenney was wondering what the fuss was about. Once on top, I was thinking that I really need to do a better job checking rope position before getting on rope (and checking rope for the next guy on longer drops). The whole experience wore me out so bad I was worthless for caving the next day.



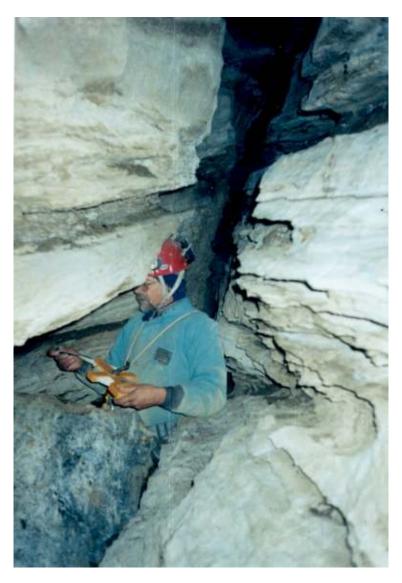


Bill Kenney on rope in October Pit.

Kenney also had some adventures climbing out of October Pit. He was working out the moves needed through the tight spot. He looked up with his mouth open while reaching for a handhold. Well, we think that the whole karst has been subjected to glaciation. We often find large or small deposits of glacier silt. Somehow Kenney swept a generous helping of this powdery substance directly into his mouth. It was very neatly done, "as if with a funnel" he said, instantly filling the entire oropharynx.

Needless to say, this problem occupied his attention for some time. Did I mention my observations on the organic content with which nature has been enriching the local soils? Poor Bill Kenney was spitting grit all the way back to camp. We were thinking there must be some lesson to be learned, and came up with this. SOMETIMES IN CAVING IT IS IMPORTANT TO KEEP YOUR MOUTH SHUT. Yes, that is a good one. Those of you who actually enjoy Bible Passages for Cavers can look up Psalm 141:3 for a little prayer in this regard.

So now you have the inside scoop, the nitty gritty, the dirt you might say, on the great and long avoided KMCTF survey of October Pit: 258 feet long, 60 feet deep, and dust by the mouthful. Here is a place to show some true grit, but don't bite off more than you can chew. And if you must bite the dust, this is what to do. Just think of it as inexpensive dental hygiene.



Bill Kenney on survey in October Pit.

HEMPHILL OBITUARY By Bill Broeckel



HEMPHILL, DONALD D BIOLOGY 55EP17

With this review of 2002 in the Marbles, it would be good for us to take a few moments to remember Dr. Don Hemphill who passed away this last June at the age of 84. A zoologist and a college biology professor, Hemphill had a special interest in the Marble Mountains. He was involved with the Klamath Mountains Conservation Task Force (KMCTF) in the early years, and carried forward identifications on cave related fauna, both past and present, as observed in the caves of the Marble Mountains. He contributed written material regarding these findings on a regular basis, and these have been preserved in KMCTF Technical Reports #3, #5, #6, and #7 from 1977 to 1981. He was familiar with a number of caves including Bighorn, Skunk Hollow, Marble Gap, Upstairs/Downstairs, and Planetary Dairy. He often sent his assistant Roy Suggett into the caves to make the actual observations or to collect specimens.

Don Hemphill led wilderness ecology field classes into many parts of the Marbles, and even spent extended time in these mountains on sabbatical. He literally hiked every trail, and was especially proud to state that he had visited every lake in the Marbles (over 100). He was an expert fisherman, and was famous for pulling large trout from tiny holes out in the middle of some forgotten meadow. This was called harvesting "meadow carrots" and his vegetarian students were reassured that they could freely enjoy eating the delicious fish fillets fried in seasoned corn meal without hesitation. After all, according to some important zoologists, these fish did not really belong to the animal kingdom?

Dr. Hemphill was an accomplished ornithologist, and did his own taxidermy. He was well known for gently coaxing wild birds into his hands as if by magic, then wringing their little necks and adding them to his collection. Some of his collections are currently on

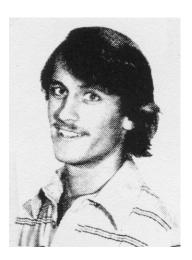
display at the Hemphill Museum of Natural History in Clark Hall at Pacific Union College (PUC).

It was my privilege to take zoology and genetics from Dr. Hemphill at PUC in the 1970s. His lectures would begin with a technical discussion, perhaps on the taxonomy of some lower life forms. Sooner or later, he would invariably digress into tales of his experiences with animals such as albino deer, wolverines, or wounded bears. This was such a tendency that students would joke and call his lectures "Uncle Don's Story Hour." But you could study the old tests on file at the library, score high, and bolster your science GPA with a solid 5 hour "A" in Zoology. Dr. Hemphill was always popular among the students, his famous "winners and losers" speech notwithstanding.

Every spring the college would have a contest to see who could find the earliest blooming Diogenes Lantern, one of the local wildflowers in the Lily Family. I would spend hours and hours searching the hills in the early spring, but Dr. Hemphill would always bring some in weeks ahead of time. This drove me crazy, and I found out later that he had a south facing spot all figured out that served as a natural greenhouse, and these things were practically cultivated. I think that eventually he was disqualified from the contest because people were tired of having him win every year.

The winners and losers thing had me paralyzed for a while, but as I gained confidence, I began to really appreciate Dr. Hemphill. I was in awe of his mastery of the natural world. I made friends with that wild and crazy Roy Suggett, and once went with Dr. Hemphill and Roy on a trip to U.C. Berkeley to check on some bones at the Museum of Paleontology. It sounds silly, but it has been a fond memory, this haunting around these archives with Dr. Don.

The greatest compliment you could get from Dr. Hemphill was if he said "you character". The last time I saw him, he was getting older but still leading groups of students into the mountains. This time he was on the saddle between Banner and Ritter in the High Sierra. He had just hauled and set a series of live animal traps up the Banner-Ritter glacier, and was engaged with his



ROY SUGGETT

group doing his usual thing – telling stories. He asked me some questions about our mountaineering trip, and when I told him that we had climbed both Banner and Ritter, he beamed his big smile face and said "you character". I count this whole episode among the greatest moments of my life, such was his hold as my teacher.

I'm glad to think that the caves in the Marbles are something I share in common with Doc Hemphill. His efforts facilitated the following biospeleological highlights in the Marbles: the first scientific report for evidence of bighorn sheep in the Marble Mountains, also the same for the native wolf: and only the third contemporary wolf specimen for the entire state of California, noting the rare snow crickets (grylloblattids), a new spider, and a population of rosy finches wintering out of their range in Upstairs/Downstairs Cave. Yet, it was his love for God and God's creation, and his enthusiasm for all things wild and zoological that seem most notable. He felt most comfortable in the Marble Mountains, and his love for these mountains has enriched a generation of KMCTF cavers. It is good to take a moment to remember the Doc, after all, he was a real character.

HEMPHILL OBITUARY

Reprinted from the St. Helena Star, 6-27-02

A memorial service will be held Thursday, June 27 at 2 p.m. for Dr. Donald Vincent Hemphill, former professor and naturalist, at the Pacific Union College Seventh-day Adventist Church youth chapel. Dr. Hemphill died June 20. He was 84.

Dr. Hemphill was born in San Francisco to Paul and Ida Hemphill. He moved to the Valley and attended high school at PUC Prep and then college at PUC. After receiving a master's degree from U.C. Berkeley in 1944, he returned to PUC as a professor and later became chairman of the Department of Biology. While at PUC, his classes were referred to as "Uncle Don's Story Hour" and he earned the title "Mr. Diogenes Lantern," for providing that flower every year for homecoming.

He enjoyed spending summers at the Mendocino Biological Field Station and teaching marine biology. He also enjoyed leading wilderness ecology backpacking trips.

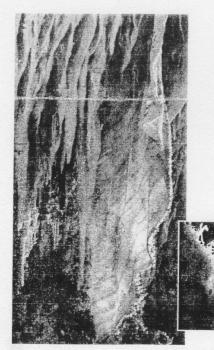
He is survived by his three children and their spouses, John Franklin Hemphill and wife, Edna of Angwin, Julie Finley and husband David, of Angwin and Jeannie McLellan and husband Bill, of Martinez. He is also survived by one grandson, Donald Finley of Angwin, and several nieces and nephews.

He was preceded in death by his wife, Winifred Hemphill. Interment will be at the St. Helena Cemetery. Memorial contributions may be made to the PUC Biology Department. Arrangements by Morrison Funeral Chapel.



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Exhibition

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Opening Program and Reception

Caves in California

Ann and Peter Bosted deliver an illustrated lecture about caving in California, where to go and what to expect when you get there.

Thursday, March 6

Reception 5:30 – 6:30 p.m. Latino/Hispanic Community Meeting Room Lecture 6:30 – 7:30 p.m. Koret Auditorium

> All programs at the Library are free. This exhibition was organized by Karst Features and the San Francisco Public Library. Supported by the Friends & Foundation of the San Francisco Public Library.



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