

INSIDE: Jim Barnhart's Chimney Caves at Hat Creek

The SAG RAG is published by the Shasta Area Grotto of the National Speleological Society. Grotto meetings are held at different locations on 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 <caverbill@live.com>. For more on SAG, check the web site at <<http://www.caves.org/grotto/sag>>.



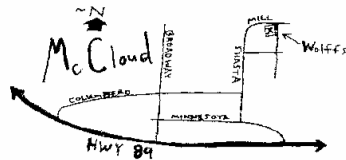
CAVER CALENDAR 2013



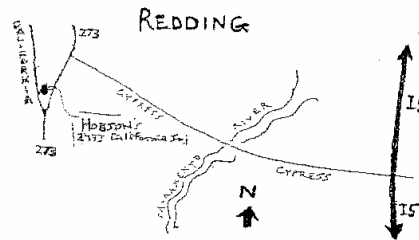
- Feb. 22 SAG meeting 7:30 pm at Wolff's in McCloud 530-964-3123
- Mar. 22 SAG meeting 7:30 pm at Hobson's in Redding 530-242-8707
- Mar. 22-24 NSS BOG at Menlo Park
- May 17-19 (?) Speleo-Ed at Prather (near Millerton Lake NE of Fresno)
- Aug. 5-9 NSS Convention at Shippensburg, PA
- Aug. 30-Sep. 2 Western Regional at Trout Lake, WA
- July 2016 NSS Convention at Ely, NV



FEB



MAR



SUMMARY By Bighorn Broeckel

Here is the last SAG RAG for 2012, featuring Hat Creek again, but also a report from the Western Regional at Frogtown last September. SAG members Bruce Rogers and Pat Helton were there and led a Geology trip. Bruce subsequently pitches in for the SAG RAG with three cave maps and related materials. The maps may have appeared somewhere previously, but are never-the-less made available to our readers here and now. Also see page 12 for Roger's History of the World. A "Ba" would be a billion years, aka "Ga" or a giga-annum. "Ma" would be a mega-annum, or a million years. "Ka" is a kiloannum for a thousand years. Kiloannum as a word, however, is not allowed in Scrabble. But if Bruce uses it, I wouldn't say anything, especially if it covers a triple word score. Remember, on good days he really is an earth scientist. The next issue might have some low key Marbles coverage, and a Liz Wolff map/report on this Ittachoomah Cave. Stay tuned.

COVER: Adapted from original artwork on the front of the 1975 NSS (Frogtown) Convention Guidebook done by a caver and graphic artist LaRhee Weaver, aka, Fi-fi LaRhue. **BB**

SHASTA AREA GROTTO MEETING**OCT 12, 2012**

The meeting was called to order at 7:35pm at the Wolffs' home in McCloud. Present were Jim & Liz Wolff, Steve Hobson, Dave Smith, Melanie Jackson, and guest Christina Monterrubio from Chico. **Minutes:** not available. **Treasurer's Report:** not available, but the balance is the same as last month. Have an outstanding check for a WCC donation. **Website & E-RAG:** all the same. **SAG RAG:** NA.

Correspondence: Two notices from the NSS bookstore. One about a false release of a new cave book and another later about the real book release that is available only through NSS. Ernie Coffman sent a link to Lava Wilderness Study Area and a link to Hat Creek and others with no mention of caves (came from the BLM office in Alturas).

Meetings: Oct. 13 SAG/SAR cave rescue training at Pluto's Cave. Nov. 16-17 Cave trip Welhella & Coyote. Dec. 7 Meeting at Hobson's home in Redding with APC trip. Jan. 25, 2013 Meeting at Melanie's home in Yreka. Feb. 22, 2013 Meeting at the Wolffs' in McCloud with annual Pluto's Cave clean-up to follow. Mar. 22, 2013 Meeting at Hobson's in Redding. Apr. 26, 2013 Meeting TBA.

Old Business: We finally received our grotto patches order. Discussion of rescue training for SAR at Pluto's Cave. Talk about: Safety, "For real", Patient Packaging (order of tie in, knots, padding etc.), litter handling (types of passes), and special in-cave techniques, hypothermia, gear management, team work, and belaying on slopes.

New Business: Planning 2013 Marbles Labor Day Weekend Trip with mules packing in gear. Adding an extra day, meaning packing in on Thursday and going out on Monday to have more time to cave.

Trip Reports: Broeckels at Hat Creek Sep. 27-28 on survey near Sweet Sinkers (Monster Pit, Thomas Jefferson, and TJ Annex). In the Marbles Labor Day Weekend Steve Hobson, Dave Smith, and Melanie Jackson checked on RP points and got a correction on the actual place that Planetary Dairy Cave is located. Kip Bauman, Ethan & Ethan's wife, and Melanie went into Planetary Dairy Cave. Rudi, Jed, Chris, and Kip made a six hour trip in Bigfoot Cave from the Discovery Entrance to one of the Monkey River entrances. Bill, Judy, and Becky Broeckel, Melanie, Chris, Chris' wife, Savannah & Macy went to the Sky High Lakes. Steve H., Dave S., Mark Harder, and Louisa V. managed and contained a forest fire just below the guard cabin for 5 hours until the Forest Service sent in a helicopter with fire fighters. Ittachoomah Cave was explored and trash was removed and a geo cache was found and an entry was made by Jim & Liz Wolff, Steve H., Dave S., and Melanie. A Lucky steel beer can with a pop top was found. Fishing lures found were added to the geo cache.

The meeting was adjourned at 8:56pm. Melanie Jackson SAG Secretary.

MJ

JIM BARNHART'S CHIMNEY CAVES

By Bighorn Broeckel

Until he retired, Jim Barnhart was our cave contact out at Hat Creek. He was that rare man willing to cut through a bunch of manzanita to reach a cave. Once he told me about a skylight entrance he found out there somewhere among the buttes. He hauled out an extension ladder and was able to reach the floor, but found no continuing passages. There being very few truly vertical caves at Hat Creek, this report stuck in my mind. I kept my eye out for it, but many years went by on the project, and it wasn't showing up. I was too non-confrontational to demand explicit directions. It's not like we've been running out of things to do out there. But then Barnhart retired. I don't even know where he lives and never see the guy anymore. We were left with another candidate for the "lost cave list", not a real written list, but more like a nebulous group of lost, imagined, or rumored caves. These somehow persist in the collective memory of us "the cavers", whispering to ourselves as we fall asleep at night, things like *"there's a vertical cave out there somewhere among the buttes"*.

Fast forward to 2012, and Linda Jameson, friend of the Wolffs and employed by Lassen National Forest, has been tasked with reviewing the Geology Notebook, a large, non-descript, loose-leaf repository of all important papers pertaining to local earth science. I wandered into the Visitors Center one day when Linda just happened to be on duty. She recognized me as a caver and asked if I knew anything about "the Kiva Cave". A distant light of cave recognition flickered in the back of my mind. Linda had this enormous notebook and I thought of Jim Barnhart. "What have you got?" I asked. It turns out that Barnhart submitted two 5x7 cards into the Geology Notebook, with details on two chimney caves, one on each card.

KIVA CAVE

The first card had a sketch showing a schematic of a vertical cave with a ladder going down it, kind of like the one shown here. It looked just like a kiva from an Anasazi ruin in the south-west. That sketch is probably why folks were calling it Kiva Cave. Barnhart didn't use that name himself, but he did write some things down.

"This spatter cone is one ladder length down. There are no tubes or openings inside. The bottom is flat with a ring along the circular wall. The ring almost resembles the wave action of throwing a pebble in water and watching an outer ring form. Perhaps this bubbled sort of like a mud pot with occasional large 'bloops' of lava that formed the small spatter cone. It's the only one of its kind I've seen (in this area)."

He also included some directions which read like a set of clues, so I called upon some experienced cave detectives (Jim & Liz Wolff) and together we set out on 11-3-12 to find the not-so-lost-after-all cave. We walked right up to it, easy as pie. Jim Wolff tied a rope to a tree, and soon the little cave was dropped, surveyed, and GPS'ed. It appears to be a parasitic vent to another nearby spatter

cone; interesting how the floor of Kiva Cave tilts slightly toward the other spatter cone. No cave entrance showed up on the other cone, but there was some cold air within the loose rocks.

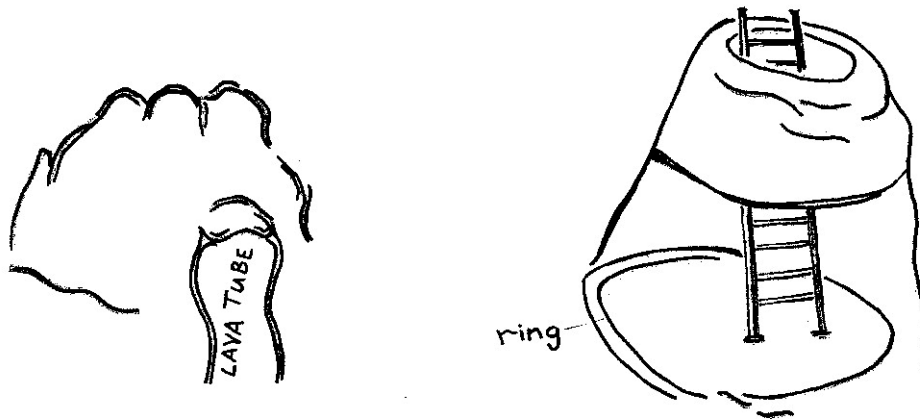
After that we still had some time, and we took turns discovering new caves, but that is all another story ...

ENCHANTED CHIMNEY

Way out in the Manzanita thickets of Hat Creek, an inconspicuous spatter cone with fine attributes stands out as unique for the area. A very liquid lava must have erupted here, forming the many tubes, half-pipes, and natural playground slides that festoon the outer surfaces of the cone. The main vent found inside the structure dives down a 5-ft diameter chimney that can be readily down-climbed to reach the underlying cave. The walking passages go around a circle, with impassable, small side tubes branching off at intervals. A lead at the bottom looks possible for thin cavers, and a short climb goes up to a sitting chamber and a back entrance.

Prominent biological processes in the cave center around heavy packrat use. A solitary day-roosting bat was observed during the survey trip last April. Though some of the floor is obscured by rat middens, the ceiling is highly decorated with pristine, secondarily mineralized lavacicles. Judy Broeckel did the book on the survey. We are quite sure that this Enchanted Chimney is in the same spatter cone recorded on Jim Barnhart's second 5x7 card years ago, and as preserved in the Lassen National Forest Geology Notebook. JB's description reads as follows:

"I don't remember the looks of this one, but I do remember being impressed by the broken lava tubes coming out of its sides that look like water slides. This blobby spatter cone is north of (Kiva Cave)... You have to cut through a lot of Manzanita to get to it, but it's worth it – it's unique – very different from the larger, cratered spatter cones."



Reasonable facsimiles of Jim Barnhart's sketches on the 5x7 cards.
(L) Enchanted Chimney and (R) Kiva Cave. The names were applied later.

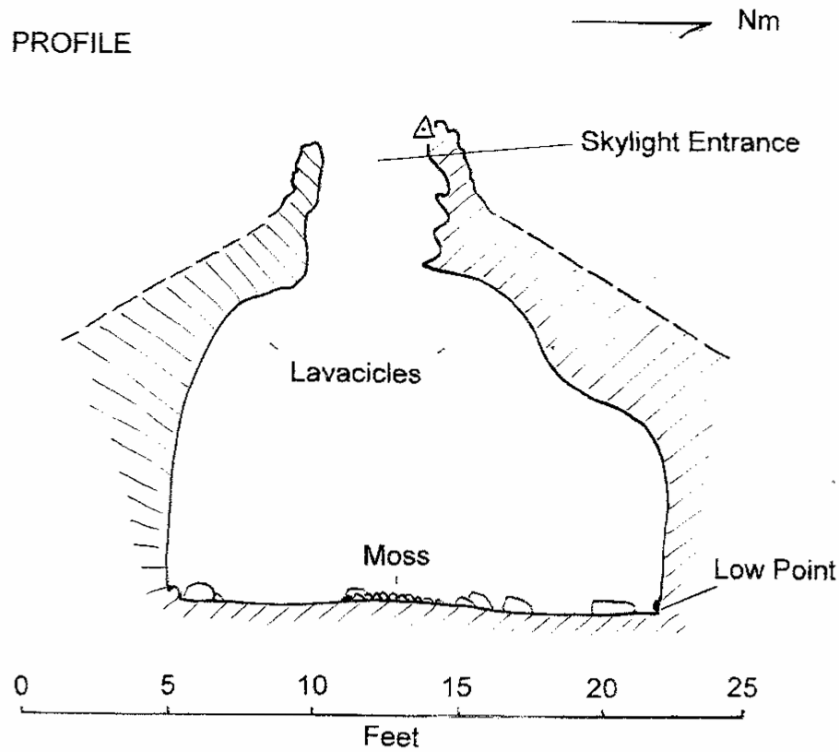
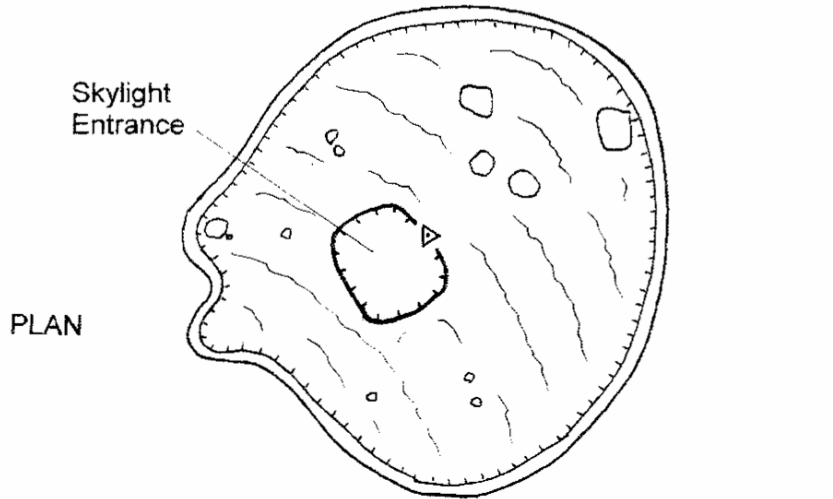
Kiva Cave

Shasta Co CA

Length 32 feet
Depth 16 feet

HACK # 203

Elev. ~4620



Tape & Instrument Survey 11-3-12 Shasta Area Grotto, N.S.S.
Bill Broeckel, Jim Wolff, and Liz Wolff for Lassen National Forest.
Cartography/Copyright 2012: Bill Broeckel.

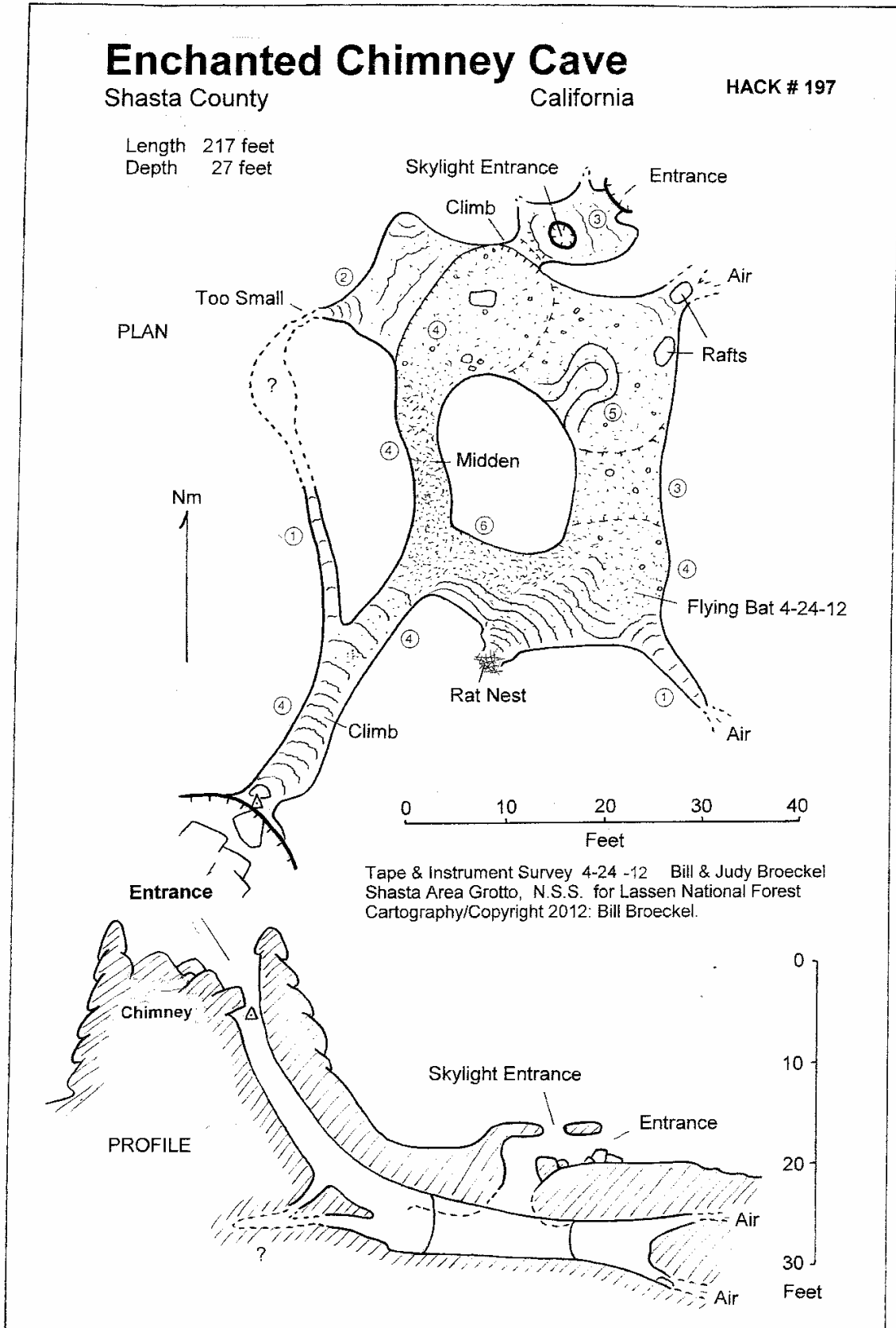
Map: Kiva Cave



Enchanted Chimney 4-3-12



Skylight entrance to Kiva Cave 11-3-12



Map: Enchanted Chimney Cave

FROGTOWN WESTERN REGIONAL 2012

By Bighorn Broeckel

Sept. 28-30, 2012 western cavers met around the frog pond on the Calaveras County Fairgrounds near Angels Camp in California. The site resonates in western caving lore, as the NSS National Convention was moved to this plot, on short notice, back in 1975. Likewise, the 2012 Western Regional was moved here at the last minute, and once again the frog pond served as a perfectly good back-up spot for cavers.

I arrived after dark, got lost, and saw a pick-up hauling jet skis, ready for the frog pond. They turned out to be fellow SAG people from Nevada, Jim Cork, and Doreen, and three teenage boys, Vance, Edwin, and Jacob. Some of us were wandering around looking for the Regional. The 1975 folks (more than a few) probably knew right where to go. Pretty much we could camp wherever we wanted around the pond. I ended up next to another fellow SAG member, Chris Kennedy. So we had a respectable turn-out from SAG, at least seven of us.

The blue moon nights were just right for sleeping, but during the day the temperatures quickly soared over 100 degrees F. The choices were caving or swimming or both (Natural Bridges). I signed up for Dave Weaver's horizontal trip, and we went to three caves – Bobcat, Porcupine, and Grapevine. The interiors offered cool, shaded, and comfortable conditions, so we stayed inside as much as possible. We tended to sit around having nice long chats in the dark. All three caves were adorned with speleothems. The routes appeared traveled, but tidy, and we found very little trash or markings on the walls. Bruce Rogers most kindly provided maps, attached here for the reader's convenience. These caves provided a wonderful relief from a hot September afternoon.

Chris Kennedy went on a vertical trip to Heater Cave and Wool Hollow. One of those caves had some bats. Back at the frog pond, the WCC made a fine dinner, then the Region meeting was conducted, and finally the auction. There were no Regional T-shirts this year, but I won a bid on a bat T-shirt, and thus didn't have to go home shirt-less. The Nevada folks were high bidders on Becky Broeckel's bat cookies. No doubt the extra viands were needed to help fend off those three hungry teenage boys.

The next day I signed up for Bruce Roger's 50ft Geology Walk. He laid out fifty feet of survey tape representing the history of the world, that is, the entire history of the world including the pre-human part. The human history only takes up a tiny little bit at the end of the fifty feet (see attached hand-out). It took us 4.5 billion years to go fifty feet. Then it was off to the caves again, where we headed straight for the best room we knew of (Grapevine Cave) and pretty much stayed there through the heat of the day, hobnobbing with the salamanders. Many thanks to Matt Bowers and company for a fun Regional, and to Claude Koch who came down to personally invite all of us to next year's Regional, and more great caves, at Trout Lake, Washington.

BB



Cow covers at Frogtown Western Regional 9-30-12



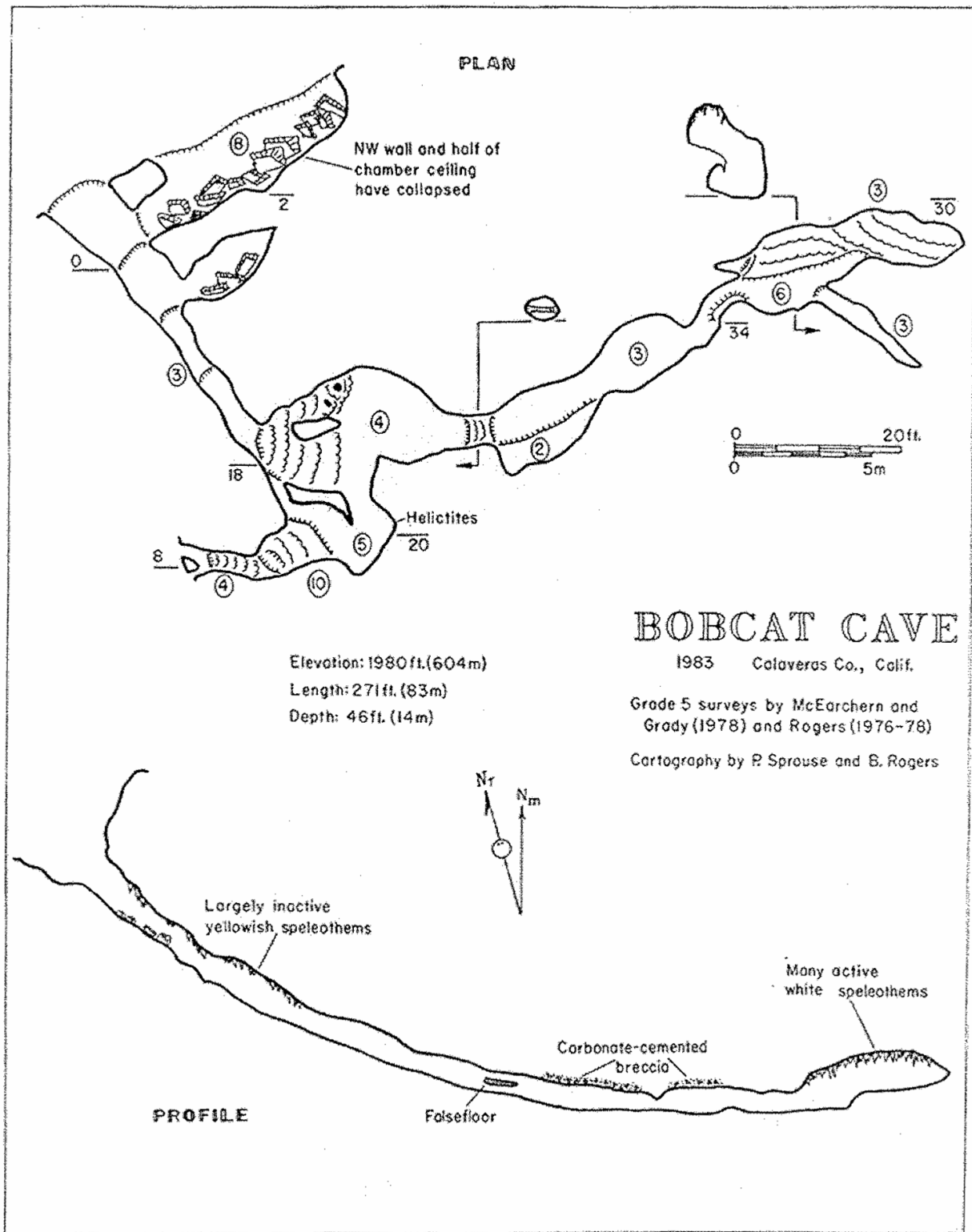
Frogtown sign under September flowerbed 9-30-12



First Aid Frog with good hot weather advice 9-30-12



Frog Pond at Western Regional 9-30-12



Map: Bobcat Cave



Surface near Bobcat Cave entrance 9-30-12



Sierra Side-Band Snail in Bobcat Cave (from Bruce Rogers)



Detail along entrance passage of Bobcat Cave 9-30-12



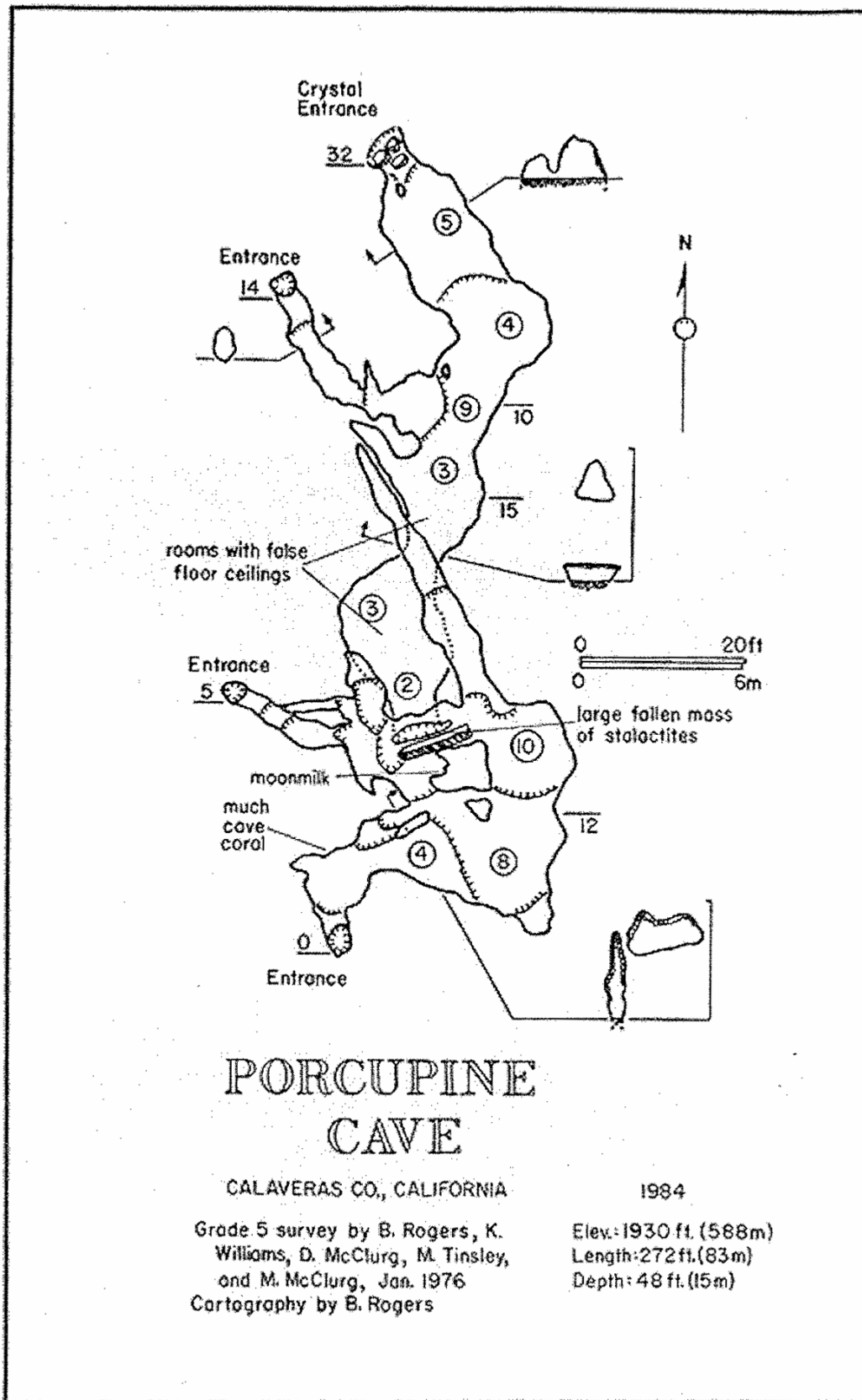
Pillar in Bobcat Cave 9-30-12



Three young cavers near the end of Bobcat Cave 9-30-12



Keeping cool in the back of Bobcat Cave 9-30-12



Map: Porcupine Cave



Ceiling detail in Porcupine Cave 9-30-12



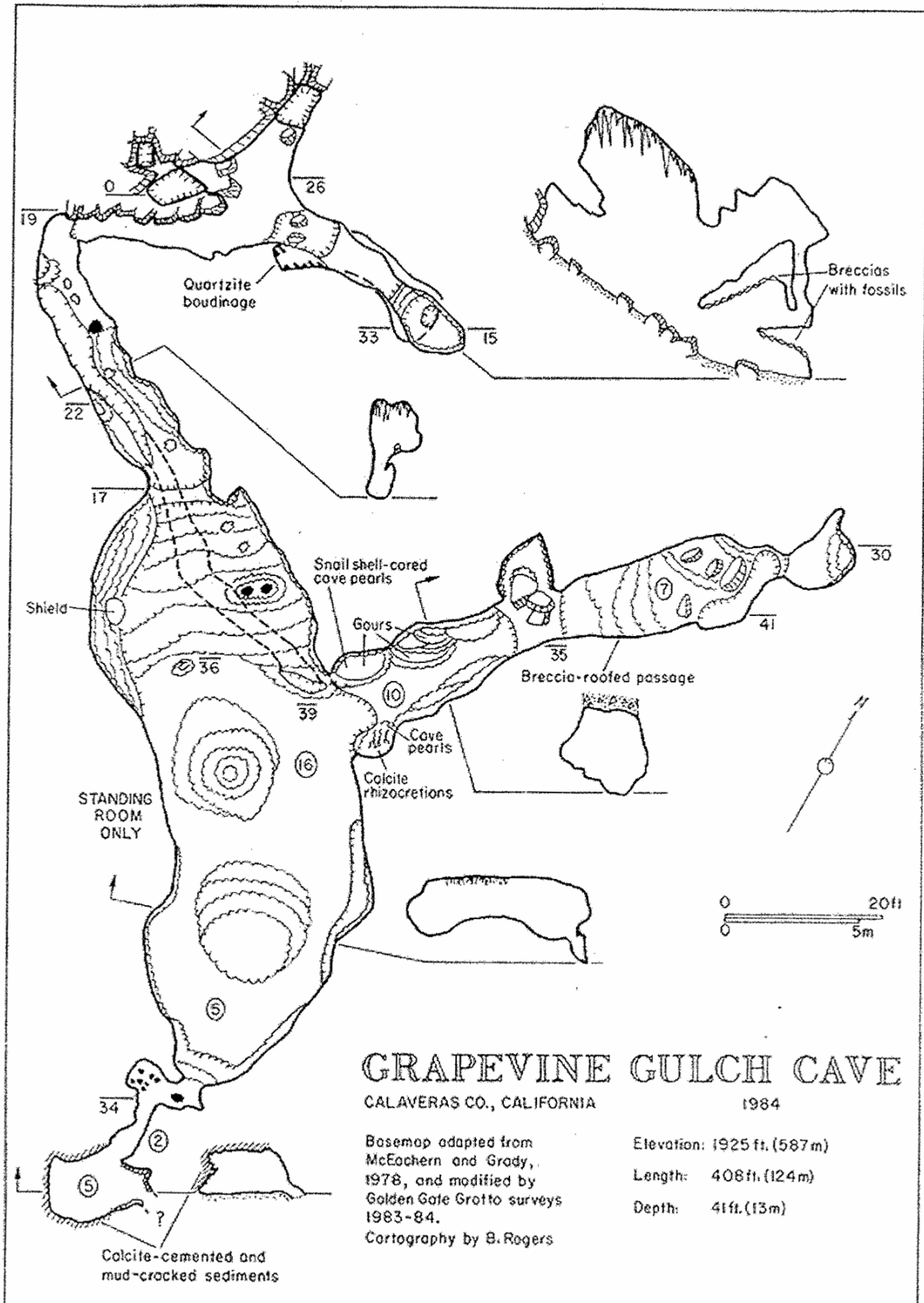
Checking for small passage in Porcupine Cave 9-30-12



Caver and ceiling projections in Porcupine Cave 9-30-12



Ceiling detail from big room in Grapevine Cave 9-30-12



Map: Grapevine Cave



Detail in Grapevine Cave 9-30-12



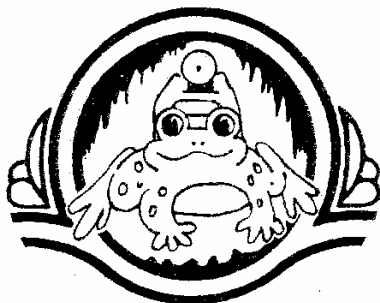
Grapevine Cave rock embedded in flowstone 9-30-12

HISTORY OF THE WORLD TIMELINE By Bruce Rogers (California Mother Lode Version)

EVENT	YEARS AGO	TAPE DISTANCE	EVENT	YEARS AGO	TAPE DISTANCE
Beginning of the earth	4.5 Ba	50ft	Widespread volcanic activity	37-23 Ma	9in
Unicellular life	3.4 Ba	38ft 4in	Sierra Nevada uplift/tilting	25 Ma	3in
Multicellular life	700 Ma	15ft 9.5in	Stretching of Great Basin crust	~20 Ma	2.5in
Ancient Appalachians form	700 Ma	15ft 9.5in	West Sierra canyons begin	~16 Ma	2in
Animals with backbones	500 Ma	15ft 0.0in	Horses, apes, dogs and cats	10.2 Ma	1.25in
Oldest rocks in Yosemite	500 Ma	Ditto	Table Mountain formed	10.2 Ma	1.25in
Fish are major life form	400 Ma	12ft	Grapevine Cave starts to form	7.1-4.5 Ma?	¼ in
Mother Lode limestone	~280 Ma	8ft 4in	West Sierra rivers cut deeper	5 Ma	ditto
Age of dinosaurs begins	245 Ma	7ft 4in	Bottom drops off Sierra Nevada	4-3.5 Ma	7/16 in
Tectonic Nevadan Orogeny	~225 Ma	6ft 9in	Hominids & Sierra Nevada uplift	3.5 Ma	13/32 in
Pangaea breaks up	200 Ma	6ft	Kings River incised even deeper	2.28 Ma	9/32 in
Subduction off CA coast	200 Ma	Ditto	Northern ice ages begin	~2.5-2.0 Ma	17/64 in
Ancestral Sierra Nevada	195 Ma	5ft 10.25in	Crystal Stanislaus Cave sediments	1.78 Ma	7/32 in
Granitic Sierra batholith	195 Ma	Ditto	Yosemite Valley's wider U-shape	1.2 Ma	¼ in (pencil)
First birds appear	175 Ma	5ft 3in	Date on Morley's birth certificate	750,000	3/16 in
Flowering plants appear	150 Ma	4ft 6in	Bishop Tuff along Owen's Valley	700,000	~3/16 in
Atlantic Ocean widens	130 Ma	3ft 11in	Sea level 400ft lower	125,000	~1/64 in
Dinosaurs die out	65 Ma	1ft 11.5in	"Modern" humans appear	100,000	credit card
Sierra volcanics eroded	65 Ma	Ditto	End of most recent ice age	10,000	~ 3 papers
Sierra batholith exposed	65 Ma	Ditto	Sea level rises to present level	9-7,000	~ 2 papers
CA subduction goes strike-slip	60 Ma	1ft 9.5in	Eastern Sierra uplift continues	9-present	~ 2 papers
West Sierra "gold channels"	58-37 Ma	1ft 5in	Written history	5,000	~ 1 paper

BR

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TABLE OF CONTENTS

TO:

Page 2 Calendar and Summary
 Page 3 October Meeting – Melanie Jackson
 Page 4 Jim Barnhart Chimneys – Bighorn
 Page 8 Western Regional – Bighorn
 Page 12 History of World – Bruce Rogers