

SAGRAG

MARCH-APRIL 1993

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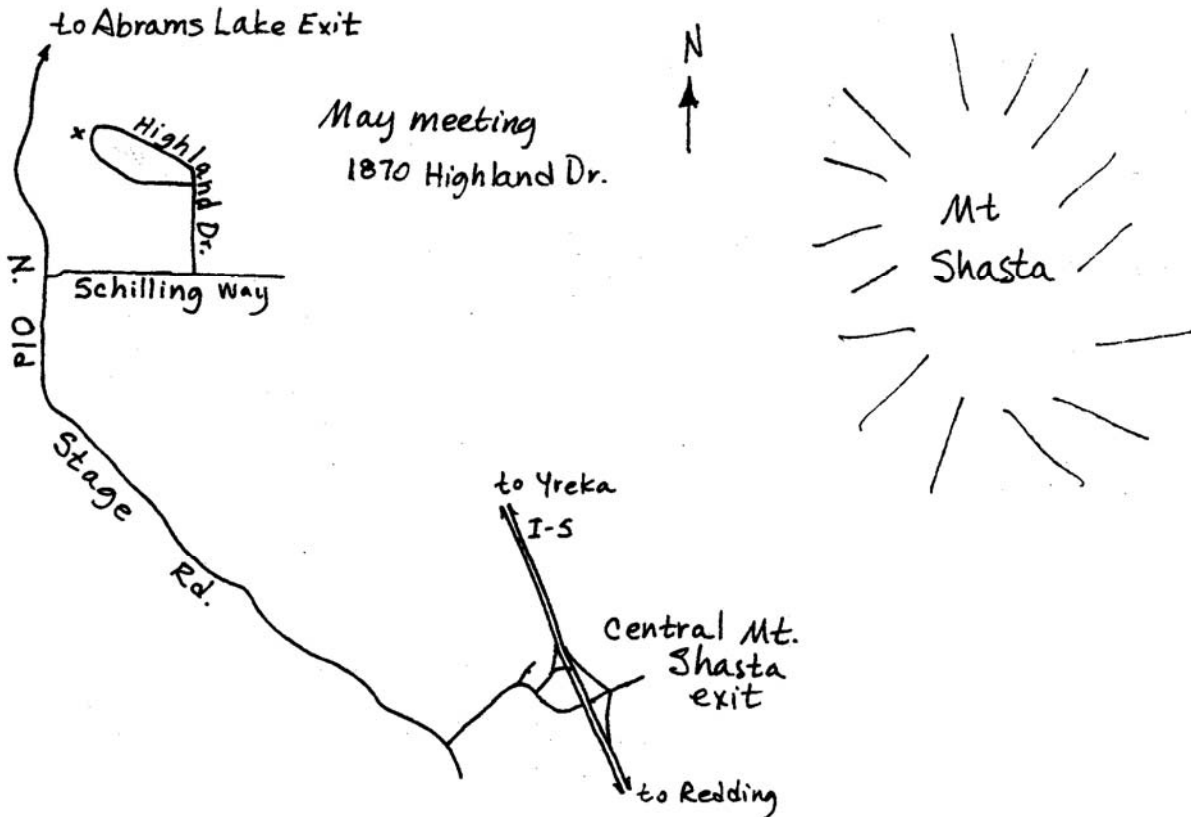
“Would you look at that? . . . By thunder, you couldn’t do that in *our* day — yessiree, the rocks were just a lot heavier back then.”

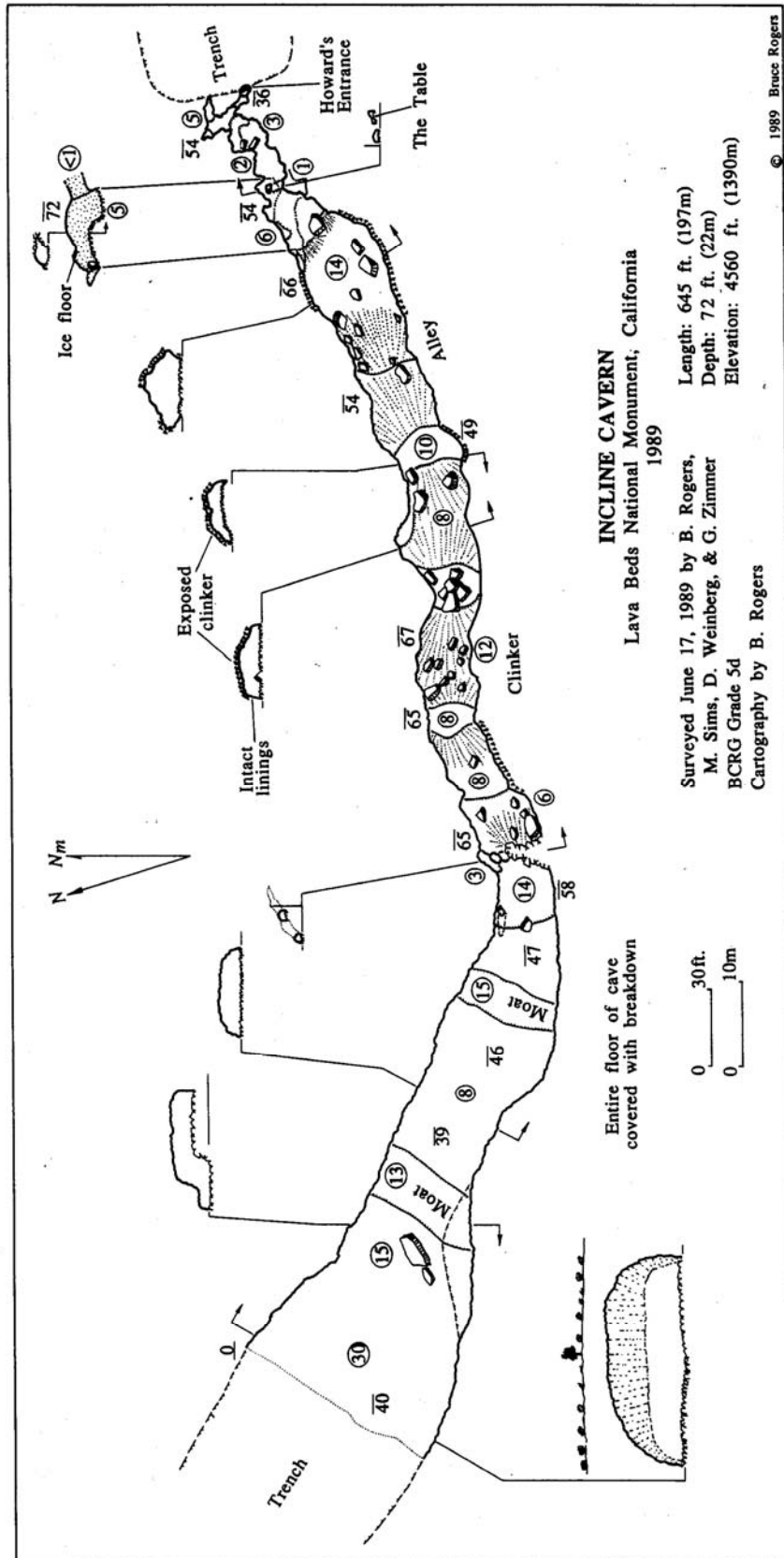
The SAG RAG is published by the Shasta Area Grotto of the National Speleological Society, Grotto meetings are held at different locations the fourth Friday of each month at 7:30 p.m. Meeting locations are announced in the SAG RAG, Membership dues are \$6 dollars per year and include newsletter subscription. 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 Ben Sutton, P.O. Box 1597, Mt. Shasta, CA 96067. Material must be in by the 15th of the month.

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C A L E N D A R

- May 14 SAG meeting at Ray Miller's.
- June 18 SAG campout at Devil's Rock (note date change). Map on back page.





Map: Incline Cavern

March 1993 Shasta Area Grotto Meeting

Present: Jim & Liz Wolff, Jim Kottinger, Melanie Jackson, Ben Sutton, Neils Smith, Bill Broeckel, Bill Kenney.

Chairman Jim Wolff called the meeting to order at 7:56 pm. The minutes were accepted as read. The treasurer's report showed a balance of \$538.36. Bill B congratulated Ben on his first issue of the SAG RAG.

Correspondence: NCRC questionnaire of personal info on each person, training – both medical & SAR – and equipment.

- a letter & copy of an article from the author on Pluto Cave from the California Explorer.
- letter from the USFS to Bill B in response to one he wrote about the sedimentation in Sinking Waters Cave in the Red Butte Wilderness area. He was thanked for his helpful suggestion on ways to deal with the problem. It was followed up by a phone call from Dave Clayton of the USFS about possible bat locations in the wilderness area.

Old Business: EIN: information on applying for the number is on the way.

- SAG RAG: need maps and cartoons & artwork, deadline Apr 15.
- Rescue: Shasta College First Aid & EMT training. Bill B passed around a brochure on wilderness medicine to take place in Medford April 9. Medical supply catalogue lists a set of inflatable casts – 6/\$100. A good idea for the Marbles since it can be easily carried in a pack. Liz moved and Neils seconded that SAG purchase a set. Passed unanimously. A large rat and water proof box is needed to store all the rescue supplies, Neils will donate one from the Bobcat Cave cache. Steve Knutson called during the week to report that a new Memorandum of Understanding is being negotiated with the USGS for the Marbles and French Creek together. KMCTF people in Portland area are starting a rescue group; NW Cave

Rescue, 503-643-8245, Eric Mortenson contact person. Bonnie Crystal of the SFBC, called during the week to say she has taken on the job of communications. She is a professional radio technician and a HAM operator. The MOU will include provision of funding for radio television with direct dial capability. Jackson Co, OR SAR is willing to train people in all types of rescue techniques in exchange for mine and cave rescues; it is SAR policy not to enter caves. Neils is still pursuing training through the Lassen Co CA mine rescue unit, with Dave Trussel. Neils also thinks that SAG may be able to get surplus military supplies – ropes, hardware, packs, etc. – for the sum of \$25 to pay for the paperwork transfer, but we must have nonprofit status.

- Oregon Caves: Concessionaire Chaz Davis is leaving OCNM for Crater Lake Mar 25th, asked if we might be interested in doing some trail restoration to caves in the National Park. Also mapping and exploration of caves.

New Business:

- Steve Knutson mentioned that Modoc NF is interested in an MOU to find, explore and map caves in their Forest.
- an internal organization questionnaire from the NSS about revision of rules governing grotto members and the NSS. Ben moved to table, no consensus. Jim appointed the secretary to answer the questions.
- Jim & Liz will be leaving the area in 2 - 6 months, so will be resigning their offices.

Neils moved and Jim K seconded, meeting adjourned at 9:15pm.

April 9, 1993 Shasta Area Grotto meeting.

Present: Ray Miller, Jim & Liz Wolff, Melanie Jackson, Bill, Cheryl, & Zane Kenney, Bill Broeckel.

Chairman Jim Wolff called the meeting to order at 7:56 pm. The minutes were accepted as read. No treasurer's report was available.

Old Business: rescue: Bill K reported that Steve Pitts of Shascade Caving Society and members are pursuing medical training, and through the local search and rescue unit have a helicopter available for the Marbles. Jim W reports that a USFS helicopter is available in Fort Jones when not on fires. Ben Sutton went to the Western Regions rescue organizational meeting in the Sierras.

- Oregon Caves: an attendee of the last SAG restoration trip, Sandy Itzkowitz of Roseburg OR, may begin attending our meetings, since her dad lives in the area.

- T-shirts: we will be reworking the logo before reshooting the screen. Should be ready soon.

New business: Wilderness medicine conference: Bill B attended the 3rd annual conference in Medford. Hypothermia and resetting fractures and dislocations in the field were the most useful seminars for us to note. He mentioned that he has figured out some items that the medical kit in the Marbles is deficient in: triangular bandages and super glue. The 36" triangular bandages can be used for a myriad of purposes and the super glue to reinforce tape used to close cuts needing stitches. He demonstrated how a dislocated shoulder would be reset in the field. A portable machine that produces heated mist for the severely hypothermic to breathe (to raise core temperature) may be something to be used in the Marbles.

- Snow has been plowed to the Gaping Holes cave area and to McCloud Reservoir caves.

- Jim W invested in an Oregon Grotto Speleograph subscription for SAG. Also we will be getting the SCS newsletter.

Trip reports: Bills Kenney and McGahey and a group from Jefferson State Grotto went to Chapman Cave on Deer Creek in Oregon. The cave is about 250' long and contains graffiti from 1888 to 1959. They saw about 2 dozen bats, some of which were *Plecotus*. The cave has 3 crystal clear pools. They then went to Dung Hole cave with 5 entrances to work on a dig that was supposed to get them to fantastic formations, all they found was some coralloids and lotsa poison oak. Jim W and Bill K went to Devil's Rock on Shasta Lake and know now where the cave is that has eluded them so many times, about 1/2 mile further than they have previously gone. Bill B and daughter Becky went to Subway Cave to clean up the north passage, and retrieved 5 lb. 3 oz. of bottles and cans. Next they went ridgewalking and found some tiny caves and one deep sink with 4 passages going out. The largest has a survey marker in it. It may be Dogleg Cave [Arc Cave – pdf ed], since it has a right angled turn in the passage. Lots more cave to see.

- With the Wolff's leaving the area Ray will loan the GPS module to anyone going out caving to note the UTM grid location, name, and entrance description of caves that they know and we don't.

- **Next two meetings:** May 14 at Ray Miller's. June 18 camp out at Devil's Rock (note date change).

Meeting adjourned at 9:02 pm.

LAVA TUBES IN MARCH

by Bill Broeckel

With many Northern California cave areas deep in snow, at least two places have remained accessible: Shasta Valley and Hat Creek.

Two SAG members visited Teeter Rock Cave on 3/12/93 just before the Grotto meeting in McCloud. A new room was uncovered near the end of the cave. You never know just when a cave might decide to grow.

The Grotto returned to Teeter Rock on 3/19 and surveyed the new bit of cave. For some of us this was a good chance to practice surveying. The new room represents a lower level development in the lava tube.

It turns out that the 1985 SAG map of Teeter Rock Cave shows two leads down to another segment of the lower level. By adjusting the position of one big rock, we were able to connect these two leads, although you still have to squeeze through some portholes to do it.

Also, we identified a fourth way down to the lower level, another new segment. This appears to be a very nasty crawl that may or may not lead to nicer passage. So there are some things remaining to be done in Teeter Rock before we can come up with some new profiles and maybe an article "Going Downstairs in Teeter Rock Cave."

Next we have a day of caving out at Hat Creek, just me and my 6 year old daughter. First we checked for trash in the Caved Caverns portion of Subway Cave. The gate on the road was closed, but we had permission to enter the cave from the Forest Service. We bagged 5 lb 3 oz of bottles, cans, and broken glass in about two hours. This job is not yet finished!

Never-the-less, in the afternoon we opted to hit the lava for a little cave hunting. And that is just what we found – little caves. The first one dropped below a small sinkhole. A 20 foot sand crawl led to a broad lava pool chamber only three feet

high. We circumnavigated this "pancake room" and found no further passages. Becky really liked this cave.

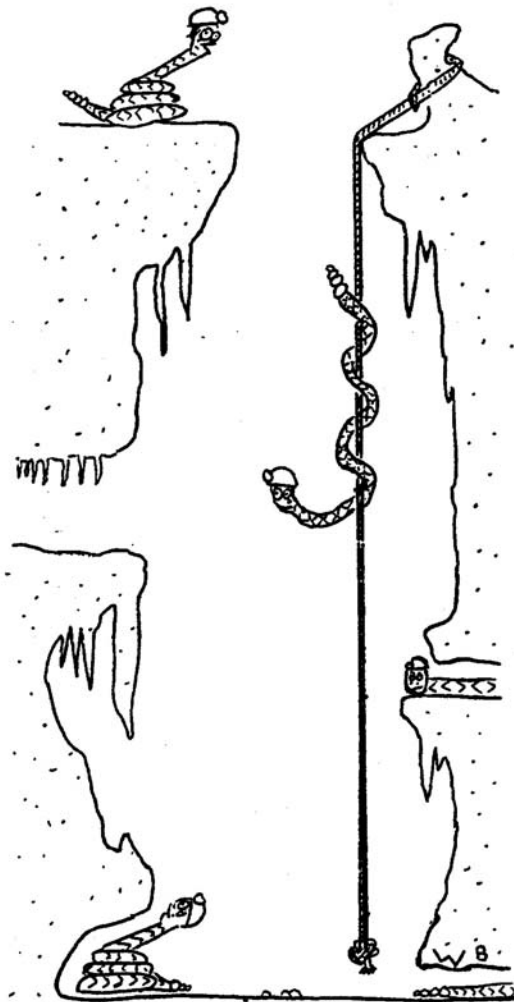
The other cave was entered behind a mountain mahogany bush. It began as a nice hopeful lava tube, but within 50 feet it had shrunk down to a dismal proportion. But the tube continued in a mean way, 1 foot high with a velcro floor, lavacicle ceiling, and no air flow. Becky wanted to push on, but I explained how as a matter of principle it was important to check for an upper entrance before we pushed this passage, possibly damaging it...

When it was time to go home, we made our best find of the day. A deep sinkhole led to big caves down at the bottom of the lava. A massive entrance chamber was filled with ambient light. A regular lava tube leaves the chamber at right angle so sharp that I appeared to melt right into the wall, and Becky screamed. Next the cave seems to end at a big breakdown. But happy day! A narrow way sneaks around the left side, and the tube resumes its course beyond the breakdown. But then comes another pile of breakdown. Is there a way through?

We were getting nervous now, so we didn't even try the second pile. We are thinking that this cave might be Dogleg Cave. There were no signs of man except for one survey station. We saw maybe 300 feet of passage and it would be a fun survey trip some time. If you are interested in future trips to Teeter Rock or Dogleg? Caves, give me a call at 842-3917.

PIT VIPERS

4/93



MEMBERS - NSS
National Snakological Society
Best Belly Crawlers in
the world.

RATTLESNAKE BITES

by Bill Broeckel, MD

Our local rattlesnake species is called *Crotalus Viridis oregonus*, the Northern Pacific Rattlesnake. This retiring reptile may stalk its prey, but is more likely to lie in wait for the next weekly meal to wander by within striking distance. If approached by a larger animal, such as a caver, the rattlesnake might strike and bite by rattling its tail and producing a loud hiss or buzz. Thus the name "rattlesnake". They can be identified by the rattle, and also by their fat bodies and triangular heads.

They are also called Pit Vipers, in reference to the small holes in front of the eyes. That name brings to mind a horrible pit full of writhing, venomous snakes. Maybe we should all learn how to change-over in mid rappel!

Rattlesnakes may indeed inhabit the entrance areas of caves, for comfort or hunting. Rarely, they may also be encountered in the dark zone, another reason for cautious caving. Hikers and ridgewalkers might do well to carry a stick for probing potential caves. Over 30% of rattlesnake bites occur among those intentionally handling or aggravating the snakes for fun. This often involves a young male who has been drinking, and decides to play a game called "the hand is faster than the snake."

10-20% of rattlesnake bites are "dry bites" with no venom injected through the fangs. The remaining 80-90%, however, are envenomated. Most often, this becomes painful and swollen within minutes. The poison contains hemolytic & proteolytic enzymes meant to digest the contents of the snake's prey (small animals). Thus, rattlesnake bites are seldom fatal, but often result in very, very nasty wounds.

First aid is simple. Move to a safe spot. Arrange for transport to a medical facility. Calm the victim. Rest the bite below the level of the heart. Remove jewelry. Apply a light constricting band above the bite to retard venom absorption. This band should not impede arterial or deep venous flow. Do not remove the constricting band until the victim has reached the hospital and is receiving antivenin. Antivenin is not intended for use in the field. Those giving antivenin must be prepared to handle reactions to horse serum. Also, Wyeth Polyvalent Crotalidae Antivenin is expensive, but helpful in providing an antibody mediated neutralization of the rattlesnake poison.

Do not incise the bite site, suck on it, or apply cold. Yes, that's right. The traditional "cut & suck" approach is definitely out the window. Go through your cave pack and toss out that little green rubber snakebite kit. Instead, put in one of those yellow elastic bands (10" penrose surgical drain) that they use in hospitals for venipuncture. They make perfect constricting bands.

Better yet, stay cautious and alert in snake country. Watch where you put those hands. The best snakebite is the one you never had!

The Earth Shook, The Sky Burned, And All The Bunnies Ran Away, Part 12: Incline Cave, Lava Beds National Monument

By Bruce W. Rogers, Regular Fellow
1993

With an 18 meter wide massively arched entrance at the bottom of a deep collapse trench, Incline Cave can hardly be typed as "nestled away in the rock-bound wilderness" of Lava Beds National Monument. The impressively deep trench leading to the equally impressively wide entrance catches the eye and beckons the explorer to slip beneath the juniper-studded pahoehoe to the cool recesses of one of the lesser visited lava tubes of the monument.

The Modoc Native Americans and their Shoshone predecessors undoubtedly knew of the cave, especially since it contains a deposit of ice in its far recesses. The cave's west-facing entrance would have provided a warm shelter from the sometimes inclement weather of this corner of the Great Basin. The ice, of course, would have provided a readily available source of water for these scattered bands of Native Americans traversing the arid lava fields. These hardy peoples, however, apparently left no sign of their passing in this particular cave.

My, what a mundane name

The gringo history of the cave starts with that indefatigable baker-cum-explorer J.D. Howard. Upon entering the cave in the 1920's, he named it for the descending slope leading down into the interior passage. One may say "My, what a mundane name", but with nearly 300 caves to christen, one does begin to stretch one's imagination. There exists some confusion as to which entrance Howard actually used. If one follows his description of rediscovering the cave on an elfin ramble from Skull Cave then he must have used the tiny Howard's Entrance. On the other hand, his description of the cave is clearly given as if one entered the main, Incline Entrance. Perhaps the application of fortifying brandy had something to do with all this but, alas, we shall never know.

As can be seen from the accompanying map, the cave is essentially a moderately large

unitary tube very similar, albeit somewhat smaller, to nearby Skull Cave. Much of the original, modestly lava-decorated lining has peeled off, leaving not only segments of exposed onion-skin walls but barely consolidated walls of clinker and cinders as well. None of the original floor is exposed in the cave, apparently being deeply mantled with breakdown. The Incline Entrance has undergone extensive frost wedging and spalling which has resulted in the initial 10 meters being nearly twice the height and triple the width of the original tube. Two curious moats are found near the Incline Entrance of the cave. Although their origin is unknown, one may speculate that they may mark the location of collapse windows, now filled with rubble, to lower passages similar to adjacent Skull Cave. Certainly one must invoke some sort of lower level to accommodate the vast amount of debris spalled from the walls and ceiling in this part of the cave.

Nearly 54 meters inside the cave the passage suddenly constricts at a collapse which nearly blocks the tube. The passage then assumes a relatively uniform diameter of approximately 6.5 meters, although the lower half of the tube is carpeted with fallen ceiling and wall linings. Indeed, in many places where the thin lining has failed, one may look "out" of the tube and into the thick deposits of surrounding clinker and cinders belched forth by the next-door towering Schonchin Butte. For over 75 meters, this part of the tube, Clinker Alley, undulates some 18 meters below the surface and gently bends almost 30' to the north to a near dead east heading. At the apparent end of the cave, a low ice-floored room is found, which is the lowest portion of the cave at nearly 22 meters below the entrance. This ice floor apparently is slowly melting away for the floor's edges are smoothly filleted up against the intact tube walls and a shallow pool of melt water overlies the room's ice floor in late summer.

By first climbing up, then crawling into the apparent collapse seal of the cave, however, the balance of the cave can be entered. The single passage from the ice-floored room to Howard's Entrance is a twisting series of tight crawlways through a chaos of loose blocks

spalled from the ceiling and walls. Howard's Entrance is a small, obscure opening in the western end of the Skull Cave collapse half hidden behind a spindly bush.

The walls of Incline Cave are decorated with thin, white crusts and patches of coralloids. Analysis of this material has not yet been undertaken but it is probably a mixture of roughly equal amounts of calcite and cristobalite as in adjacent Skull Cave. The cristobalite may reflect drier periods and the calcite wetter periods of speleothem deposition in the cave.

The biology of the cave has not been studied in detail. No bats have been reported in the cave, nor have the ubiquitous pack rats. Mouse scat has been noted scattered throughout the cave and one can readily imagine many pairs of beady little eyes closely observing the modern explorers from darkened fissures. Various red, yellow, green, and gray colored lichens can be seen growing on the collapse blocks inside the entrance. Some of the white crusts in the twilight zone are also lightly tinged with green, a result of algae growing on the damp surface.

The cave's genesis is relatively simple and parallels that of Skull Cave, although apparently without the complicated rising and lowering of intermediate lava pools. The early cave passages were formed as flows of Mammoth Crater basalt coursed around the southeast side of the existing andesite pile of Schonchin Butte. Renewed explosive eruptions of Schonchin Butte repeatedly buried the Mammoth flows and tubes under a rather deep blanket of cinders and scoria. Later in the cave's history, the creation of newer passages in higher Mammoth Basalt flows rounding the corner of Schonchin Butte gradually found their way down through the loose andesitic cinders and clinker into the older, lower passages in the buried Mammoth Basalt, thus draining the upper tube of its lava. These older parts of Incline Cave are now inaccessible, the descending connectors having been blocked by masses of rubble spalled off the ceilings and walls of the currently open passage. The two moats and the interior ice-floored room may mark these windows which connected to the underlying tube(s).

For those wishing to visit a relatively untrammelled lava tube with the added bonuses of both modest decorations and an ice floor, Incline Cave can be highly recommended.

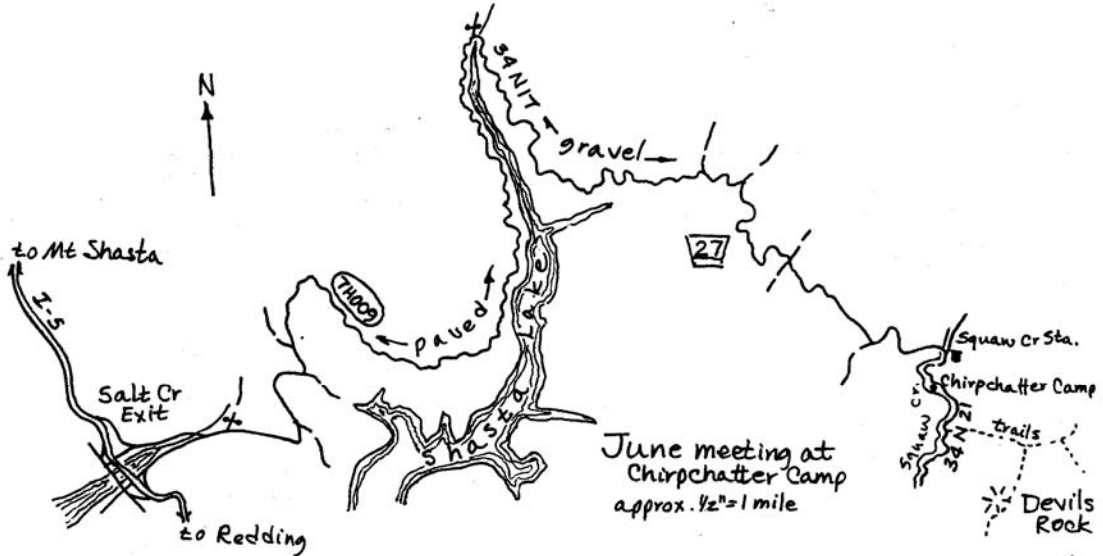
THE FAR SIDE



"One good thing about living in this age – all the caves are brand new."

JUNE Meeting

June 18th.



SAG RAG
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STAMP

TO:

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