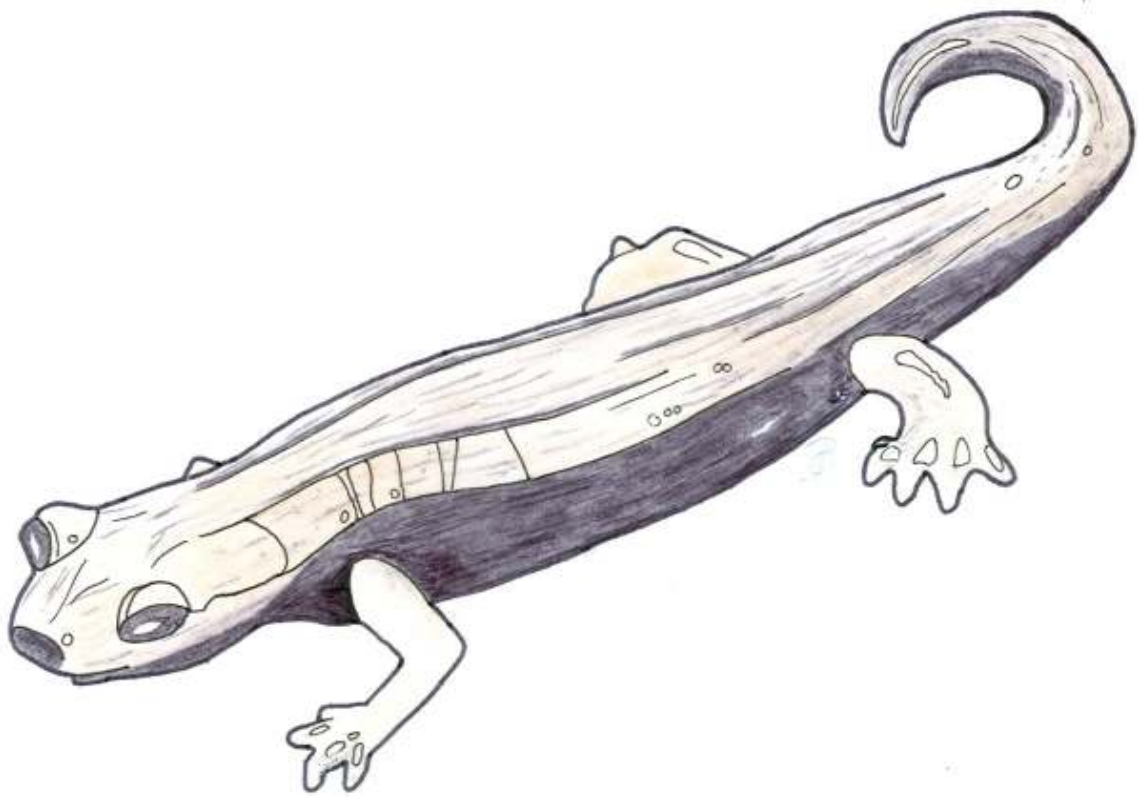


sag rag

22:2

March-April 2003

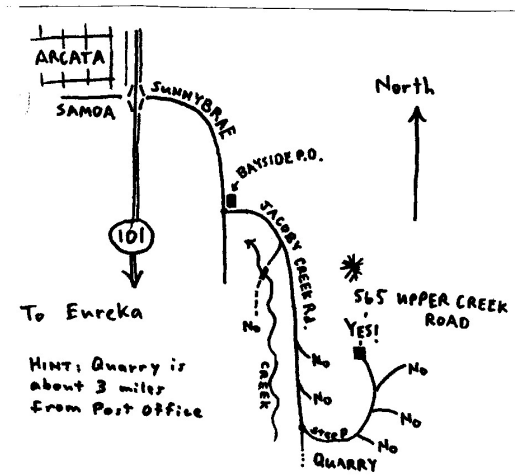


HYDROMANTES SHASTAE

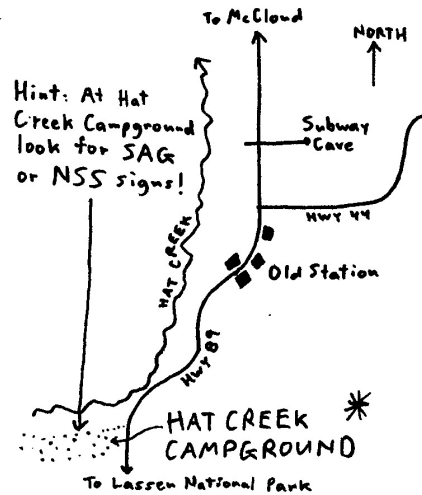
The SAG RAG is published by the Shasta Area Grotto of the National Speleological Society, Grotto meetings are held at different locations the fourth Friday of each month at 7:30 p.m. Meeting locations are announced in the SAG RAG, Membership dues are \$6 dollars per year and include newsletter subscription. 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 <jbroeckel@snowcrest.net>. For more on SAG, check the web site at <http://www.caves.org/grotto/sag>.

CAVERS CALENDAR 2003

- * May 10 SAG meeting/BBQ at Fritzke/Villatorre home in Arcata. (707) 822-8566. Call ahead, BBQ supper is BYOB & potluck, floor space available for overnighnters.
- May 23-26 CRF Lava Beds expedition. Call Bill Devereaux (503) 363-3831.
- May 31 – June 1 Small Party Cave Rescue in Troutdale. Call Dave McElmurry (253) 813-8740.
- * June 13-15 Hat Creek Cave Camp/SAG meeting, Hat Creek Campground. (530) 842-3917.
- June 14 NSS board election ballots due. Vote early, vote western, vote often.
- June 15 NSS Convention registration (without late fee) due.
- June 21-28 NCRC training in Carlsbad, New Mexico.
- Aug 4-8 NSS Convention in Porterville, CALIFORNIA. (408) 356-8506.



* Fritzke/Villatorre
 (707) 822-8566
 fritzke@humboldt1.com



* Free camping with SAG
 Courtesy Lassen National Forest
 Help survey 100 caves

SAG RAG SUMMARY (for convenience of CAL CAVER)

The Shasta salamander on the cover of the March-April 2003 SAG RAG was drawn by B. Broeckel from a photo provided by zoologist Rob Bingham. Rob goes on to help answer questions about the cave related salamander for which current research is revealing a broader range of habitats. Liz reports on the February cave conservation weekend and the grotto clean-up efforts at Sand Cave and Pluto's Cave, with photos by Arley Kisling. Jim Wolff recalls some of the highs and lows encountered in planning the Under Earth Weekend. Although a major rainstorm kept things wet, the event was a go, with a grotto meeting and at least two cave trips. Samwel Cave and Red Beard Cave were visited. B. Broeckel provides a preliminary summary and map of Red Beard Cave, where some good leads remain to be explored. **BB**

THE CHAIR CREAKS – SAG’S 2003 CAVE CONSERVATION WEEKEND

By Liz Wolff

The following is a copy of the report I sent to Jim Stout and Juan de la Fuente of Klamath National Forest. The Shasta Area Grotto met Saturday morning, Feb. 15, 2003 at 10 a.m. to clean up Pluto’s and Sand Caves, and the Pluto’s parking area. Sand Cave: 10.5 man hours, about 55 pounds of trash. Pluto’s Cave: 32 man hours, about 45 pounds of trash. A bat count was done in Pluto’s Cave: 283 bats were counted.

Participants were Bill Broeckel, Melanie Jackson, Bill Kenney, Cheryl Kenney, Arley Kisling, Ray Miller, Robert Nixon, Neils Smith, Jim Wolff, Liz Wolff. Juan de la Fuente thought about it. Jim Stout left garbage bags for us to use. Unfortunately, the bags were a bit wimpy for the use we put them to. A little heavier mil bag would survive the rigors of the cave and broken glass better than those did.

And Jim Stout’s reply: “Well, thank: you, I picked up the garbage on Tuesday. Bags are standard GSA issue. If you do it again I will purchase some heavy duty ones for cavers.” **LW**



SAG cleans up the Sand Cave sinkhole. 2-15-03. Photo by Arley Kisling.

Duties of Grotto Officers as adapted from the SFBC website: Rough Draft:

Liz Wolff

Items were deleted/changed/added from the SFBC wordings to fit our grotto. Their descriptions included a lot about a board of directors and articles of incorporation that I have deleted or changed to “executive officers.” These job descriptions will need to be compared to, and amended to fit, our own bylaws before being added to them, but are what Arley and I came up with in a discussion on 2-19-03. Secretary and Treasurer will need to be combined to cover our particular situation, but most of what is there will fit. Exact wordings may be changed too. I would suggest making webmaster an official office and preparing a list of duties for him/her. Any major bylaw changes should be published in the RAG and voted on by all members (that care to vote), before being incorporated in our bylaws. I would suggest a ballot be included in all members’ RAGs, or a special edition of the RAG with a ballot, after hashing it out in a grotto meeting or two and giving the coastal/Redding/Chico members a chance to respond to them. Send me/Arley/Mel/Bill B any changes/additions/deletions you think should be made before the next grotto meeting.

Continued on next page.\

DUTIES OF CHAIRMAN

The Chairman shall be the chief executive officer of SAG and shall supervise and control its affairs.

The Chairman shall preside at all meetings.

The Chairman shall be responsible for preparing the Annual Report.

The Chairman shall provide for programs at the monthly membership meetings

DUTIES OF VICE CHAIRMAN

The Vice Chairman shall be the chief training and safety officer for SAG and shall provide for a regular program of training activities. Training may cover: vertical and horizontal caving, survey, rescue, surface route-finding, inventory. Safety may include: solo work, communications, trip waivers, physical training, vertical safety. Actual training duties in which the vice chairman is not proficient may be delegated to other members who are proficient in those skills.

In the absence of the Chairman, the Vice Chairman shall perform all the duties of the Chairman, and when so acting shall have all the powers of, and be subject to all the restrictions on, the Chairman.

DUTIES OF SECRETARY

The Secretary shall be the chief recorder of all official SAG business, and shall maintain at his or her official address, all official records or other records as designated by the executive officers.

The Secretary shall maintain a book of minutes of all meetings.

The Secretary shall maintain the membership roster.

The Secretary shall make all records for which he or she is responsible available.

The Secretary shall see that notices of all meetings and proceedings are duly provided to the SAG membership.

DUTIES OF THE TREASURER

The Treasurer shall be the Chief Financial Officer of SAG shall have charge and custody of, and be responsible for, all funds and securities of the grotto.

The Treasurer shall receive, and give receipt for, monies due and payable to SAG from any source whatsoever.

The Treasurer shall disburse the funds of SAG as directed by the executive officers.

The Treasurer shall keep and maintain adequate and correct accounts of SAG's properties and business transactions for the current year, including accounts of its assets, liabilities, receipts, disbursements, gains and losses and shall make these records available for inspection to the membership.

The Treasurer shall present a monthly treasurer's reports at each regular Membership meeting.

The Treasurer shall prepare and certify the financial statements to be included in the Annual Report, all tax forms required to be filed by the IRS or state of California.

DUTIES OF THE EDITORS

The Editor shall be responsible for producing and distributing a newsletter, titled the SAG RAG, which shall be the official instrument for communications between and among the officers and membership, and such other parties as may share an interest in the purposes and objectives of SAG.

The SAG RAG shall include timely notice of all meetings of the Membership, schedules for all SAG activities, and the names and phone numbers of all Officers.

The Editor shall solicit and, at his or her discretion, publish in the SAG RAG such material as may further the objectives and purposes of SAG and be of general interest to the membership.

The Editor may submit material published in the SAG RAG for reprinting in other journals which serve to further the objectives and purposes of SAG. These other journals shall include, but are not limited to, the NSS News and the California Caver.

SUBORDINATE OFFICERS

The executive officers may appoint other officers.

LW

SHASTA AREA GROTTO MEETING March 14, 2003

The meeting was called to order at 7:56 pm at Melanie Jackson's home in Yreka. Present were Bill Broeckel, Jim & Liz Wolff, Arley Kisling, Ray Miller, Ernie Coffman, Bill Hirt, Deana Dewire, Chris Sawicki, and Melanie Jackson. Minutes were accepted as read. Treasurer's Report: March total \$723.91. Web Report: six requests asked for information about the grotto and one asked about Lava Beds National Monument SAG RAG: received a donation of five sheets of bat stamps from Judy Broeckel's parents Walt and Nancy Johnson. A thank-you note from the grotto will be sent to them.

Correspondence: Bill Broeckel received a letter from Judy Bushy in Happy Camp and associated with the Chamber of Commerce there. She asked about caves in the Happy Camp area for promotional purposes and for someone to come speak to the Chamber members. Bill B. responded explaining that we don't give out cave locations but that we could address cave safety and conservation. The NSS is changing their links on the grotto web page. Larry O'Brien, Vice Chairman of the Western Region, wrote asking for donations of books for the college library at the NSS Convention in Porterville in August. NCRC is June 21-28 in Carlsbad, NM. There will be the usual three levels of cave rescue training. A letter was received from Juan de la Fuente (Klamath National Forest) that reported no progress in cave management planning, but was keeping in touch. Jim Wolff had an article from Sports Illustrated about Rumbling Cave, TN, saying that TAG is trying to purchase it to protect it.

Old Business: Linda Villatorre called and would like to host the May grotto meeting on May 10 on the coast. Please call ahead if you plan to go. Floor space is available for the night and a potluck supper is planned. There will be a map, e-mail address, and phone number in the next SAG RAG. Job descriptions were received from SFBC and some changes were made to make them more appropriate to SAG's needs. They will be published in the SAG RAG and voted on at the May or June grotto meeting. Ernie Coffman suggested that the Secretary is the person who takes over a meeting if the Chairman and Vice-Chairman are not present. Nominations: 16 ballots were mailed out and 10 were received back and the officers for SAG 2003 are: Chair – Liz Wolff, Vice Chair – Arley Kisling, Sec/Treas – Melanie Jackson. Regarding advertising SAG: it was decided that we will wait until late June when the meetings resume back in the Siskiyou County area homes. More on this in the May-June SAG RAG. Arley Kisling suggested that in the future SAG may need to split the Sec/Treas position back into two separate offices again. Bill B. may need a correspondence secretary person to help with the e-mails and SAG RAG correspondence. The issue of availability of a communication network at cave events on the surface in case of emergency or accident was talked about. With more people caving there is an increased chance of accidents. The trip leaders are responsible for being aware of who the IC people, EMTs & CPR people are and to assess the rigging and ability of the people at the caving events that they lead. They are responsible for communication assessments.

New Business: Deana Dewire started working at Oregon Caves three weeks ago. She works with John Roth. This is her first cave park job. She has worked in Rocky Mountains National Park, and has done cave surveys. She has a geography background. There are no winter tours and she is not sure if there will be off trail tours. Historical, candlelight, and off trail tours are awaiting signatures to start. Special tours may start in July if signatures go through. They will be monitoring cave impacts. Campsite for the April meeting to be reserved for the April 12 weekend.

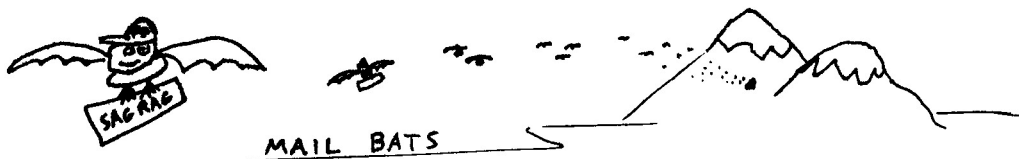
Trip Reports: Jim & Liz Wolff have two cave leads that have been re-discovered and the entrances have been GPS'd. They are J's Fault Cave and Badger Cave near McCloud. They have been entered in the cave index. Bill B. was at Shasta Lake 2-23-03 and solo surveyed Red Beard Cave to 191 feet to the end which has a hole in the floor where a rope is needed to continue. 3-9-03 he surveyed three Hat Creek caves: Stones Throw Cave at 150 feet, 30 feet in Bonus Cave and Western Style Cave at 31 feet.

Meetings: April 11 at Lake Shasta c/o Bill Kenney, May 10 at the coast at Mark Fritzke's. June 13th weekend is the Annual Hat Creek Camp Out.

The meeting was adjourned at 9:11 pm.

Respectfully submitted, Melanie Jackson Sec/Treas

MJ



SHASTA SALAMANDER – SLIGHT SHIFT IN THINKING By B. Broeckel

Introduction

In April we had 11 people in Samwel Cave, and some were privileged to see one of the Shasta salamanders. Dark red brown in color, several inches long, this moist amphibian was slowly climbing up a slick slope of smooth flowstone. It then disappeared into a crack underneath a bulging blob of rough, popcorn-covered calcite. This specimen represents a population persisting in Samwel despite many years of heavy recreational spelunking which is encouraged and concentrated on this cave. So, what's up with the Shasta Salamander anyway?

Recently Rob Bingham sent out an e-mail to the caving community with some pictures of the Shasta salamander, and asking for information about arty sightings. He was hoping to pick up more salamander sites to help him form a more complete distribution pattern for his research. I took this chance to contact Rob and found him to be open, friendly, anxious to answer questions, and really excited about these salamanders. He does salamander research at U.C. Berkeley and has studied under Dr. David B. Wake (Commander Salamander). On an internet site Rob Bingham writes, "I am currently conducting genetic work to determine the population structure and phylogeography of the Shasta salamander."

Gorman and Camp (1) published the original description of the Shasta salamander in 1953. For many years this species was considered to be "primarily a cave dweller in the Mt. Shasta area." The association of the Shasta salamander with caves was strengthened by Papenfuss and Carufel (2) when they published a survey of the species habitat for the Forest Service in 1977. A species management plan (3) followed in 1979, stating that "suitable habitat for Shasta salamanders is described as limestone caves or outcroppings which provide a cool, moist microclimate during the summer months, occurring below 3,000 feet." Furthermore, "(Shasta) salamanders are not known to use this type of habitat (forest floor) more than 50 feet from a limestone outcrop." The salamander was officially listed as a "state threatened species."

Most recently, the various government agencies have been aggressively investigating details on obscure life forms on public lands. It was suspected that the Shasta salamander was not so entirely dependent on limestone karst habitat. The government (4) adjusted the survey protocol out to 25 miles away from limestone exposures in 1998. Then Len Lindstrand III published the following (5) for Fish and Game in the year 2000. "While conducting terrestrial mollusk survey work for the U.S. Forest Service during spring and fall 1999, we discovered 6 Shasta salamanders at 6 locations in areas considered atypical habitat. ... These sites ranged from 2.4 to 6.4 km from the nearest limestone formations." This was big news in the salamander world.

While our understanding of the habitat requirements and range of the salamander appears to be expanding, it is still important to remember that these animals are able to utilize dark zones of caves in their overall survival strategy. They can still be considered very cool, opportunistic cave associated creatures, even if not entirely cave dependent.

Rob Bingham (6) has enthusiastically agreed to answer some questions about these interesting animals, and looks forward to working with cavers in the future. All of the following answers are Rob's unless otherwise referenced.

What is the scientific classification?

Hydromantes shastae, Family: Plethodontidae, Order: Caudata, Class: Amphibia (7)

From where was *Hydromantes shastae* first described?

In looking at the Ground Zero Cave descriptions, I realized that I have been to that cave and the surrounding few mapped out. Ground Zero is actually the type locality for *Hydromantes shastae*. An animal from that cave is used to describe the entire species. (6)

Are they rare or endangered?

The population in Samwel does seem to be persisting quite well for as much activity as it gets. And it's great that people are seeing these animals. At the right time of year and in the right places they're pretty easy to find. But at the off times or poor areas, you can look forever. Technically, these animals are a species of concern, but a lot of that is due to the lack of knowledge about their range and population sizes. I think they have been highly underestimated so far in how well they are doing and how widespread they are away from limestone. (6)

What is the law regarding Shasta salamanders?

In California this is a State Threatened species and it is prohibited to handle these organisms without a MOV in place with Ca DFG. Taking, including collection of voucher specimens (live or preserved) is generally prohibited and requires an additional letter of permission. The state needs to be notified if any incidental mortality occurs, and the specimen needs to be preserved and routed as per their direction. (4)

How do they get along in caves?

Shasta salamanders are fascinating animals. They have excellent eyesight in low-light conditions allowing them to live and hunt in caves. Amazingly, they can extend their tongue over 1/3 the length of their body to catch prey, and are very accurate in doing so. This kind of precision requires highly developed senses. (6)

What do they eat?

Stebbins (1972) listed centipedes, spiders, termites, beetles, and adult and larval flies as food items of the related species *Hydromantes platycephalus*. Gorman and Camp (1953) noted that the feeding habits of the two species are similar in captivity. (7)

How do they climb rocks so well?

They are very agile climbers. They frequent cave walls, as many of your members have witnessed, and use their highly webbed feet to increase grip on the rock. They also use their tail as a fifth appendage, curling it and pressing the tip onto the rock for added leverage. (6)

How many toes are on each foot?

Four toes on the front and five on the back feet is a theme in salamanders. (6)

How do they reproduce?

Females have been observed as they curled around egg clusters. Such females may defend egg clusters from certain predators. Egg clusters of between 9 and 12 eggs are laid in late summer on damp cavern walls. Young salamanders are thought to hatch in late fall. (7)

How do you tell the males from the females?

Male Shasta Salamanders are distinguished by protruding upper teeth (you can actually feel them by rubbing your finger on the underside of the chin where the teeth stick down) and an oval shaped mental gland (a hump on the chin used in mating to make the female receptive). (6)

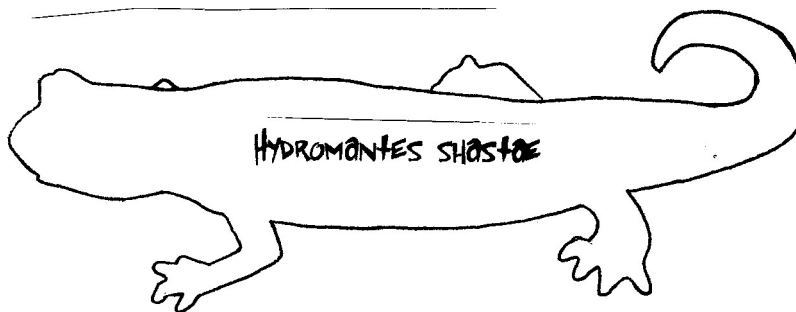
Why are they pigmented?

They are cave and crevice associated, but more and more they are being found away from limestone. When it has been raining, they are out and finding refuge under rocks, logs, leaf litter, etc. and generally they are moving at night. So why they have pigment is presumably because they still want to blend in with their surroundings even though to us it seems unnecessary. (6)

References

1. Gorman, J. and C. Camp. 1953. A new cave species of salamander of the genus *Hydromantes* from California, with notes on habits and habitat. *Copeia* 1953:39-43.
2. Pappenfuss, T. and L. Carufel. 1977. A survey of the habitat of the Shasta salamander. Interim Rep. U.S. Dep. Agric., For. Serv., Calif. Region, San Francisco. 18pp.
3. Bogener, D. and P. Brouha. 1979. Shasta salamander comprehensive species management plan and species status report. USFS Shasta-Trinity unpub. 35pp.
4. Olson, D.H. and P.C. Lewendal. 1999. Survey protocol for the Shasta salamander. Pages 65-101 in: D.H. Olson, editor. Survey protocols for amphibians under the survey and management provisions of the Northwest Forest Plan, Version 3.0, October 1999. USDA Forest Service R5/R6 and USDI BLM, Oregon, Washington, California, USA.
5. Lindstrand III, Len. Discovery of Shasta salamanders in atypical habitat. *California Fish and Game* 86(4):259-261, 2000.
6. Bingham, Rob E. Pers. Comm. Note: Rob would be interested in any Shasta salamander reports from cavers. He can be reached at the Museum of Vertebrate Zoology, 3101 Valley Life Sciences Building, University of California, Berkeley, CA 94720-3160. Phone (510) 642-7888 or 665-5734, and e-mail: rbingham@uclink.berkeley.edu
7. Morey, S. Shasta Salamander. California Wildlife Habitat Relationships System. California Department of Fish and Game, California Interagency Wildlife Task Group. <http://www.dfg.ca.gov/whdab/html/A024.html>

BB



SAG's 4th ANNUAL UNDER EARTH WEEKEND

By Jim Wolff

It all started by reserving a couple of campsites at a campground along the McCloud Arm of Shasta Lake. Seems as though the camping season begins in April and nearly all the available sites were reserved already, even group sites! So, I took a couple next to each other at Ellery Creek Camp – which I thought was good, since there were several caves close by. A few days later, I got the opportunity to have a look at the two that I reserved, and see where the big tent would go, and see how many potential tent sites and parking sites were available.

Well, the two that were assigned to us were totally unacceptable, and were the two smallest sites in the 18 unit camp! They were on real steep slopes, with a single tent site gouged into the hillside! We have had very few show up at our weekends in the past, so two sites seemed like the way to go. Now, I had to go to Plan B. Calling back the ReserveAmerica, I asked for two other sites I found to be more accommodating – for a slew of cavers!

Well, they weren't available ... ! Luckily for us, someone had cancelled (for good reason – the weather forecast!) one of the group sites at Hirz Bay Camp, so I took it! Well, at least if a few more cavers showed up, we won't be too crowded. So, I updated my revised campsite info on both the Western Region website AND the SAG website, AND to those who wanted to come. I waited for the results. Kenney was in the Philippines then.

The week of the event, I had a job in the Redding area, so I had to leave the camp set-up to the rest of the grotto. This time, I wasn't able to check the group camp before the event, so there was a good deal of worry on my part that things would still work out, and with the weather forecast for a major rainstorm, well ... !

By the time I arrived at camp Friday after work, the camp was set up, and all the directional signing along the way to camp from the freeway was done! Thanks guys! And several of our guests had arrived too!

Over the weekend we had two representatives from Oregon Caves National Monument, Geoff MacNoughton from Oregon High Desert Grotto, Dave Decker from San Diego Grotto, Anne Yoder from Redding Area BLM, and James, Ben, and Jennifer from Shascade Caving Society showed up. Shasta Area Grotto members that showed were Arley Kisling, Bill Kenney, Bill Broeckel, Melanie Jackson, Russ Yoder, Liz and Jim Wolff. A terrific turn-out!

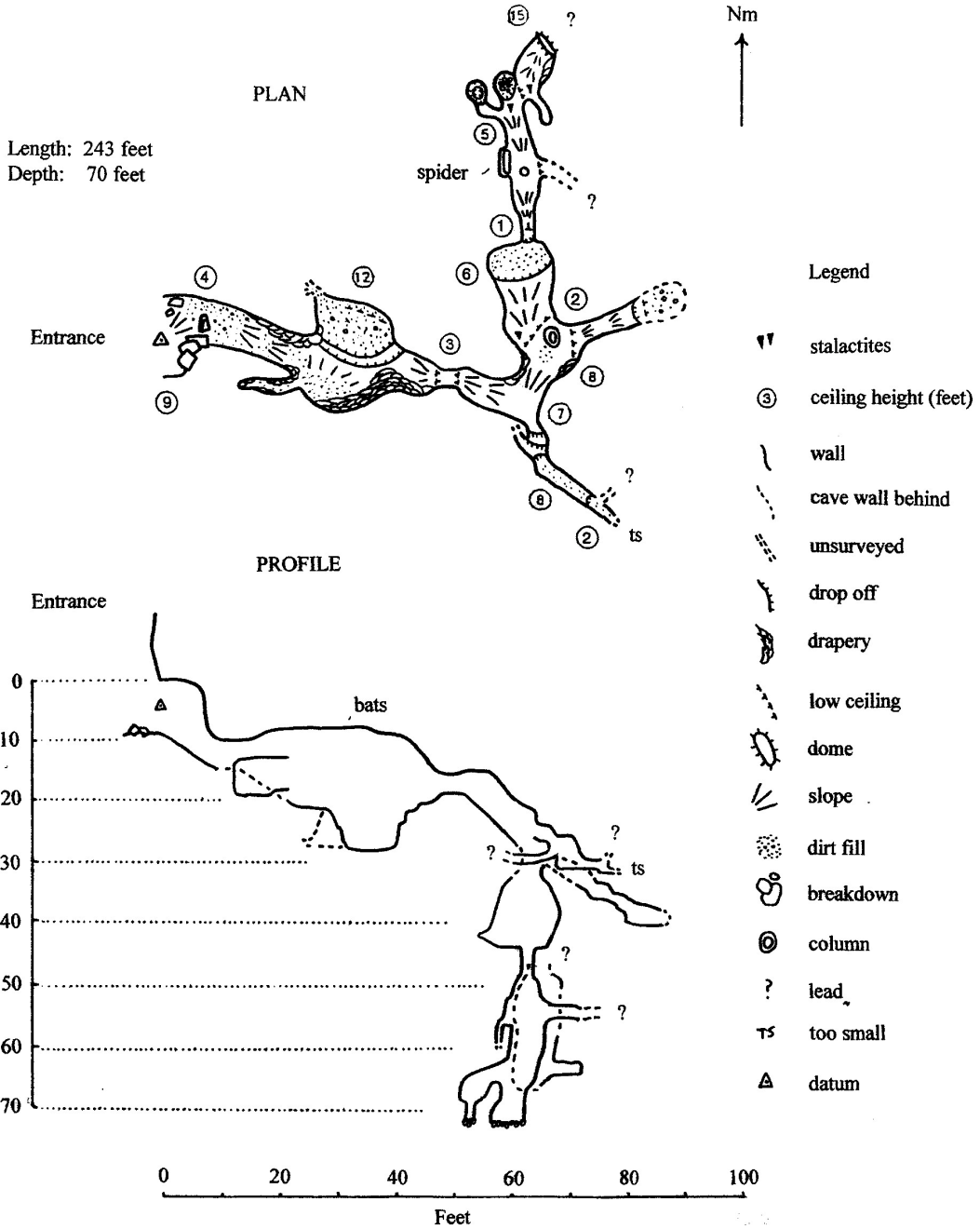
The caves that were visited were Samwel Cave and Red Beard Cave. Oh yeah, did I mention that it rained buckets of cats and dogs? Yeah, gallon-sized raindrops! Thanks to Kenney for the huge wall tent with wood stove – we wouldn't have survived nearly as well without it! We had our grotto meeting in it and nearly everyone cooked a meal or two in it at one time or another. Kenney also brought the boats. Thanks go out to all that pitched in and made this a most memorable Under Earth Weekend ever! Let's do this again next year, shall we?
JW



Entrance to Red Beard Cave. 2-23-03. Photo by B. Broeckel

RED BEARD CAVE

SHASTA COUNTY CALIFORNIA



Tape and Instrument Survey: February 23 and April 12, 2003
 Bighorn Broeckel, Geoff McNoughton, James Newell, Jim Wolff
 Oregon High Desert Grotto, Shascade Caving Society, & Shasta Area Grotto
 National Speleological Society for Shasta-Trinity National Forest.
 Copyright: B. Broeckel 2003.

Map: Red Beard Cave

RED BEARD CAVE

By Bill Broeckel

This cave is named for some curtains of reddish roots near some openings. The cave also has a sort of previous location-based name that lacks specificity.

February Trip

The triangular entrance tilts left, measuring 13 feet at the base and nine feet in height. Though the entrance is generous in size, the obscure setting and a screen of trees makes this cave hard to find. I was lucky to see it when ridgewalking the McCloud Limestone Formation on February 23, 2003. On a previous trip we hiked in a big circle around the cave without realizing it was there. James Newell has also looked in this area before.

Some breakdown immediately blocks much of the entrance, but it is easy to duck under a stray block on the lower left hand side and gain entry. A dirt floor slopes down into a chamber. The walls are covered with draperies. A flat shelf over a shallow pit provides a good spot to stand and look around. This is the largest room in the cave so far.

As I sat down, turned off the lights and waited for my eyes to adjust, I wondered if the cave continued. Yes, a hole appeared in the far wall. It was easy to climb down into the dirt filled pit, then up again to go through the hole. On the other side, the cave opened up again and got more serious about going down, curving to the left. Creeping down the flowstone, I found a safe perch near a short side passage. The next resting spot was in front of a sizable column. Here the cave divided. The right side went down to a crawl way which I didn't push.

The left side also dropped down, over more of the steep flowstone, to reach a small room. A tiny passage in the floor continued down at a steep angle. It looked just big enough to slide through and I could see maybe another 30 feet of cave down there. All the time a cave survey was in progress, and my total to this point was 191 feet, including several shots into side passages. Discretion being the better part of valor, I decided to pack it up and return later with fellow cavers and a hand line.

April Trip

Opportunity arrived in the form of a temporary lull in the downpours drenching the Under Earth Weekend. We were already damp from spending much of the day examining the friendly confines of Samwel Cave. Now, three poor suckers agreed to chase down this bird-in-the-bush cave lead. They were Jim Wolff: James Newell and Geoff McNoughton, representing three different grottos (SAG, SCS, and OHDG respectively). Most of them are grotto officers, no less, and should have known better.

The hike to the cave involved climbing or traversing steep slopes of moss, loose rocks, and thickets of wet poison oak. Inside, the cave was raining heavily so that we were soon soaked to the skin. They don't call it "dripstone" for nothing. Yes, you might say there were lots of "drops" in this cave. Outside, the rain was starting again, threatening to make dismal business out of our return trip. Yet as we made our way back to camp I don't recall feeling uncomfortable. Maybe I'm all wet, but we carried inside us the happy glow of cavers making discovery, no matter how small, and even if not original. There were a couple bits of trash at the entrance, and inside there was some possible breakage.



Column in Red Beard Cave. 2-23-03. Photo by B. Broeckel.

RED BEARD CAVE (continued)

At the lead, the hand line was rigged around the column. There were some sharp edges, so James padded the rope with two short lengths of split fire hose marked "DP". These once belonged to Dave Pryor. James went first, sliding into the hole in spite of his sore elbow, bruised in Samwel earlier. The cave went down about 30 feet and became plugged with a breakdown floor. There were a number of leads. We surveyed into the best one. It went up into a little room with a very wet flowstone climb. At the top there awaited a narrow slot with a dark attic room above that we were a little muddy, and didn't feel prepared for the climb. Also, I'm not sure we could fit through that slot in the ceiling.

This lead and some side passages should keep us

busy next time we make the tough hike to this spot under drier conditions, and maybe with a climbing and squeezing specialist. We added 52 feet to the survey, and got back to the road before it was completely dark. Red Beard Cave currently stands at 243 feet in length and 70 feet in depth.

So we left Red Beard dripping with possibilities. The whole Under Earth Weekend was a wash of exciting cave talk and trips. Thanks to Jim Wolff, Bill Kenney, and the others, all of our ducks were in a row. I've never seen the lake so high, and somehow I didn't get any poison oak this time – perhaps some sort of dilution effect. Everyone did a good job of staying well-hydrated. Most of the time SAG does dry lava caving, but once in a while we go wet and wild with a solution cave, caving during a storm, or both. **BB**



Drapery in first room of Red Beard Cave. 2-23-03. Photo by B. Broeckel.

SAG RAG

2916 Deer Mdws Rd
Yreka CA 96097

STAMP

TABLE OF CONTENTS

TO:

Page 1	Cover: Shasta Salamander
Page 2	Caver Calendar
Page 2	Issue summary for Cal Caver
Page 2	Maps to the SAG Meetings
Page 3	Chair Creaks – Cave Restoration – L. Wolff
Page 3	Sand Cave photos – Arley Kising
Page 5	March Minutes – M. Jackson
Page 6	Shasta Salamander – B. Broeckel
Page 9	Under Earth Weekend – J. Wolff
Page 10	Red Beard Map – B. Broeckel
Page 11	Red Beard Cave – B. Broeckel
Page 12	Red Beard Cave photo – B. Broeckel

Remove Staple For Inspection