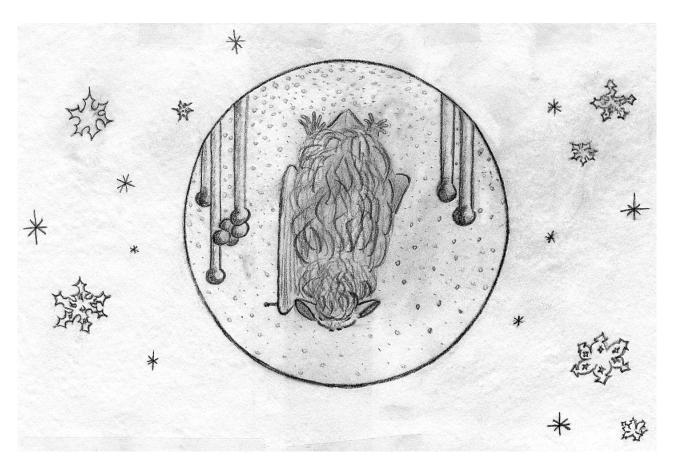


**NOVEMBER-DECEMBER 1995** 

**VOLUME 14 NUMBER 6** 



### Myotis Lucifugus

Little Brown Bat

Oh little brown bat, sleep with wings all curled Outside the snow is falling on a cold and heartless world Keep safe and snug with little bat dreams Of a better world that from the future gleams.

And so I think of that manger scene With baby Jesus sleeping so serene And all of Satan's fury, uncoiled and wild Could not prevail upon the Holy Child.

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. Material intended for the next newsletter is due by the 10th of the even month

Ahhh . . . winter. The roads get icy, and snow hides the entrances. The "big tree" doesn't look the same, and pretty soon you can't get out to it anyway because of the unplowed road. So now we have time to keep thinking about that dangling wonderful lead. Too bad we didn't have time to check it that day we were out there. We were right there. . . . So what if we were already six hours late, what's another hour? But now there is time. Time to look at cave slideshows, and read books, and go to meetings. And time to reflect.

Now cavers are an interesting bunch of people. And diverse. We come in all kinds and stripes and flavors and sizes. And that's great. Think of all we can learn from each other. It gives us a lot to be thankful for. But occasionally, or at least sometimes, it gives us something to grumble about. "You know So-and-So, you wouldn't believe what he's doing these days. He's actually . . . And I would never do it that way."

Cavers face a certain amount of rejection and mistrust from non-cavers. "You do what for fun?" "What if it caves in?" "What about all the bats in caves?" "Aren't there a lot of diseases in there?" "I'd never do that, not in a million years!" And these are just from the friendly, well-meaning non-cavers! Some of us were kind of different growing up. Maybe we wore different clothes from our peers, and read different books. We certainly wear different clothes now, at least while we are caving. How many non-cavers do you know who don coveralls and wear helmets with headlamps, carry 3 additional sources of light plus back-up batteries, carbide, and bulbs, ropes, ascenders, and so on, plus food and camping gear? Many people fail to see what makes caves so compelling. But we are used to that. We even, sometimes, feel a teeny bit superior to people who can't understand what makes us want to squeeze our dirty and bruised bodies through the "tight spot" and get to the virgin passage, the big room, that spot where you can just see the most unexpected ice sculpture, or untouched vista. So sometimes we just ignore the attitudes of non-cavers and feel good about it. But once in a while it goes farther than that. We even start feeling superior to that other caver whose style is a little different, or who talks too much, or doesn't talk at all, or caves too fast or too slow, or uses carbide, or who never uses carbide, or well whatever!

Maybe we need to cut each other a little slack. Maybe we should hold back on the roasting of whichever colleague happens not to be in attendance at the moment. A little good-humored tolerance is in order. A little good will. A little peace under the earth. After all, it's Christmas.

Judy Broeckel

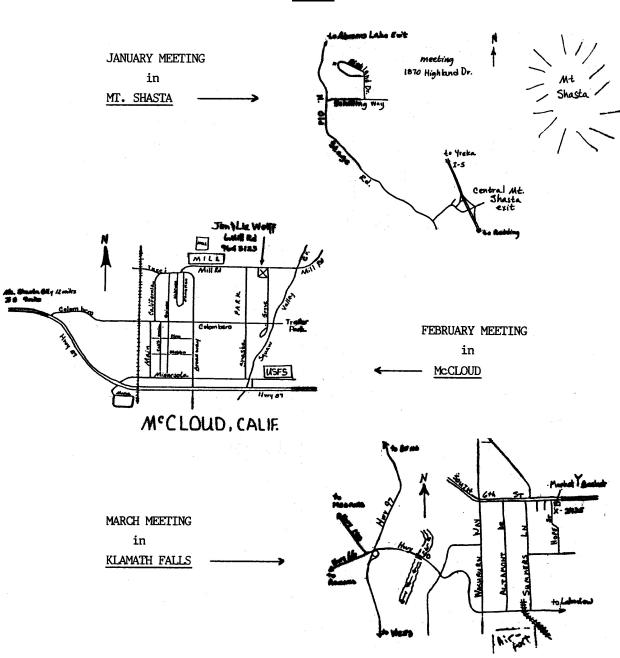
<u>COVER</u>: SLEEP IN HEAVENLY PEACE. While the weather outside might be frightful, this little brown bat (*Myotis lucifugus*) found a sheltered spot in a lava tube for his long winter's nap. This common species of *Myotis* ("mouse-eared") bat is known for its long, sleek, glossy brown fur on the head and body.

Cover by Bill and Judy Broeckel

# **CALENDAR**

January 12, 1996 February 9, 1996 March 8, 1996 August 3-9, 1996 June 23-27, 1997 August 3-7, 1998 Shasta Area Grotto meeting at Ray Miller's house, 7:30 PM Shasta Area Grotto meeting at Jim Wolff's house, 7:30 PM Shasta Area Grotto meeting at Bill Kenney's house, 7:30 PM National Speleological Society Convention, Salida, Colorado National Speleological Society Convention, Sullivan, Missouri National Speleological Society Convention, Sewanee, Tennessee

# **MAPS**



### Shasta Area Grotto Meeting - November 4, 1995

The meeting was called to order at 6:10 PM. at the Fritzke home in Arcata.

<u>Present were:</u> Linda & Mark Fritzke, Jim & Bea Kottinger, Bill, Carolyn, John, & Drew Fitzpatrick, Dick, Kathy, & Evan LaForge, Jim & Liz Wolff, Niels Smith, John Bair, Julie Donovan, Melanie Jackson, and Todd Sobol (guest).

Minutes: The minutes of the September meeting were approved as amended.

<u>Treasurer's Report</u>: \$527.08 Sept. Balance. Interest was \$6.81, SAG Postage \$92.55, Postage (LaForge) \$6.16 equals expenses of \$98.71. The current balance is \$435.18.

<u>Correspondence</u>: Jim Wolff rec'd a Certificate of Appreciation (for the Grotto) for maintaining the cave registers. The Cave Register Program is CCSU (an NSS Program).

- 1. Ray Miller rec'd from Larry King in Portland, OR. the BLM Management Plan for Pictograph Cave. It is regarding "Recreational" (bolt & anchor) cave climbing. No new bolts or anchors can be installed or removed. There is also a copy of the article about this that was in Sports Illustrated, <u>The</u> Battle of the Bolt 10/14/95.
  - 2. Jim Wolff also brought a catalog on cave rescue equipment to be perused. It is Hawills, Ltd.
  - 3. A copy of the letter The Muddy Litter (NSS Rescue Letter) was passed around.

Old Business: None (That's incredible!)

New Business: Dick LaForge donated a box of discarded knee pads from football uniforms that SAG & SOG members may have free for the taking for making their own knee pads or other comfort devices (seat pads, shoulder & hip pads for crawling and sleeping?) What we don't take and use he will throw away. Let your imagination be your guide.

There is a copy of the Cave Management Symposium 9/1995 minutes with 2 good articles on fixing cave formations. We will send a copy to the Shascade Grotto for their general information.

Bill F. suggested we think of a way to show Bill B. how much we appreciate his work as the editor of the SAG RAG.

Bill F. has a list of the SW Oregon Caves that were submitted for cave protection. It lists the caves and their locations. A copy was given to our grotto. 20 of these caves are around the rim of Crater Lake. Bill got his list from Charlie Larson.

The December 8, grotto meeting has been changed to the first week on Friday Dec. 1st at the Jackson home in Yreka, because of another conflicting program.

Jim Wolff motioned that the SAG Grotto get involved with the Lava Beds National Monument Inventory Project. Since Jim suggested the grotto put in some time on the project and he has the Handbook of Inventory it was suggested that he be the coordinator for this project.

Nominations were moved and seconded for 1996 SAG officers.

<u>Trip Reports</u>: Jim Kottinger and George Reel took a trip through Lava River Cave in Bend, OR. Their comments: Interesting!

Niels Smith commented that Jim & Liz Wolff, Bill, Judy, Becky & Benjamin Broeckel, Melanie Jackson, and Niels Smith all attended the Joint Regional Meeting at Lava Beds in Oct. While everyone went to one or more of the classes and meetings, the highlight of the weekend seemed to be Jim Wolff's surprise 50th Birthday Celebration.

Jim & Liz Wolff, Melanie Jackson, and Francis Mangelis went out to the Shastine Crater area and mapped a multi-level lava cave that contained much water and biology. The tube was approximately 680 feet in length and was named Francis' Folly after its finder, Francis Mangelis.

The meeting was adjourned at 7:05 PM.

There was a marvelous slide show afterwards. Mark Fritzke showed slides of Lechuguilla and Dick LaForge had some great stereo slides being passed around. Wolffs also brought neat slides from different places.

Needless to say the turkey dinner served before the meeting and slides was excellent! There was plenty of food for everyone. Linda and the ladies who prepared the food should go into business for themselves if they weren't already so busy.

### Shasta Area Grotto Meeting - December 1, 1995

The meeting was called to order at 8:00 P.M. at the Jackson home in Yreka.

Present were: Present were: Neils Smith, Bill, Cheryl, and Zane Kenney, Jim Kottinger, Ray Miller, Bill Fitzpatrick, Liz and Jim Wolff, Don Gibson, Melanie Jackson and guests Paul Showalter (SOG) and Steve Dagitz (Mt. Shasta).

Minutes: The minutes were approved as read.

Treasurer's Report: \$441.18 current balance. This does not include any dues that were received at this evening's meeting.

Correspondence: J An advertisement for Mexpeleo 95 happening Dec. 26-30, 1995 which is caving in Sierra de Avarez.

The American Association for the Advancement of Science (AAAS) announces a 1/2 day session of Interactions of Karst Geology and Ecology. Meeting is 2/13/96 in Baltimore Maryland.

Old Business: The NSS Audio Visual Library Catalog was passed around so we could choose what we would like to order for showing at our meetings. We need 3 choices for each month; in case one is not available.

Jim Wolff sent a letter to Jim Lakner the Western Region chairman (and cave research person) requesting information about the Lava Beds Nat'l Monument work trips. Cave research applications are available through Jim Wolff.

Bat Cave Status: this cave is in Public Review for the last time before being signed off. Funding is not a problem, only the timing of the placing of the gate is critical. It probably won't be done before next fall.

New Business: Bill Broeckel brought an article that was featured 11/10/95 in the Siskiyou Daily News. The article was on caving, specifically on Pluto, Sand and Barnum caves. Has good information, but names and places weren't always correct.

SAG received a formal invitation from Dave Pryor of the Shascade Grotto. We are invited to cave in the Redding area with Shascade.

Ray Miller attended a Bat Symposium in Victoria, B.C. in Nov. 1995 where he presented a paper on bats that night roost in highway structures. The information was basically on forest dwelling bats and not much on caves. Ray has been invited to another bat program in Durango, CO. in January 1996.

Ray Miller and Liz Wolff made recommendations for the gating of mines in the Scott River Ranger District. Jay Power is the hydrologist running this program and they have done some very fine work with the mines they have gated and have also treated the water therein.

Tues. Dec. 4 at the 7:00 P.M. SOG meeting there will be nominations. Bill Fitzpatrick will decline to be chairman. Bill Kenney has been nominated as Chairman, Paul Showalter as Vice Chairman, Ron Osbourne as Treasurer, and Ernie Coffman as Secretary.

January 12, 1996 at Ray Miller's in Mt. Shasta Meetings:

February 9, 1996 at Wolffs in McCloud (President's Day Weekend). Skiing? March

8, 1996 at Bill Kenney's in Klamath Falls

Trip Reports: B. Kenney was at Oregon Caves 11/4/95 and helped push a lead further in the River Styx

The meeting was adjourned at 8:33 P.M.

A video was shown of Ancient Palace Cave. A video of Cave Diving in the Yucatan in Mexico was also viewed along with one on Carlsbad Caverns.

Respectfully submitted, Melanie Jackson

### **All About Bats**

### **VAMPIRES**

The usual movie Vampire is a large fruit bat wearing a scary mask, and horror stories describe these animals as leaving their victims resembling a deflated balloon. In reality both of these portrayals are far from the truth.

There are 3 species of Vampires. All are small animals with a wing span of about a foot and weighing around 1 1/2 ounces. Blood feeding organisms are small, be they insect, leach or bat. Smaller animals require smaller amounts of food, and they certainly don't want to drain the pantry. Two species of Vampires appear to feed exclusively on birds, and the third also feeds on mammals. This latter species prefers cow, goat or horse blood to humans. Maybe our diverse diet makes our blood less palatable. Each bat needs about 60% of its body weight, or 2 tablespoons, of blood each night. Vampires must feed every night or they will starve, and a sick or injured animal that cannot forage is fed by buddies who regurgitate part of their meal.

Razor sharp incisors make a wound in the victim at a site where the blood supply is close to the surface. The bat then laps blood while ingredients in its saliva keep blood from clotting and veins from closing. It is expensive for bats to carry unneeded weight. The blood plasma has no nutritional value, so it is quickly absorbed in the stomach lining, shunted to the kidneys, and within 2 minutes the bat starts urinating.

Transylvania isn't a place where you will find Vampire Bats. Bram Stoker was intrigued with the Vampire descriptions given by European explorers and included these bats in his novel, *Dracula*. In reality they occur in Central America and much of Mexico and South America. They come close to the U.S. at Brownsville, Texas, but have never been found on this side of the Rio Grande.

Vampires adapt well to captivity. Although often exhibited in zoos they are not recommended as family pets.

Ray Miller

### REPRINT REPRINT REPRINT

From The Explorer, July 1995, pages 98-99

# NO VAMPIRES, THESE BATS ARE FRIENDS by Scott Pendleton

from The Christian Science Monitor July 5, 1994

Austin, Texas

Build a better bat house, and winged mammals will flap to its door.

That's the goal of the North American Bat House Research Project, which uses volunteers in 49 states to erect bat houses. They report the results to Bat Conservation International (BCI), which directs the two-year-old effort.

"The project thrives, and we learn as we enlist new people - the more the better," says ecologist Merlin Tuttle, BCI's founder and executive director.

People familiar with bats only as creepy Halloween cliches will wonder why anyone would want to attract the rabid bloodsuckers. Aren't bad hair days frequent enough without encouraging the tress-tantalized critters to roost nearby?

Dr. Tuttle scuttles these myths. Bats have no interest in human hair and capably avoid it during flight, he says. Bats are no likelier than pets or other animals to become rabid. Just don't pick them up, he says, since a bat lying on the ground may be unwell.

As for vampire bats, they live only in Latin America and are content to stay there. The bats farther north spend summer evenings devouring their body weight in airborne bugs such as beetles, moths, mosquitos, and even roaches. They hibernate in winter.

In one of the most authoritative studies yet, 25 million to 50 million Mexican free-tail bats living in Arizona's Eagle Creek Cave were confirmed to dine nightly on 200 tons of bugs that had gnawed on crops. Says Tuttle: "It doesn't take much extrapolation to say that those bats had a huge economic impact."

But that population declined to only 30,000 bats in only six years.

The reason was human interference, Tuttle says. All too often, amateur spelunkers disturb bats or developers pave over their cave entrances, as has happened in Austin, Texas.

"Most bats can get along fine around people, if we leave them a place to live," Tuttle says.

### HOUSES REPLACE HABITAT

Humans are destroying all kinds of bat habitat, from old-growth forests, where bats roost in dead trees, to abandoned mines that are being sealed. Last year Tuttle was just in time to prevent the sealing of a Michigan mine where a million bats were hibernating. But some states have sealed thousands of mines without checking for bats.

North America would have to lose millions more Mexican free-tail bats before they could be officially listed as endangered. "But at that point (the species) will be biologically and economically irrelevant," Tuttle says. "It's just as important (to the environment) to keep abundant species abundant."

BCI hopes to help by halting habitat destruction and creating new habitat to replace what has

### REPRINT REPRINT REPRINT

From The Explorer, July 1995, (continued)

been lost. The Congress Avenue bridge over Town Lake in Austin shows what's possible.

A 1980 reconstruction created spaces an inch wide and 16 inches deep between concrete beams. The size of those gaps and the humidity and temperature inside them attracted a northward spring migration of 1.5 million Mexican free-tail bats to the bridge. The bats raise their young there.

That makes Austin's bats the largest urban colony in North America. Headlines like "Bat Colony Sinks Teeth Into City" brought Tuttle to Austin from Mllwaukee in the hopes of educating the public about the benefits of bats. In 1986 he founded BCI, which now has 12,500 members in 55 countries.

Hoping to copy the serendipitous success of the Congress Avenue bridge, BCI has enlisted the Texas Department of Transportation in a study of "bat friendly" bridge design. A BCI researcher has visited 370 bridges so far. She has found 6 million bats living under 10 percent of them.

"There are good reasons why they're not using the other 90 percent," Tuttle says. Temperature, height, size of openings, accessibility to predators, surface smoothness, exposure to wind, and access to food and water are major variables. But there's much more to be learned. "It shouldn't come as any surprise that we're scratching around in the dark," Tuttle says. Although bats make up one-quarter of all mammal species, they are the least-studied mammals on Earth.

### **AMATEURS' ANSWERS**

That's why BCI is turning to the public to help with bat house research. "The beauty of having an amateur research project is that amateurs are all the time doing seemingly stupid things that turn out to work," says Tuttle. For instance, 50 years ago a scientist concluded that bats prefer houses made of unpainted wood. The scientific community took that for granted until volunteers in BCI's bat house project painted some anyway, Tuttle says. The painted houses attracted bats 2-1/2 times more often than unpainted ones.

Bat houses only 2 ft. tall and wide and only 6 in. deep can attract nursery colonies of up to 300 bats.

Tuttle warns against buying commercially made bat houses not accompanied by complete instructions. Almost all have no chance of attracting bats, he says. Those unnecessary failures, he worries, will cause people to lose enthusiasm.

Instead, he recommends "The Bat House Builder's Handbook," a publication he co-authored that contains detailed instructions and designs incorporating the latest findings. The guide (\$6.95, University of Texas Press) can be ordered from bookstores. Or send any size donation to BCI (P.O. Box 162603, Austin, TX, 78716) and it will send a copy and information on how to join the project.

"We're honing in really fast on what makes these work," Tuttle says. For instance, in northern latitudes the choice of exterior paint has been narrowed to dark brown or black. Other improvements to old designs include "landing pads" and ventilation slots. Nonetheless, BCI hopes volunteers will experiment with the design, placement, or orientation of their bat houses.

"We'll know we've arrived when we put up these houses in areas where bats already have plenty of alternatives and they move into our houses anyway," Tuttle says.

# RABIES AND BATS – LAST PART

The last section of the book Rabies in Bats by Danny A Brass addresses public health concerns. Lots of practical advice is found in the last part of the book.

Rule #1 is to avoid handling bats. Out-of-the-blue bat attacks are actually quite rare.

Rule #2 is to not try to save bats from cats. Most people remember to get rabies shots for their dogs. Pet cats also need to have rabies shots.

What should you do if you do happen to get bit by a bat? 1st, attempt to capture the bat without getting more bites. If you do capture the bat, submit it for brain biopsy. The result of this rabies test may effect your treatment.

Wash the wound with soap and water. Then go see your doctor. Remember, human rabies is a rare, but fatal disease. Also, bat bites like any other bites, tend to get infections.

Chapter 25 directly deals with caver concerns. Danny Brass describes the frequency of bat-caver encounters, and then explains the low risk of actually getting rabies by caving. In fact, he states that no caver has ever gotten bat rabies! He attributes this to caver tendency to not disturb bats.

Avoid large nursery colonies of Mexican Free-tailed bats, because of the possible risk of infection by aerosolized rabies virus. This is a very specific risk, and does not apply to other settings involving cavers and bats.

Pre-exposure rabies immunization for cavers is controversial. Bat-handling cavers, and cavers traveling to vampire bat habitat south of the border, should be so immunized. The rest of us probably don't need it, but there are some experts who disagree with that.

Leave caves with evidence of large scale bat die off. Yes, that makes sense, doesn't it?

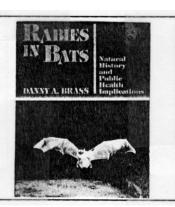
Cavers doing biology research on bats should wear gloves when working with bats. These individuals should be immunized and have a post-immunization antibody titer to prove that the immunization worked. This needs to be checked again every 1-2 years to make sure the antibody level remains protective. And, if bitten by a rabid or possibly rabid bat, some treatment is needed even if you are immunized, so you still have to go see the doctor.

There you have it. What a book! Much of the information is readable and interesting, with lots of tables and charts and other illustrations. My favorite was the drawing of the caver and the bat.

RABIES IN BATS - Natural History and Public Health Implications

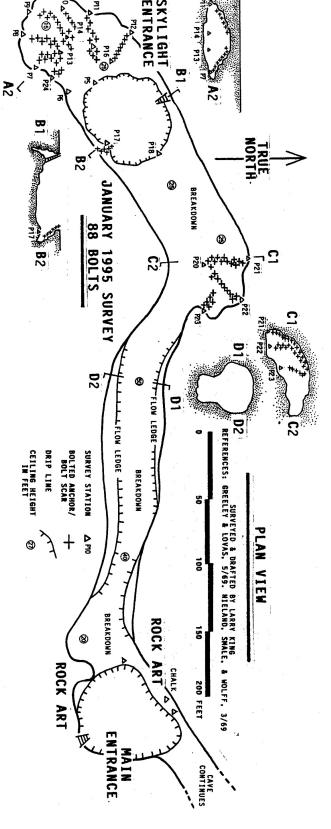
By Danny A. Brass, 1994 352 pp, 8½x11, hardbound.

Available for a limited time to NSS members from Livia Press, Ridgefield, CT for \$34.95 plus \$5.00 shipping and handling.



# DESCHUTES COUNTY, OREGON SOUTHWEST SECTION, SHOWING AREA IMPACTED BY ROCK CLIMBING ACTIVITY

550, Prineville, are encouraged to write Project has been established to plan for Pictograph Cave in early 1996. installed rock climbing equipment from the Prineville District of the BLM will be writing its to: Shaaron Netherton, Prineville District BLM, P.O. Box OR 97754 expressing support lobby for removal of permanently The Pictograph Cave Restoration for the project's cave. Interested parties management restoration



Southern Oregon Grotto of the National Speleological Society. members of the Oregon Grotto, The Pictograph Cave Restoration Project the Willamette Valley Grotto, is supported by individual and the

# SHASTA AREA GROTTO BALLOT

Each Grotto member needs to vote once for each office and return the completed ballot to Liz Wolff at POB 865, McCloud, CA 96057 by January 12, 1996. Ballots will also be accepted in person at the January meeting. Please circle your answers. Redundancy is to accomodate multi-member households. Crayola marked ballots are invalid.

Chairman	Neils Smith	Yes	Yes	Yes	Yes
		No	No	No	No
Vice-Chairman	Dick LaForge	LaForge	LaForg	e LaF	orge
•	Ray Miller	Miller	Miller	Mi1	ler
	Jim Wolff	Wolff	Wolff	Wo1	ff
Secretary	Melanie Jackso	n Yes	Yes	Yes	Yes
		No	No	No	No
Treasurer	Liz Wolff	Yes	Yes	Yes	Yes
		No	No	No	No

AME:		NSS#
DDRESS:_		
. 1		
	SAG dues (include	s RAG) \$6 per person or family.
	Membership catego	ry (family or person)?
	I want to subsrib	e to CALCAVER too. Thats another \$6.
	SAG RAG subscript	ion only without SAG membership. \$6.
	Total enclosed.	Make checks payable to Shasta Area
	Due Jan. 1.	Grotto. Send to Liz Wolff, POB 865, McCloud, CA 96057



# SPEAR

Please Help me to make the very best caving supply shop ever; by taking a few miniutes to fill out this questionaire.

Thank you.

Have you ever found it difficult to find the gear you need ? If yes ,what kind of gear ?	
Have you ever found the prices on some equipment to high? If yes, what equipment?	
Have you ever had to make some equipment yourself, because you couldn't find exactly what you needed?  If yes , what did you need?	
Would you like to see a greater selection and better prices on caving gear? If yes , would you like to be on the mailing list to recieve our catalog?	•••
NAME	

**SAG RAG** 524 Annie Street Yreka CA 96097

**STAMP** 

TO:

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