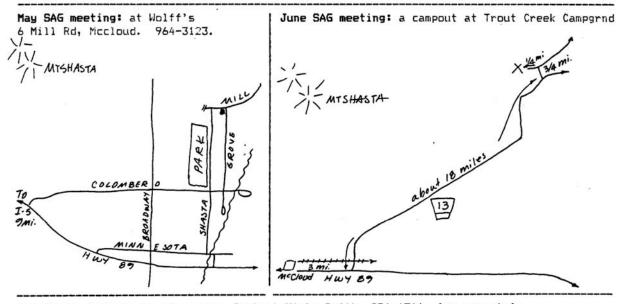


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May 24-29 Eastern Nevada caves. Contact Niels Smith, 254-6764, for more info. July 9-13 NSS Convention, Yreka CA.

Minutes of the March 1990 SAG meeting: Present: George & Dorothy Reel, Jim & Bea Kottinger, Jim & Liz Wolff, Wayne Smith, Neils Smith, Bill Broeckel. Chair Neils called the meeting to order at Reels'. Minutes were accepted as corrected. Treasurer's report shows a balance of \$358.29.

Correspondence: letters from Jim W to NSS A/V library about slide shows; Robert Rachwalski and Bill McGahey on grotto membership and convention.

Old Business: There is no further interest at this time from the Pathfinders, in caves. It was recommended that we put registers in Bat, Porcupine Butte, and Hourglass caves. Jim K will submit a bill for register materials when he's done making them. The tape of Oregon Caves was eaten by machinery; Neils will see if a camera shop can salvage it.

New Business: Samwel Cave has been vandalized; help with clean-up. Bat counting tomorrow.

Meeting adjourned. "Lechuguilla Cave: the Hidden Giant" video was shown.

Minutes of the April SAG meeting: Present: Jim & Bea Kottinger, Jim & Liz Wolff, Bill & Judy Broeckel, Al & Phylis Henderson, George Reel. Meeting was called to order by vice-chair Jim K. Minutes were accepted as read. Treasurer's report was missing.

Old Business: Jim W passed around copies of the Bat and 3-Level Cave registers, noting that there will be need for 4 or 5 more. Jim W is still looking for trip leaders for the convention. USFS' Tracy Rowland for contact person Carl Turner on Samwel Cave vandalism: wants SAG help on cleanup, suggestions for upgrading the gate and anything we can think of: monitoring, sign removal, gating, lock location and accessibility, documentation of past history and users. Siskiyou County needs a trained cave search & rescue group; George volunteers to see what has been and what is being done on this. Jim K has a graphics place that will make decals for the registers, \$3.50 each, minimum 50.

New Business: next 2 grotto meetings; May at Wolffs' and June a campout in the lavas, trips both months to familiarize members with area lava caves. Trip tomorrow to Ishi caves area.

Meeting adjourned 8:47 pm. NSS slide show of Fossil Mtn. Ice Cave.

I Got Mine!! (**Did you?**) The Cal Caver came this week. Anyone who signed up for it through the grotto and didn't get it let Ray Miller know. Either call or write: POB 475, Mt. Shasta, CA 96067, (916) 926-2440.

In this Cal Caver there is a callout for volunteers to staff various jobs at special events, registration, sessions, security, and publishing. If you're interested in helping call or write Peri Frantz, (408) 356-8506; 16345 Englewood Ave, Los Gatos CA 95032, and she will get your name to the proper convention chairmen.

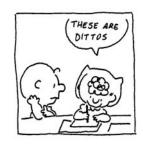
ANNOUNCING A NEW GROTTO!

Just across the border in Oregon is another new grotto, the Jefferson State Grotto, based in Ashland. You can get in touch with them: c/o Claire Cross, 12015 Dead Indian Rd. Ashland OR 97520. They meet the first Tuesday of the month, 7 pm, at the La-Z-Boy Showcase, 3424 S Pacific Hwy, Phoenix OR.

June Grotto Meeting/Campout to familiarize as many cavers with as many caves as possible! Jim Wolff is looking for willing volunteers to lead trips to caves near the '90 NSS Convention. We will be hosting the 1991 Western Regional too. So come out to see some big caves, little caves, complex caves, vertical caves, crawlway caves, and new (!?) caves.

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Rock 'n' Roll in Deep Ice Cave by Jim Wolff

April 14, the day after the SAG mtg. I awoke to find Dave Cowan and Doug Bradford (alias "The Wilderness Chef") parked outside my house. They had been doing 1990 NSS convention business and had gotten done early and had some time to kill. They didn't have any caving gear with them, but thought it would be good to try to see how far we could get towards Medicine Lake and Deep Ice Cave. I knew that we would be able to get to Three Level Ice Cave. I was going up to check on the cave register anyway, I joined the duo for the day.

We got to Deep Ice and found it nearly filled with ice! It starts out as a belly crawl right away. I remember when I was able to go nearly to the back on my hands and knees, but now there is a film of water and NO AIRFLOW!

Over the last decade rock has covered most of the entrance. I suppose that quakes and frost heaving account for it. But what Nature had done we had to undo if we were to ever see the cave again, especially with the convention coming. So, several hundred pounds of rock later, we succeeded in opening up about 80% – 90% of the original entrance. With all that rock gone and the predicted drought conditions of this year, we can expect the cave to open up in a few months. I will check on its recovery later this year.

SAMWEL CAVE VANDALIZED, again! by Jim Wolff

It has come to the attention of the grotto that Samwel Cave has received recent vandalism in the form of spray paint in the entrance room, just past the gate. Talking to a permitee from Redding, he said that the paint was still fresh and he was able to get some of the paint off with the sleeve of his coat. He recommended a cloth that didn't leave threads, to get the majority off. Good idea, but I think it's going to take more than that!

I had talked to Tracy Rowland of the FS at the Shasta Lake Ranger District, who had contacted me at work. I gave her some literature that I had on cave restoration techniques, gating designs and all the environmental concerns with gating, plus the names of cavers involved with NSS Cave Restoration projects. As Tracy put it, "the clean-up has been put on temporary hold until we can find an effective gate solution..." She received a note recently from another permitee that (once again) notes that the cave gate was found without a lock on it. Apparently the cave's gate does close now, so it can receive a lock, "but the locks keep disappearing!", according to Tracy. She suggests that the new sign (an international symbol of a caver on hands and knees) on Fender's Ferry Rd. be removed, because "this may keep the casual, 'accidental tourist' from stumbling onto the cave, but habitual vandals already know its location." I agree fully, but the sign shouldn't have been put up in the first place! Ms. Rowland wonders, "perhaps we should schedule a meeting between FS and cavers to brainstorm a solution...?"

Mr. Carl Turner (the fellow who runs the visitor center) is now in charge of the clean-up. Carl said recently that on 4/18 the gate was taken off and being repaired by a local welder. Plans are for it to be back in the cave this week. He also said that "this is only a temporary job until we come up with a permanent solution..." He can be reached at: Shasta lake Ranger District, 6543 Holiday Dr., Redding, CA 96003 Phone # (916) 275-1587.

You know, there are many cavers of the Western Region interested in helping out in one way or another, are you willing to help too??

COUNTING BATS..., the fuzzy ones, not the wooden kind! by J. Wolff

On 3/10/90 Neils Smith, Liz and Jim Wolff inventoried three caves known to contain bats, with the main purpose of locating, and counting *Plecotus* bats. We were doing this for Dr. Elizabeth ("Dixie") Pierson, who's an expert in this sort of creature...

We did a whirlwind tour of Pluto's, Teeter Rock and then Barnum Caves. While in Pluto's, we met a group of three teenaged boys that were <u>trying</u> to explore with two lights; one was just barely a-glimmer! Later on, we talked of the possibility of their lights dying back there and maybe trying to make it to surface again by following the walls in total darkness! The thought of a rescue just hastened our own return to the entrance. There were no large clumps of bats (estimated at 100 individuals per square foot!) that I saw the last time I was in Pluto's Cave, which was in February '90.

MEDICINE LAKE UPDATE by Ray Miller

After a year and a half of intense interest in the Medicine Lake Highlands earthquake activity, the USGS is lowering its level of monitoring. The area is still volatile, but priorities are such that a greater need for the special implanted seismic array exists elsewhere. The plug was pulled on the telephone line to Menlo Park as of April first.

Medicine Lake Highland is a shield volcano. It is of interest to cavers because it is responsible for the Lava Beds National Monument and the neat lava flows to the south that include "our" Freudian Complex. Also, if it wasn't for this volcano we would not have such wondrous and famous place names as Jot Dean, Hambone and Stud Hill. Wow.

Activity started in the fall of 1988 with a swarm of earthquakes. The quakes were recorded by the permanent Mount Shasta seismic array, but they could not be plotted without supplemental seismometers. These were installed immediately. Soon snow covered the area and this reduced the human generated vibrations allowing very small signals to be studied. Molten material (magma) and rocks hot enough to bend rather than break are so close to the surface that what is happening at depth can not be determined. Earthquakes are not generated in that kind of stuff. Magma may be moving, the earth may be shifting a bit (tectonic activity) or the quakes may be due to cooling of the Highlands. In any case the seismic activity has lessened.

It was learned that Medicine Like Highland is deflating, and the quakes were the result of rocks cracking as they shifted. Very precise sets of elevations, called Leveling Lines, were measured in 1984. The area has settled 390 millimeters (nearly 16 inches) since then. The affected area extends well away from Medicine Lake. To the southwest it extends to Stephens Pass, a distance of 17 miles.

While this latest activity mayor may not be related to volcanism, the potential of an eruptive episode at Medicine Lake Highlands is very real. There is a history of frequent eruptions, with the latest having occurred in 1911 at Big Glass Mountain.

Ishi Caves Trip Report by Bill and Judy Broeckel

"...of a steep wilderness, whose hairy sides with thicket overgrown..."

(John Milton, Paradise Lost)

Six members or hoping-to-be grotto members participated: Jim & Bea Kottinger, Al & Phylis Henderson, and Bill and Judy Broeckel. The road down Campbell Ridge was so bad, we were glad that we left our car behind. Up ahead it looked even worse, or better depending on your perspective.

Beyond the far edge of a distant flat lies Wowunupo, meaning "Grizzly Bears' Hiding Place." Ishi, the last of the Yahi Indians, chose this secluded ledge and old bears' den for the concealment of the last remnant of his people. Wowunupo was at least one up on us. It is way out there all right, with lots of cliffs and brush. The general rock in this region contains many overhangs, natural shelters, and alcoves. And so Ishi Caves remain an enigma to us.

Many wonders were there to be seen along the dusty road to the north: strange pinnacles baked in the Devil's Kitchen area. We crossed Deer Creek on a bridge, and drove high on the mountains with far reaching views. Mill Creek flowed along the base of Black Rock. This huge basaltic monolith is the core of an ancient volcano. Here we found a shaded picnic table for lunch.

Despite the many surface distractions, the grotto indeed entered a cave on this trip. Those who braved the poison oak were rewarded with a refreshing cool breeze blowing through Inskip Cave. You can skip right into this cave. It is a roomy lava tube, perfect for beginners. Al and Jim found a place to belly-crawl at the end of a major tributary.

For extraordinary geology and compelling vistas, think of Ponderosa Way and Ishi Land. For visiting Inskip Cave, however this was definitely the long way around. Thanks to the Hendersons for hosting this mysterious and fun trip.

THE MINI TUFFLITE... a user's report by Jim Wolff

This flashlight by Garrity is a possible caver's light that has seen rugged use and seems to be "tuff" enough, but a few modifications are needed to make it "cave-worthy." It has a ten year warranty and two types of bulbs can be used in it, the PR-4 or the Krypton bulb K-4. And it comes with batteries! I feel it is certainly worth the few bucks (usually less than \$8) to try it out. You might be hard pressed to find it at just any store, however....

Garrity claims that it is "shockproof", "rustproof" and they claim that it is "100 percent rubber"! Granted, the "skin" is rubber, but the real flashlight is inside as a thin plastic tube, for rigidity and strength, even though it is light in weight.

The light comes with a small gauge wire ring and a little rubber carrying strap that was intended to be ("just the thing") for your wrist..., I guess! I took this wimpy thing off immediately and replaced it with a nylon lanyard to go around my arm and neck. This gives me the freedom to use my hands for other purposes. In order to get to the batteries unscrew the reflector assembly (inside a rubber covering too) and drop in two fresh AA batteries. If you need to get at the switch assembly for any reason, like cleaning corrosion, you'll have to peel the rubber skin back over itself, starting at the flared, threaded opening and pull off the rubber housing. Once you do this though, the seal between the two main pieces will become the weakest point of the whole light, allowing mud and moisture into the light.... But they never claimed it to be waterproof either!

The switch is a button in the rear end of the light. The button is recessed a quarter inch, which might make it necessary to use a small pointed object (like your "pinky"!) in. order to depress it even further. The light won't come on by accident in your pack! Plus the light doesn't have a focusing beam. A few drawbacks, granted, but ones a caver can live with. I think that with washing the assembled light after a muddy trip, you will get good life out of these cheap little lights. And I have had no bad experiences, even after real rough treatment like crawling over the thing! So try it, you'll like it!

APRIL FOOLS?

APRIL FOOL'S!

APRIL FOOLS'

Record Breaking Caves

Shortest Caves: (in feet)
Bear – 5 (X 40)
Lost Key – 18
Unnamed – 25
Tom's – 30
Macramé – 30
Gary's – 40
Angel Wing – 50
Critter – 61.5
Consolation – 68
Unnamed Sea – 75
Unprintable Name – 92.5

 $\frac{Shallowest}{Amoeba-0} \frac{Caves:}{Amoeba-0} (feet)$ Batch Surface-0 Tom's-1

Most Entrances per Linear Foot: Limestone: Unnamed (Sisk) – 2/42 Insanity Culvert – 7/300 Unnamed (Shas) – 2/25 Angel Wing – 2/50 Consolation – 2/68

Lava:

Freudian Complex – 84/17000+

Bobcat – 16/4852 Unprintable Name – 3/92

News Flash !!!

Mt Shasta Collapses from Weight of SnowIt Was Hollow all the Time! Lemurian Spotted in Santa Barbara Sea Cave; Connection suspected with Shasta area caves!!!

February 30, 1990 Mt Shasta collapsed from the weight of snow, and this was an exceptionally dry year! With only 2 feet of snow, the rock structure was weakened from the lack of ice in the matrix forming the main components of the mountain. The Lemurians were there all the time, and when they noticed the rock walls begin to creak they took their silver bells and cavern constructing tools to dig their way to Santa Barbara. No more will their space craft be seen taking off and landing on the mountain.

In an interview with a Lemurian girl it was learned that tunnels were bored with a tool that vitrified the rock, creating a glassy, structurally sound coating. This relieved their engineers of placing support in the tunnels. The tunnel system extends to the Andes and links up with the Inca/Maya tunnel. Several are reported to branch off in the LA area.

Hodag Lair Found in Recently Discovered Cave!!!

Cavers were nearly asphyxiated when they came across a huge nest in a crawlway cave on the slopes of Mt Shasta. The nest let out the most incredible stench so that many were faint and felt lucky that they were using electric lights instead of carbide. It smelled volatile.

An incredibly shy animal, rarer even than Bigfoot, that inhabits the steep slopes of the mountain, he is uniquely adapted to the terrain, having one leg longer than the other so that he can more easily traverse the hillside. No one knows if this is a group of left-facing or right-facing hodags. The right-facing variety is more rare than the left-facing.

Nothing much is known about the hodag. The USQH is hoping to record the comings and goings of the animal on infrared sensors it has set in the vicinity of the cave. The sensors are good for 6 months and will be retrieved to see if a pattern of activity develops.

Comfort Ratio of Caves by Prof. Trog D. Lyte, PhD, CPA, MBA, LVN, NSS, CFR

$$ComfortRatio = \left(\frac{V}{\%}\right) \left(\frac{\# x F x W x E x A x H x T}{M x P}\right)$$

where V=volume; %=length; #=anxiety factor; F=floor; W=wall color; E=entrances; M=masochism factor; A=wind velocity; H=water hazards; T=trip type; P=party size

Key to variable values

W walls	A wind	H water	F floor	T trip type	M masochism
white 4	no breeze .9	lake 5	sand/dirt 5	science/photo 5	swim/dive .7
grey 3	slight air .7	stream 4	smooth rock 4	educational 4	climb .5
brown 2	strong air .5	drips 3	sm breakdown 3	survey 3	rough crawl .4
black 1	gale force .3	humid 2	lg breakdown 2	exploration 2	smooth crawl .2
		dusty 3	rough rock 1	tourist 1	walk .1

anxiety - .9 no anxiety, to .1 lots of anxiety; - .1 for each cause. The anxiety factor (loose ceiling boulders, flood chance, animals, [eg. snakes, panthers, wolverines, etc.], moonshiners & pot growers, tight crawls, exposed climbs, swims, rope work, water content can be looked at as a negative factor), and would be expressed as decimals. Masochism factor can negate anxiety and water factors.

As an example use Insanity Culvert Cave with a tourist party of 4. The anxiety factor is 0.8; the water factor is 3; wall color is 4(white); floor is 4 (smooth); masochism factor is low, 2; so the mathematical phrase would read: $CR = (1956.2 / 300.6)(.8 \times 4 \times 4 \times 7 \times .9 \times .3 \times 1) / (2 \times 4)$, or 19.68. A figure indicating some comfort. Of course the length/volume ratio will affect the outcome greatly, as will the other variable values.

Now, can a cave be too comfortable? It is doubtful that caves will ever be counted as truly comfortable anywhere outside of Coober Peedy Australia.

The SAG RAG c/o Jim and Liz Wolff P.O. Box 865 McCloud, CA 96057

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