

sag rag

42:5 Sept-Oct 2023



INSIDE: Basin Blues, Marbles Part 2, Old Caves New Maps Part 2, and Daggers Cave.

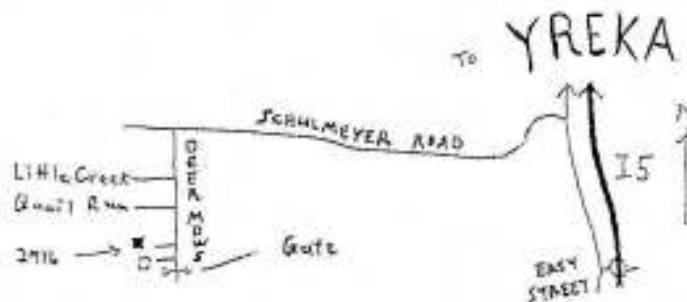
The SAG RAG is published by the Shasta Area Grotto of the National Speleological Society. Grotto meetings are held at various sites or homes on the fourth Saturday of most months at 7:30 p.m. Meeting locations are announced in the SAG RAG, subject to changes by email. Membership dues are \$5 per year, due at the first of the year, and include SAG RAG subscription. Send dues to treasurer Melanie Jackson at 708 Yama St., Yreka CA 96097. Original material submitted for the SAG RAG, unless otherwise noted, is copyright to the SAG RAG. Within the caving community, such may be copied with credit given to the author and the SAG RAG. For use outside the cave community, please seek the permission of the author or editor first. Send material for publication, always welcomed for consideration, to Bighorn Broeckel, 2916 Deer Meadow Road, Yreka, CA 96097 or <caverbill@live.com>. Also check on the Shasta Area Grotto website.

Address Change: Beginning Nov 1, 2023 please send material for publication to Dave Smith, 321 Mesa Verde Ct., Chico, CA 95973 or <theotherdavesmith@gmail.com>. Bill has been SAG RAG editor since issue 12(5) in 1993. He and Judy will be moving to Seattle at the end of the year to be closer to family. It's been 30 years (!) Bill, we will miss you!

CAVE CALENDAR 2023

Dec 2 Grotto meeting at Broeckels, Yreka 7:30 pm. Holiday cookies for sample/exchange.

Map to the Meeting



SAG RAG SUMMARY By Bill Broeckel

Here are Part 2 installments as promised, and thanks again to Liz Wolff and Mark Fritzke for these contributions. These reports really help us keep pace with the progress in local discovery, exploration, and description of the Northern California cave resource. Broeckel's late entries of Daggers Cave and a visit to John Day (photoessay) fill in the edges for this SAG RAG. Thanks also to the Union Internationale de Speleologie (UIS) 2021, for the excellent and focused explanatory description of Piping Caves, printed here as promoting to the UIS and for educational purposes. Daggers Cave is a delayed entry as it took us 15 years to decide if it was one cave or two caves. Conclusion? Well let's say it is one cave with a low spot that could reasonably be managed by a small determined caver willing to move a few rocks, thus altering the original condition to gain a passage already known and mapped. In further support for this "one cave" position? The connection was made by the tape measure.

BB

John Day Fossil Beds National Monument

Bill and Judy Broeckel

JANUARY 2020 Covid was just getting started, and we traveled to Baker City for a funeral. We stopped at John Day National Monument for short day hikes both coming and going from Baker City, and enjoyed the trails in and around Blue Basin. Back in the old days, John Day (1771-1819) and his companion Ramsay Crooks got lost from the Astor overland party. Waylaid by robbers, they lost everything including clothing near what would later be called the John Day River, where it flows into the Columbia. Both men were saved by the Robert Stuart party coming down the Columbia River. The John Day River would become known as the river with the highest sediment density in Oregon.

The John Day Fossil Beds were named for proximity to the John Day River, and became famous for an exceedingly high volume of fossil materials being present. The Congregational Minister and Paleontologist Thomas Condon (1822-1907) introduced the area to science in the 1860s, including a series of prehistoric horses. John C. Merriam (1869-1945) started a systematic data base collection in 1899 for U.C. Berkeley. A sequence was developed known as the Age of Mammals covering some 44 million years with different groups of fossil species connected with a diversity of ecosystems. The sequence goes as follows from most recent to oldest:

AGE OF MAMMALS (info from park brochure)

Rattlesnake Assemblage	7 million years
Mascall Assemblage	15 million years
Picture Gorge Basalt	16 million years
Haystack Valley Assemblage	20 million years
Kimberly Assemblage	24 million years
Turtle Cove Assemblage	29 million years
Bridge Creek Flora	33 million years
Hancock Mammal Quarry	40 million years
Clarno Nut Beds	44 million years

Illustrative dioramas and murals for the various assemblages can be viewed at the Thomas Condon Paleontology Center at the Sheep Rock Unit. Other units of the National Monument are the Painted Hills Unit and the Clarno Unit. Easy hiking trails are available at all the units. Otherwise, the general area consists of active ranchlands. The John Day Fossil Beds National Monument was so designated in 1975.

continued



Judy ready to hike the Island in Time Trail up along the running stream in Blue Basin (1-25-20).



Judy by some volcanic rocks on the Blue Basin Overlook Trail (1-27-20).

continued

So the Broeckels settled on hiking in the Blue Basin, one day up the canyon on the Island in Time Trail, and the other day on the longer Blue Basin Overlook Trail, which goes all the way around the rim of the steeply eroded valley of highly scenic blue sedimentary rock. Of course, fossil collecting and off-trail hiking were not allowed. If you are a fossil, location is everything, and taken out of context you become a nobody. We were lucky to have good January hiking conditions for both of our hiking days, albeit a bit on the cool side.

BB&JB

Judy along very scenic Blue Basin Overlook Trail (1-27-20).



Blue Basin from the Overlook Trail (1-27-20).

continued



Suffosion or piping caves

Suffosion or piping caves form by the downward movement of sediment through a more dense or well-cemented section of the same material. Typically, these form in weakly cemented sandstones and siltstones, especially along steep-walled valleys where water enters a fracture above or near a valley. The water first loosens the materials in the fracture, then washes it down and out of the base of the valley wall. While these caves usually have a relatively substantial vertical section, in some circumstances they can be nearly horizontal. Like glacier caves, suffosion caves may exist only a few years. Understanding suffosion and tectonic caves is vital to accurately predicting areas of stable and unstable ground in many regions.

(UIS)



Piping cave features obvious from a Blue Basin Overlook (1-27-20).

Marbles Trip Report Part 2 - July 2023 By Mark Fritzke

Marbles Trip Report July 21-24, 2023

Success! Caleb Crubaugh, Niles Lathrop and I connected Wasp Cave to Rainy Cave! If we ignore 70-ft errors in the survey loops, Wasp is 265-ft above Bigfoot Cave, and would add that depth to the system if we can make several connections to link Rainy to Bigfoot.

I met Caleb, a young caver from Kentucky and Texas, and invited him and Niles Lathrop to the Marbles to work on digs in Sisyphus and Wasp Cave. We hiked into Sisyphus camp Friday eve. On Saturday, Niles, Caleb and I hauled out 40 buckets of sediment flushed into the Sisyphus dig every Spring when the cave floods. At the end of the cave, thudding impact of a nearby waterfall vibrates walls; it feels like being inside a timpani drum! The end of the dig is flooded this early in the season, so hopefully we can make progress toward the waterfall passage this Fall.

In 2019, I named a clogged sink "Pit of De-Niles", after Niles attempted to get past several large boulders to drop a short pit, but every boulder he moved blocked his access and made it worse. This trip, he finally created a gap he could climb down into a short canyon and dig with airflow, just above Sisyphus camp. We packed up and moved to Marble Valley camp, and staging our approach helped me haul a 50-lb. load into Marble Valley. I am mostly recovered from last year's GBS paralysis, but my strength/endurance still has a way to go.

On Sunday, July 23, we brought survey and digging gear to Wasp Cave, renamed from Wasp Pit after we dug a crawlway in July (i.e. when a pit has more horizontal than vertical, it becomes a cave). In 2017 I began looking high on the karst for a new entrance as high on the mountain as possible. In 1978, I explored Snowcone Pit 35-ft down to a snow plug, but in 2017 we resurveyed 247-ft of cave to a clogged chute. Similarly, I dropped a cave very high on the karst with a snow plug that looked promising if the snow were gone. Over the years, giant snow plugs blocking caves on the karst have melted, and a photo by Tom Kline in 2013 showed the pit I explored 35 years earlier. Rob Lewis and I found and surveyed Silver Snag (217.7-ft) Think Thin (18.2-ft) Tombstone (41.6-ft) Lewisia Loop (yet to be plotted) and Crack-of-Boom (yet to be plotted), before we invited Ethan Donahue to join us in 2018. Ethan found the entrance in Tom's photo, where a side slot dropped into cave with airflow, and we named it Double Arch Cave (1837.4-ft). Then Rob and I found an entrance even higher, guarded by a large Wasp Pit.

The entrance slot drops 35-ft to a blind pocket, but a tiny window 4-ft off the floor opens to a pit! We returned and used every foot of a 200-ft rope to access the bottom, where 3 horizontal crawls end at digs. Neil Marchington and Edd Keudell surveyed the pit in 2019. This July, I returned with Niles and he quickly hand-dug a significant extension in a horizontal crawl, which appeared to go upstream toward the cliff on the west side of Marble Mountain. This was our main lead, as the passage appeared to be above and north of underlying Rainy Cave! However, Caleb began digging a lead heading northwest (away from Rainy) and going up a nearly vertical chute clogged with loose rock. As debris rained down around him, he joked about getting buried, but the digging was easy and the boulders small so he kept going. After an hour, Niles and I were surveying the upstream lead, but we returned to check on Caleb and make sure he was OK. He opened up the slot just enough to squirm upward, and Niles had a hard time following with his broad shoulders. 30-ft up the crumbling slot he intersected horizontal passage, and Niles confirmed: Rainy!! Wow, instead of finding Rainy by dropping to the south, we climbed into Rainy following a lead to the north! I struggled to exhale and squeeze up the dig slot, and we shot both ways in the Rainy passage to create a link. Comparing both line plots, we are fairly sure we linked to a lead with airflow shown in the Autocad map, about 20 stations from the cliff entrance of Rainy. After our connection success, we surveyed the upstream crawl in Wasp, which trends southwest, away from Rainy Cave. After a few more digs (the last one was too tight for me) they surveyed to the current end, a flat horizontal inverted-T passage about

continued

200-ft upstream. Wasp Cave now has 525-ft of passage, and we have added almost 3,000-ft of new cave survey to the upper karst since 2017!

My plan now is to return to Sunbeam Cave, where Rich Sundquist and I penetrated 7-digs to the current terminus in 1994, and connect Sunbeam to Double Arch. I also want to organize 2 teams to look for a connection between Rainy and Double Arch; hopefully this Fall! Then we can work on probing all the possible leads between Sunbeam and Bigfoot! If successful, this would add 265-ft of depth and Bigfoot could be 1470-ft deep!

Who wants to help? This is a life-goal for me, to link caves above Bigfoot into the system, so I expect everyone to be respectful of my efforts and nobody will try to scoop the connections, OK? I am grateful for the support of Steve and everybody in the project, and I am thrilled!

MF

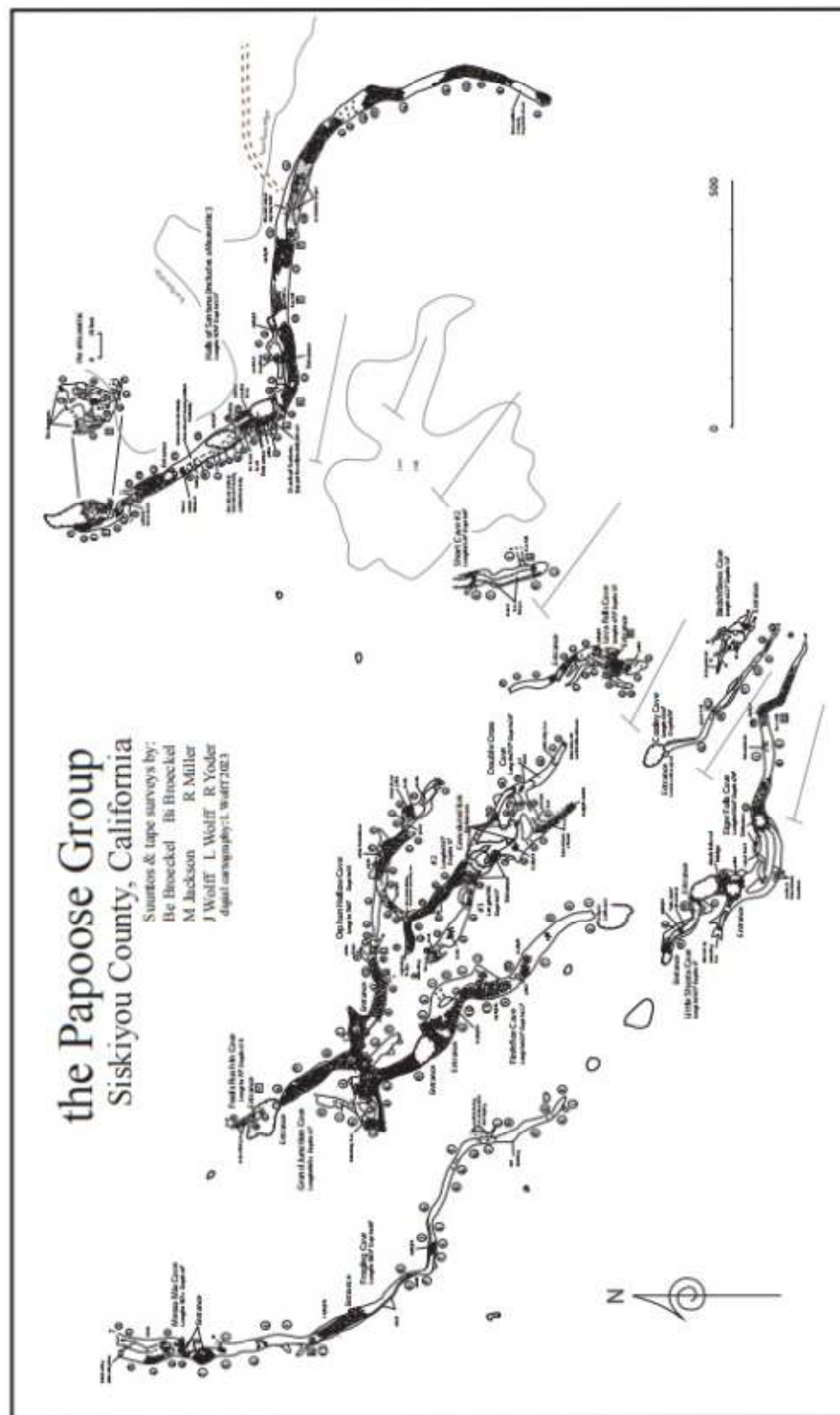
New Maps for Old Caves, Part 2 by Liz Wolff

At Dave Smith's prompting, the second group of caves that have never been published in the RAG is the Papoose group consisting of 15 caves that total 7,383 feet (1.398 miles) in length. This group is contained inside an area of 2700 feet by 1600 feet (1/2 mile by 1/3 mile). The caves range in elevation from the aMazeattic at 5317 feet to Birds'n'Bees at 5231 feet. This map was done on a google earth image, putting the caves in their proper locations and relationships to each other.

This group of caves was discovered and solo visited by Russ Yoder in 2000. They were surveyed from July of 2001 to June 2003. Dave Smith really wanted the names explained so here goes: Halls & Crawls of Santana are named for an adventurous niece of Ray Miller even though Russ wanted to call the cave Red Carpet for the red cinder carpet in part of the cave; Grand Junction describes the size and shape of passages in the cave; Orphan Hollow is a cave that seems to be alone in the outfield; Birds'n'Bees is named for the wild life inhabiting the dripping water in the entrance area; Cooley, a cool place on a hot day; Double Cross for the confusing maze of passages; Frogleg for the many frogs in the cave; Little Shasta for a formation on a high ledge; Messa Mia for the crawling griminess of the cave; Short 2 because it is the second Short Cave in the county (there are three); Lava Falls has an entrance on a steep slope; Fire & Ice, again named for the temperature contrast between outside & inside the cave; Eiger Falls was named for the movie "the Eiger Sanction" which Russ had just seen; Convolutions 1 & 2 for the convoluted sinks that contain them and seeming not to fit in with any of the rest of the caves; Fools Rush In was named for the difficulty of exiting the cave, gravity helps you get into the overhung skylight, but works against you to exit the cave, we all needed help & a rope to get out.

Many of the relationships of caves to each other had bugged me for some years, but I had done nothing about it. Putting the map onto a satellite image resolved some of my difficulties with the overall map. But the Convolution/Double Cross caves still bugged me. So, in a trip to confirm the locations of the Convolution entrances in July 2023, Jim Wolff, Steve Hobson, Dave Smith and I hiked out into the flow. We gps'd, photographed, sketched the sinks and went into Convolution 1 to confirm it was that cave. They found that the cave had apparently flooded this last spring as there were mud and water pools and mud on the roots near the back of the cave. But the resulting sketch resolved just which sink the Convolution caves exited. It introduced another close-encounter-without-connection between Convolution 2 and the side passage of Orphan Hollow. Well, here is the Papoose Group cave map as it stands today.

LW



Map: Papoose Group
(For large PDF map see Sag Rag 42(5) b)

DAGGERS CAVE

By Bill Broeckel

Here is another Siskiyou County lava tube that I don't think has been published before. It is located near a master tube, and is a small surface tube formed in the overflow from the main conduit during a lava flood surge. Occasionally, these flood events escape the main trench, and get sustained and organized enough to form little tubes of their own.

Daggers was surveyed about 15 years ago. It sports two entrances. The survey was able to pass through a low spot in the passage, a low spot partially blocked with rocks. Yet the entire depicted cave was accessed by using one of the entrances or the other. The dig looked feasible but was deemed unnecessary. Fifteen years later, I haven't changed my mind. This is another one of those times when I invoke an ethical rationale for being a lazy caver.

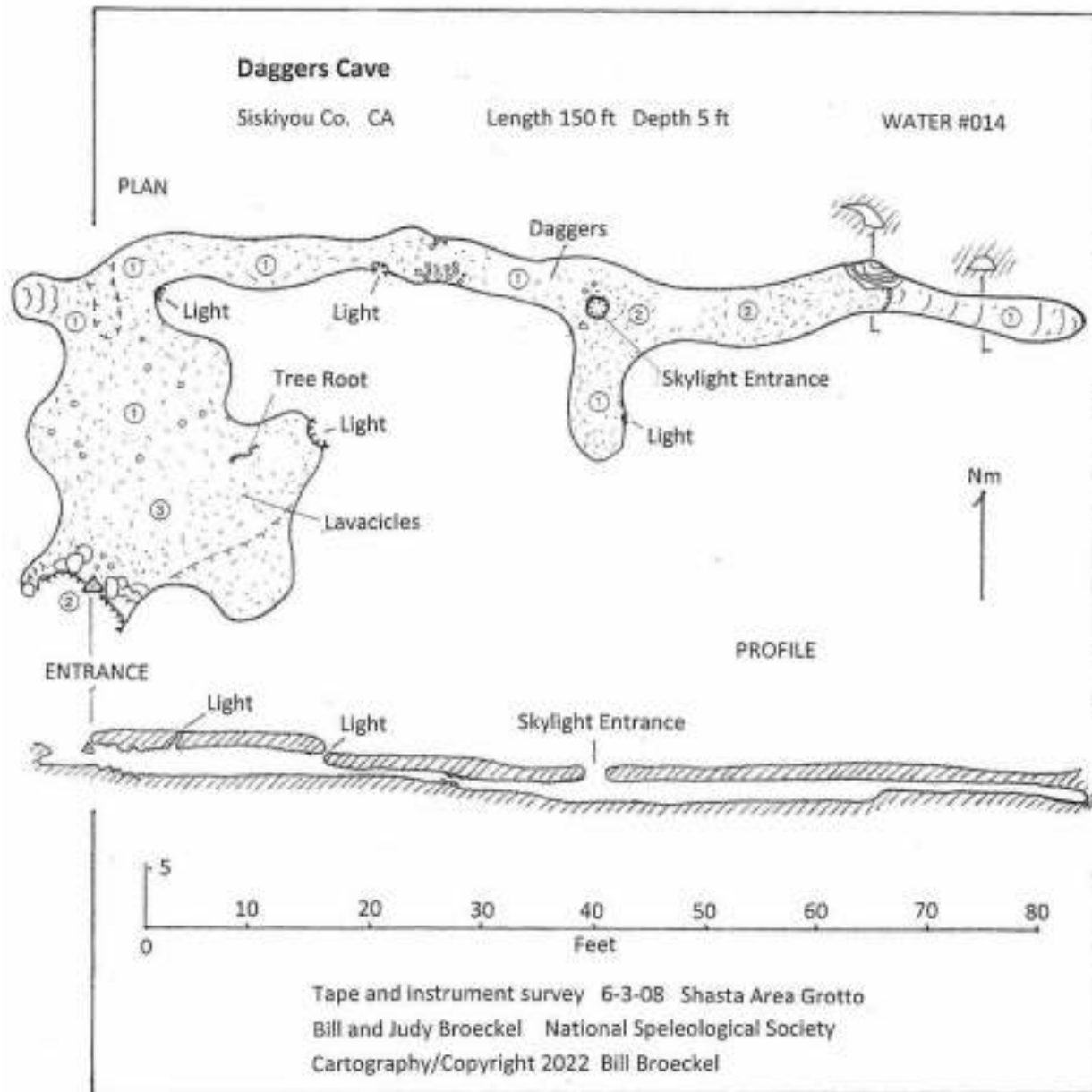
If someone else goes there some day and charges through, I wish them good health and happiness, as I can also understand the joy of connection and persistence, entrance to entrance. A bit of care would be helpful, as some of the lavacicles take on the aspect of daggers in this cave.

The entrance areas are just high enough to allow the cave a friendly feel. There is the blocked crawlway, and the end is interesting to reach. First there is a low ledge to float over, often a clue that the tube will end soon. Sure enough, the cave dips down a tad, and there it is, a perfect definitive lava seal. Altogether, I would recommend knee and elbow pads for a comfortable go. Note that Judy would not go in this cave, though she willingly served as spotter, look-out, cave guard, and general support person on the surface.

This was a lovely day in June, and we mostly were ridgewalking. Daggers Cave on survey represents my need to bring home something tangible, besides checking random entrances and scooping dangerous doomsday passages that lead nowhere. Quick surveys of small caves is the inevitable result of this strategy. But then also once in awhile something bigger shows up.

Daggers is some 150 feet long, never mind the "partially blocked crawlway" about midway through. It was called Shirt Ripping Cave for a time, but later we settled on the more descriptive Daggers Cave.

BB



Map: Daggers Cave

February 25, 2023 Shasta Area Grotto Meeting

Meeting Called to Order at 7:30 pm

Previous Meeting Updates:

1. December 2022 Meeting Minutes Approved, email version below and also published in the Nov-Dec Sag Rag 2022.
2. January Meeting: No meeting was held; planned activity was canceled due to weather.

Attendees:

Steve Hobson	Mike Spiess	Dave Mundt
Logon Hellein	Dave Smith	Melanie Jackson
Bill Broeckel	Judy Broeckel	Jim Wolff
Liz Wolff		

Treasurer Update:

DUES ARE DUE!

Amount	Description
35.00	Collected for dues
541.94	Checking Acct.
116.00	Petty Cash
692.94	Total

Websites:

1. Internal error on NSS website (caves.org) was fixed, SAG link (<https://caves.org/grotto/shasta-area-grotto/>) can now be accessed. NOTE: the page that is accessed is a splash page, or intro page, that leads to the SAG website itself via a button. Thanks Mike for fixing this!
2. Business cards: will be updated with contact information to be handed out at Lake Shasta Caverns, or given out at any location with SAG for individuals with interest in local (i.e. SAG) caving.
3. We have two Facebook pages.:
 1. The link on the caves.org website leads to a SAG group that is public, i.e. it can be found but members can only be added by invitation. The description is: **Shasta Area Grotto, NSS – SAG**
 2. The second Facebook page is **Shasta Area Grotto – SAG**. It has not been updated since August 2022. It is likely that it was replaced by the first (i.e. above) page and can be inactivated, but Steve will contact C.J. to confirm.
4. A member can have 5 pictures uploaded can send them to Mike Spiess at mspiess@caver.com. Mike can also check the pictures to ensure any location information is removed. We should all make sure we do this as a practice.

Elections:

Officers remain the same, exception is that Dave replaced Dave (□). Dave Mundt replaced Dave Smith as Secretary. Dave Smith received thanks and appreciation for his faithfulness and diligence in his service.

1. Steve Hobson – Chairman
2. Jim Wolff – Vice Chair
3. Melanie Jackson – Treasurer
4. Dave Mundt – Secretary

continued

Correspondence:

1. SAG had pledged to donating \$100.00 to WCC (Western Cave Conservancy) yearly, with a 3-year commitment for a total of \$300.00. 2023 is believed to be the fulfillment of the pledge. Mike will research.

APC Gate Repair Plan (from Brad Rust):

1. NSS Cave Gate Specialist Mark Jones will be at APC Monday 3/27 to go with Brad to Turntable Bay to inventory material/tools needed for the project (i.e. rebuilding the gate).
2. On Tuesday a Fire Crew will be engaged to help transport material/tools to the cave.
3. Wednesday/Thursday the work will be accomplished.
4. Friday a Fire Crew will be re-engaged to transport remaining materials, and tools back down to Gilman Road.

Meeting Schedule:

Date	Location	Activity
3/25	Wolff's	Pluto's Cave Cleanup
4/29	Hobson's	Rope Training
5/20	Bertrand's	Lava Beds Prep
6/9-11	Cave Rescue Training	Lava Beds
6/18	Weekend Campout	Hat Creek Caving and Meeting
7/29	TBD	TBD
8/26	Wolff's	TBD
9/23	TBD	TBD
10/21	Stufflebeam's	TBD

Trip Reports:

1. Dave Mundt and Joel went to Deanna Lynn. Steve provided context that Deanna Lynn was the wife, and Jacob David (namesake of Jacob David Cave) was the son of Jim Dancy, who discovered the caves. It would be a courtesy to provide the cave maps to him.
2. Steve Hobson, Mike Spiess, Bill Broeckel, Melanie Jackson, Jim Wolff, Liz Wolff, Dallas Carlon and Dave Mundt went to Triangle Cave (named by Bill). Bill had discovered the cave ~33 years ago, and not been back since!

MEETING ADJOURNED: 9:17 PM

Dave Mundt, Secretary

DM

March 25, 2023 Shasta Area Grotto Meeting

Meeting Called to Order at 7:30 pm

Previous Meeting Updates:

February 2023 Meeting Minutes Approved.

Attendees:

Dave Smith	Jim Wolff	Liz Wolff
Bill Broeckel	Judy Broeckel	Tessa Richards
Katrina Smith	Logan Hellein	Kit McKinley
C.J. McKinley	Melanie Jackson	Dave Mundt
Becca Rogers		

Treasurer Update:

Amount	Description
541.94	Checking Acct.
116.00	Petty Cash
-100.00	Donation to Western Cave Conservancy
557.94	TOTAL

Communications:

1. Listserv – Melanie will contact Doug for any updating needed.
2. Correspondence – Received Thank You note from WCC for the donation.
3. Business cards: Rather than printing new cards, stickers will be made with new contact information for web – sag.caves.org, and Facebook – Shasta Area Grotto, NSS - SAG

APC Gate Repair Plan Updates:

1. Brad Rust had injured his ankle, James Newell and Steve Hobson are APC Project Managers.
2. Project changes:
 - a. James goes up on 27th
 - b. The frame will be removed and taken to Turntable Bay to be rebuilt there, instead of onsite at APC.
 - c. Added to the scope will be fixing the Airlock Gate at the same time.

Calendar:

1. Some updates have been made. Steve is not available on the 29th, it was agreed to move the meeting to the 22nd for the Barnum Cave survey class led by Liz and having the meeting at Melanie's.
2. Marbles: looking at going in on the Wednesday before Labor Day weekend. Steve has had some difficulty getting ahold of the packer. He may have conflicts with his annual elk hunting.

continued

3. Some updates have been made. Steve is not available on the 29th, it was agreed to move the meeting to the 22nd for the Barnum Cave survey class led by Liz and having the meeting at Melanie's.
4. Marbles: looking at going in on the Wednesday before Labor Day weekend. Steve has had some difficulty getting ahold of the packer. He may have conflicts with his annual elk hunting.
5. For the October meeting, we talked about camping at the McCloud Bridge campground the week of the 22nd and having the meeting on the 28th..
6. Liz – Lava Beds Rescue Training –
 1. Will be a basic cave rescue for them (i.e. not medical training)
 2. Research Center will not be available to us.
 3. Entrance and camping fees waived.
 4. There will be a Sunday practicum in the cave.
 5. Siskiyou SAR is not interested in going to the Lava Beds. They may pull out, but Lava Beds will proceed without them.
 6. All and any input from SAG helps! Everyone has a role they can play.

NSS Convention 2025

Communication and expectations for the role SAG will play in the 2025 convention was not done properly. Contact was made outside of SAG, and SAG was assumed to participate in activities that the time and manpower did not permit. Discussion occurred on two major themes, our role in the convention and communication.

1. For SAG, we will gladly help with hosting cave trips and receiving freight. Other support is not assumed unless requested through official channels and approved by SAG.
2. For NSS communication for the 2025 Convention, we will look to Katrina Smith for official convention communication via the Western Region NSS.

Meeting Schedule:

Date	Location	Activity
3/25	Wolff's	Pluto's Cave Cleanup
4/29	Hobson's	Rope Training
5/20	Bertrand's	Lava Beds Prep
6/9-11	Cave Rescue Training	Lava Beds
6/18	Weekend Camp out	Hat Creek Caving and Meeting
7/29	TBD	TBD
8/26	Wolff's	TBD
9/23	TBD	TBD
10/21	Stufflebeam's	TBD

Trip Reports:

3. Bill Broeckel – Triangle Cave maps are complete.
4. Steve and James went ridge walking up past Bolliboka.
5. Kit, C.J, Tessa visited about 27 caves in the Mother Lode area!
6. Tessa reported on today's SAG trip – Cleanup at Pluto's Cave, Barnum, Windy, Devil's Kitchen and Sand Cave. Approximately 20 lbs of trash was collected!

MEETING ADJOURNED: 9:30 PM

Dave Mundt, Secretary

DM



Daggers Cave main entrance on survey day (6-3-08).

SAG RAG
2916 Deer Mdws Rd
Yreka CA 96097

STAMP

TABLE OF CONTENTS

TO:

P 2	Summary – B. Broeckel
P 3	John Day – Broeckels
P 7	Marbles 2023 – Mark Fritzke
P 8	Papoose Caves – Liz Wolff
P 10	Daggers Cave – B. Broeckel
P 12	February meeting minutes – D. Mundt
P 14	March meeting minutes – D. Mundt