## **Peppersauce Cave Graffiti Removal and Restoration**

August 10-12, 2018 Restoration Trip 6 Ray Keeler, NSS 23245

#### **Summary**:

Almost all of the efforts for the three days were in the Rabbit Hole Maze in the back of the cave. It was a very successful weekend. We are on track for completing the project on the September 21-23, 2018 weekend. There has been no new graffiti with the exception of a Sharpie several of the on arrows. These wiped off easily and WD-40 was reapplied. A total of 29 participants helped over the weekend; 10 on Friday, 22 on Saturday, 20 on Sunday. It is estimated that another 300 graffiti tags were removed, bringing the running total to approximately 1300 removed from the cave to date. Included were tags from 1976 and 1979. The volunteers were an even mix from the Central Arizona Grotto and the southern Arizona grottos. We also had two volunteers from the Coronado Outdoors webpage. Sandblasting was not used on this trip. The weight of the equipment for the expected gains was too high. We used wire brushes, electric and battery powered drills and grinders, and bio-degradable solvents. We purchased another \$96 in hand wire brushes and drill grinder brushes which augmented the USFS equipment purchased for the project. The PBS team was in the cave both Friday and Saturday. We worked closely with producer Tony Paniagua and his cameramen Nate Huffman to try and paint the story. We only had seven on Friday so the PBS team was enlisted to help. With a full complement of cavers on Sunday, and not having to pull heavy sandblasting hose out of the cave the teardown went quickly (2 hours). We did not take many before/after pictures. Everyone stayed focused on removing graffiti.

### Weekend Goals:

Remove as much graffiti as possible in the Rabbit Hole Maze. Support the PBS film crew. Brief Coronado NF Law Enforcement on status/management. All goals were completed.

## **Project Items addressed:**

- There has been an existing Peppersauce Cave Facebook page. Ray Keeler has been added as moderator to the site. Once time becomes available the web page can be modified to be more user friendly. The hope is that this will be an additional mechanism for monitoring activity and vandalism.
- Another \$96.51 was spent on additional wire brushes and drill/grinder bits besides the equipment received from Coronado NF. The abrasion equipment takes its toll.
- Several of the green "→" arrows were written on with a Sharpie but that is the only damage found. (There are now 58 arrows and "OUT →" signs in the cave)
- There was no new damage to the Forest Road caution signs.
- A meeting was held on July 17<sup>th</sup> with the new District Ranger C.J. Woddard and Sarah Corning to provide background and status to the project.
- A VS Report was submitted for the April 22md to July 31<sup>st</sup> period. **Since August 1<sup>st</sup> an additional \$21,210.67 of volunteer value was added to the project** with the total estimated **volunteer value through August 20, 2018 at \$98,320.34**. We are using the \$0.55/mile for mileage calculations. If you would prefer we can calculate volunteer value using \$0.18/mile. Please let us know.
- Mark Sanborn (Coronado NF Law Enforcement) came Sunday and was given tour to the Big Room and Main Lake, and was briefed. We discussed possible surveillance possibilities.
- The major accomplishments for the weekend were:
  - 1. Adequate staffing was achieved on all three days.
  - 2. On Friday electricity and phone lines were placed from the surface to the Book Room.
  - 3. We removed around 300ish tags during the weekend. The total count removed in the cave is above 1300 tags at this point. The front part of cave is essentially free of graffiti from the Entrance through the Rabbit Hole and much of the Rabbit Hole Maze. We will need to do some touch up removals. August progress is colored in

Aug 2018 and Needs more work . Figure 1 shows the current cleaning status.

4. A 1976 and 1979 tags were removed, which is well beyond the 2001-2003 farthest effort.

- 5. The Book Room in the Rabbit Hole Maze has been a destination for spelunkers for decades. Thus, the Book Room has been extensively tagged over the years. The Book Room and surrounding passages were cleaned of graffiti for the first time in decades. Really! However, it is anticipated that if tagging reoccurs, the Book Room will be an initial point. Reflective arrows in the Book Room lead out all the way to the Entrance.
- 6. Support the PBS (Tucson affiliate) film crew. On Friday they were filming some cleaning and doing interviews all the way back into the Rabbit Hole Maze. On Saturday we concentrated on interviews with the women that are team leads, and the camp supporting efforts. All-in-all it was a solid effort.
- Approximately 1.5 gallons of bio-degradable solvent were used.
- We will be buying more brushes for the next effort.
- No injuries were reported.

The laminated signs reserving the Peppersauce Group Campground were a nice touch, thanks. Stapling them to the road caution sign was a good idea.

Progress: Figure 1 shows the areas cleaned in from Trip 5.

Jun 2018

Apr 2018

Feb 2018

Nov 2017

Aug 2018

Graffiti has been removed from these passages. More work is needed in the passages.

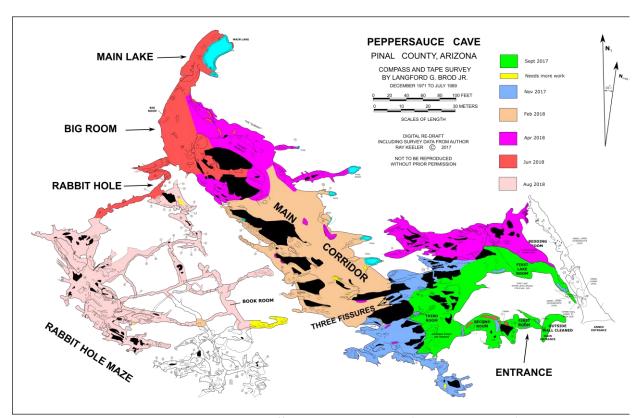


Figure 1: Peppersauce graffiti removal progress. (map by R. Keeler)

#### **Problems:**

There were very few problems. There was adequate help on all three days.

However, in the Book Room the glow in the dark graffiti "stars" on the ceiling still show when the lights are off. They have been subdued with brushing and solvent applications but still show. Suggestions welcome.

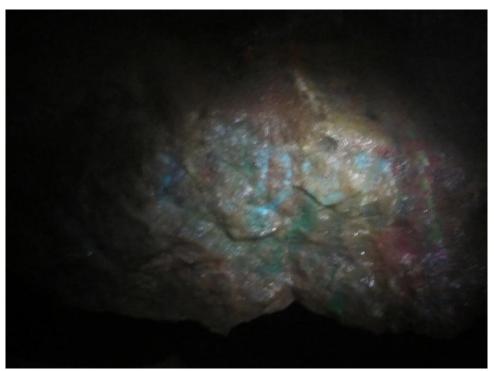
#### **Lessons Learned**

- The Lessons Learned from June were used and progress went more quickly.
- Getting volunteer commitments for specific days starting well in advance worked well again.
- The paint/rust removing grinding wheels work well but are expensive and erode quickly.
- The equipment improvements continue to work well and will be repeated. The personnel were more efficient in the field (and happier) and more was completed per person.
- Teaming wire brushing cavers with solvent teams works well. The same is true with teaming wire brush cavers with electric drill and grinder cavers. This has impact on the cave. Brushing first, then solvent then or electric drills is quicker and has less impact on the cave.
- Grinders and electric drill brushes worked well on the harder tags.
- Doing personalized safety briefings **and** teaming experienced new volunteers is substantially more efficient than one large briefing.
- The telephone to the surface continued to help substantially with coordination of equipment and personnel. A party line was set up between the surface, the Big Room and the Book Room. Caller rang once for Surface, twice for Big Room, three times for Book Room

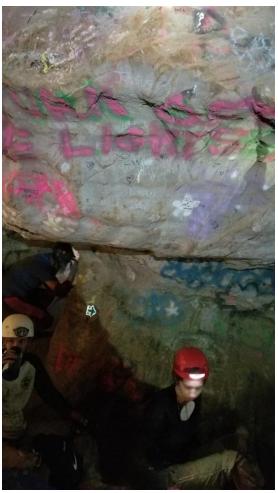
#### Schedule:

September 22-24, 2018: Continue removing tags in the Rabbit Hole Maze. Complete the project.





This is a photo from the June report and marked as "in progress". In June, two people spent two hours on this wall. In August two more people spent two more hours with solvents uncovering the three layers below what can be seen in this picture (Lori Nichols, Brenda Haynes). It is now finally clean.



Book Room – Before – Lusk



Lower wall restored on left – Lusk



Book Room Area – Before restoration - Lusk



This wall in the Book Room is just about done - Lusk



Book Room wall and ceiling with Arrow pointing out after restoration - Lusk

# From the Book Room



One wall of Book Room – Before – Lusk



After. Different angle. Work continued after this picture – Lusk



Book Room – Jason Naparalla - in progress



Nicole Davis - Interview with NPR -Tucson



Alex Nachman starting passage beyond Book Room.

Shown in Yellow on map, Figure 1. ... now in progress ...