

Peppersauce Cave Graffiti Removal and Restoration

November 17-18, 2017

Restoration Trip 2

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Summary:

- A total of 13 participants helped over the weekend. The volunteers were primarily from the Central Arizona Grotto, southern Arizona cavers, and ASU Outdoor club participants. Scheduling the weekend before the Thanksgiving holiday did not work well. At least 10 other ASU students had tests and class work and could not attend. There were three other large caving trips in Arizona. A Venture Crew of 8-10 Scouts and adults had car trouble on the way and had to abort. Even so, we made very respectable progress.
- An additional \$8807.27 of volunteer value was added to the project with the total estimated volunteer value through November 30, 2017 at \$27,983.41.
- The major accomplishments for the weekend were:
 1. The kiosk panel covers were replaced with clear composite and the kiosk looks almost new. Special thanks go to Jeff Stevens (Southern Arizona Grotto) for this work.
 2. The first group of 14 highly reflective “**OUT**” signs were placed from the Entrance to the Big Room. The signs use highly reflective, white, highway grade sign material with large green letters. Special thanks go to Jeff Stevens.
 3. Another 100+ tags (estimate) were removed. Essentially all of the tags have been removed from the Entrance through to the bottom of the Three Fissures.
- As in September some paints come off better with sandblasting. Some paints come off better with solvents. A wheel grinder has been donated to the project for some very hard tags.
- The 2nd Room was completed, requiring a sandblast and solvent team.
- Eight to ten new tags (since October 1st) were removed. Most of these were arrows.
- Almost three buckets of glass beads were used with more than two buckets of spent media being recovered from the cave.
- Approximately 1.5 gallons of bio-degradable solvent were used.

Progress: Figure 1 shows the areas cleaned in from Trip 2. Areas in **blue** were cleaned in November. Green areas were cleaned in September. Graffiti has been removed from these passages. The First, Second and Third Rooms as well as the First Lake Room had additional tags. These new tags were all removed using sand blasting and the bio-degradable solvent.

The equipment performed very well for the entire weekend. Improvements that were identified from the first trip had been addressed.

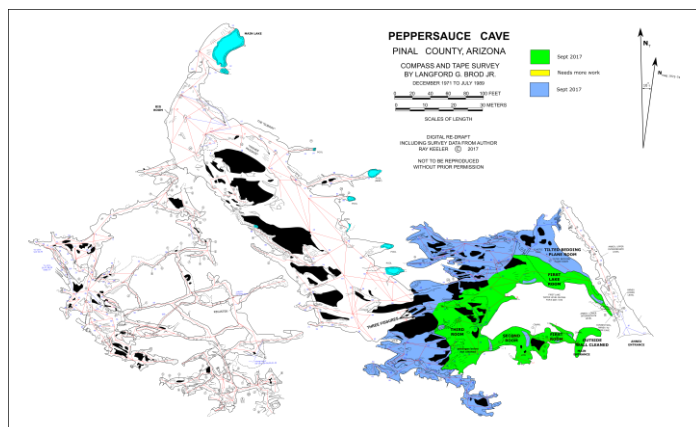


Figure 1: Peppersauce graffiti removal progress. Blue areas had tags removed in November. Green areas cleaned from the September trip. (map by R. Keeler)

On Friday (Nov. 17) the kiosk panel covers were replaced. **Figure 2** shows the before and after signs. The clear covers



Signs for the Peppersauce Group Campground use were placed (thanks to Joe Winfield) and participants arrived.

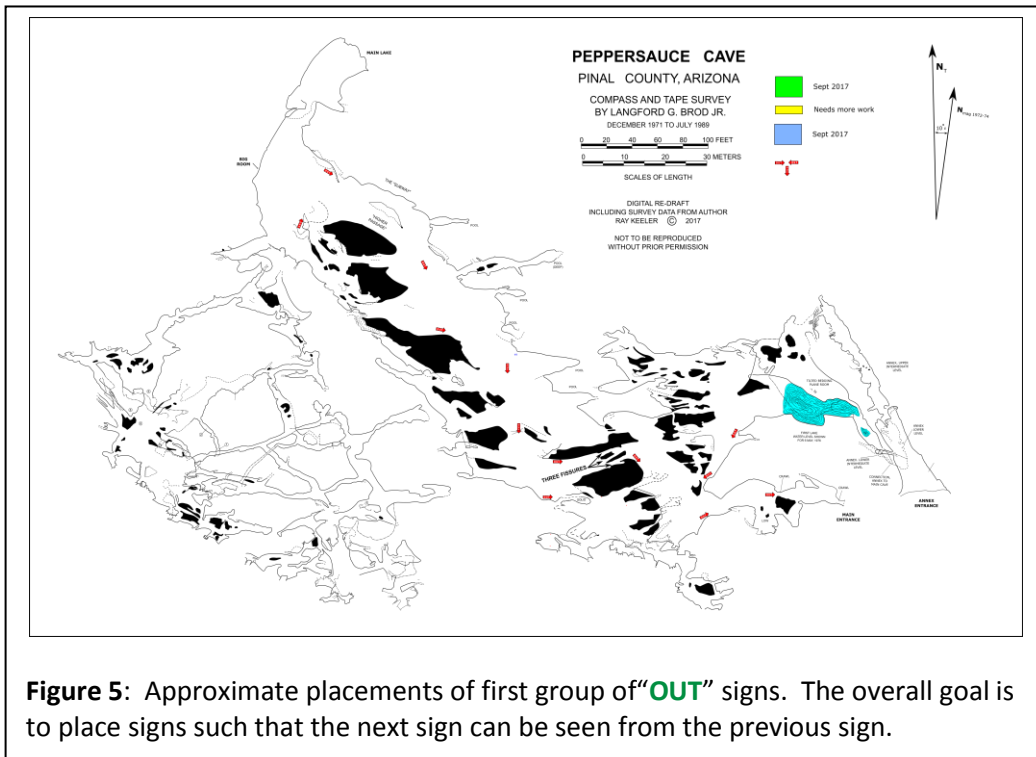
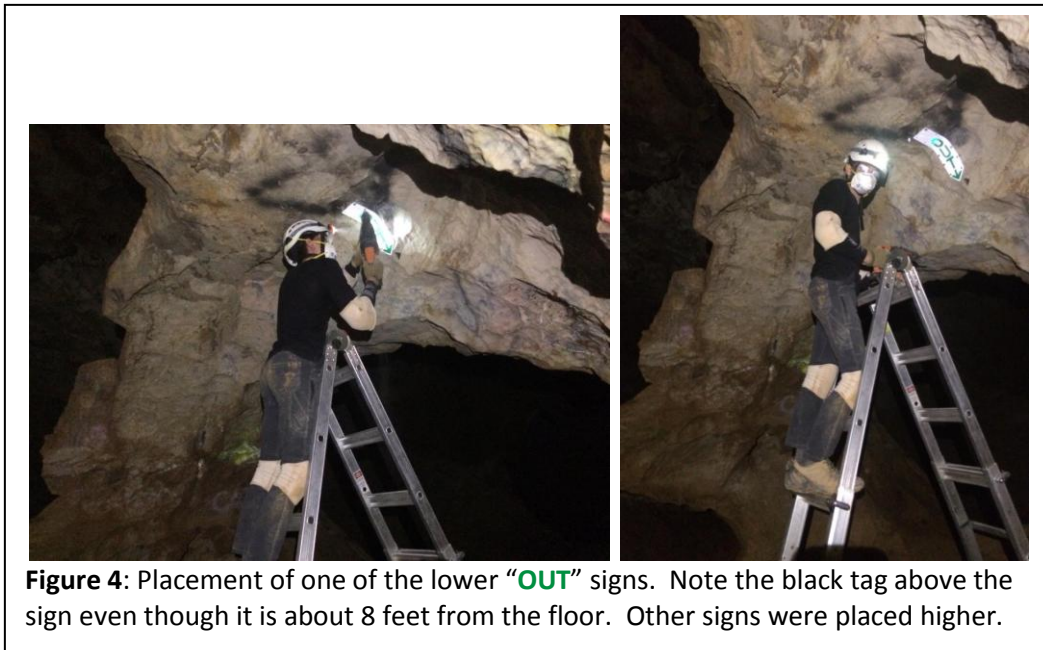
Saturday's safety briefing was at 8 am, teams assigned and work began. Assignments included:

- Surface: communications (telephone into cave), gas for compressor, sign-up sheets, equipment prep. for transport to cave, community relations (telling visitors what was being done)
- Two sand blast teams: with necessary tarps, safety and sand blasting equipment were used.
- Three solvent Teams: with necessary tarps, safety equipment, brushes and towels. Cave water was used to dilute worked areas, towed off and removed.
- One team of two used an extension ladder to place 14 reflective "OUT" signs from the Entrance to the Big Room. The signs were placed high on walls and ceilings where possible for maximum visibility and out of reach from visitors.

Similar OUT signs were placed were placed during the 2001-2003 graffiti removal effort and substantially reduced additional tagging. In the 2009 timeframe the signs were removed and the out arrows and tagging dramatically increased. **Figure 3** is one of the "OUT" signs. **Figure 4** shows an example of the sign placements. **Figure 5** shows the signs approximate placements in the cave. The reflective signs will be placed along the primary movement route and out of reach wherever possible. More signs will be needed. A smaller "arrow only" format will be used where passage sizes are smaller or a specific location needs to be identified. Two examples of this are: In Room 2 an arrow needs to specifically show the crawlway to go through to exit the cave and, on the far side of the Rabbit Hole showing the crawlway to exit the back maze of the cave. We will try and place signs and arrows such that the next sign can be seen from the previous sign, using very little light. This should cut down on the perceived need for people to continue spray painting out arrows.



Work was continued until 5 pm and then shut down. All equipment was removed from the cave and packed for transport.



Lessons Learned:

- Spray paint arrows and an “Exit” in Room 2 were tagged since October 1st. More reflective arrows are needed.
- Recent tags are easier to remove.

- The equipment improvements worked well and will be repeated. The personnel were more efficient in the field (and happier) and more was completed per person.

February 9-11, 2018 Plans: The February 9th to 11th work trip will use a Friday noon to Sunday 2 pm schedule. Besides continuing the graffiti removal with sand blasting and solvent, additional reflective "OUT" signs will be placed high in main passageways to reduce additional tagging. The primary effort will be from the bottom of the Three Fissures to the Big Room/Lake Room areas.

February 2018 will be the best trip to bring in television and news media. This will, by far, help with the decrease of additional graffiti in Peppersauce Cave. The kiosk is repaired, the reflective signs are in, and having media get the word out will create the most benefit.

On November 30, 2017 Central Arizona Grotto and Coronado National Forest signed a three year challenge cost share agreement with this project being included as a contributing factor.