

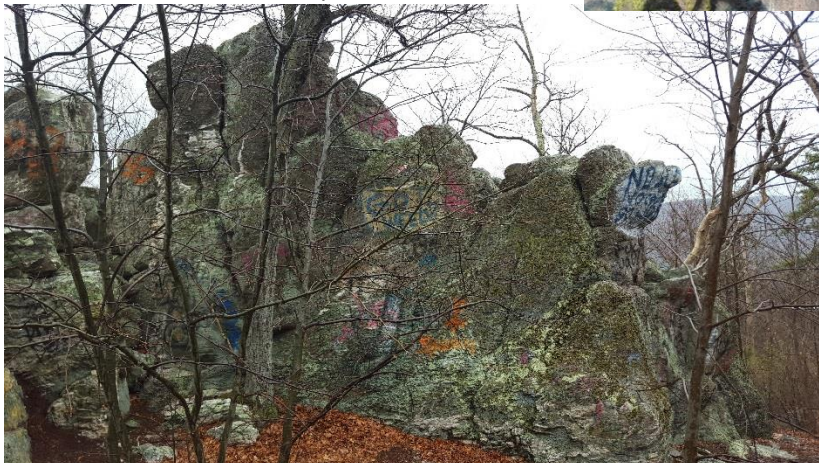


Pennsylvania Parks and Forests Foundation Hammonds Rocks 2016 Graffiti Cleanup Case Study

Pennsylvania Parks and Forests Foundation (PPFF) began in 1999 as a statewide nonprofit organization to provide a voice for the Commonwealth's 121 state parks and 2.2 million acres of forest land. Its mission is to inspire stewardship of Pennsylvania's state parks and forests through public engagement in volunteerism, education and recreation. Staffed by one fulltime and four part time people, the reach of PPFF is broadened through the contribution of volunteers and it being the parent organization for friends groups representing 42 of the parks and forests. Each of the friends groups is instrumental in raising funds and providing volunteer support for a specific park or forest.

In 2015, PPFF recognized that there was a need to provide volunteer support in parks and forests that might not have an organized group of volunteers to assist them. Many of our forests are plagued with vandalism such as illegal dumping and graffiti, but state budgets limit the staffing available to monitor these beautiful, but often isolated areas. PPFF proposed creating the *Stewards of Penn's Woods* program. The program links volunteers with specific needs across the state. Projects might include clean-up and beautification at trail heads, boat launches, rock outcroppings, vistas and other key sites in our parks and forests, removing invasive plants, or just being an extra set of eyes on a location.

The Stewards of Penn's Woods invites anyone—from individuals to businesses—to get involved in being a steward of our natural resources. In exchange for a short term commitment to steward a particular location,



volunteers receive a t-shirt, gloves, bags and other necessary items to steward a special area and then are listed on the website as the Steward of a particular location. Intrinsically, Stewards also receive a sense of accomplishment and ownership of the site.



To kick off the program. PPF decided to host a stewardship day at one of the locations highlighted in the program. They chose to focus on Hammonds Rocks, located within an hour drive from their office. A large rock outcropping along a dirt road in the Michaux Forest in south central Pennsylvania, Hammonds Rocks are about 500 million years old, but in less than fifty years the entire outcropping had been coated in paint several times over. Most of the “artwork” was no more than phone numbers, names, and obscenities.

The project seemed enormous, with about 6500 square feet of surface covered in paint. Being both easily accessed via Ridge Road yet remote from populations of people, Hammonds Rocks had become a favorite hangout. Strewn with broken glass and other debris, the rock no longer appeared safe for families or other visitors. Despite these factors, several things made it an attractive first start for PPF’s Stewards of Penn’s Woods. It was conveniently located near the PPF headquarters in Camp Hill, the staff of the Forestry District were enthusiastic about the project, there was a local Friends Group at Pine Grove Furnace who expressed support, along with the Michaux Forest Cabin Owners Association who could assist in recruiting volunteers, a local journalist expressed interest in promoting the project, and the Geology Department at Shippensburg University desired to see the area improved for use as an outdoor classroom. (Forestry had recently begun cracking down on illegal dumping and saw the graffiti removal as a logical extension of that initiative.)

An initial meeting was called to begin the planning project in January of 2016. PPF met with representatives of Forestry, Michaux Forest Association, and the Friends of Pine Grove Furnace to begin to develop a plan of action and a timeline. Staff then reached out to Shippensburg University to invite them to become involved.

Hammonds Rocks posed numerous challenges: tall rocks, no water, no electricity, and limited access on a narrow dirt road. On top of all that, there was no funding for the project. PPF reached out to Keep Pennsylvania Beautiful (KPB) to discuss graffiti removal solutions that they found successful. KPB tapped into their statewide network to share resources with the committee. They also donated a power washer and later gave a \$1000 grant towards the project.

The first step was to determine what the options were for removing the graffiti. Most graffiti products are designed for urban areas and there was uncertainty if the products would be appropriate for a natural rock site. A student intern began researching how best to remove the graffiti. Blasting (walnut shell or baking soda) and five commercial products, were reviewed. Each had to be assessed for cost, ease of application, and environmental impacts. After research and testing at the site, the following three products were considered.



Company	Size	Pricing	Case (per gallon)	Multi case/gallon
World's Best Graffiti Remover	1 gallon	\$59	\$53.50	\$49.50
	5 gallon	\$275	\$247.50	\$235.00
Graffiti Zapper	1 Gallon	\$143.75		
	55 Gallon Drum	\$6000.00		
Elephant Snot	1 Gallon	345.00		
	55 Gallon drum	3,520.00		

Notes: Each gallon covers roughly 100-125 square feet. Prices do not include shipping.

At this point, a volunteer from the Mount Holly Springs volunteer fire company was recruited to the team, as both a source of water and an information outreach partner. Meanwhile, Shippensburg students performed an environmental assessment of the soil and wildlife to determine the impact of using chemicals on the rocks, as well interviewed chemical professors at the university. Simultaneously, PPF talked to non-game biologist with the state on the potential impact of removers and activities relating to graffiti removers on the reptiles that utilize the rocks-predominately snakes and lizards.

Shippensburg students and professors also went about determining the total amount of graffiti to assist PPF in developing a budget for the project. Using drones and pole mounted cameras, they assessed that there was 6500 square feet of graffiti! They also developed a map to use in planning and guiding volunteers.

Still looking for solutions to all of the challenges, the committee was excited to learn that the) South Central Pennsylvania Climbers (SCPC) was interested in assisting. The SCPC recognized that areas were being closed to climbing due to illegal and damaging activities—they wanted to put their efforts into restoring areas and protecting their recreational activity. They have proven to be an invaluable partner.

Based on cost and ease of application, the commercial graffiti removers were most appropriate for the site. In February, a timeline was laid out and PPF began to look for funding to cover the costs of the graffiti removal products as well as paint brushes, sprayers, safety glasses, gloves, and scrub brushes. Because of the amount of debris at the site (as well as at other nearby sites), two days were scheduled for the project, one for litter pickup and one for graffiti removal. April 16 was set as the date to clean up the litter and May 21 for the graffiti removal.

PPFF and Michaux State Forest clearly understood that it would require a combination of improved enforcement, education, and changing the image of Hammonds Rocks to discourage future graffiti. Involving local organizations like the volunteer firefighters and the cabin owners was a first step in increasing community awareness. PPF began investigating how to educate and engage the public, while Michaux Forest staff, with the assistance of the Michaux Forest Association, purchased a camera for the site. Forestry also began to look at signage and rerouting a trail head as a means to educate and encourage a broader use of Hammonds Rocks



In early April, several staff from both Forestry and PPF tested the products at Hammonds Rocks to prepare for training volunteers. The Elephant Snot needs to be applied with paint brushes and allowed to sit for at least 45 minutes before removing with water. The World's Best Graffiti Remover has several product options all of which require multiple applications with a sprayer, before removing with water. Graffiti Off worked in a similar manner, but the fumes caused the testers to choke, so that and the cost of the product, eliminated it from consideration.

A combination of two methods was chosen. The more expensive Elephant Snot could only be used where the volunteers could reach with brushes and the World's Best Graffiti Remover was key for higher areas. In both cases, trial and error taught us that it was important to scrub the treated areas with wet scrub brushes prior to hosing the rocks with water. The plan was to use a combination of both products at an initial cost of \$3,046.

A local building supply store (Home Depot), a hardware store (Ritters True Value Hardware), and Sherwin Williams donated many of the supplies needed to get started-gloves, scrub brushes, and paint brushes. A private donor provided several boxes of safety glasses. The Cumberland Valley Visitors Bureau donated funds to provide meals for the volunteers. PPF staff began looking for private donations to purchase the graffiti cleaning agents. PPF established the *Wall of Honor* on their website to pay tribute to those donors who supported the cleanup efforts. A local family donated \$1000 and expressed interest in seeing how things progressed.

On April 16, 38 volunteers, including students from Shippensburg University, met with Forestry and PPF staff at Hammonds Rocks to begin to pick up litter, broken glass, and trash hauling from three sites: Buzzard's Rocks, Hammonds Rocks and Spruce Run Overlook. These three isolated vistas located along an approximately 9-mile section of dirt road are hard hit by illegal activity. The workday was kept to a half day to eliminate the need for port-a-johns. Several volunteers used their own trucks to haul trash to the designated spot along a state highway. The Department of Transportation through the *Keep America Beautiful Pennsylvania affiliate, Keep Pennsylvania Beautiful* provided trash bags and gloves. *Waste Management* picked up the trash early the next week.

At the end of the day, *80 Bags of trash, 7 boxes of glass and nails, 18 tires, a swing set, metal, a crock pot, and cinderblocks* were hauled away. Additionally, three illegal fire rings were dismantled. While broken glass still remains, the first cleaning day made a huge difference in the appearance of the rocks. (Note: We had tried to use a commercial vacuum to remove the glass through an in-kind donation of H & K Group, but the number of small rocks comingled with the glass proved to make it difficult to use.)





Meanwhile, a small campaign organized by protestors to stop the graffiti removal was launched on several social media sites. Their concern was that the graffiti was an important form of personal expression, religious expression, and that graffiti was a method to commemorate deceased friends. PPFF and Forestry hosted a public session at Shippensburg to deflect those concerns – but only four people attended, and they were in favor of removal. On the day before the cleanup there were threats of a protest, but heavy rains prevented both the proposed protest and the graffiti removal. The cleaning agents used to soften the paint are both heat and water sensitive, so prudence suggested a need to postpone the stewardship day.

On June 18, 2016, 25 volunteers joined staff from both PPFF and Forestry to begin the graffiti cleanup. Rangers were available in case protestors showed up. The Yellow Breeches Ambulance Company was available. The Mount Holly Springs Fire Company #1 and Fire Company #36 joined with Forestry to provide hose and water support through the massive rock outcropping. When faced with cleaning the enormous painted

rocks, several volunteers expressed reservations on their ability to have much of an impact on the graffiti. But, after only five hours, the improvements were dramatic. A follow-up date to finish the work was planned.

Unfortunately, more graffiti showed up within a few weeks of the first cleanup. A small crew of five volunteers and three staff were immediately mobilized to remove the new graffiti and send the signal that the Stewards were watching.

On July 21, with the temperature expected to reach the high nineties, a team of 19 volunteers and staff again took on the graffiti. Many of the volunteers were repeats from the initial stewardship day, some bearing products to assist us with the work at hand, including gloves and metal scrub brushes donated by Airgas, Chambersburg Branch. The firefighters and ambulance crew were there as well. Lunch was provided by Wegmans. Although discouraged by the new graffiti, the volunteers were encouraged to learn that Forestry had already apprehended several people responsible for the recent spray painting. After five hours working in sweltering heat, the staff proposed one final work day for the end of August.



In August, more than 20 volunteers, including students from Shippensburg University and a video crew showed up to the worksite. The video crew was capturing the efforts of volunteers in state parks and forests and the work they are doing to make a difference. The volunteers continued to make headway and were pleased to see that very limited amounts of graffiti had reappeared. A few isolated patches of graffiti remained, so another workday was scheduled. In the meantime, several people volunteered to become stewards of the site—to monitor its use and to remove graffiti as it appears. Lunch was provided by Weis Markets.



Students from Yellow Breeches Education Center joined PPF for a stewardship day, and were treated with a visit from ABC news crews. To view the footage from the day, visit:

<http://abc27.com/2016/10/20/students-other-volunteers-clean-graffiti-off-midstate-rock-formation/>



Forestry and PPF clearly understand that the cleanup was just a first step. Maintenance requires a combination of improved enforcement, education, and changing the image of Hammonds Rocks to discourage future graffiti. Involving local organizations like the volunteer firefighters and the cabin owners was important for increasing community awareness. To further bring attention to the issue,

PPFF received a grant from the Alexander Stewart MD Foundation to host some educational events at the site and to host a video and poster contest. PPFF also received a grant from Keep Pa Beautiful to expand graffiti removal to several of the other 37 identified locations across the state to build awareness of the problem while addressing the need.



In October 2016, PPFF hosted plein air painters at Hammonds Rocks and organized a poster and video contest in local schools. Winning posters and videos are traveling the state and are used in social media to raise awareness. A geology day and a second plein air day were hosted in 2017, attracting more than 100 people throughout the course of the day. With the assistance of the Michaux Forest Association, Forestry purchased a camera for the site.

The success at Hammonds Rocks has encouraged others to take on graffiti in other locations. Forestry staff cleaned graffiti from Pole Steeple another nearby rock outcropping and PPFF organized a volunteer cleanup at Beam Rocks Overlook in the Laurel Highlands. A volunteer now regularly monitors and removes graffiti at Pole Steeple, and volunteers monitor Hammonds Rocks. Having the extra set of eyes and hands is invaluable.

Some lessons learned:

1. Taggers come in all shapes and sizes, as well as ages, with the oldest person apprehended being 41. This is important, as it influences how one might outreach to the public about the lands.
2. For some taggers, it has been a life-long, family activity. Education is key to reducing graffiti, as well as a cultural shift in the acceptance of this activity.
3. Involve the community. Several of the local firefighters shared with us that their classmates were upset that we were removing graffiti. But as we worked, the young men joined us, later telling us that it felt good to be on that side of the work. They became ambassadors for the project and returned several times to help us.
4. Involve local colleges and universities, as they can assist with expertise in a variety of disciplines.
5. Involve local businesses. Not only does this lessen the costs of the removal, it improves outreach. For example, in addition to the businesses that provided goods and gift cards, we reached out to companies near the worksite to ask them to post posters about the stewardship activities. Our research on the people who were posting to our Facebook site told us where some of them worked, so we used this information to demonstrate our commitment to cleaning up Hammonds Rocks.
6. Do follow the safety precautions on the products—cotton long pants, gloves, safety glasses. Preferable long sleeved shirt. The products will burn the skin. We kept wet wipes and plenty of water on hand.



7. Always do a safety speech. We started each workday by having volunteers and staff stand in a circle and introduce themselves. We talked about why we were doing the work (including geology lessons), and thanked them profusely. We then paired each person with a partner and assigned them a particular area and task.
8. Keep it fun! And provide refreshments.
9. Elephant snot is slippery, so make sure that you have tape or other marking material on hand to indicate areas where snot may have been applied where someone could step.
10. Engage offenders in cleanup as part of community service. If possible, work with the DA to have restitution funds come back into the project, to keep it alive.
11. Share what you are doing through as many venues as possible. Invite the media every time. This is a great story for the public.
12. Give away trinkets—we had stickers and t-shirts made. Stickers went to all volunteers, t-shirts to regular volunteers. The shirts connected them to the project.
13. Build partnerships. We could not have done this alone.
14. Don't get discouraged! It's a battle of patience and changing attitudes.
15. Communicate, communicate, communicate.
16. Work with the district attorney so that he/she understands the nature of the project and the costs involved.
17. Graffiti removal is not inexpensive. The materials are costly and it takes a good deal of manpower and water to effectively remove the tags. But in our opinion, seeing positive use of Hammonds Rocks has been worth the costs. We will continue to monitor the rocks to quickly remove new tags and maintain the area for all to enjoy.

Plans for Signage and for Trail

Restoring Hammond's Rocks

This past spring forest stewards, Pennsylvania Parks and Forest Foundation, and forestry personnel kickstarted a massive restoration effort of the Hammond's Rocks vista.

Efforts focused on cleaning the area of litter and ridding the beautiful vista of graffiti.

After 5 cleanups, Hammond's Rocks is now at a point where forest visitors can enjoy a litter free, limited graffiti experience.

The next stages of restoration work are upon us!

Over the next few year's the ecosystem around Hammond's Rocks will be restored through the following ecological work phases:

- Timber harvest (March '17...)
- Daylighting (March / April '17)
- Prescribed fire (TBD)

Who benefits?

Forest visitors

Visitors will enjoy restored vistas and improved viewsheds. Improved access, recreational opportunities and wildlife viewing will also be realized.

Forest creatures

Many species including the timber rattlesnake, five lined skink and fence lizards thrive in conditions such as pitch pine scrub oak barrens. Downed trees provide increased cover and habitat. Increased sunlight provides new basking areas.

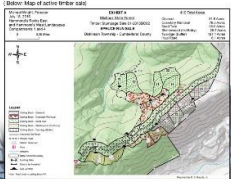
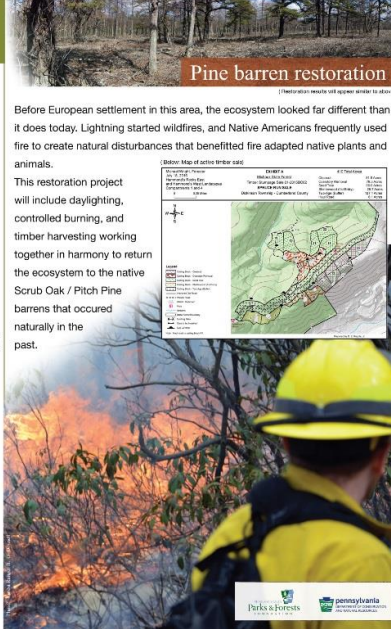
Native wild plants

The variety of fire adapted wild plant species found at Hammond's rocks call conditions following a wildfire ideal. Look for a healthy plant population following a controlled burn of the area.

Pine barren restoration

Before European settlement in this area, the ecosystem looked far different than it does today. Lightning started wildfires, and Native Americans frequently used fire to create natural disturbances that benefitted fire adapted native plants and animals.

This restoration project will include daylighting, controlled burning, and timber harvesting working together in harmony to return the ecosystem to the native Scrub Oak / Pitch Pine barrens that occurred naturally in the past.

Forestry has also begun to look at signage and rerouting a trail head as a means to educate and encourage a broader use of Hammonds Rocks. In April, a sign was erected, but immediately destroyed. The district is fabricating another sign. The sign was made on a budget knowing that it would need to be replaced.

People apprehended

Since the start of the project, multiple people have been apprehended for tagging. They range in age from 16 to 41. As soon as graffiti appears, we work to remove it, as this removes the 'prestige' from the tagger and keeps the area fresh, discouraging additional tagging.

Outreach

Simply removing graffiti does not address the problem, and PPF recognized this. Through a grant from a local foundation, several steps were put into place to raise awareness about the impact graffiti has on our natural world.

1. Regular social media posts and news articles were used to keep people apprised of the process.
2. Encouraged other social media sites and local newsletters.
3. We established a graffiti page on our website to share what we have learned with others.
4. We are planning several more plein air art days in 2017, to demonstrate proper use of paint in the natural world. Artists will also donate paintings to the program for sale to support the efforts.
5. We hosted a poster contest for middle school age students and a video contest for high school and college age students. Winners will not only be shown or displayed on our website, we will use them in social media and will show them at events and have the posters hanging in the state capitol.
6. We developed an infographic and coordinated with others the social media distribution of this graphic. It is also available for others to use.

Costs:

To date, there are over 520 volunteer hours dedicated to cleaning Hammonds Rocks. This does not include staff time involved.