

Hoyt Park is unique and wonderful because of its diversity of areas and activities; the shelters, playground, basketball court, and open space are perfect for people to get together and enjoy, yet there is so much more to Hoyt than just people-oriented space. The trails and woods make you feel as if you have left the city of Madison and are perfect for an escape from people and the city. I immediately loved Hoyt Park because of its diversity of uses and places to enjoy. Because of this mix of open, people-friendly areas and wooded ecological communities, I wanted to include and take care of both of these aspects of the park in order to maintain the balance between them, and in order for both park-users and ecological communities to benefit. My main interest being in ecology and plant communities, I had to make sure I was focusing not only on the ecology of the park, but also making the park as user-friendly as possible because after all, the park is for people to enjoy. As ranger, I feel I was able to give considerable attention to both aspects of the park, and was able to create a routine focusing on ecological health, aesthetics, and user-friendliness.

Ecological Health

The main threat to the ecological communities of Hoyt Park is of course invasive species—buckthorn, honeysuckle, garlic mustard, dames rocket, reed canary grass, Queen Anne's lace and Japanese hedge parsley, to name a few I worked on (in no particular order). Starting right away in May, my first goal was to eliminate all second year garlic mustard from the park, so from mid-May to mid-June, I spent the majority of each workday going through the entire park and systematically pulling all 2nd year garlic mustard, which took slightly longer than I had originally planned because there were some huge patches in the woods, especially the sides bordering Bluff Street and Shepard Terrace, and also parallel to Regent Street along the fence-line. I mapped out every section that I pulled, and also where there were patches of first-year garlic mustard so that I could go and spray them later, which I ended up not having time for.

By mid-June I had pulled all the second-year garlic mustard from the park, (and some on the other sides of fences bordering the park and some neighboring yards) and began pulling dames rocket, starting along Regent Street and moving north towards the fence-line that goes along the top of the bluff. I chose this area at the suggestion of Matt's report, so that my work could have the greatest possible impact, as this is the same area where Matt removed 40-50 bags of dame's rocket the previous year (as indicated by his ranger report). His work clearly had a lasting effect, as this area had a much-reduced population of dame's rocket than when Matt worked here, although certain areas were still densely populated with it. I was able to clear the same area Matt had in a few weeks. While in the woods pulling garlic mustard and dames rocket, I also pulled any baby buckthorn that I could easily pull out by hand. The other specie I gave park-wide attention to was buckthorn, but I focused only on areas where previous removal work had been done (as suggested by Matt's report), such as the area between the playground and Roy's shelter where the workday was, and also the area between Regent Street and the restrooms to the open area west of the parking lot. Matt's work was evident here; all the buckthorn I removed were relatively young, and easy to pull with the smallest weed wrench. Work should be continued in this area to maintain the health of the forest here.

Besides the park-wide removal effort on garlic mustard, dames rocket, and buckthorn, the overlook was an area deserving special attention. I wanted to continue Matt's removal work, because without a continued effort, buckthorn can easily re-invade the entire overlook. I spent many full days in June and July using the weed wrench at the overlook removing buckthorn and other woody species, and have cleared a sizeable area by the end of the summer, though the buckthorn is so dense at the overlook that even small areas took thorough work to completely clear. Once I received my pesticide certification, I could cut buckthorn and treat the stumps, which I did a lot of in August. I cleared a larger area in a shorter amount of time doing this than I was able to with the weed wrench, but I have yet to see which is ultimately more effective. I also spent time consolidating piles of buckthorn from the workday, which were piled everywhere and many piles were under oak trees, so I tried to move them into a space that has no oak trees above it so that they can be burned this winter. I agree with Matt and Russ in that it would be a good idea to plant some aggressive native grasses, which will also be good fuel to burn the brush piles in the winter. By planting grasses, we can use a selective broadleaf herbicide in the future to treat the re-sprouts of the woodies that will inevitably grow back from the seedbank and few untreated stumps (its impossible to find and spray every stump I cut). I would also suggest an early summer treatment of regrowth in order to continue progress. I did notice a few good species at the overlook, such as cup plant and wild bergamot, but there is also a large patch of first year sweet clover which it would be beneficial to weed whack early next summer.

The prairie also received special attention. I manually removed lots of buckthorn, mostly from the northwest corner near the plantings done by the boy scouts, and also from the south end of the prairie. I also removed woodies, mostly honeysuckle, from the northeast corner of the prairie. In addition to removing woodies with the weed wrench, I also girdled some black walnuts along the north side of the prairie, expanding it further towards Bluff Street, and also some from the south side of the prairie, expanding it southward too. I also girdled trees (black walnuts and a black cherry) on the west side to give some young oak trees more space. I also de-headed Queen Ann's lace to help reduce its spread, and tied and de-tasseled the reed canary grass to reduce its spread. I also dug out burdock from around the bench to give people room to sit.

User-Friendliness/ Aesthetics

As much as I like removing invasive species, this could not be my only focus, because this park is here for people. I took several approaches to make the park people friendly and safe, and keep it beautiful and enjoyable for all ages. By cleaning up trash daily from the main areas—parking lot, main shelter, playground, open area, and overlook—I hoped to inspire people to do their part to keep the park clean. (I don't know how well this worked, as there still seemed to be a fair amount of trash to clean up.) I also picked up trash along all the trails, at Roy's, along Regent St, and by fire pits and picnic tables at least once a week to keep the park generally looking clean. Keeping the park free of litter was (and will continue to be) a constant battle, but something I see as very important to maintain the look of the park. I was encouraged to hear from one city worker who parks here on lunch breaks that this is one of the cleanest parks in Madison. One thing I could suggest are small signs with messages about helping to keep the park beautiful, or about being respectful of the places you come to enjoy; just nice reminders for people to please leave what they came with.

Equally important as a clean park is a safe and easy to use park, which means keeping the trails maintained. For this I trimmed the trails as needed, which was much more often than I had

anticipated (buckthorn grows fast!), about once a week, sometimes less, sometimes more if it rained. Maintaining trails also meant keeping them even and walk-able, which meant clearing debris, and maintaining rain bars to help reduce erosion. This was quite the job, especially in June with the huge rainstorms, which meant constantly cleaning out clogged up rain bars and moving gravel from where it had washed away back onto the trails. Throughout the summer, I relocated two rain bars which were ineffective at their current placement, (one above the Cinderella staircase and one above the corner staircase), and added about 9 or 10 new rain bars in locations which I located as problem areas after rains. I also maintained existing rain bars by digging out ditches for the water to escape the path.

In addition to maintaining working rain bars, many of the paths required more gravel after the heavy rains washed much of it away. I spent most of July and early August spreading out gravel piles along different paths. All in all I went through nine piles of gravel. At an estimated 2 tons each this means I spread about 18 tons of new gravel on the paths. Among the paths that received new gravel are both paths eastward to the Hoyt School parking lot, the path leaving from the west side of the parking lot going down towards the corner staircase and up to the path along Regent, the path below the parking lot and playground which goes left towards the green fence and right towards Roy's, and the path running parallel to Regent. Some parts of the path along Regent still need to be re-graveled, including the upper part between Hoyt School and the restrooms, and parts going down to the overlook. Also, the path below the bluff along Bluff Street may need some in the future, as I did not do any of this path.

One mini-project I took on was creating a stone wall out of stones and cement to help prevent the erosion of the path by the green fence to prevent losing the fence down the bluff. The dirt around the cement block holding the fence in had almost completely eroded away, because the entire parking lot drains through the gully, across the path and down to below the bluff. Water also drains down here from the dirt path coming from the open area west of the parking lot, so erosion is high. This project occupied the entire last week of my summer, so I did not get to spray the poison ivy along the paths as I had planned, or the first year patches of garlic mustard, as I had also planned, but there is now a stone wall connecting the fence to rocks and cement down below. I can only hope that this is a lasting addition to the park and will help prevent the erosion of ground below the fence, to help keep the fence in place.

Another part of my work to maintain the beauty of the park was my work on the garden. The garden was somewhat of a project of mine, although most of my time was spent in mapping existing plants, removing non-natives, and creating a master plan, which involved going through lists of native plants to pick ones with appropriate heights and bloom times. Unfortunately, the end of the summer came so fast that I was unable to actually do much planting in the garden. I began by removing lots of small trees from the garden, as well as black raspberry bushes and other non-native forbs, including lily of the valley, campanula (creeping bellflower), Canada goldenrod, deadly nightshade, and others. Most of this time was spent on lilies of the valley, which were planted but had spread to much of the garden. I know there will be some back next year, but the majority of them have been removed. In addition to removing non-native plants, I also planted some woodland poppies in the southeast corner (nearest to the women's restroom), and have watered them every day after planting them in mid-August. I also collected and scattered seeds of bottlebrush grass in an area parallel to and behind the line of New England aster. I also collected some heads of wild bergamot and spread them in a patch near a few existing bergamot plants in the garden. I have also mapped out the existing garden plants (and Galen has a list of all existing plants), and worked on a master plan for the garden, along with

much help from Galen. I have lists of plants which can be ordered from the Flower Factory, and of plants which can be bought at farmers' market, and hope that future plantings can be done in the spring, as the middle of summer is not the best time to do planting in the garden. The best plants for the garden are savanna plants, as this is the habitat of the garden, and I look forward to seeing more work done on this garden in the future.

Community Outreach

I think that an open relationship with park users is the best way to keep everyone happy, so I always made an effort to say hi to people, and let them know I was the ranger and what I was working on. I talked to parents at the playground, and let them know if they ever saw anything on the playground that needed fixing to let me know. They were good about this, and through this communication with parents I learned of playground equipment that needed fixing, such as a red tube that had a crack down the middle, a swing that needed to be fixed, graffiti on the tic-tac-toe board, and the baby swing that needed the chain. Although I immediately notified the city of these things, and have continued to remind them, they have yet to be fixed. The red tube has been ordered and is on its way, but I do not know if the swing has been fixed or the baby swing.

Although this summer flew by, I feel it was a productive one. I was able to make progress in areas of previous invasive species removal, and to hopefully expand these previous areas. Although initially I wasn't too excited about it, re-graveling the paths was some of my favorite work because I can see my work and have a feeling of accomplishment, and in this sense this job is very fulfilling. It is nice to be able to see the results of my hard work, and some of my most rewarding days are when people thank me for my work, or tell me that they do notice the work I have been doing. I truly enjoyed this summer, and would like to thank the Friends for creating an amazing and rewarding summer job! I look forward to returning to Hoyt Park for either work or relaxation!