

Ranger Report 2011

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This being my first year as ranger I first took to tasks that many other past rangers have started. This being the manual removal of many non-native plants that are present in the park: buckthorn, garlic mustard, Japanese hedge parsley, dame's rocket, and sweet clover were my primary focus. Through the twelve plus weeks of working at the park I'm glad to say I was able to remove many and in this report I will discuss my future recommendations for following years.

Woods along Regent Street

The Hoyt Park ranger has been manually pulling invasive plants for many years. Friends of Hoyt Park have developed a master plan with a primary focus of promoting oak regeneration throughout the park. This year being no exception in May my first priority was to pull all second year garlic mustard plants in the park. I started in the southeast corner of the park, by the stone gate entrance, and headed west towards the overlook, on Regent Street. I was able to make an initial pass in just a few days. As you start head towards the overlook the wooded area starts off with a very small amount of garlic mustard and gets progressively more abundant as you head towards the overlook. The areas with the most aggressive amounts are in the control areas towards the west starting from the cable gate until you reach the overlook opening. I was able to make two passes through that area this year.

While working in the woods along Regent Street I did notice a large amount of first year garlic mustard patches. After my first two initial passes and after pulling of dame's rocket (explained later), I took a mixture of Garlon 4 and did a foliage application to areas where the first year plant was the thickest, again mostly in the woods by the cable gate. In other areas along Regent Street I simply took a gravel rake with attempt to pull the first year plant from their roots. We will have to wait and see if this was affective next spring.

Dame's rocket is found in abundance in Hoyt Park. I found this perennial plant to be growing alongside garlic mustard along Regent Street. I was able to make two passes through this area and hand pull. I did not take any herbicide to it in that I found that pulling has been able to control the spreading somewhat and the high cost of pesticides and herbicides wouldn't be cost effective.

I also manually pulled a portion of invasive from the clearing beside the gable gate. Campanula can be found towards the western end of the opening, and from past reports seems to be ever increasing. I was able to hand pull a good majority in that area. Also found that giant

ragweed is starting to establish and in efforts to limit its spread, I was able to hand pull this invasive before it went to seed. Future efforts of hand pulling will need to be done to limit the spread of campanula, giant ragweed, and dame's rocket.

After my hand pulling of herbaceous invasive plants I took on the project of clearing out the buckthorn and honeysuckle in a wooded patch by the stone gate, after the June workday had initially started the project. I was able to completely hand cut and drag out several trailer full loads. After the initial clearing I treated the stumps with a mixture of Garlon. In late August, when the temperature started to drop, to temperatures where I was able to apply herbicide, I did a foliage spray to buckthorn stumps that had re-sprouted. Heavy seed spreading should be done in order to establish woodland vegetation and slow/limit the buckthorn saplings.

Working with Si Widstrand began in August. After my clearing of the buckthorn and honeysuckle we went to work on opening up the forest canopy, in the area I cleared, to allow for more sunlight to hit the soil and promote oak growth. We successfully removed many ash, basswood, catalpa, black cherry, and mulberries and then treated the stumps with an herbicide called Pathfinder 2 (triclopyr).

We than began heading southwest along Regent Street and continued to cut and treat un-necessary tree species to again promote oak growth and open up the forest canopy. We were able to cut a large amount of trees down and did so up until we reached the bathroom building. Along the way we identified many dead standing trees, which are great for wildlife, that could pose a potential hazard and need to be cut down by the Cities' Forestry Division.

Ready Prairie

During the summer I spent most of time hand pulling and spreading out desired prairie seed throughout the prairie. During early June I was able to make my first pass pulling out dame's rocket. I than completed my second pass by early July. A large infestation is starting to establish in the southwest corner of the prairie. Also, I did my best to pull dense stand of dame's rocket that is found around the outside edge of the prairie

As noted by past rangers there is a small patch of reed canary grass and day lilies growing in the southwest corner of the prairie, along the buffer zone. In early June I was able to pull off the seed head from the reed canary grass in efforts to stress the plant. Than in late June I applied a Garlon treatment to reed canary grass and day lilies. This seemed to of done its job at first but by late August I had noticed that it started to regrow in those areas. Future effects to control the spread will need to be looked at for next summer. Since it is the friend's groups intentions to expand the prairie future girdling of large ash, walnuts, and cherry trees should be put in effect to expand the prairie and potentially build a new fire break; so that practices of controlling reed canary grass and day lilies can be done with prescribed burning.

In late July and into early August I also worked on hand pulling Queen Anne's lace, vetch, leafy spurge, giant ragweed, common ragweed, and goldenrod from the prairie. Queen Anne's lace is found throughout the prairie and is the most abundant invasive. I was able to completely pull the flower head from all second year plants, while also focusing my efforts to pull out as many first year as possible. Future efforts in hand pulling of these non-native plants should be done in order to control the spread.

In the eastern most part of the Reedy Prairie buckthorn and other shrub plants are starting to establish themselves. During the summer I was able to apply a basal bark treatment of Garlon to the stems of these non-native shrubs. The herbicide seemed to work in killing the shrubs and then in early August I was able to cut down the standing dead stems. Future controls with herbicide and then removal of the dead shrub will need to be done in future years.

Bluff Street/Quarry Face

The quarry face trail vegetation is in danger of becoming completely monoculture with garlic mustard and dame's rocket. I was successful in making two passes this summer hand pulling. However, in this area I applied no herbicide to any invasive growing along the quarry face. After discussing with past rangers their work along the quarry, I found that there has been a lot of hand pulling here with no real success. I find that this is due in large part to the seed parents that grow along the cliff face. Future discussions of what might help to kill the growth of the seed parents along the quarry face should be done before applying any chemical to this area.

Also found along the quarry face and trail is large buckthorn and honeysuckle shrubs. In efforts to try and limit the spreading of these invasive I focused my efforts on attacking the seed bearing shrubs. As a test for future management practices, I girdled three large buckthorns at the being June. This seemed to work well in killing the top growth, but in late July several trunk re-sprouts had started to grow. I then did a basal bark application to these three shrubs and it killed the re-sprouts. Future efforts with girdling and then using a basal bark application might be highly successful to stop/limit the spread of buckthorn and honeysuckle.

Overlook

There've been extensive efforts from the friend's group and past rangers to open up and establish prairie plants at the overlook with a great deal of success. My time in the overlook was very limited with all the other projects I started. The time I did spend there was done pulling campanula (creeping bellflower), Queen Anne's lace, sweet clover, goldenrod and giant ragweed.

During this time I also removed many shrubs that were growing within the many prairie plants, one noticed tree was aspens. Aspen trees do well in areas where woods have recently been clear cut, mostly due to the fact that they send up stalks from their roots. In order to control the spread I first girdled and stripped the bark from the cambium in order to stop it from sending nutrients down its phloem and into its roots. This was a success in killing the aspen saplings. I then later cut the dead stalk down with loppers.

During the next few weeks Si and I plan on cutting and treating buckthorn along the western part of the overlook in efforts to expand. In the future the friend's group should plan on purchasing and spreading desired vegetation to plant in the newly cut areas. I was able to collect and spread bottle brush seed. Suitable plant species that do well in rocky soils and open sunlight can be found online. (prairienursery.com)

No Mow Area/Eroded Valley

The no mow area has a well-established shrub layer consisting of pagoda dogwood, elm, basswood, box elder, and hackberry. The herbaceous layer has become over-whelmed with creeping Virginia, black raspberry, and poison ivy. The master plan states to limit the amount of mowing in this area in order to promote oak regeneration. Unfortunately, with limited amounts of sunlight being able to reach the soil floor no oak saplings can be found. My efforts in this area were pulling of dame's rocket, garlic mustard, Japanese hedge parsley, and black raspberry. In continuous efforts to open up the forest canopy future projects should be put in place to remove the box elder saplings, basswood, and either elms or hackberries depending on which tree species the friends group and city would like to see if oak regeneration is not achieved.

Area west of the parking lot has become eroded and channelized from the water that runs off of Regent Street and the parking lot. This year I was able to clear out a small patch of buckthorn, box elder, and honeysuckle from the parking lot to the first fire place. In efforts to not have chemical runoff and leaching I did not apply any herbicide to the cut stumps. The herbaceous layer here has a very low amount of plants present, largely due to the water runoff. In efforts to limit the amount of storm water runoff I started work on proposal and the implementation of another rain garden in this opening. I had communicated with Roger Bannerman on my thoughts and any possibilities of installing another rain garden here. If applicable another rain garden if designed correctly and with the right kinds of plants with roots suitable to grow in these conditions might be a way to direct the storm water and limit the erosion that has affect this area.

Recommendations for 2012

- Continued manual pulling of garlic mustard, dame's rocket, Japanese hedge parsley, campanula, and sweet clover.
- Spring burning along Regent Street followed up by foliage spray of re-sprouts in July.
 - With strong focus in newly cut opening west of stone gate.
- Continued efforts to open up forest canopy by removal of ash, walnut, black cherry, and catalpa trees.
- Removal of shrub layer in no mow area.
- Expansion of prairie with power equipment and girdling of large trees for wildlife.
 - Following spring prescribed burning.