

FHP Ranger Report 2012

Dustin Mireles

Basis for management goals in 2012

The following guidelines used for work tasks and goals based of proposed management goals outlined in Master Management Plant.

1. Effectively manage invasive species based on primary management areas. Where areas are accessible (prairie, regent street trail, and lower shelter trail).
2. Overall objective is to promote diversity of woodland vegetation while promoting healthy oak regeneration.
3. Improve the Aesthetic, recreational, wildlife, and educational of particular woodland type to park visitors.
4. Assign and develop new projects for future park rangers.

The above model for management goals and ranger tasks are guidelines which present a rough objective for planning and implementations of park projects for the current park ranger. In 2012, I took to following these ranger guidelines when developing my overall goal for the summer. Being that this was my second year working with the Friend's Group and alongside the City of Madison I took projects which followed up on my previous years' work as well as current upkeep with the promising projects the City and Friends group have started on within the past year. Current projects included the planting and contracted chemical application along Regent Street. Also, last fall a mowing and mulching project was started, with efforts to reduce and cut back buck thorn sprouts. With the implementation of these projects, the park has seen vast improvements and was the basis for my projects for the summer of 2012.

In the spring of 2012, we experienced abnormally high temperatures which kicked started many plant growing season; this had an adverse effect to the woodland vegetation. This gave a growing advantage to garlic mustard and dame's rocket and allowed for them to out keep for resources in the forest. While also experiencing early flowering and seed times. Coming into the season much of the park had already been cleared of garlic mustard, which was accomplished by park visitors and members of the friends group. I was then able to focus my time on hand pulling dames rocket. I'm glad

to saw I was able walk make a turn throughout the park in pulling and bagging as much dame's rocket as I could before it went to seed in early July.

Following the primary goal of pulling garlic mustard and dames rocket I was able to focus on my primary objective for the season, which was having continual follow up in the clearing at the eastern end of the part, by the stone gate. This area was cleared of buckthorn, garlic mustard, sumac, and creeping campanula last year. I provided a secondary and tertiary chemical application to all re-sprouts of buckthorn after the hired restoration crew went through in early June and then continued that all along Regent Street. Following chemical application I was able to start cutting and girdling buckthorn along Regent Street with hopes of continually fighting the spread of this ever growing shrub. My efforts did not end there in that I did multiple transplants and seed collection of bottle brush, zigzag golden rod, and tree tick foil throughout the year.

The overlook became another area of special interest for me this year. Working alongside Tim Kessenich we were able to remove a substantial amount of sweet clover. Most of my work was done through foliar and cut stump treatment with a chemical application of Pathfinder II. There I applied chemical to sumac, honeysuckle, bittersweet, and aspen. Continual upkeep to reduce the amount of shrubs creeping into in the overlook is a must as well as opening a fire break for future controlled burns to continue the environmental stress of invading plant species.

Another area of concern and primary focus is the upkeep and diversity promotion in the Ready Prairie. During the summer I spent a large chunk of my time hand pulling and spreading desired prairie seed throughout the prairie. In early May I made it primary focus to hand pull dame's rocket along the outer edge and in the southern corner of the prairie. I was able to complete my first pass in early June and continued with a second pass in the middle of July, pulling any regrowth or missed plants. Later in the summer I was able to make a complete pass pulling Queen's Anne lace and sweet clover as well as provide a chemical application to any and all buckthorn saplings growing in the southern corner of the prairie. Future controls with herbicide and then removal of the dead shrub will need to be done in future years.

Future Goals and Recommendations

A number of future goals and recommendations are presented following the previous work projects to coincide with overall objectives and management goals of Hoyt Park.

1. Undesirable woodland vegetation will continued to be controlled by the most practical and environmentally benign method as possible. By controlled burning throughout the area along Regent Street following a two year regime and continual chemical use as a cut stump and foliar application method. Larger undesirable trees and shrubs should be cut or girdled to promote a more xeric woodland type.
2. Promoting desirable herbaceous understory should be a continuing effort with hopes of promoting diversity along with desired woodland conditions. Continuous planting, transplanting and seed collecting. In interior portions of the woods dominated by unwanted species, group removal principles will be followed by hand pulling followed by plantings.
3. All trails should be monitored and shaped as necessary to prevent erosion. Continual upkeep of water bars and other water deterrent methods should be evaluated and implemented. However, vandalism and trespassing make efforts difficult to accomplish, other resources to reduce these impacts should be addressed.

In some areas, mostly oak regeneration and opening areas, decline of oak prevalence caused by soil deterioration and compaction will soon have to be addressed. Some suggested and corrective actions proposed are:

1. Improve nutrient content by adding mulch (bark, wood chips) in areas with low nutrient content and runoff.
2. Soil surface nutrient testing followed by surface application of elemental sulfur for a period of 3 years in areas that range outside the desired soil pH for oak regeneration (typically below 6.5 and as low as 5.0).
3. Woodland management with increasing xeric conditions after the removal of hackberries, maple, and elms. Continuous herbaceous and grass management in no-mow and low-mow areas.