

Glenway Woods Volunteer Restoration & Management Proposal

Site Description

Glenway Woods is a 10-acre oak woods located between Glenway Golf Course and the Southwest Bike Path. It appears to be of higher quality than many Madison oak woods, with an excellent stand of large canopy oaks and some indications of diverse wildflower populations. This higher quality is probably due to farm grazing being discontinued prior to the 1927 opening of Glenway Golf Course. While invasive honeysuckle and buckthorn are present, they are not as large or as dominant as in most Madison woodlots. There is also a large population of sub canopy trees, 4-12" in diameter, which are beginning to grow into the crowns of the mature oaks, threatening their good health. These sub canopy trees and invasive shrubs also cast too much shade for the wildflowers to survive and expand.

Goals of Volunteer Plan

The overall goal of this proposal is to maintain the woods in the present and future as a closed canopy woodland, not a savanna. To do this, we would establish an ongoing, long-term volunteer commitment to maintaining and improving the natural qualities of the woods.

Specific goals:

- Preserve the large canopy oaks
- Promote the best of the sub-canopy trees to become the next generation canopy
- Remove some undesirable sub canopy trees and invasive shrubs to allow more sunlight to reach the ground layer
- Identify areas of the best wildflower populations and make those high priority for maintenance.
- Prevent further spread of invasive species while removing existing invasives.

Implementation Strategy and Timing

Ecologically, a case could be made to support a large-scale clearing of the sub canopy and shrub layers of the woods, as the City has done at Turville Point. That would protect the large oaks and let more light reach the forest floor to revive the remnant wildflower populations that are likely present. However, while effective, we think that such a dramatic approach would not be acceptable to most neighborhoods or park users. We propose a different approach that would retain the existing character of the woods.

Thinning of the sub canopy and shrub layers would be done gradually with some selective removals every year. Removals would be prioritized to meet the goals of the plan (remove the invasives and less desirable trees). Simultaneously, there would be a program of controlling invasives such as garlic mustard in the ground layer, so that native plants can compete. Similar projects have been done in other Madison Parks over a long period of years.

Specifically, we propose the following.

Main Woods Interior –

2013

- Cut the subcanopy trees that were broken or leaned horizontal in the heavy snow of December 2012, and do routine trail clearing.
- Cut (and treat stumps with herbicide) approximately 25% of the invasive shrubs in the understory, with priority on seed-bearing honeysuckle and buckthorn, and invasives crowding native trees and shrubs.
- Identify areas of the best patches of native wildflowers, where control of invasives can be focused.
- Identify and remove scattered small patches of garlic mustard and similar invasives before they can expand.
- Evaluate progress with City staff in the fall. Develop a five-year plan, with public input as necessary, to guide subcanopy tree removals in winter 2013-14 and in future years.

2014

- Cut (and treat stumps with herbicide) approximately the worst 25% of sub canopy trees encroaching into the canopy.
- Cut and treat approximately 25% of the invasive shrubs in the understory, with priority on seed-bearing buckthorn and invasives crowding native trees and shrubs.
- Identify areas of the best patches of native wildflowers, where control of invasives can be focused.
- Identify and remove scattered small patches of garlic mustard and similar invasives before they can expand.
- Evaluate progress and future plans with City staff at the end of the year.

2015

- Repeat 2014 work with an additional 25% of sub canopy and invasive removals.
- Garlic mustard, small buckthorn and other invasives would be manually removed from identified high quality wildflower patches.
- Evaluate progress and plans with City staff at end of year.

2016 and continuing

- Continue the program from 2014, including annual evaluation with City staff and adjustment of the amount of removals needed.

Canopy Openings - Several of the large canopy trees have died in the last two decades, creating both threats and opportunities. (The newly dead trees and the older openings are visible on Google Earth summer air photos). When a canopy opening is created, it allows much more sunlight to reach the forest floor. This stimulates the vegetation, predominantly invasive shrubs like honeysuckle and buckthorn, and garlic mustard where it is present, posing a significant threat of more extensive invasion. Left unmanaged, invasives will dominate and these openings will be of poor quality.

But some positive things also happen in canopy openings. More light helps to regenerate oaks, hickories, other native trees and shrubs. Dormant wildflowers may also be revived by the additional light. With so many invasives present, these newly opened areas must be managed to remove the undesirable plants and promote the best natives. The management plan would identify these areas in the first year, and give them priority. This intensive management of scattered small areas would not be obtrusive. If they have good wildflower populations, they might actually become the best (most diverse) areas of the woods.

Eastern and Southern Woods Edge. These areas are more severely degraded due to construction and stormwater impacts. They should be kept as shady as possible to prevent invasives, especially Japanese Knotweed. On the East edge, a strategy should be developed to use shading and herbicide to prevent the knotweed from spreading further up the drainageway from the SW Path.

Northwest Woods Edge. This area abuts the mowed golf course. It too would be managed like the central woods. However, further evaluation may lead to different management strategies. For example, if solid patches of buckthorn are present on this edge, they might be controlled by brush mowing and treating every 1-3 years. Or perhaps the natural area could be expanded/replanted into the currently mowed oak grove where it is out of play for golf.

Procedures for Volunteer Activities:

Each volunteer crew/event will be managed by an on-site supervisor. Individual support, e.g. pulling garlic mustard and trash pickup, will occur on an ongoing basis.

Volunteers may use a variety of hand tools to assist in brush cutting, pruning, removal of invasive species, or other maintenance work. All pruning of desirable trees will be done in accordance with City ordinances and standards.

Where the goal is to kill and prevent re-sprouting of the removed trees, the cut stump or girdled trunk will be treated with an appropriate herbicide (supplied by Parks Division for Parks work). Treatments will be performed by a state-certified volunteer applicator, following label instructions and all city policies for pesticide application (posting signs and keeping records of use).

Volunteers approved to use a chain saw will provide their own equipment and safety gear (hard hat, eye and ear protection, chaps, steel-toed shoes, gloves) and will keep all equipment well maintained and in safe working order. Chain saw volunteers are expected to be experienced, must be approved by the City, and must sign a release form. They will cut down or girdle trees and shrubs that are competing with more desirable species. A chain saw may also be used to clear trails and prune trees. All chain saw work is ground work, unless the City provides special, prior approval for a highly trained climbing arborist.

Cut trees and brush will be removed from trails, sidewalks, mowed areas or highly visible areas. Volunteers may pile brush for pickup by City crews, or may drag it to designated areas, as per agreement with City staff for each project area.

All volunteers must sign a standard volunteer release form and volunteer hours will be reported to the City. Volunteers will work safely and use good judgment about the limits of their equipment and abilities.