

General Parks Land Management Goals City of Madison Parks

The City of Madison's residents and civic leaders have a long history of enjoying and being responsible stewards of their parks and open green spaces dating back well over 100 years to the Madison Park and Pleasure Drive Association. The purpose of this plan is to continue to honor this commitment and tradition by laying a framework by which Madison Parks will manage lands designated as general parks land as well as land yet to be developed. To accomplish the land management maintenance goals for the areas outlined in this plan, Madison Parks will endeavor to follow established Integrated Pest Management strategies and use any and all combination of Parks employees, contractors and volunteers to accomplish both routine and special project based land management maintenance. Funding for these efforts will likely come through city budget allocations, grants and both in kind and cash donations. While we recognize in many cases the Parks department alone does not and likely will not, have the resources available to achieve these goals, we none the less recognize the value of having shared and commonly known goals to which we can direct available resources. Through the adoption of this plan the Parks Commission and its relevant sub committees are further showing their commitment and support for these goals, maintenance standards as well as the work efforts required to achieve them.

In order to keep this plan manageable we have broken the general parkland acreage into four broad categories, each with more defined subsets with specific goals, maintenance practices and in recognition that Parks resources alone can not achieve these goals, notes pertaining to whom can accomplish the work required to see the maintenance done and the desired goal achieved. Each Park is being mapped for these defined areas through the ongoing efforts of both volunteers and Parks staff. Having this adopted set of land management maintenance goals, developed thru a public process, should also streamline the process for both staff and volunteer initiated projects by informing alders, friends groups, neighborhood associations, board and commission members as well as potential volunteers and donors on what types of efforts we are undertaking or desire to. Notably, lands designated as Conservation Parks have not been included in this plan due to the higher levels of maintenance, restoration and training of staff coupled with the larger scale project work often associated with these parks. However, as the land management goals in this plan follow solid fundamental principles, they could be used as the basis for land management efforts in any City of Madison parkland.

Meadows

- 1) Bluegrass dominated Managed Meadows:
Many of these meadows were formerly finish cut sites within the Parks Department. In an effort to be more environmentally sound these areas were transitioned into the newly formed Managed Meadow designation to allow for increased natural habitat and reduced maintenance inputs until such time, if any, the land is needed for active recreational purposes.
- 2) Prairie meadows:
These meadows have been planted with native wildflowers to enhance natural diversity, increase infiltration of rainfall and improve the aesthetics in the parks. In new parklands the areas are established by seeding. In existing parklands native plant plugs are installed into the bluegrass sod.

Management Goals for Bluegrass Managed Meadows:

- 1) Control woody plant growth
- 2) Control noxious /exotic plants
- 3) Maintain / enhance wildlife habitat
- 4) Maintain aesthetics of an open grassy landscape

Maintenance Practices / Implementation for Bluegrass Managed Meadows:

- 1) Mow brush patches a minimum of 1 time a year if brush control is primary issue in the late fall or early spring. After brush is controlled, complete mowing should occur every 1-3 years. Identifying the location of and the need for mowing can be a joint effort amongst Parks employees and volunteers. Mapping efforts are underway.
- 2) New prairie plantings require minimum of 2 mowings (at height of 6-8") during the year of establishment.
- 3) Noxious/ Exotic plant infestations may require several mowings a year to control. Mapping and updating the location of these infestations can be done by Parks staff as well as volunteers.
- 4) Maintenance staff and volunteers can work to create maps of noxious / exotic plant locations and ideal timeframes for mowing to control / suppress target plants. May consider converting some areas with multiple exotics back to mowed turf until restoration efforts can be completed.

- 5) Reclaiming formerly open meadows dominated by exotic brush and trees. If only a few are present then flush cutting with herbicide treatment is recommended. This can be performed by Parks employees, contractors or volunteers that are state certified pesticide applicators. Extensive woody cover will require use of heavy duty brush hog or forestry mower followed by herbicide treatment of sprouts after mowing. This removal work can be performed by Parks staff or contractors with follow up applications done by the same as well as volunteers that are state certified pesticide applicators and approved for chainsaw use.
- 6) In some cases a few native shrubs and trees can be preserved and managed within the meadows for aesthetics and wildlife habitat. Examples include sumac and dogwood. Invasives should be selectively removed from these shrub patches or treed areas within the prairie. These selective removals can include mechanical harvesting, hand removals and cut and treat with herbicide actions. Work can be performed by Parks staff, volunteers or by contractors.

Management Goals for Prairie Meadows:

- 1) Control noxious / exotic plants to facilitate growth of native plants
- 2) Control woody plant growth
- 3) Enhance wildlife habitat
- 4) Maintain aesthetics of an open grass landscape

Maintenance Practices / Implementation for Prairie Meadows:

- 1) Mow brush patches once a year annually or biennially to prevent brush from overtaking the native wildflowers. After brush is well controlled occasional mowing or burning can be used for control. Mowing to be done early Spring or late Fall. This work is to be performed by Parks staff.
- 2) Spot mow or cut weeds that can be managed with cultural practice e.g. thistles, sweet clover. While mowing is done by staff hand cutting and removals can be done by volunteers.
- 3) Weeds that are not well controlled with cultural practices such as crown vetch, teasel and burdock, will be spot treated with appropriate herbicides. This can be done by Parks staff, contractors or volunteers who are state certified pesticide applicators working in close conjunction with Parks staff.
- 4) New prairie plantings require minimum of 2 mowings (at height of 6-8") during the year of establishment. This mowing is done by Parks Staff.
- 5) Controlled burns would also be a desirable maintenance practice as appropriate with strong considerations given for the numerous site issues possible in our general parklands. Chief among them are proximity to homes, businesses, rental facilities and other Park amenities. Detailed burn plans would need to be developed for any site in which controlled burns would be considered. Qualified staff and volunteers may draft burn plans however all plans would need to be approved by the Conservation Section Supervisor. Burns could be conducted by staff, volunteers or contractors, any volunteer participating in a controlled burn

would need to be approved before hand by the Conservation section supervisor.

- 6) In some cases a few native shrubs and trees can be preserved and managed within the meadows for aesthetics and wildlife habitat. Examples include sumac and dogwood. Invasives should be selectively removed from these shrub patches or treed areas within the prairie. These selective removals can include mechanical harvesting, hand removals and cut and treat with herbicide actions. Work can be performed by Parks staff, volunteers or by contractors.

Woodlands

1) Woodland edges:

These are simply the areas where the woodlot stops and mowed parks, meadows, ponds, property lines and farm fields etc begin and are a haven for a wide variety of invasive species to grab hold. We will be focusing our efforts on controlling burdock, motherwort, garlic mustard, dames rocket, Asian bittersweet, thistles, box elders, buckthorn, and honeysuckle.

2) Woodland interiors:

Represent the majority of our woodland acreage. Typically a woodland interior would not be suitable for growing or maintaining turf or managed meadow type plantings and usually begins 20'-25' from the edge or wherever light penetration and density of tree canopy dictates.

Management Goals for Woodland edges:

- 1) Improve aesthetics of woodland edges
- 2) Promote survival of healthy oaks/hickories and native shrubs by reducing shading from competing trees.
- 3) Maintain and / or increase native plant diversity
- 4) Reduce / suppress exotic species in targeted areas

Maintenance Practices / Implementation for Woodland edges:

- 1) Park staff and volunteers will identify woodland edges where competing trees are shading desirable oaks / hickories / native shrubs and establish a work plan. This work plan will typically include an initial plan for removal of invasives (mechanical, chemical, hand work) as well as annual or biannual work to be performed to keep the woodland edge free of invasive trees or shrubs. Work plan may exclusively use volunteer, contract or Parks staff labor or be a combination of any three.
- 2) Park staff, contractors and volunteers will clear woodland edges of competing trees and shrubs according to priorities set after condition of areas are assessed and prioritized in the work plan.

- 3) Assess species type and relative abundance of weeds that appear in woodland edges that are cleared of trees. If weed pressure is significant it may require control measures (mowing, herbicide application) prior to planting native seed. While mowing would be a Parks staff function the chemical application could be done by staff, contractors or volunteers.
- 4) Seed native wildflowers, grasses and sedges along woodland edges that are enhanced by tree clearing. Mowing and spot herbicide applications may be necessary during establishment period (first 2 years) to control weeds. Sowing seeds and follow up spot herbicide treatments can be done by Parks staff, contractors and volunteers whom are state certified chemical applicators.
- 5) For low value woodland edges the finish cut mow line may be expanded closer to the woods edge so invasives may be controlled by shade and or regular mowing rather than by time consuming and often expensive restoration efforts.

Management goals for Woodland Interiors:

- 1) Promote survival of the best existing canopy natives, often healthy oaks, hickories and native shrubs by reducing shading from competing trees.
- 2) Select future canopy trees from the best available young natives than can grow into the canopy. Reduce the presence of exotic trees and vines in woodland areas containing surviving wildflower communities making a special point to target invasive seed sources.
- 3) Improve aesthetics / wildlife values.

Management practices/implementation for Woodland interiors:

- 1) Volunteers, Parks staff and contractors can control exotic shrubs / trees shading the best available natives using selective thinning, cut stump, kerf and basal bark herbicide applications.
- 2) Small populations of exotic shrubs and vines will be controlled using herbicide treatments such as cut stump, kerf and basal bark as a management practice. Requires follow up management efforts such as mowing and cut and treat herbicide applications to sustain. Volunteers, Parks employees and contractors can do this work. Volunteers may also use manual removal and girdling as an alternative to some herbicide use. The landscape must be suitable for mowing equipment available to staff. Topography and the absence of large boulders or old fence lines etc are prime issues. Requires a long-term maintenance commitment of resources to be effective.
- 3) Forestry mowing to control exotic shrubs / small trees. This practice is only recommended if there is a commitment and follow up plan in place to ensure timely mowing, herbicide treatments or full restoration. Work can be done by Parks employees and contractors.
- 4) Increase plant diversity by seeding native plant mixes. Park employees,

volunteers and contractors can do this work.

- 5). Staff / Volunteers conduct a cursory field review of oak woodland stands in general parks to determine potential for forest stand improvement i.e. enhancing oak, hickory, hackberry health by controlling competing trees. Control measures may include herbicide application as cut stump, saw kerf, or basal bark treatments. Working on larger woodland units requires a commitment of significant resources (staff, volunteers, budget) to improve and maintain the ecological health for the long term.

Wetlands

1. Emergent Marsh / Lagoons
2. Sedge / Reed canary meadows

Management Goals for Emergent Marsh / Lagoons:

1. Maintain or enhance habitat diversity
2. Reduce shoreline erosion.
3. Monitor /control invasive species e.g. purple loosestrife, yellow iris and Japanese knotweed that can be controlled more readily if found when populations are small.
4. Discourage use by resident Canada geese.

Maintenance Practices / Implementation: Emergent Marsh / Lagoons

1. Install native plant shoreline buffers on adjacent upland. Volunteers, Parks employees and contractors can do this work.
2. Experiment with establishing native plants at upland / water interface to reduce shoreline erosion . Possible locations would be Tenney, Vilas and Warner lagoons. Installation can be done by volunteers, Parks employees and contractors.
3. Use cultural controls such as hand pulling and cutting along with herbicide applications to control small invasive species populations. Parks employees, volunteers and contractors can do this work.
4. Annual late season mowing to control woody plant growth and facilitate winter ice operations while maintaining shoreline buffer plantings to discourage resident Canada geese.

Management Goals for Sedge / Reed canary meadows:

1. Maintain or enhance habitat diversity
2. Manage woody plant growth (trees and shrubs) to maintain open landscape vistas.
3. Maintain native woody plant growth adjacent to upland woodlands

Maintenance Practices / Implementation for Sedge / Reed canary meadows:

1. Limit shrub growth in Sedge / Reed Canary wetlands by mowing in winter when ground is frozen. Work performed by Parks employees and contractors.
2. Where desirable, cut trees in areas where this will create a larger open landscape aesthetic / habitat e.g. removing a narrow tree / shrub band between two open habitat areas. Cutting the tree cover along a portion of the creek at Door Creek Community Park would be an example. Work performed by Parks employees or contractors.
3. Monitor /control invasive species e.g. purple loosestrife, yellow iris and Japanese knotweed that can be controlled more readily if found when populations are small. Further, seed sources of common woody invasives like honeysuckle and buckthorn should be controlled. Work performed by volunteers, contractors and Parks employees.

Mowed Turf

1. General parks grass areas:
You will recognize these areas as those that are finish cut multiple times per month during the growing season and surround our playgrounds and shelters. These areas are often populated by picnic tables, open grown shade trees, children playing pick up games, adults throwing a Frisbee and folks of all ages reading, relaxing and getting some sun.
2. Athletic Fields:
Ball diamonds, soccer fields, football fields and golf courses, anywhere our Park patrons “pay to play”

Management Goals for General parks grass areas:

1. Establish and maintain grass type turf of a quality sufficient for intended use.
2. Prevent soil erosion by having healthy full stands of turf
3. Favor mowing and cultural practices that discourage weed growth
4. Manage these areas according to the principles of Integrated Pest Management

Maintenance Practices / Implementation for General parks grass areas:

1. Height of cut is set between 3” and 3.5” which is the ideal height for cool season turf grasses. This work is performed by Parks staff in 10-15 day cycles or as the weather dictates
2. Avoid mowing when turf is under extreme heat or drought stress.
3. Never cut off more than 1\3 of the grass blade.

4. Clean and damage check mower decks and blades daily.
5. Allow grass clippings to stay in turf areas.
6. Sharpen mower blades weekly
6. Establish weed infestation thresholds at which point a herbicide treatment would be applied followed by reestablishment of grass turf. This establishment of thresholds and remedy actions is a critical part of any Integrated Pest Management program

Management Goals for Athletic Fields:

1. Establish and maintain turf suitable for player safety and proper execution of the sports played on it with consideration given to the level of competition.
2. Set minimum thresholds for turf quality as well as action steps to implement once the threshold is reached. These thresholds and action steps will vary based on numerous factors including location of the athletic field (neighborhood park versus an athletic venue) field requirements of the sport being played and the athletes playing upon it, fees paid and funds available for actions required.
3. Turf will be maintained such that it can resist wear and recover quickly from use.

Maintenance Practices / Implementation for Athletic Fields:

1. A field rotation schedule will be devised to allow for wear to be spread across Parks fields and to lower maintenance inputs needed to completely refurbish a badly worn field. Parks staff working with volunteers and user groups can establish funds for improved maintenance and refurbishment as well as a workable field rotation schedule.
2. Fields will close due not only to unsafe conditions but also conditions that will likely cause unacceptable and costly damage such as overly wet, muddy, severe drought and heat stress conditions. Parks staff will make these decisions as conditions warrant.
3. Integrated Pest Management principles will be applied and will include routine field mowing and trimming, aeration to relieve compaction and promote wear tolerance, fertilization to promote regrowth and wear tolerance and weed control to promote playable and resilient playing surfaces. Parks staff and volunteers can share in this work.
4. Fields will be seeded in worn areas to prevent injury, weed infestation and unfavorable playing conditions. Volunteers can assist staff in this work by sowing seed or by renting and running walk behind aerators, slit seeders etc.

Definition of Terms

“Finish cut” – Grass that is regularly mowed to a height of 3”.

“Integrated Pest Management” - IPM is not a single pest control method but, rather, a series of pest management evaluations, decisions and controls. In practicing IPM follow a four-tiered approach. The four steps include: setting action thresholds, monitor and identify pests, prevention measures and control of the pest.

“Exotic or invasive” - Non native plant, shrub or tree to southern Wisconsin.

“Cut and Treat” – Process whereby an undesirable woody plant is cut and the remaining stump is directly treated with an herbicide to prevent regrowth.

“Controlled Burn” – Management practice whereby tracts of land are burned in specific timeframes and circumstances to control undesirable plant species and provide favorable opportunities for regeneration of the native species in the burned area.