

Habitat Management Plan

Owen Conservation Park

October 23, 2023



*Plan originally adopted in 2018.
This is the 5 year update for this management plan.*

Site information

- Address: 6021 Old Sauk Road
- Acreage: 97 acres. This includes the stormwater ponds and improved drainage way in the south end of the park.
- Acquired: Acquired in 1978 with Federal, State and City funds.
- Watershed: Spring Harbor, Lake Mendota
- Site summary: The property is the former hobby farm of Professor Edward T. “Buck” Owen, one of the founders of the Madison Park and Pleasure Drive Association. Remains of stone walls, roads, and the foundation of the main house, “Torwald”, are still present, as are a root cellar and milk house, which continue to be used for other purposes today. Portions of the property were still in agriculture into the 1960s. The majority of this property is being restored and managed as prairie and woodland habitat. The southern end of the park contains engineered stormwater channels and three artificial ponds that were created in 2007. Three miles of hiking trails bring visitors through these natural habitats and past historical features such as the c. 1923 farmhouse (now a caretaker’s house), stone walls and an old carriage road, while providing scenic views.
- Adjacent lands: Adjacent natural areas and areas of ecological significance include 23 acres of mesic woods owned and managed by the Crestwood Neighborhood Association (Wisconsin Cooperative Housing Association), the heavily wooded Highlands neighborhood to the north, and the Mendota-Spring Harbor Greenway managed by the City Engineering Division.

Madison Parks’ Land Management Plan (2023) defines land cover categories found in the City’s parklands, and provides general parameters for their management. That document provides a foundation upon which more detailed, site-specific work plans can be built. The natural areas of the park include:

- Tallgrass Prairie and Oak Savanna
- Urban forest – *Woodlands*
- Wetlands and Waterfronts – *Ponds*

These land cover categories are delineated on a map in Appendix A, Figure 2. The developed portion of the park features a driveway, parking lot, buildings, and an educational garden. These are categorized as:

- Turf
- Hardscapes
- Landscape Beds

This habitat management plan addresses the ecological management of the natural areas within park. It takes into account ecological processes, species lifecycles, and population and community dynamics.

Conservation values

Madison is located in the Southeast Glacial Plains Ecological Landscape as defined by the Wisconsin Department of Natural Resources (WiDNR) in The Ecological Landscapes of Wisconsin (2015). The park itself is located on a recessional moraine that traverses the west side of the city. Soil types include Miami silt loam and Miami gravelly sandy loam. The land cover and habitats at Owen Conservation Park (Owen) can be further described as the following Natural Communities, in part:

- Southern Mesic Forest
- Southern Dry-Mesic Forest
- Oak Woodland
- Oak Opening

Dry-Mesic Prairie
Mesic Prairie
Emergent Marsh
Pond (see Aquatic Features)

These recognized Natural Communities described by the Wisconsin Natural Heritage Inventory help provide more technical and specific restoration targets based on the ecology of Wisconsin. These reference communities provide benchmarks that help guide ecologically appropriate restoration efforts. Descriptions for Wisconsin's Natural Communities can be accessed at: <https://apps.dnr.wi.gov/biodiversity/Home/Index/Communities>, and are also included in Appendix D.

Appendix A, Figure 3 is a map delineating these Natural Communities in the park. Appendix B contains lists of plant and bird species that have been documented to date.

Although farmed in the past, the open fields in the park have been restored to a tallgrass prairie plant community. There is a need to increase fire frequency in order to maintain an herbaceous-dominated seral stage. Staff and volunteers are mitigating this by working to reducing the cover of woody species with mowing and targeted herbicide treatments.

Woodlands, which had been degraded due to fire suppression and grazing, had become overgrown and invaded with non-native shrubs such as buckthorn and honeysuckle, and non-native herbaceous species such as garlic mustard, *Vinca* and dame's rocket. Significant progress has been made in restoring these areas, and the land management team is currently reintroducing native plants and re-establishing a regular fire regime in this habitat.

A wide variety of wildlife has been observed and documented at Owen. Deer, coyote, fox, and other common urban mammals often use the park. A study conducted in 2021 documented De Kay's brown snake (*Storeria dekayi*), and acoustic bat surveys have detected Big Brown, Hoary, Eastern Red, and possibly Little Brown Bats. Bird watchers have documented 183 bird species in the park, including 27 species listed as Threatened, Endangered or Special Concern, and 35 species considered Species of Greatest Conservation Need (SGCN) under Wisconsin's Wildlife Action Plan (DNR 2015).

Perhaps most notably, Owen supports two umbrella species: the federally Endangered Rusty Patched Bumble Bee (*Bombus affinis*) which was first documented at the park in 2020, and the Special Concern Red-Headed Woodpecker (*Melanerpes erythrocephalus*). Habitat management that successfully supports these two species will support a wide range of other species that also depend on prairie and oak woodland communities.



Rusty Patched Bumble Bee worker. Photo credit: Sudeep Samanta

Ecological threats

Fire suppression – A history of fire suppression had resulted in mesophication of the oak woodlands throughout the park. Fire intolerant species including ash, cherry, elm and basswood had become established, closing canopy gaps and increasing canopy cover beyond that required to sustain oak regeneration. Restoration efforts over the past decade have largely restored the structure and species proportions that are more consistent with this habitat type. However, it has been challenging to implement a fire regime that reduces and limits accumulation of leaf litter and abundance of smaller diameter woody stems. Much of the oak woodland in the park is overgrown and infested with non-native shrubs. The canopy has closed in many areas, and deep oak leaf litter and garlic mustard occupy the ground layer, rather than native sedges and forbs. In prairie areas some clones of aggressive native sumac and gray dogwood are old and large enough to resist moderate fires.



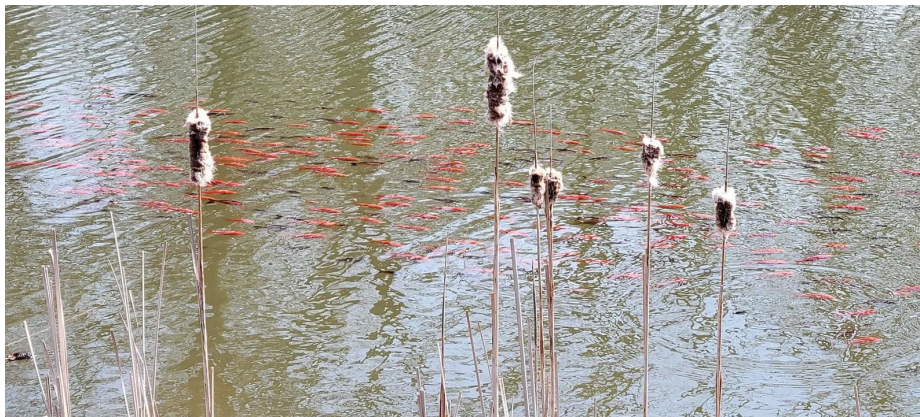
Depauperate herbaceous layer in oak woodland



Tallgrass prairie with woody species encroachment

Invasive species – Invasive plant species include garlic mustard, dame’s rocket, buckthorn, honeysuckle, porcelain-berry, Asian bittersweet; local infestations of crown vetch, greater celandine, reed canary grass, bittersweet nightshade and periwinkle are also present.

Invasive animal species include Jumping worms (*Amyntas* spp.), present in the southern and NE ends of the park, and goldfish (*Carassius auratus*) which are present in the ponds. These are both listed as “Restricted” species under Wisconsin’s NR 40 rule. House sparrows (*Passer domesticus*) are also an introduced, invasive species and are not protected by the federal Migratory Bird Treaty Act. They are abundant at Owen, and often displace Eastern Bluebirds and other native bird species.



School of goldfish. Photo credit: Judy Dilks

Overabundant wildlife – Anecdotal evidence suggests that white-tailed deer populations range from 5 to 15 individuals in the park at different times of year. Direct observations have documented more than 50 turkeys in the park at once. Turkeys disturb the soil as they forage, promoting germination of invasive species present in the seed bank, especially garlic mustard and dame's rocket. Deer browse heavily on desirable native plants and are known to reduce cover and species richness. It is exceedingly difficult to calculate the ecological carrying capacity of these species in an urban area, as their ranges overlap natural areas (like Owen and surrounding stormwater greenways), maintained open spaces (like other parks and the grounds of schools and churches), and heavily landscaped residential areas. What can be measured are the impacts of these species and their relative densities within Owen. Data collected through monitoring should be used to determine appropriate wildlife management actions aimed at maintaining a balance and optimizing biodiversity and health of the overall ecology of the park.



Flock of Wild Turkey. Photo credit: Sudeep Samanta

Conservation goals

Restore and maintain tallgrass prairie and oak woodland habitat by ensuring appropriate fire regimes, controlling invasive species and sustaining and increasing native plant species diversity.

Conserve invertebrate diversity, with special focus on monarch butterflies and the federally Endangered Rusty Patched Bumble Bee, which are both umbrella species. The Rusty Patched Bumble Bee was first documented from the park in 2020, by volunteers conducting monitoring through the Wisconsin Bumble Bee Brigade program. They observed one male and one female on 8/2/2020. The following year, a researcher discovered an active nest in the woodland on the west side of the park.

Promote healthy aquatic and emergent marsh habitats within and around the ponds by controlling invasive species and preventing cross contamination of diseases from other water bodies.

Management considerations

Madison Parks' vision is "to provide the ideal system of parks, natural resources and recreational opportunities which will enhance the quality of life for everyone." Ord. 8.40, Preservation of Conservation Parks, includes, "It is important to the residents of Madison that the City preserve Madison's native landscapes, its plant and animal populations for residents' careful use and full enjoyment."

In pursuit of this, we strive to balance ecological management needs with the needs of the community. Management decisions and actions at Owen should consider the following:

Smoke management - The park is surrounded by dense residential development on all sides and by a school and frequently travelled road to the north. This limits possible wind directions for conducting prescribed burns. Careful burn execution and proactive neighbor outreach are crucial for limiting impacts and sustaining public acceptance of this management practice.

Viewshed – In order to achieve control and subsequent re-establishment of native plant communities, it is not always feasible from an ecological or management perspective to remove populations of invasive species slowly. However, where dense stands of woody invasive species occur close to the park boundary and adjacent to neighboring residences, their removal should be followed by establishment of native shrubs to restore some screening and soften the visual transition between the park boundary and park interior.

Potential Red-headed Woodpecker populations - Red-Headed Woodpeckers (RHWO) have been observed in the park and are likely to be attracted to our restoration efforts in Oak Woodland and Oak Opening habitats. While no evidence of breeding has been observed to date, the potential should be optimized and standing dead trees larger than 6 inches diameter should be conserved, were it is safe and practical to do so.

Friends of Owen Conservation Park

Established in 2019 and formally incorporated as a 501(3)(c) in 2022, the Friends of Owen Conservation Park have become integral to the management of this natural area. The group hosts weekly volunteer workdays, provides tours and education, and engages with researchers to promote the park and support Parks staff in ecological management and restoration. Volunteers document approximately 500 hours of labor devoted to restoration and education, and about 300 hours devoted to monitoring, annually.

Parks staff and the Friends communicate regularly, and together, they coordinate work plans and priorities as they implement the habitat management plan. The Friends involve and engage new park users and active stakeholders, and they promote the park through participation in community events such as the Warner Park Bird and Nature Festival, the Wisconsin Natural Resources Foundation Bird-a-thon, and the Dane County Land and Water Storm Drain Mural program. They perform outreach to the Wisconsin Master Naturalist Program, work in cooperation with other groups such as the Wisconsin Cooperative Housing Association (the Crestwood Neighborhood) Woods Committee, Girl Scouts, and schools. They are an invaluable resource, and regularly work on invasive plant removal, native plant establishment, and monitoring on plants and insects.

The Friends have secured several small grants and initiated projects including the educational garden, where park users can study several native plants up close, without travelling off-trail. They have refurbished the rain garden and detention basin that had been established as part of a U.S. Geological Survey study that ran from 2004-2008. The study was used by Madison and other municipalities to provide evidence of the effectiveness of rain gardens vegetated with native species as compared to a retention basin vegetated with turf. The Friends have installed a Little Free Library for native seeds, where the public can obtain seed sourced from the educational garden, to help establish native landscaping at their homes.

In September 2020, the Friends completed a project, under the guidance of WiDNR, to modify the root cellar to make it more suitable as a potential bat hibernaculum.

Management history

Major work to date includes restoration of tallgrass prairie and oak woodland throughout the park, and reclamation of areas disturbed by the stormwater infrastructure projects installed in the south end of the park in 2007. Prescribed burns have been conducted regularly since 2011. See Appendix A, Figure 4 for a map of recent burns.

Initial efforts at this park included installation of native seed mixes to restore former hayfield and cropland to a native tallgrass prairie plant community. Invasive shrubs were removed from under the large, open-grown oaks in the “oak openings” areas in the Prairie Unit, and from the fire-suppressed understory of portions of the NW Woodlands unit. The canopy of the oak woodland was thinned and native seed mixes were sown.

More recent accomplishments (since 2018) include:

- Invasive shrub removal in the NE Unit, the East Woods, and the South Woodland.
- Woody debris removal from the NE Unit and South Woodland.
- Establishment of more than 400 native shrubs in the southern third of the park, in portions of the West Woodland, Pond, and South Woodland units.
- Installation of a native herbaceous seed mix containing 26 species in the NE Unit and South Woodland.

Management units

Please refer to Appendix A, Figure 5 for a map of management units.

West Woodland (16 ac) Oak Woodland and Southern Dry-Mesic Forest dominated by red oak with some white oak and bur oak. Some basswood, sugar maple and black cherry occur here as well.

NE Unit (11 ac) Oak Woodland community with large canopy gaps. Large red, white and bur oaks dominate this unit.

Forest (7 ac) Southern Mesic Forest dominated by maple and basswood. Not actively managed to date.

Prairie (34 ac) Dry-mesic Prairie and Oak Opening habitat in central portion of park. Restored over several years, warm season grass species are superabundant in some portions of this unit. Ongoing work includes burning, occasional mowing to control sumac and other shrubs, occasional cut-stump treatments to control shrubs and trees, and herbicide treatments to control Asian bitter-sweet.

Pond (8 ac) Includes stormwater ponds in SW corner of park, and surrounding emergent marsh, Mesic Prairie, and Southern Mesic Forest communities. Ongoing work includes prescribed burning and control of crown vetch. The ponds are infested with goldfish (*Carassius auratus*), a restricted invasive species under Wisconsin’s NR 40 Invasive Species rule.

South Woodland (15 ac) Fire-suppressed Oak Woodland with several large, open-grown bur and white oaks. Mesic Forest also occurs in the eastern portion of this unit. Understory was recently cleared of invasive shrubs and excess downed woody debris during the previous management plan cycle.

East Woods (4 ac) Dominated by Oak Woodland and Dry-mesic Forest that transitions to Mesic Forest in the south end of the unit. Dense infestations of buckthorn and garlic mustard have been removed by volunteers. Excess downed woody debris currently limits potential for prescribed burns.

Objectives

Options for two levels of management are presented in this plan:

“Basic stewardship” indicates the management required to sustain the current level of habitat quality, given current environmental conditions.

“Habitat improvement” proposes additional actions that are expected to increase native plant and wildlife diversity. These actions would be accomplished through implementation of capital improvement projects, special initiatives directed at a specific goal, or a general, longer-term increase in resources, including labor and materials.

“Basic Stewardship”

- Achieve and maintain 50%-70% overstory canopy cover, measured within individual management units, in areas delineated as Oak Woodland.
- Establish and maintain oak regeneration throughout the diameter distribution in Oak Woodland, Oak Opening, and Southern Dry-mesic Forest habitats.
- Establish and maintain a minimum of 10% native shrub cover, measured in individual management units, in areas delineated as Oak Woodland,
- Maintain 70 -100% native overstory canopy cover in areas delineated as Southern Mesic Forest community types
- Limit native woody species cover to 2% or less in areas delineated as Dry-mesic Prairie and Mesic Prairie.
- Reduce abundance of invasive woody vines including porcelain-berry, Asian bittersweet and bittersweet nightshade.
- Broadcast seed and plant growing stock to increase diversity and augment or re-establish native plant community.
- Burn tallgrass prairie units on 2-year return interval. (Allow 2 growing seasons between burns.) Burn no more than ½ of prairie habitat in one season to conserve invertebrate diversity.
- Mow brush as needed in prairie to supplement prescribed burns.
- Burn woodland units on a minimum 3-year return interval. (Allow 3 growing seasons between burns.)

A visual guide to canopy cover is provided in Appendix A, Figure 6. For example, 2% woody species cover in the 23 ac of delineated Dry-mesic Prairie would be equal to 0.46 ac, or 20,000 square feet of woody species foliage, when viewed from above. In the 10 acres of delineated Oak Woodland in the South Woodland management unit, 70% canopy cover would mean a total of 3 acres, or 130,680 square feet, is beneath openings in the overstory canopy.

Specific Management Unit Prescriptions:

Timeline	Unit	Task
Winter 2024	East Woods	Woody debris reduction (contract)
	West Woodland	Invasive shrub removal (cut/treat) in north end of unit
	South Woodland	Girdle remaining Norway maples
	throughout	Conduct turkey population estimates
Spring 2024	Pond	Harvest goldfish
	NA	Consult BPC, DNR, and USDA-APHIS on turkey reduction strategies
	West Woodland Prairie (south)	Rx burn
	West Woodland NE Unit East Woods South Woodland	Spring invasive species control – spray, mow or hand pull garlic mustard, dame’s rocket, burdock, motherwort, and others
	Forest	Follow-up survey and control for tree of heaven discovered in 2023
Summer 2024	Pond	Mow crown vetch, spray re-growth 4-6 weeks later
	West Woodland	Hand-pull Balfour’s touch-me-not and <i>Vinca</i>
	NE Unit	Himalayan pokeweed control (dig, or cut and spray)
	South Woodland Pond	Rx graze
Summer 2024	Prairie	Spot mow brush
	all units	Survey for porcelain berry, cut flowering stems to prevent seed production, foliar spray smaller diameter vines

Timeline	Unit	Task
Fall 2024	West Woodland	Hand pull and remove bittersweet nightshade in south end of unit, sow native seed mix
	NA	If applicable, advise public of any planned turkey reduction efforts
	throughout	Conduct deer drive to estimate population size
Winter 2025	South Woodland	Minor woody debris removal (follow-up to winter 2023 canopy thinning)
	throughout	Conduct turkey reduction, if deemed necessary
	NA	Consult BPC, DNR, and USDA-APHIS on deer reduction strategies
Spring 2025	Pond	Harvest goldfish
	NE Unit Prairie (north) Pond	Rx burn
	NE Unit	Install native seed mix post-burn
	West Woodland NE Unit East Woods South Woodland	Spring invasive species control – spray, mow or hand pull garlic mustard, dame’s rocket, burdock, motherwort, and others
Summer 2025	Pond	Mow crown vetch, spray re-growth 4-6 weeks later
	West Woodland	Hand-pull Balfour’s touch-me-not and <i>Vinca</i>
	NE Unit	Himalayan pokeweed control (dig, or cut and spray)
	Prairie	Spot mow brush
	all units	Survey for porcelain berry, cut flowering stems to prevent seed production, foliar spray smaller diameter vines
Fall 2025	West Woodland	Hand pull and remove bittersweet nightshade in south end of unit
	NA	If applicable, advise public of any planned deer reduction efforts
Winter 2026	South Woodland	Minor woody debris removal (follow-up to winter 2023 canopy thinning)
	throughout	Conduct deer reduction if deemed necessary
Spring 2026	Prairie (south) South Woodland	Rx burn
	S Woodland	Install native seed mix post-burn
	West Woodland NE Unit East Woods South Woodland	Spring invasive species control – spray, mow or hand pull garlic mustard, dame’s rocket, burdock, motherwort, and others
Summer 2026	Pond	Survey for crown vetch
	NE Unit	Survey for Himalayan pokeweed
	Prairie	Spot mow brush
	all units	Survey for porcelain berry, cut flowering stems to prevent seed production, foliar spray smaller diameter vines
Fall 2026	West Woodland	Survey for bittersweet nightshade
Winter 2027	South Woodland	Minor woody debris removal (follow-up to winter 2023 canopy thinning)

Timeline	Unit	Task
Spring 2027	West Woodland Prairie (north) Pond	Rx burn
	West Woodland	Install native seed mix post-burn
	West Woodland NE Unit East Woods South Woodland	Spring invasive species control – spray, mow or hand pull garlic mustard, dame’s rocket, burdock, motherwort, and others
Summer 2027	Pond	Survey for crown vetch
	NE Unit	Survey for Himalayan pokeweed
Summer 2027	Prairie	Spot mow brush
	all units	Survey for porcelain berry, cut flowering stems to prevent seed production, foliar spray smaller diameter vines
Fall 2027	West Woodland	Survey for bittersweet nightshade
Winter 2028	South Woodland	Minor woody debris removal (follow-up to winter 2023 canopy thinning)
Spring 2028	Prairie (south) NE Unit	Rx burn
	West Woodland	Install native seed mix post-burn
	West Woodland NE Unit East Woods South Woodland	Spring invasive species control – spray, mow or hand pull garlic mustard, dame’s rocket, burdock, motherwort, and others
	Pond	Survey for crown vetch
Summer 2028	NE Unit	Survey for Himalayan pokeweed
	Prairie	Spot mow brush
Summer 2028	all units	Survey for porcelain berry, cut flowering stems to prevent seed production, foliar spray smaller diameter vines
	Fall 2028	West Woodland

Possible burn schedule – average two burns per year:

year	1	2	3	4	5	6	7	8	9	10
Prairie (north)		x		x		x		x		x
Prairie (south)	x		x		x		x		x	
Pond		x		x		x		x		x
West Woodland	x			x			x			x
NE Unit		x			x			x		
South Woodland			x			x			x	

Portions of the East Woods unit will be burned along with respective adjacent Prairie units when appropriate.

“Habitat improvement”

In addition to the actions outlined above for basic stewardship of this natural area, the following initiatives would advance the restoration trajectory of the park, resulting in greater benefit, achieved sooner. These actions could be accomplished as capacity allows:

- Collect and sow acorns to assist regeneration of white and bur oaks.
- Plant bare root and non-dormant herbaceous plants in woodland units, particularly the East Woods, South Woodland, NE Unit and portions of the West Woodland.
- Plant additional native shrub and understory tree species throughout the park to provide structural diversity and maximize species richness.
- Install bat boxes near the ponds for summer roosting.
- Train and empower volunteers to conduct low-risk prescribed burns in specific management units to ensure establishment of desired fire regime.
- Research and implement steps to augment habitat for the Rusty Patched Bumble Bee.

Monitoring and Evaluation

Measuring results is critical to determining success. Refer to Appendix C for an outline of the goals for monitoring natural areas in Madison Parks.

Parks staff currently have very limited capacity to conduct monitoring. However, Parks is supported by a network of volunteers and researchers. Community science programs collect data on sensitive ecological indicators and provide crucial information on which to base management decisions.

Formal community science programs currently conducted by volunteers at Owen include:

Program	Coordinator	Website
Bluebird Trail	Bluebird Restoration Association of Wisconsin	https://www.braw.org/
Wisconsin Bat Program (starting in 2024)	Wisconsin Department of Natural Resources	https://wiatri.net/inventory/bats/
Wisconsin Bumble Bee Brigade (since 2020)	Wisconsin Department of Natural Resources	https://wiatri.net/inventory/bbb/
Wisconsin Odonata Survey (starting in 2024)	Wisconsin Department of Natural Resources	https://wiatri.net/inventory/odonata/
Friends of Amphibians * (since 2023)	Hua Lab, UW Madison	https://jhua13.wixsite.com/jhua
Integrated Monarch Monitoring Program (since 2020)	Monarch Joint Venture	https://monarchjointventure.org/mjvprograms/science/integrated-monarch-monitoring-program
Monarch Larva Monitoring Program (since 2020)	Monarch Joint Venture and UW Madison Arboretum	https://mlmp.org/
iNaturalist	iNaturalist	https://www.inaturalist.org/

* The Friends of Amphibians protocol was adopted in 2023 by volunteers who opted to pursue this program instead of the Wisconsin Frog and Toad Phenology Surveys that had been conducted between 2019 and 2022.

In addition, volunteers monitor vegetation along permanent transects, using a protocol where plant species richness and cover is measured in randomized square-meter quadrats. This data is stored and maintained by Parks staff and is used to calculate diversity and floristic quality. See Appendix A, Figure 7 for a map of vegetation monitoring transects.

Additional monitoring needs include:

- Tree species recruitment and diameter distribution in woodlands
- Overstory canopy cover in woodlands
- Total woody species cover in prairie
- Update and verify species lists throughout park
- Systematic photo monitoring

Budget

The work outlined in this plan is accomplished through financial and in-kind support from the City's General Operating budget, special Capital Improvement Project funding, and volunteer labor.

Typical Annual Budget Estimate:

Task	Labor required (hours)	Annual cost
Burns (two per year @ \$4,000 each)	100	\$8,000
Native seed mix and growing stock	-	\$4,000
Native plant establishment (@ \$20/hr)	100	\$2,000
Invasive species control (@ \$25/hr)	600	\$15,000
Contract for invasive species control	-	\$8,000
Monitoring (@ \$25/hr)	300	\$7,500
Trail maintenance and repair (@ \$20/hr plus materials)	150	\$4,000
Brush mowing (@ \$30/hr)	20	\$600
Wildlife population control (contract)	-	\$3,000
Totals		\$52,100

Hourly rates reflect average staff wages and volunteer "in-kind" rates.

Citations

Madison Parks. 2023. *City of Madison, Parks Division Land Management Plan*. City of Madison, Parks Division, Madison.

Wisconsin Department of Natural Resources. 2015. *The ecological landscapes of Wisconsin: An assessment of ecological resources and a guide to planning sustainable management*. Chapter 18, Southeast Glacial Plains Ecological Landscape. Wisconsin Department of Natural Resources, PUB-SS-1131T 2015, Madison, WI.

Wisconsin Department of Natural Resources. 2015. 2015-2025 Wisconsin Wildlife Action Plan. Madison, WI.

Wisconsin Department of Natural Resources. 2023. Wisconsin's Natural Communities. <https://apps.dnr.wi.gov/biodiversity/Home/Index/Communities> Accessed August 2, 2023.

Document History

This Habitat Management Plan is consistent with Madison Parks' Land Management Plan. This Habitat Management Plan has 5-year lifespan, and should be reviewed yearly. It can be revised whenever new information is discovered. If no changes have been made, it should be updated in its 5th year.

Version	Description
2/9/2018	First draft, presented to Habitat Stewardship Subcommittee
6/29/2018	Internal (Parks Staff) comments incorporated, edits made, forwarded to external stakeholders
9/11/2018	New maps added for consistency with other Habitat Management Plans
6/4/2019	Improved maps and revised section on Monitoring and Evaluation
9/13/2023	5-year update. Drafted by Conservation staff, forwarded to stakeholders for comment.
10/23/2023	5-year update. Comments from stakeholders incorporated. Forwarded to Habitat Stewardship Subcommittee for review.

Appendices

- A. Maps
 - Figure 1. Park Overview
 - Figure 2. Land Cover Categories (Parks Land Management Plan)
 - Figure 3. Natural Communities (Department of Natural Resources)
 - Figure 4. Prescribed Burns
 - Figure 5. Management Units
 - Figure 6. Visual guide to canopy cover
 - Figure 7. Vegetation Monitoring Transects
- B. Species Lists
- C. Natural Areas Monitoring Goals
- D. Detailed Natural Community Descriptions

Figure 1. Owen Conservation Park: Park Overview



Crestwood
Elementary
School

Old Sauk Road

Jetty Drive

Inner Drive

Legend

- Park Boundary
- greenway managed as conservation park
- Greenway
- Wisconsin Co-Op Housing Corp.
- Trails
- Parking
- Restroom

Figure 2. Owen Conservation Park: Parks Land Cover Categories



Legend

 Park Boundary

Parks Land Cover Categories

 Urban Forest - Woodland

 Tallgrass Prairie and Oak Savanna

 Wetlands and Waterfronts - Emergent Marsh

Map created: 9/12/2023
Aerial photo: 2022

0 250 500 Feet

Figure 3. Owen Conservation Park: Natural Communities



Map created: 9/12/2023
Aerial photo: 2022

0 250 500 Feet

Legend

Natural Communities

- Southern Mesic Forest
- Southern Dry Mesic Forest
- Oak Woodland
- Oak Opening
- Dry-mesic Prairie
- Mesic Prairie
- Emergent Marsh

Figure 4. Owen Conservation Park: Recent Burn History



Figure 5. Owen Conservation Park: Management Units



Map created: 9/12/2023
Aerial photo: 2022

0 250 500 Feet

Legend
Management Units

Figure 6. Owen Conservation Park: Visual Guide to Canopy Cover



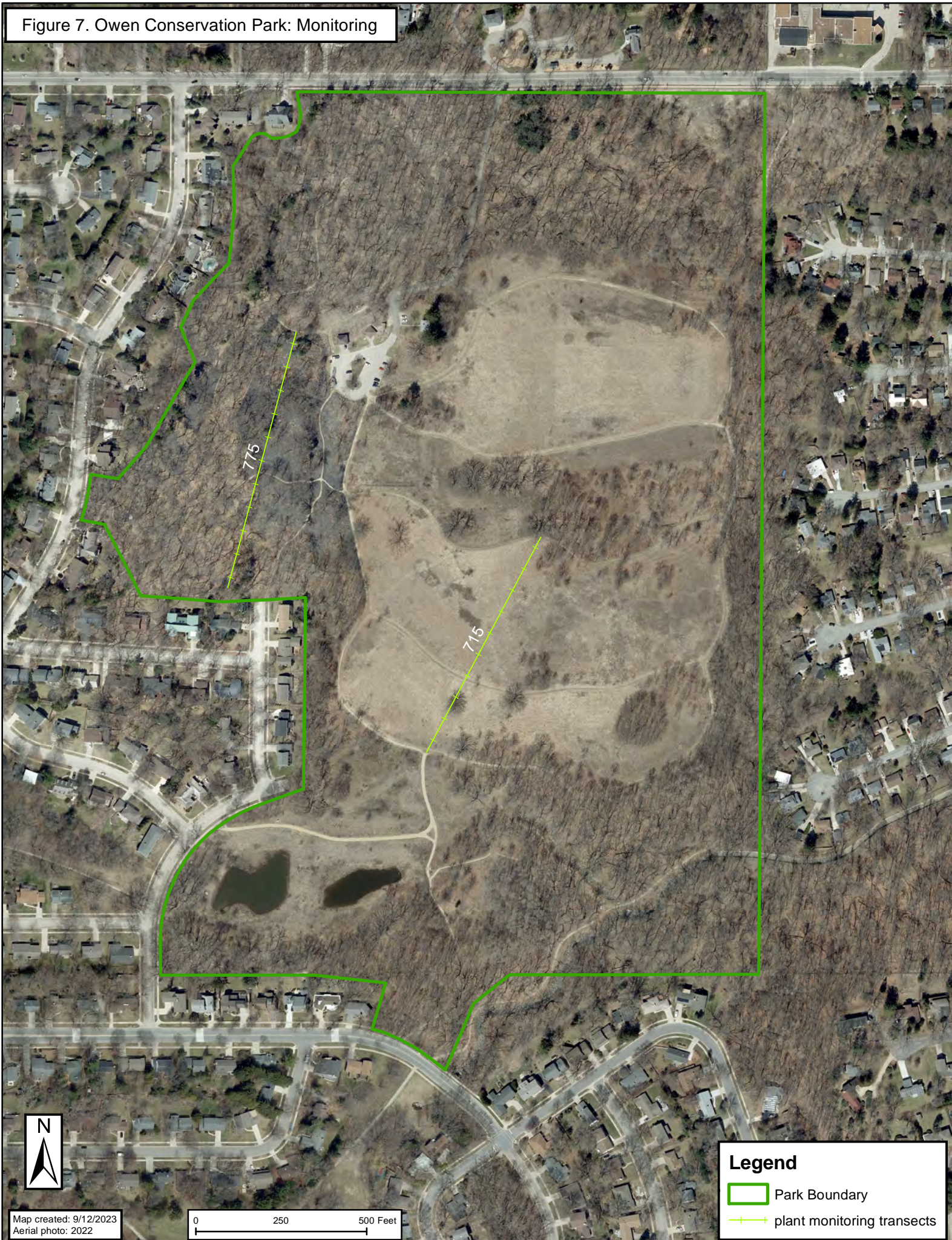
Legend

-  Park Boundary
-  Dry-mesic Prairie
-  Oak Woodland
-  woody cover
-  canopy gap

Map created: 9/12/2023
Aerial photo: 2022

0 250 500 Feet

Figure 7. Owen Conservation Park: Monitoring



Appendix B. Species Lists			
<i>Vascular Plants</i>			
SCIENTIFIC NAME	COMMON NAME	Native	Introduced
Acer ginnala	Amur maple		X
Acer negundo	Box elder	X	
Acer saccharinum	Silver maple	X	
Acer saccharum	Sugar maple	X	
Achillea millefolium	Yarrow		X
Adiantum pedatum	Maidenhair fern	X	
Agastache nepetoides	Yellow giant hyssop	X	
Agastache scrophulariaefolia	Purple giant hyssop	X	
Agropyron repens	Quack grass		X
Allium cernuum	Nodding wild onion	X	
Alliaria officinalis	Garlic mustard		X
Allium canadense	Wild garlic	X	
Allium tricoccum	Wild leek	X	
Ambrosia artemisiifolia elatior	Common ragweed	X	
Ambrosia trifida	Giant ragweed	X	
Amelanchier laevis	Allegheny shadblow	X	
Amorpha canescens	Lead plant	X	
Amphicarpa bracteata	Hog peanut	X	
Andropogon gerardi	Big bluestem grass	X	
Andropogon scoparius	Little bluestem grass	X	
Anemone canadensis	Canada anemone	X	
Anemone cylindrica	Thimbleweed	X	
Anemone patens wolfgangiana	Pasque flower	X	
Anemone quinquefolia interior	Wood anemone	X	
Anemone virginiana	Thimbleweed	X	
Antennaria neglecta	Cat's foot	X	
Antennaria plantaginifolia	Pussy toes	X	
Apocynum androsaemifolium	Spreading dogbane	X	
Aquilegia canadensis	Wild columbine	X	
Arctium minus	Common burdock		X
Arisaema triphyllum	Jack-in-the-pulpit	X	
Arnoglossum atriplicifolium	Pale Indian plantain	X	
Asarum canadense	Wild ginger	X	
Asclepias exaltata	Poke milkweed	X	
Asclepias syriaca	Common milkweed	X	
Asclepias verticillata	Whorled milkweed	X	
Asparagus officinalis	Asparagus		X
Aster azureus	Sky-blue aster	X	
Aster ericoides	Heath aster	X	
Aster laevis	Smooth blue aster	X	
Aster lateriflorus	Calico aster	X	
Aster novae-angliae	New England aster	X	

SCIENTIFIC NAME	COMMON NAME	Native	Introduced
<i>Aster oblongifolius</i>	Aromatic aster	X	
<i>Aster pilosus</i>	Frost aster	X	
<i>Aster prenanthoides</i>	Crooked aster	X	
<i>Aster sagittifolius</i>	Arrow-leaved aster	X	
<i>Baptisia leucantha</i>	White wild indigo	X	
<i>Baptisia leucophaea</i>	Cream wild indigo	X	
<i>Betula lutea</i>	Yellow birch	X	
<i>Blephilia ciliata</i>	Ohio horse mint	X	
<i>Blephilia hirsuta</i>	Wood mint	X	
<i>Bouteloua curtipendula</i>	Side-oats grama	X	
<i>Bromus inermis</i>	Smooth brome		X
<i>Bromus purgans</i>	Woodland brome	X	
<i>Camassia scilloides</i>	Wild hyacinth	X	
<i>Campanula americana</i>	Tall bellflower	X	
<i>Campanula rotundifolia</i>	Harebell	X	
<i>Carex brevior</i>	Sedge	X	
<i>Carex cephalophora</i>	Sedge	X	
<i>Carex pensylvanica</i>	Pennsylvania sedge	X	
<i>Carya ovata</i>	Shagbark hickory	X	
<i>Castanea dentata</i>	American chestnut	X	
<i>Catalpa speciosa</i>	Hardy catalpa		X
<i>Ceanothus americanus</i>	New Jersey tea	X	
<i>Celastrus orbiculatus</i>	Oriental bittersweet		X
<i>Celtis occidentalis</i>	Hackberry	X	
<i>Chelidonium majus</i>	Celandine		X
<i>Chrysanthemum leucanthemum pinnatifidum</i>	Ox-eye daisy		X
<i>Cichorium intybus</i>	Chicory		X
<i>Circaea quadrisulcata canadensis</i>	Enchanter's nightshade	X	
<i>Cirsium altissimum</i>	Woodland thistle	X	
<i>Cirsium arvense</i>	Canada thistle		X
<i>Cirsium discolor</i>	Pasture thistle	X	
<i>Cirsium vulgare</i>	Bull thistle		X
<i>Cladrastis lutea</i>	Yellow wood	X	
<i>Clematis virginiana</i>	Virgin's bower	X	
<i>Coreopsis palmata</i>	Prairie coreopsis	X	
<i>Coreopsis tripteris</i>	Tall coreopsis	X	
<i>Cornus alternifolia</i>	Alternate-leaved dogwood	X	
<i>Cornus drummondii</i>	Rough-leaved dogwood	X	
<i>Cornus racemosa</i>	Gray dogwood	X	
<i>Cornus stolonifera</i>	Red-osier dogwood	X	
<i>Corylus americana</i>	American hazelnut	X	
<i>Crataegus crus-galli</i>	Cockspur hawthorn	X	
<i>Cryptotaenia canadensis</i>	Honewort	X	
<i>Daucus carota</i>	Queen Anne's lace		X
<i>Dentaria laciniata</i>	Toothwort	X	

SCIENTIFIC NAME	COMMON NAME	Native	Introduced
<i>Desmodium canadense</i>	Canada tick trefoil	X	
<i>Desmodium glutinosum</i>	Pointed tick trefoil	X	
<i>Desmodium illinoense</i>	Illinois tick trefoil	X	
<i>Dicentra cucullaria</i>	Dutchman's breeches	X	
<i>Dodecatheon meadia</i>	Shooting star	X	
<i>Echinacea pallida</i>	Pale coneflower	X	
<i>Echinacea purpurea</i>	Purple coneflower		X
<i>Elymus canadensis</i>	Canada wild rye	X	
<i>Elymus villosus</i>	Silky wild rye	X	
<i>Elymus virginicus</i>	Virginia wild rye	X	
<i>Epilobium coloratum</i>	Cinnamon willow herb	X	
<i>Erechtites hieracifolia</i>	Burnweed	X	
<i>Erigeron annuus</i>	Annual fleabane	X	
<i>Erigeron canadensis</i>	Horseweed	X	
<i>Eryngium yuccifolium</i>	Rattlesnake master	X	
<i>Erythronium albidum</i>	White trout lily	X	
<i>Euonymus alatus</i>	Burning bush		X
<i>Euonymus europaeus</i>	Spindle tree		X
<i>Eupatorium altissimum</i>	Tall boneset	X	
<i>Eupatorium purpureum</i>	Purple joe pye weed	X	
<i>Eupatorium rugosum</i>	White snakeroot	X	
<i>Euphorbia corollata</i>	Flowering spurge	X	
<i>Euphorbia esula</i>	Leafy spurge		X
<i>Fragaria vesca americana</i>	Hillside strawberry	X	
<i>Fraxinus pennsylvanica</i>	Green ash	X	
<i>Galium asprellum</i>	Rough bedstraw	X	
<i>Galium boreale</i>	Northern bedstraw	X	
<i>Galium circaezans</i>	Wild licorice	X	
<i>Galium triflorum</i>	Sweet-scented bedstraw	X	
<i>Gaura biennis</i>	Biennial gaura	X	
<i>Gentiana andrewsii</i>	Closed gentian, Bottle gentian	X	
<i>Gentiana flavida</i>	Cream gentian	X	
<i>Gentiana quinquefolia</i>	Stiff gentian	X	
<i>Geranium maculatum</i>	Wild geranium	X	
<i>Geum aleppicum</i>	Yellow avens	X	
<i>Geum canadense</i>	Wood avens, White avens	X	
<i>Glechoma hederacea</i>	Ground ivy, Creeping charlie		X
<i>Gymnocladus dioica</i>	Kentucky coffee tree	X	
<i>Hackelia virginiana</i>	Stickseed	X	
<i>Helianthus divaricatus</i>	Woodland sunflower	X	
<i>Helianthus giganteus</i>	Tall sunflower	X	
<i>Helianthus grosseserratus</i>	Sawtooth sunflower	X	
<i>Helianthus laetiflorus</i>	Prairie sunflower	X	
<i>Helianthus occidentalis</i>	Western sunflower	X	
<i>Helianthus strumosus</i>	Pale-leaved sunflower	X	

SCIENTIFIC NAME	COMMON NAME	Native	Introduced
<i>Helianthus tuberosus</i>	Jerusalem-artichoke	X	
<i>Heliopsis helianthoides</i>	False sunflower	X	
<i>Hemerocallis fulva</i>	Lemon day lily		X
<i>Heracleum maximum</i>	Cow parsnip	X	
<i>Hesperis matronalis</i>	Dame's rocket		X
<i>Heuchera richardsonii</i>	Alum root	X	
<i>Hydrophyllum virginianum</i>	Virginia waterleaf	X	
<i>Hystrix patula</i>	Bottlebrush grass	X	
<i>Impatiens balfourii</i>	Kashmir balsam, Balfour's touch-me-not		X
<i>Impatiens capensis</i>	Orange jewelweed	X	
<i>Impatiens pallida</i>	Pale touch-me-not	X	
<i>Jeffersonia diphylla</i>	Twinleaf	X	
<i>Juglans cinerea</i>	Butternut	X	
<i>Juglans nigra</i>	Black walnut	X	
<i>Juniperus virginiana crebra</i>	Red cedar	X	
<i>Kuhnia eupatorioides</i>	False boneset	X	
<i>Lactuca canadensis</i>	Wild lettuce	X	
<i>Lespedeza capitata</i>	Round-headed bush clover	X	
<i>Liatris aspera</i>	Rough blazing star	X	
<i>Liatris pycnostachya</i>	Gayfeather	X	
<i>Lonicera dioica</i>	Red honeysuckle	X	
<i>Lonicera tatarica</i>	Tartarian honeysuckle		X
<i>Lupinus perennis occidentalis</i>	Wild lupine	X	
<i>Maianthemum canadense</i>	Canada Mayflower	X	
<i>Melilotus alba</i>	White sweet clover		X
<i>Melilotus officinalis</i>	Yellow sweet clover		X
<i>Menispermum canadense</i>	Moonseed	X	
<i>Mertensia virginica</i>	Virginia bluebells	X	
<i>Mimulus ringens</i>	Monkey flower	X	
<i>Monarda fistulosa</i>	Wild bergamot	X	
<i>Monarda punctata villicaulis</i>	Horse mint	X	
<i>Monotropa uniflora</i>	Indian pipe	X	
<i>Morus alba</i>	White mulberry		X
<i>Nepeta cataria</i>	Catnip		X
<i>Oenothera biennis</i>	Common evening primrose	X	
<i>Oenothera perennis</i>	Small sundrops	X	
<i>Onoclea sensibilis</i>	Sensitive fern	X	
<i>Osmorhiza claytoni</i>	Halry sweet cicely	X	
<i>Panicum latifolium</i>	Broad-leaved panic grass	X	
<i>Panicum leibergii</i>	Prairie panic grass	X	
<i>Panicum virgatum</i>	Switch grass	X	
<i>Parthenocissus quinquefolia</i>	Virginia creeper	X	
<i>Pedicularis canadensis</i>	Wood betony	X	
<i>Penstemon digitalis</i>	Foxglove beard tongue	X	
<i>Petalostemum candidum</i>	White prairie clover	X	

SCIENTIFIC NAME	COMMON NAME	Native	Introduced
<i>Petatostemum purpureum</i>	Purple prairie clover	X	
<i>Phalaris arundinacea</i>	Reed canary grass	X	
<i>Philadelphus pubescens</i>	Mock orange	X	
<i>Phlox divaricata</i>	Woodland phlox	X	
<i>Phlox pilosa</i>	Prairie phlox	X	
<i>Phryma leptostachya</i>	Lopseed	X	
<i>Physocarpus opulifolius</i>	Ninebark	X	
<i>Phytolacca acinosa</i>	Himalayan pokeweed		X
<i>Phytolacca americana</i>	Pokeweed	X	
<i>Pilea pumila</i>	Clearweed	X	
<i>Pinus strobus</i>	White pine	X	
<i>Plantago major</i>	Common plantain		X
<i>Poa pratensis</i>	Kentucky blue grass		X
<i>Podophyllum peltatum</i>	May apple	X	
<i>Polygonatum pubescens</i>	Downy solomon's seal	X	
<i>Polygonum pensylvanicum laevigatum</i>	Pennsylvania knotweed	X	
<i>Populus deltoides</i>	Cottonwood	X	
<i>Populus tremuloides</i>	Quaking aspen	X	
<i>Potentilla arguta</i>	Prairie cinquefoil	X	
<i>Prunus serotina</i>	Wild black cherry	X	
<i>Prunus americana</i>	Wild plum	X	
<i>Prunus virginiana</i>	Choke cherry	X	
<i>Ptelea trifoliata</i>	Wafer ash	X	
<i>Pteris pensylvanica</i>	Ostrich fern	X	
<i>Pteridium aquilinum latiusculum</i>	Bracken fern	X	
<i>Pycnanthemum pilosum</i>	Hairy mountain mint	X	
<i>Pycnanthemum virginianum</i>	Common mountain mint	X	
<i>Pyrus ioensis</i>	Iowa crab	X	
<i>Pyrus malus</i>	Apple		X
<i>Quercus alba</i>	White oak	X	
<i>Quercus macrocarpa</i>	Bur oak	X	
<i>Quercus rubra</i>	Red oak	X	
<i>Quercus velutina</i>	Black oak	X	
<i>Ratibida pinnata</i>	Yellow coneflower	X	
<i>Rhamnus cathartica</i>	Common buckthorn		X
<i>Rhus glabra</i>	Smooth sumac	X	
<i>Rhus radicans</i>	Poison ivy	X	
<i>Rhus typhina</i>	Staghorn sumac	X	
<i>Robinia pseudo-acacia</i>	Black locust		X
<i>Rubus allegheniensis</i>	Common blackberry	X	
<i>Rubus idaeus strigosus</i>	Red raspberry	X	
<i>Rubus occidentalis</i>	Black raspberry	X	
<i>Rudbeckia hirta</i>	Black-eyed susan	X	
<i>Rudbeckia subtomentosa</i>	Sweet black-eyed susan	X	
<i>Rudbeckia triloba</i>	Brown-eyed susan	X	

SCIENTIFIC NAME	COMMON NAME	Native	Introduced
<i>Sambucus canadensis</i>	Elderberry	X	
<i>Sambucus pubens</i>	Red-berried elder	X	
<i>Sanguinaria canadensis</i>	Bloodroot	X	
<i>Scrophularia lanceolata</i>	Early figwort	X	
<i>Senecio aureus</i>	Golden ragwort	X	
<i>Senecio vulgaris</i>	Common groundsel		X
<i>Silene stellata</i>	Starry campion	X	
<i>Silphium integrifolium</i>	Rosin weed	X	
<i>Silphium laciniatum</i>	Compass plant	X	
<i>Silphium perfoliatum</i>	Cup plant	X	
<i>Silphium terebinthinaceum</i>	Prairie dock	X	
<i>Sisyrinchium campestre</i>	Prairie blue-eyed grass	X	
<i>Smilacina racemosa</i>	False solomon's seal	X	
<i>Smilacina stellata</i>	Starry false soloman's seal	X	
<i>Soildago graminifolia nuttallii</i>	Grass-leaved goldenrod	X	
<i>Solanum dulcamara</i>	Bittersweet nightshade		X
<i>Solidago altissima</i>	Tall goldenrod	X	
<i>Solidago flexicaulis</i>	Zigzag goldenrod	X	
<i>Solidago missouriensis fasciculata</i>	Missouri goldenrod	X	
<i>Solidago nemoralis</i>	Old-field goldenrod	X	
<i>Solidago speciosa</i>	Showy goldenrod	X	
<i>Solidago ulmifolia</i>	Elm-leaved goldenrod	X	
<i>Sorghastrum nutans</i>	Indian grass	X	
<i>Spiranthes cernua</i>	Nodding ladies' tresses	X	
<i>Sporobolus heterolepis</i>	Prairie dropseed	X	
<i>Stipa spartea</i>	Porcupine grass	X	
<i>Stylophorum diphyllum</i>	Celandine poppy	X	
<i>Symphoricarpos albus</i>	Snowberry	X	
<i>Taraxacum officinale</i>	Common dandelion		X
<i>Thalictrum dasycarpum</i>	Purple meadow rue	X	
<i>Thalictrum dioicum</i>	Early meadow rue	X	
<i>Thaspium trifoliatum flavum</i>	Meadow parsnip	X	
<i>Thuja occidentalis</i>	Arbor vitae	X	
<i>Tilia americana</i>	Basswood	X	
<i>Tradescantia ohiensis</i>	Common spiderwort	X	
<i>Tragopogon pratensis</i>	Common goat's beard		X
<i>Trifolium hybridum</i>	Alsike clover		X
<i>Trifolium pratense</i>	Red clover		X
<i>Trifolium repens</i>	White clover		X
<i>Trillium recurvatum</i>	Red trillium	X	
<i>Trillium grandiflorum</i>	Large-flowered trillium	X	
<i>Triosteum perfoliatum</i>	Late horse gentian	X	
<i>Tsuga canadensis</i>	Hemlock	X	
<i>Ulmus americana</i>	American elm	X	
<i>Ulmus ruba</i>	Slippery elm	X	

SCIENTIFIC NAME	COMMON NAME	Native	Introduced
<i>Urtica chamaedryoides</i>	Nettle	X	
<i>Uvularia grandiflora</i>	Bellwort	X	
<i>Verbascum thapsus</i>	Common mullein		X
<i>Verbena hastata</i>	Blue vervain	X	
<i>Verbena stricta</i>	Hoary vervain	X	
<i>Verbena urticifolia</i>	White vervain	X	
<i>Veronicastrum virginicum</i>	Culver's root	X	
<i>Viburnum dentatum</i>	viburnum		X
<i>Viburnum lentago</i>	Nannyberry	X	
<i>Viburnum opulus</i>	European highbush cranberry		X
<i>Viburnum prunifolium</i>	Black haw	X	
<i>Viburnum trilobum</i>	Highbush cranberry	X	
<i>Vinca minor</i>	Periwinkle		X
<i>Viola canadensis</i>	Canada violet	X	
<i>Viola papilionacea</i>	Common blue violet	X	
<i>Viola pedatifida</i>	Prairie violet	X	
<i>Viola pubescens</i>	Downy yellow violet	X	
<i>Vitis aestivalis</i>	Summer grape	X	
<i>Zizia aptera</i>	Heart-leaved golden alexanders	X	
<i>Zizia aurea</i>	Golden alexanders	X	
total species	287		
total native	242		
total non-native	45		

Animals- Birds

Source: eBird Field Checklist generated by eBird on 6/4/2019. (GBIF.org 2019)

State listings:

END = endangered

THR = threatened

SC/M = special concern, but fully protected by federal and state laws under the Migratory Bird Act

SGCN = Species of Greatest Conservation Need, as identified in the Wisconsin Wildlife Action Plan

SINS-Monitoring = Species has numerical conservation status ranks and sufficient information to be assessed, but does not meet SGCN criteria.

SINS-Ranking = Species for which there is basic information, but not enough to assign a numerical rank

See Wisconsin natural heritage working list website for more information:

<https://dnr.wi.gov/topic/NHI/WList.html>

COMMON NAME	SCIENTIFIC NAME	state listing	Wi DNR Wisconsin Wildlife Action Plan
Acadian Flycatcher	Empidonax virescens	THR	SGCN
Alder Flycatcher	Empidonax alnorum		
American Bittern	Botaurus lentiginosus	SC/M	SGCN
American Crow	Corvus brachyrhynchos		
American Goldfinch	Spinus tristis		
American Kestrel	Falco sparverius		
American Redstart	Setophaga ruticilla		
American Robin	Turdus migratorius		
American Tree Sparrow	Spizelloides arborea		
American White Pelican	Pelecanus erythrorhynchos		
American Woodcock	Scolopax minor	SC/M	SGCN
Bald Eagle	Haliaeetus leucocephalus		
Baltimore Oriole	Icterus galbula		
Bank Swallow	Riparia riparia		
Barn Swallow	Hirundo rustica		
Barred Owl	Strix varia		
Bay-breasted Warbler	Setophaga castanea		
Belted Kingfisher	Megaceryle alcyon		
Black-and-white Warbler	Mniotilta varia		
Black-billed Cuckoo	Coccyzus erythrophthalmus		
Blackburnian Warbler	Setophaga fusca		
Black-capped Chickadee	Poecile atricapillus		
Black-crowned Night-Heron	Nycticorax nycticorax	SC/M	SGCN
Blackpoll Warbler	Setophaga striata		
Black-throated Blue Warbler	Setophaga caerulescens		
Black-throated Green Warbler	Setophaga virens		

COMMON NAME	SCIENTIFIC NAME	state listing	Wi DNR Wisconsin Wildlife Action Plan
Blue Jay	Cyanocitta cristata		
Blue Winged Teal	Anas discors		
Blue-gray Gnatcatcher	Polioptila caerulea		
Blue-headed Vireo	Vireo solitarius		
Blue-winged Warbler	Vermivora cyanoptera		
Bonaparte's Gull	Chroicocephalus philadelphia		
Broad-winged Hawk	Buteo platypterus		
Broad-winged Hawk	Butorides virescens		
Brown Creeper	Certhia americana		
Brown Thrasher	Toxostoma rufum		
Brown-headed Cowbird	Molothrus ater		
Buff-bellied pipit	Anthus rubescens		
Bufflehead	Bucephala albeola		
Cackling Goose	Branta hutchinsii		
Canada Goose	Branta canadensis		
Canada Warbler	Cardellina canadensis		SINS-Monitoring
Canada Warbler	Cardellina pusilla		
Cape May Warbler	Setophaga tigrina		
Carolina Wren	Thryothorus ludovicianus		
Cedar Waxwing	Bombycilla cedrorum		
Cerulean Warbler	Setophaga cerulea	THR	SGCN
Chestnut-sided Warbler	Setophaga pensylvanica		
Chimney Swift	Chaetura pelagica		
Chipping Sparrow	Spizella passerina		
Clay-colored Sparrow	Spizella pallida		
Cliff Swallow	Petrochelidon pyrrhonota		
Common Goldeneye	Bucephala clangula	SC/M	SGCN
Common Grackle	Quiscalus quiscula		
Common Merganser	Mergus merganser		
Common Nighthawk	Chordeiles minor	SC/M	SGCN
Common Redpoll	Acanthis flammea		
Common Yellowthroat	Geothlypis trichas		
Connecticut Warbler	Oporornis agilis	SC/M	SGCN
Cooper's Hawk	Accipiter cooperi		
Dark-eyed Junco	Junco hyemalis		
Double-crested Cormorant	Phalacrocorax auritus		
Downy Woodpecker	Dryobates pubescens		
Eastern Bluebird	Sialia sialis		
Eastern Kingbird	Tyrannus tyrannus		
Eastern Meadowlark	Sturnella magna	SC/M	SGCN
Eastern Phoebe	Sayornis phoebe		
Eastern towhee	Pipilo erythrophthalmus		
Eastern Whip-poor-will	Antrostomus vociferus	SC/M	SGCN

COMMON NAME	SCIENTIFIC NAME	state listing	Wi DNR Wisconsin Wildlife Action Plan
Eastern Wood-Pewee	<i>Contopus virens</i>		
European Starling	<i>Sturnus vulgaris</i>		
Field Sparrow	<i>Spizella pusilla</i>		SINS-Monitoring
Fox Sparrow	<i>Passerella iliaca</i>		
Gadwall	<i>Anas strepera</i>		
Golden-crowned Kinglet	<i>Regulus satrapa</i>		
Golden-winged Warbler	<i>Vermivora chrysoptera</i>	SC/M	SGCN
Grasshopper/Henslow's Sparrow	<i>Ammodramus savannarum</i>	SC/M	SGCN
Gray Catbird	<i>Dumetella carolinensis</i>		
Gray-cheeked Thrush	<i>Catharus minimus</i>		
Great Blue Heron	<i>Ardea herodias</i>		
Great Crested Flycatcher	<i>Myiarchus crinitus</i>		
Great Egret	<i>Ardea alba</i>	THR	SGCN
Great Horned Owl	<i>Bubo virginianus</i>		
Greater White-fronted Goose	<i>Anser albifrons</i>		
Greater Yellowlegs	<i>Tringa melanoleuca</i>		
Green-winged Teal	<i>Anas crecca</i>		
Hermit Thrush	<i>Catharus guttatus</i>		
Herring Gull	<i>Larus argentatus</i>		
Hooded Merganser	<i>Lophodytes cucullatus</i>		
Hooded Warbler	<i>Setophaga citrina</i>	THR	SGCN
House Finch	<i>Haemorhous mexicanus</i>		
House Sparrow	<i>Passer domesticus</i>		
House Wren	<i>Troglodytes aedon</i>		
Indigo Bunting	<i>Passerina cyanea</i>		
Killdeer	<i>Charadrius vociferus</i>		
Lark Sparrow	<i>Chondestes grammacus</i>	SC/M	SGCN
Least Flycatcher	<i>Empidonax minimus</i>	SC/M	SGCN
LeConte's Sparrow	<i>Ammodramus leconteii</i>	SC/M	SGCN
Lesser Yellowlegs	<i>Tringa flavipes</i>		
Lincoln's Sparrow	<i>Melospiza lincolnii</i>		
Long-eared Owl	<i>Otus asio</i>	SC/M	SGCN
Magnolia Warbler	<i>Setophaga magnolia</i>		
Mallard	<i>Anas platyrhynchos</i>		
Marsh Wren	<i>Cistothorus palustris</i>		
Merlin	<i>Falco columbarius</i>		
Mourning Dove	<i>Zenaida macroura</i>		
Mourning Warbler	<i>Geothlypis philadelphia</i>		
Nashville Warbler	<i>Leiostyris ruficapilla</i>		
Northern Cardinal	<i>Cardinalis cardinalis</i>		
Northern Cardinal	<i>Cathartes aura</i>		
Northern Flicker	<i>Colaptes auratus</i>		
Northern Harrier	<i>Circus hudsonius</i>		SINS-Monitoring

COMMON NAME	SCIENTIFIC NAME	state listing	Wi DNR Wisconsin Wildlife Action Plan
Northern Mockingbird	Mimus polyglottos		
Northern Parula	Setophaga americana		
Northern Rough-winged Swallow	Stelgidopteryx serripennis		
Northern Saw-whet Owl	Aegolius acadicus		
Northern Shoveler	Anas clypeata		
Northern Shrike	Lanius borealis		
Northern Waterthrush	Parkesia noveboracensis		
Olive-sided Flycatcher	Contopus cooperi	SC/M	SGCN
Orange-crowned Warbler	Leiothlypis celata		
Orchard Oriole	Icterus spurius		
Osprey	Pandion haliaetus		
Ovenbird	Seiurus aurocapilla		
Palm Warbler	Setophaga palmarum		SINS-Monitoring
Peregrine Falcon	Falco peregrinus	END	SGCN
Philadelphia Vireo	Vireo philadelphicus		SINS-Ranking
Pied-billed Grebe	Podilymbus podiceps		
Pileated Woodpecker	Dryocopus pileatus		
Pine Siskin	Spinus pinus		
Pine Warbler	Setophaga pinus		
Purple Finch	Haemorhous purpureus		
Purple Martin	Progne subis	SC/M	SGCN
Red Crossbill	Loxia curvirostra		SINS-Ranking
Red-bellied Woodpecker	Melanerpes carolinus		
Red-breasted Nuthatch	Sitta canadensis		
Red-eyed Vireo	Vireo olivaceus		
Red-headed Woodpecker	Melanerpes erythrocephalus	SC/M	SGCN
Red-tailed Hawk	Buteo jamaicensis		
Red-winged Blackbird	Agelaius phoeniceus		
Ring-billed Gull	Larus delawarensis		
Ring-necked Duck	Aythya collaris		
Rock Pigeon	Columba livia		
Rose-breasted Grosbeak	Pheucticus ludovicianus		
Rough-legged Hawk	Buteo lagopus		
Ruby-crowned Kinglet	Regulus calendula	SC/M	SGCN
Ruby-throated Hummingbird	Archilochus colubris		
Rufous Hummingbird	Selasphorus rufus		
Rusty Blackbird	Euphagus carolinus	SC/M	SGCN
Sandhill Crane	Grus canadensis		
Savannah Sparrow	Passerculus sandwichensis		
Scarlet Tanager	Piranga olivacea		
Sedge Wren	Cistothorus platensis		
Sharp-shinned Hawk	Accipiter striatus		
Solitary Sandpiper	Tringa solitaria		

COMMON NAME	SCIENTIFIC NAME	state listing	Wi DNR Wisconsin Wildlife Action Plan
Song Sparrow	Melospiza melodia		
Sora	Porzana carolina		
Spotted Sandpiper	Actitis macularia		
Summer Tanager	Piranga rubra		
Swainson's Thrush	Catharus ustulatus	SC/M	SGCN
Swamp Sparrow	Melospiza georgiana		
Tennessee Warbler	Leiothlypis peregrina		
Tree Swallow	Tachycineta bicolor		
Tufted Titmouse	Baeolophus bicolor		
Tundra Swan	Cygnus columbianus		
Veery	Catharus fuscescens		
Vesper Sparrow	Poocetes gramineus	SC/M	SGCN
Warbling Vireo	Vireo gilvus		
White-breasted Nuthatch	Sitta carolinensis		
White-crowned Sparrow	Zonotrichia leucophrys		
White-throated Sparrow	Zonotrichia albicollis		
Wild Turkey	Meleagris gallopavo		
Willow Flycatcher	Empidonax traillii		
Winter Wren	Troglodytes hiemalis		
Wood Duck	Aix sponsa		
Wood Thrush	Hylocichla mustelina		SINS-Monitoring
Worm-eating Warbler	Helmitheros vermivorum	END	SGCN
Yellow Warbler	Setophaga petechia		
Yellow-bellied Flycatcher	Empidonax flaviventris		
Yellow-bellied Sapsucker	Sphyrapicus varius		
Yellow-billed Cuckoo	Coccyzus americanus		SINS-Monitoring
Yellow-rumped Warbler	Setophaga coronata		
Yellow-throated Vireo	Vireo flavifrons		
total species	183	27	35

**Madison Parks
Natural Areas Monitoring Goals
August 2023**

Monitoring is necessary to track the success of restoration efforts as well as the overall quality of the habitat being managed. Data collected can quantify results, show trends in natural area health, and reveal potential concerns. The following framework identifies some possible monitoring subjects and strategies. Objectives and tasks can be implemented and completed as staff and volunteer capacity allow.

Much information can be gained by engaging and supporting various formal community science programs, and less formal community-populated databases. Data from many of these are accessible from the individual host organizations, as well as through clearing houses such as the [Global Biodiversity Information Facility \(GBIF\)](#). Many volunteers currently conduct monitoring within conservation parks and other natural areas. These programs are recognized below as well.

Taxa: Plants

Objectives:

1. Complete and update species inventories for each park, and each management unit where applicable (Managed Meadow, Woodland, management unit within a conservation park, etc.).

Tasks:

- a. Conduct meander surveys three times during the growing season to compile and update plant species list.
2. Determine and track floristic quality in managed natural areas
- Tasks:*
- a. Establish permanent transects with randomized 1m² plots (quadrats)
 - b. Survey quadrats and record percent cover of each species present.
 - c. Analyze data to calculate species richness, diversity, and Floristic Quality Index.

Taxa: Insects

Objectives:

1. Complete overall species inventory per park

Tasks:

- a. Conduct daytime surveys with sweep nets
 - b. Conduct nighttime surveys with light traps
 - c. Conduct surveys of soil surface insect fauna
2. Monitor pollinator abundance and species composition
- Tasks:*
- a. Collect data using [Wisconsin Bumble Bee Brigade](#) protocols
 - b. Support the [Integrated Monarch Monitoring Program](#)
 - c. Collect data using Pollard transects to target butterflies
 - d. Support the [Wisconsin Odonata Survey](#)

Taxa: Herptiles

Objectives:

1. Complete overall species inventory per park

Tasks:

- a. Conduct surveys with funnel traps

2. Conduct breeding survey

Tasks:

- a. Establish [Wisconsin Frog and Toad Survey](#) phenology survey locations where appropriate

Taxa: Birds

Objectives:

1. Conduct surveys and document species present.

2. Analyze data available from [eBird](#) through the [Global Biodiversity Information Facility \(GBIF\)](#)

Tasks:

- a. Download data sets for each park