

Site information

- Address: 802 Femrite Drive
Acreage: 62 acres (includes 2-acre storm water and park easement on Madison Metropolitan School District property)
Site summary: This former farm was acquired by the City and designated as a conservation park in 1972. Additional parcels were added in 1974 and 1979. The park is surrounded on three sides by the City of Monona, and offers 1.4 miles of trails through old fields, wetlands and oak woodlands.
Adjacent lands: Adjacent natural areas and areas of ecological significance include a prairie restoration on the adjacent Aldo Leopold Nature Center property to the west, and oak savanna in Woodland Park (City of Monona) located northwest of that.

Conservation values

The dominant natural features of Edna Taylor are the glacial drumlin and the series of ponds and wetlands that ultimately drain to Mud Lake. The park also protects seven Native American burial mounds that have been catalogued by the State Historic Preservation Office. See Appendix B for more information, contained in the Burial Mound Management Plan for this park.

The uplands throughout the park are dominated by oak savanna and oak-hickory woodland. Grazed in the past, the woodlands had become overgrown and invaded with non-native shrubs such as buckthorn and honeysuckle, and non-native herbaceous species such as garlic mustard and dame's rocket. The overstory retains many mature, open-grown oak, and significant progress has been made in restoring these areas, and staff is currently reintroducing native plants and re-establishing a regular fire regime in this habitat.

A 1-acre prairie planting is located in the center of the park on former cropland. The southern third of the park is degraded and old fields here have succeeded to goldenrod and aspen, as well as Siberian elm and black locust. The excavated storm water ponds provide valuable open water habitat for numerous species of waterfowl and wading birds, but the surrounding emergent marsh is dominated by hybrid cattail and reed canary grass.

Several rare bird species have been observed in the park, particularly in and around the ponds. Appendix C contains lists of bird and vascular plant species observed at the park.

Madison Parks' Land Management Plan (2017) outlines the main habitat types found in the City's conservation parks. These general types can be further classified into "Recognized Natural Communities" described by the Wisconsin Natural Heritage Inventory (2018). This helps us to provide more technical and specific restoration targets based on the nuances of each park. The main habitat types that occur at Edna Taylor are below, with the appropriate corresponding NHI-recognized natural communities listed under each one.

Tallgrass prairie (Madison Parks)

Mesic Prairie (NHI)

Oak savanna / Oak woodland (Madison Parks)

Oak Woodland (NHI)

Deciduous Forest (Madison Parks)

Floodplain Forest (NHI)

Southern Mesic Forest (NHI)

Sedge Meadow (Madison Parks)
Southern Sedge Meadow (NHI)

Emergent Marsh (Madison Parks)
Emergent Aquatic (NHI)

Appendix A.2 is a map showing community types within the park, using a combination of the levels described above. Further work is needed to more accurately characterize and map plant communities, and to comprehensively inventory species of all taxa found in the park.

Ecological threats

Invasive species - Major non-native species in the uplands include garlic mustard, burdock, buckthorn, and honeysuckle. Reed canary grass and hybrid cattail dominate most wetlands in the park.

Conservation goals

1. *Restore and maintain oak woodlands.*
Fire-suppressed oak woodlands in the park have been thinned to restore the appropriate woodland structure. Priorities for management include promoting oak regeneration, and re-establishing the native herbaceous layer.
2. *Restore and maintain wetland habitat.*
The wetlands in the park are part of the City's "green infrastructure" for storm water management. As such, the floristic quality is low, and although native emergent aquatic vegetation has been established around the excavated ponds, the broader wetland areas are dominated by hybrid cattail and reed canary grass. These areas could be enhanced to provide greater species richness and diversity.
3. *Maintain native herbaceous plant diversity and natural community vegetation structure.*
Management objectives and prescriptions should consider both species and habitat diversity, and ensure that actions result in a heterogeneous landscape. Efforts to control the density of woody species should ensure that native shrubs are retained and that a range of seral stages and stem densities are provided, where possible within the park.
4. *Monitor the various major taxonomic groups in order to inform management decisions.*
Increased monitoring is a broader goal of the Conservation Park program. Specifically, at Edna Taylor, there is not only a need to inventory and document species that occur, but also to collect quantitative data about species richness, diversity, and plant community cover.

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 these goals, we strive to balance ecological management needs with the needs of the community. Ecological management at Edna Taylor should pay specific attention to the following:

Smoke management - The park is situated just south of Glendale Elementary School and just west of US 51/Stoughton Road. This limits acceptable wind directions for conducting prescribed burns. Careful burn execution and proactive stakeholder outreach are crucial for limiting impacts and sustaining public acceptance of this management practice.

Snag management – Despite recent oak wilt and emerald ash borer infestations that have produced a large number of snags in the area, care should be taken to protect this habitat characteristic where possible. In general, vegetation management should strive to minimize drastic changes to available habitat and management activities will follow Madison Parks’ internal Snag Protection Policy. An inventory of snags at Edna Taylor is needed.

Friends of Edna Taylor

The Friends of Edna Taylor Conservation Park was established in 1972 to assist Madison Parks with planning, outreach and restoration activities in the park. They have worked on controlling buckthorn and garlic mustard in the park since the early 2000s.

This management plan acknowledges opportunities for Parks staff to better engage them at this site. Parks’ Conservation Supervisor will meet with the group semi-annually to discuss progress and work plans for the park.

Management history

Major work to date includes restoration of oak woodland on the drumlin and in surrounding lowlands. Cropland in the center of the park has been restored to tallgrass prairie. Prescribed burns have been conducted in the park since 2013.

Control of invasive species by Parks staff became systematic in 2016, with regular control of garlic mustard, burdock and Asian bittersweet. Staff has also worked to decrease tree density and open the canopy to encourage oak regeneration and native herbaceous species.

Management units

The park can be divided into several management units based on location and habitat type. See Appendix A.3 for a map of management units.

Mound Unit (14 ac) Upland Oak Woodland dominated by bur oak, shagbark hickory and white oak. Red oak is present as well. This unit is situated on a drumlin in the east side of the park, and features seven Native American burial mounds. Extensive restoration effort has controlled buckthorn, honeysuckle, garlic mustard and burdock.

Asher Woods (6 ac) Oak savanna grades into mesic oak woodland, and wet-mesic forest dominated by hickory, ash and maple.

Parking Lot (5 ac) This unit had been farmed in row crops and has subsequently become dominated by Canada goldenrod, reed canary grass and an aspen clone. Black locust and Siberian elm dominate the SW corner where fill had been dumped and shaped. Management has been limited to invasive species control under oak and hickory canopy that occurs along Femrite Drive.

Main Wetlands (18 ac) Emergent marsh and storm water retention ponds that were excavated in 1984 and enlarged in 1996. Dominated by hybrid cattail and reed canary grass, but open water and emergent vegetation. This unit is not currently managed.

Aldo Leopold Unit (4 ac) Oak savanna habitat in NW corner of park. Bordered by Aldo Leopold Nature Center property.

Boulder Woods (4 ac) Mesic oak woodland habitat in central portion of park. Soil moisture and high shrub density, including buckthorn, has limited effectiveness of fires. The western portion of this unit was forestry mowed in fall 2018.

North Wetlands (11 ac) Sedge meadow, emergent marsh and excavated storm water ponds with wet forest at the NE end dominated by cottonwood, silver maple and black willow. Ponds here were excavated in 1996.

Prescriptions/Options

Options for three levels of management are presented in this plan: maintenance only, moderate restoration, and extensive restoration.

Management Level 1 “maintenance only” is NOT recommended for any of the conservation parks at this time. Restricting ecological management to areas recently treated is not sustainable within the context of existing adjacent invasive species populations and dispersal corridors, both within and outside of a given park.

Management Level 2 “moderate restoration” is based on the current Conservation section budget, staff capacity, and work accomplished in the past two years. This is the level at which we currently operate.

Management Level 3 “extensive restoration” could only be accomplished with increased staffing in the Conservation Parks section, in order to conduct the in-house work outlined below, as well as manage and volunteers and Capital Improvement Project contracts.

Under management level 3, costs will eventually decrease then plateau, as all management units within a park come under active management. With initial restoration completed, treatment areas and the park as a whole, will transition from a “restoration phase” to a “maintenance phase”. Once a healthy, diverse, native plant community has become established park-wide, it can be maintained with much fewer resources. Internal ecological threats will have been minimized, and regular burning and occasional control of new populations of invasive species will be sufficient to sustain the natural area at its new equilibrium. Only then will the “maintenance only” option be successful.

Management Level 1 (maintenance only)

Objectives:

- Follow-up effort to control invasive species only in areas previously treated.
- Mow prairie planting and woodland areas to control brush.
- Burn woodland units on a 4-year return interval.

Annual Budget Estimate:

| Task | Annual cost |
|--|--------------------|
| Invasive species treatments (spring, summer) | \$4,000 |
| Mow trails | \$2,500 |
| Trail maintenance (gravel, water bars, etc.) | \$800 |
| Brush mowing | \$800 |
| Invasive species treatments (fall) | \$600 |
| Burns (average one every year) | \$4,000 |
| totals | \$12,700 |

Specific Management Unit Prescriptions:

| Timeline | Unit(s) | Task |
|-----------------|---|---|
| Spring 2019 | Boulder Woods | Rx burn |
| Spring 2019 | Mound, Asher Woods, Boulder Woods, Aldo Leopold, | Spray or hand pull garlic mustard, dame's rocket and burdock (staff and volunteers) |
| Spring 2019 | Parking lot | Support volunteers in pulling garlic mustard |
| Summer 2019 | Aldo Leopold | Pull Japanese hedge parsley |
| Fall 2019 | Mound | Cut/treat or basal bark Asian bittersweet |
| Fall 2019 | Asher Woods | Cut/treat scattered honeysuckle |
| Spring 2020 | Asher Woods | Rx burn (in woods only - exclude prairie burned spring 2019) |
| Spring 2020 | Mound, Asher Woods, Boulder Woods, Aldo Leopold, | Spray or hand pull garlic mustard, dame's rocket and burdock (staff and volunteers) |
| Spring 2020 | Parking lot | Support volunteers in pulling garlic mustard |
| Summer 2020 | Aldo Leopold | Pull Japanese hedge parsley |
| Summer 2020 | Asher Woods | Mow prairie |
| Summer 2020 | Parking Lot | Mow woodland near road |
| Fall 2020 | Mound | Foliar spray Asian bittersweet |
| Fall 2020 | Mound | Cut/treat scattered honeysuckle |
| Spring 2021 | Aldo Leopold | Rx burn |
| Spring 2021 | Mound, Asher Woods, Boulder Woods, Aldo Leopold, | Spray or hand pull garlic mustard, dame's rocket and burdock (staff and volunteers) |
| Spring 2021 | Parking lot | Support volunteers in pulling garlic mustard |
| Summer 2021 | Aldo Leopold | Survey for Japanese hedge parsley |
| Summer 2021 | Mound | Mow brush |

| Timeline | Unit(s) | Task |
|-------------|---|---|
| Fall 2021 | Mound | Foliar spray Asian bittersweet |
| Fall 2021 | Boulder Woods | Cut/treat scattered honeysuckle and buckthorn |
| Spring 2022 | Mound | Rx burn |
| Spring 2022 | Mound, Asher Woods, Boulder Woods, Aldo Leopold, | Spray or hand pull garlic mustard, dame's rocket and burdock (staff and volunteers) |
| Spring 2022 | Parking lot | Support volunteers in pulling garlic mustard |
| Summer 2022 | Aldo Leopold | Survey for Japanese hedge parsley |
| Summer 2022 | Aldo Leopold | Mow brush |
| Fall 2022 | Mound | Survey for Asian bittersweet |
| Fall 2022 | Parking Lot | Cut/treat scattered honeysuckle and buckthorn |
| Spring 2023 | Boulder Woods | Rx burn |
| Spring 2023 | Mound, Asher Woods, Boulder Woods, Aldo Leopold, | Spray or hand pull garlic mustard, dame's rocket and burdock (staff and volunteers) |
| Spring 2023 | Parking lot | Support volunteers in pulling garlic mustard |
| Summer 2023 | Aldo Leopold | Survey for Japanese hedge parsley |
| Summer 2023 | Parking Lot | Mow woodland near road |
| Fall 2023 | Mound | Survey for Asian bittersweet |

Possible Burn Schedule – average one burn every year:

| year | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---------------|---|---|---|---|---|---|---|---|---|----|
| Boulder Woods | x | | | | x | | | | x | |
| Asher Woods | | x | | | | x | | | | x |
| Aldo Leopold | | | x | | | | x | | | |
| Mound Unit | | | | x | | | | x | | |

Management Level 2 (moderate restoration)

Objectives:

- Follow-up effort to control invasive species on acres previously treated.
- Expand oak woodland restoration in Mound Unit to southeast slope of drumlin.
- Collect native seed on site and re-distribute to enhance plant community and species richness throughout managed portions of the park. Supplement this with occasional installations of purchased native seed mixes.
- Burn most units on 2-3 year return interval.
- Mow brush as needed in prairie and woodlands to supplement prescribed burns.

Annual Budget Estimate:

| Task | Annual cost |
|--|--------------------|
| Invasive species treatments (spring, summer) | \$4,000 |
| Contract for invasive species control | \$5,000 |
| Mow trails | \$2,500 |
| Trail maintenance (gravel, water bars, etc.) | \$1,200 |
| Brush mowing | \$400 |
| Invasive species treatments (fall) | \$600 |
| Woody invasive control (cut/treat) | \$4,500 |
| Burns (average two every year) | \$8,000 |
| Purchase and install native seed mix | \$1,000 |
| totals | \$27,200 |

Specific Management Unit Prescriptions:

| Timeline | Unit(s) | Task |
|------------------|---|--|
| Spring 2019 | Boulder Woods | Rx burn |
| Spring 2019 | Mound, Asher Woods, Boulder Woods, Aldo Leopold, North Wetlands | Spray or hand pull garlic mustard, dame's rocket and burdock throughout, as well as re-sprouts of non-native woody species in areas forestry-mowed in 2018. (staff, contract and volunteers) |
| Spring 2019 | Parking lot | Support volunteers in pulling garlic mustard |
| Summer 2019 | Aldo Leopold | Pull Japanese hedge parsley |
| Summer 2019 | Mound | Re-route trail to completely avoid burial mounds |
| Summer/Fall 2019 | All managed units | Collect and re-distribute native seed (staff and volunteers) |
| Fall 2019 | Mound | Cut/treat or basal bark Asian bittersweet |
| Fall 2019 | Asher Woods | Cut/treat scattered honeysuckle |
| Spring 2020 | Asher Woods Parking Lot | Rx burn (in woods only - exclude prairie burned spring 2019) |
| Spring 2020 | Mound, Asher Woods, Boulder Woods, Aldo Leopold, North Wetlands, Parking Lot | Spray or hand pull garlic mustard, dame's rocket and burdock throughout, as well as re-sprouts of non-native woody species. (staff, contract and volunteers) |
| Summer 2020 | Aldo Leopold | Pull Japanese hedge parsley |
| Summer 2020 | Asher Woods | Mow prairie |

| Timeline | Unit(s) | Task |
|-------------|--|---|
| Summer 2020 | Parking Lot | Mow woodland near road |
| Fall 2020 | Mound | Foliar spray Asian bittersweet |
| Fall 2020 | Mound | Cut/treat scattered honeysuckle |
| | | |
| Spring 2021 | Aldo Leopold, Mound | Rx burn |
| Spring 2021 | Mound, Asher Woods, Boulder Woods, Aldo Leopold, | Spray or hand pull garlic mustard, dame's rocket and burdock (staff and volunteers) |
| Spring 2021 | Parking Lot, North Wetlands | Support volunteers in pulling garlic mustard |
| Summer 2021 | Aldo Leopold | Survey for Japanese hedge parsley |
| Summer 2021 | Mound | Mow brush |
| Fall 2021 | Mound | Foliar spray Asian bittersweet |
| | | |
| Spring 2022 | Boulder Woods, Asher Woods | Rx burn |
| Spring 2022 | Mound, Asher Woods, Boulder Woods, Aldo Leopold, | Spray or hand pull garlic mustard, dame's rocket and burdock (staff and volunteers) |
| Spring 2022 | Parking Lot, North Wetlands | Support volunteers in pulling garlic mustard |
| Summer 2022 | Aldo Leopold | Survey for Japanese hedge parsley |
| Summer 2022 | Aldo Leopold | Mow brush |
| Fall 2022 | Mound | Survey for Asian bittersweet |
| | | |
| Spring 2023 | Aldo Leopold Mound | Rx burn |
| Spring 2023 | Mound, Asher Woods, Boulder Woods, Aldo Leopold, | Spray or hand pull garlic mustard, dame's rocket and burdock (staff and volunteers) |
| Spring 2023 | Parking Lot, North Wetlands | Support volunteers in pulling garlic mustard |
| Summer 2023 | Aldo Leopold | Survey for Japanese hedge parsley |
| Summer 2023 | Parking Lot | Mow woodland near road |
| Fall 2023 | Mound | Survey for Asian bittersweet |

Possible burn schedule – average two burns per year:

| year | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---------------|---|---|---|---|---|---|---|---|---|----|
| Boulder Woods | A | | | A | | | A | | A | |
| Asher Woods | | A | | B | | A | | A | | |
| Aldo Leopold | | | A | | A | | | B | | |
| Mound Unit | | | B | | | B | | | B | |
| Parking Lot | | B | | | B | | B | | | A |

Management Level 3 (extensive restoration)

Objectives:

- Follow-up effort to control invasive species on acres previously treated.
- Expand oak woodland restoration in Mound Unit to southeast slope of drumlin.
- Establish prairie in old field areas dominated by goldenrod.
- Control invasive shrubs in remainder of uplands in park and replace Siberian elm with native species.
- Collect native seed on site and re-distribute to enhance plant community and species richness throughout managed portions of the park. Supplement this with occasional installations of purchased native seed mixes.
- Burn most units on 2-3 year return interval.
- Mow brush as needed in prairie and woodlands to supplement prescribed burns.

Annual Budget Estimate:

| Task | Annual cost |
|--|--------------------|
| Invasive species treatments (spring, summer) | \$4,000 |
| Contract for invasive species control | \$9,000 |
| Mow trails | \$2,500 |
| Trail maintenance (gravel, water bars, etc.) | \$1,200 |
| Brush mowing | \$400 |
| Invasive species treatments (fall) | \$600 |
| Woody invasive control (cut/treat) | \$10,000 |
| Burns (average 2.5 per year) | \$10,000 |
| Purchase and install native seed mix | \$5,000 |
| totals | \$42,700 |

Specific Management Unit Prescriptions:

| Timeline | Unit(s) | Task |
|------------------|---|--|
| Spring 2019 | Boulder Woods | Rx burn |
| Spring 2019 | Mound, Asher Woods, Boulder Woods, Aldo Leopold, North Wetlands | Spray or hand pull garlic mustard, dame's rocket and burdock throughout, as well as re-sprouts of non-native woody species in areas forestry-mowed in 2018. (staff, contract and volunteers) |
| Spring 2019 | Parking lot | Support volunteers in pulling garlic mustard |
| Summer 2019 | Aldo Leopold | Pull Japanese hedge parsley |
| Summer 2019 | Mound | Re-route trail to completely avoid burial mounds |
| Summer/Fall 2019 | All managed units | Collect and re-distribute native seed (staff and volunteers) |
| Fall 2019 | Mound | Cut/treat or basal bark Asian bittersweet |
| Fall 2019 | Asher Woods | Cut/treat scattered honeysuckle |
| Spring 2020 | Asher Woods Parking Lot North Wetlands | Rx burn (woods only in Asher Woods unit - exclude prairie burned spring 2019) |
| Spring 2020 | Mound, Asher Woods, Boulder Woods, Aldo Leopold, North Wetlands, Parking Lot | Spray or hand pull garlic mustard, dame's rocket and burdock throughout, as well as re-sprouts of non-native woody species. (staff, contract and volunteers) |

| Timeline | Unit(s) | Task |
|-----------------|---|---|
| Spring 2020 | Parking Lot, North Wetlands | Support volunteers in pulling garlic mustard |
| Spring 2020 | Parking Lot Main Wetlands | Reed canary grass control (contract) |
| Summer 2020 | Aldo Leopold | Pull Japanese hedge parsley |
| Summer 2020 | Asher Woods | Mow prairie |
| Summer 2020 | Parking Lot | Mow woodland near road |
| Fall 2020 | Mound | Foliar spray Asian bittersweet |
| Fall 2020 | Mound, Parking Lot | Cut/treat honeysuckle in north end of Mound unit, and in SE corner of Parking lot unit (contract) |
| | | |
| Spring 2021 | Aldo Leopold, Mound | Rx burn |
| Spring 2021 | Mound, Asher Woods, Boulder Woods, Aldo Leopold, | Spray or hand pull garlic mustard, dame's rocket and burdock (staff and volunteers) |
| Spring 2021 | Parking Lot, North Wetlands | Support volunteers in pulling garlic mustard |
| Spring 2021 | Parking Lot Main Wetlands | Reed canary grass control (contract) |
| Summer 2021 | Aldo Leopold | Survey for Japanese hedge parsley |
| Summer 2021 | Mound | Mow brush |
| Fall 2021 | Mound | Foliar spray Asian bittersweet |
| Fall 2021 | Parking Lot | Begin removing Siberian elm stand |
| | | |
| Spring 2022 | Boulder Woods, Asher Woods Main Wetlands | Rx burn |
| Spring 2022 | Parking Lot Main Wetlands | Install native seed mix in reed canary grass treatment areas |
| Spring 2022 | Parking Lot | Re-plant SE corner to native trees |
| Spring 2022 | Mound, Asher Woods, Boulder Woods, Aldo Leopold, | Spray or hand pull garlic mustard, dame's rocket and burdock (staff and volunteers) |
| Spring 2022 | Parking Lot, North Wetlands | Support volunteers in pulling garlic mustard |
| Summer 2022 | Aldo Leopold | Survey for Japanese hedge parsley |
| Summer 2022 | Aldo Leopold | Mow brush |
| Fall 2022 | Mound | Survey for Asian bittersweet |
| Fall 2022 | Parking Lot | Complete Siberian elm stand removal |
| | | |
| Spring 2023 | Aldo Leopold Mound | Rx burn |
| Spring 2023 | Parking Lot | Re-plant SE corner to native trees, install native seed mix |
| Spring 2023 | Mound, Asher Woods, Boulder Woods, Aldo Leopold, | Spray or hand pull garlic mustard, dame's rocket and burdock (staff and volunteers) |
| Spring 2023 | Parking Lot, North Wetlands | Support volunteers in pulling garlic mustard |

| Timeline | Unit(s) | Task |
|-------------|--------------|-----------------------------------|
| Summer 2023 | Aldo Leopold | Survey for Japanese hedge parsley |
| Summer 2023 | Parking Lot | Mow woodland near road |
| Fall 2023 | Mound | Survey for Asian bittersweet |

Possible burn schedule – average 2.5 burns per year:

| Year | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----------------|---|---|---|---|---|---|---|---|---|----|
| Boulder Woods | A | | | A | | | A | | A | |
| Asher Woods | | A | | B | | A | | A | | A |
| Aldo Leopold | | | A | | A | | | B | | |
| Mound Unit | | | B | | | B | | | B | |
| Parking Lot | | B | | | B | | B | | C | |
| Main Wetlands | | | | C | | | | C | | B |
| North Wetlands | | C | | | | C | | | | |

Monitoring and Evaluation

Measuring results is critical to determining success. Parks conservation staff have developed a monitoring plan to begin to measure and track ecological health and the success of restoration efforts in the conservation parks. Refer to Appendix D for an outline of this plan.

While the Conservation Parks section currently has very limited capacity to increase monitoring efforts, we hope to expand our reach by working with the University of Wisconsin at Madison, Friends of Edna Taylor, and independent volunteers. Both formal research and citizen science will provide crucial information on which to base management decisions. With this in mind, basic, periodic monitoring can be performed by staff or volunteers to collect data about mammals, birds, reptiles and amphibians, invertebrates, and vascular plants. A few key metrics that should be used at Edna Taylor include plant and animal diversity, and abundance of invasive species.

As part of a wider monitoring program, the following tasks should be completed:

- Map native plant community types.
- Update/verify plant and animal species lists.
- Sample plant communities to collect data on richness and cover, then calculate diversity and floristic quality indices.
- Conduct photo monitoring on 2-year intervals.

See Appendix A.5 for a map of plant monitoring transects and photo monitoring stations.

Citations

Madison Parks. 2017. *Land Management Plan: City of Madison Parks*. City of Madison, Parks Division, Madison.

Wisconsin Department of Natural Resources. 2018. Wisconsin's Natural Communities. <http://dnr.wi.gov/topic/EndangeredResources/Communities.asp> Accessed February 8, 2018.

Document History

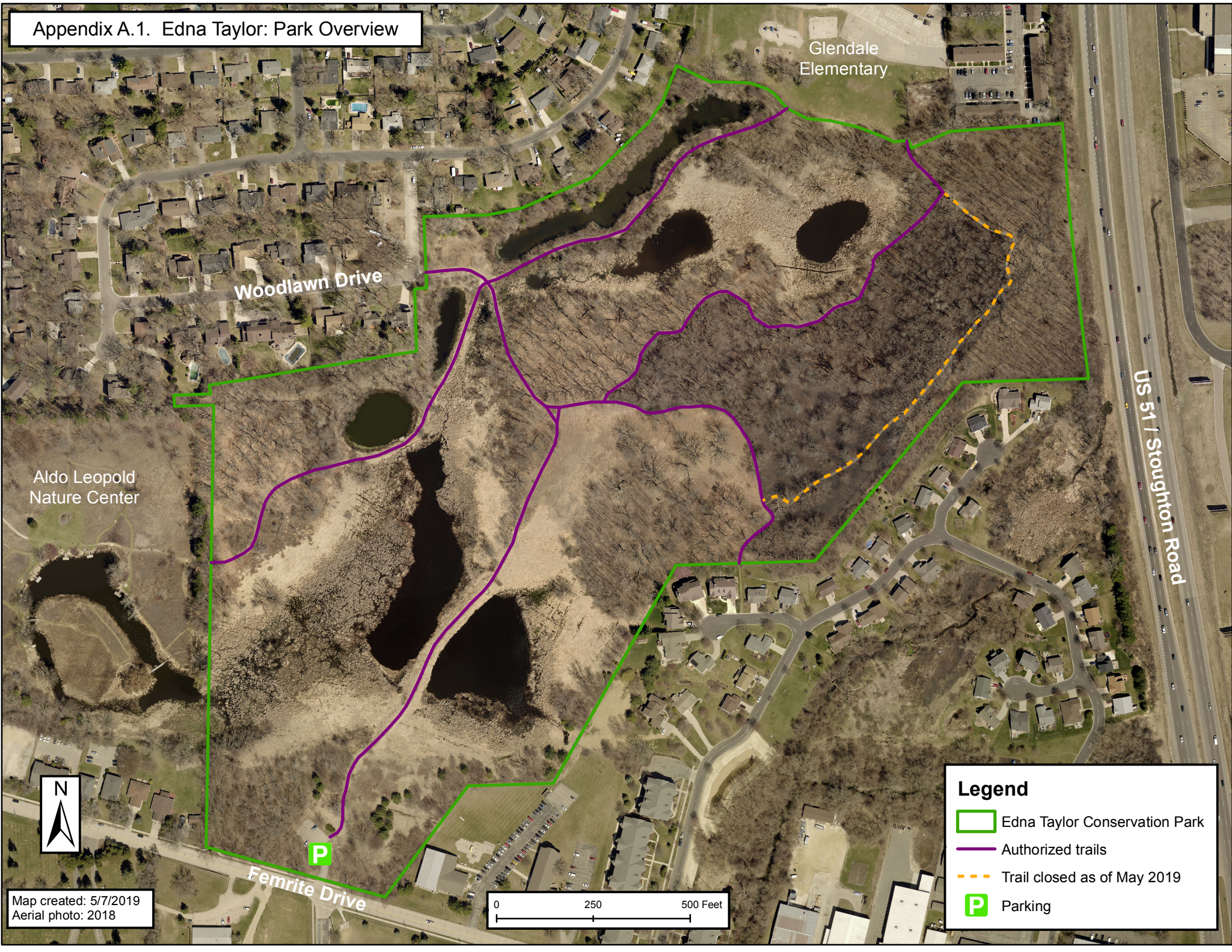
This Habitat Management Plan is consistent with Madison Parks' Land Management Plan. This Habitat Management Plan has 5-year lifespan, and should be reviewed yearly. It can be revised whenever new information is discovered. If no changes have been made, it should be updated in its 5th year.

| Version | Description |
|----------------|-------------------------------|
| 5/15/2019 | First draft, presented to HSC |
| | |
| | |

Appendices

- A. Maps
 - A.1 Park Overview
 - A.2 Natural Communities
 - A.3 Management Units
 - A.4 Prescribed Burns
 - A.5 Monitoring
- B. Burial Mound Management Plan for Edna Taylor Conservation Park (forthcoming)
- C. Species Lists
- D. Conservation Parks Monitoring Plan

Appendix A.1. Edna Taylor: Park Overview



Glendale Elementary

Woodlawn Drive





Aldo Leopold Nature Center

US 51 / Stoughton Road

Femrite Drive

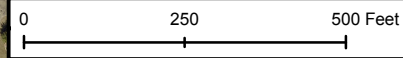
P

Legend

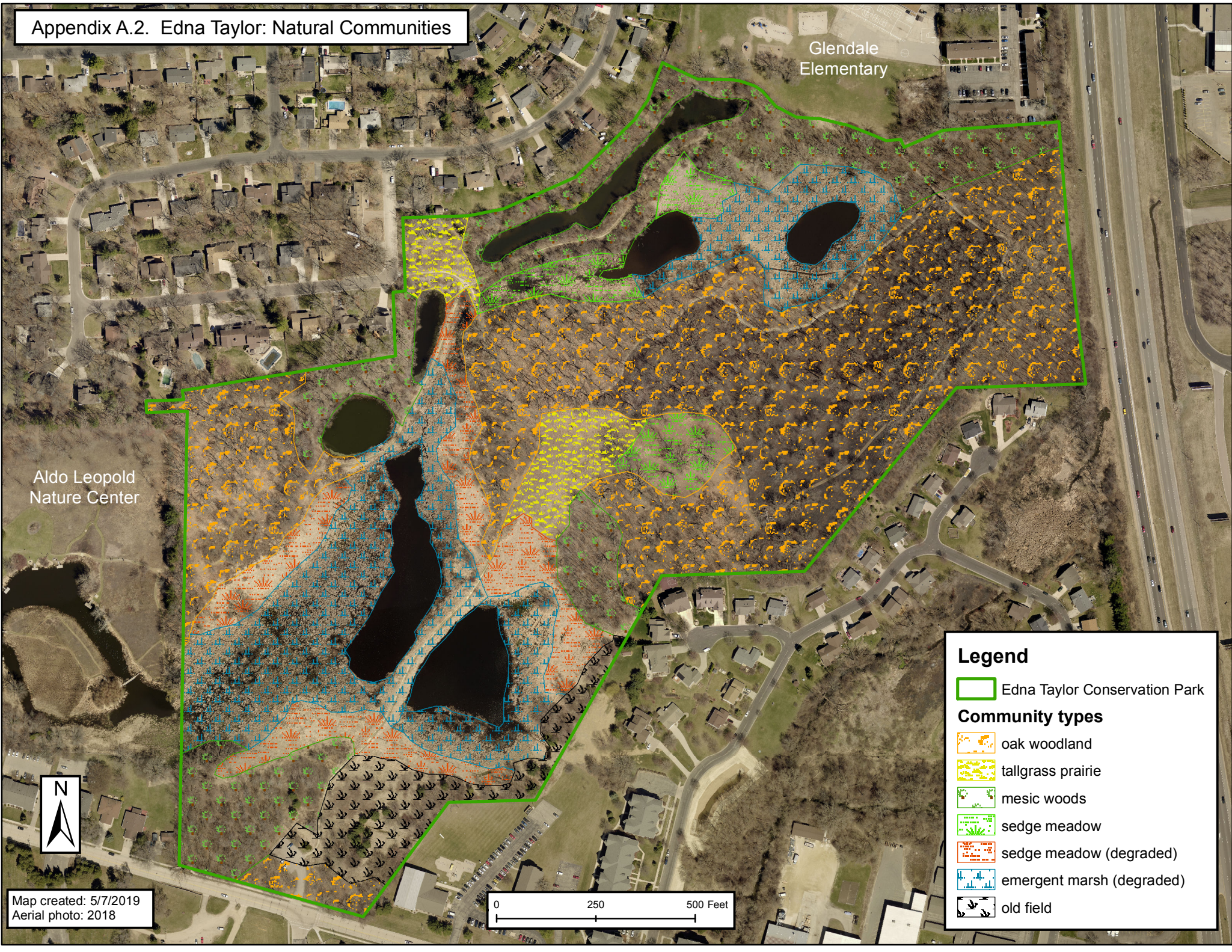
-  Edna Taylor Conservation Park
-  Authorized trails
-  Trail closed as of May 2019
-  Parking



Map created: 5/7/2019
Aerial photo: 2018



Appendix A.2. Edna Taylor: Natural Communities



Glendale Elementary

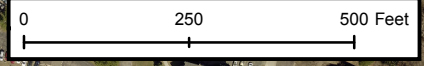
Aldo Leopold Nature Center

Legend

- Edna Taylor Conservation Park
- Community types**
- oak woodland
- tallgrass prairie
- mesic woods
- sedge meadow
- sedge meadow (degraded)
- emergent marsh (degraded)
- old field



Map created: 5/7/2019
Aerial photo: 2018



Appendix A.3. Edna Taylor: Management Units



Aldo Leopold Nature Center

Glendale Elementary

North Wetlands

Boulder Woods


Mound

Aldo Leopold

Asher Woods

Main Wetlands

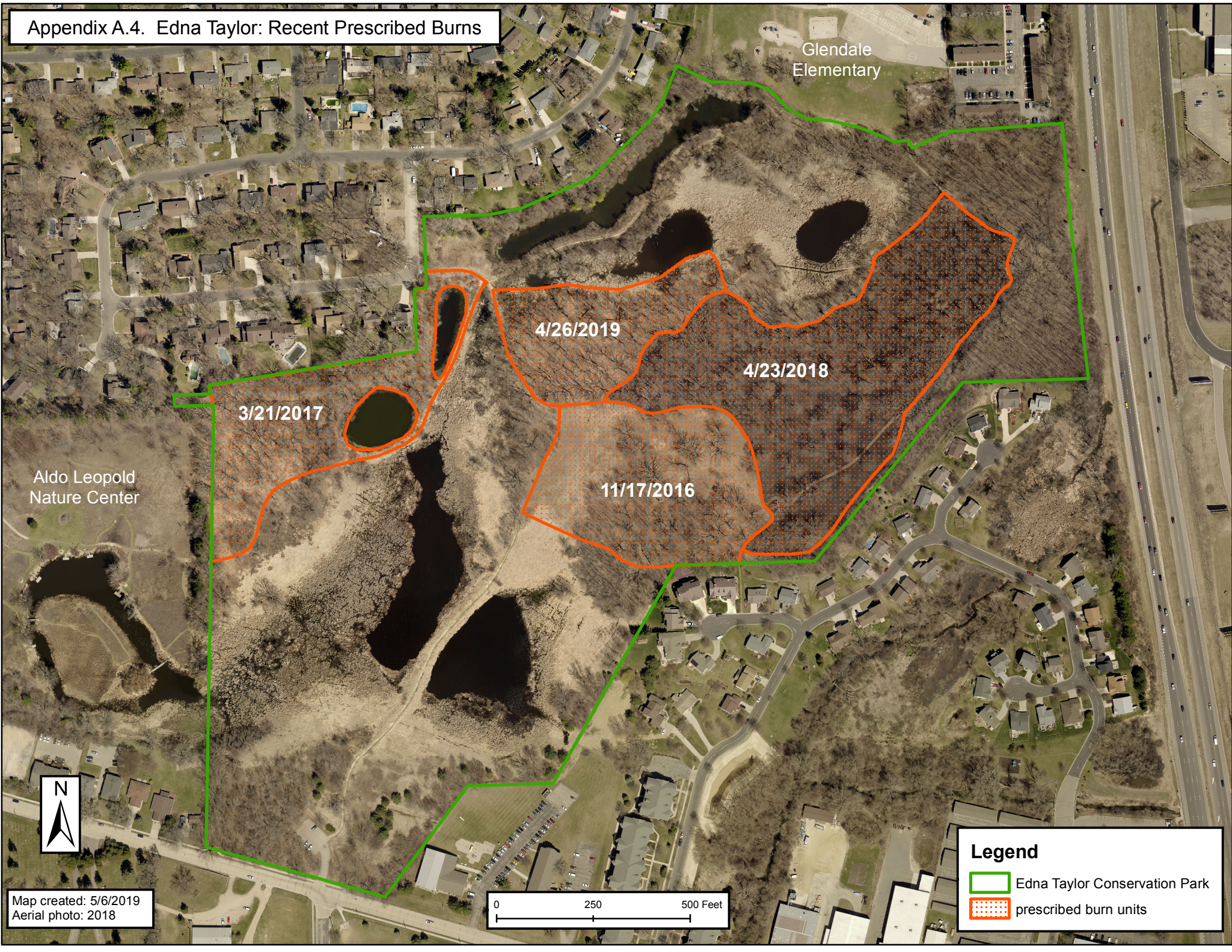
Parking Lot

Legend
 Management Units

Map created: 5/6/2019
Aerial photo: 2018

0 250 500 Feet

Appendix A.4. Edna Taylor: Recent Prescribed Burns



Glendale Elementary

Aldo Leopold Nature Center

3/21/2017

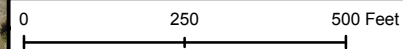
4/26/2019

4/23/2018



11/17/2016



Map created: 5/6/2019
Aerial photo: 2018



Legend

-  Edna Taylor Conservation Park
-  prescribed burn units

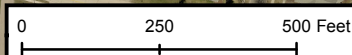
Appendix A.5. Edna Taylor: Monitoring

Glendale
Elementary




Aldo Leopold
Nature Center



Map created: 5/7/2019
Aerial photo: 2018



Legend

-  Edna Taylor Conservation Park
-  plant monitoring transect
-  photo station



| Appendix B. Species Lists | | | |
|----------------------------------|------------------------------|---------------|-------------------|
| <i>Vascular Plants</i> | | | |
| SCIENTIFIC NAME | COMMON NAME | Native | Introduced |
| Acer negundo | Box elder | X | |
| Acer rubrum | Red maple | X | |
| Acer saccharinum | Silver maple | X | |
| Acorus calamus | Sweet flag | X | |
| Agropyron repens | Quack grass | | X |
| Alliaria officinalis | Garlic mustard | | X |
| Allium canadense | Wild garlic | X | |
| Ambrosia artemisiifolia elatior | Common ragweed | X | |
| Ambrosia trifida | Giant ragweed | X | |
| Amorpha canescens | Lead plant | X | |
| Andropogon gerardi | Big bluestem grass | X | |
| Anemone canadensis | Canada anemone | X | |
| Anemone cylindrica | Thimbleweed | X | |
| Anemone virginiana | Thimbleweed | X | |
| Antennaria neglecta | Cat's foot | X | |
| Apocynum androsaemifolium | Spreading dogbane | X | |
| Aquilegia canadensis | Wild columbine | X | |
| Arctium minus | Common burdock | | X |
| Arisaema triphyllum | Jack-in-the-pulpit | X | |
| Asclepias syriaca | Common milkweed | X | |
| Aster lateriflorus | Calico aster | X | |
| Aster novae-angliae | New England aster | X | |
| Baptisia leucantha | White wild indigo | X | |
| Betula papyrifera | Paper birch | X | |
| Cacalia atriplicifolia | Pale Indian plantain | X | |
| Calamagrostis canadensis | Blue joint grass | X | |
| Caltha palustris | Marsh marigold | X | |
| Campanula americana | Tall bellflower | X | |
| Carex pensylvanica | Pennsylvania sedge | X | |
| Carya ovata | Shagbark hickory | X | |
| Cephalanthus occidentalis | Buttonbush | X | |
| Circaea alpina | Small enchanter's nightshade | X | |
| Cirsium arvense | Canada thistle | | X |
| Cirsium vulgare | Bull thistle | | X |
| Cornus racemosa | Gray dogwood | X | |
| Cornus stolonifera | Red-osier dogwood | X | |
| Corylus americana | American hazelnut | X | |
| Daucus carota | Queen Anne's lace | | X |
| Gymnocladus dioica | Kentucky coffee tree | X | |
| Hackelia virginiana | Stickseed | X | |
| Helianthus divaricatus | Woodland sunflower | X | |

| SCIENTIFIC NAME | COMMON NAME | Native | Introduced |
|--------------------------------------|------------------------------|--------|------------|
| <i>Helianthus grosseserratus</i> | Sawtooth sunflower | X | |
| <i>Heliopsis helianthoides</i> | False sunflower | X | |
| <i>Hieracium canadense</i> | Canada hawkweed | X | |
| <i>Impatiens biflora</i> | Spotted touch-me-not | X | |
| <i>Iris virginica shrevei</i> | Blue flag | X | |
| <i>Juglans nigra</i> | Black walnut | X | |
| <i>Leonurus cardiaca</i> | Motherwort | | X |
| <i>Lespedeza capitata</i> | Round-headed bush clover | X | |
| <i>Lonicera tatarica</i> | Tartarian honeysuckle | | X |
| <i>Lupinus perennis occidentalis</i> | Wild lupine | X | |
| <i>Medicago sativa</i> | Alfalfa | | X |
| <i>Melilotus alba</i> | White sweet clover | | X |
| <i>Melilotus officinalis</i> | Yellow sweet clover | | X |
| <i>Monarda fistulosa</i> | Wild bergamot | X | |
| <i>Morus alba</i> | White mulberry | | X |
| <i>Nuphar advena</i> | Yellow pond lily | X | |
| <i>Nymphaea tuberosa</i> | White water lily | X | |
| <i>Oxalis violacea</i> | Violet wood sorrel | X | |
| <i>Parthenocissus quinquefolia</i> | Virginia creeper | X | |
| <i>Poa pratensis</i> | Kentucky blue grass | | X |
| <i>Podophyllum peltatum</i> | May apple | X | |
| <i>Pontederia cordata</i> | Pickereel weed | X | |
| <i>Populus deltoides</i> | Cottonwood | X | |
| <i>Populus tremuloides</i> | Quaking aspen | X | |
| <i>Potamogeton pectinatus</i> | Comb pondweed, Sago pondweed | X | |
| <i>Prunus serotina</i> | Wild black cherry | X | |
| <i>Prunus americana</i> | Wild plum | X | |
| <i>Prunus virginiana</i> | Choke cherry | X | |
| <i>Pycnanthemum virginianum</i> | Common mountain mint | X | |
| <i>Pyrus ioensis</i> | Iowa crab | X | |
| <i>Pyrus melanocarpa</i> | Black chokeberry | X | |
| <i>Quercus alba</i> | White oak | X | |
| <i>Quercus bicolor</i> | Swamp white oak | X | |
| <i>Quercus macrocarpa</i> | Bur oak | X | |
| <i>Quercus velutina</i> | Black oak | X | |
| <i>Ranunculus fascicularis</i> | Early buttercup | X | |
| <i>Ratibida pinnata</i> | Yellow coneflower | X | |
| <i>Rhamnus cathartica</i> | Common buckthorn | | X |
| <i>Rhus glabra</i> | Smooth sumac | X | |
| <i>Rhus typhina</i> | Staghorn sumac | X | |
| <i>Rosa multiflora</i> | Multiflora rose | | X |
| <i>Rudbeckia hirta</i> | Black-eyed susan | X | |
| <i>Sagittaria latifolia</i> | Common arrowhead | X | |
| <i>Salix nigra</i> | Black willow | X | |

| SCIENTIFIC NAME | COMMON NAME | Native | Introduced |
|--|------------------------|--------|------------|
| <i>Sambucus canadensis</i> | Elderberry | X | |
| <i>Scirpus acutus</i> | Hard-stemmed bulrush | X | |
| <i>Silphium integrifolium</i> | Rosin weed | X | |
| <i>Silphium perfoliatum</i> | Cup plant | X | |
| <i>Smilacina racemosa</i> | False solomon's seal | X | |
| <i>Soildago graminifolia nuttallii</i> | Grass-leaved goldenrod | X | |
| <i>Solidago rigida</i> | Stiff goldenrod | X | |
| <i>Sorghastrum nutans</i> | Indian grass | X | |
| <i>Sparganium eurycarpum</i> | Common bur reed | X | |
| <i>Spartina pectinata</i> | Prairie cord grass | X | |
| <i>Taraxacum officinale</i> | Common dandelion | | X |
| <i>Tradescantia ohiensis</i> | Common spiderwort | X | |
| <i>Trifolium pratense</i> | Red clover | | X |
| <i>Typha angustifolia</i> | Narrow-leaved cat-tail | X | |
| <i>Typha latifolia</i> | Common cat-tail | X | |
| <i>Ulmus americana</i> | American elm | X | |
| <i>Verbascum thapsus</i> | Common mullein | | X |
| <i>Verbena hastata</i> | Blue vervain | X | |
| <i>Vernonia fasciculata</i> | Common ironweed | X | |
| <i>Veronicastrum virginicum</i> | Culver's root | X | |
| <i>Viburnum lentago</i> | Nannyberry | X | |
| <i>Viola papilionacea</i> | Common blue violet | X | |
| <i>Vitis riparia</i> | Riverbank grape | X | |
| | | | |
| total species | 108 | | |
| total native | 90 | | |
| total exotic | 18 | | |

Conservation Park monitoring program
Madison Parks
3/15/2019

DRAFT

Monitoring is necessary to track the success of restoration efforts as well as the overall quality of “the resource” – the biotic and abiotic composition of the natural areas in the conservation park system. The following outlines the current monitoring program for Madison’s conservation parks. This is a working document that will be updated as the program grows.

Taxa: Plants

Objectives:

1. Complete and update overall species inventory per park, and preferably per management unit.

Tasks:

- a. Conduct meander surveys through different management units

2. Determine and track FQI in restoration areas

Tasks:

- a. Establish transects of permanent 1m² plots
- b. Sample plots to record percent cover of each species present.

3. Measure and track herbivory pressure

Tasks:

- a. Photo monitor conditions inside/outside exclosures
- b. Plant palatable species inside/outside exclosures and track abundance and height

Taxa: Insects

Objectives:

1. Complete overall species inventory per park

Tasks:

- a. Conduct surveys with sweep nets, light traps and ground sampling?

2. Monitor pollinator abundance and species composition

Tasks:

- a. Collect data using [Wisconsin Bumble Bee Brigade](#) protocols
- b. Collect data using Pollard transects to target butterflies

Taxa: Herptiles

Objectives:

1. Complete overall species inventory per park

Tasks:

- b. Conduct surveys with pitfall traps?

2. Conduct breeding survey

Tasks:

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

Taxa: Birds

Objectives:

1. Analyze data available from eBird

Tasks:

- a. Download data sets for each park

- b. Identify likely breeding species from observation dates

- c. Compare species richness for breeding and non-breeding birds across decades

2. Conduct breeding survey

Tasks:

- a. Develop clearer goals and objectives for this based on gaps in forthcoming Wisconsin Breeding Bird Atlas II before proceeding

“Taxa”: Overall vegetative structure

Objectives:

1. Establish photo points in all parks.
2. Map plant community boundaries