

**Owen Conservation Park
Habitat Management Plan**

DRAFT

Site information

- Address: 6021 Old Sauk Road
- Acreage: 98 acres. This includes the storm water ponds and improved drainage way in the south end of the park.
- Site summary: Acquired in 1978 with Federal, State and City funds, Owen Conservation Park was once the private retreat of Professor Edward “Buck” Owen. Madison Parks is restoring this former farm with natural area remnants to native prairie and savanna habitat. The southern end of the park includes an engineered landscape that provides infrastructure for storm water runoff from a large portion of the west side of Madison. The park offers 3 miles of trails that are heavily used by neighbors who access the park on foot and visitors who drive to the park.
- 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 three forks (sections) of the Mendota-Spring Harbor Greenway managed by the City Engineering Division.

Conservation values

The dominant natural features of Owen are the tallgrass prairie and the oak savanna/oak woodland habitat that surrounds it. Although farmed in the past, the open fields have been largely restored to tallgrass prairie. Fire suppressed 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. 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.

Three miles of hiking trails bring visitors through these natural habitats and past historical features such as the caretaker’s house, stone walls and an old carriage road, while providing scenic views of the city.

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 Owen 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 Opening (NHI)
Oak Woodland (NHI)

Deciduous Forest (Madison Parks)
Southern Dry Forest (NHI)
Southern Dry-Mesic Forest (NHI)
Southern Mesic Forest (NHI)

Emergent marsh (Madison Parks)
Emergent Aquatic (NHI)

Please refer to Chamberlain, et al. (2008) for additional detail regarding the habitat types at Owen.

Ecological threats

Fire suppression – 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.

Invasive species - Major non-native species include garlic mustard, dame's rocket, buckthorn, honeysuckle, porcelain-berry, Asian bittersweet; local infestations of crown vetch, greater celandine (*Chelidonium majus*), reed canary grass, bittersweet nightshade and periwinkle are also present. Some clones of native sumac and gray dogwood are old and large enough to resist moderate fires.

Overabundant wildlife – Casual observations and direct counts put the white-tailed deer population at around 6-10 individuals, and the turkey population exceeds 50 birds. 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. Current numbers of both species exceed the carrying capacity of this 100-acre park.

Conservation goals

Restore oak woodland to perimeter of park.

Increase species diversity in tallgrass prairie.

Establish and maintain regular fire regime in oak woodland and tallgrass prairie.

Conserve invertebrate diversity, especially in prairie habitat.

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." In pursuit of this, we strive to balance ecological management needs with the needs of the community. Although managed primarily to sustain the natural communities that occur there, the City's conservation parks exist within a rich landscape context, and that management should consider and complement the needs of the surrounding community. Ecological management at Owen should pay specific attention to the following:

Viewshed - Woody species removal near the perimeter of the park should leave a buffer of shrubs and small trees for screening in areas where they currently occur. Invasive species should be removed slowly within buffer zones, and replaced with native shrub species, where appropriate. The goal is to avoid sudden, drastic changes to the viewshed, for both park users and neighbors whose homes border the park.

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.

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/oak savanna habitat. While no evidence of breeding has been observed to date, the potential should be optimized and management activities will follow Madison Parks' internal Snag Protection Policy.

Management history

Major work to date includes restoration of tallgrass prairie and oak woodland in the west and central portions of the park, and reclamation/restoration of areas disturbed by the storm water infrastructure projects installed in the south end of the park in 2007. Prescribed burns have been conducted regularly since 2011.

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 installed.

Management units

NW Woodland Unit (18 ac) Oak Woodland and Dry-Mesic Forest dominated by red oak with some white oak and bur oak. Basswood and sugar maple occur here as well.

NE Savanna Unit (8 ac) Very open Oak Woodland and Oak Opening community with large canopy gaps. Large red, white and bur oaks dominate this unit.

Forest Unit (8 ac) Mesic Forest dominated by maple and basswood. Not actively managed to date.

Prairie Unit (34 ac) Mesic Prairie and Oak Opening habitat in central portion of park. Restored over several years, warm season grass species are superabundant in much of the north, central and eastern portions of this unit. Ongoing work includes burning, occasional mowing (to control sumac), occasional cut-and-treat (to control ash and boxelder), and herbicide treatments to control Asian bittersweet. The prairie in the southeastern and east-central portions of this unit are less robust and are still becoming established in areas where thickets have been cleared.

Pond Unit (8 ac) Includes storm water ponds in SW corner of park, Emergent Aquatic and surrounding Mesic Prairie communities. Ongoing work includes prescribed burning and control of a small population of crown vetch.

South Woodland Unit (16 ac) Fire-suppressed Oak Woodland and Oak Opening with several large open-grown bur and white oaks. Dry-mesic Forest also occurs in the northeastern portion of this unit. Understory dominated by buckthorn, honeysuckle and some native shrubs such as chokecherry. Not actively managed to date.

E Border unit (4 ac) Dominated by Oak Woodland and Dry Forest that transitions to Dry-Mesic Forest in the south end of the unit. Dense infestations of buckthorn and garlic mustard are present.

Prescriptions/Options

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.

Options for three levels of management are presented in this plan: maintenance only, moderate restoration, and extensive restoration. The “maintenance only” option is NOT recommended, as it restricts ecological management to areas recently treated. In reality, this is not sustainable within the context of existing adjacent invasive species populations and dispersal corridors. The “moderate restoration” option is approximately the level at which we currently operate. The “extensive restoration” option has been supported periodically in the past with additional funding from larger Capital Improvement Projects. Once a site has been restored and a healthy, diverse, native plant community has become established, 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. Only then will the “maintenance only” option be successful.

Management Level 1 (maintenance only)

- Follow-up effort to control invasive species only on acres previously treated within last 3 years.
- Mow prairie to control brush.
- Burn prairie units on 3-year return interval. Invertebrate diversity will be conserved through refuges created by increased mowing.
- Burn currently managed woodland units on 6-year return interval.

Possible Burn Schedule – average one burn per year:

year	1	2	3	4	5	6	7	8	9	10
Prairie	x			x			x			x
Pond		x			x			x		
NW Woodland			x						x	
NE Savanna						x				

Annual Budget Estimate:

Task	Annual cost
Invasive species treatments (spring)	\$5,000
Mow trails, p-lot	\$3,200
Trail maintenance (gravel, water bars, etc.)	\$1,200
Brush mowing	\$1,500
Invasive species treatments (fall)	\$5,000
Burns (one per year)	\$4,000
totals	\$19,900

Specific Management Unit Prescriptions:

Timeline	Unit(s)	Task
Spring 2018	Prairie	Rx burn (cross-reference Rx burn database for more info)
Spring 2018	NW Woodland NE Savanna	Spray or hand pull garlic mustard, dame's rocket and burdock (staff and contract)
Spring 2018	E Border Unit	Support volunteers in pulling garlic mustard and dame's rocket
Summer 2018	Pond	Spray crown vetch, bird's foot trefoil
Summer 2018	NW Woodland	Mow or hand-pull Balfour's touch-me-not
Summer 2018	Prairie	Mow selected sumac clones and liana populations
Summer 2018	NW woodland NE Savanna	Mow raspberries
Fall 2018	NW Woodland NE savanna Prairie (SE corner) S Woodland (stream)	Cut/treat or basal bark porcelain-berry and Asian bittersweet
Spring 2019	Pond	Rx burn
Spring 2019	NW Woodland NE Savanna	Spray or hand pull garlic mustard, dame's rocket and burdock
Spring 2019	E Border Unit	Support volunteers in pulling garlic mustard and dame's rocket
Summer 2019	Pond	Spray crown vetch, bird's foot trefoil

Timeline	Unit(s)	Task
Summer 2019	NW Woodland	Mow or hand-pull Balfour's touch-me-not
Summer 2019	Prairie	Mow selected native shrub clones and liana populations
Summer 2019	NW woodland NE Savanna	Mow raspberries
Fall 2019	NW Woodland NE savanna Prairie (SE corner) S Woodland (stream)	Cut/treat or basal bark porcelain-berry and Asian bittersweet
Spring 2020	NW Woodland	Rx burn
Spring 2020	NW Woodland NE Savanna	Spray or hand pull garlic mustard, dame's rocket and burdock
Spring 2020	E Border Unit	Support volunteers in pulling garlic mustard and dame's rocket
Summer 2020	Pond	Survey for crown vetch, bird's foot trefoil
Summer 2020	NW Woodland	Mow or hand-pull Balfour's touch-me-not
Summer 2020	Prairie	Mow selected native shrub clones and liana populations
Summer 2020	NW woodland NE Savanna	Mow raspberries
Fall 2020	NW Woodland NE savanna Prairie (SE corner) S Woodland (stream corridor)	Cut/treat or basal bark porcelain-berry and Asian bittersweet
Spring 2021	Prairie	Rx burn
Spring 2021	NW Woodland NE Savanna	Spray or hand pull garlic mustard, dame's rocket and burdock
Spring 2021	E Border Unit	Support volunteers in pulling garlic mustard and dame's rocket
Summer 2021	Pond	Survey for crown vetch, bird's foot trefoil
Summer 2021	NW Woodland	Survey for Balfour's touch-me-not
Summer 2021	Prairie	Mow selected native shrub clones and liana populations
Summer 2021	NW woodland NE Savanna	Mow raspberries
Fall 2021	NW Woodland NE savanna Prairie (SE corner) S Woodland (stream corridor)	Cut/treat or basal bark porcelain-berry and Asian bittersweet
Spring 2022	Pond	Rx burn
Spring 2022	NW Woodland NE Savanna	Spray or hand pull garlic mustard, dame's rocket and burdock
Spring 2022	E Border Unit	Support volunteers in pulling garlic mustard and dame's rocket
Summer 2022	Pond	Survey for crown vetch, bird's foot trefoil
Summer 2022	NW Woodland	Survey for Balfour's touch-me-not
Summer 2022	Prairie	Mow selected native shrub clones and liana populations

Timeline	Unit(s)	Task
Summer 2022	NW woodland NE Savanna	Mow raspberries
Fall 2022	NW Woodland NE savanna Prairie (SE corner) S Woodland (stream corridor)	Cut/treat or basal bark porcelain-berry and Asian bittersweet

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Management Level 2 (moderate restoration)

- Follow-up effort to control invasive species on acres previously treated, plus add minimum 2 acres per year to treatment areas. We currently rely on both contracts and staff time to complete this work in all treatment areas. This cost will eventually decrease then plateau, as all management units come under active management and initial restoration is completed, moving the treatment areas from a “restoration phase” to a “maintenance phase”.
- Install native seed mixes to increase diversity and augment or re-establish native plant community.
- Burn tallgrass prairie units on 2-3 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 4-year return interval. (Allow 3 growing seasons between burns.)

Possible burn schedule – average two burns per year:

year	1	2	3	4	5	6	7	8	9	10
Prairie (south)			x			x		x		x
NW Woodland	x			x			x			
Prairie (north)		x		x			x		x	
NE Savanna		x			x			x		
Pond	x		x		x		x		x	
S Woodland			x			x				x

Annual Budget Estimate:

Task	Annual cost
Invasive species treatments (spring)	\$5,000
Contract for invasive species control	\$10,000
Mow trails, p-lot	\$3,200
Trail maintenance (gravel, water bars, etc.)	\$1,200
Brush mowing	\$900
Invasive species treatments (fall)	\$5,000
Woody invasive control (cut/treat) per acre	\$3,000
Wildlife population control	\$1,500
Burns (two per year)	\$8,000
Install native seed mix	\$3,000
totals	\$40,800

Specific Management Unit Prescriptions:

Timeline	Unit(s)	Task
Spring 2018	NW Woodland Pond	Rx burn (cross-reference Rx burn database for more info)
Spring 2018	NW Woodland NE Savanna	Spray or hand pull garlic mustard, dame’s rocket and burdock (staff and contract)
Spring 2018	E Border Unit	Support volunteers in pulling garlic mustard and dame’s rocket
Summer 2018	Pond	Spray crown vetch, bird’s foot trefoil
Summer 2018	NW Woodland	Mow or hand-pull Balfour’s touch-me-not
Summer 2018	Prairie	Mow selected sumac clones and liana populations
Summer 2018	NW woodland NE Savanna	Mow raspberries

Timeline	Unit(s)	Task
Fall 2018	NW Woodland NE savanna Prairie (SE corner) S Woodland (stream)	Cut/treat or basal bark porcelain-berry and Asian bittersweet
Fall 2018	S Woodland	Cut and treat 1-2 acres of buckthorn/honeysuckle understory adjacent to east end of Pond unit.
Winter 2019	all	Conduct deer and turkey reduction
Spring 2019	Prairie (N ½) NE Savanna	Rx burn (cross-reference Rx burn database for more info)
Spring 2019	NE Savanna	Install native seed mix
Spring 2019	NW Woodland NE Savanna	Spray or hand pull garlic mustard, dame's rocket and burdock
Spring 2019	S Woodland	Spray or hand pull garlic mustard and dame's rocket in area cleared in fall 2018 (staff and contract)
Spring 2019	E Border Unit	Support volunteers in pulling garlic mustard and dame's rocket
Summer 2019	Pond	Spray crown vetch, bird's foot trefoil
Summer 2019	NW Woodland	Mow or hand-pull Balfour's touch-me-not
Summer 2019	Prairie	Mow selected native shrub clones and liana populations
Summer 2019	NW woodland NE Savanna	Mow raspberries
Fall 2019	NW Woodland NE savanna Prairie (SE corner) S Woodland (stream)	Cut/treat or basal bark porcelain-berry and Asian bittersweet
Fall 2019	S Woodland	Cut and treat 1-2 acres of buckthorn/honeysuckle understory SE of Pond unit.
Spring 2020	Prairie (S ½) Pond S Woodland (part)	Rx burn (cross-reference Rx burn database for more info)
Spring 2020	S Woodland	Install native seed mix in restoration areas.
Spring 2020	NW Woodland NE Savanna	Spray or hand pull garlic mustard, dame's rocket and burdock
Spring 2020	S Woodland	Spray or hand pull garlic mustard and dame's rocket in area cleared in fall 2018-19 (staff and contract)
Spring 2020	E Border Unit	Support volunteers in pulling garlic mustard and dame's rocket
Summer 2020	Pond	Survey for crown vetch, bird's foot trefoil
Summer 2020	NW Woodland	Mow or hand-pull Balfour's touch-me-not
Summer 2020	Prairie	Mow selected native shrub clones and liana populations
Summer 2020	NW woodland NE Savanna S Woodland	Mow raspberries
Fall 2020	NW Woodland NE savanna Prairie (SE corner) S Woodland (stream corridor)	Cut/treat or basal bark porcelain-berry and Asian bittersweet
Fall 2020	S Woodland	Cut and treat 1-2 acres of buckthorn/honeysuckle understory SE of Pond unit.

Timeline	Unit(s)	Task
Spring 2021	NW Woodland Prairie (N ½)	Rx burn (cross-reference Rx burn database for more info)
Spring 2021	S Woodland	Install native seed mix in restoration areas
Spring 2021	NW Woodland NE Savanna S Woodland	Spray or hand pull garlic mustard, dame's rocket and burdock (staff and contract)
Spring 2021	S Woodland	Spray or hand pull garlic mustard and dame's rocket in area cleared in fall 2018-19
Spring 2021	E Border Unit	Support volunteers in pulling garlic mustard and dame's rocket
Summer 2021	Pond	Survey for crown vetch, bird's foot trefoil
Summer 2021	NW Woodland	Survey for Balfour's touch-me-not
Summer 2021	Prairie	Mow selected native shrub clones and liana populations
Summer 2021	NW woodland NE Savanna S Woodland	Mow raspberries
Fall 2021	NW Woodland NE savanna Prairie (SE corner) S Woodland (stream corridor)	Cut/treat or basal bark porcelain-berry and Asian bittersweet
Fall 2021	S Woodland	Cut and treat 1-2 acres of buckthorn/honeysuckle understory E of Pond unit and S of Prairie unit.
Spring 2022	NE Savanna Pond	Rx burn (cross-reference Rx burn database for more info)
Spring 2022	S Woodland	Install native seed mix in restoration areas.
Spring 2022	NW Woodland NE Savanna S Woodland	Spray or hand pull garlic mustard, dame's rocket and burdock
Spring 2022	E Border Unit	Support volunteers in pulling garlic mustard and dame's rocket
Summer 2022	Pond	Survey for crown vetch, bird's foot trefoil
Summer 2022	NW Woodland	Survey for Balfour's touch-me-not
Summer 2022	Prairie	Mow selected native shrub clones and liana populations
Summer 2022	NW woodland NE Savanna S Woodland	Mow raspberries
Fall 2022	NW Woodland NE savanna Prairie (SE corner) S Woodland (stream corridor)	Cut/treat or basal bark porcelain-berry and Asian bittersweet
Fall 2022	E Border	Cut and treat 1-2 acres of buckthorn/honeysuckle understory. Leave native shrubs and trees to remain.

Management Level 3 (extensive restoration)

- Secure contract to complete initial invasive shrub removal on all remaining acreage in park (approximately 22 acres); follow up with 2 seasons of herbaceous invasive species control.
- Follow-up effort to control invasive species on acres previously treated.
- Install native seed mixes to increase diversity and augment or re-establish native plant community.
- Burn tallgrass prairie units on 3-year return interval. (Allow 2 growing seasons between burns.) Burn no more than ½ of prairie habitat in one season.
- Mow brush as needed in prairie to supplement prescribed burns.
- Burn woodland units on 4-year return interval. (Allow 3 growing seasons between burns.)
- Install native shrubs, particularly around perimeter of park.

Possible burn schedule – average three burns per year:

year	1	2	3	4	5	6	7	8	9	10
Prairie (south)	x		x		x		x		x	
NW Woodland	x			x			x			x
Prairie (north)		x		x		x		x		x
NE Savanna		x			x			x		
Pond	x			x		x		x		x
S Woodland			x			x				x

Annual Budget Estimate:

Task	Annual cost
Phase 1 - Contract(s) for 12 ac: invasive shrub removal @ \$1,800/ac two seasons of herbaceous weed control @ \$500/ac (\$33,600 total)	\$6,720
Phase 2 - Contract(s) for 10 ac: invasive shrub removal @ \$1,800/ac two seasons of herbaceous weed control @ \$500/ac (\$28,000 total)	\$5,600
Native shrub installation	\$5,000
Invasive species treatments (spring)	\$6,500
Contract for invasive species control	\$10,000
Mow trails, p-lot	\$3,200
Trail maintenance (gravel, water bars, etc.)	\$1,200
Brush mowing	\$900
Invasive species treatments (fall)	\$6,500
Wildlife population control	\$1,500
Burns (three per year)	\$12,000
Install native seed mix	\$5,000
totals	\$64,120

Specific Management Unit Prescriptions:

Timeline	Unit(s)	Task
Spring 2018	NW Woodland Prairie (S ½) Pond	Rx burn (cross-reference Rx burn database for more info)

Timeline	Unit(s)	Task
Spring 2018	NW Woodland NE Savanna	Spray or hand pull garlic mustard, dame's rocket and burdock
Spring 2018	E Border Unit	Support volunteers in pulling garlic mustard and dame's rocket
Summer 2018	Pond	Spray crown vetch, bird's foot trefoil
Summer 2018	NW Woodland	Mow or hand-pull Balfour's touch-me-not
Summer 2018	Prairie	Mow selected sumac clones and liana populations
Summer 2018	NW woodland NE Savanna	Mow raspberries
Fall 2018	NW Woodland NE Savanna Prairie (SE corner) S Woodland (stream)	Cut/treat or basal bark porcelain-berry and Asian bittersweet
Fall 2018	NE Savanna	Install native shrubs
Winter 2019	all	Conduct deer and turkey reduction
Winter 2019	S Woodland	Contract for invasive shrub removal
Spring 2019	Prairie (N ½) NE Savanna	Rx burn (cross-reference Rx burn database for more info)
Spring 2019	NE Savanna	Install native seed mix
Spring 2019	NW Woodland NE Savanna	Spray or hand pull garlic mustard, dame's rocket and burdock
Spring 2019	S Woodland	Contract for follow-up re-sprout and herbaceous weed control
Spring 2019	E Border Unit	Support volunteers in pulling garlic mustard and dame's rocket
Summer 2019	Pond	Spray crown vetch, bird's foot trefoil
Summer 2019	NW Woodland	Mow or hand-pull Balfour's touch-me-not
Summer 2019	Prairie	Mow selected native shrub clones and liana populations
Summer 2019	NW woodland NE Savanna	Mow raspberries
Fall 2019	NW Woodland NE Savanna Prairie (SE corner) S Woodland (stream)	Cut/treat or basal bark porcelain-berry and Asian bittersweet
Winter 2020	NW Woodland S Woodland E border	Contract for invasive shrub removal
Spring 2020	Prairie (S ½) S Woodland (part)	Rx burn (cross-reference Rx burn database for more info)
Spring 2020	NW Woodland NE Savanna	Spray or hand pull garlic mustard, dame's rocket and burdock
Spring 2020	NW Woodland S Woodland E Border Unit	Contract for follow-up re-sprout and herbaceous weed control
Spring 2020	E Border Unit	Support volunteers in pulling garlic mustard and dame's rocket
Summer 2020	Pond	Survey for crown vetch, bird's foot trefoil
Summer 2020	NW Woodland	Mow or hand-pull Balfour's touch-me-not
Summer 2020	Prairie	Mow selected native shrub clones and liana populations

Timeline	Unit(s)	Task
Summer 2020	NW woodland NE Savanna S Woodland	Mow raspberries
Fall 2020	NW Woodland NE savanna Prairie (SE corner) S Woodland (stream corridor)	Cut/treat or basal bark porcelain-berry and Asian bittersweet
Fall 2020	NW Woodland	Install native shrubs
Spring 2021	NW Woodland Prairie (N ½) Pond	Rx burn (cross-reference Rx burn database for more info)
Spring 2021	S Woodland	Install native seed mix in restoration areas
Spring 2021	NW Woodland NE Savanna S Woodland	Spray or hand pull garlic mustard, dame's rocket and burdock
Spring 2021	NW Woodland S Woodland E Border Unit	Contract for follow-up re-sprout and herbaceous weed control
Spring 2021	E Border Unit	Support volunteers in pulling garlic mustard and dame's rocket
Summer 2021	Pond	Survey for crown vetch, bird's foot trefoil
Summer 2021	NW Woodland	Survey for Balfour's touch-me-not
Summer 2021	Prairie	Mow selected native shrub clones and liana populations
Summer 2021	NW woodland NE Savanna S Woodland	Mow raspberries
Fall 2021	NW Woodland NE savanna Prairie (SE corner) S Woodland (stream corridor)	Cut/treat or basal bark porcelain-berry and Asian bittersweet
Fall 2021	E Border Unit	Install native shrubs
Fall 2021	Forest	Cut/treat honeysuckle
Spring 2022	NE Savanna Prairie (S ½)	Rx burn (cross-reference Rx burn database for more info)
Spring 2022	S Woodland	Install native seed mix in restoration areas.
Spring 2022	NW Woodland NE Savanna S Woodland Forest	Spray or hand pull garlic mustard, dame's rocket and burdock
Spring 2022	NW Woodland S Woodland E Border Unit	Contract for follow-up re-sprout and herbaceous weed control
Spring 2022	E Border Unit	Support volunteers in pulling garlic mustard and dame's rocket
Summer 2022	Pond	Survey for crown vetch, bird's foot trefoil
Summer 2022	NW Woodland	Survey for Balfour's touch-me-not
Summer 2022	Prairie	Mow selected native shrub clones and liana populations

Timeline	Unit(s)	Task
Summer 2022	NW woodland NE Savanna S Woodland	Mow raspberries
Fall 2022	NW Woodland NE savanna Prairie (SE corner) S Woodland (stream corridor)	Cut/treat or basal bark porcelain-berry and Asian bittersweet

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Citations

Chamberlain, S., Fujita, S., Greene, R., Horton, J. and S. Rueth. 2008. *Owen Conservation Park Restoration Plan*. University of Wisconsin, Madison.

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Appendices

- A. Management Unit Map
- B. Habitat Type Map (forthcoming)
- C. Invasive Species Populations Map (forthcoming)
- D. Species list, including vascular plants and vertebrates (forthcoming)

Appendix A. Management Unit Map

