

**City of Ramsey**  
**Agenda**  
**Park and Recreation Commission**  
**Thursday, April 8, 2021**  
**6:30 pm**  
**Park Center Building, Central Park 7925 161st Avenue NW**  
**(Armstrong Blvd NW to 161st Avenue)**

*No remote attendance option is available for this meeting*

- 1. Call to Order**
- 2. Citizen Input**
- 3. Approve Agenda**
- 4. Approve Minutes**
  1. Approve Park and Recreation Commission Meeting Minutes
- 5. Commission Business**
  1. Consider Park and Recreation 2021 Outdoor Meeting Schedule
  - 2. Options and Alternatives for Maintaining Turfgrass in Public Spaces**
- 6. Commission/Staff Input**
  1. Commission / Staff Input
- 7. Adjournment**

**Park and Recreation Commission**

**4. 1.**

**Meeting Date:** 04/08/2021

**Submitted For:** Mark Riverblood, Engineering/Public Works

**By:** MaryJo Warner, Engineering/Public Works

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**Information**

**Title:**

Approve Park and Recreation Commission Meeting Minutes

**Purpose/Background:**

Purpose: To review and approve meeting minutes.

Background: Attached are the meeting minutes for review.

**Notification:**

**Observations/Alternatives:**

**Funding Source:**

n/a

**Recommendation:**

To review and approve meeting minutes dated March 11, 2021.

**Action:**

Motion to approve meeting minutes dated March 11, 2021.

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**Attachments**

Minutes

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**Form Review**

**Inbox**

Grant Riemer

Form Started By: MaryJo Warner

Final Approval Date: 04/01/2021

**Reviewed By**

Grant Riemer

**Date**

04/01/2021 10:00 AM

Started On: 03/31/2021 10:14 AM

**PARK AND RECREATION COMMISSION  
CITY OF RAMSEY  
ANOKA COUNTY  
STATE OF MINNESOTA**

The Ramsey Park and Recreation Commission conducted a regular meeting on March 11, 2021, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Commission Members Present:      Chair Shane Bennett  
   Commissioner Nathan Barten  
   Commissioner Jennifer Leistico  
   Commissioner Justin Loss

Commission Members Absent:      Vice Chair Brandon Sis  
   Commissioner Matthew Guck

Also Present:                              Parks & Assistant Public Works Superintendent Mark Riverblood  
   Recreation Specialist Abby Proulx

**1.      CALL TO ORDER**

Chair Bennett called the Park and Recreation Commission meeting to order at 6:33 p.m.

**2.      CITIZEN INPUT**

None.

**3.      APPROVE AGENDA**

Motion by Commissioner Leistico, seconded by Commissioner Barten, to approve the Park and Recreation Commission meeting agenda as presented.

Motion carried. Voting Yes: Chair Bennett; Commissioners Leistico, Barten, and Loss. Voting No: None. Absent: Commissioners Guck and Sis.

**4.      APPROVE MINUTES**

**4.01:    Approve Park and Recreation Commission Meeting Minutes**

Motion by Commissioner Barten, seconded by Commissioner Loss, to approve the following Park and Recreation Commission Regular Meeting Minutes:

- Park and Recreation Commission Meeting dated February 11, 2021.

Motion carried. Voting Yes: Chair Bennett; Commissioners Barten, Loss, and Leistico. Voting No: None. Absent: Commissioners Guck and Sis.

## **5. COMMISSION BUSINESS**

### **5.01: Nominate Chair and Vice-Chair of the Park and Recreation Commission**

Parks & Assistant Public Works Superintendent Riverblood stated that each year the Commission appoints a Chair and Vice Chair for the year.

Chair Bennett opened the floor for nominations.

Motion by Commissioner Barten, seconded by Commissioner Loss to nominate Shane Bennett as Chair and Brandon Sis as Vice Chair of the Park and Recreation Commission.

Motion carried. Voting Yes: Chair Bennett; Commissioners Barten, Loss, and Leistico. Voting No: None. Absent: Commissioners Guck and Sis.

Chair Bennett thanked the Commission for the position and commented that he is sure Commissioner Sis will be appreciative of the continued appointment as Vice Chair as well.

### **5.02: Approve Chapter 3 of the Park System Plan – Recreation Programming and Partnerships**

Parks & Assistant Public Works Superintendent Riverblood stated that the Commission has reviewed this draft document at multiple times throughout the creation to provide input that has been incorporated by staff. He stated that Chapter 3 focuses on recreation programming and partnerships.

Recreation Specialist Proulx stated that the Commission last reviewed this content about one year ago and the draft has been updated with more up to date information related to programming. She stated that the intent is to create the foundation for recreation through programming and partnerships and further explained the purpose of the chapter noting that it was designed to evolve with the City. She stated that staff anticipates that Ramsey will continue to grow and therefore they kept that in mind when designing the chapter in order to continue to build on that momentum. She stated that the chapter is broken up into six sections and provided a brief overview of the content within each section. She provided additional details on the fee setting framework within section five as that has been developed since the last review. She also provided examples of where different programming opportunities would fall within the fee setting framework. She stated that staff developed a Ramsey RecPass program and provided examples of how that could work for both residents and non-residents. She noted that there are a few grammatical changes and images that will be added but otherwise the content of the draft is complete and welcomed input.

Chair Bennett thanked staff for the presentation noting that he likes the balance of the visual aspects with the flow and believed that this draft is much improved from previous renditions.

Commissioner Leistico commented that this is well done and liked the graphics added. She thanked staff for the substantial amount of information they compiled.

Parks & Assistant Public Works Superintendent Riverblood applauded Recreation Specialist Proulx for the informative graphics and improved flow of the document.

Chair Bennett agreed that the graphics help to keep readers interested as they go through the chapter.

Parks & Assistant Public Works Superintendent Riverblood stated that under community health there is a factor of youth diversion. He noted that if children are productive and learning life skills, it helps to reduce mischief and other negative activity that can reduce the quality of life community wide.

Commissioner Barten agreed that this helps to highlight the benefit of recreation and the parks program as a whole.

Recreation Specialist Proulx thanked the Commission members for their input throughout this process.

Chair Bennett noted that comment that additional graphics may be added along with grammatical changes but believed that the Commission could entertain a motion to accept Chapter 3.

Motion by Commissioner Loss, seconded by Commissioner Barten, to approve Chapter 3 of the Park System Plan.

Motion carried. Voting Yes: Chair Bennett; Commissioners Loss, Barten, and Leistico. Voting No: None. Absent: Commissioners Guck and Sis.

## **6. COMMISSION/STAFF INPUT**

Parks & Assistant Public Works Superintendent Riverblood provided an overview of the winter skating season, noting that it was reduced in length because of warmer weather conditions both in the beginning and end of the winter season.

Commissioner Barten commented that there were also three weeks in February which made it difficult to skate because of the cold temperatures and therefore felt the numbers were okay for the shortened season length.

Recreation Specialist Proulx highlighted upcoming programming including the Monarch Pollinator Series, Virtual Art, and Birding Hike. She stated that staff is also working on a series for the Bluebird Recovery Project, Yoga in the Park, the Elmcrest Art Fair, and Summer Concert Series. She provided additional details on the event staff is working on for the re-naming dedication of Central Park.

Chair Bennett stated that staff mentioned that there could be potential for the Commission to hold its April meeting in conjunction with the re-dedication of Central Park.

Parks & Assistant Public Works Superintendent Riverblood stated that the event is tentatively scheduled for April 8<sup>th</sup>, which is the regular Park Commission meeting date. He stated that could be an opportunity for the Commission to hold the meeting at Central Park to conduct its regular business and participate in the dedication event.

It was the consensus of the Commission to support that suggestion.

Chair Bennett asked if the Summer Concert Series information is available on the City website and whether it would be sent to residents.

Recreation Specialist Proulx confirmed that staff just drafted the flyer this week and will be sharing that information with the public through multiple platforms.

Chair Bennett stated that he recently received the *Ramsey Resident* which includes the map of the park and trails system. He encouraged residents to save that portion of the mailer as it provides easy access to the City parks and trails system.

Commissioner Loss asked when the dog park expansion would occur.

Parks & Assistant Public Works Superintendent Riverblood stated that he will meet with the contractor the following week and anticipated that would be complete prior to the May Commission meeting. He noted that the goal would be to hold the May Commission meeting at Alpine Park in order to conduct a dedication at that time.

## **7. ADJOURNMENT**

Motion by Commissioner Barten, seconded by Commissioner Leistico, to adjourn the meeting.

Motion carried. Voting Yes: Chair Bennett; Commissioners Barten, Leistico, and Loss. Voting No: None. Absent: Commissioners Guck and Sis.

The Park and Recreation Commission meeting adjourned at 7:17 p.m.

Respectfully submitted,

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Mark Riverblood  
Parks & Assistant Public Works Superintendent

Drafted by Amanda Staple  
*TimeSaver Off Site Secretarial, Inc.*

**Park and Recreation Commission**

5. 1.

**Meeting Date:** 04/08/2021

**Submitted For:** Mark Riverblood, Engineering/Public Works

**By:** MaryJo Warner, Engineering/Public Works

**Information**

**Title:**

Consider Park and Recreation 2021 Outdoor Meeting Schedule

**Purpose/Background:**

For many years, the Park and Recreation Commission has held regular meetings outdoors in the months of May through September (weather permitting). This provided the Commission an opportunity to inspect and comment on parks and projects as a group, and it afforded residents’ access to the Commission on a neighborhood level. On the occasions of inclement weather, the Commission would hold the regular meetings at 6:30 p.m. at City Hall. The purpose of this case is to confirm the Commission’s desire for outdoor meetings in 2021 and, if so, approve the locations proposed below (or different, based upon discussion).

The following is the proposed months—if the Commission agrees to continue meeting in parks for the summer.

**May: Alpine Park** (Ribbon Cutting for Off-leash expansion area)

**June: ?**

**July: The Draw**

**August: Rivers' Bend Park**

**September: Elmcrest Park** (Assess Turf Grass Growth Regulator at the soccer fields)

Upon approval of the locations, the park locations will be published on the web site and in the next *Ramsey Resident* newsletter.

**Notification:**

**Observations/Alternatives:**

**Funding Source:**

None required.

**Recommendation:**

Determine whether outdoor meetings are desired for 2021—and if so the locations

**Action:**

Motion to approve the outdoor meeting locations, based upon discussion.

**Attachments**

*No file(s) attached.*

**Form Review**

Inbox	Reviewed By	Date
Mark Riverblood	Mark Riverblood	03/31/2021 08:26 AM
Grant Riemer	Grant Riemer	03/31/2021 01:26 PM

Form Started By: MaryJo Warner  
Final Approval Date: 03/31/2021

Started On: 03/30/2021 04:08 PM

**Meeting Date:** 04/08/2021

**By:** Mark Riverblood, Engineering/Public Works

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**Information**

**Title:**

**Options and Alternatives for Maintaining Turfgrass in Public Spaces**

**Purpose/Background:**

Background:

At the September 2020 regular Park & Recreation Commission meeting, the topic of alternatives to typical turfgrass maintenance was discussed, primarily in the context of cost savings that could be garnered by Plant Growth Regulators (PGR's) or conversion to naturalized landscapes. The unanimous consensus of the Commission was that as a matter of policy, the City should consider the conversion of *some* new or existing public lands to a ground cover that does not require weekly mowing—and to look at cultural practices like reduced mowing regimes (and visual expectations), as well as potentially the application of PGR's.

The above policy also recognizes that there are many acres of park land in the community that will and should remain as traditional turfgrass, like athletic fields, walking areas and informal play areas or leisure areas around playgrounds or the amphitheater etc.

Pearson Park, (the site of that Commission meeting), was an example of an alternative ground cover—that while is not cost-free, is certainly at a much less expense annually, in terms of what would be a weekly mobilization of people and equipment to mow the slopes around the playground. And further, that naturalized landscapes typically do not require costly irrigation.

The preponderance of those areas currently being mowed, are likely to remain so. However among the many reasons to reconsider turfgrass for ground cover in areas in parks where there is not a identifiable reason for it, cost accounting is one factor. There also is the benefit of less chemicals (fertilizers and herbicides) introduced into the environment, reduced pollutants (noise, water and air), and for visual interest (aesthetics—flowering plants and a diversity forbs, shrubs, grasses and trees add beauty to the landscape). Additionally, habitat for all manner of wildlife is greatly increased over monoculture turfgrass.

A very brief summary of some of the above benefits are highlighted within this link:  
<https://conservationtools.org/guides/151-from-lawn-to-meadow>

Purpose:

As indicated, the Commission acknowledged the implementation of this turfgrass options and alternatives policy at the end of the growing season in 2020. The purpose of this case is to report on the direction of this endeavor as Staff begins the workplan and analysis.

**Notification:**

**Observations/Alternatives:**

More information and examples of the implementation of the aforementioned policy will be available at the meeting. Additionally, the first two attachments below are an exhibit of PGR experimental area at Elmcrest Park, and also a maintenance plan for the South Half of Rivers' Bend Park. Page 23 of this plan illustrates several areas of mowed area that should be converted to naturalized ground cover.

**Funding Source:**

The primary subject of this case may entail a reduction in General Fund maintenance obligations (costs) over time.

**Recommendation:**

Staff recommends that the analysis of the use of PGR's at Elmcrest Park's soccer field be the topic of a case before the Commission in October of 2021.

**Action:**

Informational, no action required.

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**Attachments**

[Elmcrest PGR's](#)

[Rivers' Bend Park Conservation Management Plan](#)

[EPA benefits summary](#)

[Mowing acre estimates](#)

[Benefits of natural plant communities](#)

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**Form Review**

**Inbox**

Grant Riemer

Form Started By: Mark Riverblood

Final Approval Date: 04/02/2021

**Reviewed By**

Grant Riemer

**Date**

04/02/2021 12:30 PM

Started On: 03/31/2021 08:47 AM

Evaluation of Plant Growth Regulators  
Elmcrest Park 2021



UNIVERSITY OF MINNESOTA  
**EXTENSION**

**MINNESOTA MASTER NATURALIST**

**Rivers' Bend Park Conservation Management Plan**

Lucas Groskreutz  
Master Naturalist Volunteer  
University of Minnesota Extension  
Submitted June 2020

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## EXECUTIVE SUMMARY

The Conservation Management Plan for the City of Ramsey's Rivers' Bend Park is designed to advise the City of Ramsey Parks and Recreation Board, land managers, and interested park users in managing and conserving the ecological resources and aesthetic beauty of Rivers' Bend Park and its enjoyment by visitors.

Conservation values and prioritized goals are established that guide the proposals for management with a focus on ecological restoration and didactic potential. Through the strategies laid out within this plan, park managers, partner organizations, and volunteer groups can collaboratively preserve the natural and recreational features of the site.

Rivers' Bend Park was established in 1989 and contains about 60 acres of land. This includes a significant amount of undisturbed riparian forest along the Rum River as well as 6 to 7 acres of restored prairie, both of which are of vital ecological importance. Of Minnesota's original prairie, which covered a third of the state, less than two percent remains as remnants across the landscape.<sup>1</sup> The habitat corridor created by the restored tallgrass prairie on site and nearby native prairie remnants is an invaluable resource for a wide range of prairie-dependent organisms. Along with the riparian forest, the land cover of the site is vital to the continued health of the surrounding wetlands. Furthermore, up to 20 Species of Greatest Conservation Need (SGCN) have validated records of occurrences within the township that the park resides in.<sup>2</sup> One such species is the rusty patched bumble bee (*Bombus affinis*), whose primary dispersal zone includes the site.<sup>3</sup> With so much urbanization and development in the surrounding area, the park holds many resources that could be protected to help combat habitat fragmentation and degradation. Overall, there is vast potential value in committing to ecologically restoring the site and using it as a means to educate the general public about these natural systems.<sup>4, 5, 6</sup>

## DESIRED MANAGEMENT OUTCOMES

- Maximize biodiversity of native Big Woods Big Rivers species while improving ecological health and productivity
  - Contribute to habitat connectivity by providing habitat and increasing habitat value for native species, especially Species of Greatest Conservation Need (SGCN) and native pollinators
  - Restore some of the native land cover (prairie, river bottom forest, wetland) by reducing the amount of land being maintained and removing invasive species to encourage natives to further populate the area
- Increase the park's usability for recreational, didactic, scientific and interpretive purposes (birders, students, researchers, those looking to connect with nature, etc.)
  - Foster increased appreciation for the natural environment in visitors of the park

## SITE DESCRIPTION

Historical climate, geology, hydrology and human activity are critical determining factors of the distribution and abundance of particular resource elements in an area as well as the organisms

that reside there. This section discusses how these forces have impacted the present day composition of natural communities and the landscape in Rivers' Bend Park.

## **Natural History**

### *Bedrock Geology and Glacial Landscapes*

"The majority of the region is mantled by debris left by glaciers and glacial rivers; beneath this, the bedrock that is closest to the surface in Ramsey is of the Cambrian System, which is some 500-600 million years old."<sup>4</sup> This includes Cambrian and Ordovician dolomite, sandstone, and shale.<sup>7</sup>

"The topography of the area was most heavily influenced by the last period of glaciation which ended in east-central Minnesota about 10,000 years ago. During this event, glaciers sculpted the landscape and left behind a variety of deposits, including drift/till and outwash composed of sand and gravel, and windblown deposits of very fine sands. During the last glaciation, the Superior Lobe ice sheet advanced into the region from the east, and finally retreated about 20,000 years ago. With each advance and retreat, the melting ice sheet deposited immense piles of sand and gravel along its margins, and massive rivers of glacial meltwater carried additional sand and sediment across the area. These riverine, or fluvial, deposits cover much of the city and resulted in the Anoka Sand Plain.

Direct glacial modification of the landscape, such as the deposition of till and moraine, and the influence of periglacial processes such as outwash, have formed the vast majority of the landforms in this region. Most of the deposited materials associated directly with glaciers, such as till and moraine are unsorted. These consist of mixed materials, which range in size from clay and fine sand to large boulders. Overall, the materials deposited in the City tend to form well-drained to very well-drained landscapes with sands and gravels common."<sup>4</sup> Specifically, the majority of Rivers' Bend Park's soils are sandy in nature.

### *Vegetation at the Time of Settlement*

According to the original land survey notes (compiled in Minnesota between 1850's and 1900's), the presettlement vegetation of [Rivers' Bend Park] was an area of riverbottom or floodplain forest along the Rum River surrounded mostly by oak openings and barrens, but also bordering prairie to the southeast. Original species included elm, ash, cottonwood, boxelder, silver maple, willow, aspen, and hackberry.<sup>4, 8</sup>

### *Influence of Humans on the Landscape*

Ideas about the history of Native Americans and their influence on the local landscape are still evolving. Native Americans have probably inhabited and hunted in the area for over 10,000 years. The impacts of Native Americans on the land were caused by their use of a wide variety of plants and animals for food, altering vegetation patterns for cultivation and by setting fire to broad expanses of landscape. Native Americans (and European fur traders) used fire to hunt game; create desired habitat; clear the landscape for travel, communication and defense; and obtain firewood. While some fires in the region would have occurred naturally, the activities of Native Americans undoubtedly accounted for the vast majority of fires. Prairies, savannas, and oak forests are fire-dependent plant communities, and would most likely not have been present in the Twin Cities Area at the time of European settlement without these fires.<sup>4</sup>

During early European settlement, logging had an impact on the Rum River Basin. In 1820 logging began in the area to support the construction of Fort Snelling. Logs were floated down the Rum River to the Mississippi River. Heavier logging started around 1848 and lasted about 40 years. In 1853 the first dam on the Rum River was built in its current location and a sawmill was constructed the following year. Because Rivers' Bend Park is near this Anoka dam site and the confluence with the Mississippi River, it has historical significance.<sup>5</sup>

As the City of Ramsey developed, increasingly intense human activities began to change the landscape and natural communities. In the city of Ramsey today, approximately 80-90% percent of the native landscape has been substantially impacted by human activities. Examples of changes since European settlement include the roads and the railroads fragmenting forests and other communities. Urbanization continues to fragment natural communities further with the addition of more roads, streets and utilities. Construction of all types alters and compacts soils, and changes the local hydrology. Large areas of impervious surface and drainage of wetlands increases the amount of stormwater runoff and pollutants carried to local waters. Agriculture affected hydrology by draining wetlands and altering creeks. Vegetation was altered through clearing, plowing, cessation of regular fires, and grazing. These effects are evident in the reduction of native vegetation diversity in meadow and forest understory and substitution of communities of low diversity dominated by non-native plants. Soil erosion increased where native cover was removed, adding sediments to creeks, wetlands and lakes. Non-native, aggressive species like common buckthorn have been added as landscape materials. Changes in habitat and the increasing presence of humans in the landscape has brought changes in animal populations, decreasing or eliminating some species like bluebirds and bison, and favoring others such as English sparrows and white-tail deer.<sup>4</sup>

### **Existing Landscape Conditions and Features**

#### *Climate*

The climate in east-central Minnesota is considered to be continental and subhumid, with long, cold winters and relatively brief, warm summers. Wide fluctuations in temperature and precipitation strongly influence the plant communities present in the region and cause plants to be adapted to extremes, rather than averages.<sup>4</sup> Total annual precipitation ranges from 27 inches to 29 inches, with growing-season precipitation ranging from 12 to 13 inches. The growing season length ranges from approximately 136 to 156 days.<sup>7</sup>

#### *Land Cover*

In terms of land cover classification there is a significant portion of floodplain forest along the southeast bank of the park. The remaining area of the southern portion of the park is planted and maintained vegetation, but reminiscent of prairie, including 6-7 acres of restored, dry tallgrass prairie with some shrubland along the oxbow lake shore.

#### *Wetlands*

The site is contained in the Rum River Major Watershed, which lies within the Mississippi River Basin and borders the Rum River to the east. Headwaters of the Rum River originate from Lake Mille Lacs and it acts as one of the largest tributaries to the Mississippi River north of the Twin Cities. The Rum River is listed as an ecoregional priority by The Nature Conservancy, deemed a wild and scenic river, and listed by the MN DNR as having at least two species in greatest conservation need.<sup>9</sup> At some point, the Rum River developed a chute along the eastern bank of Rivers' Bend Park, cutting off its former meander along the north, west and south sides of the

park and creating the current oxbow lake. The neighboring oxbow is slowly being filled with detritus, accumulating nutrients and increasing in productivity. It may eventually become a swamp or bog. Fluctuating water levels of the Rum River affect the seasonally flooded deciduous floodplain forest on the eastern edge of the park. The area is considered very highly sensitive to water-borne contaminants affecting the uppermost aquifer.<sup>10</sup>

*Property Uses*

Currently the park is open to the public. The assortment of trails, park shelter with picnic tables, river access, and intact ecosystems bring in visitors participating in recreational activities such as hiking, jogging, bird watching, group gatherings, fishing, canoeing and kayaking. It is also a valuable resource for Anoka High School, which is located across county highway 116 to the south. Teachers and students use the property as a natural history laboratory for ecological studies.<sup>5</sup>

*Ecological Quality*

Based on the DNR's Natural Heritage's Element Occurrence Ranking Guidelines, nearby inventoried areas were given a natural quality ranking of C, which designates a moderate condition natural community with obvious past disturbance but is still clearly recognizable as a native community. Not dominated by weedy species in any layer. Minimally, the site must be visited from the edge to accurately assess its natural quality at this level. This level of quality is likely indicative of the natural quality in the southern portion of Rivers' Bend Park.<sup>6</sup>

**Walkthrough Assessment Findings and Concerns**

A walkthrough assessment of the park was conducted to identify areas of concern and assess ecological quality. The following is a summary of the observations that were made.

*Flora*

During a field visit on May 28, 2020, Aaron Soltau and Nathan Hartman, prairie restoration experts from Prairie Restorations, Inc., identified the following herbaceous native prairie species in the dry, tallgrass prairie.

<b><i>Native Flowers</i></b>			
<b><u>Scientific Name</u></b>	<b><u>Common Name</u></b>	<b><u>Layer</u></b>	<b><u>Ecosystem</u></b>
<i>Rosa arkansana</i>	Prairie rose	Shrub	Floodplain Forest/Prairie
<i>Rubus occidentalis</i>	Black raspberry	Shrub	Floodplain Forest/Prairie
<i>Achillea millefolium</i>	Common yarrow	Ground	Floodplain Forest/Prairie
<i>Agastache foeniculum</i>	Blue giant hyssop	Ground	Floodplain Forest/Prairie
<i>Asclepias syriaca</i>	Common milkweed	Ground	Floodplain Forest/Prairie
<i>Asclepias tuberosa</i>	Butterflyweed	Ground	Prairie
<i>Dalea candida</i>	White prairie clover	Ground	Prairie
<i>Dalea purpurea</i>	Purple prairie clover	Ground	Prairie
<i>Fragaria virginiana</i>	Wild strawberry	Ground	Floodplain Forest/Prairie
<i>Helianthus pauciflorus</i>	Stiff sunflower	Ground	Prairie
<i>Lespedeza capitata</i>	Round-headed bush clover	Ground	Prairie
<i>Lupinus perennis</i>	Wild lupine	Ground	Floodplain Forest/Prairie
<i>Monarda fistulosa</i>	Wild bergamot	Ground	Floodplain Forest/Prairie

<i>Rudbeckia hirta</i>	Black-eyed Susan	Ground	Floodplain Forest/Prairie
<i>Solidago rigida</i>	Stiff goldenrod	Ground	Prairie
<i>Solidago speciosa</i>	Showy goldenrod	Ground	Floodplain Forest/Prairie
<i>Thalictrum dasycarpum</i>	Tall meadow rue	Ground	Floodplain Forest/Prairie
<i>Verbena stricta</i>	Hoary vervain	Ground	Prairie
<i>Zizia aurea</i>	Golden Alexander	Ground	Floodplain Forest/Prairie
<b>Native Grasses</b>			
<b><u>Scientific Name</u></b>	<b><u>Common Name</u></b>	<b><u>Layer</u></b>	<b><u>Ecosystem</u></b>
<i>Andropogon gerardii</i>	Big bluestem	Ground	Floodplain Forest/Prairie
<i>Bouteloua gracilis</i>	Blue grama	Ground	Prairie
<i>Elymus canadensis</i>	Canada wild rye	Ground	Floodplain Forest/Prairie
<i>Panicum virgatum</i>	Switchgrass	Ground	Floodplain Forest/Prairie
<i>Schizachyrium scoparium</i>	Little bluestem	Ground	Floodplain Forest/Prairie
<i>Sorghastrum nutans</i>	Indian grass	Ground	Floodplain Forest/Prairie
<i>Spartina pectinata</i>	Prairie cordgrass	Ground	Prairie

During the same field visit, Soltau and Hartman took a brief inventory of the riparian zone on site and identified the following native species.

<b><u>Scientific Name</u></b>	<b><u>Common Name</u></b>	<b><u>Layer</u></b>	<b><u>Ecosystem</u></b>
<i>Acer saccharinum</i>	Silver maple	Canopy	Floodplain Forest
<i>Quercus rubra</i>	Northern red oak	Canopy	Floodplain Forest
<i>Quercus ellipsoidalis</i>	Northern pin oak	Canopy	Floodplain Forest/Prairie
<i>Tilia americana</i>	American basswood	Canopy	Floodplain Forest
<i>Prunus sp.</i>	A species of plum	Subcanopy	Floodplain Forest/Prairie
<i>Salix sp.</i>	A species of willow	Subcanopy/Shrub	Floodplain Forest/Prairie
<i>Rosa sp.</i>	A species of wild rose	Shrub	Floodplain Forest/Prairie
<i>Achillea millefolium</i>	Common yarrow	Ground	Floodplain Forest/Prairie
<i>Carex sp.</i>	A species of sedge	Ground	Floodplain Forest/Prairie
<i>Maianthemum racemosum</i>	False Solomon's seal	Ground	Floodplain Forest
<i>Zizia aurea</i>	Golden Alexander	Ground	Floodplain Forest/Prairie

#### *Invasive Species of Concern*

Invasive plants can be found in many areas of the site, the most apparent being a handful of woody invasive species: Siberian elm (*Ulmus pumila*), Tartarian honeysuckle (*Lonicera tatarica*) and common buckthorn (*Rhamnus cathartica*). These woody invasives are somewhat sparsely infesting the prairie and shrubland on the north, south and west sides of the park along the border of the oxbow lake. Most of the restored prairie contained within the trails is free from woody invasives except for a sapling or two of Siberian elm. The northernmost and southernmost portions of the floodplain forest seemed to be the most densely populated with woody invasives, primarily with buckthorn, while the central portion was somewhat less dense.

The understory does include a number of other species, but buckthorn was apparent as the dominant understory species of the floodplain forest.

Spotted knapweed (*Centaurea stoebe*) was present in the southern portion of the restored prairie. Leafy spurge (*Euphorbia esula*) was found to be along the southern edge of the floodplain forest and in the shrubland on the southeast corner of the site. Significant amounts of poison ivy (*Toxicodendron radicans*) inhabited the understory of the floodplain forest and the quaking aspen grove in the northern portion of the site, including at the edges of these areas near trails. There were a few volunteer trees in the prairie that have persisted through burns and some beginnings of cool season turfgrasses invading the edges of the prairie. Other species of potential concern present include perennial sow thistle (*Sonchus arvensis*), yellow goatsbeard (*Tragopogon dubius*), riverbank grape (*Vitis riparia*), prickly ash (*Zanthoxylum americanum*), Canada goldenrod (*Solidago canadensis*), field horsetail (*Equisetum arvense*), common mullein (*Verbascum thapsus*) and amur maple (*Acer ginnala*).

#### *Ecologically Sensitive Areas*

Several areas on the property should be considered ecologically sensitive. These areas either have diverse populations of plants or are important areas in the life cycle of animals. Public use should be monitored or restricted to best protect the quality of these areas.<sup>5</sup>

The entire eastern border of the property is considered sensitive because it borders the Rum River. Since the property provides direct access to the river, there is an inherent risk imposed to the waterway by public use. Excessive use along the riverbank can cause bank instability and erosion issues that could negatively affect water quality and should be monitored closely.<sup>5</sup> Additionally, this wooded area is an ecologically sensitive riparian zone. Undisturbed riparian zones are considered reservoirs of diversity that act as key habitat to species that depend on these areas, such as nesting and migrating birds as well as certain woody plant communities. They provide spatial heterogeneity to a landscape through edges and ecotones while also creating beneficial habitat corridors. A critical part of watersheds, riparian zones reduce the delivery of runoff and pollutants to water bodies, contribute to stream bank stability and sediment control, incorporate nitrogen from shallow groundwater, provide shade that reduces stream temperature, and provide allochthonous inputs that drive river ecosystems.<sup>11, 12</sup>

The restored dry, tallgrass prairie is undoubtedly sensitive as this type of land cover has become so uncommon in Minnesota. Prairie ecosystems have been in serious decline due to fragmentation, invasive species, and surrounding land uses, resulting in less than two percent of the original native prairie area remaining in Minnesota while continuing to experience decreasing plant diversity. These sites are ecologically critical because they contribute so much to pollinator and wildlife habitat and connectivity, allow for increased animal and plant dispersal, and contain concentrated, unique biodiversity. The vegetation communities present in native prairie have dense root systems that anchor and build nutrient rich soil through their contribution to biogeochemical cycling and storage. Within the landscape, they link upland and wetland sites for organisms that utilize both habitats and act as key sites for the transfer of energy between trophic levels.<sup>1</sup>

If managed properly, the site could become habitat for Minnesota Species of Special Concern regal fritillary (*Speyeria idalia*) and U.S. Fish and Wildlife Service Endangered Species listed rusty patched bumble bee (*Bombus affinis*). Any area that could increase habitat connectivity for such

threatened species should be deemed sensitive. Conservation guides for these species detail just how critical habitat fragments are for these species: “The survival of the regal fritillary in Minnesota probably depends upon concentrations of remnants within the dispersal capabilities of adults that can collectively support larger populations”<sup>13</sup> and “conservation of the rusty patched bumble bee will ultimately depend in part on connecting patches of high quality habitat.”<sup>3</sup> Rivers’ Bend Park’s native prairie remnants offer the regal fritillary the only habitat it is able to survive in within Minnesota<sup>13, 14</sup> and is already listed as within the primary dispersal zone of the rusty patched bumble bee. Additionally, all three habitat features necessary for rusty patched bumble bees are present within Rivers’ Bend Park: the duff layer of the riparian forest is key overwintering habitat, native bunch grasses in the woodlands and prairie as well as abandoned rodent tunnels in the prairie are potential nesting areas, and the abundant forbs of the prairie and spring ephemerals of the woodlands offer necessary floral resources.<sup>3</sup>

#### *Structures and Improvements*

In an effort to contribute to eastern bluebird (*Sialia sialis*) trails, bluebird houses were erected throughout the park to act as potential nesting sites within a habitat corridor. Encroaching shrub and understory growth has crowded out some of these houses.

A large bat house is located on the west side of the park, near the shore of the oxbow lake. The site has seen a lot of human traffic with a well-worn footpath going underneath the house from the paved path to the oxbow lake shore and no apparent bat activity.

#### *Erosion*

Erosion has continued to affect the shore in front of the swing river outlook located on the east side of the park due to use for fishing. The dock on the east side of the park has also become uneven due to the river current causing erosion of the sediment underneath, creating a potential tripping hazard at the entrance to the dock.

#### *Boundary Issues*

Potential boundary issues for the site include noise pollution from the bordering roads, chemical pollution from salts used on roads and paths, and air pollution from passing traffic. A line of mature spruces has been planted along St. Francis and Bunker Lake Boulevards to provide some cover for noise pollution and aesthetic appeal within the park. Some deciduous trees are beginning to encroach on the area where the spruces are growing.

## **MANAGEMENT RECOMMENDATIONS**

The following management recommendations are intended to offer the Ramsey Parks and Recreation Board potential strategies to address the park’s primary areas of concern while accomplishing the desired management outcomes:

### **Invasive Species Control**

In order to successfully increase native species biodiversity and improve ecological health of the native prairie and floodplain forest, all invasives present must be monitored to determine whether they reach a density that threatens the natural dynamics of the site. Due to the level of prominence of the woody invasive species, buckthorn, Tartarian honeysuckle, and Siberian elm must be eradicated. This process involves several elements: treatment of invasive species with herbicide, removal of undesirable woody biomass, and supplemental plantings if necessary. The

latter element will be postponed to observe natural regeneration and to provide ample time for site preparation through the removal of undesirable woody vegetation.<sup>15</sup>

#### *Woody Invasives Treatment*

Efforts will start in the areas of the park where infestations are sparse, and work towards areas of heavier infestation. This way a "front" will be developed that can be extended as the project progresses.<sup>15</sup>

The first year's goal will be to address all of the woody invasives along the oxbow lake, starting on the northwestern side of the park and continuing south along the shore. Volunteers thoroughly trained in species identification and treatment methods are proposed to assist with this portion of the site. Educational reference materials developed by Peter Leih should be utilized to help with proper volunteer training (Appendix A). Due to the severe degree of density of buckthorn within the floodplain forest, contracting specialists for woody invasive removal in this portion of the site will be necessary. Beginning on the southern edge of the floodplain forest and continuing north, removal of about 10% of the woody invasives each year is proposed. This incremental approach is important in order to avoid denuding the forest or disrupting the proper functioning of the riparian zone, including the production of allochthonous inputs, shading of the river, and stream bank stabilization.

The woody invasives being removed will be cut off 8-10 inches above the ground. Cut stump application of 25% Garlon 3A, a triclopyr based herbicide, mixed with water is proposed as it is recommended for use near aquatic areas. Subsequent years will treat any new growth or vegetation that was missed in the initial treatment. Whenever potentially hazardous chemical treatment is proposed near areas of frequent use, signage should be displayed along paths every 50-100 yards denoting the area that has been recently treated. Treatments will be done in late fall or early winter when buckthorn, Tartarian honeysuckle and Siberian elm are easy to identify and damage from overspray can be minimized. This also prevents damage to spring ephemerals, which are critical early foraging for the Rusty Patched Bumblebee. Additional sunlight reaching the ground will encourage the growth of more desirable species. Unfortunately, it will also allow for a flourish of buckthorn seed that has built up in the soil to germinate. A multi-year treatment approach is critical to address this problem. At least three years of treatment with herbicide will be necessary. Follow up treatments every three years thereafter are desirable.<sup>15</sup>

#### *Woody Biomass Removal*

Woody biomass of the treated common buckthorn, Tartarian honeysuckle, and Siberian elm will be gathered, removed from the site and burned. The remaining stumps and root systems will be left to decompose. Extra precautions during removal should be taken for any of the invasives that have the potential to spread seed, such as buckthorn with berries. Any such specimens should be transported via plastic tarps to prevent seed dispersal. Removal of woody biomass is desirable because it will accelerate restoration activities, remove fire hazards, and reduce conflict with the public who find the dead trees unsightly.<sup>15</sup>

#### *Vegetation Enhancement*

A list of desirable vegetation for the site, developed by consulting references from the City of Ramsey Natural Resources Inventory and Board of Water and Soil Resources Native Vegetation Establishment and Enhancement Guidelines can be found in Appendix B. Natural regeneration

of desirable species, combined with continued treatment of undesirable species may make supplemental planting unnecessary. If it becomes clear after three years of active site preparation that the seed bank is insufficient to produce the desired result, supplemental seeding and planting will be pursued. If and when supplemental planting becomes necessary, plant materials of local ecotype will be sought and protocols used consistent with the Board of Water and Soil Resources Native Vegetation Establishment and Enhancement Guidelines or other protocol recommended at the time.<sup>15, 16</sup> As regrowth and potential reseeding occur, it is important to manage for establishing some areas of open understory, which promotes the growth of spring ephemerals and improves potential overwintering areas for the rusty patched bumble bee.<sup>3</sup>

#### *Long-Term Maintenance*

Maintenance of the project once it is completed should be minimal. In riparian forest removal sites a fall foliar spray, naturally sourced if possible, conducted a year after removal is recommended to help new growth get established by providing nutrients, especially nitrogen. Buckthorn seed remains viable for up to five years in the soil, so a sweep of the park to identify and treat any woody invasive re-growth once a year will keep populations under control and provide the opportunity for native species to become re-established. We will use the initial project to train volunteers on proper identification and treatment methods to ensure long-term maintenance activities have sufficient labor resources and are carried out adequately.<sup>15</sup>

#### *Remaining Invasive Plants of Concern*

To combat the infringement of cool season turfgrass on the native prairie, a selective cool season spray is proposed that will control the problem species while avoiding damage to Canada wild rye. It is recommended that spotted knapweed, leafy spurge, and poison ivy be immediately addressed as well. At this time, the effects of the remaining species of concern on ecological function and stability should be monitored to determine whether they should be controlled or removed in the future. Resources for removal and control guidelines can be found on the Minnesota Department of Natural Resources Invasive Terrestrial Plants page and the Minnesota Department of Agriculture Noxious Weed page.

#### **Native Prairie Creation**

Located near a few of the scarce remaining pockets of native prairie in the Big Woods, Big Rivers biome and already containing six acres of restored prairie, the park's currently maintained turfgrass area holds vast potential ecological value as an expansion of the restored prairie area. Reconstructing a native dry mixed grass prairie community provides native flora that actively attracts invertebrate species critical to the site's food chain stability and natural functioning in addition to secondary species such as birds, herptiles and small mammals. Considering the current plight of invertebrates, specifically designing habitat to attract native species, especially pollinators, is a project worth high prioritization. Further benefits include production of natural aesthetic beauty that requires little maintenance, promotion of a prairie habitat corridor that connects the prairie remnants in the area, decreased long-term costs, and decreased emissions from mowing.<sup>17</sup>

#### *Preparing the Site*

Four portions of the maintained area to the north, northwest and northeast of the current restored prairie are the proposed sites for construction of mixed grass prairie (Maps 1-3). Any existing grass and weeds must be removed. The easiest way to do this is to treat the site with a

systemic, broad-spectrum herbicide such as glyphosate sprayed directly onto the turfgrass and any other species present. Rodeo Broad Spectrum Aquatic Herbicide is suggested, as it is safe to use near wetlands, doesn't bioaccumulate in the food chain, and has no residual soil activity. Two sessions of application are recommended, the first occurring in late summer. After the grass is dead which should be about 25-30 days after herbicide application the site should be harrowed. Following the harrowing, allow the site to regreen until it is about shin to knee height, at which point the second round of herbicide should be sprayed. When 25-30 days have elapsed, a controlled burn of the sites is proposed using appropriate procedures, equipment and permits.<sup>17</sup>

*Vegetation Enhancement*

Once the site is prepared, it will be seeded and planted with plugs the following spring (May 15- June 15). To sow the seed, mix with some inert material such as sand or loose potting soil and broadcast the mixture over the area. The seeds must be pressed into the soil by rolling or by pressing a board down onto the seedbed. You can walk over the entire area to pack down the soil. The objective is to have good contact between the soil and seeds to allow them to gain and retain moisture. Some seeds will still be visible when you are done. Add the proposed seedling plugs immediately after completing seeding. The area needs to be kept moist for four to six weeks to ensure germination and allow the plants to establish themselves. Do not allow the area to dry out while the seeds are germinating. Do not saturate the soil either as this can drown the seedlings. Once the plants are established (one to two inches), you can gradually reduce watering to only when the plants begin to show stress.<sup>17</sup> The newly planted sites should be mown at the end of the first growing season to give all species a chance to establish themselves. If it becomes clear after three years of active site preparation that the initial seeding is insufficient to produce the desired vegetation (Appendix B), supplemental seeding and planting will be pursued.

Species selection was made with ecological and aesthetic considerations in mind, aiming to create an ecosystem with a high diversity of grasses and wildflowers that will produce blooms from spring through fall, offering pollinators quality foraging habitat while fostering aesthetic beauty throughout the year. Specific consideration was given to key vegetation for regal fritillary and rusty patched bumble bee habitat, including a maximal variety and density of *Viola* species as regal fritillary larvae feed only on them.<sup>13, 14</sup> The proposed list also includes super foods and immune building foods for the rusty patched bumble bee diet and native bunch grasses for its nesting.<sup>3, 18</sup>

The seed mixes will consist of the following species and amounts:

<b>Short Dry Grass Seed Mix - 10-12 Pure Live Seed (PLS) lbs/acre</b>		
<b>Scientific Name</b>	<b>Common Name</b>	<b>Amount (%)</b>
<i>Bouteloua curtipendula</i>	Side-oats grama	38
<i>Bouteloua gracilis</i>	Blue grama	12
<i>Danthonia spicata</i>	Poverty oatgrass	3
<i>Elymus canadensis</i>	Canada wild rye	3
<i>Koeleria macrantha</i>	June grass	3
<i>Schizachyrium scoparium</i>	Little bluestem	35

<i>Sporobolus cryptandrus</i>	Sand dropseed	3
<i>Sporobolus heterolepis</i>	Prairie dropseed	3

<b>Short Dry Wildflower Seed Mix - 1.5 PLS lbs/acre</b>		
<b><u>Scientific Name</u></b>	<b><u>Common Name</u></b>	<b><u>Amount (%)</u></b>
<i>Agastache foeniculum</i>	Blue giant hyssop	1
<i>Allium stellatum</i>	Prairie onion	2
<i>Amorpha canescens</i>	Leadplant	9
<i>Asclepias syriaca</i>	Common milkweed	4
<i>Astragalus canadensis</i>	Canada milkvetch	4
<i>Calylophus serrulatus</i>	Toothed evening primrose	1
<i>Coreopsis palmata</i>	Prairie coreopsis	1
<i>Dalea candida</i>	White prairie clover	8
<i>Dalea purpurea</i>	Purple prairie clover	15
<i>Desmodium canadense</i>	Canada tick trefoil	1.5
<i>Lespedeza capitata</i>	Round-headed bush clover	4
<i>Monarda fistulosa</i>	Wild bergamot	0.5
<i>Oenothera biennis</i>	Evening primrose	1
<i>Penstemon grandiflorus</i>	Large beardtongue	4
<i>Rudbeckia hirta</i>	Black-eyed Susan	12
<i>Solidago nemoralis</i>	Gray goldenrod	2
<i>Solidago ptarmicoides</i>	Upland goldenrod	1
<i>Solidago rigida</i>	Stiff goldenrod	4
<i>Solidago speciosa</i>	Showy goldenrod	0.5
<i>Symphotrichum laeve</i>	Smooth blue aster	0.5
<i>Symphotrichum oolentangiense</i>	Sky-blue aster	0.5
<i>Tradescantia occidentalis</i>	Western spiderwort	0.5
<i>Verbena stricta</i>	Hoary vervain	14
<i>Zizia aptera</i>	Heart-leaved Alexander	6

<b>Additional Wildflower Seed</b>		
<b><u>Scientific Name</u></b>	<b><u>Common Name</u></b>	<b><u>Amount (PLS lbs/acre)</u></b>
<i>Agastache foeniculum</i>	Blue giant hyssop	0.5
<i>Asclepias tuberosa</i>	Butterflyweed	1
<i>Dalea villosa</i>	Silky prairie clover	1
<i>Echinacea angustifolia</i>	Narrow-leaved purple coneflower	1
<i>Helianthus pauciflorus</i>	Stiff sunflower	1
<i>Heliopsis helianthoides</i>	Common oxeye	0.5
<i>Lupinus perennis</i>	Wild lupine	1
<i>Penstemon grandiflorus</i>	Large beardtongue	1.5

<i>Ratibida pinnata</i>	Gray-headed coneflower	1
<i>Tradescantia occidentalis</i>	Western spiderwort	0.5

A mixture of the below plants will be planted individually in appropriate microhabitats throughout the project. Within shady areas in particular, *Elymus hystrix* should be used. A total of 1000 plugs per acre of the site is proposed. Additional plant can be planted if budget allows.

<b>Grass, Sedge and Bulrush Plugs</b>	
<b>Scientific Name</b>	<b>Common Name</b>
<i>Carex brevior</i>	Plain's oval sedge
<i>Carex pensylvanica</i>	Pennsylvania sedge
<i>Elymus hystrix</i>	Bottlebrush grass
<i>Juncus greenii</i>	Greene's rush
<i>Juncus tenuis</i>	Path rush

A mixture of the below plants will be planted individually in appropriate microhabitats throughout the project. A total of 500 plugs per acre of the site is proposed. Additional plant can be planted if budget allows. From the following list, a minimum of 15 species will be used: at least five species that bloom during spring, summer and fall. Highest priority should be given to species denoted with an XX (most critical to the habitat of the Species of Greatest Conservation Need being managed for in the plan - Regal Fritillary and Rusty Patched Bumblebee), followed by those with an X (critical to SGCN habitat) and finally those without.

<b>Wildflower Plugs</b>			
<b>Scientific Name</b>	<b>Common Name</b>	<b>Bloom Time</b>	<b>SGCN</b>
<i>Ranunculus fascicularis</i>	Early buttercup	Spring	
<i>Baptisia alba</i>	White wild indigo	Spring/Summer	<b>X</b>
<i>Fragaria virginiana</i>	Wild strawberry	Spring/Summer	
<i>Geum triflorum</i>	Prairie smoke	Spring/Summer	
<i>Lithospermum carolinense</i>	Carolina puccoon	Spring/Summer	
<i>Lupinus perennis</i>	Wild lupine	Spring/Summer	<b>X</b>
<i>Penstemon grandiflorus</i>	Large beardtongue	Spring/Summer	<b>X</b>
<i>Viola palmata</i> var. <i>pedatifida</i>	Prairie birdfoot violet	Spring/Summer	<b>XX</b>
<i>Viola sororia</i>	Downy blue violet	Spring/Summer	<b>XX</b>
<i>Zizia aptera</i>	Heart-leaved Alexander	Spring/Summer	
<i>Tradescantia occidentalis</i>	Western spiderwort	Spring/Summer/Fall	
<i>Allium stellatum</i>	Prairie onion	Summer	
<i>Amorpha canescens</i>	Leadplant	Summer	<b>XX</b>
<i>Anemone cylindrica</i>	Thimbleweed	Summer	
<i>Asclepias syriaca</i>	Common milkweed	Summer	<b>X</b>
<i>Astragalus canadensis</i>	Canada milkvetch	Summer	
<i>Calylophus serrulatus</i>	Toothed evening primrose	Summer	
<i>Coreopsis palmata</i>	Prairie coreopsis	Summer	

<i>Delphinium virescens</i>	Prairie larkspur	Summer	
<i>Ratibida pinnata</i>	Gray-headed coneflower	Summer	XX
<i>Thalictrum dasycarpum</i>	Tall meadow rue	Summer	
<i>Veronicastrum virginicum</i>	Culver's root	Summer	X
<i>Agastache foeniculum</i>	Blue giant hyssop	Summer/Fall	XX
<i>Artemisia ludoviciana</i>	Prairie sage	Summer/Fall	
<i>Asclepias tuberosa</i>	Butterflyweed	Summer/Fall	X
<i>Asclepias verticillata</i>	Whorled milkweed	Summer/Fall	X
<i>Chelone glabra</i>	White turtlehead	Summer/Fall	XX
<i>Echinacea angustifolia</i>	Narrow-leaved purple coneflower	Summer/Fall	XX
<i>Helianthus maximiliani</i>	Maximilian sunflower	Summer/Fall	XX
<i>Helianthus pauciflorus</i>	Stiff sunflower	Summer/Fall	XX
<i>Heliopsis helianthoides</i>	Common oxeye	Summer/Fall	
<i>Heterotheca villosa</i>	Prairie goldenaster	Summer/Fall	
<i>Liatris aspera</i>	Rough blazing star	Summer/Fall	X
<i>Liatris cylindracea</i>	Cylindric blazing star	Summer/Fall	X
<i>Liatris punctata</i>	Dotted blazing star	Summer/Fall	X
<i>Pycnanthemum virginianum</i>	Virginia mountain mint	Summer/Fall	X
<i>Solidago flexicaulis</i>	Zigzag goldenrod	Summer/Fall	XX
<i>Solidago nemoralis</i>	Gray goldenrod	Summer/Fall	XX
<i>Solidago ptarmicoides</i>	Upland goldenrod	Summer/Fall	XX
<i>Solidago rigida</i>	Stiff goldenrod	Summer/Fall	XX
<i>Solidago speciosa</i>	Showy goldenrod	Summer/Fall	XX
<i>Symphotrichum ericoides</i>	Heath aster	Summer/Fall	XX
<i>Symphotrichum laeve</i>	Smooth blue aster	Summer/Fall	XX
<i>Symphotrichum novae-angliae</i>	New England aster	Summer/Fall	XX
<i>Symphotrichum oolentangiense</i>	Sky-blue aster	Summer/Fall	XX
<i>Symphotrichum sericeum</i>	Silky aster	Summer/Fall	XX
<i>Symphotrichum urophyllum</i>	Arrow-leaved aster	Summer/Fall	XX

### Long-Term Maintenance

No herbicide should be applied for the duration of the first year after planting. Remove any unwanted weeds or grasses as they appear. Hand pulling of weeds is an effective strategy for smaller plantings. This is often most effective after rainfall when weeds are easier to pull. Any significant leaf litter accumulation on the edges of prairie sites should be removed. Prescribed burning is often initiated the third year after planting and can help to maintain diversity and to control woody species. Subdivide the tallgrass prairie into two halves and in the early spring of every second year rotate conducting controlled burns on one of the halves of the tallgrass prairie along with two of the four portions of new, mixed grass prairie to promote floral diversity and minimize impact to pollinators and other small animals dependent on these prairie ecosystems. Patchy burns are ideal to provide areas of refuge. In a year following a burn, conduct a dormant mow in early spring on the sites that were burned at a cutting height of at least 8 inches if possible.<sup>3, 13, 14, 16, 18</sup>

### **Species Surveillance**

Create an ongoing species inventory of the area through regular species surveys every three years to identify any pressing concerns of future infiltration by invasive species as well as monitor biodiversity progress and presence of SGCN. Not only will this allow us to measure how successful management of the park has been by assessing the ecological quality and health of the area, it will produce valuable data for organizations trying to study anything from population counts and species distribution to migration patterns.<sup>2</sup>

### **Habitat Maintenance**

#### *Bluebird Houses*

To encourage the use of the bluebird trail through the area, move any houses enveloped by vegetation to the edge of shrubland or understory they currently occupy to provide unobstructed access.

#### *Bat House*

Maintain a 10-foot clear zone around the bat house to the south, southeast, and southwest to prevent any vegetative obstruction of solar heating of the house. Move some logs into the worn footpath between the house and the paved path to discourage human traffic. These measures will ideally allow for a higher likelihood of use by and increased benefit for native bats.

### **Erosion Control**

Address erosion in front of the swing outlook through addition of more rock. Use a boat with some rigging to level the dock affected by erosion and add any rock or sand as needed to maintain stability. Ensure the onramp to the dock is not a tripping hazard through grading and addition of soil or gravel.

### **Border Maintenance**

Drawing on the same pool of volunteers assisting with removal of woody invasives, maintain the spruce screen through the removal of infringing deciduous trees. In the area just southwest of the parking lot on site, push back the tree line 15 feet by removing any deciduous trees (mostly quaking aspen) that occur between the line of spruces and the paved path. The same cut stump treatment that was used to address the woody invasives is recommended. The site should be monitored to determine any future need for further removal.

### **Didactic Signage**

In addition to the volunteering opportunities mentioned above, developing interpretive signage that highlights the park's ecological significance would allow visitors to further engage with their local natural history and increase their awareness of the importance of environmental stewardship. Hiring a graphic designer or enlisting one as a volunteer to help develop signage is recommended. Topics to feature include: benefits of an intact prairie ecosystem, invasive species, native species, SGCN, habitat corridors and connectivity, ecological importance of the riparian area and oxbow lake, bluebird houses, bat house, biodiversity, and lifecycle habitat.

**Timeline**<sup>15</sup>

<b><u>Activity</u></b>	<b><u>Description</u></b>	<b><u>Element</u></b>	<b><u>Date</u></b>
Herbicide spray of new prairie sites	First herbicide treatment of sites	Site Preparation	July 2020
Address spotted knapweed, leafy spurge and poison ivy	Take appropriate removal measures	Site Preparation	July 2020
Harrow new prairie sites	Once the vegetation has died	Site Preparation	August 2020
Move bluebird houses	Move to edge of their respective vegetation	Maintenance	August 2020
Block footpath under bat house	Obstruct worn path with logs	Maintenance	August 2020
Second spray of new prairie sites	Once the area has regreened to shin height	Site Preparation	September 2020
Address erosion sites	Add rock and gravel, level dock and onramp	Maintenance	September 2020
Controlled burn of new prairie sites	Once the vegetation has died	Site Preparation	October 2020
Buckthorn/honeysuckle/elm treatment along oxbow lake	Initial treatment done with volunteers	Site Preparation	October 2020
Removal of deciduous trees near spruce line	Move vegetation line back 15 feet with volunteers	Maintenance	October 2020
Buckthorn treatment in floodplain forest	Initial treatment of 10% of buckthorn in south portion by specialists	Site Preparation	October 2020, recurring annually in October
Shipping of woody biomass	Removal of treated invasives and any other woody biomass accumulated	Site Preparation	November 2020
Cool season spray	Selectively spray cool season grasses	Maintenance	November 2020

Develop didactic signs and find graphic designer	Create content for park signage	Project Development	November 2020-March 2021
Erect didactic signs	Install the newly developed signs	Environmental Interpretation	May 2021
Broadcast seed and plant plugs	Add plants to the treated new prairie sites	Vegetation Enhancement	May 2021 - June 2021
Mow new prairie sites	Once growing season is over	Maintenance	October 2021
Maintain clear zone around bat house	Remove any vegetation south of house within 10 feet	Maintenance	October 2021, recurring every third year
Buckthorn/honeysuckle/elm retreatment along oxbow lake	Follow-up treatment of missed vegetation / germination	Maintenance	October 2021, 2022, 2023
Fall foliar spray	Spray any invasive removal areas in floodplain forest	Maintenance	November 2021, recurring annually in November
Controlled burn of tallgrass prairie	Mow a dividing line and burn half the prairie	Maintenance	March 2022 - April 2022
Hand-pull weeds in new prairie sites	Remove any unwanted vegetation present	Maintenance	May 2022 - June 2022
Mow burned prairie	Mow the area burned the previous year	Maintenance	March 2023 - April 2023
Controlled burn of prairies	Burn the other half of the tallgrass prairie and two of the new prairie sites	Maintenance	March 2024 - April 2024, recurring every second year in early spring
Vegetation assessment of prairie and floodplain forest	Inventory to determine if diversity goals are met	Plant Establishment	June 2024 - August 2024 recurring every third year in summer
Vegetation enhancement plan	Prepare plan to supplement species if necessary	Enhancement	September 2025 and beyond
Mow burned prairie	Mow the areas burned the previous year	Maintenance	March 2025 - April 2025

## **FINAL COMMENTS**

The goals and strategies detailed in this document could be accomplished with the help of trained volunteers. Potential sources of volunteers include natural science students from the nearby high school and local environmentalist groups.

Undeveloped riparian zones and native prairie remnants are rare bastions of biodiversity and ecological value. Already established and newly proposed efforts to provide habitat to priority species creates a unique opportunity to allow the land to return closer to an ecological equilibrium with its surrounding landscape. Higher levels of biodiversity strengthen the overall landscape's ability to cycle nutrients, support water quality, and reinforce food chains while adding to the site's aesthetic beauty. Not only does this accomplish our conservation goals, it also fosters opportunities for the general public to connect with and appreciate the natural systems of their community. The continued quality and improvement of the natural resources of Rivers' Bend Park increase the beneficial effects of connectivity within the landscape of the Anoka Sand Plain.

## RESOURCES

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## **Map 1**



**Map 2**



### Map 3



### Appendix A

UNIVERSITY OF MINNESOTA  
**EXTENSION**  
MINNESOTA MASTER NATURALIST

## **Buckthorn and Buckthorn Removal**

### 1. Introduction

Common buckthorn (*Rhamnus cathartica*) and other variants of buckthorn plants have aggressively taken over portions of Minnesota's forested areas. Once a desired plant for

hedging and ornamental value, and even distributed through the garden and nursery industry, buckthorn is now considered a “restricted noxious weed” by the state Department of Natural Resources. Since 1999, it has been illegal to import, sell, or transport buckthorn in Minnesota.

## 2. A Little History...and Why Does This Matter?

Common, or European, buckthorn (*Rhamnus cathartica*) is a woody understory shrub or tree that was imported to North America from Europe as popular hedging plants in the 19<sup>th</sup> Century, but escaped from the confines of America’s yards and gardens long ago. Buckthorn has encroached upon Minnesota’s natural areas, establishing itself in our forests and oak savannahs. As happens with many introduced species, buckthorn found no natural controls in its new environment, such as insects and disease, or even native browsing. It quickly became an aggressive, invasive, nuisance plant, taking over the mid-layer of our Minnesota Big Woods Big Rivers areas and habitats. As a thriving flora, why is Buckthorn such a big deal? Common buckthorn has many competitive advantages over our native vegetation. It is extremely hardy, grows vigorously in almost any soil, and tolerates a variety of light conditions. Buckthorn leafs early in the spring, and doesn’t drop its leaves until very late in the season, allowing it to photosynthesize well before and well after much of the native understory vegetation, outcompeting other native plants for resources. Despite looking like a lush, green, thriving layer of understory to human eyes, buckthorn offers little to the natural environment. Insects don’t eat the leaves, and the deer do not browse on buckthorn either, which puts additional pressure on the already straining native vegetation. Birds will eat the berries, but usually only when desperate for forage, as they offer little in nutrition, however, do act as a powerful laxative, allowing the plant to effectively disperse seeds to new areas.

## 3. Proper Identification

One of the first, and most important, steps in buckthorn removal is proper identification. Buckthorn bark can look very similar to native plums, junberry, or cherry, so care must be taken to only remove the invasive, but leave behind the beneficial. Autumn is a great time for buckthorn removal processes. Because it holds its leaves much longer than other woody vegetation, it is often easier to identify in the late fall. Buckthorn bark is smooth and gray with small white bumps on young plants, changing to a ragged, flaky bark as the plant gets older with occasional sharp protrusions. A cut in the bark will reveal yellow/orange sapwood underneath. Branches often end in a sharp thorn. Leaves are a broad elliptic, growing slightly alternate from the stem, almost opposite, with a deeply veined, dark, glossy green color, very small edge serrations. Small nodules, where the leaf stem meets the branch, that some say look like a deer’s hoof print, and may be a part of how the plant got its name, are also an identifier.



#### 4. Removal and mitigation strategies

In large tracts of buckthorn infestation, large mature plants should be removed first through a cut and chemical procedure. After the large plants have been cleared from an area, smaller plants and saplings can much more easily be removed through pulling.

- **Tagging and cutting the plant** Using a non-toxic marking paint, mark plants to be cut 8-10" off the ground, and cut with a saw or sturdy pruners. Cut above the mark, so that the stumps can still be identified for herbicide application after cutting.
- **Berries** Because buckthorn seeds can remain viable in soil for many years before sprouting, extra care should be taken when working with plants that have fruited to keep these seed bearing fruits on the plant, and off the ground.
- **Removal of woody and leafy material** While male, or non-berry bearing plants may be removed from the site and set aside to be disposed of without further precautions, plants with berries should be carefully extracted from the site, taking special care to not drop the berries on the ground, then collected on a tarp, sheet, or other material that would prevent berries from dropping off the plant on to the ground. If working with a Natural Resources or Forestry department, arrangements should already have been made for the cut trees to be collected and disposed of properly by staff. The Minnesota Department of Natural Resources guide to the removal and disposal of noxious weeds has guidelines for the appropriate destruction of removed material if you are an individual not working with a formal organization.
- **Chemical herbicide on stumps** Chemical control for cut stumps include treating the stump immediately after cutting (within 2 hours) with an herbicide containing triclopyr (Garlon 3A/Vastlan, Garlon 4, or other brush killers with triclopyr) or glyphosate (Roundup) to prevent re-sprouting. Herbicides can be applied to cut stumps with a paint-brush, wick applicator such as a dauber, or a low volume sprayer.
- **Returning to the site** Seeds from the fruit stay viable in soil for many years, so repeated treatments and long-term monitoring are required. Without follow-up control, buckthorn will come back.

#### 5. Conclusion

Common Buckthorn, and its relatives such as Glossy Buckthorn, which was widely distributed through the plant and nursery industry, have run roughshod through Minnesota's forests, wreaking ecological havoc on our precious natural environments. Though care must be taken in any invasive species eradication project, the degree in which buckthorn can impair the forest understory, and the vigor in which it thrives under myriad conditions, demands extra care be taken in order to permanently end this woody shrub's dominance where it doesn't belong.

# UNIVERSITY OF MINNESOTA EXTENSION

MINNESOTA MASTER NATURALIST

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<https://www.mda.state.mn.us/plants/pestmanagement/weedcontrol/disposalnoxweed>

Friends of the Mississippi River:

<https://fmr.org/conservation-updates/buckthorn-how-can-shrub-be-so-harmful>

City of Burnsville, Minnesota:

<http://www.burnsville.org/1092/How-to-Identify>

## Appendix B

A total of 50-70 of the following native plant species is desired.

<b><i>Desirable Vegetation</i></b>			
<u>Scientific Name</u>	<u>Common Name</u>	<u>Layer</u>	<u>Ecosystem</u>
<i>Acer saccharinum</i>	Silver maple	Canopy	Floodplain Forest
<i>Quercus ellipsoidalis</i>	Northern pin oak	Canopy	Floodplain Forest/Prairie
<i>Quercus macrocarpa</i>	Bur Oak	Canopy	Floodplain Forest/Prairie
<i>Quercus rubra</i>	Northern red oak	Canopy	Floodplain Forest
<i>Tilia americana</i>	American basswood	Canopy	Floodplain Forest
<i>Prunus pensylvanica</i>	Pin cherry	Subcanopy	Floodplain Forest
<i>Salix amygdaloides</i>	Peach-leaved willow	Subcanopy	Floodplain Forest
<i>Salix nigra</i>	Black willow	Subcanopy	Floodplain Forest
<i>Amelanchier interior</i>	Inland serviceberry	Shrub	Floodplain Forest
<i>Amorpha canescens</i>	Leadplant	Shrub	Floodplain Forest/Prairie
<i>Ceanothus americanus</i>	New Jersey tea	Shrub	Floodplain Forest
<i>Cornus sericea</i>	Red osier dogwood	Shrub	Floodplain Forest
<i>Prunus americana</i>	Wild plum	Shrub	Floodplain Forest
<i>Ribes americanum</i>	Wild black currant	Shrub	Floodplain Forest
<i>Ribes missouriense</i>	Missouri gooseberry	Shrub	Floodplain Forest
<i>Rosa arkansana</i>	Prairie rose	Shrub	Floodplain Forest/Prairie
<i>Rosa blanda</i>	Smooth wild rose	Shrub	Floodplain Forest
<i>Rubus occidentalis</i>	Black raspberry	Shrub	Floodplain Forest
<i>Vaccinium angustifolium</i>	Lowbush blueberry	Shrub	Floodplain Forest
<i>Viburnum trilobum</i>	Highbush cranberry	Shrub	Floodplain Forest
<i>Achillea millefolium</i>	Common yarrow	Ground	Floodplain Forest/Prairie
<i>Agastache foeniculum</i>	Blue giant hyssop	Ground	Floodplain Forest/Prairie
<i>Allium stellatum</i>	Prairie onion	Ground	Prairie
<i>Andropogon gerardii</i>	Big bluestem	Ground	Floodplain Forest/Prairie
<i>Anemone cylindrica</i>	Thimbleweed	Ground	Floodplain Forest/Prairie
<i>Aquilegia canadensis</i>	Red columbine	Ground	Floodplain Forest
<i>Artemisia ludoviciana</i>	Prairie sage	Ground	Prairie
<i>Asclepias syriaca</i>	Common milkweed	Ground	Floodplain Forest/Prairie
<i>Asclepias tuberosa</i>	Butterflyweed	Ground	Prairie
<i>Asclepias verticillata</i>	Whorled milkweed	Ground	Floodplain Forest/Prairie
<i>Astragalus canadensis</i>	Canada milkvetch	Ground	Floodplain Forest/Prairie
<i>Baptisia alba</i>	White wild indigo	Ground	Floodplain Forest/Prairie
<i>Bouteloua curtipendula</i>	Side-oats grama	Ground	Floodplain Forest/Prairie
<i>Bouteloua gracilis</i>	Blue grama	Ground	Prairie
<i>Bromus ciliatus</i>	Fringed brome	Ground	Floodplain Forest

<i>Bromus kalmii</i>	Kalm's brome	Ground	Floodplain Forest/Prairie
<i>Calylophus serrulatus</i>	Toothed evening primrose	Ground	Prairie
<i>Carex brevior</i>	Plain's oval sedge	Ground	Prairie
<i>Carex pensylvanica</i>	Pennsylvania sedge	Ground	Floodplain Forest/Prairie
<i>Chelone glabra</i>	White turtlehead	Ground	Floodplain Forest/Prairie
<i>Coreopsis palmata</i>	Prairie coreopsis	Ground	Prairie
<i>Dalea candida</i>	White prairie clover	Ground	Prairie
<i>Dalea purpurea</i>	Purple prairie clover	Ground	Prairie
<i>Dalea villosa</i>	Silky prairie clover	Ground	Prairie
<i>Danthonia spicata</i>	Poverty oatgrass	Ground	Prairie
<i>Delphinium virescens</i>	Prairie larkspur	Ground	Prairie
<i>Desmodium canadense</i>	Canada tick trefoil	Ground	Floodplain Forest/Prairie
<i>Dicentra cucullaria</i>	Dutchman's breeches	Ground	Floodplain Forest
<i>Echinacea angustifolia</i>	Narrow-leaved purple coneflower	Ground	Prairie
<i>Echinacea pallida</i>	Pale purple coneflower	Ground	Prairie
<i>Elymus canadensis</i>	Canada wild rye	Ground	Floodplain Forest/Prairie
<i>Elymus hystrix</i>	Bottlebrush grass	Ground	Floodplain Forest/Prairie
<i>Elymus trachycaulus</i>	Slender wheatgrass	Ground	Floodplain Forest/Prairie
<i>Fragaria virginiana</i>	Wild strawberry	Ground	Floodplain Forest/Prairie
<i>Geranium maculatum</i>	Wild geranium	Ground	Floodplain Forest
<i>Geum triflorum</i>	Prairie smoke	Ground	Prairie
<i>Helianthus maximiliani</i>	Maximilian sunflower	Ground	Prairie
<i>Helianthus pauciflorus</i>	Stiff sunflower	Ground	Prairie
<i>Heliopsis helianthoides</i>	Common oxeye	Ground	Floodplain Forest/Prairie
<i>Heterotheca villosa</i>	Prairie goldenaster	Ground	Prairie
<i>Hydrophyllum virginianum</i>	Virginia waterleaf	Ground	Floodplain Forest
<i>Juncus greenei</i>	Greene's rush	Ground	Prairie
<i>Juncus tenuis</i>	Path rush	Ground	Prairie
<i>Koeleria macrantha</i>	June grass	Ground	Floodplain Forest/Prairie
<i>Lespedeza capitata</i>	Round-headed bush clover	Ground	Prairie
<i>Liatris aspera</i>	Rough blazing star	Ground	Floodplain Forest/Prairie
<i>Liatris cylindracea</i>	Cylindric blazing star	Ground	Prairie
<i>Liatris punctata</i>	Dotted blazing star	Ground	Prairie
<i>Lithospermum carolinense</i>	Carolina puccoon	Ground	Floodplain Forest/Prairie
<i>Lupinus perennis</i>	Wild lupine	Ground	Floodplain Forest/Prairie
<i>Maianthemum racemosum</i>	False Solomon's seal	Ground	Floodplain Forest
<i>Monarda fistulosa</i>	Wild bergamot	Ground	Floodplain Forest/Prairie
<i>Oenothera biennis</i>	Evening primrose	Ground	Floodplain Forest/Prairie
<i>Panicum virgatum</i>	Switchgrass	Ground	Floodplain Forest/Prairie
<i>Pedicularis canadensis</i>	Wood betony	Ground	Floodplain Forest/Prairie
<i>Penstemon grandiflorus</i>	Large beardtongue	Ground	Prairie

<i>Physostegia virginiana</i>	Obedient plant	Ground	Floodplain Forest
<i>Pycnanthemum virginianum</i>	Virginia mountain mint	Ground	Prairie
<i>Ranunculus fascicularis</i>	Early buttercup	Ground	Floodplain Forest/Prairie
<i>Ratibida pinnata</i>	Gray-headed coneflower	Ground	Prairie
<i>Rudbeckia hirta</i>	Black-eyed Susan	Ground	Floodplain Forest/Prairie
<i>Sanguinaria canadensis</i>	Bloodroot	Ground	Floodplain Forest
<i>Schizachyrium scoparium</i>	Little bluestem	Ground	Floodplain Forest/Prairie
<i>Solidago flexicaulis</i>	Zigzag goldenrod	Ground	Floodplain Forest/Prairie
<i>Solidago nemoralis</i>	Gray goldenrod	Ground	Floodplain Forest/Prairie
<i>Solidago ptarmicoides</i>	Upland goldenrod	Ground	Floodplain Forest/Prairie
<i>Solidago rigida</i>	Stiff goldenrod	Ground	Prairie
<i>Solidago speciosa</i>	Showy goldenrod	Ground	Floodplain Forest/Prairie
<i>Sorghastrum nutans</i>	Indian grass	Ground	Floodplain Forest/Prairie
<i>Spartina pectinata</i>	Prairie cordgrass	Ground	Prairie
<i>Sporobolus cryptandrus</i>	Sand dropseed	Ground	Prairie
<i>Symphotrichum ericoides</i>	Heath aster	Ground	Floodplain Forest/Prairie
<i>Symphotrichum laeve</i>	Smooth blue aster	Ground	Floodplain Forest/Prairie
<i>Symphotrichum novae-angliae</i>	New England aster	Ground	Prairie
<i>Symphotrichum oolentangiense</i>	Sky-blue aster	Ground	Floodplain Forest/Prairie
<i>Symphotrichum sericeum</i>	Silky aster	Ground	Floodplain Forest/Prairie
<i>Symphotrichum urophyllum</i>	Arrow-leaved aster	Ground	Floodplain Forest/Prairie
<i>Thalictrum dasycarpum</i>	Tall meadow rue	Ground	Floodplain Forest/Prairie
<i>Tradescantia occidentalis</i>	Western spiderwort	Ground	Floodplain Forest/Prairie
<i>Verbena stricta</i>	Hoary vervain	Ground	Prairie
<i>Veronicastrum virginicum</i>	Culver's root	Ground	Floodplain Forest/Prairie
<i>Viola canadensis</i>	Canadian white violet	Ground	Floodplain Forest
<i>Viola lanceolata</i>	Lance-leaved violet	Ground	Floodplain Forest
<i>Viola palmata var. pedatifida</i>	Prairie birdfoot violet	Ground	Floodplain Forest/Prairie
<i>Viola pedata</i>	Birdfoot violet	Ground	Floodplain Forest/Prairie
<i>Viola pubescens</i>	Downy yellow violet	Ground	Floodplain Forest
<i>Viola sororia</i>	Downy blue violet	Ground	Floodplain Forest/Prairie
<i>Zizia aurea</i>	Golden Alexander	Ground	Floodplain Forest/Prairie

# Benefits of Using Native Plants

Landscaping with native plants improves the environment. Native plants are hardy because they have adapted to the local conditions. Once established, native plants do not need pesticides, fertilizers, or watering. Not only is this good for the environment, it saves time and money. A native landscape does not need to be mowed like a conventional lawn. This reduces the demand for non-renewable resources and improves the water and air quality. The periodic burning (or mowing when burning is not practical) required for maintenance of a prairie landscape mimics the natural prairie cycle and is much better for the environment.

Landscaping with native wildflowers and grasses helps return the area to a healthy ecosystem. Diverse varieties of birds, butterflies and animals, are attracted to the native plants, thus enhancing the biodiversity of the area. The beauty of native wildflowers and grasses creates a sense of place, both at home and work. The native plants increase our connection to nature, help educate our neighbors, and provide a beautiful, peaceful place to relax.

**Reduced Use of Pesticides** Since native plants have adapted to local conditions, they are more resistant to pest problems. Sometimes individuals use non-persistent pesticides, which break down into harmless components, before sowing native plant seeds to minimize competition from the weeds. Once the native plants are established, pesticides are seldom needed.

**Improved Air Quality** Native landscaping practices can help improve air quality on a local, regional and global level. Locally, smog (ground level ozone) and air toxics can be drastically reduced by the virtual elimination of the need for lawn maintenance equipment (lawn mowers, weed edgers, leaf blowers, etc.) which is fueled by gasoline, electricity or batteries. All of these fuel types are associated with the emissions of the following air pollutants: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), nitrous oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), VOCs (volatile organic compounds) and air toxics such as benzene. Gasoline lawn and garden equipment, on average, produces 5% of ozone-forming VOCs in areas with smog problems. This equipment also emits toxics and particulates.



Regionally, NO<sub>x</sub> and SO<sub>2</sub> released from lawn maintenance equipment react with water in the atmosphere to form acid rain. Globally, native landscaping practices help to combat global warming in two ways. Carbon dioxide (CO<sub>2</sub>) is a major greenhouse gas and by reducing the use of lawn maintenance equipment, the associated CO<sub>2</sub> emissions are also reduced. Native plants help to reduce the amount of CO<sub>2</sub> in the atmosphere by taking in CO<sub>2</sub> and storing the carbon in the body of the plants, roots and soil. Native plants work much better than traditional mowed grass as a carbon sink due to their extensive root systems and increased ability to retain and store water.

**Improved Water Quality** In conventional landscaping, pesticides are often wrongly applied at times when target insects are not vulnerable. Overuse and inappropriate use often kill beneficial insects and other wildlife. Less than 10% of all insects are harmful to plants. Pesticides have the potential to cause serious human health problems when not handled properly or applied according to the label directions. By eliminating or minimizing the use of pesticides and fertilizers, these pollutants will not run-off into streams, lake, and bays. This improves the quality of the water and the aquatic life in it. In healthy water systems, natural controls, such as fish, frogs, and snails will help keep insect populations under control and reduce algae buildup.

A publication of the U.S EPA <http://www.epa.gov/greenacres/index.html#Benefits> reprinted by the

**Native Plant Society of Texas- Houston Chapter**

[www.npsot.org/houston](http://www.npsot.org/houston)



# Benefits of *Naturescaping* with Native Plants



There are many benefits to naturescaping, whether practiced in place of or in addition to traditional landscaping. The benefits include, but are not limited to, the following:

- **Ease of Use** - Native plants evolved to grow in local conditions and to predictable sizes. They do not require watering (except during establishment), chemical pesticides and fertilizers, or frequent cutting.
- **Public Health** (lowers cancer rates)- Traditional landscaping uses large amounts of synthetic pesticides and fertilizers, some of which are suspected carcinogens. During rains, these chemicals often run off into public water supplies.
- **Air Pollution**- Lawnmowers, weed eaters and blowers use large quantities of fossil fuels, creating greenhouse gas and other pollutants. Lawnmowing may cause up to 5% of total air pollution, and an Exxon Valdez of oil is spilled by lawnmowers each year in the U.S. Traditional landscaping also contributes to noise pollution.
- **Saves you Money** -The cost of maintaining a naturescape is dramatically less than that of a traditional landscape because a naturescape essentially takes care of itself. Naturescapes also save you time - and how valuable is your time?
- **Water Use**- In the West, 60% of consumed water goes to lawns; in the East, 30%. This water diversion harms the environment, kills fish, and returns polluted water to our streams and rivers. It also costs you - on irrigation system installation and maintenance, and on your water bill.
- **Song Birds** -Our song bird populations having dropped steadily - 5-10% per year, depending on the species - for the last several decades, and there is no end in sight. The loss is primarily due to habitat loss. Adopting naturescaping is critical if song birds are to find food and shelter.
- **Enhanced Livability** -An ecologically functional landscape offers so much more than a sterile, static landscape. It stimulates our children with color, sound and wonder. It is cleaner, quieter and healthier, and may increase property values.

**Traditional landscaping** attempts to create a landscape that "looks" the same regardless of location. This is, in part, pushed by nurseries that sell the same plant across wide markets, maximizing revenue through efficiencies of scale. (Nurseries aggressively market this limited number of plants through garden magazines, local newspapers, and radio and television programs, etc.) It is also driven by landscape designers who tend to use the same plants regardless of where the site is (less burdensome than learning new plants). Lastly, it is driven by homeowners and property managers who grew up learning one set of plants and understandably use those plants as a frame of reference as they move about the country.

These and other forces have created an atmosphere that emphasizes using the same plants regardless of location and changing a site to accommodate these plants. Site changing often entails installing irrigation, bringing in new soil or soil amendments, regularly applying chemical products (pesticides, fertilizer, etc.), and frequently cutting, pruning and weeding. This is traditional landscaping. Resulting monocultures may cause extinction of many species.

## City mowing by Park Department

2019 estimate, (does not include roadsides etc.)

### Parks

1. Alpine	12.25 acres
2. Central	30
3. Elmcrest	19
4. Titterud	7.5
5. Peltzer	1.4
6. The Draw	12
7. Riverdale	3.3
8. Emerald Pond	5
9. Flintwood	6.23
10. Riverbend	6.65
11. Solstice	2
12. Woodland Green	4.25
13. Bear	2.25
14. Brookview	.25
15. Fox	.8
16. Fordbrook	1.3
17. Rabbit	3.25
18. Autumn Heights	1.85
19. North Commons	4.45
20. Hunters Hill	.5
21. Shawn Acres	.25

### Fire Stations

1. #1	3.65
2. #2	1.36

### Water Towers

1. #1	1.68
2. #2	1.27
3. #3	2.25

**Misc. other city owned properties**

1. Municipal Center .25
2. Old Town Hall .38
3. Foster Cemetery 1.76
4. Trotbrook Cemetery .75
5. Happy Days Site .4
6. Lift Station off 157<sup>th</sup> .4
7. 69.84 miles of trails @ two passes 50+ acres

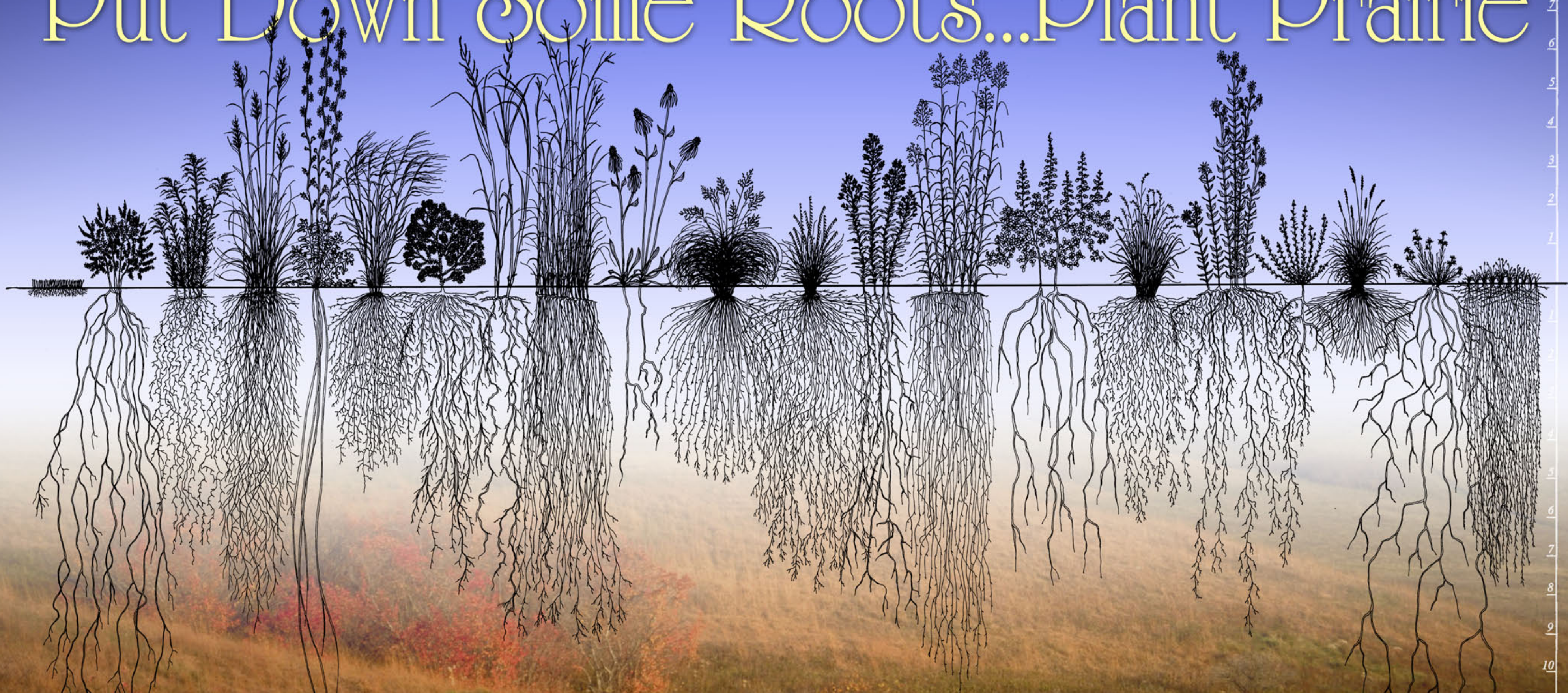
**Total acres mowed 138.63 to 189+**

No/low mow parks – Pearson and Sunfish Lake Parks

Mow 69.84 miles of asphalt trails @ two passes

Weekly equipment maintenance required

# Put Down Some Roots..Plant Prairie



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feet

**Improve water quality • Anchor soil • Provide wildlife habitat • Sequester carbon**

Native tallgrass prairie is the most endangered ecosystem in North America

- Kentucky Blue Grass**  
*Poa pratensis*  
(Nonnative)
- Lead Plant**  
*Amorpha canescens*
- Missouri Goldenrod**  
*Solidago missouriensis*
- Indian Grass**  
*Sorghastrum nutans*
- Compass Plant**  
*Silphium laciniatum*
- Porcupine Grass**  
*Stipa spartea*
- Heath Aster**  
*Aster ericoides*
- Prairie Cord Grass**  
*Spartina pectinata*
- Big Blue Stem**  
*Andropogon gerardii*
- Pale Purple Coneflower**  
*Echinacea pallida*
- Prairie Dropseed**  
*Sporobolus heterolepis*
- Side Oats Gramma**  
*Bouteloua curtipendula*
- False Boneset**  
*Kuhnia eupatoriodes*
- Switch Grass**  
*Panicum virgatum*
- White Wild Indigo**  
*Baptisia leucantha*
- Little Blue Stem**  
*Andropogon scoparius*
- Rosin Weed**  
*Silphium integrifolium*
- Purple Prairie**  
*Petalostemum purpureum*
- June Grass**  
*Koeleria cristata*
- Cylindric Blazing Star**  
*Liatris cylindracea*
- Buffalo Grass**  
*Buchloe dactyloides*

# What is a Prairie?

The classic image of the prairie is of a sea of tall waving grasses and forbs (wildflowers) with rich black soil and plants adapted to modest rainfall and regular fires. These expansive prairies once stretched across western and southern Minnesota with tallgrass prairies on moist uplands and in wet depressions. Prairies of short and mid-height grasses grew on drier areas such as gravelly slopes. Between the western prairies and the eastern deciduous forests, smaller prairie patches mixed with woodlands and savannas.

## Why do we need prairie?

The prairie landscape of the Midwest was one of our nation's most diverse terrestrial ecosystems. Today less than one percent of the original expanse of Minnesota native prairie remains. Over 900 species of plants have been recorded on remaining prairies in Minnesota, with up to 300 or more species per individual prairie remnant. Almost half of Minnesota's rare species are prairie plants and animals.

## What are the benefits of planting prairie grasses and wildflowers?

Prairies are sometimes called upside-down forests because much of the plant and animal life is below ground. Many prairie plants have roots 5 to 15 feet deep. Extensive root systems improve the ability of the soil to infiltrate water, reducing runoff and wet conditions. Deep roots decrease erosion by anchoring soil. Prairie plants also increase soil organic matter, storing carbon and rebuilding the soil. They require less long-term maintenance than traditional landscaping. Established prairie plants provide resistance to invasive species, and are a potential source of biofuel. A recent survey for Mn/DOT found that prairie flower vegetation is the only roadside vegetation that has a powerful positive effect on attractiveness, naturalness, maintenance, and safety. This suggests that the prairie flower roadside plantings could be widely used for positive aesthetic effects.

## How can you help?

Everyone in the prairie region of Minnesota can help promote prairie planting and conservation. Native landscaping provides an attractive alternative to traditional landscaping and requires less water, chemicals, and maintenance. Roadsides provide an opportunity to restore native prairie grasses and flowers because they are permanent grassy areas. The DNR Road-sides for Wildlife program provides cost share to local road authorities, conservation groups, and individuals to plant native prairie species along roadsides. Other programs provide assistance with shoreland restorations, native buffer programs, and living snow fences. Rain gardens are a great solution to reduce runoff in yards, school grounds, and near parking lots. If you know of an existing native prairie, work with local conservations groups to protect and maintain this precious resource.

## Benefits of Prairie:

- Superior erosion control
- Stormwater filtration
- Groundwater recharge
- Less long-term maintenance
- Greater resistance to weeds
- Increases soil organic matter
- Rebuilds the soil
- Provides wildlife habitat

# Tallgrass Prairie Facts

1. Native tallgrass prairie is the MOST ENDANGERED ecosystem in North America. (Kansas State University)
2. Native prairie root systems are the BEST natural soil anchors on earth.
3. One acre of established prairie can produce 24,000 pounds of roots. (Iowa State University)
4. One acre of established prairie can ABSORB 9 inches of rainfall per hour before runoff occurs. (University of North Iowa)
5. One acre of established prairie will INTERCEPT as much as 53 tons of water during a one-inch hour rain event. (University of Nebraska-Lincoln)
6. Prairie foliage represents a surface area 5 to 20 times larger than the soil area beneath it. (University of Nebraska-Lincoln)
7. Prairie planted in roadside ditches makes our highways safer by INCREASING the holding capacity for snow in the ditch PROVIDED the shoulder is mowed. Mn/DOT.
8. Natural competition of prairie plants REDUCES the occurrence of weeds in an area. (Iowa State University)
9. Greater prairie diversity creates greater biotic barriers to PREVENT weed invasion. (University of Minnesota)
10. One acre of reconstructed prairie can produce more net bioenergy than land used to grow corn for ethanol. (University of Minnesota)

# Prairie Ecology Principles

## Prairie Grass

Grasses (family Poaceae) are highly adapted to life on the prairie. Most prairie grasses are sod grasses, which means they spread horizontally by sending out new shoots and roots and the result is a dense mat of plants and roots. Sometimes as much as 90% of the weight of a grass plant is in its roots. These deep and extensive roots store huge amounts of sugars, water, and energy and protect the plant from drought, grazing, and fires. Dense sod also discourages competition by other species. Height varies from ground cover to six feet tall. Depending on their time of growth they are either warm or cool season species. Cool season species grow most actively in spring and early summer, while warm season species begin growth in early summer and continue until fall. Warm season grasses include big bluestem, little bluestem, Indiangrass, sideoats grama, switchgrass, cordgrass, and prairie dropseed. Cool season grasses include porcupine grass, western wheatgrass, Canada wild rye, June grass, and Kalm's bromegrass.

## Fabulous Forbs

Wildflowers are beautiful, provide nectar and seeds for insects and birds, and some (legumes) have nitrogen-fixing properties that enrich the soil. Some wildflowers will quickly establish and provide erosion control. Wildflowers are some of the best competitors against weeds. Common long-lived species that occur in a range of prairie habitats in Minnesota include: blue vervain, golden alexander, showy goldenrod, stiff goldenrod, Canada milkvetch, Culver's root, round-headed bush clover, white prairie clover, purple prairie clover, prairie rose, leadplant, birdsfoot coreopsis, heart-leaved alexander, smooth white aster, smooth blue aster, heath aster, stiff sunflower, black-eyed susan, grey-headed coneflower, and wild bergamot. Butterfly weed and dotted blazing star are restricted to dry sites. Bottle gentian, northern plains blazing star, and New England aster are restricted to moist habitats.

## Provide a Variety of Landscapes, Habitat and Species

Minnesota's original prairies support species adapted to wet, mesic (moist) and dry habitats. When planting prairie species, it is important to consider both uplands and wetlands. There are prairie species that thrive in rocky, sandy, wet, or even salty conditions. Animals require a variety of habitats for feeding, nesting, and cover. If you wish to attract birds, plant species that hold seeds or fruit into the winter.

## Use Local Native Prairie Seed

When purchasing seed or plants try to get them from a reputable native plant producer. They can help you find the best plants for your locations and soil type. Native plants are plants that are indigenous to a particular region. In Minnesota, plants are considered indigenous/native if they occurred in an area prior to European settlement. These plants are adapted to the specific climate, landscape, and soil conditions. Even within Minnesota, species may have distinct local ecotypes adapted to the conditions of certain regions (see map). Ask for seed that is as local in origin to your planting location as possible. Read the seed tag closely to find details on the origin of your seed. Yellow Tag certified seed has been independently assured to be of a particular ecotype and to have undergone minimal artificial selection. Avoid cultivars or non-native varieties that may mix with native species and dilute the gene pool.

## Diverse seed mixes are better

It is important to develop seed mixes that are appropriate for the specific landscape where they will be planted. In general, plant as much diversity of wildflowers and grasses as your conditions and budget will allow. Try for at least 20-50 different prairie grass and wildflowers. Diverse plantings are less prone to weed invasion. An exception to this principle is where invasive species are a severe problem and/or where ongoing spraying of broadleaf herbicides will occur. In these locations it may be best to plant native grasses. What kills broadleaf weeds also kills native wildflowers. Avoid plants that are so aggressive they overrun the entire planting.

## Erosion Control & Cover Crop

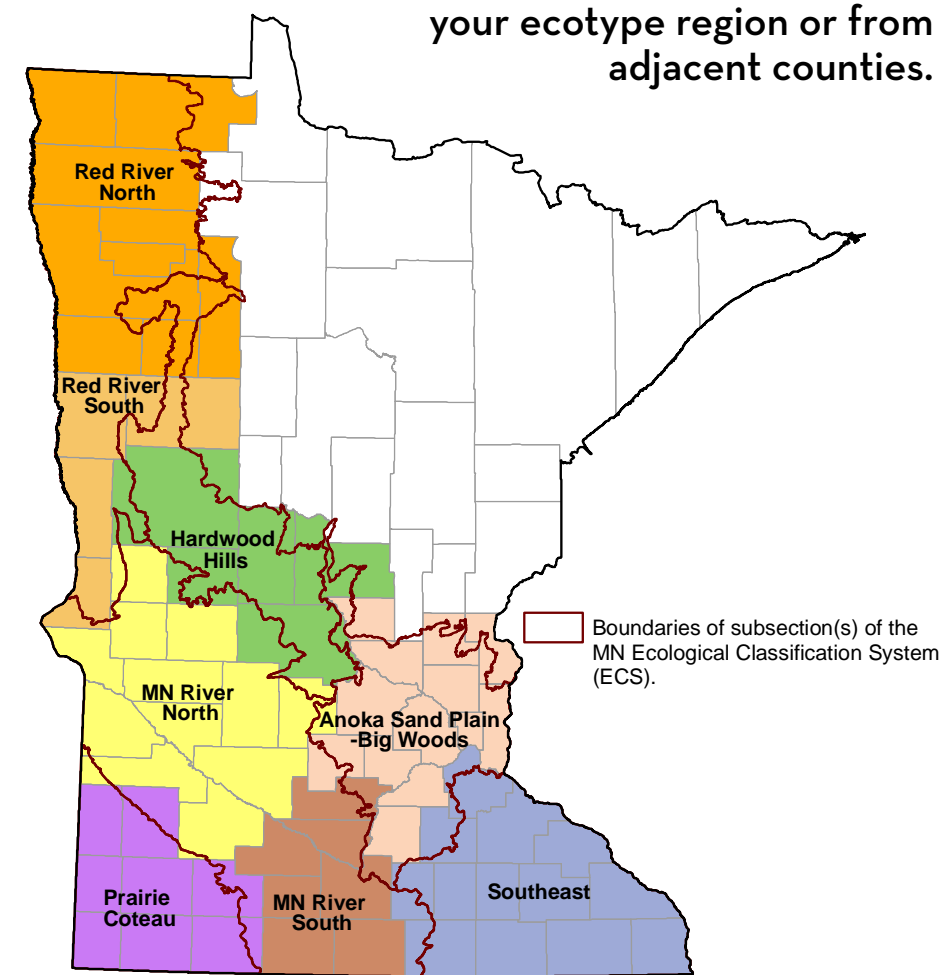
Established native prairie is excellent at erosion control. However, because many prairie species take a few years to become well established, it is important to use a seed mix that includes annual cover crops for immediate erosion control as well as cool-season native grasses to provide intermediate erosion control until the planting matures. Grasses for erosion control include Canada wild rye, slender wheatgrass, Virginia wild rye, June grass, sideoats grama, rough or northern dropseed, and blue grama. Forbs for erosion control include black-eyed Susan, partridge pea, penstemon, aster species, and purple prairie clover.

## Importance of Weed Control

Weed control is very important both before planting and in the early years of prairie plantings. A site should be cleared of weeds before planting by using one or more herbicide treatments or tillings. Until a planting matures, weeds must be controlled through a combination of mowing, spot-spraying, and prescribed burning. Avoid broad-spectrum herbicides and broadcast spraying after the seeds have been planted.

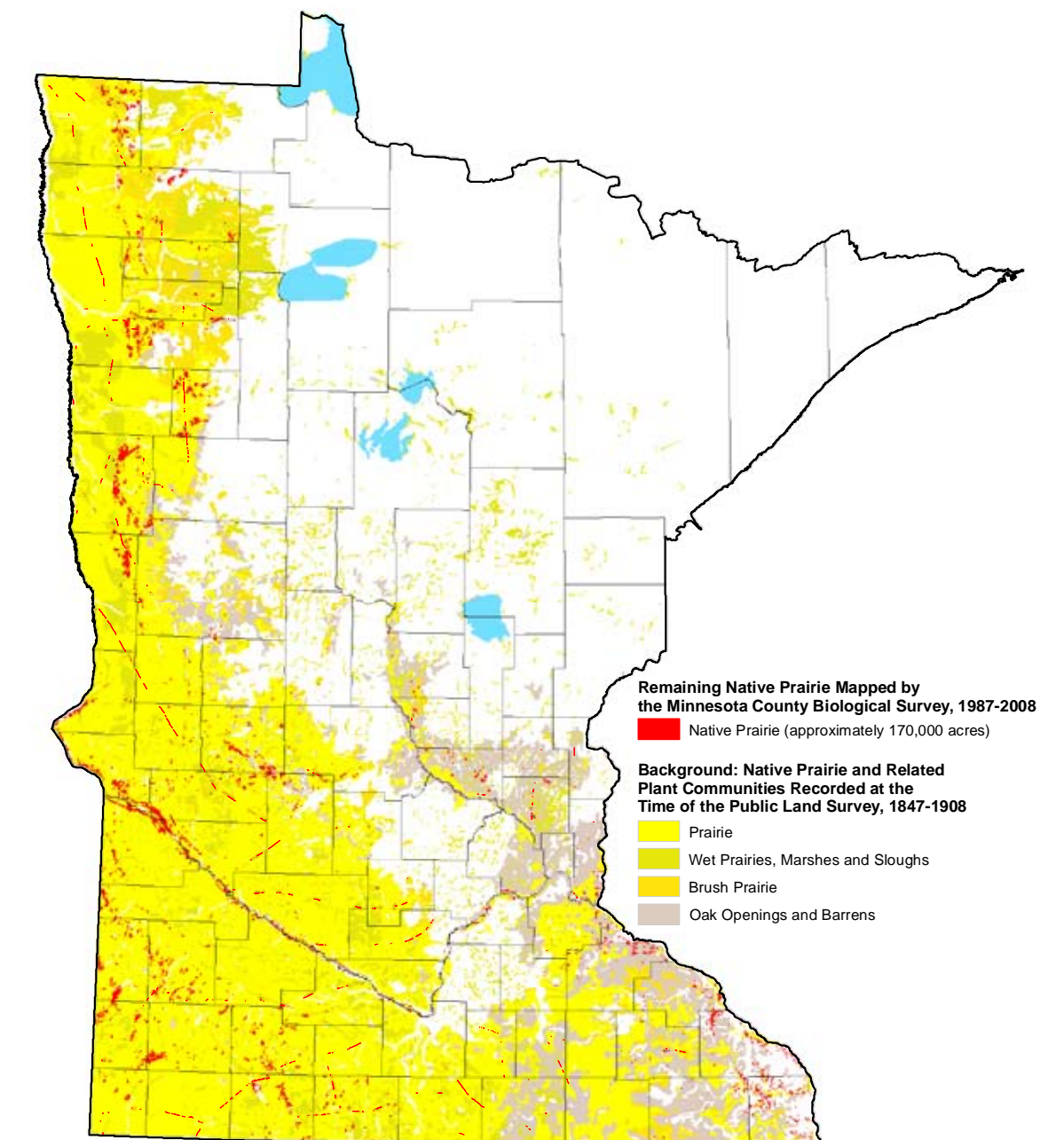
# Native Prairie Ecotype Regions

We recommend using seed from your ecotype region or from adjacent counties.



# Minnesota's Remaining Native Prairie

Native Prairie Recorded 1847-1908 (Shown in Shades of Yellow and Tan)  
Remaining Native Prairie Mapped 1987-2008 (Shown in Red)



This map depicts native prairies documented by the DNR's Minnesota County Biological Survey from 1987-2008, in comparison with the prairie vegetation recorded during the Public Land Survey from 1847-1908. Less than 1% of the prairies recorded in Minnesota during the Public Land Survey remain. For more information and a larger version of the map, see [www.mndnr.gov/eco/mcbs/index.html](http://www.mndnr.gov/eco/mcbs/index.html)



©2008 State of Minnesota, Department of Natural Resources  
500 Lafayette Road  
St. Paul, MN 55155-4040  
(651) 296-6157 (Metro Area)  
1-888-MINNDNR (646-6367) (MN Toll Free)  
MNDNR.gov  
Printed on recycled paper containing 25% post-consumer waste.



## Who to Contact for Help or Possible Cost Sharing

**For info on prairie protection programs and restoration:**  
[www.mndnr.gov/prairierestoration](http://www.mndnr.gov/prairierestoration)

**For Living Snow Fence assistance:**  
Daniel.Gullickson@dot.state.mn.us  
651-366-3610

**For info about native plant communities:**  
[www.mndnr.gov/npc/index.html](http://www.mndnr.gov/npc/index.html)

**For DNR Roadside for Wildlife Info:**  
[www.mndnr.gov/roadsidesforwildlife](http://www.mndnr.gov/roadsidesforwildlife)

**For Roadsides for Wildlife information, plans, presentations, training, and legal mandates:**  
Carmelita.Nelson@dnr.state.mn.us  
651-259-5014

**For invasive species and weed management info:** [www.mda.state.mn.us](http://www.mda.state.mn.us) or [www.mndnr.gov/eco/invasives](http://www.mndnr.gov/eco/invasives)

**For roadside cost-share projects (75% reimbursement-maximum \$300/acre), local ecotype prairie planting, technical assistance, prescribed burning, and equipment coordination:**  
Pete.Schaefer@dnr.state.mn.us  
507-225-3572

**Other Prairie Contacts:**  
MN Native Wildflower/Grass Producers – 507-526-3049 [www.mnwgpa.org](http://www.mnwgpa.org)

**Native Buffer Cost-Share Program** - Contact your local SWCD office

**Pheasants Forever Habitat Teams** – [www.pheasantsforever.org](http://www.pheasantsforever.org)

**For free roadside signs, brochures, annual youth poster contest, and nest box info:**  
Larinda.Burg@dnr.state.mn.us  
507-359-6035

**Park and Recreation Commission**

6. 1.

**Meeting Date:** 04/08/2021

**Submitted For:** Mark Riverblood, Engineering/Public Works

**By:** MaryJo Warner, Engineering/Public Works

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**Information**

**Title:**

Commission / Staff Input

**Purpose/Background:**

- **Update on Park projects**
- **Update on Park Maintenance**
- **Recreation Specialist Replacement**
- **New Art Classes**
  - In addition to Virtual Art, the City of Ramsey has partnered with the Rum River Art Center to offer an extension of the popular Vitality Arts program.
  - Vitality Arts Older Adults Art Camps are a great opportunity to connect with the community, try something new, or brush up on an old talent. Each session is held over five days from 9am – 12pm at Elmcrest Park. All materials are included.
  - Offerings are as follows:
    - Clay Tile, 7/12 to 7/16
    - Nature Watercolor, 7/19 to 7/23
    - Plein Air Watercolor Painting, 8/2 to 8/6
    - Nature Collage, 8/9 to 8/13
    - Art Nature Journaling, 8/23 to 8/27
  - *Flyers attached*
- **Elmcrest Art Fair**
  - Join the city of Ramsey and Rum River Art Center for the 5th Annual Elmcrest Art Fair! This event will feature local artists and their work, local food vendors, artist demonstrations, and introductory art classes. Visitors will be able to vote on their favorite artists.
  - The art fair will take place from 10am to 4pm at Elmcrest Park in Ramsey.
  - For more information, or to register as an artist, volunteer, or food vendor please visit: <https://www.ci.ramsey.mn.us/329/Elmcrest-Art-Fair>
  - *Flyer attached*
- **Summer Concert Series**
  - The City of Ramsey is delighted to host the 11th annual Concerts Series at The Draw. The outdoor concerts are a family friendly event series accompanied by supplemental programs such as Art in the Park, and concludes with the Trott Brook Benefit Bash.
  - For more information on the concert series, please visit: <https://www.ci.ramsey.mn.us/278/The-Draw-Summer-Event-Series>
  - Flyer attached

**Notification:**

**Observations/Alternatives:**

**Funding Source:**

n/a

**Recommendation:**

**Action:**

---

**Attachments**

Art Clay Tile

Art Nature Water Color

Art Plein Watercolor

Art Nature Collage

Art Journaling

Art Fair

The Draw Summer Concert

---

**Form Review**

**Inbox**

Mark Riverblood

Grant Riemer

Form Started By: MaryJo Warner

Final Approval Date: 03/31/2021

**Reviewed By**

Mark Riverblood

Grant Riemer

**Date**

03/31/2021 01:14 PM

03/31/2021 01:23 PM

Started On: 03/31/2021 09:04 AM



# Ramsey Parks & Recreation Presents: Vitality Arts with the Rumriver Art Center



## Vitality Arts: Clay Tile

Clay is a great medium for expression. Creativity is not something lost with age and clay can easily showcase creative ideas. Participants will design and create unique tiles using additive and subtractive methods while thinking about overall composition and style. Tiles can be viewed individually or as a unified wall piece once completed.

Our goal is to have clay projects fired and ready to be picked up 2 weeks after the class is held. Once the clay projects are ready, participants have 14 days to pick up their projects.

## Older Adults Art Camp

The City of Ramsey is proud to partner with the Rumriver Art Center to offer some amazing in person Summer Art Camps at local parks. Art camps will be offered at Elmcrest Park in Ramsey. The Art Camps will be 5 days Monday through Friday for 3 hours each day.

All art materials will be included. The cost of the camps is \$100, scholarships are available through the Rumriver Art Center.

## Where:

Elmcrest Park  
16303 Quicksilver St. NW  
Ramsey, MN 55303

## Dates:

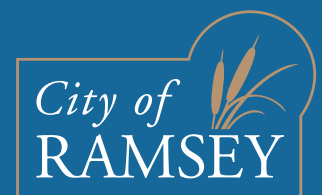
7/12 - 7/16: Clay Tile  
From 9:00am - 12:00pm

## Registration

To register or learn more about the Vitality Arts Older Adults Art Camp, please visit: [www.rumriverart.com/vitality-arts-older-adults-art-camp](http://www.rumriverart.com/vitality-arts-older-adults-art-camp)

To view other Ramsey Parks and Recreation Offerings, please visit: [www.CityofRamsey.com/ParkEvents](http://www.CityofRamsey.com/ParkEvents)

For more information and additional offerings on Ramsey Parks and Recreation, please visit: [www.cityoframsey.com/ParkEvents](http://www.cityoframsey.com/ParkEvents)





# Ramsey Parks & Recreation Presents: Vitality Arts with the Rumriver Art Center



## Vitality Arts: Nature Watercolor

Watercolor is delightful, fresh, exciting, messy, delicate and tender, all at the same time. It is an enormously popular painting medium and has been since the nineteenth century. The most brilliant quality of watercolors is transparency and in this camp students will learn how to use it in their watercolor paintings. We will learn how to use the palette, how to mix color in order to have the right shade, and a lot about brushes and brushstrokes. In this camp we will learn a lot about composition, light and form, tonal painting, and negative space.

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## Where:

Elmcrest Park  
16303 Quicksilver St. NW  
Ramsey, MN 55303

## Dates:

7/19 - 7/23: Nature Watercolor  
From 9:00am - 12:00pm

## Registration

To register or learn more about the Vitality Arts Older Adults Art Camp, please visit: [www.rumriverart.com/vitality-arts-older-adults-art-camp](http://www.rumriverart.com/vitality-arts-older-adults-art-camp)

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# Ramsey Parks & Recreation Presents: Vitality Arts with the Rumriver Art Center



## Vitality Arts: Plein Air Watercolor

Experience the wonder of the outdoors and capture it on paper and canvas! Come and learn to draw and paint the landscape in the great outdoors. The Plein air painting camp teaches the fundamentals of color, color mixing, painting technique, approach, creating the illusion of depth, and exploring composition ideas. Nothing teaches an artist more about color and light than to escape into the outdoors and paint the landscape in plein air.

## Older Adults Art Camp

The City of Ramsey is proud to partner with the Rumriver Art Center to offer some amazing in person Summer Art Camps at local parks. Art camps will be offered at Elmcrest Park in Ramsey. The Art Camps will be 5 days Monday through Friday for 3 hours each day.

All art materials will be included. The cost of the camps is \$100, scholarships are available through the Rumriver Art Center.

## Where:

Elmcrest Park  
16303 Quicksilver St. NW  
Ramsey, MN 55303

## Dates:

8/6 - 8/2: Plein Air Watercolor  
From 9:00am - 12:00pm

## Registration

To register or learn more about the Vitality Arts Older Adults Art Camp, please visit: [www.rumriverart.com/vitality-arts-older-adults-art-camp](http://www.rumriverart.com/vitality-arts-older-adults-art-camp)

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# Ramsey Parks & Recreation Presents: Vitality Arts with the Rumriver Art Center



## Vitality Arts: Nature Collage

Nature is an open canvas as we find our subject for Nature Collage Camp. We will use plants, flowers and bugs that we see in nature. The participants will create a nature collage on canvas panels, boards and paper. Students will use many different art materials and nature materials to create their vision.

## Older Adults Art Camp

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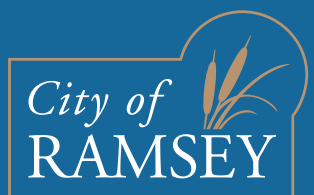
8/9 - 8/13: Nature Collage  
From 9:00am - 12:00pm

## Registration

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# Ramsey Parks & Recreation Presents: Vitality Arts with the Rumriver Art Center



## Vitality Arts: Art Journaling in Nature

Nature is an open canvas as we look outside to find our subject. Observational drawing is a tool that encourages looking closely and recording what you experience. Students will create a nature sketchbook of their very own and head outside to draw about what they see, hear, smell and wonder. Students will have chance to use pencil, charcoal, pastels and watercolor to create their vision.

## Older Adults Art Camp

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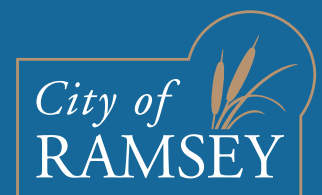
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**Rumriver Art Center & The City of Ramsey**

# **ELMCREST ART FAIR**

## **ART**

Original Art  
From Local &  
Visiting Artists

**Sunday, July 11, 2021**

**10:00am-4:00pm**

**Elmcrest Park**

**16303 Quicksilver St NW  
Ramsey, MN**

## **FOOD**

Variety of Food  
Trucks

**FREE ADMISSION**

**FOOD TRUCKS**

**RAFFLE DRAWINGS**

**ARTIST DEMOS**

**FREE ARTS CLASSES**

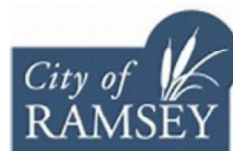
**AND MORE!**

## **FAMILY**

FREE Art Classes &  
Demonstrations

**REGISTER & LEARN MORE AT:**

**[rumriverart.com/calendar/special-events/](http://rumriverart.com/calendar/special-events/)**



# The Draw Summer Event Series

Thursday nights 6:30 - 8:00 pm at The Draw park & amphitheater, 7401 Ramsey Parkway

Presented by Ramsey Parks & Recreation

**June 17 - Roadhouse Blue** - Enjoy a country-rock band, free Killebrew Root Beer & Cream Soda Floats

**June 24 - Magic 70s Sunshine Band** - The ultimate tribute to 70's am radio

**July 1 - Free & Easy** - Dance along to this edgy, modern, and retro pop band

**July 8 - Tumblin Dice** - Playing the Rolling Stones the way you remember them

**July 15 - Shirts & Skins** - Enjoy pop and rock through the decades

**July 22 - Church of Cash** - An incredible tribute to the legacy of the Man in Black, Johnny Cash

**July 29 - A Hard Day's Night** - Take a trip back in time with this all out Beatles Tribute

**August 5 - Dust N' Bones** - Guns N' Roses greatest hits all in one of the best shows around

**August 12 - Rumble Seat** - A homage to John Mellencamp's many hits through the years

**August 19 - Starlette's Web** - A tribute to women of pop, rock, country, and groove from the 80's to today!

**August 26 - Mick Sterling Presents: Born to Run** - Join Trott Brook Financial for the 17th annual Benefit Bash! Enjoy a tribute to Bruce Springsteen, food trucks, & more!



City of  
**RAMSEY**

**CITY OF  
RAMSEY  
FOUNDATION**  
*Charter in Mission*