

2021

**Glacial Ridge Prairie Core Area Cooperative Invasive Species
Management Area (CISMA) Strategic Plan**



*CRP field, northwest Minnesota
Photo by J. Fejszes, Farm Bill Biologist*

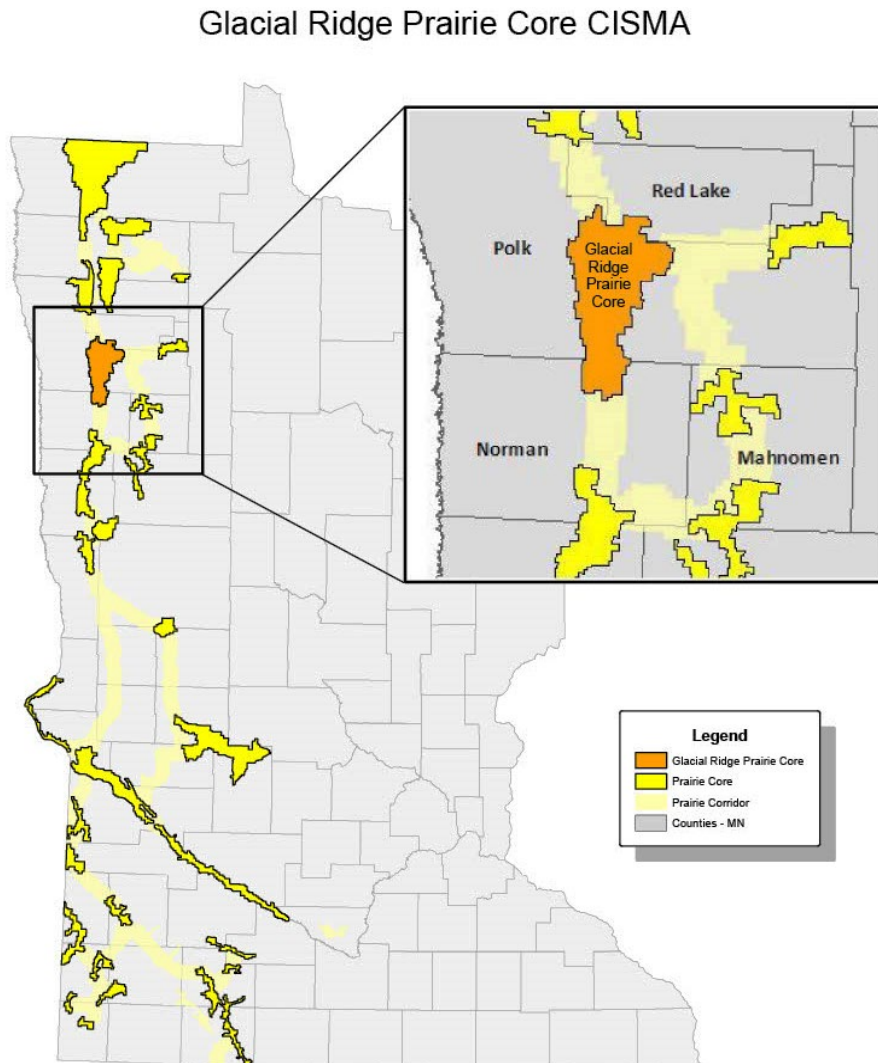
Introduction:

The Glacial Ridge Prairie Core Area CISMA (Figure 1: pg. 1) was established through a collaborative partnership of members of the Glacial Ridge Local Technical Team through the Minnesota Prairie Conservation Plan. This group holds the expertise to build a unified management approach to suppressing invasive noxious weeds within the Glacial Ridge Prairie Core Area identified in the Minnesota Prairie Conservation Plan. This Prairie Core Area will be used to prioritize and target invasive species management efforts through a landscape approach. This partnership is the planning group to develop and implement a long-term comprehensive Glacial Ridge Prairie Core Area CISMA plan.

Purpose:

This plan is meant to clearly define the goals, objectives, and some of the strategies for meeting those objectives. This will provide a framework for continuing cooperative invasive species management effort in the Minnesota Prairie Conservation Plan Glacial Ridge Prairie Core area.

Figure 1: Glacial Ridge Prairie Core CISMA Map



Goals:

The primary goal of the plan is to provide management strategies to control existing establishments and further spread of invasive species. This effort is necessary in order to focus on treatments that target the successful isolation and elimination of emerging treats and conserve the natural ecosystems of the Minnesota Prairie Conservation Plan Glacial Ridge Prairie Core Area. Management strategies for these species will be established by delineating priority areas, technical assessments, and best treatment and management practices. The targeted invasive species of the Glacial Ridge Prairie Core Area CISMA at this time are Wild Parsnip, Spotted Knapweed, Leafy Spurge and Common Tansy.

Objectives:

1. The development and implementation of a long-term comprehensive plan of the Minnesota Prairie Conservation Plan Glacial Ridge Prairie Core area.
 - a. Strategy: Planning and management will be conducted through meetings and communication of the planning group to provide input into developing a comprehensive CISMA plan. The plan will incorporate a collaborative effort identifying of invasive species infestations through mapping; targeting identified threats; education and outreach to increase awareness. Long term funding and resources will be sought and obtained in order to offer invasive weeds species control and management.
2. Identify invasive plant infestations to aid in planning for control efforts. Mapping will help to prioritize control efforts and allow a method of tracking progress.
 - a. Strategy: Use printed maps of the Glacial Ridge Prairie Core Area for identifying locations of infestations. Also used will be the Eddmap, and Midwest Invasive Species Information Network (MISIN). A GIS layer will be available of the Glacial Ridge Prairie Core Area indicating high, medium, and low priority infestation areas and treatments used.
3. Target invasive threats such as Common Tansy (*Figure 2: pg. 5*), Wild Parsnip (*Figure 3: pg. 5*), Spotted Knapweed (*Figure 4: pg. 5*), and Leafy Spurge (*Figure 5: pg. 5*) of the Glacial Ridge Prairie Core area.
 - a. Strategy: Create a science-based strategic site selection of these invasive noxious weeds and identify high priority areas by infestation. Establish management strategies for these species by delineating priority areas, technical assessments, and best treatment and management practices.

4. Education/outreach events for landowners, agencies, land managers and communities located in the Glacial Ridge Prairie Core Area. This is to increase awareness of the impacts of invasive species and educate on management efforts. Awareness will ultimately aid in increasing resources to address the problem.
 - a. Strategy: Conduct two educational programs/outreach for those landowners, agencies, land managers, communities and neighboring areas located in the Glacial Ridge Prairie Core Area. Specify which partners have the ability and time to do outreach. Possible outreach materials and avenues include websites, brochures, presentations, events and displays.

5. Determine means for getting long term funding and resources to the appropriate entities for invasive species control. Funding may go through the Glacial Ridge Prairie Core Area CISMA as a cost share incentive to townships, counties and private landowners that can do on the ground control work.
 - a. Strategy: Future funding will be sought from grants through the Minnesota Board of Water and Soil Resources, MN DNR, and other sources. The planning group will create a method for future funding needs and other funding avenues.

6. Conduct meetings to maintain management activities.
 - a. Strategy: Schedule quarterly meetings to update list of active members; update priority areas; continue to update inventory and mapping; incorporate collaboration of ideas and planning. Transfer of information of new and existing invasive species and utilize current research from scientific community on control measures.

The Glacial Ridge Prairie Core Area CISMA collaborative partners will be able to leverage their resources in a coordinated effort for invasive weed management in the Minnesota Prairie Conservation Plan Glacial Ridge Prairie Core Area.

7. Identify what financial resources will be needed to support the partnership activities.
 - a. Strategy: Create a budget to determine what immediate and future resources will be needed.; use the anticipated budget to evaluate the financial resources needed to sustain the services of the initiative and basis for future grant requests.
 - b. Identify potential sources of funding and support, including in-kind support from partners' organization; form a committee to acquire appropriate resources.

8. Timeframe

- a. Strategy: This plan will be in effect May 2021 – December 2025.

Glacial Ridge Prairie Core Area CISMA Strategic Plan Timeline

Start Date	
2021	
5/15/2021	Strategic Plan reviewed and commenced
6/15/2021	Start planning for a fall educational event
7/15/2021	Establishing event components
8/15/2021	Confirm event components (venue-virtual/speakers/materials/etc.)
10/15/2021	Hold the educational event
12/15/2021	Educational event debrief/discuss spring educational event
2022	
1/15/2022	Quarterly Meeting/start planning for a spring educational event
2/15/2022	Establishing event components
3/15/2022	Confirm event components (venue-virtual/speakers/materials/etc.)
4/15/2022	Hold the educational event
6/15/2022	Educational event debrief
2023	
1/15/2023	Quarterly Meeting
3/15/2023	Quarterly Meeting
7/15/2023	Quarterly Meeting
10/15/2022	Quarterly Meeting
2024	
1/15/2024	Quarterly Meeting
3/15/2024	Quarterly Meeting
7/15/2024	Quarterly Meeting
10/15/2024	Quarterly Meeting
2025	
1/15/2025	Quarterly Meeting
3/15/2025	Quarterly Meeting
7/15/2025	Quarterly Meeting
10/15/2025	Quarterly Meeting

Figure 2: Common tansy (*Tanacetum vulgare*)



Common tansy forms dense cover that can outcompete native plants. It can be toxic to cattle and horses. It can become abundant in pastures and reduce available forage.

Dense common tansy can make it difficult for trees to establish so it can negatively impact timber production and habitat restoration.

Figure 3: Wild parsnip (*Pastinaca sativa*)



Wild parsnip readily moves into disturbed habitats and is often found along roadsides, forest edges, and trails. It invades slowly, but once the population builds up, it spreads rapidly and can severely modify open dry, moist, and wet-moist habitats. Wild parsnip has also been found to invade native prairies.

When the sap of wild parsnip contacts skin in the presence of sunlight, it can cause chemical burns that can look like a rash with blistering and discoloration of the skin (phytophotodermatitis).

Figure 4: Spotted knapweed (*Centaurea stoebe* L. ssp. *micranthos*)



Spotted knapweed is an invasive weed that is poisonous to other plants (phytotoxic) and forms dense monocultures. It especially threatens dry prairie, oak and pine barrens, dunes, and sandy ridges.

It spreads rapidly along road corridors and in gravel pits, agricultural field edges, and overgrazed pastures and reduces forage quality in pastures for livestock.

Figure 5: Leafy Spurge (*Euphorbia esula*)



Leafy spurge is a perennial plant that grows well in sunny and partly sunny areas such as pastures, grasslands, prairies, and roadsides. It greatly reduces the productivity and biodiversity of pasture and prairie lands and is toxic to cattle and horses.

It can grow well in a wide range of soil types from dry to moist. Plants can reproduce sexually by seed and spread vegetatively from underground roots.

References:

- Minnesota State Management Plan for Invasive Species; October 20, 2009
- Red Lake County Cooperative Weed Management Area Strategic Plan
- Becker County Cooperative Weed Management Area Plan; May 2009
- Minnesota Department of Natural Resources – www.mndnr.gov
- Minnesota Board of Water and Soil Resources: Cooperative Weed Management Area Program - <http://bwsr.state.mn.us/cooperative-weed-management-area-program>

Disclaimer:

This document has been prepared by the West Polk Soil and Water Conservation District on behalf of a collaborative partnership of members of the Glacial Ridge Local Technical Team through the Minnesota Prairie Conservation Plan.

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