

CHAPTER 3

MANAGEMENT AREA PRESCRIPTIONS

3.1. INTRODUCTION

Management areas designate appropriate locations for specific management activities at Midewin National Tallgrass Prairie. The management prescriptions address resource conditions and visitor experiences, and identify proposed and probable practices and actions appropriate to achieve the desired conditions. Midewin has two management areas described below.

3.2. MANAGEMENT AREA 1 – PRAIRIE ECOSYSTEM RESTORATION

This area includes the majority of Midewin National Tallgrass Prairie that will be managed to restore, maintain and enhance the tallgrass prairie ecosystem and grassland bird habitat. This Management Area includes areas to be restored to native prairie vegetation, and cool season grasslands where existing habitat will be maintained, including lands managed for unfragmented habitat.

3.2.1. *Desired Condition*

Land, resources and vegetation conditions contribute to restoration of tallgrass prairie ecosystem, habitat for grassland birds, recovery of federally listed, proposed, and sensitive species, restoration and maintenance of healthy watersheds and scenic integrity. While land conditions that support prairie and habitat restoration are emphasized, the conditions also provide for recreational opportunities and other uses.

- a) Long-term goals include restoring and maintaining approximately:
- 1,380 acres of Dolomite Prairie,
 - 4,020 acres of Upland Typic prairie,
 - 4,640 acres of wet prairie/sedge meadow,
 - 490 acres of savanna, and
 - 430 acres of forest/woodland, and
 - 6,690 acres of agricultural grassland habitat maintained until grassland birds effectively adapt to restored native prairie habitat.

Vegetative restoration and management activities are prioritized and described in the Standards and Guidelines.

- b) A minimum of 10,260 acres of land would be maintained in five large open tracts (500 to 3,000 acres each) or in “unfragmented” condition by removing existing hedgerows and fencerows, decommissioning roads and rail beds, and locating future roads or trails on the edges of these blocks or further

away. (See Figure 6, Transportation and Trail Corridors for a map of the unfragmented areas).

Unfragmented Areas (Acres are rounded to nearest 10)

Size	Number of Unfragmented Areas by this size
>3000	2
2001-2000	0
1001-2000	2
501-1000	1

- c) Maintain, enhance or restore habitats suitable for stable or increasing populations of species listed as Threatened and Endangered per the Endangered Species Act (ESA) and for Regional Forester Sensitive Species (Forest Service Region 9) for the Midewin National Tallgrass Prairie.
- Evaluate natural and restored habitats that may have suitable microhabitat for sensitive plant and animal species within 5 years of Plan implementation.
 - Restore sensitive plant and animal species where habitat exists in numbers that will support a viable population.
 - Develop effective methods to restore, establish and propagate sensitive plant species that will not impact the existing populations.

3.2.2. Sensitive Species Prescriptions By Habitat Type

3.2.2.1. Wetlands

- Enhance and restore palustrine wetlands and surrounding uplands (including the removal or redesigning of roads, railroad beds, fences and other structures that restrict animal movement) in appropriate vegetation to increase connectivity of habitats.
- Manage existing and restored palustrine wetlands for relatively high dominant species diversity, including sedges (Carex spp.), prairie cordgrass (Spartina pectinata), smartweeds (Polygonum spp.), bulrushes (Scirpus spp.), cattails (Typha spp.), and bur reed (Sparganium eurycarpum) to provide habitat for wetland sensitive species.
- Enhance and manage soils and hydrology in wetland areas and contributing areas to establish beneficial conditions for wetlands.

3.2.2.2. Native Prairie Vegetation

- Maintain existing and restore potential dolomite prairie and typical prairie communities on appropriate soils for sensitive species to maintain viable populations.
- Maintain existing and increase habitat for sensitive insect species, providing suitable host plants.

3.2.2.3. Short Stature Grassland

- Expand and maintain large unfragmented tracts >1,235 acres totaling at least 4,000 acres within 10-12 years of Plan implementation.
- Manage short-stature grassland habitat using a combination of grazing, prescribed fire, and mowing to maintain a mosaic of grass cover between 4 to 12 inches from late April to July, specifically:
 - Higher cover at 6-12 inches height in late May.
 - Shorter cover at 8 inches or less from mid-June to mid-July,
 - Primarily through the use of livestock grazing.
- Provide a low density of fence posts, tree stumps, or rock piles within short-stature grassland habitat.
- At the margins of these unfragmented areas, manage for scattered thorny shrubs and trees at a density of 1-10 per 10 ha, within 100 m (328 ft) of the margin of the area. At least 90% of the ground cover at the edge of the tract should be herbaceous cover, with no more than 10% woody cover.
- Thorny trees and shrubs (native hawthorn, crabapple, wild plum, wild roses or non-native non-fruiting Osage-orange) should be 10 - 13 feet in height.

3.2.2.4. Medium Stature Grassland

- Expand and maintain large unfragmented tracts > 1,482 acres totaling at least 2,400 acres within 10-12 years of Plan implementation, with a litter depth of 5-11 inches and vegetation cover of 8-14 inches by late May each year.
- Maintain medium stature habitat with a woody cover density of < one shrub or tree per 2.5 acres and with 60-80% live grass cover.

- Maintain medium stature grassland areas with no trees or shrubs within 164 feet of the area boundary.

3.2.2.5. Tall Stature Grassland

- Expand and maintain at least three large unfragmented areas, each of at least 550 acres within 10-12 years of implementation of the Prairie Plan.
- A minimum of 2,000 total acres of unfragmented tall stature grassland should be left unburned each year.
- Maintain tall stature grasslands, primarily restored prairie with a well developed litter layer of 1 to 2 inches and vegetation cover of 16-32 inches in late May.
- Maintain tall stature grassland with moderate amounts of residual vegetation containing between 50-80% cover of dead herbaceous vegetation and with minimal woody encroachment, including no woody edge within approximately 164 feet of the boundary.

3.2.2.6. Native Woodland/Forest Habitat

- Maintain forest woodland habitat through exotic species control and prescribed burns to promote oak regeneration.

3.2.2.7. Streams

- Direct watershed management activities to protect and improve water quality and streamflow, including summer oxygen and temperature levels, sediment loads, and summer base flow.
 - Protect native freshwater mussel beds in Jackson, Prairie and Grant creeks from disturbance.
 - Manage perennial creeks to improve conditions for native freshwater mussels, and to create new opportunities for the natural establishment of mussel beds.
 - Manage streams to create diverse and improved habitat for host fish species of native mussels.
- d) Restore, improve, and manage watershed conditions through conservation practices, drainage and channel restoration measures, and soil restoration measures in conjunction with vegetation and habitat management. Site-specific applications may include drain tile removal, channel reconstruction, fill of ditches, redirection of drainage, removal of floodplain obstacles, replacement of excavated soils, removal of fill, and

rehabilitation of soils.

- e) Prescribed fire applications should make use of roads, fence-lines, stream courses, topography, and burn frequencies to create a varied landscape, or vegetation mosaic, to help maintain and enhance the tallgrass prairie ecosystem, and to encourage and manage the plant and animal life associated with the prairie.
- f) Noxious weeds and invasive plant species will not be introduced in wetland or prairie restoration projects. Existing noxious weeds and invasive plant species that are likely to adversely impact restoration will be controlled or eradicated using Integrated Pest Management techniques that include use of approved herbicides.
- g) Livestock will be grazed in allotted grasslands under special use or grazing permits to maintain habitat for specific suites of grassland birds or to achieve other desired resource objectives, such as invasive species control.
- h) Agriculture land use will diminish over the next 10 to 15 years as crop lands are converted to either cool season grasses or restored to more native vegetation conditions, according to priorities outlined in the Standards and Guidelines.
- i) A variety of visitor activities and dispersed recreational opportunities that are not inconsistent with the four purposes of Midewin will be provided, as sites are cleared of environmental and safety issues, including trails for hiking, biking, and equestrian use, and dispersed camping sites. Approximately 48 miles of trails would be provided.
- j) A visitor transportation system will provide transportation to various points within Midewin, for interpretive tours, and access to the prairie, on approximately 12 miles.
- k) The majority of the roads constructed for the former Joliet Arsenal will be decommissioned and many of the former Joliet Arsenal structures and facilities will be removed and the sites restored.

3.3. MANAGEMENT AREA 2 – ADMINISTRATIVE AND DEVELOPED RECREATION SITES

This area includes those portions of Midewin National Tallgrass Prairie that contain facilities developed for administration and recreational use.

Administrative sites include all current and proposed sites for the administrative office and work center, including the Hot Shot firefighting facilities, seedbed production areas and parking areas. Developed recreation sites include proposed visitor center and access points, proposed group campground and picnic area, and associated grounds and parking areas.

3.3.1. *Desired Condition*

Land, resources, vegetation and facilities contribute to safe, attractive, efficient, and user-friendly settings for administration and visitor uses. Recreational and administrative developments and uses are emphasized, but prairie restoration and natural resources management also occur.

- a) Infrastructure to support designated uses of sites will be constructed, including parking lots, water and sanitation facilities, buildings or shelters, signs, interpretive trails and roadways.
- b) New recreational and administrative facilities will be designed according to the Master Site Plan, the Built Environment Image Guide, the scenic integrity objectives and architectural themes appropriate for Midewin.
- b) Administrative sites and visitor facilities will be designed to minimize impacts on resources, and provide for visitor safety and security.
- c) Noxious weeds and invasive plant species will be controlled or eradicated.
- d) Native seed production will be expanded to increase seed production capacity needed to meet restoration goals.

Midewin Land and Resource Management Plan

Table 3.1: Activities Prescribed or Allowed by Management Area

	Management Area 1 Prairie Ecosystem Restoration	Management Area 2 Administrative Sites and Developed Recreation Sites
Mowing	Prescribed	Prescribed
Agriculture Use (crops, hay, or grazing)	Prescribed	Limited per MA 2 Lands and Special Use Standards and Guidelines
Prescribed Fire	Prescribed	Limited
Prairie Restoration	Prescribed	Limited
Wetland Restoration	Prescribed	Limited
Watershed Restoration	Prescribed	Limited
Other Habitat Restoration	Prescribed	Limited
Noxious and Invasive Species Management	Prescribed	Prescribed
Grassland Habitat Management	Prescribed	Limited
Seed Production	Not Required	Prescribed at designated seed bed areas
Fencerow Removal	Prescribed	Not Required
Group Camp Sites	Not Permitted	Permitted
Recreational Hunting/Trapping	Permitted; See Wildlife Standards and Guidelines	Not Permitted
Environmental Education	Permitted	Permitted
Dispersed Camping	Permitted	Not Permitted
Research	Permitted	Permitted
Hiking Trails	Permitted, See MA 1 Recreation Standards and Guidelines for restrictions	Permitted
Multiple Use Trails	Permitted, See MA 1 Recreation Standards and Guidelines for restrictions	Permitted
Motorized Access	Prohibited	Permitted on public access roads and parking lots
Guided Shuttle or Tours	Permitted	Permitted
Road Decommission	Prescribed	Prescribed
Infrastructure Demolition/removal and Environmental Cleanup	Prescribed	Prescribed