

COMPATIBILITY DETERMINATION

Use: Prescribed Haying for Habitat Management

Refuge Name: Upper Mississippi River National Wildlife and Fish Refuge (Refuge).

Establishing and Acquisition Authorities: The Upper Mississippi River National Wildlife and Fish Refuge was established by Public Law No. 268, 68th Congress on June 7, 1924. This act authorized acquisition of lands for Refuge Purposes. Additional lands acquired in fee title by the U. S. Army Corps of Engineers are managed as part of the Refuge under a 1963 Cooperative Agreement between the Department of the Army and Department of the Interior.

Refuge Purpose(s): The Refuge shall be established and maintained (a) as a refuge and breeding place for migratory birds included in the terms of the convention between the United States and Great Britain for the protection of migratory birds, concluded August 16, 1916, and (b) to such extent as the Secretary of the Interior by regulations, prescribed, as a refuge and breeding place for other wild birds, game animals, fur-bearing animals, and for the conservation of wild flowers and aquatic plants, and (c) to such extent as the Secretary of the Interior may, by regulations, prescribe a refuge and breeding place for fish and other aquatic animal life.

National Wildlife System Mission: The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. (National Wildlife Refuge System Administration Act of 1966, as amended (16 U.S.C. 668dd-668ee).

Goals of the National Wildlife Refuge System:

- a. To fulfill our statutory duty to achieve refuge purpose(s) and further the System mission.
- b. Conserve, restore where appropriate, and enhance all species of fish, wildlife, and plants that are endangered or threatened with becoming endangered.
- c. Perpetuate migratory bird, interjurisdictional fish, and marine mammal populations.
- d. Conserve a diversity of fish, wildlife, and plants.
- e. Conserve and restore, where appropriate, representative ecosystems of the United States, including the ecological processes characteristic of those ecosystems.
- f. To foster understanding and instill appreciation of fish, wildlife, and plants, and their conservation, by providing the public with safe, high-quality, and compatible wildlife-dependent public use. Such use includes hunting, fishing, wildlife observation and photography, and environmental education and interpretation.

Description of Use:

What is the use? The Refuge would allow haying by private individuals for the purpose of habitat management. Haying is the cutting and processing (typically baling) of grass and forbs, with subsequent removal to an off-Refuge location.

Where is the use conducted? Haying would be conducted by third parties primarily on grassland/wet meadow habitat types on the Refuge. There are approximately 4,072 grassland acres and 9,081 wet meadow acres on the Refuge, however many of these acres are essentially inaccessible for haying management.

When is the use conducted? Prescribed haying will be permitted only after August 1 (to April 1) to minimize disturbance to nesting birds and in compliance with Region 3 Pollinator Guidance For Grassland Management Activities (2015) and Region 3 Grazing and Haying Guidance (2014). Some circumstances may warrant earlier haying of a unit but must be justified by a specific management objective in an approved plan or approve through an Area Supervisor.

Hay is typically cut, then allowed to dry several days, baled using various baling equipment and tractors. Bales are typically removed the same day as baled or within a couple days to minimize vegetation damage.

How is the use conducted? Hay is typically cut (processed) using various mowers, cutters and crimpers pulled behind tractors. Haying on the Refuge typically includes the cutting of both grass and forbs, with the subsequent removal from the Refuge. Cut hay is raked into wind rows, allowed to dry several days, then baled using various baling equipment pulled by tractors. Bales are typically removed the same day as baled or within a couple days to minimize vegetation damage. Occasionally bulk hay is loaded into carts instead of being baled. Haying is usually conducted as a single event during any one given year, but may be repeated periodically.

Why is the use being proposed? Refuge grassland habitat may be managed using various tools to achieve desired plant community composition and structure for wildlife use. Haying may be used as a management tool: to manage and control undesirable grasses and forbs (exotic or invasive plants), provide a competitive advantage to desired grasses and forbs, remove accumulated plant biomass, reduce woody vegetation encroachment, provide a desired vegetative structure and condition (such as short grass for goose browse), reduce fuel loading and wildfire risks near urban environments, or prepare sites for future habitat restoration including forestry work, prairie, and wetland communities.

Availability of Resources: The refuge has the needed staff to devote time to the administration of the haying program. Staff time will be required to determine units for haying treatments through habitat management planning. Implementation of the program will required staff time to prepare maps, create advertisements for bidding, selecting successful bidders, issuing Commercial Refuge Special Use Permits, monitoring the permits and collecting bills. The additional time needed to administer this use is within the existing Refuge resources.

Anticipated Impacts of the Use: Prescribed haying will result in short-term disturbances and long-term benefits to both resident and migratory wildlife using the Refuge. Short-term impacts will include disturbance and displacement of wildlife by equipment operation and noise. Cutting of vegetation will also result in short-term losses of habitat for species using those areas for nesting, feeding, or resting. In the long-term, Refuge grassland habitats will experience positive impacts through the establishment of desired plant communities and habitat structure. Haying treatments will be timed in compliance with the Region 3 Pollinator Guidance For Grassland

Management Activities (2015) and Region 3 Grazing and Haying Guidance (2014), ensuring the needs of nesting birds, and pollinators are appropriately considered when haying management is executed

Public Review and Comment: This Compatibility Determination is a re-evaluation of an existing determination which was included in the Draft Comprehensive Conservation Plan and Environmental Impact Statement (EIS) released May 1, 2005 for a 120-day comment period. It was also available during a subsequent 90-day review period on a supplement to the EIS released December 3, 2005. Public notification included notices in the Federal Register, media announcements, and 31 public meetings and workshops attended by more than 3,700 persons. No comments specific to this use or determination were received.

A draft of this re-evaluation was released on August 5, 2016 for a 30-day comment period. Public notification of the availability of this CD included media announcements and posting on the Refuge's website. No comments specific to the draft re-evaluation were received.

Determination:

 Use is not compatible.

XX Use is compatible with the following stipulations.

Stipulations Necessary to Ensure Compatibility:

1. Haying will be allowed only after August 1 to minimize disturbances to nesting birds. Haying operations prior to this date must be justified by a specific management objective in an approved plan or otherwise approved through the Area Supervisor. Haying should be delayed as late as possible to minimize negative effects to wildlife.
2. Haying must meet specific habitat and related wildlife objectives and contribute to the purpose of the Refuge.
3. A goal of 30-50% of similar habitat type in the management unit or adjacent areas will be left unhayed when feasible to serve as refugia for pollinators and other wildlife. Refugia locations should be planned taking foraging flight ranges of pollinators into consideration.
4. No single area should be hayed more than once per year to allow time and space for pollinator populations to recover unless there's a specific management objective identified in an approved plan or otherwise approved by the Area Supervisor.
5. Bales must be removed from the Refuge within 5 days of baling.
6. Windrowed grass left lying to dry should remain on the ground no more than 6 days prior to baling.

