

COMPATIBILITY DETERMINATION

Use: Trapping of Furbearers

Refuge Name: Sherburne National Wildlife Refuge

Establishing and Acquisition Authorities: Migratory Bird Conservation Act 16U.S.C. & 715d

Refuge Purpose(s):

"... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16U.S.C. § 715d (Migratory Bird Conservation Act)

National Wildlife Refuge System Mission: The mission is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Description of Use:

What is the use? Trapping of resident furbearers on the refuge in accordance with State and refuge regulations. The primary purpose of the trapping program is to manage populations of species that may otherwise become a detriment to trust species, population management, or facilities management. Predator trapping for trust species would primarily be targeted towards mink and raccoon. Trapping of muskrat and beaver, which may cause damage to dikes and water control structures, may be utilized through public trapping but will likely be targeted towards certain nuisance animals through a special use permit.

Where is the use conducted? Sherburne National Wildlife Refuge, (approximately 30,700 acres) lies within the deciduous forest-woodland zone of Minnesota on the Anoka Sandplain, a large flat sandy outwash area now thought to be lacustrine in origin, with small dune features and low moraines exposed above the outwash (Wright, 1972). This zone in Minnesota is transitional between tallgrass prairie and deciduous forest. The uplands within the Refuge consist of these flat sandy areas with some rolling small sand dune areas, interspersed with wetlands, four lakes, and the St. Francis River.

The refuge is divided into fourteen trapping units within the wetland areas of the refuge and eighty percent of those wetland units are open to trapping. Special use permits for trapping mink, muskrat and raccoon are issued through a bid system. Nuisance beaver and muskrat trappers are selected by the Refuge Manager. The number of individuals that participate in the trapping program varies each year and is restricted to no more than fourteen individuals.

How is the use conducted? Trapping is restricted to "conibear" type killing traps and water sets using either "conibear" type killing traps or leg holding drowning sets to ensure rapid submergence of the animal. All drowning sets incorporate drowning locks or equivalent.

Floating or feeding platform sets are prohibited.

All trappers must still comply with regulations on road and trail use.

When would the use be conducted? The mink, muskrat and raccoon season corresponds to the Minnesota State regulations. Trapping for beaver occurs throughout the year, at times and problem sites throughout the refuge, as directed by the Refuge Manager.

Availability of Resources:

Administering the small bid and permit system has been a part of the station's general operating costs for many years. Mink, muskrat and raccoon trappers pay the Service for the rights to trapping units on the refuge and a portion of these funds return to the station. Beaver trappers are not charged because generally the beaver are removed at the request of the Refuge manager as a service and they may not retain those animals trapped. Administering the predator trapping program has an estimated cost of \$3,500 and approximately \$2,800 for the nuisance beaver control.

Anticipated Impacts of the Use:

The temporal separation of mink, muskrat and raccoon trapping activities and waterfowl using the refuge for production, there are no direct impacts to waterfowl production. Beaver trappers using the refuge after early March, undoubtedly disturb individuals on occasion, and cause temporary displacement of waterfowl from specific and limited areas. These impacts would be occasional, temporary, and isolated to small geographic areas. Any habitat change as a result of the physical impacts of trapping activity (trampling, etc.) is undetectable.

Indirect impacts to wildlife production do result from the removal of animals under a trapping program. In many instances, these impacts are positive. Mink and raccoon are predators on waterfowl at various stages in the production cycle. Controlling populations of predators on waterfowl has generally positive impacts on the refuge purpose but in some cases may indirectly influence other predator prey relationships in various ways.

At the current population levels, a number of individuals are interfering with water control activities by placing dams at the control structures and/or in the delivery ditches, hindering the movement of water between managed Refuge wetlands. These dams also cause damage to the refuge infrastructure due to the resultant flooding at water control structures. The flooding undermines refuge and county roadways located within the refuge, increasing the potential for washouts to occur. Muskrat and beaver burrowing can also damage the dike infrastructure on the refuge. It is desirable and cost effective to allow a trapping program to manage these populations, thereby reducing the refuge's annual maintenance costs associated with the adverse impacts of beaver activity.

Managing beaver and muskrat populations at reasonable levels through a trapping program may also have a positive impact to waterfowl and other aquatic wildlife species. Overabundance of muskrats in particular can lead to an excessive loss in emergent vegetation. This phenomenon is known as an "eat out" of a wetland impoundment. However, muskrats do provide a valuable service by providing open water areas in heavily vegetated impoundments. The goal of a trapping program is to control, but not eliminate, muskrats from the ecosystem.

Trapping serves to minimize the need to commit Service resources to removal of beaver dams and additional control measures.

Public Review and Comment:

Determination:

Use is Not Compatible

Use is Compatible with the Following Stipulations:

Stipulations Necessary to Ensure Compatibility:

Justification:

Refuge Manager: _____ Date: _____

Regional Chief: _____ Date: _____

Mandatory 10- or 15-year Re-evaluation Date: _____

COMPATIBILITY DETERMINATION

Use: Recreational picking of berries, fruits, nuts and mushrooms

Refuge Name: Sherburne National Wildlife Refuge

Establishing and Acquisition Authorities: Migratory Bird Conservation Act 16U.S.C. & 715d

Refuge Purpose(s):

"... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. § 715d (Migratory Bird Conservation Act)

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Description of Use:

What is the use? To provide the opportunity to collect berries, fruits, nuts and mushrooms for personal consumption in accordance with refuge regulations.

Where is the use conducted? Sherburne National Wildlife Refuge, (approximately 30,700 acres) lies within the deciduous forest-woodland zone of Minnesota on the Anoka Sandplain, a large flat sandy outwash area now thought to be lacustrine in origin, with small dune features and low moraines exposed above the outwash (Wright, 1972). This zone in Minnesota is transitional between tallgrass prairie and deciduous forest. The uplands within the Refuge consist of these flat sandy areas with some rolling small sand dune areas, interspersed with wetlands and four natural lakes.

All collection must occur within 100 feet of established roads and trails in the upland areas throughout the refuge. This allows the general public using established trails and roads the ability to pick berries, fruit, nuts and mushrooms for personal consumption without a special use permit. Use has averaged less than 100 visits annually. Any amount deemed excessive for personal consumption by law enforcement and/or refuge management is prohibited.

How is the use conducted? This use is open to the general public when they are using the refuge in compliance with all other rules and regulations. This use is generally a traditional family orientated activity which provides an educational opportunity for those participating to collect wholesome foods while enjoying the nature. All collection must occur within 100 feet of established roads and trails in the upland areas throughout the refuge.

When would the use be conducted? The fruit, nut, berry and mushroom season usually occurs from May through September. Harvest is typically during a stretch of several days as the fruits, nuts or mushrooms ripen.

Availability of Resources:

This takes very little in refuge resources to administer. The fruits, nuts, berries and mushrooms are only available for a limited amount of time on a first come first served basis. The administration of this program costs less than \$100.

Anticipated Impacts of the Use:

Historically, public participation in the collection of plant food products on the refuge has been low, and future participation is also expected to be low. The few fruits, nuts, berries and mushrooms picked by refuge visitors will not significantly reduce the food source for wildlife.

Public Review and Comment:

Determination:

Use is Not Compatible

Use is Compatible with the Following Stipulations:

Stipulations Necessary to Ensure Compatibility:

Justification:

Refuge Manager: _____ Date: _____

Regional Chief: _____ Date: _____

Mandatory 10- or 15-year Re-evaluation Date: _____

COMPATIBILITY DETERMINATION

Use: Firewood Cutting/Timber Harvest

Refuge Name: Sherburne National Wildlife Refuge

Establishing and Acquisition Authorities: Migratory Bird Conservation Act 16 U.S.C. & 715d

Refuge Purpose(s):

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Description of Use:

What is the use? The removal/harvest of dead standing or fallen trees by private individuals on the Sherburne NWR. This covers all wood removal activities regardless of the ultimate use of the wood (e.g. firewood, forest thinning, pulp, etc.).

Where is the use conducted? Sherburne National Wildlife Refuge, (approximately 30,700 acres) lies within the deciduous forest-woodland zone of Minnesota on the Anoka Sandplain, a large flat sandy outwash area now thought to be lacustrine in origin, with small dune features and low moraines exposed above the outwash (Wright, 1972). This zone in Minnesota is transitional between tallgrass prairie and deciduous forest. The uplands within the Refuge consist of these flat sandy areas with some rolling small sand dune areas, interspersed with wetlands and four natural lakes.

The scope of the activity will be determined by the management objective for the area and by the quantity and quality of available wood. Harvest sites will vary in size from a portion of an acre up to a few thousand acres depending on the site and management objectives. Commercial harvesting will generally occur in the oak woodlands and the conifer plantation. Firewood cutting will generally occur along trails and firebreaks and wherever there is a need to remove hazard trees.

When is the use conducted? Wood removal activities may be authorized throughout the year. Most often, wood removal activities for the purposes of firewood will occur September through December, while commercial harvest activities occur during the winter months when frozen ground will facilitate access and afford protection to underlying soils and vegetation.

How is the use conducted? Equipment used for harvest may range from chainsaws and axes, to traditional logging equipment such as feller-bunchers and log skidders. All equipment must be cleaned prior to entering refuge to mitigate for the spread of invasive species.

Access may be by car and trailer, pick-up truck, farm tractor, or larger traditional logging equipment. Vehicle access for wood removal will be limited to existing trails or restricted to the frozen ground period when rutting and damage to growing vegetation would occur and must be specified in the special use permit.

Differences in scope and necessary equipment will occur depending on the amount and type of wood available for removal. Only trees that are outlined in the permit will be removed and some standing cavity trees, which are actively being used by wildlife, will be marked and protected.

Fire wood cutters are issued a Special Use permit on a "first come, first serve basis". Commercial harvesting is awarded through a bidding process. The number of people participating in this activity varies from year to year depending on need and has been from zero to fifteen.

Why is this use being proposed? This activity will only occur where the Service has determined that a management need exists to remove wood. Wood removal may be done where trees are encroaching on hiking trails, fire breaks and/or roads, open marshes, grassland areas, oak savanna restoration areas, or degrading earthen water impoundment structures. Wood cutting is not a priority public use, as defined by the Refuge Improvement Act of 1997, of the National Wildlife Refuge System.

Availability of Resources: Planning, issuing permits, and monitoring a wood product harvest program would require a minimal commitment of staff hours. In the past, the Refuge has issued approximately 5 to 10 permits annually for this activity. All harvest sites are marked with flagging tape or paint by refuge staff. Based on past activity, we estimate that administering a small timber harvest program will require from \$1,000 to \$2000 in staff salary costs. If larger timber harvests are needed (e.g. the pine plantations on the southern spur) salary cost could be as much as \$5,000. By permitting a wood products harvest, the manager has identified a management need and will have secured and prioritized the necessary station resources.

Anticipated Impacts of the Use: In permitting this type of activity, the potential exists to directly impact wildlife by displacement of animals from localized areas due to disturbance, or crushing of ground nests as a result of access for this activity. These impacts are easily avoided by timing of the activity in accordance with site specific characteristics. A special use permit will be issued so that site specific impacts can be reduced or eliminated and Service management goals are met.

Indirect impacts to wildlife and refuge goals will occur as a result of removing woody vegetation. In nearly every instance, these impacts will be positive. The removal of woody vegetation facilitates native habitat restoration efforts on the refuge. In some cases, the removal of trees along roads, trails, and dikes is necessary because of the hazard to users from dead trees.

Access for the purpose of removing wood may impact habitat by rutting soils, destroying ground cover, creating weed seed beds, introducing invasive species, and increasing sedimentation due to runoff in nearby wetlands. These impacts can again be avoided by

timing of the activity and requiring equipment be cleaned prior to entering the refuge.

Public Review and Comment: Open houses were held and written comments were solicited from the public about Refuge operations during the drafting of the Comprehensive Conservation Plan (CCP). This Compatibility Determination was prepared concurrently with, and included in the Draft Comprehensive Conservation Plan. Public review and comment will be solicited during the CCP comment period.

Public Review and Comment:

Determination: (check one)

Use is Not Compatible

Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility:

Justification:

Refuge Manager: _____ Date: _____

Regional Chief: _____ Date: _____

Mandatory 10- or 15-year Re-evaluation Date: _____