

HUNTING COMPATIBILITY DETERMINATION

Compatibility Determination

Use: Hunting

Refuge Name: Swan Lake National Wildlife Refuge (NWR)

Establishing and Acquisition Authorities: Executive Order 7563 established Swan Lake National Wildlife Refuge on February 27, 1937.

Refuge Purposes:

- "...as a refuge and breeding ground for migratory birds and other wildlife: ..." Executive Order 7563, dated Feb. 27, 1937
- "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. § 715d (Migratory Bird Conservation Act)
- "...particular value in carrying out the national migratory bird management program." 16 U.S.C. § 667b (An Act Authorizing the Transfer of Certain Real Property for Wildlife)

National Wildlife Refuge System Mission: The mission of the National Wildlife Refuge System 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:

This Compatibility Determination updates and supersedes the Compatibility Determination developed concurrently with the refuge's Comprehensive Conservation Plan (CCP) and authorized in 2011.

Is the use a priority public use?

Hunting is a priority public use of the National Wildlife Refuge System.

Where would the use be conducted?

Waterfowl hunting will be permitted in 19 designated units or blind, including one accessible blind. . The Comprehensive Conservation Plan calls for expanding hunting opportunities to include duck hunting and small game hunting. All waterfowl hunting will be restricted to the perimeter of the Refuge, leaving the vast majority of the interior of the Refuge as a waterfowl sanctuary. Waterfowl hunting will be restricted to 3-5 days a week, with rest days being designated on an annual basis by the Refuge Manager. During the Conservation Order season for snow geese, designated areas will be open to hunting 7 days a week. The Refuge will allow

dove hunting in the North Agricultural Units and squirrel hunting in the area along Yellow Creek.

In addition, the Yellow Creek Triangle Area, located on west side of Swan Lake NWR in the area between the railroad track and the Yellow Creek Conservation Area, and the four outlying fee title properties managed by Swan Lake NWR will be opened to hunting in accordance with Missouri State regulations. These outlying properties are located in Chariton County (Schmidt Unit), Cedar County (Moresi Unit), Saint Clair County (Moresi Unit and Truman Reservoir Unit), Henry County (Truman Reservoir Unit), and Bates County (Bates Unit).

White-tailed deer hunting will occur on Swan Lake NWR throughout the entire Refuge, excluding administrative sites or any other site deemed closed by the manager. In cooperation with the Missouri Department of Conservation (MDC), there will be a disabled deer hunt, a youth deer hunt, and regular managed archery and firearms deer hunts.

When would the use be conducted?

Goose hunting typically starts on the Refuge on November 1 and ends on January 31. As part of a Conservation Order issued to reduce snow goose numbers, there is also an additional season with no bag limit for light geese (snow geese and Ross's geese) that starts on February 1 and ends when the Refuge opens to the public on March 1. The Comprehensive Conservation Plan calls for allowing duck hunting. The specific dates and duration of duck hunting season vary annually, but typically occurs between late October and late December.

Dove hunting generally begins on September 1 and is open through early November, but the majority of dove hunting occurs the first two weeks of September.

The white-tailed deer hunts are considered managed hunts and are listed as such in the MDC hunting season regulations and usually occur on weekends in November, December, or January. One of the managed hunts is a youth deer hunt and the second a public deer hunt.

The squirrel hunting statewide season generally runs from May 28 through February 15.

On the Yellow Triangle Unit and outlying properties, lands will be open to all legal hunting seasons. The vast majority of activity will be during fall and winter, but some seasons, such as coyote and squirrel, are open from May through the following March.

How would the use be conducted?

Hunters use harvest methods and firearms consistent with the Wildlife Code of Missouri and refuge regulations. Refuge staff work closely with MDC staff to determine the most effective and efficient strategy for assigning waterfowl hunters to the specific hunting units, which may include internet draw systems, self-registration, or other mechanisms. Waterfowl hunters will be required to check in at the Refuge hunter check station utilizing the MDC green cards for waterfowl harvest.

The number of participants in the managed deer hunts is regulated by MDC through their managed hunt program, but is typically around 50 for each of the two hunts. Deer hunters enter the Refuge at times specified in MDC regulations for hunting hours and park on public access

roads. The hunt occurs from one-half hour before official sunrise and one-half hour after official sunset each day and hunters must abide by all MDC hunting regulations and refuge specific regulations. Hunters must check in all harvested deer before leaving the Refuge. Hunters are required to attend a pre-hunt meeting before each hunt and are allowed to scout the hunt areas after the meeting.

Arrangements for physically disabled deer hunters are coordinated by Refuge staff. Typically from 5-10 hunters participate during this two-day hunt, and are provided drive-in access to an accessible blind with parking.

Dove and squirrel hunters will hunt in designated areas and be required to sign in before hunting. Hunting on the outlying properties will be walk in hunting and conducted in accordance with state regulations.

Hunting on the Yellow Triangle Unit and outlying properties will be open to all legal Missouri state seasons according to state regulations. Access to the Yellow Triangle unit is only through the adjacent Yellow Creek Conservation Area. Access to the outlying properties will be through designated parking areas located on the units.

Why is this use being proposed?

Hunting is a priority general public use of the Refuge System that is also an important wildlife management tool. The Service recognizes hunting as a healthy, traditional outdoor pastime, deeply rooted in the American heritage (USFWS 2006). Hunting can instill a unique understanding and appreciation of wildlife, their behavior, and their habitat needs. Hunting programs can promote understanding and appreciation of natural resources and their management on lands and waters in the Refuge System. Public hunting opportunities are also available nearby on the 7,100-acre Fountain Grove Conservation Area administered by the Missouri Department of Conservation.

Availability of Resources:

What resources are needed to properly (considering quality and compatibility) and safely administer use?

Refuge staff will be required to conduct pre-hunt meetings and staff, volunteers, or contractors may be needed for additional administration of the managed deer hunts. . Refuge regulations mirror State regulations in large part, which allows Missouri Department of Conservation Officers to assist in law enforcement. There is a small amount of road maintenance, mowing, and other upkeep performed that is funded as part of regular Refuge management activities. Approximately \$1,000 annually is required for labor and materials to update and print maps, and maintain signs.

Are existing Refuge resources adequate to properly and safely administer the use?

At the present level of hunting use there are adequate Refuge resources to implement the hunting program. Law enforcement is the primary tool necessary to ensure proper and safe administration of this use. Although there is no Law Enforcement Officer stationed at the Refuge, law

enforcement services are available through the Regional Law Enforcement Program. Missouri Department of Conservation Officers provides additional law enforcement support.

Anticipated Impacts of the Use:

The Environmental Assessment for the Draft CCP for Swan Lake NWR contains a thorough discussion of the anticipated impacts of hunting. Parts of this analysis are summarized below.

How does hunting affect Refuge purposes and the NWRS mission?

The Refuge was established to provide for the needs of migratory birds and other wildlife. Hunting does not adversely affect the ability of the Refuge to fulfill this purpose. National Wildlife Refuges are managed first and foremost for wildlife (USFWS 2001). But the focus is on wildlife populations not individuals (USFWS 1992). Hunting causes mortality and wounding of individual animals, but is regulated so it does not threaten the perpetuation of wildlife populations. The effects of hunting on wildlife populations are monitored within the State and across the nation and are considered in setting annual bag limits. Hunting is a priority public use of the Refuge System and allowing hunting on the Refuge helps fulfill the Refuge System mission.

How does hunting affect fish, wildlife, plants, and their habitats; and the biological integrity, diversity, and environmental health of the Refuge/NWRS?

Migratory Birds

Hunting is not expected to adversely affect migratory game bird populations that occur on the Refuge. The U.S. Fish and Wildlife Service works closely with state and provincial governments, as well as with the public, in a joint effort to establish annual hunting regulations for migratory birds. The Service's Division of Migratory Birds establishes framework regulations to manage all migratory bird hunting in the United States. These regulations establish limitations by which states can then create season lengths, bag limits and areas of migratory bird hunting.

Regulations on migratory bird hunting are determined through the assessment of annual data (USFWS 1995). Data is obtained through aerial surveys of the North American Flyway, which count birds, ponds and nests, and provide information for analyzing population and habitat conditions. Hunter surveys and questionnaires determine the number of hunters participating yearly. Recommendations from the Flyway Council are considered when original rules are created. Rules are presented to the public through the Federal Register and followed by a series of public meetings for any recommendations. The final regulations are assessed based on a collective analysis of all factual information as well as council and public recommendations.

White-tailed Deer and Other Game

The Missouri Department of Conservation annually reviews hunting seasons and bag limits and modifies them to avoid any long-term population declines. Hunting is not expected to adversely impact deer or other game populations.

Disturbance

In *Managing Visitor Use and Disturbance of Waterbirds: A Literature Review of Impacts and Mitigations* DeLong (2002) include a summary of effects on wildlife from disturbance from hunting and other forms of recreation. The author documents that disturbance can alter behavior (e.g. foraging time), population structure, and distribution patterns of wildlife. It is probable that hunting would cause some or all of these effects to some degree on Refuge wildlife. A number of measures mitigate these effects. Hunting seasons largely occur outside the times when most wildlife species are raising offspring and are most sensitive to disturbance. Also, waterfowl hunting is limited to designated sites, leaving much of the Refuge free of hunting disturbance. The number of deer hunters permitted daily is presently limited to 50, and hunting occurs on four days throughout the entire year and is limited to half the Refuge on any of the four days. Hunting activity is estimated at about 500 visits annually on the Refuge and is expected to increase over time especially if waterfowl and small game hunting are offered.

Because the Yellow Triangle Unit is only accessible by foot through the adjacent state wildlife area, hunting pressure is expected to be minimal. Outlying properties are relatively small and remote, and few hunters are expected to utilize these areas.

Habitat

Hunting is not expected to adversely affect refuge habitat.

Biological Integrity, Diversity, and Environmental Health

Hunting conducted in accordance with State and Federal regulations is not expected to adversely affect wildlife populations that occur on the Refuge and likely assists in maintaining the biological integrity, diversity, and environmental health of the Refuge. Some species, such as white-tailed deer, today occur at levels well above those thought to occur under historic conditions. Left unchecked, high numbers of such species could adversely affect biological integrity, diversity, and environmental health. Hunting is a closely monitored tool that helps regulate wildlife populations.

Other Uses and Public Safety

Hunting is not expected to adversely affect other refuge uses or public safety. Dogs are permitted for hunting for retrieving. At present levels of use, dogs used for this purpose are not expected to adversely impact non-target species or conflict with other uses. As public use levels on the Refuge expand across time, unanticipated conflicts between user groups may occur. The Refuge's Visitor Services programs would be adjusted as needed to eliminate or minimize each problem and provide quality wildlife-dependent recreational opportunities that include promoting public safety. Experience on many National Wildlife Refuges has proven that time and space zoning (e.g., establishment of separate use areas, use periods, and restrictions on the number of users) is an effective tool in eliminating conflicts between user groups. Overall, the cumulative impact of hunting on other wildlife-dependent recreation or public safety at Swan Lake NWR is expected to be minor.

The Yellow Triangle area and outlying properties will not be open to other public uses, so conflicts will not occur.

Public Review and Comment:

This compatibility determination is part of an updated Hunt Plan and Environmental Assessment. A public scoping meeting specific to the Hunting Plan's Environmental Assessment was held on September 24, 2011 in which feedback was received from the public with regards to the alternatives discussed in the EA. Public notification and review for the Hunt Plan and Environmental Assessment included a 30-day comment period (October 5, 2012 – November 5, 2012) in which 23 comments were received. This Compatibility Determination was available for a 14 day comment period (May 2-16, 2013) with news releases announcing the availability of the document for review being sent to numerous local media outlets and posted at the Swan Lake Visitor Center and in the area community. There were no comments returned.

Determination (check one below):

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility: The following stipulations are required to ensure compatibility:

1. This use must be conducted in accordance with State and Federal regulations and special refuge regulations published in the Refuge Hunting Brochure and Public Use Regulations brochures.
2. A system of closed areas must be maintained on the main portion of Swan Lake NWR to ensure that migratory birds have adequate resting and feeding areas while hunting seasons are occurring.
3. Hunting is subject to modification if on-site monitoring by refuge personnel or other authorized personnel results in unanticipated negative impacts to visitor safety, natural communities, wildlife species, or their habitats.
4. Harvest occurs only in populations that can support the removal of individuals.
5. Hunting may be more restrictive than State seasons and regulations to ensure compliance with visitor safety and reduce wildlife disturbance.
6. Waterfowl hunting on the main portion of Swan Lake NWR is restricted to ½ hour before sunrise until 1:00 p.m. to allow the birds to feed and rest undisturbed in wetland areas. Waterfowl Hunting will be allowed for four days per week only with the exclusion of the Conservation Order Light Goose Season which will be open in the spring for seven days per week.

7. The day before and during the managed firearms deer hunt, waterfowl hunting on the main portion of Swan Lake NWR will be closed to avoid conflicts.
8. No motorized ATVs or other vehicles are allowed to be used to aid in hunting.

Justification:

In view of the above and with the stipulations previously described, hunting will not materially interfere with or detract from the purposes of the refuge or the mission of the Refuge System. Hunting seasons and bag limits are established by the Missouri Department of Conservation and generally adopted by the refuge. These restrictions ensure the continued well-being of overall populations of game animals. Hunting does result in the taking of many individuals within the overall population, but restrictions are designed to safeguard and maintain adequate breeding populations from year to year. Specific refuge regulations address equity and quality of opportunity for hunters and help safeguard refuge habitat. Disturbance to other fish and wildlife does occur, but this disturbance is generally short-term and adequate habitat occurs in adjacent areas.

The removal of a portion of the deer herd will help control the population at a level to ensure habitat protection from over-browsing and maintain the health of the herd. The deer herd is studied regularly through survey methods and post-mortem examination of harvested deer. To not continue with current harvest rates may cause appreciable damage to refuge habitat. The existing deer population can support the removal of deer through managed hunts and still maintain the herd stability and provide a recreational opportunity. Restricting afternoon waterfowl hunting on management units 9, 13, and 15, as well as no-hunting days three days a week, provides adequate time for feeding, resting, and social behavior activities.

Conflicts between hunters are localized and are addressed through law enforcement and continuous review and updating to State and refuge hunting regulations. Conflicts between other various user groups are minor given the season of the year for hunting, the location of most hunting away from public use facilities, and the system of administrative closed areas. Currently hunters, bird watchers, wildlife observers, hikers, anglers, and photographers can equally enjoy recreational activities in a safe manner.

The stipulations listed above will ensure proper control of the means of use and provide management flexibility should detrimental impacts develop. Allowing this use also furthers the mission of the National Wildlife Refuge System by providing renewable resources for the benefit of the American public while conserving fish, wildlife, and plant resource on the refuge.

Signed:

Refuge Manager:

Steve White 5-21-13

Concurrence:

Regional Chief:

Tim Winter 5/23/13

Mandatory 10- or 15-year Re-Evaluation Date: 2028