

COMPATIBILITY DETERMINATION

Use: Wildlife Observation and Photography (including the means of access such as automobile driving, hiking, biking, canoeing, kayaking and boating and picnicking incidental to these uses)

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:

Is the use a priority public use?

Wildlife observation and photography are priority public uses of the National Wildlife Refuge System.

Where would the use be conducted?

Wildlife observation and photography occur along roads, trails, and waters throughout the Refuge. The Refuge nature trail is currently located near the office and is roughly three-quarters of mile long this compatibility determination will include the use of this trail and extending the trail around the Swan Lake wetland to provide more wildlife viewing opportunities and access to photography blinds with minimal wildlife disturbance.

When would the use be conducted?

Wildlife observation and photography would occur year-round along the entrance road and the nature trail near the Visitor Center. The remainder of the Refuge is open for wildlife observation and photography from early March through late October. Permanent photography/observation blinds will be available by reservation only. The blinds will be locked and a key will be issued when reservations are made. The blinds will be accessible for 1 hour before official sunrise and 30 minutes after official sunset by reservation and available on a year-round basis with the exception of times during the special deer hunts.

Refuge tours can be conducted any time of the year with the approval of the Refuge Manager to ensure they do not conflict with other Refuge uses or make negative impacts on wildlife.

How would the use be conducted?

Visitors observe and photograph wildlife from vehicles along roads and on foot throughout the Refuge. There is an observation platform and scope along the entrance road that provides wildlife observation opportunities. The Refuge will place 2-4 photography/observation blinds at high quality wildlife viewing locations that will be available by a reservation system. The blinds will be locked and when reservations are made a key will be issued. Wildlife observation can also be conducted by Refuge tours either staff-led or self-led by various groups approved by the Refuge Manager at opportune times for wildlife viewing.

Why is this use being proposed?

Wildlife observation and photography are priority general public uses of the Refuge System. Wildlife observation and photography programs can promote understanding and appreciation of natural resources and their management on lands and waters in the Refuge System. There are also opportunities to observe and photograph wildlife near the Refuge on the 7,100-acre Fountain Grove Conservation Area administered by the Missouri Department of Conservation and at the 3,500-acre Pershing State Park administered by the Missouri Department of Natural Resources.

Availability of Resources:

Facilities and staff are currently available to provide access, maintain roads, parking lots, secondary access roads, and signage. Maintaining the public use facilities is part of routine management duties and staff and funding is available. Kiosks and interpretive trail signs may be added to improve visitor information, but are not necessary to support the use.

Anticipated Impacts of the Use:

How does wildlife observation and photography affect Refuge purposes and the NWRS mission?

Wildlife observation and photography do not adversely affect Refuge purposes and they help fulfill the mission of the NWRS.

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

Wildlife and Wildlife Habitat

In *Managing Visitor Use and Disturbance of Waterbirds: A Literature Review of Impacts and Mitigations* DeLong (2002) includes a summary of effects on wildlife from disturbance from various 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 wildlife observation and photography would cause some or all of these effects to some degree on Refuge wildlife. Much of the Refuge is not affected because wildlife observation and photography tend to be concentrated along roads and trails and at observation facilities. Damage to habitat by walking is minimal and temporary. Large groups typically use

established foot trails or roads with little to no impact on vegetation. There is some temporary disturbance to wildlife due to boating and human activities on trails, however, the disturbance is generally localized and would not adversely impact overall populations. Wildlife observation and photography are expected to increase over time. In the future measures may be necessary to ensure that wildlife disturbance from wildlife observation and photography as well as other uses is kept to acceptable levels.

The cumulative disturbance caused by wildlife observation and photography and all other public uses occurring on the Refuge is not expected to adversely affect fish and wildlife populations or their habitats. A number of factors including: suitable site conditions, presence of facilities, access limitations, and seasonal restrictions or other regulations tend to concentrate uses. At any one time, much of the Refuge is unaffected by these uses and is free of disturbance.

Biological Integrity, Diversity, and Environmental Health

Wildlife observation and photography conducted in accordance with Refuge regulations is not expected to adversely affect fish and wildlife populations or the biological integrity, diversity, and environmental health of the Refuge as it is defined in Service policy (USFWS 2001).

Other Uses and Public Safety

Wildlife observation and photography are not expected to adversely affect other Refuge uses or public safety. As public use levels on Swan Lake NWR 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, which includes 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 wildlife observation and photography on other wildlife-dependent recreation or public safety at Swan Lake NWR is expected to be minor.

Public Review and Comment:

This compatibility determination was part of the Swan Lake NWR Draft Comprehensive Conservation Plan and Environmental Assessment. Public notification and review included a notice of availability published in the Federal Register, a 30-day comment period, local media announcements, and a public meeting near the Refuge. Comments received and agency responses are included in the final version of the Swan Lake NWR Comprehensive Conservation Plan.

Determination:

Use is Not Compatible

Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. The Refuge Manager will monitor use patterns and densities and make adjustments in timing, location, and duration as needed to limit disturbance.
2. Use will be directed to public use facilities (both existing and in the future), which are not in or near sensitive areas.
3. Personal portable photo or viewing blinds must be removed by sunset each day.
4. Trail layout and design will continue to ensure adequate adjacent cover for wildlife and avoid sensitive wildlife areas or habitat.
5. Interpretive signs will include messages on minimizing disturbance to wildlife.
6. Certain modes of access such as motorized vehicles will be limited to designated roads and parking lots.

Justification:

This use has been determined compatible because the level of use for wildlife observation and photography is moderate and generally consolidated to the developed public-use areas (trails, roads, parking lots). The associated disturbance to wildlife is temporary and minor. Wildlife observation and photography are priority public uses and provide visitors with opportunities to enjoy and learn about our lands and wildlife. These uses also help fulfill the mission of the National Wildlife Refuge System. Wildlife viewing and photography would not materially interfere with or detract from Refuge purposes

Refuge Manager:

Steve Whitson 2-3-11
(Signature and Date)

Concurrence:

Regional Chief:

Rick Schults 2/15/11
(Signature and Date)

Mandatory 10- or 15-year Re-Evaluation Date: 2026

References:

- DeLong, A. K. 2002. Managing visitor use and disturbance of waterbirds — a literature review of impacts and mitigation measures — prepared for Stillwater National Wildlife Refuge. Appendix L (114 pp.) *in* Stillwater National Wildlife Refuge Complex final environmental impact statement for the comprehensive conservation plan and boundary revision (Vol. II). Dept. of the Interior, U.S. Fish and Wildlife Service, Region 1, Portland, OR. Available URL: <http://www.fws.gov/stillwater/litreview.pdf>
- U. S. Fish and Wildlife Service. 2001. Biological integrity, diversity, and environmental health. 601 FW 3. National Wildlife Refuge System, Department of Interior. Available URL: <http://policy.fws.gov/601fw3.html>