

Draft Compatibility Determination

Use: Archery as part of the National Archery in the Schools Program (NASP)

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 (NWRS) 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 use will involve hosting archery target shooting in partnership with the Missouri Department of Conservation during Refuge events utilizing the National Archery in the Schools Program (NASP) program and equipment.

Is the use a priority public use?

Archery target shooting, when done as a NASP activity, is an educational activity that helps increase interest in outdoor skills, helping connect people to nature. Since this use supports Refuge education events, is related to hunting skills, and carried out in an interpretive manner it falls under the priority public uses of environmental education and interpretation. This is an activity that is encouraged through a training program offered at the National Conservation Training Center (USFWS), course #OUT8061, promoted as a way to “expand and enhance your visitor service programs through archery” (U.S. Fish and Wildlife Service 2014).

We utilize the NASP program for this activity, which was developed for schools and teachers and often utilized by conservation organizations and agencies for educational programs. Information about the NASP program can be found at <http://naspschools.org/>.

Where would the use be conducted?

This use is conducted in the area around the Visitor Center. This area is identified in the approved Swan Lake CCP Objective 3-6, Strategy 1 (U.S. Fish and Wildlife Service 2011: 44) as a site for environmental education and interpretation. This use is conducted in

conjunction with other events and located at a place away from other activities that has been deemed safe for its participants and non-participants. The location is approved by the Refuge Manager prior to the use.

When would the use be conducted?

This use is primarily conducted during events such as First Friday's, Annual 8th Grade Outdoors Day, and the Youth in the Outdoors Day (Green-Wing Day), but may be utilized as an activity at other events that may occur. These events occur on weekdays or weekends, during daylight hours when the Refuge is open to the public. They can occur anytime of the year, but typically occur sporadically from April through September.

How would the use be conducted?

This is a highly organized activity. The Instructors are Refuge employees, Missouri Department of Conservation employees, or Volunteers that have been certified through an instructional program to be a NASP Basic Archery Instructor. Following is a description of training required of NASP Instructors as taken from the NASP website:

Instructor Training was developed so teachers in every participating school could be certified to present NASP® lessons that are safe for students, instructors, bystanders, and the facility. Teachers have a choice of being certified as NASP® Basic Archery Instructors (BAI – 8 hours) or Basic Archery Instructor Trainers (BAIT--24 hours). During the training teachers learn how to set up and operate a safe archery range in their gymnasium. They are taught whistle signals which are used to move students to various taped lines on the range floor or ground to “get bows”, “shoot”, and “go get arrows”. They learn how to determine a student’s “Dominant Eye” and make a “String Bow®” training aid to teach the “Eleven Steps to Archery Success” -- archer form, shot execution, and follow-through. Teachers are provided extensive advice on how to provide positive coaching. Finally, sessions are conducted to explain inspection, maintenance and operation of the bows and arrows (National Archery in the Schools Program 2014).

The instructor to student ratio on the shooting line is 1:2 for older more skilled students and 1:1 for younger less skilled students. All other participants are stationed behind a marked line at least 10 yards behind the shooting line. Targets are set at a shooting distance of 7 yards, with a woven cloth back drop arrow catch that is approximately 8 foot tall and 40 foot in length located about 5' behind the targets. We only shoot at the 5-7 yard distances for learning and not the 10-15 competition distances described in NASP. Instructors visually check down range behind and beyond the back drop arrow catch before each shooting session and prior to commands for students to take a bow in hand to prepare to shoot for that session.

Following is a description of the equipment utilized for NASP as taken from the NASP website:

Archery Equipment used in NASP® is highly standardized to be safe, durable, economical, and most importantly, universal fit for almost every student. In NASP® learning the “process” of shooting is stressed far more than arrow scores. The only bow used in NASP® is a “Genesis®” compound which has no let-off and is adjustable from 10-20 pounds in draw weight at any draw length. Only full-length aluminum arrows are used in NASP® to fit every student and to preserve NASP®’s perfect safety record. Sights, release aids, and stabilizers are kept out of NASP® to facilitate equipment sharing among students in archery class.

Finally, NASP® students are taught to shoot at an international, 80 centimeter target face. While students start learning at an “always hit” distance of 5-7 yards or meters, competitive distances in NASP® are 10 and 15 meters (National Archery in the Schools Program 2014).

The equipment that will be utilized on the Refuge is owned and maintained by the Missouri Department of Conservation. This equipment is serviced annually at an Archery Service Shop and inspected after each use by an MDC employee. The equipment is also inspected prior to each use by the certified NASP Instructor that will be conducting the activity.

Why is this use being proposed?

This use is being proposed because archery is a valuable outdoor skill that many people do not get an opportunity to learn. It is an enjoyable activity that can help increase people’s interest in the outdoors by exposing them to a different outdoor skill. We utilize it as an activity at our public use events as a method to give people experience with outdoor skills that they might otherwise not have the opportunity to experience. It is a great enhancement to our Refuge events, and helps people take away good experiences from their Refuge visit and build connections to Swan Lake NWR. The National Conservation Training Center (USFWS) has a training course entitled “Archery as an Outreach Tool (Out8061)” that utilizes the NASP training. This course description states its goals is to “Expand and enhance your visitor service programs through archery” (U.S. Fish and Wildlife Service 2014).

This use fulfills the findings in Section 2 (2) and (6) of the National Wildlife Refuge System Improvement Act of 1997 (U.S. Congress 1997), in support of the big six priority public uses on a National Wildlife Refuge.

Since this use is conducted in partnership with the Missouri Department of Conservation it complies with 601 FW 7 of the Service Manual “Coordination and Cooperative Work with State Fish and Wildlife Agencies” 7.3 A (U.S. Fish and Wildlife Service 2008).

This use helps to enhance a component of hunting, Archery, it fulfills Executive Order 12996 (1996) Management and General Public Use of the National Wildlife Refuge System Section 2. (a), and Executive Order 13443 (2007) Facilitations of Hunting Heritage and Wildlife Conservation Section 1 and Section 2. (a).

This use helps to accomplish goals and objective listed in the Refuge CCP, particularly, Strategy 5 of Objective 3-6 Environmental/Conservation Education (U.S. Fish and Wildlife Service 2011: 44).

Availability of Resources:

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

Access to NASP certified equipment and NASP certified instructors are necessary to carry out this activity.

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

At the present level of use and staffing there are adequate Refuge resources to administer the Services end of this archery activity when conducted during Refuge events. The NASP equipment is available at the local MDC with no cost to the Refuge. The Refuge currently has Certified NASP Instructors and can easily keep staff and Refuge volunteers certified. There are NASP Training Instructors available in Missouri who hold instructor classes in the area. MDC also has NASP Instructors available when additional help is needed. The NASP instructor training is offered at no cost to the Service.

Refuge facilities are more than capable of handling this program, as we have areas that are available within the Visitor Center complex that allow us to safely conduct this use away from other activities and out of the flow of visitors.

Accessibility: The Visitor Center, amphitheater, restrooms, and nature trail overlook all meet accessibility standards requirements. There is accessible parking located in the Visitor Center parking lot. Certified NASP Instructors are trained during the certification process to utilize the NASP equipment with various impairments such as wheel chair confined participants or other disabilities. The areas where the shooting stations are set up are in grassy areas, but are in level areas that are often utilized by Refuge visitors in wheel chairs. Consequently, this should not prevent accessibility to the site.

Anticipated Impacts of the Use:

How does the Archery Event affect Refuge purposes and the NWRS mission?

The Refuge was established to provide for the needs of migratory birds and other wildlife. Educational programs and events such as this do not adversely affect the ability of the Refuge to fulfill this purpose. This archery activity falls under Environmental Education and Interpretation, which are priority general public uses of the National Wildlife Refuge System and supports the goals the NWRS. The archery activity also allows the Refuge to build broader constituencies of users who will learn more about the mission of Swan Lake NWR and the National Wildlife Refuge System by coming to Swan Lake NWR to participate in Refuge events.

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

Migratory Birds

This archery event is not expected to adversely affect migratory bird populations that occur on the Refuge. There is no take involved, and the activity occurs in developed areas that provide little habitat benefit to migratory birds.

Disturbance

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 the archery activities would cause some or all of these effects to some degree on Refuge wildlife. A number of measures mitigate these effects, and they are not expected to occur at levels that would interfere with the purposes of the Refuge. The area most directly impacted would be the environmental education site located in and around the Refuge Visitor Center, which has been discussed in the approved CCP (U.S. Fish and Wildlife Service 2011: 44). Other areas would be affected accessing this site via roads that are open to the public which would have minimal increase impacts from these users.

Habitat

Activities from Archery would cause little or no habitat disturbance since they will take place in areas already open to public use that provide little habitat benefits to Refuge wildlife.

Biological Integrity, Diversity, and Environmental Health

Activities from Archery are not expected to adversely impact the biological integrity, diversity, and environmental health of the Refuge. An Intra-Service Section 7 Biological Evaluation for listed Endangered Species present on the Refuge has been conducted for the site of this activity. Species and determinations include Least Tern (*Stemula antillarum*), Indiana Bat (*Myotis sodalis*), and Piping Plover (*Charadrius melodus*) with a “No Effect” determination. A “Not Likely to Jeopardize candidate or proposed species/critical habitat” determination was made for the Proposed Northern Long-Eared Bat (*Myotis spetentrionalis*) found in the areas around the Refuge.

Other Uses and Public Safety

Public safety issues are address by the placement of this activity described above and by following NASP guidelines and procedures designed to make this activity a safe and enjoyable opportunity for participants. This activity will be evaluated each time it is utilized to make sure unforeseen changes don’t cause negative impacts upon other uses or safety issues for Refuge visitors.

Overall, the cumulative impact of this activity on other wildlife-dependent recreation or public safety at Swan Lake NWR is expected to be minor since it is concentrated in an isolated location, under a controlled situation, and only occurs occasionally on the Refuge.

Public Review and Comment:

Public notification and review includes a 30-day comment period with local media announcements and postings at the Refuge Visitor Center, Sumner Post Office and Chillicothe Public Library. Comments received will be included with this document in the final Compatibility Determination.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Anytime this NASP archery activity is carried out it must be coordinated with the Refuge Manager with regards to available resources, location, and timing prior to any promotion of the program.
2. Archery must be carried out under the guidelines and procedures as prescribed in the NASP program and only carried out by Certified NASP Instructors or with capable volunteers (no more than one per Certified Instructor) under the direct supervision of a Certified NASP Instructor that is present and directly overseeing the activity.
3. Only NASP archery equipment may be utilized in this activity, while all associated safety equipment is also being utilized. Students or instructors may not utilize their own personal archery equipment, or any other equipment outside of the NASP program for this activity.

Justification:

In view of the above and with the stipulations previously described, the NASP Archery program will not materially interfere with or detract from the NWRS mission or purposes of the Refuge. Environmental education and interpretation are priority public uses of the Refuge System, and providing this activity contributes to achieving Refuge goals. Well-designed environmental education and interpretation programs can be effective resource management tools that provide an opportunity to influence visitor attitudes about natural resources, Swan Lake NWR, the Refuge System, and the Service.

Signature: Refuge Manager _____
(Signature and Date)

Concurrence: Regional Chief _____
(Signature and Date)

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

References

- 16 U.S.C. *United States Code, 2010 Edition: Title 16 – Conservation, Chapter 7 – Protection of Migratory Game and Insectivorous Birds*. The U.S. Government Printing Office. Retrieved February 6, 2014 (<http://www.gpo.gov/fdsys/pkg/USCODE-2010-title16/html/USCODE-2010-title16-chap7.htm>)
- 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)*. Department of the Interior, U.S. Fish and Wildlife Service, Region 1, Portland, OR. Available online (www.fws.gov/stillwater/litreview.pdf).
- Exec. Order No. 7563. 1937. Retrieved February 6, 2014 (<http://www.presidency.ucsb.edu/ws/index.php?pid=61216>)
- Exec. Order No. 12996. 1996. Retrieved February 6, 2014 (<http://www.fws.gov/refuges/policiesandbudget/EO12996.html>)
- Exec. Order No. 13443. 2007. Retrieved February 7, 2014 (<http://www.gpo.gov/fdsys/pkg/FR-2007-08-20/pdf/07-4115.pdf>)
- National Archery in the Schools Program. 2014. Retrieved February 6, 2014 (<http://naspschools.org/>)
- U.S. Congress. 1997. *National Wildlife Refuge System Improvement Act of 1997*. Passed October 9, 1997. Retrieved February 6, 2014 (<http://www.fws.gov/northeast/planning/downloads/NWRSimprovementact.pdf>)
- U.S. Fish and Wildlife Service. 2008. *601 FW 1: Coordination and Cooperative Work with State Fish and Wildlife Agencies*. Released August 25, 2008. Retrieved online February 7, 2014 (<http://www.fws.gov/policy/601fw7.html>)
- U.S. Fish and Wildlife Service. 2011. *Swan Lake National Wildlife Refuge: Comprehensive Conservation Plan and Environmental Assessment*. Department of the Interior, U.S. Fish and Wildlife Service, Region 3, Bloomington, MN.
- U.S. Fish and Wildlife Service. 2014. “OUT8061—Archery as an Outreach Tool.” U.S. Department of the Interior, U.S. Fish and Wildlife Service, National Conservation Training Center. Retrieved February 6, 2014 (<http://training.fws.gov/nctweb/catalog/CourseDetail.aspx?CourseCodeLong=FWS-OUT8061>)