



Compatibility Determination- Herpetological Citizen Science Project (Field Trip) on Pond Creek NWR

USE: Herpetological Citizen Science Project (Field Trip)

REFUGE NAME: Pond Creek National Wildlife Refuge (NWR)

DATE ESTABLISHED: August 12, 1994

ESTABLISHING AND ACQUISITION AUTHORITY:

- 16 U.S.C. 3901(b) Stat.3582-91(Emergency Wetlands Resources Act of 1986)
- Sec. 305, P.L.104-33 (Omnibus Parks and Public Lands Act of 1996)

REFUGE PURPOSES:

- " ...the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international treaty obligations contained in various migratory bird treaties and conventions
- "...recognize the important public purposes served by non-consumptive activities, other recreational activities, and wildlife-related public use, including hunting, fishing and trapping." Furthermore, this plan " ...shall permit, to the maximum extent practicable, compatible uses to the extent that they are consistent with sound wildlife management, and in accordance with the National Wildlife Refuge System, Administration Act of 1996 (16 USC668dd-668ee) and other applicable laws."

NATIONAL WILDLIFE REFUGE SYSTEM MISSION:

The mission of the Refuge System, as defined by the National Wildlife Refuge System Improvement Act of 1997, 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:

(a) What is the use? Is the use a priority public use?

The use allows an organized herpetological group to conduct a field trip to search, identify, and photograph amphibians and reptiles for the purpose of compiling a species list. Wildlife observation is one of six priority public uses of the National Wildlife Refuge System, under the National Refuge System Administration Act of 1966 {16 U.S.C. 668dd-668ee}, as amended by the National Wildlife Refuge System Improvement Act of 1997. Many of the species observed will be done by sight, however some non-venomous species will be caught, handled and photographed in order to properly identify those species.

An organized group of less than 50 individuals with the North American Herpetological Society (NAFHA) and the Arkansas Herpetological Society (AHS) will conduct a field trip where the group(s) will observe, develop a list, catch, handle, and photograph amphibians and reptiles for the purpose of science, education, and learning opportunities. Individuals will divide up into smaller groups while herping (the activity of searching for amphibians and reptiles) on the refuge.

(b) Where would the use be conducted?

Herping would be allowed anywhere within the refuge's 28,261 acres (26,878.81 fee title, 325.73 DOT, 1,056.42 COE), except within the 8 acre office/shop impoundment. Individuals will travel public roads or may walk on or off trails. Some individuals may use kayaks and canoes to access areas within the refuge. All other areas are prohibited from entry (CFR Title 50 Sect 26.21).

(c) When would the use be conducted?

Herping will be allowed in accordance with all applicable Federal and State regulations. The organized herpetological groups are scheduled to visit the refuge anytime from April 29 through May 1, 2016. The group will be accessing the refuge during daytime and nighttime hours.

(d) How would the use be conducted?

Field herping is an educational experience that provides physical exercise and a connection with nature. It is very much akin to birding but field herping tends to be a more hands-on experience. Amphibians and reptiles are generally small, secretive creatures that must be uncovered from hiding.

Some of the specific actions associated with field herping, as they apply to this meeting, are:

- Hiking off trail.
- Canoeing/kayaking.

- Lifting logs, rocks, and over cover materials (in herp lingo "flipping").
- Seining, dip-netting, and wading through swamp muck.
- Running minnow traps and turtle hoop nets.
- Employing hands, tongs, and hooks to capture and work with herps safely.
- Driving less-traveled roads, particularly at night (in herp lingo "road cruising").
- Employing flashlights at night.
- Site of capture hands-on manipulation of individual specimens for identification, observational, and photographic purposes.

Venomous snakes will only be observed and not be handled with hands or equipment.

Archery turkey season will be open during this time, precautions should be made to enter the property after 10 am and it is strongly advised that highly visible colors be worn (i.e. hunters orange).

(e) Why is this use being proposed?

An organized group of individuals with the North American Herpetological Society (NAFHA) and the Arkansas Herpetological Society (AHS) will get the opportunity to observe, develop a list, catch, handle, and photograph amphibians and reptiles for the purpose of science, species identification, and education. Benefits to the refuge will be the information collected during the meeting such as professional photographs, species occurrence lists, and documentation of potential deformation of amphibians. Refuges benefit from citizen science based groups such as these where experienced professionals are allowed to collect information that can be shared with and used by the refuge.

A variety of benefits from this meeting should align with the purpose of Pond Creek NWR, including:

- A highly educational on-site experience for participants. The exploration of unique habitats and wildlife present at Pond Creek NWR, including a focus on the amphibians and reptiles, will facilitate an informal, but vast, sharing of knowledge between individual participants. From this knowledge, a greater appreciation for these natural systems should develop.
- General health benefits for participants through physical exercise. Field herping tends to be a highly strenuous activity, particularly when searching bottomland/swamp habitats that occur at Pond Creek NWR.
- Inventory list of amphibians and reptiles observed, including species and total number, provided to the South Arkansas Refuges Complex. Herps, while vital ecosystem components, tend to be overlooked in survey efforts of natural areas. An inventory list of herps compiled by the participants should provide a more complete picture of what wildlife is present at Pond Creek NWR.

- Participants will be encouraged to look for and report any amphibian deformities observed. A report of amphibian deformities will be documented and provided to the South Arkansas Refuges Complex.
- Informal training for Pond Creek NWR (or other refuge, state park, etc.) personnel in herp identification and survey techniques.
- Propagation of education about the habitats and wildlife present at Pond Creek NWR through social media and other venues. Many field herpers post their "stories" and photographs to share with others online. These presentations inevitably instill a greater knowledge and appreciation of nature in others. While herps, particularly snakes, are unfortunately reviled by many people, the positive sharing of these experiences with a wider audience can, and does, change attitudes for the better. Many photographs will be posted to the Herps of Arkansas website (<http://HerpsOfArkansas.com>).
- Photographs of selected herps for potential inclusion in an Arkansas herp field guide (in development). Kory Roberts is the primary photographer for this project and will be looking to increase photographic coverage of herp species during this meeting. The field guide will, of course, expand knowledge of the naturally occurring herps in the state.
- Photograph availability for use by the South Arkansas Refuges Complex. At request, these photographs are made available for educational/nonprofit purposes. Other participants who take photographs, often of publishable quality, can be encouraged to offer the same availability.
- Greater understanding of the distribution of herps in Arkansas. A number of herp species from Pond Creek NWR have potential to be confirmed as new county records for Arkansas. These may be submitted as photographic vouchers to scientific museums and eventually included in the Arkansas Herpetological Atlas and Arkansas herp field guide.
- Report of inventory species to the Arkansas National Heritage Commission. Any inventory (i.e. rare) species from Pond Creek NWR will be reported to the ANHC.

ANTICIPATED IMPACTS OF THE USE:

Herping activities can result in a temporary limited negative impact to wildlife and other refuge resources. Minor negative impacts to the refuge may include: damage to vegetation, littering, conflicts among refuge visitors (ie turkey hunters), and disturbance to wildlife.

Specific impacts are likely to include:

- Temporary displacement of animals due to human presence and movement, including driving roads and using flashlights is likely to occur. Efforts will be undertaken not to harass wildlife unduly.

- Temporary disturbance of swamp muck, leaf litter, rocks, logs, etc. Generally, herpers make every effort to return disrupted elements to their original positions and this will be emphasized to the group. In addition, habitats present at Pond Creek NWR (primarily hardwood bottomland forest) are seasonal/fluctuating and recover quite quickly from the kinds of activities that will be undertaken.
- By-catch in nets, etc. Any unintended capture of aquatic insects, fishes, etc. will be released immediately.
- Stress of individual herp specimens due to hands-on manipulation and temporary hold. Only a small number of herp specimens are anticipated to be impacted in this way, usually to include no more than 1 or 2 individuals per species. Herps tend to be fairly resilient to temporary hands-on manipulation and generally recover very, very quickly to their normal routines. High value specimens, anticipated to be less than 10 total individuals, will NOT be detained and must also be released at the same site shortly after being identified and photographed. All individual specimens will be returned to their original points of capture in a timely manner. **No wildlife will be permanently collected or removed from the refuge** (CFR Title 50 Sect(s) 27.21, 27.51, and 27.73).

A positive effect of allowing this organized herping field trip will be the provision of additional wildlife-dependent recreational opportunities and a better appreciation and more complete understanding of the wildlife and habitats associated with the refuge. This can translate into more widespread and stronger support for the refuge, the National Wildlife Refuge System, and the Service.

PUBLIC REVIEW AND COMMENT:

This compatibility determination will be made available for public review and comment for a 14-day period by 1) posting on refuge bulletin board/kiosk, 2) posting on refuge website and social media networks, 3) public media press release.

DETERMINATION (CHECK ONE BELOW):

USE IS NOT COMPATIBLE

USE IS COMPATIBLE WITH FOLLOWING STIPULATIONS

NEPA Compliance for Refuge Use Decision: Place an X in appropriate space.

Categorical Exclusion without Environmental Action Statement
516 DM 8, 8.5 (7) Minor changes in the amounts or types of public use on Service or State-managed lands, in accordance with existing regulations, management plans, and procedures.

___ **Categorical Exclusion and Environmental Action Statement**

___ **Environmental Assessment and Finding of No Significant Impact**

___ **Environmental Impact Statement and Record of Decision**

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

1. The applicant will need to obtain a completed and approved Special Use Permit provided by the Refuge Manager.
2. Notify manager before night activity
3. A species list will be provided to the refuge.
4. Collecting is prohibited
5. Venomous snakes will only be observed and not be handled with hands or equipment.
6. No wildlife or any items will be permanently collected or removed from the refuge (CFR Title 50 Sect(s) 27.21, 27.51, and 27.73).
7. Herping will be allowed in accordance with all applicable Federal and State regulations.
8. Participants will need to understand and abide by refuge regulations as outlined in the Refuge Brochure.

JUSTIFICATION:

Wildlife Observation is a priority wildlife-dependent use for the National Wildlife Refuge System through which the public can develop an appreciation for fish and wildlife (Executive Order 12996, March 25, 1996 and The National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997 [Public Law 105-57]). The Service's policy is to provide expanded opportunities for wildlife-dependent uses when compatible and consistent with sound fish and wildlife management and ensure that they receive enhanced attention during planning and management.

The need for data on plants and animals is many times beyond refuge budgets and staff's ability to collect it. So refuge managers and biologist are turning to experienced citizens to help with inventorying and monitoring of refuge resources. This effort can support the refuge's efforts by providing valuable data. Photos can also be used for outreach.

Considering the information presented in this document and with the stipulations previously described, organized filed herping will not materially interfere with or detract from the NWRS mission or purposes of the refuge. Disturbance to other fish and wildlife may occur, but this disturbance is generally short-term and minor in nature. Herping is not expected to adversely affect the biological integrity, diversity, and environmental health of the refuge or the Refuge System.

Stipulations 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 resources on the refuge.

**SIGNATURE: REFUGE
MANAGER:**_____

(Signature and date)

**REVIEW: REGIONAL COMPATIBILITY
COORDINATOR:**_____

(Signature and date)

**REVIEW: REFUGE
SUPERVISOR:**_____

(Signature and date)

**CONCURRENCE: REGIONAL
CHIEF:**_____

(Signature and date)

MANDATORY 10- OR 15-YEAR REEVALUATION DATE:
