



Compatibility Determination-Pond Creek National Wildlife Refuge- Long-tailed Weasel Research

USE: Long-tailed Weasel Research

REFUGE NAME: Pond Creek National Wildlife Refuge

DATE ESTABLISHED: August 12, 1994

ESTABLISHING AND ACQUISITION AUTHORITIES:

- 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 is scientific research conducted by researchers from Tennessee Technological University titled "Distribution and Status of the Long-tailed Weasel (*Mustela frenata*) in Arkansas. The intent is that this research will establish base-line information for the occurrence and probability of detecting long-tailed weasels in various ecoregions of Arkansas. The objectives of this study are to: (1) determine a measure of occupancy in each of the ecoregions sampled; (2) provide a measure of detectability in each of the ecoregions sampled; (3) provide a habitat model of potential locations for future efforts; and (4) estimate the amount of effort required, in monetary terms, to effectively detect the species. Research conducted by non-Service personnel, such as this, is not a priority public use of the Refuge System.

(b) Where would the use be conducted?

This study will be conducted across the state of Arkansas in each of the ecoregions [Ozarks (Ozark Mountains, Boston Mountains, Arkansas River Valley), Ouachita Mountains, South Central Plains, Mississippi Alluvial Valley including Crowley's Ridge] on private and public lands, including wildlife management areas, national wildlife refuges, and national forest properties. Locations to be sampled will come from the sampling frame developed in the GIS. Pond Creek NWR has been identified as one area that is likely to support long-tailed weasels and the entire refuge will be open to this study.

(c) When would the use be conducted?

The study will occur across two years (2015 & 2016). A graduate research Assistant (GRA) will conduct the majority of the field work during March 1-May 31 with the help of a research technician.

(d) How would the use be conducted?

Sampling will be based on a minimum of 5 sites in each ecoregion and will be surveyed at 14 stations each for a total of at least 280 surveys across the state each year. Each site will be surveyed using two methods of detection, each placed at a station. The first method will be a soot-track plate system. Soot-track plates will be baited using chicken or some other meat with a predator scent sprayed at the site. Soot-track plate systems will be made of a 60 cm long cubby in which two 20 cm soot-track aluminum plates will be placed; one at each end. Contact paper will be placed over the last third of the plate to collect foot prints. Bait will be hung in the middle of the cubby. The second method will be a trail camera system programmed to record images every 10 seconds. One camera will be mounted on natural vegetation or a stake at 1 m above the ground and pointed at one end of each cubby. Both methods will be used at each station and there will be 14 stations per site. Stations will be spaced approximately 1 km apart and at least 50 m from any road or trail. Each station will be checked daily for a week to take track samples, replenish bait, check the soot-track plates, and replace batteries. Tracks on soot-plates will be identified to species, as will images taken using the camera system. Though not planned, any capture and handling of weasels will be performed following guidelines of the American Society

of Mammalogists and will be approved by Tennessee Tech University Institutional Animal Care and Use Committee. Any weasels caught will be immediately released un-harmed on site.

(e) Why is this use being proposed?

Long-tailed weasels are considered common in most southern and mid-western states, but, while it is listed as an international species of least concern, several states do consider it a species of concern. This species is considered widely distributed throughout Arkansas, but rare in its occurrence. The benefit of the research work will be to establish a baseline of information relative to population distribution within the state and will serve as a foundation on which to build future assessment efforts for the species. Information gained will also be provided to scientific meetings, with peers via papers, reports at meetings, and updates for the Arkansas Wildlife Action Plan.

AVAILABILITY OF RESOURCES:

There will not be any monetary cost to the USFWS. Monetary cost will include \$31,311 to Tennessee Technological University (TTU) and \$28,411 to the Arkansas Game & Fish Commission (AGFC) for the first year and \$29,626 to (TTU) and \$22,620 to the Arkansas Game & Fish Commission for the second year.

ANTICIPATED IMPACTS OF THE USE:

Impacts to vegetation and wildlife as a result of long-tailed weasel research activities are expected to be minimal.

Long-tailed weasel research activities may conflict with the refuge's modern gun and archery turkey hunting seasons. Potential problems include safety concerns for the researchers and disturbance to hunters. However, these conflicts can be avoided by discontinuing researcher field activities during the 4 days of modern gun turkey hunting.

PUBLIC REVIEW AND COMMENT:

This compatibility determination has been made available for public review and comment for a 14-day period by 1) posting at the Refuge Visitor Center, 2) posting on refuge website and social media networks, 3) public media press release. The comment period was March XXX, 2015 to March XXXX, 2015.

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:

Researchers have submitted a detailed proposal following Service Policy (FWS Refuge Manual Chapter 4 Section 6, as amended). A Special Use Permit (SUP) will be issued for this research and will list the conditions that the refuge manager determines to be necessary to ensure compatibility. The SUP will also identify a schedule for progress reports and the submittal of a final report or scientific paper.

1. Vehicles and other equipment will be operated in a safe manner at all times. The speed limit on refuge roads is 25 miles per hour unless posted otherwise.
2. The normal field season will be March 1, 2015 through May 31, 2015 and March 1, 2016 through May 31, 2016. Any field activities outside of these specified seasons must be approved in advance by the Refuge Manager. For the safety of the researchers, all field activities will cease during the Youth and Adult April modern gun quota turkey hunts (total of 4 days).
4. A pre-field season conference between the Refuge Manager and researchers is required before beginning field activities to ensure understanding of the permit conditions and to avoid conflicts.
5. Researchers will be required to obtain appropriate State and Federal permits.

JUSTIFICATION:

The Service encourages approved research to further the understanding of refuge natural resources. Research by non-Service personnel adds greatly to the information base for refuge managers to make the best-informed decisions possible. Research conducted by non-Service personnel will not materially interfere with or detract from the mission of the National Wildlife Refuge System or the purposes for which the refuge was established.

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**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:
