

FINAL PERFORMANCE REPORT



Federal Aid Grant No. F17AP00233 (E-86-RL-1)

**An Ecoregion Approach for Recovery and Protection of Karst-
Dependent Federally Listed Species: Phase IV**

Oklahoma Department of Wildlife Conservation

March 1, 2017 through February 28, 2018

FINAL PERFORMANCE REPORT

State: Oklahoma

Grant Number: F17AP00207 (E-86-RL-1)

Grant Program: Endangered Species Act Non-traditional Section 6 (Recovery Land Acquisition)

Grant Name: An Ecoregion Approach for Recovery and Protection of Karst-dependent Federally-listed Species: Phase IV

Grant Period: March 1, 2017 through February 28, 2018

Reporting Period: March 1, 2017 through February 28, 2018

Principal Investigator: Matt Fullerton, Oklahoma Department of Wildlife Conservation

A. ABSTRACT

As part of a multi-state proposal with the Arkansas Game and Fish Commission, the Oklahoma Department of Wildlife Conservation attempted to acquire a 29 acre tract known as the “Owl Tract” in Adair County for the benefit of both the endangered Gray Bat (*Myotis grisescens*) and threatened Northern Long-eared Bat (*M. septentrionalis*). The Owl Tract adjoins another tract owned by the Oklahoma Chapter of The Nature Conservancy (TNC) that contains AD-7, a large cave system that supports a maternity colony of Gray Bats. If acquired, the tract would have been sub-granted to TNC to increase the size of the current preserve and allow for the protection of foraging habitat for bats and other Ozark-endemic species. Due to disputes among members of the selling family, acquisition of the Owl Tract did not, and will not, occur.

B. BACKGROUND

The Ozark Highlands ecoregion of Arkansas, Oklahoma, and Missouri is predominantly a karst region, and the region is often known by the moniker, the Ozark Karst ecosystem. A karst region is characterized by the presence of numerous springs, sinkholes, underground streams, and caves. In the Ozark Highlands ecoregion, over 10,000 caves have been documented. Springs dominate the landscape with large magnitude-1 springs occurring in the eastern part of the Ozarks. In addition to supporting more than 100 obligate subterranean species, this karst ecosystem supports multiple federally listed species including the endangered Gray Bat (*Myotis grisescens*), Ozark Big-eared Bat (*Corynorhinus townsendii ingens*), threatened Northern Long-eared Bat (*Myotis septentrionalis*), and the threatened Ozark Cavefish (*Amblyopsis rosae*).

In Arkansas and Oklahoma, protected habitats for the Ozark Big-eared Bat, Gray Bat, Northern Long-eared Bat, and Ozark Cavefish occur on lands owned by government agencies (state and federal) as well as non-profit entities. These lands form a complex of wildlife refuges, management areas, natural areas, and preserves that are dedicated to the

recovery of these listed species. Yet, these areas are a small part of the total landscape used by these species, and therefore an important task associated with the recovery of these species is identifying additional high-priority locations to supplement the current network of protected spaces. Enhancement of the current matrix of protected areas not only helps recover listed species, but these additional protected areas provide important habitat for declining migratory Ozark forest birds and both game and non-game species of concern in the Ozarks. In addition, better protection of lands within the surface watersheds used by these karst species will help maintain higher water quality by reducing such threats as enrichment from farms or ranches, confined feeding operations, pollution from urbanization, and hydrological alteration and sedimentation from road and other development. Furthermore, acquiring fee title lands for these species will provide a positive impact on metapopulation dynamics at the ecoregion scale.

Because so much of the Ozark karst ecosystem has been lost due to land development and those pressures continue, protecting extant habitat in Arkansas and Oklahoma is urgently needed if the Gray Bat, Ozark Big-eared Bat, Northern Long-eared Bat, and Ozark Cavefish are to recover. Acquisition of ecologically-important lands in the Ozark Highlands can assist in addressing tasks outlined in the U.S. Fish and Wildlife Service's recovery plans for these species.

C. OBJECTIVE

TNC will acquire 29 fee simple acres in Adair County, Oklahoma (Owl tract) by February 2018. The purpose of this grant is for The Nature Conservancy -Oklahoma Field Office, as subgrantee, to acquire in fee simple 29 acres in Adair County known as "Owl tract." This acquisition is adjacent to the TNC Charley Owl Preserve which includes cave AD-7, therefore providing additional protection of the cave entrance. The acquisition will also provide foraging and summer roosting habitat for three federally-listed bat species: Gray Bat, Ozark Big-eared Bat, and Northern Long-eared Bat.

D. PROCEDURES

During May – August 2017, TNC staff engaged the Owl Family to negotiate for the purchase of the 29 acre Owl Tract.

E. RESULTS AND DISCUSSION

Due to disagreements among family members of the seller, the Owl Tract was not successfully acquired through this grant.

F. SIGNIFICANT DEVIATIONS:

When the original multi-state proposal was submitted, TNC (the sub-grantee) was interested in purchasing several small tracts adjacent to the Twin Cave Preserve in Delaware Co, Oklahoma owned by the Lakemont Shores Property Owners Association. Due to issues with unclear titles for the tracts, TNC requested that ODWC modify the target land acquisition to be the Owl Tract in Adair Co.

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H. DATE: 23 April 2018

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Figure 1. Owl Tract in Adair County, Oklahoma (Sec 23, T15N, R24E).

