Final Report for: Grant Agreement #06-025W
Bat Inventories with Emphasis on Locating Potential Bat Colonies in Macon County at Sand Creek and Friends Creek Conservation Areas

Grantee:
Macon County Conservation District
3939 Nearing Lane
Decatur, IL 62521

Date: 11-11-06

Report completed by:
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Operations Manager
Macon County Conservation District
217-423-7708

Objective:
The objective of the bat survey in Macon County is to conduct a multi-year study of bat diversity and richness on property owned by the Macon County Conservation District (MCCD). Captured bats will be documented for species, weight, height, wingspan, sex and age (juvenile or adult). At the end of the study period, a summary report will be prepared and submitted to the Illinois Department of Natural Resources.

Completed Project Description:
By completing a thorough chiropteran inventory of all MCCD properties, both MCCD and the IDNR will be better able to create and/or manage habitat suitable for the long-term survival of Illinois' 12 native bat species and provide insight into the use of summer maternity habitat by bats within the highly fragmented and agriculturized, central Illinois' ecosystem.

Measurable outcomes of this scientific inventory will be a better understanding of the bat species using MCCD properties as both summer foraging grounds and establishment of maternity colonies in natural and artificial structures (i.e. abandoned barns, buildings, etc.).

Completion of a thorough mist-netting effort at MCCD sites may also reveal the presence of a State and/or Federally listed bat species which have yet to be documented in Macon County, Illinois.

Project Accomplishments Summary:
With the help of IDNR staff, MCCD staff and volunteers, night time field inventories were scheduled to conduct mist netting of bats on MCCD properties in Macon County. After reconnaissance visits to Sand Creek, Friends Creek and Fort Daniel Conservation Areas, it was decided to conduct this multi year study at Sand Creek and Fort Daniel. Field inventories were conducted in the summers of 2005 and 2006. Specific dates were planned at two consecutive night intervals in June, July and August of each year.
Joe Kath from the IDNR, assisted with capture and release procedures. Used and followed were standard Indiana bat mist-netting guidelines as provided in the March, 1999 Indiana bat revised recovery plan (Agency Draft). Mr. Kath can provide a copy of these guidelines and all recorded field data upon the request of the Wildlife Preservation Fund Committee and can be reached at (217)785-8764 or Joe.Kath@illinois.gov. Handling of protected species is allowed only by Scientific Permit administered by IDNR. Mr. Kath provided oversight of the scientific permit.

Common bat species captured during the survey were Big Brown, Little Brown, Red and Hoary Bats. An Evening Bat, a not so common species of bat, was captured at Sand Creek. No Indiana Bats were captured. Photographs (included with this report) were taken along with all necessary measurements. Each bat was banded with a numbered/colored band on its’ wing.

MCCD provided staff assistance and purchased materials/supplies for use with this project. Materials/supplies purchased included, five (5) radio transmitters, a bat detector and a high beam rechargeable light. The transmitters were to be attached to Indiana Bats if captured. Mr. Kath provided poles, nets and other equipment* to carry out the study.

Mr. Kath would like to continue this field study in the future to provide a long term study of bats in Macon County. Until this project, there has never been a recorded study of bats in Macon County. MCCD supports the idea to continue bat inventories in Macon County. Information gathered is valuable to determine habitat management guidelines for MCCD properties and to determine the presence or absence of any federally endangered species. Information gathered from the study will be used for educational programs produced by MCCD Program Services Department to educate the public on bats.

**Expenditures:**
Material and Supplies:
5- Bat transmitters, purchased 4-5-06 ($825.00)
Holohil Systems, Ltd.
112 John Cavanagh Road
Carp, Ontario, Canada KOA ILO

1- bat detector, purchased 9-28-06 ($395.00)
Bat Conservation International, Inc.
DBA Batcatalog.com
P.O. Box 162603
Austin, Texas

1-Spotlight, purchased 10-3-06 ($70.85)
Forestry Suppliers
205 West Rankin Street
P.O. Box 8397
Jackson, Mississippi 39284
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Personnel cost and purchase of materials and supplies were from MCCD funds.

* Supplied by IDNR