Section 6 (Texas Traditional) Report Review

Form emailed to FWS S6 coordinator (mm/dd/yyyy): 10/23/2012

TPWD signature date on report: 10/8/2012

Project Title: Habitat Use of Hatch-year Black-capped Vireos in Central Texas

Final or Interim Report? Interim

Grant #: TX E-139-R

Reviewer Station: Arlington ESFO

Lead station concurs with the following comments: NA (reviewer from lead station)

Interim Report (check one):

☒ Acceptable (no comments)

☐ Needs revision prior to final report (see comments below)

☐ Incomplete (see comments below)

Final Report (check one):

☐ Acceptable (no comments)

☐ Needs revision (see comments below)

☐ Incomplete (see comments below)

Comments:

It appears the first year data collection was successful.

INTERIM REPORT

As Required by

THE ENDANGERED SPECIES PROGRAM

TEXAS

Grant No. TX E-139-R

Endangered and Threatened Species Conservation

Habitat Use of Hatch-year Black-capped Vireos in Central Texas

Prepared by:

Dr. Patrick Weatherhead

TEXAS PARKS & WILDLIFE

Carter Smith
Executive Director

Clayton Wolf
Director, Wildlife

8 October 2012

INTERIM REPORT

STATE: Texas GRANT NUMBER: TX E-139-R-1

GRANT TITLE: Habitat Use of Hatch-year Black-capped Vireos in Central Texas

REPORTING PERIOD: 1 Sep 11 to 30 Sep 12

OBJECTIVE(S). To determine the habitat use of independent HY black-capped vireos with particular focus on comparison of riparian corridors and typical breeding habitat.

Segment Objectives:

Task 1. Collect data on the relative abundance of age HY individuals in typical breeding habitat and in riparian areas by using standardized, simultaneous mist-netting in both areas.

Task 2. Describe movement patterns of birds captured in typical breeding habitat and riparian areas. We will attach transmitters to birds captured while we pursue the collection of data described in #1 above. We will determine the location of each of these birds twice daily. If after one field season the radio telemetry data support this prediction, then we propose to conduct translocations of birds between habitats during the second field season in an attempt to strengthen the inference that riparian areas are preferred.

Task 3. Describe the vegetation structure of areas used by HY vireos, including canopy cover, canopy species, shrub cover, shrub species, distance to nearest stream or body of water, shrub foliage density

Significant Deviations:

None.

Summary Of Progress:

Please see Attachment A.

Location: Bell, Coryell Counties, Texas.

Cost: Costs were not available at time of this report, they will be available upon completion of the Final Report and conclusion of the project.

Prepared by: Craig Farquhar Date: 8 October 2012

Approved by: _____ Date: 8 October 2012
C. Craig Farquhar

ATTACHMENT A

Texas Parks and Wildlife Interim Report

HABITAT USE OF HATCHING-YEAR BLACK-CAPPED VIREOS IN CENTRAL TEXAS

Principal Investigator:

Dr. Patrick Weatherhead, Department of Natural Resources and Environmental Sciences, University of Illinois, Urbana, IL 61801

phone 217-244-0319

email: pweather@illinois.edu

Co-PIs:

Erika Dittmar (MS student); University of Illinois; erikadittmar@yahoo.com

Dr. Jinelle Sperry; University of Illinois; jinelle.sperry@usace.army.mil

Dr. David Cimprich; U.S. Army; david.cimprich1@us.army.mil

Reporting Period: 1 October 2011 – 30 September 2012

Summary of Progress:

The project had three main tasks associated with collecting data to quantify the habitat use of hatching-year (HY) black-capped vireos. Data were collected between 5 June 2012 and 16 August 2012 on Fort Hood Military Reservation in central Texas.

1. The first task was to collect data on the relative abundance of HY individuals in breeding habitat and riparian areas. We operated mist-nets and accumulated 52 and 50 net hours in breeding and riparian habitats, respectively (one mist-net hour equals one 12 m net open for one hour). At each net we broadcast recordings of conspecifics and screech-owl vocalizations to increase capture rates. Abundance of HY vireos was approximately equal in the two habitats: we captured 25 HY vireos in riparian areas and 27 HY vireos in breeding habitat.
2. The second task was to collect data describing movement patterns of HY black-capped vireos captured in breeding habitat and riparian areas. We attached radio transmitters to 18 HY vireos captured during mist-netting efforts, as described above. Nine birds were tracked in each habitat type. Birds were located twice a day for up to 14 days, the expected battery life of the transmitters. There were no injuries or mortalities associated with the study and radio transmitters did not appear to have a negative effect on individuals. In total, we collected 412 locations for the 18 birds. A preliminary analysis of habitat preference indicated that radio tracked vireos show high preference for riparian areas over any other available habitats.
3. The third task was to describe the vegetation structure of areas used by HY black-capped vireos. We conducted vegetation sampling at every other bird location (n=237) and at random locations (n=118). At each location we evaluated shrub and canopy cover, measured foliage density, and noted dominant shrub and canopy species. Analyses of these data are underway.