

NORTHERN BOBWHITE RESPONSE TO ENVIRONMENTAL QUALITY INCENTIVES PROGRAM (EQIP) PRACTICES IN THE HIGH PLAINS ECOREGION OF TEXAS

INVESTIGATOR INFORMATION

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INTRODUCTION

The Northern Bobwhite Conservation Initiative seeks to reverse northern bobwhite declines across the specie's range. The goal for the Southern High Plains of Texas, or the Texas portion of the Shortgrass Prairie Bird Conservation Region (TBCR 18) as it is delineated in the initiative, is to add 18,933 new coveys to those already in existence. Regrettably, cotton, the primary crop in the region, uses a cropping system that precludes bobwhite habitat. Rangeland provides the most usable habitat for quail in TBCR 18. However, much of the rangeland that provide suitable habitat has been overgrazed to the point it is no longer usable. New incentives could change the dynamics in TBCR 18.

In Texas, the Environmental Quality Incentives Program (EQIP) provides incentives for management practices that are beneficial to northern bobwhite. EQIP was created as part of the 1996 Farm Bill to assist agricultural producers address environmental problems. This program is voluntary and seeks to promote the compatibility of agricultural production and sustained environmental quality. EQIP offers cost-shares and incentive payments for conservation practices that producers might not otherwise implement. Approximately \$66.8 million were available for EQIP projects in Texas for 2004. The primary wildlife species of concern for TBCR 18 are the Lesser Prairie chicken (*Tympanuchus pallidicinctus*) and the Black-tailed Prairie dog (*Cynomys ludovicianus*). Prescribed grazing, brush management, and prescribed burning are eligible practices for EQIP in this area. About 21 individual EQIP projects were planned in TBCR 18 during 2004. These practices may also be beneficial for developing or improving northern bobwhite habitat in the region. Destocking or grazing deferment may be one of the single most effective methods of increasing acreage of suitable northern bobwhite habitat in TBCR 18. In fact, the Texas Quail Conservation Initiative indicates 75% of the needed coveys in Texas could be produced by altering range management practices. The potential benefits of EQIP projects for Northern Bobwhite in TBCR 18 have not been evaluated. As scaled quail (*Callipepla squamata*) are sympatric with northern bobwhite in many of these areas it is probable that their populations may also benefit from EQIP practices.

OBJECTIVES

- 1) Examine northern bobwhite and scaled quail population responses to brush management and grazing deferment (EQIP practices) in TBCR 18.

PROGRESS TO DATE

Since our last progress report, we have completed an additional spring whistle count survey, a fall covey count survey, and a capture-recapture survey on all treatment and control sites. Further, extensive vegetation surveys were completed between June and August, 2006 to characterize plant composition and visual obstruction of the study sites. Preliminary analysis suggested no differences in quail abundance, plant composition, or visual obstruction between EQIP contract and control sites to date. However, we have identified several vegetative characteristics that are highly correlated with quail abundance. We believe another year of data collection and further analysis will yield specific management recommendations that can be used to fine tune current NRCS practice standards for TBCR 18.

PRESENTATIONS

Abercrombie, E. D., and C. B. Dabbert. Northern bobwhite (*Colinus virginianus*) and scaled quail (*Callipepla squamata*) response to Environmental Quality Incentives (EQIP) practices in the Shortgrass Prairie Conservation Region. Gamebird 2006. Athens, GA, 30 May- 4 June, 2006.

Abercrombie, E. D., and C. B. Dabbert. Northern bobwhite and scaled quail response to Environmental Quality Incentives (EQIP) practices in the Shortgrass Prairie Conservation Region. The Wildlife Society 13th Annual Conference. Anchorage, AK, September 23-27, 2006.

PUBLICATIONS

None to date

PARTICIPATING AGENCIES AND LANDOWNERS

Landowners. James Adams, Stan Adcock, Tommy Box, Manuel T. De Leon, Vennum Fitzgerald, Mary Dale Forbus, Robert Leopard, Tommy Lewis, Jim Lutz, Jackie L. Pate, Lynnette K. Payne, Robert Perkins, L.J. Sanders Jr.

NRCS INVOLVEMENT

Charles Coffman. Wildlife Biologist. Charles provided guidance on the development of the project and serves as our primary NRCS contact.