

Fiscal Year 2009 Contractor's Report
Professional Services Contract #09 516 0000 00046
Santo Domingo Gray Vireo (*Vireo vicinior*) Surveys

Following preliminary habitat evaluations in late April 2009, Gray Vireo surveys began in earnest on 14 May 09 in the arid hills of the Santo Domingo Tribal uplands. The methods outlined in our proposal, and in accordance with the protocol suggested by DeLong and Williams *Status Report and Biological Review of the Gray Vireo in New Mexico*, 2006, have been employed and demonstrated to be adequate in fieldwork performed thus far. The species songs were recorded from the website of Western Soundscape Archives onto a handheld micro-cassette recorder for tape-playback in selected habitat. This method has been invaluable in the surveys as only on two occasions to date have the birds been located extemporaneously.

Arrival and courtship dates for the species stated in DeLong and Williams, 2006 would seem to be correct given that the birds located in the first week of the survey approached the researcher(s) in pairs. This was evidenced by differences in vocalizations, and mating displays such as the behavior and postures associated with breeding as described in *The Birds of North America Gray Vireo* species account No. 447, Jon C. Barlow, et al., 1999. At one location an intruder, a second male, also responded to tape-playback and was subsequently driven away by the first male. That occurrence brought into question territory size in the study area. We have not found any suggestion in the literature that Gray Vireos are even loosely colonial in nesting habits. They do, however, tend to cluster somewhat once habitat that meets their specific requirements is found (Nancy Cox, pers. comm.). That information has been helpful in obtaining the most accurate count of individual birds when it is apparent that more than one bird, or pair, responds to tape-playback at a single location.

The first few Gray Vireos discovered during the current study were found at elevations somewhat lower than the 5500 feet expected in this part of New Mexico, at approximately 5200 ft. It was at that elevation that walking surveys began in Township 15N, Range 5#, Section 2 To date, extensive walking surveys have covered juniper dominated habitats in: Township 15N, Range 4E, Sections 1, 2, 3, 12, and 13, and Range 5E, Sections 7, 8, 17, 18, and 21. To date 41 individual vireos, on what are apparently 26 territories, have been recorded. UTM coordinates have been recorded from all vireo sightings, and plotted by a GIS specialist at the Santo Domingo Natural Resources office. Surveys will continue upslope until the Santo Domingo boundary is reached. At that point the elevations encountered will be somewhat lower than the upper breeding range limit of 7000 feet suggested by most researchers. The remainder of the study season, until the vireos disperse, sometime in July, will be focused on other suitable habitat of the tribal uplands.

Several avian species listed as potential nest predators of Gray Vireos by Barlow, et al., 1999, have responded to tape-playbacks. Brown-headed Cowbirds (*Molothrus ater*) have been observed in the vicinity of the vireos as well, but it is unclear whether or not they arrived in response to the playbacks (all of this information will be addressed in our final report).