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Abstracts

FEATURE ARTICLES

GENETIC DIFFERENTIATION IN THE ENDANGERED BLACK-CAPPED VIREO

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Abstract. We surveyed electrophoretic variation and examined population structuring in the endangered Black-capped Vireo (*Vireo atricapillus*), a species whose distribution is closely tied with a successional habitat. Sixteen presumptive loci were resolved from blood from individuals in four populations in Texas and Oklahoma. Mean heterozygosity in the Black-capped Vireo was 0.058. A significant departure from random mating expectations was detected in only 1 of 26 comparisons. Highly significant differentiation was observed among populations (mean F_{ST} = 0.17). Although the high levels of differentiation suggest limited exchange between populations, most of the differentiation was due to divergence at two loci. The relatively high heterozygosity and the association with successional habitats suggest a source-sink population dynamic with new habitat patches colonized from several source populations. Our results suggest that management of this species should focus on its habitat preferences and conserving connectivity between patches rather than on concerns of loss of heterozygosity.

Key words: allozymes, endangered, genetic variation, *Vireo atricapillus*.