

SHORT COMMUNICATIONS

PHYLOGEOGRAPHY AND PATTERNS OF DIFFERENTIATION IN THE CURVE-BILLED THRASHER

OCTAVIO R. ROJAS-SOTO<sup>1,3</sup>, ALEJANDRO ESPINOSA DE LOS MONTEROS<sup>1</sup>, AND ROBERT M. ZINK<sup>2</sup>

<sup>1</sup>*Instituto de Ecología, A. C., Departamento de Biología Evolutiva, km 2.5 Carretera Antigua a Coatepec No. 351, Congregación el Haya, C. P. 91070, Xalapa, Veracruz, Mexico*

<sup>2</sup>*Bell Museum, 1987 Upper Buford Circle, University of Minnesota, St. Paul, MN 55108*

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<sup>3</sup> E-mail: [octavio.rojas@inecol.edu.mx](mailto:octavio.rojas@inecol.edu.mx)

*Abstract.* Recent mitochondrial DNA (mtDNA) and morphological studies suggest that the Curve-billed Thrasher (*Toxostoma curvirostre*) consists of three historical groups, corresponding to the subspecies *curvirostre* and *palmeri* and a new taxon distributed in Oaxaca and Puebla. Previous mtDNA analysis did not include the subspecies *T. c. insularum* found on Tiburon Island (Sonora, Mexico). We collected new samples to address the distinctiveness of the three groups, to explore possible contact between the *curvirostre* and southern clades, to clarify the status of *T. c. insularum*, and to explore population histories of the major clades. Our mtDNA results confirm the existence of three major haplotype clades, which represent either two or three species depending on the species concept used. We interpret the occurrence of two mismatched haplotypes in Puebla and Oaxaca as recent gene flow. Haplotypes from Tiburon Island were intermixed within the *palmeri* clade, thereby failing to support the subspecies *T. c. insularum*. In contrast, principal components analysis of morphological data showed that *insularum* was distinct and, given the lack of mtDNA distinctiveness, suggests rapid phenotypic evolution on the island. The molecular data suggest that the widespread *curvirostre* clade has undergone recent population growth, whereas the other two clades appear to have been more stable.

*Key words:* gene tree, introgression, morphometric variation, phylogeography, species limits, subspecies, *Toxostoma curvirostre*.