

Known natal and wintering sites of a Bicknell's Thrush

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ABSTRACT. We banded a nestling Bicknell's Thrush (*Catharus bicknelli*) in southern Vermont and recaptured the same individual 19 months later on its wintering territory in the Dominican Republic. Such recaptures, where both the natal or breeding site and wintering location of a bird are known, are rare. This instance, the second documented for Bicknell's Thrush, highlights the strong links between the species' geographically restricted breeding and wintering habitats, both of which are increasingly threatened by human impacts.

SINOPSIS. Lugar natal y lugar en donde pasó el invierno un individuo de *Catharus bicknelli*

Anillamos a un Zorzal de Bicknell (*Catharus bicknelli*) en el sur de Vermont y recapturamos el individuo 19 meses más tarde en la República Dominicana. Tales recapturas de individuos invernales, previamente marcados en su lugar de nacimiento, son raras. Este es el segundo caso conocido para el Zorzal de Bicknell. Esto enfatiza la importancia del vínculo estrecho entre el lugar natal y el lugar en donde las aves pasan el invierno, ambas localidades amenazadas por el impacto negativo de humanos.

Key words: Bicknell's Thrush, *Catharus bicknelli*, Dominican Republic, migration, recapture

Banding efforts in the winter ranges of many Nearctic-Neotropical migratory passerines have yielded few recaptures of birds previously banded on their breeding grounds (Berthold 1993, Webster et al. 2002). Given the recent intensive banding efforts on the breeding grounds of Bicknell's Thrushes (*Catharus bicknelli*; Rimmer et al. 2005), similar efforts in the restricted wintering range of this species area might be expected to result in the recapture of individuals previously banded on the breeding grounds.

On 2 July 2002, we banded a nestling Bicknell's Thrush on Stratton Mountain, Vermont (43° 09'N, 72° 93'W). This bird was in a brood of four young that fledged on 13 July. On 29 December 2003, we recaptured this same individual in a mist net in the western Sierra de Neiba, Dominican Republic (18° 68'N, 71° 79'W), a straight-line distance of 2665 km from Stratton Mountain. This bird responded aggressively to conspecific playback of song and call notes, and was captured within 6 min of the start of playback. This bird was subsequently determined to be a female by analysis of a blood sample (JMT and CCR, unpubl. data).

Bicknell's Thrushes are known to establish discrete territories in the Dominican Republic by early November (Rimmer et al. 2001). Territorial boundaries are maintained on the wintering grounds by counter-vocalizing and agonistic displays. Based on the capture date and the aggressive response to playback (fast, swooping flights in the direction of the speaker and vocal counter-calling), this individual was likely an established winter resident in the Sierra de Neiba at the time of capture.

The Sierra de Neiba is a mountain range along the Haiti-Dominican Republic border. Suitable habitat for wintering Bicknell's Thrushes is restricted to small islands of high-elevation cloud forest along the western edge of the range, directly adjacent to a thoroughly deforested section of the range that extends into Haiti (Rimmer et al. 1998, 2003). Although this western edge of the Sierra de Neiba was formally given park status in 1995, ongoing human disturbance in the form of illegal logging and slash-and-burn agriculture is evident throughout the park. Bicknell's Thrushes occupy the remaining fragments of suitable forest habitat, and we captured 20 individuals in such fragments during winter surveys in 1997–1998, 2002–2003, and 2003–2004 (Rimmer et al. 1998, 2003, unpubl. data).

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The individual reported here is the second Bicknell's Thrush with known summer origins recaptured on its wintering grounds in the Dominican Republic. In December 1995, a third-year bird was captured in montane forest habitat of the Sierra de Bahoruco (Rimmer and McFarland 2001). This male had been banded 6 months earlier on its presumed breeding territory on Mt. Mansfield in Vermont, and was recaptured during each of the next two summers (Rimmer and McFarland 2001).

The probability of such north-south recaptures is greater in species that are both intensively studied and geographically range-restricted. Like Bicknell's Thrushes, Kirtland's Warblers (*Dendroica kirtlandii*) occupy highly fragmented and restricted habitats during both summer and winter (Mayfield 1992). Recent banding studies of this species in Michigan and the Bahamas have produced at least 10 north-south recaptures (D. Ewert, pers. comm.). In contrast, only one such north-south recapture has been reported for the broadly distributed Black-throated Blue Warbler (*Dendroica caerulescens*) on Hispaniola (Keith et al. 2003) and, despite intensive study on both its breeding and wintering grounds, none have been recorded in Jamaica (Sillert and Holmes 2002).

Although rare, recaptures of passerines from known breeding/natal sites and known wintering sites highlight the migratory connectivity and the importance of suitable habitat in both areas for Nearctic-Neotropical migrants. Recent analyses of deuterium in the feathers of migratory passerines (Rubenstein et al. 2002, Hobson 2004) and of molecular genetic markers (Smith et al. 2004) have helped further establish links between regional breeding and wintering populations.

Our recapture of a Bicknell's Thrush on its wintering grounds underscores the important conservation connection between breeding areas in Vermont and wintering areas in the Dominican Republic. Bicknell's Thrushes, ranked as the top conservation priority among Nearctic-Neotropical migrants in northeastern North America (Pashley 2000, Rich et al. 2004), are threatened by habitat loss and degradation at both ends of its migratory range. Continued study of the links between these two regions will help to inform and integrate conservation decisions for this vulnerable species.

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