

## NOTES

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### TWO BICKNELL'S THRUSHES BANDED DURING SPRING MIGRATION ON KEY LARGO: FIRST ACCEPTED RECORDS FOR FLORIDA

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The spring migration of Bicknell's Thrushes (*Catharus bicknelli*) between wintering areas in the eastern Caribbean and breeding areas in the northeastern United States is poorly known, and reliable records of this species to the south or west of South Carolina during spring migration are rare (Rimmer et al. 2001). Wallace (1939) reported eight records between North Carolina and Florida between 3 May and 18 May (two of these were from Florida). Cruickshank (1986) reported several sight records of Bicknell's Thrushes from Brevard County, on the east coast of Florida, between 6 May and 22 May. Two nocturnal flight calls of this species were recorded at Merritt Island National Wildlife Refuge on 6 May 1991 (Evans 1994). Stevenson and Anderson (1994) reported five tower-killed *bicknelli* specimens (unknown dates) from collisions with the WCTV tower near Tallahassee stored in collections at Florida State University and the Florida Museum of Natural History. Due to the difficulty of separating Bicknell's Thrush from Gray-cheeked Thrush (*Catharus minimus*) in the field (Lane and Jaramillo 2000) none of these sight, specimen, or acoustic records of Bicknell's Thrush in Florida has been accepted by the Florida Ornithological Society Records Committee (FOSRC).

We captured two *Catharus* thrushes, which we identified in-hand as Bicknell's Thrushes, during a 3-year study of stopover ecology in the hardwood hammocks of the Florida Keys (Lott et al. in press). Between 4 and 11 May 2002, consistently strong east winds (ranging from 28-36 km/h) were recorded at the NOAA weather station at Sombrero Key, approximately 56 km (35 mi) southeast of our banding site on Key Largo. On 8 and 11 May 2002, two *Catharus* thrushes were captured in mist-nets, banded, and identified in-hand by measurements and plumage characteristics as Bicknell's Thrushes using characteristics described by Ouellet (1993) and Pyle (1997). These identifications represent the first and second in-hand records for Bicknell's Thrush in Florida, and the most southwestern of all records for this species during spring migration.

The narrative descriptions of plumage and bare-part coloration that follow were made at the banding station while observing the birds immediately after capture and before reviewing photos or field guides, but with prior knowledge of identification issues germane to separating these species. Pyle (1997: p. 10, Fig. 9) describes a number of wing morphology measurements that are useful for separating the two species. These measurements quantify the distance between the tips of various pairs of primaries (flight feathers) on a folded wing (in the natural position) that are made with a transparent ruler. For example, p8-p1 = 24 indicates that the distance between the tip of the first primary and the eighth primary is 24 millimeters. A number of these measurements, combined with other characteristics of flight feather shape (e.g., whether or not a particular flight feather is emarginated), are diagnostic for separating these two species in the hand. Both birds were measured by S. Brand, who has several years of experience banding and measuring passerines. All measurements are in millimeters. Five photos of bird #1 and three photos of bird #2 were submitted to the FOSRC for review. Both records have been accepted as natural occurrences of this species in Florida (FOSRC

catalog numbers 04-547 and 04-548) primarily on the basis of in-hand measurements with plumage details providing only corroborating evidence (Jon Greenlaw, FOSRC, pers. comm.). We recommend that the wing formula measurements listed in Pyle (1997) for separating Bicknell's Thrush from Gray-cheeked Thrush be taken for all uncertain specimen records to review the past occurrence of this species in Florida.

*Bird #1-May 8, 2002.*—Mantle warm brown. Upper tail with a slight rufous tinge. Wings uniform with the back. No wing bars present. Flanks gray, contrasting with the back. Under-tail coverts white. Belly white. Breast buff with not well-defined spots. Crown and auriculars uniform with the mantle. No eye-ring present. Throat whitish. Legs purplish, feet darker than tarsus. Upper mandible black. Lower mandible with yellow at the base, extending to more than half the bill length. Measurements (mm): unflattened wing chord = 91, Tail = 67, p8-p6 = 4, p9-p6 = 0, p8-p7 = 0, p8-p1 = 24, p6 emarginated. Weight = 29.86 g.

*Bird #2-May 11, 2002.*—See photos 6-8. Mantle warm brown. Upper tail uniform with the back. Wings uniform with the back. No wing bars present. Flanks gray, contrasting with the back. Under tail coverts white. Belly white. Breast buff with not well defined spots. Chin and throat whitish. Legs purplish, feet darker than tarsus. Measurements (mm): unflattened wing chord = 93.5 (left and right wing); Tail = 67; p8-p6 = 5 (right), 5.1 (left); p9-p6 = 1; p8-p7 = 0; p8-p1 = 26.2 (right), 26.1 (left); p6 emarginated; exposed culmen = 12.6. Weight = 27.42 g.

#### IDENTIFICATION

Field identification of Bicknell's Thrush—specifically, separating this species from Gray-cheeked Thrush (*Catharus minimus*)—is controversial and often impossible using plumage characteristics alone (McClaren 1995, Smith 1996). Identification by plumage characteristics alone is not necessarily improved by having birds in the hand, as plumage characteristics may be overlapping between Bicknell's Thrush and Gray-cheeked Thrush. However, non-overlapping measurements and wing formula compiled in Ouellet (1993) and Pyle (1997) make in-hand separation of these species more straight-forward. Both Wilson and Watts (1997) and Rimmer et al. (2001) have used wing-chord measurements alone to separate these species during migration. We used a combination of plumage characteristics that were consistent with a Bicknell's Thrush identification (yet perhaps not diagnostic), and multiple measurements (which are diagnostic for this species) to support our identification of both birds as Bicknell's Thrushes.

Several characteristics on the first bird point toward Bicknell's Thrush. The wing chord of this bird was 2 to 2.4 mm shorter than any reported Gray-cheeked Thrush wing chord measurement (Pyle 1997, Ouellet 1993). Furthermore, the rounded wingtip (p8 = p7 and p9 = p6) is consistent with Bicknell's Thrush and unlike the more pointed wing of the Gray-cheeked Thrush (Pyle 1997). The measurements of p8-p1 and p8-p6 are smaller and not overlapping with Gray-cheeked Thrush (Pyle 1997:394). The extensive yellow on the lower bill was more than expected for Gray-cheeked Thrush (Pyle 1997, Ouellet 1993, Rimmer et al. 2001). The identification of the second bird was more difficult. The rounded wing shape (p8 = p7 and p9-p6 = 1 mm) fits Bicknell's Thrush. The amount of yellow on the lower bill suggests Bicknell's Thrush. The length of the primary projection as shown by the p8-p1 measurement also excludes Gray-cheeked Thrush (Pyle 1997: 394). All other measurements fit well with this species, but do not exclude the smallest possible Gray-cheeked Thrush.

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