

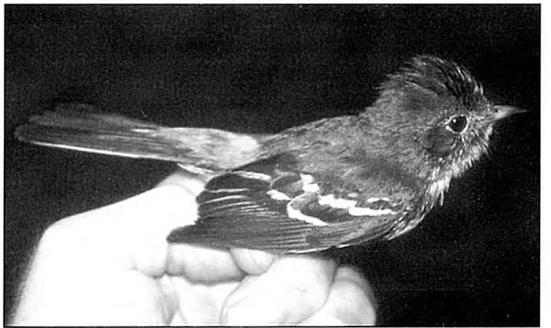
## Records of wintering Hudson's Black-tyrant *Knipolegus hudsoni* at the Estación Biológica del Beni, Bolivia

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The genus *Knipolegus* comprises 10 medium-sized tyrant flycatchers, of which three are known austral migrants<sup>12</sup>. The most marked migrations are undertaken by Hudson's Black-tyrant *K. hudsoni*, which breeds in chaco woodland in central Argentina (from Córdoba south to Río Negro, and south-west Buenos Aires province). It withdraws from Argentina, migrating northwards to Bolivia and extreme south-west Brazil, although surprisingly there are very few records from Paraguay<sup>7</sup>. Since the species is relatively little known and considered "near-threatened"<sup>4</sup>, details concerning its winter status in Bolivia are noteworthy, and add to the increasing body of information on austral migration in the Neotropics<sup>3</sup>.

In Bolivia, *K. hudsoni* has been noted throughout the dry season (which runs from mid-May to mid-September) in small numbers (e.g. daily maxima of 12<sup>9</sup>) from Beni and Santa Cruz departments<sup>1,10</sup>, with records also from La Paz (Caranavi), Chuquisaca and Pando<sup>1,11</sup>. Sightings in Santa Cruz show that the species occupies a range of habitats including chaco, disturbed cerrado, weedy pasture and even suburban gardens<sup>5,8</sup>. In Beni, it is reported to occur in trees and bushes at woodland and road edges<sup>9</sup>, which agrees with our observations made between July and September (1994 and 1995) at the Estación Biológica del Beni (EBB) (14°52'S 66°20'W, and 200 m above sea-level), in an area of forest islands (of 1-5 ha in size) within seasonally wet savanna. In common with Parker's<sup>9</sup> sightings (June 1989) and those of White *et al.*<sup>13</sup> at the EBB (July–August 1992), a small number of solitary birds (maximum of six) were noted on most days, with both males and female/immature males present. As is typical for this species<sup>8,9,12</sup>, exposed low- to mid-height perches were utilised to make short aerial sorties to catch insects either in the air, from foliage, or from the ground.

In 1994, four adult males and seven female/immature males (see photographs) were mist-netted and ringed: the totals in 1995 were five and eight birds respectively. Sexing the latter can be problematic. Males attain a "female-type" plumage following post-juvenile moult, and may



Hudson's Black-tyrants *Knipolegus hudsoni* (Jon Hornbuckle)  
top and middle: male (note small white flank patch)  
bottom: female/immature male

possibly breed in this plumage the following year<sup>6</sup>. Davis<sup>5</sup> acquired two males in this female-type plumage in Santa Cruz during September. Consequently, it was impossible to separate

immature males from females with certainty, despite all trapped birds being positively aged.

During our surveys, we formed the subjective impression that some *K. hudsoni* individuals were probably seasonally resident at particular sites. This was reinforced by a female/immature male caught in a 1.1 ha forest island on 26 August 1994, and retrapped five days later in the same forest island. Another bird netted in scrub on 29 July 1995 was recaptured at the same location eight days later. Of greater significance was an adult male retrapped on 5 August 1995 within the same 1.9 ha forest island in which it had been ringed the previous year on 28 July.

From this albeit limited data, we have demonstrated a degree of wintering site fidelity of an austral migrant both within one season and between years. Since *K. hudsoni* appears to be absent from Bolivia outside the dry season, we conclude that the individual returning in 1995 will have undertaken a minimum round-trip of 4,000 km since departing the EBB the previous year. Of the other tyrant flycatchers frequenting the EBB, one species, the Spectacled Tyrant *Hymenops perspicillatus*, exhibits a similar migratory pattern, although geographically it has a far larger breeding range<sup>12</sup>. It will be interesting to see whether we detect the returning male *K. hudsoni* again during our 1996 fieldwork.

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### References

- Armonía (1995) *Lista de las aves de Bolivia*. Santa Cruz de la Sierra: Armonía.
- Canevari, M., Canevari, P., Carrizo, G. R., Harris, G., Mata J. R. & Straneck, R. J. (1991) *Nueva guía de las aves Argentinas*. Buenos Aires: Fundación Acindar.
- Chesser, R. T. (1994) Migration in South America: an overview of the austral system. *Bird Conserv. Internatn.* 4: 91-107.
- Collar, N. J., Gonzaga, L. P., Krabbe, N., Madroño Nieto, A., Naranjo, L. G., Parker, T. A. & Wege, D. C. (1992) *Threatened birds of the Americas: the ICBP/IUCN Red Data Book*. Cambridge, U.K.: International Council for Bird Preservation.
- Davis, S. (1993) Seasonal status, relative abundance and behavior of the birds of Concepción, Departamento Santa Cruz, Bolivia. *Fieldiana Zool.* n.s. 71: 1-33.
- Fjeldså, J. & Krabbe, N. (1990) *Birds of the high Andes*. [Copenhagen:] Zoological Museum, University of Copenhagen, and Svenborg: Apollo Books.
- Hayes, F. E. (1995) *Status, distribution and biogeography of the birds of Paraguay*. Colorado Springs, Colorado: American Birding Association (Monogr. Field Ornithol. 1).
- Kratter, A. W., Gillett, T. S., Chesser, R. T., O'Neill, J. P., Parker, T. A. & Castillo, A. (1993) Avifauna of a chaco locality in Bolivia. *Wilson Bull.* 105: 114-141.
- Parker, T. A. (1989) *An avifaunal survey of the Chimane ecosystem program area of northern Bolivia, 17-26 June 1989*. Unpublished report (for Conservation International).
- Remsen, J. V. & Traylor, M. A. (1989) *An annotated list of the birds of Bolivia*. Vermillion, South Dakota: Buteo Books.
- Remsen, J. V., Traylor, M. A. & Parkes, K. C. (1987) Range extensions for some Bolivian birds, 3 (Tyrannidae to Passeridae). *Bull. Brit. Orn. Club* 107: 6-16.
- Ridgely, R. S. & Tudor, G. (1994) *The birds of South America*, 2. Austin: University of Texas Press.
- White, A. G., Brace, R. C., Duffield, G. E., Hesse, A., Payne, A. J. & Spick, S. (1993) Nottingham University Bolivia 1992: an ornithological survey of the Beni Biological Station. Unpublished report (for BirdLife International).

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