

## SHORT COMMUNICATIONS

*Wilson Bull.*, 99(4), 1987, pp. 688–690

**Distribution of *Microligea palustris* in Haiti.**—*Microligea palustris*, the Green-tailed Ground Warbler, which is endemic to Hispaniola, has been previously reported in Haiti only from the Massif de la Selle (Wetmore and Swales 1931; Bond 1980, 1984; AOU 1983) (Fig. 1). In this mountain range, it is found in dense shrub or disturbed patches of montane wet forest above 1700 m (Wetmore and Swales 1931, pers. obs). There have been no confirmed reports of *Microligea palustris* in the Massif de la Hotte in the west, or in other parts of Haiti, where similar habitat exists (Bond 1984). In the Dominican Republic, it is a habitat generalist, and it is found as low as sea level and in semiarid areas (Wetmore and Swales 1931, Bond 1980, Dod 1981).

On 14 August 1985, southeast of Bombardopolis (97 km northwest of Gonaives) on Morne Chien, at an elevation of 115 m, I observed 4–5 *M. palustris* and collected a single specimen. The specimen was deposited in the skeletal collection in the Carnegie Museum of Natural History (CMNH No. S-11063). The species was common in transitional scrub between desert thornscrub and the more mesic woodland around Bombardopolis. I observed 3–4 more *M. palustris* the following day at an elevation of 330 m, on the road from Bombardopolis to Mole St. Nicholas, in similar habitat. They were traveling in mixed species flocks with Black-crowned Palm-Tanagers (*Phaenicophilus palmarum*).

James Bond (1986) believes that the skeletal specimen may be a race related to *M. p. vasta* found in xeric habitats in the Dominican Republic. (He did not examine the specimen.) Although the skin is not available for confirmation of its racial affinities based on plumage criteria, a preliminary genotypic comparison of this individual to three specimens from southern Haiti suggests that the northern specimen shares alleles with its southern counterparts in 13 of 14 loci examined to date.

A taxonomic comparison of *Microligea* to other tanagers and warblers demonstrates that it clusters behaviorally and genetically with tanagers, and not with wood warblers (unpubl. data). Furthermore, as a tanager, its genetic variability is quite low ( $\bar{H}$  (observed) = 0.017 vs 0.109 for tanagers; McDonald, unpubl. data), suggesting that *Microligea* may have gone through a population bottleneck and has not yet recovered (Nei et al. 1975). An alternative explanation is that *Microligea* has recently invaded the northwest peninsula and is suffering low genetic variability due to the founder effect.

The occurrence of *M. palustris* in xeric and transitional habitats in the northwest peninsula of Haiti is interesting because of its ecological and biogeographical implications. Extensive collecting efforts by W. L. Abbott in the early part of the century (January–June, 1917) failed to turn up *Microligea* in this region (Wetmore and Swales 1931). If *Microligea* were a recent arrival in this region, it is unlikely it has emigrated from the mountains in southern Haiti. Morne Chien is an island of transitional scrub and mesic woodland in the middle of the northwest peninsular desert. *M. palustris* found in this area is not confined to mesic woodland, but is abundant in dry transitional scrub below the woodland, suggesting that (1) arid habitats may not form a barrier to dispersal of these forms and (2) that this form is adapted to xeric conditions. Therefore, if *Microligea* is a recent arrival, it most likely came from the lowland arid zones of the Dominican Republic to the east.

A more extensive genetic and morphological analysis of the northern group of specimens from the Dominican Republic and southern Haiti is needed: (1) to determine if *M. p. vasta* differs genetically from the Haitian specimens and (2) to determine if there are significant gene frequency differences between the northern and southern Haiti populations.

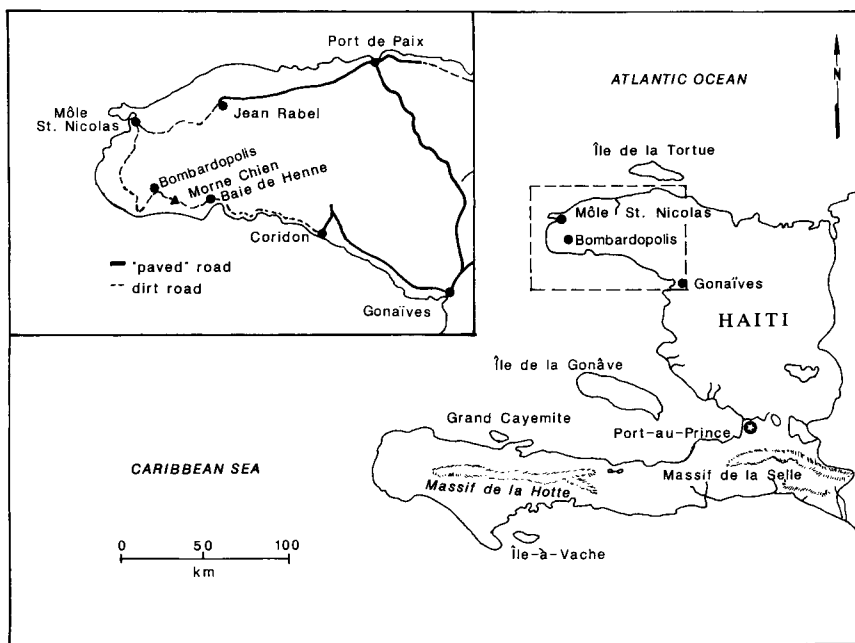


FIG. 1. Map of Hispaniola designating major landmarks in Haiti regarding distribution of *Microligea palustris*.

*M. palustris* is common where it is found (Dod 1981, unpubl. data); however, most montane habitats in Haiti are in danger of vanishing, and the species is protected in Haiti (Magny 1985). The "protected" status in Haiti is equivalent to the "vulnerable" status listed by IUCN/ICBP (King 1981), requiring special permits for collecting. Its presence in a xeric region of Haiti, with a low human population density, makes it potentially less vulnerable to extirpation there. Until more is known about the range of this species in Haiti, it should remain protected.

*Acknowledgments.*—I thank M. C. Coulter, J. E. Lovich, K. T. Scribner, and P. Humphrey for reviewing the manuscript. I am deeply grateful to J. Flores, G. Jerome, and O. Michael for their support during our trip through the northwest of Haiti. I am grateful to J. B. Coleman for the illustration, and to P. Davis and K. Knight for typing the manuscript. I am indebted to the Chapman Memorial Fund of the American Museum of Natural History, the Organization of American States, the Savannah River Ecology Laboratory, and the Sigma Xi Grants-in-Aid program for partial funding of this research. Manuscript preparation was supported by Contract DE-AC09-76SR00-819 between U.S.D.E. and The Institute of Ecology of the Univ. Georgia.

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*Wilson Bull.*, 99(4), 1987, pp. 690–692

**Expansion of the zone of hybridization of Northern Flickers in Alberta.**—Hybridization between the eastern yellow-shafted form of the Northern Flicker (*Colaptes auratus auratus*) and the western red-shafted form (*C. a. cafer*) has been well documented for the Great Plains of the United States (Short 1965, Anderson 1971, Moore and Buchanan 1985). In the Great Plains, the zone of hybridization has remained essentially stable over the past 100 years (Moore and Buchanan 1985); however, contact between yellow- and red-shafted birds farther north has been little studied (Rising 1983). Short (1965) examined only 45 specimens in his analysis of the distribution of parental and hybrid forms of flickers in Saskatchewan and Alberta, Canada. Here we report on the examination of 98 Northern Flicker skins collected during the breeding season (1 May to 31 July) between 1891 and 1984 in Alberta. A maximum of 10 of these skins were included in the Short (1965) analysis; therefore at least 88 provide additional data on the delineation and temporal stability of the hybrid zone in Alberta.

Specimens were divided into two groups: (1) those collected prior to 1960 (1891–1957) and (2) those collected after 1960 (1961–1984). These groups facilitate comparison with Short's (1965) work and allow us to examine changes in the hybrid zone over time. Following Short (1965), we scored 6 plumage color characters for each specimen on a scale of 0 (pure *auratus*-like) to 4 (pure *cafer*-like). The characters examined, with parental states given in parentheses in the order *auratus-cafer* were crown color (gray-brown), ear covert color (tan-gray), throat color (tan-gray), nuchal patch (present-absent), shaft color (yellow-salmon) and malar color (males only, black-red). Scores of 1–3 represent proportionally intermediate states. Scores were summed across the 6 plumage characters to yield a hybrid index score. All scores from female specimens were converted to a scale of 24 to make them comparable to those of males. These scores range from 0 (*auratus*-like) to 24 (*cafer*-like). Specimens were grouped according to collection sites, and scores were then plotted on a map of Alberta (Figs. 1A and 1B).