

FIRST REPORTED NEST OF THE WHITE-EARED GROUND-SPARROW (*MELOZONE LEUCOTIS*)

KATHY WINNETT-MURRAY

The White-eared Ground-Sparrow (*Melozone leucotis*) occurs in the Pacific slope highlands of Central America from southeastern Chiapas, Mexico, through El Salvador, north-central Nicaragua, and central Costa Rica (Ridgway 1901, Miller et al. 1957, Slud 1964, AOU 1983). I report here my discovery of a White-eared Ground-Sparrow that was incubating two eggs at Monteverde, Puntarenas Province, Costa Rica, apparently the first published nest record for the species. There the sparrow is a common resident found at or near ground level in the understory of regenerating forest, forest edges, and the tangled brush of overgrown gardens and clearings, from 1,300 to 1,500 m elevation (pre-montane and lower montane moist and wet forest life zones; Holdridge 1967).

The nest was in a grove of banana trees near a wooded windbreak on a dairy farm at 1,400 m elevation (Fig. 1). The bowl-shaped cup had inside and outside diameters of 7 and 10 cm, respectively, and filled a 10-cm deep depression at the base of a small embankment. The entrance, partly obscured by foliage, measured 11 × 11 cm. The nest was about 3 cm thick at the base and was composed of loosely woven stem fibrils, dry grass, and thin twigs. The nest material was more tightly woven on the inside, which created a soft lining. Longer pieces of nest material extended up the sides, partly covering the top of the nest. A nest of this ground-sparrow that was found by E. H. Skinner in Topachula, Chiapas, Mexico, on 19 May 1898 was also lined with plant fibers, including vines and plantain leaf strips, but was 0.6 m high in an "orange bush" (R. C. Banks and R. Browning, pers. comm.).

When I found the nest on 30 April 1983, an adult was incubating two eggs (weighing 4.1 and 4.0 g, determined with a 10-g Pesola spring scale). They were white, with cinnamon speckles, as are two eggs (measuring 27.2 × 18.7 and 26.5 × 18.8 mm) that were collected from the Chiapas nest (R. C. Banks and R. Browning, pers. comm.; U.S. National Museum No. 32519). The eggs of other *Melozone* species are white (L. Kiff, pers. comm.). I watched the nest for a total of seven hours over four days between 2 and 10 May, and I believe that only one parent incubated. A second adult, however, was usually present in the immediate vicinity when I checked the nest contents.

Two chicks, weighing 4.0 g each, hatched on 12 May. One chick disappeared on 13 May. Both adults fed the remaining chick, and one parent brooded it for part of each day until at least 20 May. The remaining chick disappeared on the afternoon of 23 May. It weighed 35 g on that morning, and its primaries were about three-quarters emerged from their sheaths. I do not know whether the chick fledged at 11 days of age or if it was preyed upon. The nest was not used again in 1983.

I calculated the chick's growth rate, following Ricklefs (1967). The growth constant ($k = 0.465$) and the time interval (9.5 days) for growth from 10–90% of the asymptote (37.1 g) are similar to those of other neotropical emberizines (Ricklefs 1976).

The nesting habits of the White-eared Ground-Sparrow appear to resemble those of the Chiapas Sparrow (*M. biarcuatum*), which shares the same range (Cherrie 1892, Slud 1964), but generally occurs at lower elevations (down to



FIGURE 1. An incubating White-eared Ground-Sparrow (*Melozone leucotis*).

about 900 m) than does *M. leucotis* in Costa Rica (Carriker 1910, Slud 1964).

These observations were made incidental to other research supported by the Frank M. Chapman Memorial Fund of the American Museum of Natural History, the Organization for Tropical Studies, and the University of Florida. I thank R. C. Banks and R. Browning for kindly providing information on the egg set from Chiapas, and L. Kiff, M. Lawton, and G. Murray for suggestions on the manuscript.

LITERATURE CITED

- AMERICAN ORNITHOLOGISTS' UNION. 1983. Check-list of North American Birds. 6th ed. American Ornithologists Union [Washington, DC].
- CARRIKER, M. A., JR. 1910. An annotated list of the birds of Costa Rica including Cocos Island. *Ann. Carnegie Mus.* 6:905–906.
- CHERRIE, G. K. 1892. A preliminary list of the birds of San José, Costa Rica. *Auk* 9:248–249.
- HOLDRIDGE, L. R. 1967. Life Zone Ecology. Tropical Science Center, San José, Costa Rica.
- MILLER, A. H., H. FRIEDMANN, L. GRISCOM, AND R. T. MOORE. 1957. Distributional checklist of the birds of Mexico. Part II. Pacific Coast Avifauna 33.
- RICKLEFS, R. E. 1967. A graphical method of fitting equations to growth curves. *Ecology* 48:978–983.
- RICKLEFS, R. E. 1976. Growth rates of birds in the humid New World tropics. *Ibis* 118:179–207.
- RIDGWAY, R. 1901. The birds of North and Middle America. Part I. Fringillidae. *U.S. Natl. Mus. Bull.* 50:441–443.
- SLUD, P. 1964. The Birds of Costa Rica. *Bull. Am. Mus. Nat. Hist.* 128.

Department of Zoology, University of Florida, Gainesville, Florida 32611. Received 24 November 1984. Final acceptance 2 May 1985.