SHORT COMMUNICATIONS

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OBSERVATIONS ON THE NESTING OF THE OLIVE FINCH (LYSURUS CASTANEICEPS) IN EASTERN ECUADOR

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Observaciones sobre la anidación del Pinzón Oliváceo (Lysurus castaneiceps) en el este del Ecuador.

Key words: Egg, nest, east Andean foothills, nest location, Olive Finch, Lysurus castaneiceps.

The Olive Finch (Lysurus castaneiceps) ranges from Colombia to eastern Peru and is generally rare and local throughout its range (Ridgely & Tudor 1989). It favors narrow, mossy ravines from 700 to 2200 m (Rigely & Tudor 1989, Ridgely & Greenfield 2001), but little is known of its habits in any part of its range. Sclater & Salvin (1879) described the eggs, but over 100 years passed before the nest was described by Schulenberg & Gill (1987) from southeastern Ecuador. Rasmussen et al. (1996) also give a brief account of a nest in southeastern Ecuador, but little else has been published on the breeding of this enigmatic species. Here we provide brief observations on a dozen nests found in the foothills of the northeastern Ecuadorian Andes.

We observed the nests of Olive Finch from 1100 to 1200 m elevation near a campsite (00°22S, 78°08W), within the community-owned reserve, Mushullacta, Napo Province, Ecuador, adjacent to the Napo-Galeras sector of the Gran Sumaco National

Park. From 30 March to 10 April 2005, we found nests by systematically searching along streams in the area, along which we commonly observed Olive Finches. Along these streams, we found 12 nests, one under construction, two with incubation underway, one with a young nestling (and an infertile egg), and eight which were empty but appeared freshly built. Five of the latter showed obvious signs of depredation (i.e., holes torn in the side or adult feathers below). Despite also searching extensively away from streams, we found no other nests. Depending on the accessibility of each nest, we recorded various measurements and observations. All measurements below, therefore, are given with specific sample sizes.

All nests were large green balls built of moss, rootlets, and live fern leaves. They had a slightly hooded side entrance which opened into a chamber lined with green fern leaves mixed with a few rootlets and dry strips of *Asplundia* sp. (Cyclanthaceae) leaves. This

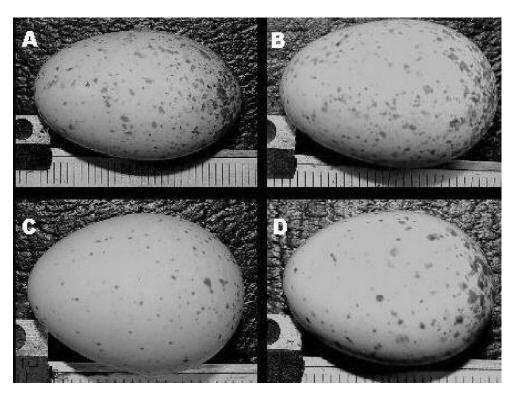


FIG 1. Eggs of Olive Finch (*Lysurus castaneiceps*) from Napo Province, eastern Ecuador. A and B are infertile eggs, C and D are fertile eggs.

inner lining was roughly 1.5 to 2 cm thick below the egg cup and 0.5 to 1 cm thick across the roof of the nest chamber. The bottom of the chamber held a thick cup built of dry strips of *Asplundia* leaves alternately layered with a few dark rootlets. We dissected and measured (cm) two nests: outer width, 22 and 20; outer depth (front to back), 18 and 17; outer height, 23 and 22; protrusion of overhang above entrance, 4 and 4; entrance width, 6 and 6; entrance height, 4 and 4; egg cup depth, 4.5 and 4.5; egg cup width, 6.5 and 6; inner chamber height, 11.5 and 10; inner chamber width, 8.5 and 9.

Three of 12 nests were built against rock faces, always with a small clump of plants supporting the base. The remaining nine nests were all built out away from solid substrates,

six built into vine tangles and three supported by one or several thin branches. Nests ranged in height from 1.5 to 3.1 m above the stream $(n = 10, mean \pm SD = 2.1 \pm 0.6 m)$. For five nests supported by multiple vines or branches, the average number of support branches was 4.8 (range = 3 to 8), with most or all of them passing through the outer mossy walls of the nest. Supporting branches were usually around 1 cm thick. While all nests were along streams, only three were directly over moving water. At each nest we measured the orientation of the stream flow, as well as that of the nest entrance. Unlike other nests found along streams in the area [e.g., Spotted Barbtail, (Premnoplex brunnescens); Greeney unpubl.], we observed no pattern of nest orientation either in relation to compass direction or stream flow.

We examined seven eggs, four from two clutches being actively incubated (and developing), two in a partially destroyed and abandoned nest (eggs without yolks), and one infertile egg in a nest with a partially grown nestling. All eggs were white with varying amounts of red-brown speckling, sometimes forming a denser cap at the larger end (Fig. 1). Average measurments of all seven eggs (± SD) were 26.3 \pm 2.6 by 18.0 \pm 0.5 mm (range = 29.6-22.9 by 17.6-18.6 mm). The three infertile eggs were quite different in shape from the four developing eggs, however, being longer (mean 28.9 vs 24.4 mm) and slightly wider (mean 18.5 vs 17.7 mm) (Fig. 1a, b). Average measurements for the four normally developing eggs (Fig. 1c, d) were 24.4 \pm 1.1 by 17.7 \pm 0.1 mm, which closely matches the sizes given for eggs collected by Schulenberg & Gill (1987) in southeastern Ecuador. For additional photographs of nests, eggs, and nestlings of Olive Finch, see Greeney (2005).

The construction of the nests observed here generally agrees with the single, well described nest from southern Ecuador (Schulenberg & Gill 1987). The nest mentioned by Rasmussen et al. (1996), appears to have been situated in hanging vegetation, away from the actual rock face. Only one quarter of the nests observed here were placed on the sides of rock faces. The eggs described here, white with red-brown markings, match those described by Sclater & Salvin (1879) and that described by L. Kiff in Schulenberg & Gill (1987). As the all white eggs described by Schulenberg & Gill (1987) undoubtedly also belong to this species, it appears there may be fairly significant variation in egg coloration.

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REFERENCES

Greeney, H. F. 2005. Lysurus castaneiceps, Olive Finch. In Greeney, H. F., R. C. Dobbs, & P. R. Martin (eds.). Natural history of Ecuador's mainland avifauna. http://depts.washington.edu/nhrg/nhema.html (Accessed 15 October 2005).

Rasmussen, J. F., C. Rahbek, B. O. Poulsen, M. K. Poulsen, & H. Bloch. 1996. Distributional records and natural history notes on threatened and little known birds of southern Ecuador. Bull. Br. Ornithol. Club 116: 26–46.

Ridgely, R. S., & P. S. Greenfield. 2001 The birds of Ecuador. Volume 1. Cornell Univ. Press, Ithaca, New York.

Ridgely, R. S., & G. Tudor. 1989. The birds of South America. Volume 1. Univ. of Texas Press, Austin, Texas.

Schulenberg, T. S., & F. B. Gill. 1987. First description of the nest of the Olive Finch, *Lysurus castaneiceps*. Condor 89: 673–74.

Sclater, P. L., & O. Salvin. 1879. On the birds collected by the late Mr. T. K. Solomon in the state of Antioquia, United States of Colombia. Proc. Zool. Soc. London 1879: 486–550.

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