

THE NEST AND EGGS OF BLACK-CAPPED HEMISPINGUS (*HEMISPINGUS ATROPILEUS*) IN EASTERN ECUADOR

EL NIDO Y HUEVOS DE *HEMISPINGUS ATROPILEUS* EN EL ESTE DE ECUADOR

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The genus *Hemispingus* contains *ca.* 12 species of medium-sized, warbler-like tanagers (Remsen *et al.* 2012). The genus is distributed throughout the Andes, generally at mid-to high elevations (Hilty & Brown, 1986; Ridgely & Greenfield, 2001; Isler & Isler, 1987), and the breeding biology of most species is extremely poorly known (Isler & Isler, 1987). The Black-capped Hemispingus (*Hemispingus atropileus*) inhabits the understory of cloud-forests from 1800 - 3600 m, in the Andes from Venezuela to Bolivia. While few data are available for the Black-capped Hemispingus, Tackzanowski (1884) provides a description of a nest and eggs from Peru (as *Chloropsingus auricularis*). Apart from several reports of dependent fledglings from eastern Ecuador (Greeney *et al.*, 2010a, b), however, little else is known of its reproduction. Here, from northeastern Ecuador, we provide the first modern description and illustration of the nest and eggs of Black-capped Hemispingus.

We studied a single nest of this species found on the Guacamayos Ridge just south of the Yanayacu Biological Station (00°36' S, 77°53' W) in the Napo Province of northeastern Ecuador. On the morning of 16 December 2009 we flushed an adult from a nest containing two eggs. Both were pale blue with lavender and cinnamon flecking and speckling, heaviest at the larger end (Figure 1). They measured 19.4 x 15.3 and 19.4 x 15.8 mm. When we returned on 18 December we again flushed an adult from the nest which still contained two eggs. The nest was 2 m above the ground and supported by the dense whorls of leaf petioles from two stems of *Chusquea* cf. *scandens* bamboo at a point where they crossed in the form of an X. The nest was in an area of broken-canopy, primary forest along a ridgeline at 2500 m and was surrounded by a dense understory dominated by *Chusquea* bamboo. The area above the nest was relatively free of vegetation, with only a few sparse stems of bamboo providing shelter.

In overall form, the nest was remarkably camouflaged and appeared as nothing more than another of the many clusters of dead foliage trapped in similar situations within the bamboo. The nest was an open cup of bamboo leaves and petioles loosely woven together with rootlets and small vines (Figure 1). The nest rested on top of the supporting petioles, with only a few of them woven into the nest. The inner cup was sparsely lined with thin, stiff, grass-like fibers. Outside, the nest measured 15.5 cm wide by 9.5 cm tall. The inner cup measured 4 cm wide by 5 cm deep.

Taczanowski (1884) describes eggs of Black-capped Hemispingus from Peru as having a pale rose ground color whereas the eggs in our nest were distinctly bluish. It is possible that this reflects the fact that Taczanowski was describing the eggs from already blown specimens and the bluish cast was not readily apparent. Taczanowski (1884) does not specify his sample size but implies he observed only one nest. He uses the plural when discussing eggs, but does not discuss clutch size or specify the number measured. Nonetheless, gives measurements of 20.0-20.2 by 15.4-16.4 mm, closely matching the eggs described herein. The nest measurements provided (outside 9 cm wide by 5 cm tall, inside 6.5 cm wide by 3.5 cm deep) are considerably smaller than the nest we measured. This may be, however, simply an artifact of the measurements taken by Taczanowski being made on an already collected and transported nest. The original description provided by Taczanowski is as follows: “*Le nid est construit de grosses feuilles sèches des graminées et garni intérieurement de tiges très fines des mêmes herbes.*” Thus, with regard to composition, both nests appear to be nearly identical; both composed of dry monocot leaves and lined with fine fibers. Taczanowski (1884) does not mention details of nesting site or substrate, again presumably because he is describing a collected nest outside of the field.

Most authors consider Black-capped Hemispingus a bird of montane bamboo thickets (*Chusquea* spp.) (Isler & Isler, 1987; Hilty & Brown, 1986; Ridgely & Greenfield, 2001; Hilty, 2003), and our observations in the study area concur with this. Of considerable interest is that Black-capped Hemispingus now joins a growing list of *Chusquea* bamboo-inhabiting species to nest during drier months in eastern Ecuador. These include the following: Maroon-chested Ground-Dove, *Claravis mondetoura* (Greeney *et al.*, 2007); Long-tailed Antbird, *Drymophila caudata* (Gelis & Greeney, 2006), Chestnut-crowned Antpitta, *Grallaria ruficapilla* (Martin & Greeney, 2006); Chestnut-naped Antpitta, *Grallaria nuchalis* (Juiña *et al.*, 2009); Slate-crowned Antpitta, *Grallaricula nana* (Greeney & Sornoza, 2005; Greeney & Miller, 2008; Greeney *et al.*, 2010a); Blackish Tapaculo, *Scytalopus latrans* (Greeney *et al.*, 2005a; Greeney *et al.*, 2010a); Chusquea Tapaculo, *Scytalopus parkeri* (Greeney & Rombough, 2005; Greeney *et al.*, 2010a); Rufous-crowned Tody-Flycatcher, *Poecilatriccus ruficeps* (Greeney *et al.*, 2005b); Black-crested Warbler, *Basileuterus nigrocristatus* (Greeney *et al.*, 2005c; Greeney *et al.*, 2010a, b); and Yellow-billed Cacique, *Amblycercus holosericeus* (Greeney *et al.*, 2008). While sample sizes are sorely needed for these, and other, *Chusquea*-associated species, we feel this record for Black-capped Hemispingus supports this seasonality-habitat correlation pointed out most recently by Greeney *et al.* (2008). Whether this is a reflection of preferences for these species to nest during periods of slowed growth rates of *Chusquea* during the drier months (see discussions in citations above), or is, perhaps a reflection increased abundances of the vast numbers of larval lepidoperans specializing on *Chusquea* (Miller & Dyer, 2008; Greeney & Warren, 2009; Greeney *et al.*, 2009a, b; Miller 2009a, b; Pycz *et al.*, 2010), remains to be tested.

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Figure 1. Nest and eggs of Black-capped Hemispingus *Hemispingus atropileus* on the Guacamayos Ridge, Napo Province, Ecuador, 18 December 2009. Photo Rudy Gelis.

Figura 1. Nido y huevos de *Hemispingus atropileus* en la cordillera Guacamayos, Provincia Napo, Ecuador, 18 de diciembre de 2009. Foto Rudy Gelis