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First description of the nest and eggs of the Bornean wren-babbler, *Ptilocichla leucogrammica* (Aves: Timaliidae)

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Abstract. I describe the nest and eggs of the Bornean wren-babbler (*Ptilocichla leucogrammica*) from Kalimantan, Indonesian Borneo, and compare them to those of the most closely related species, striated wren-babbler (*P. mindanensis*). The nest was found on 14 November 2012 in hilly primary dipterocarp forest 765 m in elevation at the headwaters of the Mahakam River in East Kalimantan. It consisted of a roughly formed bowl and partial roof constructed of dried leaves and was placed 0.8 m high in a small rattan palm (Arecaceae). It contained two milky-white eggs. The nest and eggs were quite similar to those of *P. mindanensis*.

Key words. Bornean wren-babbler, *Ptilocichla leucogrammica*, Timaliidae, babbler, nest, eggs

INTRODUCTION

The genus *Ptilocichla* consists of three species of primarily ground-dwelling babblers (Timaliidae) from Borneo and the Philippines. The Bornean wren-babbler (*P. leucogrammica*) is endemic to Borneo and the sole representative of the genus on the island. It is known mainly as a lowland primary forest bird (Smythies, 1999; Sheldon et al., 2001), but has been found at lower densities in logged forests as well (Lambert, 1992), although in a recent study it appeared to be absent from logged plots (Edwards et al., 2013). Little is known about the ecology of this species, and information on its breeding is restricted to gonad data from specimens: Thompson (1966) reported two specimens of Bornean wren-babbler collected in Sabah, Malaysian Borneo, in July and August 1963, with eggs in the oviduct; and Sheldon et al. (2001) reported a male with enlarged testes from Sabah in October 1982.

For the other two species in this genus, both endemic to the Philippines, a single nest of the striated wren-babbler (*P. mindanensis*) of Mindanao and the central Philippines has been described (Robson & Davidson, 1996), and the breeding season is thought to extend from January to August (Collar & Robson, 2007). The nest of the falcated wren-babbler (*P. falcata*) of Palawan remains unknown, but two specimens collected in October and November had weakly developed gonads (Collar & Robson, 2007).

In this paper, I describe a nest of the Bornean wren-babbler found with eggs in November 2012. Because nest types are expected to be similar among closely related species (Sheldon & Winkler, 1999), I compare the nest and eggs to those of the striated wren-babbler.

NEST DESCRIPTION

On 14 November 2012 at 1800 hours I discovered a Bornean wren-babbler nest near the headwaters of the Mahakam River in East Kalimantan, Indonesian Borneo (0.82438°N, 114.14355°E), at 765 m in elevation in hilly primary dipterocarp forest. An adult flushed from the nest at a distance of about 5 m and slowly circled the area for 10–15 minutes, quietly but with great interest. I had mist-netted and photographed an adult of the same species 80 m away from the nest site two days prior to discovering the nest.

The nest contained two eggs and was located 0.8 m above the ground in the main fork of a 2.25 m rattan palm (Arecaceae; Fig. 1). The nest cup was thick, untidy, and made of medium-sized (5 × 10 cm) dry leaves, which also formed walls surrounding 75% of the nest circumference and included a partial roof of 3–4 large leaves (Fig. 2) such that when viewed from above, approximately 80% of the nest cup was obscured. The outer diameter of the circular cup was 9 cm, the inner diameter about 4.5 cm, and the depth 3.25 cm. A thin layer of small twigs and rootlets lined the inside of the cup bottom.

Two short sub-elliptical eggs (Fig. 3) about 20 × 14 mm were present in the nest at the time of discovery. No calipers were available, but a measuring tape was used to estimate length and width. The eggs were predominantly a nearly transparent milky-white color, but were more opaque and brighter white near the larger end.

The area surrounding the nest consisted entirely of primary forest, and the nearest areas of human disturbance to the forest were small shifting agriculture plots lining the banks of the Mahakam River about 4 km to the south. Slopes of

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about 30° dominated the hilly landscape, but the nest was located in a nearly flat area about 80 m in diameter. A small stream, 2 m across when exiting a ravine 100 m above the site, spread out into a damp rocky area 15 m wide at about 3 m from the nest. The rattan palm that contained the nest was in a small ditch carrying a trickle of water from the stream adjacent to this area. The nest was below a large tree (100 cm diameter), and the understory was relatively open (Fig. 4). About 40 m away, an old tree-fall area was covered with thick shrubs.

DISCUSSION

The mid-November timing of this nest extends the previously known breeding season—Thompson's (1966) July and August records and the Sheldon et al. (2001) October record, all from Sabah—into November. Specimens with breeding data are so few that it is difficult to say whether the breeding period commonly extends through this time of year. Because most Bornean forest bird reproduction occurs from about February–May (Smythies, 1999; Sheldon et al., 2001), the Bornean wren-babbler appears to have an unusually late breeding season.

Within the genus *Ptilocichla*, the striated wren-babbler, which is known to breed from January to August, also appears to nest about 1 m above the ground in understory palms (Robson & Davidson, 1996). The one described nest was a semi-domed cup similar to the nest described in this paper, and it also was composed of dead leaves and lined with fine roots and twigs (Robson & Davidson, 1996). The

Fig. 1. Nest of the Bornean wren-babbler described in the text, from hill forest at 765 m elevation in East Kalimantan, Indonesian Borneo, on 14 November 2012. All photos by the author.

Fig. 2. Side view of the nest bowl of the same *Ptilocichla* nest.

Fig. 3. Eggs and nest cup of the Bornean wren-babbler.

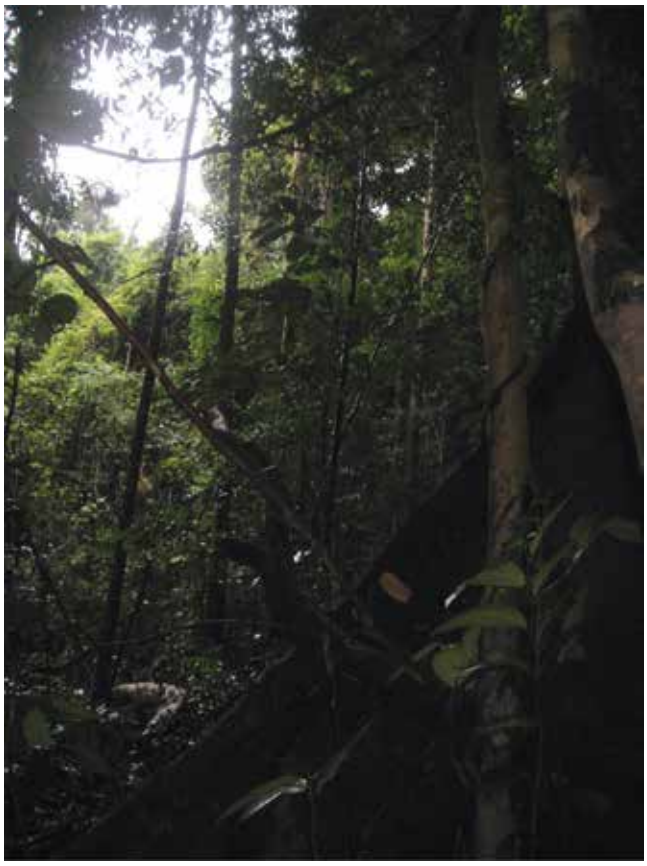

Fig. 4. A view of the forest surrounding the *Ptilocichla* nest location. An old tree-fall caused an open canopy and dense undergrowth in the background.

single striated wren-babbler egg was bluish-tinged white with some slightly darker lines, blotches, and purplish clouds (Robson & Davidson, 1996). In this respect it differed from the Bornean wren-babbler's egg.

Recent molecular phylogenetic study indicates that *Ptilocichla* falls within Pellorneinae, one of the three core babbler sub-clades, and is most closely related to the genera *Jabouilleia* and *Rimator*, as well as the striped wren-babbler (*Napothera epilepidota*), a member of an apparently polyphyletic genus (Moyle et al., 2012). Among these three genera (six species), nests have been described for two species, both of which nest on the ground or among boulders or moss banks (Collar & Robson, 2007). The nests of several other mainland Southeast Asia *Jabouilleia* and *Rimator* species await description. The construction and placement of this new Bornean wren-babbler nest is very similar to the nest of its closest relatives within this diverse and still poorly-known group.

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