

## Nest of the Long-tailed Antbird *Drymophila caudata*

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Un nido de *Drymophila caudata* fue encontrado en sotobosque dominado por *Chusquea* en una selva montana en el este de Ecuador. Ambos adultos llevaban provisiones a los pichones y el macho realizó el 61% de las visitas al nido. Todos los ítems alimentares provistos a los pichones parecieron ser pequeños invertebrados. Los pichones fueron atacados por un individuo de *Thryotorus euophrys*, y así obligados a saltar del nido.

Long-tailed Antbird *Drymophila caudata* is a common yet poorly studied inhabitant of montane evergreen forest, from Venezuela to Bolivia and is found in Ecuador most readily at elevations of 1,200–2,700 m<sup>2.5</sup>. *D. caudata* is one of two thamnophilids (Bicoloured Antvireo *Dysithamnus occidentalis* being the other) that occurs at our study site (see below). Though reportedly not as strongly associated with bamboo as its congeners<sup>9</sup>, in Ecuador we have found it almost exclusively in dense stands of *Chusquea* bamboo. It is persistently vocal, seemingly year-round, often singing or giving short contact notes whilst in the company of 1–2 conspecifics. Long-tailed Antbirds are particularly easy to see at our study site as they move rather methodically through dense bamboo, with little or no regard to the observer. They occasionally reveal themselves in the open as they peer around and glean insects, insect larvae and other arthropods from bamboo leaves, especially near the plant nodes. They seem to become more active in the presence of bamboo-associated, mixed-species flocks (e.g. Rufous-crowned Tody-tyrant *Poecilatriccus ruficeps*, Black-eared Hemispingus *Hemispingus melanotis*, Plushcap *Catamblyrhynchus diadema*), although frequently they are independent of such flocks (pers. obs.). To date, its breeding biology has not been described. Here we present a description of a nest with two nestlings, provide details on nestling care and document an unusual avian predator at the nest.

### Study area and methods

We discovered a nest of Long-tailed Antbird with two nestlings on 5 August 2004, at 10h30, at 2,000 m in the private reserve of Cabañas San Isidro, adjacent to Yanayacu Biological Station and Center for Creative Studies (00°35'S 77°54'W). The 1,700-ha reserve comprises a mosaic of primary and secondary growth in humid, montane evergreen forest c.3 km west of Cosanga, prov. Napo, north-east Ecuador. The nest region was a gentle slope at the border between primary forest and an adjacent (c.30 m distant) abandoned pasture. Understorey was dominated by bamboo (*Chusquea*, Gramineae) and the 20-m canopy by *Erythrina* (Leguminosae)

and *Ficus* (Moraceae). We located the nest by following a pair that foraged rapidly, carrying food and made several quick flights toward the nest. The nest contained two nestlings that we measured and photographed. We placed a video camera on a tripod c.4 m from the nest and videotaped it on three different days (5–6 and 8 August) for a total of 19.6 hours. The adults appeared unaffected by the presence of the camera and tripod. The nest was empty on the final day at 13h30. Video-tapes were transcribed at a later date.

### Results

#### Nest description

The cup nest was suspended like other *Drymophila*<sup>9</sup>, c.2 m above ground between the leafy branches of a single node of a 5-m long, strongly arched bamboo. The thin layer of live, green moss attached to the outside, plus a few skeletonised broad dicot leaves gave the nest a remarkable resemblance to a clump of fallen debris. The neatly formed cup and inner lining was composed primarily of thin (1 mm), pale brown leaf sheaths of bamboo. The nest was 8.6 cm tall (not including a 6.1 cm length of moss that dangled from the bottom) and the outside rim was 7.2 cm wide. Inside, the cup was 5.8 cm deep and 5.1 cm wide.

#### Nestlings

On the day of discovery, the nestlings were 5 cm long (tip of bill to tip of tail pins, neck unstretched) and had a yellow gape and slightly opened eyes. The pins of the remiges appeared to have just broken their sheaths whilst the pins of the rectrices had not emerged. Contour feathers were already well formed. On the final day of video-taping the nestlings had fully opened eyes, well-developed remiges and the plumage closely resembled that of the adult female.

#### Nestling care

Feeding a nestling was a brief event (usually c.5 seconds), wherein the adult landed on the nest rim, passed a single prey item directly from its bill to the gape of a nestling, and quickly flew from view. The

adults did not brood the nestlings. They always visited the nest with food. Visits were frequent throughout the time we video-taped the nest. One- to eight-minute intervals between visits were common and the longest period without a feeding was 22 minutes. Faecal sacs ( $n=58$ ) were taken from the nest by both sexes. Sixty-one percent of the 324 visits was made by the male. During 19.6 hours, the adults fed the nestlings at a rate of 8.26 meals per nestling-hour. Prey brought to the nestlings was usually too small to identify, but most items were apparently small invertebrates. We identified 35 prey items: 20 lepidopteran larvae (1–2 cm), 11 adult lepidopterans (2.0–3.5 cm), a small spider (Arachnida), a small beetle (Coleoptera), a small adult fly (Diptera), and a 3-cm stick insect (Phasmida).

#### Additional observation

A Plain-tailed Wren *Thryothorus euophrys*, another montane bamboo specialist<sup>2</sup>, landed on the rim of the nest at 13h00 on the final day of observation (8 August); the nestlings immediately began to beg and the wren made 11 rapid, forceful, stabbing thrusts at the nestlings with its long, sharp bill. The nestlings' first reaction and line of defence was to sink into the nest. The wren continued its attack and after 10 seconds both nestlings jumped from the nest.

#### Discussion

The observed nest with older nestlings in early August, in combination with dependent fledglings in the area in November and December (HFG unpubl.), suggests Long-tailed Antbird breeds at least from the latter part of the wet season (June) through the early dry season (October) in the Andes of north-east Ecuador. This follows the pattern of other bamboo specialists in the area, which are also known to breed in the drier months<sup>1,3</sup>. In Brazil, Scaled Antbird *D. squamata* constructs a basket or cup nest similar in size and location to Long-tailed Antbird<sup>4</sup>. Cup nests are also mentioned specifically for Bertoni's Antbird *D. rubricollis* and Dusky-tailed Antbird *D. malura*<sup>9</sup>. Although we are uncertain of nestling age in our study, their well-developed plumage and open eyes, plus their ability to leave the nest in the face of danger, suggest they were near fledging. Like some other antbirds<sup>4,6,8</sup>, the male Long-tailed Antbird fed nestlings more frequently than the female. The high proportion of Lepidoptera, as larvae and adults, fed to nestlings may indicate that Long-tailed Antbird is an important predator of these organisms within *Chusquea* microhabitat. The attack on the nest by

Plain-tailed Wren may represent a novel event, but future studies may show these wrens play an important role in nesting biology of other montane bamboo birds.

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