Chestnut-crowned Antpitta *Grallaria ruficapilla* occurs in Andean forests of Venezuela, Colombia, Ecuador and northern Peru, at 1,200–3,600 m. In the eastern Ecuadorian Andes *G. ruficapilla* is one of the most numerous species by voice, yet little is known of its breeding biology. Here we present a description of the nest, nest location, eggs and nestling period of *G. r. ruficapilla* from 2,250 m elevation in the eastern Ecuadorian Andes.

Nest description

On 20 September 2004, we located a nest of *G. ruficapilla* in montane Andean forest at SierrAzul Research Station (00°40'S 77°55'W), part of the Andean Biodiversity Research Center west of Cosanga, Napo province, Ecuador. Habitat around the nest consisted of a canopy composed almost entirely of *Alnus acuminata* (Betulaceae), c.20 m in height, with a variable understorey of occasionally dense *Chusquea* bamboo (Poaceae) interspersed with herbaceous *Solanaceae*, *Urticaceae* and *Piperaceae*. The nest site was on the edge of a patch of *Chusquea* and surrounded by more open herbaceous understorey.

The nest was located 197 cm above ground on a mat of 8–10 supporting *Chusquea* branches that ran horizontally beneath the nest (Fig. 1). Other detritus (fallen and decomposing leaves) was between the *Chusquea* branches and the nest, and may have been an old *Grallaria* nest itself. Immediately above the nest (c.10 cm) was a sparse overhang of live *Chusquea* leaves, providing cover for the nest.

The nest was composed primarily of sticks and twigs, with additional bamboo leaves, sparse moss, leaf petioles and some dicot leaves, and a sparse lining of dark rootlets. The outer diameter was 27.0 x 27.0 cm (measured at perpendicular angles).
Description of the nest, eggs and nestling period of Chestnut-crowned Antpitta

inner diameter (i.e. the egg cup) measured 11.5 x 11.5 cm. The cup depth was 7 cm and the external nest height (i.e. bottom of the nest proper to the rim of the cup) was 18.5 cm, with no hanging nest material below the nest.

**Egg description**

When located, the nest contained two eggs warm to the touch. Video and field observations from 20 September 2004 showed *G. ruficapilla* incubating the two eggs. Eggs were uniform turquoise or pale greenish-blue, with no flecking or spotting (Fig. 2). Both eggs had a short subelliptical shape, with one egg notably stouter than the other. The first egg measured 26.5 x 24.3 mm and weighed 8.765 g. The second egg measured 29.9 x 24.2 mm and weighed 9.095 g. Both eggs were checked six days later and weighed 8.442 g and 8.700 g, respectively. This represents a water loss rate for the first egg of 0.053 g/day and 0.065 g/day for the second. Using an estimated incubation period of 19 days1,3 we calculate an 11% and 13% loss of mass for each egg, respectively. This is somewhat less than that reported for *G. guatimalensis*.

**Other observations**

The eggs hatched on 29 September and both young left the nest on 17 October, i.e. an incubation period of at least nine days and a nestling period of 18 days. We observed two adults (presumably both members of a pair) incubating and subsequently attending nestlings. Both adults also engaged in nest maintenance by occasionally bringing single rootlets when arriving to incubate, and adding them to the lining of the cup. Both adults were observed to rapidly thrust their bill in and out of the nest lining as for other Formicariidae1,9,16, presumably as a method of parasite removal1,4. Details of incubation behaviour and nestling care will be presented elsewhere.

**Discussion**

Previous descriptions of the eggs of *G. ruficapilla* are consistent with the observations presented here (summarised in Krabbe & Schulenberg4), with the exception of a clutch of three eggs collected by S. B. Gabaldon (American Museum of Natural History, New York, 13865), which was described as "buffy eggs with rufous blotches"25. Clutch size, colour and markings of Gabaldon's eggs are inconsistent with *G. ruficapilla* and the genus *Grallaria* in general, and the identity of these eggs is suspect4. All other described clutches of *G. ruficapilla* were of subelliptical, bluish-turquoise eggs without markings1,21. Clutch size of described nests has been invariably two eggs1,4,5.

Despite the collection of several clutches of *G. ruficapilla*4, we are aware of only one previous description of the nest. T. K. Salmon described the nest from Antioquia, Colombia as "... a mass of roots, dead leaves, and moss, lined with roots and fibers ... placed at some height from the ground"26. The nest in eastern Ecuador differs somewhat from Salmon's observations in that it was composed primarily of sticks and twigs. Otherwise the nest composition is qualitatively similar, with moss and dead leaves in the bulk of the cup, and rootlets lining the nest. The structure and composition of the Ecuadorian nest is most similar to a nest described for the closely related *G. watkinsi*22 (see also *G. hypoleuca*17). Both the Ecuadorian *G. ruficapilla* and *G. watkinsi* have nests composed primarily of sticks and twigs, forming a messy broad cup. Most other *Grallaria* build bulky cups of decaying leaves, moss and other herbarious material with few sticks2,3,4,8,9,11,14,17,21,22.

Nest placement amidst dense branches has been observed for some *G. guatimalensis* nests1,6. *G. watkinsi* and *G. quitensis* have been reported to nest against upright or fallen trunks or in the main forks of trees8,9,16,17,21,22. September breeding for *G. ruficapilla* coincides with the early dry season (September–December) in the Napo region of the eastern Andes. Other records of breeding, breeding-condition adults and fledglings are available from virtually all months3,4. We require more data to know whether *G. ruficapilla* breeds seasonally as do some other Chusquea specialists in our study area (e.g. *Poecilotriccus ruficeps*).

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**References**


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**Cotinga 25**

Antpitta

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**Cotinga 26**

Anpitta

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Antpitta (Grallaria guatimalensis). Cotinga 19: 65–70.


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