

# Rediscovery and status of the Brown-banded Antpitta *Grallaria milleri* in the central Andes of Colombia

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## Summary

The Brown-banded Antpitta was last recorded in the Central Andes of Colombia in 1942 but a population of the species has been rediscovered in the Ucumarí Regional Park.

*Grallaria milleri* era una especie conocida de solo diez especímenes colectados en dos localidades de la vertiente occidental de la Cordillera Central de Colombia. Nueve de los especímenes fueron colectados en la cuenca del Río Quindío, a elevaciones entre 2,745 y 3,140 m, en 1911 y 1942. El décimo espécimen fue colectado en 1918, a 3 km de la ciudad de Manizales. Durante trabajo ornitológico realizado en el Parque Regional Ucumarí desde 1994, individuos de esta especie han sido capturados en redes y observados, lo cual revela la presencia de una población en este sitio intermedio entre las dos localidades originales. El Parque Ucumarí tiene 4,240 ha y protege la cuenca alta del Río Otún entre 1,800 y 2,600 m. *G. milleri* ha sido registrada solamente en un estrecho rango entre 2,400 y 2,600 m, en donde se han contado 93 individuos a lo largo de 6.3 km de transectos en tres tipos de hábitat: rastrojos de regeneración temprana, plantaciones de aliso (*Alnus acuminata*) y bosques de regeneración de treinta años. En esta localidad *G. milleri* es simpátrica con otras cuatro especies de *Grallaria* (*squamigera*, *nuchalis*, *ruficapilla* y *rufocinerea*) y con *Grallaricula nana*, por lo cual Ucumarí es un sitio de gran interés para la conservación de este grupo de aves neotropicales.

## Introduction

The Brown-banded Antpitta *Grallaria milleri* was known from just 10 specimens collected at two localities on the western slope of the Central Andes of Colombia, the last two of which were collected in 1942. The type series of six specimens was collected in 1911 at a site known as Laguneta (4°35'N 75°30'W), at an elevation of 3,140 m, on the trail between Salento and Ibagué, with an additional specimen collected "above Salento" at an elevation of 2,745 m (Collar *et al.* 1992). These localities are on the Quindío River watershed, in the Department of Quindío. In 1942 two additional specimens were collected at the type locality. In 1918 an immature female was collected at El Zancudo (c. 5°05'N 75°30'W), 3 km east of the city of Manizales (Department of Caldas), at an elevation of 2,400 m. The airline distance between Laguneta and El Zancudo is about 62 km. Intensive surveys conducted in 1986, 1988 and 1991 at the same localities failed to reveal the presence of this species (Collar *et al.* 1992).

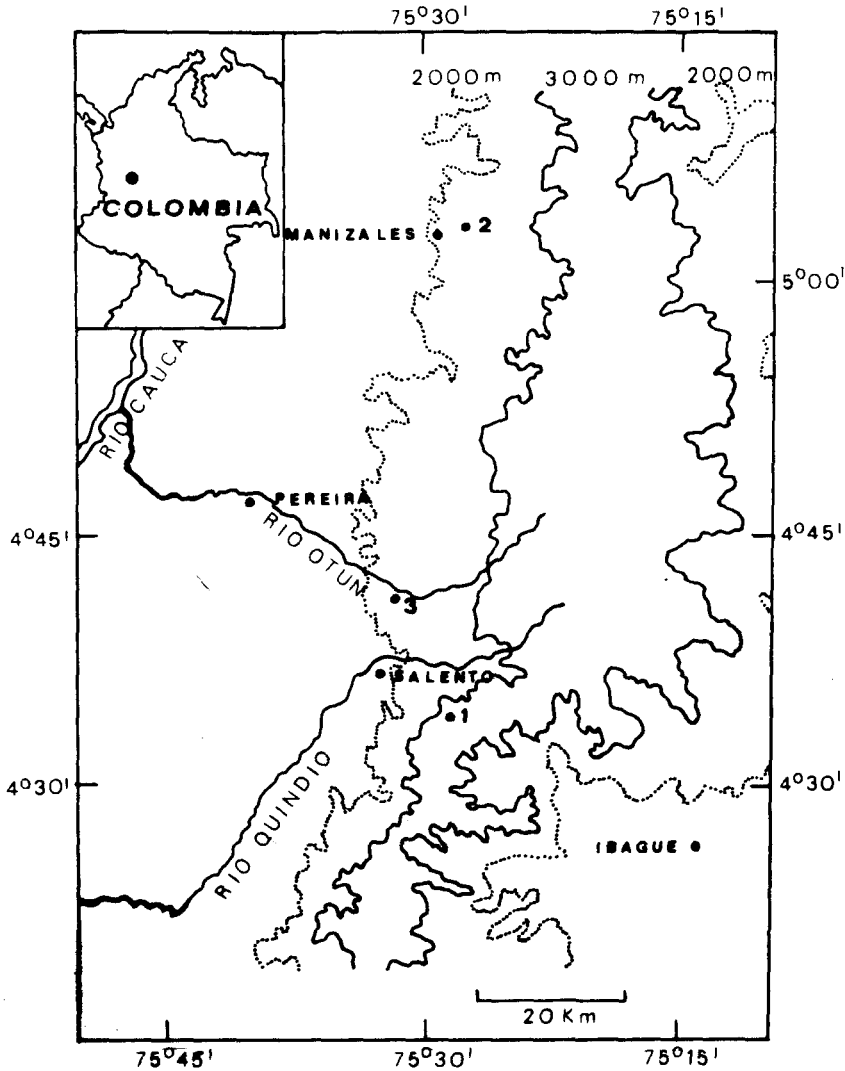


Figure 1. Map of the central region of the Central Andean range of Colombia, showing the localities where *Grallaria milleri* has been recorded. 1, type locality where specimens were collected in 1911 and 1942, at 2,745–3,140 m on the trail between Salento and Ibagué; 2, locality where a specimen was collected in 1918, at 2,400 m; 3, Ucumarí Regional Park, where a population of *G. milleri* has been found at an elevation of 2,400–2,600 m. The point on the insert map indicates the location of the region illustrated.

### Study area

Ornithological work has been conducted since 1994 at Ucumarí Regional Park, Department of Risaralda (4°39'N 75°36'W). Ucumarí Regional Park protects the Otún River watershed, which is halfway between the original localities (Figure 1). The park protects an area of 4,240 ha that extends between elevations of 1,800 and 2,600 m and constitutes a buffer zone for the 38,000-ha Los Nevados National

Park which protects higher elevations. Above 2,000 m, the Otún River runs through a narrow glacier valley, with very steep slopes. With a mean annual precipitation of 2,600 mm and mean annual temperature of 14 °C, Ucumari is classified as Lower Montane-Humid Forest in Holdridge's life-zone classification system (Espinal *et al.* 1977).

Protection of the Otún River watershed dates from the 1960s when local government agencies started purchasing private land (Londoño 1994). At that time most of the foothills of the valley were deforested and kept as pasturelands. Forests remained only on the steepest slopes and some adjacent canyons. Since the establishment of the park, most of the area has been revegetated, largely by natural regeneration. Small areas were planted with monospecific stands of exotic ash *Fraxinus chinensis* on the lower part of the park (1,800–2,000 m), and native alder *Alnus acuminata* on the upper parts (2,400–2,600 m). These stands were abandoned and are overgrown with native vegetation (Murcia in press). Presently about 87% of the park is forested, most of it in second growth forest (2,600 ha) (Londoño 1994). A few small private holdings with pasturelands are still included in the park. Ucumari therefore has a very heterogeneous landscape, with a patchwork of forest, overgrown tree plantations, pasture and second growth of all ages. It supports a rich flora and fauna (Rangel 1994).

## Results and discussion

Since 1994 Brown-banded Antpittas have been both mist-netted and observed (Figure 2) thus revealing the presence of a population at this site. The first bird was captured and released at 2,450 m on 26 May 1994 in a mist-net set next to a patch of montane bamboo *Chusquea* sp., on a hill covered with 30-year-old forest. A second individual was netted, banded and released on 23 November 1994 in very humid, moss-laden early second growth at the river edge. These birds were caught during routine netting and censusing which continued monthly throughout 1995 but there were no additional captures or observations. In March 1996 we initiated surveys to assess the status of the Brown-banded and other antpittas in the park. Since then a further 10 Brown-banded Antpittas have been captured, banded and released. These captures have been made by placing nets very low in thick understorey and playing back recordings of the antpitta's call. Three of these individuals have been recaptured at the same site, within 2–3 months of the original capture.

We have recorded two different Brown-banded Antpitta vocalizations. The first one is a loud whistled *woooo* that rises slightly. This is the most frequent vocalization and is apparently a territorial and alarm call, as it is given spontaneously but has also been given by captured birds. Birds respond readily to playbacks of this call. The other vocalization is a soft whistle *puuh, pü-pü*, with the first two notes at the same tone and the third note a little higher. This call is heard infrequently.

In addition to captures, by using playbacks to attract the birds we have made numerous visual and auditory records of Brown-banded Antpitta. By mapping the position of singing birds, we have recorded 93 individuals along 6.3 km of trails. Records have been made in three types of habitat: (1) early second growth vegetation with a high density of herbs and shrubs, (2) understorey of



Figure 2. Brown-banded Antpitta captured and banded 4 October 1996 at an elevation of 2,400 m, Ucumari Regional Park, Central Andes of Colombia.

30-year-old alder plantations, (3) understory of 30-year-old forest. Brown-banded Antpittas are very terrestrial, walking and feeding on the forest floor. Very rarely they fly short distances on their own initiative, or perch on twigs very close to the ground. All records of Brown-banded Antpitta have been made at the site known as La Pastora, at a narrow elevational range of 2,400–2,600 m, where it is sympatric with five other antpittas; Undulated *G. squamigera*, Chestnut-naped *G. nuchalis*, Chestnut-crowned *G. ruficapilla*, Bicolored *G. rufocinerea* and Slate-crowned Antpitta *Grallaricula nana*.

Several species of antpitta may occur along elevational gradients in the Andes from Venezuela to Bolivia and up to eight species have been recorded along an elevational gradient in the Central Andes of Colombia (Graves 1987). The occurrence of six sympatric species at a single elevation, however, is noteworthy. The species differ widely in size but home ranges of individuals of at least three species (*G. nuchalis*, *G. milleri* and *G. rufocinerea*) overlap extensively at La Pastora (pers. obs.). We are currently conducting surveys to determine the patterns of altitudinal distribution, abundance and habitat use of antpittas at Ucumari Regional Park. This information will help in understanding the factors that determine the coexistence of these species and will support the development of plans to ensure the long-term persistence of their populations.

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