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FIRST DESCRIPTION OF THE NEST AND EGGS OF THE PLUMBEOUS (*MYRMECIZA HYPERYTHRA)* AND THE BLACK-FACED (*MYRMOBORUS MYOTHERINUS*) ANTBIRDS

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Resumen. – Primera descripción del nido y huevos del Hormiguero Plomizo (*Myrmeciza hyperythra*) y del Hormiguero Carinegro (*Myrmoborus myotherinus*). – Aquí presento la primera descripción del nido de dos hormigueros de bosques de tierras bajas del parque Nacional Manu en Perú. Dos nidos en forma de copa del Hormigueo Plomizo (*Myrmeciza hyperythra*) fueron encontrados colgando en la vegetación, en el bosque maduro inundable y en el de sucesión tardía. Cada nido contenía dos huevos de color rosado claro cubierto con líneas moradas oscuras. Estos fueron depredados antes de eclosionar. Dos nidos del Hormiguero Carinegro (*Myrmoborus myotherinus*) también fueron encontrados en los mismos habitat. Esta es la primera descripción del nido y huevos para este genero. Los nidos fueron construidos en el suelo y tenían forma de túnel. Contenían uno y dos huevos, respectivamente, de color blanco salpicado con manchas y líneas vinotinto. Se observaron polluelos en uno de los nidos. Estos estaban completamente desnudos con el pico rosado y las comisuras bien amarillas. Los polluelos fueron depredados seis días después de eclosionar.

Abstract. – Here I present the first nest description for two antbirds of the lowland forest of Manu National Park, Peru. Two pensile cups nests, of the Plumbeous Antbird were found above the ground in mature flood plain and late succession habitats. The nests contained two pinkish-white eggs covered with dark purplish-red streaks. Eggs in both nests were preyed before hatchling. Two oven-shape nests of the Black-faced Antbird were found on the ground in the same habitats. The nests contained one and two white eggs, respectively. Eggs were sparingly marked with dark purplish spots and short streaks. Nestlings were naked and had pinkish bill with soft yellow palate. Nestlings were preyed six days after hatching. *Accepted 8 January 2003.*

Key words: Nest, eggs, Plumbeous Antbird, Black-faced Antbird, *Myrmeciza hyperythra*, *Myrmoborus myotherinus.*

INTRODUCTION

Many antbirds (Thamnophilidae) are poorly known (Ridgely & Tudor 1994), but there is considerable information on the nests, eggs, and nestlings of a number of species. Many build open cups attached to the horizontal fork of a slender branch or in a similar situation (Skutch 1996), but other species differ in nest placement and structure. Nests can be on the ground or inside natural cavities (Wetmore 1972, Oniki & Willis 1982, 1983; Haverschmidt & Mees 1994, Skutch 1996, Wilkinson & Smith 1997, Cadena *et al.* 2000, Willson 2000). Recently, nest architecture provided insights regarding phylogenetic relationships (Whitney *et al.* 1996, Sheldon & Winkler 1999, Zyskowski & Prum 1999). Here, I provide the first descriptions of the nests, eggs and nestlings of the Plumbeous (*Myrmeciza hyperythra*) and Black-faced (*Myrmoborus myotherinus*) antbirds, and briefly

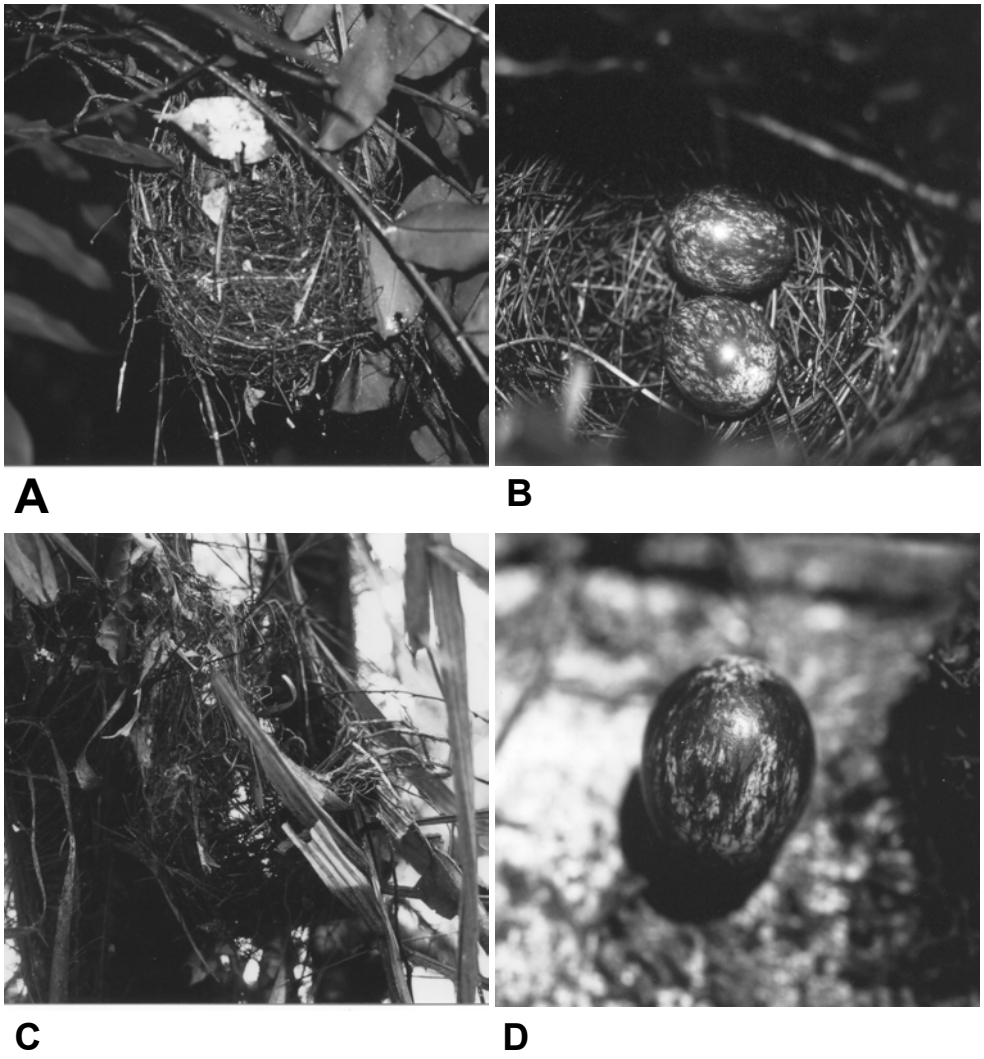

FIG 1. First nest (A), eggs in the first nest (B), second nest (C), and egg of the second nest (D) of the of Plumbeous Antbird.

report some observations on nest-building behavior and incubation.

STUDY AREA

Nests were in the trail system of Cosha Cashu Biological Station, an area of undisturbed lowland forest on the meander belt of the Manu River, in the Manu National Park, depto. of Madre de Díos, southeastern Peru (11°51'S, 71°19'W; 400 m a.s.l.) (Terborgh 1983). Three habitats are of particular importance to this study. First, the *Ficus*/*Cedrela* belt is along beaches, and consists of *Cedrela odorata* and *Ficus* spp. 15–18 m tall, as well as *Erythrina* spp., *Guarea* spp., *Sapium* spp., and

Cassaria spp. Understory of monocotyledonous plants include *Costus* spp., *Heliconia* spp., and *Calathea* spp. This type of forest is exposed to periodic flooding during the rainy season. Second, the late successional forest is located along an oxbow lake first dominated by *Ficus trigona*. Later it becomes a successional forest 15–20 m tall. Finally, there is a mature flood plain forest that occupies the greater part of the meander belt. There are trees 50–60 m tall, as *Dipteryx micrantha*, subemergent trees including *Ceiba* sp., *Ficus* spp., and 30–35 m tall *Dipteryx micrantha*, under which there are several species of palms. The understory is mostly composed of Rubiaceae, Melastomataceae, Nyctaginaceae and Myrsinaceae; the ground is covered by *Tectaria incise* ferns which are replaced by *Heliconia* spp. in places where there is standing water. Precipitation, averaging 2000 mm/year, is seasonal, falling mostly from November to May, with a dry season of under 100 mm per month between June and October (Terborgh 1990).

RESULTS

Plumbeous Antbird. The Plumbeous Antbird is a fairly common understory insectivore in undergrowth and borders of várzea and transitional forest (Ridgely & Tudor 1994). In the study area, it is most common in the *Ficus*/*Cedrela* belt, and seems associated with *Heliconia* (Robinson & Terborgh 1997).

I found the first nest of this species on 15 March 2001 in the mature flood plain forest, 5 m from the edge of a creek, among leaves of an epiphytic fern 1 m above ground. The pendent cup was 75 mm deep, and hung between two horizontal fern leaves, while other fern leaves above covered it well (Fig. 1A). The inner diameters of the cup were was 50 x 100 mm, the outer diameters 80 x 160 mm, and the nest wall average 20 mm thick. It was made of black rhizomorphs and dry leaves of an unidentified plant that were attached to the outside by spider webs. When found, the nest contained two pinkish-white eggs almost completely covered with dark purplish-red streaks (Fig. 1B). Both measured 17 x 23 mm. One of the eggs disappeared on 21 March, the other on 23 March. I observed the male incubating only in the mourning, but I did not visit the site in the afternoon or early mourning. As a consequence, I do not know if the female incubated, but male and female called near the nest.

I found a second nest in late successional forest on 12 October 2001, pendent from the trunk spines of a *Bactris* sp. palm, about 0.7 m above the ground (Fig. 1C). It contained two eggs. The materials were much as described for the first nest. The inner dimensions of this nest were 66 x 74 mm wide by 95 mm deep, 108 mm x 112 mm outside, and the nest wall was about 22 mm thick. The two eggs resembled the others in color and pattern, but were lightly larger (20 x 24 mm) and weighed 5.25 g each (Fig. 1D). One egg disappeared on 12 October, the other two days later.

Black-faced Antbird. The four species of *Myrmoborus* occur in the undergrowth of Amazonian forests and woodlands, often segregated by habitat (Ridgely & Tudor 1994). The Black-faced Antbird is fairly common near the ground in *terra firme* forest and mature secondary woodland (Ridgely & Tudor 1994). In Cosha Cashu, it is found in the late successional forest but is more common in the mature floodplain forest and *terra firme* (Robinson & Terborgh 1997).

Wendy Schelsky found the first nest on 20 October 2001, in mature flood plain forest. The nest oven was on the ground, between two thin crossing branches that provided support and protection (Fig. 2A). The floor (where the eggs were laid) was lower than the entrance floor. Inside, the nest was 71 x 72

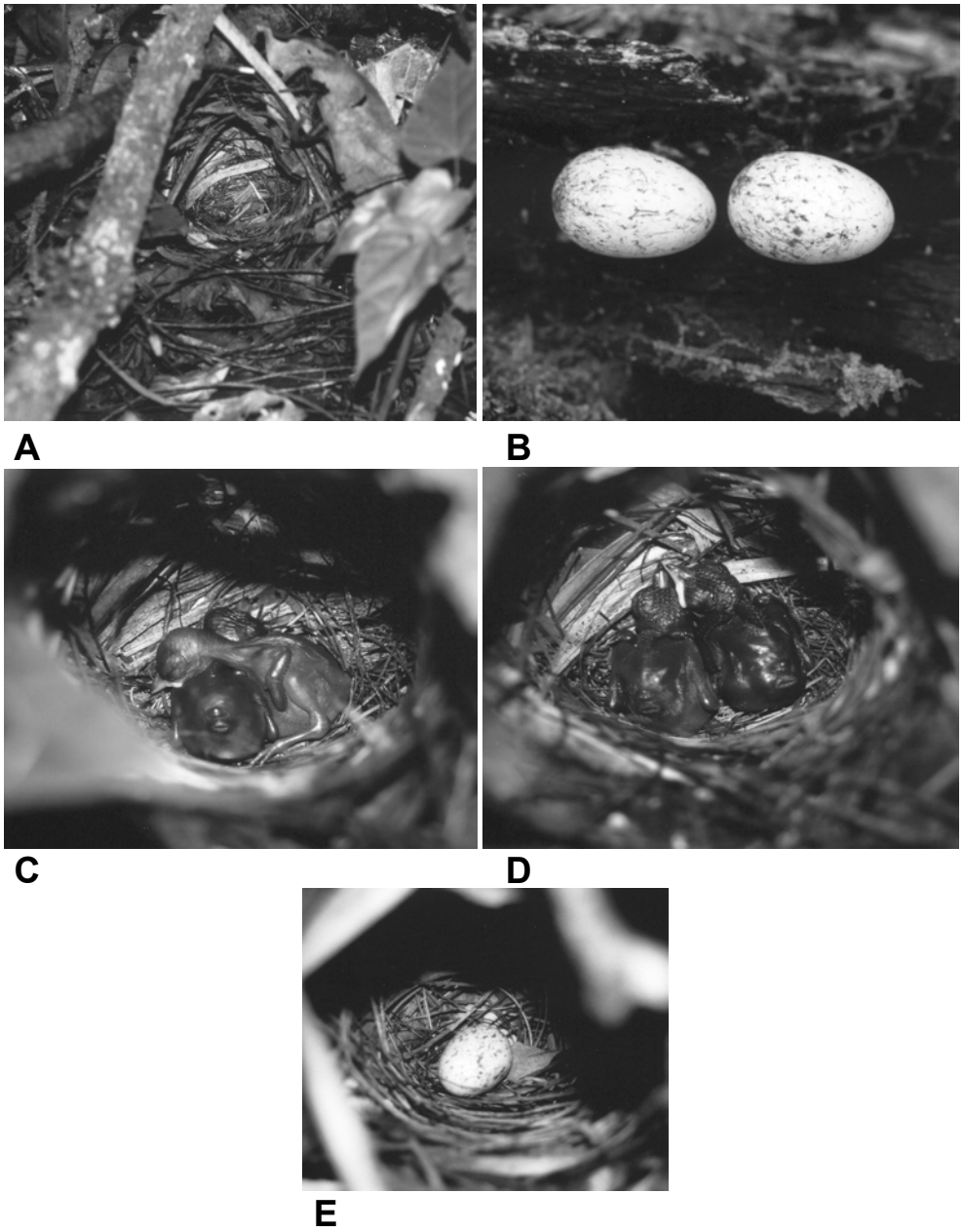

FIG 2. First nest (A), eggs of first nest (B), 1-day old nestlings (C), 6-day old nestlings, and second nest (E) of the Black-faced Antbird.

mm wide by 105 mm deep (the deepness is measured from the entrance to the end of the oven), outside 175 x 217 mm wide by 133 mm tall, with the wall 40 mm thick. The nest had

four layers, the innermost of black palm fibers, the second with dry leaves from palms and other trees, the third of dry flexible stems from vines, and the outermost of dry leaves that made the nest very inconspicuous. The nest contained two white eggs sparingly marked with dark purplish spots and short streaks; both measured 14 x 20 mm and weighed 2.25 g (Fig. 2B).

On 4 November (15 days after the nests was found), there were two nestlings (there were still eggs on 3 November) (Fig. 2C). Their eyes were closed and their naked skin was reddish with some darker zones. Bills were pinkish with yellow at the base, and legs were gray. Four days later, the skin of the head and wings had projections from which feather sheaths would appear (Fig. 2D). When I passed, the male or female flushed and gave a broken-wing display along the ground, probably to distract attention from the nest. Both female and male participated in the incubation and feeding nestlings. Both nestlings disappeared on 9 November (5 days after hatching). Observations from different couple reveal that females and males participated in nest construction. I also saw a male and a female feeding a juvenile with insects.

Juan Luis Parra found a second nest on 30 November 2001, in late successional forest, 15 m from the bank of the Manu River. This nest was also on the ground, under a liana and between two branches, much like the other nest (Fig. 2E). It had the same oven shape, but inside was 65 x 73 mm wide by 95 mm deep (from the roof to the floor), outside 110 x 145 mm wide by 135 mm high, with nest walls 30 mm thick. The materials used, the construction in four layers, and the egg coloration were much as in the first nest. In contrast with the other one, however, there was one egg of 16 x 21 mm and 2.75 g. The egg remained unhatched on 4 December, when I left the station.

DISCUSSION

I will compare the nest of the Plumbeous Antbird with other species in the genus. The nest of the Sooty Antbird (*M. fortis*) is concealed in leaf litter on the forest floor, and consists of a spherical chamber with a short horizontal entrance tunnel (Wilkinson & Smith 1997). The nest of the Goeldi's Antbird (*M. goeldii*) has been only briefly reported, as a open-cup nest on the ground (M. B. Robins, *fide* Wilkinson & Smith 1997). Recently, a deep-cup nest of a White-shouldered Antbird (*M. melanoceps*) was discovered above the ground, with entrance partially covered by a thin layer of dead leaves over its top (A. Link in prep.). The nest of Chestnut-backed Antbird (*M. exsul*) is a bulky and cup-shape nest sitting loosely on short plants, dead palm leaves or debris near the ground, and most nests are made of dead leaves and strands, with a thin lining of rhizomorphs (Willis & Oniki 1972). Based on previous nest descriptions for these species, it appears that the nest of Plumbeous Antbird has different characteristics and location from its apparent relatives. On the other hand it is similar in materials and shape to the nest of the Chestnut-backed Antbird.

There are no published nest descriptions for the genus *Myrmoborus*, and thus it is impossible to make comparisons among species in the genus. Comparing it with nests described for others antbirds, the nest of Black-faced Antbird is most similar to that of the Sooty Antbird (Wilkinson & Smith 1997), but with less leaf litter around it and smaller size.

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