## NOTES ON NESTS OF RUDDY QUAIL-DOVES (GEOTRYGON MONTANA), LESSER SWALLOW-TAILED SWIFTS (PANYPTILA CAYENNENSIS), MOUSE-COLORED ANTSHRIKES (THAMNOPHILUS MURINUS), AND SCALE-BACKED ANTBIRDS (HYLOPHYLAX POECILINOTUS) FROM CENTRAL AMAZONAS, BRAZIL

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Comentários breves nos ninhos de Juriti-piranga (*Geotrygon montana*), Taperá-tesoura (*Panyptila cayennensis*), Choca-murina (*Thamnophilus murinus*), e Rendadinho (*Hylophylax poecilinotus*) de Amazonas Central, Brasil.

Key words: Amazonas, nests, Geotrygon, Panyptila, Thamnophilus, Hylophylax.

Nests of four little-studied species were found in the *terra firme* forests in the reserve network of the Biological Dynamics of Forest Fragments Project (BDFFP), some 80 km north of Manaus in the Brazilian state of Amazonas. A detailed account of the study site is provided by the BDFFP website [http://pdbff.inpa.gov.br/] and Lovejoy & Bierregaard (1990). These nests were discovered haphazardly during a study of habitat use by terrestrial insectivores. Unfortunately, time constraints by the study did not allow for multiple visits to most nests.

Ruddy Quail-Dove (Geotrygon montana). At the BDFFP reserves, this dove is common during the wet season (Stouffer & Bierregaard 1993, Cohn-Haft et al. 1997). Some nests have been described (e.g., Skutch 1949, Goodwin 1983, Haverschmidt & Mees 1994).

Few descriptions of nests and eggs of Ruddy Quail-Dove from the Amazonian Basin exist (Oniki & Willis 1983), although active nests were noted at the BDFFP site (Stouffer & Bierregaard 1993).

Eight nests were found in the BDFFP continuous forest tract (reserve 1501: 02°27′00″S, 59°45′00″W) between 25 January 2002 and 3 March 2002, while singing males were detected there and in other BDFFP reserves (pers. observ.). Nests had two nonglossy cream-colored eggs and were between 1 and 1.5 m up. Nests were platforms constructed with a few loosely-placed sticks and covered with a mixture of green and dead leaves. Seven nests were on the central rachises of *Attalea* fronds, and one nest was within the leaves of a shrubby palm. Ten egg masses were 5.0–5.5 g (mean = 5.3 g), and six egg dimensions were 25.2–27.0 mm (mean =

26.4 mm) and 19.4–21.0 mm (mean = 19.9 mm). Nests were visited between 15:00 and 18:00 h. Only females were on nests and all flushed when approached within a few meters. Though males do incubate, these observations are not unexpected since females of this species incubate in the late afternoon (Skutch 1991).

Lesser Swallow-tailed Swift (Panyptila cayennensis). This species is rare around the BDFFP reserves (Cohn-Haft et al. 1997) and is more common in the nearby city of Manaus (pers. observ.). In November 2001, O. F. da Silva, a BDFFP field assistant, found an empty nest on a fallen trunk at the edge of a 10-ha forest fragment at Fazenda Esteio (02°24'30"S, 59°52'00"W). The tubular nest was approximately 44 cm high and 12 cm wide. Sick (1993) likened the nest of this species to a "thick woolen stocking fixed by its sole to a branch", an appropriate analogy. The nest was made of plumose bristles from the seeds of Odentadenia sp. (Apocynaceae), with very few feathers scattered within the nest matrix. One of these feathers was red and probably was from the common Silver-beaked Tanager (Ramphocelus carbo). Saliva was used to cement the top 35 cm of the nest, which was much darker than the lower portion. A cup of Odentadenia bristles for eggs and nestlings was inside the nest, 12 cm from the outside top of the nest, and was 5 cm long by 3 cm wide. For photographs and diagrams of similar nests, see Sick (1947, 1958) and Haverschmidt (1954). Many small pores (c. 2 mm wide x 4 mm deep), over the surface of the cemented portion of the nest, were possibly insect oviposition sites. The nest is deposited at the INPA bird collection in Manaus.

Mouse-colored Antshrike (Thamnophilus murinus). A nest of this common species was found on 25 January 2002 at reserve 1501. The nest was in the fork of a branch approxi-

mately 1.25 m up in a 2.5-m sapling (Chrysobalanaceae). Inside, it was 5.5 cm wide and 5.8 cm deep. The walls and bottom were so thin that eggs were partially visible from beneath. Nest material consisted almost entirely of thin fibers from the trunk of arborescent palms, unlike the two nests described by Oniki & Willis (1982) and Tostain (1990) that were primarily composed of black rhizomorphs.

The two eggs were cream colored with brown-purple blotches mostly on the wider end. Mass of the two eggs weighed together was 5 g. The nest was visited six times between noon and 14:00 h, 25 January – 3 February 2002. On three visitations the male was incubating, on the other visits the female was incubating. After I approached the nest, either adult would fly a few meters away to a perch less than 0.5 m from the ground. No alarm calls or distraction displays were observed and only one parent was at the nest during each visit.

Scale-backed Antbird (Hylophylax poecilinotus). This is a common understory species of the Manaus area (Cohn-Haft et al. 1997), but few nests and eggs have been described. Oniki & Willis (1982) describe fledglings but not the nest or eggs they discovered near Manaus. A male was incubating at reserve 1501 on 8 March 2002 at 14:00 h and on 10 March at 8:00 h. The nest was approximately 0.5 m from the base inside the remains of a hollow 1.5 m dead arborescent palm stump of about 10 cm in diameter (measured at the height of the nest). Elsewhere in the Amazon, nests have been found on the ground or in a low "stub" (Willis 1982). A longitudinal crack in the stump allowed the bird to fly directly to the nest, yet the nest was almost entirely concealed from above. The nest consisted of dead palm leaves and was lined with palm fibers similar to those described for Mousecolored Antshrike. Remarkably, this species

also builds an open cup nest (Cadena et al. 2000) and differs from other members of this genus in having a cavity nest. For example, Spotted Antbirds (*H. naevioides*) build an open cup nest, not a cavity nest (Willis 1972, Robinson et al. 2000).

Mass of the two eggs weighed together was 7 g and were 22.9 x 16.1 mm and 23.3 x 16.4 mm, respectively. Eggs were pale mauve with dark mauve blotches, denser on the larger end. Colors and patterns were similar to those described by Cadena *et al.* (2000) from Colombia, but the eggs were slightly larger.

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