

Host records for the Striped Cuckoo from Costa Rica.—The Striped Cuckoo (*Tapera naevia*) is one of only 3 species of New World cuculids that exhibits obligatory brood parasitism. Accounts of its reproductive behavior and host records have been provided by Haverschmidt (J. f. Ornithol. 96:337-343, 1955; J. f. Ornithol. 102:353-359, 1961) for Surinam and by Friedmann (Ibis (13) 3:532-538, 1933) for various parts of South America.

Little is known about the habits of the species north of South America, although it is common in many lowland areas of Middle America. Aside from a single instance of parasitism on the Rufous-breasted Spinetail (*Synallaxis erythrothorax*) in Guatemala, which was filmed by Hugh C. Land (Wetmore, Smith. Misc. Coll. 150(2):132-136, 1968), we can find no other host record for the species north of Panamá. Wetmore (1968) found "beautiful blue" eggshell fragments in the oviduct of a Striped Cuckoo he collected at Buenavista, Chiriquí, Panamá on 1 March 1960, but eggs of the Middle American race, *T. n. excellens*, otherwise appear to be undescribed.

While working near Rincón de Osa, Puntarenas Province, Costa Rica between February-April, 1971, A. W. found the Striped Cuckoo to be common in second growth adjacent to primary rain forest at elevations <20 m. On 10 April 1971 in a second growth area about 2 km W of Rincón de Osa, he found a nest of the Plain Wren (*Thryothorus modestus*) which contained 1 wren egg and another egg believed to be that of the Striped Cuckoo. The nest, typical for the Plain Wren, was a retort-shaped structure composed of dry stiff grass stems and grass heads and lined with a few feathers. It was placed 1 m off the ground in the vertical fork of a small thorny shrub. The nest and eggs were collected and are now in the collection of the Western Foundation of Vertebrate Zoology (WFVZ no. 58440).

Both eggs were fresh. The wren egg is white, subelliptical in shape (after Preston in Palmer, Handbook of North American birds, vol. 1, Yale Univ. Press, 1962:13), somewhat glossy, and measures 18.75×14.79 mm. It is essentially identical to 10 other eggs of this species from southwestern Costa Rica in the WFVZ collection. The presumed Striped Cuckoo egg is medium blue (faded from bright greenish-blue when collected), oval (Preston 1962), lacks gloss, and measures 23.43×16.46 mm. These details agree with the description given by Hellebrekers (Zool. Med. Ryksm. Nat. Hist. Leiden, 24: 251-252, 1942) for 50 *Tapera naevia* eggs from Surinam (range of measurements = $18.7-23.5 \times 14.1-17.3$ mm).

Three other nests of *Thryothorus modestus* containing 2 eggs each were found in the Rincón de Osa area between 21 March-19 April 1971, but none contained parasite eggs. We are unaware of any previous record of *Tapera naevia* parasitism on *Thryothorus modestus*, although Wetmore (1968) suggested that this wren might be a suitable host for the parasite in Panamá and described several instances of Striped Cuckoo parasitism on a congener, *Thryothorus rufalbus*.

At a nearby southwestern Costa Rica locality, Sierpe, a small village near sea level, 13 km S of Palmar Sur, Puntarenas Province, L. F. K. found Striped Cuckoos to be unusually common from March to November, 1970. The species was not reported from this area prior to 1966 (Wolf, Condor 68:400-401), but it is apparently increasing in abundance in southwestern Costa Rica as primary habitats are reduced to second growth by agricultural and lumbering activities.

On 31 May 1970 on the outskirts of Sierpe, L. F. K. dismantled 1 of the massive stick nests of the Pale-breasted Spinetail (*Synallaxis albescens*) and found that it contained 2 spinetail eggs and another egg presumed to be laid by the Striped Cuckoo. The nest, the only one of this species examined in the vicinity, was situated in a tangle of vines on

a fencepost standing in the middle of a dense *Heliconia* thicket. The incubating spintail was flushed from the nest.

The spintail eggs were dull white when collected, but acquired a distinctly greenish tinge after they were blown. They are short oval in shape (Preston 1962) and have a rough texture. They measure 19.40×16.01 and 18.92×15.90 mm. The probable Striped Cuckoo egg is identical in color and shape to the 1 collected by Williams at Rincón de Osa and measures 22.01×16.45 mm. The specimens are now in the WFVZ collection (no. 51515).

While this is the first record for *Synallaxis albenscens* as a host in Middle America, it is known to be parasitized frequently by Striped Cuckoos in various parts of South America (Friedmann 1933; Haverschmidt 1955).

The parasite eggs described here are identified on the basis of circumstantial evidence, but we believe that their designation as *Tapera naevia* eggs is an accurate one. In color, size, and texture they agree with published descriptions of the eggs of the 2 South American races of the Striped Cuckoo, *Tapera n. naevia* and *T. n. chochi* (e.g., Hellebrekers 1942; Friedmann 1933). Since there are only slight mensural and color differences between these subspecies and the Middle American *T. n. excellens*, it is reasonable to expect that their respective eggs are very similar, at least in size. Striped Cuckoos were common at both Rincón de Osa and Sierpe, and they were occasionally seen perched on the fencepost that supported the spintail nest described from the latter locality. Finally, based on our joint experience with the nesting birds of Costa Rica and an examination of the eggs of neotropical species in most major North American collections, we know of no other Middle American species that lays eggs of this description.

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Ant-following birds in South American subtropical forests.—Apart from their legendary aspects, army ants (*Dorylinae*) have attracted the attention of ecologists because of the interactions between the ants and their associated bird followers (e.g., Willis, *Living Bird* 5:187–231, 1966a; Oniki, *Acta Amazonica* 2:59–79, 1972). Hilty (Wilson Bull. 86:480–481, 1974) has called attention to the rarity of reports of birds associated with army ants at higher elevations, and we report here on birds associated with 2 such ant swarms.

On 16 and 19 April 1973, with R. Gochfeld and M. Kleinbaum, we visited Pichindé at about 1700 m near the crest of the western Andes above Cali, Department of Valle, Colombia. The vegetation and area have been described by Trapido and San Martin (*Am. J. Trop. Med. Hyg.* 20:631–641, 1971). On 19 April, on the steep slope in upper subtropical forest, above a fast-rushing stream, we encountered a swarm of small black army ants (*Neivamyrmex* sp.). We remained with the swarm from about 08:30 to 10:00. Our attention was attracted by the calls of Crested Ant-tanagers (*Habia cristata*) and Lineated and Montane foliage-gleaners (*Syndactyla subalaris* and *Anabacerthia striatocollis*). We noted up to 10 of these ant-tanagers which foraged mainly between 1 and 2 m above the ground, moving along the edge of and in front of the swarm. They were noisy, giving loud nasal jay-like calls as described by Willis (*Condor* 68:56–71, 1966b) and were quite animated, frequently erecting or “flashing” their red crests, sometimes main-