

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  $19.40 \times 16.01$  and  $18.92 \times 15.90$  mm. The probable Striped Cuckoo egg is identical in color and shape to the 1 collected by Williams at Rincón de Osa and measures  $22.01 \times 16.45$  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.

Our fieldwork in Costa Rica was supported by the Western Foundation of Vertebrate Zoology and Ed N. Harrison.—LLOYD F. KIFF AND ANDREW WILLIAMS, *Western Foundation of Vertebrate Zoology, 1100 Glendon Avenue, Los Angeles, CA 90024*. (Present address AW: *P.O. Box 23, Njoro, Kenya*). Accepted 10 Oct. 1977.

**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-

taining them erect for several seconds. The 2 species of foliage-gleaners were represented at the swarm by 2 individuals each. The *Anabacerthia* foraged in more or less upright branches mainly above 2 m, while the 2 *Syndactyla* remained closer to the ground and called repeatedly. During our visits to Pichindé, we found the tanagers and *Syndactyla* only at the swarm.

The following species were also persistent attendants at the swarm: 2 or 3 Black-billed Thrushes (*Turdus ignobilis*); 1 female antbird (*Myrmeciza* spp., probably *M. immaculata*), seen in low vegetation within 1 m of the ground; 1 male Slaty Antwren (*Myrmotherula schisticolor*) seen repeatedly over the swarm; 1 male Plain Antwren (*Dysithamnus mentalis*); 1 Spotted Barbtail (*Premnoplex brunnescens*), foraging 1–3 m above the ground; 2 Gray-breasted Woodwrens (*Henicorhina leucosticta*) actively foraging among the ants; 1 Rufous-naped Greenlet (*Hylophilus semibrunneus*).

Additionally, several species were seen only briefly near the swarm. For example, a male Andean Cock-of-the-Rock (*Rupicola peruviana*) flew right into the area where the Ant-Tanagers were calling, as if attracted to the commotion. We could not watch it in the dense foliage and do not know whether it remained and fed. Several other species appeared to be associating with the bird flock, rather than benefiting from the ants. Willis (1966b op. cit.) and Oniki (Condor 73:372–374, 1971) noted that wandering bird flocks often join ant-following flocks without actually using the ants. Thus the coalescence and disintegration of flocks of different social structure, feeding in different manners and moving at different rates, may occur regularly in subtropical and tropical forests.

Hilty (op. cit.) reported 2 species of *Tangara* tanagers attending mid-elevation (900–1500 m) swarms in Colombia. At Pichindé we recorded 8 species of *Tangara* within 300 m of the swarm (some much closer), but none actually associated with it. Significantly, the only bird common to our flock and Hilty's was the *Myrmeciza*, which Willis (pers. comm.) has found to be a regular ant-follower elsewhere. Willis (1966b op. cit.) gave a detailed account of the ecology and behavior of the Crested Ant-tanager, and the habitat at Pichindé seems to be characteristic. None of the 16 mixed flocks in which Willis saw *H. cristata* were attending ants, and S. Hilty and R. Ridgely have seen it at Pichindé in the absence of ants. Although this appears to be the first report of *H. cristata* following ants, some other members of the genus do so regularly.

Of the 45 species which Willis listed in 16 flocks, 10 occurred in the flock we observed. Of these 10, the wood wren and Slaty Antwren occurred in 9 and 8 of the 16 non-ant-following flocks studied by Willis, raising the question of whether there is a consistency to mid-elevation flocks quite apart from a common attraction to ant swarms. The Golden Tanager (*Tangara arthus*), one of the commonest forest birds at Pichindé, was not seen near the flock, and Willis found it in only 1 of 16 flocks. Hilty (op. cit.) indicated that the small black ants he encountered in the upper Anchicaya Valley were "presumably *L. [=Labidus] praedator*." The ants from Pichindé were identified as *Neivamyrmex* sp. by H. Topoff. Although there have been no previous reports of birds following ants of this genus, it is likely that *Neivamyrmex* swarms will be attended when appropriate bird species encounter them.

On 30 January 1974, at 1550 m altitude in subtropical forest above the headquarters of Parque Nacional de Rancho Grande, Aragua, Venezuela, R. Gochfeld, M. Kleinbaum and M. G. found an ant swarm attended by 4 Black-faced Anthrushes (*Formicarius analis*), and 1 Short-tailed Anthrush (*Chamaeza campanisoma*). A Strong-billed Woodcreeper (*Xiphocolaptes promeropyrhynchus*) spent about 5 min foraging on vertical trunks 2–10 m above the swarm. Unlike Pichindé, no other species appeared near the

swarm, and the 3 species attending the swarm were silent for the entire time. The ant species was not identified.

In conjunction with Hilty's observations (op. cit.) it appears that the paucity of reports of ant-attending birds at high altitudes may reflect the relative scarcity there of Doryline ants, and that where such ants occur, one may anticipate that some bird species will attend them. It is unlikely that professional ant-followers (in the sense of Willis, *Ecology* 47:667-672, 1966c; Oniki and Willis, *Acta Amazonica* 2:127-151, 1972), could maintain themselves more than marginally at such altitudes. Willis (pers. comm.) notes that *Myrmeciza immaculata* is probably such a professional, but its altitudinal range is mainly below 1700 m. In view of the scarcity of raiding ants, ant-attending birds of subtropical forests should be mainly non-professional opportunistic species, offering an interesting chance to study their behavioral interactions in the absence of professionals. Very often the most interesting insights into complex ecologic situations come from observing phenomena at the extremes of a range where atypical events are likely to occur. Further investigation of birds at high altitude swarms will provide opportunities to extend observations made at low elevations.

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**Fishing behavior of Black and Turkey vultures.**—Black and Turkey vultures (*Coragyps atratus* and *Cathartes aura*) are usually characterized as carrion feeders, though both species have occasionally been observed taking live prey (e.g., Bent, U.S. Natl. Mus. Bull. 167, 1937; Mueller and Berger, *Auk* 84:430, 1967; Gladding and Gladding, *Condor* 72:244-245, 1970; Bang, *J. Morph.* 115:153-164, 1968). While both species are known to include fish in their diet, it has usually been assumed that the fish were obtained as carrion. Bendire (U.S. Natl. Mus. Spec. Bull. 1, 1892) however collected a Turkey Vulture which had a crop gorged with "fresh" small minnows, at least suggesting the possibility that the fish were taken alive. While discussing these species, we discovered that each of us had observed vultures fishing and decided to collaborate in the presentation of our observations. Our observations include apparent fishing by Black Vultures in Virginia and Mississippi and by a Turkey Vulture in Florida.

*Virginia.*—Just before dusk on 2 January 1975, in the Radford Army Ammunition Plant, 14 km west of Blacksburg, Virginia, Prather and Conner observed Black Vultures engaged in a behavior which looked like fishing. Beneath a large roost (Prather et al., *Wilson Bull.* 88:667-668, 1976) on the banks of the New River, 5 vultures stood along the bank and peered into the water. Three others on fallen limbs jutting out over the river assumed positions much like that of the Green Heron (*Butorides virescens*; Bent, U.S. Natl. Mus. Bull. 191, 1950) when fishing from a perch. A continuous rain of excrement from the roosting birds above peppered the river. This may have attracted fish. From a distance of 0.5 m above the water, one of the Black Vultures suddenly pushed with its legs and dove into the river. The bird's head and body were completely sub-