

## GENERAL NOTES

**A record of *Elaenia martinica* for western Puerto Rico.**—The Caribbean *Elaenia* (*Elaenia martinica*) has not successfully colonized any of the larger islands of the Greater Antilles, though the species is widespread on the smaller islands of the Caribbean region from Bonaire and Curaçao on the south to the Virgin Islands on the north, and from islands off Yucatán on the west to Barbados on the east (Bond, *Check-list of the birds of the West Indies*, Acad. Nat. Sci. Philadelphia, 1956; see pp. 112–113). Recent reports of isolated individuals in extreme eastern Puerto Rico proper (Schwartz and Klinikowski, *Proc. Acad. Nat. Sci. Philadelphia*, 115, 1963, pp. 67–68; Bond, *Eighth supplement to the check-list of the birds of the West Indies* [1956], Acad. Nat. Sci. Philadelphia, 1963: see p. 10) may represent a continuation of the westward range extension of this species from the Lesser Antilles into the Virgin Islands and the islands just east of Puerto Rico that has been documented by Robertson (*Auk*, 79: 69–70, 1962). Schwartz and Klinikowski (*loc. cit.*), in reporting the first specimen for Puerto Rico proper (on the northern coast, 15 miles east of San Juan), commented that “this bird is possibly a vagrant; on the other hand it may represent the beginning of the establishment of a breeding population of this species in Puerto Rico.”

On 28 April 1965, Peter Puleston and I discovered two *elaenias* in the Guánica Forest Reserve on the southwestern coast of Puerto Rico, 22 miles from the extreme southwestern tip of the island. Our attention was first drawn, at about 0800 hours, to a single bird that was calling quite regularly. We recorded some calls and played them back, thereby attracting the bird to within several yards of us and stimulating vocal response. Soon a second individual appeared and “conversed” noisily with the first bird at brief intervals for half an hour. Repeated attempts to collect one of these birds with sound playback technique and mist net failed because of strong winds. One or the other of these individuals was observed at the same locality until about 1900 that day, when it became necessary for us to return to San Juan. We were unable to substantiate our conjecture that the birds represented a breeding pair. Dr. J. B. McCandless of Mayaguez, Puerto Rico, informed of our discovery, visited the same locality on four occasions thereafter but was unable to locate the birds.

Fortunately field identification of the species of *Elaenia* is facilitated by a knowledge of their species-diagnostic vocalizations. A spectrographic analysis of the calls of the Guánica birds confirmed their identity as *E. martinica* and eliminated the remote possibility that they were vagrant individuals of a sibling species, *E. flavogaster*, the Yellow-bellied Elaenia of the southern Lesser Antilles and Central and South America. Figure 1 compares the calls of these two species, as recorded from representative populations in Central America and the West Indies. The most diagnostic call of *E. martinica* is a single note that rises sharply and then falls off in pitch just as abruptly, as illustrated by spectrograms 4 through 8. This call has been described phonetically by Bond (*Birds of the West Indies*, Boston, Houghton Mifflin, 1961, see p. 158) as a “harsh *che-eup*.” Another call of *E. martinica* that distinguishes this species from *flavogaster* is shown in spectrogram 10. To the human ear it sounds dissyllabic; but frequently a third element is added, as in spectrogram 9, and Bond (*loc. cit.*) has described the latter as the “*wi-wi-eup*” call. Both the dissyllabic and trisyllabic calls were manifest in the recordings made of the Guánica birds (spectrograms 11 through 13). Bond (*op. cit.*: 157) says the voice of *flavogaster* is “quite different from that of Caribbean *Elaenia*; a harsh *creup-creup-wi-creup*, or merely a drawn-out *creup*.” Such phonetic descriptions are inadequate in pointing

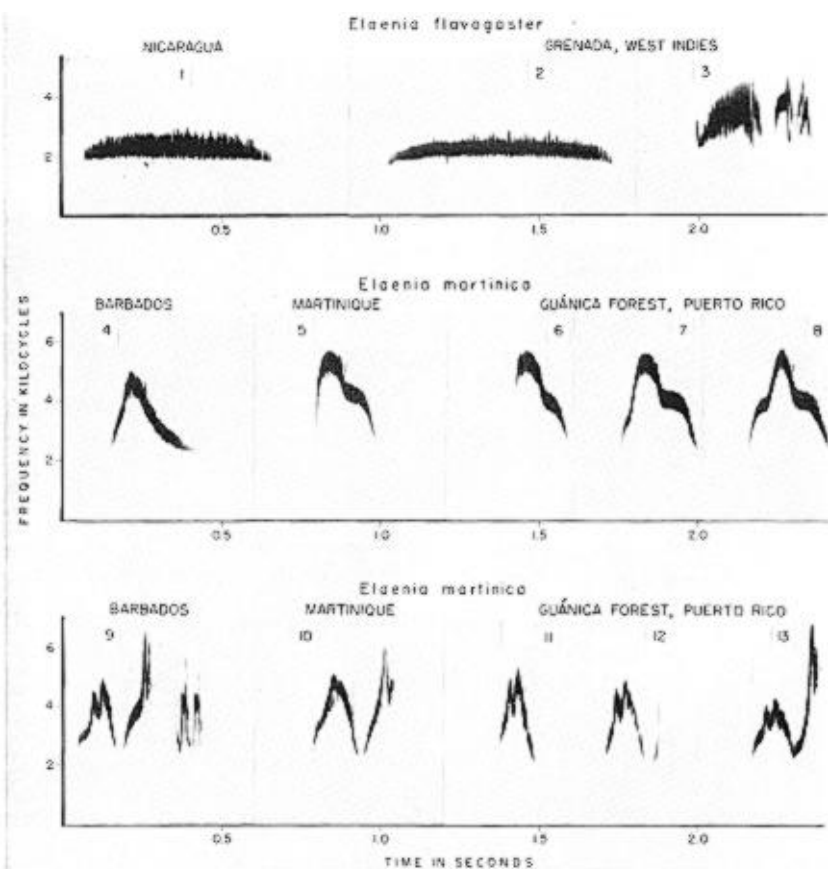


Figure 1. Sound spectrograms of species-diagnostic vocalizations of *Elaenia martinica* and *E. flavogaster*. 1, Jinotega, Nicaragua, 25 April 1959; 2 and 3, Belmont, Grenada, 3 April 1965; 4 and 9, St. Philip, Barbados, 7 April 1965; 5 and 10, Grande Anse, Martinique, 9 April 1965; 6-8 and 11-13, Guánica Forest Reserve, Puerto Rico, 28 April 1965.

up the specific differences between the voices of these siblings, but spectrograms 1 through 3 demonstrate the distinctiveness of the *flavogaster* calls.

I am indebted to Benjamin Seda, Chief of the Division of Forestry, for placing the facilities of the Guánica Reserve at our disposal, and to Félix Iñigo, Chief of the Fish and Wildlife Division of the Puerto Rican Department of Agriculture, for courtesies extended in connection with our studies. These observations were made incidentally to field work on *Myiarchus* in the West Indies sponsored by the Leonard C. Sanford Trust Fund of the American Museum of Natural History. During this study my companion Puleston was a participant in the National Science Foundation Undergraduate Research Program.—WESLEY E. LANYON, *American Museum of Natural History, New York, New York.*