

A new subspecies of *Sporophila angolensis* (Aves: Emberizidae) from Isla de Coiba and other additions to the avifauna of the Veragua Archipelago, Panama

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Abstract.—New information is presented concerning the systematics and biogeography of the islands of the Pacific coast of western Panama. *Sporophila angolensis fractor*, new subspecies, characterized by a larger bill than *S. a. ochrogyne*, is described from Isla de Coiba, Panama. Recent doubt cast on the validity of the Coiba endemic subspecies *Polioptila plumbea cinerica* is unfounded. The first specimen records are given for Islas Secas and Isla Jicarón, including a specimen of *Contopus cinereus* from the latter that is referable to the Coiba subspecies *C. c. aithalodes*. *Tyrannus melancholicus* and *Elaenia flavogaster* are added to the avifauna of Isla Brincanco.

The series of islands lying off the Pacific coast of the provinces of Chiriquí and Veraguas, Panama, which I termed the Veragua Archipelago (Olson 1997), is dominated by Isla de Coiba, by far the largest and most diverse faunistically of the group (Wetmore 1957). By comparison, the avifauna of the remaining islands is depauperate but nevertheless of interest for studies of island biogeography (Olson 1997). One unresolved issue in the region is the taxonomic status of the Thick-billed or Lesser Seed-Finch *Sporophila angolensis* on Isla de Coiba. I address this anew here and also record several specimens that were overlooked in my account of the avifauna of the Veragua Archipelago (Olson 1997) that provide new island records.

Isla de Coiba

Genus *Sporophila*

Morphological and behavioral evidence have been cited for including the

seed-finches of the genus *Oryzoborus* with the seedeaters in the genus *Sporophila* (Olson 1981a). More recently, molecular evidence based on mitochondrial DNA (Lijtmaer et al. 2004) and an independent study using cytochrome *b* sequences (Robbins et al. 2005), establish that *Sporophila*, *Oryzoborus*, and *Dolospingus* constitute a monophyletic clade, although resolution of relationships within the clade was not sufficient to establish, for example, whether the two species of *Oryzoborus* would constitute a paraphyletic group. Regardless, there still does not seem to be any justification for *Oryzoborus* as a distinct genus.

Sporophila angolensis sensu lato

Whether the all-black males of the *Sporophila funereus* group west of the Andes are specifically distinct from the populations of *S. angolensis* east of the Andes in which the males have chestnut bellies continues to be debated. I argued that the existence of hybrids in the Magdalena Valley, Colombia (Olson

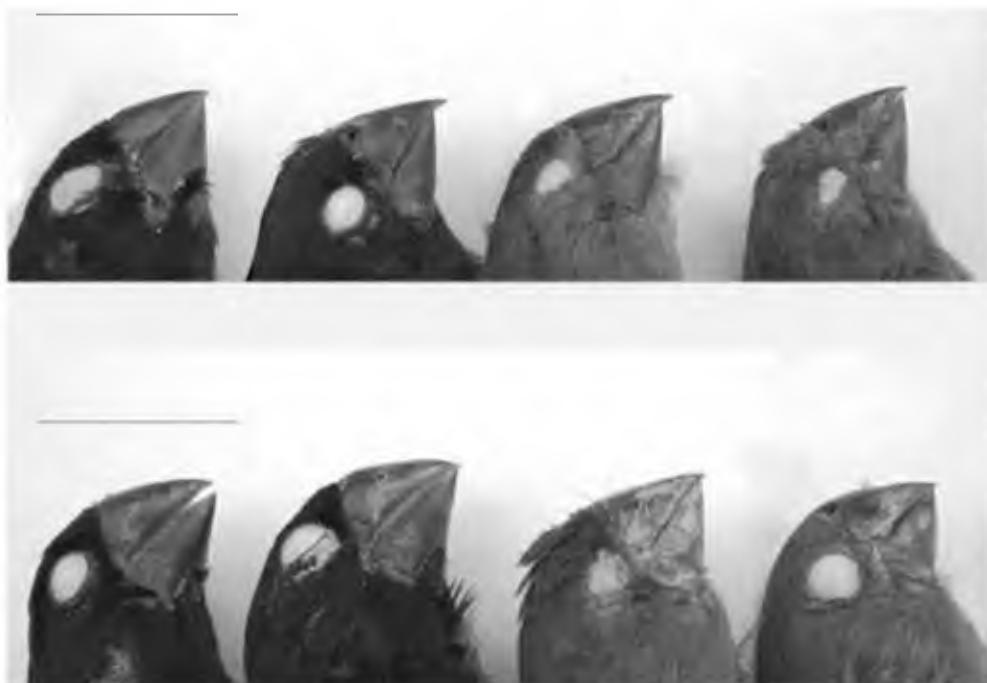


Fig. 1. Comparison of the bill size in *Sporophila angolensis ochrogyne* (top row, two males, two females) from western Panama and the type series of *S. a. fractor* (bottom row, two adult males, immature female, and female holotype USNM 461373 on far right). Scale bars = 2 cm.

1981b), indicated that these taxa were best treated as conspecific. The contrary view is that no evidence of a hybrid zone has been established (American Ornithologists' Union 1998). This seems rather arbitrary as there are numerous taxa of Neotropical birds that are still considered to be only subspecifically distinct yet are not known to form hybrid zones (e.g., the forms of *Gymnopithys leucaspis* and *Tangara inornata* in Bocas del Toro, Panama—Olson, 1993). What has passed without consideration here is that, although there are at least four subspecies recognizable among *S. "funereus"* based on female plumage (Olson 1981a), females of one of them, *S. "funereus" ochrogyne*, are indistinguishable from females of *S. angolensis* from a wide range in South America. Thus, we clearly have a case where differences in male plumage, which are very minor and could conceivably be under the control of a single gene, are considered to be significant at the

specific level, whereas minor differences in female plumage are recognized at the subspecific level. I continue to consider that *S. funereus* and *S. angolensis* should be treated as conspecific.

Sporophila angolensis fractor, new subspecies

Fig. 1

Holotype.—USNM 461373, adult female, Salinas, Isla de Coiba, Veraguas, Panama. Collected 23 Jan 1956 by Alexander Wetmore.

Paratypes.—USNM 461371, adult male, Cativál, Isla de Coiba, 27 Jan 1956, A. Wetmore. USNM 461372, adult male, Cativál, Isla de Coiba, 11 Jan 1956, A. Wetmore. AMNH 106561, labelled as female but the coloration is that of an immature male (see Olson 1981a:45), Isla de Coiba, 18 Apr 1901, Joseph H. Batty.

Measurements of holotype and paratypes.—See Table 1.

Table 1.—Measurements (mm) of *Sporophila angolensis fractor*, new subspecies, (holotype, the only female, in boldface) compared with *S. a. ochrogyne* from western Panama (range with means in parentheses; $n = 10$ for each sex; bill measurements with asterisk are from an aberrantly large specimen from central Panama (USNM 207550) and are not included among the other statistics).

Measurement	<i>S. a. ochrogyne</i> males	<i>S. a. ochrogyne</i> females	<i>S. a. fractor</i> new subspecies
Wing	54.0–58.6 (56.6)	52.4–56.8 (54.0)	55.8 , 57.8, 59.3, 59.5
Tail	49.4–53.2 (50.5)	46.6–51.1 (49.2)	49.4 , 51.4, 51.7, 52.5
Culmen length	12.4–13.8 (13.1) 14.5*	12.4–13.8 (13.0)	15.0 , 15.4, 14.7, 15.2
Maxilla width at rictus	7.4–8.4 (7.9) 10.2*	7.6–8.3 (8.0)	9.2 , 9.6, 10.1, 9.2
Bill depth	10.0–11.1 (10.7) 11.6*	9.6–10.7 (10.3)	12.1 , 12.7, 12.6, 12.3

Diagnosis.—Coloration as in *S. a. ochrogyne* but bill larger (Table 1).

Range.—Isla de Coiba, Province of Veraguas, Pacific coast of Panama.

Etymology.—Latin, *fractor*, breaker, in reference to the large bill. The name is a masculine noun in apposition.

Remarks.—There is overlap in wing and tail measurements between Coiba birds and those of the mainland, although the wing in the former averages longer (Table 1). The authenticity of the provenance of the paratype collected in 1901 by Batty could be questioned because of the partially fraudulent nature of the specimens that Batty labeled as coming from that island (Olson 1997). Its measurements and the nature of its labeling, however, indicate that it is a genuine Coiba specimen. Wetmore (1957:102) noted the large size of the bill in the Coiba birds based on his three specimens and that of Batty but declined to distinguish them nomenclaturally pending collection of more specimens. He noted two mainland specimens of the *funereus* group that had oversized bills but regarded them as aberrations. One of these (USNM 207550 Gatun, Canal Zone) was stated to be in the range of Coiba birds, but it is actually more nearly intermediate between *fractor* and *ochrogyne* (Table 1). The other specimen (AMNH 388791), from Antioquia, Colombia, had the bill decidedly more massive than Coiba birds. Olson (1981a) remarked on an even more

aberrantly large-billed female of *S. a. angolensis* from Venezuela, but a few such widely scattered aberrations would have little bearing on the fact that Coiba birds have consistently larger bills than birds of the adjacent mainland. It therefore seems appropriate to give formal recognition to the Coiba seed-finch, especially in light of the high rate of endemism at the subspecific level among the other birds of Coiba.

Tropical Gnatcatcher *Polioptila plumbea cinericia*

Wetmore (1957) described the resident gnatcatcher of Isla de Coiba as a new subspecies, *Polioptila plumbea cinericia*, based on the darker coloration that is typical of many Coiba endemics. Atwood & Lerman (2006:373) questioned the validity of this taxon because the original description was “based on comparison with *bilineata* rather than with adjacent mainland *superciliaris*; [so that] further study [is] needed to clarify whether *cinericia* should be synonymized with [the] latter.” This issue should never have arisen. At the time Wetmore wrote, *superciliaris* was considered to be a synonym of *bilineata* (see Hellmayr 1934: 501–502). Wetmore et al. (1984) affirmed the validity of *cinericia*, comparing it with birds from mainland Panama identified as *superciliaris*, and Wetmore’s original comparisons were undoubtedly made with the same specimens.

Isla Jicarón

Isla Jicarón is relatively large (20 km², elevation 342 m) and should be of considerable potential biogeographical interest as it is well isolated from the mainland by the intervening island of Coiba, which lies 7 km to the N. Despite this, there has never been a scientific survey of the avifauna of the island and as far as I am aware the following five specimens, which were overlooked in my report on the archipelago (Olson 1997), are the only ones available for the island, apart from a series with data that were completely fabricated by J. H. Batty and that did not come from Jicarón at all (Olson 1997). One of these, a specimen of Rufous-browed Peppershrike *Cyclarhis gujanensis*, became a somewhat notorious piece of evidence in the fraud, as it belongs to the mainland race *C. g. subflavescens*, whereas if the species actually occurs on Jicarón, the distinctive Coiba subspecies *C. g. coibae* would be expected (Wetmore 1957:83).

All specimens were collected in Isla Jicarón, 24 March 1959, by P. T. Beaudette and J. R. Northern. All five species also occur on Isla de Coiba and none of the specimens differs subspecifically from birds from that island.

Rufous-tailed Hummingbird *Amazilia*
t. tzacatl

LACM 34947, male.

Green Kingfisher *Chloroceryle*
americana isthmica

LACM 34971, male.

Tropical Kingbird *Tyrannus*
melancholicus chloronotus

LACM 34986, female.

Panama Flycatcher *Myiarchus*
p. panamensis

LACM 34980, male.

Tropical Pewee *Contopus cinereus*
aithalodes

LACM 34974, female. This specimen is significant in confirming the predicted geographical alliance between Jicarón and Coiba, as it is very clearly referable to the dark subspecies hitherto endemic to Coiba that Wetmore (1957: 65) named *C. c. aithalodes*.

Islas Secas

I was unable to document any ornithological activity in this group of small islets (Chiriquí Province, 7°58'N, 82°02'W) after dismissing the series so labeled by Batty as fraudulent (Olson 1997). There are, however, two specimens collected there 27 March 1939 by G. P. Ashcraft.

Belted Kingfisher *Ceryle alcyon*

LACM 50319, labeled as female but male by plumage. In Panama, this species is a wintering migrant from the north and 27 March is a rather late date for it as the latest mentioned by Wetmore (1968:425) is 2 April.

Yellow-green Vireo *Vireo flavoviridis*

LACM 50391, female. As this species is migratory, it is not necessarily a breeding resident in Islas Secas.

Isla Brincanco

I reported 27 specimens of birds collected by Wetmore on Isla Brincanco 23–24 March 1962 (Olson 1997). I was not aware that he was preceded there by P. T. Beaudette and J. R. Northern, who collected 18 specimens on the island on 26 March 1959. Most of these are the same as encountered by Wetmore, but two common flycatchers are new to the island's avifauna.

Tropical Kingbird *Tyrannus*
melancholicus chloronotus

LACM 34987, male.

Yellow-bellied Elaenia *Elaenia flavogaster* subsp.

LACM 39896, male. This species otherwise occurs in the Veragua Archipelago only on Isla Coiba and Isla Afuerita, plus a sight record for Isla Parida (Olson 1997). The specimen is a juvenile without a crown patch, suggesting either that the species breeds on the island or that this represents a wandering individual of a rather vagile species. The larger size of the specimen rules out either Lesser Elaenia *E. chiriquensis* or Mountain Elaenia *E. frantzii* (Wetmore 1972:555), neither of which is known from the archipelago (Olson 1997), but the stage of plumage does not admit of subspecific determination.

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