GENERAL NOTES

Range and affinity of the Pale-bellied Mourner (*Rhytipterna immunda*).— The Pale-bellied Mourner (*Rhytipterna immunda*) of northern South America is rare in museum collections, virtually unknown in life, and of uncertain generic and familial affinities. Since Sclater and Salvin described the species in 1873, from two specimens presumably taken in French Guiana (locality uncertain), the species has been collected by Klages (Santarem, Brazil), by the Olalla brothers (Rio Guainia, extreme southeastern Colombia; Yavanari, along the Rio Negro, Brazil; Manáos, Brazil; and at Santarem), and by Haverschmidt at Zanderij, Surinam. Recently we have become aware of three additional specimens that extend the known range of the species to northeastern Mato Grosso, approximately 800 miles south of the nearest previously known locality (Santarem).

Fry spent August and September 1968 in the Serra do Roncador, Mato Grosso, Brazil (12° 54′ S, 51° 52′ W) on the Xavantina/Cachimbo Expedition organized and financed by the Royal Society and the Royal Geographic Society of London. Among the specimens taken at that locality and later sent to Lanyon for identification were three species of *Myiarchus* flycatchers (including *M. ferox*) and one puzzling specimen tentatively assigned to "*M. ferox*", though its coloration was noticeably paler below and the bill was substantially narrower than in that species. Subsequently Lanyon was reminded of notations by Hellmayr (1929: 154), Zimmer (1936), and later authors on the remarkable similarity between *Myiarchus* and *Rhytipterna immunda*. Careful reexamination of the specimen (AMNH 803012) showed it to have a tarsal scutellation that, according to Warter (1965), is unique to *Rhytipterna*. The recurved margins of the plantar scutes give the upper portion of the posterior edge of the tarsus a serrated appearance. Comparison of the specimen to *immunda* then confirmed its identity.

While this manuscript was in preparation Lanyon received from Helmut Sick of the National Museum in Rio de Janeiro a loan of Brazilian *Myiarchus*. Included in this shipment were two specimens of *immunda* that had been identified tentatively as "*M. ferox*." One of these (A. 1423) Sick took in 1949 in northeastern Mato Grosso, less than 100 miles from where Fry collected his specimen, and the other (A. 2838) Sick collected along the Rio Cururú in southwestern Pará in 1957.

Fry's specimen of *immunda* was netted in "cerradáo," a Brazilian term for the closed woodland habitat intermediate between open woodland savanna and forest. Fry (1970) has published more detailed analysis of the environment and associated avifauna at this locality. Haverschmidt (1968: 278) published the only other reference to the species' habitat, "sandy savannas near Zanderij where there are scattered dense, high bushes," and further recorded it feeding on "berries and fruit." Of its vocal behavior Haverschmidt wrote: "It is a solitary, silent bird although I once heard it utter a finch-like note." Sick was similarly impressed with its finch-like vocalizations for he listed the bird in his notes as "Morgenfink-Tyrann" (tyrant that sings like a finch early in the morning).

Fry collected his Mato Grosso specimen on 12 August; it is in fairly worn plumage and its testes measured 6 mm (slightly smaller than the testes of reproductively active *Myiarchus* of comparable body size). Nine other adults collected at Yavanari, Zanderij, Santarem, and in Mato Grosso from August through October are all in worn or very worn plumage. The adult taken on the Rio Guainia in Colombia in May is in fairly fresh plumage. From these data one can speculate that *immunda* breeds from late August through October and undergoes

a single annual molt shortly thereafter. This cycle is similar to that of many populations of *Myiarchus* throughout the Amazonian basin (Lanyon, MS). Sick's specimen from Pará, collected on 18 June, was noted as having large follicles and "laying," suggesting that the breeding cycle may not be as synchronized as the data above might suggest. The nest of *immunda* is unknown.

Historically the genus *Rhytipterna* has been placed in the Cotingidae largely because of characteristics of the tarsal envelope (Ridgway, 1907). Hellmayr (1929) and most recent authors have placed it near such cotingas as *Laniocera* (the "mourners") and *Lipaugus* (the "pihas"). But Ames (1971) found a striking similarity in the syringeal anatomy of *Rhytipterna*, *Laniocera*, and *Myiarchus*, and on that basis recommended that both of the "cotingid" genera be placed in the *Myiarchus* subgroup of the Tyrannidae. The only one of the three species of *Rhytipterna* available to Ames for dissection was *holerythra*, the least myiarchine with respect to plumage characteristics. Warter (1965) found the skulls of *Rhytipterna* to be "virtually indistinguishable" from those of *Myiarchus* and related tyrannid genera and, in the "absence of any substantial unifying character with the Cotingidae," recommended that "*Rhytipterna* be transferred to the Tryannidae and placed near *Myiarchus*, which it most resembles."

In view of the remarkable "convergence" (?) in plumage coloration and pattern between the *Myiarchus* flycatchers and *immunda* (lacking in the other two species of *Rhytipterna*), one immediately wonders whether or not *immunda* is a hole-nesting species (like all *Myiarchus*) and whether its vocal reportoire contains characters in common with that of any of the South American *Myiarchus*. Modifications in the tarsal envelope traditionally have been considered of significance at all levels of classification within the suboscines, and the tarsal serrations of all three species of *Rhytipterna* do effectively define the genus. We are reminded that *Myiarchus validus* of Jamaica was formerly placed in a monotypic genus ("*Hylonax*") and even transfered to the Cotingidae (Ridgway, 1907) on the basis of deviations in the tarsal envelope. Subsequently the revelation that the tarsal condition in *validus* is shared in varying degrees by other *Myiarchus* (Zimmer, MS) and information on the nesting habits and voice of *validus* (Lanyon, 1967) argued for the inclusion of the species in *Myiarchus* and confirmed a relationship strongly suspected on the basis of plumage coloration and pattern alone. The question of the generic affinities of *Rhytipterna immunda* must be left unanswered until more information is available on the nesting habits and vocal characters of it and its two congeners.

There is a real possibility that additional specimens of *Rhytipterna immunda* may be extant but misidentified, and we urge curators of museum collections to examine carefully their *Myiarchus* material from northern South America. The extensive and now widely dispersed collections of the Olalla brothers might be especially profitable in this regard, for five of the six Olalla specimens of *immunda* in the collection of the American Museum of Natural History were originally catalogued as *Myiarchus* and subsequently identified correctly by Zimmer. Suspect are any unusually pale-bellied specimens of "*M. ferox*" that have comparatively narrow bills. Bill width, measured with calipers at the anterior corner of the nostril, ranges from 5.6 mm to 6.4 mm (average 6.0 mm) in the 12 specimens of *immunda* examined. In a series of 20 *ferox* from the Amazonian region, bill width ranged from 7.1 to 8.7 mm (average 7.9 mm). A positive separation of *immunda* from *Myiarchus* can be made by the presence of the tarsal serrations (see Ridgway, 1907: 818–819, and use available specimens of *Rhytipterna simplex* or *R. holerythra* to illustrate this character).

We are grateful to Helmut Sick for sharing his field notes with us and for the opportunity to examine material from the National Museum in Rio de Janeiro, which led to the fortuitous discovery of two of the specimens reported here. It is a pleasure to acknowledge assistance from David Snow, for his examination of the type specimens in the British Museum (Natural History), and from Kenneth Parkes for the loan of the Klages specimens in the Carnegie Museum. Correspondence and discussion with Peter Ames, Stuart Warter, Eugene Eisenmann, and Fernando Novaes helped to clarify certain points.

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Cedar Waxwing courts White-throated Sparrow.—On 29 June 1971 at 09:00, I watched a female White-throated Sparrow (*Zonotrichia albicollis*), building a nest near the Wildlife Research Station in Algonquin Park, Ontario. While she sat in a black spruce near her nest site with her bill full of nesting material, a Cedar Waxwing, (*Bombycilla cedrorum*), flew to within 4 feet of her and began weaving back and forth on an open branch in the stereotyped courtship dance of this species, which Putnam (Wilson Bull., 61: 141, 1949) describes as giving "the impression of spring-wound mechanical toys in operation." No other birds of either species were nearby. The waxwing, with its breast feathers fluffed, hopped with a swaying and bobbing motion in which the tail appeared to move out of phase with the bird's body. It repeatedly gave a soft vibrating "zeee" sound, which was likely the courtship note Putnam described. After about 30 seconds the sparrow began chipping and jumping from branch to branch, but was followed by the waxwing, which at one point broke off a small twig and presented it to the sparrow while continuing to dance about a foot away. Finally the sparrow dropped the nesting material she was carrying and flew down into a hazel thicket, chipping loudly. The Cedar Waxwing then left.

This waxwing's behavior agrees with other descriptions of courtship in this species (Tyler, U. S. Natl. Mus., Bull. 197: 79, 1950), except that the object pre-