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A NEW GENUS AND SPECIES OF TANAGER FROM PERU

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THIRTY-FOUR years have elapsed since the discovery of the last new genus or species in the predominantly Neotropical family Thraupidae. Although there are admittedly vast areas in Peru, as well as in other parts of South America, that have not been intensively explored by ornithologists, the bird life of the country as a whole is reasonably well known. Consequently, we were more than surprised when, in the course of his third summer of extensive collecting in eastern Peru, the junior author obtained a specimen of a new tanager that bears no resemblance to any known species. The specimen was among a series of skins procured from Aguaruna Indians through a missionary friend, Miss Mildred L. Larson, who was residing near the village of Chávez Valdivia, in the Departamento de Amazonas, close to the point where the Río Cenepa unites with the Río Comaina to form a tributary of the Río Marañón, not far from the Ecuadorian boundary. This new tanager, although strikingly distinct (see Frontispiece), is apparently related to the members of the complex of genera that includes *Thraupis*, *Buthraupis*, *Bangsia*, *Poecilothraupis*, *Compsocoma*, and *Iridisornis*. However, it differs so markedly in a number of sharply defined characters from any existing genus that, in addition to representing a new species, it must also be described as a member of a new genus.

Wetmorethraupis gen. nov.

Type-species.—*Wetmorethraupis sterrhopteron* Lowery and O'Neill.

Diagnosis.—A medium-sized thraupid with feathers of malar region, lower chin, and throat stiff and almost bristly, with a waxy appearance; wing long but tail and tarsus short (wing more than 1½ times as long as tail and nearly 5 times as long as the tarsus); bill large (length of exposed culmen more than ¾ the length of the tarsus), broad and deep basally (width and height at base of exposed culmen almost equal), and with exposed culmen equal to middle toe without claw; culmen strongly convex

throughout its length and with tip decidedly uncinatè and with a distinct subterminal notch; maxilla slightly sulcate; maxillary tomium almost straight and without median "tooth"; gonys ascending but not conspicuously so and its length shorter than length of maxilla from posterior edge of nostril; rictal bristles only moderately well developed, those of interramal space greatly reduced; acrotarsium thrushlike with only two scutes, these near the distal end; wing pointed with length of the tip (the difference between the longest and the shortest primary) greater than the length of the tarsus; longest primary exceeding shortest secondary by more than half the length of the wing; 7th primary (counting from the inside) longest, followed in order of length by the 6th, 8th, 9th, 5th, 4th, 3rd, 2nd, and 1st (the 6th, 7th, and 8th are almost equal); feet, toes, and claws moderately heavy, with lateral claw reaching the base of middle claw.

Coloration.—Black above with brilliant orange throat and rich cream-colored abdomen and under tail coverts; tail black; primaries black but with wing coverts and anterior edge of secondaries between Light Violet-Blue (capitalized color names are from Ridgway, 1912) and Flax-flower Blue; color of bill, tarsi, and feet jet black in fairly freshly preserved skin.

Sexes.—Differences between sexes not known but the single specimen now extant is alleged by the Aguaruna Indians to represent the male.

Range.—So far as known, in the eastern foothills of the Cordillera del C6ndor in the Departamento de Amazonas, in extreme northern Peru.

***Wetmorethraupis sterrhopteron*¹ sp. nov.**

Orange-throated Tanager

Type.—Louisiana State University Museum of Zoology no. 31457; Ch6vez Valdivia, near confluence of the R6o Comaina and the R6o Cenepa, lat. 4° 26' S, long. 78° 11' W, Depto. Amazonas, Peru; July 1963; obtained indirectly by John P. O'Neill from Aguaruna Indians.

Diagnosis.—Same as for the genus, of which it is the only known member.

Description of type.—Frontal region, crown, occiput, hind neck, anterior edge of chin, feathers at base of mandible, lores, subocular region, auriculars, sides of neck, dorsum, rump, flanks, upper tail coverts, and tail velvety Black. Malar region, lower chin, and entire throat between rich Orange Chrome and rich Cadmium Orange, tending to possess a burnished quality in area where the lower throat meets the upper breast. Remainder of under parts, including the crissum, between Pale Orange-Yellow and Buff-Yellow. Feathers on tibiotarsus Blackish Brown. Scapulars Black but outer vane of the outermost feathers narrowly edged with blue. Mar-

¹From *στερρός* "stiff" and *πτερόν* "feather," referring to the unique feathers of the throat.

ginal coverts and the lesser and median secondary coverts between Light Violet-Blue and Flax-flower Blue; greater secondary coverts blackish posteriorly but strongly edged anteriorly and terminally with Light Violet-Blue; alula and primary coverts Black but narrowly edged anteriorly with blue; bend of wing Grayish Violaceous Blue; primaries entirely Black; secondaries Black but edged anteriorly with Grayish Violaceous Blue; under wing-coverts Blackish Slate but a few of these feathers edged with blue. Bill, tarsometatarsus, and toes jet black in dried specimen.

Specimens examined.—One, the type.

Measurements in millimeters.—Wing, 99; tail, 62; exposed culmen, 14.4; tarsus, 20.4; middle toe minus claw, 14.5; middle toe with claw, 21.0; height of bill at middle of nostril, 8.45; height of bill at base, 8.9; length of mandible from tip to feathers on side of mandible, 14.6; length of gonys, 10.4; length of maxilla from posterior edge of nostril, 12.9; length of maxilla from posterior edge of nostril to subterminal notch, 11.3; amount of tail graduation, 1.5; excess of longest primary (7th) over shortest (1st), 21; distance from tip of longest primary to tip of shortest secondary, 59; length of wing-tip, 21.7.

Remarks.—Mainly because of its robust bill and predominantly blue wings, this new tanager appears at once to be allied to some of the genera in Sclater's subdivision of his subfamily Tanagrinae that he calls the "Tanagrinae fortirostres" group (Sclater, 1886: 139). In these respects alone, however, does it resemble, even superficially, certain species in the genera *Buthraupis*, *Poecilothraupis*, *Tephrophilus*, and *Compsocoma*. This similarity is, however, immediately overshadowed by other more striking and deep-rooted differences. The color of the throat, which is a brilliant orange, and the cream color of the breast, abdomen, and under tail coverts are colors that are unique in the family; the feathers of the throat are stiff and almost bristly; the bill appears disproportionately large in relation to the bird's general size; and the tail is relatively short in comparison with the length of the wing.

As implied above, even the blue of the wing bears only a superficial similarity to that of other genera. In the two species of *Compsocoma*, for example, the anterior edges of the primaries are blue, while in *Wetmorethraupis* these feathers are wholly black. Furthermore, in *C. notabilis* the marginal coverts are green and the wing lining is yellow, in sharp contrast to the blue marginal coverts and the dark wing linings of the new genus. In *C. flavinucha* and its races there is the added difference that the blue anterior edging of the primaries is a much paler blue than that of the wing coverts. The species of the genera *Poecilothraupis*, *Iridisornis*, *Delothraupis*, and *Stephanophorus* all have blue instead of black edgings to the primaries, and in *Tephrophilus*, in which the primaries are wholly black,

the secondary coverts differ in being broadly black basally. *Wetmorethraupis* is most similar, with respect to the distribution of blue in the wings, to *Buthraupis*, especially *B. montana*, but, of course, differs from that genus in other important ways.

The bill of *Wetmorethraupis*, although similar to that of *Thraupis*, notably *T. bonariensis*, differs in being much more massive and bulbous, in having the culmen more convex throughout its entire length, and in having the width of the bill at the base greater than, instead of decidedly less than, its depth at the same level. Surprisingly enough, the bill of *Wetmorethraupis* is most like that of *Cissopis*, with which the new genus agrees in no other respect. The plumage of *Cissopis* is black and white, the black iridescent feathers of the head, throat, and upper breast are lanceolate, the black tail is strongly graduated with each rectrix broadly tipped with white, and the tail is much longer than the wing instead of decidedly shorter.

The wing/tail ratio of *Wetmorethraupis* (1.6) differs greatly from that of *Buthraupis eximia* (1.2) but agrees rather closely with that of *Buthraupis montana* (1.5). The wing/tail ratios of the species of *Bangsia* are also similar to that of *Wetmorethraupis*, but are, if anything, greater than in *Wetmorethraupis*. In *Bangsia edwardsi* the wing/tail ratio is 1.6–1.8, in *B. arcaei*, 1.8, in *B. rothschildi*, 1.8, in *B. aureocincta*, 1.6, and in *B. melanochlamys*, 1.7–1.8. In no other related genus is this ratio comparable. In *Iridisornis* it is 1.1–1.2; *Delothraupis*, 1.2; *Stephanophorus*, 1.2; *Poecilothraupis*, 1.2; *Compsocoma*, 1.2–1.3; *Thraupis*, 1.2–1.4; *Spindalis*, 1.2–1.3; *Dubusia*, 1.0; *Tephrophilus*, 1.1.

The short tarsus of *Wetmorethraupis* is reflected in its great wing/tarsus ratio of 4.9. The closest approach is found in *Stephanophorus* with 4.4 and in *Buthraupis montana* with 4.3. In *Buthraupis eximia* the ratio is only 3.1 and in the species of the genus *Bangsia* it ranges from 3.4 to 4.0. In *Iridisornis*, *Delothraupis*, *Compsocoma*, *Poecilothraupis*, and *Thraupis* it is less than 4.0, and in *Tephrophilus* it is only 2.9.

The structure of the tarsus in *Wetmorethraupis* is perhaps unique among the thraupids. The acrotarsial envelope is almost without scutes, there being only two near the distal end (Figure 1). Rand (1959) has shown that the presence of acrotarsial scutellation in the New World nine-primaried oscines is remarkably constant except in the family Parulidae. However, in certain thraupid genera that normally have a series of well-defined acrotarsial scutes, we have found an occasional specimen in which the scutellation is difficult to discern and hence suggestive of the condition we have noted in *Wetmorethraupis*. Consequently, we cannot be sure that the "booted" tarsus in our one specimen of *Wetmorethraupis* is not also attributable to individual variation.

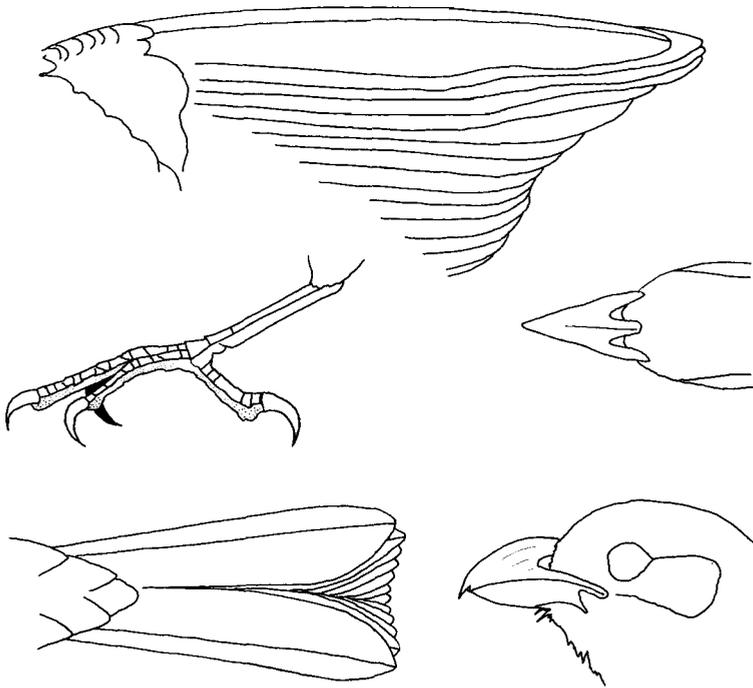


Figure 1. External structural features of *Wetmorethraupis* ($\times 1$).

There is much variation in the wing formulae of the different genera. In *Wetmorethraupis*, the 7th primary (counting from the inside) is the longest, followed in order by the 6th, 8th, 9th, 5th, 4th, 3rd, 2nd and 1st. The 6th, 7th, and 8th are almost equal, a feature not observed by us in any other thraupid genus. In *Dubusia* and *Tephrophilus* the 9th primary is the shortest, in which respect these two genera differ from all other genera in the complex. In *Phlogothraupis*, *Ramphocelus*, *Spindalis*, *Iridisornis*, *Delothraupis*, *Stephanophorus*, *Poecilothraupis*, *Compsocoma*, *Buthraupis*, and some species of *Thraupis*, the 9th is shorter than the 5th. In three of the five species of the genus *Bangsia* the 9th is longer than the 5th, but in not one of the species of this genus are the 6th, 7th, and 8th primaries so nearly equal as they are in *Wetmorethraupis*.

Wetmorethraupis sterrhopteron bears one interesting similarity to *Iridisornis analis*. In the latter species the upper chin is black in sharp contrast to the color of the lower chin and throat, as it is in *W. sterrhopteron*, but the resemblance goes no further.

The stiff, bristly, orange throat feathers of *Wetmorethraupis* set it apart from all other genera of tanagers, although, surprisingly enough, the few

orange feathers that are sometimes found on the lower throat and upper breast in certain male examples of *Spindalis* are suggestive of the condition found in *Wetmorethraupis*. In the latter, however, the entire chin and throat possess the stiff orange feathers instead of their being restricted to a few clusters of feathers as is the case in the species of *Spindalis* in which they occur. These orange throat feathers in *Wetmorethraupis* are described as being bristly. They are not erect and pilelike, but they are, nevertheless, rigid and with little pliancy.

We believe that *Wetmorethraupis* is perhaps closer to *Bangsia* than to any other genus. If, however, we follow the arrangement of genera according to Hellmayr (1936), this allocation would unfortunately place *Wetmorethraupis* also close to *Tephrophilus* and *Dubusia*, with which it appears to have no real affinities. But the final arrangement of the genera in this segment of the family demands much additional study, particularly of the skeleton, which cannot yet be undertaken because of the almost total lack of skeletal material of many of the genera. Of equal importance no doubt will be the comparative ethology of the different species, about which little or nothing is now known.

We take great pleasure in naming this new genus of tanager for Dr. Alexander Wetmore in recognition of his many outstanding contributions to ornithology, ranging from the classification and systematics of both recent and fossil birds to such diverse facets of the subject as bird migration and pterylosis.

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