

CRITICAL NOTES ON SOME YELLOWTHROATS OF  
THE PACIFIC SOUTHWEST<sup>1</sup>

WITH ONE ILLUSTRATION

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The following conclusions, insofar as they relate to the yellowthroats of southern California and southern Arizona, are in close accord with those already published by Grinnell and Swarth. However, a reiteration of the differences between *Geothlypis trichas occidentalis* and *Geothlypis trichas scirpicola* may appropriately be introduced since in some quarters doubt apparently still exists concerning their distinctness. Briefly the differences between the northern and northwestern form *occidentalis* (Brewster, Bull. Nutt. Orn. Club, 8, 1883, p. 159 [Truckee River, Nevada]) and the southern race *scirpico'a* (Grinnell, *Condor*, 3, 1901, p. 65 [El Monte, Los Angeles County, California]) are the brighter coloration and slightly larger bill of the latter. To be more specific; in *scirpicola* the dorsal plumage is greener (less grayish); the yellow of the underparts extends farther over the abdomen and is, in series, definitely brighter; the flanks are more brownish (less grayish); and the post-frontal band of white in the males is wider. Probably most of the doubt surrounding the validity of this resident, sedentary subspecies arises from failure to recognize the fact that the migratory *occidentalis* occurs as a winter visitant and a transient over its entire range. Personal experience leads me to believe that the majority of yellowthroats to be found in southern California, even as late as the middle of May, are migratory *occidentalis* passing through at a time when *scirpicola* has commenced to breed. This is particularly true on the desert side of the mountains.

To the already determined range of *scirpicola* I have a few extensions based on breeding birds. The re-vamped range extends along the Pacific slope from about latitude 30° in Lower California (see Grinnell, *Lower California Ornithology*, 1928, pp. 203-4; also many specimens examined by me in the Natural History Museum) north to Santa Barbara, California, the southern San Joaquin Valley (Buena Vista Lake), and Walker Basin on the south fork of the Kern River (all in the Dickey collection: birds from the last two localities incline toward *occidentalis*). The Colorado River drainage colony which is (apparently) isolated from that on the Pacific extends from the mouth of the Colorado River north along that stream, and its tributary the Virgin River, to Washington, Washington County, Utah (Dickey coll., typical), west through the Imperial Valley (many specimens) to Mecca, Riverside County (Dickey coll.), and east up the Gila and Santa Cruz rivers at least to Tucson, Arizona (Dickey and Nat. Hist. Mus. colls.).

Some years ago Swarth (Univ. Calif. Publ. Zool., 10, 1912, pp. 71-3) in commenting on four breeding birds from the San Pedro River in Cochise County, Arizona, expressed the opinion that they might prove to be separable from *scirpicola*. He has subsequently (Proc. Calif. Acad. Sci., 4th ser., 18, 1929, p. 339) reaffirmed his previous statements. His alternative was to consider them as possibly referable to *Geothlypis trichas melanops* (Baird, Rev. Amer. Birds, 1865, p. 222 [Mexico]) a form known only from the states of Vera Cruz and Oaxaca, and the Valley of Mexico. The Dickey collection has lately acquired a series of yellowthroats from northern and east-central Sonora, Mexico, consisting of eleven breeding birds from Saric and a March specimen from Tecoripa. These prove to be similar to the San

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Pedro River birds (all four of which are at hand) but the color characters are carried to an even greater extreme. By the courtesy of the United States National Museum there is available the type of *melanops* and also two other males of that form (Biological Survey coll.) from the Valley of Mexico. The two latter are surely breeding birds, for they were collected on June 25 and 26. These three specimens are all very much larger than any of the more northerly subspecies, as will be seen from the accompanying table of measurements. They bear, in color, close resemblance to *scirpicola* save that the posterior underparts are continuously yellow and there is more concealed yellow in the crown. The Sonora series constitutes a very distinct race, the brightest colored of all the forms of *Geothlypis trichas*, and for it I propose the name of

*Geothlypis trichas chryseola* subsp. nov.

*Type*.—Breeding male adult, no. 28,584, collection of Donald R. Dickey; Saric, north-central Sonora, Mexico; June 12, 1929; collected by J. T. Wright; original number 3557.

*Subspecific characters*.—Compared with *Geothlypis trichas melanops*, size decidedly smaller and whole plumage lighter and brighter; yellow of underparts more intense; green of upperparts, wings, and tail more yellowish (less olive) green. No females of *melanops* are available for comparison. Compared with *Geothlypis trichas scirpicola*, both sexes are brighter and more yellowish above, the yellow of the underparts is brighter and more extensive (the flanks of the males are only slightly, or not at all, tinged with grayish), and the post-frontal white band in the males is even wider and is noticeably suffused with yellow.

*Range*.—North-central Sonora, northeast to the San Pedro River in Cochise County, Arizona; east to northwestern Chihuahua and south, in spring at least, to Tecoripa, east-central Sonora.

*Remarks*.—The Chihuahua specimen mentioned by Ridgway (Bull. U. S. Nat. Mus., 50, pt. 2, 1902, p. 674, footnote) unquestionably belongs here. As for the four previously mentioned birds from the San Pedro River, Arizona, they are so variable that, as a lot, they could go into one race just as unsatisfactorily as into the other. One (no. 2913, Swarth coll.) is close to typical *chryseola*, another (19,116, Mus. Vert. Zool.) is nearest *chryseola*, a third (19,118) is just about intermediate, while the fourth (19,117) is, except for the very wide post-frontal band, closer to *scirpicola*. The preponderance in the small series is certainly closer to *chryseola* and accordingly I have so called them. Mr. Swarth informs me that they were all taken at exactly the same place, about midway between Fairbank and Charleston, on the San Pedro River. Three of the four localities from which the new race is known (Saric, Tecoripa, and San Diego) indicate an upland habitat, and when finally worked out the range will probably be found to center on the northern part of the Mexican plateau.

The breeding yellowthroats of the Arid Tropical Zone in southern Sonora are a variable lot. I have finally concluded that, as a whole, they are best referable to *Geothlypis trichas modesta* (Nelson, Auk, 17, 1900, p. 269 [San Blas, Tepic (= Nayarit), Mexico]), although actually they are a series of variable intergrades between that form and *chryseola*. There are available, from the type locality, three females and a male of this race (Calif. Acad. Sci. coll.) as well as eight males and two females (Dickey and Bancroft collections) from various points in Sonora, from Empalme (near Guaymas) south to Agiabampo on the Sonora-Sinaloa boundary. In typical form, *modesta* is a dark-colored race. It is very much like *Geothlypis trichas sinuosa* of the San Francisco Bay region, but is slightly grayer (less olive) and has a longer tail and decidedly larger bill. However, were it not for the larger bill, a very noticeable feature, it would require pretty fine discrimination to distinguish between these two races even though their respective ranges are separated by a gap of over a thousand miles. In addition to the mainland examples enumerated above, there are two females of *modesta* collected by the writer in southern Lower California. These were taken respectively at Magdalena Bay (North Estero) on March 3, 1930, and on San José Island, in the Gulf, on March 14, 1930. Both were

in a mangrove-salicornia association, the typical habitat of *modesta* on the opposite side of the Gulf. Their presence was, of course, purely fortuitous, and comparable to the sporadic occurrences of other Mniotiltidae such as *Euthlypis lachrymosa tephra* and *Compothlypis graysoni*. Incidentally, I think it possible that a re-examination of the Brewster collection might produce other Lower California records of *modesta*. This suggestion is based on Brewster's remarks (Birds Cape Region, 1902, p. 186) relative to the possible occurrence of "*sinuosa*" in the Cape Region.

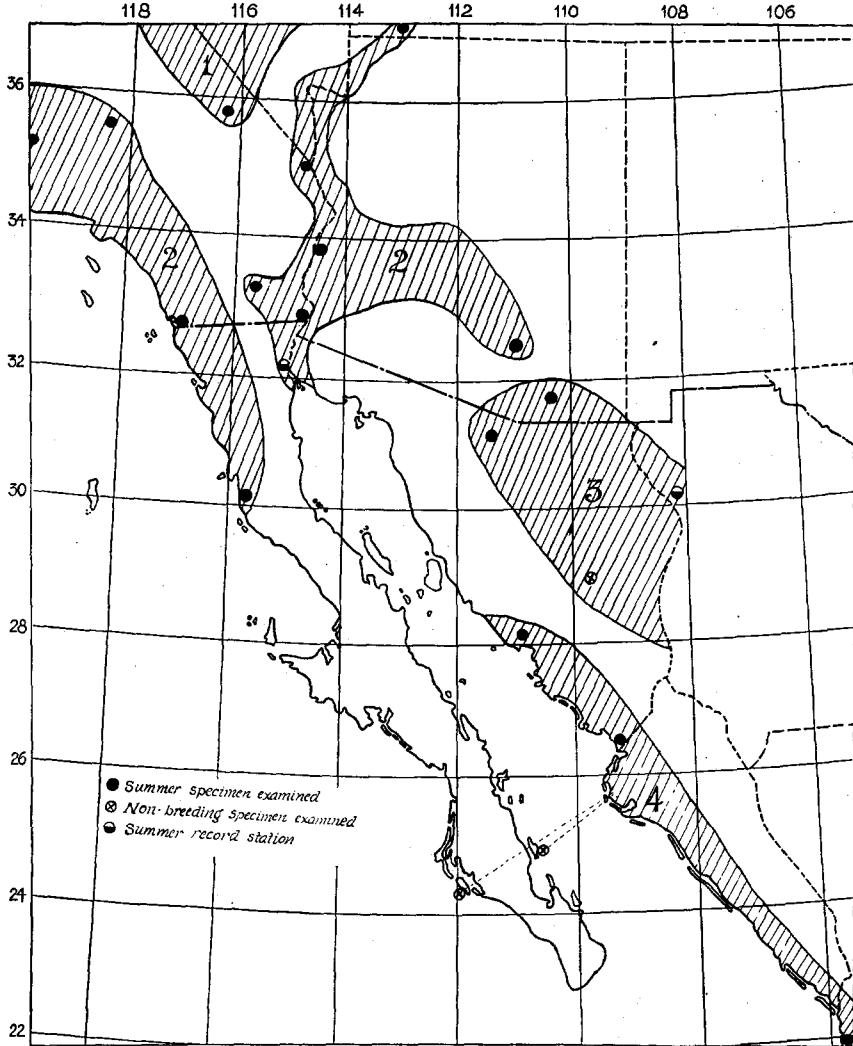


Fig. 111. DISTRIBUTION OF YELLOWTHROATS IN THE PACIFIC SOUTHWEST. RANGES OF THE RACES ARE INDICATED AS FOLLOWS. 1. *occidentalis*. 2. *scirpicola*. 3. *chryseola*. 4. *modesta*.

In arriving at the opinions expressed above I have examined more or less critically, but unfortunately not all at the same time, some 500 yellowthroats. However, as many as 275 have been assembled and directly compared at once. In addition to the 178 in the Dickey collection, specimens have been freely borrowed or notes made from the various public and private collections to whom credit is given

in the text above. On the accompanying map (fig. 111) no effort has been made to "spot in" record stations other than critical ones as a basis for the range outlines drawn.

Average Measurements of Males			
	Wing	Tail	Exposed culmen
20 occidentalis	55.7	52.4	10.7
20 scirpicola	55.6	52.7	11.5
10 chryseola	55.5	53.6	11.7
9 modesta	53.8	52.3	11.7
20 sinuosa	52.6	49.2	10.1
3 melanops	61.7	61.7	12.3

*Pasadena, California, August 22, 1930.*