PROCEEDINGS

OF THE

CALIFORNIA ACADEMY OF SCIENCES

FOURTH SERIES

VOL. XV, No. 16, pp. 493-500 SEPTEMBER 15, 1926

XVI

A CRITICAL INSPECTION OF THE GNATCATCHERS OF THE CALIFORNIAS

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In further process of critically determining the collections of birds accumulating from the San Pedro Martir region of Lower California, I have come to the gnatcatchers (genus *Polioptila).* Two groups are involved, the Black-tailed series and the Blue-gray series. In making this inquiry, there have been available to me not only the extensive materials in the Museum of Vertebrate Zoology but also certain important specimens in the private collection of Dr. Louis B. Bishop, and, through the courtesy of Dr. Barton Warren Evermann, Director, the pertinent specimens in the Museum of the California Academy of Sciences. From the United States National Museum, through the kindness of Doctors Wetmore and Richmond of its staff, there have been sent on for my examination the examples in that Museum from the Cape district of Lower California including the two Ridgway types.

With respect to the Blue-gray Gnatcatchers first: A western subspecies, *Polioptila caerulea obscura,* has been recognized almost universally since first pointed out by Ridgway (1883, p. 535). The form was named in an "editorial" footnote, by

Ridgway, in one of Belding's articles based on the latter's Lower California collections. The type was from San José del Cabo, in the Cape district. It was stated that this specimen agreed in certain respects with other western examples. There was no intimation in that connection, however, that the birds of the Cape district might differ in some degree from those of the Pacific Coast district to the northward.

The materials now accessible in sufficient amount show that there is a separately recognizable race of Blue-gray Gnatcatcher resident in the restricted faunal area known as the Cape San Lucas district of Lower California. The facts above stated indicate that the name *obscura* of Ridgway applies definitely to this Lower Californian race. As has been fully set forth by numerous systematic students, most clearly by Ridgway himself (1904, p. 720), the Blue-gray Gnatcatchers of the "southwestern United States and contiguous parts of northern Mexico" differ from the race of the eastern United States. By the present interpretation, the birds of the west, outside of the southern tip of Lower California, must be provided with a new name; and since in Ridgway's synonymy (loc. cit., pp. 721-722) there is no previous name available, one may now be provided, as follows:

Polioptila caerulea amoenissima, new subspecies

Western Blue-gray Gnatcatcher

Type locality.—Pleasant Valley, 600 feet altitude, Mariposa County, California.

Type.—Male adult, in full breeding plumage; No. 25813, Mus. Vert. Zool.; May 23, 1915; collected by J. Grinnell, orig. No. 3173.

Diagnosis.—Similar to *Polioptila caerulea caerulea* (Linnaeus), of eastern North America, "but gray of upper parts slightly duller, and black at base of inner web of outermost rectrix more extended, usually showing beyond tip of under tail-coverts" (as according to Ridgway, 1904, p. 720); similar to *P. c. obscura* Ridgway, of the Cape San Lucas region, but wing and tail (especially the tail) longer, bill slightly slen-

derer, and median lower surface less clearly white, more imbued with very pale gray.

Range.—Precisely as set forth by Ridgway *(loc. cit.)* for his *obscura,* save for the elimination of the Cape San Lucas district.

Measurements.—Average, minimum and maximum, in millimeters: *Polioptila caerulea amoenissima,* 20 examples, 10 of each sex, from Upper California (Mariposa County south to Riverside County): Wing, 49.6 (46.5-53.0); tail, 52.0 (49.3-55.2); exposed culmen, 10.0 (9.3-10.4). *P. c. obscura,* 10 examples, four of them "males", from the Cape San Lucas district (La Paz and San José del Cabo): Wing, 47.1 (45.5-49.5); tail, 48.1 (44.9-51.0); exposed culmen, 9.9 (9.2-10.4). My reason for combining the sexes here is primarily that I believe some of the specimens were wrongly marked as to sex. And, anyway, the dimensional difference between the sexes in these gnatcatchers is very slight.

Remarks.—Since in essence the present naming is merely the result of the setting off of a local race of very restricted habitat, it is the latter that should be accorded special comment. Ridgway's table of measurements (1904, p. 720) will be found to indicate, but not strongly, the fact of the Cape district birds having the relative proportions indicated in the present diagnosis. Curiously, the type of *obscura* (No. 87530, U. S. Nat. Mus., ♂, San José del Cabo, April 17, 1882, L. Belding) shows the greatest dimensions of any of the Cape specimens before me. This led me to suspect that it might have been a winter visiting individual of the more northern race, in which case an opposite course of naming procedure would have been necessary. But this type, it seems to me, in the average of its characters falls with the Cape birds rather than with the northern birds. Paucity of material (only three males and one female were measured by Ridgway) and a very proper feeling of conservatism, were probably the factors that have held back the formal separation of these two races until now.

Now with respect to the "black-tailed" series of gnatcatchers, a somewhat similar situation is found to occur as in

the blue-grays, even though involving a greater number of forms. The specific name to be used for this group is, as shown by Penard (1923, p. 335), *Polioptila melanura* Lawrence, and not *P. plumbea* of Baird as heretofore within recent years usually employed. Up until now the "Plumbeous" Gnatcatchers of the Cape district of Lower California have been referred to *melanura* (or *plumbea);* but several authors, notably Brewster (1902, p. 210), comment upon differences apparent in specimens from the Cape region as compared with specimens from Arizona and Texas.

Until the present time, *Polioptila californica* Brewster, of southern California and northwestern Lower California, has been considered a full species. But certain authors (Thayer and Bangs, 1907, p. 138, and McLellan, 1926, p. 318) have reported specimens from subterminal parts of the Lower Californian peninsula as being intermediate in characters between *"plumbea"* of the Cape district, and *californica.* The implication of intergradation was not, however, put upon record in suitable nomenclatural manner. Furthermore, Ridgway (1904, p. 733, footnote), it turns out, definitely gave a name, *Polioptila margaritae,* to this intermediate form, though apparently thinking he had named an insular species. Material at hand shows that nearby mainland birds are identical with those of Santa Margarita Island, the type locality of *margaritae.*

My own present study shows that the "Plumbeous" Gnatcatchers of the immediate Cape San Lucas district are distinguishable from those of southeastern California and Arizona, fully meriting naming, though so close that the trinomial must be employed. It thus appears that, even though *californica* is to *melanura* of southeastern California and Arizona as a full species, variation geographically to the southward, through the race *margaritae,* to the Cape form, and intergradation thence with *melanura* through individual variation, warrants considering it just the extreme in a continuous series of subspecies. The case is quite parallel to that of the Brown Towhees, *Pipilo fuscus* and subspecies, occupying about the same areas (see Oberholser, 1919, p. 211, and Grinnell and Swarth, 1926). Diagnoses of the exclusively Lower Californian races of Black-tailed Gnatcatcher may now be given.

Polioptila melanura abbreviata, new subspecies

Cape San Lucas Black-tailed Gnatcatcher

Type locality.—Cape San Lucas, Lower California.

Type.—Male adult, in full breeding plumage; No. 27835, coll. Calif. Acad. Sci.; May 28, 1925; collected by Frank Tose, orig. No. 864.

Diagnosis.—In general character similar to *Polioptila melanura melanura* (see Ridgway, 1904, p. 731, under *Polioptila plumbea)* of southeastern California and southern Arizona, but (in both sexes) tail decidedly shorter, bill somewhat larger, leaden hue of dorsum slightly deeper, and lower surface slightly more imbued with gray, not so clearly white.

Measurements.—Average, minimum and maximum, in millimeters: *Polioptila melanura abbreviata,* 9 adult examples, 5 marked male, 4 female, from Cape San Lucas, San José del Cabo, Todos Santos (latitude, 23° 25′), and La Paz: Wing, 45.4 (44.0-46.7); tail, 46.7 (45.0-48.8); exposed culmen, 9.4 (8.9-10.0). *P. m. melanura,* 20 examples, 10 of each sex, from the lower Colorado River valley in Arizona and California: Wing, 46.0 (44.5-47.8); tail, 50.7 (46.8-53.2); exposed culmen, 8.6 (7.8-9.2).

Range.—So far as now definitely known, only the southern end of the Lower Californian peninsula, from San José del Cabo and Cape San Lucas north to La Paz.

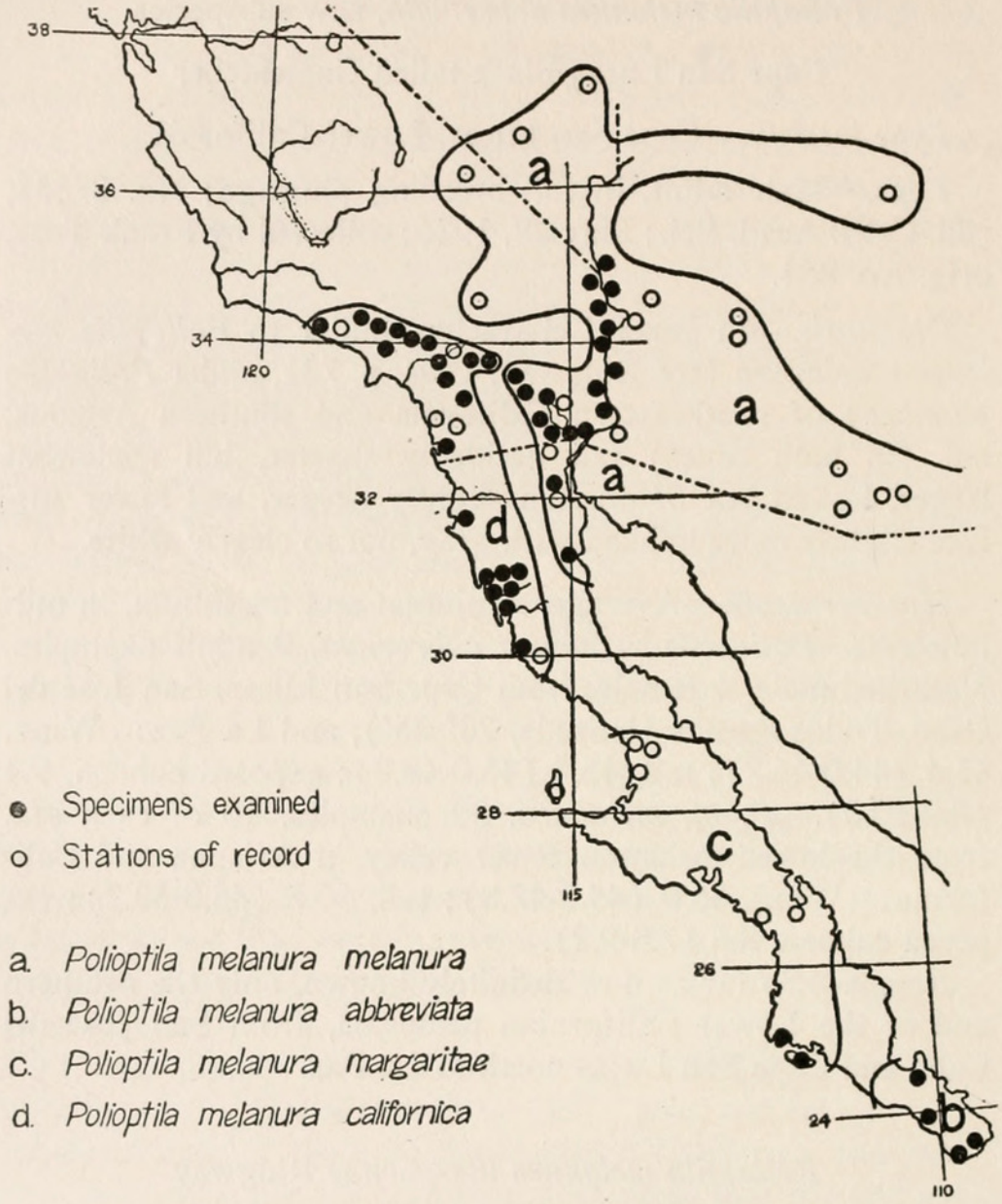
Polioptila melanura margaritae Ridgway

Santa Margarita Black-tailed Gnatcatcher

Type locality.—Santa Margarita Island, latitude near 24° 30′, west coast of Lower California.

Type.—Juvenal, ♀ (?); No. 149938, U. S. Nat. Mus.; May 2, 1888; taken on one of the U. S. S. "Albatross" expeditions; skinned from alcoholic and somewhat discolored.

Diagnosis.—Named originally (Ridgway, 1904, p. 733, footnote) from two young birds skinned from alcoholics; so that adequate characterization was impossible. Full-plumaged, adult specimens now at hand from Santa Margarita Island



Approximate Ranges of the Subspecies of the Black-tailed Gnatcatcher in the Californias.

and Magdalena Bay show the following characters: Similar to *P. m. abbreviata,* but bill a little smaller, tones of color above and below in both sexes a trifle deeper, and tail with white edges and tips of outermost rectrices greatly reduced—to practically as in *P. m. californica* (see Brewster, 1881, p. 103); as compared with *californica,* tail somewhat shorter, and upper and lower surfaces decidedly paler (less darkly slaty).

Measurements.—Average, minimum and maximum, in millimeters: *Polioptila melanura margaritae,* 7 adult examples, 4 males and 3 marked female, from Santa Margarita Island and Magdalena Bay: Wing, 46.7 (44.1-48.7); tail, 46.4 (45.5-48.0); exposed culmen, 9.1 (8.4-9.7). *P. m. californica,* 20 examples, 10 of each sex, from Los Angeles County, California: Wing, 46.2 (44.0-49.9); tail, 49.8 (46.0-53.4); exposed culmen, 9.3 (8.8-10.1).

Range.—A section of the Lower Californian peninsula extending at least from Santa Margarita Island and closely adjacent mainland, north to Rosarito and Santana, latitude about 29° (see Thayer and Bangs, 1907, p. 138). Santa Margarita Island is very close to the mainland, indeed only 4 miles, with islets serving as stepping stones between; so that there is no reason to expect any effect of insularity upon its bird-life.

Remarks.—The range of the California Black-tailed Gnatcatcher, *Polioptila melanura californica* Brewster, in northwestern Lower California extends south from the United States boundary over the lower Pacific slopes as far as the vicinity of El Rosario, latitude 30°, as shown by specimens actually in hand. There are other record stations for Black-tailed Gnatcatchers in Lower California, for instance Cedros Island; but in absence of specimens their subspecific status remains in doubt. The Plumbeous Black-tailed Gnatcatcher, *Polioptila melanura melanura* Lawrence, extends its range into the northeastern (Colorado Desert) section of Lower California, south at least as far as San Felipe Bay, whence newly collected specimens are at hand. (See accompanying map.)

The species and subspecies of the genus *Polioptila* as occurring in Upper and Lower California may now, in accordance with the analysis given above, be listed as follows:

1. *Polioptila caerulea amoenissima* Grinnell.
   Western Blue-gray Gnatcatcher.
2. *Polioptila caerulea obscura* Ridgway.
   Cape San Lucas Blue-gray Gnatcatcher.
3. *Polioptila melanura melanura* Lawrence.
   Plumbeous Black-tailed Gnatcatcher.

4. *Polioptila melanura abbreviata* Grinnell.
   Cape San Lucas Black-tailed Gnatcatcher.
5. *Polioptila melanura margaritae* Ridgway.
   Santa Margarita Black-tailed Gnatcatcher.
6. *Polioptila melanura californica* Brewster.
   California Black-tailed Gnatcatcher.

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