

lower tail-coverts are like the belly. The paler, duller color of the lower surface serves to distinguish this species at once from the more richly colored *grayi*.

It is closely related to *M. grayi* which it probably replaces in the region where it occurs. This supposition is based upon the fact that among the considerable series of *grayi* before me from various parts of Mexico not one is from the State of Tamaulipas, while the present species is unrepresented among the considerable series of that bird from the neighboring State of Vera Cruz.

DESCRIPTION OF A NEW SUBSPECIES OF *DENDROICA*.

BY HARRY C. OBERHOLSER.

A RECENT careful examination of the series of Yellow Warblers contained in the United States National Museum has revealed the existence of a well-defined geographical race of *Dendroica aestiva*, which has hitherto been recognized only in synonymy. The subspecies in question should, therefore, now be known as

***Dendroica aestiva rubiginosa* (Pallas), subsp. restit.**

ALASKAN YELLOW WARBLER.

Motacilla rubiginosa PALLAS, Zoogr. Rosso-Asiat. I, (1811?) 1831, 496.¹

CHARS SUBSP. — *D. aestivae morcomi sat similis, sed corpore supra olivaceo-viridi obscuriore fere unicolore, vertice et uropygio vix flavescenti-*

¹ All other of the numerous synonyms of *Dendroica aestiva* apply with reasonable certainty to the eastern form. The bird which Pallas described (*l. c.*) was from Kadiak Island, Alaska, and is fairly well characterized in his diagnosis, the essential portions of which are herewith presented, italicized as in the original:

“*Motacilla rubiginosa.*

M. flavissima, . . . pectori lituris longitudinalibus rufis, rectricibus flavis fusco marginatis. Vibrissae narium et frons ad medium usque verticem, lateraque capitis et subtus avis tota citreo-flava; frons virescenti nebulosa. . . . Cervix cum dorso uropygioque virescit.”

oribus; auricularibus, colli capitisque lateribus magis olivaceo-viridi lavatis; necnon remigibus cum alarum tectricibus superioribus minus conspicue flavido marginatis.

AL., 61.5-65.3 (63) mm; caud., 43.2-47.2 (44.4) mm.; exp. culm., 9.4-10.4 (9.9) mm; tarsi., 17.3-19.3 (18.3) mm.

HABITAT. — Alaska et Columbia Britannica.

DESCRIPTION. — Male, adult, No. 131807 U. S. Nat. Mus.; Kadiak Island, Alaska, June 7, 1893; C. H. Townsend. Above olive green, somewhat more yellowish on crown, auriculars, rump and sides of neck, but with no well-defined yellow crown-patch. Longest feathers of the superior tail-coverts with central portions olive brown. Lores, orbital ring, conspicuous superciliary stripe and lower parts, pure gamboge yellow, slightly shaded with olive green on sides, which, together with jugulum and breast, are streaked with brick red as in *morcomi*. Wings dark olive brown, the lesser coverts like the back, the median, greater and primary coverts, with outer margins of remiges, edged with yellowish olive green; the inner margins of the last broadly canary yellow at base, this color decreasing in amount toward the ends of the feathers. Axillars and under wing-coverts lemon yellow. Tail-feathers dark olive brown, the inner webs broadly lemon yellow, this color on the outer pair occupying all but a terminal guttate spot, and diminishing in extent on each succeeding pair, until it disappears entirely from the two middle rectrices; basal two-thirds of external web of outermost pair also lemon yellow. Outer edges of all the rest, including both margins of two middle feathers, narrowly olive green.

Typical *Dendroica aestiva rubiginosa* differs from *D. a. morcomi* most noticeably in its darker, less yellowish and almost uniform upper parts, the crown and rump being not in appreciable contrast to the olive green of the back. In consequence of the olivaceous color of the whole pileum, both the yellow eye-ring and superciliary stripe are much more clearly indicated. Minor characters exist in the more olivaceous tint of the auriculars and sides of the neck and head; also in the duller, sometimes scarcely yellowish external edging to wing-quills and their coverts. The color below averages slightly paler, especially on the throat and the lower tail-coverts, though upon examination of a larger series this may prove merely an individual variation. There seems to be no material difference in size. From *Dendroica aestiva* the present form is further separable by the narrower streaking of the breast.

The characters here ascribed to *rubiginosa* are remarkably constant in all of the six adult males from Alaska, though a specimen

from Nushagak (U. S. N. M. No. 86517), and one from the Yukon River (U. S. N. M. No. 54425) are very slightly more yellowish above than the birds from Kadiak (the type locality), and have also the wing edgings somewhat brighter; but these aberrant features are apparently of quite trivial importance. Of three breeding birds from Victoria, British Columbia, two have a fairly well-marked yellow crown-patch, though this is somewhat obscured by olive-green tips to the feathers; but all three specimens are fully as dark above, and in every other respect so much like *rubiginosa* that they are without hesitation referred to this form.

Summer birds from Great Slave Lake (Fort Resolution and Fort Rae) are, however, quite typical of *D. æ. morcomi*; as are also specimens from northern California (Baird and Red Bluff), and one example from Fort Steilacoom, Washington (U. S. N. M. No. 7643). It thus would seem to be indicated that the breeding range of *rubiginosa* is almost, if not entirely, confined to Alaska and British Columbia.

Three Yellow Warblers collected by Dr. Edgar A. Mearns at Mountain Spring, San Diego County, California, May 11, 1894, though rather more yellowish above than average Alaskan specimens, are closely matched by the birds from British Columbia, and are with little doubt referable to *rubiginosa*. A spring specimen from San Antonio, Texas, taken May 3, 1889 (U. S. N. M. No. 152396), and one collected by Mr. Richmond on the Escondido River, Nicaragua, May 5, 1882 (U. S. N. M. No. 128416), are equally similar, and both belong apparently to the race at present under consideration.

Among the 53 North American specimens of *Dendroica æstiva* and *Dendroica æ. morcomi* which have been examined in this connection, there are but three, with regard to whose identity, so far as *rubiginosa* is concerned, any uncertainty might exist. One of these three examples is from Wheatland, Indiana, and approaches the Alaskan race by reason of its almost uniform coloration above, but the olive green portions of its plumage are, upon comparison, seen to be much more suffused with yellowish than in *rubiginosa*, thus leaving no question of its correct identification with *D. æstiva*. The two other aberrant specimens are from Calais, Maine, and Moose Fort, Ontario, respectively; and while in slight details

rather more yellowish than average Alaskan birds, they are still with some difficulty to be distinguished from *rubiginosa*, but nevertheless are perhaps best considered as *D. aestiva*.

The above remarks are, of course, based entirely upon adult males, as the females and young of *rubiginosa*, from Alaska, are apparently not certainly separable from corresponding plumages of *morcomi*, though there are not at hand sufficient specimens with sex and age properly determined, to permit a perfectly satisfactory disposition of this point.

The writer desires to express his indebtedness to Mr. Robert Ridgway for kind permission to make use of the specimens in the National collection; and to Dr. Edgar A. Mearns for the privilege of examining the Yellow Warblers collected by the naturalists of the recent International Boundary Commission.

Detailed measurements of *Dendroica aestiva rubiginosa* are given below.

MEASUREMENTS OF BREEDING SPECIMENS OF *Dendroica aestiva rubiginosa*.

U. S. N. M. No.	Sex.	Locality.	Wing.	Tail.	Exposed Culmen.	Tarsus.	Middle Toe with Claw.
131807	♂	Kadiak Island, Alaska.	65.3	44.2	9.7	19.3	14.5
70106	♂	" " "	64.	45.	9.4	18.3	15.2
54429	♂	" " "	62.7	47.2	10.2	18.5	15.
27267	♂	Yukon R., mouth of Porcupine R., Alaska.	62.2	44.5	9.7	19.	14.7
86517	♂	Nushagak, Alaska.	63.5	43.7	9.9	17.3	14.2
54425	♂	Yukon River, Alaska.	61.5	43.2	9.7	17.8	13.5
153279	♂	Victoria, Brit. Columbia.	63.5	43.9	10.4	17.8	14.7
153280	♂	" " "	62.2	44.2	9.9	18.5	14.5
153278	♂	" " "	62.2	43.7	10.2	17.8	14.2
Average.			63.	44.4	9.9	18.3	14.5