

ing away. I examined the place, but found nothing to account for their presence.

At the Natural Bridge near Fort Verde, I saw several nests of this bird in 1893, some of which were old, but several new and containing young. One or two were in cups in the rock of the bridge; the others in giant sycamores; that grew in the narrow canyon. The old Scotchman, Dave Gowan, who owns the bridge, called them "Black Falcons," and said they had nested there for years. They are much more common in this section, than in the southeast corner of the territory.

The California Yellow Warbler.

BY JOSEPH GRINNELL.

THE object of the present paper is to recall attention to the California race of the yellow warbler with a view to its being generally recognized in nomenclature. The fact that skins from certain western localities exhibit peculiarities in size and color is not by any means a new one. That keenest of last-century systematists, Baird, in 1858 noted that "specimens from the Pacific coast appear rather smaller, with less conspicuous streaks than eastern, but no other differences are appreciable." Nearly thirty years later, in 1887, Coale worked over the yellow warblers of North America, with the result that "the western race" was given the name *Dendroica aestiva morcomi*, typeship being conferred on a skin from Fort Bridger, Wyoming. Shortly after, Ridgway included a description of the subspecies in regular standing in his Manual, where it remained in the last edition. In 1899 the A. O. U. Committee rejected the race, and it has not since been reconsidered. In spite of the A. O. U. Committee's ruling a few independently observant students have since then ventured to recognize the "Western Yellow Warbler," using Coale's name. Ridgway has recently changed his opinion as to the value of the characters assigned in his Manual. For in Part II of his *Birds of North and Middle America*, he writes in a foot-note: "I am not able to make out satisfactorily a western form (*D. a. morcomi* Coale). Western specimens seem, as a rule, to have shorter wings and longer tails than eastern examples, and adult males are often much less heavily streaked beneath; but the differences appear much too inconstant to justify recognition of a western subspecies." Finally Brewster, in his *Birds of the Cape Region of Lower California*, makes the following well-considered observations: "The remaining six birds [from the Cape Region] apparently belong to the form which breeds in California, and which, although usually called *aestiva*, has been referred by a few writers to *morcomi*. It differs rather constantly from *aestiva* of eastern North America in having the chestnut streaks on the under parts narrower and fainter in this respect, showing an approach to *sonorana*, from which, however, it may be readily distinguished by the decidedly darker, greener coloring of its upper parts. The female is similar to *aestiva* (although less often streaked beneath) and hence quite different from that of *sonorana*, which is grayish above and clay-colored beneath, with but faint traces of yellowish on the body plumage. On the whole the yellow warbler of California seems to me too nearly like true *aestiva* to be recognized as a distinct subspecies. In any case it should not be called *morcomi*. At least Mr. Ridgway and I agree in considering the type of that supposed form merely an exceptionally faintly streaked specimen of *aestiva*, of which, moreover, the National Museum possesses a number of perfectly typical

examples from the same general region (i. e., Utah and Montana), one of them being actually from the same locality (Fort Bridger)." It would appear from the foregoing quotations that the chief objection to the recognition of a Pacific coast race is the inconstancy and comparative slightness of the distinguishing characters.

For the past three years I have taken pains to personally gather a series of California yellow warblers, and these, together with similar material kindly loaned me by Mr. T. J. Hoover and Mr. F. S. Daggett, amount to ninety seven specimens. The former has also provided a series of eastern birds, and the National Museum, through Dr. C. W. Richmond, has granted me the use of a most requisite series of yellow warblers from the Rocky Mountain region. Even a superficial view of the above material suffices to impress one with the conspicuous peculiarities of the California race, as distinguished from the bird of the Rocky Mountains and eastward. These differences are surely of as much value as those marking the lutescent warbler, long-tailed chat, golden pileolated warbler, Calaveras warbler (much more so!), or many others of the better-known subspecies that could be mentioned.

As to the application of the name *morcomi* the remarks of Mr. Brewster seem wholly correct. Coale's name was based on individual extremes of *Dendroica æstiva æstiva*, as well as on examples of the actually different race from west of the Sierra Nevada Mountains. The type was undoubtedly one of the former, hence the necessity of retiring the name *morcomi* to the synonymy of *æstiva*, and supplying the California race with a new name. This I do, commemorating in the name selected an ornithologist toward whom we feel grateful for his extensive and careful work on western birds.

Dendroica æstiva brewsteri new name.

SUBSPECIFIC CHARACTERS.—Resembling *Dendroica æstiva æstiva*, from which it differs in smaller size, paler (or less brightly yellow) coloration, and, in the male, narrower streaking on under surface; differs from *Dendroica æstiva rubiginosa* in much smaller size and yellower coloration, and from *Dendroica æstiva sonorana* in smaller size and much darker coloration.

TYPES.—♂ ad.; No. 4701 Coll. J. G.; Palo Alto, California; May 18, 1901. ♀ ad.; No. 4154 Coll. J. G.; Palo Alto, California; May 14, 1900.

(The types were carefully selected to represent the *average* manifestation of subspecific characters.)

DESCRIPTION OF TYPES.—*Male*. Whole mantle and hindneck yellowish olive-green (the feathers with faintly more yellowish edgings), becoming lemon yellow on rump, and subdued Indian yellow on crown and forehead; wings and tail "fuscous" edged with canary yellow; sides of head and throat lemon yellow; rest of lower parts deepening into gamboge yellow; breast and sides "narrowly" streaked with chestnut (approaching liver brown), these streaks approximating one millimeter broad at widest. *Female*. Upper parts olive-green, becoming more yellowish on rump and forehead; lower surface pale canary yellow, weakening to primrose yellow on lores, throat and belly; sides faintly and very narrowly streaked with pale liver brown.

MEASUREMENTS (in inches).—

		Wing.	Tail.			Wing.	Tail.
54 ♂♂	Average	2.45	1.96	30 ♀♀	Average	2.33	1.93
	Minimum	2.25	1.80		Minimum	2.18	1.70
	Maximum	2.61	2.20		Maximum	2.48	2.07

DISTRIBUTION.—Transition and Upper Sonoran Zones west of the Cascades and Sierra Nevada from Oregon to Southern California. Specimens examined from Oregon: Salem*; and California: Siskiyou, Battle Creek, Redding, Amador City, Palo Alto*, Santa Cruz, Los Angeles*, El Monte, Pasadena*.

INDIVIDUAL VARIATION.—In the matter of streaking in the male there is surprising constancy. Among the fifty-four adult males of *brewsteri* at hand, but one specimen (No. 1849, Coll. T. J. H., Palo Alto, May 7, 1898) is so heavily streaked as to resemble in that respect even the lightly streaked extremes among thirty-seven males of true *æstiva*. This specimen is also brighter yellow than usual, and closely matches No. 10983, Coll. U. S. N. M. (Fort Bridger) which is a topo-

type of *morcomi* and unusually narrow in its streaking. But in this case, the small size of the California skin at once distinguishes it. The same example also very closely resembles a skin from Delavan, Wisconsin, and one from East Providence, Rhode Island, both of which are unusually lightly streaked for *æstiva*. The Rhode Island skin (No. 1613, Coll. T. J. H.) is also smaller than the eastern average, so that the differences in this instance I confess to be not obvious. But this only goes to show how the normal range of variation in two subspecies may result in close resemblances in certain individual cases. And this is exactly what must be expected where the degree of difference is not greater than the normal range of individual variation. Among the females the color differences appear even more constant. Among thirty examples of *brewsteri* there are none so yellow as to be comparable to any of my *æstiva*. But the available series of the latter (thirteen) is altogether too small to make a conclusion at all satisfactory. The yellowness of females from the Rocky Mountains and eastward holds in all the examples at hand as a distinguishing character from California birds. But in each series there is considerable variation, and it would not be surprising if overlapping of characters would be found in larger series. Discrepancy in size ought still to offer a valuable criterion in the great majority of specimens. Out of the present series (one hundred and sixty in all) only about three per cent of specimens are not with certainty identifiable without reference to locality. The average differences are perceptible at a glance to any one. I therefore recommend that the California yellow warbler receive recognition in nomenclature along with the many already accepted subspecies of the same rank.

Nesting Dates for Birds in the Denver District, Colorado.

BY FRED M. DILLE.

SOON after I began the exchange and barter of "bird eggs" at Greeley, Colorado, in 1882, I noticed that altho the data coming from the East was nicely written and arranged according to the rules of "Lattin's Hand-book," the dates of collecting for allied species were not good guides for me in my raids about my own locality. The Colorado calendar appeared to be later than the Eastern by from one to four weeks. I therefore began to list my results as to sets, their state of incubation and date of collecting, which list thereafter made my finds much more satisfactory. After moving to Denver in 1892, I continued my work on the list, and it was found of much service by friends coming from the East who wished to do some collecting, and who realized after experiencing a good snow storm in May that their Eastern knowledge would not benefit them much here. I hope therefore the publication of these oological secrets will prove of value to all new comers. For I know that, if we Colorado boys were to try our luck in California or Maine, we would lose much time if we could not get help of this nature.

The first aim of an oological collector is to find his sets full, as to the number of eggs, and at the same time lacking incubation. The next plan is not to waste your time beating about for meadowlark's nests when the killdeer and her nest demand it. These points are the gist of the list. I have bunched the varieties as much as their averages will permit, and from the time that collecting becomes interesting I have put them one week apart. Collectors who are employed in banks, offices, etc., will perceive the utility of this arrangement without more disclosure.

The first criticism I expect will be to the effect that some one has taken a set of 8 magpie, fresh on April 15. So have I, but I have also taken 253 sets of magpie and the date given on the list has given the best results. Most all of these dates are therefore the result of much collecting and many years work. I have