

LITERATURE CITED

- BAIRD, S.F. 1858. Birds. in Reports of explorations and surveys to ascertain the most practicable and economical route for a railroad from the Mississippi River to the Pacific Ocean, vol. 9, part 2. Washington, D.C. (*Not seen by us; quoted in Ratti 1979*).
- COOCH, F.G. AND J.A. BEARDMORE. 1959. Assortative mating and reciprocal difference in the Blue-Snow Goose complex. *Nature* 183: 1833-1834.
- O'DONALD, P. 1959. Possibility of assortive mating in the Arctic Skua. *Nature* 183: 1210-1211.
- RATTI, JOHN T. 1979. Reproductive separation and isolating mechanisms between sympatric dark- and light-phase Western Grebes. *Auk* 96: 573-586.
- STORER, ROBERT W. 1965. The color phases of the Western Grebe. *Living Bird* 4: 59-63.

Identifying "Myrtle" and "Audubon's" warblers out of Breeding Plumage

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*These two subspecies groups
still deserve recognition;
here's how to do it*



Within the last couple of decades it has been proven (see Hubbard 1969) that the two birds formerly known as the Myrtle Warbler *Dendroica coronata* and Audubon's Warbler *D. auduboni* interbreed freely where their ranges come in contact. Because of this, they have been officially (A.O.U. 1973) "lumped" into one species under the name of Yellow-rumped Warbler *D. coronata*. However, their hybrid zone is relatively small, so the vast majority of all the Yellow-rumped Warblers on the continent can be clearly referred to either the Myrtle or Audubon's group, and can be identified as such in the field. For this reason, most observers continue to be aware of the two as distinct taxonomic entities (which they are), and, for convenience, to refer to the two subspecies groups by their former specific names.

The differences between breeding-plumaged adult male Myrtle and Audubon's warblers are obvious, and are pictured and described adequately in all the standard bird guides. There are also a number of characters helpful in separating dull-plumaged birds (females, immatures, winter-plumaged males) of the two forms; the bird guides generally fail to discuss these. In my conversations with birdwatchers from around the

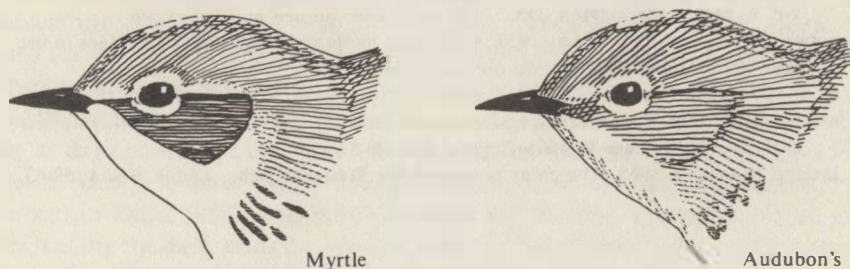


FIGURE 1. Face-patterns of winter Yellow-rumped Warblers.

continent, I have found that the field marks for the duller Yellow-rumped are well-known in areas where both forms occur regularly, but poorly known elsewhere: these field characters are evidently being learned only through direct experience or by word-of-mouth. Hopefully, then, this brief article will be helpful to birders in areas where only one of the Yellow-rumped forms occurs regularly (but where the other might be looked for as an occasional stray).

COMPARISON OF CHARACTERS FOR "MYRTLE" AND "AUDUBON'S" FORMS

In the comments below, hybrids are temporarily ignored. Thus, to all of these statements, one should add the mental reservation that hybrids could be intermediate between the conditions described.

Throat color: Dependence upon throat color as a means of separating Myrtles and Audubon's can lead to confusion and misidentifications. Although a bright yellow throat is a good sign of an Audubon's and a snowy-white throat usually indicates a Myrtle, many dull-plumaged birds will not fit into either of these extremes. Some Audubon's (especially immature females) may have throats that are quite whitish — more so than the dingy throats of some young Myrtles. Thus, other characters frequently must be checked.

Face pattern: Given a decent look at the bird, the face pattern quickly separates most Myrtles and Audubon's; each has a distinctive appearance made up of several features. The Myrtle has the stronger pattern of the two. Its auriculars (or "cheek-patches") are almost always conspicuously darker than the rest of the face, and the contrast is enhanced by the fact that the whitish area of the throat usually extends right up to the lower edge of the auriculars (and often up behind the rear edge of them). Completing the picture of contrast with the dark auriculars is a pale spot before the eye and a pale line behind it.

The Audubon's has a much plainer facial appearance, with the auriculars never conspicuously darker and normally not contrasting even slightly with the rest of the

face. Its pale throat area is generally smaller than the Myrtle's, not extending up to the lower edge of the auriculars and seeming to narrow posteriorly rather than spreading out toward the sides of the neck. Audubon's often has some faint indication of a pale spot before the eye, but usually lacks the pale postocular line. Both Myrtle and Audubon's warblers show a fairly conspicuous (usually broken) eye-ring. I have sketched out the differences in their typical face patterns in Figure 1.

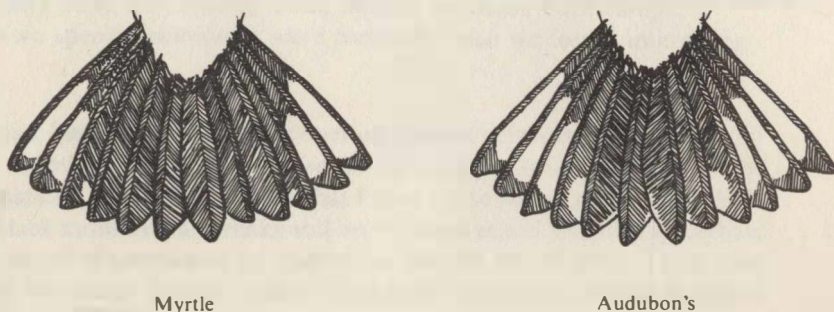
Chest pattern: There is a general tendency in winter birds for the Myrtle to have a whitish chest with well-defined darker streaks, while the Audubon's chest is darker, washed with brownish-gray, with only a blurry streaked effect at most. However, there is enough individual variation in this that I have found it useful only in a minor way, to reinforce the identification suggested by other characters.

Tail spots: As a rule, the Audubon's shows more white in the tail than does the Myrtle. Usually two or three outer rectrices on each side have white spots in Myrtles, while the white reaches four or five pairs of rectrices in Audubon's. This character is variable; within each form males have somewhat more white in the tail than females (and adult males have more than immature males); in addition, Myrtles from the northwesternmost breeding populations have, on the average, slightly more tail white than those breeding farther east (Hubbard 1970). However, taking this variability into account, the difference between the two forms is still worth noting. See Figure 2 for examples of typical patterns.

This difference in tail patterns can be helpful in "elimination birding," when one is scanning large numbers of birds looking for out-of-place individuals. In Arizona and California I have often picked out Myrtles among flocks of Audubon's (when many birds were moving about, spreading their tails in flight) by noting the odd individual with restricted white areas near the outside edge of the tail. In a similar fashion, when wading through hordes of wintering Myrtles on the southern Atlantic coast I have sought Audubon's by watching the birds as they flushed ahead, looking for one with unusually broad white patches in the tail corners.

Call-notes: Describing in words the chip-notes of warblers is a perilous task, but it is worth pointing out that typical chips of Myrtle and Audubon's warblers differ

FIGURE 2. Tail-patterns of Yellow-rumped Warblers (as viewed from above). These are done from specimens of immature males; see text for a discussion of age and sex differences in the amount of tail white.



noticeably in tone quality. The Myrtle's characteristic note is a loud, hard *check*, with a penetrating quality unusual in warbler calls. Audubon's typically delivers a softer *chep*. A Myrtle chipping among Audubon's is usually noticeable, but to pick out an Audubon's among Myrtles is more difficult; and there is much individual variation in the calls of both. To separate them on voice alone with 100% accuracy would require a keen ear indeed (and a considerable amount of practice).

A NOTE OF CAUTION: IDENTIFYING HYBRIDS

The observer should always keep in mind the possibility of hybrids when attempting to distinguish the subspecies groups of this complex. If a bird does not display all the characters of either the Myrtle or the Audubon's form, it may in fact be something intermediate between the two.

On the other hand, it is probably not safe to field-identify the birds as hybrids when they are in dull plumage. In the field I often comment to myself that a wintering Yellow-rumped at which I'm looking might be a hybrid, but in my daily notes such individuals are entered merely as "Yellow-rumped Warbler (ssp.)," indicating that they were not identified to either the Myrtle or Audubon's group. It must be remembered that hybrids can range in appearance from near-Myrtles with just one or two Audubon's characters to near-Audubon's with just a trace of visible Myrtle ancestry. Picking out a member of this motley crew in winter plumage probably cannot be done with complete certainty in the field. However, in spring it is worth watching for hybrids in adult male plumage, as some of these birds can display truly interesting plumage patterns.

LITERATURE CITED

- AMERICAN ORNITHOLOGISTS' UNION. COMMITTEE ON CLASSIFICATION AND NOMENCLATURE. 1973. Thirty-second supplement to the American Ornithologists' Union check-list of North American birds. *Auk* 90: 411-419.
- HUBBARD, JOHN P. 1969. The relationships and evolution of the *Dendroica coronata* complex. *Auk* 86: 393-432.
- _____. 1970. Geographic variation in the *Dendroica coronata* complex. *Wilson Bull.* 82: 355-369.