

**The first prebasic molt of the Common Yellowthroat (*Parulidae*).**—Conflicting reports exist as to the nature of the first prebasic molt (= postjuvenile) in the Common Yellowthroat (*Geothlypis trichas*). Dwight (Ann. New York Acad. Sci., 13: 280, 1900) described the postjuvenile molt as incomplete, as is typical of most wood warblers, but on the basis of 18 immature specimens Stewart (Auk, 69: 52, 1952) reported a complete molt as did Behle (Condor, 52: 196, 1950) who based his statement on 9 immature specimens. Stewart's report was the basis for the statement by Foster (Condor, 69: 195, 1967) that the Yellowthroat is "the only certain North American parulid with an unquestioned complete postjuvenile molt." Data from birds banded from 1961 through 1967 at the Kalbfleisch Field Research Station of the American Museum of Natural History, Huntington, Long Island, New York, indicated that the first prebasic molt of the Yellowthroat is always incomplete and prompted us to make a critical reevaluation of the molt.

Our study sample included 1 captive bird, 89 banded immatures (21 recaptured once, 6 recaptured twice), and 20 collected birds now at the American Museum of Natural History. The banded birds were netted at the Kalbfleisch Station from 11 July through 4 September 1968. We collected birds at the station and near Central Islip, Long Island, New York, from 13 July through 25 August 1968 and examined specimens at the American Museum of Natural History and the University of Michigan Museum of Zoology. Whenever possible we reexamined immature Yellowthroats used in previous molt studies (cited above) for molt and the extent of skull ossification, the latter being checked by X ray.

We recorded all birds with incompletely ossified skulls as immatures and judged molt by the presence of sheathed feathers. We considered molt of body feathers, remiges, and rectrices to be a complete first prebasic molt and molt of body feathers only to be an incomplete first prebasic molt. Distinguishing a symmetrical, induced molt of remiges and rectrices from normal molt required examination of all flight feathers. If the other remiges or rectrices were of similar length we considered the loss to be accidental, unlike a normal molt where a gradient of feather lengths occurs. Such premature, induced feather loss might be a result of encounters with predators, mist nets, or other accidents.

We noted no normal molt of rectrices or remiges on any immature Yellowthroat in our sample, including those that had completed molt of the body plumage. The hand-raised bird, estimated to be 12 days old when captured on 22 June, never replaced any remiges or rectrices, which we painted for identification, even though it molted the body plumage in a normal sequence. An occasional Yellowthroat showed loss of remiges or rectrices, but the loss was never symmetrical and we presumed the loss to be accidental.

We reexamined as many of Stewart's and Behle's specimens as possible. Five of Stewart's sample of 18 are at the University of Michigan Museum of Zoology (UMMZ 99085-99086, 99092-99094) but we could not find the other 13. Of these specimens one female was incorrectly sexed as an immature male, one immature male was indicated as "probably adult" before being identified as an immature, one adult female was incorrectly aged as an immature female, and two showed no molt of remiges or rectrices. Two of these specimens, 99085 and 99093, showed an apparent symmetrical molt but, because of the uncertainty of their aging and sexing, these individuals do not provide convincing evidence for a complete first prebasic molt. These five specimens were collected at Ann Arbor and Whitmore Lake, localities Stewart (in litt.) omitted in his paper. No record exists of the exact specimens Behle used but we

examined 20 specimens that he may have borrowed for his study and none were molting flight feathers.

As a result of our study and the lack of evidence for a complete first prebasic molt we believe the Yellowthroat does in fact conform to the incomplete first prebasic pattern exhibited by most wood warblers.

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**Some taxonomic comments on the genus *Auriparus*.**—The Verdin of the genus *Auriparus* has long been believed to be related to the Penduline Tits of the genus *Remiz*. Both genera are placed in the same subfamily (Remizinae) or family (Remizidae), depending upon the system of classification followed. The original taxonomic basis for grouping these genera seems to have been on grounds of their superficial resemblance because of acrobatic habits and similarly shaped bills. Both characters suffer greatly from the convergence hazard, and in the past bill shape has been used with too much confidence as a taxonomic character. Yet no ornithologist has challenged the thinking of the early taxonomists who placed the two genera together. The purposes of this note are to reappraise the relationship between the genera *Auriparus* and *Remiz* using data based on distribution, morphology, and behavior, and to suggest a closer relative of *Auriparus*.

On the basis of present distributional patterns, the Verdin is not widespread and is found only in certain areas of the southwestern deserts of North America. Dixon (1959) suggests the species may have entered the deserts originally from arid subtropical scrub, a contention supported by the Verdin's geographic distribution in the southwestern United States and its occurrence in "tropical areas" of Sonora (van Rossem, 1945). The Verdin exhibits definite altitudinal limits in the mountains of the Southwest. Unlike *Auriparus*, the genus *Remiz* is widespread and has a Palearctic distribution.

Morphologically *Auriparus* and *Remiz* do not appear as close as might be expected. Ridgway (1904: 420), comparing *Auriparus* with *Remiz*, states: "*Auriparus* is very distinct, having the bill broader with tip less attenuate, the tail rounded instead of emarginate, the outermost (tenth) primary much larger (in *Remiza* [*sic*] it is almost rudimentary), and the style of coloration very different." The ground color of the eggs of *Auriparus* is green; in *Remiz* the eggs are white.

*Auriparus* differs from *Remiz* in many behavioral traits. The data presented on *Remiz* are taken largely from papers by Merkel (1932), Steinfatt (1934), and Burckhardt (1948). Both genera build covered nests, but the nests differ remarkably not only in superficial appearance but also in techniques of construction, materials utilized, and the roles of the building sexes. Mayr and Amadon (1951) describe the nest of *Remiz* as bag-like. The typical nest of *Auriparus* is globular. *Auriparus* starts its nest as a horizontal platform of sticks (Taylor, 1967). Hinde (1952: 12) describes *Remiz* as first covering a thin forked twig with material which is extended