

bird was hidden by thick bushes, handed me his gun and I secured it. They proved to be a young male and a female, the first examples of this species, I believe, ever taken in Worcester County.— R. E. KIMBALL, *Fitchburg, Mass.*

A Yellow-crowned *Regulus calendula*.—April 27, 1890, I shot near Laurel, Md., an adult male 'Ruby-crowned' Kinglet which has the crown-patch pure orange-yellow instead of vermillion, the plumage being otherwise quite normal. The crown-patch is very well developed, being more extensive than in the average of specimens. — ROBERT RIDGWAY, *Washington, D. C.*

The Breeding Ranges and Songs of Three Thrushes in Montana.—In June, 1889, while collecting in the Belt River Cañon I found the summer home of three of the smaller Thrushes more or less overlapping, and the following notes and comparisons, made at the time, may be of interest. The birds referred to are *Turdus fuscescens salicicolus*, *T. ustulatus swainsoni* and *T. aonalaschkae auduboni*, the Willow, Olive-backed and Audubon's Thrushes.

First, I will speak of the Willow Thrush, the commonest and most widely distributed of the Thrushes in Montana. It finds favorite nesting sites all along the valley streams in thickets of willow, rose, box-elder, etc., that, as the summer advances, become almost impenetrable with a rank growth of weeds. From such localities its song is often heard on its first arrival, but later little else than its loud, plaintive call-note greets the listener's ear and one may spend many a fruitless moment in trying to obtain a fair glimpse of the wary little inhabitant of the secluded covert. From the lower valleys this species ranges up to the mountain foot-hills and cañons, but I have never seen it far from water or more than a few yards above the earth, and never in heavy, evergreen timber. The Willow Thrush's song, identical with that of the Eastern form, although so difficult to describe, is probably familiar to most lovers of birds in the regions where either variety breeds. It is not surpassed, in my estimation, either in beauty or length by the song of the Olive-backed or of Audubon's Thrush. The song of the latter may about equal it, while in any case, I should put the Olive-back last on the list of vocalists, although its notes are the most varied, and quite odd as well. Willow Thrushes are rare here in spring and fall migration, from which it may be inferred that no great numbers go much farther north. They arrive with considerable regularity about May 15. The latest date I have for their departure is September 7.

Next in order of abundance during the breeding season, is the Olive-backed Thrush. In migration it is the only common bird of the three, appearing in considerable numbers about the middle of May, and again the second or third week in September, along all the lower valley streams. The earliest I have noted their arrival in spring is May 10, and at this season they do not tarry long away from their breeding grounds. In the fall they appear from the higher elevations about September 1, and

remain till October 10 at least. Throughout the summer the Olive-back is only found in the mountains and, like the Willow Thrush, but very short distances from water, but unlike that species, the male is not satisfied with an elevation of only a few feet, when towards evening he pours forth his curious lay to his shy mate below. At such times the most prominent limb of some tall cottonwood is none too lofty a perch.

About the first of July I camped for several days in a grove that seemed a chosen resort for Olive-backs. Regularly, an hour or so before dark, a bird would be heard from some topmost branch, and scarcely would he be through, before another would answer from a few rods away, only to be followed by still another, till half a dozen or more could be heard from different localities. Nor would they cease until the last rays of daylight were rapidly disappearing from the western sky. In early morning they were not nearly so active. In regard to the song itself, the birds almost always begin with several call-notes, interspersed with various odd chucks, then the ringing melody, characteristic of the Willow Thrush's song is produced, winding up rather abruptly with some fine, weaker notes. Occasionally they would utter the first call-notes and chucks without anything following, but I never heard the latter and more pleasing part of the song without the prelude. They were so excessively shy that it was some time before I actually identified the song as belonging to this bird. Usually, long before getting within anything like shooting distance, the notes would cease, and while vainly endeavoring to catch a glimpse of the shy performer through the dense foliage above, suddenly his mocking call-note would come from some impenetrable thicket near by.

Audubon's Thrush, according to my observations, is much the rarest, in Montana, of the birds under consideration. It reaches a somewhat higher elevation than the other two, and I have seen it at least half a mile from streams in dense evergreen timber. The first specimen noted was in the top of a pine sixty or seventy feet high, standing on a projecting knoll of the mountainside some eight hundred or a thousand feet above Belt River. I was first attracted by the song, at that time quite new to me, and shortly discovered and obtained the bird. Their song begins with two (sometimes only one) clear, whistle-like notes of slightly different pitch, followed by the ringing melody peculiar to the songs of the other species, and the whole, though rather too brief, produces a fine effect as it comes floating, clear and distinct, from the silent dark-timbered mountainsides. They sing at irregular intervals throughout the day, and never seem to collect together in any numbers, certainly manifesting some very hermit-like traits.

Following are about the altitudes at which I have found the three species during the breeding season. The Willow Thrush inhabits from the lowest valleys up to about 4200 ft., the Olive-back from 4200 to 5000 ft., and Audubon's Thrush from 4200 ft. up to probably 6000 ft.—R. S. WILLIAMS, *Great Falls, Montana.*