

ured one inch in diameter at this point. Just clear of the nest on the lower side a twig one half an inch in diameter slopes away from the nest but does not support it in any way. The end of the branch was broken off, as often occurs with the tulip tree, and the nest was placed near this end, 15 feet out from the tree and 48 feet 6 inches up from ground. There was but one branch growing lower on this tree and it was on the other side, so that there was a clear space between the nest and the ground. The nest would answer in every particular for the original of the one described on page 360 of the October, 1900, number of 'The Auk,' collected in western Ontario by Mr. W. E. Saunders, whose brother was with me when I first identified this species.

TWO RACES OF THE VARIED THRUSH.

BY JOSEPH GRINNELL.

Hesperocichla nævia nævia (Gmelin) Ridgway.

Turdus nævius GMELIN, *Systema Naturæ*, Tom. I, 1788, p. 817.

Hesperocichla nævia RIDGWAY, *Proc. U. S. Nat. Mus.*, Vol. III, 1880, p. 166.

Type, ♀ ad., No. 1222, coll. J. G., Sitka, Alaska, July 2, 1896; collected by J. Grinnell.

Description—Back, scapulars and rump bistre; upper tail-coverts brightening into vandyke brown; upper surface of tail dark Prout's brown; top of head and cervix dark mummy brown abruptly outlined posteriorly against the color of back. Dark parts of outer surface of closed wing seal brown; tips of greater and middle wing-coverts, and spot composed of outer webs of primaries near their base, tawny ochraceous; edging of outer webs of terminal third of primaries and secondaries hazel. Foreneck tawny, brightest laterally on malar region; lores and auriculars same as top of head, perhaps slightly grayish; feathers of auriculars with narrow ochraceous shaft-streaks; longitudinal stripe from above eye along upper margin of auriculars, and spot on lower eyelid ochraceous; complete pectoral band raw umber; remainder of under parts posterior from pectoral band tawny ochraceous; feathers of sides with crescent-shaped tips of light sepia; flanks nearly uniform light sepia with a perceptible raw umber tinge; middle of belly white with a faint buffy

tinge; feathers of lower tail-coverts basally sepia, laterally tawny and terminally buff. Tips of under wing-coverts and bar on inside of closed wing pale buff. Lower surface of wings and tail light sepia. Small wedge at tip of inner web of one outer tail-feather pale buff.

Measurements of Type.—Wing, 4.75; tail, 3.60; tarsus, 1.25; middle toe with claw, 1.17; culmen, .78; bill from nostril, .60. Primary formula, 4-3-5-2-6-7-8-9-10-1.

Range.—Northwest coast region; in summer, the Sitkan District; south in winter along the coast as far as central California (Santa Cruz Mountains).

Hesperocichla nævia meruloides (revived name), new subspecies.

Orpheus meruloides SWAINSON, Fauna Boreali-Americana, 1831, Birds, p. 187.

Type.—♀ ad., No. 3986, coll. J. G., Kowak River, Alaska, May 22, 1899; collected by J. Grinnell.

Description.—Back and scapulars drab gray washed with sepia; rump clear mouse gray; upper tail-coverts and upper surface of tail hair brown; top of head and cervix bistre, shading posteriorly into color of back. Dark parts of outer surface of closed wing varying from clove brown to sepia; light tips of middle and greater wing-coverts and edgings of primaries buff. Foreneck ochraceous; lores and auriculars hair brown; post-ocular stripe and small spot on lower eyelid cream buff; complete pectoral band hair brown washed with isabella color; under parts immediately posterior to pectoral band rather pale tawny ochraceous, fading behind into the pure white of the lower abdominal region; feathers of sides tipped with hair brown crescents which condense on flanks into a patch of the same; lower tail-coverts basally olive, laterally ochraceous and terminally white. Tips of under wing-coverts and bar on inside of closed wing white. Lower surface of wings and tail dark drab gray. White wedges at ends of inner webs of three outer tail-feathers; wedge of outermost tail-feather one half inch in length; those on the other two successively smaller.

Measurements of Type.—Wing, 5.10; tail, 3.80; tarsus, 1.30; middle toe with claw, 1.22; culmen, .82; bill from nostril, .63. Primary formula, 3-4-5-2-6-7-8-9-10-1.

Range.—In summer the interior of northern Alaska (eastward to the Mackenzie River?); wintering abundantly in southern California.

As is evident on comparing the above descriptions, well-marked differences exist in the case of the female between the Varied Thrush breeding in the humid Sitkan District and that of the

dryer interior region of northern Alaska. The Sitkan race is characterized by a predominance of deep browns, restriction of white or light markings, and by a shorter and more rounded wing. The northern and interior race has a much grayer and paler coloration, greater extension of white markings, and a longer and more pointed wing. Unfortunately I have no male birds from Sitka, except juveniles; but three spring males from the Kowak Valley, when compared with late winter males from northern California taken along with females referable to *nævia*, are of a lighter slate color dorsally and slightly paler tawny beneath. The females of this species appear to be much more subject to protective coloration, so-called, than the males, and it is therefore reasonable to expect climatic variations to be more pronounced in the females than in the males, especially when the climate of the *summer* habitat is of an extreme nature.* In the winter home of the Varied Thrushes there is also a different distribution of the two races, but their latitudinal relation is reversed. Thirty-five skins from Los Angeles County, California, are all but one referable strictly to *meruloides*, while the majority of the winter skins from the coast region of central and northern California are near *nævia*. So that *meruloides*, although its summer habitat is northernmost, goes farthest south in winter, and its migration route is much the longest. *Nævia* apparently has a much shorter migration route, probably at most between the latitudes of Sitka and Monterey. The wing-contour seems to offer a criterion by which to judge the length of the annual migration of a bird. By the study of further material I hope to arrive at some more definite conclusions in this regard.

Now, as to the correct nomenclature of the two forms here described, I have had some trouble. *Turdus nævius* of Gmelin is briefly described from specimens taken at Nootka Sound, Vancouver Island. As this is rather within the Sitkan District, I have applied Gmelin's name to the race breeding in that region. I have not seen the description of Pallas's *Turdus auroreus* from Kadiak Island. But the birds from there are probably nearer the Sitkan race, unless they occur only as migrants from further north. For the present, *Turdus auroreus* may be left as a synonym of *nævia*. *Orpheus meruloides* of Swainson was described from a

single male specimen taken at Fort Franklin, $65\frac{1}{4}^{\circ}$ N. Lat. I have seen no skins from the Mackenzie River region, but judging from the similarity in climatic and floral conditions, I feel fairly certain that the Varied Thrushes of the Kowak Valley and Mackenzie Valley must be similar. An examination of parallel races of other species points toward the same conclusion. I have therefore revived the name *meruloides* for this northern form, in preference to proposing a new name.

ON A COLLECTION OF BIRDS MADE BY MR. T. R.
THOMPSON AT THE CAY LOBOS
LIGHTHOUSE, BAHAMAS.

BY J. LEWIS BONHOTE, B. A., F. Z. S. L.,

Member of the British Ornithologist's Union.

SOME two years ago when staying at Nassau, Bahamas, I was struck by the ease with which birds could be observed on their migrations at certain times of the year. It therefore occurred to me that it might be of interest if records could be obtained from the various lighthouses round the group of the many species annually passing there on migration. I wrote to Mr. Chapman of the Natural History Museum in New York and through him obtained from Dr. A. K. Fisher of the U. S. Biological Survey at Washington a number of schedules similar to those which were being circulated throughout the Lighthouses of North America. These together with various instructions were sent round to all the lighthouses of the Bahama group, but, I regret to say, have not brought forth much result. Several keepers have written promising their assistance but although they are kept supplied with schedules only one collection has as yet come to hand, the results of which I append below; before doing so, however, I would convey my thanks to Mr. Chapman and Dr. Fisher for kindly procuring me the schedules, and to Mr. Theo. R. Thomp-