PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

DESCRIPTION OF A NEW SUBSPECIES OF PERISOREUS OBSCURUS.

BY HARRY C. OBERHOLSER.

Mr. S. F. Rathbun, of Seattle, Washington, some time since directed the writer's attention to apparent subspecific differences in the Oregon jays from northwestern Washington. A series of 20 specimens from the vicinity of Puget Sound and Lake Crescent, Washington, has now been brought together, largely through the efforts of Mr. Rathbun. For the loan of one specimen we are further indebted to Mr. F. S. Wright. This material confirms the existence in this region of a well marked geographic race which has apparently no available name. As Mr. Rathbun very generously insists that I shall describe this new subspecies, and has presented the type and three other specimens of his series to the Biological Survey collection in the United States National Museum, I take pleasure in complimenting him by calling it

Perisoreus obscurus rathbuni, subsp. nov.

Chars. subsp.—Similar to Perisoreus obscurus obscurus, but somewhat larger; upper parts, posterior to the cervix, darker, much more slaty (less brownish); light nuchal collar averaging broader and more whitish; and cap darker, much more blackish (less brownish).

Description.—Type, adult male, No. 828, collection of S. F. Rathbun; Lake Crescent, Clallam County, Washington, April 21, 1916; S. F. Rathbun, original number, 828. Forehead and nasal plumes, creamy white; center of crown dull creamy white, the feathers tipped with fuscous; sides of crown to the middle of eyes, occiput, supra-auricular region, and crescent reaching half way down on the sides of the neck, brownish black; a broad nuchai collar brownish white; back and scapulars, fuscous, somewhat mixed with mouse gray, the feathers with dull whitish

shafts; rump and upper tail-coverts, between mouse gray and neutral gray; tail between mouse gray and deep neutral gray, the outer vanes deep mouse gray, the tips of the rectrices brownish white; wings fuscous, the quills, together with the greater and median coverts and a few of the lesser coverts, narrowly tipped with brownish white; lores dull creamy white, mixed with a few blackish hairs; cheeks, auriculars, and sides of the neck not occupied by the brownish black crescent, together with all the lower parts, including the lining of the wings, brownish white, but the sides, flanks, and crissum heavily washed with brownish gray.

Measurements.—Male:* wing, 133-144 (average, 139.3) mm.; tail, 124-137 (132.3); exposed culmen, 13-16 (14.8);† tarsus, 32-34 (33.5); middle

toe without claw, 17-19.5 (18.1).

Female: wing, 130.5-140 (average, 136.3) mm.; tail, 126-132 (129.4); exposed culmen, 13.5-17.5 (15.7); tarsus, 32-34.5 (33.3); middle toe without claw, 16.5-18 (17.3).

Geographic distribution.—Resident in northwestern Washington north to Snohomish County and Strait of Juan de Fuca; west to western Clallam County; south to Clallam County and King County; and east to

central King County and western Snohomish County.

Remarks.—This interesting new subspecies differs from Perisoreus obscurus griseus in its smaller size, much darker upperparts, broader, more whitish, nuchal collar; and thus, while intermediate in size between Perisoreus obscurus and Perisoreus obscurus griseus, is in coloration decidedly darker than either. Our series of Perisoreus obscurus rathbuni is very uniform. A juvenile from Port Townsend, Washington, is in poor condition, but apparently belongs to this race. One specimen, No. 230,604, U. S. Nat. Mus., from Kirkland, Washington, is rather lighter and more brownish than typical birds; and another from Edmunds, Washington (No. 53, collection of S. F. Rathbun), is considerably more brownish and somewhat lighter, but both are undoubtedly referable to this new form.

A single specimen in the United States National Museum from Port Gamble, Kitsap County, Washington, taken on December 16, 1880, is apparently referable to Perisoreus obscurus obscurus, although it may be only a winter wanderer in this locality. By courtesy of Dr. Joseph Grinnell, the four adult and four juvenile birds of this species from Vancouver Island, recorded by Mr. H. S. Swarth\(\gamma\) as Perisoreus obscurus obscurus, have been examined in the present connection. A careful comparison of these specimens with a series of both Perisoreus obscurus obscurus and Perisoreus obscurus griseus shows that they are in color absolutely the same as Perisoreus obscurus griseus, although in size somewhat smaller, about like Perisoreus obscurus rathbuni, and show thus

^{*}Ten specimens, from northwestern Washington.

[†] It is of importance here to note that measurements of "exposed culmen" in Mr. R. Ridgway's recent account of this species (Bull. U. S. Nat. Mus., No. 50, part III, 1904, pp. 372-374) are really those of the total culmen inadvertently given as exposed culmen.

I Nine specimens, from northwestern Washington.

[§] Univ. Calif. Pub. Zool., X, No. 1, February 13, 1912, pp. 48-50.

some vergence toward that form. Two of the adults in this Vancouver Island series (Nos. 15,830 and 15,831, Mus. Vert. Zool.) are in worn summer plumage; two other adults (15,832 and 15,833, Mus. Vert. Zool.) are badly worn, but on the interscapulum have acquired new plumage which exhibits the true color of the upper parts. In faded plumage *Perisoreus obscurus griseus* sometimes closely resembles *Perisoreus obscurus*, and unless absolutely comparable specimens are available for comparison, is liable to be misleading.

The type of *Perisoreus obscurus* obscurus* came from Shoalwater Bay, Washington, and is typical of the race inhabiting the coast of middle and southern Washington south to northwestern California. The type of *Perisoreus obscurus griseus*† was obtained at Keechelus Lake, Kittitas County, Washington, and is a good example of the gray interior race. This makes it clear that the bird from Clallam County, here described as *Perisoreus griseus rathbuni*, is the unnamed form.

With the addition of this new subspecies, the races of *Perisoreus obscurus* number three. The ranges of the two hitherto recognized, after the revision made necessary by the subtraction of *Perisoreus obscurus rathbuni*, will stand as follows:

Perisoreus obscurus obscurus.—Pacific Coast region of the northwestern United States, east to the coast ranges, from Humboldt County, California, north through western Oregon and western Washington to northern Chehalis County, central western Washington, and, at least in winter, to Kitsap County, Washington.

Perisoreus obscurus griseus.—Northwestern United States, east of the coast ranges, from central northern California, north through the Cascade region of west central Oregon (west to Washington County) and central Washington (except Puget Sound region), to southwestern British Columbia, including Vancouver Island.

Detailed measurements of the adult specimens of *Perisoreus obscurus* rathbuni examined in the present connection are included in the following table:

^{*} Perisoreus canadensis var. obscurus Ridgway, Bull. Essex Inst., V. November, 1873, pp. 194, 199.

[†] Perisoreus obscurus griseus Ridgway, Auk, XVI, No. 3, July, 1899, p. 255.

Middle toe with- outclaw.	17.0 18.0 18.0 18.5 17.0 17.0 17.0 17.0 17.5 17.0 17.0 17.0 17.0 17.0
Tarsus.	83.50 83
Exposed culmen.	14.0 15.0 16.0 16.0 16.0 17.0 17.0 18.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19
Tail.	124.0 130.5 130.5 134.0 134.0 134.0 135.0 135.0 135.0 135.0 125.0 125.0 125.0 125.0 125.0
Wing.	133.0 138.0 137.0 137.0 137.0 137.0 141.0 142.0
Collector.	S. F. Rathbun S.
Date.	Feb. 22, 1892 Oct. 23, 1914 April 21, 1916 April 22, 1917 April 19, 1917 April 20, 1917 April 20, 1917 April 21, 1917 April 21, 1917 April 21, 1917 April 12, 1917 April 11, 1917 April 11, 1917 April 19, 1917 April 22, 1917
Locality.	Edmonds, Wash. North Fork of Snoqualmie R. at Sunda Creek, King Co., Wash. Lake Crescent, Wash.
Sex.	ক্ষত ক্ষতিক্ষত্ৰিক্ষত্ৰ ক্ষত
Museum and No.	S. F. Rathbun, 535 S. F. Rathbun, 72 S. F. Rathbun, 828 S. F. Rathbun, 830 S. F. Rathbun, 996 S. F. Rathbun, 1000 S. F. Rathbun, 1000 S. F. Rathbun, 1005 S. F. Rathbun, 1005 S. F. Rathbun, 996 S. F. Rathbun, 993 S. F. Rathbun, 995