A NEW RACE OF CANADA JAY FROM COASTAL BRITISH COLUMBIA By ALDEN H. MILLER

Jays of the genus *Perisoreus* range westward through the coastal mountains of central British Columbia but do not occur in the archipelago of this section or in southeastern Alaska. The southern coastal species, *Perisoreus obscurus*, extends north only to Vancouver Island and in the coast ranges reportedly as far north and east as Lillooet (Brooks and Swarth, Pac. Coast Avif. No. 17, 1925:79-80). Although there is recurrent surmise that *Perisoreus obscurus* and *Perisoreus canadensis* merge in southern British Columbia, I have yet to see an adequate account of evidence showing that these two species interbreed (note Hellmayr, Cat. Birds Amer., 8, 1934:69). Certainly they do not in central Oregon where they approach each other within 30 miles and maintain sharply their distinctive characteristics. Somewhere north of the Lillooet district in the coast ranges, *Perisoreus obscurus* is replaced by *P. canadensis*, for in the latitude of Bella Coola (52°30') canadensis has been taken repeatedly.

In an earlier study of Canada Jays (Miller, Trans. San Diego Soc. Nat. Hist., 7, 1933:287-298) specimens from central British Columbia were found to be equivalent to *P. c. canadensis* from other parts of the range of that race; the merest suggestion was made (p. 290) that they were darker and of more neutral hue than birds from northern British Columbia and from Minnesota. This conclusion was based largely on material from the interior, in the Cariboo District, although I had available then a few apparently similar birds in worn spring plumage from Anahim Lake and Hotnarko River in the coast range east of Bella Coola. Recently I have been able to assemble a series of eleven specimens from slightly farther west, all of which bear some fresh feathers and eight of which are in complete fall plumage. These birds are remarkably distinct from *P. c. canadensis* and are by far the darkest Canada Jays known from western North America. They parallel in trend of differentiation the dark *P. c. nigricapillus* of Labrador. Although I have not compared them with that form directly, I should judge that they surpass it in darkness of dorsal color (see Austin, Mem. Nutt. Ornith. Club, 7, 1932:158).

The backs of these freshly plumaged birds are so sooty as to match almost exactly the peculiarly dark juvenal plumage of the species. Two thoughts come to mind in searching for an explanation for this heavy pigmentation: (1) These jays may register the "effect" of a humid environment, as do many races of animals in coastal British Columbia, even though in this sector they actually are restricted to the western extension of an interior type of forest. (2) They may constitute a relic stock of Canada Jays in which the adult plumage remains like that of the juvenile and hence presumably like that of the ancestors of the group. I am inclined to favor the latter idea as at least a partial explanation. Boanerges [=Perisoreus?] internigrans of Szechwan, China, is a possible ancestor of Perisoreus canadensis which resembles the juvenal plumage of the New World species according to Suschkin and Stegmann (Jour. für Ornith., 77, 1929:404).

The dark race of coastal British Columbia may be known as

Perisoreus canadensis pacificus, new subspecies Pacific Canada Jay

Type.—Male, no. 80743 Mus. Vert. Zool.; Mount Brilliant, 5000 feet, Rainbow Mountains [north of Bella Coola River], Coast District, British Columbia, September 12, 1940; collected by Hamilton M. Laing.

Diagnosis.—Similar to Perisoreus canadensis canadensis, but dorsal coloration darker and sootier (near Dark Mouse Gray of Ridgway, Color Standards and Color Nomenclature, 1912), hence less brown; in fresh plumage, dorsal gray collar of neck inconspicuous and in some individuals obsolete; white of forehead of same extent and comparably suffused with gray in fresh plumage, but not noticeably buffy as in P. c. fumifrons; size as in P. c. canadensis.

Range.—Thus far known only from the Rainbow Mountain area at the headwaters of the Dean

and Bella Coola rivers, in the central coast range of British Columbia.

Measurements.—Type: wing, 143.6 mm.; tail, 145.5; bill (from distal edge of nostril), 15.0; tarsus, 35.7. Average, standard deviation and extremes of 7 males (compare table in Miller, op. cit.: 292): wing, 145.65, σ 5.70, 136.3-152.0; tail, 143.81, σ 4.54, 134.4-151.0; bill, 14.41, σ 0.29, 14.1-15.0; tarsus, 34.81, σ 0.61, 33.9-35.6.

Comparisons.—The race P. c. pacificus shows no approach in characters to Perisoreus obscurus of southwestern British Columbia. The coloration dorsally is blue or neutral gray, rather than brown as in obscurus, the shaft streaks of the back feathers are no more apparent than in any race of P. canadensis, and the underparts are deep gray posterior to the throat, not whitish and uniform as in obscurus.

Compared with P. c. fumifrons, pacificus is not only distinctly darker dorsally but less brown. Fumifrons does not approach pacificus geographically since P. c. canadensis intervenes in northern coastal and interior British Columbia, extending south to the Skeena River valley and west along the Stikine River valley to Flood Glacier (Brooks and Swarth, loc. cit.; specimens in Mus. Vert. Zool.). Fumifrons apparently occurs no farther south and east on the coast of Alaska than Cook Inlet.

Acknowledgment.—I am indebted to Dr. Louis B. Bishop and to Mr. Hamilton M. Laing for loan of the specimens necessary for this study. Mr. Laing collected the entire series upon which the

new race is based.

Museum of Vertebrate Zoology, Berkeley, California, February 28, 1942.