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OCCASIONAL PAPERS OF THE MUSEUM OF  
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A NEW RACE OF BROWN-HEADED CHICKADEE FROM  
NORTHERN WASHINGTON

By ALDEN H. MILLER

The occurrence of Brown-headed Chickadees (*Parus hudsonicus*) in southeastern British Columbia has long been known and it is from this region that the race *P. h. columbianus* was named, with type locality at Field.<sup>1</sup> Westwardly in British Columbia the species extends to the Okanagan region, where it has been reported breeding in the mountains west of Okanagan Lake<sup>2,3</sup> at elevations of 3,200 feet or greater.

The presence of this chickadee in the State of Washington I find mentioned only by Hoffmann<sup>4</sup> who states that it occurs in heavy timber in northwestern Okanogan County, close to the Canadian boundary. No further particulars are given and Kitchin<sup>5</sup> in his distributional list of the birds of the State of Washington places the species in the hypothetical list because of lack of record specimens from the State.

Much credit is due to Austin W. Burdick of the Museum of Zoölogy of Louisiana State University for successfully searching out the Brown-headed Chickadee and obtaining specimens of it in the area mentioned by Hoffmann. Five excellent skins were prepared by Burdick in the summer of 1942, representing juvenal, breeding and fresh autumnal plumages.

<sup>1</sup> Rhoads, *Auk*, 10, 1893:23.

<sup>2</sup> Brooks, in Dawson and Bowles, *The Birds of Washington*, 2, 1909:966.

<sup>3</sup> Munro, in Kermodé, *Rept. Prov. Mus. Nat. Hist. 1915*, Victoria, 1916:9.

<sup>4</sup> *Birds of the Pacific States*, Houghton Mifflin Company, Boston and New York, 1927:231.

<sup>5</sup> *Northwest Fauna Series No. 1*, 1934:23.

It has been my privilege to study these through the courtesy of George H. Lowery, Jr. The Washington birds are at first glance distinguishable from *Parus h. columbianus*, particularly by their possession of a sooty pileum in which the brown pigment generally characteristic of the species is reduced or obscured to an extreme degree. It appears that there is a well-marked endemic race restricted to the northern end of the Cascade Mountains which may be named

*PARUS HUDSONICUS CASCADENSIS* new subspecies

CASCADE BROWN-HEADED CHICKADEE

*Type*.—Adult male, in fresh plumage, no. 3270 Louisiana State University Museum of Zoölogy; 1 mile south of Monument 83 [long. 120° 38½'] on the United States-Canadian boundary, 6,000 feet, Okanogan County, Washington, August 23, 1942; collected by A. W. Burdick.

*Subspecific characters*.—Differs from *Parus hudsonicus columbianus* by darker, much sootier pileum (near Chaetura Drab in fresh plumage rather than Bister or Sepia); interscapular area somewhat darker and gray of sides of neck darker and more extensive proximally in auricular area; chestnut of sides darker (Prout's Brown rather than Cinnamon-Brown). Size much as in *columbianus*, although measurements of the small sample available suggest somewhat greater average dimensions for the Cascade population (see measurements and compare figures given by Rhoads<sup>6</sup> and Ridgway<sup>7</sup>).

*Comparisons*.—The race *cascadensis* is even darker and duller on the pileum than is *P. h. littoralis* of the eastern seaboard and it is larger and notably longer-billed as are *P. h. hudsonicus* and *P. h. columbianus*. The contrast in coloration between *cascadensis* and *columbianus* is almost as great as that between *P. h. hudsonicus* and *Parus cinctus alascensis*, which, although evidently closely related, breed side by side in the Kowak Valley of Alaska.

*Range*.—*Cascadensis* is known at present only from the northern Cascade Mountains in the vicinity of Monument 83 on the United States-Canadian boundary in northwestern Okanogan County, Washington. This is an area lying between the Pasayten River and the Cascade divide. Burdick took three of the specimens at 6,500 feet at Monument 83, the other two at the type locality. A skin from Mabel Lake, northeast of Okanogan

<sup>6</sup> *Auk*, 10, 1893:332.

<sup>7</sup> *Birds N. M. Amer.*, pt. 3, 1904:414.

Lake, British Columbia, belongs to *columbianus* as do others from farther north in the Province (Indianpoint Lake, Hazelton and Atlin). The nature of the birds breeding west of Okanagan Lake in British Columbia has not been ascertained by me, but such examples as may have been collected there presumably did not differ conspicuously from *columbianus*, for they were reported as belonging to this race or to *P. h. hudsonicus*. We may suppose that the Similkameen River valley constitutes a lowland barrier around the northern end of the Cascade Mountains of Washington which separates *cascadensis* from *columbianus*.

TABLE 1  
MEASUREMENTS IN MILLIMETERS

<i>Parus hudsonicus cascadensis</i>								
No.	Sex	Plumage	Date	Wing length	Tail length	Culmen	Bill length from nostril	Tarsus
3270 L. S. U. . . . .	♂	ad. fall	Aug. 23	67.6	65.1	10.0	7.5	16.9
3269 L. S. U. . . . . type topotype	♂	spring	July 11	69.9 (worn)	64.4	9.7	7.4	17.2
3267 L. S. U. . . . .	♂	juv.	Aug. 12	68.3	65.4	9.7	7.1	16.9
3268 L. S. U. . . . . (now in MVZ)	♂	juv.	Aug. 12	68.8	66.1	10.1	7.5	17.5
3266 L. S. U. . . . . (now in MVZ)	♀	juv.-im.	Aug. 12	65.8	62.5	10.1	7.6	17.1
<i>Parus hudsonicus columbianus</i>								
Averages of 18 males from British Columbia . . . . .			66.29	64.12	9.66	7.36	16.43	
Standard deviations . . . . .			σ1.91	σ2.20	σ0.46	σ0.30	σ0.40	

Museum of Vertebrate Zoölogy, Berkeley, California, August 6, 1943.