A NEW RACE OF BROWN-HEADED CHICKADEE FROM NORTHERN WASHINGTON

By Alden H. Miller

The occurrence of Brown-headed Chickadees (Peris bussonicus) 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. Westwardly in British Columbia the species extends to the Okanogan region, where it has been reported breeding in the mountains west of Okanogan Lake at elevations of 3,200 feet or greater.

The presence of this chickadee in the State of Washington I find mentioned only by Hoffmann who states that it occurs in heavy timber in northwestern Okanogan County, close to the Canadian boundary. No further particulars are given and Kitchin 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 Zoology 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 juvenile, breeding and fresh autumnal plumages.

1 Rhoads, Auk, 10, 1893:23.
5 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 b. 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 Zoology; 1 mile south of Monument 83 [long. 120° 38 1/2'] on the United States-Canadian boundary, 6,000 feet, Okanogan County, Washington, August 23, 1942; collected by A. W. Burdick.

_Subspecies characters._—Differ from _Parus hudsonicus columbianus_ by darker, much sootier pileum (near Chauterra 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 arcular 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 and Ridgway).†

_Comparisons._—The race _cascadensis_ is even darker and duller on the pileum than is _P. b. litoriatus_ of the eastern seaboard and it is larger and notably longer-billed as are _P. b. hudsonicus_ and _P. b. columbianus_. The contrast in coloration between _cascadensis_ and _columbianus_ is almost as great as that between _P. b. 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 Okanagan

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*Auk*, 10, 1893:332.


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. b. 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_

<table>
<thead>
<tr>
<th>No.</th>
<th>Sex</th>
<th>Plumage</th>
<th>Date</th>
<th>Wing length</th>
<th>Tail length</th>
<th>Calmen</th>
<th>Bill length from nostril</th>
<th>Tarsus</th>
</tr>
</thead>
<tbody>
<tr>
<td>3270</td>
<td>♂</td>
<td>ad. fall</td>
<td>Aug. 23</td>
<td>67.6</td>
<td>65.1</td>
<td>10.0</td>
<td>7.5</td>
<td>16.9</td>
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<tr>
<td>3269</td>
<td>♂</td>
<td>spring</td>
<td>July 11</td>
<td>69.9</td>
<td>64.4</td>
<td>9.7</td>
<td>7.4</td>
<td>17.2</td>
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<tr>
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<td>juv.</td>
<td>Aug. 12</td>
<td>68.3</td>
<td>64.4</td>
<td>9.7</td>
<td>7.1</td>
<td>16.9</td>
</tr>
<tr>
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<td>juv.</td>
<td>Aug. 12</td>
<td>68.8</td>
<td>66.1</td>
<td>10.1</td>
<td>7.5</td>
<td>17.5</td>
</tr>
<tr>
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<td>juv.</td>
<td>Aug. 12</td>
<td>66.8</td>
<td>62.5</td>
<td>10.1</td>
<td>7.6</td>
<td>17.1</td>
</tr>
</tbody>
</table>

**Parus hudsonicus cascadensis**

| Averages of 16 males from British Columbia | 66.29 | 64.12 | 9.66 | 7.36 | 18.43 |
| Standard deviations                      | ±1.91 | ±2.20 | ±0.46 | ±0.30 | ±0.49 |

_Museum of Vertebrate Zoology, Berkeley, California, August 6, 1943._