

NOTES ON THE ALASKA CHICKADEE.

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THE Alaska Chickadee, *Penthestes cinctus alascensis*, appears seldom in ornithological literature, since its range lies in rather inaccessible regions. Therefore, additional observation on this species may be worth while.

This bird was first taken by MacFarlane¹ in 1864, near Fort Anderson. The nest and eggs which he found on June 1 of that year are the only ones on record for this subspecies, although Grinnell² obtained a female with an egg in the oviduct, May 8, 1899, on the Kobuk River. He collected 14 specimens. Nelson³ obtained a series of specimens in the lower Yukon region, chiefly Nulato, during the period from 1877 to 1881. Turner⁴ also collected a few, taking a single specimen at St. Michael, where, he says, he never saw them in the breeding season. A. W. Anthony⁵ observed Chickadees "at long intervals in the willows" at Grantley Harbor, Alaska, in 1905. He believed all he saw were *alascensis*.

Dr. R. M. Anderson⁶ found a few in the willows on Hulahula River, on the north side of the Endicott Mountains, in Alaska, November and December, 1908, and in the spruce timber south of the divide January and February, 1909. In the delta of the Mackenzie, on the south side of Richard Island, a single bird was seen, and on Horton River, about 15 miles south of Langton Bay, another Chickadee, believed to be of this species, was observed. None were found east of that locality.

Dr. H. C. Oberholser had called my attention to the fact that

¹ Roderick MacFarlane, Notes on and list of birds and eggs collected in Arctic America, 1861-1866. Proc. U. S. Nat. Mus., XIV, pp. 413-466, 1891.

² Joseph Grinnell, Pacific Coast Avifauna, No. 1, 1900.

³ E. W. Nelson, Report upon Natural History collections made in Alaska. Arctic series of publications issued in connection with the Signal Service, U. S. Army, No. III, 1887.

⁴ Lucien M. Turner, Contributions to the Natural History of Alaska. Arctic series of publications issued in connection with the Signal Service, U. S. Army, No. II, 1886.

⁵ A. W. Anthony, Stray Notes from Alaska, Auk, vol. XXIII, No. 2, pp. 179-184, April, 1906.

⁶ R. M. Anderson, Stefansson's My Life with the Eskimo. 1913.

several specimens of the Alaska Chickadee had accumulated in the collections I had sent in to the U. S. Biological Survey from Alaska. Then in the summer of 1926 I had opportunity to make more extensive observations on this species, when I made a trip into the Old Crow River region to band waterfowl.

The first few specimens, previous to this last expedition, were collected in winter. Two were taken in February, 1921, on McManus and Twelve-mile Creeks, on the winter trail between Fairbanks and Circle, Alaska. They were found in the willows bordering the streams, at the edge of the spruce forest. On February 24, 1923, two more were taken on the Alatna River on the south side of the Endicott Mountains. On April 6, 1924, another specimen was taken on the Distna River, near the Beaver Mountains, in the Kuskokwim district. This is the southernmost record for this form.

In the summer of 1926 I went into the Old Crow River district in Yukon Territory. This time I was able to observe the Chickadees in summer on their nesting grounds. The season was too far advanced for nests and eggs, but I arrived in time to find the broods of young evidently just out of the nests. A Chickadee was heard near the mouth of Old Crow River, June 24, but was not identified. The birds were secretive at this time and not much in evidence. But on July 8 a noisy family group was found and two specimens taken. After this date they became very common.

During July and part of August, I was very busy banding waterfowl and often was not prepared to collect specimens when these Chickadees were present, but they were easily approached or attracted, and a near view with binoculars left no doubt whatever as to identity in most cases. Thus, by observing closely and collecting a specimen occasionally, I was able to trace the occurrence of the species throughout the region covered. A series of thirteen specimens was taken.

The Alaska Chickadee is easily distinguishable from *hudsonicus* in the field, provided a reasonably near view can be had. *Penthestes c. alascensis* is white over the whole side of the neck, and the flanks are pale, as contrasted with the ashy neck and darker, brown flanks of *hudsonicus*. The crown of the former is also paler than that of *hudsonicus*. In general the Alaska Chickadee is lighter

in color throughout. The side of the neck and the flanks furnish the best field marks for identification in life.

The characteristic call of this Chickadee generally consisted of two notes, which I described variously in my field notes as "dee-deer," "chee-ee," or "pee-vee," with emphasis on each syllable and a tone and accent which seemed to imply a peevish or complaining state of mind. Nelson describes it as "'pistée-tée,' uttered in a hissing tone." I imagined this call differed from that of the Hudsonian Chickadee, but in the absence of the latter for comparison at the time I can not rely too greatly on this impression.

The habitat of the Alaska Chickadee was spruce and willow woods covering the valley of the Old Crow River, about a mile in width, but much more in some places. The edge of this valley rises abruptly about 75 feet above the stream to the level of the flat tundra, which stretches away for many miles on either side. The tundra is covered with numerous ponds and lakes, and except for a few small groups of spruces here and there it is practically treeless, although near the mouth of the river, where it enters the general wooded area of the Porcupine River district, there is a more general distribution of forest. The wooded valley of the Old Crow and some of its tributaries, therefore, carry the spruce woods in the form of long sinuous belts through a tundra region. These narrow belts of forest are the home of the Alaska Chickadee, apparently to the exclusion of other Chickadees. *Penthestes hudsonicus* was not collected on the Old Crow nor was it identified among those observed.

On August 11, on the return journey, a Hudsonian Chickadee was taken on the Porcupine River just below the mouth of Old Crow River. South of this point Chickadees were heard on several occasions but generally with no opportunity for identification. Three more were collected, however, and all proved to be *hudsonicus*. No more Alaska Chickadees were found south of Old Crow River. This seems to indicate a rather marked separation of the habitats of the two species, and one is tempted to draw certain conclusions.

A consideration of the circumstances under which the Alaska Chickadee has been observed tends to show that it prefers the

edges of forest tracts or regions where spruce forest is broken up, as contrasted with more extensive, continuous forest areas. In the Beaver Mountain country, where one of my specimens was taken, the forest tends to become broken up, and those taken on McManus and Twelve-mile Creek, although in the midst of an extensive forest region, were near the upper edge of the spruce, just below the bare hilltops. Grinnell says, "The Alaskan Chickadee was never seen in company with the other species and was an inhabitant of the spruce tracts along the base of the mountains rather than in the river bottoms." Other records show that *alascensis* was found even in the willows beyond the spruce woods.

The range of this bird borders the northern tree limit, where habitat conditions mentioned here may be found. In more southern areas altitude or other factors may produce similar conditions. Observations on the Old Crow River indicate that, at least in summer, *alascensis* and *hudsonicus* are separated by habitat choice even though their general ranges may greatly overlap. Possibly this separation is not equally sharp in every instance. In winter, also, there may be a somewhat different distribution and greater mingling of the two forms.

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