NOTES ON THE WINTER BIRDS OF THE CARIBOO DISTRICT, B.C.

By ALLAN BROOKS.

I spent the winter of 1900-01 in the western portion of the Cariboo district, and as I was in the field the whole season, I had ample opportunities to note the birds of both the Upper Fraser river valley and the more heavily timbered mountains to the

The whole district, both in fauna and flora shows a decided infusion of the Hudsonian element, but this is less marked in the case of the winter birds than in the summer residents and the spring and fall migrants, many of which do not occur to the southward, except perhaps as stragglers. Such species as Sartram's Sandpiper, Tennessee, Black poll and Magnolia Warblers, and Empidonax alnorum probably migrate east through the Yellowhead pass and down the Mississippi valley.

Many of the mammals found in the district are identical with, or closely allied to those found east of the Rockies, for instance Arctomys monax and Microsovex hoyi.

The southern range of the Moose in British Columbia will

approximately define the limit of the Hudsonian element. The season was a very poor one for winter birds. Redpolls and Snowflakes, which are very abundant as a rule, were comparatively scarce, and Hawks and Owls were almost entirely absent. The northern portion of Ontario-Algoma district-will approximate very closely to western Cariboo both in climate and physical features.

299. Dendragapus franklini. Franklin's Grouse.

Abundant in suitable localities. To the northward it will probably intergrade with the Canada Grouse, as many of the specimens secured showed a decided infusion of Canadensis blood, the tail often being narrowly tipped with fulvous or white.

300b. Banasa umbellus umbellvides. Gray Ruffed Grouse.

Most of the Ruffed Grouse could be referred to this form, but some specimens were closer to typical umbellus or to logata.

304. Lagopus leucurus. White-tailed Ptarmigan.

Only occurs at high altitudes. The only species of Ptarmigan ob-

308. Pediacetes phasianellus. Sharp-tailed Grouse.

The form occurring at Quesnelle is apparently the typical northern

Richardson's Grouse occurs in the district both along the Fraser river and at timber line in the high mountains, but not in the intervening country, and was not observed during the winter.

334. Accipiter atricapillus. American Goshawk.

The only hawk observed during the winter months.