

original suggestion and an admirable model.

In the case of each species of which a change in status is hereinafter noted, I have given, following the English name, a translation of Mr. Dionne's statement concerning his observations on its occurrence here, as found in his book, such translation being terminated by Mr. Dionne's name in parentheses. Then I have summarized my own observations of the species under discussion. In order to ensure that my translations should render the meaning of Mr. Dionne's French sentences as accurately as possible, I have submitted them all to Mr. Dionne, who has most kindly verified them. I am much indebted to Mr. Dionne, not only for this aid, but also for his ever-ready assistance and encouragement in all the work of an ornithological character which I have done at and near Quebec.

The changes of status described in this paper may be divided into the following four classes:

(A) The increase in abundance of many small Warblers, Finches, Vireos, etc., normally of more or less northern breeding range. The chief known factors which may have assisted in causing these birds to increase seem to be their protection by law here and in the United States, the creation of many clearings in the forests of the north, and the absence or rarity of the domestic cat over large parts of their breeding range.

(B) The northeastward advance of five species (Crested Flycatcher, Meadowlark, Vesper Sparrow, Migrant Shrike, and House Wren), originally of more southern or southwestern breeding range. While this may represent the continuation of the northward advance of many species following the close of the last Glacial Period, there is no doubt that it has been greatly accelerated by the cutting of the forests and the settlement of the country by the white race.

(C) The diminution of two species (Eskimo Curlew and Purple Martin), due to very obscure causes.

(D) The accidental occurrence of one species (Blue-gray Gnatcatcher).

The Zone Map of North America, as published inside the front cover of F. M. Chapman's "Hand-book of Birds of Eastern North America", 1912 edition, indicates the vicinity of Quebec City to be in the Canadian Zone. The Transition Zone is represented as reaching northeastward along the south bank of the St. Lawrence River about as far as to Levis, P.Q., but as not extending northeast of the Ottawa River on the north bank of the St. Lawrence. The dividing line between the two zones between Montreal and Levis, which is directly opposite Quebec, is thus made to coincide with the St. Lawrence River. There can be little doubt that this is not exactly correct, for the Tran-

sition Zone certainly crosses the Ottawa and extends northeastward along the north bank of the St. Lawrence for some distance. Whether or not it should be considered as reaching to Quebec City is a matter on which opinions may differ. It appears to me, however, that the most nearly correct position for this portion of the necessarily arbitrary dividing line between the Transition and Canadian zones is at the southern foot of the Laurentian Mountains, in general some miles north of the St. Lawrence. This would mean that a strip of the Transition zone extends along the north shore of the St. Lawrence as far as Cap Tourmente, about twenty-five miles below Quebec, where the Laurentians finally front directly on the river. A person standing on the Citadel, or even on Dufferin Terrace, at Quebec, can distinguish at a glance the low-lying cultivated, Transition (?) country immediately around the city and along the St. Lawrence in either direction from the elevated, wooded, undoubtedly Canadian mountainous country behind. The following data concerning the status of certain species of birds about Quebec may be of assistance to those interested in this question:

1. Transition species which are summer residents at Quebec: Virginia Rail (not common), Sora Rail (fairly common), Black-billed Cuckoo (irregular), Kingbird (common), Crested Flycatcher (uncommon), Prairie Horned Lark (fairly common), Bobolink (uncommon), Cowbird (uncommon), Red-winged Blackbird (uncommon), Meadowlark (fairly common), Vesper Sparrow (fairly common), Chipping Sparrow (very common), Purple Martin (rare), Blue-headed Vireo (rare), Catbird (fairly common), House Wren (uncommon), Veery (common), and Bluebird (uncommon).

2. Canadian species which are summer residents at Quebec: Pine Siskin (common), White-throated Sparrow (common), Slate-colored Junco (rare), Lincoln's Sparrow (rare), Philadelphia Vireo (not common), Tennessee Warbler (rare), Myrtle Warbler (rare), Magnolia Warbler (fairly common), Bay-breasted Warbler (rare), Blackburnian Warbler (fairly common), Water-Thrush (fairly common), Mourning Warbler (not common), Canadian Warbler (common), Winter Wren (rare), Red-breasted Nuthatch (rare), Olive-backed Thrush (uncommon), and Hermit Thrush (rare).

266. *Numenius borealis* (Forst.). Eskimo Curlew.

This Curlew is more common than the preceding species [*N. hudsonicus*] and frequently occurs on the beaches and in the fields not far from Quebec (Dionne).

No recent record of this species near Quebec is known to Mr. Dionne or myself.