STATE DISTRIBUTION OF RETURNS FROM BANDED DUCKS

FIRST PAPER—ALBERTA

By Frederick C. Lincoln

Knowledge of the dispersal of migratory waterfowl from points of concentration is of interest to the student of birds, while it is also of decided importance to the official charged with their conservation and proper administration. Under the provisions of the Migratory Bird Treaty, the Biological Survey in the United States, and the National Parks Branch in Canada, are charged with this responsibility, which is ample explanation of the attention that is paid by these agencies to

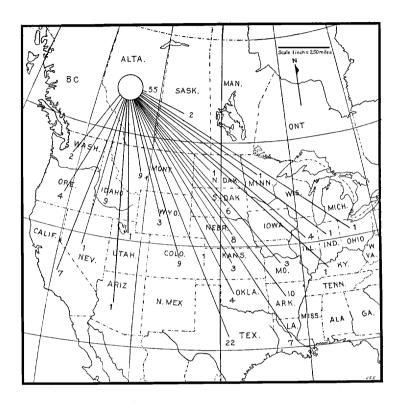
the banding of ducks and geese.

On July 1, 1932, the total number of migratory waterfowl that had been marked with Biological Survey bands was 98,948, and from these, important series of return records have been accumulated. It is planned ultimately to utilize this material in the preparation of technical migration studies of the different species. Such a report, treating the distribution and migration of the Mallard and the Black Duck is now in preparation. Since need for economy in Government printing makes it uncertain when publication will be possible, it seems desirable at this time to show briefly just what is being accomplished. Accordingly, in planning the present series of papers, it is the purpose of the writer to illustrate, by maps and short descriptive statements, the extent of the information that is now at hand relative to the movements of banded ducks.

The several States and Provinces where important waterfowl stations have been in operation will be treated in alphabetical order, beginning with the Province of Alberta. The maps will show the aggregate of returns received for all species, although the accompanying statement will indicate the numerical status of each.

ALBERTA

The banding of waterfowl in Alberta has been done chiefly by Paul E. Page, of Eagle Gorge, Washington, who operated a station at Lac Ste. Anne during the seasons of 1924, 1925, 1926, 1928, and 1929. Mallards were banded in largest numbers, but return records also were received for a few Green-



LEGEND FOR MAP

STATE DISTRIBUTION OF DUCKS BANDED IN ALBERTA

The banding area in Alberta includes Lac Ste. Anne, Leduc, Flat Lake, Camrose, Forestburg, Walsh, and Many Islands.

The lines extending into the several States and Provinces are not to be considered as indicating either routes of travel or the exact points of recovery, even where only a single return is listed for the State.

winged Teals, Blue-winged Teals, Redheads, and Lesser Scaups. Lac Ste. Anne is about forty miles west and north of Edmonton.

D. H. Bendick, of Leduc, about twenty miles south of Edmonton, banded ducks at that point in 1926 and 1927; Archie Hull, of Brigham City, Utah, banded a few Mallards at Flat Lake in the Lac la Biche district during July, 1928; T. E. Randall and Frank L. Farley banded several Pintails and Golden-eyes at Camrose in 1927; Randall banded a few Canvasbacks at Forestburg in 1928; and Alex Glennie banded a few Shovellers at Walsh and Many Islands in 1927 and 1928. Mallards, however, make up 156 of the 176 returns that have been received from ducks banded in this Province.

As is always the case when banding of game waterfowl is conducted immediately before or during the shooting season, there is a heavy local mortality, in the present instance the hunters of Alberta accounting for 55 of the records. These are all Mallards.

The data in this group illustrate how much the plains and Mississippi Valley States are dependent on the prairie Provinces of Canada for their Mallards, as of the 101 returns from points outside of Alberta, 74 are from the region east of the Rocky Mountains. The easternmost record, that from Ohio, is a Pintail banded at Forestburg. Of the 22 returns from Texas, 18 are Mallards, 3 are Pintails, and 1 is a Blue-winged Teal.

Curiously enough, despite the great importance of the Bear River Marshes in Utah, only one Alberta-banded duck has been recovered there. This was a Shoveller banded at Walsh in June, 1928, and killed in December of the same year.

The single return for Minnesota is of a Redhead that was obviously traveling the great flyway used by diving ducks *en route* to the waters of Chesapeake Bay and the South Atlantic coast.

The thirteen returns for the Pacific coast are for eight Mallards, two Lesser Scaups, one Canvas-back, one Shoveller, and one Golden-eye. The single record for Arizona is for a Mallard.

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