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Report 262

OHIO WATERFOWL CONDITIONS AND A POSSIBLE WATERFOWL REFUGE AT THE  
WESTERN END OF LAKE ERIE IN OHIO

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This report has been prepared at the suggestion of Mr. J. Clark Salyer, Chief of the Migratory Waterfowl Division, of the U. S. Biological Survey.

Before proceeding my qualifications for making such a report may be indicated. For the past 15 years, I have been much interested in the migratory waterfowl of Ohio from both a conservation and scientific standpoint. During that period much time was spent observing and studying waterfowl conditions in every section of Ohio. This was especially so during the four years preceding 1934, during which I served as Assistant in the Bureau of Scientific Research, of the Ohio Division of Conservation. Ample opportunity was then had, and was made use of, to periodically visit the waterfowl concentration areas of the state, and to correspond with, and receive reports from many observers, state game protectors and members of duck hunting clubs. In addition to this, I made a preliminary survey in the spring and summer of 1932, as yet unpublished, of the species and concentrations of nesting ducks in the Ohio marshes at the western end of Lake Erie.

The data thus accumulated have definitely shown that:

1. Excepting the Lake Erie district, there are only a few small localities in Ohio, such as the three largest state reservoirs and the country adjacent to the mouths of the larger rivers flowing into the Ohio River, where ducks still occasionally concentrate, or are able to do so.

2. In the Lake Erie district of Ohio (that portion of the state within 20 miles of Lake Erie and Sandusky Bay) there is little duck concentration except at the

western end. Here in the counties of Lucas, Ottawa, Sandusky, and Erie, lie about 30,000 acres of marshland, scattered at various intervals along Lake Erie and Sandusky Bay from the city of Toledo eastward to the city of Sandusky.

3. In these 30,000 acres of marshland, great concentrations of ducks occur in migrations. The reasons for this are (a) the converging of several important waterfowl flyways (as repeatedly pointed out by Lincoln, Phillips and others), (b) the suitability of the marshes for waterfowl, and (c) the intensive feeding and baiting of ducks which attracts and holds these birds in this region.

4. The water level of many of the marshes are as much as 4 feet above Lake Erie proper. To maintain this water level it is necessary to pump great quantities of water from the lake or neighboring streams into the marshes; and to build and keep in repair miles of dykes. This is done only at considerable expense, and involves a continual high overhead.

5. The lowland areas which could be dyked and operated as marshes at the lowest possible cost have all been utilized. To construct a large marsh in the few remaining and available localities left today would be prohibitive from the standpoint of initial cost and continued overhead.

6. Because of the concentration of waterfowl (mostly shoal-water ducks) in these marshes, hunting is exceedingly good and the marshes are most extensively hunted. They are all private, however; no public hunting is allowed in any of them. The public hunting in this area is done about the larger streams and around the margins of a few of the private marshes.

7. If only the shoal-water ducks of this area were studied, and no attention were paid to the rest of Ohio or of North America, the inevitable conclusion would be that there are today as many ducks in North America as there were 25 years ago, and that no duck shortage exists. In fact, it is quite possible that there may be more ducks during migrations in those marshes than there were 25 years ago, as at that time extensive feeding of birds was not so universal.

8. Due to the concentrations of waterfowl here there is a definite need of a federal waterfowl refuge, where a fair proportion of the migrating birds can remain unmolested. It is true that many duck hunting clubs maintain "rest" and "feeding grounds" on their marshes but these are not sufficient.

9. For the federal government to acquire a marsh that is dyked and in constant need of water, which would need be pumped to maintain the water level, would be prohibitive from the standpoint of expense. It would be much more practical to acquire a marsh which is connected with Lake Erie.

10. Of the few remaining marshes still connected with Lake Erie, the so-called East Harbor marsh is by far the most logical for acquisition. This marsh is situated in Danbury Township, Ottawa County, Ohio, about 2 miles west of the village of Lakeside. The entire marsh area **comprises** approximately one square mile of actual marsh and perhaps 100 acres of open water. Reasons why this marsh is suitable for a waterfowl refuge are:

(A) It lies in the center of the 30,000 acres of marshland and therefore in the center of the duck concentration area.

(B) Pumping water and maintaining extensive dykes is not necessary, as the marsh is connected directly with Lake Erie. This connection with Lake Erie at times causes considerable fluctuation of water level. This fluctuation, on the whole, is much more beneficial to migrating waterfowl than otherwise.

(C) Unlike all except a few of the marshes, this one is equally suited for both shoal-water and diving ducks. In fact, it has long been noted for its former concentrations of Lesser Scaup, Redhead, Canvasback and Ring-necked ducks.

(D) There is a plentiful supply of natural duck food. Such duck foods as wild celery and pond weeds (Potamogeton) are especially abundant; while there is much smartweed, bulrush, sedges, white and yellow water lilies, horn wort (Ceratophyllum), ditch moss (Elodea), water plantain, pickerel weed and arrow head. The taller bulrushes, sedges and cattail form abundant cover.

(E) Since this marsh is usually the last one of the region to freeze over, ducks congregate here from other marshes when they freeze over in late winter and early

spring. It should therefore be preserved to provide a feeding and resting area under such adverse conditions. When even this marsh becomes frozen, corn could be fed, to save the ducks which concentrate here.

(F) Each year a moderate number of Black and Mallard ducks, and an occasional Blue-winged Teal nest here. The number of nesting ducks here is comparable with that of any other marsh of like size at the western end of Lake Erie.

(G) Law enforcement on this marsh would be feasible, decidedly more so than it would be on the average marsh of the region.

11. If East Harbor were acquired as a waterfowl refuge, certain existing conditions would need be considered and properly dealt with. These conditions, and recommendations concerning them, are given below:

(A) Like other marshes of this region, the East Harbor marsh contains a large number of muskrats. These compete with the waterfowl for food. Therefore their numbers should be held in check. To do this would necessitate trapping. If done at the proper season, as it has been done in the past and can still be done, this trapping of muskrats should be profitable.

(B) Though natural food is abundant, this marsh, or any other marsh for that matter, cannot be expected to concentrate ducks in such numbers as are attracted to marshes where grain is fed in large quantities. To compete with these marshes it may be necessary to feed grain at times, as during spring freeze-ups. The cost of buying this grain might be balanced by the sale of muskrat hides, thereby doubly assisting the ducks, by feeding them and by decreasing the number of competitors.

(C) At present more than 18 summer cottages surround the eastern end of the marsh. These cottages would not detract from the value of East Harbor as a waterfowl refuge. However, some future restrictions should be placed on the building of other cottages, especially on the number to be built on the bar which separates Lake Erie from the harbor.

(D) There is some motor boating and row boating now on the open water. This should be allowed to continue during late spring and summer. It might be well to prohibit

it for a few weeks previous to and during the hunting season.

(E) Sport fishing is now practiced in the marsh. It should by all means be allowed to continue and should be encouraged.

(F) The more open waters of the harbor contain large numbers of Largemouth Bass (Aplites salmoides), White Crappie (Pomoxis annularis), Black Crappie (Pomoxis sparoides) and Yellow Perch (Perca flavescens). These, if they become too abundant, could be seined and planted elsewhere by the U. S. Bureau of Fisheries, or by the Ohio Division of Conservation.

(G) The Carp (Cyprinus carpio) should be removed from the marsh if they are destructive to plant life or competitors with the waterfowl for food. As there is a constant demand for carp for the market they could be sold for the expense it costs to remove them, or even at a small profit. It is likely that the Ohio Division of Conservation would remove them at no cost to the Federal Government, for feeding them, ground, to their hatchery fish.

12. Recommendation for future consideration are as follows:

(A) Because of the duck concentrations and converging of the flyways, much information that would be of the utmost importance to waterfowl conservation could be gotten through the medium of banding. It is therefore recommended that at some future date a banding station be placed at this marsh, to be supervised by the Federal Government, the Ohio Division of Conservation, the Ohio State University or some other equally qualified organization.

(B) Other types of scientific research, such as a further study of the malaria-like disease of ducks, by competent organizations, should be encouraged here.

13. CONCLUSIONS.--(A) A waterfowl refuge of some size is urgently needed at the west end of Lake Erie, (B) East Harbor is best suited for this purpose, (C) Because of its importance in the duck conservation program, this waterfowl refuge should be acquired by the Federal Government, even though the cost per acre would be decidedly higher than that ordinarily paid for Western refuges. Any marsh in this critical area of converging flyways will be relatively expensive, because all the worthwhile marshes of the region are controlled by hunting clubs.