

The Diving Duck Crisis

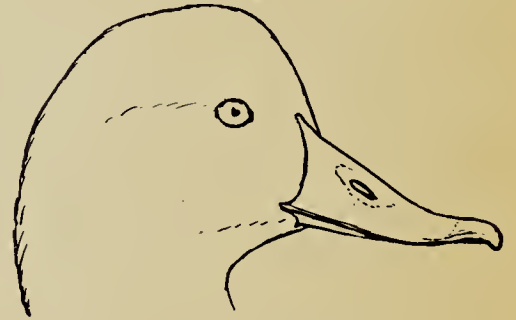
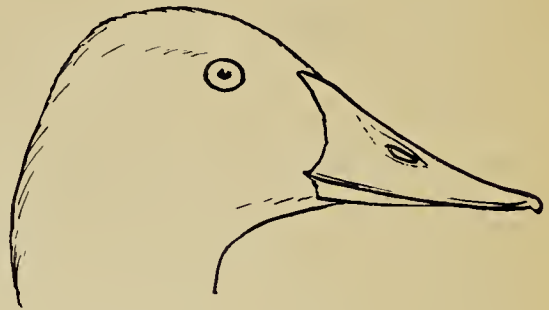
By Dr. Stuart Houston, Yorkton

The sharp drop in the population of our diving ducks calls for a close look at the whole situation by all naturalists and sportsmen, as well as by the professional biologists and administrators. Past performances suggest that we are rarely aroused until it is too late—or almost too late.

The diving ducks (Redheads, Canvasbacks, Ringnecks and Scaup) require more specialized habitat than do the puddle ducks (such as Mallards, Pintails, Widgeon and Teal). The diving ducks need larger, deeper marshes and more cover. The declining water levels this year have suddenly emphasized our shortage of good marshes. We have been short-sighted, greedy and even stupid, for we have drained many of the best marshes. Even now, there is pressure from some sources to drain more marshes. With modern earth-moving equipment, it is all too easy to ruin a marsh for ever.

Our present game laws are formulated chiefly with the more abundant puddle ducks in mind—they do not allow for the different habits of the diving ducks. The diving ducks tend to nest later (on the average), and mature later; I have seen Canvasbacks and Redheads still unable to fly three weeks after the opening of the hunting season! The female Redhead makes matters worse by being a poor mother, laying eggs in nests of other ducks, and being less attentive to her young. Diving ducks are particular in their habitat needs, do not fly out to feed in grain fields, and are more apt to remain on their home marsh. Banding has shown that female ducks (particularly Redheads, in my experience), return to nest in the marsh where they were raised. Hence if there is heavy shooting pressure on the home marsh, the local breeding population can be wiped out, especially if the season opens early before the local birds are "diluted" with northern birds. Breeding birds have in this way already disappeared from many good marshes in Minnesota.

Although stubble shooting is popular in most parts of Saskatchewan, it is "pass shooting" and shooting from boats that pose a men-



Canvasback above; Redhead below

Sketch by F. W. Lahrman

ace to our diving ducks. This type of shooting is concentrated on the lakes and marshes where diving ducks occur. Canvasbacks are a favorite with our American visitors. Although many think that little marsh shooting is done in Saskatchewan, we must remember that intensive shooting on one marsh may decimate the native population. When Redheads constitute less than 1% of the duck population, a very little of this type of shooting may prove too much.

My banding recoveries from ducks banded near Yorkton between 1943 and 1948, show that shooting pressure is heavier on Canvasbacks and Redheads than on any other species. (Close behind in third place is the Mallard, but this species, more adaptable and with higher reproductive success, seems able to withstand heavier hunting pressure). Here are the recovery percentages for the five main species:

Canvasback, 28.2% (24 recoveries from 85 birds banded).

Redhead, 21.3% (80 recoveries from 375 birds banded).

Mallard, 21.2% (413 recoveries from 1946 birds banded).

Pintail, 13.7% (69 recoveries from 504 birds banded).

Blue-winged Teal, 4.9% (65 recoveries from 1335 birds banded).

Remember that these figures need to be approximately doubled to give the true loss from hunting; to allow for crippling losses; unrecovered birds and bands not reported. Thus Canvasbacks and Redheads are subject to about 40% mortality from shooting each year.

Most of this shooting is done in the United States, so they will need to reduce their bag limits for diving ducks. In Canada, game regulations must also take the diving ducks into account. In Manitoba, they open the duck season in two sections—an early opening for stubble shooting, to help reduce crop depredations by the Mallards and Pintails; and a later opening of over-water marsh shooting, to protect the diving ducks. I would suggest the last week in August and the first week in October as being suitable dates for Saskatchewan. There are theoretical difficulties in enforcement, but these are not much more serious than supervising before-season permits for crop protection or having waterfowl and upland game seasons opening on different dates. If a hunter has five Canvasbacks and three Redheads in his bag, he wasn't shooting over stubble!

There is an urgent need to educate the public to the value of our

marshlands; as our population grows, we need the marshes more, not less. Let us not be misled by the cry that "we must not oppose progress." So-called progress may be in a backward direction! Even from an economic aspect, marshes rarely become good farm land and the value to the farmer of a high water table and an ample water supply should never be forgotten. Further, a marsh can raise a valuable crop of fur, sometimes worth more in dollars than any crop it could produce after being drained. The present dry spell can at least remind us to preserve those marshes that still remain.

EDITOR'S NOTE: The figure of 40% for the Canvasback and Redhead kill, arrived at by Dr. Houston on the basis of his banding returns, coincides almost exactly with the findings of the United States Fish and Wildlife Service whose records show that hunters take an astonishing 47% of the Canvasback population each fall. Even more sobering are the statistics released by H. Albert Hochbaum, director of the Delta Waterfowl Research Station (*Winnipeg Free Press*, Sept. 24, 1958). Dr. Hochbaum told the executive of the Manitoba Federation of Game and Fish Associations that banding returns indicate that 90% of the banded adult female and young Canvasbacks flying south are killed by U.S. and Canadian hunters annually. This removes any chance of natural increase among the Canvasbacks because it is a known fact that when the kill is greater than 15% natural increase ceases in any species.

The estimated Canvasback population in North America, according to Dr. Hochbaum, is now 350,000. This low figure sinks when the sex ratio is examined. There are 70 males for every 30 females, reducing the reproduction stock to about 100,000 breeding pairs. The sex ratio is aggravated by the fact that males go to the northern lakes following the breeding season and later, when they go south, avoid the hunting marshes of southern Canada and the United States where female Canvasbacks are subjected to heavy hunting pressure.

PRELIMINARY REPORT ON THE PRAIRIE NEST RECORDS SCHEME

By E. L. Fox, Regina

The Prairie Nest Records Scheme which began in the spring of this year had by the middle of October received over 600 returns on 91 species of birds. We know that there are a number of cards still to be turned in and we should like to have these as quickly as possible in order that they may be included in the first annual report to be published in the March issue of the **Blue Jay**.

We have received cards from many areas in the southern half of Saskatchewan and in addition we have a few returns from Alberta and Manitoba. It is important that our Alberta and Manitoba members send

in returns as the Prairie Nest Records Scheme is intended to bridge the gap between Ontario and British Columbia where similar information is being recorded.

Returns have been received on 91 species including most of the common birds. Strangely enough, reports have not yet been received for the following common species: Green-winged Teal, Redhead, Gray Partridge, Willet, Franklin's Gull, Bonaparte's Gull, Burrowing Owl, Brown Thrasher, Baltimore Oriole. On the other hand, nesting information has been received for a number of species which are rare or whose nests