Basic Band Recovery Information for Cape Breton, Nova Scotia

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REPORT

Preface

Why would a Ruddy Duck from Wisconsin or a Redhead from New York show up in Cape Breton? A wigeon from Judique was shot in Ontario a short time later and several Blue-winged Teal were recovered in Ontario and Wisconsin. This leap-frog helter skelter behaviour goes on each year and is part of <u>The</u> <u>Waterfowl Olympics</u> - a game to confuse waterfowl biologists. Several events are worth mentioning: <u>The Hop, Skip and Jump</u> a speciality for blue wings who frequent all North American flyways and three continents; <u>The Relays</u> a favourite for Mallards, the goal to be fed and recaptured at several stations during migration; <u>The Long Jump</u> - many birds can leave Labrador and land in Florida or South America; <u>The Diving Events</u> are spectacular - a ring neck (diver) released in the Atlantic Region will emerge in the Gulf of Mexico. <u>The Trap and Skeet Event</u> were cancelled as they were too disruptive and complicated normal events.

Introduction

The movement of Cape Breton waterfowl is interesting and the possibilities for interpretation endless. Limited data can be restrictive but the quest for more can complicate the issue. Band recovery data are sufficient for interpretation for only the Black Duck, Ring-necked Duck, Blue-winged Teal and Green-winged Teal banded on Cape Breton. Records for experimental or hand-reared birds, the Erskine merganser study, and the Canada Goose release program are not included.

Data from the 1967-1973 bait trapping and night-lighting efforts are summarized. Recovery information for ring-necks, blue-wings and green-wings was forwarded from Ottawa (request 88-080A) and the Black Duck data were tabulated from CWS computer records. The <u>B</u> U <u>R</u> <u>P</u> figure for each species indicates total banded, recovered and percentage recovery. A <u>direct recovery</u> is that for a bird recovered shortly after banding or during the first period of migratory movement. Direct recoveries of immature birds are important in providing harvest distribution data for the location of banding.

Black Duck

The Black Duck is the <u>duck of the northeast</u> with relatively restricted migratory movements. The harvest and recovery data (Figures 1,2 & 3) confirm that blacks are different from other Cape Breton dabblers. Compared to them, distance of the Black Duck's range is shortest and the <u>Canadian harvest is highest</u>. Unlike other ducks, blacks seldom stray from the Atlantic Flyway and their migratory range is a narrow coastal zone between Cape Breton and North Carolina. It is suggested that Cape Breton blacks depart the Atlantic Region through two corridors, a minor one through P.E.I. and southern New Brunswick and a more important one through P.E.I. and the length of Nova Scotia to Yarmouth. The most important U.S. wintering area for Cape Breton Black Ducks is probably the Cape Cod area of Massachusetts.

Other than for wintering habitat the American states have little impact on the Cape Breton Black Duck population. Since 1930 only 104 recoveries of American banded blacks are on record. Most were banded during mid winter and only 4 birds were banded as immatures. New Brunswick is isolated both for Cape Breton waterfowl export and import. Only three New Brunswick banded birds have been recovered in Cape Breton.

Two degrees west and three hundred miles north of Cape Breton lies Baie Johan Beetz, P.Q. and one hundred and fifty miles to the northeast, Codroy Newfoundland. Both are bait trap stations that have sampled the northern Black duck populations. Considering the large areas and small number of birds banded, the fifty-eight Cape Breton recoveries of Blacks banded at those stations is surprising. Several Labrador birds are included. Unlike the USA-banded birds, 70 percent are immature and 55 percent are direct recoveries.

The provincial exchange of P.E.I. and Cape Breton Black Ducks has been obvious to crews at simultaneous banding stations. Similar to the recoveries of birds banded in northern areas, fifty-eight percent are direct recoveries. Of known age birds 53 percent were immature. A total of 24 Black Ducks banded on P.E.I. was recovered on Cape Breton.

The mainland Nova Scotia Black Duck population contributes to the Cape Breton population. Most returns of mainland banded blacks were from

bandings at the Musquodoboit - Shubenacadie area and seventy percent were recovered in the Isle Madame area. Nineteen of these (sixty one percent) were direct recoveries of immature birds. The northerly movement of young birds is not unusual. Movement throughout the length of Nova Scotia (Cape Breton -Yarmouth) is consistent with other Cape Breton recoveries. Only seven recoveries are from birds banded in The Border Area and NE Nova Scotia where approximately ten thousand Black Ducks have been banded.

The status of the Isle Madame area is not understood. The high proportion of mainland recoveries may be inflated due to a heavy hunting near a wintering area, seasonal differences between Cape Breton and Halifax which leads to heavy hunting by Haligonians, and a hunter preference for dabblers over divers. Cape Breton Black Ducks appear not to use this area. Only eleven returns are on record but Antigonish County harvest of Cape Breton birds is extensive and, to a lesser degree, Musquodoboit and Yarmouth area harvests. Fifty-five percent of the western Cape Breton recoveries are from Antigonish County, Nova Scotia.



Figure 1. Recovery data for Black Ducks banded in Cape Breton, Nova Scotia

<u>Blue-winged Teal</u> - Known for its <u>complex migratory movements</u> and long distance flight, this teal species is unique as a world traveller. These traits are reflected in the <u>low Cape Breton recovery rate</u>. Only thirty teal (six percent) were recovered because of their early migration and long flights spanning two continents. There is speculation of a oceanic route from a jump off point in southwestern Nova Scotia, southerly to the Caribbean Island system and to South America. A coastal route along the Atlantic seaboard to Florida and the Caribbean islands is more logical. Both scenarios are possible (Figure 2), however the small sample size limits further speculation.



Figure 2. Recovery data for Blue-winged Teal banded in Cape Breton, Nova Scotia

Green-winged Teal

A <u>minor western shift</u> for migrant green-wings through P.E.I. and into New Brunswick is not as important as for ring-necks. Seven direct recoveries of Cape Breton-banded birds are recorded for the Madeleine Islands, P.E.I. and the N.B.-N.S. Border Area. Based on recoveries a <u>fifty-fifty split for USA</u> <u>and Canadian harvest</u> is indicated. A further breakdown of Green-winged Teal recoveries is found in Figure 3. After departing the Atlantic Provinces a restricted southwesterly coastal movement to Florida is indicated. Green-wings are known to winter in the Gulf of Mexico states but only one recovery from Louisiana is on record.



Figure 3. Recovery data for Green-winged Teal banded in Cape Breton, Nova Scotia

Ring-necked Duck

Approximately 20 percent of the ring-necks banded in Cape Breton have been recovered. This <u>high recovery rate</u> is dependent on many factors. The Lake Ainslie area, known for its ring-neck production, is heavily hunted and 14 percent of the recoveries are from this area. Many Cape Breton ring-necks <u>exhibit a western shift</u>, bypassing mainland Nova Scotia before moving southerly along the Atlantic Flyway. This behaviour moves those birds through P.E.I. and into the Saint John River marshes, two heavily hunted areas. Eighteen direct recoveries extending into Quebec are on record. Of these twelve are females and all except two are immature birds. Once south of the Atlanic Region, the ring-neck migratory pattern is restricted to a coastal zone extending to Florida and then westerly along the Gulf of Mexico to Louisiana. Figure 4 contains the recovery percentages and harvest pattern.



Figure 4. Recovery data for Ring-necked Ducks banded in Cape Breton, Nova Scotia

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