

*Primary
NWA gen. box*

Breeding Waterfowl on
National Wildlife Areas - Atlantic Region

by

H. Peter Barkhouse

Abstract - Eight of the regions NWA's provide breeding habitat for fifteen species of waterfowl with total annual production estimated to exceed 600 broods. 7 pages

November 1979
CWS Habitat Section
Internal Report

NWA
Gen.
13

Breeding Waterfowl on National Wildlife Areas - Atlantic Region

Fifteen waterfowl species have been recorded breeding on National Wildlife Areas in the Atlantic Region to date. Eight of the ten wildlife areas in the Atlantic Region provide waterfowl with breeding habitat and only Boot Island and Margaree Island wildlife areas do not. Total annual production is now estimated to exceed 600 broods. A summary of breeding locations and approximations of annual production (1979) is presented in Table 1.

The principal waterfowl species breeding on National Wildlife areas in the Atlantic Region are Black Duck, Green-winged Teal, Blue-winged Teal and Ring-necked Duck. Black Duck and Green-winged Teal nest annually on all eight areas. Blue-winged Teal breed on all but Sand Pond National Wildlife Area and Ring-necked Duck on five of the eight areas.

Mallard and Pintail have been recorded breeding on five areas and Shoveler on six, but in smaller number than the above species and not every year. Pintail was first recorded breeding at Shepody National Wildlife Area in 1979. American Wigeon breed on four areas.

Portobello Creek National Wildlife Area is the only area providing any substantial amount of suitable habitat for tree nesters. Wood Duck, Common Goldeneye and Hooded Merganser all nest there. Common Goldeneye are known to nest only at Portobello Creek as were Hooded Merganser prior to 1979 when a brood was recorded at Wallace Bay National Wildlife Area.

During the last three breeding seasons two broods of Canada Geese have been reared at Tintamarre National Wildlife Area. It is one of very few locations in the Maritime Provinces where Canada Geese breed in the wild.

The breeding records of Gadwall, Redhead and Ruddy Duck on National Wildlife Areas are of single broods. A brood of Gadwall at Amherst Point in 1978 represents the first breeding record of that species in Nova Scotia. Likewise the brood of Ruddy Duck, also at Amherst Point in 1979, represents the first provincial record.

The Redhead brood at Wallace in 1979 represents the first on National Wildlife Areas and one of only a few for the Maritimes.

Since the inception of the National Wildlife Area program in 1967 and the subsequent development of habitat (largely by Ducks Unlimited) on several of the areas established to date, the number of breeding waterfowl has increased substantially as has the variety of species. To illustrate that a summary of waterfowl production prior and subsequent to habitat development on four National Wildlife Areas in the Atlantic Region is presented in Table 2. The values given are actual brood counts from helicopter surveys. Observed annual production on the four areas has increased from 72 broods prior to habitat development to 350 broods. Six new waterfowl species have also been recorded breeding on those areas following habitat management.

Peter Barkhouse
November, 1979

Table 1. Summary of Waterfowl breeding on National Wildlife Areas - Atlantic Region

	Tintamarre	Cape Jourmain	Shepody	Chignecto	Wallace Bay	Portobello Creek	Sand Pond	Portage Island	Approximate Production (1979)
Canada Goose	1	-	-	-	-	-	-	-	< 5
Mallard	1	1	1	1	-	1	-	-	< 10
Black Duck	4	4	5	4	4	5	1	1	> 180
Gadwall	-	-	-	1	-	-	-	-	> 1
Pintail	2	1	1	2	-	1	-	-	> 20
Green-winged Teal	3	1	2	2	3	4	1	1	> 90
Blue-winged Teal	5	1	5	3	4	5	-	1	> 140
Am. Wigeon	1	-	-	1	1	2	-	-	> 10
Shoveler	1	1	1	1	1	1	-	-	> 5
Wood Duck	1	-	-	1	-	4	-	-	> 30
Redhead	-	-	-	-	1	-	-	-	> 1
Ring-necked Duck	3	-	5	3	2	2	-	-	> 90
Common Goldeneye	-	-	-	-	-	4	-	-	> 20
Hooded Merganser	-	-	-	-	1	3	-	-	> 15
Ruddy Duck	-	-	-	1	-	-	-	-	> 1
Approximate Annual Production	100	30	150	75	75	175	5	5	> 600

Annual Brood Production (approximation indication of number of broods)

- 1: 1-5
- 2: 6-10
- 3: 11-20
- 4: 21-30
- 5: >30

1 : Single brood observed, one year only.

Table 2. Waterfowl Brood Production on Tintamarre, Shepody, Chignecto and Wallace Bay National Wildlife Areas prior and subsequent to Habitat Development (Actual Brood Counts from Helicopter Surveys).

A. Tintamarre National Wildlife Area - Jolicure Lakes and Hog Lake Sections

	Pre Development		Development	Post Development	
	1967	1968	1969-1975 (1)	1976 (2)	1978 (3)
Black Duck	4	5		18 (3)	8 (14)
Green-winged Teal	10	11		14 (2)	5 (9)
Blue-winged Teal	5	6		21 (4)	23 (9)
Ring-necked Duck	6	6		5 (1)	12 (4)
Pintail	2	2		6	4 (2)
Wood Duck	1	1		-	-
Shoveler	-	-		-	3
Mallard	-	-		-	2
Wigeon	-	-		-	2
Canada Goose	-	-		2	2
Unknown	-	-		8	- (5)
TOTAL	28	31		72 (82) 74 84	61 (104)

(1) 1969-1975 Five hundred and twenty acres impounded by Ducks Unlimited

(2) 1976 Impoundment 5 drawn down. Counts in brackets are from 1978 surveys of that impoundment

(3) 1978 Hog Lake and Impoundment 5 only locations surveyed. Counts in brackets are from 1976 survey of other locations (Impoundments 1-4, 6, Front Lake, Filmore's Hole).

B. Chignecto National Wildlife Area - Amherst Point Section

	Pre Development		Development	Post Development	
	1972	1973	1974-1977 (1)	1978 (2)	1979
Black Duck	1	9		13	17
Green-winged Teal	-	4		6	4
Blue-winged Teal	3	8		10	7
Ring-necked Duck	2	-		8	11
Pintail	-	4		6	1
Wood Duck	-			1	
Shoveler	-			1	
Mallard	-			1	
Wigeon	3	1		1	2
Gadwall	-			1	
TOTAL	9	26		48	42

(1) 1973-1977 Seven hundred and thirty-five acres impounded by Ducks Unlimited

(2) 1978, 1979 Impoundments only locations surveyed, therefore counts approximate increased production.

C. Shepody National Wildlife Area - Germantown Section

	Pre Development		Development	Post Development	
	1972	1973	1974-1976 (1)	1978	1979
Black Duck	6	5		21	29
Green-winged Teal	1	1		6	7
Blue-winged Teal	1	2		21	38
Ring-necked Duck	3	5		11	40
Pintail	-	-		-	1
Shoveler	-	-		-	1
Mallard	-	-		-	1
Unknown	-	-		4	
TOTAL	11	13		63	117

(1) 1974-1977 Eight hundred and sixty-eight acres impounded by Ducks Unlimited

D. Wallace Bay National Wildlife Area

	Pre Development 1973	Development 1974-1977 (1)	Post Development 1978
Black Duck	2		18
Green-winged Teal	-		8
Blue-winged Teal	-		23
Ring-necked Duck	-		3
Shoveler	-		1
Wigeon	-		1
Unknown	-		1
TOTAL	2		55

(1) 1974-1977 Three hundred and sixty acres impounded by Ducks Unlimited.