DOG - AIRBOAT AND ROCKET NET WORK IN THE ATLANTIC REGION - 1992

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PREFACE

Climatic conditions and work scheduling disrupted several banding programs in 1992. The Atlantic Region experienced unusual weather conditions for the third consecutive year. None was as extreme as the torrential flooding in Texas and California, or snow storms in the Middle East. However, record low temperatures and rain in Ontario contrasted with record high temperatures in the Yukon, Vancouver experienced torrential rains, the weather patterns in the prairies were reversed, the tourist industry declined by as much as 30 percent and wet weather delayed crops in the Atlantic Region by ten days.

Climatologists agree that most of the blame is an errant current of warm water in the tropical Pacific Ocean known as El Nino. This phenomenon develops once every four or five years with warm air and high pressure zones capable of disrupting continental air currents.

The volcanic eruption of Mount Pinatubo in the Philippines in 1991 left a blanket of ash in the atmosphere that is cooling temperatures on a global scale. The blast considered the largest in over one hundred years reduced global temperature by about half a degree and is expected to last up to five years.

INTRODUCTION

Banding with a dog began on 23 July at which time both flying and class 1 Black Duck broods were present. The age discrepancy indicative of re-nesting success on a local basis was not evident in the night-lighting exercise near Fredericton, NB. Night time observations indicated normal Black Duck production with all other species exhibiting late nesting chronology.

The field work for dog work, night-lighting and rocket-netting was reduced by seventy-five percent in 1992.

RESULTS AND DISCUSSION

DOG WORK

Ginger, a wire-haired Pointer, was used to band waterfowl as part of the 1992 Co-operative Waterfowl Banding Program. Black Ducks are the target species with additional waterfowl incidental catches, or spin-offs from other field work. Similar to 1991 a staggered hatch limited the numbers banded. No peak in developed broods materialized as many broods could fly or were too small for banding when encountered. Increased fox predation and draining of the most productive salt marsh in the study area limited production. Fox sightings, including two dens and other signs were abundant in 1992 and reflected the fur industry collapse. Drainage of the Ram Pasture Marsh, one of the most productive salt marshes in the upper Bay of Fundy zone decreased salt marsh work area by over fifty percent.

Four species of dabbling ducks were captured all of which were local birds. Black Ducks were the most numerous and comprised 71 percent of the total. Table 1 summarizes the age and sex composition by species for waterfowl banded with dogs.

Banding eider and island inventory work was again carried out on the Nova Scotian Eastern Shore Islands Wildlife Management Area near Sheet Harbour. Nova Scotia Natural Resources technician, George Boyd supervised this seaduck banding program. Banding is scheduled near the end of egg laying so the disturbance will not cause nest abandonment. For the second consecutive season, banding was delayed but for a different reason in 1992. In 1991 the delayed nesting chronology was very unusual in that weather conditions were ideal. Analysis of energy reserves on a sample of female eider were inconclusive in 1991.

The delay in 1992 appeared to be caused by the wet cold spring. However, other factors are cause for concern:

1) The number of birds banded has been decreasing.
2) Nest predation appears to be increasing.
3) Recaptures were out-numbering birds banded on some colonies,
4) Ideal productive habitat is not being re-colonized.

Seven colonies were worked and 137 hen eider banded in 1992. In the past, the White Island colony alone would produce approximately 200 birds in three hours of

banding.

Nova Scotia Natural Resources is assisting Acadia University student Lance Woolaver in a study on eider production and habitat requirements in this area. The study was initiated in 1992 and will fulfil the requirements for a masters degree.

Six of seven geese captured in Labrador with a dog were neck-collared. Since 1985 two programs have contributed to over one thousand neck-collared geese. Approximately 500 geese were captured in the Malecki Program while the Hestbeck Program is on-going. Both programs are contributing significantly to the management strategies for Canada Geese. Population status for this species is being closely monitored with several areas of concern. Harvest and production indices for Canada Geese in the Atlantic Region have indicated a gradual 5 year decline. The production ratio (immature:adult) as illustrated in Table 5 is abnormally low and is indicative of successive poor production years on the northern breeding grounds. Within the Atlantic Region all of the local aged geese fitted with collars have been caught with dogs.

Salvage work with dogs for crippled or toxic waterfowl has been on-going since 1989. A small sample in 1989 included some of the first documented lead-poisoned birds for the Atlantic Region. Since then, an average of 55 recovered birds have provided data on lead poisoning, hunting infractions, crippled birds and non-game losses. The lead-poisoning data has provided support for other sampling techniques on many marshes.

A total of fifty-four incapacitated birds were recovered in the 1992 exercise (Table 4). Within this sample preliminary analysis indicates that 9 percent of the ring-necks, 10 percent of the Black Ducks, and 25 percent of the mallards had ingested pellets. Post-mortem analysis by Dr. Pierre Daoust at the Atlantic Veterinary College in Charlottetown will be more conclusive.

NIGHT-LIGHTING

Banding with the CWS Panther Airboat in 1992 was not productive as a combination of circumstances severely reduced this night-lighting program. Traditionally night-lighting efforts began near the last week of July with normal brood development. A ten-day delay coincided with the full moon phase destroying airboat efficiency and reducing the work effort to only five days. A follow-up program in late August was impossible due to work commitments in Labrador. Table 2 summarizes the total waterfowl banded with the CWS Panther Airboat.

Waterfowl observations were unusual but may be simply the results of working during a full moon phase, high water levels in the river system or the previously mentioned brood chronology. Black duck brood sightings comprised over 95 percent of the broods observed. The two teal species and other dabbling ducks were alarmingly absent. Normally during bright night-time work Black Ducks are difficult to catch and success is limited for the other species.

Similar to 1991 the night-lighting effort focussed on five species of waterfowl for fluoroscope work. Black Ducks, Mallard & Hybrids, Pintail, Wood Ducks and Ring-necked Ducks were scanned for pellet ingestion. Ingestion rates for Black Ducks, Mallards and Ring-necked Ducks were excessive. Percentages varied with species and locations all of which are summarized in Table 6. Twenty-five percent of the fluoroscope sample was captured with the airboat.

The transmitters implant work by Petrie and Sears in the Woodstock, NB area was one of the most interesting segments of the night-lighting program. Transmitters were surgically implanted in a sample of hen Mallards and Black Ducks to monitor survival, movements and mortality factors.

ROCKET-NETTING

The second consecutive year for the Hestbeck Canada Goose Neck Collar Program was carried out in 1992. Interest in neck collar programs and management by NS and NB Wildlife Agencies is increasing. The province of New Brunswick released 300 Ontario nuisance geese in 1992 and attempted to rocket-net migrants for the first time near Jemseg on the Saint John River. Nova Scotia began a rocket net program in the Kentville and Windsor area and neck-collared geese for the first time. The activity for New Brunswick may not be continued due to time, financial restraints, and success is presently limited to unpredictable water levels in the Saint John River. The number of geese banded in Nova Scotia will likely increase substantially. Program support is increasing in addition to new equipment purchases.

The total geese banded (143) was lower than in to 1991 when 331 geese were neck-collared. It does, however, surpass the nine year program average of 87 birds. The age and sex composition of Canada Geese rocket-netted on PEI is summarized in Table 3.

Bitter cold weather persisted on PEI during the first stages of goose migration. Anti-freeze had to be used on many of the net set-ups. Harsh conditions persisted until the 18, 19 April when a warm weather system was high-lighted by a mass exodus of migrant geese. Goose numbers built up again but behaviour was unpredictable and migration north from PEI was earlier than usual.

A ten-day educational commitment and a serious illness to a key player on staff with PEI Fish and Wildlife completely disrupted the 1992 program.

Table 1. Age, sex, and species composition of waterfowl banded with dogs in the Atlantic Region, 1992.

Species	Local		Hatch Year		After Hatch Year		Total
	M	F	M	F	M	F	
Mallard	2	3	-	-	-	-	5
Black Duck	17	22	-	-	-	-	39
N. Pintail	6	2	-	-	-	-	8
A. Wigeon	3	-	-	-	-	-	3
C. Eider*	-	-	-	-	-	137	137
Canada Goose	4	3	-	-	-	-	7
Total	**32**	**30**	**-**	**-**	**-**	**137**	**199**

* Seaduck banding under NSDNR permit

Table 2. Age, sex and species composition of waterfowl banded with the CWS Panther Airboat, 1992.

Species	Local		Hatch Year		After Hatch Year		Total
	M	F	M	F	M	F	
Mallard	1	3	3	7	2	1	17
Black Duck	10	8	29	26	1	8	82
B. x M. Hybrid	-	-	1	-	-	-	1
G.-w. Teal	-	-	1	1	1	2	5
B.-w. Teal	-	-	3	1	-	1	5
A. Wigeon	-	-	1	2	-	-	3
N. Pintail	-	3	-	1	-	-	4
Wood Duck	2	-	-	-	36	5	43
R.-n. Duck	6	9	-	1	2	3	21
Total	**19**	**23**	**38**	**39**	**42**	**20**	**181**

Table 3. Age, sex and species composition of waterfowl rocket-netted on Prince Edward Island, 1992.

	SY			AHY			Total
Species	M	F	T	M	F	T	
Black Duck				2	-	2	2
Canada Goose	19	55	74	44	23	67	141
Total	**19**	**55**	**74**	**46**	**23**	**69**	**143**

Table 4. Crippled and unretrieved waterfowl collection - 1992.

SAMPLE	DATE	AREA	SPECIES	HOW OBTAINED	CONDITION	FLUOROSCOPE
1	2 Oct.	White Birch	Ring-n Duck	found dead	Good	-
2	2 Oct.	White Birch	Ring-n Duck	found dead	Good	+1
3	2 Oct.	White Birch	Ring-n Duck	found dead	Good	-
4	2 Oct.	White Birch	Ring-n Duck	found dead	Good	-
5	2 Oct.	White Birch	Ring-n Duck	found dead	Good	-
6	2 Oct.	White Birch	Blue-w Teal	found dead	Good	-
7	2 Oct.	White Birch	Mallard	found dead	Good	-
8	5 Oct.	Shepody NWA	C. Merganser	crippled & shot	Good	-
9	5 Oct.	Shepody NWA	Green-w Teal	crippled & shot	Good	-
10	5 Oct.	Shepody NWA	Wood Duck	crippled & shot	Good	-
11	5 Oct.	Shepody NWA	Green-w Teal	found dead - mink predated	Fair	-
12	5 Oct.	Shepody NWA	Pied-b Grebe	found dead	Fair	-
13*	5 Oct.	Shepody NWA	Ring-n Duck	found dead	Poor (eaten)	-
14	6 Oct.	White Birch	Blue-w Teal	found dead	Good	-
15	6 Oct.	White Birch	Green-w Teal	crippled & shot	Good	-
16	6 Oct.	White Birch	Mallard	caught & dispatched	Good	-
17	6 Oct.	White Birch	Wood Duck	found dead	Good	-
18	6 Oct.	White Birch	Wood Duck	found dead	Good	-
19	6 Oct.	White Birch	Black Duck	found dead	Good	-
20	6 Oct.	White Birch	Black Duck	found dead	Good	-
21	6 Oct.	White Birch	Ring-n Duck	crippled & shot	Good	-
22	6 Oct.	White Birch	Ring-n Duck	crippled & shot	Good	-
23	6 Oct.	White Birch	Ring-n Duck	crippled & shot	Good	-
24	6 Oct.	White Birch	Ring-n Duck	found dead	Good	-
25*	6 Oct.	White Birch	Am. Wigeon	found dead	Poor (eaten)	-
26	9 Oct.	E. Amherst	Green-w Teal	found dead	Good	-
27	9 Oct.	E. Amherst	Green-w Teal	found dead	Poor	-
28	9 Oct.	E. Amherst	Blue-w Teal	found dead	Fair	-
29	9 Oct.	E. Amherst	N. Shoveler	crippled & shot	Good	-
30	9 Oct.	E. Amherst	Ring-n Duck	crippled & shot	Good	-
31	9 Oct.	E. Amherst	Black Duck	found dead	Good	-
32	9 Oct.	E. Amherst	Black Duck	found dead	Good	+1
33*	9 Oct.	E. Amherst	Black Duck	found dead	Poor (eaten)	-

Table 4. Crippled and unretrieved waterfowl collection - 1992. (continued)

SAMPLE	DATE	AREA	SPECIES	HOW OBTAINED	CONDITION	FLUOROSCOPE
34	9 Oct.	E. Amherst	King Fisher	found dead	Good	-
35	10 Oct.	Wallace	Ring-n Duck	crippled & shot	Good	-
36	10 Oct.	Wallace	Green-w Teal	found dead	Fair (eaten)	-
37	10 Oct.	Wallace	H. Merganser		crippled & shot	Fair -
38	10 Oct.	Wallace	H. Merganser	found dead	Good	-
39	10 Oct.	Wallace	Mallard	crippled & shot	Good (neck injury)	+1
40	10 Oct.	Wallace	Yellowlegs	found dead	Good	-
41	10 Oct.	Wallace	Yellowlegs	found dead	Good	-
42	13 Oct.	White Birch	Black Duck	crippled & shot	Good	-
43	13 Oct.	White Birch	Black Duck	crippled & dispatched	Good	-
44	13 Oct.	White Birch	Mallard	found dead	Poor	-
45	13 Oct.	White Birch	Sora Rail	found dead	Fair	-
46	14 Oct.	White Birch	Black Duck	crippled & shot	Good	-
47	14 Oct.	White Birch	Black Duck	found dead	Poor	-
48	14 Oct.	White Birch	Black Duck	found dead	Poor	-
49*	14 Oct.	White Birch	Am. Wigeon	found dead	Poor (eaten)	+1 shot-in
50*	14 Oct.	White Birch	Green-w Teal	found dead	Poor (eaten	-
51*	14 Oct.	White Birch	Sora Rail	crippled-lost	Poor	-
52	15 Oct.	E. Amherst	Black Duck	crippled & shot	Good	-
53	15 Oct.	E. Amherst	Am. Wigeon	crippled & shot	Good	-
54	15 Oct.	E. Amherst	Green-w Teal	crippled & shot	Good	-

Table 5. Production ratios for Canada Geese calculated from tail fan receipts for the Atlantic Region Species Composition Survey - 1992.

Province	Immature	Adults	Production Ratio
Prince Edward Island	50	73	.68
New Brunswick	13	23	.57
Nova Scotia	46	53	.87
Newfoundland	8	8	1.00
Labrador	2	6	.33
Total	**119**	**163**	**.73**

Table 6. Summary of data for ingested pellets in fluoroscoped ducks from marshes near Fredericton along the Saint John River in 1992.

Marsh	A. Black Duck			Mallard & Hybrids			N. Pintail			Wood Duck			Ring-necked Duck			Total Sampled
	sample	+ lead	%	sample	+ lead	%	sample	+ lead	%	sample	+ lead	%	sample	+ lead	%	
Boyds Marsh	32	2	6	1	-	-	-	-	-	7	-	-	-	-	-	40
Duffies Meadow	185	16	9	57	4	7	4	-	-	31	-	-	23	6	26	300
Foshay Lk.(Imp. 1)	40	4	10	-	-	-	-	-	-	31	-	-	1	-	-	72
Grassy Island	6	-	-	13	-	-	-	-	-	-	-	-	-	-	-	19
Guthries	61	8	13	29	3	10	3	-	-	-	-	-	-	-	-	93
Long Island	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
L. Babbits Meadow	36	2	6	14	5	36	-	-	-	27	1	4	-	-	-	77
L. Musquash Island	13	-	-	-	-	-	1	-	-	-	-	-	-	-	-	14
Morrow Pond	18	4	22	-	-	-	-	-	-	8	1	13	-	-	-	26
Round Pond	8	-	-	1	1	100	-	-	-	7	-	-	-	-	-	16
Total	**405**	**36**	**9**	**115**	**13**	**11**	**8**	**-**	**-**	**111**	**2**	**2**	**24**	**6**	**25**	**663**

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Name

Date

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