

CANADIAN WILDLIFE SERVICE P. O. BOX 1590 SACKVILLE, N. B. EOA 3CO

# ATLANTIC FLYWAY COOPERATIVE BANDING PROGRAM

ATLANTIC PROVINCES

1987

compiled by

M. C. Bateman
W. R. Barrow
Canadian Wildlife Service
Atlantic Region

February 1988

QL 677.5 A881 1987

Environment Canada Canadian Wildlife Service

O/F

Environnement Canada Service canadien de la faune CANADIAN WILDLIFE SERVICE P. O. BOX 1590 SACKVILLE, N. B. EOA 300 PL 677.5 A 281 1987

Atlantic Flyway Cooperative Banding Program

Atlantic Provinces

1987

M. C. Bateman W. R. Barow

Canadian Wildlife Service Atlantic Region February 1988 This report is a summary of the 1987 waterfowl banding program in Atlantic Canada. Included in the compilation, for information only, are the reports prepared by the crew leaders of the banding stations. The information in the tables is correct but the opinions and recommendations are not necessarily those of the Canadian Wildlife Service. Any publication or quotation of the contents will require substantial editing.

Atlantic Flyway Cooperative Waterfowl Banding Program, Atlantic Region 1987

The 1987 Black Duck banding effort in the Atlantic Provinces consisted of eight bait stations, the CWS airboat, and the U.S. Fish & Wildlife Airboat. The effort directed toward banding Black Ducks was the same as in 1986 except that the Nutak station was not operated in 1987 due to the excessive cost of that station. Also, the research project at Nutak had been completed in 1986. A new bait station was attempted in western Labrador in 1987 with poor results.

A total of 4047 birds was banded in 1987 (Table 1). In addition to the bait stations and airboats directed toward Black Duck banding, 193 Common Eider were banded at The Wolves, New Brunswick and 45 Canada Geese were banded on Prince Edward Island. Waterfowl were banded in all four Atlantic Provinces (Table 2): 2177 (53.7% of the total) in New Brunswick, 699 (17.2%) in Nova Scotia, 313 (7.7%) in Prince Edward Island, 524 (12.9%) in insular Newfoundland and 334 (8.2%) in Labrador.

Forty-two percent of the waterfowl banded in 1987 was Black Ducks; 25 percent Blue-winged Teal; and 16 percent Green-winged Teal (Table 2). Common Eider were banded in a study off the southwest coast of New Brunswick and Canada Geese were banded in a separate study on Prince Edward Island.

The total number of Black Ducks banded was 37 percent lower in 1987 than in 1986 (1720 compared to 2735 in 1986) and thirty percent lower if the same stations are compared. The number of blacks banded in 1987 was considerably lower than in 1986 at all bait stations except Carmanville, Newfoundland and the New Brunswick-Nova Scotia Border. The relatively low

ratio of hatch year to adult birds at Indian House Lake, Tinker Harbour,

Codroy and Bathurst suggests either low production or a distribution different

from most years. Low water levels in 1987 may have contributed to differences
in duck behaviour, distribution and accessibility to banders. The Black

Duck: Mallard ratio in 1987 was the same as in 1986 (1:0.03).

The number of Green-winged Teal banded in 1987 was 35 percent less than in 1986 (643 compared to 995 in 1986), and 20 percent lower than at the same stations in 1986. The Churchill Falls Station operating for the first time in 1987, banded 55 Green-winged Teal. Tinker Harbour and Codroy have been the most successful stations for Green-winged Teal in the past. In 1987 those two stations banded a total of 178 Green-winged Teal, and Carmanville, where green-wings have not been abundant in past years, banded 169.

Blue-winged Teal was the second most numerous species banded in 1987. A total 1001 birds was banded by the CWS Airboat, the U.S. Fish and Wildlife Service Airboat and at the Shepody NWA bait station.

The total cost of the 1987 banding program was \$49960 (Table 3). The overall cost was less than in previous years, largely due to termination of the Nutak Station. However the cost per Black Duck banded was higher in 1987 (\$29.04) than in 1986 (\$25.72) because fewer birds were banded. The most efficient Black Duck banding operations were again, the New Brunswick-Nova Scotia Border (\$9.08 per Black Duck), Carmanville (\$9.88 per Black Duck), Bathurst (\$11.97 per Black Duck), and the CWS Airboat (\$12.23 per Black Duck).

The 1987 banding season was the first year in a series of years of relatively constant banding effort in the Atlantic Region. During the last five years, the Tinker Harbour, Codroy, Carmanville, Bathurst and New Brunswick-Nova Scotia border stations have operated continuously. Bait

stations at Indian House - Parke Lake, Shepody NWA and Nutak have operated for four of the five years. The total Black Ducks banded at those stations since 1983 are: Tinker Harobur - 848, Codroy - 1038, Carmanville - 538, Bathurst - 1371, New Brunswick-Nova Scotia Border - 1686, Indian House - Parke Lake - 945, Shepody NWA - 705, and Nutak - 1090.

During the 1981 to 1987 banding in Labrador, 3254 Black Duck were banded there. The previous banding in Labrador, between 1947 and 1966, resulted in 1339 blacks banded. Recovery rate from the 1981 to 1985 bandings is currently 5 percent. Recoveries were 62 percent from Canada, 19 percent from the New England states and 18 percent from other US states.

Table 1. Summary of waterfowl banded in the Atlantic Provinces by station 1987

	Black		BlkXMal	G-w	BW.	Am.	N.	Wood	Rn.	N.	G.	C.		Н.	Rb.	C.	C.	Mis.	
Banding Location	Duck	Mallard	Hybrid	Teal	Teal	Wigeon	Pintail	Duck	Duck	Shov.	Scaup	Gold.	Gad.	Merg.	Merg.	Goose	Eider	Sp.	Total
Tinker Harbour, Lab.	55	2	_	84	_	_	9	-	-	-	-	-	-		-	_	-	-	150
Indian House Lake, Lab.	100	-	1	26	1	- 1	-	-	-	-		-	-	-	-	-	-	-	129
Churchill Falls, Lab.	-	-	-	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55
Codroy River, Nfld.	67	-	3	94	1	-	5	-	-	-	-	-	-	-	-	-	-	-	170
Carmanville, Nfld.	167	-	6	169	7	-	5	-	-	-	-	-	-	-	-	-	-	-	354
Shepody NWA -N.B.	70	4	3	89	492	_	-	7	10	-	-	-	-	-	-	-	-	-	675
Bathurst, N.B.	330	14	4	6	-	1	2	-	-	-	-	-	-	-	-	-	-	-	357
The Wolves, N.B.	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	193	-	193
N.BN.S. Border Area	337	13	4	-	4	-	3	-	1	-	-	-	-	-	-	-	-	-	362
Rocket Netting, P.E.I.	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45	-	-	50
U.S.A. Airboat	264	21	24	41	262	95	-	84	2	12	-	3	-	-	-	-	-	-	808
CWS Airboat	325	2	-	79	234	22	8	11	56	3	-	-	2	2	-	-	-	-	744
	1720	56	45	643	1001	118	32	102	69	15	1	3	2	2	_	45	193	_	4047

Table 2. Total number and percent by province of waterfowl banded by Cooperative Waterfowl Banding Program,
Atlantic Provinces - 1987

	New					ce Edwa						
Species	Brun:	swick %	Nova :	Scotia %	Isla No.	nd %	Newfo	oundland %	Labr No.	ador	No.	Fotal
Mallard	40	2	14	2	-	-	-	-	2	-	56	1
Am. Black Duck	764	35	453	65	114	36	234	45	155	46	1720	42
Black X Mallard Hyb.	31	1	4	-	-	-	9	2	1	-	45	1
Green-winged Teal	143	6	49	7	23	7	263	50	165	49	643	16
Blue-winged Teal	775	35	127	18	90	29	8	1	1		1001	25
American Wigeon	97	4	6	1	15	5	-	-	J -	-	118	3
Northern Pintail	2	-	6	1	5	2	10	2	9	3	32	1
Northern Shoveler	12	-	3	-	-	-	_	_	-	-	15	-
Wood Duck	96	4	6	1	-	-	-	-	-	-	102	3
Ring-necked Duck	21	1	28	4	20	6	-	-	-	-	69	2
Greater Scaup	-	-	-	-	-	-	-	_	1	-	1	-
Gadwall	-	-	2	-	-	-	-	-	-	-	2	-
Common Eider*	193	9	-	-	-	-				-	193	5
Hooded Merganser	-	-	1	-	1	-	-	-	-	-	2	-
C. Goldeneye	3	-	-	-	-	-	-	-	-	-	3	-
Canada Goose	-	-	-	-	45	14	-	-	-	-	45	1
rotal .	2177		699		313		524		334		4047	

<sup>\*</sup>Eider banding in SW New Brunswick was not part of the Co-op program

Table 3. Cooperative Waterfowl Banding Cost Summary - Atlantic Region - 1986

Station	Salaries	Bait	Food & Lodging	Transportation	Equipment & Supplies	Total Cost	No. of Birds	Cost/ Bird	No. of Black Ducks	Cost/ Black Duc
Tinker Harbour				(82.85)	(224.50)					
	*2448.83	*259.03	*1024.97	*925.19	*562.69	5528.06	150	36.85	55	100.51
Indian House Lake					(224.50)					
	*3824.00	*259.03	*243.44	*3894.24	*305.72	8750.93	129	67.83	100	87.51
Codroy River				(250.00)	(198.00)					
	*2680.00	*185.03	*1200.00	*238.00	*143.85	4894.88	170	28.79	67	73.05
Carmanville	*1300.00	*150.00	-	*150.00	*50.00	1650.00	354	4.66	167	9.88
Churchill Falls	(1150.00)				(224.50)					
	*2670.00	259.03	\$1347.30	*2475.92	(1669.65)	9796.40	55	178.11	-	-
Shepody NWA	(1150.00)			(400.00)	(198.00)					
	*1250.00	*296.35	-	*116.00	*128.72	3539.07	675	5.24	70	50.55
Bathurst, N.B.	(75.00)			(250.00)	(238.00)					
	*2700.00	*185.03	*208.08	*116.00	*178.35	3950.46	357	11.06	330	11.97
N.BN.S.					(263.51)					
Border Area	*2000.00	*233.35	-	*470.60	*95.12	3062.58	362	8.46	337	9.08
P.E.I.										
Rocket Netting	(2550.00)	(314.75)	(950.00)	(310.00)	(186.13)	4310.88	50	86.21	-	-
U.S.A. Airboat	*500.00	(Total USA	Airboat costs un	navailable) -	-	500.00	-	3.02 4.5.	34/	9,20 U
CWS Airboat	(1000.00)	-	(374.00)	(753.00)	(1849.95)	(3976.95)	744	5.34	325	12.23
Total	25297.83	2141.60	5347.79	10431.80	6741.19	49960.21	3046	16.40	1720	29.04

<sup>( )</sup> CWS Funds 13216.69

<sup>\*</sup> Co-op Funds 36743.52

Table 4. Age, sex and species of waterfowl banded at the Border Area, 1987

	1	Local		F	latch	Year	After	Hat	ch Year	
Species	M	F	T	M	F	T	M	F	T	Total
Mallard	-	-	-		7	7	4	2	6	13
Black Duck	20	17	37	102	122	224	56	20	76	337
Blk X Mallard	-	-	-	-	-	-	2	2	4	4
Pintail	-	-	-	1	2	3	-	-	_	3
Ring-n. Duck	-	-	-	-	-	-	-	1	1	1
Blue-w. Teal	-	-	-	2	2	4	-	-	-	4
Total	20	17	37	105	133	238	62	25	87	362

Table 5. Age, sex and species of waterfowl banded at Shepody NWA - 1987

			Local		Н	atch	Year	After	Hato	h Year	
Species	U.U.	M	F	Т	M	F	T	М	F	T	Total
Mallard	-	_	-	-	2	-	2	2	-	2	4
Black Duck	-	1	3	4	38	20	58	5	3	8	70
Bl.X Mal. Hyb.	-	-	-	-	1	2	3	-	-	-	3
Am. Gw.Teal	1	-	-	-	35	30	65	16	7	23	89
Bw.Teal	2	1	4	5	207	241	448	30	7	37	492
Wood Duck	-	-	-	-	2	-	2	5	-	5	7
Rn.Duck	-	2	5	7	-	3	3	-	-	-	10
Total	3	4	12	16	285	296	581	58	15	75	675

Table 6. Age sex and species of waterfowl banded at Bathurst - 1987

		Local		Ha	atch	Year	Afte	r Hate	ch Year	
Species	M	F	T	М	F	T	М	F	T	Total
Mallard	-	-	-	3	2	5	6	3	9	14
Black Duck	-	-	-	63	58	121	87	122	209	330
Bl.X Mal. Hyb.	-	-	-	1	-	1	2	1	3	4
Am. Gw.Teal	-	-	-	1	2	3	-	3	3	6
American Wigeon	-	-	-	-	1	1	-	-	-	1
N. Pintail	-	-	-	2	-	2	-	-	-	2
	-	-	-	70	63	133	95	129	224	357

Table 7. Total waterfowl banded by sex and age class Prince Edward Island Rocket netting 1987

	Hatch	Year	Afte	r Hatch Year	
Species	M	F	М	F	Total
Canada Goose	12	17	7	9	45
Black Duck	3	1	-	1	5
Total	15	18	7	10	50

Table 8. Age, sex and species of waterfowl banded by the U.S.A. Airboat - 1987

		Loca	1	Н	atch	Year	After	Hat	ch Year	
Species	M	F	T	M	F	T	М	F	T	Total
Mallard	1	8	9	7	3	10	0	2	2	21
Black Duck	51	66	117	62	63	125	3	19	22	264
Bl.XMal.Hyb.	2	2	4	8	10	18	0	2	2	24
Am.Gw.Teal	7	9	16	10	5	15	4	6	10	41
Bw.Teal	75	81	156	40	40	80	9	17	26	262
Am. Wigeon	35	40	75	7	4	11	3	6	9	95
N. Shoveler	1	2	3	5	3	8	0	1	1	12
Wood Duck	9	12	21	4	8	12	44	7	51	84
Rn.Duck	1	1	2	-	-	-	-	-	-	2
C. Goldeneye	1	2	3	-	-	-	-	-	-	3
	183	223	406	143	136	279	63	60	123	808

Table 9. Age, sex and species of waterfowl banded by the CWS Airboat - 1987

		Local		и	atch	Voor	After	Hat	ch Year		
Species	M	F	T	M	F	T	M	F	T	U	Total
Mallard	-	-	-	-	-	-	1	1	2	-	2
Black Duck	81	51	132	89	86	175	5	13	18	-	325
Gw. Teal	2	4	6	21	18	39	27	6	33	1	79
Bw. Teal	37	22	59	83	63	146	17	12	29	-	234
Am. Wigeon	9	4	13	4	-	4	1	4	5	-	22
N. Pintail	1	-	1	1	4	5	2	-	2	-	8
Wood Duck	_	-	-	-	-	-	11	-	11	-	11
N. Shoveler	-	-	-	-	2	-	1	-	3	-	3
Rn. Duck	11	11	22	6	6	12	9	13	22	-	56
Gadwall	-	-	-	1	1	2	-	-	-	-	2
H. Merganser	-	-	-	-	2	2	-	-	-	-	2
	141	92	233	205	182	387	74	49	123	1	744

Table 10. Age, sex and species of waterfowl banded at Tinker Harbour - 1987

		Local		На	atch !	Year	After	Hat	ch Year	
Species	M	F	T	M	F	T	М	F	T	Total
Black Duck	-	-	-	10	7	17	24	14	38	55
Mallard	-	-	-	1	-	1	1	-	1	2
Gw. Teal	-	-	-	34	27	61	11	12	23	84
N. Pintail	-	-	-	2	4	6		3	3	9
Total				47	38	85	36	29	65	150

Table 11. Age and sex of ducks banded at Indian House Lake, Labrador, 1987.

	Hatch	Year	Aft	er H	atch Year	Total
М	F	Total	M	F	Total	Banded
-	-	-	1	-	1	1
44	30	74	10	16	26	100
10	13	23	1	2	3	26
-	1	1	-	-	-	1
-	1	1	-	-	-	1
54	45	99	12	18	30	129
	M - 44 10	M F  44 30 10 13 - 1 - 1	M F Total  44 30 74  10 13 23  - 1 1  - 1 1	M F Total M  1  44 30 74 10  10 13 23 1  - 1 1 -  - 1 1 -	M F Total M F  1 -  44 30 74 10 16  10 13 23 1 2  - 1 1  - 1 1	M F Total M F Total  1 - 1  44 30 74 10 16 26  10 13 23 1 2 3  - 1 1  - 1 1

Table 12. Age and sex composition of waterfowl banded at the Codroy bait station 1987

Species		Hat	ch	Year	Af	ter	Hat	ch Year			Tota	als
	M	F	U	Total	M	F	U	Total	M	F	U	Total
Black Duck	22	9	1	32	25	9	1	35	47	18	2	67
Black X Mallard	1	-	-	1	1	1	-	2	2	1	-	3
Pintail	4	1	-	5	-	-	-	-	4	1	-	5
Green-winged Teal	34	41	-	75	9	9	1	19	43	50	1	94
Blue-winged Teal	1	-	-	1	-	-	-	-	1	-	-	1
Totals	62	51	1	114	35	19	2	56	97	70	3	170

Table 13. Age and sex breakdown, 1987 Carmanville, Newfoundland waterfowl banding project

	На	Hatch Year			Hatch	Year	Total		
Species	M	F	T	M	F	T	М	F	T
Black Duck	71	82	153	7	7	14	78	89	167
Bl.X Mal. Hyb.	1	5	6	-	-	-	1	5	6
N. Pintail	3	2	5	-	-	-	3	2	5
Gw. Teal	70	84	154	3	12	15	73	96	169
Bw. Teal	4	3	7	-	-	-	4	3	7
Totals	149	176	325	10	19	29	159	195	354

Table 14. Age, sex and species of waterfowl banded at Churchill Falls - 1987

Species	M	Hatch F	Year	After M	Hatch F	Year	Total
Am. Green-winged Teal	14	38	52	_	3	3	55



Waterfowl Banding Project

New Brunswick - Nova Scotia Border Area

July 26 - August 23, 1987

Crew Members

Bradley F. Smith
Stephen Parker

#### Introduction

Waterfowl banding during 1987 was operated on the Chignecto National Wildlife Area. Bait trapping using whole kernel corn was conducted on three impoundments. Two of the impoundments were located within the John Lusby Section of the NWA while the third was on the Amherst Point Sanctuary. A total of 362 waterfowl was banded during the project period.

#### Results and Discussion

The Chignecto National Wildlife Area has much diversity and is used by waterfowl for both breeding and staging purposes. Banding on both sections at this wildlife area has been ongoing for twenty years with success varying due to weather, management practices and personal effort. The range of Black Ducks banded during the past decade is shown in Figure 1.

The pre-baiting period in which all sites were visited was important. Waterfowl utilization was assessed, potential trap sites located, area familiarization was achieved and bait was distributed. A map with approximate trap locations is provided in Figure 2. Trap locations will vary from year to year depending on water levels and waterfowl preference. The 1987 banding at Amherst Point witnessed extremely low water conditions. Water levels at John Lusby were also very low. Given the low water levels at Amherst Point there was less waterfowl use of the area than in previous years.

Five species of waterfowl and 362 birds were banded at the Border Area in 1986. Black Ducks were the most numerous comprising 94% of the total banded. Mallard, pintail, Ring-necked Ducks and Blue-winged Teal made up the remaining 6% of the total. In addition four hybrids were captured. The total by species with age and sex breakdown are presented in Table 1.

The Black Duck total is encouraging since this is the target species in the banding program. As shown in Figure 1 the 1987 Black Duck total is average compared to totals over an eleven year period. The station was operated for 24 days in 1987. Table 2 summarizes the trapping success by area. Over 89% of the birds banded were captured on the two John Lusby Area impoundments. This figure is in line with the banding conducted during 1986. Figure 3 indicates daily success.

## Recommendations

- 1. Try barley or mixed bait in order to attract more Teal.
- Maintain a balanced and efficient trap line. Too many traps cause waste in material and manpower.
- 3. Visit the Amherst Point area prior to setting up the traps and determine if it would not be better to operate more traps on the John Lusby area and forego the Amherst Point Area.

Table 1. Age, sex and species of waterfowl banded at the Border Area, 1987

	I	Local		Н	atch	Year	After	Hato	ch Year	
Species	M	F	T	М	F	T	M	F	T	Total
Mallard	-	-	-	-	7	7	4	2	6	13
Black Duck	20	17	37	102	122	224	56	20	76	337
Blk X Mallard	-	-	-	-	-	-	2	2	4	4
Pintail	-	-	-	1	2	3	-	-	-	3
Ring-n. Duck	-	-	-	-	-	-	-	1	1	1
Blue-w. Teal	-	-	-	2	2	4	-	-	-	4
Total	20	17	37	105	133	238	62	25	87	362

Table 2. Summary of waterfowl banded by location

	Black	Black X		Ring-n .	Blue-	aJ.
Mallard	Duck	Mallard	Pintail	Duck	Teal	Total
2	196	2	2		3	205
6	108	2		1	1	118
5	33		1			39
	2	Mallard Duck  2 196  6 108	Mallard Duck Mallard  2 196 2 6 108 2	Mallard Duck Mallard Pintail  2 196 2 2 6 108 2	Mallard Duck Mallard Pintail Duck  2 196 2 2 6 108 2 1	Mallard         Duck         Mallard         Pintail         Duck         Teal           2         196         2         2         3           6         108         2         1         1

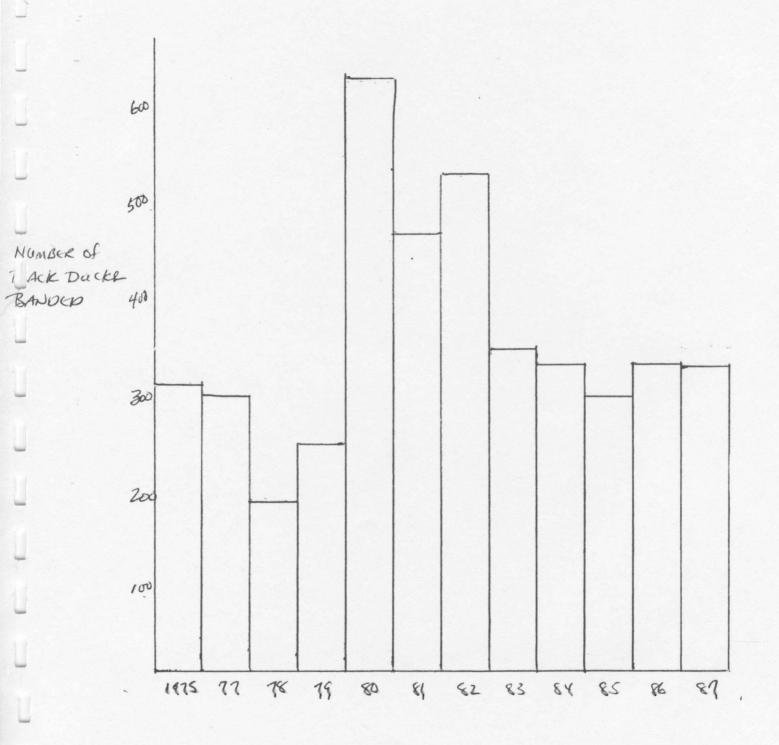


FIGURE 1

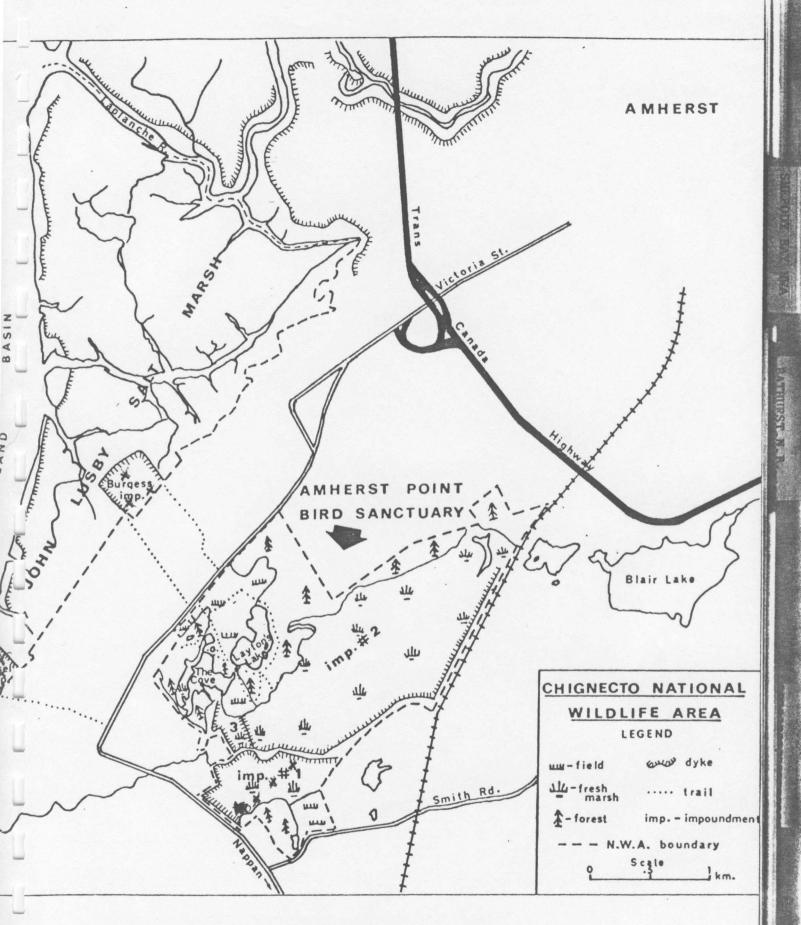


Figure 2. Trap locations for Border Area banding station - 1986.

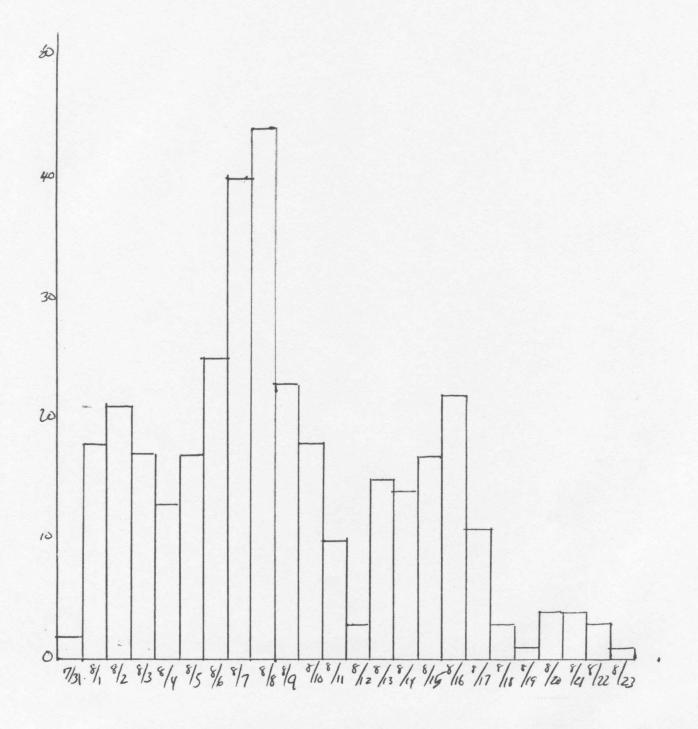


FIG 3 WATERFOWL BANGED ON A BAILY BASKS
JULY 31 - AUGUST 23

Waterfowl Banding Project

Shepody National Wildlife Area

August 1 - September 4, 1987

Crew Members

John Wilson

Dale Patterson

9 L 677.5. A881 Shepody

## Introduction

During 1987 a waterfowl bait trapping station was operated within the three sections of the Shepody Bay NWA. Maps of the three areas are provided at the end of this report showing trap locations.

Six species of waterfowl were banded with a total of 675 birds.

Blue-winged Teal increased from 1986 with a total of 490 birds banded. Black

Duck numbers were down with only 69 birds banded. Eighty-nine Green-winged

Teal were banded which is a large increase over last year.

This year we also caught fewer Wood Ducks and Ring-necked Ducks than last year with no Pintails at all banded. Three Black X Mallard Hybrids were banded as well.

Future banders should operate the station during the same time period and concentrate their efforts throughout the last two weeks of August.

### Acknowledgements

I would like to give my thanks to my partner Dale Patterson Jr., Mark
Petrie and Danny Sears for giving me the benefit of their experience and
Myrtle Bateman for giving me a chance to work with waterfowl. I would also
like to thank John Maxwell, Gerry Parker and Mike Malone.

New Horton C #1 - August 8 - September 4, 1987

This trap had very low production with only one or two birds caught on most occasions. This was possibly because the water level here was slightly lower than most traps.

New Horton C # 2 - August 8 - September 3, 1987

Good production early in season but it tapered off toward the end and had few birds in the last week of operation.

New Horton A # 1 - August 11 - September 3, 1987

Five Blue-winged Teal were found dead in this trap August 18. The trap was closed for four days. This trap had a fair yield early in the season but it dropped off at the end.

New Horton A # 2 - August 9 - September 4, 1987

This trap was second in numbers of birds yielded only to Germantown #1. It also had every species banded in it. It was interesting to note that the water level dropped to only 4 inches as the season progressed but this did not hinder its productivity at all.

New Horton A # 3 - August 13 - August 21, 1987

This trap was similar to New Horton C#l in a few ways. It had large numbers of birds staging around it but few were caught. Both of these traps should expect high yield. This trap was removed early because it was not producing.

Germantown F #1 - August 9 - September 4, 1987

This trap had the highest production for the days of operation yielding over 60 birds more than once. On August 25th a predator got into the trap and killed eleven banded birds. The trap was closed for five days. This trap yielded Blue-winged Teal primarily with a few Green-winged Teal.

Germantown F # 2 - August 11 - September 4, 1987

This trap had good production and was consistent. It had primarily Blue and Green-winged Teals in it and a few Black Ducks.

### Recommendations

Netting and Fencing

The mesh size of both the overhead netting and the hand held capture nets needs to be smaller. With the overhead netting a Blue-winged Teal was found hanging from the netting by its head. This was new netting for this year with larger holes than the previous netting types. The #2 trap at Mary's Point had holes in the netting, which was evidently done by chewing. This problem did not occur with the green netting at all.

As mentioned last year fencing with the holes running vertically might alleviate the problems that birds have of catching their bills in the wire resulting in scraping and breaking of bills, scraping heads and drowning. A plastic or latex rubber coating on the wire might prevent the birds from scraping their bills.

Wood Duck Nest Boxes

The installation of the nest boxes being stored at the Shepody Camp might induce a greater number of Wood Ducks to raise broods on the Shepody Marshes.

Table 1. Age, sex and species of waterfowl banded at Shepody NWA - 1987

			Local		Н	atch	Year	Af	ter	Hatc	h Year	
Species	U.U.	M	F	T	М	F	Т	1	M	F	T	Total
Mallard	-	-	-	-	2	_	2		2	-	2	4
Black Duck	-	1	3	4	38	20	58		5	3	8	70
Bl.X Mal. Hyb.					1	2	3					3
DI.A Hai. Hyb.		-		_	•	2	3					3
Am. Gw.Teal	1	-	-	-	35	30	65	1	6	7	23	89
Bw.Teal	2	1	4	5	207	241	448	3	0	7	37	492
Wood Duck	-	-	-	-	2	-	2		5	-	5	7
Rn.Duck	-	2	5	7	-	3	3		-	-	-	10
Total	3	4	12	16	285	296	581	5	8	15	75	675
					200	2,5						0.0

Table 2. Birds banded on a daily basis with Totals - Shepody NWA 1987

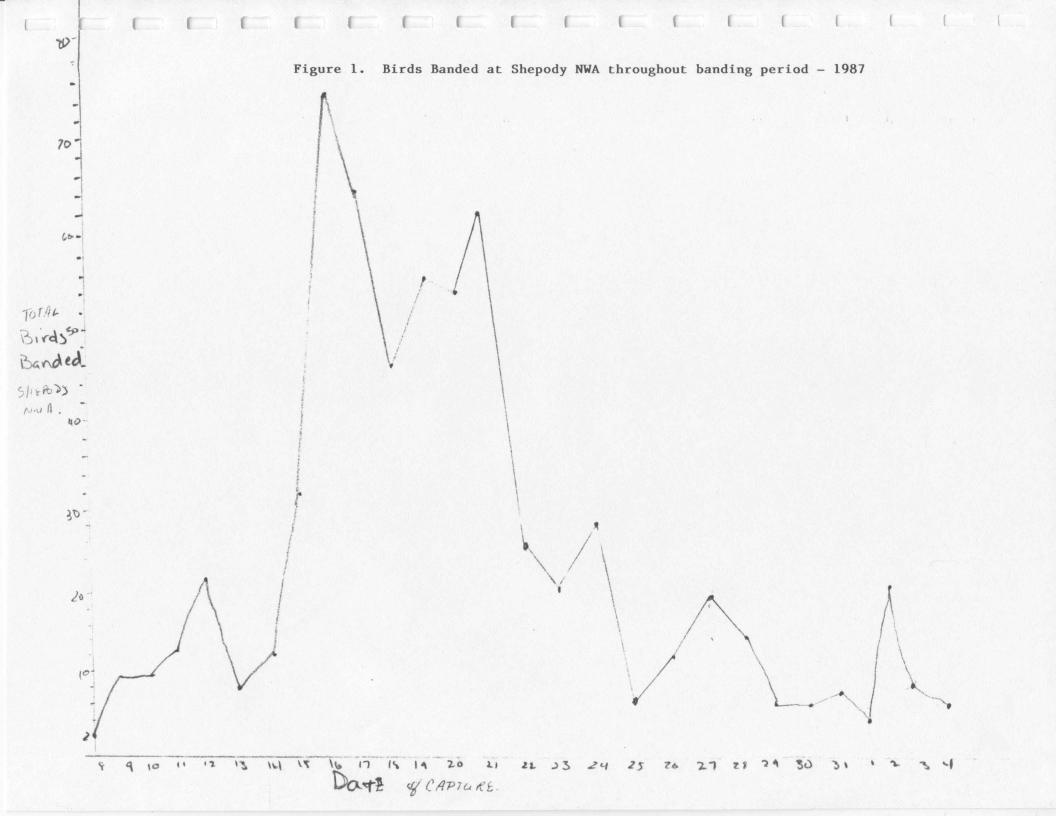
Date	B1. Duc	k B-w.Teal	G-w.Teal	Mallard	Wood Duck	R.n-Duck	Total
Aug. 8/87	2	_	_	_	_		2
Aug. 9/87	9	-	-	_	_	_	9
Aug. 10/87	2	7	-	-	-	_	9
Aug. 11/87	7	5	-	-	-	_	13
Aug. 12/87	3	6	1	1	-	-	21
Aug. 13/87	2	6	-	-	-	-	8
Aug. 14/87	-	10	2	-	-	-	12
Aug. 15/87	7	22	2	-	-	-	31
Aug. 16/87	-	66	4	-	1	- / -	71
Aug. 17/87	-	49	11	-	-	-	60
Aug. 18/87	3	30	15	-	-	-	48
Aug. 19/87	1	47	7	-	1	- 3	56
Aug. 20/87	1	47	8	-	-	_	56
Aug. 21/87	-	70	8	-	2	_	80
Aug. 22/87	-	19	3	3	-	1	26
Aug. 23/87	6	13	-	1	-	-	20
Aug. 24/87	10	11	1	1	-	2	25
Aug. 25/87	1	3	-	-	-	2	6
Aug. 26/87	-	9	6	-	-	1	26
Aug. 27/87	-	15	2	-	3	-	20
Aug. 28/87	2	7	4	-	-	-	13
Aug. 29/87	1	2	3	-	-	1	8
Aug. 30/87	2	3	1	1	_	-	7
Aug. 31/87	1	5	2	_	-	1	9
Sept. 1/87	_	5	1	-	-	-	6
Sept. 2/87	7	11	2	-	-	1	21
Sept. 3/87	1	8	2	-	-	-	11
Sept. 4/87	1	4	4	-	-	-	9
Total	69	492	89	4	7	10	674

Table 3. Recaptures by species on a daily basis with totals - Shepody NWA - 1987

Date	Bl Duck	Bw.Teal	Gw. Teal	Other	Total Recaptures
Aug. 8/87	2				2
Aug. 9/87	9				9
Aug. 10/87	2	7			9
Aug. 11/87	2				2
Aug. 12/87	1				1
Aug. 14/87		1			1
Aug. 16/87		18			18
Aug. 17/87		41			41
Aug. 18/87	3	45	5		53
Aug. 19/87		44	4		48
Aug. 20/87		49	4		53
Aug. 21/87	3	64	4		71
Aug. 22/87	2	54	6		62
Aug. 23/87	1	35		1*	37 *Wood Duc
Aug. 24/87	4	45	2		51
Aug. 25/87		15			15
Aug. 26/87		5	2		7
Aug. 27/87		15	2		17
Aug. 28/87	22	7	4		13
Aug. 29/87	1	2	3		6
Aug. 30/87	2	3	1		6
Aug. 31/87	1	5	2		8
Sept. 1/87		5	1		6
Sept. 2/87	7	11	2		20
Sept. 3/87	1	8	2		11
Sept. 4/87	1	4	4		9
Total	46	485	49		581

Table 4. Comparison by Percentages of 1986 and 1987 totals by species

Birds Banded	1986	1987	% of last years numbers
Black Duck	214	69	32%
Blue-winged Teal	124	492	396%
Green-winged Teal	38	89	234%
Wood Duck	29	7	24%
Ring-necked Duck	88	10	11%
Mallard	2	4	200%
Black X Mallard Hybrid	1	3	300%



# Color Code

Black

-Roadway

Red

-Canoe

Brown

-wooded

Green

-cattails

Blue

-canoe launch

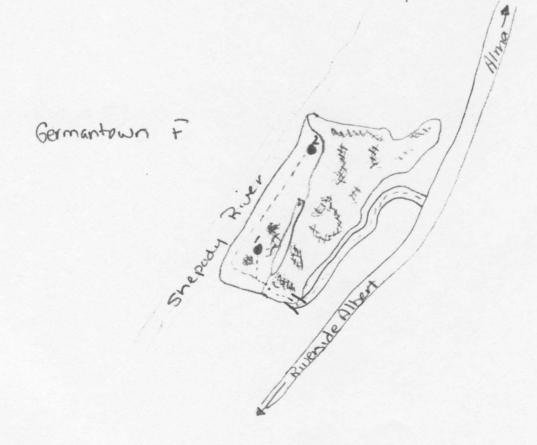
Orange

-trap

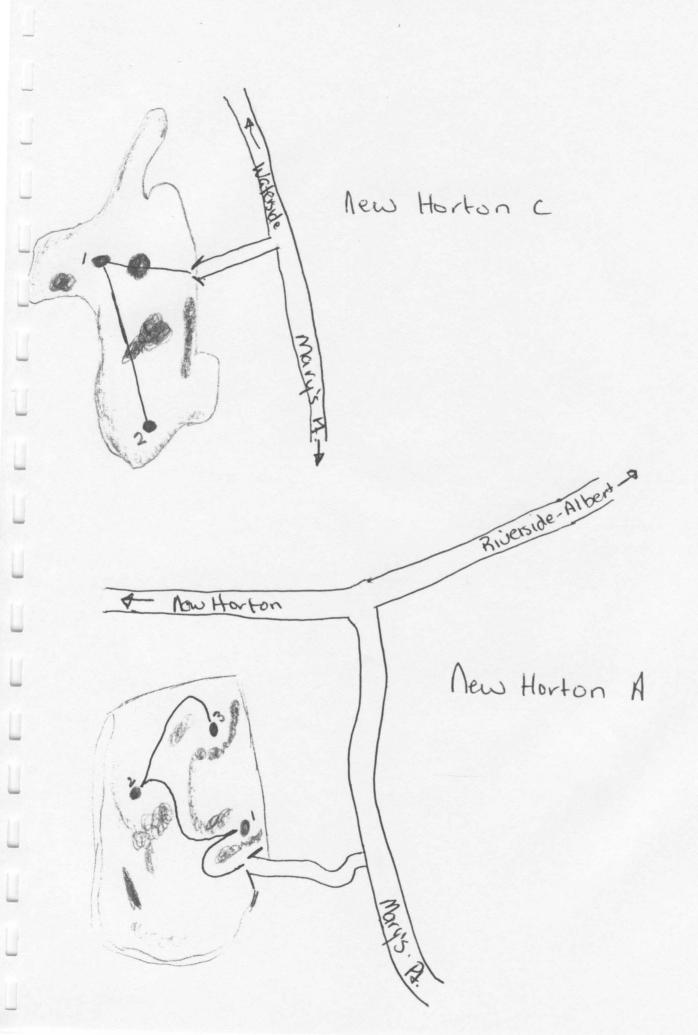
Light Brown -ground

Mary's Point

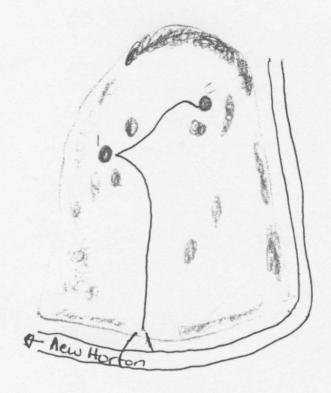




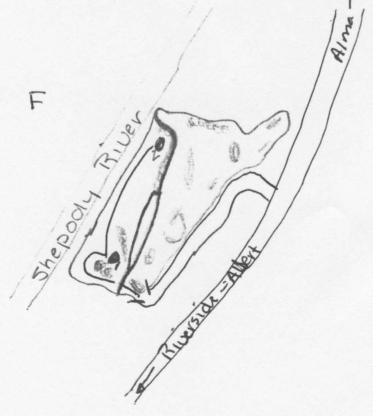
Riverside. Altert 4- NewHorton New Horton A

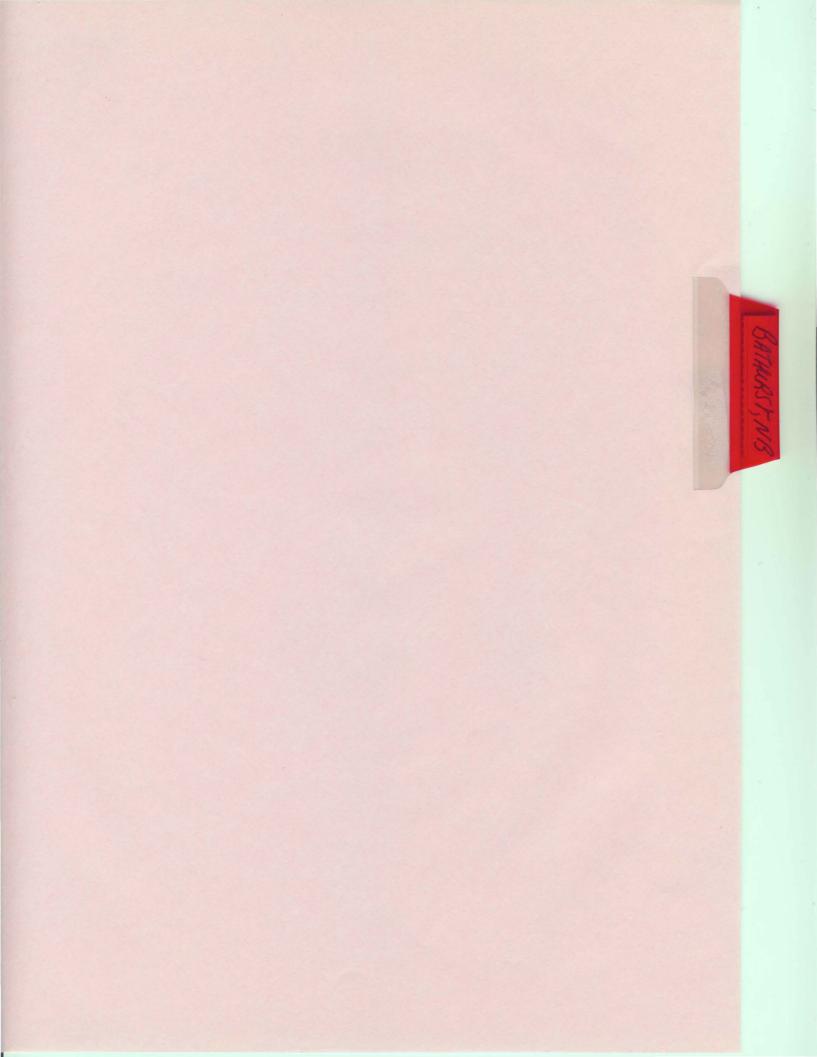


Mary's Pt.



Germantown





Waterfowl Banding Project

Bathurst, New Brunswick

September 8 to October 18, 1987

Crew Members

Mike Arsenault

Dale Paterson

Denis Desjardins

The Canadian Wildlife Service has been operating a waterfowl banding station near Bathurst, New Brunswick since 1978. The mouth of the Tetagouche River, most commonly referred to as the Bathurst Harbour, is the traditional area for waterfowl banding. During 1987 three areas (Figure 1) Tetagouche River, Ferguson Point and Carron's Marsh were worked. These locations were chosen after a general survey taking in consideration the tide factor and exposure. A total of 357 ducks was banded from September 8 to October 18. Five species, including 330 Black Ducks, 14 Mallard, 6 Green-winged Teal, 2 Pintail, 1 American Wigeon and 4 Black X Mallard Hybrids were captured. The breakdown by species age and sex is found in Table 1.

Crew-leader Mike Arsenault and helper Dale Patterson arrived in Bathurst on September 8 and stayed nearby at the Petit Rocher ranger station.

A survey of the Bathurst Harbour area was conducted with CWS technician John Maxwell. A summary of waterfowl observations for the banding period is found in Table 3.

Pre-baiting began on September 9 with three sites baited at

Tetagouche, two sites in Carron's Marsh and one site at the Ferguson Point.

Birds got on to the bait quickly at the Carron's Marsh sites and the Ferguson

Point but took a day or two to get at the Tetagouche sites. An average of

three days were taken to pre-bait the sites before erecting the traps.

	Trap No.	Erected	Made Operational
Carron's Marsh	1	Sept. 16	Sept. 19
	2	Sept. 11	Sept. 16
Tetagouche	1	Sept. 15	Sept. 19
	2	Sept. 12	Sept. 16
	3	Sept. 16	Sept. 18
Ferguson Point	1 (4')	Sept. 15	Sept. 18
(Golf Course)	floating trap	Sept. 22	Sept. 28
	1 (6')	Oct. 5	Oct. 5

We met with Dept. of Natural Resources technician Charlie MacAleenan on September 16 concerning a possible trap site on an island near his home.

Many ducks were observed daily but this effort was abandoned due to severe weather conditions.

The first Black Duck was banded on September 18 from the Carron's Marsh No. 2 trap. Banding proceeded slowly but increased as the temperatures got cooler. The best banding day was on October 13 with 38 banded ducks.

Carron Marsh was the only location with a predator problem. On October 7

seven ducks were killed by a mink which resulted in the following mortalities
- 6 Black Ducks (2 banded) and 1 Mallard (banded).

We had some problems with the 4' trap in Ferguson Point due to the rocky bottom as the aluminum poles would not anchor. Funnel traps were replaced in this area and a floating trap set-up was attempted. Similar to previous years, the floating trap proved unsuccessful and funnel traps were again used at a new location.

On October 9 the extreme high tide was a problem and we had to move certain traps (Carron's Marsh No. 2, Tetagouche No. 2 and 3) to a higher ground. The new locations were just as productive (Figure 11) and traps were left at these new locations.

After meeting with the supervisor M. Bateman from the Canadian Wildlife Service, we decided to close down the station on October 18. All the traps were brought out by hand except the floating one that was pulled out with the motorized canoe.

## Conclusions and Recommendation

The three Tetagouche traps produced a total of 202 ducks banded (56%) with Trap no. 1 and no. 2 being the most successful. Carron's Marsh comes in second with 126 birds banded (35%) and the Golf Course Trap no. 1 with 32 (9%). Although the Golf Course was unproductive it is suggested to keep trapping that location due to the numbers of waterfowl using that area. In the future an extra trap could be set up in the cove that is formed along the point.

A further presentation of trap success is found in Table 2.

It is suggested to start the banding routine with Carron's Marsh and ending at the Golf Course due to the effects of the tides on the water level (Carron's Marsh fills up before the Golf Course and Tetagouche).

Reducing the movements of the floating trap would certainly improve the trap success.

## Acknowledgements

Many thanks are due to the following people for their assistance:

N. B. Natural Resources Division Bathurst - Charlie MacAleenan

Ron Gauthier

Arthur Ronalds - for his good advice and pulling us out of the Marsh.

Jean Arsenault - for his help in assisting while banding.

## Useful Information

- bait can be purchased at Bathurst Agricultural Society #3

100 Munro Street

548-8730

- weekly tide timesare published every Wednesday in Northern Light

Table 1. Age sex and species of waterfowl banded at Bathurst - 1987

	Local			Hatch Year			After Hatch Year				
Species	M	F	T	М	F	T		M	F	T	Total
Mallard	-	-	-	3	2	5		6	3	9	14
Black Duck	-	-	-	63	58	121		87	122	209	330
Bl.X Mal. Hyb.	-	-	-	1	-	1		2	1	3	4
Am. Gw.Teal	-	-	-	1	2	3		-	3	3	6
American Wigeon	-	-		-	1	1		-	-	-	1
N. Pintail	-	-	-	2	-	2		-	-	-	2
	-	-	-	70	63	133		95	129	224	357

		BANDED/F	#1 RECAP	TRAP BANDED,		TRAP		GOLF CO TRAP BANDED/	#1	TRAP	CARRON' #1 O/RECAP	TRAF	#2	TOTAL BAND	TOTAL RECAP	TOTAL CAPTURE	% BAN
Sept. 18	}							L.				1		1 '	1,	1	100
19						1				3				4		4	100
20	)			6		6						11	1	23	1	24	95
21										1		2		3		3	100
22												4	2	4	2	6	66
23						4	1			5		5	2	14	3	17	82
24												3	4	3		3	100
25												1	1	1	1	2	50
26						5	1			9	5	2		16	6	22	73
27						1	1					1	2	2	3	5	40
28	}	15	1							10	3			25	4	29	86
29	)	4				5	3							9	3	12	75
30	)	8		2		1								11		11	100
oct. 1		3	4			4	4					7	4	14	12	26	54
2	)	2	2			6	5			6	11			14	18	32	44
3	}					4	1			7	2	8	14	19	17	36	53
4		6	6	1	2	1	2			4	5			12	15	27	44
5	)	16	9	1	2	4	1							21	12	33	64
6	)	3	2			2	1	10	5					15	8	23	65
7	7	2	8			2	2							4	10	14	29
8	3		2			2	2	2	2	6	2			10	8	18	55
9	)	5	5					3	1	3	4			11	10	21	52
10	)			1		6	8							7	8	15	47
11		6	18			1	1					1		8	19	27	30

TABLE 2. INDLE OF TRAP SUCCESS - BATHUKST 1907 (CUNT D)

DATE							TRAP	CARRON'S MARSH TRAP #1 TRAP #2 ANDED/RECAP BANDED/RECAP			TOTAL TOTAL RECAP		TOTAL CAPTURE	% BAND		
	BANDEL	J/KECAP	BANDED	KECAP	DANUED	KECAP	BANDE	J/ KECAP	BANDED	/ KECAP	BANDEL	J/ KEUNP				
ct. 12					11	8	4	6	2	7	4	6	21	27	48	44
13	18	10	2	8	8	5	2	1	7	3	1	2	38	29	67	57
14	1		2		5	2	8	11	2	2	2	4	19	19	38	50
15					1	1		3		1			1	5	6	17
16	7	5	1	4	6	9	2	9	3	4	2		21	31	52	40
17	7		1	2	2	8	1	14				1	5	25	30	16
18								9	4	1		1	4	11	15	27
	(	97	1	7	8	8		32	7	 '1	E	55	360	307	667	54

9%

35%

FOREIGN RECAPTURES - 13

56%

TABLE 3. WATERFOWL SURVEYS - BATHURST HARBOUR, SEPTEMBER 27 TO OCTOBER 17, 1987

SPECIES	SEPT. 27	OCT. 5	OCT. 12	OCT. 17
BLACK DUCK	298	140	270	470
MALLARD	10	1	1	-1
GREEN-WINGED TEAL	10			
BLUE-WINGED TEAL	5			
PINTAIL	1			
COMMON GOLDENEYE		8	20	
GREATER SCAUP		4	5	
RED-BREASTED MERGANSER		20	63	4
COMMON MERGANSER		3	3	
HOODED MERGANSER		1	1	
CANADA GOOSE	1490	2785	4500	5810

## EQUIPMENT

An inventory of the Bathurst Banding Station equipment was made on October 18, everything was stored in the small white shed at the Petit Rocher DNR office.

Trap wire for 5 - 3 funnel 4' traps
3 - 3 funnel 6' traps

1 floating trap with - moaring ropes
4 bricks (anchor)
3 - (7') 2" x 4"

Trap netting for all traps and enough spare netting for 1 trap

1 bait bucket (steel grey)

1 bait bucket (plastic yellow)

2 dip nets

2 burlap bags

banding station signs - 10 backing boards for signs - 15

10' trap poles - 10
1 piece of 3' x 6' trap wire

INBFS red wooden box for the following accessories:

1 pair of gloves

1 hammer

2 rolls of wire (trap wire)

1 burlap bag (spare)

1 coat hanger (always good when locking the keys in truck!)

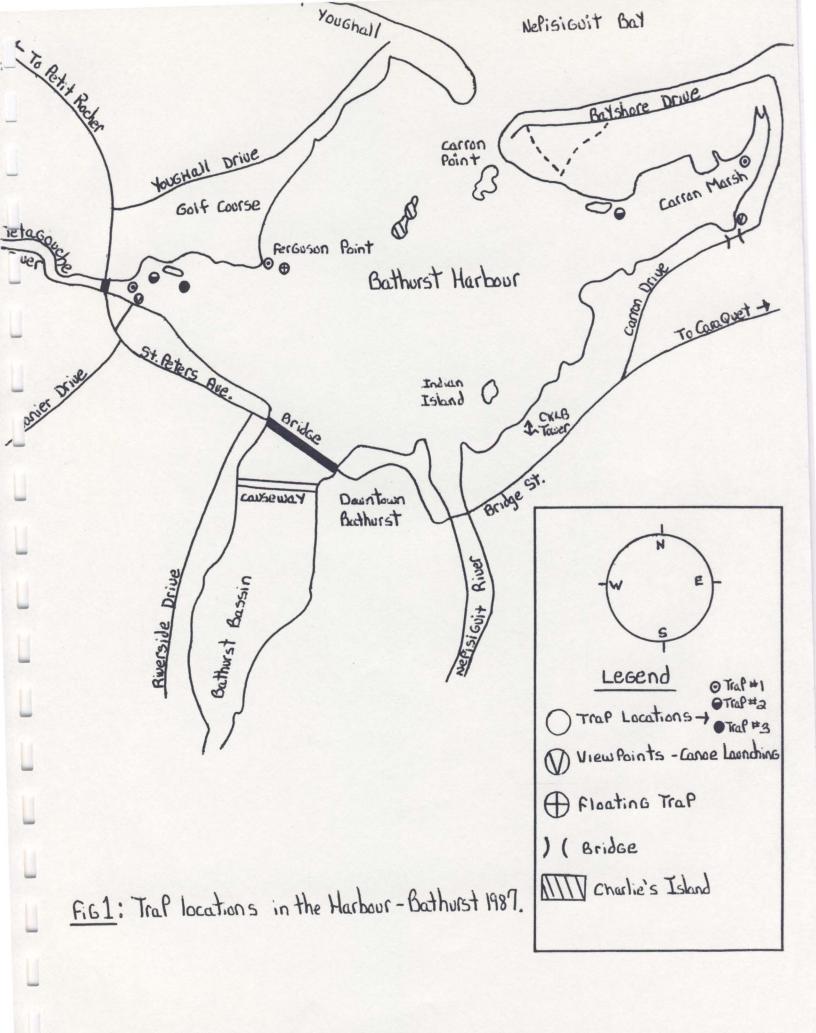
1 piece of big rope

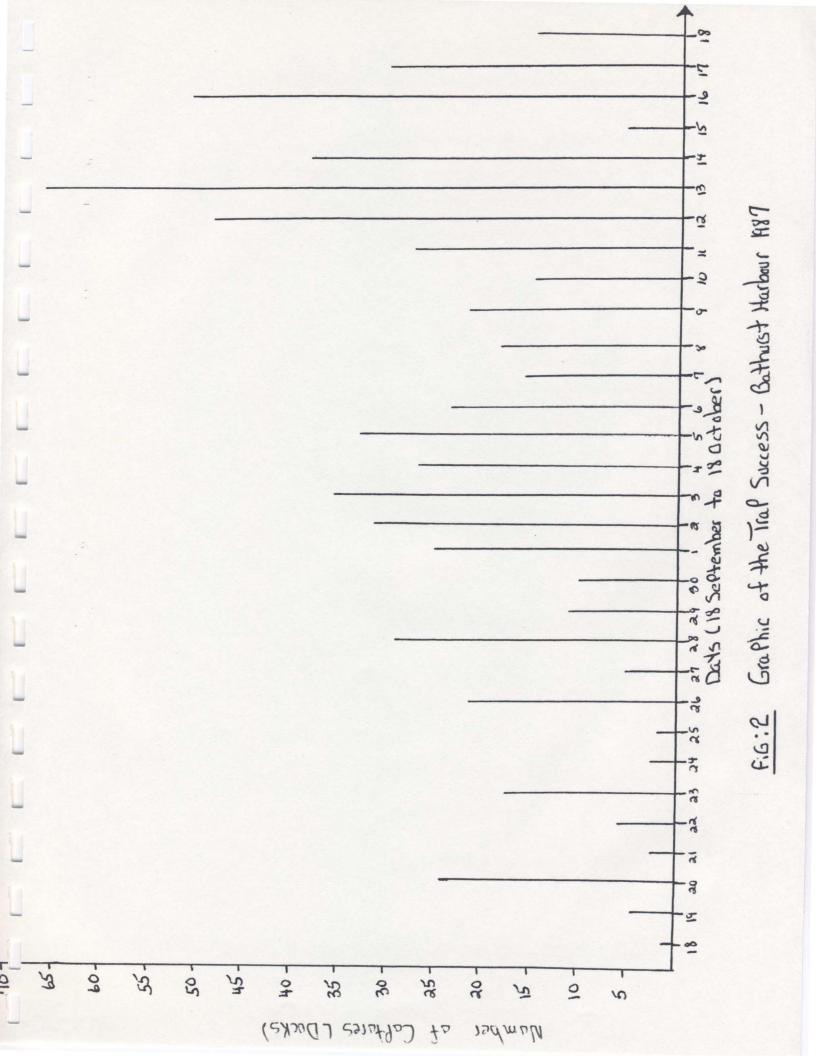
1 roll of mending string

1 mending needle

1 key to the "Identification of Hylrids (Black X Mallard)"

1 piece of netting for repairs





Waterfowl Banding Project

1987 Airboat Banding Station

St. John River, New Brunswick

## Crew Members

Carl Ferguson, USFWS, Parker River NWR, Newburyport, MA

Terry Villanueva, USFWS, Great Dismal Swamp NWR, Suffolk, VA

John Wilson, CWS, Sackville, New Brunswick

Patrick Kehoe, Fish and Game Branch, Dept. of Natural Resources,

Fredericton, New Brunswick

## Introduction

The U.S. Fish and Wildlife Service provided a two-person crew, 18' airboat and nightlighting equipment for the U.S./Canadian cooperative waterfowl banding station at Jemseg, New Brunswick, Canada. Waterfowl are captured and banded on marshes along the Saint John River, east of Fredericton, New Brunswick. The Canadian airboat crew member was from the Sackville, New Brunswick office of the Canadian Wildlife Service. The New Brunswick Department of Natural Resources and Energy's waterfowl biologist assisted us for most of the banding period, which again this year was 14 consecutive banding nights.

## Preparation

The airboat and nightlighting equipment is stored at Parker River
National Wildlife Refuge, Newburyport, Massachusetts and is maintained by the
refuge maintenance person Woody DeSerres. This particular Panther airboat has
been used four years at the Saint John River banding station.

Coordination with CWS in Sackville, New Brunswick included arranging an arrival date at Jemseg, obtaining an oversize trailering permit for New Brunswick, and arranging to obtain CWS waterfowl banding permits and to rendezvous with the Canadian crew members.

In addition to the letter of introduction sent to Canadian Customs from USFWS-OMBM, I sent a letter to Canadian Customs, Port of Entry, Woodstock, New Brunswick explaining the cooperative banding program and attached a complete equipment list. This helped expedite the border crossing which took about 40 minutes. In addition, the U.S. crew member needed a temporary work permit.

Coordination for the banding assignment from Parker River NWR also included initiating paperwork for travel authorization and travel advances; providing both the primary and alternate crew members with pertinent information about the banding assignment; and assisting Parker River maintenance personnel in preparing the airboat and nightlighting equipment.

This banding assignment is normally scheduled to start during the last week of July, so that the majority of Black Duck broods encountered will be Class 3 size and also to take advantage of moon phases of lesser illumination, important in using this capture technique.

#### Results

A total of 808 ducks was netted and banded by the airboat crew in 47.3 hours of operation during 14 consecutive nights within 18 marshes along the Saint John River (Tables 1, 2, 3 and 4).

The water level, during the banding period, was the lowest for at least the last five years and down 35 to 40 inches from the 75 year high of 1984. With this heavy airboat the crew was restricted to impoundments and large channels in the banding area. Large areas of marsh that normally could be worked were not because of the low water. The crew banded 264 Black Ducks in 47.1 hours of operation. Table 1A compares the Black Ducks/hours of capture effort for the past five years.

Table 1A - Black Ducks/Hours of Capture Effort

Year	Hours	Black Ducks	Black Duck/Hour
1983	42.0	521	12.4
1984	44.0	500	11.4
1985	53.3	521	9.8
1986	49.7	395	8.0
1987	47.1	264	5.6

The 808 duck total represented eleven species and a hybrid. The capture rate of 57.4 ducks/night and 5.6 Black Ducks/hour is the lowest total in at least eight years (Table 1).

Black Ducks are at least at a five-year population low in the Saint

John River area. An attempt is made to capture all ducks encountered on the

marshes, with an emphasis placed on Black Ducks. The banding effort has been

somewhat of a constant index the last four years as the same airboat and crew

leader have been at the station. Some possible reasons for the low Black Duck

numbers this year include:

 Combination of extremely low water/heavy airboat prevented the crew from getting into shallow marshes and wet meadows where possibly more Black Ducks were located.

- 2) A high percentage of Black Duck broods may have been earlier than average, thus resulting in an early dispersal from the area by hatching year birds.
- 3) Black Duck numbers are down this year in this population.

Hatching year Black Duck numbers were down in most of the traditional late summer staging areas. These include Grand Lake marshes, Foshay Lake, Jemseg Flats, Portobello, Farnham Marsh, Coys Lake, and Long Island. Two new areas, both Ducks Unlimited projects, Boyd's Meadows and upper Babbits Meadows produced over 30 percent of the Black Ducks and over 40 percent of the waterfowl total.

#### Recommendations

#### Equipment

- Another airboat generator is needed for next year; ours broke on the second night.
- Build new duck holding cages next year. Use smaller mesh size to prevent ducks from sticking their bills through.
- Trailer winch needs to be checked for gear wear, etc. The cable on it needs to be replaced.

- 4. The 4-wheel truck used on this banding assignment needs upgrading.
- 5. A minor oil leak on the airboat engine needs to be corrected.
- The footwell and cagewell on the airboat are leaking at the bottom seams.
- 7. Bow push board on the trailer needs to be replaced.
- 8. If possible, inter-crew communicaton gear should be acquired to increase the safety aspects and capturing efficiency of the assignments.
- 9. The tool box for the airboat needs to be replaced.

## Operations

- Assist the Department of Natural Resources and Energy in New Brunswick and the Canadian Wildlife Service, Sackville, N.B. office in a media effort to inform the area residents of this cooperative banding effort.
- 2. Coordinate with land owners for permission to band on their marshes.
- Coordinate with the Fish and Game Branch, New Brunswick Department of Natural Resources and Energy and Ducks Unlimited into providing launch access into eight DU impoundments.

- 4. An experienced netter should be used the first few nights if the airboat netters are inexperienced.
- If possible obtain aerial photographs of the marshes for locating channels, especially for new crew leaders.
- 6. Evaluate all phases of the operation to minimize noise, especially in the Jemseg River and Foshay Lake areas.
- 7. On thickly vegetated marshes, swing all captured ducks in front of the capture lights to ensure that there is not a muskrat in the net.
- 8. The public relations aspect of the banding assignment cannot be stressed enough. Use every opportunity to inform landowners, local residents, and the general public about the hows and whys of this cooperative effort.

#### Comments

Once again we continued the "norm" of working long hours in resolving various problems with the equipment and the lack of launch sites due to low water. We managed to operate 12 full nights and 2 partial nights, a personal high for myself. This boat, with its inherent heavy weight/low horsepower continued to "keep us on our toes". The numbers of ducks, especially Black Ducks, were down, but our airboat hours were the third highest in five years.

We enjoyed excellent support from Myrtle Bateman, Canadian Wildlife
Service and from Pat Kehoe, New Brunswick Department of Natural Resources and
Energy. The Department provided us with a new airboat generator when ours
went down on the second night. Pat, an experienced netter, assisted the
"green" airboat crew in getting a start on capturing ducks.

Ducks Unlimited provided information on waterfowl locations. Over 40 percent of the total ducks and over 30 percent of the total Black Ducks came from their projects.

I would say thanks to the airboat crew, Terry and John, for their efforts during a physically demanding two week period. They got the job done despite low water, airboat and truck mechanical problems, muskrats, and the crew leader.

Good luck to next year's crew at Jemseg.

Prepared by: Carl Ferguson

August 31, 1987

Crew Leader

Table 1. Age, sex and species of waterfowl banded by the U.S.A. Airboat - 1987

	Local			н	atch	Year	After	After Hatch Year				
Species	M	F	T	М	F	T	M	F	T	Total		
Mallard	1	8	9	7	3	10	0	2	2	21		
Black Duck	51	66	117	62	63	125	3	19	22	264		
Bl.XMal.Hyb.	2	2	4	8	10	18	0	2	2	24		
Am.Gw.Teal	7	9	16	10	5	15	4	6	10	41		
Bw.Teal	75	81	156	40	40	80	9	17	26	262		
Am. Wigeon	35	40	75	7	4	11	3	6	9	95		
N. Shoveler	1	2	3	5	3	8	0	1	1	12		
Wood Duck	9	12	21	4	8	12	44	7	51	84		
Rn.Duck	1	1	2	-	-	-	-	-	-	2		
C. Goldeneye	1	2	3	-	-	-	-	-	-	3		
	183	223	406	143	136	279	63	60	123	808		



Waterfowl Banding Project

CWS Airboat

May 11 - October 2, 1987

Crew Members

Randy Hicks

Canadian Wildlife Service

Sackville, N.B.

EOA 3CO

## Introduction

The CWS nightlighting program was operated in various locations throughout the three Maritime provinces during the 1987 season. The boat was operated by one permanent crew member with local banders and volunteers helping as netters. Eight marshes were worked in 1987; five in Prince Edward Island, two in Nova Scotia and one in New Brunswick. The boat was operated whenever time permitted this season, for a total of fourteen nights.

## Preparation

Few repairs were needed for the airboat in preparation for the 1987 nightlighting season. Last season, the performance of the airboat was hampered by heavy vibrations resulting from the propeller becoming waterlogged. This was corrected by removing the propeller for drying, stripping, sanding and resealing. The engine was given a tune-up and the oil and filter were replaced, also the generator oil was changed.

## Results and Discussion

A total of 744 birds was banded in 14 nights (31.8 hours) between May 11 and September 2, 1987. The total of 744 birds included 325 Black Ducks, 234 Blue-winged Teal, 79 Green-winged Teal, 56 Ring-necked Duck and 50 of other species (Table 1).

Sixteen of the 56 Ring-necked Ducks were marked with nylon nasal markers (plus shape, colours- white, red, yellow, green, and blue) at Amherst Point Migratory Bird Sanctuary, Impoundments 1 and 2. Two of the 14 nights (3.1 hours) worked were for the capturing and marking of Ring-necked Ducks. Five of the 14 nights (10.9 hours) were worked for the sole purpose of capturing local Black Ducks at Shepody National Wildlife Area. Fifty-five of

the 325 Blacks were fixed with radio transmitters for a research study under the direction of Gerry Parker, Canadian Wildlife Service, Atlantic Region, Sackville, N.B.

Recaptured birds totalled 9, of which 5 were station returns and 4 were foreign recaptures (Table 6). The age and sex breakdown by province and/or marsh is found n Table 2-5.

New purchases for the Airboat this year included two new batteries, coleman lantern and a spot light. The capture nets were restrung and the hoops repaired. The bottom of the airboat was treated with a new coating of fiberglass. A new wheel bearing was installed on the rear right wheel of the trailer and the rest of the wheels were repacked with grease. This work was done prior to being stored for the winter.

Only four liters of oil were used this year and the boat ran smoothly. Water levels were exceptionally low this year making it hard to work areas. The only major problem this year was an overheating problem with the truck which was finally cured by a new radiator.

#### Recommendations

- The electric winch for the airboat should be replaced as the present one is not big enough.
- 2. The decking should be replaced in front of the netters seat.
- If money is available, an additional light should be installed on the front of the boat to prevent a shadow being cast out to the side.

- 4. The propeller needs to be sanded down and resealed.
- 5. A cover should be made to protect the propeller from the elements when not in use.
- 6. New motor mounts should be installed on the rear mounts of the motor.
- 7. The airboat should have the pre-season tune-up along with an oil and filter change in both the boat and generator.

## Acknowledgements

All volunteer help was greatly appreciated this year since only one permanent crew member was involved in the program.

# List of Band Numbers for the 1986-87 Night-lighting season

624-20609 - 20625

624-20873 - 20900

664-35386 - 35400

664-39980 - 40000

825-54438 - 54500

825-54669 - 54700

845-17481 - 17500

845-20301 - 20400

845-17347 - 17367

866-52754 - 52800

876-01247 - 01285

896-63327 - 63345

1427-97343 - 97400

1437-59001 - 59091

1437-59101 - 59200

1437-59823 - 59900

Table 1. Age and Sex Breakdown, CWS Airboat, 1987

	_	Local	<u> </u>	Hat	ching	Year	After	Hatch.	ing Year	_	Tota	1	
Species	М	F	Unk	M	F	Unk	М	F	Unk	M	F	Unk	Tota
Black Duck	81	51		89	86		5	13		175	150		325
Mallard							1	1		1	1		2
Blue-winged Teal	37	22		83	63		17	12		137	97		234
Green-winged Teal	2	4		21	18		27	6		50	28	1	79
American Wigeon	9	4		4			1	4		14	8		22
Northern Pintail	1			1	4		2			4	4		8
Ring-necked Duck	11	11		6	6		9	13		26	30		56
Wood Duck							11			11			11
Hooded Merganser					2						2		2
Northern Shoveler					2		1			1	2		3
Gadwall				1	1					1	1		2
Total	141	92		205	182		74	49		420	323	1	744

<sup>\*</sup>Marked with nylon nasal markers (plus shape, colours-white, red, yellow, green, and blue).

Table 2. Age and Sex Breakdown, Amherst Point, CWS Airboat 1987

		Loca	1	На	Hatching Year		After Hatching Year			Total			
Species	м	F	Unk	М	F	Unk	м	F	Unk	M	F	Unk	Total
Black Duck	1			6	10					7	10		17
Blue-winged Teal				3	2					3	2		5
Green-winged Teal				3	5		5			8	5		13
American Wigeon								1			1		1
Pintail					1						1		1
Ring-necked Duck	2	1		1	1		8*	8*		11	10		21
Gadwall				1	1					1	1		2
Total	3	1		14	20		13	9		30	30		60

Table 3. Age and Sex Breakdown, Wallace Bay NWA, CWS Airboat 1987

		Loca	1	Hat	ching	Year	After	Hatch	ing Year		Tota	1	
Species	M	F	Unk	М	F	Unk	М	F	Unk	M	F	Unk	Total
Black Duck	4	2		42	44		3	4		49	50		99
Blue-winged Teal	2	2		53	43		11	7		66	52		118
Green-winged Teal				15	8		8	4		23	12	1	36
Ring-necked Duck		2		3	1					3	3		6
Wood Duck							6			6			6
Northern Shoveler					2		1			1	2		3
American Wigeon				4				1		4	1		5
Northern Pintail							2			2			2
Hooded Merganser					1						1		1
Mallard								1			1		1
Total	6	6		117	99		31	17		154	122	1	277

Table 4. Age and Sex Breakdown, Shepody NWA, CWS Airboat 1987

	Local		Hato	Hatching Year		After	Hatch	ning Year	Total		
Species	М	F	М	F	Unk	М	F	Unk	М	F Unk	Total
Black Duck	50 (32)	* 33 (17)*	5 (3)	* 5		2	5 (	(4)*	57 (3	5)*43	100 (56)*
Blue-winged Teal	2	3	10	6					12	9	21
Green-winged Teal	1	4		2					1	6	7
American Wigeon							1			1	1
Ring-necked Duck		3	2	4					2	7	9
Wood Duck						5			5		5
Mallard						1			1		1
Total	53 (32)	* 43 (3)*	17 (3)	*17		8	6 (	(4)*	78 (3	5)*66 (21)*	144 (56)*

the state of the s

<sup>\*</sup>Black Ducks fixed with radio transmitters

Table 5. Age and Sex Breakdown, Prince Edward Island, CWS Airboat 1987

	_	Loca	1	Hat	ching	Year	After	Hatch	ing Year	_	Tota	1	
Species	M	F	Unk	M	F	Unk	М	F	Unk	M	F	Unk	Total
Black Duck	26	16		36	27			4		62	47		109
Blue-winged Teal	33	17		17	12		6	5		56	34		90
Green-winged Teal	1			3	3		14	2		18	5		23
Northern Pintail	1			1	3					2	3		5
Ring-necked Duck	9	5					1	5		10	10		20
Hooded Merganser					1						1		1
American Wigeon	9	4					1	1		10	5		15
Total	79	42		57	46		22	17		148	99		263

Table 6. Recaptures, CWS Airboat 1987

	Amherst Po	int MBS	Wallace	Bay NWA	Shepod	iy NWA	Tot	al	
Species	М	F	M	F	M	F	М	F	Total
Black Duck	-	-	-	-	-	1	-	1	1
Blue-winged Teal	-	-	-	1*	-	-	-	1*	1*
Green-winged Teal		-	-	1*	-	-	-	1*	1*
Ring-necked Duck	1*	4(1*)	-	-	-	-	1*	4(1)*	5(2)
Wood Duck	-	_	-	1	-	-	-	1	1
Total	1*	4(1)*	_	3(2)*	_	1	1*	8(3)*	9(4)

<sup>\*</sup>Foreign Recaptures



Goose Banding Project
Prince Edward Island
October 5 - November 3, 1987

Crew Members

John Maxwell
William Barrow

## Introduction

Canada Goose banding with rocket nets was first attempted on Prince Edward Island in the spring of 1983 and continued through the spring of 1984 and 1985.

Although it was expected that geese would be more difficult to bait in fall than in spring, it was decided to attempt a fall banding operation. It was thought that geese banded in the spring were not necessarily the same geese that migrated over P.E.I. in the fall. In order to sample this segment of the fall population it was decided to band in October 1987, concentrating the trapping sites on Provincial Waterfowl Sanctuaries.

#### Methods

Pre-baiting began in several fields on September 17 at both Orwell Bay and Rollo Bay sanctuaries. Hunters at Rollo Bay expressed concern about banding because some felt that the report of the rockets would scare the geese out of the area before the start of the hunting season. After meeting with hunters and landowners it was decided to cancel the banding program in Rollo Bay for 1987.

In the Orwell Bay Sanctuary birds were feeding in several fields on the outskirts of the sanctuary and only returning to the Bay during the night. We decided to suspend banding until after the hunting season opened on October 5 when geese would be using the sanctuary more.

A total of three nets were used for the 1987 season with the first net set on October 7, the second on October 14 and the third on October 16.

Some areas that were pre-baited and had geese coming to the baited areas had to be abandoned as farmers had ploughed up their grain fields.

#### Results

A total of 45 Canada Geese and 5 Black Ducks were banded between October 5 and November 3, 1987. There were 29 hatch year and 16 after hatch year Canada Geese and 4 hatch year and 1 after hatch year Black Ducks. There were no local or foreign recaptures. Table 1 summarizes the totals by sex and age and Table 2 summarizes the totals by banding sites.

#### Discussion

Five shots were fired from three different locations. In most cases the nets worked well with the net going out to 75% of its potential size. In one shot no geese were captured and it was believed that the rockets were placed at too steep an angle so that all the birds flew out from under the net before it landed.

All nets set were ground sets as they were easier to camouflage and the geese would approach them quicker than the net boxes.

Whole kernel corn was used as bait. However in one field where farmers had dumped some oats, that grain seemed to be preferred over the corn.

Banders stayed at Woods cabins in Orwell which were considered to be ideal as they were close to the banding area and proved to be quite comfortable and affordable at \$350.00 per month.

The fall of 1987 proved to be quite dry and access to the fields could be accomplished by driving the truck to most of the nets. In future years, a three wheeled ATC and trailer may have to be used to move the nets as the ground on P.E.I. can become quite soft when a wet season is experienced.

Canada Geese were more concentrated during the fall season but hunting pressure outside the sanctuary made the geese more wary and it took more time to bait geese near the net. There was also more natural food on the

ground so geese did not approach the bait as readily as in the spring. There were approximately 4,000 geese in the Orwell sanctuary during most of the trapping season but towards the end of October there were only 1,500 to 2,000 geese and they spent more time in the outer bay feeding on eelgrass beds. This shift in feeding habits may have been natural or could have resulted from disturbance by the rocket nets in the grain fields.

A goal of 150-200 Canada Geese could be achieved during the fall season if more nets were available and both Rollo Bay and Orwell Bay areas were trapped. Hunter opposition to trapping in the Rollo Bay area continues to be strong and there has been increased opposition in Orwell Bay as well. Close co-operation between Canadian Wildlife service and P.E.I. Wildlife staff is essential and farmer contact for the use of fields for trapping, should be done by local area wildlife enforcement officers.

#### Recommendations

- Banding not start until after the hunting season has opened i.e. one or two days after opening day.
- 2. Four nets could be used in Orwell Bay and two nets in Rollo Bay Sanctuary.
- Landowners be contacted by local wildlife enforcement officers and a commitment from the farmer not to plough the grain fields being used until late in the season.
- 4. Nets should not be placed too near the edge of a field where trees or bushes grow as geese seem to be quite cautious of edges where predators could conceal themselves.

- 5. Wire to detonators should not be strung through pasture where cattle are grazing as they can cut the wire by stepping on it.
- 6. Woods cabins should continue to be used as they provide comfortable accommodations close to the banding site.
- 7. In order to better use time, two additional Black Duck Bait banding sites could be run in conjunction with the goose banding operation.
- 8. A three-wheel ATC and trailer should be used to transport nets if ground is wet to avoid damaging grain fields and access roads.
- 9. A new 50 shot capacity detonator should be purchased as the small hand held detonators will not set off the charges if a long lead wire is necessary.

# Acknowledgements

We wish to thank the following people for use of their grain fields during the banding period.

Mr. Peter Voss

Mr. Eugene McKenna

Mr. Charles Grant

We would also like to thank Wildlife Enforcement Officer, Clair Birch for his help and co-operation in contacting local landowners also the P.E.I. Fish and Wildlife Department for their efforts to implement the banding program in the Rollo Bay area.

Table 1. Total waterfowl banded by sex and age class Prince Edward Island

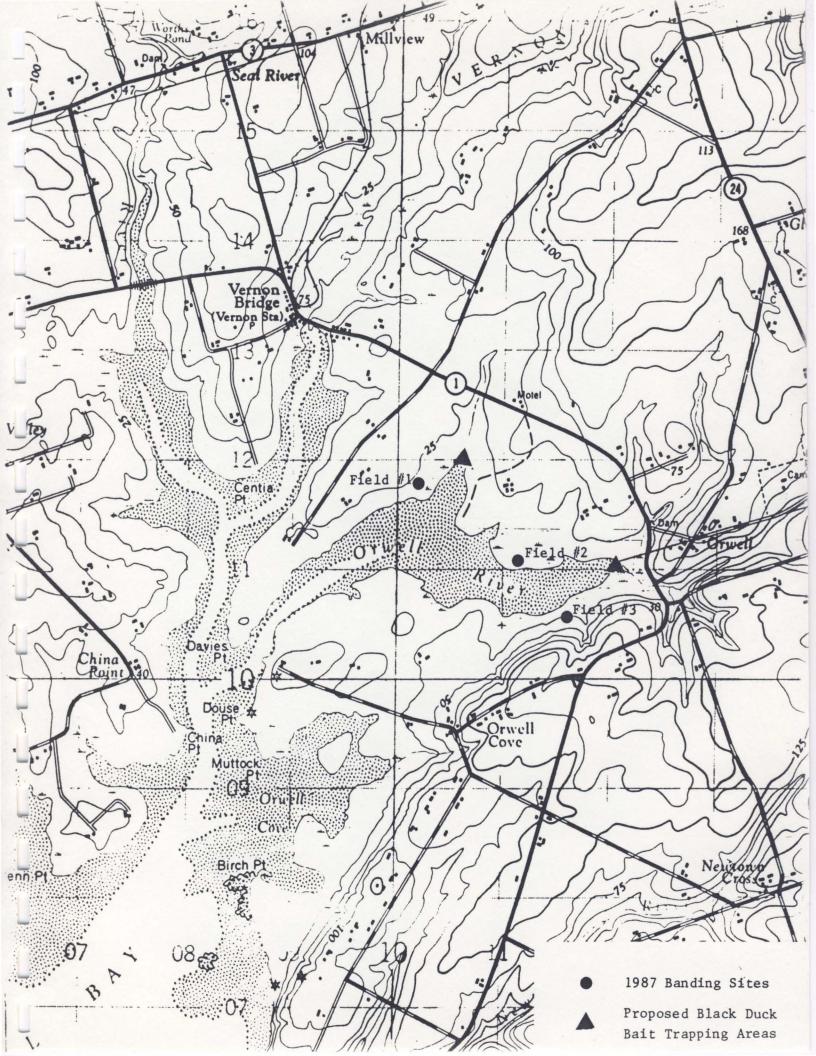
Rocket netting 1987

	Hatc	h Year	After H		
Species	M	F	M	F	Total
Canada Goose	12	17	7	9	45
Black Duck	3	1		1	. 5

Table 2. Total Canada Geese banded by field

Prince Edward Island Rocket netting 1987

		Hatch	Year	After H	atch Year	Total	
		М	F	H	F		
Field # 1		9	8	3	2	22	
Field # 2	-	2	3		1	6	
Field # 3		1	6	4	6	17	



List of bands used in 1987 P.E.I. Goose banding.

698-83701 - 83745

1427-95384 - 95388

List of neck collars used in 1984 P.E.I. Goose banding.

1XK1	2XK1	3XK1	4XK1
1XK2	2XK2	3XK2	4XK2
1XK3	2XK3	3XK3	4XK3
1XK4	2XK4	3XK4	4XK4
1XK5	2XK5	3XK5	4XK5
1XK6	2XK6	3XK6	
1xK7	2XK7	3XK7	
1xK8	2XK8	3XK8	
1xK9	2XK9	3XK9	
1xK0	2XK0	3XK0	



Waterfowl Banding Project

Tinker Harbour, Labrador, Newfoundland

August 27 to September 26, 1987

Crew

Larry Willett

Mike Michelin

### Introduction

This project is a continuation of an effort to band waterfowl in Labrador. It is a co-operative venture between the states and provinces of the Atlantic Flyway and both Federal Wildlife Services. This report covers the seventh summer of activity at Tinker Harbour.

#### Methods

Banders Michelin and Willett landed at Rigolet on August 27. One boat and two local men were hired to take the bait to Tinker Harbour; this took them two trips, one on the 27th and one on the 28th. Michelin and Willett took all the gear, except two boxes, in one trip.

Baiting of trap sites began on the same day the crew arrived, and trapping started on the 28th. Fifteen traps were used - three were constructed of materials left from the previous year. One trap was discarded initially and another when the trapping was stopped for the summer. The traps were lily-pads and panels; some were moved at various times in an effort to increase success. Three two-foot high traps were covered with poultry mesh which injured some birds, i.e. feathers were knocked from foreheads. To prevent scalping these traps should be covered with netting. Also, teal get their wings stuck in the wire of four-foot traps (lily-pads) and inadvertently attracted assisted predators.

All birds were banded at the traps except for a few which were obtained just at dark and carried to camp.

### Weather

The temperature only dropped below freezing on two mornings. Much of the time the weather was best described in the waterfowlers' terminology as "bluebird". However, one terrific storm lasted four days and, filling traps with seaweed, making them inoperative. As well, much effort was spent bailing out the boat which leaked continuously. A two inch (4 cm) rip along the transom, where the skin fits under the port-side stern seat, was hammered shut but caused much leakage. This damage was noticed upon delivery to the crew, but the extent of damage was not realized at the time. Furthermore, the extra weight of bilge in the boat caused, during high winds, the boat to pull its mooring lines free.

#### Recommendations

- 1) Mike knows of a man in Goose Bay who can weld aluminum. These necessary repairs must be done before the boat is re-issued for extensive trips.
- 2) Banding should be started much earlier in order to catch teal. Interestingly Reg Michelin, an owner/operator of a sporting lodge at Double Mer, told the men while they were at Rigolet government wharf, that teal had migrated through the area early.
- 3) Two Innuit hunters whom the crew met at Tinker Harbour and others at Rigolet, reported a maximum of 12,000 Canadas at Goose Brook, across Groswater Bay from Tinker Harbour. This concentration should be investigated for the purposes of banding.

- 4) Traps should only be covered with netting.
- 5) Bait could be shipped to contacts at Rigolet and transhipped to Tinker

  Harbour before the crew arrives; in fact baiting could be started a week

  or more before camp is made. Bait could be covered with a tarp.
- 6) Labradoreans should make up as much of the crew as possible, especially people who traditionally hunt the Groswater Bay for waterfowl. They should be encouraged to bring their guns and nets so that fresh food can be made available.
- Non-Labradoreans should be issued complimentary small-game permits along with their gun permits.
- 8) The Pioneer tent should be discarded as it leaks too much. Furthermore, tents which rest over a pole, like that used at Tinker Harbour should not be used as replacements.
- 9) The crew should have at least a day to go over the gear ensure that they have oar locks, drain plug, and instead of eighteen bottles of fly dope, a wash basin and a dish basin.
- 10) Perhaps the new camp at Crawford Head could be rented and used in future if banding is attempted.
- 11) A proper description of the region for any future crews should be made available by telephone or letter.

- 12) Total amount of gear (weight) could and should be reduced.
- 13) Crew should only include watermen who have had an explanation of the "tide lop" which results whenever the west wind and exiting tide occur simultaneously.
- 14) Six volt batteries for two flashlights should be available.
- 15) Coleman lamp and stove should receive maintenance before departure.
- 16) Kit should or must include a tin stove and chimney.
- 17) Something should be done about the different crystals in the radios.
- 18) A small transmitter radio might be useful for getting weather reports before long trips by open boat.
- 19) A cooking pot of about one-gallon size should be in the kit so good-size meals can be prepared.
- 20) A new filter is needed for Coleman fuel.
- 21) Kit should include an axe file and pocket hone
- 22) A dip-net frame would be nice.

- 23) Mesh on dip net should be smaller than that supplied, to lessen damage to birds.
- 24) The camp-site should be left as nearly as possible to a clean state.
- 25) Additional supplies which are recommended to be included in any future ventures to Tinker Harbour:
  - a) Trout net
  - b) groundfish trawl
  - c) two 5-gallon plastic buckets
  - d) 5 lbs coarse salt
  - e) tent pegs 10 four-footers in case crew arrives late or in rain
  - f) ball of bank twine
  - g) field guide to birds
  - h) a large game bag for carrying grain
  - i) candles and waterproof matches
  - j) patch kit for rubber boots
  - k) a spotting scope for making counts
- 26) Outboard motors <u>must</u> be serviced and checked. There <u>must</u> be extra spark plugs provided and tools which fit the make and model of motor.
- 27) Future work should go to Cortland Palliser and Lester Pottle of Rigolet if crews require guides or grain to be transported.

# Acknowledgements

Myrtle Bateman and John Maxwell both of the CWS, supervised and did some ground work. The CWS provided the equipment which was used. Funding was from the Atlantic Flyway Co-operative Banding Fund.

Special thanks go to Judy Reade of the School for Resource and Environmental Studies, Dalhousie University, for acting as our "official" librarian, and to Cortland Palliser and Lester Pottle of Rigolet for acting as our guides and "duck bait" movers.

As well, Larry would like to thank "anonymous" for recommending him to Myrtle.

# Results

A total of 150 ducks were banded. Of these, 55 were Black Ducks and 84 were Green-winged Teal; nine were Pintails and two were Mallards.

Interestingly, inshore ponds did not produce as in previous years, and this might reflect what Reg Micheline said about our tardiness in arriving after the main teal migration - maybe not; perhaps this reflects a drop in teal populations.

Basically, two populations frequent the Tinker Harbour area. One which rests on inshore ponds south of Stag Island and feeds around Stag Island and Canoe Cove. The other rests on ponds ashore and inland from Tinker Harbour and feeds on a bar which lies exposed at low water. The second is the largest group of birds. While it was felt that the Stag Island birds were exposed to the corn in their normal feeding pattern, the Tinker Harbour population was moving, for the most part, farther out from the trapping area

and in a place too difficult and distant to reach. The water levels there and exposure precluded conventional trapping. The crew did not conceive of a plan whereby these waterfowl could be more fully exposed to their efforts for more than a few hours per day when the tides were near high but much too far from the feeding area – as well, at high water the birds usually left for freshwater, inland.

Table 1. Age, sex and species of waterfowl banded at Tinker Harbour - 1987

		Local		На	atch Y	l'ear	After	Hate	ch Year	
Species	M	F	T	М	F	T	M	F	T	Total
Black Duck	_	_	-	10	7	17	24	14	38	55
Mallard	-	-	-	1	-	1	1	-	1	2
Gw. Teal	-	-	-	34	27	61	11	12	23	84
N. Pintail	-	-	-	2	4	6	-	3	3	9
Total				47	38	85	36	29	65	150

Table 2. Waterfowl observed at Tinker Harbour Area - summer 1987

		Canada	Black	Green	Northern	Common Common					
		Goose	Duck	w.Teal	Pintail	Eider	Scoters	Goldeneye	Merganser sp.		
Aug.	27*	15	294	19	-	10	-	-	-		
	28*	20	501	29	-	15	-	-	-		
	29	15	91	90	10	-	-	-	-		
	30	18	200+	-	-	-	-	-	-		
	31	-	60	15	-	-	-	-	_		
Sept	. 1*	150	360+	60	20	70	4	-	_		
	2*	150	500+	6	-	-	-	-	_		
	3	_	20	75	5	-	-	-	_		
	4	5	100	10	3	-	-	-	_		
	5	_	5	200	6	50	-	-			
	6	30	14	_	-	_	4	-	_		
	7	-	200+	20+	3	-	-	-	_		
	8*	2	906	100	3	-	35	-	-		
	9	-	-	60	-	-	,-	-	_		
	10	-	_	30+	10	_	-	-	-		
	11	2	70	12	-	_	_	-	_		
	12	_	-	_	_	_	2	-	_		
	13*	3	241	6	-	70+	50+	2	-		
	14*	-	192	-	3	300+	30+	-	-		
	15	20	4	-	9	-	-	-	_		

Table 3. Waterfowl observed at Tinker Harbour Area - summer 1987

	Canada	Black	Green	Northern	Common		Common	
	Goose	Duck	w.Teal	Pintail	Eider	Scoters	Goldeneye	Merganser sp
16	2	66	31	5	20	-	-	-
17	15	6	15	10	10	-	-	-
18	22	100+	24	-	16	-	-	-
19	25	10	3	-	20	-	_	-
20	-	10	30	-	15	/-	-	_
21	2	2	12	-	31	2	-	_
22	-	9	6	-	13	-	-	-
23	2	329+	2	1	6	_	-	9
24	_	309	1	10	18	-	_	. 11

N.B.\* Asterisks denote days upon which counts were made with the use of binoculars

Table 4. Waterfowl banded at locations near Tinker Harbour - 1987

	Black	Green	Northern			
	Duck	w.Teal	Pintail	Mallard	Total	
					34.	
Camp Pond	_	30	_	-	30	
Duffett Cove	-	-	-	-	0	
Tidal Pond	-	-	-	/ -	0	
Lookout Island	4	_	_		4	
Canoe Cove	45	17	7	1	70	
Teal Pond Shell Pond	-	3	-	_	3	
	,		•			
Stag Island	6	34	2	1	43	
1	55	84	9	2	150	

Table 5. Chart of trap-nights at Tinker Harbour - 1987

	August		t	September												
	28	29	30	1	4	6	7	8	11	14	17	22	23	24	25	
Stag Island Pond				3			4					0				
Canoe Cove		1			2	3			4					2	0	
										1						
Shell Pond	1									0						
Teal Pond		1			0											
Camp Pond	3								2				0			
Duffett Cove			2								0					
Tidal Pond			1				0									
Lookout Island			1				2							0		

Thus, 150 ducks were trapped and banded over 413 trap-nights of effort; plus four recaptures and forty-three retraps

# Retraps at Tinker Harbour - 1987

Black Ducks 14

Green-winged Teal 21

Northern Pintails 6

Mallard 2

Further observations of birds, or additions to the list of birds observed at Tinker Harbour by Duffett and Sears in 1986

Mourning Dove (Zenaidura macroura)

Peregrine (Falco peregrinus anatum)

Bald Eagle (Halioeetus leucocephalus)

Great Horned Owl (B.v. heterocnemis)

Snipe (Capella gallinago delicata)

Horned Lark (probably) Eremophila alpestris alpestris)

Savannah Sparrow (P.s. labradorius) or (P.s. savanna)

Woodpecker (Dendrocopos villosus or pubescens)

Scoters: a note

While returning to Goose Bay by boat along the north shore of Lake
Melville, between Charlies Point (about ten miles west of Rigolet) and
"Lowlands" for a distance of approximately forty miles, well over 1,000
scoters were observed in six or seven large flocks or "companies". Very
few other birds were seen.

Figure 1: Sketch of Tinker Harbour east, showing trap locations and caches - (after Duffett and Sears) · - trap stes \* - trap caches Eamp Pond -> 3 outwide: deep water Misside bound when some the standard winds and and book of planned and rock hide Tidal Bond - 3

Figure 2: Statch of Tonker Harbour west, showing trap locations and caches - (after Duffett and Sease). - trap sites Gros water

Lates windy 18 cold & wridy in every fine cool nights um might, duckerd, fine seaweed build-up, calm LOSEB Sat. no gas sales at Hudson's Bay 6.

ENDIN HOUSE
AAKE, Labrador

Waterfowl Banding Project

Indian House (Parke) Lake, Labrador

August 27 - September 19, 1987

1

Crew Members

Vernon D. Stotts

Robert M. McKee

#### V. D. Stotts and R. M. McKee

This banding project was a part of a cooperative program between Atlantic Flyway States and provinces and the federal wildlife services. It was the fourth year that waterfowl were banded at Indian House Lake, Labrador. The primary objective was to band a significant representative sample of the Black Ducks inhabiting the region in order to calculate such factors as survival rates and distribution of recoveries.

## Description of Area

Indian House Lake is a wide section of a river that feeds Parke Lake in its northwest quadrant and is part of the Eagle River drainage. It is located about 90 kilometers ESE of Goose Bay-Happy Valley, Labrador and is part of the ten-minute block 525-0590 (52°57.5'N, 59°08'W). Elevation of the lake is about 375 meters above sea level. It is subject to early frosts and snowfall. Upland habitat is primarily open boreal forest of black spruce, balsam fir and tamarack interspersed with string bogs (see 1984 and 1985 report for specific plant and animal names). Lake, pond and river shores are bordered by dense thickets of alder, dwarf birch and willow with minor fringes of sedges, rushes and spikerushes. Major waterfowl feeding areas occur on shoals dominated by burreed, arrowhead, dwarf spikerush, awlwort, horsetail, mare's-tail, and bladderwort. The first four species are intensively eaten by Black Ducks. Deeper waters have dense beds of pondweeds (several species), aquatic moss and often filamentous green algae. This region is part of the

Precambrian Shield, having major outcrops of rocks, boulders and hard sands.

Most aquatic bottoms have 10-25 cm of soft sticky, sandy-clay silt overlaying hard sand or rock.

### Methods

The banding crew set up camp on the northeastern corner of Indian House Lake on August 27, 1987. Baiting was begun on August 28 at good sites noted in 1986. Corn (2 bags) was restricted to panel traps. The primary bait was barley (17 bags). The first three traps were set to catch on September 6 in the western and northern edges of Indian House Lake. After intensive prebaiting 13 traps were set at 13 different sites for a total of 146 trap days (Table 1 and Figure 1). One preset trap was never used by ducks and finally pulled. Traps were not set in the southeastern sector of the lake above Willow Island Rapids again this year due to lack of Black Ducks there. All 13 traps were closed by September 19. All but two traps were moved one time due to fluctuating water levels.

Traps were made of 2" x 2" mesh, 3' and 4' high, 14 ga. welded wire.

Eleven were formed from 25' long sections into lily-pad shapes. Two were 10'
long x 10' wide x 4' high panel traps. Lily-pad traps were covered with 6'
wide, 1" mesh poultry netting. Panel traps were covered with garden netting.

Small traps were held in place by two 5' conduits (3/4" diameter) and one tall
wooden stake that also served as a bag-holding stake. Ducks were retrieved
with a long-handled dip net (a catch-box was used for panel traps) and placed
in burlap bags to speed drying. Initial water depth of sets was 10-25 cm,
often in soft silt overlaying hard-bottomed shoals. Trap mouths were
initially of slit design with most requiring additional reinforcing to
maintain optimum openings. Trap mouths were eventually redesigned with 1"
mesh poultry netting to reduce escapes after capture.

#### Results

A total of 129 ducks was banded (Table 2). Of these 100 were Black Ducks with 26.0 percent adult (39.3 percent including retraps from earlier years), indicating much lower production in the population sampled than in 1986. Only a few other species were captured with Green-winged Teal of secondary importance. Twenty-two retraps were captured (all Black Ducks, 16 AF and 6 AM.)

Doug Blake and Bob Baikie, Newfoundland-Labrador Wildlife Division reported that the spring season was 3-4 weeks earlier than normal and that winter snowfall was way below average. All young dabbling ducks were at flight stage.

Birds repeating in traps never really became a problem (Table 3).

The largest 1-day catch in 1987 was 28 early in the banding period, when 71 percent were new birds. The average new-bird catch per trap-day during the overall period of operation was 0.88 ducks (1.63 during 203 trap-days in 1984, 0.84 during 340 trap-days in 1985, and 1.38 during 247 trap-days in 1986.)

Regular daily counts of birds showed peak occurrence of Black Ducks at the very beginning (Table 4). It should be noted here that these counts in 1986 (or any other year) excluded all birds in traps. The highest single-day count of Black Ducks in 1987 was 155 early in the trapping period. Peak counts were much later in 1984 and 1985. An early spring breakup should have indicated high production, but that was not the case. It is doubtful if production was high, with young birds moving elsewhere prior to banding.

One duck (a Black Duck) was crippled in a banding trap, primarily\_a result of 2" x 2" mesh welded wire. We believe that only 1" x 2" mesh welded wire (with line wires at 2" intervals") or 1" mesh poultry netting will prevent such problems.

The condition of primary flight feathers was checked in all ducks captured. "Green" primaries (blood-tipped) were noted in Black Ducks throughout most of the trapping period. This included young adult females as well as young birds.

All ducks were checked for "pinto" or speckled feet (Stotts, 1959). Only the adult Black Ducks (and one adult Mallard-Black Duck hybrid) showed this lack of foot pigment. Nine of 31 females (29.0 percent) and one of 17 males (5.9 percent) were pinto-webbed.

All Black Duck wing linings were checked for dark feathers along the anterior edge in the vicinity of the bend of the wing. None was classed as "light-winged", there was, however, one Black X Mallard hybrid.

Blood smears (Bennett, 1970) were made from 117 Black Ducks (40 IM, 30 IF, 16 AM, 31 AF), 26 Green-winged Teal (10 IM, 13 IF, 1 AM, 2 AF), 1 AM Mallard-Black Duck, 1 IF Blue-winged Teal and 1 IF Greater Scaup to check on malaria (Leucocytozoon simondi) and other parasites. Blood was taken from the tarsal vein. An addendum to this report will be made when collection results are available.

One panel trap caught best, but no one trap or trap site stood out (Table 5). Catches were too meager to say much.

All equipment and supplies were flown out this year. Clyde House at Labrador Wilderness Camp kindly let us use his docking facilities for this effort.

#### Weather and Water Levels

During the period in camp, daily low temperatures averaged 35.7°F ranging from 25° to 47°. Daily highs averaged 63.1°F ranging from 55° to 80°. It dropped to freezing on 8 days, the earliest on August 28. No snow fell this year. Overall period in camp was balmy with relatively short light rain periods.

Initial lake levels were about equal to those at the start of 1984 and 1986. Water levels fell 18 cm by September 6, the lowest point. About 31 mm of rain fell between August 28 and September 17. The changing lake levels required that most traps be moved once during the period they were set.

### Miscellaneous Observations

Hunters were not known to have been in the area. Clyde House (pers. comm.) felt that banding operations in Indian House Lake have kept him and his customers from using the best hunting sites.

An added feature again this year was a mouse trapline of 20 snap traps (11 Victor and 9 museum specials). Five three-night traplines were operated between September 1 and September 16. No small mammals were trapped or signs noted.

The Bald Eagle nesting near Gas-drum Island was on a nearby rock 8' above water level. A pair and 1 young were noted throughout the period in camp.

The flooded graminae in Indian Mountain pond had tremendous numbers of snails (Family Lynnaeidae). This site was the only one where Blue-winged Teal were noted.

### Recommendations

1. This station banded 945 Black Ducks in the four years (Table 6) and should be closed until further need arises in 3-5 years. Then, only a 3-year well-planned operation should be instigated with traps only at the west end of Indian House Lake to reduce conflict with local hunters.

- 2. The best trapping areas are the western lake-edges. Three panel traps and at least six 3' lilypad traps should be set at sites shown in Figure 2. Only good grade barley (about 20 bags) should be used for bait. The period of operation should be one month maximum starting in late August. Use 1" x 2" 14 ga wire (line wires spaced at 2") 3'H wire for all traps. If 2" x 2" mesh wire is used it should be only on panel traps measuring 10' L x 10'W. Garden netting can be used for all trap tops. Catch-boxes (24-30") should be available at all panel traps.
- 3. Banders should be aware of the possibility of rapidly changing lake levels and begin to edge their traps toward shore or away with each change of about 10-15 cm.
- 4. Use of artificial decoys worked well when three or more were clustered at a site only when lots of young birds were present.
- 5. A 17'-square end canoe with a 4.5 hp motor with tilt and auxillary gastank was ideal for such shoal, rock-infested habitat.
- and off-loading aircraft at the first small island south of camp proved best for both campers and aircraft. It may be necessary to off-load in Parke Lake during years with below average water, but it requires two days of portaging to reach the campsite. Its best to arrange to have pilots (such as Wayne Pert) experienced with this lake in order to prevent unnecessary time setting up camp.

## Acknowledgements

Myrtle Bateman and John Maxwell of Canadian Wildlife Service supervised this operation in 1987 and provided logistics and assistance in the initial phases. The Canadian Wildlife Service provided equipment and the Atlantic Waterfowl Council provided funds for salaries (in part), materials and supplies. The Newfoundland-Labrador Wildlife Division and Department of Public Works provided much help with vehicles and storage. Personnel at Labarador Wilderness Camp at Parke Lake, especially Clyde House, gave us docking facilities to ease the transfer of equipment and supplies up to and back from Indian House Lake. We also stayed over the last night at L.W.

Camp. The Newfoundland-Labrador Department of Forest Resources and Lands loaned a camp stove to us. We are especially grateful to the radio operators at Labrador Air, Goose Bay and N.L.A.T., Pasadena for transmitting messages.

Dr. Gordon Bennett at Memorial University checked blood slides for parasites.

Snails collected were identified by P. Barkhouse and E. Hudgins of the Canadian Wildlife Service.

### References Cited

- Bennett, G. F. 1970. Simple techniques for making avian blood smears. Can.
  J. of Zool. 48(3): 585-586.
- Stotts, V. D. 1959. Black Duck Studies Final Report: A study of the breeding ecology of black ducks on the upper Eastern Shore of the Chesapeake

  Bay in Maryland from 1953 to 1959. MD Pittman-Robertson Proj.

  W-30-R. 241 p.

(Submitted September 24, 1987)

Table 1. Trap days and Site Catch Information, 1987.

Trap Name and Site No.	Date Set	First Catch	Date Closed	Trap Days
Indian Mt. Pd. I. (E)-2	9/6	9/8	9/16	10
Indian Mt. Pd. I. (W)-3	9/6	9/7	9/16	10
Beaverdam Panel - 5	9/6	9/8	9/19	13
Beaverdam Pond - 6	9/7	9/8	9/19	12
Cut-thru (N)-7	9/7	9/9	9/18	11
" (mid)-8	9/7	9/8	9/18	11
" (S)-9	9/7	9/8	9/19	12
Back Gut - 12	9/8	9/12	9/18	10
Blueberry Pd - 14	9/8	9/9	9/18	10
Back Gut/Ind. R. Panel - 13	9/7	9/9	9/18	11
Juniper Pd. (NW) - 11	9/7	9/10	9/19	12
Juniper Pd. (N) - 10	9/7	9/13	9/19	12
Ind. House Lake (W) -17	9/7	9/14	9/19	12
Camp Covew - 1 (preset only)	8/28		9/13	0
			Total	146

Table 2. Age and sex of ducks banded at Indian House Lake, Labrador, 1987.

- 1	M Tot	al F	M	Total	Banded
			1	1	1
) 44	4 74	15	11	26	100
10	0 23	3 2	1	3	26
	1				1
	1				1
5.	4 99	17	13	30	129
	5	5 54 99	5 54 99 17	5 54 99 17 13	5 54 99 17 13 30

<sup>1.</sup> A total of 5 young had one or more green primaries (also 4 adult females)

<sup>2.</sup> One adult female had one green primary.

Table 3. Total Daily Duck Catches, 1987.

	New	New	Repeat	Dead/ Crippled	Total	% New
Date	Birds	Retraps	Birds	Birds	Birds	Bandings
9/7	7	3			10	70.0
8	15				15	100.0
9	21	1	1		23	91.3
10	20	1 5	1 3		28	71.4
11	17	2	6		25	68.0
12	9	1 1	8		18	50.0
13	3	1	4		8	37.5
Wk 1	92	13	22	0	127	72.4
9/14	7	1	3		10	70.0
15	8		13		21	38.1
16	5		6	la	12	41.6
17	7	1	8		16	43.8
18	6	5	11		22	27.3
19	4	2	10		16	25.0
Wk 2	37	9	51	1	97	38.1

<sup>(</sup>a) Wing badly hurt after long-term entrapment in 2" x 2" wire mesh

Table 4. Average populations of ducks and geese noted in the western and northern sectors of Indian House Lake in 1987.

Species	8/28-9/3	9/4-10	9/11-17	9/18-19
Blue-winged Teal				
Ave.		Tr		
Range		0-2		
Black Duck				
Ave.	96	60	24	62
Range	21-155	2-123	1-106	5-119
Green-winged Teal				
Ave.	7	9	8	9
Range	3–11	0-20	3-12	9-9
Pintail				
Ave.	1	1		
	0-3	0-4		
Unid. Diver				
Ave.	2			
Range	0-6			
Scaup				
Ave.	1	1	1	
Range	0-4	0-4	0-4	
Goldeneye				
Ave.	20	16	27	41
Range	0-34	5-20	10-40	36-93
Scoter				
Ave.	Tr			
Range	0-1			
Merganser				
Ave.	3	13	3	6
Range	0-11	0-28	0-7	0-11
Canada Goose				
Ave.	21	16	7	12
Range	0-62	0-58	0-20	0-25

Table 5. Individual Trap Catches (new birds) 1987.

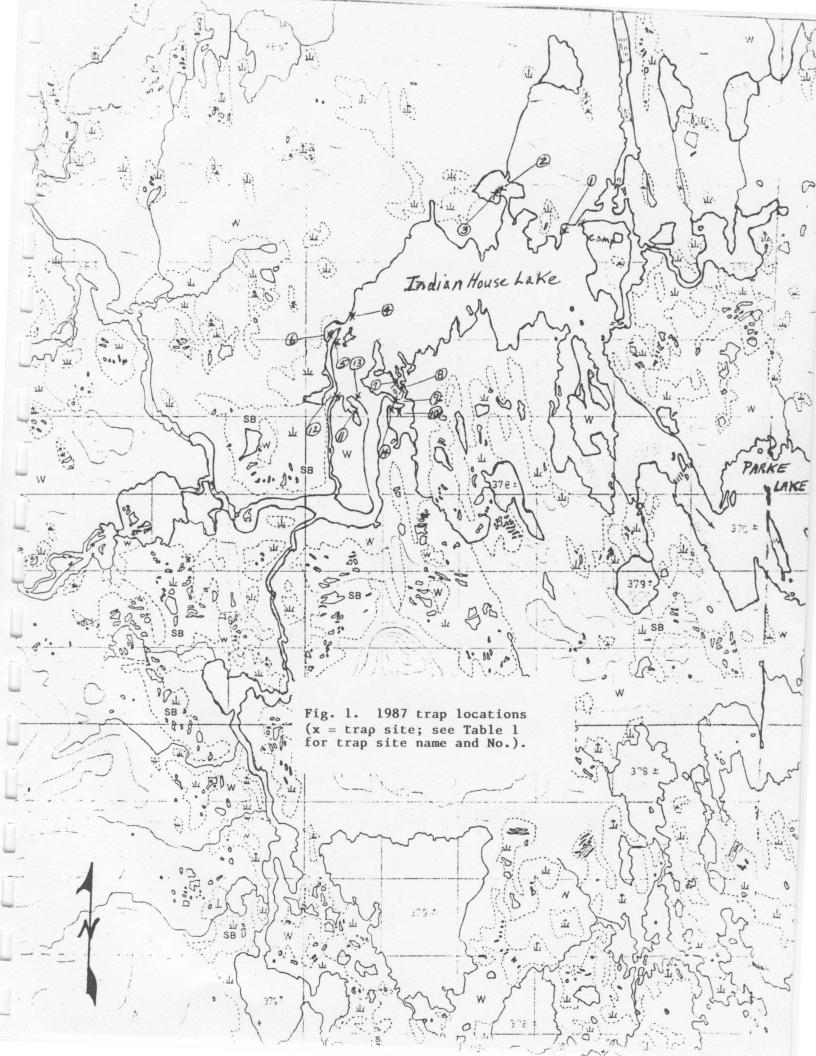
	Mallard	Black	GW.	Bw.	Great	
Trap Name - Map No. a	X Black	Duck	Teal	Teal	Scaup	Total
Camp Cove - 1 <sup>b</sup>						0
Ind. Mt. Pd. I.(E)-2		5				5
Ind. Mt. Pd. I.(W)-3		9				9
Ind. House L4		3	5		1	9
Beaverdam Panel -5		6				6
Beaverdam Pond -6		10				10
N. Cut-thru -7			12			12
mid Cut-thru-8		1	4	1		6
S. Cut-thru-9		13	2			15
Juniper Pd. (N)-10		9	1			10
Juniper Pd. (NW)-11		10	1			11
Back Gut -12		2				2
Indian R. Panel -13		1	24			25
Blueberry Pd14			8	1		9
Total	1	100	26	1	1	129

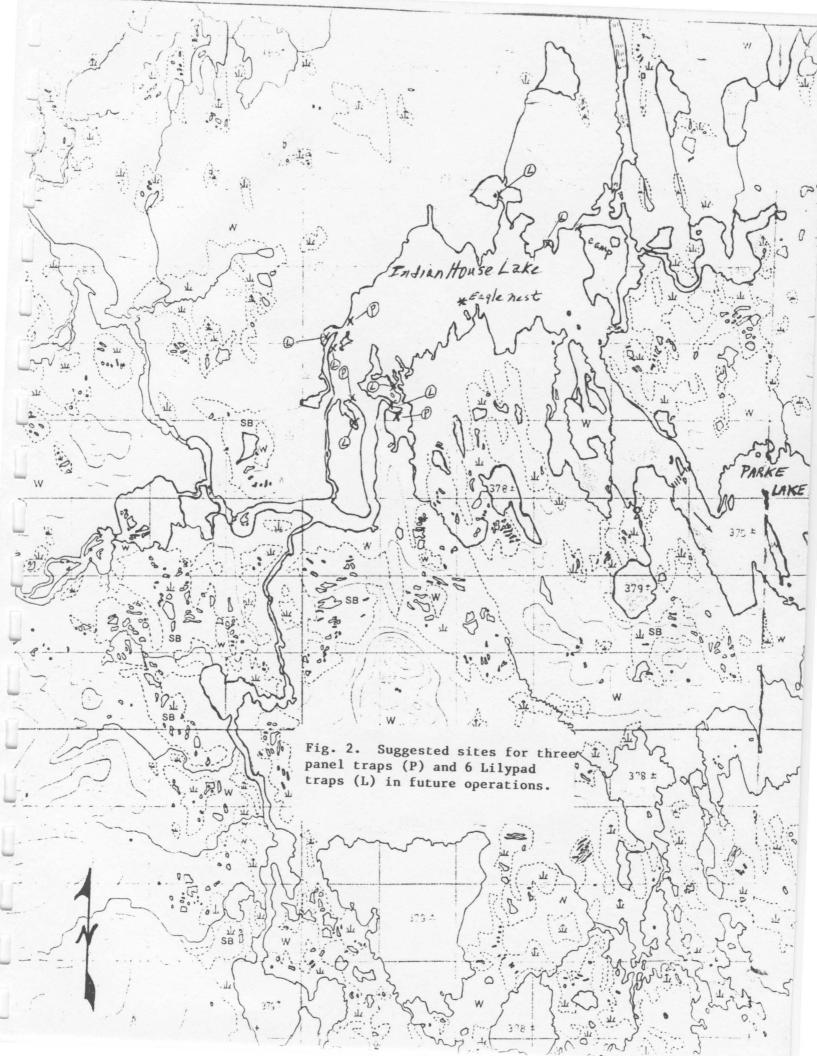
a. See Figure 1.

b. Trap never set due to lack of duck signs.

Table 6. Black Ducks and Green-winged Teal banded at Indian House Lake, 1984-87.

		В	lack Du	ck			Green-	-winged	Teal	
Age & Sex	1984	1985	1986	1987	Total	1984	1985	1986	1987	Total
L-F	7	14	8		29		1			1
L-M	3	12	4		19					
HY-F	154	56	145	30	385		26	22	13	61
НҮ-М	131	49	149	44	373	1	44	12	10	67
AHY-F	13	35	22	15	85		1	2	2	5
AHY-M	8	23	12	11	54		8		1	9
Total	316	189	340	100	945	1	80	36	26	143
Retrap F		14	17	16	47					
Retrap M		20	9	6	35					
Total		24	27	22	82			2		2







Waterfowl Banding Project

Codroy, Newfoundland

September 5 - October 17, 1987

Crew Members

Bryan Pellerin Charles Karpyn

### Introduction

This report describes banding activities on the Grand Codroy River during the period of September 5 to October 17, 1987. A total of 170 waterfowl was banded in 230 trap days. Waterfowl numbers were low compared to previous years with peak Black Duck (190) and Green-winged Teal (250) counts on September 12. Black Ducks observed on the river fluctuated between 40 and 75 on most days (Appendix 1) Canada Geese were also not as abundant as usual with a peak count of 400 birds on September 29 and October 13th. Also observed in some numbers were Northern Pintail, Blue-winged Teal, Red-breasted Mergansers, American Wigeon, and a Mallard drake (Ian Goudie - September 29). Other wildlife which was observed around the Codroy River area during the program included Harbour Seals, Belted Kingfishers, Osprey, American Bitterns, Great Blue Herons (supposedly rare for area), Greater Yellowlegs, a long (or short) billed Dowitcher as well as Rough-legged Hawks, Marsh Hawks, Kestrels, and Merlins (Appendix 2).

During our last day at the Codroy Banding Station it was brought to our attention by a hunter that he had shot a Wood Duck in the Port Aux Basques area. The bird was frozen and subsequent examination showed his identification to be correct.

During our stay at the Station the Codroy River from the Codroy

Provincial Park boundary to the river mouth was declared a wetland of

International Importance as part of the Wildlife '87 celebrations in Canada.

Three days were spent showing various reporters (CBC TV, newspaper, and CBC

Radio) the river area as well as our banding operations.

The weather was fairly warm with the first frost on October 12 and then again on October 13th and 14th. Windy conditions were present on some days which kept the water at a high level.

The factors which may have affected our banding success in 1987 were:

- eel fishing activity on the river (esp. at low tide, i.e. optimum feeding times for ducks)
- mink predation although it did not appear to be as prevalent as previous years.
- at least one poaching incident and possibly others which we were not aware of
- 4. a few days of windy weather and the exceptionally warm summer and autumn weather in Newfoundland
- 5. duck hunting season opened on October 1

### Trap Mortalities

- black killed by mink at Cormiers I on September 11
- possible mink predation on Black Duck at Brooms (Oct. 7)
- drowned? Green-winged Teal at Cormiers II (Oct. 7)
- mink predated Pintail at MacArthurs II (Oct. 8)
- mink predation? at Cormiers II on October 11 (2 Black and a pintail).
- possible mink predation at Broom's Brook October 17 (mink tracks seen inside trap but no ducks found)

# Poaching Incidents

Poaching did not appear to be a major problem this year except on one occasion at Brooms Brook: after observing ducks in and around the trap, we decided to check other traps rather than disturb that one. However, after we had returned to Brooms, approximately one hour later, there were no ducks in or around the trap.

Another form of poaching which seemed to have had some effect on our efforts, was goose hunting on Cormiers Marsh. A later patrol with Ed Walsh of the RCMP failed to produce poachers.

### Recommendations

- A variable schedule where traps are checked, maintained and rechecked at different times each day may eliminate future poaching.
- 2. If possible, a spotting scope should be used for waterfowl observations.

#### Results

There were four species of ducks trapped on the Codroy this season (Table 1): 67 Blacks, 94 Green-winged Teal, 5 Northern Pintail, and 1 Blue-winged Teal. Three Black X Mallard Hybrids were also banded. Of the 170 ducks banded there were 97 males, which includes 62 hatch year birds; 70 females (51 hatch year) and 3 unknown sexed ducks (1 hatch year and 2 hatch year).

A total of nine traps were operated over a total of 230 trap nights (Table 2). Our best trapping success occurred at MacArthurs I (Table 3) with

a total of 71 ducks (including recaptures) followed by Brooms Brook (623),

Cormiers II (41), Sandspit (22), Billy's Marsh (17), Cormiers I (12),

MacArthurs II (4) and Betts Peninsula (0). Black Duck captures were most

numerous at Brooms Brook and MacArthurs I with 29 and 27 respectively.

Green-winged Teal captures were most numerous at Cormiers I (31); MacArthurs I

and Brooms Brook were moderately successful locations with 16 each.

Figure 1 shows that optimum days for catching Black Ducks was October 2nd and 3rd with 10 and 11 ducks respectively.

## Acknowledgements

Mr. and Mrs. Gillis for the accommodations

Ian Goudie for help with the traps.

Joe Doyle for various favors received.

Ed Walsh and Paul MacIssac of the RCMP for enforcement assistance.

Joseph Martin, Angus McNeil, and George MacArthur for providing us with access across their land.

Table 1. Age and sex composition of waterfowl banded at the Codroy bait station 1987

Species	_	Hat	ch	Year	Af	ter	Ha	tch Year	_		Tota	als
	М	F	U	Total	M	F	U	Total	М	F	U	Total
Black Duck	22	9	1	32	25	9	1	35	47	18	2	67
Black X Mallard	1	-	-	1	1	1	-	2	2	1	-	3
Pintail	4	1	-	5	-	-	-	-	4	1	-	5
Green-winged Teal	34	41	-	75	9	9	1	19	43	50	1	94
Blue-winged Teal	1	-	-	1	-	-	_	-	1	-	-	1
Totals	62	51	1	114	35	19	2	56	97	70	3	170

Table 2. Summary of traps in operation at the Codroy bait station - 1987

Location	Baited	Erected	Dismantled	Trap Nights
Betts Penn.	Sept. 8	Sept. 9	Sept. 16	7
Billy's Marsh I	Sept. 7	Sept. 8	Sept. 15	6
Billy's Marsh II	Sept. 15	Sept. 19	Oct. 17	27
Cormiers I	Sept. 7	Sept. 9	Sept. 30	18c
Cormiers II	Sept. 7	Sept. 8	Oct. 17	38a
MacArthurs I	Sept.7&11	Sept. 14	Oct. 17	32b
MacArthurs II	Sept. 7	Sept. 10	Oct. 16	36
Sandspit	Sept. 11	Sept. 16	Oct. 17	30
Broom's Brook	Sept. 8	Sept. 9	Oct. 17	37
Total				230

a - moved to new area Sept. 14

b - moved closer to shore Oct. 1

c - closed night of Sept. 13 due to possible mink problem

Table 3. Summary of trap success at the Codroy bait station 1987

Location	Blacks	GWT	BWT	Pintail	Recap.	Total
Billy's Marsh		12	1	2	2	17
Broom's Brook	29	16	-	3	14	63
Bett's Penn.	-	-	-	-	-	-
Cormiers I	-	11	_	-	1	12
Cormiers II	5	31	-	-	4	40
MacArthur's I	27	16	-	-	17	71
MacArthur's II	2	-	-	-	2	4
Sandspit	4	8	-	-	10	22
Totals	67	94	1	5	50	220

Note: Also trapped 1 hybrid (Black X Mallard) at each of the following locations - MacArthurs I

- Cormiers II

- Brooms Brook

Waterfowl Counts along Codroy 1987

Date	Blacks	GWT	Geese	Pintail	Others
Sept. 6	42	4	16	1	12 RBM
Sept. 8	150	-	_	_	12 RBM
Sept. 10	32	125	8	4	12 RBM
Sept. 11	75	100+	40	-	48 RBM
Sept. 12	190	250	135	_	3 BWT
Sept. 14	-	-	200	-	-
Sept. 15	10	20	-	-	_
Sept. 17	-	50		-	-
Sept. 19	50+	30+	-	20+	-
Sept. 27	100+	-	-	-	
Sept. 28	-	50	-	-	
Sept. 29	40	-	400+	10	mallard M
Oct. 4	-		_	-2	4 wigeon
Oct. 5	50+	-	-	-	-
Oct. 6	60	20+	_	-	-
Oct. 7	35	50	150	-	6 RBM
Oct. 9	50	-	-	-	15 BWT
Oct. 10	75	70	30	-	20+ RBM
Oct. 11	40	60+	-		-
Oct. 12	75	40	_	25	-
Oct. 13	-	-	400+	-0.00	-
Oct. 16	80	-	_		-
Oct. 17	40	_	_	35	_

Appendix 2 Wildlife observations (other than waterfowl)

Sept. 9 - Harbour Seal in river

Sept. 10 - 3 kingfishers (Cormiers marsh)

- 4 cormorants (river)

- marsh hawks (Cormiers)

- mink (Cormiers)

Sept. 11 - 2 osprey (MacArthurs Island)

- 20 Greater Yellowlegs (Mac. I)

Sept. 12 - GBH

- Bittern

Sept. 26 - 2 GBH - Mac. Marsh

Oct. 1 - 2 Rough-legged hawks on Great Codroy side of river

Oct. 5 - Bittern at Mac. II area

Oct. 8 - Long (or short)-billed Dowitcher

Wood Duck shot at Port aux Basques by:

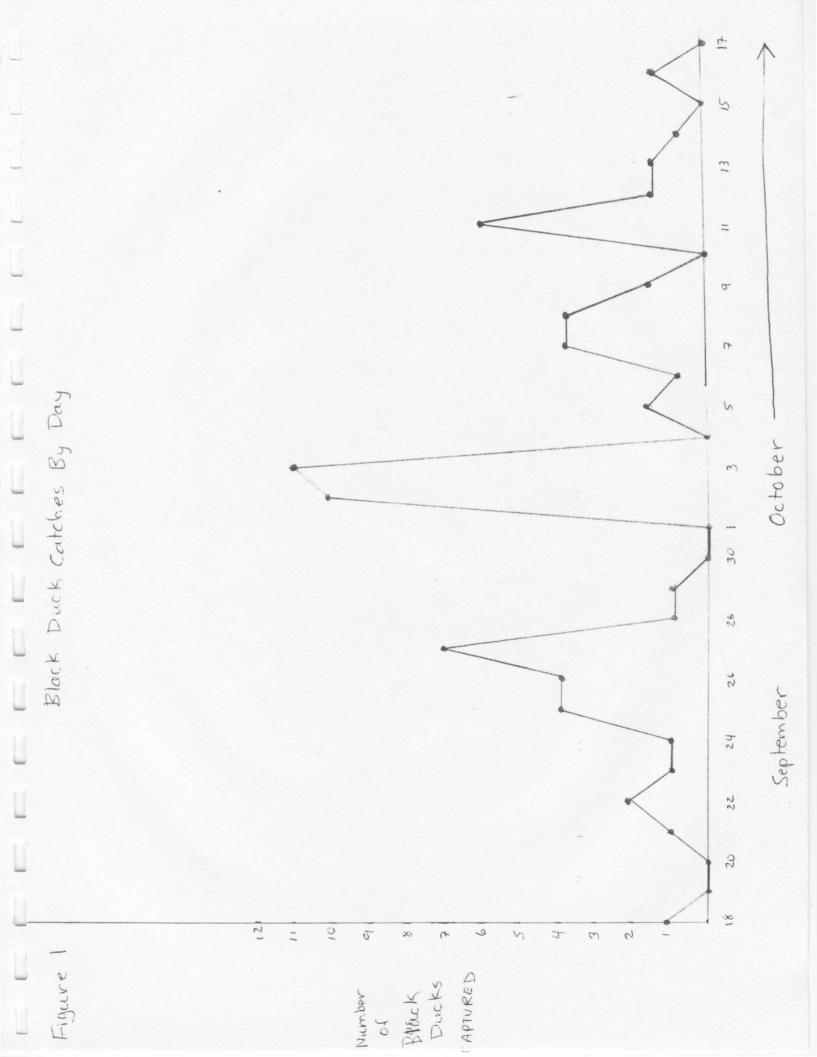
Wayne Power 7 Valley View Road Killride, St. John's, Newfoundland (709) 368-3740

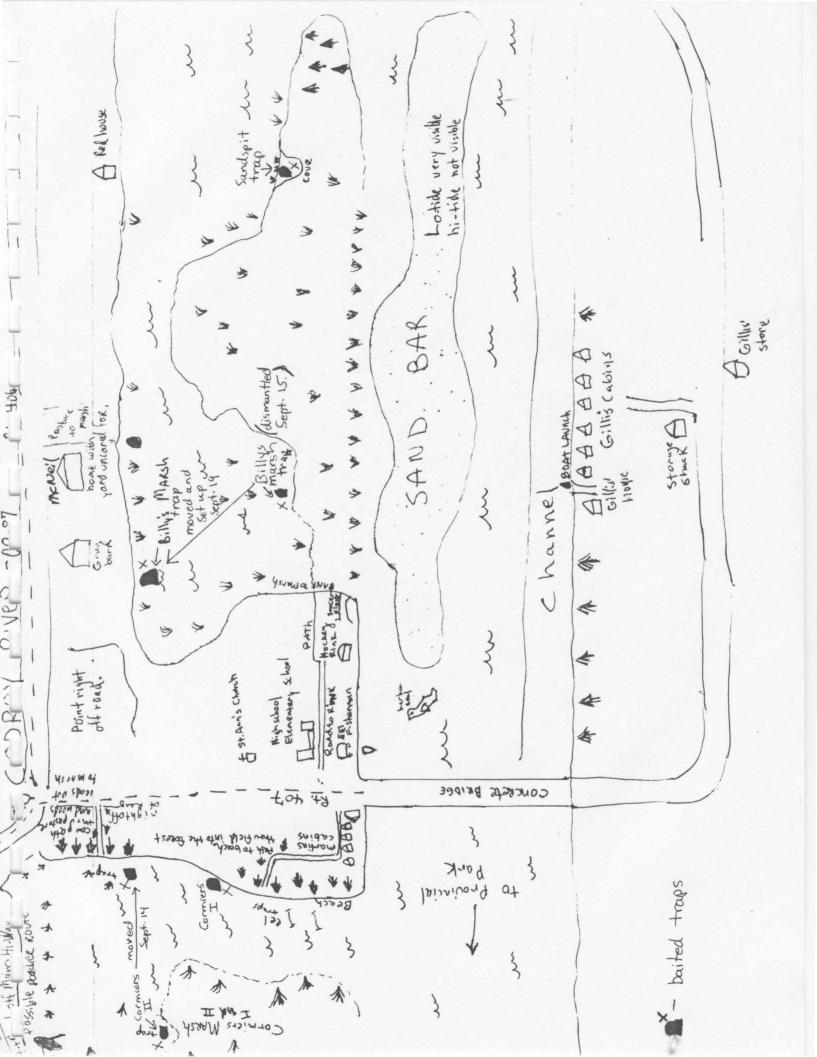
# Appendix 3

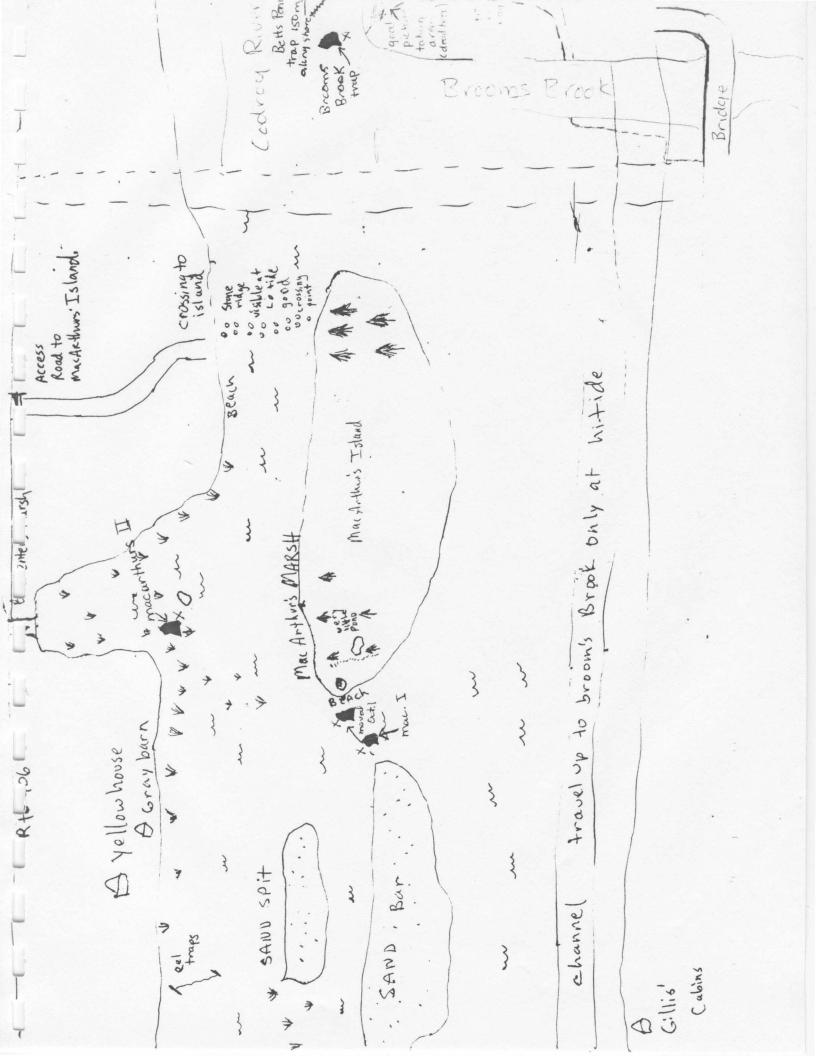
Gear missing from Gillis' upon arrival:

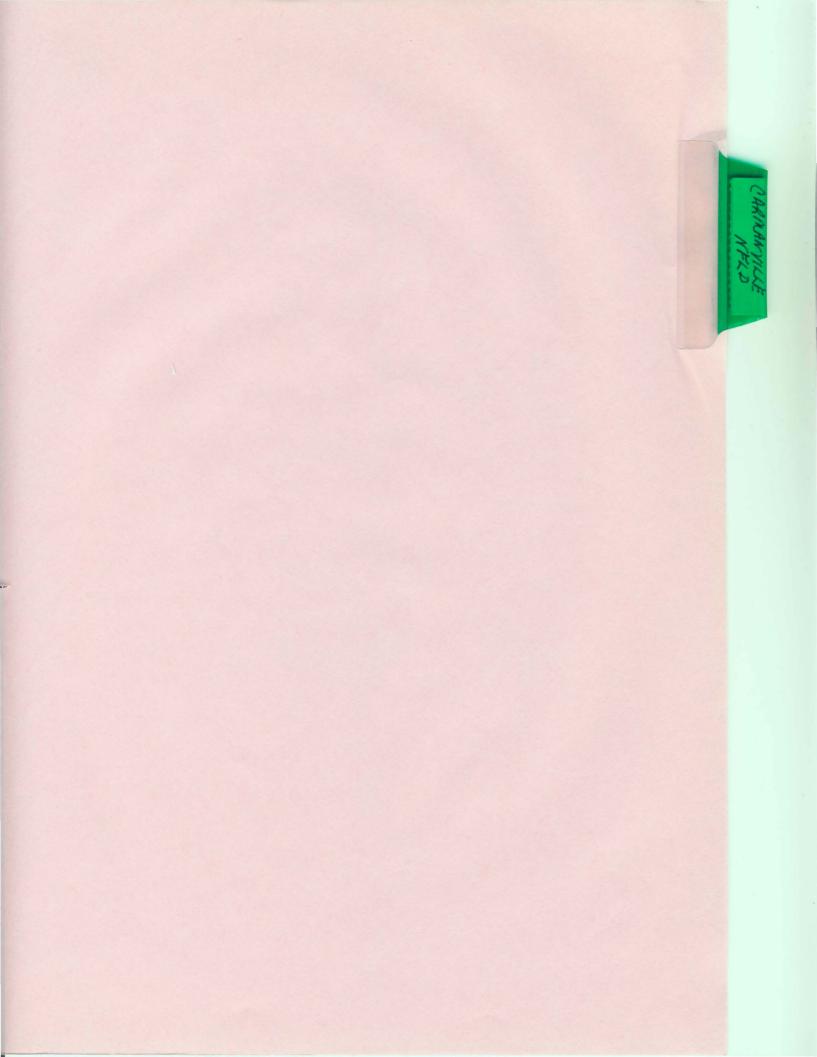
- 2 life jackets
- 3 pails
- 1 Coleman lantern and fuel
- 2 canoe paddles
- 2 trap signs
- 12 burlap bags

The metal parts of the traps were left behind Gillis' shed when we departed but everything else was taken back to Sackville in anticpation of the Banding Station being moved further north in 1988.









Waterfowl Banding Project

Carmanville, Newfoundland

August 2 - September 15, 1987

Crew Member

George Brinson

A bait trapping station was operated in 1987 at Carmanville for the fifth consecutive year. The project ran from August 2 to September 15. A total of 354 birds was banded and eight additional birds were recaptured.

As in previous years banding took place on Middle Arm, the salt water bay adjacent to Carmanville. The same location was utilized as in 1986, that being the extreme south end of the arm. This was described in the 1986 report.

Baiting began August 2. First traps were erected August 7 with first birds banded August 9. Baiting continued until September 12, and banding ending September 15, two weeks prior to opening of hunting season in area.

A total of 167 Black Ducks, 6 Black/ Mallard hybrids, 5 N. Pintail, 169 Green-winged Teal and 7 Blue-winged Teal was banded. These totals along with the recaptures of previous years, have made this the most successful year to date.

The most interesting change in the 1987 statistics is the high number of Green-winged Teal banded. Last year's total of only 31 was down from the normal of 60-65 birds in previous years, but soared to 169 birds in 1987.

Green-winged Teal were everywhere, indicating possibly, an excellent production year. The numbers of Blacks were also up, exceeding 1986 numbers by 17 birds. Black Duck numbers appeared to be normal throughout the region, as compared to last year. Six Black/Mallard hybrids were also banded, indicating a brood, from possibly the local area. The 5 Northern Pintail and 7 Blue-winged Teal captures would also indicate local production for these two species.

No Canada Geese were trapped, nor were any observed in the area.

This species usually arrive in fair numbers in late October, most years, so cannot be expected in early season.

Species, sex and age of banded birds are listed in Table 1.

Comparing the number of adults to hatch year birds, statistics are identical for blacks and green-wings, with adult birds comprising approximately 8 percent of the total numbers.

In addition, this year, random samples of weights were taken for the two major species, and are as follows:

Black Duck		Males	1188	grams	(36 birds sampled)
		Females	1088	grams	(36 birds sampled)
	Overall	average	1138	grams	(2.5 lbs)
Green-winged	Teal	Males	321	grams	(35 birds sampled
		Females	286	grams	(45 birds sampled)
	Overal1	average	303	grams	(.66 lbs)

No Green-winged Teal were recaptured from previous years bandings; however, there were 8 Black Duck recaptures from previous years. There were 6 from 1986, 1 from 1985 and 1 from 1984. The latter is most interesting: bird # 1357-11522 was banded August 1984 - recaptured during banding in 1985 and 1986, and again this year! Incidentally, the bird was banded as an adult in 1984.

In general, birds were present on the arm through the whole banding period. Teal were trapped immediately, with few retraps indicating there was a fairly consistent movement of birds through the area. Blacks arrived a little earlier than usual, and followed the same pattern as teal, except for the last week of banding, when retraps dominated, indicating that most birds from the area had been captured.

No problems were incurred during banding. Predators were present, with mink being the most common. A pair of Bald Eagles presented no problem, although they spent much time in the immediate area. Poaching was not a problem this year. The local RCMP detachment made regular patrols, of which the local public was well aware.

## Conclusions

As with 1986 bandings, the number of blacks continued to rise.

Possibly a peak has been reached in the numbers that can be expected from this region of the island, when considering its geographical location. The teal numbers are most encouraging, and hopefully, at least 100 birds could be expected annually.

Overall, it has been the most successful year since banding began in 1980. Hopefully the program will continue, as returns are just beginning to show a development of migration patterns. However, more work is still needed.

Table 1. Age and sex breakdown, 1987 Carmanville, Newfoundland waterfowl banding project

	На	Hatch Year			Hatch	Year	Total		
Species	M	F	T	М	F	T	M	F	T
Black Duck	71	82	153	7	7	14	78	89	167
B1.X Mal. Hyb.	1	5	6	-	-	-	1	5	6
N. Pintail	3	2	5	-	-	-	3	2	5
Gw. Teal	70	84	154	3	12	15	73	96	169
Bw. Teal	4	3	7	-	-	-	4	3	7
Totals	149	176	325	10	19	29	159	195	35

Waterfowl Banding Project

Churchill Falls, Labrador

September 3 - October 5, 1987

Crew Members

David Morow

Scott Makepeace

A total of 55 Green-winged Teal were banded at the Churchill Falls Station, during this first season of operation (in Table 1). Crew members Scott Makepeace, John Maxwell, and volunteers Jim Yoos and Dallas Holder arrived in Churchill Falls on August 29 with two truckloads of gear for the station. Reports from local hunters indicated waterfowl numbers were unusually low this fall in the whole area around Churchill Falls. Our surveys and aerial surveys by P. Ryan, P. Linnegar and B. McTavish of S. Fudge and Associates confirmed that not many waterfowl were present in the area (Table 2 - Waterfowl Observations). It was decided to concentrate on the Baikie Lake, Julian River area as a potential banding site, and a camp was set up at Julian River on September 1. David Morrow arrived on September 3 and John Maxwell left. Holder and Yoos departed September 5. During the period Sepember 2-6, 9 sites on the Julian River were baited, although this was purely speculative baiting, since very few ducks were observed. These bait sites were touched only occasionally or not at all from September 5 - 15, and were never cleaned up. On September 11 we surveyed Baikie Lake as a potential site and over the next two days took in the canoe and outboard motor and baited 9 more sites on an island in the lake.

We continued to have problems getting the birds on bait, and this was due to the low numbers in the area. Our obsservations indicate that no more than the following numbers of waterfowl were using the Baikie Lake, Julian River areas: Black Duck - 40, Green-winged Teal - 70, Pintail - 5, Mallard - 1, R.B.Merganser - 20, G. Scaup - 10, C. Goldeneye - 10, S. Scoter- 2, Canada Goose - 130, Snow Goose (Blue phase) - 1.

The birds seemed to be moving around a lot, and there is plenty of good habitat. However, starting September 15 we began to get ducks on bait. The first traps were put in at Julian River on September 19 and Baikie Lake

on September 20. Four traps were made operational September 22 and 23 and the first Green-winged Teal were banded September 23. Although up to 29 Blacks had been seen around the sites at Julian River, they left the area as soon as traps were made operational and never frequented the trap sites after. We continued to catch small numbers of Green-winged Teal in the 4 traps and erected a fifth trap at Baikie on September 25 as a three funnel Canada Goose trap, but had no success with it.

During the last few days traps were operational we captured mostly recaptures of our own banded birds. On September 30 and October 2 gear was moved to Churchill Falls (see equipment inventory) and stored for next year. Traps were stashed at Julian River and Baikie Lake (refer to map supplement).

#### Conclusions

Undoubtedly low waterfowl numbers in the area this year was the main reason we met with little success. All the local people told us that usually there are many more in the area and the mid-September period would usually be the best time, although some hunters felt a banding station would be more appropriate in the summer. We received reports that several hundred Canada Geese frequent Baikie Lake all summer - mostly immatures. Both Baikie Lake and Julian River have many excellent sites for both bait trapping and cannon netting. Julian River is more accessible since a canoe can be launched from the road, Baikie Lake is more difficult since everything has to be hauled in over a 1 km trail. If both sites are to be trapped it requires driving 40 km between Baikie and Julian. In future the crew can use two canoes and leave one at each location or concentrate on one, depending on waterfowl use. Because Baikie Lake is not hunted intensively, a conflict with local hunters is unlikely there.

## Recommendations

If the banding crew next year operates at Baikie and Julian, gas should be purchased in 45 gallon drums to save driving to Churchill Falls for gas. Work will need to be done on the truck (see truck repairs). This can be arranged with the CFLCO Garage. A second spare wheel and tire should be purchased.

# Acknowledgements

Many thanks are due to the people in Churchill Falls who helped us during our stay, in particular Wallace Bursey, Clem Reid and Gary Brinston.

Table 1. Age, sex and species of waterfowl banded at Churchill Falls - 1987

		Hatch	Year	Hatch F	h Year	Total
Species	М	F	T		Т	
Am. Green-winged Teal	14	38	52	2	2	55

Table 2. Waterfowl observations in the Baikie Lake and Julian River areas during the 1987 banding season

Species	BAIKIE LAKE	JULIAN RIVER		
Black Duck	35- Sept 4, 8-Sept 11 1-Sept 12, 8-Sept 16	2-Sept 1, 8-Sept 2 6-Sept 5, 2-Sept 6 11-Sept 15, 15-Sept 16 8-Sept 17, 12-Sept 18, 18-Sept 19, 8-Sept 20 12-Sept 21, 29-Sept 23		
Green-winged Teal	37-Sept 12, 70-Sept 14 40-Sept 23, 18-Sept 25 40-Sept 26, 15-Sept 27	1-Sept 1, 6-Class 3F Sept 5 5-Sept 9, 13-Sept 21 20-Sept 18, 12-Sept 20 14-Sept 21, 15-Sept 23 6-Sept 24-30		
Pintail	5-Sept 4	1-Sept 11 - HY F		
Mallard		1M-Sept 15, 1M Sept 22		
Common Goldeneye	1-Sept 11, 1-Sept 27 2-Sept 30	2-Oct 1, 3-Oct 2, 2-Sept 25		
Surf Scoter		1-HY F DSept 1, 1M-Sept 21		
Greater Scaup	6-Sept 16-17, 4-Sept 21 10-Sept 26, 3-Sept 27, 2-Sept 30	4-Sept 12, 13-Sept 3 4-Sept 12, 13-Sept 3		
Rb. Merganser	4-Sept 12, 20-Sept 13 2-Sept 14, 10-Sept 25 1-Sept 30, 8-Oct 1			
Snow Goose	1-Sept 13, 1-Sept 16-17			
Canada Goose	4-Sept 4, 130 Sept 13 80-Sept 16, 31-Sept 11 119-Sept 12, 65-Sept 16, 130 Sept 25, 1-Sept 30	4-Sept 7, 5-Sept 9		

List of suggested repairs to the CWS truck at Churchill Falls, 1987

- (1) There is oil leakage between engine and transmission
- (2) Both gas tanks have leaks in them.
- (3) The exhaust system needs work, the manifold is bent and leaks, the tailpipe is being held on with wire.
- (4) The brakes sometimes make strange noises, the brake pads in the front brakes may at least need to be replaced.
- (5) General tune up required, it idles rough

<u>Contact List - Churchill Falls</u> Gary Brinston - Municipal Services, Town Center, 2nd level

Bill Carew - Shipping of Bait, Warehouse Office, Materials Management Supervisor, P. O. Box 310, C.F. 925-3943 Bait to Clarke Transport 1560 Hymus Blvd., Dorval, Quebec

Doug Goodyear, L. W. Thorne - Newfoundland Constabulary 925-3524

Andrew McFarlane - Environment Canada - Weather station - Will look after truck inspection

Work - 925-3444 Home - 925-3996

## Useful Tips

Gas, groceries etc. can only be purchased through the CFLCO outlets, get a copy of their current opening hours.

Air can be obtained at the compressor at the CFLCO hobby shop 24 hours a day

The only tire repair in town is RSP Tire Repair, 4 Gull Street 925-3300

Any hardware items can be bought at the gift shop - town centre or CFLCO warehouse

Auto oil, camp fuel etc. can be purchased at the grocery store

Shower and laundry facilities are available through CFLCO - showers at swimming pool - laundry at staff house

## Equipment Inventory

Traps: Stashed at Baikie Lake - 2-3 funnel

Julian River - 2-3 Funnel 1-2 Funnel

at Julian River Campsite - wire for 2-3 funnel conduit

(see map supplement)

Gear - At old tire shop see Gary Brinston - municipal Services

2 Grumman 17' canoes

2 4.5 HP Motors - with spare props, parts, spark plugs

3 gas tanks

3 plastic tarps

8 canoe paddles

1 coleman stove

2 coleman lanterns

2 canvas tents

1 nylon tent

1 tent stove

cooking supplies - pots, pans etc.

3 5 gal. gas containers

1 2 1/2 gallon

1 1 gallon gas containers

toolbox

decoys (Black Duck)

3 5 gallon water jugs

14 burlap bags

17 45 kg bags bait (corn and barley)

Truck - see Gary Brinston - left in truck: spare tire, jack hammer, axe, saw, 5 gallon gas jug

seen from Goose Bay - Julian River

Common Loon Black Duck Mallard Pintail Green-winged Teal Surf Scoter Common Goldeneye Greater Scaup R.-b.Merganser Canada Goose Snow Goose (Blue phase) Lesser Golden Plover Semi-palmated Plvoer Semi-palmated Sandpiper White-rumped Sandpiper Pectoral Sandpiper Snipe Greater Yellowlegs Herring Gull Great Black Backed Gull Osprey Red-tailed Hawk Northern Goshawk Rough-legged Hawk Peregrine Falcon Merlin Bald Eagle Northern Shrike Raven Grey Jay Boreal Chickadee Spruce Grouse Willow Ptarmigan Kingfisher Tern species Common Flicker Northern three-toed Woodpecker Robin Ruby-crowned Kinglet Pine Siskin Rusty Blackbirds Rock Doves Blackpoll Warbler Yellow-rumped Warbler Horned Larks Northern Junco White-crowned Sparrow Swamp Sparrow American Tree Sparrow Savannah Sparrow

# Mammal Species List

tracks or scat or seen

Moose
Caribou
Black Bear
Beaver
Muskrat
Mink
Marten
Porcupine
Red Fox
Raccoon
Weasel sp. (short or long tailed)
Red Squirrel
Red-backed Vole
Jumping Mouse (no white tip on tail)
Wolf (tracks on road from Goose Bay to Churchill Falls)

Notes to accompany Julian River hand drawn map

### Note # 1

As you drive into the gravel pit there will be two very deep gullies between the gravel pit and road. In the gully nearest to the campsite is where the trap wire, pipe and signs are located, at the bottom of the gully.

The gullies are not easy to see because bushes and trees obscure them.

### Note #2

The point that the traps are located is the only one that almost touches the opposite bank. You can walk, with chest waders, across to the point from the other side. The point is almost directly across from the gravel pit entrance.

The traps are near some larch trees that are on the point.

### Note #3

Here the trap is located in some willow and alders on a line of land that separates one pond from another. There is a small brook that crosses from one pond to the other and it is here that the trap as cached.

Notes to accompany Baikie Lake Map

Note #1 - The Trail

The trail is on the left side of the road as you travel to the Julian River.

It is on the second major right hand turn after you have gone past the turnoff into the Twin Falls control structure.

There is a hydro pole on the turn that has a sign with M7 on it. There is another smaller number on a metal tag and it is number 66.

The trail is a blazed line that will take you to the Lake as shown on the map. The blazes are on both sides of the trees making it easier coming out.

Note #2 - The Trap Stash
The stash is on the opposite side of the island.

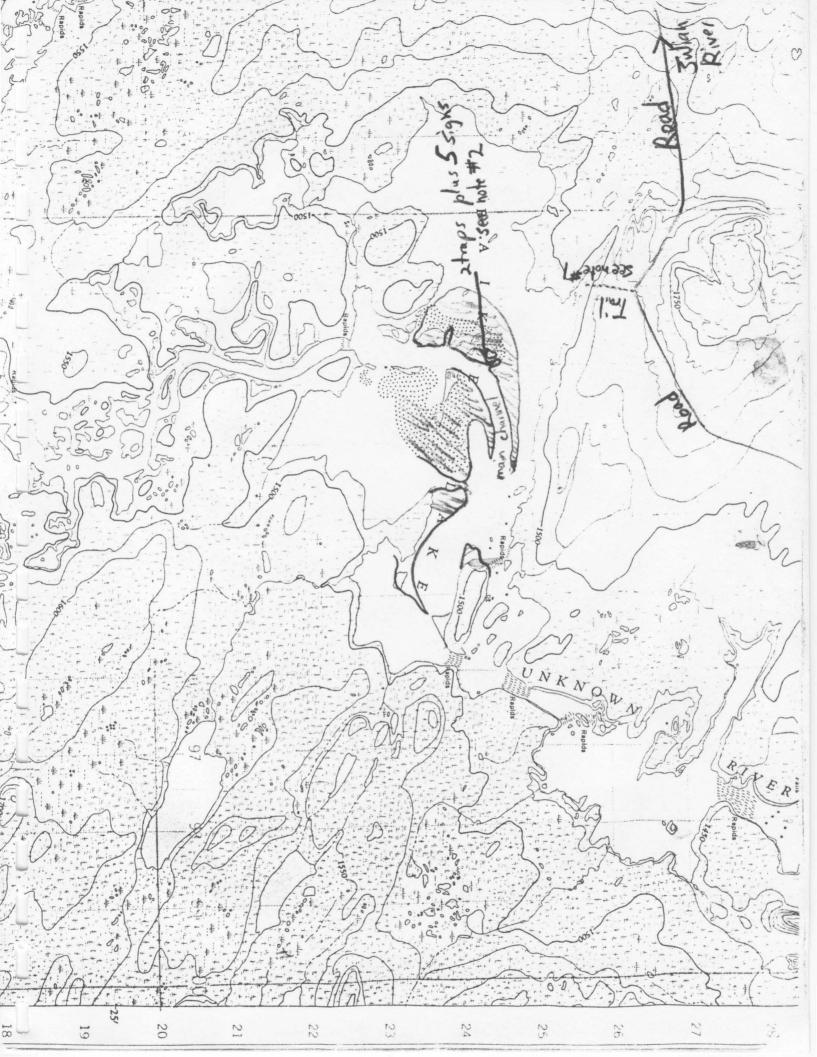
To get to it you must drive the boat around the long narrow point of the island to the main channel.

Once you round the point the stash will be by the first inlet you come to along that side of the island.

As you drive in the inlet there will be a line of willow that ends on your left hand shore. It is in these willows on your left and near the shore that you will find the 2 traps and 5 signs.

There is a piece of flagging tape on the edge of the willow, marking where the stash is.

nok #3 (alhed trap wire cache signs note #1 Gravel p+ step Lill up note # 2 Lake steep hill down V to twin falls



CANADIAN WILDLIFE SERVICE P. O. BOX 1590 SACKVILLE, N. B. EGA 3CD

QL 677.5 188h

QL 677.5 A881 1987

Atlantic Flyway Cooperative Banding Program, Name

Name

Feb/ 193

Atlantic Flyway Cooperative Banding Program Atlantic Prov. 1987.