

Sackville Env. Can. Lib./Bib.



39 504 592

1966 C-operative Banding
Program in the Maritimes

Richard Fyfe

March 1966

WE-203

Data File

QL

677.5

A881

1966

CANADIAN WILDLIFE SERVICE MANUSCRIPT ROUTING

Date File
DL
677.5
A 881
1966

TITLE 1966 Co-operative Banding Program in the Maritimes

AUTHOR Richard Fyfe

MONOGRAPH SERIES _____ REPORT SERIES _____ PROJECT NO. _____

ARTICLE _____ NAME OF PERIODICAL _____

PAPER _____ NAME AND DATE OF MEETING _____

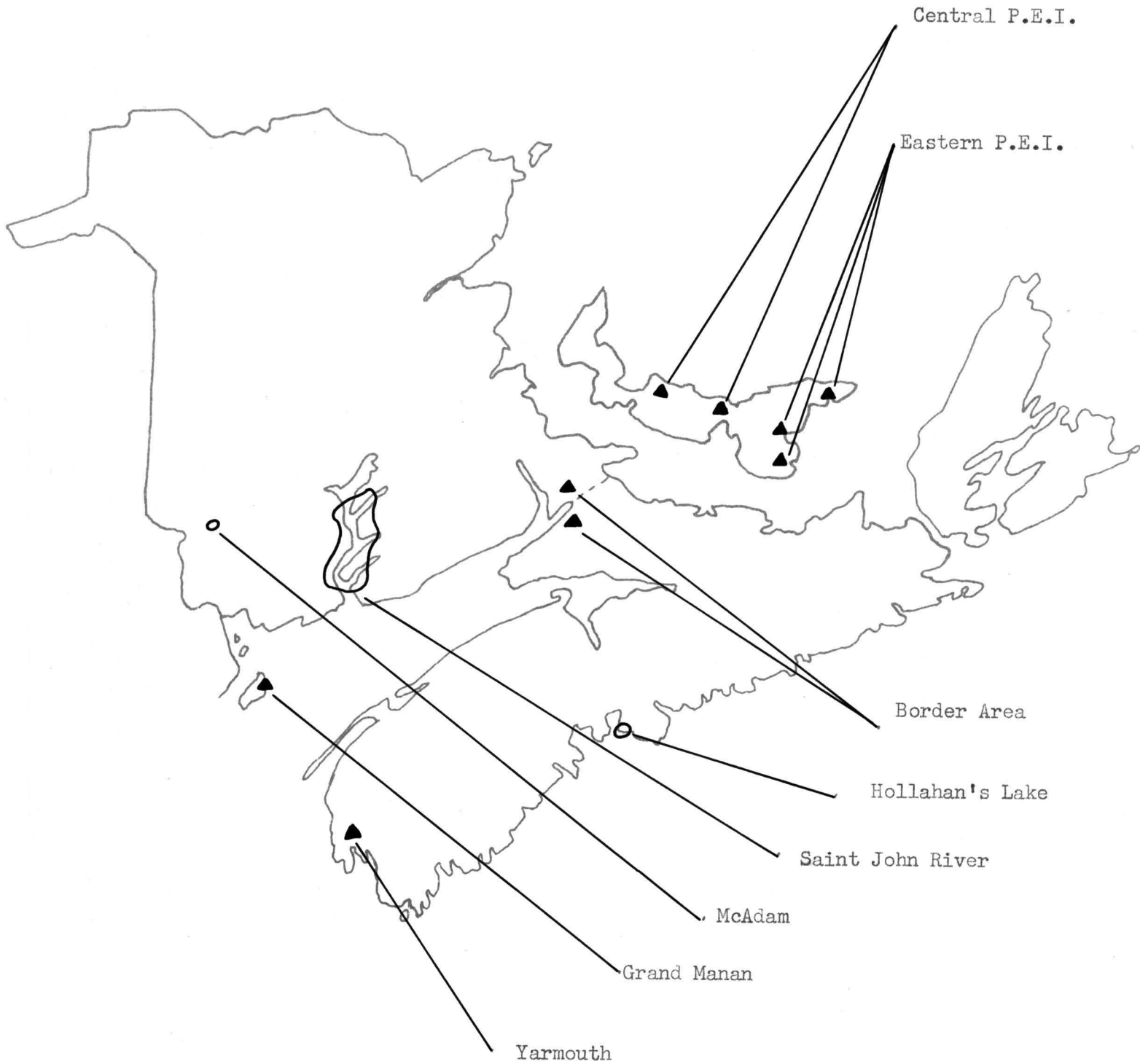
OTHER _____ SPECIFY _____

No. of manuscript pages	17
No. of tables (inc. in MS)	11
No. of line drawings, graphs, charts Orig. artwork attached?	
No. of halftone photos Orig. negatives attached?	
No. of colour photos Orig. slides attached?	
Cover photo Colour or b & w?	

No.	REGION	DATE SENT	DATE REC'D
	Supervisor for technical approval or revision	Feb. 24 1967	
	Author for revision		
	Supervisor for approval		
	Regional Superintendent		
OTTAWA			
	Chief		
	Staff Specialist		
	Biometrician (possibly)		
	Editor		
	Author for approval of edited manuscript		
	Editor		
	Pool for retyping		
	Clean copy to Editor		
	Dept. for approval, or Q.P. for estimate of cost		
	Approval or cost estimate rec'd.		
	To periodical/stencilling/requisition submitted		

Environment Canada
 Environmental Conservation Branch
 Atlantic Region
 17 Waterfowl Lane
 P.O. Box 6227
 Sackville, New Brunswick
 E4L 1G6

1966 Maritime Co-operative Banding Stations



▲ Stations operated under
C.W.S supervision.
○ Other Maritime Co-operative
banding stations.

1966 CO-OPERATIVE BANDING PROGRAM IN THE MARITIMES

Richard Fyfe
Canadian Wildlife Service
Sackville, N. B.

In 1965 the Atlantic Flyway Council began a co-operative pre-season waterfowl banding program in eastern Canada, with emphasis placed on the banding of black ducks and Canada geese. This program was set up initially as a three-year project to be financed and carried out by the member states, provinces, and federal agencies. The field operation was planned and co-ordinated by the Atlantic Flyway Banding committee.

During the summer and early fall of 1965, the first year of the pre-season co-operative banding program was carried out in eastern Canada. In the south, banding crews worked in Ontario, Quebec, Newfoundland, and the Maritimes; in the north, in Ungava, on the islands in James Bay, and on Southampton Island.

In the Maritimes, banding crews operated bait trapping stations in all three provinces as well as night lighting boats in New Brunswick and Nova Scotia. Specifically, the Co-operative Banding stations and personnel for the Maritimes were as follows:

Table 1. 1965 Maritime Banding Projects

Station	Type	Personnel	Agency
<u>NEW BRUNSWICK</u>			
N.B.-N.S. Border Area	Bait Trapping	Stan Teeple Rex Coupland	C.W.S. C.W.S. casual
Saint John River	Bait Trapping	Bruce Parker Morton Smith	U.S.F.& W.S. U.S.F.&W.S.
	Night Lighting	Gerald Cummings Provincial Game Warden and students from U.N.B. as available	U.S.F.& W.S.
Williamston Lake	Bait Trapping	Owen Seelye Bob Gibbon	U.S.F.&W.S. Student Co-op Funds
McAdam	Bait Trapping	Walter Sangster	Northeastern Wildlife Stn.
<u>NOVA SCOTIA</u>			
Yarmouth	Bait Trapping	Howard Brown Allen Francis	U.S.F.&W.S. N.S.Consv. Officer
Hollahan's Lake	Bait Trapping	Fred Payne	N.S.Dept.Lands & Forests
		George Archibald	Student Co-op Funds
Nova Scotia	Night Lighting	Fred Payne	N.S.Dept.Lands & Forests
		Lawrence T.Willet	N.S.Dept.Lands & Forests
<u>PRINCE EDWARD ISLAND</u>			
Upper Hillsbore River Valley (Central P.E.I.)	Bait Trapping	George Arsenault Wayne Neily	C.W.S. Student Co-op. Funds

Generally it can be said that the 1965 program throughout eastern Canada fell far short of the desired quotas and as a result a somewhat larger field operation was planned for 1966. In the Maritimes it was decided that we would attempt trapping at all previous sites except the one at Williamston Lake. In addition, we agreed to add two new banding stations, one on Prince Edward Island and another on Grand Manan.

Table 2. 1966 Maritime Banding Projects

Station	Type	Personnel	Agency
<u>NEW BRUNSWICK</u>			
*N.B.-N.S. Border Area	Bait Trapping	Bob Gibbon Mike Mesheau Ray Glasrud	Student Co-op. Funds C.W.S. casual C.W.S. summer student
*Grand Manan	Bait Trapping	Vernon Bagley	C.W.S.
Saint John River	Night Lighting	Gerald Cummings Wm. Forward James Wilson	U.S.F.&W.S. U.S.F.&W.S. Student Co-op. Funds
Saint John River	Bait Trapping	James VanWeelden Joseph Ware	U.S.F.& W.S. Student Co-op. Funds
McAdam	Bait Trapping	John Sangster Walter Sangster	Northeastern Wildl. Station Northeastern Wildl. Station
<u>NOVA SCOTIA</u>			
*Yarmouth	Bait Trapping	Stan. Teeple George Inch	C.W.S. Student Co-op. Funds
Hollihans Lake	Bait Trapping	Wayne Neiley	Student Co-op. Funds
Southwest Region	Night Lighting	Fred Payne L.T. Willett	N.S. Dept. Lands & Forests N.S. Dept. Lands & Forests

Table 2. 1966 Maritime Banding Projects (concluded)

Station	Type	Personnel	Agency
<u>PRINCE EDWARD ISLAND</u>			
*Central	Bait Trapping	Doug. Beach	Student Co-op. Funds
		Richard Swain	Student Co-op. Funds
*Eastern	Bait Trapping	Bill Grant	Student Co-op. Funds
		Richard Anderson	Student Co-op. Funds

*Areas covered in more detail by this report.

The remainder of this report will deal specifically with only those aspects of the 1966 Maritime banding program with which I was directly involved, and with only those stations which were under my supervision. Specifically, these stations were as follows:

1. New Brunswick-Nova Scotia Border Area
2. Central Prince Edward Island
3. Eastern Prince Edward Island
4. Yarmouth County, N.S.
5. Grand Manan Island, N.B.

The actual operation of the banding sites was carried out for the most part by the four 2-man student banding crews. (see Table 2.) Mr. Vernon Bagley (Sanctuary caretaker on Grand Manan Island) operated the Grand Manan station by himself, and Mr. Ray Glasrud (C.W.S. student assistant) assisted in the Border Area for approximately three weeks. Each of the crews

was given the responsibility for carrying out the banding operation in one area, with assistance and direction given by Mr. Whitman (C.W.S. Biologist, Sackville) and myself.

Procedure

Potential banding sites were first located through ground and aerial reconnaissance carried out in late July and early August. On August 1st the banding assistants reported to Sackville, and several days were spent in a brief orientation which included waterfowl recognition, aging and sexing techniques, trap construction and trapping methods. The crews were then dispatched to their respective areas.

As indicated, in most areas waterfowl concentrations were first located by either ground or aerial reconnaissance. Once a suitable area was located potential trap sites were chosen. These sites were then heavily baited with a mixture of whole kernel corn and feed wheat, and following a short interval of prebaiting, traps were installed and baiting continued.

The traps employed at most sites were large funnel traps constructed of 1 x 2 inch weldwire covered by netting, and measuring approximately 6' x 4' x 4' in height. These traps were most often situated in one to two feet of water, with the funnel facing the shoreline.

Trapping and banding went fairly smoothly, although we experienced great difficulty getting ducks onto bait and considerably more effort was expended than in the previous year for the number of birds trapped.

Experimental trapping techniques were tried in tidal areas on Prince Edward Island and along the eastern New Brunswick coast. At one location we tried baiting the birds onto dry land; at another we attempted to trap birds in an area barely flooded at high tide; and in still another we tried a floating trap. In each instance the experiment was not successful.

Problems encountered

Throughout the Maritimes the major problem was simply that in many areas the ducks would not take the bait and could not be induced into the traps. This problem was encountered in tidal, brackish and freshwater areas and always resulted in no birds being trapped. In two instances the concentrations seemed to be loafing, while in other areas the birds seemed conditioned to other foods. In future years other techniques should be tried or new techniques developed, in order to trap and band some of these birds.

A serious problem which has created difficulties in both years, has been the necessity for students to leave early in September in order to register for classes. This has resulted in trapping either ceasing or being interrupted just when the populations of black ducks at most stations were starting to

build up. If it were practicable to continue banding at all stations until at least the 23rd of September, our trapping success with black ducks should increase markedly.

Predation by man and raccoons was again a problem, and as in 1965, for some unknown reason was largely confined to the sanctuary areas. Although unpleasant, it was not serious enough to disrupt the banding program.

AREA SUMMARIES

Border Area

Trapping and banding success in this area was very different from that of 1965. Blue-winged teal were abundant, whereas black ducks and green-winged teal were much less plentiful than in the previous year. Fortunately, black ducks began to move into the area early in September and our success in banding blacks improved; nevertheless, our totals for this species were only about half of last year's totals.

Table 3. New Brunswick-Nova Scotia Border Area

Species	Totals	
	1965	1966
Black duck	575	240
Mallard	59	5
Mallard-black hybrid	4	3
Blue-winged teal	387	447
Green-winged teal	136	16
Wood duck	31	28
Pintail	21	14
Baldpate	20	3
Ring-necked duck	<u>18</u>	<u>9</u>
	1251	765

Note: For a detailed breakdown by station, see Tables 9 and 10 on pages 15 and 16.

Central Prince Edward Island

During the 1966 banding season the central area of Prince Edward Island had a substantial waterfowl population. Black ducks generally frequented tidal flats, whereas teal were found on most fresh and brackish water areas. As in 1965, we were again able to band several hundred teal, but for the most part were unsuccessful in trapping black ducks in the central region.

Table 4. Central Prince Edward Island

Species	Totals	
	1965	1966
Black duck	5	9
Blue-winged teal	267	427
Green-winged teal	109	77
Wood duck	8	4
Pintail	12	12
Baldpate	4	12
Ring-necked duck	5	-
	<u>410</u>	<u>541</u>

Note: For a more detailed breakdown by area see Tables 9 and 10 on pages 15 and 16.

Eastern Prince Edward Island

Judging from both ground and aerial reconnaissance, eastern Prince Edward Island appeared to have little potential for banding. Black ducks were observed only in small groups, teal were not abundant and those present were widely scattered on several water areas; nevertheless, bait trapping yielded a small number of new birds caught in each trap almost daily. As repeats were at a minimum the results suggest a small yet continuous movement through the area throughout the banding season.

Table 5. Eastern Prince Edward Island

Species	Totals	
	1965*	1966
Black duck	17	221
Mallard	-	3
Blue-winged teal	1	92
Green-winged teal	6	20
Wood duck	-	1
Ring-necked duck	-	5
	<u>24</u>	<u>342</u>

* During 1965 bait trapping in Eastern Prince Edward Island was carried on for one week only.

Note: For a detailed breakdown by station see Tables 9 and 10 on pages 15 and 16.

Yarmouth County

In 1965 U.S. Fish and Wildlife Service agent Brown attempted to trap and band waterfowl in the Yarmouth County, N.S., area with very little success. As the area is known to be one of the more important waterfowl areas in Nova Scotia, it was decided that another attempt should be made in 1966. As in 1965, a very determined effort was made to bait trap birds in Yarmouth County, with little success. Although black ducks were present both years, it was not possible to get the birds to take bait.

Table 6. Yarmouth County

Species	Totals	
	1965* Aug.4-31 Appr.	1966 Aug.14-Sept.7
Black duck	32	1
Blue-winged teal	-	12
Green-winged teal	4	4
	<u>36</u>	<u>17</u>

* Agent Brown's report was not sent through this office. I was advised that he trapped only 36 birds. This figure is not included in our total.

Grand Manan

Following discussions with Mr. Vernon Bagley, caretaker of the C.W.S. sanctuary on Grand Manan, it was decided to include Grand Manan in the 1966 Banding operation.

Although trapping success was not what we had hoped for, we think the problems encountered can be readily overcome. By involving Mr. Bagley in the initial orientation in Sackville and by providing more technical assistance at the beginning of the project, I believe his trapping success can be greatly increased.

Table 7. Grand Manan

Species	<u>Totals</u> 1966
Black duck	70
Blue-winged teal	3
Green-winged teal	43
	116

CONCLUSIONS

The banding results and surveys during the 1966 banding program indicate quite radical changes in the distribution and movements of waterfowl in both the New Brunswick-Nova Scotia Border Area, and in Prince Edward Island. We were able to trap and band similar numbers of black ducks and teal as in 1965, but only as a result of a considerable increase in effort.

Table 8. Total ducks banded, 1965 and 1966

Species	Totals	
	1965	1966
Black duck	597	541
Mallard	59	8
Mallard-black hybrid	4	3
Blue-winged teal	655	981
Green-winged teal	251	160
Wood duck	39	33
Pintail	33	26
Baldpate	24	15
Ring-necked duck	23	14
	1685	1781

Note: For a breakdown of total ducks by province see Table 10a. For the complete breakdown for all provinces by station see Tables 9 and 10 on pages 15 and 16.

Experimental trapping was carried out in coastal, tidal waters with no success. Although it is difficult to say whether experimental trapping is warranted, a high percentage of our black ducks frequent tidal areas after the first week of September, and we have had no banded sample from these concentrations. I would, therefore, recommend that in 1967 one crew be given the specific task of finding a suitable technique for trapping these birds.

An aerial reconnaissance of the Magdalens was carried out in late August by Jake Chamberlain (U.S. Fish and Wildlife Service) and myself. As in 1965, we located a concentration of approximately 500 waterfowl in the large tidal lagoon just south of Grindstone Island. It would seem advisable to attempt to band these birds. However, I seriously doubt that we will trap enough birds to justify the cost and effort required. I base this opinion on our continued failure to trap black ducks in tidal areas, plus the fact that we will have to train a new man to do the work.

A determined effort in southwestern Nova Scotia has again yielded very few birds. I believe that we have given pre-season banding a fair trial in this area and I recommend that it now be discontinued. Likewise, our banding operation in central Prince Edward Island (although very successful with teal) has yielded a total of only 14 black ducks in two

years of trapping. Therefore, I also recommend that this station be closed until such time as there is a specific demand for the banding of either species of teal.

During discussion with Dr. Erskine, he has suggested that we may have been missing a good opportunity by not attempting to trap black ducks in Cape Breton. As we have had little or no success with pre-season banding in southwest Nova Scotia, I suggest that we simply shift our effort to Cape Breton for 1967.

RECOMMENDATIONS

1. Continue pre-season banding -

N.B.-N.S. Border Area	- 1 crew
Eastern P.E.I.	- 1 crew
Grand Manan	- Mr. Bagley
2. Discontinue pre-season banding - S.W. Nova Scotia
3. Where practicable, continue our banding effort until September 23, or even later, in areas where a closed or later hunting season would permit.
4. Undertake experimental trapping to determine suitable techniques for catching black ducks on tidal areas.
5. Continued assistance to the banding crews through aerial reconnaissance.
6. Establish a new banding station in Cape Breton in the Mabou, Lake Ainslie district.

Table 9. Complete summary of banding 1965.

Species	Area												
	N.B.-U.S. Border					Central P.E.I.				East.P.E.I.		TOTAL	
	Amherst Point	Jolicure	Shenogus	Trentwater R.	Dixon's Pond	Derecho Pt. Pond	Piscuit Pond	Hillsborough R.	Bog Pond	Black Pond	Cardigan R.		
Black Duck	A	87	20		1	14							
	I	236	156	15	12	11							433
	L	1	4				4	1					9
	U	25	2		1								28
Mallard	A		1			31							32
	I		1			24							25
	L		2										2
Black-Mallard	A		1			1							2
	I		1			1							2
G.-w. Teal	A	41	11	5	1		24	1	6	19		1	109
	I	66	7	2	3		23		29	5		5	140
	L						2						2
B.-w. Teal	A	42		1			35	11	5				94
	I	262	35	39			128	21	65		1		551
	L	7					2						9
	U	1											1
Wood Duck	A		27				7	1					35
	I		4										4
Pintail	A	2	3			1							6
	I	8	6		1	1	5	3	4				27
Baldpate	I	10			1			1	3				15
	L	9											9
R.-n. Duck	A						1						1
	I		11				1						12
	L		7				3						10
Totals		787	299	62	20	63	235	39	112	24	23	1	1685

* Includes November banding at Amherst Point

Table 10. Complete summary of banding 1966.

Species	Areas													TOTAL
	N.B.-N.S. Border					East. P.E.I.			Central P.E.I.					
	Amherst Point	Jolicure	Missungash	McLeod's Pond	Stenopus	Black Pond	Cardigan	Creek River	Deroche Pt. Pond	Plisquid Pond	Hillsborough R.	Hunter River	Plymouth Lake Yarmouth	
Black	A	14	17	2		16	6	18	1				40	114
	I	122	75	8		115	22	30	2	2		1	30	408
	L						9		3					12
	U	1	1			4		1						7
Mallard	A		1			1		1						3
	I	2	2			1								5
Black- Mallard	A	1												1
	I	2												2
G.-W. Teal	A	7		2		3	1	9	23		3	8	20	76
	I	5	1	1		1		6	34	2	4	3	23	84
B.-W. Teal	A	32	1		18	8	2	2	18	10	13	15	1	120
	I	312	6		6	48	9	20	70	56	130	110	2	853
	L				72	3			5					8
Wood duck	A		17	11				1	4					33
Pintail	A	1												1
	I	1		12					3	3	6			25
Baldpate	A								1					1
	I	3							4					7
	L								7					7
R.-N. Duck	A					1								1
	I		2	4		4								10
	L		3											3
Totals		503	126	40	6	90	205	49	88	175	73	156	137	1781

Table 10a. Summary of banding 1965, 1966

Area	1965		1966	
	Blacks	All ducks	Blacks	All ducks
N.B.-N.S. Border Area	575	1251	240	765
Central P.E.I.	5	410	9	541
Eastern P.E.I.	17	24	221	342
Yarmouth County	32*	4*	1	17
Grand Manan	-	-	70	116
TOTALS	597	1685	341	1781

* Agent Brown's figures, not included in our total.

Table 11, following, is a photocopy of the cost breakdown for the Maritime Provinces and Newfoundland as prepared for the Banding Committee of the Atlantic Waterfowl Council.

Table 11. Cost break-down of 1966 Co-operative banding program for Eastern Canada and Atlantic Flyway States - continued

Banding Station	Cost Estimates					Total Cost	Total Birds	Cost per bird
	A	B	C	D	E			
NEW BRUNSWICK								
St. John River (night lighting)	3,300	1,700	640	16	30	5,686	1,709	3.33
St. John River (bait stations)	2,150	450	201	130		2,931	92	31.86
N.B. - N.S. border marshes	2,000	312	195	291		2,798-	728	3.84
Grand Manan	600			82		682	117	5.83
NOVA SCOTIA								
Hollahans L.	600	200		72		872	175	4.98
N.S. General	1,500	700	50	134		2,384	655	3.64
Yarmouth	1,100	100	30	90		1,320	17	77.65
P.E.I.								
Eastern P.E.I.	1,600	100	3000	188		2,188	341	6.42
Mt. Stewart	1,690		489	148		2,327	542	4.29
NEWFOUNDLAND								
Birchy Basin	390	64	281	448		1,183	214	5.53
Lobstick L.-Labrador	3,207	1,725	4,825	669	150	10,576	43	245.95
MARITIME TOTAL	18,137	5,351	7,011	2,268	180	32,947	4,633	7.11
TOTAL CANADA	52,954	14,051	24,442	6,932	545	98,962	26,453	3.74

A - Salaries

B - Per diem and travel other than government vehicle

C - Automobile, gas, oil, repairs, boats, motors,
rentals, 2-way radio, helicopter, trailer, etc.

D - Pliers, bait, wire, hog rings, etc.

E - Other