Cape Breton Waterfowl Surveys - 1988

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Caadian Wildlife Service
Sackville, N.B.

Introduction

Between 1967 and 1973, 3026 birds were banded on Cape Breton Island. Of that total 1795 (59 percent) were Black Ducks which were then, and continue to be the target species in Atlantic Canada. The station was terminated for several reasons:

(1) the Black Duck quota of 500 birds per season was never achieved (omitting 1972 totals, the yearly average was approximately 290 blacks;

(2) excessive travel costs and logistics compared to other stations of the day.

(3) hypothesis that Cape Breton birds could be intercepted and banded easier at other stations.

Discussion

In 1967 two years after The Co-operative Waterfowl Banding Program was initiated in Atlantic Canada, a Cape Breton bait-trapping station was started. During a seven year span (1967-1973), ten species of waterfowl, Black X Mallard Hybrids, and two species of marsh birds were banded. Approximately three thousand ducks were banded. Black Ducks, Blue-winged Teal, Ring-necked Ducks, and Green-winged teal were the most important species (Table 1). The night-lighting effort in Cape Breton was restricted by limited habitat to work, travel distance safety considerations, poor results and because a bait-trapping crew was working the area. Night-lighting was however, carried out on two occasions (Table 1).

Additional station information (duration, banders, comments) are summarized in Table 2. More data are available in the seven station reports in the CWS-Atlantic Region Library in Sackville, N.B. A copy of the 1973 report which is representative of all efforts is found in the Appendix. Extensive observations on weather, waterfowl, eagles and trapping technique are included in the station reports.

Two areas (Kenloch and McCormicks Corner) on Lake Ainslie were worked throughout the seven year bait trapping period (Table 3). Known specifically as a diving duck (ring-necks, goldeneye) production area, Lake Ainslie was also the most successful in capturing dabbling ducks. Most waterfowl observed was the unpredictable early flight of migrants. This situation was consistent for all of the trapping area, and the general concensus was that this was an area of low production with migrants justifying the trapping effort.

In August, 1988 waterfowl observations were conducted throughout the area of the old bait trap station to determine if a future banding effort was practical. Early morning and late evening counts were carried out on most areas to determine the presence of broods. Forty-six broods were observed within this zone with fifty percent located at three locations on Lake Ainslie. The Scotsville marsh at the head of the southwest Margaree River was not surveyed. However, it has traditionally produced around ten broods of waterfowl (pers. comm. T. Erskine, CWS Sackville). The species composition of broods in the area would be 4 Ring-necked Duck, 2 Goldeneye, 2 Black Ducks, 1 Merganser and 1 teal species (Table 4). The total production for the Lake Ainslie Area could exceed fifty broods as many were missed and not all areas were surveyed. This number of broods indicates a very important production area for the Atlantic Region.

Ground observations were carried out ten days later to document changes in waterfowl numbers and behaviour. Although brood observation were secondary and visits to many areas were at inopportune times for brood observations, additional broods were recorded (Table 4). Care was taken not to duplicate brood sightings.

With the exception of one area, waterfowl numbers varied little over the two week period of surveys and the results are considered representative of the local population. Brood development had progressed and many family groups were testing their wings flying between freshwater and saltmarsh habitats.

On August 28 the Middle River Marsh at Nyanza contained 75 Black Ducks, 10 Blue-winged Teal, and 8 Common Mergansers. The status of these Black Ducks is unknown and the flock is notable because it was the largest concentration of Black ducks sighted. Situated between the Whycocomagh and Baddeck marshes

where no blacks were observed, this area may have concentrated the total Black Duck production. In 1956 James K. Lowther banded waterfowl at Nyanza under the directin of Brian C. Carter, the Dominion Wildlife Officer for the Maritime Provinces. Only twenty-six ducks were banded (20 Green-winged Teal, 6 Black Ducks). However, a concentration of 600 Black Ducks was recorded.

On September 7, 8, 1988 parts of Cape Breton Island were surveyed with a CS206 aircraft. The coastline from Troy to Margaree Harbour, Lake Ainslie, the Margaree River, Indian Bay (Nyanza), the Mira River and the coastline from Glace Bay to St. Ann's Bay were surveyed. The sites trapped during the 1960's-70's banding operation had relatively good numbers of blacks (Table 5). A total of 143 blacks were recorded at Judique, Mabou Harbour and McCormack's Corner. The Mira River, and the shoreline at Indian Bay, two areas not previously trapped, also had flocks of blacks when surveyed. Those areas are too far removed from the previous trapping sites to be included in the same bait station. However, a second station on the east side of Cape Breton will be considered.

Several potential banding sites and all of the sites formerly banded were surveyed for waterfowl use and banding possibilities. Many of the areas were not used to their fullest potential and/or were overlooked. Appendix "A" includes a basic description with recommendations for each area.

Recommendations

Bait trapping in Western Cape Breton should be limited to the Lake Ainslie to Judique Intervale area. Travel outside this zone is too costly and time consuming.

All past banding crews were university bound in early September. An effort to find experienced banders able to work September is necessary. A six week banding period beginning mid August may prove beneficial.

Five trapping techniques should be employed in this area. Bait trapping and night lighting efforts have been successful in the past. To compliment these techniques a pointing dog can be used on the smaller areas. Several birds were captured this fall and areas have been identified for future work. Lake Ainslie is perfect for a drive trap operation. The trap and lead poles can be built during the nesting season so set-up time would be less than one hour. A diving-duck trap may prove more successful for Ring-necked Ducks and goldeneye.

Upwards to 100 adult male ring-necks and goldeneye moult on Lake Ainslie in late July. The drive trap technique could be tried on these birds.

An effort to identify the natal areas for staging Black Ducks on Cape Breton is important. If they are Newfoundland or Labrador birds, banding such birds in Cape Breton would be an indirect but the most efficient operation to date.

A complete data analysis of Cape Breton banded birds is required. A computer analysis for Cape Breton Black Ducks is now available from CWS Sackville. Data for the other species should be requested from Ottawa.

The expertise for quality transmitter work on waterfowl is now available at the CWS Sackville office. Western Cape Breton would be an ideal location for such work on our hinterland populations. The feasibility of such work would depend on Parker's transmitter study at Shepody NWA.

A well qualified birder should be employed for a six week period to monitor bird acitivity around St-Paul Island. Documentation of Newfoundland

avian export would be invaluable to understanding the Cape Breton waterfowl population and provide useful information on other bird life.

Banding local birds with dogs would enhance future data interpretation. To date 180 local blacks vs. 1514 hatch year birds have been banded. The recovery percentages for harvested birds are nearly identical (19.4 vs. 18.1). A similar trend (10.3 vs 10.5) is evident for American recoveries. Considering that only 29 local recoveries and 274 hatch year recoveries are on record this figure may be statistically unreliable in determining differential population characteritics and harvest or migratory patterns.

In addition to the Kenloch, MacCormick Corner and Baddeck River areas night lighting is possible in the Scotsville area.

When looking at natural unaltered habitat and associated waterfowl numbers the Lake Aislie area of Cape Breton is probably one of the most productive in Atlantic Canada. If similar habitat types exist in Cape Breton an effort to identify those is recommended.

The days of room and board at $25-30/week are over and probably not practical. Students will require a cottage with house keeping facilities. Units are available at Inverness Beach Vilage (902-258-2653), the present rate being $300.00/wk. A discount for duration and fall season seems logical. The Inverness Lodge (902-258-2193) is bulding new units for 1989.

Students working this area are in for a treat. A testimony by Alexander Graham Bell is indicative of this area - "I have travelled around the globe. I have seen the Canadian and American Rockies, the Andes and the Alps and the Highlands of Scotland; but for simple beauty, Cape Breton outrivals them all".

Table 1. Bait trapping and night lighting summary for Cape Breton Island, 1967 to 1973

Species	1967	1968	1969	1970	1971	1972	1973	Total
Bait-trapping								
Mallard	0	6	1	0	0	0	2	9
Black Duck	241	341	331	342	190	44	306	1795
Black X Mall. Hyb.	0	1	0	4	0	0	0	5
Green-w. Teal	6	40	38	36	48	104	45	317
Blue-w. Teal	6	21	72	42	61	123	108	433
Pintail	1	0	1	1	0	0	1	4
Ring-necked Duck	22	58	66	41	137	38	60	422
Wood Duck	5	1	8	4	2	1	2	23
Am. Wigeon	0	0	0	0	0	0	1	1
Am. Goldeneye	2	0	0	0	3	0	0	5
Com. Merganser	0	0	1	0	0	0	0	1
Pied-billed Grebe	0	0	2	1	0	0	1	4
Am. Coot	0	0	0	0	0	0	7	7
Totals	283	468	520	471	441	310	533	3026

Nightlighting	1969		1971	
	Lake Ainslie	Baddeck River	Lake Ainslie	Total
Black Duck	21	10	1	32
Green-winged Teal	29	5	-	34
Blue-winged Teal	35	38	-	73
Ring-necked Duck	9	6	-	15
	94	59	1	154

Table 2. Summary of Cape Breton Banding Stations 1967-73

Year	Duration	Students	Total Banded	(B.D.	R-n Duck	G.-w. Teal	B.-w. Teal)	Remarks
1967	1 Aug-15 Sept	Rex Coupland Richard Anderson	283	241	22	6	6	An unreliable supply of cracked corn and unpredictable waterfowl movements hampered trapping.
1968	2 Aug-12 Sept	Richard Anderson Simon Lunn	468	341	58	40	21	Unstable weather affected trap success and waterfowl movements. Travelling 250 mi/day and working 15+ hrs/day was beyond work expectations.
1969	2 Aug-12 Sept	Simon Lunn H. Hatfield	520	331	66	38	72	Whycocomagh produced well this year, however Baddeck and Nyanza were disappointments. Other sites consistent, however long days and excessive travel were required.
1970	2 Aug-13 Sept	Simon Lunn Philip Van Zoost	471	342	41	36	42	Concensus that station is a late area with migrants moving in Sept at close of banding. Station travel restricted to western portion of island.
1971	9 Aug-15 Sept	Wayne Larouche Richard Rose	441	190	137	48	61	A hurricane upset banding procedures dramatically.
1972	1 Aug-15 Sept	Richard Rose Ian Cameron	310	44	38	104	123	"Hurricane Dawn" completely wrecked station.
1973	1 Aug-15 Sept	Ian Cameron Cyril MacDonald	533	306	60	45	108	A good report for future reference. Representative of previous efforts.

Table 3. Breakdown for numerically important species banded by area at the Cape Breton Banding Station 1967-73

Location/Year	Black Duck	Ring-n. Duck	G.-w. Teal	B.-w. Teal
Lake Ainslie (2)				
1967	100	13	1	3
1968	84	58	3	-
1969	67	65	2	-
1970	118	40	1	1
1971	145	129	-	6
1972	41	38	65	47
1973	132	56	12	33
Mabou				
1967 L.S.	28	-	-	-
1968	59	-	-	-
1969	14	-	-	-
1970	79	-	-	-
1971	-	-	-	-
1972	29	-	-	-
1973	-	-	-	-
Judique Ponds (3)				
N-Catharine 1967	11	2	1	1
Centre 1968	14	-	9	15
S-McKays 1969	116	-	22	65
1970	86	-	32	39
1971	40	8	61	55
1972	3	-	39	76
1973	115	3	28	69
Margaree Area (2)				
1967	59	7	4	2
1968	126	-	19	6
1969	65	25	1	7
1970	59	1	3	2
1971	5	-	-	-
1972	-	-	-	-
1973	-	-	-	-
Indian Pt. Pond or Judique Interval				
1967	43	-	-	-
1968	33	-	2	-
1969	-	-	-	-
1970	-	-	-	-
1971	-	-	-	-
1972	-	-	-	-
1973	30	-	5	6

Table 3. Breakdown for numerically important species banded by area at the Cape Breton Banding Station 1967-73

Location/Year		Black Duck	Ring-n. Duck	G.-w. Teal	B.-w. Teal
Whycocomagh (3)					
Nyanza					
Baddeck	1968	25	-	6	-
	1969	69	-	2	-
	1970	-	-	-	-
	1971	-	-	-	-
	1972	-	-	-	-

Table 4. Brood observations within the Judique - Lake Ainslie zone of Cape Breton 14-16 August 1988

Date	Location	Species	Number	Age
14 Aug 88	Indian Pt. Pond (Judique Intervale)	1 Red-b. Merganser	7	2B
		1 Black Duck	5	2C
		2 Black Duck	12	3+
		Black Duck - 2 broody females		
14 Aug 88	McKays Pond	1 Ring-n. Duck	3	2B
		1 Black Duck	6	2C
		1 Black Duck	5	2C
		1 Blue-winged Teal	6	3+
14 Aug 88	Judique Ponds	1 Black Duck	3	2C
		1 Black Duck	6	3+
		(2 blacks, 1 pintail unknown status)		
14-15 Aug	Livingstones Pond	1 Black Duck	6	3+
		1 Black Duck	7	3+
		1 Blue-winged Teal	4	3+
		1 Green-winged Teal	12	3+
14 Aug 88	Livingstones Pond	1 Black Duck	6	3+
		1 Black Duck	7	3+
		1 Blue-w. Teal	4	3+
		1 Green-w. Teal	12	3+
14 Aug 88	Campbells Brook Pond	NIL		
15 Aug 88	Murphys Pond	NIL		
15 Aug 88	Sutherlands Pond	NIL		
15 Aug 88	Johnny Bans Ponds			
	#1 Front-barrier beach	NIL		
	#2 Circular	NIL		
	#3 Rectangular	1 Black Duck	3	2A
15 Aug 88	Indian Point Ponds (Mabou Harbour)	NIL		
15 Aug 88	SW Mabou Estuary	2 C. Merganser	18	3+
		2 Black Duck	13	3+
		2 Black Duck	15	3+
		(1 Mallard - 1 Green-w.Teal unknown status)		

Table 4. Brood observations within the Judique - Lake Ainslie zone of Cape Breton 14-16 August 1988 ...Cont'd

Date	Location	Species	Number	Age
15 Aug 88	Mabou River	1 Blue-winged Teal	5	3+
		3 Blue-winged Teal	18	3+
		6 Black Duck	36	3+
		2 Green-winged Teal	11	3+
	Rankins Pond	1 Black Duck	4	3+
	MacNeils Pond	(single Green-winge Teal unknown status)		
27 Aug 88	NE Mabou River (cove area)	1 Black Duck	4	3
15-16 Aug 88	The Pond	1 Blue-winged Teal	7	3
		1 Blue-winged Teal	4	3
		1 Ring-necked Duck	4	2B
		1 Ring-necked Duck	5	2B
		1 Ring-necked Duck	7	2B
15-16 Aug 88	Lake Ainslie (Kenloch)	1 Ring-necked Duck	8	2B
		1 Ring-necked Duck	4	2B
		1 Black Duck	3	3+
		1 Ring-necked Duck	5	2B
		1 Ring-necked Duck	2	1B
		1 Ring-necked Duck	9	2C
		1 Ring-necked Duck	2	2C
		1 Ring-necked Duck	5	3+
		1 Ring-necked Duck	3	1B
		1 Ring-necked Duck	7	2B
		1 Black Duck	5	3+
		(1 Adult female Black Duck in molt)		
16 Aug 88	Lake Ainslie (McCormick's Corner)	1 Ring-necked Duck	7	1B
		1 Ring-necked Duck	4	1A
		2 Ring-necked Duck	4	2B
		1 Ring-necked Duck	8	2C
		1 Ring-necked Duck	9	2B
		2 Ring-necked Duck	10	2B
		(1 Ad. male Ring-n. Duck in molt)		
		(Black Ducks - 1 Blue-winged Teal unknown status)		
27 Aug 88	Scotsville	1 Goldeneye	1	1B
		1 Ring-necked Duck	6	2B
		1 Ring-necked Duck	7	1B
		1 Ring-necked Duck	6	2C
		1 Ring-necked Duck	6	3+
		1 Black Duck	4	3+
		(Black Duck broody female)		
		1 Adult Male Wood Duck		

Table 4. Brood observations within the Judique - Lake Ainslie zone of Cape Breton 14-16 August 1988 ...Cont'd

Date	Location	Species	Number	Age
28 Aug 88	Margaree River	1 Black Duck	6	3+
28 Aug 88	Whycocomagh	1 Ring-necked Duck	6	3
		(4 Blue-winged Teal unknown status)		
28 Aug 88	Middle River or Nyanza Marsh	1 Common Merganser	8	2C
		(75 Black Ducks - 10 Blue-winged Teal unknown status)		
28 Aug 88	Baddeck River	1 Ring-necked Duck	7	3+
		1 Blue-winged Teal	4	3
		1 Ring-necked Duck	6	3
		2 Ring-necked Duck	14	3
		1 Ring-necked Duck	4	2C

Table 5. Black Ducks recorded during an aerial survery of parts of Cape Breton Island - September 7, 8, 1988

Location	Number of Black Ducks Recorded
Troy	16
Judique	44
Mabou Harbour	63
McCormick (Lake Ainslie)	38
North Ainslie	14
Scotsville	0
Nyanza (Bras D'Or Lake)	42
East Bay	12
Mica River (to Victoria Bridge)	97
Glace Bay	24
Indian Bay and Sediment Pond	40 + 60
North Syndey	0

Basic description of some waterfowl habitat throughout Western
Cape Breton

Pond

ow saltwater tidal pond with extensive eelgrass beds and heavy
in sheltered areas making canoeing difficult. The interval
the railway is freshwater with good pond and marsh diversity.
working a dog and has potential for bait trapping. Be careful
along railway bed.

water pond with cattail and bullrush emergents and abrupt forest
hidden bays provided limited brood cover. Bait trapping and
possible. The main highway forms part of the southern boundary
access or observations. Some saltwater flushing is possible
s or very high tides through a highway culvert.

ponds known as Catharine Pond & Judique Pond south, or Allan
Gillis Pond. Both are freshwater with limited emergents and
00 percent tidal flushing during storms. Substrate is very mucky
requires special technique. Waterfowl have traditionally used
night time habitat. Both are barrier beach ponds exposed to the
human disturbance such as swimming and gravel removal. The
tat with dominant emergent such as bullrush, cattail, spike rush
is being destroyed by grazing cattle.

Campbells Brook Pond and Murphys Pond

Two small coastal ponds which receive tidal influence daily. They are situated near a new government wharf and a fish plant where continual disturbance would limit waterfowl utilization. No waterfowl were observed on these areas and both are unsuitable for trapping waterfowl.

Livingstone Pond

A large saltwater pond with vast eelgrass beds bordered by thick mixed woods forest. The inlet at Captains Brook provides excellent production habitat with typical freshwater emergents. Pond bottom is very soft and trap sites may be limited.

Sutherlands Pond

Small brackish pond surrounded by grass and spirea edge and stunted spruce. The seaward boundary is a fragile dune system posted for protection by Lands and Forests signs. Very poor access through a car dump before reaching a beautiful secluded beach. Bullrush is the dominant emergent and although pond has potential no waterfowl were observed.

Johnny Bans Ponds

The main most seaward pond is most diverse with many plant communities - flooded alder and willow and blue flag beds, cranberry, edged with cattail and bullrush interspersed with beds of yellow pond lily. Upland area is stunted spruce and extensive sand dune systems. Attractive and productive but subject to beach disturbance. No birds were observed.

Johnny Bans #2

Small circular pond surrounded by a solid spruce edge with alder willow spirea interspersed. Cranberry and water shield are common. Pond area in 95 percent choked with dense cattail and bullrush which eliminates most waterfowl utilization.

Johnny Bans #3

A rectangular pond with good interspersion of bullrush, open water, and pond weed communities. Pond edge is dense grass and abundant cranberry vines surrounded by stunted spruce. One Black Duck brood was observed.

Indian Point Ponds

Two small ponds edged with spartina and associated grasses with an upland coniferous forest. Ponds are salt with dense eelgrass beds. A low gravel and shale beach separates pond area from Mabou Harbour. No waterfowl were observed in area.

Southwest Mabou Estuary

A beautifully diverse area with excellent pond and channel interspersion. Salt marsh plant community is mostly spartina. Cattail is present in small stands. Tidal fluctuations may influence trapping however a dog banding exercise may also prove successful.

Mabou River Estuary

Intricate island pond and backwater system with cattail and bullrush edges on most ponds. Alder, willow, farm fields with elms, and mixed woods bounded by the highway and railway are important to this system. Good numbers of waterfowl and broods were observed in the estuary system and at Rankin and MacNeils Brook Ponds. Banding in this area should be productive.

Northeast Mabou

A small cattail cove near the entrance to Mabou Harbour appeared very productive and contained one Black duck brood. Trapping here and at the other Mabou sites would enhance the program.

MacDonalds Glen Pond

Situated between farm and fishing communities, and surrounded by stunning hulls it is probably the most scenic pond area in the region. Viewed from the Mountain Road, it is a spectacular sight. Gypsum banks surround the ponds and spartina - bullrush and cattail are the dominant plant species. The lower half is flushed with seawater daily. No waterfowl were observed but it has potential for future dog work.

Whale Cove Pond

Small pond located in hollow between highway and graveyard - probably most scenic in Nova Scotia. Flushed by daily tides, emergent bullrush grew only on the most distant section from the sea. No waterfowl were observed on area and status is low.

MacKinnons Beach Pond

Situated behind dune system near cottages and farming influence. Pond is 95 percent open with limited pondweed and cattail vegetation. Human disturbance may be a factor however pond is suited for dog work. No birds were sighted on area.

Margaree River System

Large island and river system with dense grasses, elms, alder, and flooded swamp conditions with little defined edge. Past bait trapping efforts had limited success. Further investigation is required for this area.

Lake Ainslie System

Large freshwater lake known for brood production and waterfowl utilization. The Kenlock, Scotsville, The Pond and MacCormicks Corner areas are suited for various waterfowl banding techniques. Bait trapping and nightlighting have been successful in the past.

Banding Report

Cape Breton

1973

Crew Members

Ian Cameron
Cyril MacDonald

Equipment

The following equipment is on store at the Department of Lands and Forests depot, pole barn, top floor Baddeck.

Wire traps: 13 traps of varying sizes all are tagged. The tags indicate size of trap and the location at which it was used this season. All traps but one are in good condition for several seasons yet. Old net on four medium traps will have to be replaced next year.

Poles: Sufficient for traps in store and approximately 15 extra, all in good condition.

Net: About 2 fathoms of 12 foot net, more than enough to replace old net.

Burlap: Approximately 15 - 20 feet of burlap, four feet wide.

Sign posts: 5 sign posts and 2 signs minus posts, sufficient new signs will be needed next year.

Bottoms: 3 - 2 small size, 1 large

Corn: 5 bags cracked corn.

Also on store are the poles necessary to construct floating trap.

Equipment needed

Enough net wire and poles for 5 medium size traps: 1 to replace trap in poor condition. 2 to concentrate more on Judique Pond South. 2 to concentrate more on Mabou Marsh.

Also enough wire for one large 3 funnel trap to replace 3 funnel chicken wire destroyed - after a very productive and fulfilling life.

Predation Problems and Casualties

Cape Breton station has only one thing going for it, Predator problems! They are almost non-existant. Coons, a major pest on the mainland, are rare here. They did manage to kill two local male ring-necked ducks at McCormicks Corner, when the trap was moved to a new location the trouble stopped coming and so did the ducks.

Fox, also a troublesome critter on the mainland only once made itself evident at this station. When it raided one night a dryland set on Lake Ainslie.

It is possible that Bald Eagles which reside along the western shore of the Lake cause some trouble, however no direct evidence could be found.

Most casualties in Cape Breton occur from panic which ends up in the birds getting caught in the trap and with them either hanging or drowning. This year one green-winged teal.

Problems resulting from the species Homo Sapien were non-existent this year due probably to the inaccessibility of the trap locations, or their very presence in a populated area where people were seeing them all the time preventing theft. The young of the species proved a nuisance, coming around just to see what was going on.

Conclusions

Note: Cracked corn should be ordered by the Sackville office in sufficient time that it will have arrived at the Co-op nearest to where the banders are staying when they have arrived and are ready to start work.

Notify R.C.M.Police in Inverness before you start setting traps. Also when in Baddeck getting traps try and see District Forester, Allister Fraser, and District Biologist, Dan Banks. Both can be contacted through Lands and Forests in Baddeck and both may prove of assistance.

The following landowners should be contacted before banding operations proceed.

(a) Margaree Inlet - both farmer on opp. hill above road, and John Don MacDonald, name on mail box (Cyril's father)

(b) Judique Pond South - Mr. Gillis, house marked on map - across

(c) Catherine Pond - shore road from access road.

(d) Judique Interval - people in first house on last drive on shore road.

Generally you will have no worries, they are all interested and very willing to lend assistance. Often they will stand and talk about ducks of by gone years, that want to make you sit down and cry!

We would like to thank Darryl Gillis (14 yrs old) for his assistance. He is enthusiastic and lent a helping hand. Often he led us to where we would find ducks, and wou,d tell us before we got there just what could be there. Crew leaders in the future will find him of great assistance - see his father for access to Catherine Pond.

General

1. Bird banders will find evening and/or early morning observations in Cape Breton very beneficial and most necessary. In reading old reports from 1968 on I have found ducks have shifted their major areas of concentration especially on Mabou Marsh and Judique Pond South. Old reports are helpful in telling you how well your traps are fishing.
2. For a place to stay see Mrs. Alex D. Beaton, R.R.#3 Mabou. She has kept the "Duck Hunters" for three years now and knows and accepts their way of life. Currently well worth $25 a week but expect it to be $30. next year and another $5. a week for laundry. The place is central and I just don't think you will find better.
3. For night life in this area, try Bingo on Thursday and/or Sunday night. Its the people "from away" who always win - so the odds are on your side.
4. We heard from alittle rubber duckie that the pond beside the "Old Hard surface Plant" in Little Judique was a good place for Ducks. We later looked it up - its the same as Judique Interval. You might however try the marsh on "Captains River" we didn't have a chance but it looks good.

Submitted by: Ian Cameron
September 15, 1973

Margaree Inlet

This area is a well sheltered tidal inlet, with a mucky bottom near the mouth of the Margaree River. Vegetation and natural food are abundant. The thick reed cover around the westerly perimeter of the pond is of great liking to the birds.

Problems here are many. Salt water increases the rate of corn rot. The strong tides of one to three feet disperse corn very evenly over the pond's bottom where it is lost in the muck. Along the southern edge of the pond, which the birds this year seemed to prefer, a grade of 60^{o} - 70^{o} makes a secure trap impossible. A floating concoction must be used.

The area supported throughout the season a resident flock of 20-40 blacks. They often concentrated on the Inlet but ranged widely. Previous years show some movement into Lake Ainslie. However in an effort to keep milage down the area was not trapped. For future years - keep a close eye on it.

Species observed were black, blue-winged teal, green-winged teal, three broods of blacks with a total of 24 young were also seen.

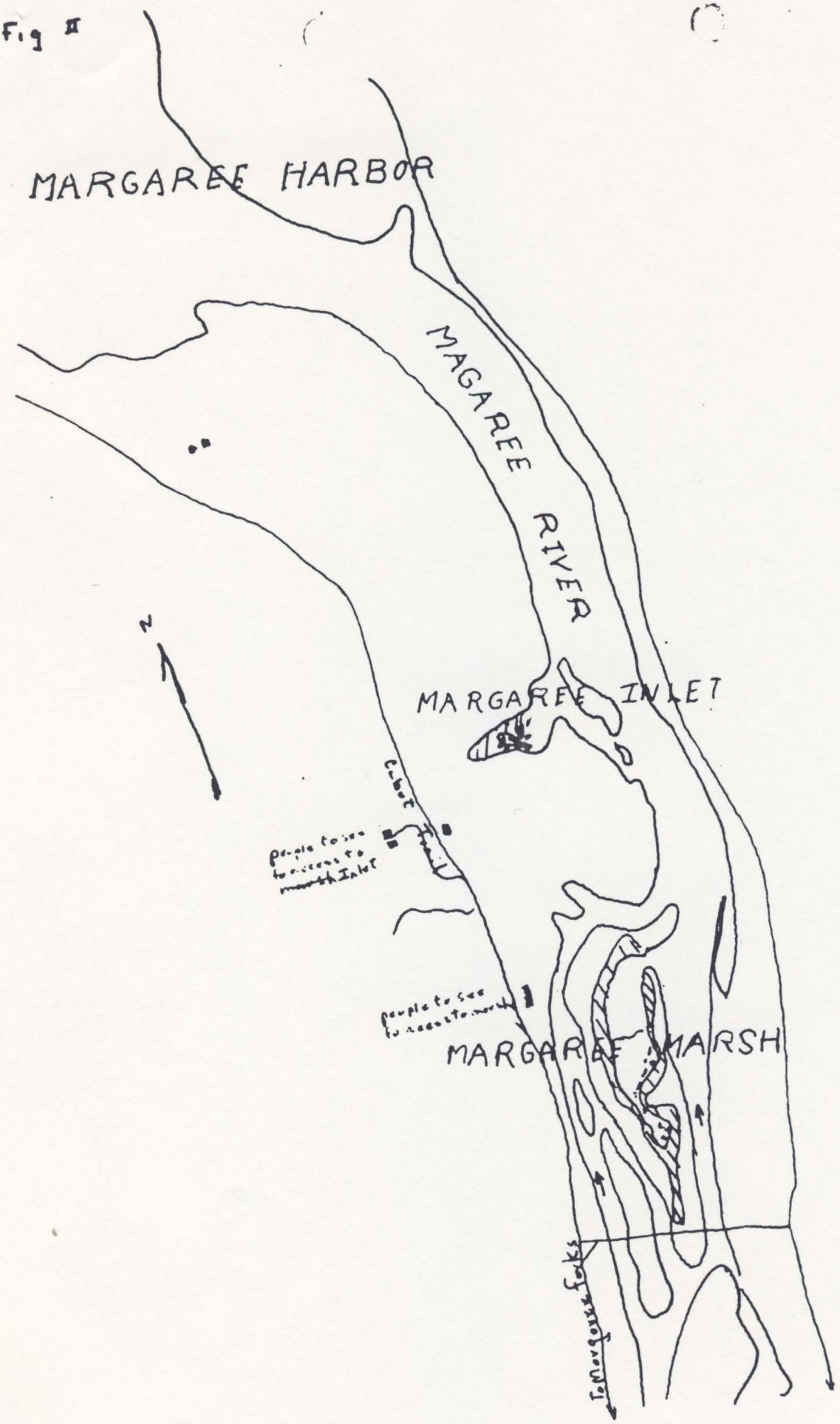
A flock of 40+ blacks were observed using this area through the first part of August but moved out when September came and nothing arrived to replace it.

Margaree Marsh

A small, rush surrounded, tidal influenced pool between two branches of the Margaree. The river merges near the outlet of the pond.

Problems here are similar to those of the Inlet. The steep grade on the bottom is absent but just as soft as that of the Inlet. Sand bottom exists at its mouth but tidal currents prevent trapping. Bottoms are necessary on traps here.

Fig II


MARGAREE HARBOR
MAGAREE RIVER
MARGAREE INLET
N
Culvert
people to see to access to mouth Inlet
people to see to access to mouth
MARGAREE MARSH
To Margaree forks

Margaree Marsh - continued

There is much movement of ducks between here and the Inlet. If they are disturbed in one area they move to the other. Similar movement depends on tides, winds, etc.

Area not trapped.

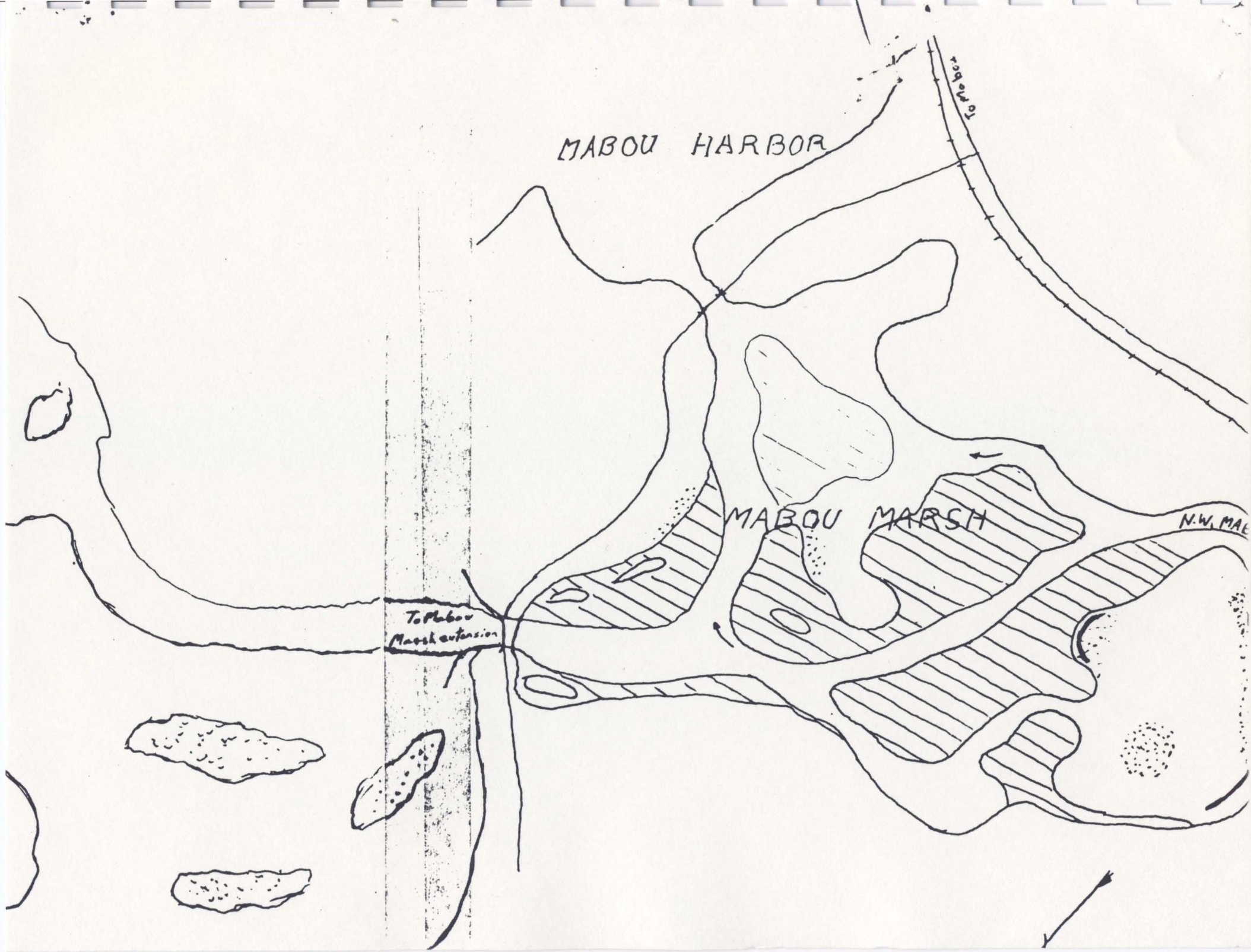
Species present were: Blacks, blue-winged teal, green-winged teal, No production was observed but local children say brood of three black - possibly same as brood of three observed on the Inlet.

Mabou Marsh

Mabou Marsh is a large area of estuary flats, honeycombed by tidal streams and pools. Food plants are extremely abundant and at low tide most pools are one foot or less in depth and thus readily accessible to dabbling ducks. Fowl can find sheltered water on the marsh from most winds. The bottom although mucky will support two feet if you don't spend too long in one spot. Being connected with Mabou harbour the area was affected by all tides ranging in height up to four feet.

Problems here come in variety. Of course those associated with tidal sea water stood out. Accessibility by canoe was excellent at high tide;at low you often had to walk through shallow water and drag the canoe. In case of pools we found it easier to run these traps at high tide! The great abundance of both vegetative and invertebrate foods over the whole area made the concentration of ducks into a single area using corn rather hard. Traps were set for two weeks before pay dirt was hit.

Birds were first observed here on August 20 when a flock of about 90± birds consisting of equal numbers of both black and teal moved in. They spread their numbers in small or large flocks over the marsh depending on tides, wind and time of day. Birds tended to move on and off the marsh in


MABOU HARBOR
To Mabou
MABOU MARSH
N.W. MAB
To Mabou
Marsh extension

Mabour Marsh - continued

groups. Retrap evidence indicated movement was to and from Lake Ainslie. As a result of this catches were often sporadic on the Lake if ducks spent prime feeding time on the marsh.[1]

After a week of baiting and another of finding nothing in the traps the first birds (4 blacks) were trapped on September 1. We managed to find locations so that bottoms were not necessary (and found it necessary to work from the canoe to keep the bottom clear). Because of the high tides funnels were constructed so that birds would be able to enter at low normally and would have to dive in at high tide. This we wound was the only way to keep birds in the traps.[2]

There was no production observed here. Species present were: black ducks, blue- and green-winged teal and red-breasted merganser and mallard.

People and predator problems were nil here as neither could stand the sand flies which inhabited the marsh.

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1. During September a flock of 100± blue-winged teal became resident to the marsh - none were trapped. Black ducks were only observed in flocks of 25± although a flock of 60± blacks rose from Mabou Marsh Extension along with 100± teal when investigated on September 9.

This area is a well sheltered - very well sheltered area - to which birds tend as later investigation proved. It may prove profitable to set traps here. Two would be sufficient along with two on the other part of the marsh trapped this year.

2. For some reasons the birds didn't take to trap #1, only five being banded from it. It may be better to place this trap on shoreline marked in red ink on map.

Judique Interval

Judique Interval is a very large tidal estuary. Its bottom is almost completely covered by a very dense mat of aquatic vegetation and 0-12" of water at low tide. As a result ducks tend to spread out over the whole area while feeding and are consequently hard to concentrate on bait. However, ducks did tend to favour the shore which did provide shelter from off-shore winds.

The major problem encountered here was the exposure of the area to off-shore winds, which tended to force the birds from the marsh (notably onto Catherine and Judique ponds). Normal tides of 1½ to 2 feet were not of sufficient strength to wash corn. During a storm it was an estuary of a different colour.

Traps were first set here on August . They failed to produce birds at a steady rate until September. The bottom, though muddy and covered with growth, did include areas in suitable location so that bottoms were not necessary in the traps.

Duck movement will be discussed later.

No production was observed on this area. Species present were: blacks, blue-winged teal, green-winged teal, Canada geese, Several species of shore birds also used the area for feeding.

Catherine Pond

Catherine Pond is a small lake! open to the ocean on the western perimeter and on the other sides surrounded by forest. Its bottom varies from very hard sand to very soft muck. Most of this substance being covered with a thick mat consisting of several species of aquatic vegetation. The pond is affected by storm tides. Often this results in the formation of a channel to the sea.

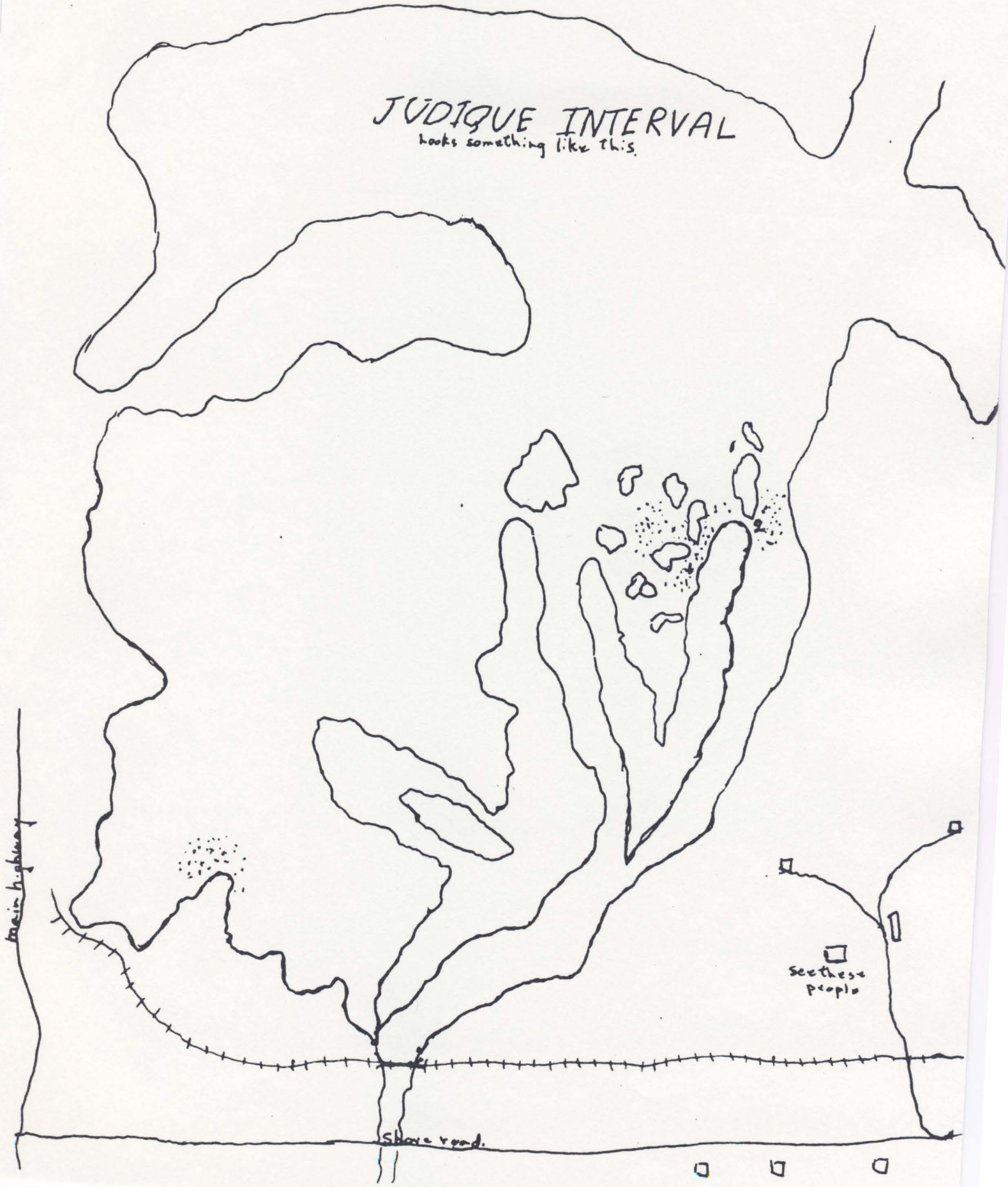
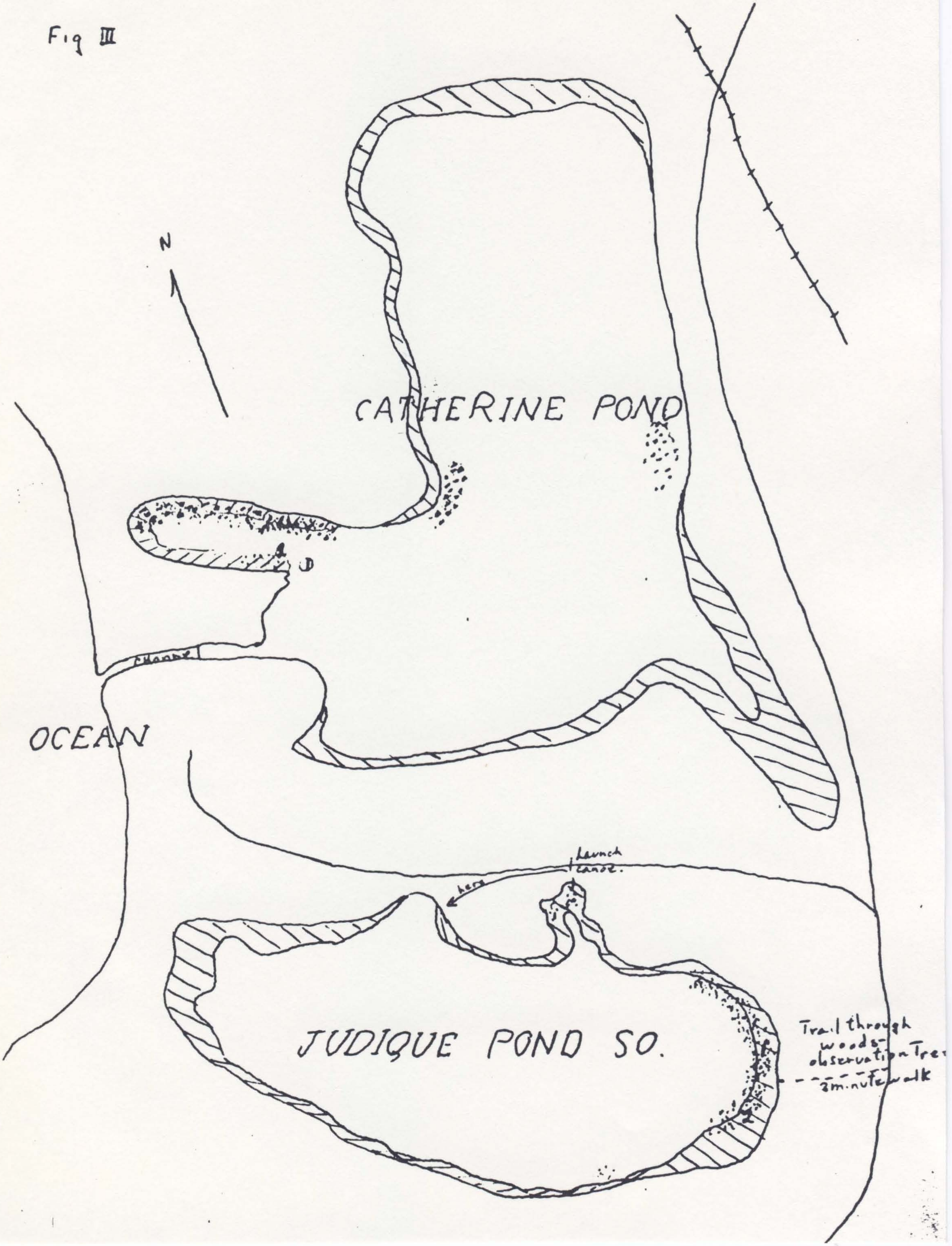

JUDIQUE INTERVAL
Looks something like this
main highway
Shore road.
See these people

Fig III


N
CATHERINE POND
OCEAN
Launch canoe.
here
JUDIQUE POND SO.
Trail through woods- observation Tree
3 minute walk

Catherine Pond - continued

Banding was restricted to westerly bay of the pond very near the shore. Birds tended to concentrate here, it being the most sheltered water from the off -shore winds. The bottom was hard and clear. At any other location except a cove on the northerly tip of the pond (rejected by the birds) bottoms would have to be used. Traps were in 10-15" of water, 30' apart and 20' off shore.

The only problem encountered here was its accessibility. Swimmers who used the beach by Judique Pond often came down for a look. A gravel company found the beach not 500 yards away very suitable. Their operation proceded almost always after 6:00 and often went on after 10:00. As a result of sporadic operations on the beach catches were very low until the last week of August and then high winds of 20-25 mph spoiled things.

Bird movement will be discussed later.

Species present were blacks, blue- and green-winged teal, ring-necked ducks, pintails and American wigeon and wood duck. Three broods were observed, a hen black with 10, a blue-winged teal with three and a ring-necked duck with four young.

Judique Pond South

This pond is another small lake adjacent to Catherine Pond - accessible from the same road. Although exposed to off shore winds the thick stands of rushes on the westerly end of the pond offered good protection in three pools on the leaward side. The bottom of these pools is mucky and are covered by a thick growth of "duckweed" and 2-3 feet of water. Bottoms are necessary in traps and the masses of vegetation will support them so that they ~~fish~~ operate in 10" of water.

Judique Pond South - continued

People problems and predation problems were nil here. Accessibility is good by canoe and motor. One could probably make it with chest waders from the shore road through the reeds - reeds only about ten feet high and so thick you can hardly walk through them - good luck.

Don't let Judique Pond fool you. You NEVER see birds on any other part of the water. The best way is to go to the observation tree. Also good for seeing local production. To find the tree, see Darrel Gillis, he can show you where the tree is and tell you just exactly what you will see, so you won't have to climb the tree.

Birds present were: blacks, blue-winged teal, green-winged teal and ring-necked duck. Local production observed: a brood of blacks 3+ and a brood of green-winged teal 4+. A hen ring-neck and a hen blue-wing acted as though they too had young on the lake.

We didn't start trapping the area until the last week of August which was too late. This area should be started immediately on arrival. Two traps were fished here this year, however, three or four medium traps could probably fish this pond without over crowding and all be productive. Bottoms for traps would be needed in all cases.

Bird Movements in Judique area

Throughout August the three ponds in the Judique area were frequented by 50 to 75 teal species and about 70 black. After September more birds moved in in greater numbers. The birds tend to spread out during feeding time, spreading their numbers between Catherine Pond and Judique Interval. It seems that the ducks move between Judique Interval and Judique Pond depending on wind and tide conditions on the Interval for roosting. Often the traps on one area were full and the other empty. There is however definite movement between the three areas as determined from retrap data.

It should also be noted that all three areas produced birds at a steady rate once they got onto the bait. And because of accessibility to Catherine Pond and conditions on the Interval depending on weather, it is advisable to trap all three locations.

Lake Ainslie

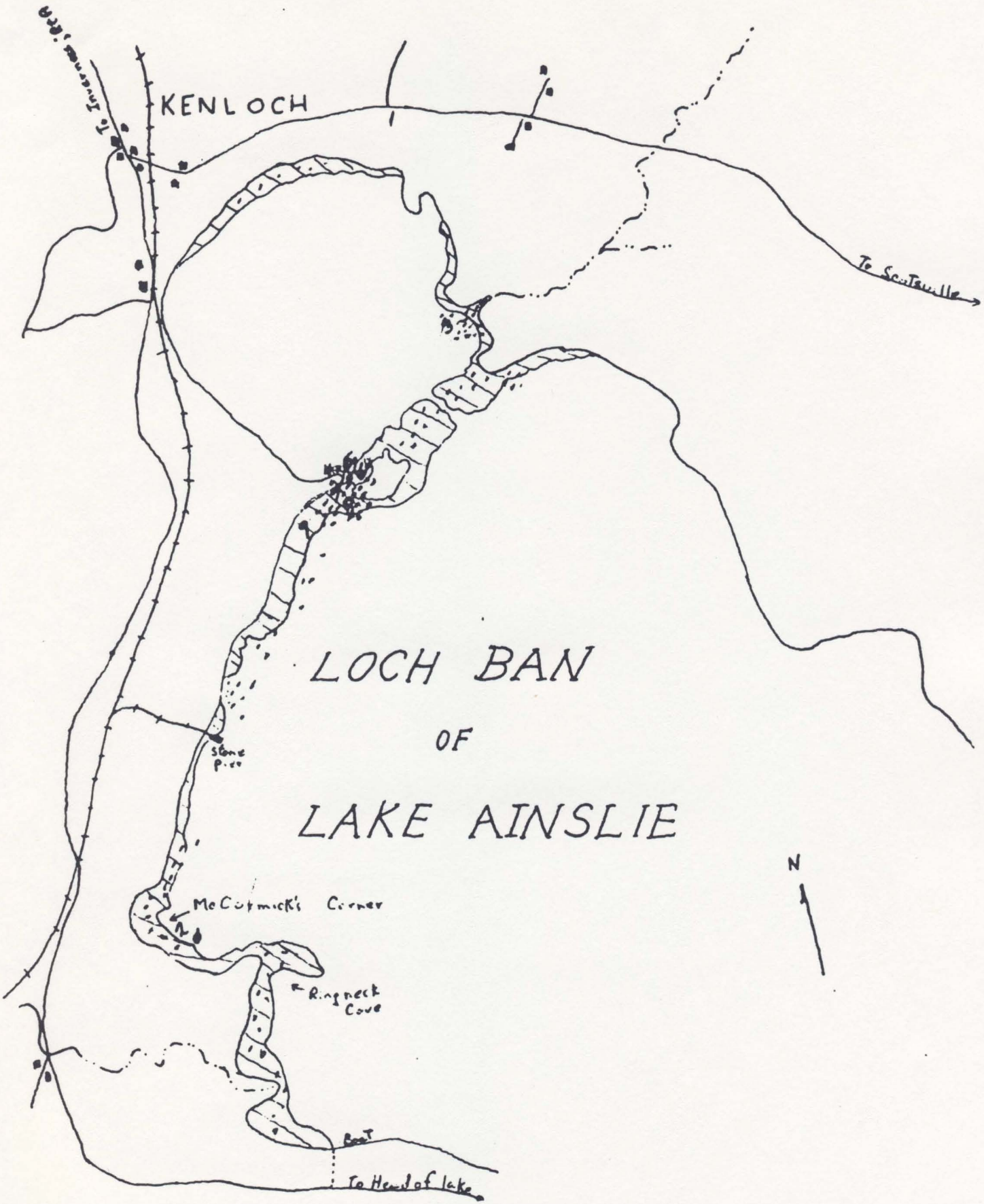
Lake Ainslie is a large freshwater body of water approximately 25 miles by 14 miles at its widest point. Banding activities were restricted to Loc Ban. The western shores of the Bay support abundant growths of aquatic and emergent vegetation which make both duck feed and shelter plentiful. The surrounding forest shelters the numerous bays and coves along this shore to any winds, excepting those from the south or south-east. The substratum of the lake along this shore varies greatly in texture and in the amount of water covering it. However, for those areas where birds concentrated, hard bottom and a suitable depth of water could be found so that bottoms were not necessary in the traps.

The northerly sector of the Loc is cut by an underwater sand bar and numerous bands of emergent vegetation forming a smaller body of water known as Kenlock. Banding was carried out primarily on the western side of the bar. The hard clear sand bottom in shallow water on this part of the bar is a bander's dream come true - when birds are present! Corn can be easily seen and is taken readily.

Accessibility to the area is excellent (by boat). People were no problem having no means of getting onto the western shore without a boat. Predators were a minor problem (see Predator Problems).

The major problem with the sand bar is its openness to prevailing winds. Although the emergent vegetation cuts down wave action anything over 10 mph will cause the bait to drift from the traps in the shallow water. As a result the birds often get a feed for free.

Fig. 1


To Inverness
KENLOCH
To Scotsville
LOCH BAN
OF
LAKE AINSLIE
Stone Pier
McCormick's Corner
Ringneck Cove
Boat
To Head of lake
N

Lake Ainslie - continued

The area known as McCormicks corner was also trapped, it being well sheltered with good bottom. The only problem with this area was a lack of birds. Generally it seems birds will spread out along the whole western shore but will only concentrate on the sand bar area. This makes trapping difficult.

The lake is used as a resting place and feeding place during the late evening, night and early morning. Birds move out during the daylight hours as is reflected in the observation chart.

Birds were seen in trappable numbers frequently in McCormacks Corner the first two weeks of August but cleared out later, never to return. During the first three weeks of August a resident flock of about 70 blacks and a small flock of adult male ring-necks made use of the bar. A high percentage of both flocks was trapped. A flock of 8 adult male wood duck was also present.

During the week of August 20 things slackened off as resident birds moved out (general all over - see chart) and didn't pick up till September 8 when 10 or more birds were trapped daily.

Traps were set three on the sand bar, one in McCormacks Corner and one on the eastern part of the bar but before August was over all traps were concentrated on the bar (except the one at McCormacks Corner). Traps were moved frequently because of wind which this year washed bait with great effectiveness and because of changing water level - ~~they~~ fell 15 inches from August to September. Perhaps in an effort to keep bait in trap the traps were moved too many times and the birds became wary?

Species present were wood duck, blacks, blue- and green-winged teal, mallard, ring-necked duck, common goldeneye, common loon and cormorant sp., and American merganser.

Lake Ainslie - concluded

Local production was observed to include 10 broods of ring-necks, 60± young, 2 broods of goldeneye, 12 young, one brood of green-winged teal with 1+ young and 2 broods of black with 4± young. A brood of 8 American mergansers were also seen.

N.B. At this point is is strongly recommended that the first day on the lake banders go out early and see as much of the shoreline of Kenlock and Loc Ban as possible to observe local production. Hens with broods just disappear when they hear the motor far away from the next day on.

It may be a better risk next year because of the low sporadic catches to move the trap in McCormacks corner to ring-neck cove (see map). Observation periodically showed a movement of hen ring-necks with broods into this area and concentration of flying ring-necks in flocks of 30± often lifted here in daytime. I do suspect however, that they move to the sand bar during the early morning and late evening. The best policy is to have a good look at both areas.

This year we took a look at a small "branch lake" about 5 miles down shore from Loc Ban.(see map). The area drains the Hays River. Although well sheltered and having a depth of 12-24" the bottom of this pool is very soft. One can stick the paddle through it and not find hard bottom. It is the closest thing to quicksand I ever saw. A few ring-necks (10±) were observed here periodically and a trip up the dead water showed black and blue-wings both with broods. A trip earlier in the season might be beneficial for seeing production. Bald Eagles were also observed in this area.

An eye should also be kept on the headwaters of the Southwest Margaree which drains the Lake. It would be worth a trip around here to see local production and maybe set a trap. Bald Eagles were also observed on this area.

Observations

	Lake Ainslie	Sudique pond South	Catherine pond	Mabou marsh	Margaree Inlet	Margaree marsh.
August 1	15 Blk Brood BwT (6) 11 Golden eye (5) Rn 10 Broods 7-13/Brood	0	Brood BwT(5)	9 Blk.	23 Blk 2 BWT	1 Blk
2	7 Blk 2 Broods Rn 5+4 2 Brood golden eye 5+4 1 loon adult	0	Brood BwT(5) " Blk 2+ 3 young otters	~~nothing AM~~ 0	no obser.	no obser.
3	28 Blk Brood (5) Rn 1 Golden-eye 5 teal (SP) 3 loon-adult	3 Blk 1 Rn 1 BWT 1 Blk } with broods?	2 teal (sp) 2 Blk	0 - AM 1 Blk in evening	no obser.	no obser.
4	1 loon adult 34 Blk 1 BWT 2 Brood BWT (8+4) Brood Golden eye (4) 8-Brood Rn (most in Ross corner) 6-9	1 Black	Brood BWT-(3) 4 Rn 2 Blk	0	8 Blk	34 teal sp.
5	23 Blk 3 GWT 2 BWT 8 Rn 1 Golden eye (4) 2 Brood Rn (13)	0	12 Blk (A.M) - - - - - - - - 13 Blk 2 GWT Brood Blk (7) Brood BWT (3) P.M.	no obser ~~no obser.~~ ~~1 Blk (PM)~~	no obser.	no obser.
6	21 Blk 6 BWT 8 Rn	0	3 Blk	1 Blk	no obser.	no obser
7	2 loons 5 black 2 teal sp 1 Golden eye Brood Rn (8)	0	2 BWT 3 Blk	0		
8	25 Blk 1 Golden eye 7 teal sp 5 BWT 3 Rn.	0	4 Blk 5 BWT	no obser	4 Blk 1 Brood Blk (8)	5 Blk

	Lake Ainslie	Sid. Lake pond south	Catherine pond	Mabou marsh	Margaree Inlet	Margaree Marsh.	Sid. Lake Interval
August 9	4 BWT 7 BIK 1 loon Brood Rn(7) Goldeneye.	0	1 BIK	no observ	no observ.	no observ.	
10	7 BIK 3 BWT Goldeneye. Brood(6) Brood Rn(6)	0	10 BWT 4 BIK	0 - AM. 2 BIK 10 teal sp } PM.	no observ	no observ	
11	8 RN 11 BIK 2 Brood Rn 1 Golden-eye 1 BWT	0	3 BIK	no observ	8 BIK	0	
12	2 BWT 4 Golden eye 5 BIK 4 Rn. 1 Osprey	0	3 BIK 2 teal sp	no observ	no observ	no observ	
13	2 Golden eye 3 teal sp 1 BWT 11 BIK 2 Rn.	0	5 BIK AM. 1 BWT 20 BIK Rn PM 13 teal sp. Brood Rn(4) " BWT 3) " BIK(9)	0	no observ	no observ	
14		0	10 BIK 6 teal sp 2 Rn.	no observ	0n PM. 30± BIK 10± BWT 3 Brood BIK 24)	5 BIK	
15	5 Golden eye 11 ~~BIK~~ ~~8 BIK~~ 7 Rn 2 BWT 7 BWT 1 loon	0	4 BWT.	0	8 BIK	0	50± BIK 30± BWT
16	7 BWT 4 BIK 3 Golden eye 1 Rn 1 loon.	1 BWT	8 BIK 9 BWT Brood Rn (3) 1 red-throat loon in sea	6 teal sp	17 BIK 13 WT	2 BIK	48± BIK 50± BWT

	Lake Ainslie	Judique pond south	Catherine pond	Mabou marsh	Margaree marsh	Margaree Inlet	Judique Interval
August 17	8 RN 1 BIK 3 BWT 1 Golden-eye.	0	4 BIK 6 BWT	0	no observ	no observ	45± BIK 50± BWT
18	Broo Rn - 6 2 loon 7 BWT 2 Golden-eye	0	4 BIK 10 BWT	0	25 BIK	0	10 BIK 35± BWT
19	2 BIK	0	10 BWT 4 BIK	0	no observ	no observ	0
20	1 BIK	0	5 BIK 20± BWT	0 - Am. - PM 60± BIK 40± teal sp	no observ	no observ	20± BIK 30± BWT
21	1 Golden-eye 4 BIK 2 Rn.	40± BIK 30± teal sp	7 BIK 15± teal sp	25± teal sp	no observ	no observ	0
22	2 Broad Rn (13) 1 wood duck 3 BIK 5 BWT	BIK 15± teal sp	6 BIK 7 teal sp.	20± BWT	no observ	no observ	17 BIK 23 BWT
23	6 RN 13 BIK 3 BIK - mes common	40± BIK 20± BWT	0	45± BIK 15± teal sp	no observ	no observ	12 BIK 25± BWT
24	2 GWT 1 BWT 2 Rn 4 BIK	0	0	50± BIK 20± teal sp	no observ	no observ	15± BIK 4 GWT

	Lake Ainslie	Sud.que pond Smtl	Catherine pond	Mabou Marsh	Margaree Inlet	Margaree Marsh.	Sud.que Interval
August 25	46WT 3BIK 1Rn.	0	0	9BIK 25±BWT 15±6WT	3 BIK	0	0
26	1Rn 36WT	0	4BIK 76WT 5BWT	40± BIK 20± tea sp	3 BIK	0	30± BIK 20± tea sp.
27	1BIK 2GWT	8BIK 5BIK 2BWT P.M.	2GWT 26± BIK P.M. 30 tea sp	12GWT 70± BIK 50± tea	no observ	no observ	50 BIK 30± BIK 60± tea
28	1BIK 2BWT 3GWT	0	0	0	no observ	no observ	no observ
29	18BIK 2Rn 3GWT 2Geye 4boldeeye Brood	5BIK	15BWT 16WT	0	22BIK	0	16BIK 4BWT
30	3BWT 1Rn 2BIK P.M. 1Rn 1BWT	1BIK	0	16 tea sp	no observ	no observ	12BIK 2BWT
31	2Rn 1Goldeneye 1loon(C)	50± BIK 50± tea sp 1Rn.	15BIK 5BWT	33 tea sp	no observ	no observ	15BIK 2BWT
32		This space Reserved for keepers					

September	Lake Ainslie	Sudique pond South	Catherine pond	Mabou Marsh	Margaree Inlet	Margaree Marsh	Sudique Interval
1	2 Cormorants 15 Blk 8 WDk(?) 4 Goldeneye 5 Rn 30± teal sp	6 Blk 2 BWT 1 Rn	10± teal sp 4 Blk	2 Blk 30± teal sp	10 Blk 14 BWT	am 0	18 Blk 5 teal sp.
2	1 Loon(?)	2 Blk 3 BWT	18 Blk 5 BWT	7 Blk 50± teal - pond wifhetsrun marsh.	5 Blk		18 Blk 12 teal sp.
3	30± BWT 1 Rn 2 Goldeneye 5 Blk 1 Cloon	9 Blk 13 BWT	18 Blk 5 teal sp	60± Blk 2 mallard 30± teal sp	no observ	no observ	17 Blk 10 teal sp
4	4 BWT 1 Rn	5 BWT 1 Blk	40± Blk 60± BWT (pred[illegible])	0	no observ	no observ	0
5	1 Goldeneye 46 teal sp	1 BWT	0	0	no observ	no observ	0
6	2 Goldeneye 5 teal sp	1 Blk 2 BWT	10 Blk 5 BWT	0	0		15± BWT
7	25± Rnd [illegible] 2 Rn [illegible] 5 BWT 20± A Merg	15± BWT 2 Blk 5 gwT	1 dozer 2 gravel trucks 2 GWT 2 Blk 7 BWT PM 18 Blk 20 BWT	0	no observ	no observ	0
8	1 Goldeneye 2 Rn 1 Blk 2 GWT	3 Blk 5 BWT	0 digging gravel.	60± Blk 40± BWT (mostly)	0	2 Blk	7 Blk 1 BWT

September	Lake Ainslie	Judique pond South	Catherine pond	Mabou Marsh	Margaree Inlet	Margaree Marsh	Judique Intervale
9	8RBMerg 8Goldeneye 5BIK 6Rn	5BIK 2BWT	0	9BIK	no observ	no observ	4BIK
10	2BIK	1BIK	4Rn 7BIK 5Bdsp	1Mallard 18BIK 100± BWT	no observ	no observ	18BIK 1BWT
11	Brant 8 RBMerg 16Goldeneye 1Rn 1BIK	1BIK	25± BWT 4Rn 3BIK	100± BWT 25± BIK	no observ	no observ	18BIK 7BWT
12	1BIK 2BWT 46WT	1BIK	30BIK 5BWT 16WT	14BIK	no observ	no observ	1BIK
13	1BIK 2BWT	1BIK	3BIK 16WT	7BIK 100± BWT 8RBMerg	no observ	0	0
14							
15							

Bald Eagle Observations

2	A pair of adults was observed during the last weeks occasionally over Mabou Harbour.
1	An adult was observed occasionally over Mabou Marsh - one of the pair above.
3	2 adult, 1 immature, were observed rarely on shore road between banding stations.
2	A pair of mature adults (that's a good one) were observed once between Glenmora and Strathlorne.
5	3 immature and 2 mature were observed frequently along the west side of Loc Ban.
2	A pair of adults were observed at Lake Ainslie outlet (South-west Margaree)
1	Adult observed at Nyanza.
1	Mature observed at North-east Mabou river; one of same eagles from Harbour?
1	Adult observed occasionally over Margaree Marsh.

Estimated total: 4 immature and 12 mature.

Red Tailed Hawks were also observed regularly over the general area of travel.

REPORT

QL 677.5 B278 1988

Barrow, W R
Cape Breton Waterfowl Surveys - 1988.
Name Date

Barrow, W R