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Details on the Conne River Band Council Food Fishery in 1986

by

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Abstract

This paper provides information on the food fishery of the Band Council of Conne River Micmacs in the estuary of Conne River, Newfoundland in 1986. A trapnet was fished from 5 June to 10 July during which time 519 salmon were retained for food. The catch was 98.2% 1-sea-winter salmon and 1.8% previous spawners, and of the total number caught, 25% were male and 75% were female.

Résumé

Le présent article donne de l'information sur la pêche de subsistance pratiquée par les Micmacs dans l'estuaire de la rivière Conne, Terre-Neuve, en 1986 (Conseil de Bande des Micmacs de la rivière Conne). On a exploité un filet-trappe du 5 juin au 10 juillet, ce qui a permis de capturer 519 saumons destinés à la subsistance. La prise a été constituée à 98,2 % de saumons d'un hiver en mer et à 1,8 % de reproducteurs antérieurs, et du total des prises 25 % étaient de sexe mâle et 75 % de femelle.

Introduction

The purpose of this paper is to provide information on the food fishery prosecuted by the Band Council of the Conne River Micmacs (Band Council) in the estuary of Conne River, Newfoundland, in 1986.

Methods

During fishing operations, records of the number of salmon caught were made daily and the salmon retained for food were measured for fork length to the nearest cm, whole weight to the nearest tenth of a kg, a scale sample removed, and sex determined visually from the gonads. These measurements, as well as record of catches, were made by employees of the Band Council who were supervised by Department of Fisheries and Oceans staff. The scale samples were removed from the left side of the fish from three to six scale rows above the lateral line on a line extending from the posterior edge of the base of the dorsal fin to the anterior edge of the anal fin. These scales were later mounted on plastic slides and freshwater and sea ages determined using standard criteria (Anon. 1984). Once during fishing operations the physical characteristics of the trap were determined by measuring mesh for size of opening while wet using a ruler.

Details on Fishery

The Band Council for purposes of obtaining salmon for food were allowed to set a trap net at a predetermined site in the estuary of Conne River (Fig. 1). The season for this fishery extended from June 5 to July 31, 1986. Similar to regulations for the angling fishery only fish smaller than 63 cm could be retained in the landed catch. The season quota was 1,200 salmon with a weekly quota of 200 salmon (see Appendix 1 for further details of the management plan).

The trap fished by the Band Council was similar in design to that used for herring in Newfoundland. Its dimensions were 13 m x 18 m x 7 m with a 53 m leader tapered from 7 m depth on the trap end into the shoreline. The nominal mesh size in the trap was 92 mm stretched measure and in the leader 178 mm. The mesh size when measured wet was 93 mm (S.D. = 1.52) in the trap and 174 mm (S.D. = 1.00) in the leader. The material used to construct the trap and leader was black multifilament twine, similar to that which is used to construct cod traps. During fishing operations the trap was hauled twice per day when weather permitted and was sometimes taken out of fishing operation on the weekend. Some salmon which were alive in the trap were given to the Department of Fisheries and Oceans (DFO) for tagging in exchange for dead salmon which were caught in DFO gill nets as part of a tagging study (Reddin et al. 1986).

Results and Discussion

The food fishery began on June 5 and lasted until July 10 when the trap was removed from the water by the Band Council because of poor catches. In

total, there were 517 salmon less than 63 cm that were caught in the trap in Bay d'Espoir set by the Band Council. In addition, there were 8 salmon caught larger than or equal to 63 cm that were not retained for food. Fifty-three salmon were caught and passed on to DFO staff for tagging or biological sampling. In return, DFO gave the Band Council 55 salmon less than 63 cm. The total number of salmon retained by the Band Council for food was 519 salmon, all less than 63 cm.

Virtually all of the salmon caught were meshed in either the leader or the trap. Some salmon were meshed from the outside of the trap. Most of the salmon were dead or were killed as they were removed from the mesh. Those salmon which were released alive could only be removed by cutting the webbing of the trap. One of the possible reasons for the salmon being meshed in the leader and from the outside of the trap was the dark color of the water. It was apparent that the mesh size of the trap was too large to effectively release salmon alive from the trap. A reduction in mesh size to 64 mm would better achieve this goal.

Of the 519 salmon retained for food, 492 were measured for fork length and 440 for whole weight (Table 1). The mean fork length and whole weight of 1-sea-winter salmon was 50.9 cm and 1.49 kg, respectively. Previous spawners had a mean fork length of 53.0 cm and whole weight of 1.45 kg. The total sample had a mean fork length of 51.0 cm and whole weight of 1.49 kg.

There were 514 salmon for which sea age could be determined. Of these, 98.2% were 1-sea-winter salmon and 1.8% were previous spawners (Table 2). The 1-sea-winter had river ages ranging from 2 to 6 years; although 91% of them were 3 or 4 years old.

There were 500 salmon for which sex was determined (Table 3). The 1-sea-winter salmon were 24.6% males and 75.4% females. Of the total numbers, 25.0% were male and 75.9% were female.

Acknowledgments

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References

Anon. 1984. Report of the Atlantic salmon scale reading workshop. International Council for the Exploration of the Sea.

Reddin, D. G., P. B. Short, and G. Furey. 1986. Results of tagging adult salmon in Conne River estuary. CAFSAC Res. Doc. 86/108. 7p.

Table 1. Fork length (cm) and whole weight (kg) of salmon caught in the Conne River estuary, 1986.

Sea Age	Variable	N	Mean	Standard deviation	Standard error of mean
Unknown	FL	1	51.00		
	WW	1	1.70		
1-sea-winter	FL	482	50.91	2.31	0.1051
	WW	433	1.49	0.21	0.0100
Previous spawners	FL	9	53.03	3.71	1.2363
	WW	6	1.45	0.33	0.1335
Total	FL	492[a]	50.95	2.35	0.1059
	WW	440[b]	1.49	0.21	0.0100

FL = fork length
WW = whole weight

[a]There were 27 salmon that were not measured for FL.

[b]There were 79 salmon that were not measured for WW.

Table 2. Sea age and river age distribution of salmon caught in Conne River estuary, 1986.

	River age						
Sea age	2	3	4	5	6	Unknown	Total
1-sea-winter	22	256	198	20	1	8	505
	4.43	51.51	39.84	4.02	0.20	-	98.2
Previous spawners	0	5	4	0	0	0	9
	0.00	55.56	44.44	0.00	0.00	-	1.8%
Total	22	261	202	20	1	8	514[a]
	4.35	51.58	39.92	3.95	0.20	-	

[a]There were five salmon for which sea age could not be determined.

Table 3. Sex ratios of salmon caught in the food fishery in the Conne River estuary, 1986.

	Male		Female	
Sea age	Number	%	Number	%
1-sea-winter	121	24.6	370	75.4
Previous spawners	4	44.4	5	55.6
Total[a]	125	25.0	375	75.0

[a]There were 19 salmon that were not sexed.

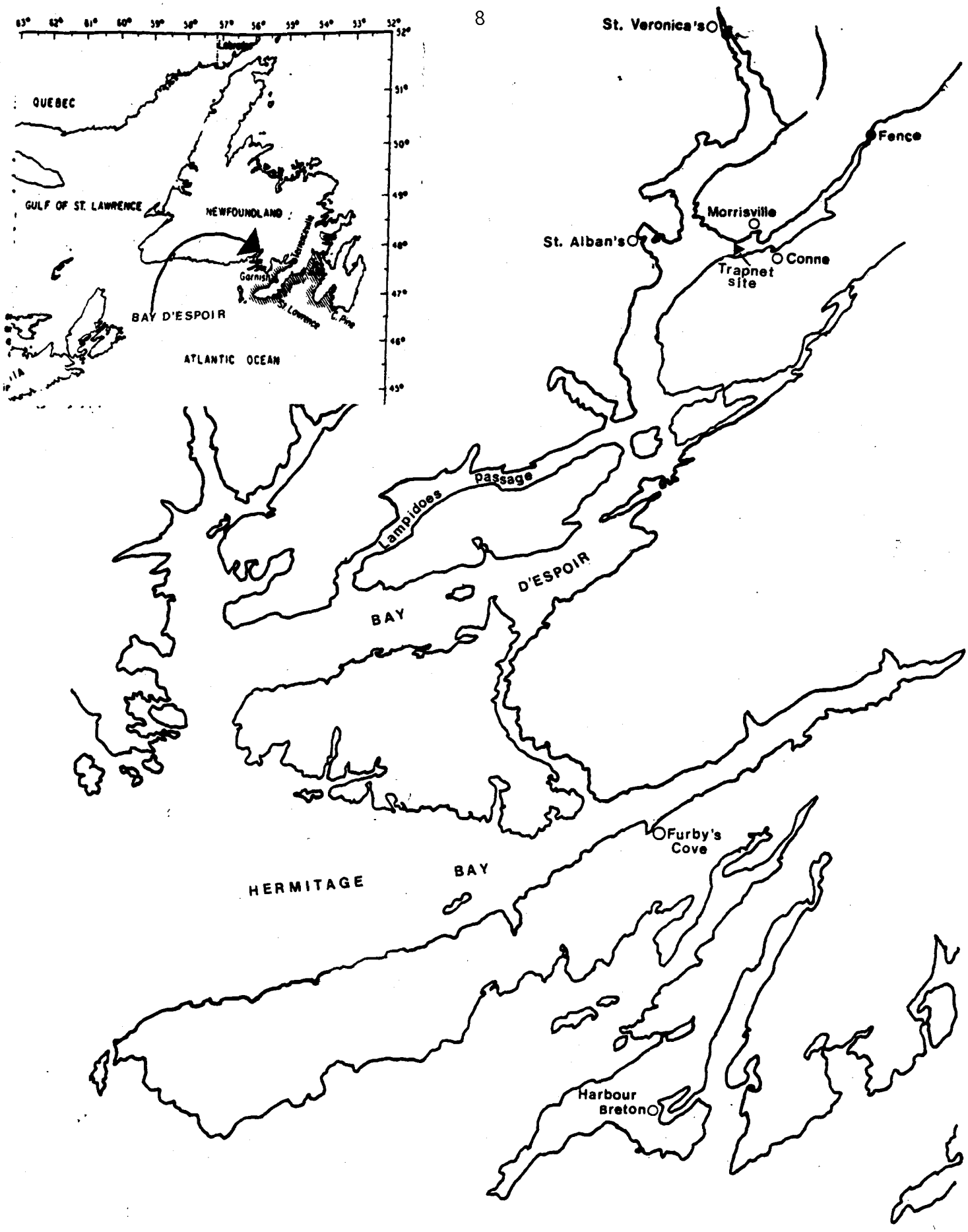

Fig. 1. Location of food fishery trap, 1986.

Appendix 1

1986 Salmon Management Plan
for the
Miawpukek (Conne River Micmac) Band Food Fishery

This food fishery management plan was developed following negotiations with the Miawpukek Band. It is an annual plan subject to review each year.

1. Introduction

This salmon management plan outlines the principles under which the food fishery of the Miawpukek Bank is to be conducted and details the specific provisions pertaining to the 1986 food fishery.

2. Basic Principles of Management

(a) The first priority is conservation.

(b) Once the needs of conservation are met, the available resource is to be shared between the Miawpukek food fishery, the commercial fishery and the recreational fishery. The three user groups as defined are legitimate users of the salmon resource.

(c) The Miawpukek Band will have involvement in the development and implementation of the annual food fishery management plan through negotiations with the Department of Fisheries and Oceans.

(d) The Food Fishery Management Plan will be part of the 1986 Atlantic salmon Management Plan and subject to future Atlantic food fishery policy.

(e) Fish taken in the food fishery are solely for use as food by members of the Miawpukek Band and may not be sold or used for any other purpose.

3. Specific Provisions

(a) Species

Salmon (less than 63 cm).
All other species and salmon 63 cm or greater incidentally captured must be released.

(b) Area Restrictions

The food fishery will take place in the tidal waters of the estuary of the Conne River. The following locations are specified as trap berths:

William Crant
Simon McDonald

Additional locations may be considered through discussion with the local Fishery Officer.

(c) Quotas

The quota in numbers of fish for 1986 will be 1200. Catches of salmon will be distributed throughout the fishing season in order to protect specific stock components. A maximum of 200 fish can be retained per week.

(d) Season

June 5-July 30, 1986.

(e) Gear Types

Only trap nets will be permitted in this fishery.

Only one trap net may be fished at any time.

The mesh size of the trap is not to exceed 8.9 cm (3.5 inches; leader 18 cm (7 inches).

*1986 will be considered a trial year for the use of salmon traps and their operation will be reviewed at the end of the season.

(f) Identification of Harvest

All salmon harvested in the food fishery will be tagged. One orange tag will be issued to the Band for each fish allocated to the food fishery.

(g) Licence

A fishing licence will be issued to the Band. The licence must be renewed annually.

4. Administrative Requirements

The Band Council will be responsible for:

i) Designating fishermen for each area and specifying the period and level of harvest for each fishermen. Detailed records of the fishing activity are to be maintained at the Council Office and made available upon request to DFO.

ii) Maintaining weekly catch records, copies of which are to be supplied to DFO no later than 60 days after the closure of the fishery. These records should specify the number and size of fish harvested and the areas caught.

iii) Distributing the fish to Band members.

iv) Ceasing fishing activity when the quota has been taken.

v) Submitting an annual report of the food fishery to DFO.