

THE MARKETING OF FISH IN CANADA

AN INTERIM REPORT ON THE FRESHWATER FISHERIES

Standing Senate Committee on Fisheries

September 1986

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Proceedings of the Standing Senate Committee on

Délibérations du Comité sénatorial permanent des

Fisheries

Pêches

(Formerly called Standing Senate Committee on Agriculture, Fisheries and Forestry)

(Précédemment désigné Comité sénatorial permanent de l'agriculture, des pêches et des forêts)

Chairman The Honourable JACK MARSHALL

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L'honorable JACK MARSHALL

Président

August 6, 1986

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Twenty-fifth proceedings on:

The examination of all aspects of the marketing of fish in Canada and all implications thereof.

Vingt-cinquième fascicule concernant:

L'étude de la commercialisation du poisson au Canada dans tous ses aspects et répercussions.

SECOND REPORT OF THE COMMITTEE

DEUXIÈME RAPPORT DU COMITÉ

MEMBERSHIP OF THE STANDING SENATE COMMITTEE ON FISHERIES

The Honourable Senator Jack Marshall, Chairman

The Honourable Senator Norbert L. Thériault, Deputy Chairman

and

The Honourable Senators:

Bielish, Martha P. Bonnell, M. Lorne

*Doody, C. William *Frith, Royce

Le Moyne, Jean

*MacEachen, Allan J., P.C. Molgat, Gildas L.

*Murray, Lowell, P.C.
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Petten, William J.
Phillips, Orville H.
Robertson, Brenda M.
Rowe, Frederick W.
Watt, Charlie

*Ex Officio Members

MEMBERSHIP OF THE COMMITTEE FORMERLY CALLED STANDING SENATE COMMITTEE ON AGRICULTURE, FISHERIES AND FORESTRY

HERARY OF PARLIAMENT

The Honourable Senator Jack Marshall, Chairman

The Honourable Senator Herbert O. Sparrow, Deputy Chairman

and

The Honourable Senators:

Argue, Hazen Bielish, Martha P.

*Doody, C. William

*Frith, Royce Hays, Daniel Le Moyne, Jean

*MacEachen, Allan J., P.C.

McGrand, Fred A. Molgat, Gildas L. Phillips, Orville H. *Roblin, Duff, P.C.

*Roblin, Duff, P.C. Sherwood, Cyril B. Thériault, Norbert L. Watt, Charlie

*Ex Officio Members

Nota: The Honourable Senators Perrault, Robertson, Simard and Thompson also served, at various stages, on that Committee.

ORDERS OF REFERENCE

Extract from the Minutes of the Proceedings of the Senate, on Wednesday, February 6, 1985:

"Pursuant to the Order of the Day, the Senate resumed debate on the motion of the Honourable Senator Marshall, seconded by the Honourable Senator Bielish:

That the Standing Senate Committee on Agriculture, Fisheries and Forestry be authorized to examine and report upon all aspects of the marketing of fish in Canada, and all implications thereof;

That the Committee have power to travel from place to place in Canada; and

That the Committee be empowered to engage the services of such counsel and technical, clerical and other personnel as may be required for the purpose of the said examination.

After debate, and —

The question being put on the motion, it was —

Resolved in the affirmative."

Extract from the Minutes of the Proceedings of the Senate, on Wednesday, May 14, 1986:

"Pursuant to the Order of the Day, the Senate resumed the debate on the motion of the Honourable Senator Molgat, seconded by the Honourable Senator Barrow:

That Rule 67(1) of the *Rules of the Senate* be amended by striking out paragraph (n) and substituting the following:

"(n) The Senate Committee on Agriculture and Forestry, composed of twelve members, four of whom shall constitute a quorum, to which shall be referred, on order of the Senate, bills, messages, petitions, inquiries, papers and all other matters relating to agriculture and forestry generally, and the Canadian Wheat Board."; and

That the following new paragraph be added immediately after paragraph (n):

"(n.1) The Senate Committee on Fisheries, composed of twelve members, four of whom shall constitute a quorum, to which shall be referred, on order of the Senate, bills, messages, petitions, inquiries, papers and other matters relating to fisheries generally."

After debate, and —

The question being put on the motion, it was —

Resolved in the affirmative."

Extract from the Minutes of the Proceedings of the Senate, on Thursday, June 12, 1986:

"With leave of the Senate,

The Honourable Senator Marshall moved, seconded by the Honourable Senator Bonnell:

That the Order of Reference of the Standing Senate Committee on Agriculture, Fisheries and Forestry, dated February 6, 1985, pertaining to a study on the marketing of fish in Canada and all implications thereof, be deemed to have been referred to the Standing Senate Committee on Fisheries; ...

The question being put on the motion, it was —

Resolved in the affirmative."

Charles A. Lussier

Clerk of the Senate

REPORT OF THE COMMITTEE

The Standing Senate Committee on Fisheries, formerly called Standing Senate Committee on Agriculture, Fisheries and Forestry, has the honour to present its

SECOND REPORT

Your Committee, which was authorized to examine and report upon all aspects of the marketing of fish in Canada, and all implications thereof, has, in obedience to the Orders of Reference of February 6, 1985, May 14, 1986 and June 12, 1986, proceeded to that inquiry and now presents an interim report.

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PREFACE

On February 6, 1985, the Standing Senate Committee on Agriculture, Fisheries and Forestry was given an Order of Reference pertaining to a study of the marketing of fish in Canada and all implications thereof. On May 14, 1986, the Standing Senate Committee on Agriculture, Fisheries and Forestry was divided into two separate committees, one being the Standing Senate Committee on Agriculture and Forestry and the other the Standing Senate Committee on Fisheries. As a result, the Order of Reference of the Standing Senate Committee on Agriculture, Fisheries and Forestry pertaining to a study of the marketing of fish in Canada and all implications thereof was referred to the Standing Senate Committee on Fisheries on June 12, 1986.

This interim report, which is the result of the work of the two last mentioned Committees, focuses on the freshwater fisheries of the Ontario and Western Regions. (The latter includes Manitoba, Saskatchewan, Alberta, the Northwest Territories, and a small sector of northwestern Ontario.) Together these two regions produce 97% of both the landed value and the quantity of freshwater fish harvested in Canada.

In keeping with the relevant Orders of Reference, 25 hearings related to the marketing of fish in Canada were held between March 1985 and May 1986. Of these, some 17 dealt exclusively with the freshwater fisheries while the others laid the groundwork for studying the marketing of all types of fish throughout Canada. Most of the formal and informal hearings on the freshwater fisheries were held in the Western Region, but were supplemented by several meetings in Ottawa.

The Standing Senate Committee on Fisheries is indebted to the various interested parties from across Canada who provided it with well over 40 submissions on the marketing of fish in Canada.

During the study and the preparation of this report, much assistance was provided by the Clerk of the Committee, Mrs. Diane Deschamps; Mr. Pierre Touchette, Research Officer, Library of Parliament; and Miss Raine Phythian, Administrative and Research Assistant of the Committee. Recognition also goes to the work done by Econome Consultants Inc. The Committee would also like to thank Mr. Vince A. Gobuyan, who has recently assumed the position of Director of Research of the Committee.

Many witnesses from industry (fishermen, processors, wholesalers, retailers and distributors) and from government generously contributed their views and knowledge to the conduct of this phase of the study. It is hoped that their continued co-operation will be forthcoming over the next year as the Committee pursues the completion of its mandate to examine and report on all aspects of the marketing of fish in Canada.

FOREWORD

The various sectors of Canada's fishing industry are enjoying buoyant markets as the demand for fish expands. However, this is not a time for complacency but rather for caution as the industry is regularly subjected to cycles in which periods of demand-driven markets are inevitably followed by periods of excess supply. In addition, there are a number of changes occurring in the industry and the market-place that will impact on Canada's fishing industry in the coming years. Among these are the increasing protectionism in the U.S. market, the development of aquaculture and the possibility of more product substitution by consumers as the price of fish continues to rise relative to that of other protein products. Therefore, the Canadian fishing industry, particularly the freshwater fishing industry, must meet a number of challenges, the most important of which is possibly the expansion of the domestic market.

Also, since this interim report on the freshwater fishing industries of the Western and Ontario Regions addresses the marketing of fish and fishery products, it must also examine, as far as possible, the resource management system. This system plays an important part in determining whether the fishing industry is "market-driven" or "supply-driven". Ideally, it should ensure that the industry is continuously market-driven so as to minimize the extent of the cyclical variations that affect both the stability of fishermen's earnings and the profitability of the fish processing companies.

The Committee has therefore put forward, for the consideration of industry and the federal and provincial governments, recommendations it deems would alleviate constraints on the marketing of Canadian freshwater fish. These recommendations, which are regrouped in section 6 of this report, suggest the implementation of some changes in the marketing structure and the resource management systems of the Western Region. They also deal with the needs in both Regions to develop the local or domestic market for freshwater fish, particularly in its fresh form, and to consolidate the industry's position to meet the challenges and opportunities that will result from the development of aquaculture.

While the Committee has striven to deal with all subjects submitted for its consideration, it is well aware that many questions remain unanswered. Accordingly, the Committee is looking forward to continuing its study of the marketing of fish in Canada.

Jack Marshall
Chairman

Introduction — The Freshwater Fish Industry

1.1 Comparing the Fisheries of the Western and Ontario Regions

An understanding of the differences between the ways in which the two regions organize the marketing of freshwater fish is important to the analysis which follows. The Ontario fishery is a mosaic of private sector operations — a fragmented industry — while the Western Region's fishery processing and marketing are controlled by a Crown corporation.

The private sector or free-enterprise concept of marketing which prevails in the Ontario Region is very similar to that of most industries producing and selling commodities. In this model, a wide range of integrated fishing operations catch, process and market the available fish for the highest possible return. These companies compete with each other to sell similar and often identical products to the domestic as well as the export markets. But, since the products they market are often in direct competition with equivalent or substitutable products from other sources, the Ontario fish suppliers can hardly influence price levels. The essence of the competition for the local producers boils down to pricing which in this situation is the principal factor that influences buyers' decisions. Once the price challenge is met, other factors such as quality of product, reliability of supply and efficiency of service come into play to enhance competitiveness.

When a product is highly processed for further value addition, its marketability increases and pricing can be administered more flexibly. New product forms can be developed and new markets opened up, invariably rewarding the innovator with better returns and a competitive edge.

Under the single-desk selling system, on the other hand, one organization is the only buyer and seller of a commodity produced in a specific geographic area. Single-desk selling operations occur in a wide variety of industries but provide their greatest overall benefit when they are created to consolidate the efforts of disparate and dispersed production. They can also be useful in industries where production varies widely according to the season. Streamlining of the marketing process can be achieved with single-desk selling which should impact positively on the returns to the fishermen as well as the processors. Greater control can be exercised over factors such as quality

and variety of products, speed of delivery, degree to which service is suited to clients, flexibility in transport and terms of payment.

Within its region, the single-desk selling operation can regulate prices to fishermen (within market limits) without threat of competitive counter action, thus securing the local market. Outside its region, the operation can mobilize the resources required to enable it to seek out markets. Also, given the amounts of product it can market at any one time, single-desk selling can theoretically secure better returns for the portions of sales it makes in the outlying markets. Thus, as in the case of the Freshwater Fish Marketing Corporation (FFMC), a single-desk selling operation can be very successful given a product line of fair market acceptance.

As the FFMC competes with the Ontario producers in domestic and export markets, sporadic complaints of unfair competition arise. Single-desk selling also engenders grievances from within its own territory about its policies, prices or other aspects of its operations. As such, it is often a target of diverse complaints from fishermen and some fish traders.

1.2 The Limits of Comparison

Although, an appreciation of the differences between the structures and organizations of the Western and the Ontario regions is useful, these fisheries are in fact difficult to compare as each is a system unto itself, subject to distinctly different socio-economic, resource and geographic factors.

Comparisons between elements of regional fisheries are difficult at the best of times because of the wide variety of species, and the diversity of equipment and techniques used by the large number of fishermen involved. Although the conditions affecting the freshwater fisheries of the Ontario and the Western regions are less extreme than those characterizing Canada's coastal fisheries, the problems of comparison are still substantial.

Ideally, a rational economic analysis could, however, compare the two systems. In the words of the Minister of Fisheries and Oceans, the Honourable Tom Siddon, at his appearance before the Committee:

We have two parallel regimes here. We should do some economic comparisons. I would be very pleased to receive an analysis of the relative prices paid to fishermen for perch and other fish caught in the Great Lakes, on the one hand, compared with the price fishermen in northern Saskatchewan and northern Manitoba are paid by the FFMC. I would like to have a comparison of the benefit by way of prices to fishermen against the cost, in each case, and a measure of the stability of earnings in each case in order to decide which system works best.⁽¹⁾

Recognizing the usefulness of such an exercise, the Committee recommends that:

(1) The Department of Fisheries and Oceans, in co-operation with the relevant provincial and territorial governments, undertake an economic comparison of the freshwater fisheries of the Ontario and Western Regions.

⁽¹⁾ Canada, the Senate, Proceedings of the Standing Senate Committee on Fisheries, Issue No. 35, May 15, 1986, p. 33.

Description of the Western and Ontario Regions

2.1 Geographic Boundaries

Distance is an overwhelming factor which hinders the performance of the Western and Ontario Regions' freshwater fisheries. The territory covered by both these regions is vast in area, diverse in climatic conditions and fish stock habitats, and poses formidable challenges with respect to the transportation of the harvests to their markets. This is especially true in the case of the Western region.

2.1.1 The Western Region

The area covered by the FFMC is the shaded portion of the map presented as Exhibit 1 on page 4. It includes all of the provinces of Alberta, Saskatchewan and Manitoba, the northwestern sector of Ontario, and all of the Northwest Territories. The area encompassed is 5.34 million km² (some 333,000 km² of which are inland water), yet it has a total population of only 4.43 million.

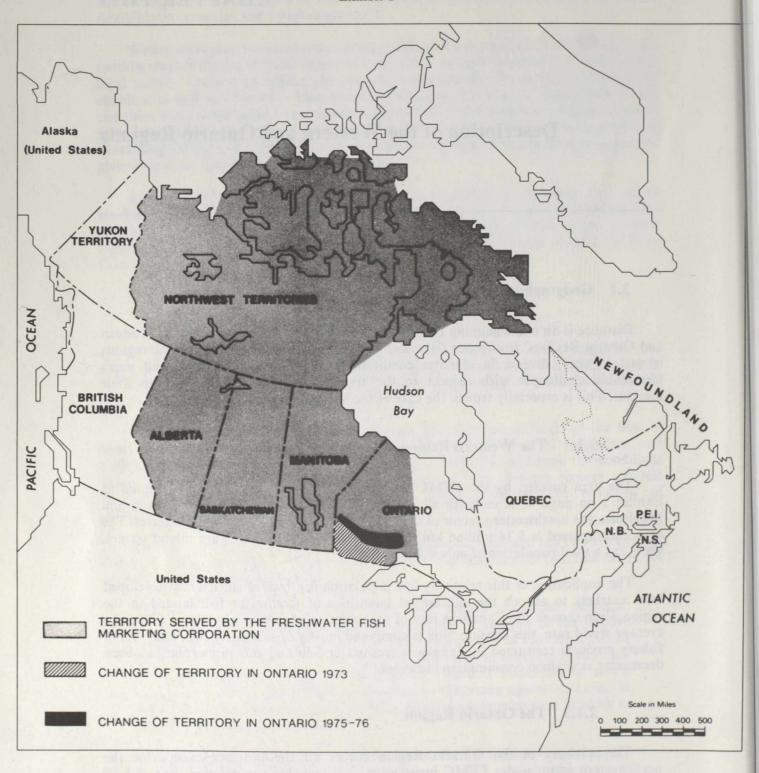
The implication of this relatively low population is a lack of sufficiently developed local markets to absorb the substantial quantities of freshwater fish landed in the region. Even though the Canadian rate of consumption of fishery products is above the average world rate, this consumption is composed mostly of salt water fish. Only 4% of fishery products consumed in Canada is freshwater fish and this proportion has been decreasing as seafood consumption increases.⁽¹⁾

2.1.2 The Ontario Region

The territory of the Ontario Region covers all the province except for the northwestern sector under FFMC jurisdiction, and includes a population base of 8.62 million people. The Ontario Region covers some 1.07 million km², of which

⁽¹⁾ Canada, Department of Fisheries and Oceans, Canadian Fisheries Annual Statistical Review, Volume 16, 1983, p. 35.

Exhibit 1



Source: Freshwater Fish Marketing Corporation, 1975-76 Annual Report.

approximately 177,000 km² are inland waters. It should be noted that during the course of the FFMC's existence, two areas of Ontario have been removed from its jurisdiction.

An outstanding feature of Ontario is the Canadian portion of the Great Lakes which accounts for approximately 40% of the region's waters. These huge bodies of water are the principal locations of the Ontario freshwater fishing industry. The importance of this factor is two-fold. First, the sources of freshwater fish are heavily concentrated around Lakes Erie and Huron. Secondly, these locations are adjacent to a huge market, the U.S.A., which is, by rule-of-thumb, ten times the size of the Canadian market. Furthermore, the highest concentration of Canada's population is within easy access from the major fishing locations. This market comprised of the Windsor-Toronto and Toronto-Niagara corridors accounts for almost 4 million people.

2.2 Landings in the Western Region

The FFMC is geared up to process and market the 23 species of fish listed in the Freshwater Fish Marketing Act that are harvested by licensed commercial fishermen within its jurisdiction. Approximately 3,500 commercial licensees spread across the FFMC territory supply the Corporation with fish for processing. In 1984, this harvest amounted to some 17.8 thousand tonnes (39.2 million lb.) of fish, practically the lowest quantity handled since the creation of the FFMC. It compares with a high of 26 thousand tonnes (57.3 million lb.) achieved in 1979/80, and an average of approximately 20.4 thousand tonnes (45 million lb.) over its 16 years of operation. Table 1 gives commercial landings over 10 years in the FFMC area, broken down by major species.

Table 1

WESTERN REGION
TEN YEAR LANDINGS TREND
(quantities in tonnes, round weight)

Species	82/83	81/82	80/81	79/80	78/79	77/78	76/77	75/76	74/75	73/74
Whitefish	6,560	6,577	8,713	8,660	7,520	7,585	7,007	6,729	6,634	6,626
Pickerel	5,366	5,224	4,142	4,276	3,770	4,572	4,198	3,441	3,025	3,027
Sauger	1,476	1,769	1,903	1,372	1,398	1,512	1,639	1,912	1,778	1,881
Lake Trout	445	602	919	936	552	823	716	531	537	593
Northern Pike	3,956	3,883	3,927	4,207	3,714	3,694	3,470	3,040	3,123	2,969
Tullibee	228	294	386	451	393	520	462	748	1,054	299
Perch	107	100	101	61	59	48	53	61	90	58
Mullet	3,654	2,378	2,102	5,044	2,019	1,609	289	2,182	3,108	2,069
Carp	569	958	1,418	677	607	687	285	487	655	13
Arctic Char	68	76	92	78	76	125	53	33	16	0
Inconnu	18	40	70	130	167	91	79	100	95	100
Sturgeon	21	14	20	16	15	15	16	11	9	13
Others	108	28	39	130	106	80	241	163	293	626
Total	22,576	21,944	23,830	26,038	20,395	21,360	18,506	19,440	20,417	18,275

Source: Department of Fisheries and Oceans, Western Region, Annual Summary of Fish Harvesting Activities, Western Canadian Freshwater Fisheries, Winnipeg, 1982-83.

Since the FFMC is strictly a processing and marketing organization, the amount it markets depends on the harvests of a large number of independent fishermen. The figures provided in Table 1 are not an indication of the area's capabilities for producing fish for market since they represent only the amount of product delivered to the FFMC. They do not therefore include the catch sold directly to the final consumer by fishermen within their own provinces, or the quantities of fish being marketed privately in Alberta and Saskatchewan, where intra-provincial fish marketing regulations were recently relaxed.

2.3 Landings in the Ontario Region

Except in the northwestern part of Ontario, where fishermen market their catch (approximately 1% of the total Ontario harvest) through the FFMC, there is no single organization in Ontario responsible for either processing or marketing the province's freshwater fish. Nearly all the fish harvested in Ontario under the 931 authorized commercial licences is processed and marketed through private, in-house or cooperative services.

In 1984, the harvest of fish from Ontario waters amounted to approximately 22.7 thousand tonnes (50 million lb.). This compares to a 10-year average of 25.2 thousand tonnes (55.5 million lb.) and a high of 34.1 thousand tonnes (75.2 million lb.) achieved in 1982. Table 2 provides six-year landings figures for the Ontario freshwater fisheries, broken down by major species.

Table 2
LANDINGS OF THE ONTARIO COMMERCIAL FISHERIES
BY SPECIES, 1979-84
(quantities in tonnes, round weight)

Species	1984	1983	1982	1981	1980	1979
Smelt	7,485	4,351	19,809	13,901	11,427	10,883
Whitefish (Lake and Round)	1,927	2,271	1,814	1,800	1,771	1,417
Bass (Rock and White)	2,035	259	1,626	936	960	828
Perch (White and Yellow)	5,165	3,575	5,042	4,816	6,344	6,022
Yellow Pickerel	2,280	1,855	1,379	1,471	1,353	1,059
Northern Pike	111	281	324	295	269	314
Lake Herring	915	594	1,131	1,451	1,476	998
Chub	745	524	311	393	450	503
Sucker (Mullet)	273	488	631	604	572	636
Freshwater Drum	261	190	232	256	180	166
Bullhead	215	223	205	233	243	238
Lake Trout	193	264	260	226	280	168
Carp	132	182	160	208	122	181
Sunfish	105	112	131	126	119	129
Eel	114	70	32	111	169	228
Catfish	97	112	96	116	86	97
Burbot (Ling)	39	73	81	181	109	130
Sturgeon	8	22	20	20	22	15
Sauger	15	20	28	20	17	16
Other	554	1,027	177	907	735	1,109
Total Landings	22,667	27,538	34,110	28,072	26,701	25,137

Source: Ontario Department of Natural Resources.

2.4 Relative Economic Importance of the Inland Fisheries

Table 3 translates the freshwater fish harvest for 1983 into value on a province-byprovince basis, and indicates the relative economic importance of the commercial freshwater fishery to each of the provincial/territorial economies.

Table 3 shows that, relative to the total size of each of the provincial economies, none of the freshwater fisheries exceeds 0.21% of the value of the gross provincial product, and none employs more than 0.5% of the provincial/territorial labour force. By comparison, the total Canadian fisheries account for approximately 1% of the total national gross domestic product, and the fisheries account for 5-12% of employment in some of the Atlantic provinces.

The table also shows that the four provinces under the FFMC's jurisdiction, covering a huge territory with approximately twice the inland water base and a much larger number of fishermen, handle slightly less product than the Ontario region. The explanation for this imbalance is the concentration of capital and effort that characterizes the less geographically-dispersed fisheries. As shown in the subsequent sections of this report, the Great Lakes fisheries account for over 93% of the quantities landed even though they account for only 53% of the number of licences issued in the Ontario Region.

Table 3

THE FRESHWATER FISHERY, ECONOMIC IMPORTANCE, BY PROVINCE 1982/83

Province	Harvest ('000	Landed Value	Market Value	% of GPP	Employ- ment*	% of Total Provincial
	tonnes)	(\$000),000)			Employment
Ontario	32.5(e)	27.84	60.0(e)	0.050	2,881	0.07
Manitoba	15.9	12.95	28.2	0.200	3,708	0.50
Sask.	3.5	2.35	6.5	0.040	1,153	0.29
Alberta	1.2	0.78	1.9	0.004	516	0.04
N.W.T.	1.5	1.35	2.5	0.210	134	0.05

Source: Department of Fisheries and Oceans, Western Region, Annual Summary of Fish Harvesting Activities, Western Canadian Freshwater Fisheries, Winnipeg, 1982-83.

While fully recognizing that the inland fisheries of the Western and Ontario Regions are of minimal importance to the national economy or even their respective provincial economies, the Committee wishes to stress the many representations made to it as to their local importance, especially in northern areas where up to 90% of fishermen are of native origin. The lack of alternative employment makes some remote northern communities even more dependent on commercial fishing than would be the case in some Atlantic Canada communities.

^{*} Employment figures reported by DFO may be at variance with Provincial/ Territorial figures.

⁽e) Estimate.

2.5 Processing Facilities in the Western Region

The FFMC was established in 1969 by The Freshwater Fish Marketing Act, a federal statute which gave it the exclusive right to process and market the freshwater fish harvested from the Western Region in the domestic and export trade. The purpose of this mandate was to: a) market fish in an orderly manner, i.e. process according to market specifications b) maximize returns to fishermen and c) increase domestic and export trade in freshwater fish. At the same time, provincial legislation was passed in all participating provinces giving the FFMC a monopoly on the intra-provincial markets.

With the creation of the FFMC, many of the existing processing facilities in the Western region became redundant. The number of packing stations was reduced from over 200 to about 100. A modern, mechanized, highly efficient processing plant was installed in Transcona, Winnipeg, to process the bulk of the harvest of the whole region. This facility replaced the capacity of 5-6 other plants which were taken over by the Corporation and subsequently closed.

The Transcona plant is a modern fish plant subject to on-going mechanization in the interests of efficiency and, ultimately, to realize cost reductions and improvements in quality. The plant has a through-put capacity of 16 thousand tonnes (35.3 million lb.) per year, and a maximum weekly through-put of approximately 900 tonnes (2 million lb.). The Transcona plant can dress, fillet, freeze, grind and store great volumes of fish of numerous species. Of its total production, approximately 85% is shipped from the plant to export markets, the remaining 15% being marketed in Canada.

2.6 Processing Facilities, Producer and Processor Relationships in the Ontario Region

In contrast to the highly centralized processing effort in the Western Region, it is particularly in processing that the Ontario Region displays its fragmented characteristics. Some 79 processing facilities, employing up to 1,500 people on a seasonal basis, process 93% of the Ontario catch of freshwater fish. Approximately 85% of this is exported to the neighbouring U.S. market, or to other overseas destinations. Species which are processed in significant quantities include yellow perch, smelt, pickerel, whitefish and bass.

One of the characteristics of the industry in the Ontario Region is the presence of integrated fishing enterprises. According to figures obtained from the Ontario Department of Natural Resources, some 18 of these firms out of a total of 79 hold commercial fishing licences. Except for one, which is located in the region of the northern inland waters of Ontario, all these operations are on the Canadian portion of the Great Lakes. The 14 firms located on Lakes Erie, Huron and Superior, and one located in northern Ontario, together represent 14% of the quotas on these lakes. Based on the recent (1984) harvest figures available for these lakes, this represents a harvesting capacity of nearly 3 thousand tonnes (6.6 million lb.). This is approximately 13% of total quantities of fish landed in the Ontario Region. There is not enough information to assess the harvesting capacity of the three processing firms holding fishing licences on Lake Ontario but it is possible to conclude that most of the 931 authorized commercial fishing licences in Ontario are issued to independent fishermen who account for well over 70% of landings in the Ontario Region.

Integrated fishing companies can stabilize their supply of raw material, to a certain extent, through the use of their own licences plus the option of increasing their quota by buying additional licences. They also augment their supply of raw material by bidding for the catches of the independents on the open market. In some instances, independent fishermen enter into agreements to sell all of their catch on a regular basis to one or two of the principal processors. Usually some formula is set out in the agreement whereby the independent can be certain of a fixed price on a sliding scale depending on the state of the total market. These "loyalty" agreements help reduce the uncertainty for both the independents and the major suppliers, who are concerned about having adequate supplies.

In addition to having well developed relationships with the fish processors, the independent fishermen also do some processing and marketing. Many licence holders ship fresh fish, with minimal amount of processing, direct to the U.S. market. Also, a substantial proportion of the 15% of the total Ontario harvest which is marketed in Canada is sold directly to Ontario consumers by the fishermen at lakeside stalls.

In summary, it should be emphasized that the fishing operations in the Ontario Region are greatly diverse in size and type of activities. While some may handle mostly fresh fish, others engage in substantial processing operations which range from smoking to breading. The marketing of fresh fish takes place between the spring and autumn, while the marketing of processed frozen products takes place on a year round basis although it also decreases during the winter as raw material availability declines.

The Markets for Freshwater Fish

Table 4 provides a breakdown of the 1984/85 freshwater fish sales volume by market. The figures show the United States as the principal market for both the FFMC and the Ontario Region. For the FFMC, the domestic market is the second largest, followed by Finland and France. Japan ranks as the second most important market for Ontario fish followed closely by the domestic market. The Committee was made aware of the fact that data on Ontario fish exports has not been compiled completely. The

Table 4

MARKETS FOR FRESHWATER FISH, BY PRODUCING REGION, 1984/85
(product weight in tonnes)

Estre.	Market	FFMC	Ontario	Total
	U.S.A.	7,224	8,734	15,958
	Japan		2,383	2,383
	Finland	1,052		1,052
	France	1,050	THE PARTY NAMED IN	1,050
	Germany	468	es an expose dere in	468
	Switzerland	5	246	251
	Sweden	154	60	214
	England	48	alemnia (- anidodist	48
	Other	ed while the made	166	166
	Total Exports	10,001(85%)	11,589(85%)	21,590(85%)
	Canada	1,766(15%) 11,767	2,045(15%) 13,634 (e)	3,811(15%) 25,401

⁽e) These figures are derived by assuming that exports constitute 85% of the total markets of the Ontario fishery.

Sources: 1) Freshwater Fish Marketing Corporation, special compilation.

²⁾ Statistics Canada, special compilation of freshwater fish exports by province of landing.

Ontario figures were arrived at by deducting the FFMC exports from the total freshwater fish exports reported by Statistics Canada.

Table 5 shows a breakdown of 1984 exports by freshwater fish species by product form from all Canadian provinces and territories. In terms of quantity, whitefish is the top export species followed closely by smelt, pike and pickerel. The major product form is round or dressed sold either fresh or frozen. On the whole, most of the freshwater fish production (68%) is sold in the frozen form.

Table 5

CANADIAN FRESHWATER FISH EXPORTS BY SPECIES AND PRODUCT
FORM IN TONNES, 1984

	Freshwater Fish Round or Dressed		Freshwater Fish Fillets		Freshwater Fish Blocks	Total	
100 100 L	Fresh	Frozen	Fresh	Frozen	Frozen	Fresh	Frozen
Perch	414		756	1,216		1,170	1,216
Pickerel	1,232	193	202	1,591		1,434	1,784
Pike	444	538		430	824	444	2,236
Sauger	85	92		524		85	616
Smelt	1,245	4,806				1,245	4,806
Tullibee	315					315	_
Whitefish	3,148	2,176		199	779	3,148	4,399
Mullet					418		418
Other	2,291	908	195	113	132	2,486	1,153
Total	9,174	8,713	1,153	4,073	2,135	10,327	16,628

Note: Export figures shown here include exports from all provinces.

Source: Department of Fisheries and Oceans, Canadian Fisheries Exports — 1984.

3.1 Canadian Channels of Distribution for Freshwater Fish

Canadian distribution channels for freshwater fish appear to be less developed than those in the United States. A number of factors have kept them from developing to their full extent.

On the whole, the New York market primarily influences the prices of freshwater fish in the North American market. Since the prices for Canadian freshwater fish in the United States are generally higher, in Canadian dollar terms, than in Canada, a large proportion of Canadian freshwater fish supply is consequently exported to the United States. As a result, many Canadian consumers find freshwater fish not readily available or is simply not distributed widely enough. Obviously this adversely affects the consumption of freshwater fish in Canada. However, in areas close to the freshwater fish sources, consumers can buy freshly caught fish at lower prices.

Under-developed domestic consumer demand, aggravated by the emphasis of the major producers on the export markets as their first priority, has hindered the growth of domestic distribution and sales of freshwater fish.

Over the past few years, the major food chains have initiated special merchandising and promotional efforts to increase their sales of fish. It is indeed encouraging to note that of late stronger interest in merchandizing and promotion of fish, particularly fresh fish are becoming evident.

In most supermarkets, the fresh fish operations are handled by the meat departments. It is, however, felt that this may not be appropriate as there are inherent differences between the merchandising of meat and that of fish. Some fish specialists suggest that fish sales at the retail level should be handled by the fresh produce department. In their view, there are similarities between the merchandising of fish and fresh produce.

3.1.1 Distribution Channels for the Western Region's Production

The FFMC mainly markets fish in the Western Region and in Central Canada. In British Columbia and east of Quebec, the FFMC products are by and large not competitive or not as saleable as salt water fishery products presumably due to the lack of consumer experience with freshwater fish.

In marketing its products in Western Canada, the FFMC mainly acts as a distributor moving fish to a network of wholesalers and brokers who, in turn, service the retail and food service trades in the major western cities. Outside the major cities of the Western Region, the FFMC is the main supplier of freshwater fish to the retail and food service markets. In Alberta and Saskatchewan, however, changes were recently made to the intra-provincial fish marketing regulations making it possible for fishermen to sell their product direct to intra-provincial retail and food service outlets. Previously, fishermen could sell their product only to the FFMC or directly to the end-consumer. This is still the case in Northwestern Ontario and to some extent in the NWT and Manitoba.(1) The changes in Alberta were the result of a study showing that there were undue constraints on the local Alberta market for freshwater fish. One of these was obviously the need to route the product to and from a central processing plant with the attendant transportation and overhead costs. Another was the considerable fluctuation in the availability and price of freshwater fish. As an export-oriented operation, the FFMC is constantly responding to market forces independent of local markets. This had apparently constrained many retail outlets from handling the product. (2)

In Central Canada, the FFMC relies on one particularly large wholesaler which distributes FFMC products in Ontario and Quebec. However, the marketing of FFMC products in these provinces is highly seasonal as the FFMC cannot compete with

⁽¹⁾ In the NWT, the FFMC on the recommendation of the Territorial government issues special dealer licences to permit intra-provincial sales from fishermen to commercial enterprises such as retail outlets, hotels and restaurants. In Manitoba, the FFMC also issues similar special dealer licences in remote areas.

⁽²⁾ Thorne, Stevenson & Kellog, Evaluation of Fresh Freshwater Fish Processing and Marketing Opportunities Within Alberta, November 1983, p. 14.

Ontario integrated companies in the summer when the Great Lakes are open and Ontario fresh fish prices are \$.30 to \$.40/lb. lower than FFMC prices. Therefore, the FFMC inventories a portion of its summer-caught products and sells these in frozen form in the winter when freshwater fish prices normally rise due to tight supply. East of Quebec, the FFMC virtually does not pursue the marketing of its product line except for specialty items such as Arctic char.

3.1.2 Distribution Channels for the Ontario Region's Production

The Ontario fishing companies concentrate their domestic marketing activities in Quebec and Ontario. However, as in the Western Region, high prices in the U.S. market draw the bulk of the supplies from Ontario producers, thereby curtailing availability of products to local markets. In addition, the inability of the Ontario fishery to supply the retail and food service sectors with fresh fish on year-round basis has inhibited the development of the local markets for fresh products.

In Ontario's major metropolitan centres, freshwater fish is moved through wholesalers who service small restaurants and fish shops while also selling through their own retail outlets. However, large restaurants and caterers, who are making large volume purchases, generally buy direct from the fish companies.

During its investigation, the Committee was made aware that one of the major supermarket and food distribution chains in Quebec recently purchased the operations of Montreal's largest and best known fish distributor. This obviously indicates that chain's intention of developing its fresh fish sales. As will be pointed out in subsequent sections of this report, the development of fish and seafood sales in the large retailing chains is an important factor in the expansion of the domestic market for Canadian fishery products. Industry observers believe that a continuation of the trend towards increased marketing of fresh fish at the retail level in Canada could increase domestic sales of fish and fishery products up to 50%.

It should be noted that the Committee's inquiries have revealed that no comprehensive study of the Canadian fish marketing system is available, and that there is a general lack of meaningful information on the domestic fish market. In view of this, the Committee recommends that:

(2) The Department of Fisheries and Oceans undertake a comprehensive study of the Canadian fish and seafood market to determine the size, nature and potential of the domestic market for the purpose of providing sound bases for future fish marketing plans.

3.2 Overview of U.S. Production, Markets and Distribution Channels

3.2.1 U.S. Production of Freshwater Fish

Although the United States ranks fourth among the top 20 fish producing countries of the world (Canada ranks sixteenth), it is a substantial importer of fishery products and is the world's second largest importer after Japan. In 1985, U.S. imports of fishery products (edible and non-edible) reached a record high level of U.S. \$6.7 billion. U.S. imports of only edible fishery products also reached a record high of 1.2 million tonnes (2.6 billion lb.) valued at U.S. \$4.1 billion in 1985.

In 1985 Canadian exports to the U.S. of all fishery products (edible and non-edible) amounted to a record 340.4 thousand tonnes (750 million lb.) valued at U.S. \$832.2 million. Of this total, 19.5 thousand tonnes (43 million lb.), valued at U.S. \$51.9 million, were freshwater fish exports. Canadian freshwater fish exports therefore accounted for 5.7% of the volume and 5.2% of the value of Canadian exports of fish to the United States. The fisheries of the Western and Ontario Region accounted for over 92% of these exports. Of this, the FFMC supplied approximately 45% and the Ontario Region 55%, as shown in Table 4. However, neither of these two fisheries is a dominant force if one considers overall freshwater fish production in the U.S.

According to the U.N. Food and Agriculture Organization, commercial landings of freshwater fish in the United States were in the order of 75.8 thousand tonnes (167 million lb.) in 1983, which is a level consistent with the average of landings over the past 10 years. (1) By comparison, Canada's freshwater commercial landings were in the order of 48.8 thousand tonnes (107.5 million lb.) in 1983. (2) Therefore Canadian commercial freshwater landings represented approximately 39% of total freshwater landings of Canada and the United States.

In addition to commercial landings, a substantial quantity of freshwater fish is produced through aquaculture in the United States, possibly up to 156 thousand tonnes (344 million lb.) in 1983, approximately 60% of which was catfish. Other freshwater species produced through aquaculture in the U.S. include trout, sturgeon and certain varieties of carp. In the U.S., freshwater fish accounts for 86% of the total aquaculture production. By comparison, freshwater fish aquaculture in Canada largely consists of approximately 1.5 thousand tonnes (3.3 million lb.) of trout produced mainly in Quebec and Ontario. (3)

Thus, the harvests of natural stocks from Canada's major freshwater fisheries, although important, do not figure prominently in the total U.S. fish supply picture. However, the FFMC is a major supplier of two species: it accounts for up to 60% of the total North American production of whitefish and for as much as 75% of pickerel production, depending on annual harvest conditions. (4) Lake Michigan is the second largest source of production of whitefish, the Canadian Great Lakes being a distant third. On the other hand, Ontario is a major supplier of perch and smelt with large amounts of these species being harvested from Lake Erie.

3.2.2 Trends in Fish Consumption in the U.S.

The demand for fish has risen substantially in recent years. From a level of 5.6 kg (12.3 lb. - edible weight) in 1982, per capita consumption in the U.S. rose to 6.6 kg (14.5 lb.) in 1985. While this recent increase applies equally to fresh and frozen fish and to canned and cured products, the long-term trend has been towards an increased

Food and Agriculture Organization of the United Nations, Yearbook of Fishery Statistics - Catches and Landings, Volume 56, 1983.

⁽²⁾ Canada, Department of Fisheries and Oceans, Annual Statistical Review, 1983.

Data on U.S. and Canadian Aquaculture production were obtained from the Department of Fisheries and Oceans and from *The Future of Aquaculture: Profile of Global Growth Industry*, The International Aquaculture Foundation, Washington, D.C.

⁽⁴⁾ Freshwater Fish Marketing Corporation, special compilation.

consumption of fresh and frozen products. In 1985, per capita consumption of fresh and frozen products reached 4.1 kg (9.0 lb.) compared to 3.5 kg (7.7 lb.) in 1982.

As a nation, the United States can be described as a moderate demand market (on a per capita basis), ranking 37th out of a total of 125 fish-eating nations listed in statistics of the U.N. Food and Agriculture Organization. The United States' consumption rate is less than 20% of that of Japan, the heaviest user-nation. However, on a range of per capita consumption figures going from 0.1 kg (0.22 lb. — round weight) to 86 kg (189 lb.), the United States' consumption rate of 16.6 kg (36.6 lb.) is slightly above the average, which stood at 14 kg (31 lb.) between 1980 and 1982. (1)

It must be remembered that this level of consumption occurs in a country with one of the highest standards of living in the world. Americans generally are not limited in their choice of what to consume by lack of disposable income or by the lack of availability of fish products. In other words, they are consumers who have the money to pay for any one of the many product alternatives in the marketplace.

Consumer behaviour is usually greatly influenced by relative pricing. The price index for fish, as reported by the U.S. Department of Commerce, has risen since 1977 at a faster rate than that of meat or poultry. Using 1977 as the base year, fish escalated in price by 56.6% by December of 1984, as compared to the rise of 46.6% for red meat and 32.2% for poultry.

It appears that prices for fish have risen more rapidly mainly as a result of relatively higher growth in production cost in the fishing industry and to some extent the demand trend for fish. Although the price of fish has risen at a greater degree relative to that of other protein foods, this rise has not yet been steep enough to cause product switching (see Table 6 below). Certainly, the emphasis on fish as an important component of a healthy diet (with its beneficial effects on the cardio-vascular system) has contributed to the increasing demand over the last few years. However, this demand would probably have grown even faster had fish prices not increased so rapidly since the mid-seventies.

Table 6

U.S. PER CAPITA CONSUMPTION OF ANIMAL PROTEIN PRODUCTS (edible weight in kilograms)

gal at a division	1965	1970	1975	1980	1983	1985
Red Meat	67.4	74.4	70.5	72.0	65.5	65.7
Poultry	18.7	22.2	22.3	27.7	29.8	31.9
Fish	4.9	5.4	5.5	5.8	6.0	6.6

Source: U.S. Dept. of Agriculture, Economic Data Research Service

⁽¹⁾ United States Department of Commerce, Fisheries of the United States, April 1985.

3.2.3 Overview of the U.S. Markets and Distribution Channels

The Great Lakes Region (see Exhibit 2 on page 18), ranked fifth in terms of fish consumption by the National Marine Fisheries Services, is the major U.S. market for Canadian freshwater fish. Per capita income in that region is slightly above that of the national average but, more importantly, it is inhabited by 26% of the U.S. population and is relatively close to the Canadian border. The Great Lakes Region is served by the distributors and wholesalers of Detroit and Chicago which are the largest ones for freshwater fish. The Detroit distributors service the states of Michigan and Ohio and move minimal amounts of freshwater fish into the New York market. The Chicago fish distributors are more developed than those in Detroit as they handle larger amounts of product. Wholesalers in Chicago serve the states of Illinois and Indiana, while those in Minneapolis move FFMC products mainly into the Mid-West states and even California.

The mid-Atlantic Region, also an important market for freshwater fish, centres on the New York market. Wholesalers in New York service the important New York area market as well as New Jersey. In the past, the New York market basically drew its importance from serving the traditional Jewish market through the retail and small restaurant trades. This established the New York market as the price setter for freshwater fish.

The wholesalers of these large freshwater fish market segments generally service the retail trades as well as the small independently-run restaurants. However, the FFMC and the Ontario fish producers in addition to utilizing the wholesale distribution system also sell directly to some fast food chains and food processors in the United States. As well, the Canadian freshwater fish companies sell directly to institutional markets such as cafeterias, hospitals and prisons, but these are limited outlets for Canadian products since, as a rule, these institutions must satisfy local procurement regulations.

As a final note on this overview of the U.S. market and distribution network for freshwater fish, it should be noted that, as shown in Table 7 on page 19, the food service industry accounts for 65% of sales of fish in the U.S. and the retail market for 35%. This tends to confirm that: "American food consumers demand and generally get reliability of supply, price and quality in the supermarket. The erratic presentation of seafood at the retail level and, consequently, to the consumer [in addition to the consumer's lack of knowledge of how to prepare fishery products] has kept home usage down in the United States, despite many favorable attributes." Therefore, in addition to striving continually to improve its image of quality, the Canadian freshwater fishing industry should also endeavour to make its products available in the market place on a broader scale and on a year-round basis.

⁽¹⁾ Seafood Management Corporation, Surimi: The Explosive Seafood Market, 1984, p. 8.



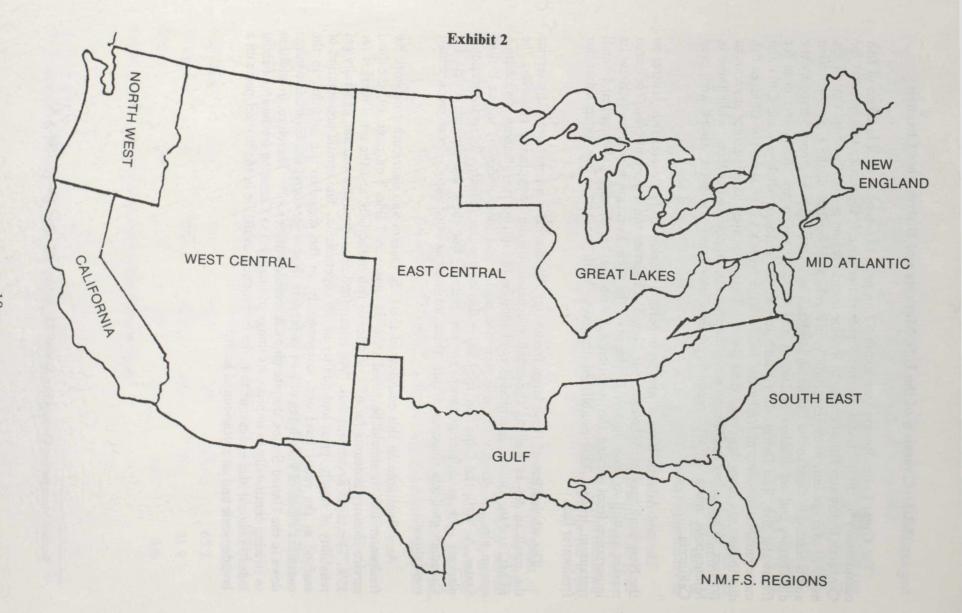


Table 7

COMPOSITION OF U.S. MARKET FOR FISH

FOOD SERVICE (Institutional and Public)

65% - US \$2.1 billion

RETAIL

35% - US \$1.1 billion

Total

100% - US \$3.2 billion

INSTITUTIONAL FOOD SERVICE

PUBLIC FOOD SERVICE

School Lunch

Plant Cafeterias

Hospitals

Prisons

Military

- White tablecloth restaurants
- Franchised restaurants
- Checkered tablecloth restaurants
- Fast food

RETAIL

- Supermarkets
- Grocery stores
- Specialty stores

Source: Overview of the U.S. Market for Canadian Fish & Fishery Products, Marketing Directorate, DFO, February 1985.

Table 7

COMPUSITION OF U.S. MARKET FOR ITSE

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INTERNATION TOOD SERVICE TO SERVICE TOOD DEALER

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Problems, Issues of Concern, Opportunities and Recommendations

4.1 The Western Region

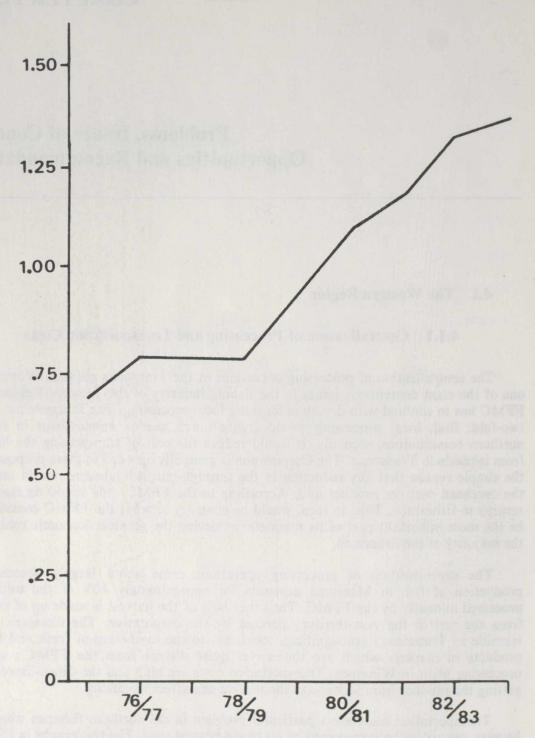
4.1.1 Centralization of Processing and Transportation Costs

The centralization of processing operations at the Transcona plant in Winnipeg is one of the most contentious issues in the fishing industry of the Western Region. The FFMC has to contend with demands for more local processing. The rationale for this is two-fold: first, local processing would create much needed employment in remote northern communities; secondly, it would reduce the cost of transporting the harvest from lakeside to Transcona. The Corporation is generally opposed to these proposals for the simple reason that any reduction in the through-put at Transcona would increase the overhead cost per product unit. According to the FFMC, this would decrease the returns to fishermen. This, in turn, would be contrary to what the FFMC considers to be the most important part of its mandate: achieving the greatest economic returns to the majority of the fishermen.

The centralization of processing operations came about largely because the production of fish in Manitoba accounts for approximately 40% of the total fish processed annually by the FFMC. The other 60% of the harvest is made up of catches from the rest of the vast territory covered by the corporation. The distances (from lakeside to Transcona) are significant obstacles to the marketing of fresh and frozen products in markets which are themselves quite distant from the FFMC's central processing plant in Winnipeg. Transportation costs are high and the delays involved in getting the product from lakeside to the market can affect its quality.

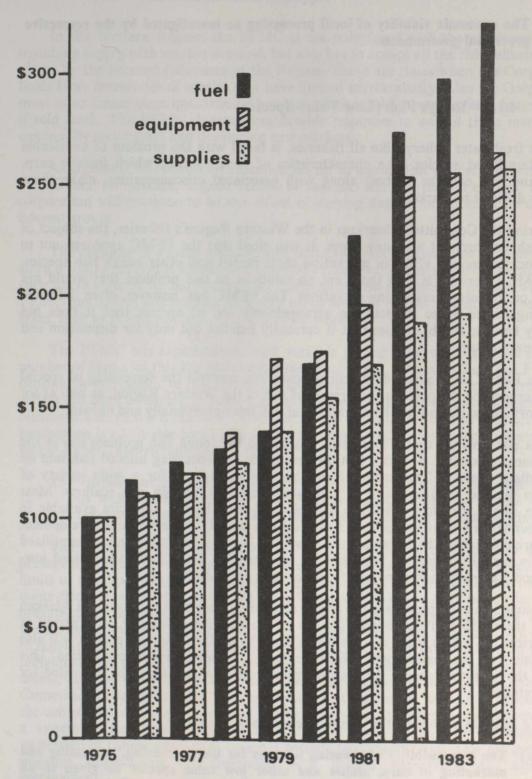
Transportation costs are a particular problem in the northern fisheries where the harvest must often be transported by air to the nearest road. The two graphs in Exhibits 3 and 4 on pages 22 and 23 show that air transportation costs doubled between 1976 and 1983 and that fuel costs tripled over the same period.

The current cost-price squeeze faced by the fishermen of the Western region results in pressure on the FFMC to increase prices beyond the level that the market can bear.



AIR TRANSPORTATION COSTS (\$ per km) BASED ON A 545 KG PAYLOAD FOR A BEAVER AIRCRAFT, 1975/76—1983/84.

Source: Manitoba, Department of National Resources, Five-Year Report to the Legislature on Fisheries, Year Ending 1983-84, p. 49.



INDEX OF LEADING COST FACTORS AFFECTING COMMERCIAL FISHERIES, 1975-1984.

Source: Manitoba, Department of National Resources, Five-Year Report to the Legislature on Fisheries, Year Ending 1983-84, p. 43.

The Committee recommends that:

(3) The economic viability of local processing be investigated by the respective provincial governments.

4.1.2 Rough Fish (Low Value Species)

The freshwater fishery, like all fisheries, is faced with the problem of unsaleable and underutilized species. The characteristics of these species, which include carp, mullet and ling cod (or burbot) along with associated misconceptions, make these products difficult to market.

During the Committee's hearings in the Western Region's fisheries, the subject of rough fish was brought up many times. It was cited that the FFMC appeared not to have allocated enough effort in marketing carp, mullet and other rough fish species. The FFMC's position is that there are no solutions to this problem that would not impinge on its normal marketing operations. The FFMC has, however, often indicated its willingness to agree to licensing arrangements for: a) species that it does not currently handle; and b) species that it currently handles but only for disposition and sale to new markets.

The FFMC, as a single-desk selling operation, controls the dispensing of special dealer licences for the purchase and resale of fish in the Western Region, as well as for intra-provincial sales and for the marketing of fish inter-provincially and abroad.

It is also possible that a long-term solution to the rough fish problem lies in the development of surimi. This is a fish product made by processing minced fish into an intermediate product. This material can be used as a base for a wide variety of imitation seafood products such as simulated crab legs, shrimp and scallops. Most Japanese surimi products today use Alaskan pollock, which is a species available in great abundance and at low prices (3 to 4 cents a pound). Research and development efforts are being made to determine the feasibility of using low-value and underutilized species in surimi production. For example, on Canada's East Coast, small-sized low-valued cod is already used as raw material for high grade surimi.

As long as surimi producers can obtain supplies of very cheap fish such as Alaskan pollock, there will be resistance to the use of other species. However, in a period of rising prices for fish as food, it is inevitable that the price of Alaskan pollock will also rise, opening up the possibility of substituting other species for surimi production. This may be the opening required for the low value freshwater species to be harvested for higher returns.

As a result of the above, the Committee recommends that:

- (4a) The responsibility of granting licences for the purchasing, processing and marketing of carp, mullet and other low value species be given to an impartial body composed of federal and provincial officials with the inclusion of a representative from the FFMC.
- (4b) Research and development work be accelerated to find alternative uses for rough fish species.

4.1.3 The Coordination of Supply

In the Western Region, the FFMC is not only faced with the usual problem of matching supply with market demand, but also has to accept all the fish delivered to its plants by the licensed fishermen of the Region. There are times when the Corporation holds large inventories of species that have limited marketability. Also the Corporation must often freeze large quantities of product which would otherwise fetch better prices if sold fresh. The FFMC devotes considerable resources to unload these inventories, continually seeking out and developing new markets.

As a central marketing organization set up to accomplish precisely this task, the FFMC has, on balance, a good record of success. But the task is endless, and the corporation will continue to be the object of varying degrees of criticism by different interest groups.

The presence of a large organization, that can either find markets for a product or store it until a market is found, diminishes the incentive for the provinces to rationalize their quota systems for harvest control. There have been instances in Alberta where the FFMC has had to process and inventory up to 400,000 pounds of fish from particular lakes, such as Wanigami lake, within a single week.

The FFMC has experimented with variable pricing on a seasonal basis and in a number of instances this has increased winter landings of certain species. The FFMC is continuing to attempt to control surges in deliveries by paying fishermen prices that reflect the costs of having to store and hold products which would have brought better returns if sold in the fresh form. The Committee recognizes that this variable pricing mechanism is a valuable tool which should be refined further for wider implementation by the FFMC, and recommends that:

(5) Variable pricing be implemented on a larger scale to control surges in delivery as well as quality levels. The fishermen affected by this should be fully informed of the pricing changes as well as the reasons for implementing them.

The provinces have the responsibility for regulating the harvest. They do so at present by means of licensing systems which combine individual quotas, species catch limits or gear specifications. In Manitoba, experimentation with transferable individual quota-licences is taking place in the Lake Winnipeg fishery so as to permit harvesting operations of economically viable size. Alberta is following Manitoba's lead by introducing transferable licences. However, the licensing system in Alberta will attempt to regulate quantities harvested by specifying the type of gear that can be used with the individual licences. While this is more economical in terms of enforcement requirements, it is a somewhat less effective way of controlling the harvest levels. The Committee understands that the introduction of transferable licences is necessary for the consolidation of very fragmented fishing operations. It wishes to note, however, that a system of transferable licences must contain certain safeguards to ensure that ownership of fishing operations does not become too concentrated. This has potentially negative implications for fishermen with limited opportunity for alternative employment.

The provincial/territorial governments, in cooperation with DFO, have no option but to continue their experiments and to evolve systems that will take into account both the needs of the fishermen and the protection of the resource.

The Committee recommends that:

- (6a) The provinces consult with the FFMC when establishing quota levels with a view to achieving a better coordination of supply and demand.
- (6b) The provinces investigate the possibility of issuing transferable licences specifying annual quotas, the amounts of which would be staggered throughout the year.

Essential to the system described above would be the option of the FFMC to control the quantities purchased within the limits of specified quotas. The system outlined here has the advantage of being "self-regulatory" in that the FFMC would enforce the respect of quota limits.

While realizing that a uniform resource management system across the provinces and territories in the Western Region is not necessarily an advisable objective, given that different fisheries often require different management systems, the Committee recommends that:

(7) A permanent inter-provincial freshwater fishery committee composed of provincial and territorial government representatives, FFMC officials, fishermen's elected representatives and DFO personnel be formed for the purposes of co-ordinating inter-provincial fisheries policies, sharing information on matters of provincial domain, and taking responsibility for matters of common concern and common potential benefit.

4.1.4 Over-Participation and Over-Capitalization

Over-participation is a major problem in the fisheries of the Western Region. The average quantity (round weight) delivered by each fisherman to the FFMC is approximately 6,360 kg (or 14,000 lb.). Approximately 60% of the fishermen have annual deliveries at or below this amount. The average amounts delivered, however, depend on harvest controls (species and gear restrictions), biological productivity of the lakes, fishing equipment and transportation costs as well as the time expended by the fishermen and the type of their operation.

Commercial fishing in the outlying northern areas of the Western Region cannot support even a small number of people at acceptable levels of existence. The Committee saw direct evidence of this in the Great Slave Lake area of the Northwest Territories. The Great Slave Lake fishery has been declining since the late 1960s for a number of reasons among which are high transportation costs and competition from the Great Lakes fisheries. In the FFMC area, the average gross income of fishermen was \$8,218 in 1984/85. However, 66% of the fishermen (2,124 out of a total 3,242) had incomes below that level. This results in a substantially unequal income distribution in the fisheries of the Western Region.

According to 1977 sample data, the average replacement costs of fishing assets in the western skiff fisheries was \$3,810 for aggregate quota fisheries and \$5,723 for individual quota fisheries. Between 1977-1978 and 1984, the National Income

P.C. Thompson, The Economic Performance of the Commercial Skiff Fishery in Western Canada, Canadian Technical Report of Fisheries and Aquatic Sciences # 1037, Winnipeg, December 1981. The value of assets in the individual quota fishery is higher since this is a more viable fishery because of better cost control given its proximity to the Transcona plant.

Accounts implicit price index for machinery and equipment rose by 63%. Assuming the prices of fishing equipment rose in line with this trend, this would put current replacement costs of fishing equipment at \$6,210 for aggregate quota fisheries and \$9,328 for individual quota fisheries. In 1984,⁽¹⁾ the average harvest of 6,435 kg (14,160 lb.) generated average gross revenues of \$8,222. It would appear that most fishermen have gross earnings well below what is necessary to make fishing an economically viable activity. In general, fishing is an over-capitalized activity which in the long-run undergoes a decapitalization process as the activity fails to produce reasonable returns on investment.

The related problems of over-capitalization and over-participation have several effects: they over-load the costs of bringing a product to market, create pressure for higher prices, and raise expectations that the economic activity should give greater returns than it realistically can.

With respect to the foregoing, the Committee recommends that:

- (8a) The Department of Fisheries and Oceans assess existing programs to determine whether these contribute to the economic viability of commercial fishing activities in the Western Region.
- (8b) The provincial, territorial governments in co-operation with the FFMC coordinate their efforts to bring about a good balance of investments in harvesting facilities and the number of participants in the Western fisheries given the harvestable quantities of fish.

4.1.5 Allocation of Fish Stocks in the Western Region

The question of allocation of stocks was raised often during the Committee's trip to the Western Region. Commercial fishermen testified that in some areas commercial fisheries had been closed for the benefit of the recreational or sports fisheries. In other areas, commercial fishermen are restricted to harvesting species, such as whitefish, that do not qualify as gamefish as do sauger, pickerel, pike and perch. These latter species command much higher market prices. While the allocation of stock does not fall within its mandate, the Committee wishes to stress that the dwindling access by commercial fishermen to the higher value game species has decreased their ability to make a living from their trade especially in those areas where transportation costs from lakeside to Winnipeg are high.

Provincial governments in the Western Region have definite policies favouring the recreational fisheries, based on the generally accepted notion that these generate more economic benefits to the community. These benefits result from the purchase by recreational fishermen of major durables and property as well as supplies, equipment, food and lodging. All of these run into substantial amounts of money. In Saskatchewan for example, anglers' expenditures attributed wholly to sports fishing totalled \$69.9 million in 1980. In Manitoba, the equivalent figure was \$83.9 million. Of course, these figures represent gross economic benefits; i.e., they do not represent a net value added figure which is the usual way of assessing an industry's net production.

⁽¹⁾ Data provided by the FFMC were converted from a fiscal to calendar year basis.

Cognizant of the principle that governments should favour industries that have real positive economic impact, the Committee recommends that:

- (9a) The provincial governments concerned provide assurances that decisions favouring the recreational fisheries over the commercial fisheries take into full consideration all relevant information, including the fact that economic hardship for commercial fishermen may be engendered in areas where alternative employment is not available. It follows from this that commercial fisheries in these areas should be closed or curtailed only if the presence of the sports fisheries results in alternative employment opportunities or commensurate economic benefits for the displaced commercial fishermen.
- (9b) Stock enhancement programs be instituted to increase the quantities of high value species for commercial fishing.
- (9c) The allocation of game species to commercial fishermen be used to increase their incomes where possible, especially in the northern fisheries facing high transportation costs.

4.1.6 Environment

The Churchill River diversion project was constructed by Manitoba Hydro to increase the flow of the Nelson River. This changed the water levels of a number of lakes, raising some and lowering others, resulting in debris and increased sediment levels. The project had a severe impact on commercial fisheries in the Nelson House, the South Indian, Ilford and the Split Lake areas.

The most immediate impact was the decline in the level of landings. This has been attributed to the disruption of spawning beds by water level changes and increased amounts of sediments in the water. The project also resulted in the downgrading of whitefish stocks in South Indian Lake from export to cutter grade. There was also an increase in the natural mercury levels found in the higher valued species (pickerel and northern pike), possibly as a result of leaching from the sediment.

Fishermen from South Indian Lake received a \$2.5 million one-time settlement, but the fishermen from the Nelson House fishery have yet to settle although it has been ten years since the project was completed. With respect to the above, the Committee recommends that:

- (10a) The Department of Fisheries and Oceans, in collaboration with the Department of Environment, continue its evaluation and monitoring of large industrial projects with a view to preventing environmental damage to the fisheries.
- (10b) Should environmental damage be inevitable, individuals or groups whose livelihoods will be affected should be consulted and mutually agreeable terms for compensation worked out prior to the implementation of the project.

Another environmental issue in the Western Region is the Garrison water diversion project designed to irrigate areas of North Dakota in the U.S. Had this

project gone through as originally planned, it would have introduced alien fish species and diseases into the Hudson's Bay watershed with substantial damage to Manitoba's largest commercial fishery, Lake Winnipeg. Even though the project is still in the planning stages and was recently downscaled to the point where the danger of this is minimal, the Committee recommends that:

(11) The Government of Canada continue its close monitoring of the Garrison project and pursue efforts to protect the aquatic environment of the Western Region.

4.1.7 Situation of the Northwest Territories

In Hay River, the centre of the Great Slave Lake fishery, a number of fishermen who testified before the Committee felt strongly that the single-desk selling approach is not a desirable option for their area's fishery. Some of them reiterated that they had been unwilling to be put under the Corporation's umbrella when it was first created. The fishermen of the NWT also maintained that the sales of higher quality whitefish from their area are subsidizing the returns of fishermen from other provinces that produce lower quality whitefish.

It is true that final payments to the fishermen do not differentiate between the various grades of whitefish. Only the initial payments (80% of the total payment) are paid out according to quality categories. The reason for this is that, although the FFMC may purchase an export quality whitefish at a premium price, this could later be sold at a cutter grade whitefish price to a gefiltefish manufacturer in the U.S. This implies reverse subsidization in that the returns realized on sales of lower grades of whitefish to gefiltefish manufacturers may subsidize the final payments for export quality fish.

This cross-subsidization results from the fact that the actual end-use of the product is not necessarily related to its initial quality grading. The Committee recommends that:

(12) The whitefish species pool be classified into appropriate categories according to the quality grades of the whitefish caught and marketed.

Final sales differentiated by grade could be made directly from each pool and rewarded accordingly while sales made irrespective of quality could be paid for at the corresponding accepted rate.

However, the above does not solve the problem of those NWT fishermen who believe their whitefish could command a premium market price on the basis of being harvested in the "cold, crystal-clear waters of the Northwest Territories". This is a promotional theme which the FFMC has only recently initiated in its whitefish market development program in the Los Angeles area. With regard to the desire of some NWT

The FFMC purchases fish at initial prices posted by the Corporation. The initial price approximates 80% of the projected total payments to fishermen (initial plus final) based upon forecasts prepared by the Corporation. Final payments, if any, to fishermen are determined by the Board after the end of the year, based on the results of operations for the year.

fishermen to be exempted from the Freshwater Fish Marketing Act, the Committee recommends that:

- (13a) The fishermen of the NWT put their concerns to the territorial government which, in co-operation with the Department of Fisheries and Oceans and in consultation with the majority of fishermen, should take whatever action it deems appropriate for the benefit of most of the fishermen of that area.
- (13b) The territorial government, in co-operation with the federal government, license a few carefully selected individuals or groups to purchase and market species from the territorial harvest. This would be a pilot project designed to assess whether private enterprise has the capability to participate actively in revitalizing the declining fisheries of the Territories. The participants in this pilot project must be prepared to market all of their catch.

While the last recommendation applies to all species, one which is particularly well-suited for such an experiment is the Territories' Arctic char. It is a highly saleable product that would need a unique and creative marketing approach. Such an experiment may help to increase the Eastern Canada market for this product which is apparently undeveloped mainly because it is obligatory that it be routed through Winnipeg. Since the Arctic char fishery is exclusive to the NWT, such a project would mean that the producers could market the product inter-provincially in Western Canada where a large part of the current market lies as well as in Central Canada and on the export markets. This however, may not apply to species which are common to most provinces in the Western Region.

In conclusion to this section, the Committee would like to emphasize that the portion of the NWT, particularly the Eastern Artic, requires a more intensive study to determine whether it is being adequately served by the present system as carried out by the FFMC.

4.2 The Ontario Region

During the hearings held by the Committee on the fisheries of the Ontario Region, it quickly became apparent that the problems and concerns of these fisheries are much less numerous and contentious than those of the Western Region. However, a number of issues were raised and therefore should be dealt with notwithstanding the relative scarcity of social and economic data relating to these fisheries.

The dual nature of the Ontario Region fisheries should first be noted. On one hand there are the Great Lakes fisheries and on the other, there are the so-called inland waters. Out of the 931 commercial fishing licences in Ontario, 497 are in the Canadian waters of the Great Lakes. The remaining 434 licences are distributed in the so-called inland waters of northern and southern Ontario. Based on these figures, the average catch per licence in the Great Lakes fisheries (excluding Lake Saint Clair) would be upwards of 40,000 kg (88,000 lb.) compared to less than 3,000 kg (6,600 lb.) per licence in the fisheries outside the Great Lakes. An obvious consequence of this is the unequal income distribution, although this occurs here to a lesser degree than in the Western Region. In the Ontario Region: "There are perhaps 300 part-time fishermen and subsistence fishermen with gross annual incomes well below \$6,000 and about 100

with incomes in excess of \$45,000 annually."(1) Fishermen with the lowest incomes are usually the ones located in the "inland" waters while the most successful fishermen are those in the Great Lakes.

Thus the Ontario fisheries are larger and more highly developed than those in the Western Region because of the concentration of fishing in the Great Lakes, in particular Lake Erie. Notwithstanding a relatively high level of development, however, the Great Lakes fisheries are deemed to suffer from over-capitalization and over-participation relative to the biologically sustainable yields. This has led to the recent attempt to control harvesting in the Great Lakes major fisheries by the introduction of individual quota systems.

The transferability of individual quota-licences is expected to help solve the problems of over-capitalization and over-participation in the primary and secondary sectors of the industry. Some producers are of the opinion that quota systems, such as the one on Lake Erie, are good for the industry. Consequently, the system generates a high level of support which is conducive to self-enforcement by producer associations. However, most producers agree that quotas should not be changed for reasons other than protection of the resource and that, whenever possible, changes should not be made to quota levels during the fishing season.

According to a number of witnesses, the major problem of the Ontario fisheries in the coming years is likely to be the availability of supply rather than marketing. Although the Ontario freshwater fishery is the largest in Canada and has the widest variety of species, it is still rather narrowly based both in terms of species and geographic location. Nearly 60% of the landed value in the Ontario fisheries is from the Canadian waters of Lake Erie and consists of a limited number of species such as smelt, perch, bass and pickerel. The Committee would like to emphasize that, in light of such a narrowly based dependence, environment and habitat protection, stock management and maintenance take on an added importance for both industry and government.

In recent years, the Ontario fishing industry has to some extent been affected by pollution. With the exception of a temporary drop in export sales of smelt to Japan, brought on by the dioxin scare, consumer support has remained good as a result of an effective information campaign. Although pollution is being controlled, governments must continue to set more stringent environmental standards. These not only protect fish stocks but also millions of people who use the same bodies of water for drinking water and recreational use. Moreover, at any given time, export sales from the Great Lakes Region could be seriously threatened if the level of toxins in any of the fish were to exceed acceptable limits without adequate counter-measures being taken immediately. This implies certain responsibilities on the part of both government and industry.

Accordingly, the Committee recommends that:

(14a) Ontario processors offer quota officers the opportunity to work in their companies in order to establish better understanding of the quota needs of the industry. Should this exercise yield positive results, it could become an on-going program.

Department of Fisheries and Oceans, Ontario Region, Overview of the Ontario Fishery, Pacific, Inland and Arctic Fisheries Reference Manual, July 3, 1984, p. 6.

- (14b) The Ontario Department of Natural Resources create a ministerial advisory committee (similar to those existing in the coastal fisheries) composed of the various groups utilizing the resource. In addition to advising the Minister, such a committee would help foster better understanding between the various user-groups (e.g. recreational and commercial fishermen).
- (14c) The relevant authorities and concerned parties from Ontario participate in the inter-provincial freshwater fishery committee as outlined in section 4.1.3.
- (14d) The industry protect its own interests by pressing for environmental protection and corrective action as required, providing the media with accurate information about environmental issues that could adversely affect the industry. In this way inaccuracies can be prevented and the public notified of the immediate action being taken by industry and government.
- (14e) Ontario processors in co-operation with the Department of Natural Resources investigate the possibility of processing fish from the more remote areas of Northern Ontario.

The last recommendation, through the development of winter fishing in Northern Ontario, may provide a solution to the Ontario industry's long-term supply problems as well as to the highly seasonal nature of its marketing pattern.

On the subject of areas of Ontario currently under the FFMC's jurisdiction, the Committee received information suggesting that fishermen licensed to fish in lakes of both the Western and Ontario Regions obtained higher prices by selling their catch from lakes in the Ontario Region to Ontario processors. This would be the result of a number of competitive advantages arising from the Ontario Region's close proximity to its markets. Also, some fishermen from the sector of Ontario under the FFMC's jurisdiction have reported what they considered to be substantial problems in having their catch transported to Winnipeg in addition to claiming that they are not well serviced by the FFMC. Extending to Ontario producers the option to compete for the fish harvested in Northwestern Ontario would likely increase their income without any major effect on the FFMC, which obtains only 2% of its total supplies from the part of Northwestern Ontario currently under its jurisdiction.

4.3 Problems, Issues and Opportunities Common to Both Regions

4.3.1 Insufficient Development of Local Markets

Although the Canadian industry does a good job of selling freshwater fish on the American market, it could do a much better job on the domestic market, in both the Western and Ontario Regions.

Firms seem to be reluctant to expend any effort or money to develop this market, possibly because most are loath to undertake a project which they feel will benefit the competition as much as themselves. A unified government and industry effort would be appropriate since the domestic market for fish represents the greatest potential for growth. Development of this market would also help offset any loss of sales should U.S.

freshwater aquaculture make in-roads into the Canadian market share or if protectionist pressures in the U.S. are brought to bear on the Canadian industry.

Both the Ontario industry and the FFMC concentrate on the U.S. market, supporting the FFMC's contention that sales in the U.S. provide better returns. However, neither the FFMC nor the processors of the Ontario Region have sought to develop the local markets so as to compensate for present lower domestic returns with higher sales volumes and lower transportation costs. This does not mean that the local market would not be lucrative if developed. For the development of the intra-provincial markets of the Western Region, the Committee recommends that:

(15) The FFMC and the provincial/territorial governments jointly pursue concerted efforts to stimulate the expansion of the domestic market for freshwater fish.

The Committee considers that the recent changes in the Alberta and Saskatchewan fish marketing regulations are unlikely to disrupt the FFMC's current intra-provincial sales but may increase freshwater fish and particularly fresh fish consumption at the local level.

It should be noted that in those areas (Alberta, Saskatchewan) where the fishermen are allowed more latitude to sell their fish intra-provincially, the purchasers such as processors, wholesalers and distributors must obtain from the FFMC a special dealer licence. Additionally, they must satisfy various provincial licensing requirements related to public health regulations. The Committee recommends that:

(16) The licensing process for intra-provincial sales be streamlined by eliminating the requirement for special dealer licences in all provinces under FFMC jurisdiction.

This will have the effect of putting the licensing process entirely in the hands of the provincial/territorial governments. As a further means of developing the domestic market, the Committee recommends that:

(17) The FFMC continue to extend efforts to ensure the expansion of distribution and sales of freshwater fish in the Western Region as well as in Central Canada.

The above recommendation implies the use of improved packaging for fish offered on local markets. This should be similar to the excellent packaging, superior to that of most competitors, which the FFMC already uses for the U.S. market.

The Committee recognizes that the FFMC, in cooperation with other agencies (e.g. The Freshwater Institute), has had some good success in developing products such as golden caviar, pickerel cheeks, etc. It therefore strongly encourages the FFMC to promote these products on the domestic market.

Increased consumption of fish in Canada is intrinsically linked to the promotion of fresh fish sales in the large retail food chains and specialty fish shops. At present, these concentrate on selling frozen fillets and frozen whole fish in dump coolers. Such displays can hardly compete with those of fresh red meats, poultry and pork.

In U.S. supermarkets, fresh fish counters with large, open-faced display coolers are prevalent. There are usually attendants to serve customers, just as there are butchers in

the meat department. Fish displays feature special offers, free samples, recipes and pamphlets, as well as special sauces and equipment used in making appetizing fish meals.

The freshwater fish producers of Canada have their best opportunity for growth in this country. To date, producers have not taken the time to achieve full penetration of the Canadian retail market and have failed to demonstrate how profitable a fresh fish operation can be in a supermarket. In consultation with fish retail specialists from chains in the United States, who regard their fresh fish operations as a leading source of profit, Canadian management could test new marketing strategies in supermarkets.

With regard to the development of the domestic market for freshwater fish on a larger scale (including the Central Canada markets) the Committee recommends that:

- (18a) The Department of Fisheries and Oceans extend its program of emphasizing quality in the freshwater fish marketing with the objective of enhancing the image, and thereby increasing the consumption, of freshwater fish.
- (18b) The Ontario Council of Commercial Fisheries, in co-operation with other industry associations such as the Ontario Fish Producers Association, undertake to develop and promote the sale of freshwater fish in the major supermarket chains in Ontario.
- (18c) The freshwater fishing industries of both the Western and Ontario Regions, with the help of the federal, provincial and territorial governments, form an association for the purpose of developing generic advertising campaigns aimed at domestic consumers.

In addition, participating companies should be encouraged to share their ideas for improvement. They have more to gain from an overall enhancement of the image of the industry than they would lose to competition through the sharing of ideas. For example, improving fish scaling operations, sizing, packaging, product development and promotion, would lead to a greater acceptance of the product both at home and abroad.

4.3.2 Product Substitution

As the demand for fish has grown, so have prices. In fact fish prices have risen faster than those of any other food sector in the last decade in Canada and the United States. Though this is not yet evident, experts believe that product substitution by consumers will begin at the upper and lower ends of the price scale. Premium products like Arctic char are beginning to run into some price resistance amongst middle income earners as people buy less expensive fish or choose meat instead. At the lower end of the scale, lower income consumers have begun to switch to poultry products which are cheaper because they are produced in the vicinity of most major cities. If fish prices continue to rise, consumers will be persuaded to switch to aquaculture products.

4.3.3 The Growth of Aquaculture

To date there has been no serious market research into the likely impact of aquaculture on the fishing industry, freshwater and saltwater alike. Nevertheless, it

appears that fish farming will have considerable impact on the traditional industry in the next 20 years, as the expertise develops.

Competitively priced fish species raised through aquaculture are already available on the market. Norwegian-farmed salmon and Canadian-farmed Atlantic salmon seem to be more acceptable than the free-range fish because of their uniform sizing and perceived superior quality. One company which grows and markets catfish in the southern United States, is experiencing growth at the rate of as much as 60% a year. Quality, continuity of supply and low costs due to economies of scale seem to be the principal reasons for the firm's success.

Aquaculture offers benefits from reduced transportation and harvesting costs. The fish can be raised close to the target markets and delivered fresh. Handling and storage costs are reduced to a minimum. The product is harvested as needed, in quantities that closely match demand, thereby avoiding losses due to wastage. Long channels of distribution from the boats to the shore to the market by truck, rail or air can be shortened substantially.

Aquaculture also receives a much higher return from its capital investment than does free-range fishing. The cost of catching the fish is significantly lower as throughout the growing period the fish are confined in enclosures which permit efficient harvesting.

Compared with conventional fishing, aquaculture has much in its favour and promises to be the industry of the future. Aquaculture is in a dramatic phase of growth; experts predict that its impact will become more significant in the fishing industry in the next few years. By that time, the major food corporations of the United States and Canada will have consolidated their positions within the aquaculture industry and will even have moved ahead to control it.

Aquaculture has the potential to have a negative effect on the freshwater fish industry of Canada. Even if leading corporations within the Canadian industry were to shift their efforts to fish farming, they are not likely to be competitive unless they establish their operations closer to the major U.S. markets. Canada should therefore be moving quickly to take the action necessary to protect its fishing industries against the potential loss of revenue and jobs.

In view of the above, the Committee recommends that:

(19) Industry and the Department of Fisheries and Oceans increase their monitoring of developments in aquaculture with a view to assisting in the consolidation of the freshwater aquaculture industry in Canada and helping the traditional fishing industry react to these developments.

4.3.4 The Potential Impact of Duties on Canada's Exports

Any industry which is dependent upon a single market for up to 85% of its sales has a legitimate cause for concern in the resurgence of protectionist sentiment in the U.S. Notwithstanding the Canadian government's thrust toward freer trade with that country, the nature and operating mechanisms of the U.S. legislative system leave open the possibility, as U.S. terms of trade continue to decline, that imports of a variety of Canadian products will be subject to U.S. industry's pressures for protection. Although

only a narrow band of East Coast sea fishery producers were behind the latest countervailing petition, U.S. protective measures may be contemplated at any time in any sector of the fishing industry.

Canadians should recognize the power of lobbying and realize that complacency and inaction could lead to losses of one form or another. The industry, with the help of government, will have to act to protect its interests and to mount an on-going campaign to safeguard Canadian fish and fish products against U.S. protectionism.

4.3.5 Foreign Sales Promotion

An emphasis on quality improvement and image enhancement in the Canadian freshwater fishing industry as discussed in sections 3.2.3 and 4.3.1 will be useful on both the export and domestic markets. The Department of Fisheries and Oceans should act as a catalyst, encouraging the industry to promote sales of Canadian freshwater fish through a generic advertising campaign in the United States and other foreign markets. If Canada's freshwater industry hopes to retain its share of foreign fish markets as well as its share of the total protein food market (both at home and abroad), it will have to promote its products as aggressively as its competitors, whether they be other countries and/or other food industry sectors.

As the demand for fish products strengthens, the Canadian fishing industry as a whole (including the freshwater industry) has an opportunity to put itself ahead of all the foreign countries who promote their products in the United States. By emulating such countries as Norway, well known in the U.S. because of its aggressive marketing strategy which includes participation in major seafood trade shows and regular advertising in the media, Canada could learn how to market its products more aggressively.

Without losing their individual characteristics, which are wide ranging indeed, Canadian government and industry should further unify their efforts to sustain and strengthen Canada's position as a leading exporter of fish and fishery products.

The Committee therefore recommends that:

(20) In addition to participating in existing associations and programs, the federal and provincial/territorial governments in consonance with freshwater fishing industry in the Western and Ontario Regions initiate special projects to pursue the development of new markets for freshwater fish.

CHAPTER FIVE

Conclusions

In summary, the Committee would like to emphasize that the inland fisheries are of crucial importance to some of the regional and local economies of both the Ontario and Western Regions. Governments have the responsibility to support these fisheries, particularly in northern areas where few employment alternatives are available.

Witnesses and participants in this investigation expressed strong feelings about the advantages of either single-desk selling or a free enterprise marketing system. As the two systems were developed in response to the needs of the time, however, it is the Committee's considered opinion that there is more to be gained by improving the existing systems than by changing them completely. It is understood that the proposals put forth by the Committee will require further study and evaluation by both industry and government, but the Committee believes that their eventual implementation could make a strong contribution to the prosperity of Canada's freshwater fisheries.

Summary of Recommendations

The Committee recommends that:

- (1) The Department of Fisheries and Oceans, in co-operation with the relevant provincial and territorial governments, undertake an economic comparison of the freshwater fisheries of the Ontario and Western Regions.
- (2) The Department of Fisheries and Oceans undertake a comprehensive study of the Canadian fish and seafood market to determine the size, nature and potential of the domestic market for the purpose of providing sound bases for future fish marketing plans.
- (3) The economic viability of local processing be investigated by the respective provincial governments.
- (4a) The responsibility of granting licences for the purchasing, processing and marketing of carp, mullet and other low value species be given to an impartial body composed of federal and provincial officials with the inclusion of a representative from the FFMC.
- (4b) Research and development work be accelerated to find alternative uses for rough fish species.
- (5) Variable pricing be implemented on a larger scale to control surges in delivery as well as quality levels. The fishermen affected by this should be fully informed of the pricing changes as well as the reasons for implementing them.
- (6a) The provinces consult with the FFMC when establishing quota levels with a view to achieving a better coordination of supply and demand.
- (6b) The provinces investigate the possibility of issuing transferable licences specifying annual quotas, the amounts of which would be staggered throughout the year.
 - (7) A permanent inter-provincial freshwater fishery committee composed of provincial and territorial government representatives, FFMC officials,

fishermen's elected representatives and DFO personnel be formed for the purposes of co-ordinating inter-provincial fisheries policies, sharing information on matters of provincial domain, and taking responsibility for matters of common concern and common potential benefit.

- (8a) The Department of Fisheries and Oceans assess existing programs to determine whether these contribute to the economic viability of commercial fishing activities in the Western Region.
- (8b) The provincial, territorial and federal governments in co-operation with the FFMC coordinate their efforts to bring about a good balance of investments in harvesting facilities and the number of participants in the Western fisheries given the harvestable quantities of fish.
- (9a) The provincial governments concerned provide assurances that decisions favouring the recreational fisheries over the commercial fisheries take into full consideration all relevant information, including the fact that economic hardship for commercial fishermen may be engendered in areas where alternative employment is not available. It follows from this that commercial fisheries in these areas should be closed or curtailed only if the presence of the sports fisheries results in alternative employment opportunities or commensurate economic benefits for the displaced commercial fishermen.
- (9b) Stock enhancement programs be instituted to increase the quantities of high value species for commercial fishing.
- (9c) The allocation of game species to commercial fishermen be used to increase their incomes where possible, especially in the northern fisheries facing high transportation costs.
- (10a) The Department of Fisheries and Oceans, in collaboration with the Department of Environment, continue its evaluation and monitoring of large industrial projects with a view to preventing environmental damage to the fisheries.
- (10b) Should environmental damage be inevitable, individuals or groups whose livelihoods will be affected should be consulted and mutually agreeable terms for compensation worked out prior to the implementation of the project.
- (11) The Government of Canada continue its close monitoring of the Garrison project and pursue efforts to protect the aquatic environment of the Western Region.
- (12) The whitefish species pool be classified into appropriate categories according to the quality grades of the whitefish caught and marketed.
- (13a) The fishermen of the NWT put their concerns to the territorial government which, in co-operation with the Department of Fisheries and Oceans and in consultation with the majority of fishermen, should take whatever action it deems appropriate for the benefit of most of the fishermen of that area.
- (13b) The territorial government, in co-operation with the federal government, license a few carefully selected individuals or groups to purchase and market

species from the territorial harvest to international markets. This would be a pilot project designed to assess whether private enterprise has the capability to participate actively in revitalizing the declining fisheries of the Territories. The participants in this pilot project must be prepared to market all of their catch.

- (14a) Ontario processors offer quota officers the opportunity to work in their companies in order to establish better understanding of the quota needs of the industry. Should this exercise yield positive results, it could become an on-going program.
- (14b) The Ontario Department of Natural Resources create a ministerial advisory committee (similar to those existing in the coastal fisheries) composed of the various groups utilizing the resource. In addition to advising the Minister, such a committee would help foster better understanding between the various user-groups (e.g. recreational and commercial fishermen).
- (14c) The relevant authorities and concerned parties from Ontario participate in the inter-provincial freshwater fishery committee as outlined in section 4.1.3.
- (14d) The industry protect its own interests by pressing for environmental protection and corrective action as required, providing the media with accurate information about environmental issues that could adversely affect the industry. In this way inaccuracies can be prevented and the public notified of the immediate action being taken by industry and government.
- (14e) Ontario processors in co-operation with the Department of Natural Resources investigate the possibility of processing fish from the more remote areas of Northern Ontario (including those currently under FFMC jurisdiction).
- (15) The FFMC and the provincial/territorial governments jointly pursue concerted efforts to stimulate the expansion of the domestic market for freshwater fish.
- (16) The licensing process for intra-provincial sales be streamlined by eliminating the requirement for special dealer licences in all provinces under FFMC jurisdiction.
- (17) The FFMC continue to extend efforts to ensure expansion of distribution and sales of freshwater fish in the Western Region as well as in Central Canada.
- (18a) The Department of Fisheries and Oceans extend its program of emphasizing quality in the freshwater fish marketing with the objective of enhancing the image, and thereby increasing the consumption, of freshwater fish.
- (18b) The Ontario Council of Commercial Fisheries, in co-operation with other industry associations such as the Ontario Fish Producers Association, undertake to develop and promote the sale of freshwater fish in the major supermarket chains in Ontario.
- (18c) The freshwater fishing industries of both the Western and Ontario Regions, with the help of the federal, provincial and territorial governments, form an association for the purpose of developing generic advertising campaigns aimed at domestic consumers.

- (19) Industry and the Department of Fisheries and Oceans increase their monitoring of developments in aquaculture with a view to assisting in the consolidation of the freshwater aquaculture industry in Canada and helping the traditional fishing industry react to these developments.
- (20) In addition to participating in existing associations and programs, the federal and provincial/territorial governments in consonance with the freshwater fishing industry in the Western and Ontario Regions initiate special programs to pursue the development of new markets for freshwater fish.

APPENDIX A

Canadian Freshwater Fish Species of Commercial Importance

ENGLISH COMMERCIAL NAME	LATIN NAME	FRENCH COMMERCIAL NAME	ENGLISH COMMON NAMES	
Arctic Char**	Salvelinus alpinus	omble chevalier	Sea Trout llkalu or Ekaluk Hudson Bay Salmon Alpine Char	
Black Bullhead	Ictalurus melas	barbotte noire	Bullhead Black Catfish	
Brown Bullhead	Ictalurus nebulosus	barbotte brune	Bullhead	
			Mudcat Minister	
Buffalofish	Ictiobus spp	buffalo	Buffalo	
Burbot**	Lota lota	lotte	Ling Maria Eelpout Lawyer	
Carp	Cyprinus carpio	carpe	German Carp Mirror Carp Leather Carp	
Channel Catfish	Ictalurus punctatus	barbue	Catfish Spotted Catfish	
Cisco	Coregonus spp	cisco	Tullibee Chub	
Freshwater Drum	Aplodinotus grunniens	malachigan	Drum Sunfish	
			Silver Bass Quinter	

^{*} Ontario Region only

[&]quot; Western Region only

Canadian Freshwater Fish Species of Commercial Importance (Continued)

ENGLISH COMMERCIAL NAME	LATIN NAME	FRENCH COMMERCIAL NAME	ENGLISH COMMON NAMES
Goldeye**	Hiodon alosoides	laquaiche aux yeux d'or	Winnipeg Goldeye
Inconnu**	Stenodus leucichthys	inconnu	Sheefish Connie Conny
Lake Cisco*	Coregonus artedii	cisco de lac	Cisco Freshwater Herring Tullibee Lake Herring
Lake Sturgeon	Acipenser fulvescens	esturgeon jaune	Freshwater Sturgeon Rock Sturgeon
Lake Trout	Salvelinus namaycush	touladi	Trout Grey Trout Salmon Trout Siscowet
Mooneye	Hiodon tergisus	laquaiche argentée Toothed Herring	
Northern Pike	Esox lucius	ducius grand brochet Pickerel (in U.S.A.) Jackfish Northern Pike	
		White Carp Carpsucher	
ainbow Trout Salmo gairdneri truite arc-en-ciel Kamloops Tro Steelhead		Kamloops Trout Steelhead	
Redhorse**	Moxostoma spp	suceur	"Mullet"
Sauger	Stizostedion canadense	doré noir	Sauger Pickerel Sand Pickerel

ENGLISH COMMERCIAL NAME	LATIN NAME	FRENCH COMMERCIAL NAME	ENGLISH COMMON NAMES
Smelt*	Osmerus mordax	éperlan arc-en-ciel	Rainbow Smelt Frost Fish American Smelt
Sucker	Catostomus spp	meunier	"Mullet"
Walleye	Stizostedion vitreum	doré jaune	Pike (in U.S.A.) Yellow Walleye Yellow pike-perch Yellow pickerel
White Bass*	Bass* Morone chrysops		Gold Eye Silver Bass
		Lake Whitefish Great Lakes Whitefish	
Yellow Perch	Perca flavescens	perchaude	Perch Lake Perch

[·] Ontario Region only

[&]quot; Western Region only

WITNESSES

ISSUE No.	DATE	ORGANIZATIONS AND WITNESSES
1	March 5, 1985 Ottawa	From the Freshwater Fish Marketing Corporation Mr. Don D. Tansley Chairman of the Board Mr. J. Thomas Dunn President
5	April 30, 1985 Ottawa	From the Department of Fisheries and Oceans Mr. Victor Rabinovitch Assistant Deputy Minister, Marketing and International Fisheries Mr. Joshua John Director General, Marketing Directorate
10	May 28, 1985 Ottawa	From British Columbia Packers Ltd. Mr. Bruce Buchanan Vice-Chairman From the Department of Fisheries and Oceans Mr. Peter Leitz
		Market Planning/Processing Economist, Pacific Region
11	June 4, 1985 Ottawa	From the Fisheries Council of Canada Mr. Ron Bulmer President
		From Dalhousie University Ms. Leigh Mazany Assistant Professor, Department of Economics
12	June 11, 1985 Ottawa	From the Department of Fisheries and Oceans Mr. Joshua John Director General, Marketing Directorate Mr. Larry Doucette Director, Market Intelligence and Industry Services Branch

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		From the Technical University of Nova Scotia Dr. E. Graham Bligh, Ph.D Director, Canadian Institute of Fisheries Technology
14	June 18, 1985 Ottawa	From the Department of External Affairs Mr. D.B. Browne Director General, Agriculture, Fish and Food Products Bureau Mr. R. Horne Special Projects, Agriculture, Fish and Food Products Bureau Mr. Ian Bruce Fisheries and Fish Products Division
18	October 8, 1985 Ottawa	From McGill University Dr. Charles Steinberg Professor, Industrial Relations
20	October 15, 1985 Ottawa	From Lapointe Fish Market Ltd. Mr. Ron Byrnes General Manager Mr. Brian Graff Wholesale Manager
21	November 5, 1985 Ottawa	From the Canadian Wildlife Federation Mr. Kenneth Brynaert Executive Vice-President Mr. Stephen Hazell Corporate Counsel
		From the Department of Fisheries and Oceans Mr. R.W. Crowley Director General, Economic and Commercial Analysis Directorate Dr. W. Falkner Director General, Ontario Region Mrs. J. Quiring Senior Analyst, Recreational Fisheries
22	November 18, 1985 Hay River, N.W.T.	The Mayor of Hay River His Worship Ron Courtoreille From the Chamber of Commerce of Hay River Mr. Bill Harris President

Individual presentation

Mr. Dana Ferguson, Fisherman

The Leader of the Government of the Northwest Territories

The Hon. Nick Sibbeston, M.L.A.

From the Government of the Northwest Territories

The Hon. Tagak Curley, M.L.A.

Minister of Economic Development
and Tourism

Mr. Sydney Kirwan
Head of Renewable Resources,
Department of Economic Development
and Tourism

From the Federation of Fishermen of the Northwest Territories

Mr. Don R. Stewart
President
Mr. Alex Morin
Past President
Mr. Ed Studney
Secretary

Individual presentation

Mr. John Nault, Fisherman

Individual presentation

Mrs. Jane Mayo, Fisherperson

The Speaker of the Legislative Assembly of the Northwest Territories

The Hon. Donald M. Stewart, M.L.A.

From the Arctic Co-Operative Ltd.

Mr. Bill Lyall President

Individual presentation

Mr. John Mapes, Fisherman

November 19, 1985 Lac La Biche, Alberta

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From the Lac La Biche Regional Economic Development Council Mr. David McArthur

Director

From the Freshwater Fish Marketing Corporation

Mr. Alex Drobot Field Operations Manager

From the Lac La Biche Fishermen's Co-Operative Ltd.

Mr. Russell Moughrabi President

From the Zone E. (Edward) Commercial Fishermen's Association

Mr. Syd Caudron Secretary

From Westend Fish

Mr. Gordon Caudron Shareholder

From the Department of Public Lands and Wildlife of the Government of Alberta

Mr. Steven Kendall
Commercial Fisheries, Fish and
Wildlife Division

November 20, 1985 La Ronge, Saskatchewan

The Mayor of La Ronge His Worship Mayor Mel Hegland

From the Department of Parks and Renewable Resources of the Government of Saskatchewan

Mr. Paul Naftel
Director of Fisheries
Mr. Merv Swanson
Superintendent of Fisheries

From the Saskatchewan Fishermen's Co-Operative Federation Ltd. and the La Ronge Fishermen's Co-Operative Ltd.

Mr. Albert James Carlson President Mr. Merle Hewison Secretary

From the Stony Rapids Indian Band and the Black Lake Fishermen's Co-Operative

Mr. Jimmy Laban Mr. Billy Sandypoint

From the Freshwater Fish Marketing Corporation

Mr. Bruce Smith
District Manager
Mr. Alex Drobot
Field Operations Manager

From the La Loche Turnor Fishermen's Co-Operative

Mr. Eric Sylvestre

Individual presentation

Mr. Ed. Brunet

From the Pelican Narrows Fishermen's Co-Operative Ltd. and the Southend Fishermen's Co-Operative

Mr. Thomas Morin President Mr. Henry Morin Mr. Joseph Clark

From the Fond du Lac Indian Band and the Athabasca Native Fishermen's Co-Operative

Mr. Donald Deranger
Resource Development Coordinator

Individual presentation Mr. René Rediron, Fisherman

From the Department of Tourism and Small Businesses of the Government of Saskatchewan Mr. Joe Cools

Mr. Joe Cools
Senior Business Consultant

November 21, 1985 Thompson, Manitoba

The Mayor of Thompson His Worship Mayor Donald G. MacLean

From the Thompson Industrial Commission Mr. Adrian DeGroot Chairman

From the Wabowden Fishermen's Association Mr. Alex Jonasson

President

From the Wekusko Fishermen's Association

Mr. Russell Bartlett President

From the Freshwater Fish Marketing Corporation

Mr. Alex Drobot
Field Operations Manager
Mr. Rick Hay
Zone Manager for Northern Manitoba

From the Department of Natural Resources of the Government of Manitoba

Mr. Donald W. Cook Regional Fisheries Manager

From the Norman Regional Development Corporation

Mr. Arnold R. Christmann General Manager

From the Commercial Fishermen's Association (Pikuitonei)

Mr. William R. Cordell
Commercial Fisherman and Trapper

Individual presentation

Mr. Arthur Trapp
Member of the Canadian Executive
Council Overseas

From the Norway House Fishermen's Co-Operative

Mr. Oliver Monkman

From the Local Government District of Lynn Lake

His Worship Mayor Stanley W. Geddes

From the Swampy Cree Tribal Council

Mr. Philip Dorion
Executive Director

From The Pas Indian Band Council

Mr. Lawrence Whitehead Executive Director

From the Grand Rapids Fishermen's Co-Operative

Mr. Hubert Sinclair

From the Pukatawagan Commercial Fishermen's Association

Mr. Mathias Sinclair President

Individual presentation

Mr. John Bodnar
Fishery Consultant and member of the
Canadian Executive Council Overseas

From the Moose Lake Fishermen's Association

Mr. John James Easter President

A former M.P.

Mr. Cecil M. Smith

From the Thompson Liberal Association

Mr. Ronald G. Orr

Individual presentation

Mr. Kenneth S. Bigglow

From the Nelson House Fisheries

Mr. Sam Dysart President

November 22, 1985 Winnipeg, Manitoba

From the Freshwater Fish Marketing Corporation

Mr. Donald D. Tansley Chairman

Mr. J. Thomas Dunn

President and General Manager

Mr. Peter Smith

Vice-President of Marketing

Mr. Guy A. L'Heureux

Member of the Advisory Committee

Mr. Sydney Kirwan

Member of the Board of Directors

Mr. Delbert Hamilton

Member of the Advisory Committee

Mr. A.H. "Dempsey" Valgardson

Member of the Board of Directors

Mr. Raymond E. England
Member of the Board of Directors
Mr. Alex Drobot
Field Operations Manager
Mr. John Ateah
Member of the Advisory Committee

From the Lake Winnipeg Fishermen's Association

Mr. Ed Isfeld President

From the Interlake Reserves Tribal Council

Mr. René Toupin Administrator

From the Matheson Island Marketing Co-Operative

Mr. Bill Bennett

From the Norcom Fisheries Mr. William King

From the Island Lake Tribal Council and the Northeast Manitoba Committee of Garden Hill, God's Narrows, God's River, Oxford House, Red Sucker Lake, St. Theresa Point, Wasagamark Chief Joe Guy Wood

From the Southern Resource Development Council of Manitoba and the Berens River First Nation

Chief Lester Everett

Individual presentation Mr. John Maskell

From the Fish Distributors (1983) Limited Mr. Robert J. Bodner

From the Department of Natural Resources of the Government of Manitoba Mr. Worth Hayden Director of Fisheries Branch

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27	November 23, 1985	From the Lake Manitoba Fisheries
	Ashern, Manitoba	Association Mr. Joseph Johnson Director
		From the Sigurdson Fisheries Ltd. Mr. Clyde Sigurdson
		From the Department of
		Natural Resources of the
		Government of Manitoba
		Mr. Kenneth Sauerbrei
		Conservation Officer II
		Individual presentation
		Mr. Helgi Jones, Fisherman
		From the Freshwater Fish Marketing Corporation
		Mr. Alex Drobot
		Field Operations Manager
		From the Lake Manitoba Commercial Fishermen's Association
		Mr. Elmo Helgason President
		From the Interlake Development Corporation
		Mr. Bill Aitken
		General Manager
		Individual presentation
		Mr. John Fleming
		Commercial Fisherman
		Individual presentation Mr. Robert Kristjanson
28	December 3, 1985 Ottawa	The Honourable James A. McGrath, M.P.
29	December 10, 1985 Ottawa	The Honourable Michael J.L. Kirby, Senator
30	February 4, 1986 Ottawa	The Honourable Michael J.L. Kirby, Senator

ISSUE No.	DATE	ORGANIZATIONS AND WITNESSES
31	February 11, 1986 Ottawa	From Omstead Foods Ltd. Mr. Leonard H. Omstead President and Chief Executive Officer
		From the Ontario Fish Producers Association Mr. Donald McDonald President Mr. John Waugh Manager
		From the Algoma Manitoulin Association of Commercial Fishermen Mr. George Purvis President
32	February 12, 1986 Ottawa	From the Ministry of Natural Resources of Ontario Mr. Colin Haxell Manager, Client Services Section, Fisheries Branch
34	March 4, 1986 Ottawa	From the Department of Fisheries and Oceans Dr. John C. Davis Director General, Fisheries Operations Dr. N. Ward Falkner Director General, Ontario Region Dr. Edward R. Cowan Director, Economic Services, Ontario Region
35	May 15, 1986 Ottawa	The Hon. Thomas E. Siddon, P.C., M.P. Minister of Fisheries and Oceans
		From the Department of Fisheries and Oceans Mr. Louis Tousignant Assistant Deputy Minister, Policy and Program Planning Mr. Ronald W. Crowley Director General, Economic and Analysis Directorate Mr. Jean J. LeVert Director, Crown Corporation Branch