# Canadian Fishermen Have "Excellent Year" in 1978

Fisheries and Oceans Minister Romeo LeBlanc released Canada's sea fisheries catch and landed value statistics for the first 9 months of 1978 which, compared with the same period in 1977, indicate an excellent year for Canadian fishermen. Sea fish catch until the end of September 1978 for both Atlantic and Pacific coasts totalled 895,647 metric tons (t) valued at \$448,943,000, according to the Fisheries and Oceans report.

"I am extremely happy with this general improvement in the sea fisheries, and hope that this trend will continue throughout 1978 and into 1979," said LeBlanc.

On the Atlantic Coast the total fish catch for the first nine months of 1978 was up 21 percent over the 1977 figure for the same period, and the landed value was up 49 percent. Figures for the Pacific Coast indicate an overall decline of seven percent from 1977 landings, due mainly to the lower abundance of shrimp and herring, but reflected an increased value of 44 percent.

#### Atlantic Coast

The total catch at the end of September 1978 amounted to 744,545 t with a landed value of \$263,417,000, compared with the 1977 statistics of 615,912 t valued at \$177,190,000.

#### **Pacific Coast**

On the Pacific Coast the total catch for the first 9 months of 1978 amounted to 151,102 t valued at \$185,526,000. For the same period in 1977 the figures were 162,627 t valued at \$128,939,000. More complete details on catch and value statistics are provided in the accompanying table or are available from the Intelligence Services Division, Marketing Services Branch, Fisheries and Oceans, Ottawa, Ontario, Canada, K1A OE6.

Canada's marine fish catch, January-September 1977 and 1978, based on preliminary estimates.

Species/area	Landings (t)		Percent	Values	Percent	
	1977	1978	increase or decrease	1977	1978	increase
Atlantic						
Groundfish	346,135	452,376	31	\$ 80,127	\$116,669	46
Cod:Maritimes	44,960	57,086	27	\$ 12,205	\$ 17,382	42
Quebec	19,708	27,948	42	\$ 5,662	\$ 8,577	51
Newfoundland	96,468	151,382	57	\$ 22,824	\$ 40,201	76
Redfish	42,121	51,217	22	\$ 6,130	\$ 8,491	39
Flatfish	80,843	77,527	-4	\$ 16.929	\$ 17,276	2
Herring:Maritimes	96,017	72,928	-24	\$ 9,737	\$ 11,591	19
Newfoundland	34,330	31,688	-8	\$ 3,186	\$ 5,145	61
Quebec	3,948	5,404	37	\$ 485	\$ 901	86
Total Atlantic	615,912	744,545	21	\$177,190	\$263,417	49
Pacific						
Groundfish	19,982	19,930	0	\$ 14,497	\$ 22 178	53
Salmon	53,996	54,625	1	\$ 84.731	\$110,951	31
Herring	81,575	66,708	-18	\$ 25,313	\$ 46,573	84
Shellfish	4,562	4,268	-6	\$ 3,658	\$ 4,881	33
Total Pacific	162,627	151,102	-7	\$128,939	\$185,526	44

### Japan Expects High 1978 Fishery Product Imports

Japan's imports of edible fishery products, particularly those of salmon, shrimp, and squid, were expected to register new historical highs in 1978, according to a leading fishery newspaper in Tokyo. Imports of salmon totaling 20,400 metric tons (t) to August 1978, twice the amount to the same month in 1977, eclipsed a 1977 total import. To August 1978, imports of shrimp totaled 89,000 t (19 percent above 1977 to August), those of squid 67,000 t (53 percent), and those of octopus 53,000 t (42 percent above).

Also increasing at a pace ahead of 1977 were the imports of sea bream and spiny lobster. Imports of Spanish mackerel and hairtail from South Korea were also reported on the rise. The sharp increase in the imports of edible fishery products in 1978, occurring in spite of the stagnation of domestic consumption, was attributed to the high value of the yen and the concern among the importers over the future supply of these products from foreign 200-mile zones, according to the newspaper. (Source: FFIR 78-14).

### Japanese, Mexican Firms In Joint Fishery Venture

Two major Japanese firms, Nichiro Fisheries Company<sup>1</sup> and C. Itoh and Company, as of 5 October, formed a fishery joint venture with a Mexican firm Valores Industriales S.A., a principal firm under one of Mexico's largest conglomerates, Monterrey Group, with businesses in beer, fertilizer, cannery, real estate, and financing. The joint venture, named Abisal, is said to be the first of its kind to be formed under the 1977-1982 National Fishery Development Program of Mexico with participation of a Japanese firm.

The paid capital of the joint venture, is 11,600,000 pesos (aproximately 100 million or US\$0.55 million). Valores

<sup>1</sup>Mention of trade names or commercial firms does not imply endorsement by the National Marine Fisheries Service, NOAA. Industriales S.A. holds 51 percent of the stocks in the joint venture, with the remaining 49 percent held in equal shares of 24.5 percent each by Nichiro and C. Itoh. The joint venture, to be headed by five Mexican and four Japanese officers under a Mexican chief executive officer, will have its main office in Monterrey, Baja California, and will conduct its fishery operations from the base at Ensenada.

The joint venture planned to begin fishing for black cod in December 1978 in waters off Baja California where it

## JAPAN PLANS TO CATCH MORE KRILL

The Japanese efforts to harvest krill during the 1978-79 Antaractic summer were planned to be the largest since the annual efforts began 4 years ago. A total of 21 fishing vessels were to participate in the harvesting that lasts about 3 months beginning December 1978. Additionally, several refrigerated transports were to be employed to carry the products to Japan. The total catch is expected to exceed 40,000 t. Table 1 shows the Japanese krill fishery plans for the 1978-79 Antarctic season.

Japan caught 4,500 t of krill during the 1975-76 season in its first attempt at commercial krill fishing. In 1976-77, the catch jumped to 11,500 t, and in 1977-78, it nearly doubled to 21,000 t. Although the endeavors are commercial in scale, they have not yielded profits.

During the 1977-78 season, 18 vessels engaged in harvesting, and they processed the catch into four types of products: Fresh frozen (whole); boiled and frozen (whole); peeled, boiled, and frozen; and dried (whole). In Japan these products have been selling well, except the boiled frozen whole krill.

That product has been repacked in Japan for the general consumer market. The present retail sales of the repacks are 50 percent below the 1977 level, owing to the extensive consumer apathy towards the prices of fish in general. If the sales do not improve, a 5,000 t inventory surplus of this commodity will exist when the products made from the new crop appear at the markets.

Krill producers estimate that about 60 percent of this season's catch will be processed into animal and aquaculture fish feeds. The remainder will become various processed food. The feed use is well established, but, the food use needs more innovative sales promotions. (Source: LSD 78-19).

Table	1.—Japanese	krill	harvesting	plan	for	the	1978-79	season.
-				No	of	vace	ole	

Organization	Large trawlers	Medium trawlers	Mother- ship	Production target (t)
Hoko Suisan Company	1			1,500
Japan Marine Research Center	1	10	1	17,214
Kyokuyo Gyogyo Company	1			2,000
Nichiro Gyogyo Company	2			3,656
Nippon Suisan Company	2			10,120
Taiyo Gyogyo Company	3			7,150
Total	10	10	1	41,640



reportedly had discovered a promising fishing ground for this fish. Initial catch target was said to be 1,500 t using one vessel to be chartered from Nichiro, but the operations will employ five vessels 3 years later aiming to catch approximately 15 percent of Japan's annual demand for black cod totaling between 40,000 and 50,000 t. The joint venture is believed to be hopeful to expand its fishing operations not only for squid and tuna within Mexico's 200mile waters, but also in the U.S. 200mile zone where Mexico is allowed catch quotas for Alaska pollock, hake, and squid. (Source: FFIR 78-14).

# Quality and Price Key to Japan's Fish Consumption

Future consumption of fishery products among Japanese consumers would depend upon the quality as well as the price of the products, according to an analysis released last fall by a leading fishery trade journal in Tokyo.

During a 5-year period up to 1976, the spending by an average Japanese family on seafood products approximately doubled although the amount of fresh and frozen seafood consumption remained about constant. This was attributed to the fact that the consumers increasingly sought high quality and gourmet products in proportion to the rising income.

This pattern saw a rude disruption in 1977 when the consumers reacted to speculative high prices of fish products with what was termed as "fish alienation." For instance, during the first 6 months of 1977 alone, the prices of seafood rose as much as 25-30 percent, as compared to the normal annual rise of 10-15 percent, and the consumption of fresh and frozen seafood by an average family declined to 56.5 kg for the year, down 6.1 percent from the previous year.

Predictably, the decline was particularly severe for high priced products such as sole, salmon, jack mackerel, Alaska pollock, and saury. In 1978, the low prices of high quality tuna were said to be luring back some of the alienated consumers to seafood products. (Source: FFIR 78-13).

# Stable Japan Market Seen for Air-Shipped Bluefins

In 1972, Japanese fish traders shipped 60 t of giant bluefin tuna from the northeastern parts of the United States to Tokyo by air freight. This was the beginning of the commercial scale airfreighting of the frozen tuna intended for the Japanese sashimi and sushi (or, raw) use, according to the NMFS Language Services Branch, International Fisheries Development and Service Division. Seven years later, in 1978, the volume has increased to nearly 1,000 t, and the demands for the "jumbo" tuna, so-called by the Japanese traders, is stable.

The headed and gutted frozen tuna begins its journey to Japan from Logan Airport, Boston, or Kennedy Airport, New York. The average weight of the fish in this form is 300 kg. They consist of catches from a widely stretching coastal area between New Brunswick, Canada and New Jersey. Moreover, the bluefins have been caught by a variety of methods by several categories of fishermen.

More than a half of these giant fish come from the catches of U.S. sport fishermen. The remainder come from the catches of eastern Canadian sport fishermen; from the purse-seining catches of Massachusetts; and from ocean ranching in Margaret's Bay, Nova Scotia, Canada. The ranching operation fattens up the bluefins that are incidentally caught in the local mackerel setnets. These fish are found in the nets in June and July, as they have migrated northward after spawning. They are too lean for the Japanese raw fish market, but 2-3 months feeding in a special net pen fattens them to the exportable level.

The purse seiners are based in Sandwich, Mass. Three vessels participate in this operation, each having a 180 t allocation a year. The Marubeni Trading and the Nichiro Fisheries

Table	1Number	of	air-freighted	bluefin	tuna'	by	

fishery and by year.						
Fishery	Prospect for 1978	'1977	²1976			
U.S. sport catch	1,800	1,650	1,500			
Canadian sport catch	450	750	650			
Purse seining off Mass.	400	500	500			
Ocean ranching	450	700	350			
Total	3 100	3 600	3 000			

To obtain the volume multiply the number by 300 kg, which is the weight of the average headed and gutted bluefin tuna air-freighted. "Estimates.

Table 2.—Average Tok	yo wholesal	le price of air-freighted
bluefins b	y month a	nd year.
	The states of the	

	19	978	1977		
Month	Yen/kg	US\$/Ib'	Yen/kg	US\$/Ib2	
July	1,820	4.17	1,100	1.85	
August	1,990	4.52	1,900	3.20	
September	2,450	5.57	2,300	3 87	

2@270 Yen=US \$1.00

Companies jointly deal with the American owners of the two of the vessels, and the Satake Company deals with the owner of the remaining one. Table 1 shows the number of airfreighted bluefin tuna by year and by fishery.

The exvessel prices of the sport fishermen-caught bluefins have risen from US\$0.30-0.40/pound in 1972 to US\$0.70-1.85/pound in 1978. The wholesale price of the commodity fluctuates seasonally, reaching a high usually after the summer. Table 2 shows the prices of the air-freighted bluefin tuna at the Toyko Central Fish Market.

The "jumbos" are distributed at several other central markets, including the ones at Sapporo, Hokkaido; Sendai, Miyagi Prefecture; and Kyoto, Osaka and Kobe in western Japan. The wholesale prices at those regional centers are only slightly higher than in Tokyo. (Source: LSD 78-19).

### Bluefin Tuna Corral Culture Progress Noted

A prototype experiment aiming to raise bluefin tuna in an artificial corral, currently in the second year of the project off the Sukumo Bay, Kochi Prefecture,



Japan, has reportedly succeeded in attaining the initial objective: To raise a young fish to an adult.

A group of about 400 baby fish, which were placed in the corral in July 1978, are reported to have grown to an average size of 700 g each from the initial 150-200 g within 3 months. Five surviving fish from the group which entered the corral in 1977, reportedly weighed 5-6 kg each by fall 1978 and were expected to grow to a weight of about 10 kg by the end of 1978.

According to Japan's Fishery Agency, sponsor of the project, the success thus far is attributed to: 1) The improved methods of switching the corral in accordance with the growth in fish size, 2) the high dissolved-oxygen content and the clean water available in the offshore corral, and 3) establishment of a method to safeguard the fish from predators such as shark. (Source: FFIR 78-14).

## CANADA'S 1979 SEAL HUNT QUOTA STATIC

Following national and international consultations on the status of seals, Fisheries Minister Roméo LeBlanc announced the 1979 quotas for the east coast seal hunt late last year. The total regulated catch of harp seals in 1979 will remain at the 1978 level of 170,000 not including an expected catch of 10,000 by indigenous peoples of Greenland, the Canadian Arctic and Labrador.

In announcing the catch limits the Minister noted that the scientists have advised that the current population of harp seals could sustain a catch of 214,000-240,000. Canada and the European Economic Community, on behalf of Denmark/Greenland have agreed on a policy of restricting catches to lower levels in order to allow the population to grow from its present level of 1.3-1.4 million animals 1 year of age and older to 1.6 million. At the present rate of population growth this level is expected to be reached in 5-10 years.

Canada's share of the catch will be increased from 135,000 in 1978 to 150,000 in 1979, while Norway's share is reduced from 35,000 to 20,000. The additional Canadian allocations will be taken by land-based sealers and the allocation to Canadian large vessels at the Front ice fields northeast of Newfoundland and Labrador will remain at the 1978 level of 57,000.

The official opening and closing dates were set for 10 March and 24 April but the Minister indicated that the opening date could be varied slightly depending upon conditions at the time. The hooded seal season was scheduled to open 8 days after the harp seal opening date, subject again to possible slight variation, but not later than 19 March. The total Allowable Catch for 1979 remains at 15,000. It was agreed that a quota of 6,000 be allocated to Norway and that the Canadian fleet would take up to 6,000 by 26 March. On that date the balance of 3,000 was to be made available to vessels of either country.

An important conservation measure adopted for 1977 was that the kill of adult female hooded seals would be restricted to 10 percent of the total catch. This measure was further strengthened for 1978 when the limit was reduced to 7.5 percent of the total catch. For 1979 the limit was further reduced to 5 percent. The scientists have determined that the management regime for hooded seals will also allow this population to increase.

Preliminary statistics indicate that the 1978 catch of harp seals at the Front and Gulf of St. Lawrence was 161,100, including 16,254 taken by Norway, while that of the hooded seals was 10,200, including 6,315 taken by Norway.

# Canadian Heads FAO Fisheries Department

Kenneth C. Lucas, Senior Assistant Deputy Minister in the Fisheries and Marine Service of Canada's Department of Fisheries and the Environment, has been named Assistant Director-General in charge of the Food and Agriculture Organization's Fisheries Department. The appointment of Lucas was announced in Rome by FAO Director-General Edouard Saouma.

Lucas has been responsible, since 1973, for establishing and managing the Fisheries and Marine Program of the Canadian Department of Fisheries and the Environment. The scope of the program included management of Canada's ocean and inland fisheries and conduct of fisheries and oceanographic research, contributing to the understanding and optimum use of renewable aquatic resources and marine waters. The Fisheries and Marine Service engages in hydrographic surveying and charting of navigable coastal and inland waters and manages 2,400 fishing and recreational harbors. Lucas also supervised environmental impact studies of developments affecting coastal and inland waters and living aquatic resources. He engaged in the negotiation and administration of 30 international treaties and agreements.

Lucas was born 8 June 1929 in Vancouver, British Columbia, and was educated in British Columbia. In 1952, he received a Bachelor of Science Degree in Civil Engineering from the University of British Columbia. In 1956, he obtained the Registration Certificate of the Association of Professional Engineers of British Columbia.

# Norway's Cod and Capelin Quotas Reduced for 1979

The distribution and the regulation of the capelin and Norwegian-Arctic cod quotas in the Barents Sea were the central issues for discussion at the 5-day meeting of the Norwegian-Soviet Fishery Commission held in Oslo between 30 October and 3 November 1978, reports the Norwegian Information Service (Norinform).

As a consequence of the negotiations, the decision was taken to reduce the total quotas for catches of capelin and Norwegian-Arctic cod in 1979. The total quota for capelin has been fixed at 1.8 million tons and the Norwegian share is stipulated at 60 percent and not 75 percent as originally requested by Norway. Soviet vessels will fish the residual amount. The cod quota is to be reduced by 150,000 t to 660,000 t, and this quota will be divided equally between Norway and the Soviet Union after 90,000 t has been allocated to third countries. Of this latter amount, 15,000 t will be fished in the Svalbard zone, 45,000 t in the Norwegian zone, and 30,000 t in the Soviet zone. Each of the partners is to license 7,500 t in the "grey zone." The quota of coastal cod has also been changed and fixed at 40,000 t for both nations. As has been the case in 1978, the Soviet Union will be able to fish 80,000 t of her cod quota in the Norwegian zone, and in the light of the total quota reduction, it means that a comparatively larger part of the Soviet

### Canada's Fish Industry Will Switch to Metric

Canada's oldest primary industry commercial fishing—has finalized plans for converting to the metric (SI) system in line with the general move to metric measurement in Canada. January, 1981, has been set as the target date by which Canada's fishing industry will essentially be conducting its business in metric units. A list of preferred metric sizes will be developed for each category of fishery product, based on an industry-wide consensus. A "hard"<sup>1</sup> conversion will be introduced wherever possible.

Responsible for preparing the metric conversion plan was the Fishing and Fish Products Sector Committee of Metric Commission Canada under the chairmanship of I.H. Langlands, of National Sea Products Ltd., Halifax, N.S.

"The conversion plan is intended to be voluntary and has been devised for use by industry and government as a guide in preparing their own detailed plans," said Langlands. "It is not meant to be an exacting pattern for all, but rather as recommendations to allow the transitioin to take effect in as short a period as possible. The plan will be updated as necessary to reflect changing situations."

Canada's fishing industry involves approximately 62,000 commercial quota will be fished in this zone than hitherto. In 1979, Norwegian vessels will only be able to fish 30,000 t of the Norwegian quota in the Soviet zone. The commission also decided to forbid capelin fishing between 1 May and 15 August, and there were critical comments from Norwegian fishermen regarding the reduced quotas.

During the negotiations, it was reported that the Soviet research scientists had suggested a lower catch

fishermen who operate some 28,000 vessels, ranging from 10-m one-man boats to sophisticated deep-sea trawlers. There are close to 800 fish processing plants, employing some 25,000 persons.

Membership on the Sector Committee includes the Fisheries Council of Canada, representing fisheries trade associations across Canada, federal, quantity of Norwegian-Arctic cod for 1979 than the Norwegians, who had based their recommendation on a more long-term alternative. These negotiations originate as a consequence of the serious situation facing fish stocks in the north, and the representatives from both delegations demonstrated the good will and concern that the incidence of spawning, so drastically reduced in recent years, should be restored, Norinform said.

provincial and territorial departments responsible for fisheries, and fish marketing corporations. An industrygovernment group under the chairmanship of André Arseneault, of Pêcheurs Unis de Québec, is preparing an information program to alert fishermen and the industry generally to the metric changes which it is planned to introduce.

### West Germany to Look for More Eels Outside Europe

West Germany, the largest consumer of eel in Europe, will have to look for additional sources of supply outside Europe since eel production in the EEC countries is considered to have reached its capacity, according to a survey last year by the Japan External Trade Organization. West Germany's current consumption of eel is reported to average approximately 6,000 t a year, whereas domestic production has been on the decline in recent years, averaging around 1,000 t a year.

Approximately 85-90 percent of eel is consumed as smoked products in West Germany, and the retail price for premium products would run as high as \$8/pound. Since most of the imported eel is used for smoked products, a strict standard of minimum 12 percent fat content is applied to the eel imported into West Germany. Import prices of U.S. eel in 1976 were reportedly around \$1.50/pound for fresh eel on the average, and \$1.10/pound for frozen eel, whereas those from Denmark and Italy were around \$2.00-2.25/pound. West Germany's eel imports in 1977 jumped

Major eel suppliers to West Germany, 1976-77.

Country	Amo	unt (t)	Country	Amou	Amount (t)	
of origin	1976	1977	of origin	1976	1977	
Denmark	2,290	1.844	Sweden	219	312	
Canada	428	631	Australia	154	162	
Poland	399	522	Italy	121	108	
Netherlands	472	411	France	108	82	
New Zealand	308	405	Ireland	37	52	
U.S.A.	377	251	U Kingdom	30	35	

13.4 percent over 1976 to 5,165 t. The leading supplier was Denmark with 1,844 tons or 35.7 percent, and the United States supplied 251 tons or 4.85 percent. Major foreign suppliers of eel to West Germany in 1976 and 1977 are shown below. (Source: FFIR 78-12).

Note: Unless otherwise credited, material in this section is from either the Foreign Fishery Information Releases (FFIR), compiled by Sunee C. Sonu, Foreign Reporting Branch, Fishery Development Division, Southwest Region, NMFS, NOAA, Terminal Island, CA 90731, or the International Fishery Releases (IFR) or Language Services Daily (LSD) reports produced by the Office of International Fisheries, NMFS, NOAA, Washington, DC 20235.

<sup>&</sup>quot;Hard" conversion involves a revision of packaging so that all capacities appear in round metric figures, rather than in the metric equivalents of previously used inch-pound measures. "Soft" conversion is a straight conversion of imperial units to the metric equivalent.