

Columbia Coho Show High Dollar Return

Coho salmon production in the Columbia River Fisheries Program returns seven dollars in benefits to the economy for each dollar spent, according to an analysis by the Commerce Department's National Oceanic and Atmospheric Administration. NOAA's National Marine Fisheries Service administers funds for 21 Columbia River fish hatcheries operated by the States of Washington and Oregon and the Bureau of Sport Fisheries and Wildlife in the Department of the Interior.

To find out what the taxpayer is getting for the nearly \$40 million spent on Columbia River salmon and steelhead hatcheries over the past 22 years (presently \$2.5 million annually) the Fisheries Service analyzed data gathered by marking a known proportion of hatchery fish with a finclip or combination of finclips. The number of marked fish caught was then used to determine the hatchery contribution to each fishery. Values of the fish released by the hatchery were compared with the cost of rearing fish to determine the benefit-cost ratio.

A similar analysis of the data from hatchery contributions of fall chinook is nearly complete. Preliminary estimates indicate that for every dollar spent rearing fall chinook in Columbia River hatcheries, the Pacific coast economy gained at least three dollars. The benefit-cost ratios for the two species are not directly comparable because of different time periods and methods used to determine value, but the ratios provide fisheries personnel with solid indications of the value of the hatchery program to the Pacific coast.

The NMFS is now conducting a marking study to determine the contribution of Columbia River spring chinook salmon to the fisheries. Little is known about the hatchery contribution of this species to the marine and freshwater sport and commercial

fisheries. This study is important as spring chinook represents about 20 percent of the 2.6 million pounds of

smolts (young fish) released annually from NMFS-financed Columbia River hatcheries.

Foreign Fishery Developments

Troubled Icelandic Fisheries Produce

Despite territorial waters disputes and a volcanic eruption that closed several of its best fish processing facilities, Iceland's 1972 fish catch, 739,000 metric tons, was the highest since 1967 (Table 1), and the value of exports, \$141 million (Table 2), marked a new high, according to Salvatore Di Palma, Regional Fisheries Attache for Europe, U.S. Embassy, Copenhagen, Denmark.

A 52 percent increase in the catch of low-value capelin, however, accounted for most of the 1972 increase and landings of the higher-valued cod were again down to 1968 levels. Most of the cod was taken in Icelandic waters;

some was taken off East Greenland and the set-net fishery of March and April accounts for a major part of the landings.

Of Iceland's \$141 million exports, the U.S. took 40 percent by value, primarily frozen cod fillets and blocks, and the nine members of the European Economic Community (EC) took 25 percent (Table 3). In quantity, exports were up three percent to 281,944 metric tons. A doubling of frozen scallops exports, mostly to the United States, indicates a high level of interest in expanding this previously unutilized fishery resource. High U.S. prices triggered Icelandic interest in scallops.

Table 1.—Icelandic catch of fish and shellfish, 1969-1972¹.

Species	1969	1970	1971	1972	Jan-Dec '71	Jan-Oct '72
--- 1,000 metric tons --- --- US\$1,000 ---						
Demersal						
Cod	287	308	255	232	28,354	30,132
Haddock	35	32	32	29	5,128	4,411
Saithe	54	64	60	60	5,676	5,280
Ocean perch	29	25	32	33	3,694	3,914
Ling	9	8	9	²	857	614
Plaice	11	8	7	²	1,310	691
Greenland halibut	6	7	5	²	757	691
Other demersal	20	22	21	45	1,891	2,140
Total demersal	451	474	421	399	47,667	47,873
Pelagic						
Herring	47	41	61	43	9,520	5,498
Capelin	171	192	183	278	3,256	4,386
Shellfish						
Lobster (Nephrops)	3.5	4.0	4.7	4.3	2,421	3,296
Shrimp	3.3	4.5	6.5	5.0	1,477	1,071
Scallop	0.4	2.4	3.7	6.5	387	885
Other	3	6	4	3	818	141
Total	688.2	733.9	683.9	738.8	65,546	63,150

¹ Source: AEGIR, Nr. 17-18, October 1972.

² Included in "Other demersal."

Table 2.—Icelandic exports of fish and shellfish, 1971 and 1972, from the Statistical Bureau of Iceland.

Product	1971		1972	
	Metric tons	US\$ 1,000	Metric tons	US\$ 1,000
Fresh herring ¹	33,986	22,085	31,738	27,178
Other fresh fish ²	47,879	7,072	38,010	6,144
Frozen fillets and blocks	18,359	4,631	16,786	4,617
Other frozen fish	69,533	58,294	67,234	60,530
Salted and dried fish ³	13,833	3,429	12,659	4,185
Frozen lobster (<i>Nephrops</i>)	1,120	4,988	1,329	6,955
Frozen shrimp	1,110	3,249	1,221	3,683
Frozen scallops ⁴	362	1,012	739	2,850
Canned fish	1,116	2,035	1,362	2,637
Cod meal ⁵	29,622	5,469	27,607	5,442
Capelin meal	26,825	5,218	42,212	7,118
Other fish meal	5,392	883	5,699	1,236
Fish oil ⁶	7,421	1,694	13,354	1,707
Other	17,187	6,878	21,994	7,128
Total	273,745	126,937	281,944	141,410

¹ Landed directly in Denmark for human consumption.

² Landed directly in the United Kingdom and Western Germany.

³ Cod and other demersal species.

⁴ Includes negligible amount of fresh scallops.

⁵ Meal from offal.

⁶ Except fish liver oil.

Table 3.—Icelandic exports of fish and shellfish in 1972, by major destination.¹

Destination	Exports			
	Metric tons	Per cent	US 1,000	Per cent
West Germany	17,807	6	9,137	7
Other EC (6)	16,764	6	6,083	4
Total EC (6)	34,571	12	15,220	11
United Kingdom	41,617	15	11,880	8
Denmark	45,098	16	8,655	6
Total EC (9)	121,286 ²	43	35,755 ²	25
United States	49,315	17	56,198	40
Soviet Union	18,770	7	11,754	8
Other	92,572	33	37,707	27
Total	281,943	100	141,414	100

¹ Source: Statistical Bureau of Iceland.

² Includes exports to Ireland.

The volcanic action on Heimaey Island, closing several fish processing facilities, was a setback to Iceland's fish processing capacity. However, catch losses were minimized because the Heimaey based fleet fished out of other ports and delivered their catches to processing plants in mainland ports.

Iceland's fishing fleet consists of three main groups: (1) high-seas trawlers, (2) multipurpose vessels of more

than 100 GRT, and (3) multipurpose vessels under 100 GRT. The number of trawlers in operation has decreased since 1960 to about 22 vessels in 1971. Most of the vessels withdrawn from the fleet were over 20 years old. The number of multipurpose vessels of over 100 GRT has increased significantly. During the latter part of 1972, delivery began of the 34 new stern trawlers ordered from foreign yards.

The changes in the fleet represent an increased and more efficient trawling capacity. In the face of predicted lower stock abundance for the near future on the Icelandic grounds, the industry expected to utilize the extra capacity on resources which it hopes to be available from reduced fishing by foreign vessels inside Iceland's newly claimed fishery limits.

On September 1, 1972, Iceland extended its fishery limits to 50 nautical miles. Efforts to reach an understanding with the two major foreign fleets, the United Kingdom (U.K.) and the Federal Republic of Germany, on fishing inside the new limits failed, and the matter has been strongly contested. The dispute has held up implementation of a trade agreement reached between Iceland and the EC. An agreement was reached with Belgium and the Faroe Islands whose fishermen have a modest fishing effort on the Icelandic grounds.

The waters around Iceland have been fished in recent years mainly by Iceland, the U.K., and West Germany. These countries catch 98 percent of the total catch of cod from Iceland grounds. Iceland takes 60-70 percent of the total catch. The U.K. catch has been about 25 to 30 percent and West Germany's, 5-7 percent. The cod fishery can be considered as two sectors: the spring fishery for spawning cod off the southwest coast consists of largely Icelandic vessels, and that around the island year around for nonspawning cod, when Iceland's fleet is joined by trawlers from other countries, mainly working on the immature cod.

Annual production of cod has

varied around 390,000 metric tons since 1960. From 1964 to 1967, the catch declined from 434,000 tons to 345,000 tons, owing to the absence of good year classes in the spawning fishery. Since then, a good 1964 year class and several good year classes which had migrated to Iceland from East Greenland raised the catches to 471,000 tons in 1970, the high level since 1960. Since 1970 the catch has declined.

Source: NMFS Foreign Fisheries Leaflet 73-17.

Danish Fish Catch Continues to Climb

Over the last decade the Danish fish catch has doubled and the catch value continues its upsurge, reports Salvatore Di Palma, Regional Fisheries Attache for Europe, United States Embassy, Copenhagen, Denmark. Landings of fish and shellfish reached record levels in 1972—1,416,800 metric tons in quantity and US\$144 million in value. Exports also set record levels, includ-



ing a 26-percent rise in value to US\$271 million.

The United States took products worth US\$34.8 million, double the 1971 value, mostly in frozen cod fillets and blocks. The Faroese catch was down slightly to 200,000 tons, but the value of exports was up 14 percent. Greenland landings were 42,500 tons, 11 percent higher than 1971. The marked expansion of the Danish fisheries is to a large extent due to development of its industrial fisheries and the production of cod.

Entry into the European Economic Community (EC) is bringing changes to the Danish fisheries. Regulations are being revised to comply with the EC fisheries policy. On April 1, 1973, EC duty levels were reduced 20 percent for Danish products in a market which took nearly half the Danish exports of fish and shellfish in 1972. Danish duties will change, mostly rising, by 40 percent of the difference between the EC level beginning in January 1974; U.S. exports will be negatively affected.

Development of a position on fishing limits for the UN Law of the Sea Conference is complicated by differences between Denmark proper and its outlying areas. The Greenlanders and Faroese favor a 50-mile fishing limit whereas Denmark is satisfied with 12 miles.

Two major conservation measures were adhered to during 1972—one phasing out fishing for salmon on the high seas in the Northwest Atlantic while guaranteeing Greenland fishermen a quota for salmon taken in Greenland waters, and the other restricting North Sea herring fishing during February 1 to June 15, 1973.

Source: NMFS Foreign Fisheries Leaflet 73-20.

Japanese To Fish Madagascar Shrimp

Four major Japanese fishery firms are focusing attention on the skipjack resource off Madagascar (Malagasy

Republic) in the western Indian Ocean according to Japanese news reports. Those firms—Taiyo, Nichiro, Kyokuyo and Kaigai Gyogyo—are planning to form joint ventures with Madagascar interests for the development of skipjack fishing grounds northwest of that country.

Kaigai Gyogyo, which has previously fished off northwestern Madagascar with good results, shortly plans to obtain permission to establish a joint fishing company for operation of the 1,000-gross-ton mothership "Seishu Maru No. 18" and eight 150-ton bait boats. From February to December 1972, that firm surveyed the waters off the Comoro Islands with three bait boats, which averaged catches of about 15 tons per boat per day. Baiting grounds inside the territorial waters were used with the permission of the Madagascar government.

Peru Will Develop Food Fish Industry

The phenomenal growth of the anchoveta fishing industry in Peru has tended to obscure the complexity of that country's long-term fisheries development program, according to a paper to be presented at the forthcoming world Technical Conference on Fishery Products being convened by the Food and Agriculture Organization of the United Nations (FAO), in Tokyo from December 4-11, 1973.

While the anchoveta account for about 98 percent of the Peruvian catch, upwards of 200,000 tons of food fish are caught yearly, including hake, bonito, skipjack, yellowfin tuna, crustaceans, and molluscs.

In the course of the development of the anchoveta fishery there was considerable industrialization. For example, there are now more than 100 plants established along the coast to convert the fish to meal and oil and the shipbuilding industry has expanded.

As part of its plans for the diversification and expansion in fisheries, the government established a Ministry of Fisheries in 1970, which has set up an

Nichiro hopes to shortly obtain permission to conduct fishing preliminary to forming a joint venture with local interests. That firm plans to send the pole-and-line vessel "Kuroshio Maru No. 72" (240 gross tons) to Madagascar, and if results are favorable, it hopes to send more boats.

Kyokuyo has been exploring the waters northwest of Madagascar with "Daido Maru" (199 gross tons). The catch has been averaging over six tons per day. Because of the profitable outlook, Kyokuyo has decided to form a joint venture this fall and plans to employ 5-10 Okinawan vessels.

Taiyo, which is planning to venture into joint shrimp fishing in Madagascar, also hopes to develop a skipjack fishery in that region. It plans to conduct experimental fishing off the Comoro Islands, utilizing the baiting ground around Nosy Be Island.

organizational structure to cover all aspects of the industry. This includes a state organization to participate in the food fish industry, influencing "pricing and distribution policies, the infrastructure developed and assistance given to the cooperatives".

A doubling of food fish production is called for in the Ministry's Five Year Plan (1971-76). Included in the expansion plans are 16 fish terminals and 12 inland fish distribution depots, which are expected to be completed this year. The infrastructure is being developed to give more help to the artisanal fishermen and a sales network is being established in the Sierra to provide the local people with fish to add more protein to their diet. Further, a modern million dollar fish terminal has replaced the old pier at Callao and the Lima Wholesale Fish Market has been rebuilt, to be supplemented by a number of smaller, decentralized markets. Fresh fish are now being distributed in 100,000 42-liter boxes.

In vessel construction, 40 fishing

boats of 50-foot length were launched in 1972, another 80 were planned for 1973 with 100 more to follow in 1974. The Ministry is also concerned with converting surplus anchoveta fishing boats for use in the food fish industry. In an effort to improve quality standards, the Ministry has established a fish inspection service.

The paper on Peruvian fisheries development is by W. Philip Appleyard, manager of the UNDP-FAO fish marketing and utilization project in Peru. The project is chiefly concerned with fish marketing and utilization and has been closely associated with all the Peruvian fishery development activities in recent years. Appleyard also points out that some of the vast catch of anchoveta might be used for human consumption: "In addition to canning, possibilities are being explored for freezing, drying and salting the fish and a food target of several thousand tons of anchoveta should be achievable within the next two or three years."

Canada To Conserve, Study Bluefin Tuna

Fishing lines heavier than 130 pounds test have been prohibited in Canada's Gulf of St. Lawrence bluefin tuna sport fishery, Fisheries Minister Jack Davis has announced.

The move is intended to prevent overfishing of large, mature tuna stocks in the Gulf area. The 130 pound-test line is the standard maximum game fish tackle approved by the International Game Fish Association.

"This conservation measure reinforces action taken in 1972 to prohibit commercial fishing for tuna in the Gulf of St. Lawrence," Mr. Davis said. "We cannot allow tuna stocks to be over-fished."

Sport fishing for tuna in Gulf waters is centered in Prince Edward Island where landings have increased by more than 400 per cent during the last three years. Anglers' catches rose from 99 in 1970 to 482 last year.

Canadians Urged To Catch Atlantic Fish

Canadian Fisheries Minister Jack Davis has asked Canadian fishermen to catch more fish in the North Atlantic.

Quotas for more than 20 different stocks were set by the International Commission for the Northwest Atlantic Fisheries (ICNAF) at its annual meeting in Copenhagen, Denmark, in June. Canada's allotment was increased by 50,000 metric tons. Its estimated landed value is \$8 million and processed value, \$20 million.

"Canada's larger share is in waters fished by Canadians for years, mainly off southern Labrador, Newfoundland and Nova Scotia," Mr. Davis said.

In return for higher allocations of cod and herring, Canada accepted a reduction in species in which Canadians have little or no interest—for example, silver hake on the Nova Scotia Banks.

Canada's share of cod catches in the areas under ICNAF quota for 1973 will total 193,000 metric tons, 80,000 more than Canadians took in these areas in 1972.

In the Labrador-Eastern Newfoundland area, the Canadian allocation is 110,000 tons, compared to a 1972 catch of 66,000 tons.

Norway Fish Exports Rise, Labor Drops

Norwegian exports of fish and fish products in the first 6 months of 1973 went up in value by 19.3 percent to 1,476 million kroner (about \$264 million) compared with the first 6 months of 1972, according to *Norway Trade News*.

The biggest increase has been the export value of fish meal, which earned 380 million kroner, a 77.8 percent increase in the corresponding period last year, although the export quantity increased by only 7.3 percent to

181,000 tons. Exports of fish oil earned 59 million kroner and exports of hardened marine fats 77 million kroner.

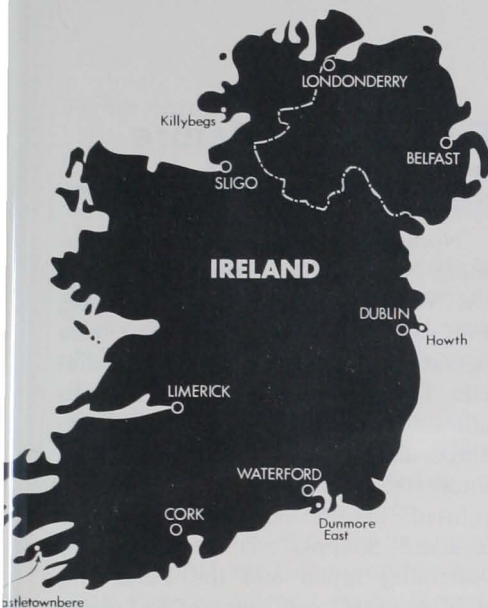
Meanwhile, the Norwegian frozen fish marketing organization Frionor, in Oslo, reports that exports worth between 30 and 40 million kroner (about \$6 million) have been lost this year due to a shortage of workers in the processing plants, particularly in North Norway. Fish prices on the world market are very favorable at present, and supplies of fish, chiefly cod, haddock and saithe, have also been good, says Frionor's Managing Director Arne Asper. Further "mechanization of production" is believed a key to making the fish processing industry work more attractive.

Ireland Sets Record For 1972 Fish Season

During 1972, Irish landings of herring and other pelagic species rose sharply and offset a decline in landings of cod, haddock, and other demersal species. Total value of marine fish and shellfish reached a record US\$12.5 million compared with US\$10.8 million in 1971, according to Salvatore Di Palma, Regional Fisheries Attache for Europe, United States Embassy, Copenhagen, Denmark.

As usual, herring was the leading species accounting for 40 percent of the marine catch by value and the 1972-73 winter herring season was the most valuable ever. Despite lower landings, cod, haddock, and plaice were the main demersal fish taken. Various species of lobsters also were important in the Irish catch, accounting for US\$2.3 million or 18 percent of the total. The salmon catch, not included under marine landings, was valued at an estimated US\$4.9 million, up from US\$3.3 million the previous year.

Herring, salmon, and lobster products contributed to record fishery



industrialized operations found in neighboring countries.

Five major fishing centers—Killybegs, Galway, Dunmore East, Howth, and Castletownbere—are envisioned in government fishery development plans; work is well along at these, as well as at lesser fishing ports along the Irish coast.

Ireland claims three-nautical-mile territorial waters and exclusive fishing rights between 3 and 12 miles. Several countries have traditional fishing rights to certain stocks in the 6- to 12-mile zone. European Economic Community (EC) countries have fishing rights inside the 6- to 12-mile zone along specified areas of the coast.

Entry into the EC required a re-orientation of industry goals and changes in regulations. Although some opposition was voiced against entry, advantages in marketing and other areas are believed to outweigh possible competition inside the Irish 6- to 12-mile fishing zone.

Another potential troublespot may arise if large EC and other European vessels, now being eased out of areas like the Icelandic and North African fishing grounds, decide to fish waters off the Irish coasts more extensively.

Source: NMFS Foreign Fisheries Leaflet No. 73-18.

Japan Tests Isotope "Tagging" of Salmon

Japanese scientists have developed a method to identify the birthplace of a salmon by using activation analysis in which a nonradioactive element made radioactive is mixed in the feed given to young salmon. When the grown fish is caught a few years later, the element which has been concentrated in the fish's scales over the years would be detected in the activation analysis. Japan hopes to use the method to settle disputes over the birthplace of salmon raised in fishery talks with the Soviet Union. After a successful experiment at a fishery

station, the Japanese Agriculture-Forestry Ministry plans to test the method next spring using 45 million young salmon released in the Nishibetsu River in Hokkaido. The element to be used is europium.

Canada Eyes Atlantic Fish Vessel Policies

A thorough review and assessment of Canada's Atlantic fishing fleet development programs, leading to the introduction of new licensing and vessel construction subsidy policies has been announced by Fisheries Minister Jack Davis. The objective is to achieve orderly development of the fishing fleet on the Atlantic coast and to ensure that catching capacity does not greatly exceed available fish resources.

Pending the results of the review, an immediate three-month freeze has been placed on construction subsidies available under the Fishing Vessel Assistance Regulations for craft 35 to 75 feet in length. During the same period, departmental approval will be withheld for construction of larger fishing vessels under the Ship Construction Subsidy Regulations administered by the Department of Industry, Trade and Commerce. The freeze on subsidies applies throughout Canada.

Mr. Davis said there has been intensified interest in fishing vessel construction in recent months, particularly on the east coast. This trend has been encouraged by unprecedented high returns for fish and prospects for an expanding share of the international North Atlantic catch under International Commission for the Northwest Atlantic Fisheries (ICNAF) quotas. The possibility of an improvement in Canada's fishing position stemming from decisions that may be reached at the upcoming UN Law of the Sea Conference is another factor.

He said current applications for vessel construction subsidies already

exports valued at US\$18.6 million. The United Kingdom continued to be the largest market, taking US\$6.8 million worth, or 36 percent. During 1972 Irish exports of fresh and preserved herring reached the highest level in more than 20 years, totaling 37,187 metric tons, up 33 percent from 1971 and valued at US\$8 million. Imports also rose and were worth US\$8.7 million; fish meal and canned salmon were the main items.

Outlook for the future is for continued expansion and higher exports, though difficulties foreseen include insufficient personnel and increased competition from foreign fishermen. Despite recent growth Irish fishermen still take only an estimated 15 percent share of the resources in nearby waters.

The Irish fishing fleet is still primarily an inshore fleet, comprising small to medium fresh-fish vessels which stay out less than 24 hours as a rule. In 1973, the fleet of vessels with inboard engines included 30 vessels over 75 GRT, 245 vessels from 26-75 GRT, and 732 craft 25 GRT and under.

The Irish fish and shellfish processing industry is marked by new facilities, found all along the coast. These range from plants producing frozen and cured products to holding ponds for shellfish. The processing side, like the fishing side, is still noteworthy by the absence of large-scale, integrated,

exceed the funds allocated for this purpose in 1973-74.

"The prospects for increased fish catches by Canada in the future are good" said Mr. Davis. "But while we are asking our fishermen to go out and catch more fish, we must plan for a controlled development of the fleet and avoid short-term overcapitalization which would dilute the benefits that our fishermen, shoreworkers and processors would otherwise gain from increased catches.

"What we want to do, in effect, is to tailor the capacity of our fleets to the quantities of fish available to Canadian fishermen" he added. New vessels that have been approved for subsidies will not be affected by the

three-month freeze.

Mr. Davis explained that when the new licensing scheme is implemented in the Atlantic region, vessels already fishing or for which firm commitments had been made for acquisition prior to this announcement will be granted licenses, providing they meet existing regulations. Licensing of new entries to the fleet beyond this point will be considered in the light of the new policy.

An overall license plan for commercial fishing boats on the Pacific coast has been in existence for several years.

The policy review involved full consultation with the provincial governments concerned and with the fishing industry.

European Investment Bank Funds Trawlers

The European Investment Bank (EIB) has granted to Reederei Sohl of Bremerhaven (run in conjunction with Hanseatische Hochseefischerei AG) a loan of DM 17.7 million (US \$7.335 million)¹ for 14 years at a yearly interest rate of 7¾ percent. This partnership of shipping companies, which combines the Oetker group's fishing interests, is the second largest fish producer in West Germany holding 30 percent of the fresh fish market and 20 percent of that for frozen fish products.

The bank's loan will be used for the purchase and operation of two refrigerated trawlers with the most modern design and equipment. They are part of an order for four ocean-going vessels (placed with Seebeck-Werft of Bremerhaven), being built under a Government-approved program set up by various shipping companies in West Germany and the German Deep-Sea Fishing Federation. The program provides for the construction of 14 vessels with a total gross tonnage

of 50,000; it takes into account the quotas fixed by international fishing agreements and will not bring about any substantial increase in the fleet's catching capacity, but it is mainly intended to provide replacement and rationalization investment which will help to restructure the West German deep-sea fishing industry. Like the corresponding program in other EEC countries, its main objective is to adapt supply to the long-term trend of demand and to guarantee adequate supplies to the market by increasing production of frozen fish. The consumption of frozen fish has been rising steadily in all EEC countries for several years and should continue to do so in the future, unlike that of fresh fish.

The financing by EIB of this project, which in all will cost about DM 46 million (US\$19,165 million)¹, is in line with its task of financing modernization and conversion projects and ties in with the EEC's policy on fishing.

Fish Nomenclature Trips New Zealand

Nomenclature appears to be troubling New Zealand exporters, reports the Worldwide Information Service. For some time now, they have been negotiating with the U.S. Food and Drug Administration (FDA) to allow "New Zealand Snapper" to enter and be marketed in the U.S. under that name. To date, FDA has refused, despite the fact that "New Zealand Snapper" is acceptable to Australia, Japan and the Food and Agricultural Organization of the United Nations (FAO).

The basis for FDA's refusal is that the species called "New Zealand Snapper" (*Chrysophrys auratus*) is a member of a group known as "porgies" in the United States. FDA has no objection to the product if labeled "New Zealand Porgy".

Canada Subsidizes Fish Meal Industry

A \$10 million purchase program for fish meal under the provisions of the Fisheries Prices Support Act has been announced by Canada's Fisheries Minister Jack Davis.

Under the program, the Fisheries Prices Support Board will offer to purchase fish meal from Canadian producers who may find themselves in difficulty due to the federal government's recently imposed export embargo on the product. Companies who sell fish meal to the Board will have the right of first refusal to re-purchase for resale at a later date.

Canada exported 36,000 tons of fish meal in 1972, valued at approximately \$7 million. Chief markets are the United States and Britain. In recent years, successful purchase programs to stabilize the market have been operated by the Fisheries Prices Support Board for such commodities as groundfish and Lake Erie yellow perch.

¹ Exchange rate as of July 27, 1973.

Source: Press Release, EIB, July 19, 1973.