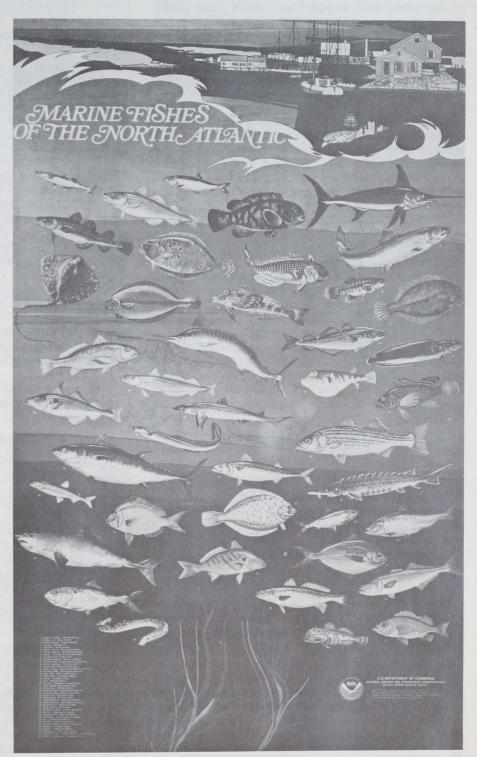
# NMFS PREPARES NORTH ATLANTIC MARINE FISH CHART

NMFS has prepared a full-color chart showing 42 marine fishes of the North Atlantic from New England south to the Chesapeake Bay. It is the first in a series of 6 designed to meet a long standing educational need. NMFS receives many requests from teachers and others for such material.

The other charts planned will show marine fish of the North Pacific, the Gulf and South Atlantic, the California-Hawaii area, and freshwater fish and shellfish.

The chart is 30 by 48 inches and can be framed for schools, libraries, restaurants, or recreation rooms. It is available for \$1.50 each from the U.S. Superintendent of Documents, GPO, Washington, D.C. 20402.

The chart was developed by Bob E. Finley, Chief, NMFS National Marketing Service Office, Chicago, Illinois.



# WORLD FISH CATCH ROSE 10% IN 1970

In 1970, the world fish catch rose more than 10% to a new record of 69.3 million metric tons. In 1969 it had dropped to 62.9 from 64.3 in 1968, the first decline in almost 25 years. This was reported by the UN's Food and Agriculture Organization (FAO). In 1948, the catch was 19.6 million tons.

The 69.3 million tons comprise marine, freshwater, and diadromous (fresh and salt water) fish and molluscs, crustaceans, and other marine life. Whales and seals are listed separately. The figure also contains a 5.8 million-ton estimate for China, which supplied no official figures.

### THE STANDINGS

Peru remained No. 1 with 12.6 million tons (9.2 in 1969, 10.6 in 1968). Almost all of Peru's catch were anchoveta, processed into fish meal for export.

Japan followed with 9.3 million tons (8.6 in 1969). The Soviet Union was third with 7.3 million tons (6.5 in 1969); then China, 5.8 million tons (estimate); Norway, 3 million tons (2.5 in 1969); the United States, 2.7 million tons (2.5 in 1969); India, 1.7 million (1.6 in 1969).

Thailand was 8th with 1.6 million tons (1.3 million in 1969, 1.1 in 1968).

South Africa dropped to 9th with 1.5 million tons (1.8 in 1969, 2 in 1968).

#### OTHER NATIONS

1970

	1010	1000
	(Metric Tons)	
Spain	1,496,600	1,496,000
Canada	1,377,500	1,504,800
Indonesia	1,249,000	1,214,400
Denmark	1,226,500	1,275,400
Chile	1,161,000	1,076,900
United Kingdom	1,099,000	1,083,000
Philippines	989,800	978,100
S. Korea	933,600	879,100
France	775,200	770,500
Iceland	733,800	689,500
Taiwan	613,000	560,900
W. Germany	612,900	651,600

### CATCHES BY CONTINENTS

All the continents except Africa caught more fish in 1970 than in 1969.

AFRICA: Catch dropped to 4.2 million tons from 4.3 million tons in 1969 and 1968. This resulted mainly from catch decrease by South Africa, the largest fishing nation. Angola's catch fell from 419,200 to 368,400 tons.

Several countries increased catches: Chad from 110,000 tons to 120,000; Ghana, 162,800 tons to 187,100; Morocco, 227,200 to 256,000 tons; Nigeria, 115,700 to 155,800 tons; Senegal, 182,100 to 189,200 tons; Tanzania, 150,200 to 195,000 tons; Uganda, 125,300 to 129,000 tons; Zaire, 112,000 to 122,000 tons.

NORTH AND CENTRAL AMERICA: 4.8 million tons (4.5 in 1969, 4.6 in 1968). The U.S. and Canada accounted for most of it. The U.S. catch was its highest since 1964, but still below that of earlier years: in 1956, almost three million tons were caught.

Canada's catch was below 1968's and 1969's but above previous years'.

Cuba continued its steady catch rise: to 105,800 tons; in 1969, 79,700; 1968, 66,000 tons.

SOUTH AMERICA: The biggest increase of any continent. Catch rose to 14.8 million tons from 11.3 million tons in 1969. Peru produced most of the increase. Chile's catch also rose significantly—from 1.1 million to 1.2 million tons. Argentina's rose from 203,400 tons in 1969 to 214,800 tons. Brazil's remained level at 493,000 tons; Venezuela's dropped to 126,300 tons from 134,100 tons in 1969.

ASIA: Caught more fish than all the other continents and its highest ever--26.2 million tons; in 1969, 24.7 million tons. Japan was largely responsible. India, Thailand, and Indonesia followed, all in million-ton category. Thailand's catch increased significantly to almost 1.6 million tons from 1.3 million tons in 1969. The Philippines and S. Korea approached a million tons.

1969

Gains were reported by S. Vietnam (577,400 tons), Burma (432,400 tons), Hong Kong (123,500 tons), and Yemen (115,000 tons).

Pakistan's catch dropped from 455,000 tons in 1969 to 420,000 tons in 1970; Malaysia's from 372,100 to 364,900 tons.

EUROPE (Excluding USSR): 12 million tons, up from 11.3 in 1969. Norway, Spain, Denmark, and the United Kingdom each exceeded a million tons. Following in order were France, Iceland, W. Germany, Poland, Portugal, Italy, E. Germany, the Netherlands, Sweden, and the Faroe Islands.

France's catch rose slightly to 775,200 from 770,500 tons in 1969. Italy had a record 403,400 tons (in 1969, 370,900 tons). W. Germany dipped slightly; E. Germany's catch increased from 309,900 to 321,800 tons. Iceland's reached 733,800 tons from 689,500 tons in 1969 and 600,600 tons in 1968, but it remained well below the 1966 peak of 1,240,300 tons.

Denmark's catch slipped from 1.3 million tons in 1969 to 1.2 million tons. Netherlands' catch fell from 323,200 to 300,700 tons.

OCEANIA: Australia, New Zealand, and South Western Pacific Islands. Harvested 190,00 tons, up 10,000. Australian catch was 102,600 tons; in 1969, 91,900 tons.

#### THE ECONOMIES

Developed countries increased their catches by slightly over one million tons to 26 million tons. Developing countries showed significant catch increases: from 23.6 million tons in 1969 to 28.1 million tons in 1970. This was due mainly to Peru; without Peru, the rise would have approximated the developed countries' rise.

The centrally planned economies expanded fishing from 14.3 million to 15.1 million tons.

More than half of it was contributed by the USSR and Eastern Europe; China accounted for the bulk of the remainder.

#### CATCHES BY SPECIES AND AREAS

The greatest catch increases during 1970 were in marine fishes: from 48.3 million metric tons in 1969 to 53.5 million tons. Freshwater catches increased slightly--from 6.8 million to 7 million tons. There were small increases in crustaceans and molluscs.

Herrings, sardines, anchovies and related species were bulk of the marine catch: 21.2 million metric tons. South African pilchards dropped significantly, from 1.4 million to 700,000 tons. Alaskan pollack, cods, hakes, haddocks, redfishes, and mackerels were higher. Tuna catches remained at about 1969 level. Shrimps rose. Carps increased considerably among the freshwater fishes, from 166,000 to 193,000 tons.

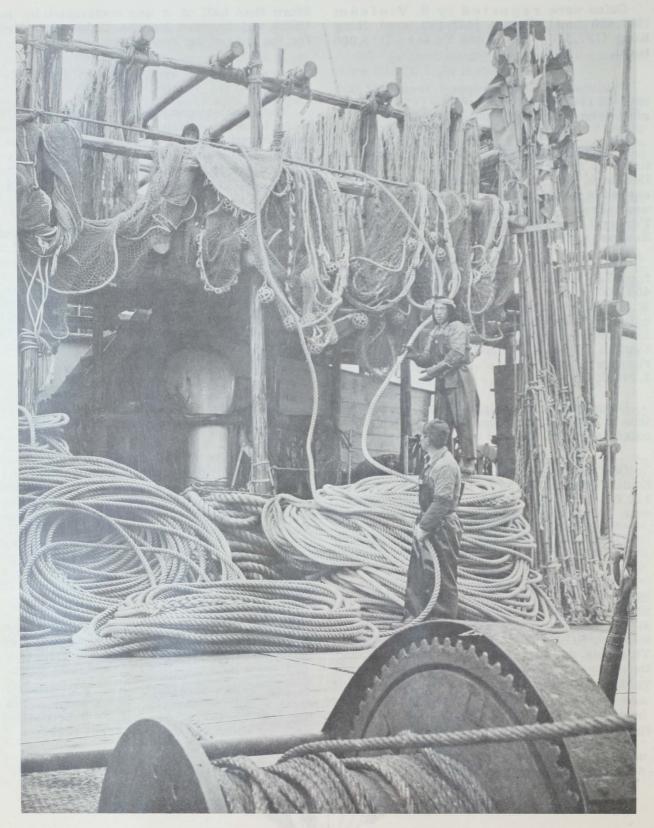
Whale catches rose from 41,735 to 42,266, mostly sperm whales, but figure was lower than in most earlier years.

The Pacific Ocean produced the largest catch: 35.3 million tons, compared to 30.1 million tons in 1969. The Atlantic Ocean yielded 23.6 million tons, up one million. Most Atlantic catches were in Northeast and Northwest Atlantic, which yielded 14.8 million tons. In Southeast Atlantic, where a new international fishery convention became operative recently, catches dropped from 3 million tons in 1969 to 2.4 million tons in 1970.

The Mediterranean and Black Seas, grouped within the Atlantic region, produced 1.1 million tons; in 1969, 970,000 tons.

The Indian Ocean, about one-fifth the earth's marine surface, was a small arena for the world marine catch: 2.7 million tons, up about 160,000 tons from 1969.





Stowing net and line aboard the 'Shinyo Maru'.

# **NORWAY'S FISHERIES PROSPERED IN 1971**

Again in 1971, Norwegian fisheries had a very prosperous year. Exvessel value rose 10% to a new high of US\$220 million. The catch of 2.8 million tons was the second highest (1970: 2.7) but less than 1967's record 3 million tons.

Traditionally, the bulk of the catch has come from inshore or coastal waters. But, with rapid expansion in use of purse seines since 1965, distant operations have grown and offshore catches have increased.

## Capelin Half of Catch

With decline in North Sea herring and mackerel stocks, more effort was directed toward capelin, which are caught mostly off North Norway. Capelin has become the leading fish in production of fish meal and oil. In the last two years, it was half the total catch. The 1971 capelin catch was the best ever: 1.4 million tons worth US\$39 million.

## Fish Meal Up

Fish meal production is considerably above 1970. Output of fish oil will total about 179,000 tons. A factory fleet off West Africa also caught 200,000 metric tons of sardinella and mackerel, which were processed into fish meal.

# Cod, Herring, Brisling

In 1971, the important cod fisheries yielded a record 341,000 tons worth US\$78.6 million. The herring catch was 300,000 tons worth US\$20.7 million. Previously, herring

had formed the greater part of the catch; now they are in relatively short supply. Not many years ago, the winter herring fisheries off Norway yielded several hundred thousand tons annually. In 1971, the catch of winter herring was only 6,894 tons, fat herring 12,944 tons, and "small" herring 2,248 tons. Until recently, the main herring catch came from the North Sea; stocks there have declined drastically. The 1971 North Sea herring catch was down to 210,399 tons. The catch of brisling, mainstay of Norway's important fish-canning industry, was about 9,000 tons, down 30% from 1970.

## Protecting Herring

Norway has agreed with other countries to prohibit catches of winter herring in 1972 and to reduce catch of fat and small herring to 45% of 1969 catch. A closed season for herring fishing from April 1 to June 15 has been established.

## Record Exports

Exports of fish and fish products are estimated at record earnings of about \$314 million.

#### The Industry

About one percent of Norwegians are fishermen (43,000). They operate 36,000 fishing vessels, of which 27,000 are small open motor vessels. Also, many Norwegians work in fish processing and auxiliary trades. (The Export Council of Norway, and U.S. Embassy, Oslo.)

# **ICELAND IS BUILDING 21 STERN TRAWLERS**

The Icelandic Government is fostering a program to strengthen its fisheries. As part of this, contracts have been negotiated to build 21 stern trawlers, 500 to 1000 tons, totaling 14,000 GRT. Government and private investment will be nearly US\$30 million.

Many of the new vessels are to be built in Spain; 7 in Norway, 2 in Poland, and some in Iceland. This is the first recruitment to this fleet since 1969. Delivery is slated for 1972-73.

## Situation and Outlook

The failure of Iceland's herring fisheries in recent years has renewed interest in trawling. In 1970, groundfish catches were the largest since 1960; good catches are expected to continue into 1972.

Favorable prices for groundfish have strengthened the financial status of the vessel owner-operators. So they are encouraged to better equip their fleet.

The principal fishing grounds have been in Icelandic coastal waters, mainly along the south and west coasts. The newer vessels will be capable of fishing distant waters.

### Government Loans

The fleet modernization, which began in 1970, is supported by government loans. Loans available from the Fisheries Fund may cover three-quarters of the vessel cost if the vessel is built at home, and two-thirds if built abroad. Interest rates are established by agreement between the Ministry of Finance and the Central Bank of Iceland. All loans are guaranteed with a first mortage on the vessel. (U.S. Embassy, Reykjavik.)

# NORWAY'S FIRST PURSE SEINER TO FISH TUNA OFF AFRICA

Norway's first tuna purse seiner, the 'Sun Tuna', has been delivered to A/S Sun Tuna & Company in Aalesund. It is a former 216-foot whale catcher rebuilt in Norway.

The vessel's freezing equipment has a maximum daily capacity of 100 metric tons of fish. Total loading capacity is 900 tons.

It will carry two purse seines, one among the largest ever made in Norway: 1,640 yards long, 220 yards deep, and covering 75 acres of sea.

The 'Sun Tuna' will fish off Africa and land its catch directly in Italy. (U.S. Embassy, Oslo.)



# DENMARK EXEMPTS PROCESSED SHRIMP & HERRING FROM 10% IMPORT SURCHARGE

On Oct. 20, 1971, Denmark imposed a 10% import surcharge on all prepared and preserved fish products, including frozen cooked shrimp, a principal U.S. export to Denmark. On November 24, Denmark exempted prepared and preserved shrimp, among other items.

The exemption will permit continued expansion of the sale of Maine and Alaskan shrimp to Denmark. Another item exempted was prepared or preserved herring, whole or filleted. (U.S. Embassy, Copenhagen.)



# FRENCH TO TEST PROTEIN FROM PETROLEUM

A plant to test a commercial process for manufacturing protein from petroleum will start operation near Marseilles. It will have a 20,000-ton annual capacity plant. If it proves successful, a 150,000-ton-capacity plant will be constructed in about 5 years. Operator is Soviete Francaise de Petroles B.P.

Present speculation is that project's protein output will compete with such proteins as fish meal. The protein from petroleum is 70% pure. Experiments have indicated no

adverse effects on growth or meat quality of test animals. A uniform product is assured by adding carefully developed strains of yeast and basic chemical compounds to petroleum.

Differs from U.S. & British Work

The French process differs from U.S. and British experiments, which first separate paraffins from petroleum. Research is being conducted with the World Health Organization into possible uses for fortifying human food. (Agric. Att., U.S. Embassy, Paris.)



# ITALY SETS STRICTER MERCURY TOLERANCE LEVEL

Italy has revised its ordinance concerning mercury in fishery products, reported the Japanese newspaper 'Suisan Tsushin' Jan. 18. Effective until Dec. 31, 1972, it establishes a new tolerance level of 0.7 part per million (ppm) of total mercury content in fish. The previous limit was 1.0 ppm; its 3-month period expired Dec. 14, 1971.

New Regulation

The new regulation allows foreign fishery products to enter Italy without sampling at the port if accompanied by a government inspection certificate of the exporting country. The certificate must state mercury content does not exceed 0.7 ppm. If there is no document, the product will be sampled by an Italian testing laboratory.

