

# COMMERCIAL FISHERIES REVIEW

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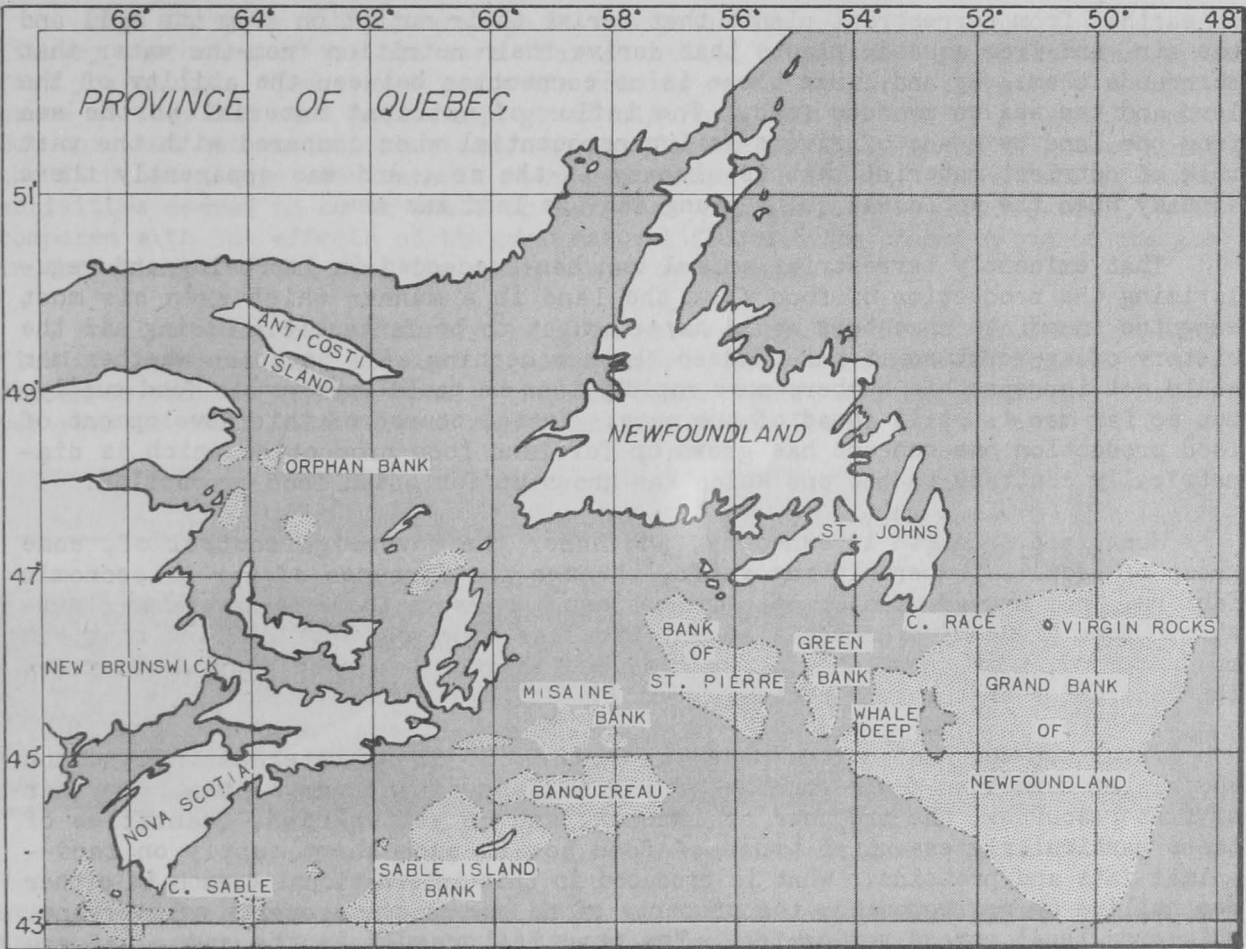
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## UNITED STATES POLICY WITH REGARD TO HIGH SEAS FISHERIES<sup>1/</sup>

By W. M. Chapman\*

Your Chairman has asked me to speak on the subject of the policy which our Federal Government has toward high seas fisheries. This policy, briefly put, is



NORTHWEST ATLANTIC FISHING GROUNDS OFF NEWFOUNDLAND, NOVA SCOTIA AND THE GULF OF ST. LAWRENCE WHICH ARE FISHED BY UNITED STATES, NEWFOUNDLAND, CANADA, AND EUROPEAN MARITIME NATIONS.

to make possible the maximum production of food from the sea on a sustained basis year after year.

So stated, this policy is extremely simple, and I doubt that any man in the world will find objection to it. In a hungry world the production of food from any

\*Special Assistant to the Under Secretary of State.

<sup>1/</sup>An address delivered before the National Resources Section Meeting of the State-wide Annual Meeting of the California State Chamber of Commerce at San Francisco on December 2, 1948.

Note: See article "Northwest Atlantic Fisheries Conference" for a draft of the International Convention for the Northwest Atlantic Fisheries, p. 65 of this issue.

source, and the maintenance of any source of food production, is looked forward to avidly by everyone. Yet the implementation of this simple policy is fraught with as much complexity as any policy that the United States Government has before it. The roots of the difficulties go back into history to our colonial period and even further. The difficulties are being rapidly accentuated by the vast advances in marine technology that the recent war stimulated.

All food on this planet comes from one source. Plants put together the energy of the sun with the chemicals that surround them and the result is new chemicals which animals can eat and from which they can derive energy. These chemicals are collectively called food.

The production of these plant foods comes from two independent kinds of area on earth: from terrestrial plants that derive their nutrition from the soil and the air, and from aquatic plants that derive their nutrition from the water that surrounds them. By and large there is no connection between the ability of the land and the sea to produce food. The influx of nutrient material to the sea from the land by means of rivers is inconsequential when compared with the vast bulk of nutrient material that is already in the sea, and was apparently there already when the world was quite young and the land was new.

That eminently terrestrial animal man has succeeded in improving and regularizing the production of food from the land in a manner which even his most sanguine immediate ancestors would have thought to be fantastic. During all the history of agriculture it has, indeed, been something of a question whether man would not increase his numbers more rapidly than he could improve his food supply, but so far man is still ahead of the race. In the course of this development of food production one concept has grown up for land food production which is diametrically contrary to the one which has grown up for ocean food production.

Most land on earth is owned by, and under the sovereign control of, some group of people. Ownership may shift, through the fortunes of war or economic factors, from one group of people to another, but always there is sovereign ownership. Some group of people can at any time say, for any spot of land that can produce food, that the food will be produced in such and such a way. They own the land and everything that comes from it.

In direct contrast no one owns the ocean. It is an international common comprising more than three-fourths of the surface of the earth; the reservoir of vast resources; the producer of immense, and as yet unknown, quantities of those particularly essential types of food now in such short supply on land—animal fats and proteins. What is produced in this international common is either res nullius or res communis, the property of no one or the property of everyone, whichever legal phrase you prefer. The practical result is the same. If you can reduce any part of the production to your possession before somebody else does then it is yours—but not until then.

The consequence of this lack of ownership is that there is no law to cover the means of production from these food resources. They cannot be placed under any solid type of management either for good or for bad. Fish are owned property when they are reduced to possession; fishery resources of the open sea are owned by everyone or no one. They are the sovereign property of no nation.

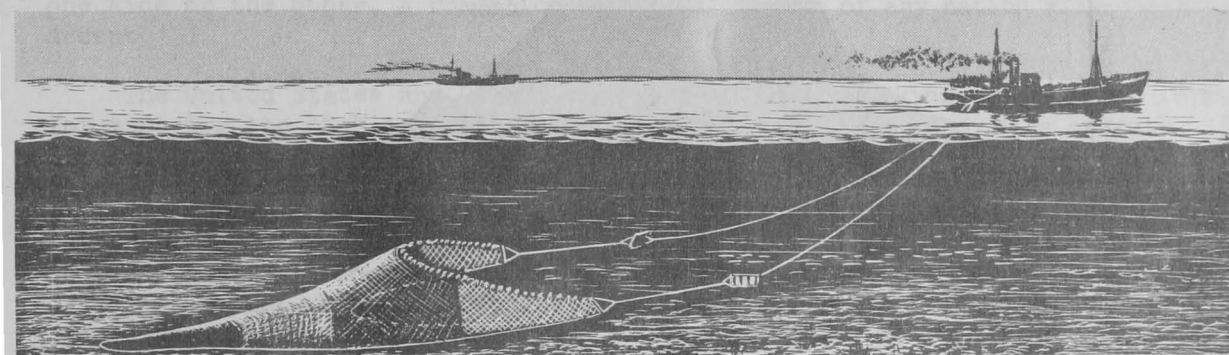
Between the land and the open sea is a narrow belt of water which in many parts of the world is very productive, and which is called territorial waters.

By international accord this is taken to be under the sovereignty of the nation whose coasts it washes, and its products are the property of that nation. The narrowness of this band of water is assured because naval policy and commercial policy, and ordinarily the fishery policy, of the major maritime nations demand that the seas be open to unimpeded navigation.

Most of the major fisheries of the world started in these narrow territorial waters. As market demands increased, however, fishermen increased the size and navigability of their vessels, and the efficiency of their methods, and went far beyond territorial waters for their catches. For the past two hundred years most of the major fisheries of the world have lain at least partially outside territorial waters.

Until forty or fifty years ago it was generally considered that these major fishery resources of the sea were inexhaustible. The more you fished the more fish you caught. True, some years the herring or cod were not there in such abundance as they had been before and great distress came to the fishing villages. But this had happened in the time of your father, or his father's father, and the fish had always come back in abundance sooner or later. The effect of man's activities seemed to be so small on the fish populations he fished upon, when compared with the effects of the great natural fluctuations caused by cyclic changes in the climate of the sea, that they could be ignored.

But fishermen became more clever at harvesting the sea. In this century fishing intensity has increased tremendously. Motors in vessels increased the distances that a fisherman could travel to the banks, and the numbers of trips per year he could make between market and the banks. Diesel engines made the trips



ILLUSTRATES TYPE OF FISHING FOR GROUND FISH DONE BY TRAWLERS FISHING ON THE BANKS OF THE NORTH ATLANTIC.

even more dependable and cheaper. First ice and then mechanical refrigeration on the vessels made it possible for him to stay longer on the grounds, and go farther to new grounds, and return with larger catches in first class condition. Gear was improved to catch more fish in less time. In only the last few years new developments have improved fishing efficiency tremendously. New instruments from the war permit the fisherman to follow the schools in the depths and to set his nets where the fish are without having sighted a fish. Other instruments have made the most complex navigation easy to the simplest fisherman. Radar permits him to operate in the heaviest fog--that bane of all seamen.

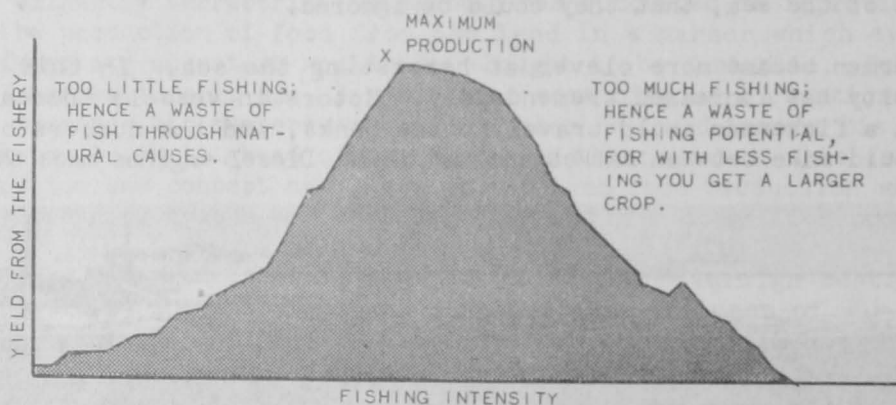
With this tremendous increase in fishing effort, which is still increasing at a rapid rate, there came a new factor into the sea fisheries. Some kinds of fish became less abundant. This had been happening for time without memory and fishermen said, "Wait, they will be back again."

But some kinds of fish just did not come back. A new branch of science had built up, fishery biology, and biologists now claimed that some fish would never come back unless the fishery was relaxed. Too great a crop had been taken. The population of fish would not produce so many and still be able to maintain its abundance. In order to get big crops of food again from this population of fish you would have to take smaller crops until the population recovered in size; you had to build up your capital stock if you were to increase your revenue from it.

Evidence has continued to mount in recent years that the following is true: when you begin fishing on any population of fish, that population begins to decrease in total numbers as the take of fish from it increases. Up to a certain point, however, the reproductive capacity of the population increases also—whether because there is more food for what fish are left, or less loss to natural predators, or whatever cause, is not well understood yet.

If the fishing intensity continues to increase, however, you at last come to a point where the population of fish cannot respond and now the yield begins to drop off no matter how hard you fish or how many vessels you use, or how efficiently you work.

The matter is easily expressed in a simple curve:



The sense of this is that for any particular population of fish there is a point of fishing intensity which will yield a maximum crop of fish from that population year after year into eternity. Less fishing than that is wasteful, for the surplus of fish dies from natural cause without benefit to mankind; more fishing than that is wasteful because it results actually in a smaller crop (this is frequently called depletion).

The determination of this point of optimum fishing intensity is a difficult and expensive task. Please remember also that the abundance of the population of fish is still fluctuating due to natural causes beyond the control of man, and consequently this point of maximum production changes as the cyclic changes in the climate of the sea affect the productive ability of the particular fish population. In such important kinds of fish as herring and sardine it becomes apparent that these natural fluctuations are of major importance; in such fish as halibut it seems that natural fluctuations are small enough that they can almost be ignored.

It is not my purpose to go into the difficulties of the scientific work at this time, but to dwell on the diplomatic difficulty that follows as a result of this new concept: that less fishing can in some cases provide more fish, and

the apparent fact that, as the technology of catching improves, one after another of the major fishery resources of the sea stands in danger of overfishing and depletion.

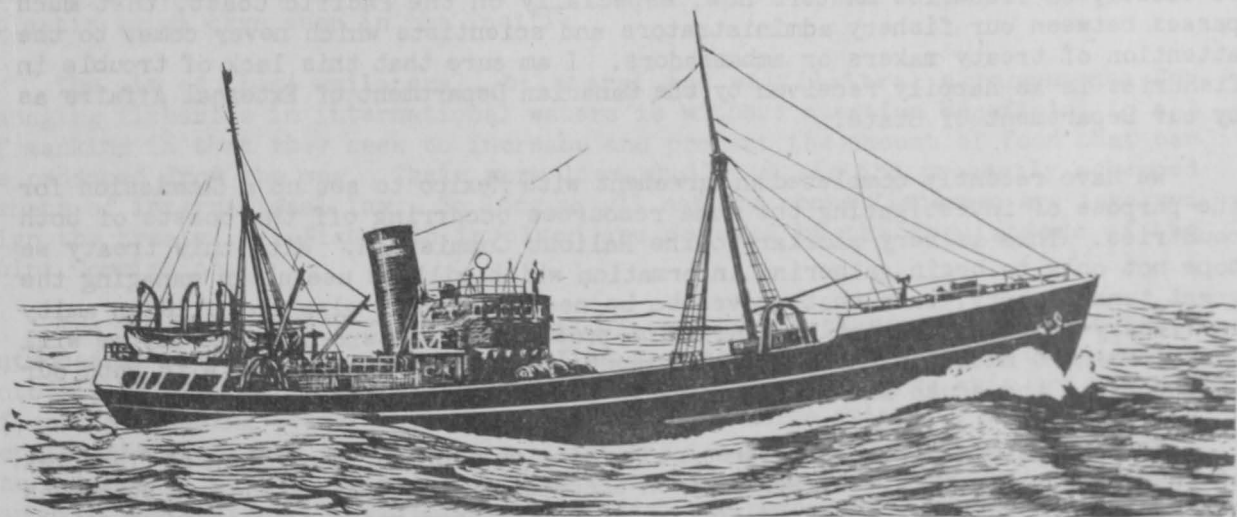
These factors indicate that management of each fishery will be desirable when the fishing intensity gets beyond the point of maximum return. But who is to manage the fishery on the high seas? Management means laws, and the enforcement of those laws. The high seas are an international common. It would probably be argued that the United States under accepted international procedure has no right to regulate the fishermen of another nation unless that nation has given us permission to do so.

There is one way out of this puzzle. It is not generally known to fishermen, but is well known to all foreign chancelleries over the world. A fisherman once he goes beyond the limits of territorial waters of his country is no longer exercising rights which belong to him as an individual. He is exercising rights belonging to his country under international law. Consequently each country has control over its own fishermen wherever they go on the high seas and can, either through the central government or the power of its political subdivisions, control fully the activities of these fishermen.

Thus any nation has all the powers it needs to regulate and manage any fishery in which its own nationals only participate.

The difficulty is that most kinds of fish are migratory and fishermen follow the fish without regard to nationality. Where the nationals of more than one nation fish together on the same grounds all must work under the same regulations which must be uniformly enforced on all, or a commercial advantage will accrue to one side or the other, a condition that no fisherman of any nation will peacefully accept.

The United States and Canada have succeeded in working out a joint formula for managing the high seas fisheries in which only their nationals operate. Beginning first with the halibut fishery of the North Pacific, the two nations set up a Joint Commission under treaty. The first duty of this Commission was to determine whether regulation of the halibut fishery was necessary and desirable.



TYPE OF ENGLISH TRAWLER FISHING IN THE NORTH ATLANTIC.

Through the determination of scientific information the Commission found that regulation was desirable. Successive changes in the treaty have given the Commission more and more power of regulation over this fishery. The regulations have proved to be tremendously beneficial to the fishermen of both countries, and consequently to both countries.

It is to be noted that regulations of the Commission are designed solely to keep the populations of halibut in the Northwest Pacific at that level of abundance which makes possible the maximum sustained yield from those populations year after year. The percentage of this catch which goes to either country depends solely on the energy and ability of its fishermen. Within the season fishermen of both countries fish everywhere under equal privilege; when the season closes all fishermen stop.

When the Commission began managing the halibut fishery the fishermen of both countries together, fishing nine months of the year (all the weather would permit) could take about 35 million pounds of halibut from the North Pacific. The populations of halibut on the banks have been so carefully managed and built up that now those fishermen take 55 million pounds each year in less than two months of fishing.

The object lesson of this cooperative effort has been so striking that it has had world wide significance. Canada and ourselves have been joint partners in another similar Commission for the past several years, the International Pacific Salmon Commission, which has as its duty the management of the sockeye salmon fishery of the Fraser River. This Commission is also producing results which are highly beneficial to both countries and, in that its work results in a greater production of food, to mankind generally. A third fishery treaty has been signed between our two countries to manage the fisheries of the Great Lakes. This has still to be ratified by our Senate before coming into effect.

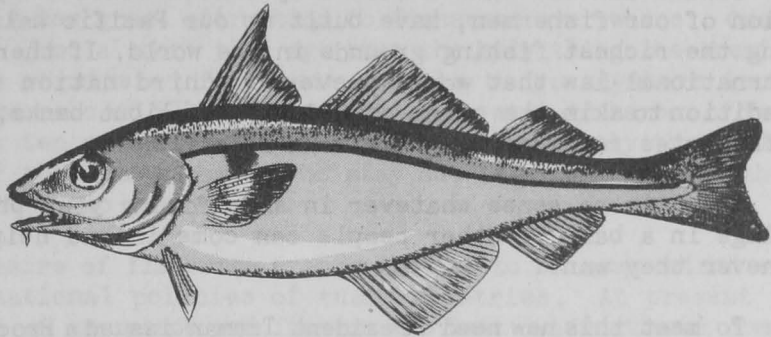
A major benefit of these various treaties has been that the two countries have become used to working together on fisheries problems. What used to be serious political problems between us have one after the other come under the impartial eye of our fishery scientists working jointly, and one after another they have simply evaporated before the pressure of scientific fact. In fact we work together so closely on fisheries matters now, especially on the Pacific Coast, that much passes between our fishery administrators and scientists which never comes to the attention of treaty makers or ambassadors. I am sure that this lack of trouble in fisheries is as happily received by the Canadian Department of External Affairs as by our Department of State.

We have recently completed an agreement with Mexico to set up a Commission for the purpose of investigating the tuna resources occurring off the coasts of both countries. This is very similar to the Halibut Commission. With this treaty we hope not only to begin gathering information which will be useful in managing the great tuna fishery, when that proves to be necessary, but also to build up amity on fishery problems by joint work on joint problems to the end that one day we will have permanent mutually amicable relationships in fisheries matters with both our neighbors to the south and to the north.

These bilateral treaties represent the simplest form of management of fisheries in international waters. The work of even these bilateral Commissions has been much more difficult than has appeared on the surface. Long years of gathering scientific facts have had to precede each positive step by both of our working Commissions.

Arguments and high temperatures in meetings have occurred; a high degree of statesmanship has been necessary on the part of both Commissioners and industry leaders; a high degree of scientific competence has been required on the part of the Commission staffs. That these treaties have worked at all is a high tribute to the good will, energy, and level-headedness of the men involved.

We are now embarking on a task which is many-fold more difficult than anything that has been attempted to date in managing fisheries in international waters. It has become apparent that the halibut, haddock, and cod resources of the Northwest Atlantic either require regulation now or will in the immediate future. Canada and ourselves are both involved in these fisheries. We would have no trouble in signing a joint treaty to handle these fisheries, as we have others of our joint fisheries, if only Canada and ourselves were alone involved.



HADDOCK (*MELANOGRAMMUS AEGLEFINUS*) IS NEW ENGLAND'S MOST VALUABLE FISHERY RESOURCE, AND ONE OF THE NORTH ATLANTIC'S MOST VALUABLE. U. S. PRODUCTION OF HADDOCK, IN RECENT YEARS, HAS DECLINED CONSIDERABLY.

But here fishermen of other nations are involved. There is good evidence that Basque fishermen were fishing cod on the Grand Banks when Leif Ericsson, the Norseman, sailed by on his way to Vinland, long before Columbus set sail to the west or before there was a Canada or a United States. Spanish, Portuguese, French, Italian, English, Danish, and Norwegian fishermen work on these stocks of fish, as well as fishermen from Canada, Newfoundland, and the United States. That these nations have rights to fish in the waters of the Northwest Atlantic goes without question. That it is impossible to regulate one kind of fisherman on a bank and not another kind who is fishing along side him, is also unquestioned.

This Government is calling together, in late January, a conference of these and other nations in the expectation of reaching a multilateral agreement establishing a Commission which will have the same beneficial effect in the Northwest Atlantic as we have seen in the Pacific.

The aim of these unilateral, bilateral and multilateral arrangements for managing fisheries in international waters is without question beneficial to all of mankind in that they seek to increase and protect the amount of food that can be produced from the sea. Their work lies wholly within the presently accepted tenets of international law. So long as all nations whose fishermen are involved sign the treaty, all fishermen involved are covered by the regulations of the Joint Commission.

The difficulty is that these types of agreements stand in danger of being outmoded by technological advances in fishing practice before they can be fully put into force. The mothership has come into the picture. A large ship and a group of smaller fishing vessels go out as a group. The large ship acts as a supply and repair vessel for the small vessels. The small vessels catch the fish and transfer the catches to the big ship for processing or refrigeration. The group of vessels can go to the ends of the earth after its catch and never come into the territorial waters of another country.

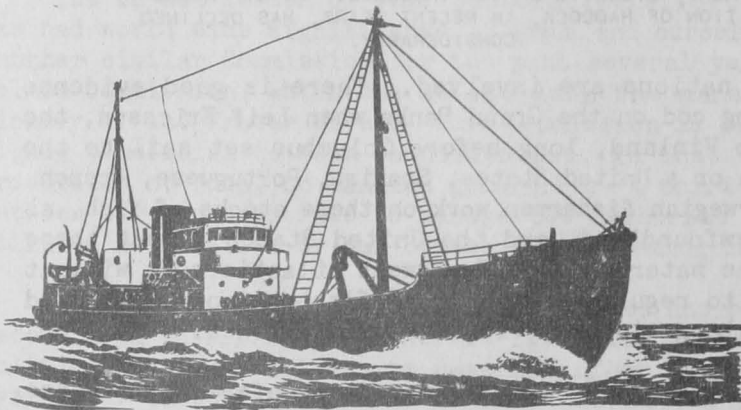
In this way European whalers catch and process whales in the Antarctic. Japanese mothership operations have worked in Bristol Bay. English motherships have operated in the Greenland halibut fishery, and so on. Fishermen from any country have the method, when they get the capital and working experience, to operate off the shore of any other country. This is a revolution in fishing technique and it will require a modification in international legislation to meet the new condition.

Canada and the United States by mutual sacrifice, expense, and strict regulation of our fishermen, have built up our Pacific halibut banks so that they are among the richest fishing grounds in the world. If there is nothing under accepted international law that would prevent a third nation from sending a mothership expedition to skim the cream off of these halibut banks, what is the use of building up fisheries resources in this manner?

There is no sense whatever in sacrificing your present pleasure to build up savings in a bank if other people can come in and help themselves to your money whenever they want.

To meet this new need President Truman issued a Proclamation in September 1945, to the effect that the United States might set up conservation zones to protect its coastal fisheries without regard to the limitations of territorial waters. Where only its own nationals are involved the United States would undertake exclusive jurisdiction over the fishery. The United States would recognize similar action by other countries in fisheries off their own coasts.

Note carefully that there was no mention in this proclamation of extension of sovereignty beyond territorial waters, nor of exclusion of fishermen of any nationality from any fishery.



MODERN NEW ENGLAND TRAWLER WHICH PRODUCES THE BULK OF NEW ENGLAND'S CATCH OF GROUND FISH ON THE BANKS OF THE NORTH ATLANTIC.

The purpose of the proclamation was to provide for new means, under law, to protect fishery resources lying in international waters from over-exploitation.

Now one nation by itself cannot change law. A proclamation by the United States does not bind other nations to accept the new principle into the body of international law. There have already, for instance, been issued by several other nations proclamations covering their coastal waters which extend very considerably the scope of the Truman Proclamation.

Although they differ considerably, the general tendency of these other proclamations is to extend the territorial waters of the country involved--its sovereignty--a considerable distance beyond generally recognized limits, in some cases, indeed, up to 200 marine miles. All the production of the sea in this new territory might be regarded as the property of the country. Foreign fishermen in the area might be looked upon as illegal operators and treated accordingly.



This thesis would lead logically to the division of the oceans of the world into segments of sovereign property in the same way that the land surface of the world is so divided. This would be a step backward into the past to the time when Spain, Portugal, England, and other nations claimed vast areas of the ocean seas. The principle of sovereign ownership of the seas did not work then and will not work now. It works against too many maritime interests of too many maritime nations and is simply unacceptable to them.

Yet half of this thesis has great attraction to fishermen everywhere. One of our industry men told me in jest a short time ago that the only thing the American fishing industry wanted was permission for their vessels to go anywhere in the world and for the fishing vessels of all other countries to stay in harbor. To my knowledge there are at least ten countries who would like to see exactly the reverse of this—for the vessels of this man's company to stay out of the waters off their coast, and for their vessels to go everywhere.

This normal selfish desire of fishermen everywhere has to be compromised with the realities of the international policies of their countries. At present the nationals of any nation can go any place and fish on the vast international common of the sea. It cannot be demonstrated that it is in the general good of mankind to restrict, for selfish national purpose, the fishing activity of any particular nation in any particular segment of this common.

It can be demonstrated that it is in the general welfare of all mankind to protect the resources of the sea from overfishing to the end that the sea will continue to produce the maximum quantity of food that it can.

This is precisely the goal at which we aim. The aim is to provide a mechanism which will provide for each high seas fishery in the world the possibility of management, to the end that the population of fish upon which the fishery works will be kept at that level at which a maximum crop can be harvested year after year, ad infinitum.

As to who will get what share of that crop the nations of the world could not possibly agree at this time.

This part of the problem must be left, for the present, to free enterprise and competition, based upon fair methods of operation. There is a crop to be taken in the international common. Each takes according to his ability. When the safe crop is taken, all stop the harvest.

