United States Department of the Interior, J. A. Krug, Secretary
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OPERATION FISHERIES IN JAPAN

Address by Reginald H. Fiedler, Colonel, A.U.S.,* at the Fishery Products Conference of the National Canners Association in Convention at Atlantic City, N. J., January 20, 1947.

"Operation Fisheries" was the name we in the Fisheries Division in Tokyo dubbed it. While this name appears in no official War Department dispatches or communications, nevertheless the need for a trained fisheries staff for the occupation of Japan was realized by that Department in the summer of 1944. At that time the invasion of Europe had been in progress only a few months and the forces of General MacArthur and Admiral Nimitz were still concerned with the Philippines and other Pacific Islands. As a result of a call by the War Department, a small group of highly trained fishery specialists volunteered for military government duty aimed at the Far East. In this group, which was augmented by a number of Army and Navy officers already in the military forces, were fishery technologists, economists, biologists and engineers. They were drawn from the Federal and State governments, fish canneries and college faculties. After a course in military tactics and government at the Army School for Military Government at the University of Virginia, a course on Japan and in the Japanese language at one of six universities, and combat training at the Presidio of Monterey, the group was sent overseas to serve in General MacArthur's occupation forces.

The first two of the group arrived in Tokyo by way of the Philippines around the middle of September, 1945. Other members arrived a few weeks later. The main body of the group was integrated into the staff of the Supreme Commander for the Allied Powers and later constituted the nucleus of the Fisheries Division of the Natural Resources Section of that Command. Others were assigned to Korea, where they became a part of the Military Government Organization of the XXIV Corps. Still others were assigned to military government teams which were located in the various prefectures (states) of Japan. As time went on, the staff of the Fisheries Division was augmented by fishery specialists from Australia, Canada, and Siam, as well as by several of the foremost fishery scientists of Japan. At its height the staff numbered only about 25 persons.

The mission of the Fisheries Division in Japan was to recommend measures for the rehabilitation of the Japanese fisheries to produce food and other marine products needed for consumption in Japan, from areas open to Japanese fishermen; and to prepare intelligence studies on fisheries which would be of value in meeting the needs of the occupation forces. The Japanese Bureau of Fisheries and the various prefectural governments continued to administer the fishery industry and private firms and individuals continued to operate it.

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Policies for carrying out the mission stemmed from directives of the Joint Chiefs of Staff and the State, War, and Navy Coordinating Committee in Washington and from plans determined upon by the Supreme Command in Japan. Early in the occupation it was determined that rehabilitation of the fishery industry was an urgent necessity from the humanitarian standpoint and to assist in allaying disease and unrest. Furthermore, rehabilitation of this industry was important to American citizens, for every ton of food produced locally by the Japanese themselves relieved the United States from shipping that amount of food to Japan. And the United States, up to the time I left Japan in mid-October 1946, was the only country shipping food to Japan. It still is.

Upon arrival of the first contingent of officers in Japan, they found the fishery industry in a demoralized condition. The great Japanese fisheries formerly conducted along Asia from the Arctic to the Antarctic were lost to the Japanese and the fisheries around the home islands were virtually at a standstill. Before 1941, Japan's fish catch ranged from four to six million tons annually from home and overseas fisheries. This was roughly one-fifth to one-fourth of all the marine products taken from the waters of the world. It took 1½ million fishermen using some 350,000 boats and vessels of all types to achieve this yield. About one-fifth of her fishery products and nearly all her exportable marine products came from overseas areas. All of the whaling mother ships and many of the transports had been sunk as well as all but one of her salmon and crab factory ships. The one that remained became a repatriation ship. Many of the other larger ships of around 100 to 500 tons also were lost or damaged, especially those used in the tuna and bonito fisheries and in the otter trawl fisheries around the Islands and in the Yellow and China Seas. As of Surrender date the productive capacity of the fleet around the Home Islands was reduced to about sixty percent of normal, according to a statement of the Japanese Bureau of Fisheries. The elaborate fishing establishments, including ships, docks, processing plants, repair yards and similar equipment in the South Seas, Formosa, North China, Manchuria, Korea, Sakhalin, Russian Maritime Provinces and the Kurils, all passed out of control of the Japanese.

Fishing Areas

Within a few days after surrender fishing was resumed on a small scale, but for security reasons, it was permitted no further than twelve miles from shore. Later in September security regulations were relaxed and the Supreme Commander permitted Japanese vessels of all sizes and descriptions to fish over a wider area around the four main islands of Japan. Vessels over 100 tons were required to register before making their original voyage. Distance from shore ranged from three to six hundred miles at the furtherest point, but averaged only about one hundred miles.

It was estimated that fishing in this area would produce domestic needs for fish. As you are well aware, the Japanese are the world's foremost fish eaters. Having a desire to eat fish for breakfast, lunch, and dinner seven days a week; and prepared in courses ranging from the first of raw fish or soup to the last of rice, total fish consumption in the Islands amounts to some three million tons annually. Consumption per head has been estimated up to 95 pounds annually but is probably more nearly about 65 pounds. Even at the lower figure the people of no other country eat so much fish. High production and consumption, however, depend upon large runs of sardines. In former years as much as a million or more tons of sardines have been taken annually around the four main islands. Recently

however, the catch of this species has been declining. Therefore, it was necessary in order to more nearly approach the goal of three million tons annually, to enlarge the area from time to time and to permit some specialized types of fishing outside the area. Whaling was permitted, under certain restrictions, around the Bonin Islands during the winter of 1945-46. This was in an area outside the basic fishing area established in September, 1945. In June, 1946, the basic area was again enlarged by the Supreme Commander. Primary changes were that the southern and eastern boundaries were moved further to sea and included among other areas the waters around the Bonin Islands. This permitted the use of many fishing vessels that could not operate efficiently in the more restricted zone. The principal species caught in this area, which really embraces the coastwise fisheries, are sardines, squid, mackerel, salmon, herring, tuna and tunalike fishes, flounders, shrimp, bonito, tai, codfish, and abalone. Seaweed is also an important crop.

The Supreme Commander also authorized two Japanese whaling expeditions to the Antarctic for the season 1946-47. It is estimated that some 2,000 whales will be caught. While a large quantity of whale oil will be produced, the primary purpose of these expeditions is to secure whale meat for food in Japan. These and all other Japanese whaling activities will be conducted in strict accordance with the provisions of all the International Whaling Agreements. In this connection the Japanese, by directive, have also been prohibited from engaging in pelagic fur sealing.

It was hoped that by these enlargements of the basic fishing area that the goal of three million tons would be reached in a twelve-month period. Since fishing did not get well under way until the early spring of 1946, the goal was not reached in that year. It is believed, however, that about 2½ million tons were landed which is about the same or slightly more than the total annual landings of fish in the United States and Alaska. It is likely that a catch of three million tons will be reached in 1947. This is all for consumption in Japan.

Fishing Craft and Gear

Due to the urgent need for food in Japan, the Japanese Government at the outset of the occupation was directed to expedite the rehabilitation of her fisheries. She was advised to put to sea the craft and gear then available and to begin repair and construction of new equipment to meet the needs of the Japanese people for fish. The Supreme Commander assisted by supplying fuel oil, and other petroleum products for the fishing fleet and raw cotton for the manufacture of fishing nets. These products were delivered to the Japanese Government from American sources on credit derived from the sale of silk and other Japanese products in this country. The Japanese Government in turn sells the petroleum products to the fishing industry and the cotton to net and twine manufacturers. No Lend-Lease, no UNRRA, no American loans, and no American subsidies or other like means were utilized in the reactivation of the Japanese fishing industry. The entire problem was left up to the Japanese to solve, under restrictions or such authorizations as were permitted.

Conversely, you may be surprised to learn that the Japanese asked for no assistance of this kind. They only asked for permission to engage in fisheries and I can assure you that there were many such requests and that many were denied. In one or two cases they did ask to purchase or charter several large American ships which then were not being utilized. They offered to pay in fishery products. Up to the time of my departure from Japan, these requests had not been favorably considered.

Fishing Harbors

In addition to rehabilitating her fishing fleet, Japan is also taking steps to repair and improve fishing harbors, some of which were badly damaged during t bombing. In pre-war years the Japanese Government spent large sums in the devel ment and actual construction of fishing harbors. While fishing villages are located at every possible site along the seacoast, sometimes within a few hundre yards of each other, and natural harbors are plentiful, considerable constructio has been necessary to make some ports near good fishing grounds usable in poor weather. In addition, much work has been done to improve fish harbors by con- structions of piers, sheds, freezing and cold storage rooms, warehouses, net lofts, and the like.

Usually the cost of these enterprises are shared on a fifty-fifty basis by the central and prefectural governments. In all, some 135 fish harbors were built prior to the war. The cost was about 67 million yen. At that time the yen was valued at two to four to the dollar. As indicated, work is still being continued as found necessary. Recently some eight million yen were allocated fo construction and repairs at one port alone.

Processed Fish Products

Canned Fish -- As is well known to you, Japan formerly produced large quantities of canned sardines, tuna, bonito, salmon, crab, and other fishery pro ucts. But, as has been related previously, Japan had lost to her the rich salmo fisheries in northern waters. These produced annually some 2,500,000 standard cases (48-1 pound cans) of canned salmon and 200,000 tons of salted salmon. T only salmon fisheries now open to the Japanese are around Hokkaido. No producti of canned salmon of any account has resulted from these since 1942. It is un- likely that this source of canned salmon will affect the American market even if production is resumed and if exports were permitted.

Japan also had lost to her the large and important crab fishery in northern waters, except those around Hokkaido. Operations are continuing in the latter waters and in 1946 there was a small pack. This was originally intended for domestic consumption in Japan to help meet food needs, but I learned last week some is being offered for export.

Sardines, mackerel, tuna and several other species taken in the coastwise and near offshore fisheries were canned at points in Japan Proper. During the years of prosperity some 75 canneries were in operation. These were located primarily on the Pacific Coast near the areas where cannery fish are taken in largest quantities. Due to the shortage of tin plate and the great demand for fresh fish, the fish canneries have not operated since the occupation. When tin plate and other canning supplies are available they will likely resume operation

Frozen Fish -- Japan was well supplied with fish-freezing plants. A large number were destroyed during the bombing, but many of these since have been repaired or rebuilt. The output of frozen fish was designed primarily for the export market. Estimates, which seem optimistic, report annual productions of frozen fish as high as sixty thousand tons. This was the output of some 100 freezing plants located throughout the fishing ports of Japan and at inland points. The most important species frozen were salmon, tuna, swordfish, and scallops. Quantities of these and other fish are still being frozen in small amounts. The output is going into domestic consumption.

Agar-Agar -- One of the important marine products of Japan is agar-agar. This is derived from various types of seaweeds which grow prolifically around Japan. The harvest is made by divers in the summer. The jelly of the seaweed is subjected outdoors to a natural refrigeratory-drying process to remove moisture and impurities leaving an almost pure dry, substance. This is done in the mountainous areas of Japan during the winter where the nights are cold and the days are clear and sunny. Many firms have been in this business for 150 to 200 years. Average annual production from 1930 to 1940 was about 2,500 tons. Exports during this period averaged about 1,500 tons per year. They went primarily to the United States, Great Britain, France, Germany and the Netherlands East Indies.

Because of the importance of this industry to the economy of Japan and since it is a "natural" industry due to the fact that the raw product is found along many parts of the coast of Japan, encouragement was given to reactivation of the industry. However, production during 1946 was expected to reach only 375 tons, from 170 to 520 plants that operated because so much of the weed is being used for a food in Japan. During 1946, small shipments of agar-agar were made to the United States.

Fish Meal -- In former years large quantities of sardines and herring were converted into fish meal and oil by the Japanese, but the principal center of production was in Korea. Pre-war production was reported at 600 to 700 thousand tons of meal a year and 100 thousand tons of oil. Due to the need for food the Japanese were advised to use the sardine and herring for edible purposes direct, or the meal and oil derived therefrom for food. It is not likely, therefore, that any quantities of these products will be available for export for some time.

Seed Oysters -- With the embargo on imports from Japan to the United States in 1941 the Pacific Coast oyster industry was left without a source of seed oysters. Therefore, in October, 1945, in response to requests initiated by the National Canners Association, the Pacific Coast Oyster Growers and Dealers, and the Department of Commerce, the seed-oyster industry was given encouragement to produce an exportable surplus. The Pacific Coast oyster growers indicated a demand of some 50,000 cases (about 12,000 seeds per case). Recent reports indicate that 60 to 65 thousand cases will be available to our growers this winter.

Vitamin Oil -- Realizing the great world need for vitamin oil, encouragement has been given to the production of vitamins A and D from tuna and bonito livers and from other fish. While Japan itself is a consumer of this product, a small amount of oil was available for export during early fall of 1946. More will be available in 1947 as facilities for central collection of fish livers becomes better organized. At present, large amounts of livers are utilized for food.

Exports

Since the primary purpose of reactivating the Japanese fisheries was and is to provide food for the Japanese people the exports of such foods derived from these fisheries were prohibited during 1946. It is likely this policy will be pursued in 1947 unless exportable surpluses develop. Exceptions in 1947 are that exports of small amounts of dried shark fins, dried and smoked oysters, beche de mere, and other exotic fishery products likely will be permitted. These will go to China primarily to help in a small way to pay for large quantities of salt

imported from there for salting fish. Apparently now some exports of canned crabmeat are being permitted and maybe some sperm and whale oil will be available to us or other countries. Inquiries regarding imports of fishery products from Japan should be directed to the U. S. Commercial Company, Washington, D. C.

Research and Education

You may ask how it is that Japan became the foremost fishing nation in the world. This might be answered by using the old adage that "necessity is the mother of invention". Only about 16 percent of the total land area of Japan Proper is suitable for farming. This did not and cannot produce enough food for her ever-growing population. Thus Japan turned to the sea for food; as well as for industrial products. She thereby reaped a fabulous harvest as well as profits. Furthermore, the sea not only provided Japan with her domestic needs for fish, but also produced huge amounts for export.

The Japanese Government aided in the venture. Trained fishery experts from government and business were sent abroad to study fisheries in every land. The best of foreign processes and methods were adopted. Research vessels explored the Pacific for fish. These studies and explorations resulted in Japanese penetration to fisheries in the remotest parts of the Pacific and were leading to the Atlantic Ocean.

At home, fishery schools were established to train personnel for positions in the ever-growing fisheries. Training began and still begins in the grammar grades. There are said to be five to six hundred primary schools teaching fisheries. Then there are specialized schools, like high schools, devoted entirely to fishery courses. There are 32 of these schools in 24 prefectures. Lastly, there are two fishery colleges and three of seven Imperial universities have fishery departments. One of the colleges, the Imperial Fisheries Institute in Tokyo, is administered by the Bureau of Fisheries. This is the only educational institution outside the jurisdiction of the Ministry of Education.

Technical and biological laboratories were established. There are six Imperial or federally supported laboratories and 112 prefectural laboratories. The latter are also supported in part by the central government. One of them located at Yoichi on the Island of Hokkaido, is said to be the largest fishery laboratory in the world. Overseas, Japan formerly operated 14 research stations in Korea, five in Formosa, one in Karafuto, one in the South Seas, one in Kwantung, and three in Manchuria.

These laboratories aim at developing new methods and processes and at studies of fish migrations and populations, fish reproduction and growth and other phases. Minute studies are conducted to make every water area around Japan contribute its full share of fish or other marine products. Water farming is practiced on a large and profitable scale in bays and estuaries as well as in lakes and ponds. Oysters, clams and seaweed are planted and raised as crops. Even the rice fields are made to produce fish during the summer growing season when the paddies are flooded. A production of some seven thousand tons of carp was expected from this source alone in 1946. In addition to the above government sponsored research, there are a number of laboratories operated by fishing companies.

Large research vessels were built to study the deep sea fisheries, both pelagic and dermersal. Practically every prefecture along the seacoast has some sort of fishery research vessel. The largest and most imposing -- that which conducted studies along our Pacific Coast in the late Thirties -- was sunk during the war by our action. However, it was not long after our arrival in Japan that another, but not so pretentious, was outfitted to replace her. One could talk an hour and more on fishery research and education in Japan. Some of these research activities are sound and some not so good, but there is no doubt at all but that they proved valuable in making Japan a great fishing nation.

In connection with fishery education in Japan it is interesting to note that every effort is made by Japanese authorities to instill a fishing spirit in school children in various ways. For instance, in some schools the children are kept advised daily of the positions of fishing vessels, aboard which they have parents or relatives. This is done by ship-to-shore communications which are relayed to certain schools. The teacher then traces the track of the voyage on a map blackboard in the school room. In turn this information is carried back to the home of the children.

Fisheries Intelligence

The Fisheries Division compiled considerable information on Japanese fisheries and fishery research. In this the Japanese Bureau of Fisheries was of great assistance. In one instance a committee of 50 fishery specialists was assembled by that Bureau to prepare concise and detailed reports on the overseas fishing activities of Japan and on the Japanese home fisheries. The committee was composed of Bureau officials, industrialists, fishery college professors and research workers. I will never forget the two occasions on which the chairman brought to my desk the completed reports of the committee. They each ran around three thousand pages in Japanese text and contained hundreds of photographs, line drawings, and maps. This material is now being translated and edited and after publication will be available to our American fishery industry.

The staff of the Fisheries Division also prepared and has in process of preparation numerous reports on special Japanese fisheries. These cover such subjects as the Hokkaido fisheries, the Japanese salmon industry, Japanese fishing areas, fishery research and education in Japan, the canned crab industry, fish refrigeration, fish meal and oil, fishing methods, the pearl culture industry, the agar-agar industry, the Tokyo fish market, and fishery associations, guilds and societies. Those publications already released are available through the Civil Affairs Division of the War Department. If not yet released you can place your name on file with that Division to receive a copy when published. Due to the size and magnitude of the reports on the Japanese home and overseas fisheries, they may not be available for some time. In connection with securing general or specific information on Japanese fisheries, it is suggested that inquiries be directed to the Civil Affairs Division rather than writing to the Fisheries Division in Tokyo.

What of the Future?

As has been indicated previously, Japan, following the surrender, had lost to her the privilege of participating in the rich overseas fisheries. At present she is permitted to fish only within the area prescribed in June, 1946, which is around Japan Proper. The only exception is that she is permitted to engage in Antarctic Whaling during the 1946-47 season.

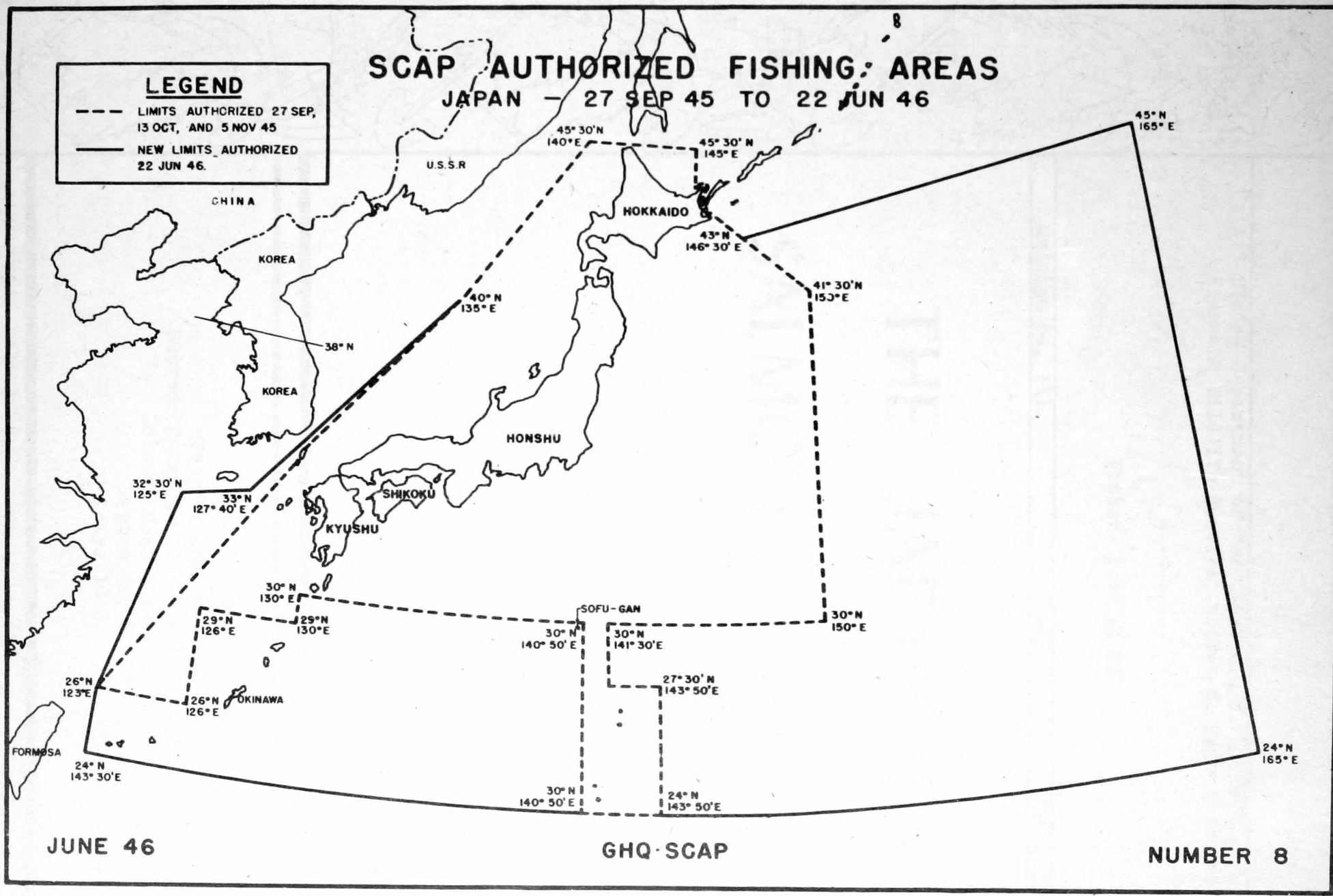
For the present Japan is required by the Supreme Commander to feed her people at home. Unlike European countries which are denying their populations, even of food, to send goods into world markets for the purpose of obtaining foreign exchange, the Japanese are required to meet home needs first, and as far as possible from their own agriculture and fisheries. Even three million tons of fish -- and it still has not been reached -- may not be enough to meet her domestic needs.

Whether Japan will ever be permitted to share in any or all of the overseas fisheries is a matter for the policy-makers to decide. I can assure you that Japan wants to do so. Perhaps a guide to the situation is contained in the "Potsdam Declaration" of 26 July 1945 and the "U. S. Initial Post-Surrender Polic of Japan" of 22 September 1945.

The Declaration contains this paragraph: "Japan shall be permitted to maintain such industries as will sustain her economy and permit the exaction of just reparations in kind, but not those which would enable her to rearm for war. To this end, access to, as distinguished from control of, raw materials shall be permitted."

The Post-Surrender Policy states: "Japan shall be permitted eventually to resume normal trade relations with the rest of the world. During occupation and under suitable controls, Japan will be permitted to purchase from foreign countries raw materials and other goods that it may need for peaceful purposes, and to export goods to pay for approved imports."

Japan is a nation of fishermen and with a national energy highly developed in that direction. Where and how that energy will be allowed to flow and to what extent, is, I reiterate, in the hands of the policy-makers.


SCAP AUTHORIZED FISHING AREAS
JAPAN — 27 SEP 45 TO 22 JUN 46
LEGEND
LIMITS AUTHORIZED 27 SEP, 13 OCT, AND 5 NOV 45
NEW LIMITS AUTHORIZED 22 JUN 46.
U.S.S.R
CHINA
KOREA
KOREA
HOKKAIDO
HONSHU
SHIKOKU
KYUSHU
OKINAWA
FORMOSA
SOFU-GAN
45° 30'N 140°E
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45°N 165° E
43°N 146° 30' E
41° 30'N 153°E
40° N 135° E
38° N
32° 30' N 125° E
33°N 127° 40' E
30° N 130° E
29°N 126° E
29°N 130°E
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