FOREIGN FISHING ACTIVITIES LING SEA AND GULF OF ALASKA

1973





NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE
LAW ENFORCEMENT DIVISION
JUNEAU, ALASKA

FOREIGN FISHING ACTIVITIES BERING SEA AND GULF OF ALASKA

1973

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National Oceanic & Atmospheric Administration US Dept of Commerce

Law Enforcement Division National Marine Fisheries Service Alaska Region

> Juneau, Alaska November, 1975

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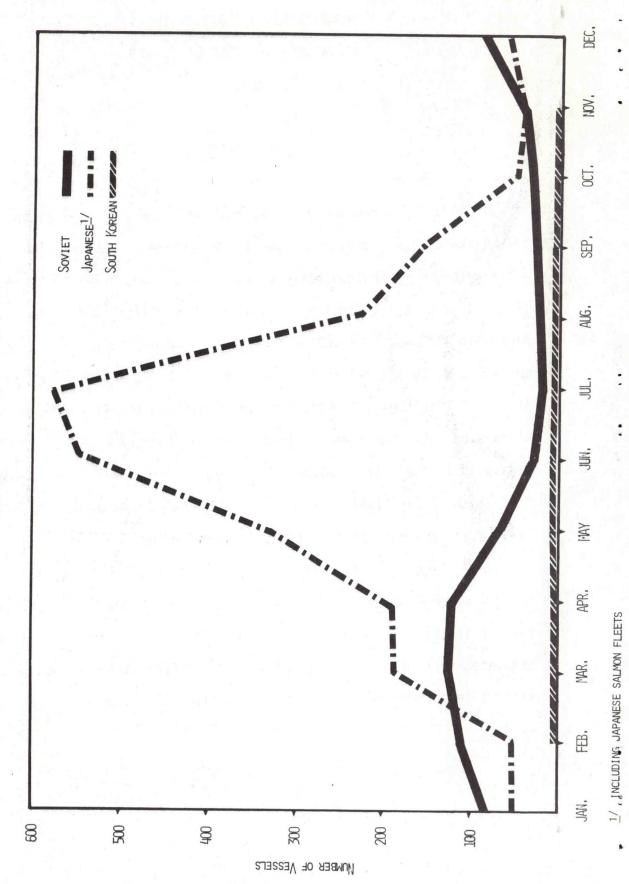
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INTRODUCTION

In 1973 Japan and the U.S.S.R. continued their massive fisheries off Alaska's coast, employing over 1,130 different vessels. The number of ships present simultaneously varied from a high of 597 to a low of 87 (Fig. 1). The total foreign catch of fish, shellfish and whales off Alaska in 1973 was 2,245,804 metric tons. The Japanese took 1,808,412 metric tons, 26,588 metric tons less than in 1972, and the Soviets took 457,399 metric tons, slightly less than they did in 1972. The major efforts by both countries remained in the Bering Sea with lighter pressures in the Gulf of Alaska and along the Aleutian Islands chain.

South Korean fishing off Alaska in 1973 remained on a relatively small scale and consisted of ten independent stern trawlers and a longliner. The total number of South Korean vessels was one less than in 1972 but consisted of four more independently operating stern trawlers plus an initial single ship venture into the longline fishery. It is estimated that the 1973 catch totaled 7,737 metric tons, almost 50 percent less than the 1972 estimated catch of 13,150 metric tons.

FIGURE 1. -- ESTIMATED NUMBER OF VESSELS IN SOVIET, JAPANESE, AND SOUTH KOREAN FISHERIES BY MONTH, 1973.



Poland appeared on the Alaska scene for the first time when a single factory stern trawler fished briefly in the Gulf of Alaska and the Bering Sea. Present from October 19 through November 1 its reported catch was 433 metric tons of Alaska pollock and herring.

Throughout 1973 the U.S. Coast Guard and the National Marine
Fisheries Service (NMFS) continued intensive joint fisheries patrols.
Patrol ships and aircraft covered a record high 456,994 miles in enforcing
U.S. fisheries laws and regulations, policing fisheries subject to
international fisheries agreements, and maintaining surveillance of
extra-treaty foreign fisheries.

UNITED STATES FISHERY PATROL ACTIVITIES

United States' fisheries patrols in the North Pacific Ocean and Bering Sea off Alaska in 1973 covered 112,553 miles by ships and 344,441 miles by aircraft. As in past years these patrols performed a dual mission: (1) maintaining surveillance of foreign fisheries contiguous to Alaska and (2) enforcing the following international fisheries agreements and associated U.S. laws:

- A. International Convention for High Seas Fisheries of the North Pacific Ocean (commonly known as the INPFC) of 1952 involving Japan, Canada, and the United States.
- B. Convention between the United States and Canada for Preservation of the Halibut Fishery of the Northern Pacific Ocean and Bering Sea (commonly known as the IPHC) of 1953.
- C. Convention for the Protection of North Pacific Fur Seals of 1957 - involving Japan, Canada, the U.S.S.R., and the United States.
- D. International Convention for the Regulation of Whaling of1946 involving the major whaling nations of the world.

- E. U.S.-U.S.S.R. Agreement Relating to King and Tanner Crab Fishing in the Northwestern Pacific Ocean.
- F. U.S.-Japan Agreement Relating to King and Tanner Crab Fishing in the Northeastern Pacific Ocean.
- G. U.S.-U.S.S.R. Agreement Establishing Areas of Fixed Fishing Gear off Kodiak Island.
- H. Public Law 88-308 an act of 1964 prohibiting foreign fishing in the territorial waters of the United States.
- I. Public Law 89-658 an act of 1966 establishing U.S. jurisdiction within a contiguous fishery zone extending nine miles seaward of the 3-mile territorial sea.
 - (1) U.S.-U.S.S.R. Agreement implementing Public Law 89-658.
 - (2) U.S.-Japan Agreement implementing Public Law 89-658.
 - (3) U.S.-Canada Agreement implementing Public Law 89-658.
 - (4) U.S.-Republic of Korean Agreement implementing Public Law 89-658.

Aerial patrols were conducted by HU-16E (Grumman Albatross) piston-prop aircraft and H3 helicopters from the Coast Guard Air Station on Annette Island, and by C-130H (Lockheed Hercules) turbo-prop aircraft and H3 helicopters from the Coast Guard Air Station on Kodiak Island (Appendix Table 6). Surface patrols were conducted by the Alaska-based Coast Guard Cutters STORIS, CONFIDENCE, IRONWOOD, SWEETBRIER, SORREL, CITRUS, CLOVER, BALSAM, and BITTERSWEET, and by the Cutters WINONA,

MELLON, RUSH, MIDGETT, BOUTWELL, and JARVIS, which were assigned to the Alaska area on a rotational basis (Appendix Table 5).

A total of 93 boardings were made of 60 different foreign vessels in 1973. These included 60 enforcement and 25 courtesy boardings of Japanese vessels, 2 courtesy boardings of Soviet vessels, and 2 enforcement and 4 courtesy boardings of South Korean vessels.

Two foreign vessels were seized in 1973 for fishing within the U.S. contiguous fishery zone (CFZ) and 4,109 crab pots with their associated lines and buoys, all of Japanese origin, were seized within the contiguous fishery zone around St. Paul Island in the eastern Bering Sea. One foreign vessel was seized for possessing salmon and halibut in violation of the International Convention for the High Seas Fisheries of the North Pacific Ocean (INPFC).

One was a South Korean vessel, a stern trawler, which was detected fishing in the CFZ ten and a half miles off Cape Cross in southeast Alaska. That violation resulted in penalties totaling \$100,000. The other was a Japanese stern trawler which was detected fishing 9.1 miles off Alava Point, Akutan Island in the Aleutian chain on the Bering Sea side. The total penalty in that case was \$230,000.

The 4,109 crab pots found from 9.5 to 12 miles off St. Paul Island in the eastern Bering Sea were eventually retrieved by two U.S. Coast Guard Cutters and one U.S. research ship and sold at public auction in Kodiak for the sum of \$35,446. The crab gear was discovered by a U.S. Coast Guard Cutter on routine patrol in that area but officials were unable to positively connect the gear with specific Japanese ships

operating in that area. After waiting for over a week in the vicinity, the gear was finally retrieved by U.S. patrol units. Available evidence indicated that the gear was set by catcher boats from the KOYO MARU fleet.

One Japanese vessel, a stern trawler, was seized in the Gulf of Alaska for possessing salmon and halibut in violation of the INPFC. It was released to the Japanese Government for prosecution in accordance with the Convention.

Three Japanese landbased salmon gillnet boats were detected fishing in violation of the INPFC 600 miles east of the salmon abstention line. The vessels abandoned their gear and fled. A Japanese patrol ship was notified of the violation and intercepted them before they could recross the Abstention Line at 175°W longitude ordering them to Japan for prosecution in accordance with the INPFC. Coast Guard Cutters retrieved approximately 18 miles of the abandoned gill net. Total penalties for each vessel were reported to have ranged from \$103,900 to \$137,266 plus a 100-day layoff in port which was imposed upon each vessel.

Details of the above and other reported violations of territorial waters, CFZ and international fisheries agreements are presented in Appendix Tables 8, 9, and 10.

NEW AND REVISED INTERNATIONAL FISHERIES AGREEMENTS

In early 1973 the United States renegotiated its bilateral fishery agreements with the Soviet Union and extended for one year its bilateral agreement with Canada. The U.S.-Canadian agreement was unchanged.

In February 1973 United States and Soviet officials met in Moscow to renegotiate agreements pertaining to Soviet fishing in the U.S. CFZ and Soviet crab fisheries in the eastern Bering Sea. The agreements went into effect for a period of two years upon their signing in Moscow on February 21, 1973. Many of the features of the old agreements were carried forward into the new agreements. The major changes in the U.S.-Soviet CFZ agreement affecting fishing operations in the Alaska area are as follows:

- (1) The period during which Soviet fishing and loading is permitted within the CFZ west of 176° west longitude north of the Aleutian Islands was shortened four months.
- (2) The period during which Soviet fishing and loading is permitted in the CFZ between 172° and 176° west longitudes north of the Aleutian Islands was shortened three months.
- (3) The period during which Soviet fishing and loading is permitted in the CFZ west of 178°30' west longitude south of the Aleutian Islands was shortened four months.
- (4) The provision for Soviet fishing in the CFZ between 166° and 169° west longitudes south of the Aleutian Islands was eliminated.

- (5) The period during which Soviet fishing and loading is permitted in the CFZ between 172° and 178°30' west longitudes south of the Aleutian Islands was reduced three months.
- (6) The provision for Soviet loading operations in the CFZ off the Semidi Islands in the western Gulf of Alaska was discontinued.
- (7) A new area in the CFZ south of Unalaska Island in the eastern Aleutians was established for Soviet loading operations.
- (8) The period during which Soviets refrain from fishing in the three areas outside the CFZ in the Gulf of Alaska was changed from the first 15 days of the halibut season to 3-3/4 days before and 3-1/2 days after the opening of the halibut season.
- (9) The period during which Soviets refrain from fishing with mobile gear in the three areas in the Bering Sea was changed from the first six days of the halibut season to 3-3/4 days before and 3-1/2 days after the opening of the halibut season.
- (10) A provision was added restricting the Soviet's eastern Bering Sea flatfish catch (primarily yellowfin sole) to 100,000 metric tons which was the annual average catch for the years 1969-71.
- (11) The period during which Soviets refrain from using mobile gear in one of the six areas outside the CFZ off Kodiak Island was extended by 3-1/2 months.

(12) An additional agreement was enacted setting forth procedures to facilitate the settlement of claims advanced by a national of one country against a national of the other country as a result of financial loss arising from damage to fishing vessels or to fishing gear and to prevent fishing conflicts between fishing vessels of both countries carrying out fishing operations in the same area.

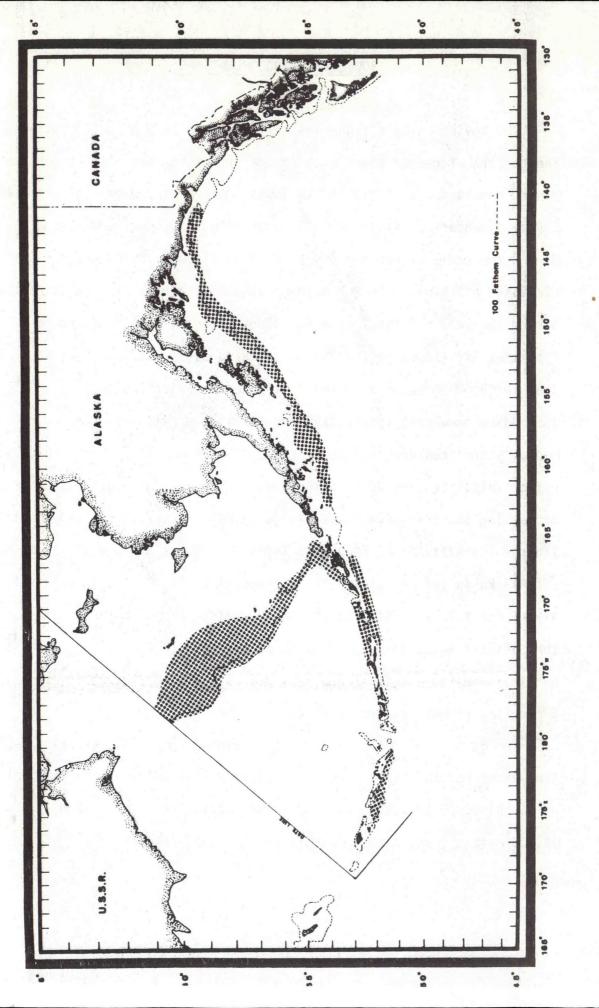
The major changes in the U.S.-Soviet crab agreement are as follows:

- (1) The annual king crab quota was reduced from 23,000 cases or about 572,700 crabs to 260,000 crabs a reduction of about 55 percent.
- (2) The annual quota of tanner crab was reduced from 35,000 cases or approximately 5,281,500 crabs to 4,200,000 crabs a reduction of over 20 percent.
- (3) The crab fishing grounds in the eastern Bering Sea were divided into a "southern" area and a "northern" area each with separate king and tanner crab quotas. The southern area includes all the grounds historically fished by the Soviets and encompasses virtually all the area used by U.S. fishermen. The crab quotas allocated the Soviets in the southern area are 100,000 king crabs and 1,800,000 tanner crabs. Those are reductions in the allowable catches in that area of approximately 62 percent for king crab and 67 percent for tanner crab.
- (4) Retention of female tanner crab is prohibited.
- (5) Soviet crab fishing is restricted to use of pots only and use of destructive tangle nets was eliminated.

SOVIET FISHING OPERATIONS

The Soviet Union's fisheries off Alaska in 1973 (Fig. 2) followed the pattern of recent years with the major effort occurring during the winter months and activity at its lowest during the summer. A shift in Soviet flounder activity, normally occurring in the eastern Bering Sea during the early winter months, to a fleet fishery in the central Gulf of Alaska off Kodiak was the major change in their fishing pattern during the year. A total of 414 different Soviet ships engaged in fisheries off Alaska in 1973 as compared to 544 in 1972 and 469 in 1971. They included 96 support vessels, 119 stern trawlers, primarily BMRTs, 185 medium trawlers, mostly SRTM and SRT side trawlers with a few new medium stern trawlers included for the first time, 11 research ships, 3 patrol ship. Support vessels included factory ships, refrigerated processing and transport ships, cargo ships, tankers, tugs, and passenger liners. Identity by class of the individual ships engaged in the fishery off Alaska in 1973 is listed in the Appendix. The Soviet catch off Alaska for 1973 is estimated at 232,000 metric tons. Data supplied by the Soviets indicates a total catch of approximately 457,000 metric tons but it is believed this figure includes catches from the northwestern Bering Sea as well as from off Alaska.

The major Soviet fishing effort continued to be in the Bering Sea. The winter herring fishery in the central Bering Sea reached a maximum of 65 ships, 25 less than in 1972. The herring catch was slightly over 34,000 metric tons, almost exactly half of that taken in 1972. The



winter flounder fishery failed to materialize in the eastern Bering Sea in 1973, apparently partly because of ice conditions and a scarcity of resource. As mentioned earlier, the fleet that would normally have been engaged in this fishery moved into the Gulf of Alaska near Kodiak. Total flatfish catches for the Soviets off Alaska were estimated at 22,117 metric tons. Further discussion on catch figures can be found in the "Groundfish Trawl Fishery" section. The groundfish trawl fishery along the Continental Shelf edge in the Bering Sea, Gulf of Alaska and Aleutians was conducted at about the same level in 1973 as in 1972. Pacific ocean perch comprised less than 10 percent of the total catch, losing completely their importance as a target species. The bulk of the catch was Alaska pollock with Atka mackerel as the second most abundant species, reaching as high as 18 percent in the western Gulf of Alaska. The Soviet shrimp fishery in the Gulf of Alaska in 1973 again employed SRTM medium trawlers centered near the Shumagin Islands, but at about half the strength of the 1972 fishery. The estimated catch was between 1,500 and 2,000 metric tons. For the second year in a row there was no Soviet crab fishery in the eastern Bering Sea. The Soviet Pacific whaling fleets, as in recent years, remained far off shore and no whales were reported taken in the Alaskan area.

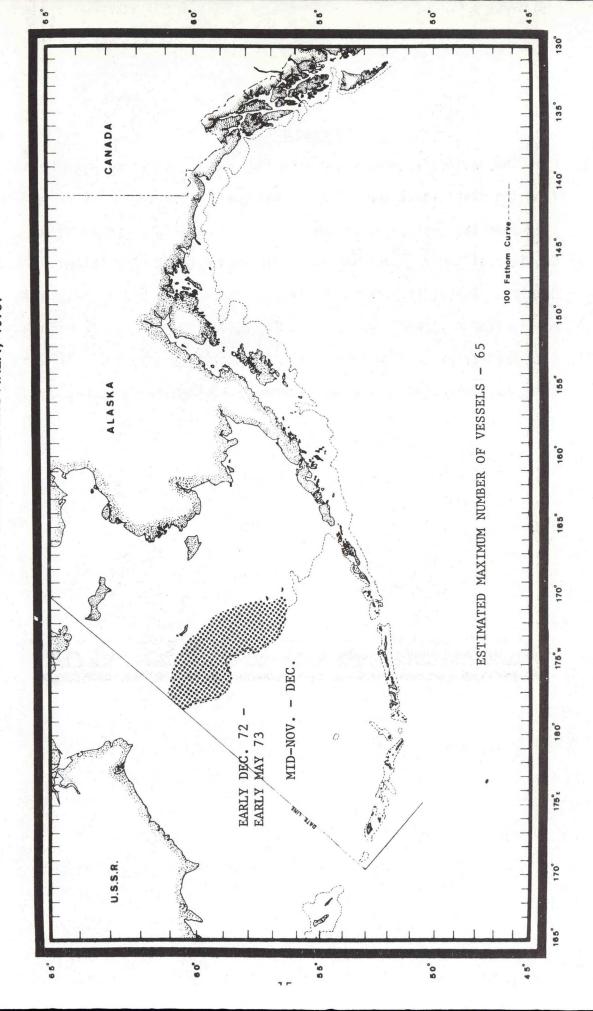
Herring Fishery

The Soviets continued their annual winter herring fishery (Fig. 3) north and west of the Pribilof Islands in the central Bering Sea. The 1973 expedition began in early December 1972 and extended into the first week of May 1973, a month longer than 1972. The peak fleet was about 65 vessels in 1973 as compared to 90 in 1972. The number of ships present simultaneously was 15 to 25 less except for March when the number was about equal. The fishery was centered near the Continental Shelf edge in March and April and some of the trawlers apparently fished for other species, primarily Alaska pollock, in addition to herring. The catch of herring was 34,361 metric tons in 1973 as compared to over 67,000 metric tons in 1972.

The 1973 fishery began in early December 1972 with 20 to 25 trawlers. The fleet remained at that level through December and began increasing in January. The peak fleet of about 65 vessels (10 BMRT stern trawlers, 40 SRTM medium trawlers, 5 SRT medium trawlers, and 10 support ships) was reached in late January. The fleet remained at that strength through March. The number of vessels dropped to between 40 and 45 in April and the first week in May when the expedition ended.

The 1974 herring fishery was begun in mid-November 1973 by 5 to 10 trawlers. The fleet increased to over 30 trawlers in early December and remained at that level through the end of the month. Fishing was again on the traditional herring grounds northwest of the Pribilof Islands in the central Bering Sea.

FIGURE 3. -- SOVIET HERRING FISHING AREA, 1973.

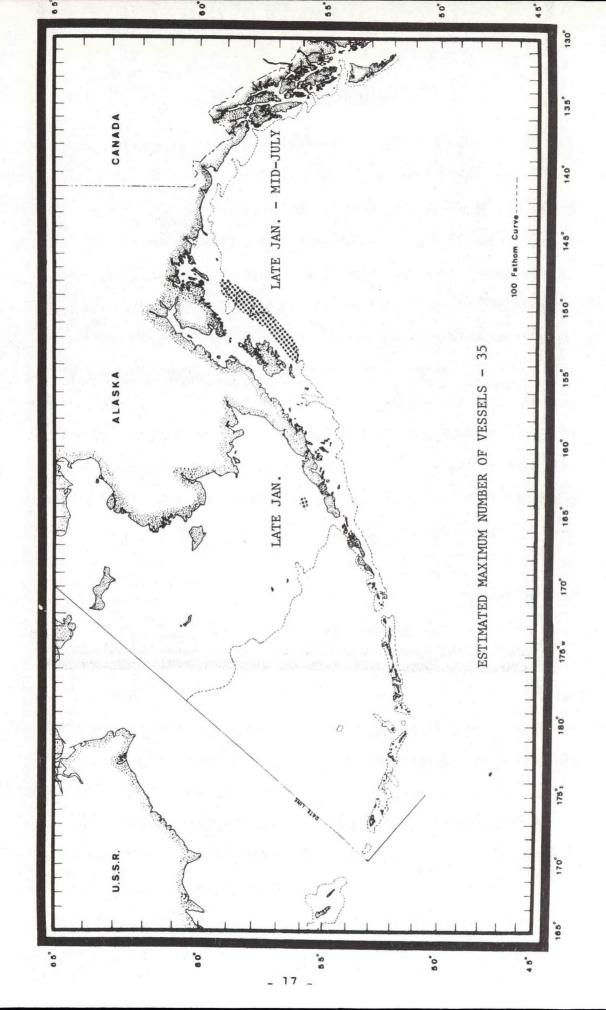


Flounder Fishery

The Soviet flounder fishery in 1973 was marked by an abrupt departure from the traditional operation of past years. For the first year since 1959 when the Soviets began their annual flounder expedition on the Continental Shelf in the eastern Bering Sea, the fishery failed to develop. Soviet fishing on the traditional eastern Bering Sea grounds was limited to 2 BMRTs and 2 SRTMs for about two weeks in late January.

The Soviets did, however, take flounder in the Gulf of Alaska in 1973. As discussed in the "Groundfish Trawl Fishery" section.

FIGURE 4. -- SOVIET FLOUNDER FISHING AREA, 1973.



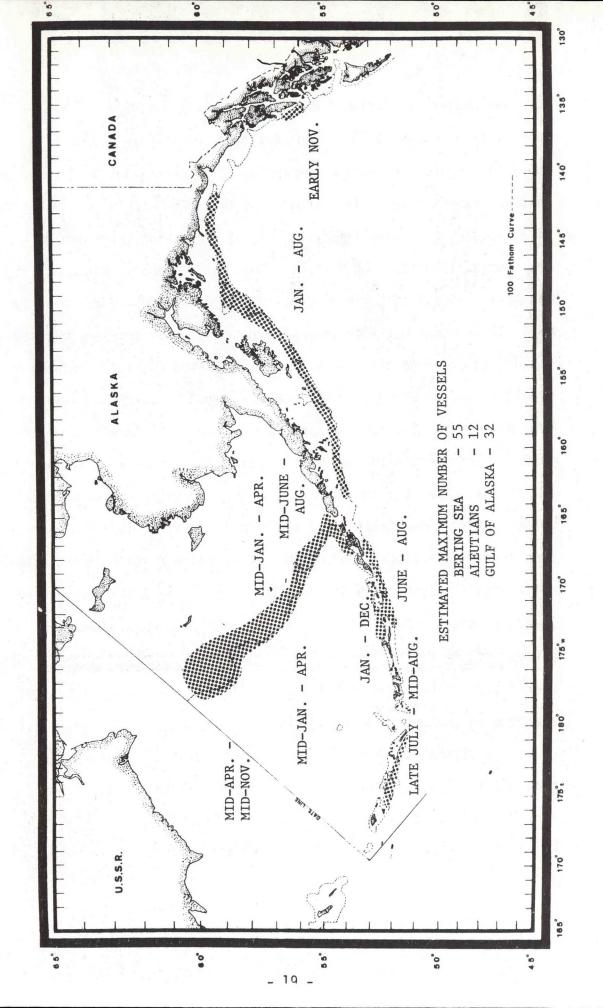
Groundfish Trawl Fishery

Soviet trawlers fish for several species of groundfish near the Continental Shelf edge in the Gulf of Alaska, along the Aleutian Islands chain, and in the Bering Sea. In the past few years Soviet trawlers in the Gulf of Alaska and along the Aleutians have broadened their efforts to take several species of round and flatfish as well as the long-standing target species of rockfish. In 1973 the Soviets conducted their first intensive fishery for flounder and Alaska pollock in the Gulf for three months during the winter. During the remainder of the year the Gulf fishery was conducted at a lower level, similar to past years. Fishing along the Aleutians in 1973 was a minor operation by independent trawlers. The Bering Sea trawl fishery for groundfish continued as a year-round venture with the number of trawlers fluctuating between one and two dozen.

Gulf of Alaska

Soviet trawling in the Gulf of Alaska (Fig. 5) in 1973 was high-lighted by the initiation of an intensive three month fishery for Alaska pollock and flounder on Albatross Bank south of Kodiak Island. That expedition was a fleet type operation centered around a factory ship and processing refrigerated transports and involving various classes of medium and stern trawlers. During most of the other nine months of 1973 Soviet trawling in the Gulf was a low keyed operation involving traditional independent trawlers. From the mid-1960's through 1972 Soviet trawling in the Gulf of Alaska was principally by independent trawlers fishing primarily for rockfishes and in recent years other species of round and flatfishes.

FIGURE 5. -- SOVIET GROUNDFISH TRAWL FISHING AREA, 1973.



The winter expedition for Alaska pollock and flounder began on outer Chiniak Gully south of Kodiak Island in late January with 11 SRT and 2 SRTM medium trawlers accompanying a factory ship. The number of vessels increased to 25 in February and to 28 in March. The peak fleet of 32 vessels including 1 factory ship, 3 processing refrigerated transports, 11 SRTs, 8 SRTMs and 9 BMRTs was reached in early April. By mid-April the effort began to drop and the expedition ended in early May. In mid-December a factory ship and six medium trawlers resumed the fishery on outer Portlock Bank. It is estimated the 1973 catch of this fleet, exclusive of the BMRTs, totaled between 20 and 25 thousand metric tons with 60 to 70 percent Alaska pollock and 30 to 40 percent flatfishes. The primary species of flatfish were rock sole, flathead sole, and the secondary species were rex sole, dover sole, and turbot taken in deeper water. Some Pacific cod and a small quantity of ocean perch were also taken. A sprinkling of halibut was evident in most of the catches containing flatfish. The Soviet catch figures for this fleet are much lower, slightly under 9,000 tons, with flatfish making up only one percent of the catch. Direct observation of the fishery (which involved over 1,500 trawler days)indicate these figures and the proportion of flatfish in the catch to be unreliable.

In addition to the expedition described above, a fishery for groundfish by independent trawlers taking an estimated 53,000 metric tons was conducted in the Gulf of Alaska. From January through mid-August the number of such trawlers varied from one to half a dozen BMRTs

and one to two SRTMs. Fishing during those months was primarily on outer Portlock and Albatross Banks in the central Gulf with lesser activity between Cape St. Elias and Cape Spencer in the eastern Gulf and between Chirikof Island and the Shumagin Islands in the western Gulf. From late August through October, 10 independent trawlers, mostly BMRTs fished in the central Gulf, primarily on outer Portlock and Albatross Banks. The number of independent trawlers decreased to four in November and remained at that level through the end of the year with fishing remaining centered in the central Gulf. The catch for this fleet was approximately 60 percent pollock with Atka mackerel comprising the second highest species at 18 percent. Pacific ocean perch and similar rockfish, once the target species for this fishery, comprised only 8 percent of the catch.

Aleutian Islands

In 1973, as in past years, trawling along the Aleutian Islands (Fig. 5) was again a minor fishery conducted during the summer months. According to Soviet officials trawl catches along the Aleutian in recent years have included a variety of other species such as sculpins, rat tails, Atka mackeral, etc., as well as the traditional rockfish. It is estimated the 1973 Aleutian catch totaled between 15 and 18 thousand metric tons.

Fishing along the Aleutians began in early June by one stern trawler in the Seguam-Amukta Pass area in the central Aleutians and by the end of the month the fleet had increased to four BMRT's and four SRTM's.

The fishery remained at about that level and in that area until late July when the fleet increased to 6 BMRT's and 2 SRTM's and split with half the effort near Seguam and Amukta Passes area and the other half off the Rat Islands in the western Aleutians. In early August the fleet declined to 4 BMRT's, 2 in the central Aleutians and 2 in the western Aleutians. Fishing ended in late August.

Bering Sea

Soviet trawling for groundfish in the Bering Sea (Fig. 5) continued as a year-round expedition along the Continental Shelf edge from north of the Fox Islands in the eastern Aleutians to the northwest into the central Bering Sea. The two primary fishing areas were just north of the Fox Islands in the eastern Aleutians and northwest of the Pribilof Islands in the central Bering Sea. The principal species caught were arrowtooth flounder, sablefish and ocean perch north of the Fox Islands and Alaska pollock and yellowfin sole in the central Bering Sea. It is estimated the Soviets 1973 eastern and central Bering Sea groundfish catch totaled between 75 and 100 thousand metric tons.

In January and the first half of February fishing was centered northwest of the Fox Islands and involved nearly 20 SRTM medium trawlers and 4 small stern trawlers (SRTK). In the latter half of February and during March the fleet was scattered from north of the Fox Islands to near the Pribilof Islands with the number of medium trawlers decreasing to 6 and the number of stern trawlers of all classes increasing to 9.

In early April the number of trawlers increased sharply ranging up to 20 medium trawlers and 6 stern trawlers north of the Fox Islands and 6 medium trawlers and 15 stern trawlers off the Pribilofs. In May the major effort was northwest of the Pribilof Islands in the central Bering Sea where up to 5 medium trawlers and 10 stern trawlers fished, while the effort in the eastern Bering Sea north of the Fox Islands and Unimak Pass dropped from 15 to 8 medium trawlers. During the summer months of June, July and August the Bering Sea groundfish trawl fleet split into two groups with 5 to 8 medium trawlers fishing between Fox Islands and the Pribilof Islands in the eastern Bering Sea and about 10 medium trawlers and occasionally a stern trawler fishing northwest of the Pribilof Islands in the central Bering Sea. The fleet remained divided in September, October, and November but the major emphasis was in the eastern Bering Sea where about a dozen medium trawlers fished and less effort in the central Bering Sea where about a half dozen medium trawlers and 1 to 4 stern trawlers fished. In December fishing was entirely in the eastern Bering Sea where 8 to 10 medium trawlers and up to 18 stern trawlers operated.

Pacific Ocean Perch Fishery

In recent years Soviet trawlers fishing in the Gulf of Alaska and along the Aleutian Islands chain have sought a variety of species rather than fishing principally for ocean perch as in the 1960's. That trend was much more pronounced in 1973, particularly in the Gulf of Alaska where the major emphasis was on taking Alaska pollock and flounder.

Ocean perch in 1973 clearly became an incidental species comprising less than 2 percent of the catch. Soviet trawling in the Gulf of Alaska and along the Aleutian Islands is discussed in the "Groundfish Trawl Fishery" section.

Crab Fishery

The Soviet eastern Bering Sea crab fishery conducted annually from 1959 through 1971 but discontinued in 1972 again did not take place in 1973.

Under the terms of the new agreement signed by the Soviet Union and the United States on February 21, 1973, the Soviet crab quota was reduced from 23,000 cases (48 one-half pound cans per case of king crab) the equivalent of approximately 575,000 crabs to 260,000 crab. The Soviet tanner crab quota was reduced by 20 percent from 35,000 cases (equivalent to about 5.4 million crab) to 4.2 million crab. The new agreement also increased the size of king crab that could be retained to 15.8 cms. in minimum carapace width and eliminated the use of tangle nets, restricting the fishery to pots only.

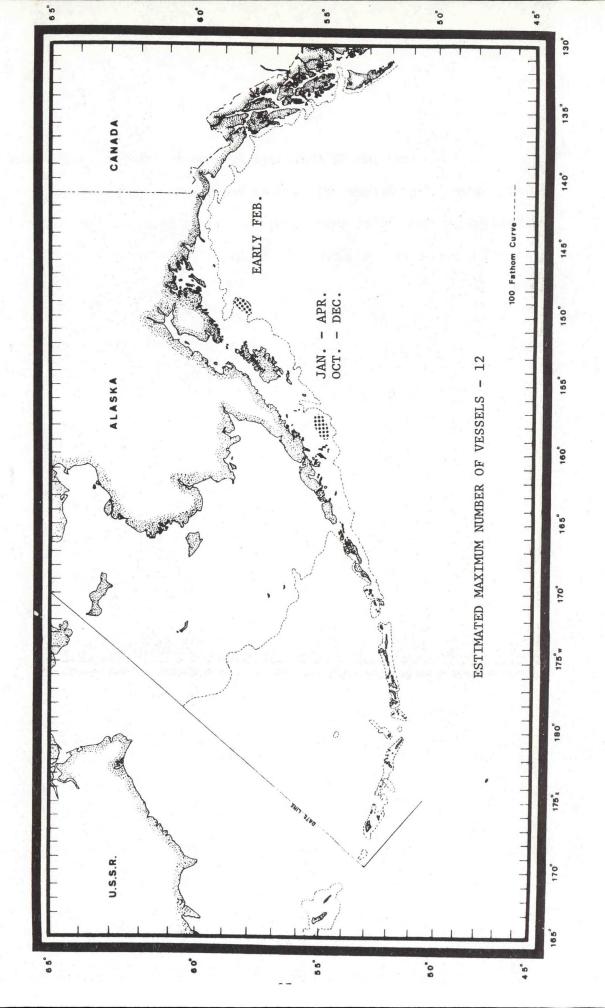
Although there were some indications from Soviet officials that they would mount a crab fishery on the Continental Shelf north of the Alaska peninsula in 1973 no sign of such fishery was ever observed. The low quota, with the required transition from tangle net gear to pot gear called for by the U.S.-Soviet agreement, probably influenced their decision to terminate this fishery.

Shrimp Fishery

In 1973 the Soviets fished for shrimp in the Gulf of Alaska (Fig. 6) from the end of January through late April, about the same period as in the previous year, and then, for the first time since 1966, from late October through December. Except for two weeks of exploratory fishing by two vessels on Portlock Bank fishing was entirely in the Shumagin Islands area. The Soviets again employed SRTM medium trawlers in this fishery and the 1973 fleet averaged about one-half the size of the 1972 fleet. From February through late April, as in recent years, the shrimp fleet was accompanied by a Soviet whale killer vessel serving as a patrol ship. Observations in 1973 indicate the trawlers experienced small catches and it is estimated the 1973 catch totaled between 1,500 and 2,000 metric tons. Soviet catch figures show 3,177 metric tons for this fishery, but close observation by U.S. patrol units indicate the validity of this figure to be extremely doubtful.

At the end of January two SRTM's, apparently conducting exploratory operations, began fishing on outer Portlock Bank east of Kodiak Island. They remained in that area for about two weeks and then shifted to the Shumagin Islands the second week in February. The number of SRTM's increased to 4 in mid-February, 7 in early March, and 8 in mid-March. In late March the number of trawlers decreased to 5 but then in early April began to increase and reached 10 about the second week of April. In mid-April the number of trawlers dropped to 8 and in late April fishing ended.

FIGURE 6. -- SOVIET SHRIMP FISHING AREAS, 1973.



In late October one SRTM resumed fishing for shrimp in the Shumagin Islands area. The number of trawlers increased steadily in November, reaching 9 by the end of that month. In early December the number of trawlers dropped to 7 and remained at that level through the rest of the month.

Whaling

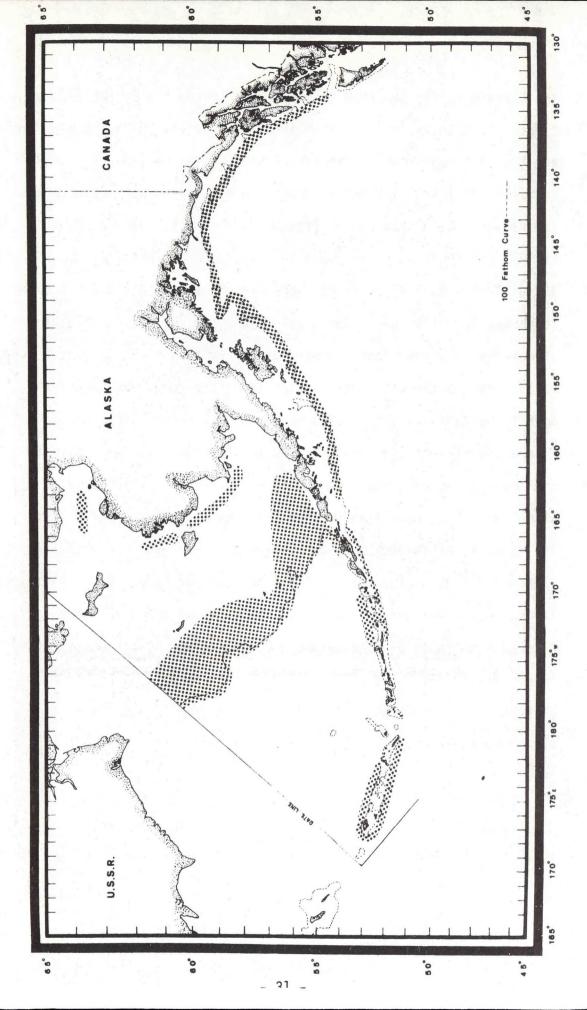
The Soviet North Pacific Whaling expedition in 1973, as in past years, remained far off shore and did not enter the Alaska area. No whales were reported killed north of 50° north latitude. In addition to the two whaling fleets usually deployed in the North Pacific, consisting of two factory ships and 34 whale killers, the Soviet's largest far eastern based whale factory ship the SOVETSKAYA ROSSIYA, normally deployed in the Antarctic, also fished in the North Pacific. It worked with 17 whale killers, generally south of 30° north latitude. The total North Pacific kill was 4,694 whales consisting of 3,828 sperm whales, 618 Brydes whales, 88 sei whales, and 160 fin whales. This was considerably under the quota established for the Soviet North Pacific fishery at the 24th Annual Meeting of the International Whaling Commission, which established the Soviet portion of the combined Japanese/Soviet North Pacific 1973 quota at 5,725 sperm whales, 983 sei whales, and 391 fin whales.

- 29 -

JAPANESE FISHING OPERATIONS

Japan continued her intensive fisheries off Alaska in 1973 (Fig. 7) taking 1,808,412 metric tons of fish, shellfish and whales, a decrease of 26,500 metric tons from 1972. A total of 714 different Japanese ships engaged in the fisheries off Alaska in 1973 as compared to 907 in 1972. The 714 Japanese ships included 51 support ships, 23 factory ships, 629 fishing vessels, 8 patrol ships, and 2 research ships. Identity by type of vessel is shown in the Appendix. The maximum number of ships present simultaneously was 575 in 1973 as compared to 445 in 1972 (Appendix Table 4). As in the past, peak fishing efforts occurred in the summer months with the fisheries at their lowest level in the winter months. Again following the previous pattern the most intensive efforts were in the Bering Sea with less emphasis along the Aleutian Islands chain and in the Gulf of Alaska. The most intensive and productive Japanese fishery off Alaska was again the groundfish trawl fishery by factory ship fleets and independent stern trawlers in the Bering Sea and along the Aleutians. The 1973 groundfish catch totaled 1,752,908 metric tons (this includes the blackcod catch by longliners) of which 81 percent was Alaska pollock. Pacific ocean perch and associated rockfish dropped to 2 percent of the total groundfish catch. The Japanese herring fishery in the Bering Sea again included a winter trawl fishery and a spring gillnet fishery along the coast of western Alaska. Japanese reported a total catch of less than 2,000 metric tons for both fisheries, down from 25,000 m.t. in 1971 and 13,000 m.t. in 1972.

FIGURE 7. -- JAPANESE FISHING AREAS OFF ALASKA, 1973.



The eastern Bering Sea crab fishery, again conducted by two crab factory fleets, reportedly fell below their allowed quota by 476,000 king crabs and 56,000 tanner crabs. The tanner crab fishery west of 175° west longitude in the Bering Sea was again pursued by an estimated 12 vessels. The Japanese high seas salmon fishery on the North Pacfic and Bering Sea in 1973 continued with the usual 10 factory ship fleets, accompanied by 332 gillnetters. All 10 fleets were present in the Alaska area simultaneously in early July. The trawl fishery in the Gulf of Alaska remained a year-round operation by independently operating stern trawlers. Ocean perch remained the principal species taken and comprised 47 percent, down 13 percent, of the 124,300 metric tons of fish taken in the Gulf of Alaska and along the Aleutians. The longline fishery for sablefish continued to be centered in the Gulf of Alaska with sporadic fishing along the Aleutians. Twenty-three ships were involved in the fishery. The catch is estimated at 25,000 metric tons, slightly more than in 1972. The fishery for sea snails in the central Bering Sea, never very large, again declined and only one ship is known to have fished in the Alaskan area in 1973. The Japanese North Pacific whaling fleets again remained well off shore with only 202 whales reported taken from the Alaskan area. The overall take in the North Pacific declined again from 4,039 whales in 1972 to 3,770 in 1973.

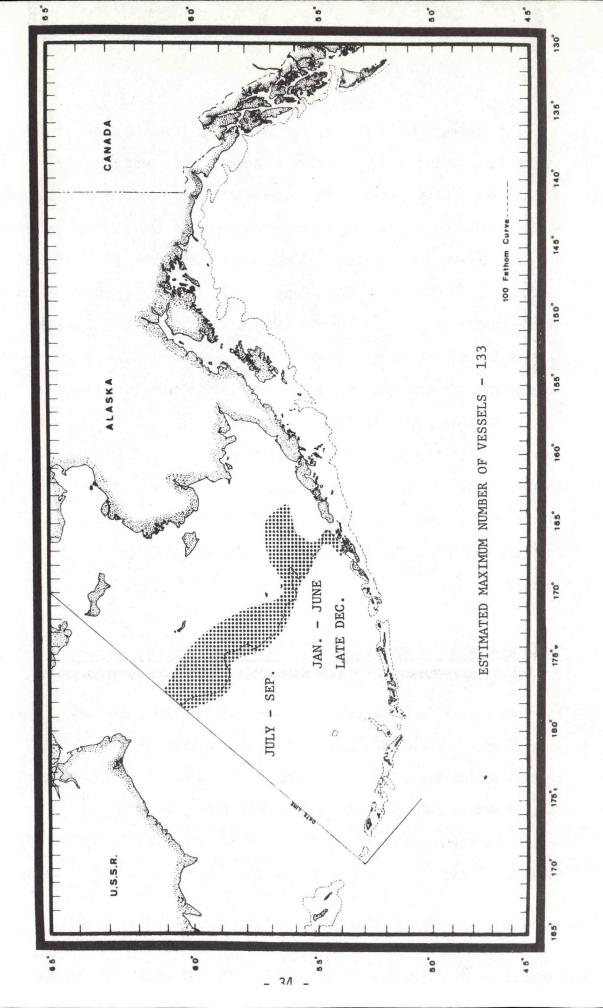
Groundfish Trawl Fishery

The Japanese trawl fishery for groundfish (Figs. 8 and 9) continued as the largest and most productive fishery (foreign and domestic) in the Alaska area. As a conservation measure the Japanese government imposed a catch quota of 1.5 million metric tons upon the trawl fleets in 1973. That was a reduction of about 170,000 metric tons from the 1972 record catch of 1,670,000 metric tons. Again in 1973 the bulk, up to 79 percent, of the catch was Alaska pollock. Total production in 1973 for the eastern Bering Sea and Aleutians by factory ships and independent trawlers (combined quota 2,050,000 m.t.) was reported to be 1,659,540 m.t.

This fishery uses two methods of operation; (1) factory ships operating with fleets of "catcher" boats -- stern, side, and pair trawlers and danish seiners -- and (2) independent stern trawlers. The peak effort in 1973 involved 6 factory ships with a total of 111 accompanying trawlers and nearly 30 independent stern trawlers -- about the same as in 1972.

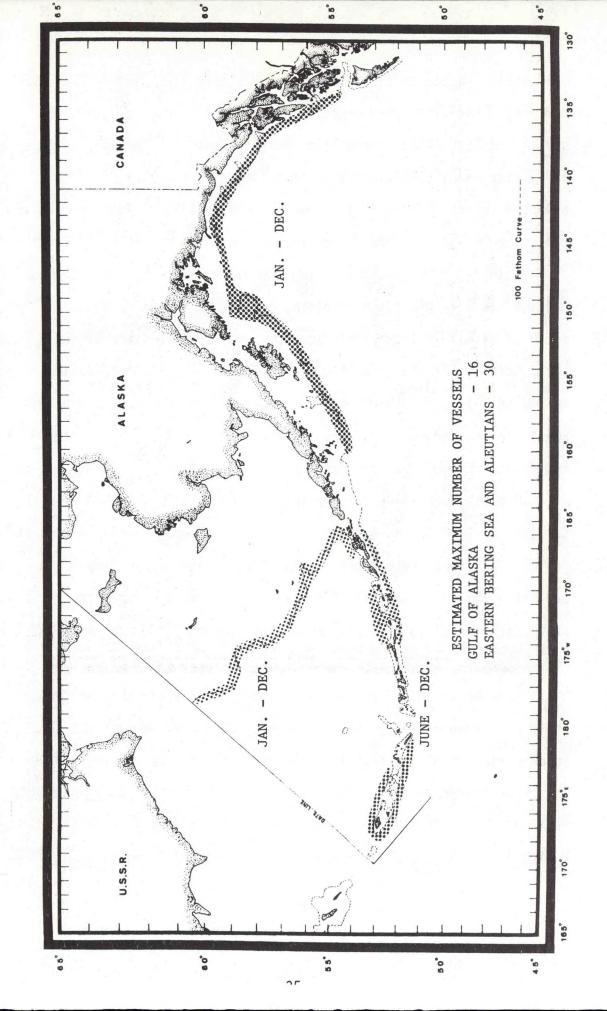
Factory Ship Fleet Operations

Factory ship fleets again in 1973 fished on and along the edge of the Continental Shelf north of the eastern Aleutians and Unimak Island in the eastern Bering Sea northwest of the Pribilof Islands in the central Bering Sea. The Japanese government imposed a catch quota of 950,000 metric tons upon the factory ship fleets in 1973. Alaska pollock was the target species for all the fleets except one which fished for flounder. Manufactured products from the catches included fish meal,



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FIGURE 9. -- JAPANESE GROUNDFISH TRAWL FISHING AREAS, 1973 - INDEPENDENT TRAWLERS.



oil, surimi (a minced fish product used to make fish sausage and cake) and frozen fish for human consumption. The principal products are surimi and fish meal. Emphasis on surimi production has been increasing every year and in 1973, for the first time, the quantity of surimi produced surpassed that of fish meal. Also in 1973 at least one of the fleets froze blocks of Alaska pollock for export to the United States.

Factory ship operations during the first two months of 1973 were confined to a single fleet involving 8 trawlers on the Continental Shelf north of Unimak Island. That fleet arrived in the eastern Bering Sea in early October 1972 to conduct a winter fishery for flounder (primarily yellowfin sole). The body meat was frozen for human consumption and the heads, tails, and entrails were reduced to meal and oil. In late March the flounder fleet departed for Japan.

In early March five factory ships accompanied by a total of 94 trawlers arrived in the eastern Bering Sea and began fishing for Alaska pollock. The primary products of the five fleets were surimi, fish meal and oil with lesser amounts of frozen fish for human consumption. As in past years the pollock fleets began fishing north of Unimak Pass and the Fox Islands in the eastern Aleutians. The fleets remained in that area until late April and then began moving northwest along the Continental Shelf edge towards the Pribilof Islands. In mid-May one of the fleets moved northwest of the Pribilof Islands to the central Bering Sea while the other four remained south of the Pribilof Islands. A sixth fleet arrived in late May, bringing the total number of trawlers to 111.

During June and most of July the six fleets fished along the Continental

Shelf edge from south of the Pribilof Islands in the eastern Bering Sea to northwest of the Pribilofs in the central Bering Sea. By late July all six fleets had moved northwest of the Pribilof Islands and remained in that area until the end of September when all six fleets ended operations.

In mid-October a factory ship accompanied by eight trawlers arrived on the Continental Shelf north of Unimak Island and began a winter fishery for flounder. That fleet remained on the grounds through the rest of the year.

In mid-December a factory ship accompanied by ten trawlers arrived in the eastern Bering Sea to fish for Alaska pollock for surimi and fish meal production. The fleet began fishing northwest of the Fox Islands in the eastern Aleutians and in late December shifted well northwest of the Pribilof Islands. The shift to the central Bering Sea was a marked change in the pattern of Japanese winter pollock fishing.

Independent Trawler Operations

In 1973 independent stern trawlers fished along the 100 fathom curve in the eastern and central Bering Sea and to a lesser extent along the Aleutians, continuing their pattern of past years. Alaska pollock remained the primary species taken in the Bering Sea while ocean perch continued as the target species along the Aleutian Islands. The independent stern trawlers were equipped with processing facilities ranging from sharp freezers on the smaller trawlers to freezers, meal, oil, and surimi plants on the larger trawlers. The Japanese Government imposed a quota of 550,000 metric tons upon the independent trawlers.

At the beginning of 1973 about five trawlers were fishing along the Continental Shelf edge north of Unimak Pass in the eastern Bering Sea. By the end of January the trawl fleet had increased to 15 vessels scattered along the Continental Shelf edge from Unimak Pass to south of the Pribilof Islands. The fishery remained at that level in February and then in March the number of trawlers increased to 20, a level which was maintained through September.

From March through July the trawlers moved back and forth on the Continental Shelf edge from Unimak Pass to just northwest of the Pribilof Islands. In August the major emphasis shifted to the Shelf edge northwest of the Pribilof Islands in the central Bering Sea. In October the number of trawlers dropped from 20 to 15, they shifted southwest with the major emphasis in the eastern Bering Sea. The number dropped to 12 in November and remained at that level until the end of the year.

Trawling along the Aleutian Islands began in June by about 7 vessels fishing centered in the Sequam-Amukta Passes area in the central Aleutian Islands in June and July until August when two of the trawlers shifted to the Rat Islands in the western Aleutians. In late August the number of trawlers dropped to 5 -- three in the western and three in the central Aleutians. In late September fishing again centered in the Amukta-Sequam Passes area. The number of trawlers dropped to 3 in November and remained at that level until the end of the year.

Gulf of Alaska Trawl Fishery

The Japanese trawl fishery in the Gulf of Alaska in 1973 (Fig. 9) continued as a year-round fishery by independent stern trawlers along the Continental Shelf edge. As in recent years the major emphasis was in the eastern Gulf where 49 percent of the effort occurred -- 27 percent off southeastern Alaska and 22 percent off the Yakutat grounds. Another primary fishing area was off Albatross Bank where 22 percent took place. Other fishing areas were off Middleton Island, off Portlock Bank in the central Gulf and between Chirikof Island and the Shumagin Islands in the western Gulf.

It is estimated that the Japanese trawlers in the Gulf of Alaska caught 125 thousand metric tons of groundfish in 1973, an increase of 10 thousand metric tons from 1972. Ocean perch was the major species taken and accounted for 46.4 percent of the catch. Alaska pollock and black-cod accounted for most of the remainder. The major product was frozen fish for human consumption. The larger trawlers also produced fish meal and oil from the waste of the edible fish and from unedible species.

An estimated 545 trawler weeks were expended in the Gulf in 1973 as compared to an estimated 500 in 1972. The additional effort in 1973 occurred during the period January through April. The number of trawlers during those months varied between 10 and 14 in 1973 as compared to between three and eight in 1972. During the remainder of the year the effort was slightly higher in 1972 than in 1973.

About 14 trawlers fished in the Gulf in January and February with most of the effort occurring off the Yakutat grounds and southeastern

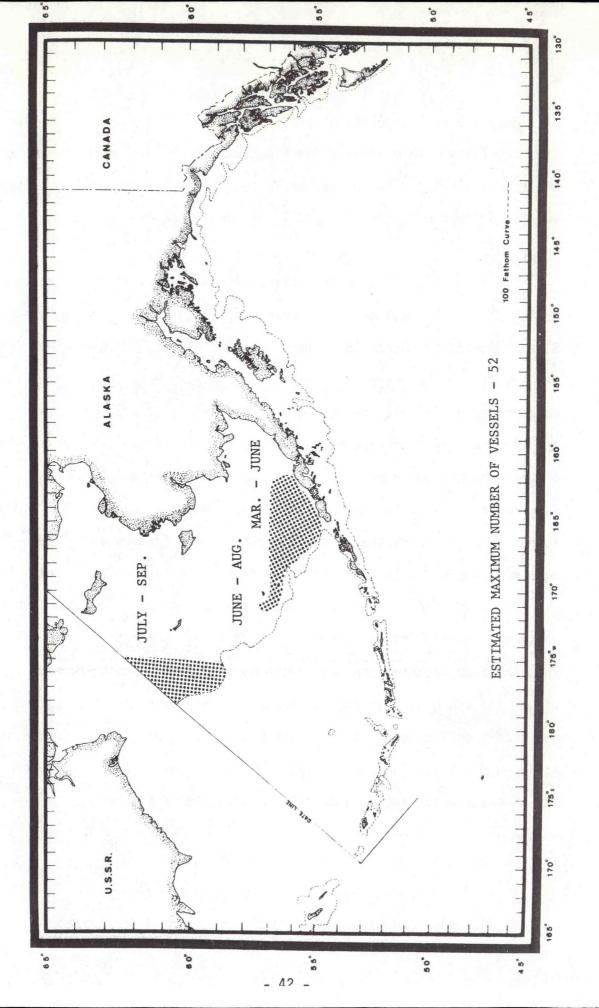
Alaska in the eastern Gulf. By the first of March they dropped to 10 and the principal fishing area shifted to Albatross Bank. The number of trawlers increased to 12 in late March, 15 in early April and then dropped to 12 at the end of April. The major effort remained off Albatross Bank with less in the eastern and western Gulf. From the first of May through mid-June the number of trawlers varied between 10 and 12 and scattered throughout the Gulf. In late June the season's peak of 16 trawlers occurred and then declined to 9 by the end of July. They remained scattered throughout the Gulf with the major effort off the coast of southeastern Alaska. From September through November the number of trawlers averaged 11 and the major effort continued in the eastern Gulf, principally off southeastern Alaska. The number of trawlers dropped to six in early December and then increased to seven late in the month with major emphasis still in the eastern Gulf.

Crab Fishery

Japanese crab expeditions off of Alaska in 1973 continued the long-standing factory ship fishery for king and tanner crab on the Continental Shelf in the eastern Bering Sea and a pot fishery by independent vessels for tanner crab west of the 175°W longitude in the central Bering Sea (Fig. 10).

The factory ship fishery on the Continental Shelf in the eastern Bering Sea in 1973 was the first year of fishing under a new two year U. S. - Japanese Crab Agreement. The Agreement divided the Bering Sea into two areas - the southern area north of the Alaska Peninsula in the eastern Bering Sea and the northern area which is generally northwest of the line running from Cape Newenham almost to the Pribilof Islands. The annual Japanese quota was set at 270, 000 king crabs and 6,000,000 Tanner crabs in the southern area, and 430,000 king crab, and 8,000,000 Tanner crab in the northern area. Another major feature of the new Agreement was the provision requiring crab to be taken only by pots.

The two factory ships were accompanied by a total of 30 pot fishing vessels - 16 with one factory ship and 14 with the other, 6 ships less than the previous year when the two fleets totaled 36 catcherboats rigged to fish both pots and tangle nets. The first fleet arrived on the traditional grounds north of the Alaska Peninsula (in the southern area) on March 5. The second fleet arrived in the same area on March 12. Shortly after arriving each fleet sent one or two vessels



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to the vicinity of Pribilof Islands in the northern area to conduct exploratory fishing. In mid-May each fleet sent a few more boats to the Pribilof Islands area. Factory ship operations remained centered in the southern area until mid-June when one fleet shifted to the Pribilofs in the northern area. The other fleet followed a few days later. In mid-July one fleet returned to the southern area for about a week and then returned to the northern area where both fleets continued fishing until late August. One fleet ended operations on August 20, the second on August 25.

Japanese crab fishing in the eastern Bering Sea that they did not fill their quota. They all but completed their tanner crab quota taking 13,942,990 crab out of a 14,000,000 quota but they took only 228,450 king crab which was 471,550 short of their quota. The following tabulation reflects the catch and quota of each species in numbers of crab for the southern and northern areas.

	Southern Area		Northern Area	
	Quota	Catch	Quota	Catch
King Crab	270,000	222,450	430,000	6,000
Tanner Crab	6,000,000	5,991,580	8,000,000	7,951,410

For several years the Japanese have been placing increased emphasis on freezing rather than canning their catches. In 1973 both factory ships reportedly processed their entire crab catch by freezing.

The Japanese again conducted a tanner crab fishery west of 175° W longitude in the central Bering Sea. As in the past the fishery was conducted by independent vessels fishing conical pots identical to those used by the Japanese factory ships in the eastern Bering sea. The fishery presumably again involved about a dozen such vessels and lasted from July through September.

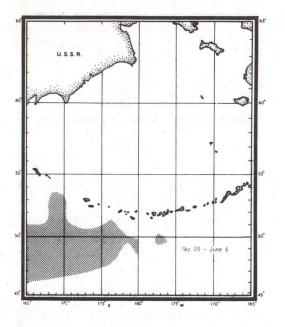
Salmon Fishery

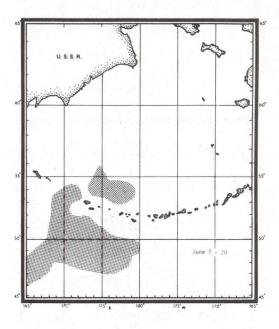
The Japanese fishery in 1973 (Fig. 11), as in 1972, was by 10 factory ships accompanied by a total of 332 gillnetters. Fishing began on May 20, 1973, one day earlier than in 1972, and ended on July 25, one day earlier than in 1972.

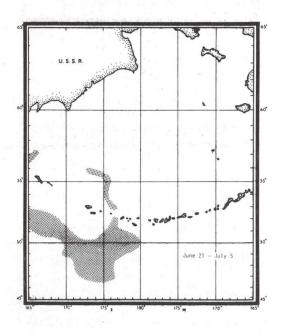
The Japanese salmon fishery in the north Pacific Ocean and the Bering Sea is governed by two treaties: (1) International North Pacific Fisheries Convention (INPFC) between Japan, Canada, and the United States, which prohibits Japanese salmon fishing east of longitude 175°W, and (2) The Northwest Pacific Fisheries Convention between Japan and the U.S.S.R. which governs Japanese fishing in the north Pacific and Bering Sea west of 175°W. The latter treaty places a quota on the Japanese salmon catch which is renegotiated each year. The 1973 quota for the factory ships was 35,732 metric tons--406 metric tons more than in 1972.

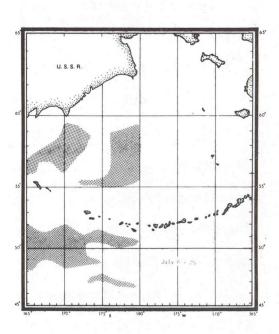
The 1973 fishery began May 20 and as in past years fishing was initially southwest of the Aleutian Islands in the north Pacific Ocean. From the beginning date to about June 10, 5 of the fleets were in the Alaska area south of the western Aleutians. By mid-June the fleets in the Alaska area increased to 7, all south of the western Aleutians. Shortly after mid-June fishing expanded into the Bering Sea. From late June to early July all 10 fleets were in the Alaska area - 7 south of the western Aleutians and 3 north of the western Aleutians, all were west of the 180th meridian. From mid-July until the fishery ended on July 25, 4 to 5 fleets were in the Alaska area - 2 to 3 fishing southwest of the western Aleutians and 2 in the Bering Sea.

FIGURE 11. -- JAPANESE HIGH SEAS SALMON FISHING AREAS, 1973.









The 10 fleets caught a total of 35,589 metric tons, nearly achieving their 35,732 ton quota. By weight the catch consisted of 45 percent pink salmon, 30 percent chum salmon, 15 percent red salmon, and 10 percent silver and king salmon. In numbers the catch was 12.1 million pink salmon, 5.3 million chum salmon, 3 million red salmon, and 1.5 silver and king salmon. Again in 1973 the high seas fleets took red salmon destined for Bristol Bay. The catch of fish of Alaska origin was calculated at 468,000 matures and 162,000 immatures. Because of a good market for fresh frozen salmon in Japan most of the fish were processed by freezing while only a small portion of the catch was canned.

On May 29 three Japanese salmon gillnetters were sighted fishing 120 miles south of the Shumagins in the western Gulf of Alaska. The 3 vessels were not associated with the 10 factory ship fleets but were from the Japanese land based fleet licensed to fish in the western north Pacific south of 46°N latitude and west of 175°W longitude. The boats were more than 600 miles east of the INPFC salmon abstention line.

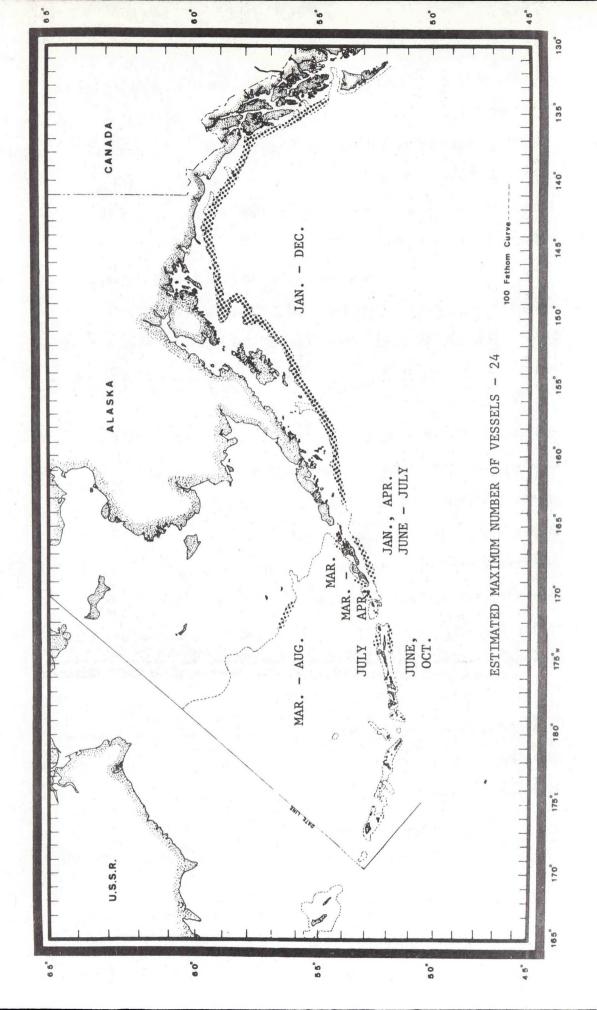
Since U.S. surface patrol units were not in a position to intercept the fleeing gillnetters their course, speed, and position were relayed to a Japanese Fishery Agency patrol ship which intercepted the 3 boats and dispatched them to their home ports for judicial action. Japanese officials reported that each of the gillnetters had 40-45 metric tons of salted salmon on board but the masters claimed that they had only fished one day east of the abstention line taking 3,000 fish (40 percent chums and 60 percent reds) on that day.

Longline Fishery

The Japanese longline fishery (Fig. 12) off Alaska in 1973 continued as a year-round operation by independent vessels. As in past years the fishery was centered in the Gulf of Alaska with sporadic effort along the Aleutian Islands and in the Bering Sea. The longliners were equipped with freezing facilities, enabling them to process their own catches. In most instances each ship remained on the grounds for a period of 2 to 4 months until reaching a full load of about 400 metric tons, then returned to its home port. At least one of the vessels, however, transshipped its frozen catch to a refrigerator transport, enabling the vessel to remain on the grounds for longer than a normal period. Transshipment has occurred infrequently in past years and remained an exception to the rule in 1973.

Twenty-three individual longliners were identified in the Gulf of Alaska in 1973. Information received from the Japanese Government and the Japanese Longline Association indicated 22 longliners were licensed to fish in the Gulf. It is believed that the 23rd vessel was a replacement for one of the other vessels. The average number of longliners per week in the Gulf in 1973 was 7.5, the same as in 1972. It is estimated that the longliners made a total of 64 trips into the Gulf in 1973 as compared to 59 in 1972. Seventeen of the 23 vessels in 1973 made 3 trips to the Gulf, 4 made 2 trips, 1 made 1 trip, and 1 made 4 trips. The effort was relatively constant in 1973 with 7 to 8 ships generally present. The peak effort occurred in mid-February when the number of

FIGURE 12. -- JAPANESE LONGLINE FISHING AREAS, 1973.



vessels rose to 11 and again in November when the number reached 10. The lowest number was 5 for one week in June, one week in August, and the first week in November. It is estimated the Japanese 1973 longline catch in the Gulf totaled 25,600 metric tons - 2,000 more than in 1972. As in past years the catches were predominantly sablefish with the primary incidental species being rock fish.

The primary fishing area in the Gulf of Alaska was again off southeastern Alaska where about 50 percent of the effort occurred.

Vessels were present off the coast of southeastern Alaska throughout the year. In 1973 as in 1972 the second largest effort, 16 percent, occurred off the Yakutat grounds. Vessels were generally present in that area throughout the year except for late May and June and during late October. Ranging just behind the Yakutat grounds was the Albatross Bank area where 15 percent of the effort occurred. Vessels were present in that area almost continually during the winter months and sporadically during the summer months. The other major areas of longlining in the Gulf were near Middleton Island (8 percent) and in the western Gulf of Alaska (primarily off Chirikof Island) where 5 percent of the effort occurred. Fishing in these areas was sporadic throughout the year.

Thirty-one boardings were made on Japanese longliners by U.S. Enforcement Officials in the Gulf of Alaska in 1973 to check their compliance with salmon and halibut abstention provisions of the INPFC. No violations were found.

As remarked earlier, Japanese longining along the Aleutian Islands in the Bering Sea was sporadic. One boat fished in early January, 1 in mid and late March, 1 in mid-April, 1 in mid-June, 1-2 from mid-July to early August, 1 in early October and 1 in late October and early November. Longlining in the Bering Sea was confined to 1 vessel in late March and 1 in early and late August.

Herring Fishery

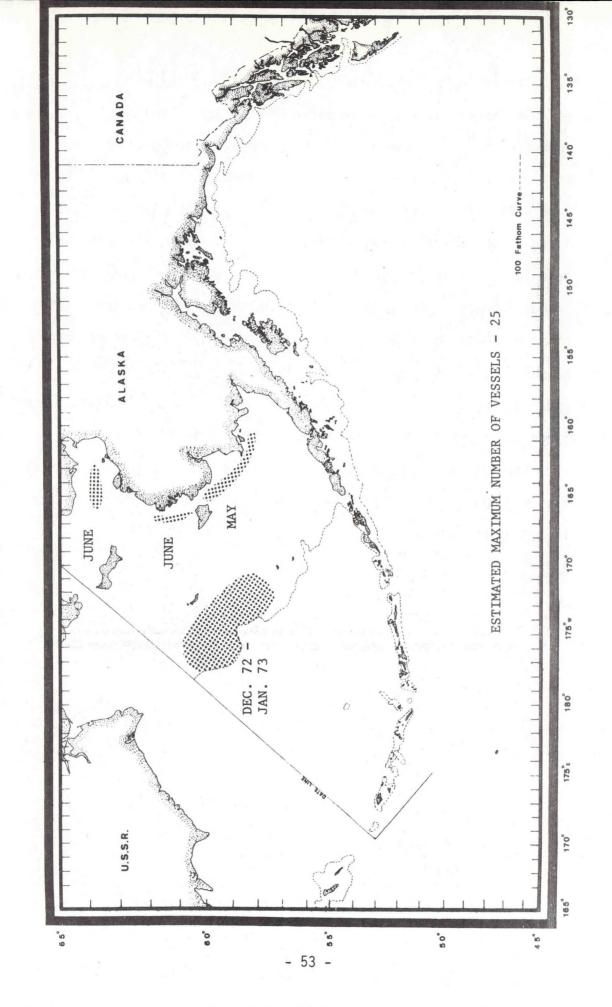
The Japanese herring fishery off of Alaska (Fig. 13) in 1973 again included a winter trawl expedition northwest of the Pribilof Islands in the central Bering Sea and a spring gillnet expedition along the coast of western Alaska. The Japanese Government set a quota of 49,000 metric tons for the trawl fishery and 4,600 metric tons for the gillnet fishery. Both expeditions reportedly experienced extremely poor fishing and it is doubtful that either came close to their quotas.

The winter trawl fishery was conducted on the Continental Shelf northwest of the Pribilof Islands in the central Bering Sea in the same area where the Soviets fish. The 1973 expedition was begun in early December 1972 by 10 stern trawlers accompanied by two refrigerator transports. The fleet remained at that strength until the third week of January when the number of trawlers decreased to five. In late January the expedition ended. The 1973 fishery was about six weeks shorter than the 1972 fishery and peaked at less than half the level of the 1972 fishery. Reportedly the trawlers catches were very poor and the 1973 trawl expedition caught less than 500 metric tons.

A spring fishery by trawlers was attempted northwest of the Pribilof Islands in April but because of ice conditions that expedition was abandoned with no catches being made.

The 1974 winter trawl fishery in the central Bering Sea was begun in mid-December by about four trawlers. The vessels reportedly were not able to find any large concentrations of fish and consequently the fleet did not increase by the end of December.

FIGURE 13. -- JAPANESE HERRING FISHING AREAS, 1973.

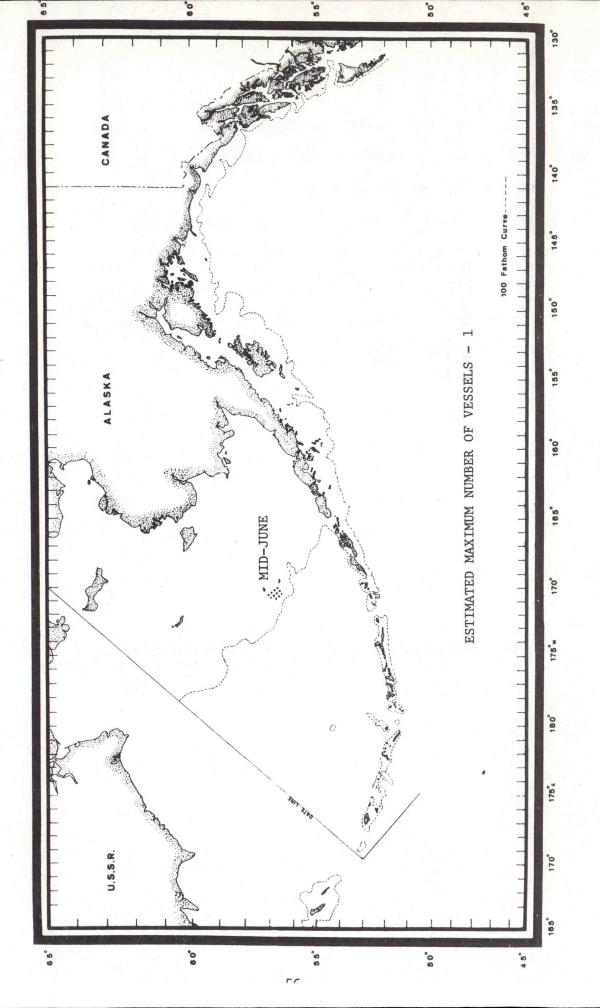


The spring gillnet fishery was begun in mid-May by 13 gillnet vessels fishing off Togiak in outer Bristol Bay. The number of vessels increased to 15 in late May and the fishery shifted off Kuskokwim Bay. In early June the fleet moved northwest through Etolin Straits to off Cape Romanzoff. About the second week in June the number of vessels began to decline as fishing shifted to Norton Sound. The number of vessels had dropped to two by mid-June when the fishery ended. The 1973 expedition was a few weeks shorter than the 1972 fishery and reached about the same level as the 1972 fishery. In 1973 the vessels were not hampered by ice to the extreme the fleet was in 1972 but Japanese sources reported the catches were still poor. The 1973 gillnet fishery catch was estimated at approximately 1,500 metric tons.

The total herring catch by the Japanese in 1973, totaled approximately 2,000 metric tons, far below their own quota and the 1972 catch of 14,000 metric tons.

Snail Fishery

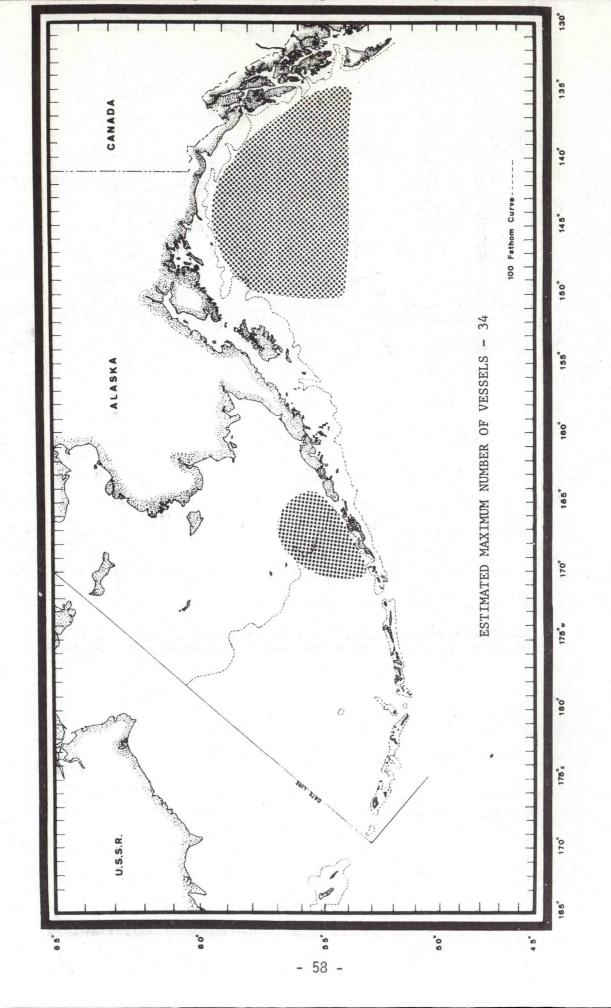
The Japanese Fisheries Agency in 1973 for the first time licensed vessels to fish for snails east of 175°W longitude in the Bering Sea. Twenty-one such vessels were licensed but only one vessel operated briefly for snails in 1973. That vessel fished pots just west of the Pribilof Islands. This reduced effort was not surprising after observing the small snail catches made by Japanese vessels in previous years in the Bering Sea. At least one of the licensed vessels was known to have fished for tanner crab in the central Bering sea west of 175°W longitude.



Whaling

The 1973 Japanese North Pacific whaling expedition (Fig. 15) involved three factory ship fleets, the same number as in the preceding eleven years. Two of the factory ships were accompanied by seven whale killer vessels and the other by eight. A total of nine support ships (refrigerated transports and tankers) serviced the three fleets. The Japanese, like the Soviet whaling fleets, followed the pattern of past operations and their whaling efforts were in areas far offshore. The three Japanese fleets killed a total of 3,770 whales in 1973 as compared to 4,039 whales in 1972. Forty-five percent of the whales killed were sei whales and 47 percent were sperm whales. The remainder of the kill was all fin whales except for two Bryde whales. Only 202 whales, about 5 percent of the total 1973 kill, were taken in the Alaskan area. Complete statistics on the Japanese North Pacific whale kill are given in Appendix Table 15.

Blue whales, right whales, humpback whales, grey whales, and Greenland whales were placed on a restrictive harvest list at an international conference on the conservation of wild animals, held in Washington, D.C. Fourteen countries, including Japan, attended the Conference. The International Whaling Commission met in London and agreed with some of the restrictions but decided that whaling should not be totally banned. In June 1973, the U.S. Government made a plea to IWC for a complete ban on whaling which would begin not later than three years after June 1973. The plea was rejected by the IWC.



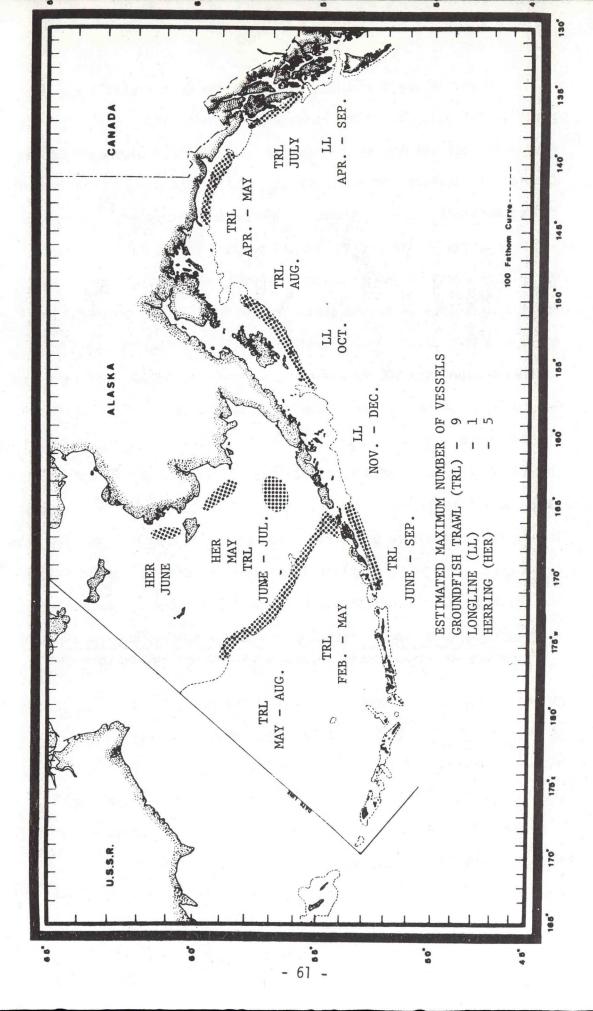
The IWC, in its 25th Annual Meeting held in London during June 1973, established 1974 total catch limits in the North Pacific Ocean of: 550 fin whales (100 less than 1972), 3,000 sei whales, and 10,000 sperm whales. Japan's 1974 quota for North Pacific Ocean was: 246 fin whales, 2,017 sei whales, and 4,275 sperm whales. This was a reduction of 13 fin whales from 1973, while quotas on other species remained the same.

SOUTH KOREAN FISHING OPERATIONS

South Korean fishing off Alaska in 1973 (Fig. 16) remained a small operation but did expand from trawling to include longlining and they were suspected of gillnetting. A total of 10 independently operating stern trawlers, 1 factory ship accompanied by 4 pair trawlers and 1 longliner operated off Alaska in 1973. This was a six vessel increase for stern trawlers and a six vessel decrease for the factory ship fleet from 1972. It is estimated the 1973 catch totaled 7,737 metric tons, nearly half the estimated catch of 13,150 metric tons for 1972.

Groundfish Trawl Fishery

Trawling for groundfish in the Gulf of Alaska was primarily for ocean perch and black cod along the Continental Shelf edge. One stern trawler made two expeditions in the Gulf in 1973. This first expedition was from mid-April to mid-May off the Yakutat grounds in the eastern Gulf. Fishing in the Gulf was resumed by the same vessel off the coast of southeastern Alaska in early July. A few days after the trawler began fishing, however, she was seized for fishing inside the United States contiguous fishery zone. Approximately three weeks later, after judicial proceedings were completed, the trawler began fishing off Portlock Bank in the central Gulf. Fishing in that area continued about four weeks and then the trawler departed the Alaska area.



Trawling in the Bering Sea was along the Continental Shelf edge north of Fox Islands, Unimak Pass, and northwest of the Pribilof Islands. Alaska pollock was the target species. The first independent stern trawler was a vessel from mid-February until late March. That vessel fished north of the Fox Islands in the eastern Aleutians. Independent stern trawling in the Bering Sea was resumed in mid-May by a single vessel northwest of the Pribilof Islands in the central Bering Sea. About a week later a second stern trawler arrived and began fishing north of Unimak Pass. The trawler in the central Bering Sea fished southward along the 100 fathom curve working its way out of the Bering Sea to south of the eastern Aleutian Islands by mid-June. The trawler which began operations in the eastern Bering Sea fished northward along the 100 fathom curve towards the central Bering Sea ending operations in early July. In mid-July another independent stern trawler arrived in the eastern Bering Sea and until late August fished along the 100 fathom curve northwest of the Pribilof Islands in the central Bering Sea.

Fishing for groundfish south of the Fox Islands in the eastern Aleutians by independent stern trawlers began in mid-June by a vessel which had previously fished in the eastern and central Bering Sea. The number of independent trawlers south of the eastern Aleutians increased to two in mid-July, three in late July, and four in early August. The number of trawlers dropped to two in late August, to one in early September and in mid-September trawling south of the eastern Aleutians ended.

About the second week in June a factory ship accompanied by four pair trawlers arrived on the Continental Shelf north of the Unimak Island in the eastern Bering Sea. The fleet remained in that area

for about two weeks and then departed the Alaska area. Officials of the fleet claimed the trawlers fished for groundfish but there is strong evidence that they also fished gillnet for salmon. A U.S. crab pot vessel reported observing one of the four trawlers retrieving gillnet which had fouled on U.S. crab pot buoys. Abandoned gillnet was retrieved from the immediate area where the Korean fleet had fished. Examination by a National Marine Fisheries Service gear expert revealed that the net had been hung by South Korean fishermen. A NMFS Agent boarded the factory ship and observed a gillnet float on deck of the factory ship and porpoise and shark in the ship's holds. Porpoise and shark are not normally caught by trawl gear but are taken by gillnets. Inspection of one of the ships holds revealed frozen pollock, grey cod, and small flatfish which substantiated the claim by the ship's officials that the fleet did engage in trawling for groundfish. The fleet reportedly took 60 metric tons of groundfish from the time they arrived until they departed the Alaska area.

Herring Fishery

A South Korean factory ship and four accompanying pair trawlers fished for herring off of Alaska's westcoast in the Bering Sea from early May until mid-June. The fleet began fishing off Cape Newenham and then moved northward to off Kuskokwim Bay where it remained through May. In early June the fleet moved to north of Nunivak Island where it fished for about two weeks and then departed the Alaska area. The four trawlers delivered their catches to the factory ship where they were frozen in the round. It is estimated that their catch totaled 285 metric tons.

Longline Fishery

In mid-March a South Korean longliner arrived off southeastern Alaska in the eastern Gulf of Alaska and began the first South Korean longline fishery off Alaska. That vessel remained on the grounds catching sablefish until mid-May when apparently a full cargo was achieved and she returned to her home port. In early September the same vessel returned to the eastern Gulf and fished for sablefish through October. The vessel fished off southern Alaska in September and off Albatross Bank in October. The vessel was identical to those used by the Japanese in the Gulf of Alaska and was apparently purchased from a Japanese fishing company.

FOREIGN INTERFERENCE WITH U.S. FISHERIES

Four instances of U.S. gear losses of 61 crab pots allegedly caused by foreign fishing vessels (Appendix Table 11) were reported to NMFS in 1973. All were reported by U.S. crab fishermen and occurred in the Bering Sea and Gulf of Alaska.

One loss, involving 15 crab pots, allegedly caused by a South Korean vessel in the eastern Bering Sea. One loss, involving 25 crab pots, believed to be Soviet vessels in the Shumagin Islands area. Two losses, totaling 21 crab pots, believed to be Japanese vessels in the eastern Bering Sea.

Losses in the eastern Bering Sea were outside the Unimak sanctuary.

REFERENCE

- Chitwood, Philip E.
 - 1969. Japanese, Soviet, and South Korean Fisheries Off Alaska, History and Development through 1966. Bureau of Commercial Fisheries, Circular 310, 34 pp.
- International North Pacific Fisheries Commission.
 1970. Proceedings of the Nineteenth Annual Meeting, INPFC,
 pp. 166, 167, 210, 211.
- Naab, Ronald C.
 1971. The Growing Role of International Agreements in Alaskan Fisheries. National Marine Fisheries Service, Commercial Fisheries Review, Vol. 33, No. 9, pp. 27-40.
- U.S. Fish and Wildlife Service.
 1963 through 1969. Foreign Fishing Activities, Bering Sea
 and Gulf of Alaska. Bureau of Commercial Fisheries, Juneau, Alaska,
 (Unpublished reports.)

1970 through 1972. Foreign Fishing Activities, Bering Sea and Gulf of Alaska. National Marine Fisheries Service, Juneau, Alaska (unpublished reports.)

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TABLE 1. -- ESTIMATED COMPOSITION AND DISTRIBUTION OF SOVIET FISHING FLEETS BY MONTH, 1973.

MONTH		GULF	GULF OF ALASKA				щ	BERING SEA2/				ALEU	ALEUTIAN ISLANDS	13/		CBAND TOTAL
	Factory Ships	Stern Trawlers	Other Trawlers	Support	TOTAL	Factory	Stern	Other Trawlers	Support	TOTAL	Factory Ships	Stern	Other	Support	TOTAL	CHANGE COLUMN
JAN.	1	2	1	1	77	2	10	877	4	29	1	1	10	3	13	188
FEB.	7	7	15	2	22	9	11	09	5	82	- 1	1	10		11	115
MAR.	٦	9	23	7	34	5	16	20	9	77	1	ı	9	ı	9	117
APR.	٦	7	23	4	35	4	22	31	2	62	1	2	17	Т	50	711
MAY	I	5	1	١	2	4	10	56	4	7.5	1	1	13	Н	7	63
JUNE	1	3	1	Ŧ	7	П	8	13	1	18	1	8	10	٦	13	35
JULY	I	J	1	1	٦	1	Т	10	1	11	1	Q	7	Н	10	22
AUG.	1	7	1	П	2	1	~	6	1	7	1	7	7	Ì	1	27
SEPT.	I	10	1	1	11	-	1	9	Í	7	1	1	11	1	75	30
OCT.	L	10	1	٦	12	I	1	9	1	7	1	1	12	1	13	32
NOV.	L	2	2	1	11	1	10	9	٦	18	1	I	11	1	77	17
DEC.	7	3	10	1	77	1	27	25	7	57	İ	ı	600	1	ď	79

- 1 -

1/ North of Dixon Entrance 2/ East of International Date Line 3/ East of 170 East Longitude

TABLE 2. -- ESTIMATED COMPOSITION AND DISTRIBUTION OF JAPANESE FISHING FLEETS BY MONTH, 1973.

GRAND TOTAL.	1	53	27	179	185	340	553	575	210	150	55	87	59
	TOTAL	1	I	٦	1	077	255	255	00	r	9	7	2
	Support	1	ı	1	1	7	7	7	1	1	١	-1	1
	Salmon Gillnetters	ı	1	1	1	132	233	233	1	1	1	1	1
SLAND93/	Whale	1	1	1	1	I	I	1	1	1	1	1.	ı
ALEUTIAN ISLANDS	Longline	1	1	1	1	1	П	П	1	I	. 1	1	1
	Stern	1	I	1	I	1	7	7	7	5	2	7	3
	Factory. Ships	1	1	1	1	7	2	7	ĺ	ı	Í	1	1
	TOTAL	30	27	158	191	180	278	298	186	128	33	26	07
	Support	6	3	10	80	60	13	13	6	100	4	3	
27	Salmon Gillnetters	1	1	1	ı	1	66	66	1	1	1	-	
BERING SEA	Other4/ Trawlers	100	€0	124	126	7777	135	155	677	95	77	60	18
1 1/2 1	Stern Trawlers	18	15	17	20	50	20	20	20	20	77	77	15
	Factory Ships	1	1	7	7	80	11	11	60	2	П	П	2
	TOTAL	23	772	20	23	20	20	22	16	17	16	18	16
ASKA-1/	Support Ships	8	ı	2	2	٦	٦	2	Н	٦	J	П	п
GULF OF ALASKAL	Longline Vessels	7	10	7	80	7	9	80	9	7	2	6	60
	Stern	77	13	П	13	12	13	12	6	6	60	80	9
MONTH		JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.

^{1/} North of Dixon Entrance 2/ East of International Date Line 2/ East of 170^o East Longitude 4/ Includes pot and tangle net vessels and longliners

TABLE 3. -- ESTIMATED NUMBER OF SOVIET VESSELS BY MONTH, 1963-73.

MONTH	1963	1964	1965	1966	1961	1968	1969	1970	1971	1972	1973
JANUARY	119	155	163	151	160	109	120	156	188	142	84
FEBRUARY	186	160	181	204	170	116	160	198	196	180	115
MARCH	155	188	194	246	180	110	163	178	179	143	117
APRIL	172	211	205	165	130	82	94	108	165	126	117
MAY	186	207	212	154	06	34	51	19	98	87	63
JUNE	200	200	216	102	80	28	22	19	23	28	35
JULY	211	66	182	30	75	23	15	14	18	30	22
AUGUST	157	92	178	44	09	27	13	12	24	29	27
SEPTEMBER	75	55	169	36	40	33	17	17	27	26	30
OCTOBER	44	40	128	20	25	29.	12	17	34	20	32
NOVEMBER	4	44	105	23	20	33	22	31	41	30	41
DECEMBER	22	26	121	75	09	72	66	119	93	53	79

TABLE 4. -- ESTIMATED NUMBER OF JAPANESE VESSELS BY MONTH, 1963-73.

MONTH	1963	1964	1965	1996	1961	1968	1969	1970	1971	$1972^{\frac{2}{2}}$	1973
JANUARY	16	2	ω	19	20	52	38	43	09	98	53
FEBRUARY	23	15	17	27	30	99	34	20	51	84	51
MARCH	23	33	59	52	9	94	116	165	185	176	179
APRIL	63	72	49	29	100	135	128	196	181	170	185
MAY	152	167	130	124	155	159	250	408	286	348	340
JUNE	221	178	149	203	180	153	471	547	390	441	553
JULY	221	129	145	208	200	166	301	304	531	445	575
AUGUST	191	103	151	206	165	176	189	234	213	233	210
SEPTEMBER	129	114	106	81	130	171	159	198	211	162	150
OCTOBER	34	16	22	17	25	20	44	51	73	22	55
NOVEMBER	16	15	7	12	10	37	43	48	83	26	48
DECEMBER	10	6	12	18	35	40	35	9	83	49	59

^{1/} Excluding salmon fleets.

^{2/} Including salmon fleets.

TABLE 5. -- SUMMARY OF U.S. VESSEL FISHERIES PATROLS, 1973.

DAYS T SIER	LED	MILES					
T VIER SWEET		PATROLLED	JAPANESE	SOVIET	SOUTH	CANADIAN	TOTAL SIGHTINGS
T SIER SWEET	The state of the s	7,696	23	=	-	-	36
T SIER SWEET		16,929	112	213	5	9	336
NT STER SWEET		7,721	172	17	0	9	249
XIER SWEET		9,915	175	10	=	5	201
XIER SWEET		7,864	153	26	2	3	184
SWEET		1,962	4	-		1	22
		1,592	F	1		1	1
CITRUS		1,540	4	2	-	1	7
BALSAM 9		1,480	7	17	1	1	24
STORIS 88		15,270	586	177	-	-	465
CONFIDENCE 108		25,121	283	213	2	20	521
BOUTWELL 43		10,381	33	31	-	1	65
CLOVER 10		1,912	5	2	1	9	13
SORREL 9		1,112	4	-		-	9
IRONWOOD		2,058	8	6	-	1	12
TOTALS 549		112,553	1,280	778	28	49	2.135

TABLE 6. -- SUMMARY OF U.S. AERIAL FISHERIES PATROLS, 1973.

		1	
4	258,354	258,35	1,317 258,35
17	76,247	76,24	657 76,24
0	9,840		123 9,84
_	344,441		2,097 344,44

- 6 -

1/ Sightings by ship based helicopters are included in sightings by U.S. patrol vessels

TABLE 7 - BOARDINGS OF FOREIGN FISHING VESSELS, 1973

JAPANESE

Ship	Location	Date	Remarks
Japanese Stern Trawler Akebono Maru No. 72	Eastern Bering Sea 55-55N 165-34W	5/13	
Japanese Longliner Anyo Maru No. 21	Sitka	12/27	
Japanese Stern Trawler <u>Aso Maru</u>	Eastern Bering Sea 56-12N 163-54W	5/11	
Japanese Stern Trawler Aso Maru	Gulf of Alaska 57-51N 137-18W	7/11	Seized for vio- lation of INPFC
Japanese Crab Ship Azuma Maru No. 8	Central Bering Sea 56-31N 170-14W	5/15	
Japanese Independent Crab Ship <u>Azuma Maru</u> No. 26	Central Bering Sea 58-31N 175-44W	7/22	
Japanese Longliner Choyo Maru No. 81	Sitka	1/6	
Japanese Longliner Choyo Maru No. 81	Gulf of Alaska 59-30N 145-11W	6/21	
Japanese Longliner Choyo Maru No. 81	Seward	10/22	
Japanese Longliner Choyo Maru No. 81	Seward	10/27	
apanese Cargo Ship Daien Maru No. 31	Central Bering Sea 57-07N 170-19W	8/9	
apanese Stern Trawler Daishin Maru No. 22	Gulf of Alaska 59-27N 144-54W	12/7	
apanese Longliner bisu Maru No. 88	Sitka	1/11	
apanese Herring Gill- etter <u>Ebisu Maru</u> o. 88	Central Bering Sea 61-26N 166-46W	6/8	

TABLE 7 - BOARDINGS OF FOREIGN FISHING VESSELS, 1973 (cont'd)

Ship	Location		Date	Remarks
Japanese Longliner Fukuyoshi Maru No. 75	Gulf of Alaska 56-11N 135-30W		5/16	
Japanese Longliner Fukuyoshi Maru No. 75	Gulf of Alaska 57-08N 136-16W		8/15	
Japanese Longliner Fukuyoshi Maru No. 85	Gulf of Alaska 56-33N 135-57W		8/6	
Japanese Factory Ship Fyokuei Maru	Central Bering 55-47N 168-34W	Sea	4/18	
Japanese Herring Gill- netter <u>Hatsuei Maru</u> No. 38	Eastern Bering 59-37N 166-47W	Sea	6/3	
Japanese Longliner Hatsuei Maru No. 38	Gulf of Alaska 55-55N 154-57W		9/17	
Japanese Longliner Hatsuei Maru No. 55	Gulf of Alaska 55-28N 135-04W		9/27	
Japanese Pair Trawler Hokuto Maru	Eastern Bering 56-35N 163-39W	Sea	11/6	
Japanese Factory Ship Hoyo Maru	Central Bering 56-30N 167-10W	Sea	6/10	
Japanese Factory Ship Hoyo Maru	Central Bering 60-07N 175-58W	Sea	8/28	
Japanese Stern Trawler Ishikari Maru	Eastern Bering 56-11N 163-36W	Sea	5/11	
Japanese Stern Trawler Ishikari Maru	Gulf of Alaska 55-58N 135-15W		8/15	
Japanese Factory Ship Kashima Maru	Eastern Bering 54-54N 165-56W	Sea	2/21	
Japanese Factory Ship Kashima Maru	Eastern Bering 56-35N 163-39W	Sea	11/6	

TABLE 7 - BOARDINGS OF FOREIGN FISHING VESSELS, 1973 (cont'd)

Ship	Location	Date	Remarks
Japanese Factory Ship Keiko Maru	Eastern Bering Sea 55-20N 164-10W	3/17	
Japanese Factory Ship Keiko Maru	Eastern Bering Sea 56-17N 164-02W	5/13	
Japanese Factory Ship Keiko Maru	Eastern Bering Sea 55-46N 165-12W	6/11	
Japanese Factory Ship Keiko Maru	Central Bering Sea 56-13N 167-08W	6/15	
Japanese Factory Ship Keiko Maru	Central Bering Sea 56-29N 168-28W	7/20	
Japanese Longliner Kiyo Maru No. 51	Sitka	3/31	
Japanese Longliner Kiyo Maru No. 51	Sitka	4/13	
Japanese Longliner Kiyo Maru No. 51	Gulf of Alaska 54-56N 134-12W	9/15	
Japanese Stern Trawler Koshin Maru No. 11	Gulf of Alaska 59-59N 142-48W	9/12	
Japanese Factory Ship Koyo Maru	Eastern Bering Sea 55-34N 163-38W	3/18	
Japanese Factory Ship Koyo Maru	Eastern Bering Sea 55-45N 163-21W	4/12	
Japanese Factory Ship Koyo Maru	Central Bering Sea 56-30N 166-59W	6/11	
lapanese Factory Ship Koyo Maru	Central Bering Sea 56-38N 168-45W	7/20	
apanese Stern Trawler Coyo Maru No. 2	Gulf of Alaska 55-23N 134-48W	8/22	

TABLE 7 - BOARDINGS OF FOREIGN FISHING VESSELS, 1973 (cont'd)

Ship	Location	Date	Remarks
Japanese Stern Trawler Koyo Maru No. 21	Gulf of Alaska 57-54N 137-32W	9/14	
Japanese Crab Ship Koyo Maru No. 31	Central Bering Se 56-44N 170-23W	a 6/27	
Japanese Stern Trawler Kyowa Maru No. 5	Gulf of Alaska 59-02N 147-47W	7/23	
Japanese Longliner Matsuei Maru No. 72	Gulf of Alaska 57-52N 137-30W	9/14	
Japanese Factory Ship Mineshima Maru	Central Bering Se 56-05N 168-08W	a 4/14	
Japanese Factory Ship Mineshima Maru	Eastern Bering Se 55-45N 166-01W	a 5/14	
Japanese Longliner Mito Maru No. 82	Seward	9/13	
Japanese Stern Trawler Mitsu Maru No. 30	Central Bering Se 55-17N 169-44W	9/16	Seized for vio- lation of U.S. CFZ
Japanese Stern Trawler Niitaka Maru	Gulf of Alaska 57-51N 137-21W	8/23	
Japanese Factory Ship Nisshin Maru No. 2	Central Bering Se 56-05N 168-08W	a 4/15	
Japanese Factory Ship Nisshin Maru No. 2	Eastern Bering Se 55-53N 165-28W	a 5/13	
Japanese Factory Ship Nisshin Maru No. 2	Central Bering Se 58-55N 174-45W	a 7/22	
Japanese Factory Ship Nisshin Maru No. 2	Central Bering Se 60-07N 175-58W	a 8/28	
Japanese Salmon Gill- netter <u>Nitto Maru</u> No. 7	Aleutian Islands 51-02N 177-42E	6/15	

TABLE 7 - BOARDINGS OF FOREIGN FISHING VESSELS, 1973 (cont'd)

Ship	Location	Date	Remarks
Japanese Research Ship Oshoro Maru	Eastern Bering Sea 57-24N 161-10W	7/7	
Japanese Longliner Ryusho Maru No. 7	Gulf of Alaska	4/5	
Japanese Longliner Ryusho Maru No. 7	Gulf of Alaska 59-56N 144-38W	5/5	
Japanese Factory Ship Shikishima Maru	Central Bering Sea 56-20N 168-20W	4/24	
Japanese Longliner Shinko Maru No. 3	Aleutian Islands 52-26N 174-26W	7/31	
Japanese Longliner Shinko Maru No. 3	Gulf of Alaska 59-14N 146-46W	9/24	
Japanese Stern Trawler Shinsei Maru No. 2	Gulf of Alaska 57-06N 151-15W	2/26	
Japanese Herring Gill- Netter <u>Shintoku Maru</u>	Central Bering Sea 61-29N 166-47W	6/8	
Japanese Longliner Shoyu Maru No. 5	Central Bering Sea 55-50N 168-51W	7/19	
Japanese Factory Ship Soyo Maru	Eastern Bering Sea 55-07N 167-28W	4/2	
Japanese Longliner Sumiyoshi Maru No. 33	Sitka	2/8	
Japanese Longliner Taisan Maru No. 1	Gulf of Alaska 57-12N 151-22W	3/16	
Japanese Longliner Taisan Maru No. l	Gulf of Alaska 59-31N 143-20W	4/17	
Japanese Stern Trawler Takachiho Maru	Gulf of Alaska 55-58N 135-14W	1/7	

TABLE 7 - BOARDINGS OF FOREIGN FISHING VESSELS, 1973 (cont'd)

Ship	Location	Date Remarks
Japanese Stern Trawler Takachiho Maru	Gulf of Alaska 55-53N 135-08W	8/6
Japanese Longliner Tenyo Maru No. 25	Sitka	2/1
Japanese Longliner Tenyo Maru No. 25	Gulf of Alaska 55-47N 135-13W	5/16
Japanese Longliner Tenyo Maru No. 25	Gulf of Alaska 59-27N 144-54W	12/7
Japanese Herring Gill- netter <u>Tenyu Maru</u> No. 37	Eastern Bering Sea 59-40N 166-52W	6/3
Japanese Herring Gill- netter <u>Tomi Maru</u> No. 85	Eastern Bering Sea 59-37N 165-39W	6/2
Japanese Herring Gill- netter <u>Tomi Maru</u> No. 88	Central Bering Sea 61-29N 166-36W	6/8
Japanese Longliner Tomi Maru No. 88	Gulf of Alaska 59-34N 142-25W	8/2
Japanese Longliner Tomi Maru No. 88	Seward	9/13
Japanese Longliner Tomi Maru No. 88	Gulf of Alaska 59-01N 147-40W	10/24
Japanese Longliner Tomi Maru No. 88	Gulf of Alaska 57-54N 149-07W	12/14
Japanese Longliner Tune Maru No. 31	Gulf of Alaska 57-56N 149-12W	1/4
Japanese Stern Trawler Yamasan Maru No. 85	Aleutian Islands 52-31N 173-32W	7/31
Japanese Crab Ship Zenei Maru No. 38	Eastern Bering Sea 56-10N 164-25W	5/13

TABLE 7 - BOARDINGS OF FOREIGN FISHING VESSELS, 1973 (cont'd)

SOUTH KOREAN

Ship	Location	Date	Remarks
South Korean Stern Trawler Dong Bang No. 71	Gulf of Alaska 54-20N 164-52W	5/11	
South Korean Stern Trawler <u>Dong Bang</u> No. 71	Gulf of Alaska 57-50N 136-56W	7/11	
South Korean Stern Trawler <u>Dong Bang</u> No. 71	Gulf of Alaska 57-54N 137-54W	7/13	Seized for vio- lation of U.S. CF
South Korean Longliner Dong Won No. 91	Gulf of Alaska 57-40N 135-35W	4/6	
South Korean Longliner Dong Won No. 91	Gulf of Alaska 58-23N 148-20W	10/3	
South Korean Factory Ship <u>Hae Yon No. 27</u>	Central Bering Sea 55-38N 167-10W	6/23	
South Korean Factory Ship <u>Kum Yong No. 501</u>	Central Bering Sea 60-47N 167-26W	6/7	
SOVIET			
Soviet Trawler BMRT Kommunist Ukrainy	Gulf of Alaska 54-43N 162-51W	11/3	
Soviet Tug Reshitelnyi	Womens Bay Kodiak Island	5/2	Meeting re: U.S USSR Bilateral Fishery Agreement

TABLE 8. -- VIOLATIONS OF U.S. TERRITORIAL WATERS, 1973.

Remarks	Commercial aircraft reported an unidentified Soviet vessel fishing I mile off Akun Head. A Coast Guard aircraft with NMFS Agent aboard investigated and located the Japanese trawler Nitto Maru No. 5 anchored 3.25 miles offshore in position 54-20.5N 165-42W. A gear marker was located nearby 2.75 miles offshore. A surface vessel was not available to investigate.
Location	2.75 miles north of Akun Head, Akun Island,
Vessel	Trawler Nitto Maru No. 5, Reg. No. HK1-277
Nationality	Japanese
Date	March 27

TABLE 9. -- VIOLATIONS OF THE U.S. CONTIGUOUS FISHERY ZONE, 1973.

	Date	Nationality	Vessel	Location	Remarks
	February 24	Soviet	Refrigerated Trans- port Kamchatskie Gory and stern trawlers Kamyshin and 50 Let Vlksm	3.8 miles off Aghiyuk Island, Semidi Islands 56-15N 156-48W	Coast Guard Cutter with NMFS Agent sighted subject vessels transshipping in position shown. Area had been designated Soviet loading zone until U.SUSSR agreement renegotiated and said zone abolished three days prior to this incident. Vessels advised that such activities no longer permitted in that area.
- 15 -	March 27	Soviet	Unidentified large trawler	6.5 miles off Cape Mordvinof, Unimak Island	U.S. fishing vessel reported subject vessel fishing in position shown. Coast Guard aircraft with NMFS Agent dispatched and found area void of Soviet vessels.
	June 27	Japanese	Crab Pot vessel Koyo Maru No. 31 and 2 unidentified vessels	10.8 miles off Otter Island, Pribilof Islands 56-48.2N 170-26.2W	Coast Guard Cutter with NMFS Agent detected 3 vessels and foreign crab pot markers in CFZ. Subject vessel was closest to shore and was pursued and boarded. Master denied ownership of gear in CFZ. Two Coast Guard Cutters monitored the area for 7 days then recovered approximately 4,109 crab pots of Japanese manufacture from CFZ. The pots were later sold at U.S. Marshal auction.

TABLE 9. -- VIOLATIONS OF THE U.S. CONTIGUOUS FISHERY ZONE, 1973 (CONT'D.).

Remarks	Coast Guard aircraft sighted subject vessel fishing in position shown. Second Coast Guard aircraft with NMFS Agent confirmed violation and assisted in "hot pursuit". Vessel seized. Master fined \$20,000 with \$10,000 suspended. Settlement of \$80,000 reached in civil suit against the vessel.	Coast Guard Cutter with NMFS Agent sighted subject vessel fishing in position shown. Vessel seized after 13 hours of "hot pursuit". Master fined \$30,000 and settlement of \$200,000 reached in civil suit against the vessel.	U.S. fishing vessel reported subject vessels fishing in position shown. No patrol unit available for investigation
	Coast Guard vessel fish Second Coas Agent confiin "hot pur Master fine pended. Se in civil su	Coast Guard sighted sub position shill hours of fined \$30,00 \$200,000 rethe vessel.	U.S. fishir vessels fis patrol uni
Location	10.5 miles off Cape Cross, southeast Alaska 57-56.9N 136-54.9W	9.1 miles off Lava Point, Akutan Island 54-17N 166-15.5W	9 to 10 miles off Amlia Island, central Aleutians 52-18N 173-20W
Vessel	Stern trawler Dong Bang No. 71	Stern trawler Mitsu Maru No. 30	2 unidentified vessels
Nationality	South	Japanese	Soviet
Date	July 12	Sept. 15	Dec. 1
		- 16 -	

TABLE 10. -- VIOLATIONS OF INTERNATIONAL FISHERIES AGREEMENTS, 1973.

Vessel	Nationality	Type	Violation	Date	Remarks
SRTM No. 8-454	Soviet	U.SU.S.S.R. Fixed Gear Agreement	Trawling in Kodiak Fixed Gear Area No. 4 in position 56-48N 152-25W	Mar. 1	U.S. fishing vessel reported subject vessel trawling near her crab pots in position shown. Coast Guard aircraft and vessel, each with a NMFS Agent, sighted subject vessel in violation. Coast Guard vessel advised Soviet vessel of violation by signal flags. Documentation forwarded to Washington, D.C., for possible protest to the U.S.S.R.
Pogranichnik Dushnikov, Pogranichnik Vurin, and Pogranichnik Gayunov	Soviet	U.SU.S.S.R. Crab Agree- ment	Trawling in Unimak Island pot sanctuary in position 54-47N 165-06W	Mar. 8	U.S. fishing vessel reported subject vessels trawling in position shown. Coast Guard aircraft with NMFS Agent 1.5 hours after initial report sighted subject vessels underway in position 54-57N 165-00W approximately 10 miles from initial reported position.
Unidentified trawler	Soviet	U.SU.S.S.R. Crab Agree- ment	Trawling within Unimak Island pot sanctuary	Mar. 27	U.S. fishing vessel reported subject vessel trawling 6.5 miles off Cape Mordvinof, Unimak Island. Coast Guard aircraft with NMFS Agent found area void of Soviet vessels (incident also reported under CFZ violations).

TABLE 10. -- VIOLATIONS OF INTERNATIONAL FISHERIES AGREEMENTS, 1973 (CONT'D.).

Remarks	Coast Guard aircraft with NMFS Agent sighted subject vessels in position shown with salmon on decks and hauling gillnets. Vessels abandoned gear and fled. A Japanese patrol ship notified of violation intercepted fleeing vessels and ordered them to Japan for prosecution in accordance with INPFC. Coast Guard Cutters retrieved approximately 18 miles of abandoned gillnet.	U.S. fishing vessel reported subject vessels fishing salmon gillnet in position shown. Coast Guard vessel with NMFS Agent located and retrieved approximately 2,000 feet of salmon gillnet which NMFS gear specialists identified as being of South Korean origin. Documentation forwarded to Washington, D.C. for possible protest to South Korean Government.
Date	May 29	June 17
Violation	Gillnetting salmon east of INPFC abstention line in position 52-23N 158-10W approximately 150 miles south of the Shumagin Islands	Gillnetting salmon east of INPFC abstention line in position 56-11N 164-42W
Type	INPFC	U.SSouth Korean Bi- lateral Fishery Agreement
Nationality	Japanese	South
Vessel	Salmon Gill- netters Keiyo Maru No. 33, Matsuei Maru No. 81, and Hokushin Maru No. 88	Trawler Hae Yeon No. 62

TABLE 10. -- VIOLATIONS OF INTERNATIONAL FISHERIES AGREEMENTS, 1973 (CONT'D.).

Vessel	Nationality	Type	Violation	Date	Remarks
Stern trawler Aso Maru	Japanese	INPFC	Fishing and possess- ing halibut and salmon east of INPFC absten- tion line in position 55-48.3N 137-14.7W	July 12	Coast Guard boarding party discovered salmon and halibut in holds of subject vessel in position shown. Vessel seized and released to Japanese Government for prosecution in accordance with INPFC.
Longliner Shirley Rose	Canadian	IPHC	Fishing halibut in closed area in position 56-27N 156-24W	0ct. 1	Coast Guard aircraft with NMFS Agent sighted subject vessel fishing halibut in position shown. Case documented and forwarded to Canadian authorities in accordance with IPHC. Inves- tigation disclosed error in information on closure dates supplied Master. Charges with- drawn.

TABLE 11. -- DAMAGE TO U.S. FISHING GEAR BY FOREIGN FISHING VESSELS, 1973.

Date	Reported By	Alleged Offenders	Location	Losses and Remarks
June 17	Nordic Fury	South Korean Trawler <u>Hae Yeon</u> No. 62	Eastern Bering Sea Near 56-11N 164-42W	10 crab pots lost. South Korean vessel set gillnet over <u>Nordic Fury</u> 's crab pot buoys.
June	Royal Pacific	Unknown (Believed Japanese)	Eastern Bering Sea Near 56-20N 165-00W	6 crab pots lost.
June	Viking	Unknown (Believed Japanese)	Eastern Bering Sea Near 56-20N 165-00W	8 crab pots lost
o June	Rondys	Unidentified South Korean Trawler	Eastern Bering Sea Near 56-20N 165-00W	5 crab pots lost. Gillnet entangled on <u>Rondys</u> crab pot buoy.
June	Paul Lin	Unknown (Believed South Korean or Japanese)	Eastern Bering Sea Near 56-20N 165-00W	2 crab pots lost.
June	Aleutian Spray	Unknown (Believed Japanese)	Eastern Bering Sea Near 56-20N 165-00W	5 crab pots lost.
November	Patricia Ann	Unknown (Believed Soviet)	Gulf of Alaska Shumagin Islands Near 54-46N 160-51.5W	10 crab pots lost.

TABLE 11. -- DAMAGE TO U.S. FISHING GEAR BY FOREIGN FISHING VESSELS, 1973 (CONT'D.).

Date	Reported By	Alleged Offenders	Location	Losses and Remarks
December 21 Dolphin	Dolphin	Three Unidentified Trawlers (Believed Soviet)	Gulf of Alaska, Shumagin Islands Near 54-49.5N 160-38.5W	6 crab pots lost. Observed unidentifi foreign trawlers near fishing gear.
December	Crusader	Unknown (Believed Soviet)	Gulf of Alaska, Shumagin Islands Near 54-50N 160-39W	6 crab pots lost.
- 21 -	Oceania	Unknown (Believed Soviet)	Gulf of Alaska Shumagin Islands Near 54–50N 160–39W	3 crab pots lost.

TABLE 12. -- SOVIET EASTERN BERING SEA CRAB FISHERIES STATISTICS, 1959-73.

case of 1/ Tanner Crab (Number)		1		}	1	1	4,000	4,000	20,400	21,000	37,558	38,416	27,390	1	-
Tanner Crab Catch	Î	1	-		-	1	665,000	665,000	3,390,000	3,490,000	6,242,950	5,724,113	4,204,231	1	-
King Crab <u>2/</u> Per Case (Number)	39.0	26.4	25.6	24.4	22.7	21.7	24.7	24.4	23.2	24.4	24.4	25.1	24.8	1	-
Case of 1/ King Crab (Number)	15,922	75,444	146,308	144,320	152,738	144,208	90,020	104,734	68,590	22,442	9,834	12,790	10,694		
King Crab <u>2/</u> Catch (Number)	620,406	1,995,006	3,441,314	3,019,211	3,019,417	2,799,620	2,225,567	2,559,598	1,592,427	548,713	369,420	320,414	264,994	-	-
Net Boats	1	°	9	9	9	6	6	6	6	9	9	9	9	1	-
Picker Boats	80	10	21	22	33	33	33	33	33	22	22	22	22	1	-
Factory Ships	-	_	2	2	c	c	c	c	8	5	2	2	2	1	1
Year	1959	1960	1961	1962	1963	1964	1965	9	1961	1968	1969	1970	1971	$1972^{\frac{3}{2}}$	19733/

King crab catch data not available for 12,000 cases in 1961, 20,780 cases in 1962, 19,976 cases in 1963, and 15,370 cases in 1964. Approximately 129,000 crabs were frozen in 1969. The Soviets did not fish for crabs in the eastern Bering Sea. 24 pound cases 5/2 3/

TABLE 13. -- JAPANESE EASTERN BERING SEA CRAB FISHERIES STATISTICS, 1964-73.

	Totor	Dickou	Po+/No+	dead paid	(Jacos of 1)	King Chah	Tannon Crah	
Year	Ships	Boats	Boats	Catch (Number)	King Crab (Number)	Per Case (Number)	Processed (Number)	
1964	2	17	12	5,895,380	235,000	25.1	220,000	+ .
1965	2	17	10	4,215,860	185,000	22.8	1,030,000	
9961	2	19	10	4,206,260	185,000	22.7	1,490,000	
1961	2	19	10	3,764,200	163,000	23.1	8,600,000	
1968	2	17	16	3,853,300	163,000	23.6	11,980,000	
1969	2	10	30	2,072,920	85,000	24.4	17,600,000	
1970	2	22	40	2,080,390	85,000	24.5	18,190,000	
1971	2	4	36	885,620	$37,500^{2/}$	23.6	15,738,800	
1972	2	4	36	874,210	3/		15,593,090	
1973	2	1	$30^{4/}$	228,450	3/	1	13,942,990	

24 pound cases 8,908 cases were canned; the equivalent of 28,592 cases was processed by freezing. Primary processing of ing crab was by freezing. Fishery limted to pot gear only under terms of U.S.-Japan bilateral agreement of December 20, 1972. 4131517

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TABLE 14. -- U.S.S.R. NORTH PACIFIC WHALE PRODUCTION, 1959-73 (IN NUMBER OF WHALES).

_	Factory	Catcher Boats	Blue	Fin	Humpback	Sei	Sperm	Others	Total
			12						
	4	107	390	1,837	3,900	1,025	12,736	-	19,886
	4	46	77	2,500	242	595	5,432	13/	8,847
	4	49	72	1,492	243	969	8,196	1	10,698
	4	42	1	1,318		1,510	9,439	-	12,267
	4	35	1	1,188	1	1,997	9,430	1	12,615
	က	32	1	1,062	1	1,100	9,526	-	11,688
	က	35	1	593	1	1,091	8,198	1	9,882
	2	35		412	1	781	8,567	66 <mark>4</mark> /	9,826
	2	28	1	190	1	596	5,512	6374/	6,635
	2	30	1	250	1	71	1,736	76.57	2,133
	2	34	1	160	1	88	3,828	6184/	4,694
TOTAL FROM 1959	959		539	11,002	4,385	9,247	82,600	1,391	109,170

Includes seven catchers which operated from Kuril Islands. Includes two catchers which operated from Kuril Islands. The The

Right whale taken for scientific purposes.

Brydes whale. 71 Brydes

Norwegian Whaling Gazette, No. 7, July 1965, Sandefjord, Norway. Norwegian Whaling Gazette, No. 6, June 1966, Sandefjord, Norway. Norwegian Whaling Gazette, No. 3, May/June 1967, Sandefjord, Norway. The

TABLE 15. -- JAPANESE NORTH PACIFIC WHALE PRODUCTION, 1959-73 (IN NUMBER OF WHALES).

Total	18,959	5,043	5,353	6,464	7,318	7,549	7,177	6,462	4,874	4,039	3,770	77,008
Others	91/	1		-			112/	10^{2} /	$111\frac{3}{2}$	54/	24/	1482/
Sperm	10,649	2,461	2,460	3,000	3,000	3,000	3,000	2,700	1,802	1,567	1,802	35,441
Sei	1,444	1,533	1,398	2,208	3,474	3,820	3,590	3,234	2,419	2,041	1,710	26,871
Humpback	36	-	40		-	-	-	1	1	1	-	92
Fin	905*9	1,007	1,406	1,256	844	729	576	518	542	426	256	14,066
Blue	315	42	49			;	-			1	-	406
Catcher Boats	88	21	25	28	33	30	30	56	52	27	22	
Factory Ships	m	m	m	c	m	က	က	m	ĸ	m	8	TOTAL FROM 1959
Year	1959- 1963	1964	1965	9961	1961	1968	1969	1970	1971	1972	1973	TOTAL F

Includes seven catchers which operated from Kuril Islands. Includes two catchers which operated from Kuril Islands.

^{3/} Right whale taken for scientific purposes. 4/ Brydes whale.

^{5/ 71} Brydes

The Norwegian Whaling Gazette, No. 7, July 1965, Sandefjord, Norway. The Norwegian Whaling Gazette, No. 6, June 1966, Sandefjord, Norway. The Norwegian Whaling Gazette, No. 3, May/June 1967, Sandefjord, Norway.

LIST OF

SOVIET FISHING AND SUPPORT VESSELS

OPERATING OFF ALASKA IN 1973

	NUMBI	ER HU	LL NO.
ACTORY SHIPS			
ish Factory Ships			
Lamut Class - GRT-4,982, Length-362', B	eam-53'		
Lamut		TP	0960
Professor Baranov Class - GRT-13,571-14	,340, Length-538', Bear	m-70'	
Arktika			0020
Marshal Meretskov			0016
Novaya Kakhovka			0013
Novaya Ladov			0013
Novaya Ladoga			0015
Severnyy Polyus		IP.	8000
Sovetskoye Primurye		CD	0074
Sovetskoye Zapolyarye			0014
Tomsk			0005
Yulian Markhlevskii		38	0013
Spassk Class - GRT-18,000, Length-572',	Beam-79'		
Severodonetsk		PP	0870
Spassk			
Sulak		PP	3868
Severodvinsk Class - GRT-10,036, Length	-510', Beam-66'		
Arman		PP	8801
Sovetskaya Kamchatka		3.314.5.19	

	NUMBER	HULL NO.
BASE SHIPS		
Pyatidesyatiletiye Sovetskaya Arktika		
PROCESSING REFRIGERATED SHIPS		
Aktyubinsk Class - GRT-5,217, Length-424', Beam-55'		
Ivan Stepanov Titaniya Yaroslavl Zelenogradsk		PT 3467 S 0388
Baltiysk Class - GRT-3,553, Length-376', Beam-46'		
Sapmeya Nerys		
Bratsk Class - GRT-2,288, Length-270', Beam-43'		
Evoron Kizi No. 27	PR 8005 PR 8004	PR 3004
Converted Medium Trawlers - GRT-265, Length-125', Beam-	-24'	
Paratunka		TT 0917
Khabarov Class - GRT-650, Length-152', Beam-27'	ingered ()	
Araks Barnaul Elizovo		S 0906
Grodekoyo Kurilsk		TT 0910
Pervomaysk Class - GRT-3,321, Length-311', Beam-47'		
Pervomaysk No. 20 Primorsk No. 19		PR 3765 PR 3766
Priboy Class - GRT-9,660, Length-497', Beam-67'		
Altaiskie Gory Kamchatskie Gory Ostrov Lisyanskogo Ostrov Schmidta Ostrov Shokalskogo Ostrov Ushakova		PT 3088 PT 3085 PT 3114 PT 3112 PT 3109
Sakhalinskie Gory Sayanskie Gory		SB 0870

PROCESSING REFRIGERATED SHIPS (cont'd)	NUMBER	HULL NO.
Sevastopol Class - GRT-5,527, Length-387', Beam-55'		
Churkin Egersheld Volchansk		PR 3534 PR 3583
Sibir Class - GRT-6,133, Length-429', Beam-55'		
Ivan Kramskoy K <mark>hudozhnik Vrubel</mark> Marshal Malinovskiy Vasily Perov		PT 3009 PT 3025 PT 3036 PT 3011
<u>Tavriya Class</u> - GRT-3,230-3,556, Length-326', Beam-46		
Namangan		PR 3060
Yana Class - GRT-3,782, Length-365', Beam-48'		
Indigirka Kuloy	-	PT 3509 PT 3515
Miscellaneous Class		
Dekastri Icha Karskoye More Okhotskoye More Olyutorka Orekhovo Zuevo		PT 3664 PT 3124
Solomeya Neris		SKH 0184
CARGO SHIPS		
Donbass Class - GRT-3,858, Length-355', Beam-48'		
Daugava Kadiyevka Primorsk		PKH 0004
Miscellaneous Class		
Kamchatka Kansk Olensk Omsk Orochen		
Pluton Svoboda Ukraina	PP 0930	TT 0215

PASSENGER SHIPS

Mikhalail Uritskiy Class - GRT-4,720-4,871, Length-401', Beam-53'

Grigoriy Ordzhonikidze Turkmeniya

Miscellaneous Class

Nikolaevsk Priamurye

FUEL AND WATER CARRIERS

Pevek Class - GRT-3,330, Length-345', Beam-48'

Anapka
Erebus TM 0137
Evensk PI 0128

Miscellaneous Class

Egoryevsk Komsomolets Ukrain

TANKERS

Amgum
Frunze
Narymneft
Noginsk
Petr Shirshov
Tyuman Neft

PN 0159

TM 0434

TUGS

Barguzin
Bditelnyy
Besstrashniy
Bulat
Dekabrist
Dozornyy
Oberton
Reshitelnyy

Yugansk

PCH 0265 SCH 0021

PCH 0263

WHALE KILLERS	NUMBER	HULL NO.
Mirnyy Class - GRT-847, Length-209', Beam-3	11'	
Entuziast Ivan Nosenko Zvezdnyy	V 0031 V 0042 V 0036	
STERN TRAWLERS		
BMRT Mayakovskiy Class - GRT-3,170, Length-	278', Beam-46'	
Adimi	BMRT 0486	PB 0986
Aleksandr Kraev	BMRT 0439	PB 0939
Aleksandr Maksutov	BMRT 0475	TB 0975
Aleksei Makhalin	BMRT 0456	TB 0956
Amgu	BMRT	10 0330
Arkovo	BMRT 0362	SB 0861
Askold	BMRT 0367	PB 0867
Barabash	BMRT 0347	SB 0847
Basargin	BMRT 0347	
Belkino	BMRT	PB 0843
Boris Gorinskii		TD 0000
Danko	BMRT 0450	TB 0950
Diomid	BMRT 0461	PB 0961
Ekvator	BMRT 0372	SB 0872
Fyodor Kraynev	BMRT 0482	PB 4982
	BMRT 0449	SB 0949
Galifan Batarshin	BMRT 0454	PB 0954
Ikhtiolog	BMRT 0279	TB 1279
Illarion Ryabikov	BMRT 0470	TB 0970
Itelmen	BMRT 0399	TB 0899
Ivan Chernopyatko	BMRT 0445	PB 0945
Ivan Panov	BMRT 0423	SB 0923
Ivan Sereda	BMRT 0479	TB 0979
Kalar	BMRT	TB 0268
Kalitva		TB 0269
Kamchatskaya Pravda	BMRT 0485	TB 0985
Kamyshin	BMRT 0285	TB 0285
Kanguaz	BMRT 0359	PB 0858
Karagat	BMRT	
Kargopo1	BMRT	0301
Katangli	BMRT 0491	SB 0991
Kazakhstan	BMRT 0387	PB 0887
Kazalinsk	BMRT 0290	TB 0290
Kazalina	BMRT	TB 0920
Kazatin	BMRT 0291	TB 0291
Khayryuzovo	BMRT 0266	TB 0266
Khingan	BMRT 0354	TB 0853
Klyuchevskoy	BMRT	
Kolyvan	BMRT 0288	TB 0288

RN TRAWLERS (cont'd)	NUMBER	HULL NO.
MRT Mayakovskiy Class (cont'd)		
Kommunist	BMRT 0476	PB 0976
Kommunist Ukrainy	BMRT 0492	PB 1992
Krechet	BMRT 0303	TB 0303
Kuba	BMRT 0385	TB 0885
Leninets	BMRT 0494	TB 1994
Lotos	BMRT 0496	PB 0996
Luchegorsk	BMRT 0254	TB 0254
Malki	BMRT 0265	TB 0265
Mark Reshetnikov	BMRT 0455	PB 0955
Matematik	BMRT 0260	TB 0260
Medik	BMRT 0261	KHB 0261
Meteorid	BMRT 0272	PB 0152
Mys Yelagina	BMRT	TB 0336
Meteorolog	BMRT 0262	KHB 0262
Mys Lazareva	BMRT	SB 0338
Mgachi	BMRT 0370	SB 0870
Mys Bobrova	BMRT	KHB 0331
Mys Ermak	BMRT	KHB 0272
Nadezhdinsk	BMRT 0495	PB 0995
Mys Senyavina	BMRT	10 0555
Vikolai Ostrovski	BMRT 0371	TB 0871
Nikolay Uzbekistan	BMRT 0880	10 00/1
Novaya Era	BMRT 0466	SB 0966
Opala	BMRT 0339	TB 0866
Ozyornii Kluchi	BMRT 0278	PB 0278
Pakhacha	BMRT 0481	
Pasionariya	BMRT 0460	TB 0981
Paudzha		SB 0960
Pechenga	BMRT 0302	TB 0302
Petr Ilichev	BMRT 0363	PB 0863
Petr Ovchinikov	BMRT 0467	TB 1967
Priamure	BMRT 0448	TB 0948
	BMRT 0951	DD 0007
Pogranichnik Strelnikov	BMRT	PB 0287
Polevod	BMRT	PV 0212
Posyet	BMRT 0356	PB 0854
Priozersk	BMRT	TB 0952
Revolyutsioner	BMRT 0468	PB 0968
Sakhalin	BMRT 0383	SB 0883
Samara	BMRT 0289	SB 0289
Samarga	BMRT 0357	PB 0856
Seroglazka	BMRT 0435	TB 1935
Shturman Elagin	BMRT 0469	TB 0969
Sibiryak	BMRT 0458	PB 0958
Sidimi	BMRT 0348	PB 0848
Sovetskaya Gavan	BMRT 0484	PB 0984
Sovietskiye Profsoyuz	BMRT 0281	TB 0281

TERN TRAWLERS (cont'd)	NUMBER	HULL NO.
BMRT Mayakovskiy Class (cont'd)		
Soyuz 5 *Pyat*	BMRT 0284	SB 0284
Suifun	BMRT 0358	PB 0857
Svetlaya	BMRT 0480	SB 0980
Tadzhikistan	BMRT 0391	PB 0891
Taishet	BMRT 0421	PB 0921
Taman	BMRT 0397	SB 0897
Tekhnolog	BMRT 0280	TB 1280
Terney	BMRT 0487	PB 0987
Tikhvin	BMRT 0428	PB 0928
Tiraspol	BMRT	TB 0271
Tretyakovo	BMRT 0426	PB 0926
Truskovets	BMRT	TD 0040
Trudovye Rezervy	BMRT 0440	TB 0940
Tymlat	BMRT	0000
Tymovsk	BMRT 0498	SB 0998
Uzbekistan	BMRT 0380	TB 0880 SB 0942
Valentin Kotelnikov	BMRT 0442	SB 0946
Vasiliy Vinevitin	BMRT 0446	TB 0937
Voskhod	BMRT 0437	PB 0964
Yubilei Oktyabrya	BMRT 0464	
Yunost	BMRT 0462	TB 0962 TB 0999
Zarubino	BMRT 0499	TB 0943
15 Sezd Vlksm	BMRT 0443	PB 0997
50 Let V1ksm	BMRT 0497	PD 0997
RTM Atlantik Class - GRT-2,657, Length-270	, Beam-45'	
Akustik	RTM 7108	P 7108
Aleksandrovsk	RTM	PV 0187
Amga	RTM 7170	
Arbatov	RTM	
Druzhva	RTM	
Kamenskoye	RTM	PV 4197
Meteorit	RTM 7152	PV 0152
Pravovyed	RTM	
Publitsist	RTM	PV 0219
Poet	RTM	
Poleyod	RTM	
Pravadio	RTM	PV 0214
Safuin	RTM	
Yuzhnogorsk	RTM	PB 0159

IDE TRAWLERS (cont'd)	NUMBER	HULL NO.
SRTM Mayak Class (cont'd)		
Dubrava *Poisk*	SRTM 8486	
Dzhigit	SRTM	PI 1048
Evekun	SRTM 1315	TI 0142
Garpuner	SRTM 1307	SI 0106
Gayvoron	SRTM	TI 1625
Geograf	SRTM	TI 0141
Gornovoy	SRTM	PI 0005
Gorodok	SRTM	TI 0226
Graver	SRTM	
Gravyor	SRTM	SI 0108
Iskra	SRTM 8462	PI 2080
Kashira	SRTM	PI 1056
Kedrovka	SRTM 0004	
Karat	SRTM 8437	SI 0128
Khabarovsk	SRTM	PI 0048
Kislovobsk	SRTM	TI 0219
Kitoboy	SRTM	SI 0101
Krylaty	SRTM 1304	PI 0013
Leninskoye	SRTM	SI 0136
Lunniy	SRTM 8469	PI 1049
Markovo	SRTM	SI 0137
Mars	SRTM 8601	SI 0111
Mashinist	SRTM 1318	SI 0112
Matros	SRTM 1287	PI 0015
Mekhanik	SRTM	TI 0152
Molniya	SRTM 8465	PI 2083
Motorist	SRTM 1289	
Nevelskii Komsomolets	SRTM	SI 0164
01ga	SRTM	PI 0019
Opolot Mira	SRTM 1306	SI 0114
Ore1	SRTM	TI 0138
Ossorka	SRTM	PI 2095
Ovruch	SRTM	TI 0628
Pauzhetka	SRTM 8487	TI 0149
Perm	SRTM	TI 0221
Plankton	SRTM 0825	PI 2094
Pivan	SRTM	TSI 1722
Pogranichnik Abbasov	SRTM 8418	PI 2062
Pogranichnik Buinevich	SRTM 8401	PI 2052
Pogranichnik Denisenko	SRTM 8413	PI 2059
Pogranichnik Dushnikov	SRTM 8405	PI 2055
Pogranichnik Ermolyuk	SRTM 8410	TI 0135
Pogranichnik Gayunov	SRTM 8406	PI 2056
Pogranichnik Gladyshev	SRTM 8407	PI 2057
Pogranichnik Korzhukov	SRTM 8409	PI 2091

E TRAWLERS (cont'd)	NUMBER	HULL NO
RTM Mayak Class (cont'd)		
Pogranichnik Kovalev	SRTM 8416	PI 2061
Pogranichnik Mankovskii	SRTM 8403	PI 2053
Pogranichnik Petrov	SRTM 8402	TI 0402
Pogranichnik Vetrich	SRTM 8412	SI 0116
Pogranichnik Yurin	SRTM	PI 2058
Pogranichnik Zmeev	SRTM 8411	TI 0136
Pogranichnik Zainut Dinov	SRTM 8417	
Preobrazhenie	SRTM	SI 0142
Radek	SRTM	
Radekhov	SRTM	
Rakheta	SRTM 8447	
Radzin	SRTM	TI 1232
Ravenstvo	SRTM 1279	PI 0023
Raychikhinsk	SRTM	PI 0208
Razdan	SRTM	PI 1232
Sargassa	SRTM	PI 2336
Schastye	SRTM 1277	TI 1051
Shiveluch	SRTM 1291	TI 1157
Shubertovo	SRTM 0002	TI 0158
Sikhoteh-Alin	SRTM	
Skovorodino	SRTM	TSI 1638
Sofiysk	SRTM	TI 0139
Solnechniy	SRTM 8472	SI 0121
Sretensk	SRTM	PI 0029
Stroitelnii	SRTM 8429	PI 2070
Suchan	SRTM	
Sudovoditel	SRTM 1316	TI 0140
Svetozar	SRTM 1269	SI 0120
Svoboda	SRTM	PI 0026
Svobodnyy	SRTM	PI 1050
Tetyukhe	SRTM	PI 0030
Tikhirka	SRTM	SI 0123
Trud	SRTM 1274	PI 0032
Tunets	SRTM 8602	SI 0122
Tungus	SRTM	PI 4097
Turgen	SRTM	TI 0150
Uala	SRTM 1292	TI 1156
Uelen	SRTM	PI 0050
Ulibka	SRTM 8488	SI 0125
Vankarem	SRTM	SI 0139
Vasyugan	SRTM	SI 0102
Verabelik	SRTM	SI 0103
Verkholaz	SRTM	TI 1154
Verkhoyansk	SRTM	PI 1053
Voditel	SRTM	11 1055

DE TRAWLERS (cont'd)	NUMBER	HULL N
SRTM Mayak Class (cont'd)		
Vadalas	CDTM	TT 110
Vodolaz Volodya Dubinin	SRTM	TI 115
Volodya Dubinin Vysotnik	SRTM 8406	SI 010
Yakutsk	SRTM SRTM	PI 000
Yaroslavskiy Komsomolets	SRTM 8489	PI 005 PI 209
Zarevo	SRTM 8466	TI 014
Zvezda Rybaka	SRTM 1286	11 014
270244 190414	SRTM 8419	PI 206
	SRTM 8415	PI 206
	SRTM 8438	TI 014
	SRTM 8457	PI 207
	SRTM 8480	SI 013
	SRTM 8430	PI 207
	SRTM 8431	PI 207
	SRTM 8420	PI 206
	SRTM 8481	PI 208
	SRTM 8426	PI 206
	SRTM 8423	PI 206
	SRTM 8428	PI 206
	SRTM 8408	PI 010
	SRTM 8484	PI 208
	SRTM 8439 SRTM 8433	PI 003 PI 207
	SRTM 8433 SRTM 8440	SI 012
	SRTM 8440	PI 206
	SRTM 8483	SI 013
	SRTM 8448	PI 003
	SRTM	SI 034
	SRTM	SI 021
SRTR Okean Class - GRT-505, Length-167'	, Beam 29'	
Almak	SRTR 9165	P 030
Andromeda	SRTR 9162	SI 033
Kanopus	SRTR 9163	PI 030
Komandor	SRTR 9043	
Ochakov	SRTR 9021	SI 034
01guya	SRTR 9089	CT 004
Onor	SRTR 9088	SI 034
SRT Medium Trawlers - GRT-265-335, Leng	th-125', Beam-24'	
Agat	SRT 1048	PI 045
Andriyan Nikolaev	SRT	TI 039
Aniva	SRT 1041	
Blagoveshchensk	SRT 0656	P 065
	SRT 4456	TI 057
Kambalnyy		
Kansk	SRT	TI 041
Kansk Kayum	SRT 4460	TI 040
Kansk		

SIDE TRAWLERS (cont'd)	NUMBER	HULL NO.
SRT Medium Trawlers (cont'd)		
Kombayner Koros ten Kos troma Krater Krilon Krutoy Kuzachin Leshch Navaga	SRT SRT 4177 SRT 0124 SRT SRT SRT 4393 SRT 0208 SRT SRT 1070	TI 0412 TI 0395 TI 0403 TI 0413 TI 0572 TI 0405 TI 0409
Nikolai Vilkov Nyuton Piksha	SRT 0122 SRT 4549	T 0122
Rynda Tagil Tugan	SRT SRT 4404 SRT 0026 SRT 1051	8101 P 4404
Ufa Valeriy Bykovskiy Verkhoyansk Yubileinyi	SRT 1153 SRT 4395 SRT 4290 SRT	SI 0380 TI 0574 TI 0151
RESEARCH SHIPS		
Akademik Berg *Tinro* Avtogenshchik *Tinro* Gornostay *Tinro* Muzhestvo *Tinro* Olenyok *Tinro* Oriana *Tinro*	BMRT 0377 SRTM SRTM SRTM SRTM SRTM SRTM SRTM SRTM	PB 4877 PI 0058 SI 0107 TI 0018 PI 2096 PI 4044
Partizansk Pelamida *Tinro* Seskar *Tinro* Volnomer	RT 0217 RT 0219 RTM	PG 4258 PG 4260
PATROL SHIPS		
Druzhni Flotinspektsiya l Flotinspektsiya 5	SRTM SRTM	PK 2048 PI 4002
TYPE UNKNOWN		

Marshal Rokossovskiy

LIST OF

JAPANESE FISHING AND SUPPORT VESSELS

OPERATING OFF ALASKA IN 1973

	REGISTRY NUMBER	REMARKS
FACTORY SHIPS		
Fish Chiyo Maru Gyokuei Maru Hoyo Maru Jinyo Maru Kashima Maru Kizan Maru Kyokusei Maru Meisei Maru Meiyo Maru Mineshima Maru Miyajima Maru Nisshin Maru No. 2 Nojima Maru Ohtsu Maru Shikishima Maru Soyo Maru Yoho Maru	TK1-232 TK1-333 TK1-331 TK1-293 TK1-182 TK1-432 TK1-802 TK1-370 TK1-381 TK1-716 TK1-137 TK1-208 TK1-302 TK1-302 TK1-302 TK1-334 TK1-648 TK1-518 TK1-518	Salmon Groundfish Groundfish Salmon Groundfish Salmon Salmon Salmon Groundfish Salmon Groundfish Salmon Groundfish Salmon Groundfish Salmon Groundfish Salmon Groundfish Salmon
Crab Keiko Maru Koyo Maru	HK1-157 TK1-163	
Whale Kyokuyo Maru No. 3 Nisshin Maru No. 3 Tonan Maru No. 2	TK1-841 TK1-406 TK1-197	
TRAWLERS		
Akashi Maru No. 16 Akashi Maru No. 17 Akashi Maru No. 51 Akashi Maru No. 52 Akashi Maru No. 63 Akashi Maru No. 65 Akashi Maru No. 66 Akashi Maru No. 67 Akashi Maru No. 68	YG1-232 YG1-233 YG1-241 YG1-242 YG1-266 YG1-267 YG1-273 YG1-275 YG1-280	

	REGISTRY NUMBER	REMARKS
TRAWLERS (cont'd)		
Akashi Maru No. 69 Akashi Maru No. 71 Akashi Maru No. 72 Akashi Maru No. 73 Akashi Maru No. 75 Akashi Maru No. 76	YG1-281 YG1-289 YG1-290 YG1-299 YG1-300 YG1-301	
Akashi Maru No. 77 Akatuki Maru Aoba Maru Chitose Maru	YG1-305 HK2-10814 NS1-492 HK2-11757	
Choei Maru No. 38 Daiei Maru No. 12 Daihiko Maru No. 18	AM1-172 HK2-11637 HK2-11883	
Ebisu Maru No. 11 Ebisu Maru No. 21 Ebitsu Maru No. 45	HK1-560 HK1-383	
Eifuku Maru No. 21 Eiyo Maru Eiyo Maru Fukuyo Maru Hakurei Maru	FS2-2169 F01-283 NS1-310 F01-279 NS1-534	
Heikyu Maru No. 25 Hiyo Maru	HK1-453 NS1-232	
Hokkai Maru Hokko Maru No. 12 Hokuetu Maru No. 21	NS1-435 HK1-265 HK1-270	
Hokushin Maru Hokuto Maru Jinei Maru Junyo Maru	NS1-537 NS1-538 HK2-11366 F01-257	
Kaiho Maru No. 8 Kaiko Maru No. 8 Kaiun Maru No. 25	HK2-11756 AM1-163 HK2-11794	
Kaiun Maru No. 52 Kakuyo Maru No. 1 Kakuyo Maru No. 2	HK1-389 NS1-431 NS1-432	
Kakuyo Maru No. 3 Kakuyo Maru No. 5 Kakuyo Maru No. 7 Kakuyo Maru No. 8	NS1-437 NS1-438 NS1-543 NS1-544	
Katori Maru Katsura Maru No. 21 Katuki Maru	NS1-485 HK2-11967 NS1-486	
Kofuku Maru No. 38 Koyo Maru Koyo Maru Kureha Maru	HK2-11758 F01-278 NS1-296 F01-294	

TRAWLERS (cont'd)

Kyuho Maru No. 5 Meigen Maru No. 31 Meigen Maru No. 32 Meigen Maru No. 36 Meigen Maru No. 37 Meiho Maru Mitsu Maru No. 35 Mitsu Maru No. 50 Myoei Maru No. 8 Myoken Maru No. 1 Nisho Maru Nitto Maru No. 23 Nitto Maru No. 31 Nitto Maru No. 32 Nitto Maru No. 35 Nitto Maru No. 35 Nitto Maru No. 36 Otoha Maru Rakuyo Maru Rakuyo Maru Rakuyo Maru Rakuyo Maru Rone Maru No. 8 Shinpo Maru No. 8 Shinpo Maru No. 15 Shoken Maru Shosei Maru No. 15 Shoken Maru Shosei Maru No. 15 Shunyo Maru Shoyo Maru Soho Maru No. 18 Tokuyo Maru No. 11 Tenyu Maru No. 11 Tenyu Maru No. 18 Tokuyo Maru Toyoshima Maru Toyoshima Maru Wakaba Maru Washima Maru Washima Maru Washima Maru Washima Maru	HK2-11961 YG1-237 YG1-238 YG1-320 YG1-321 HK2-11970 AM1-121 AM1-158 HK2-11976 HK2-11960 HK2-11517 HK1-227 HK2-11666 YG1-276 YG1-277 YG1-278 YG1-279 F01-293 NS1-309 F01-261 NS1-297 HK2-11470 HK2-11750 FS2-2335 HK2-11683 HK2-10715 HK1-254 F01-260 F01-284 AM1-150 HK2-11731 HK1-454 FS2-2185 HK2-11681 F01-297 NS1-420 NS1-493 F01-296 F01-256 NS1-419
Wakaba Maru Washima Maru	NS1-493 F01-296
Wayo Maru Yashima Maru Yoshi Maru No. 35	F01-256 NS1-419 FS2-2186
Yuyo Maru Zenpo Maru No. 25	NS1-233 FS2-2246 NS1-412
	NS1-413

	REGISTRY NUMBER	REMARKS
STERN TRAWLERS		
Akebono Maru No. 11 Akebono Maru No. 12 Akebono Maru No. 15 Akebono Maru No. 16 Akebono Maru No. 17 Akebono Maru No. 18 Akebono Maru No. 21 Akebono Maru No. 22 Akebono Maru No. 50 Akebono Maru No. 52 Akebono Maru No. 52 Akebono Maru No. 72 Aso Maru Chikubu Maru No. 118 Daiei Maru No. 118 Daiei Maru No. 12 Daishin Maru No. 12 Daishin Maru No. 22 Daishin Maru No. 23 Eikyu Maru No. 2 Eikyu Maru No. 11 Eikyu Maru No. 11 Eikyu Maru No. 11 Fukuho Maru No. 3 Fukuho Maru No. 3 Fukuho Maru No. 8 Fukushin Maru No. 2 Haruna Maru Hatto Maru No. 82	HK1-196 YG1-297 YG1-298 TK1-635 HK1-206 HK1-207 TK1-644 TK1-688 TK1-368 TK1-429 TK1-496 F01-81 TK1-796 TK1-890 HK1-257 IK1-53 TK1-466 TK1-513 HK1-513 HK1-495 HK1-476 F01-167 IG1-238 FS1-137 FS1-200 FS1-144 F01-220 HK1-177	herring gillnet herring gillnet
Heian Maru No. 8 Hoken Maru No. 18 Hokko Maru No. 31 Hokko Maru No. 37 Hokuto Maru No. 3 Ishikari Maru	KT1-10 HK1-202 HK1-156 HK1-308 HK1-241 F01-151	
Juru Maru No. 2 Kahoku Maru No. 12 Kaiko Maru No. 2 Kaiko Maru No. 3 Kaiko Maru No. 5 Kaiun Maru No. 38 Kakudai Maru No. 25 Kashima Maru No. 15 Kitakami Maru	HK1-212 HK1-481 HK1-165 HK1-223 HK1-493 FS1-226 AT1-15 MG1-526 F01-132	herring gillnet
Koei Maru No. 25 Koei Maru No. 51 Kohoku Maru No. 11	MG1-558 MG1-440 HK1-443	

	REGISTRY NUMBER	REMARKS
STERN TRAWLERS (cont'd)		
Kohoku Maru No. 15 Kongo Maru Koshin Maru No. 11 Kotobuki Maru No. 25	HK1-492 F01-221 MG1-668 MG1-741	
Kotoshiro Maru Koyo Maru No. 2 Koyo Maru No. 3 Koyo Maru No. 21 Kyosho Maru No. 31 Kyowa Maru No. 5	HK1-495 TK1-629 TK1-829 TK1-640 MG1-627 FS1-141	herring gillnet
Kyowa Maru No. 11 Mangyo Maru No. 31 Mitsu Maru No. 30 Mutsu Maru No. 52 Narita Maru No. 3 Niitaka Maru	FS1-206 HK1-571 AM1-191 HK1-184 AM1-105 F01-168	
Nitto Maru No. 5 Nitto Maru No. 71 Ohtori Maru Orient Maru No. 2 Rikuzen Maru Ryuho Maru No. 15	HK1-277 HK1-173 TK1-759 MG1-463 TK1-755 MG1-495	
Ryuho Maru No. 32 Ryuyo Maru Ryuyo Maru No. 2 Seiju Maru No. 58 Shinnichi Maru No. 31 Shinsei Maru No. 2	MG1-420 TK1-546 TK1-837 AM1-108 TK1-673 YG1-231	
Shoshin Maru No. 21 Shunyo Maru No. 18 Tahata Maru No. 31	AM1-217 HK1-258	herring gillnet
Taisei Maru No. 51 Taisei Maru No. 56 Takachiho Maru Teisho Maru No. 18 Tenyo Maru Tenyo Maru No. 2	HK1-181 HK1-266 F01-90 FS1-228 YG1-370 YG1-376	
Tenyo Maru No. 3 Tenyo Maru No. 5 Tidori Maru No. 61 Tomi Maru No. 63 Tomi Maru No. 81 Tomi Maru No. 85 Tora Maru No. 18 Tsuda Maru Yahata Maru No. 21	YG1-377 YG1-390 MG1-566 AM1-151 HK1-350 HK1-485 HK1-213 TK1-852 AM1-100	herring gillnet herring gillnet

	REGISTRY NUMBER	REMARKS
STERN TRAWLERS (cont'd)		
Yamasan Maru No. 71 Yamasan Maru No. 81 Yamasan Maru No. 85 Yamato Maru Yashima Maru No. 3 Yashio Maru No. 11 Yoshi Maru No. 15 Zenpo Maru No. 21 Zuiho Maru No. 8 Zuiyo Maru Zuiyo Maru Zuiyo Maru No. 2 Zuiyo Maru No. 3	HK1-486 HK1-488 F01-280 EH1-306 AM1-141 MG1-571 HK1-179 TK1-609 TK1-503 TK1-568 TK1-685 FS1-143 HK1-176 HK1-272	
FLEET CRAB POT FISHING VESSELS		
Anyo Maru Azuma Maru No. 8 Fukuyo Maru No. 8 Fukuyo Maru No. 18 Heiyo Maru Hokuetsu Maru No. 18 Hokuyo Maru No. 38 Hokuyo Maru No. 36 Houn Maru No. 38 Houn Maru No. 58 Keiyo Maru No. 2 Keiyo Maru No. 7 Keiyo Maru No. 18	NS1-450 KN1-294 HK2-11974 HK1-228 NS1-451 HK2-11679 HK2-11718 HK2-10700 HK2-10680 HK2-1927 HK2-9446 HK2-911077 HK2-9215	

Kikaku Maru No. 12 FS2-1944 Kinko Maru No. 3 TY2-978 Kosin Maru No. 8 FS2-2134 Kosho Maru MG2-2003 Koyo Maru No. 31 HK2-13753 Kyokko Maru No. 21 AM2-3002 Mutsu Maru No. 11 CB2-2985 Myoho Maru No. 81 HK1-405 Myojin Maru No. 5 MG2-2562 Nitto Maru No. 71 HK1-173 Shinei Maru No. 28 HK2-11202 Suwa Maru No. 31 HK1-390

Taiyo Maru No. 32

Toki Maru No. 38

Tenryu Maru

TK1-641

HK2-13751

F01-1

FLEET CRAB POT FISHING VESSELS (cont'd)

Tokuyo Maru No. 23	FS2-1483
Zenei Maru No. 38	HK2-11946

INDEPENDENT CRAB VESSELS

Azuma Maru	KN1-315
Azuma Maru No. 15	KN1-406
Azuma Maru No. 26	KN1-347
Daitoku Maru No. 3	TK1-864
Hokusyo Maru No. 26	HK1-137
Kibi Maru No. 2	KN1-312
Mito Maru No. 38	HK1-153
Mito Maru No. 53	HK1-151
Tenyo Maru No. 21	HK1-347

SNAIL POT VESSELS

Ryokichi Mar	u No.	18	IT1-102
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LONGLINERS

Anyo Maru No. 21	TK1-891		
Choyo Maru No. 81	HK1-503		
Ebisu Maru No. 88	HK1-308	herring	gillnet
Eikyu Maru No. 82	HK1-311		
Fukuyoshi Maru No. 75	HK1-254		
Fukuyoshi Maru No. 85	HK1-343		
Hatsue Maru No. 38	HK1-313	herring	gillnet
Hatsue Maru No. 55	HK1-456		
Kiyo Maru No. 51	HK1-274		
Matsuei Maru No. 72	HK1-278		
Mito Maru No. 82	HK1-298	herring	gillnet
Ryuho Maru No. 17	MG1-547		gillnet
Ryusho Maru No. 5	TK1-656	3	3
Ryusho Maru No. 7	TK1-758		
Shinko Maru No. 3	HK1-318	herring	gillnet
Shintoku Maru No. 25	HK1-461	herring	gillnet
Shoyu Maru No. 5	TK1-713		
Sumiyoshi Maru No. 33	HK1-287		
Taisan Maru No. 1	TK1-825	herring	gillnet
Tenyo Maru No. 25	MG1-502	3	
Tenyu Maru No. 37	MG1-473	herring	gillnet
Tomi Maru No. 88	HK1-465		gillnet
Tune Maru No. 31	HK1-378	3	3

	REGISTRY NUMBER
SALMON GILL-NETTERS	
Chiyo Maru Fleet	TK1-232
Sanyo Maru No. 27 Hokuyu Maru No. 23 Tokoro Maru No. 18 Mutsumi Maru No. 62 Kinjo Maru No. 58 Tomi Maru No. 5 Tenyu Maru No. 15 Sanyo Maru No. 12 Kaiyo Maru No. 30 Ryokai Maru No. 25 Kinei Maru No. 88 Chidori Maru No. 53 Shofuku Maru No. 28 Koei Maru No. 36 Kyosho Maru No. 3 Hakuryu Maru No. 52 Kashima Maru No. 18 Shoichi Maru No. 3 Hachiryu Maru No. 11 Daikichi Maru No. 3 Hachiryu Maru No. 3 Taihei Maru No. 11 Daikichi Maru No. 3 Shinei Maru No. 15 Yuei Maru No. 51 Hakuo Maru No. 23 Kyotoku Maru No. 8 Chokyu Maru No. 8 Chokyu Maru No. 8 Chokyu Maru No. 8 Kyoei Maru No. 18 Yamasen Maru No. 18 Yamasen Maru No. 31 Yamasan Maru No. 32 Kotobuki Maru No. 32 Kotobuki Maru No. 32 Shinsei Maru No. 32	HK2-10794 HK2-13596 HK2-11604 HK2-13678 HK2-13585 HK2-13687 HK2-11807 HK2-11541 HK2-11965 AM2-3768 AM2-3806 IT2-2928 MG2-2810 MG2-2922 MG2-2980 MG2-3127 MG2-3041 MG2-3062 MG2-3012 MG2-3012 MG2-3012 MG2-3016 MG2-3133 MG2-3107 MG2-3095 MG2-2878 YM2-625 FS2-1924 FS2-2206 IG2-1941 IG2-1858 HK2-13735 AM2-3277 IT2-2848 MG2-3133
Jinyo Maru Fleet	TK1-293
Keiyo Maru No. 5 Shunyo Maru No. 36 Kinpo Maru No. 28 Sachi Maru No. 18 Koei Maru No. 2 Kohoku Maru No. 51 Daikichi Maru No. 18 Tokichi Maru No. 11	HK2-13708 HK2-13657 HK2-11880 HK2-13555 HK2-11540 HK2-13653 HK2-11981 HK2-10738

REMARKS

SALMON GILL-NETTERS (cont'd)

Jinyo Maru Fleet (cont'd)

Zenryu Maru No. 35	HK2-11918
Choei Maru No. 11	HK2-13692
Zuiho Maru No. 10	HK2-13501
Heian Maru No. 21	HK2-11731
Hoken Maru No. 28	HK2-13704
Obayashi Maru No. 8	HK2-13548
Hokutaku Maru No. 2	HK2-11210
Habomai Maru No. 5	HK2-11618
Habomai Maru No. 8	HK2-13813
Toyo Maru No. 10	HK2-13502
Toyo Maru No. 15	HK2-13788
Kintomi Maru No. 35	
Koyo Maru No. 35	HK2-13578
Tsuneo Maru No. 36	HK2-11830
Kinsho Maru No. 15	HK2-13577
Mito Maru No. 2 GO	HK2-13797
Tomi Maru No. 35	HK2-13518
Tokai Maru No. 65	HK2-13823
Nichiren Maru	HK2-11256
Niikappu Maru	HK2-13550
Koshin Maru No. 38	HK2-13818
Noboribetsu Maru No. 2	HK2-13740
Ishikari Maru No. 12	HK2-13684
Hojo Maru No. 27	HK2-11455
Komai Maru No. 8	IG2-1763
Eifuku Maru No. 11	MG2-3150

Kizan Maru Fleet

Murazen Maru No. 38	TK2-1201
Choko Maru No. 25	MG2-2943
Chidori Maru No. 57	MG2-2893
Narita Maru No. 1	MG2-3018
Kosho Maru No. 8	MG2-3051
Ebisu Maru No. 58	MG2-3038
Myojin Maru No. 3	MG2-3007
Konpira Maru No. 18	MG2-2941
Myojin Maru No. 21	MG2-3215
Yakushi Maru No. 50	MG2-3258
Daikichi Maru No. 28	MG2-3266
Eikyu Maru No. 28	MG2-2928
Koyo Maru No. 11	MG2-3063
Kotobuki Maru No. 35	MG2-3253
Hosho Maru No. 11	MG2-2808

TK1-432

REGISTRY	
NUMBER	

REMARKS

SALMON GILL-NETTERS (cont'd)

Kizan Maru Fleet (cont'd)

Tenyu Maru No. 18	MG2-3291
Yae Maru No. 8	MG2-3137
Hakko Maru No. 28	MG2-3251
Taikei Maru No. 25	MG2-2690
Seisho Maru No. 27	MG2-2981
Kashima Maru No. 22	MG2-
Koei Maru No. 51	MG2-3153
Meisho Maru No. 31	MG2-3097
Ryuho Maru No. 25	MG2-2906
Sachi Maru No. 21	MG2-
Yakushi Maru No. 11	AM2-3890
Mutsu Maru No. 18	CB2-4060
Fukuyoshi Maru No. 31	MG2-2977
Daikichi Maru No. 27	MG2-324
Tairyu Maru No. 2	MG2-3058
Yae Maru No. 10	MG2-3141
Tairyu Maru No. 8	MG2-3217
Choun Maru No. 11	MG2-3087
Gyoei Maru No. 18	MG2-3105

Kyokusei Maru Fleet

Kumano Maru No. 36	CB2-6138
Kumano Maru No. 18	CB2-3168
Sanno Maru No. 8	FS2-2286
Kaiun Maru No. 38	FS2-2212
Seiki Maru No. 2	FS2-2292
Koyo Maru No. 28	FS2-2096
Eifuku Maru No. 51	FS2-2331
Taiko Maru No. 28	FS2-2213
Chokyu Maru No. 38	FS2-2201
Koun Maru No. 35	FS2-2338
Seisho Maru No. 58	FS2-8
Hosho Maru No. 28	MG2-2900
Ryushin Maru No. 5	MG2-3223
Kashima Maru No. 18	MG2-2933
Taki Maru No. 108	IK2-3033
Takoshima Maru No. 56	IK2-2888

SALMON GILL-NETTERS (cont'd)

Kyokusei Maru Fleet (cont'd)

Takoshima Maru No. 62	IK2-3111
Kyoei Maru No. 18	YM2-715
Ichiura Maru No. 21	HK2-13779
Kumano Maru No. 72	CB2-2980
Shotoku Maru No. 5	HK2-13874
Kogyo Maru No. 128	HK2-13736
Kinjo Maru No. 38	HK2-11007
Kyosei Maru No. 55	HK2-12000
Seitoku Maru No. 63	HK2-11770
Kinsei Maru No. 23	HK2-13601
Choyo Maru No. 37	HK2-11457
Daichu Maru No. 35	HK2-13504
Hojo Maru No. 8	HK2-13512
Tokichi Maru No. 21	HK2-13749
Sachi Maru No. 25	HK2-13700
Koshin Maru No. 28	HK2-13543
Keikyu Maru No. 62	HK2-11988

Meisei Maru Fleet

HK2-13500
HK2-13508
HK2-11696
HK2-13509
HK2-13522
HK2-11860
HK2-11879
HK2-13526
HK2-13819
HK2-13838
HK2-99768
HK2-13824
HK2-13503
HK2-13671
HK2-13593
HK2-11667
HK2-11903
HK2-13666
HK2-11588
IT2-2714
IT2-2669
IT2-2671
IT2-2753

SALMON GILL-NETTERS (cont'd)

Meisei Maru Fleet (cont'd)

Kinsei Maru No. 38	IT2-2760
Kinsei Maru No. 35	IT2-2707
Inari Maru No. 8	IT2-2595
Kinei Maru No. 56	IT2-2724
Tenyu Maru No. 28	IT2-
Konpira Maru No. 35	IT2-2933
Takaya Maru No. 18	IT2-2488
Shinichi Maru No. 32	YM2-673
Konsei Maru No. 21	NG2-1213

Meiyo Maru Fleet

eryo maru rreet	1101 301
Ryuho Maru No. 5 Tomi Maru No. 15 Tomi Maru No. 12 Zenho Maru No. 30 Heikyu Maru No. 21 Tomi Maru No. 83 Hakucho Maru No. 21 Heiun Maru No. 18 Matsu Maru No. 18 Matsu Maru No. 18 Yugyo Maru No. 50 Ume Maru No. 23 Kashima Maru No. 21 Choju Maru No. 15 Sakae Maru No. 3 Eifuku Maru No. 3 Eifuku Maru No. 28 Seiki Maru No. 5 Chokyu Maru No. 10 Giho Maru No. 32 Kakudai Maru No. 31 Junyo Maru No. 31 Junyo Maru No. 31 Junyo Maru No. 21 Taikoku Maru No. 3 Mutsumi Maru No. 3 Kyokko Maru No. 53 Kyokko Maru No. 53 Naka Maru Taito Maru No. 58 Taian Maru No. 78 Aioi Maru No. 18	HK2-13816 HK2-11715 HK2-13586 HK2-11966 HK2-11969 AM2-4198 AM2-3632 IT2-2221 IT2-2868 IT2-2638 MG2-3001 MG2-3088 MG2-3128 MG2-3210 FS2-7 FS2-6 FS2-7 FS2-6 FS2-23 AT2-859 AT2-859 AT2-839 NG2-1305 TT2-1077 HK2-11989 AM2-4280 IT2-2637 IT2-2249 HK2-11428 HK2-11502 MG2-3250

SALMON GILL-NETTERS (cont'd)

Meiyo Maru Fleet (cont'd)

Hanasaki Maru No. 52	HK2-13600
Miyajima Maru Fleet	TK1-137

Jinei Maru No. 11 Nitto Maru No. 7 Katsura Maru No. 11 Kaiun Maru No. 38 Kofuku Maru No. 38 Hokugyo Maru No. 18 Nichiren Maru No. 7 Wako Maru Ryoyo Maru No. 2 Taki Maru No. 18 Kifuku Maru No. 25 Yawata Maru No. 3 Kinsei Maru No. 53 Gyokichi Maru No. 8 Kojin Maru No. 17	HK2-11510 HK2-13843 HK2-11482 HK2-11921 HK2-11878 HK2-13551 HK2-13798 HK2-13703 IT2-1998 IT2-2664 IT2-2938 IT2-2801 MG2-3186 MG2-3222
Tenyu Maru No. 5	MG2-3056
Koyo Maru No. 55	FS2-1875
Fukuyoshi Maru No. 28	FS2-
Kichi Maru No. 32	FS2-2093
Kasuga Maru No. 31	FS2-2141
Matsu Maru No. 35	FS2-2046
Kichi Maru No. 3	FS2-2196
Gyofuku Maru No. 18	FS2-18
Zensei Maru No. 21	IG2-
Seisho Maru No. 28 Akita Maru No. 37 Toyama Maru No. 18 Shunei Maru No. 18 Shincho Maru No. 18 Yuko Maru No. 18 Yusho Maru No. 18 Yusho Maru No. 28 Ooei Maru No. 18	CB2-6188 AT2-818 TY2-886 KA2-968 KA2-1158 KA2-1025 KA2-1128 KA2-957

Nojima Maru Fleet TK1-302

Kaiun Maru No. 21	HK2-11545
Nitto Maru No. 3	HK2-13530
Hokko Maru No. 3	HK2-11802
Shoun Maru No. 20	IT2-2735
Minato Maru No. 5	MG2-2558

SALMON GILL-NETTERS (cont'd)

Nojima Maru Fleet (cont'd)

Kintoku Maru No. 7 Koei Maru No. 11 Shinmei Maru No. 51 Kasuga Maru No. 32 Koyo Maru No. 85 Nikko Maru No. 38 Tatsumi Maru No. 22 Kaiyo Maru No. 28 Koun Maru No. 28 Suwa Maru No. 21 Meiji Maru No. 21 Fukuyoshi Maru No. 38 Zuiho Maru No. 38 Sakae Maru No. 32 Jinei Maru No. 32 Jinei Maru No. 18 Kiya Maru No. 18 Kiya Maru No. 1 Nakayoshi Maru No. 5 Akita Maru No. 51 Kofuku Maru No. 18 Kiyo Maru No. 3 Tateyama Maru No. 18 Toyama Maru No. 20	MG2-3242 MG2-3231 MG2-3156 FS2-2142 FS2-2194 FS2-1925 FS2-2200 FS2-1837 FS2-2092 FS2-2048 FS2-2143 FS2-205 FS2-205 FS2-205 FS2-1931 IG2-1950 IG2-1426 IG2-1986 CB2-6178 AT2-878 YM2-640 NG2-1423 TY2-888 TY2-925
Tateyama Maru No. 18	TY2-888

Otsu Maru Fleet

Choei Maru No. 50	HK2-11445
Choyo Maru No. 51	HK2-11662
Keikyu Maru No. 61	HK2-11888
Wakashio Maru No. 31	HK2-13505
Taisei Maru No. 58	HK2-13675
Mito Maru No. 85	HK2-13659
Seiho Maru No. 12	HK2-1374
Tokuei Maru No. 28	HK2-13769
Benten Maru No. 28	HK2-11068
Shunyo Maru No. 12	HK2-11638
Keiyo Maru No. 8	
Benten Maru No. 31	HK2-11372
Toka Maru No. 2	MG2-3176
Tenyo Maru No. 21	MG2-2938
Tenyu Maru No RO GO	MG2-2882

TK1-334

SALMON GILL-NETTERS (cont'd)

Otsu Maru Fleet (cont'd)

Obayashi Maru No.		MG2-3145
Gyoei Maru No. 51		MG2-3236
Taito Maru No. 12		MG2-3143
Fukunaga Maru No.		MG2-2848
Ryuho Maru No. 35		MG2-3041
Sankichi Maru No.	38	FS2-2210
Seiei Maru No. 28		FS2-2101
Koyo Maru No. 53		FS2-2145
Kaiun Maru No. 25		FS2-2108
Kichi Maru No. 53		FS2-2333
Eiyo Maru No. 35		FS2-2102
Inari Maru No. 23		FS2-2203
Kenei Maru No. 31		FS2-1926
Geinichi Maru No.	8	TY2-1092
Shoei Maru No. 23		HK2-1350
Minato Maru No. 80)	
Koei Maru No. 52		MG2-2328
Kashima Maru No. 2	20	MG2-3047

Shinano Maru Fleet

Kyoshin Maru No. 8 Taiho Maru No. 35	AM2-3900 MG2-3243
Kaiko Maru No. 18	AM2-
Kiku Maru No. 38	AM2-
Seiun Maru No. 18	AM2-3548
Shoshin Maru No. 15	AM2-3540
Yugyo Maru No. 18	
	AM2-3539
Kosei Maru No. 2	FS2-1935
Choei Maru No. 7	FS2-1938
Konpira Maru No. 2	FS2-2105
Monju Maru No. 21	FS2-2215
Asahi Maru No. 10	FS2-1803
Yayoi Maru No. 31	FS2-2010
Teiko Maru No. 28	FS2-1941
Kaiyo Maru No. 38	FS2-1930
Kiku Maru No. 35	FS2-2024
Shoichi Maru No. 18	FS2-1932
Taisei Maru No. 21	FS2-2017
Tokuei Maru No. 31	FS2-2088
Hokushu Maru No. 25	FS2-2020
Hokushu Maru No. 28	FS2-2128
Kitcho Maru No. 31	FS2-2014
Choei Maru No. 28	FS2-1958

	REGISTRY NUMBER	REMARKS
SALMON GILL-NETTERS (cont'd)		
Shinano Maru Fleet (cont'd)		
Taiyo Maru No. 21 Taijo Maru No. 31 Jyokyo Maru No. 18 Mansei Maru No. 21 Koshu Maru No. 18 Daiichi Maru No. 10 GO Obata Maru No. 25 Hosei Maru No. 8 Tohaya Maru No. 35 Katsu Maru No. 3 Eiwa Maru No. 25	FS2-1799 FS2- IG2-1908 IG2- IG2-1945 IG2-1860 IG2-1907 CB2-6076 CB2-3437 CB2-3395 TY2-927	
WHALE KILLERS		
Kyokuyo Maru No. 3	TK1-841	
Kyo Maru No. 1 Kyo Maru No. 10 Kyo Maru No. 11 Kyo Maru No. 23 Kyo Maru No. 25 Kyo Maru No. 27 Taka Maru Kyo Maru No. 12	TK1-795 TK1-188 TK1-200 TK1-209 TK1-211 TK1-712 TK1-359 TK1-220	
Nisshin Maru No. 3	TK1-406	
Toshi Maru No. 25 Toshi Maru No. 18 Toshi Maru No. 17 Toshi Maru No. 16 Toshi Maru No. 15 Toshi Maru No. 12 Fumi Maru No. 18 Toshi Maru No. 11 Seki Maru No. 17	TK1-449 TK1-300 TK1-298 TK1-297 TK1-287 TK1-278 TK1-254 TK1-507 TK1-265	
Tonan Maru No. 2	HG1-10	
Konan Maru No. 17 Konan Maru No. 25 Konan Maru No. 26 Konan Maru No. 27 Shonan Maru Shonan Maru No. 2	TK1-207 TK1-286 TK1-289 TK1-299 TK1-843 TK1-844	

	REGISTRY NUMBER	REMARKS
WHALE KILLERS (cont'd)		
Tonan Maru No. 2 (cont'd)		
Ryuho Maru No. 7 Ryuho Maru No. 8	TK1-151 TK1-217	
RESEARCH VESSELS		
Oshoro Maru Shunyo Maru Wakatake Maru	HK1-100 G01-768 HK1-400	
PATROL VESSELS		
Fukutoku Maru No. 7 Fumi Maru No. 17 Hakuryu Maru Katsu Maru No. 2 Katu Maru No. 10 Konan Maru No. 20 Seki Maru No. 16 Toko Maru	F01-337 TK1-253 TK1-520 TK1-252 TK1-402 TK1-218 TK1-264 TK1-141	
CARGO SHIPS - REFRIGERATED & D	RY HOLD	
Abugawa Maru Chiyoda Maru Chiyoda Maru Choyo Maru Daien Maru No. 31 Daitoku Maru No. 15 Eiho Maru Eikei Maru Eishin Maru Eiyo Maru Fukuyo Maru Haruna Maru No. 2 Hayatsuki Maru	TK1-784 TK1-366 TK1-360 TK1-436 S01-527 TK1-856 TK1-355 TK1-447 TK1-400 IK1-65 EH1-201 TK1-391 TK1-858	
Hokko Maru Hotoku Maru Hoyo Maru Itsukushima Maru	TK1-396 TK1-639 TK1-155	
Juyo Maru Kakogawa Maru Kashiwahana Maru Kotoshiro Maru No. 8 Matsukaze Maru	TK1-786 HS1-2 IK1-26 TK1-763	

CARGO SHIPS - REFRIGERATED & DRY HOLD

	Nagisa Maru		TK1-826
	Nichijima Maru No. Nikkai Maru	5	TK1-765 TK1-816
	Nipponham Maru No.	1	HS1-1
	Ryoyo Maru		TK1-134
	Sachikaze Maru		TK1-695
	Sachishima Maru		EH1-311
	Satsu Maru No. 36		TK1-389
34	Seiko Maru		TK1-418
	Shinyo Maru		TK1-342
	Shotoku Maru Shuyo Maru		TK1-857 TK1-592
	Sumiyoshi Maru No.	62	KN1-648
	Suzukaze Maru JBV1	OL .	TK1-723
	Taiei Maru		/20
	Taisei Maru No. 2		
	Taisei Maru No. 39		ME1-327
	Taisei Maru No. 52		ME1-537
	Tenichi Maru		MG1-11
	Toko Maru		TK1-415
	Tonichi Maru		HG1-11
	Tosa Maru Yuko Maru		TK1-414
	Yuyo Maru		TK1-388
	ray o mara		111 300

TANKERS

Kakuyu Maru	TK1-727
Shizu-ura Maru	
Tenryo Maru	
Toshiwa Maru	TK1-686
Uko Maru	

LIST OF

SOUTH KOREAN FISHING AND SUPPORT VESSELS

OPERATING OFF ALASKA IN 1973

NAME	TYPE	HOMEPORT	REMARKS
Buk Neung Hae Yeon No. 27 Kum Yong No. 501	Factory Ship Factory Ship Factory Ship	Pusan	
Cheog Yang Ho Dong Bang No. 71 Gae Yang Ho Han Jin Ho Hwa Rang Kum Kang San Kum Yong No. 101 Mae Kum Kang Salvia Seo Yang	Stern Trawler	Pusan	
Hae Yeon No. 51 Hae Yeon No. 52 Hae Yeon No. 61 Hae Yeon No. 62 Kum Yong No. 51 Kum Yong No. 52 Kum Yong No. 53 Kum Yong No. 55	Trawler Trawler Trawler Trawler Trawler Trawler Trawler Trawler Trawler		ama Registry ama Registry
Dong Won No. 91	Longliner		

CENEDAL	CHADT	OF	ADEAC	RFFFRRFD	TO	INI TENT
GENERAL	CHAKI	UF	AREAS	KFFF KKFD	1()	INTEXT

