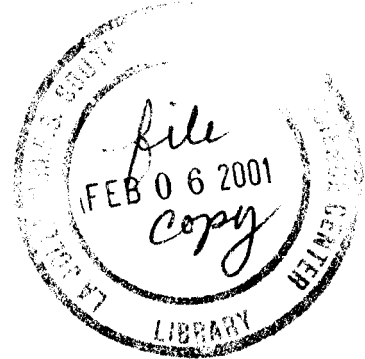


NOAA Technical Memorandum NMFS



ESTIMATES OF THE CATCH AND EFFORT BY FOREIGN TUNA LONGLINERS AND BAITBOATS IN THE FISHERY CONSERVATION ZONE OF THE CENTRAL AND WESTERN PACIFIC, 1965-77

Marian Y. Y. Yong and Jerry A. Wetherall

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National Oceanic and Atmospheric Administration
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NOAA Technical Memorandum NMFS

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**National Marine Fisheries Service
Southwest Fisheries Center
Honolulu Laboratory
Honolulu, Hawaii 96812**

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Philip M. Klutznick, Secretary

National Oceanic and Atmospheric Administration

Richard A. Frank, Administrator

National Marine Fisheries Service

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INTRODUCTION

Since passage of the Fishery Conservation and Management Act (FCMA), there has been an increasing need for information on the fishing activity of foreign vessels in the U.S. Fishery Conservation Zone (FCZ) and other areas of U.S. interest. A knowledge of foreign catch and fishing effort is essential for analysis of management policies, for appraisal of fishery development potentials, and for planning of fishery surveillance and enforcement activities.

In the case of billfishes, foreign catches in the FCZ are made by tuna longline vessels of Japan, Taiwan, and the Republic of Korea. The vessels usually direct their effort toward tunas and catch billfishes only incidentally.¹ The primary purpose of this report is to summarize available information on the nominal effort and the catch of tunas and billfishes by these foreign longline fleets in the FCZ of the central and western Pacific during the period 1965-77. In addition, the report presents estimates of the effort and tuna catch by Japanese baitboats fishing around Hawaii, Guam, the Northern Marianas, and other U.S. possessions.

In the following section the data sources and their characteristics and limitations are described. Then the data summarization and estimation procedures are discussed. Finally, the tables of resulting catch and effort statistics are presented, and suggestions are given for improving and updating the information.

DATA SOURCES

The estimates of foreign catch and effort were based on a variety of statistical sources. In this section the sources are systematically identified and described. For reference purposes a data set name is assigned to each source (Table 1).

Japanese Tuna Longline Statistics by 1° Square [Data Set D1]

This data set consists of records of Japanese tuna longline nominal effort (hooks fished and days fished) and associated catches of tuna and billfish species (number of fish) by month and 1° square. It covers only those 1° squares in the central and western Pacific overlapping the FCZ in Hawaii, American Samoa, and Guam, and only the years 1971-75. The data are unpublished, and were made available to the National Marine Fisheries Service (NMFS) by the Fisheries Agency of Japan. The data were provided in unraised form; estimates of total catch and effort in each time-area stratum were made by multiplying the sample data by raising factors taken from appropriate issues of "Annual Report of Effort and Catch Statistics by Area on Japanese Tuna Longline Fishery" published by the Fisheries Agency of Japan.

¹Under the FCMA, the U.S. claims jurisdiction over billfishes in the FCZ, but not over tunas.

Japanese Tuna Longline Statistics by 5° Square
[Data Set D2]

This data set consists of the well-known published statistics of monthly catch and effort by Japanese tuna longliners in 5° square areas. It is available throughout the range of the Japanese fleet in the Pacific for 1962-77. The data are published in the reference cited above. The catch and effort totals for a 5° square are equal to the sum of these statistics over all 1° squares in the 5° block, i.e., data set D2 may be considered an aggregation of data set D1. The statistics are published in raised form since 1967, and unraised form for the earlier years.

Taiwanese Tuna Longline Statistics by 5° Square
[Data Set D3]

This data set contains monthly statistics on catch of tunas and billfishes (number of fish and weight of fish) and effort (hooks fished) of Taiwanese high-seas longliners by 5° square throughout the range of the fleet. Data for 1967 through 1977 are available, provided to us by the Taiwan Fisheries Bureau. Unraised sample statistics were provided by Taiwan and then raised. Annual summaries of the unraised statistics and raising factors are published by the Taiwan Fisheries Bureau in "Annual Catch Statistics of Taiwan's Tuna Longline Fishery."

American Samoa Tuna Longline Statistics
[Data Set D4]

This unpublished data set contains the catch (number of fish) and effort (hooks fished and days fished) by sampled Taiwanese, Korean, and Japanese longliners based at Pago Pago and operating primarily in the South Pacific. The statistics are extracted from logbooks of daily fishing activity submitted by vessel captains to the Office of Marine Resources of the Government of American Samoa, and are available for the period 1960 through 1976.² The logbook records give daily effort and catch by species along with the midday position of the vessel. Not all vessels submit logbooks, so raising factors are necessary to project the sample catch and effort to the entire fleet. Computation of raising factors is facilitated by a second set of data for vessels based at Pago Pago. These are the records of cannery landings made available to us by Star-Kist Samoa, Inc. and Van Camp Sea Food Co. They provide direct estimates of the tonnage of fish landed by all vessels, those appearing in the logbook statistics and those not covered in the catch and effort sampling.

Japanese Baitboat Statistics
[Data Set D5]

This data set consists of catch and effort records of the Japanese baitboat fleet operating in the central and western Pacific. Catch (in metric tons) and nominal effort (vessel days) are published annually by

²Data for 1977 and 1978 are available, but are incomplete, so catch and effort estimates are possible only through 1976.

the Fisheries Agency of Japan in "Annual Report of Effort and Catch Statistics by Area, Japanese Skipjack Baitboat Fishery." The published records are given by 1° square and 10-day interval. In our analysis we used summaries by month and 1° square for the years 1970-77. On the average, the baitboat statistics cover about 80% of the actual catch and effort, so we raised the statistics by a factor of 1.25.

PROCEDURES AND ASSUMPTIONS

Boundaries

Figure 1 shows the boundaries we used for computing catch and effort within the FCZ around the Hawaiian Islands, American Samoa, Guam, the Northern Mariana Islands, and the various minor U.S. possessions, e.g., Wake Island, Johnston Atoll, Howland Island, Baker Island, Kingman Reef, Palmyra Island, and Jarvis Island. Boundaries are essentially as given in the Federal Register (vol. 42(44)-7 March 1977; vol. 43(7)-11 January 1978), except that we included Kingman Reef as a U.S. territory, and we assumed straight-line closures around parts of Jarvis Island, Howland Island, and Baker Island. Similarly, we drew a provisional boundary (dashed line) around the northern and northeastern part of the American Samoa FCZ (including Swains Island) and assumed a median-line separation between American Samoa and the Tokelau Islands.

The provisional boundaries drawn here were adopted to provide a basis for catch computations only. They are not to be construed as legal limits, nor do they prejudice any U.S. position regarding disputed claims or jurisdictional conflicts in the Pacific.

In addition to computing catches of tunas and billfishes and nominal effort within each of the 200-mile zones, or within the entire FCZ areas, we also computed these statistics for other more restricted zones around Hawaii, American Samoa, Guam, and the Northern Mariana Islands (Figures 2, 3, and 4). The boundaries adopted in these cases were selected primarily for illustrative purposes, and are not intended to reflect any preference with respect to fishery management policy. For the Hawaiian Islands, the chain was split into the main Hawaiian Islands and the Northwestern Hawaiian Islands (NWHI), with the dividing line at 161°W longitude (between Niihau Island and Nihoa Island). Catches and effort were computed within 50 miles, 100 miles, and 200 miles of the islands in each sector (Figure 2).

In the case of Guam, the Northern Mariana Islands, and American Samoa, a 50-mile zone was drawn and catches and effort were estimated for these zones as well as for the entire FCZ (Figures 3 and 4).

Apportioning

Estimates of nominal effort and the catch of tunas and billfishes were made by adding up the appropriate statistics for all 1° squares or 5° squares, or parts thereof, falling within the boundaries of the area of interest. In instances where the boundary of an area cut through a square, the distribution of catch and effort within the square was assumed to be homogeneous, and a part of the square's catch and effort was added to the area totals according to the proportion of the square falling within the area boundaries.

One-degree square statistics (D5) were used to estimate effort and catch of Japanese baitboat vessels around the Hawaiian Islands, Guam, and the Northern Marianas, and other U.S. possessions. One-degree square data were also used for Japanese longline catch and effort around Hawaii and Guam during 1971-75 (D1), and for all of the American Samoa longline catch and effort estimates (D4). In every other case 5° square statistics were used.

Raising Factors

The tuna longline fishery statistical systems of Japan and Taiwan are sampling systems, which means that there is not a complete enumeration or accounting of the catch and effort. Instead, only a sample of the logbooks from vessels operating in the Pacific is covered. The sample catch and effort statistics must be expanded to produce estimates of total catch and effort, using raising factors. Sampling coverage for Japanese tuna longline vessels is relatively high (Table 2). Coverage is proportional to size of the vessel for Japan-based boats. The raising factors for Japanese statistics are available only on an annual and Pacific-wide basis.

In the case of Taiwanese longliners, raising factors are available monthly (Table 3), but for all sizes of vessels combined and for the entire Pacific until 1977. Beginning in 1977, factors were computed by month and 5° square. Coverage of Taiwanese vessels is very low, being generally less than 20%.

For vessels based at Pago Pago, coverage is variable. From 50 to 95% of the vessels landing at Pago Pago submit logbooks containing detailed statistics on catch and effort. Since 1970 Korean vessels have been covered more completely than longliners from Taiwan, and for vessels of both flags the coverage rate has decreased considerably from the levels maintained during the 1960's.

In our initial analyses we computed raising factors for American Samoa as the product of (1) estimated average weight, taken from Taiwanese longline data for the area, and (2) ratio of landings by all vessels to landings by those vessels included in the logbook sampling. However, when these factors were applied to the sampled numerical catches the resulting estimates of total catch in weight were in most cases less than the recorded total cannery landings. This could happen if our average weight estimates were too low, or the proportion of the catch actually landed and recorded in cannery records was greater for sampled longliners [those submitting logbooks] than for other vessels, or the logbook catch data for sampled vessels was incomplete. Since no detailed information was available for evaluating these possible sources of error, we carried out the catch and effort estimation in a different manner. First we adjusted the billfish landings during each quarter to account for billfish which were landed at one of the canneries but did not appear in the statistics available to us. This adjustment was made assuming the ratio of billfish landings to tuna landings was the same at the two canneries. It was done separately for each vessel nationality. Next, the adjusted landings were multiplied by other correction factors to convert from dressed weights to round weights. These correction factors were 1.15 for yellowfin tuna, 1.16 for bigeye tuna, 1.2 for billfishes, and 1.0 for albacore and wahoo. Then, final correction factors were

computed by year, species (except billfishes were combined), nationality, and cannery as the ratios of total landings (adjusted as indicated above) to the corresponding total numbers of fish caught by the sampled vessels. These final factors were multiplied by the individual monthly catches in 1° cells (D4) and, after apportioning in the manner described above, the products were summed within each zone of interest. This procedure was followed for billfishes, albacore, yellowfin, bigeye, and wahoo. Thus for these species we assumed the total adjusted cannery landings were accurate and accounted for all fish caught. The remaining species are skipjack and bluefin tunas. These are very minor constituents of the catch and are neglected in the canneries' summary statistics. Therefore, for these species we estimated total catches in weight by simply multiplying the observed catches in number of fish by estimated average weights of 6.0 kg (skipjack tuna) and 52.6 kg (bluefin tuna).

The cannery statistics should account for virtually all tuna and billfish taken by the longliners based at Pago Pago, although small amounts which are not landed there may go unrecorded.

Adjustment factors were also used to estimate the total nominal fishing effort by American Samoa longliners. These were computed by nation, cannery, and year as the ratio of total vessel days of fishing by all vessels covered in the statistics of cannery landings to the number of vessel days fished by longliners appearing in the logbook sampling.

As mentioned in an earlier section, a raising factor of 1.25 was used to expand the sample Japanese baitboat catch and effort statistics.

Average Weights

The basic longline catch statistics of data sets D1, D2, D3, and D4 are expressed in number of fish taken. (Weight of catch is also reported by Taiwanese longliners (data set D3), but this information was available to us only in aggregate form.)

Longline catches in weight for Hawaii, Guam, the Northern Marianas, and minor U.S. possessions were estimated by multiplying catch in number by appropriate values of average weight. The average weight statistics came from two sources:

- (1) Average weights for catches in the Hawaiian FCZ and around Johnston Atoll were based on annual statistics from the Hawaiian domestic longline fleet, provided by the United Fishing Agency, Ltd. of Honolulu, Hawaii and the Hawaii Division of Fish and Game (Table 4).
- (2) The average weights of tunas and billfishes taken elsewhere by longliners of Taiwan and Japan were estimated from data obtained from the Fisheries Agency of Japan and from publications of the Taiwan Fisheries Bureau (Table 5).

Accuracy

Assuming the basic statistics we used are correct, the accuracy and reliability of our catch and effort estimates depend on two main conditions: (1) homogeneity of catch and effort distribution within the smallest space-time stratum under consideration, and (2) uniformity of sample coverage in time and space.

The first condition does not generally hold, as may be demonstrated by comparing estimates based on 5° square data with corresponding estimates based on 1° square statistics. A 5° breakdown of catch and effort statistics is simply too coarse for an accurate, detailed spatial analysis of fishing activity within the FCZ. Estimates based solely on 5° square data should therefore be viewed circumspectly.

Even greater problems are created by departures from the second condition. The use of a common ocean-wide raising factor may be perfectly adequate for ocean-wide estimates, but may lead to serious distortion in estimates of catch and fishing effort in small subareas of the ocean. Steps have recently been taken by the Taiwan Fisheries Bureau to improve their sampling system so that individual raising factors are available by month and 5° square.

Considering these factors, it is obvious that one cannot put a great deal of confidence in some of the catch and effort estimates. Nevertheless, these estimates are the best currently available.³

THE CATCH AND EFFORT TABLES

The estimated nominal effort and catch statistics are presented in Tables 6 through 91. Catches are stated in metric tons (mt). Effort is given in vessel days. In the case of Taiwan longline effort outside the American Samoa area, the effort figures were estimated by dividing the number of hooks fished by 2,000, which is approximately the average number of hooks fished per vessel day. In other cases effort was computed directly. An asterisk in the effort section denotes effort greater than zero but less than 1 vessel day. An asterisk in the catch columns means some fish were caught but less than 1 mt.

³A similar report has been released by the South Pacific Commission, Noumea, New Caledonia. See: Klawe, W. L. 1978. Estimates of catches of tunas and billfishes by the Japanese, Korean, and Taiwanese longliners from within the 200-mile economic zone of the member countries of the South Pacific Commission; SPC Occasional Paper No. 10.

Longline catch estimates are presented for the following species:

albacore	<u>Thunnus alalunga</u>
yellowfin tuna	<u>T. albacares</u>
bigeye tuna	<u>T. obesus</u>
bluefin tuna ⁴	<u>T. thynnus</u>
skipjack tuna	<u>Katsuwonus pelamis</u>
blue marlin	<u>Makaira nigricans</u>
black marlin	<u>M. indica</u>
striped marlin	<u>Tetrapturus audax</u>
swordfish	<u>Xiphias gladius</u>
sailfish	<u>Istiophorus platypterus</u>
shortbill spearfish	<u>T. angustirostris</u>

In addition, catches of wahoo, Acanthocybium solandri, are given for the longline vessels based at Pago Pago. Note that all tables of longline catches give a combined estimate of the catch of sailfish and shortbill spearfish, since these species are not separated in the records submitted by either Japanese or Taiwanese longline fishermen, or in the logbook records of foreign vessels based at American Samoa.

The Japanese baitboat catch estimates are given for albacore, yellowfin, bigeye, bluefin, and skipjack. In addition, catches of frigate tuna, Auxis thazard, and miscellaneous species (others) are estimated.

IMPROVING ESTIMATES

We have identified several possible shortcomings in the estimates of catch and effort within specified geographical areas. The estimates may be improved by (1) using more detailed longline statistics than the usual 5° square summaries which are now generally available. In the case of longline vessels based at Pago Pago daily fishing logs are available to us. But the official, published longline statistics of Taiwan, Japan, and Korea are only by 5° square. More detailed Japanese data are available in unpublished form; (2) using more detailed raising factors, instead of the Pacific-wide factors now employed. Taiwan has taken steps to refine this aspect of their longline catch estimation--it would be useful if other nations also instituted such improvements; (3) using more accurate statistics on average weight. Temporal and spatial variation should be taken into account, and better size statistics should be sought from unpublished sources; (4) a more complete analysis of the American Samoa-based fishery. The estimates given here reflect only the landings reported by the two tuna canneries operating in Pago Pago. The records available to us do not take into account small amounts of fish landed and sold through other channels. A more extensive study of American Samoa fishery statistics should be undertaken so that a complete accounting can be made of all fish caught or landed in that area of the FCZ.

⁴In the case of vessels based at American Samoa, the negligible bluefin catch is mostly southern bluefin tuna (T. maccoyii) taken in the southern extremity of the South Pacific albacore grounds.

The estimates reported here do not present a complete picture of foreign tuna and billfish catches in the FCZ, since except for American Samoa-based vessels no Korean statistics were considered. Korean tuna longliners (mostly sashimi boats) are known to fish in all areas of the FCZ, and while extensive catch and effort data are available, we are not yet able to answer key questions about appropriate raising factors, sampling procedures, and reliability. Until such considerations can be dealt with, we will refrain from using the Korean longline statistics.

In addition to problems with the Korean longline statistics we have been unable to evaluate possible Korean baitboat catches in the FCZ. No information is available to us on this subject.

Mention should be made of fishing inside the Hawaii FCZ by longline vessels based in American Samoa. Such catches, mainly by Korean boats, are minor, but the frequency of such visits has been increasing in recent years. Information on this subject is being compiled for publication in a separate report.

A comment is also needed concerning the possibility that some small catch in the American Samoa FCZ is made by longliners not based in Pago Pago and therefore not monitored in the American Samoa logbook system. Catches by Japanese vessels can be ruled out, since Japanese Government statistics show no effort in that area by her vessels since 1971. But the question remains unanswered for Taiwan and Korea.

Finally, the published catch and effort records examined in this analysis do not cover any Japanese baitboats or longliners under 20 gross tons, or any Taiwanese longliners under 50 gross tons. This is of no consequence except around Guam and the Northern Marianas, where some small Taiwan-based Taiwanese longliners and small Japanese longliners may be operating. Also neglected are any Japanese purse seine catches of tunas in this area; however, these are negligible, as most purse seine activity is south of this region.

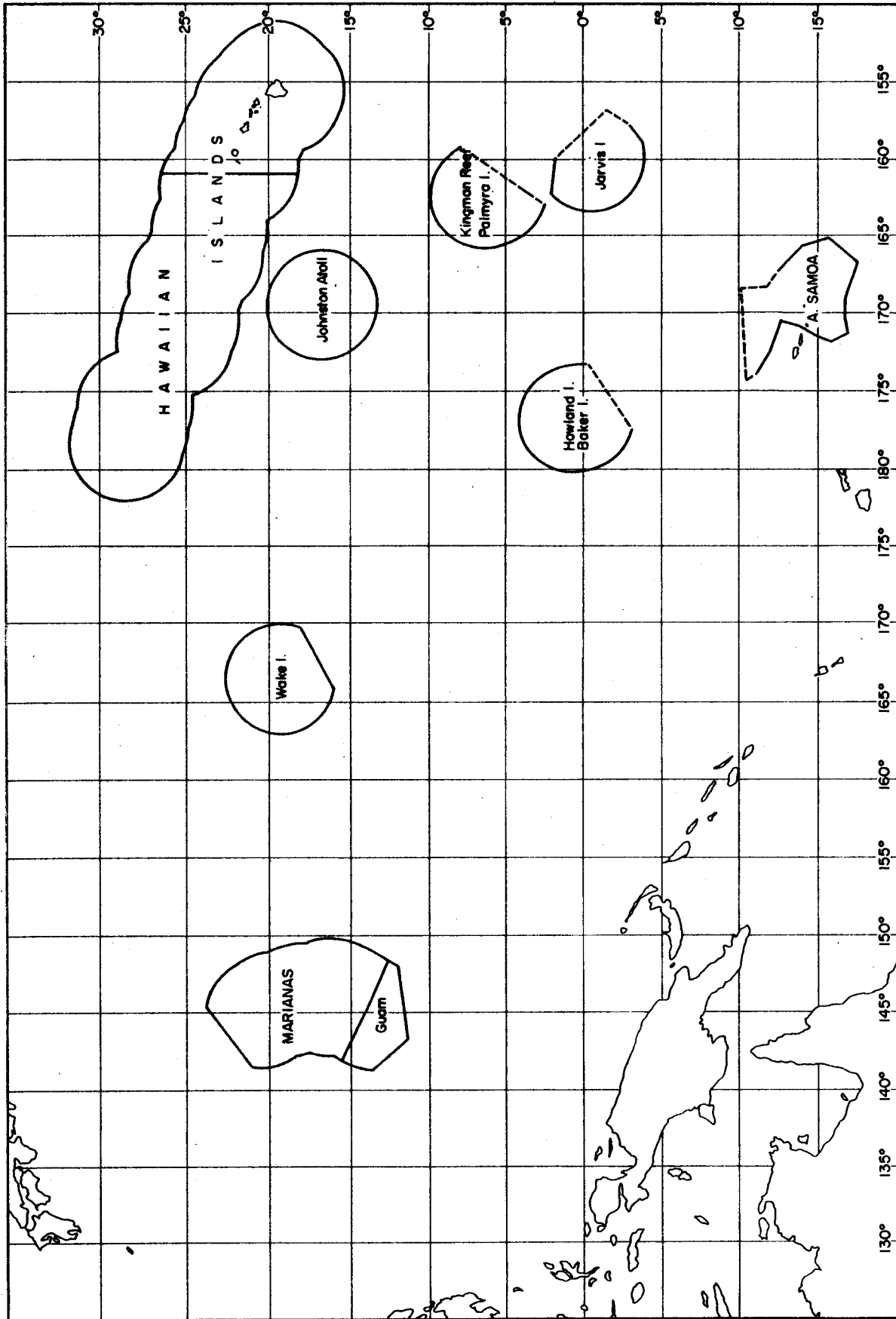


Figure 1.--Boundaries of the Fishery Conservation Zone around Hawaii, American Samoa, Guam, the Northern Mariana Islands, and other U.S. possessions. [See text for explanation.]

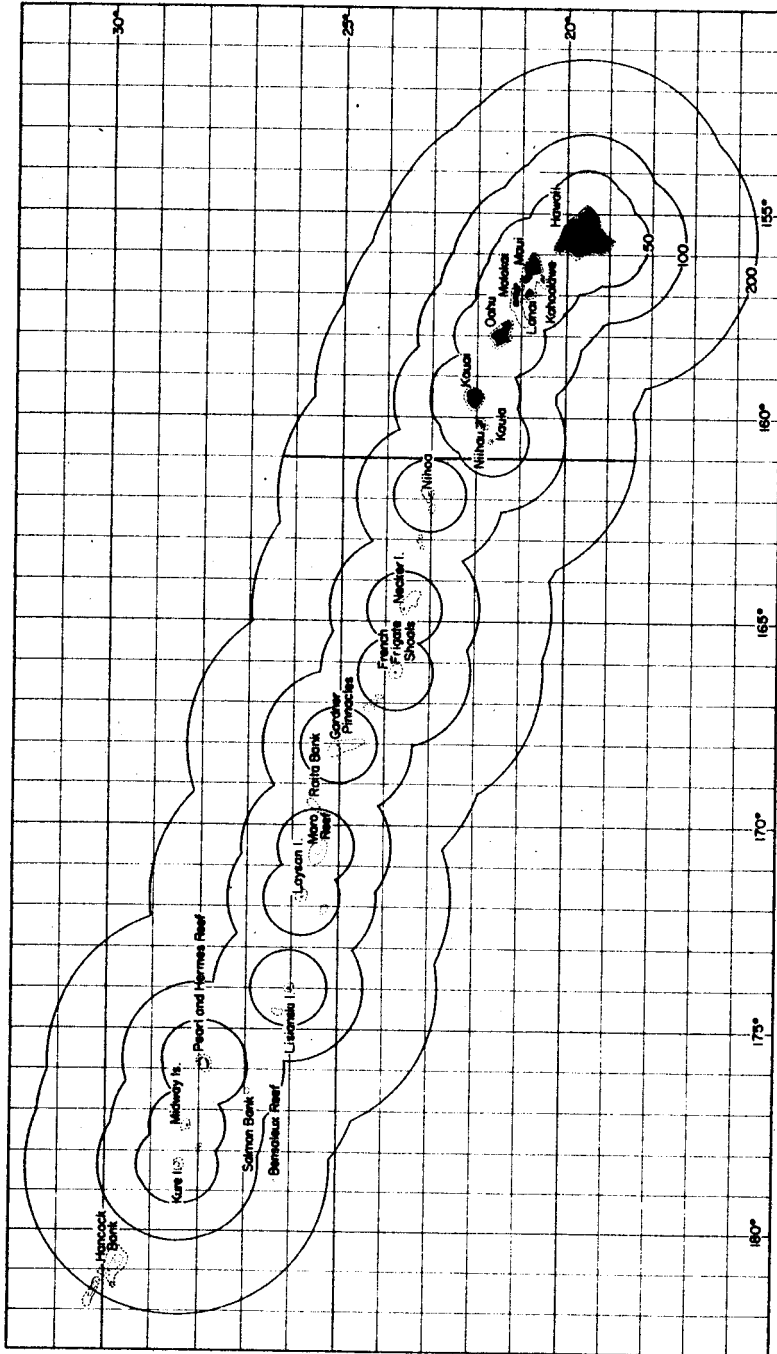


Figure 2.--The 50-, 100-, and 200-mile zones around the Hawaiian Islands.

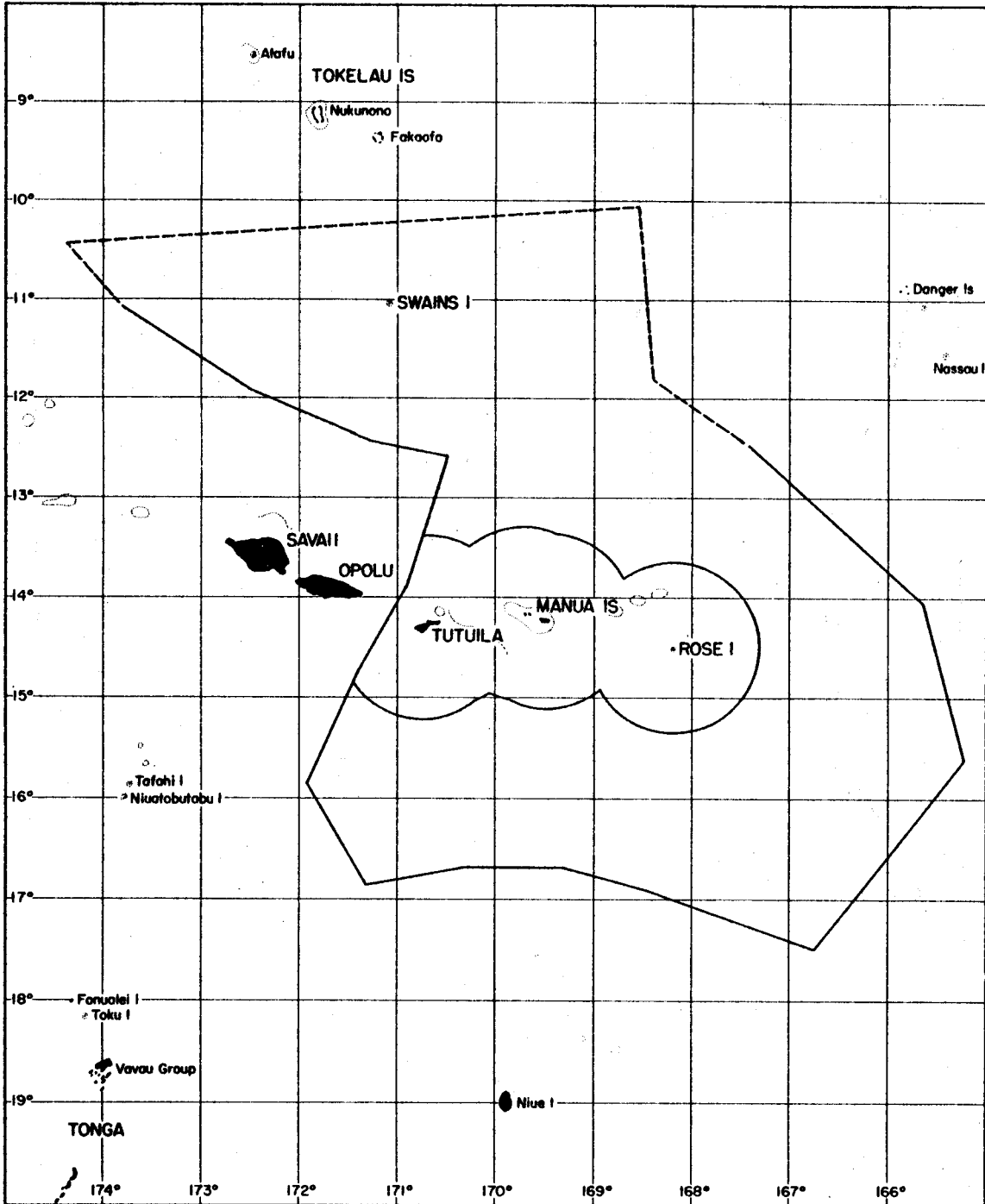


Figure 3.--The 50-mile limits and the Fishery Conservation Zone around American Samoa.

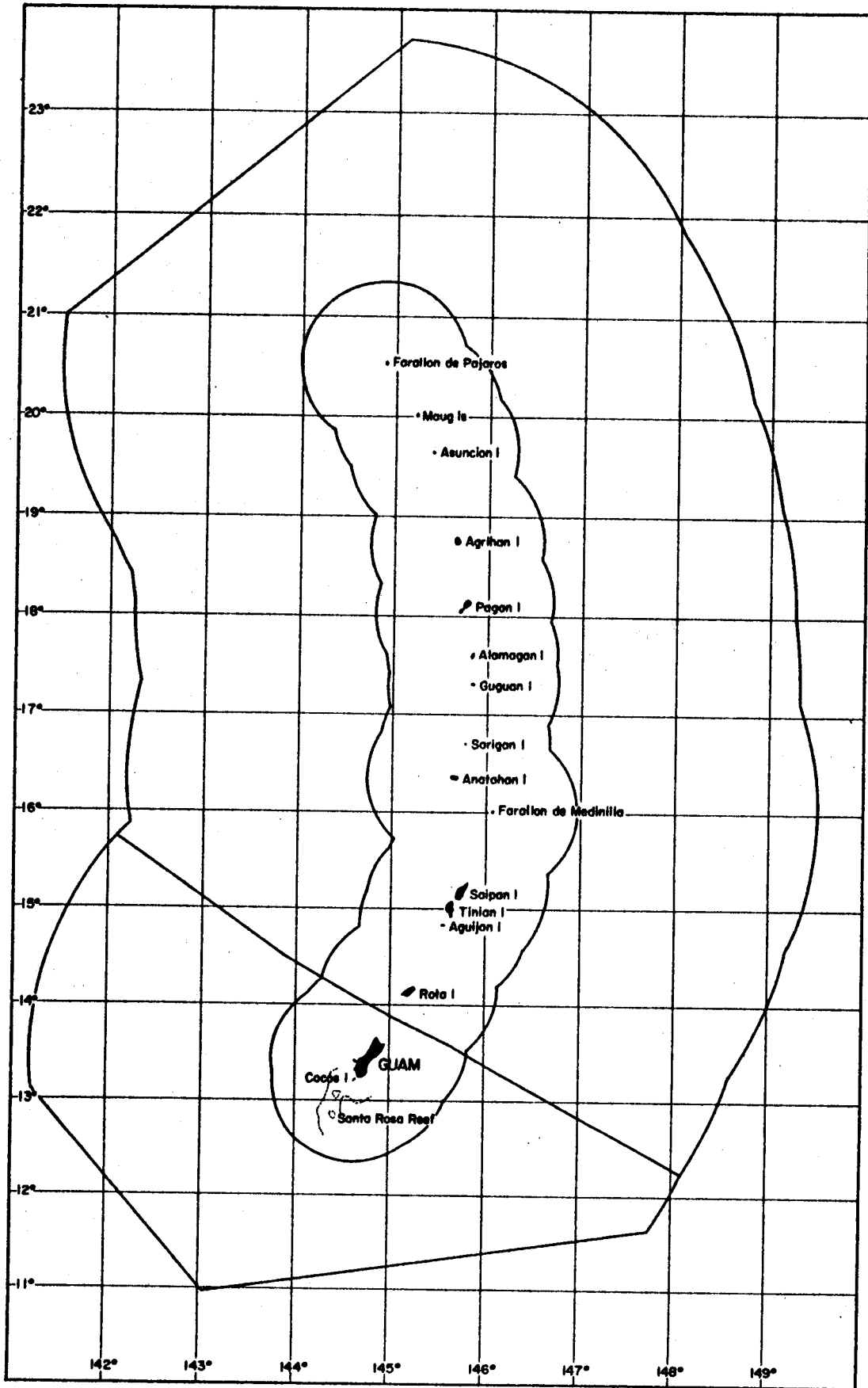


Figure 4.--The 50-mile limits and the Fishery Conservation Zone around Guam and the Northern Mariana Islands.

Table 1.--Description of data sets.

Data set	Type of data	Nationality	Year available	Spatial and temporal detail		Source of data
D1	Sample catch (number of fish) by species; nominal effort (hooks, vessel days)	Japan	1971-75	1° square, by month, size of vessel, bait type	Fisheries Agency of Japan (Unpublished)	
D2	Catch (number of fish) by species; nominal effort (hooks, vessel days)	Japan	1962-77	5° square, by month, size of vessel, bait type	"Annual Report of Effort and Catch Statistics by Area on Japanese Tuna Longline Fishery," published by Fisheries Agency of Japan	
D3	Catch (number of fish) by species; nominal effort (hooks)	Taiwan	1967-77	5° square, by month	"Annual Catch Statistics of Taiwan's Tuna Longline Fishery," published by Taiwan Fisheries Bureau	
D4	Catch (number of fish) by species; nominal effort (hooks, vessel days)	Japan, Taiwan, Korea	1960-76	By midday position for each sampled vessel based at Pago Pago	Office of Marine Resources, Government of American Samoa (Unpublished)	
	Landings (pounds) at Pago Pago by species (tuna), or combined (billfish); nominal effort (vessel days)		1954-76	By month	Van Camp Sea Food Co., Star-Kist Samoa, Inc. (Unpublished)	
D5	Sample catch (metric tons) by species; nominal effort (vessel days)	Japan	1969-77	1° square, by 10-day interval, effort by vessel tonnage class	"Annual Report of Effort and Catch Statistics by Area, Japanese Skipjack Baitboat Fishery," published by Fisheries Agency of Japan.	

Table 2.--Hundreds of vessel days of nominal effort (top figures) and appropriate raising factors (bottom figures) for Japanese tuna longline vessels, 1965-77.

Year	Japan-based vessels (gross tons)				Motherships with catcher boats	Foreign-based vessels (Pacific)
	20-50	50-100	100-200	>200		
1965	718 1.41	- 442 - 1.99	- 1.99	425 1.24	22 1.27	101 2.01
1966	621 1.27	- 515 - 1.81	- 1.81	473 1.18	9 1.17	90 1.30
1967	745 1.68	266 2.10	196 1.44	395 1.19	7 1.14	105 1.94
1968	616 1.74	242 2.02	209 1.50	417 1.26	7 1.16	59 1.51
1969	579 2.10	278 1.93	237 1.67	472 1.16	18 1.21	30 2.34
1970	395 1.73	292 1.74	205 1.39	527 1.02	16 1.08	29 2.45
1971	316 2.12	344 1.81	198 1.48	519 1.22	3 1.63	22 5.70
1972	211 2.43	385 2.04	178 1.47	613 1.18 1.23	1 1.75	15 1.30
1973	151 2.24	463 1.95	157 1.72	682 1.13 1.44	4 1.13	4 1.75
1974	124 2.25	594 1.84	124 1.47	628 1.16 1.28	1 1.20	0 --
1975	98 1.84	612 1.71	93 1.42	509 1.13 1.32	2 1.00	0 --
1976	95 1.35	663 1.25	118 1.10	735 1.13 1.10	3 1.00	0 --
1977	80 1.23	675 1.20	112 1.24	700 1.04 1.02	1 1.00	0 --

¹Upper raising factor is for vessels landing in Shizuoka and Kochi Prefectures. Lower factor is for other vessels.

Table 3.--Raising factors for Taiwan's tuna longline statistics
(Pacific Ocean).

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
January	9.09	3.48	6.21	4.27	2.36	4.40	4.36	7.15	16.37	9.53
February	9.09	3.48	6.21	4.53	2.47	3.67	5.73	7.26	12.25	9.53
March	9.09	3.48	6.21	3.91	2.73	4.59	6.21	10.15	7.61	9.53
April	9.09	3.48	6.21	3.55	2.34	3.89	8.25	10.48	6.21	8.04
May	9.09	3.48	6.21	3.83	3.23	4.58	7.62	7.54	5.90	8.04
June	9.09	3.48	6.21	3.04	3.23	5.05	5.84	8.86	4.54	8.04
July	9.09	3.48	6.21	2.43	3.20	3.91	6.65	8.77	4.37	8.98
August	9.09	3.48	6.21	2.44	3.42	3.98	8.31	14.24	5.26	8.98
September	9.09	3.48	6.21	2.70	3.03	4.62	5.49	13.42	4.46	8.98
October	9.09	3.48	6.21	2.56	4.47	3.78	5.57	13.33	5.56	11.71
November	9.09	3.48	6.21	2.43	3.51	3.85	5.13	11.30	6.06	11.71
December	9.09	3.48	6.21	2.67	4.05	4.18	6.05	11.93	6.83	11.71

Note: Raising factors for 1977 were computed by month and 5° square. However, at the time this table was prepared, monthly ocean-wide averages were not available. The annual average raising factor for the Pacific was 3.84 for 1977, indicating a considerable improvement in sampling coverage.

Table 4.--Estimated average weights (kg) used in computing longline catches in the FCZ around the Hawaiian Islands and Johnston Atoll. (From data supplied by Hawaii Division of Fish and Game and United Fishing Agency.)

Year	Albacore	Yellowfin tuna	Bigeye tuna	Bluefin tuna	Skipjack tuna	Blue marlin	Black marlin	Striped marlin	Swordfish	Sailfish and spearfish
1965	25	49	46	200	6	89	65	29	84	16
1966	24	50	54	200	6	115	65	25	84	16
1967	24	51	50	200	5	102	65	28	84	16
1968	26	52	45	200	5	92	65	30	84	15
1969	25	50	47	200	4	90	65	30	84	16
1970	25	48	44	200	4	83	65	28	84	16
1971	25	47	43	200	5	97	65	30	84	16
1972	26	48	45	200	7	89	65	32	84	17
1973	23	49	48	200	6	70	65	26	84	18
1974	24	49	39	200	5	66	65	28	84	16
1975	23	45	43	200	4	77	65	28	84	17
1976	26	50	46	200	5	89	65	30	84	16
1977	25	49	46	200	5	89	65	29	84	16

Table 5.--Estimated average weights (kg) used in computing longline catches in the FCZ around Guam, the Northern Marianas, and some other U.S. possessions in the Pacific. (From data supplied by Fisheries Agency of Japan and Taiwan Fisheries Bureau.)

Year	Albacore	Yellowfin tuna	Bigeye tuna	Bluefin tuna	Skipjack tuna	Blue marlin	Black marlin	Striped marlin	Swordfish	Sailfish and Spearfish
<u>Guam and Northern Marianas</u>										
1975	25	28	38	237	5	55	79	34	30	22
1976	24	30	39	237	5	55	79	34	30	22
1977	24	30	37	237	5	55	79	28	30	22
Other years	24	29	38	237	5	55	79	32	30	22
<u>Wake Island</u>										
1975	26	30	39	184	5	50	79	30	33	28
1976	27	35	43	184	5	50	79	30	33	28
1977	27	35	42	184	5	56	91	22	39	28
Other years	27	33	41	184	5	52	83	27	35	28
<u>Howland Island, Baker Island, Palmyra Island, Kingman Reef, and Jarvis Island</u>										
All years	18	25	27	53	5	47	60	39	56	25

Table 6.--Estimated catch and effort by Japanese longliners within 200, 100, and 50 miles of the Hawaiian Islands, 1965.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	18	7	4	56	30	12	74	37	16
February	18	7	3	27	5	1	45	12	4
March	5	2	1	61	21	7	66	23	8
April	19	8	3	45	27	10	64	35	13
May	169	66	30	291	147	53	460	213	83
June	47	26	12	412	218	75	459	244	87
July	0	0	0	80	46	18	80	46	18
August	17	6	3	9	2	*	26	8	3
September	2	1	0	3	*	0	5	1	*
October	2	1	*	77	35	14	79	36	14
November	9	3	1	113	22	7	122	25	8
December	61	25	12	153	39	16	214	64	28
Total	367	152	69	1327	592	213	1694	744	282
Annual catch ²									
Albacore	6	3	2	133	19	7	139	22	9
Yellowfin tuna	131	54	25	330	158	59	461	212	84
Bigeye tuna	330	122	55	412	133	49	742	255	104
Bluefin tuna	3	1	1	3	2	1	6	3	2
Skipjack tuna	2	1	1	7	4	1	9	5	2
Total tunas	472	181	84	885	316	117	1357	497	201
Annual catch ²									
Blue marlin	54	25	11	245	126	45	299	151	56
Striped marlin	113	54	25	775	406	145	888	460	170
Swordfish	5	3	1	67	24	9	72	27	10
Black marlin	2	1	*	5	2	1	7	3	1
Spearfish & sailfish	10	4	2	24	12	4	34	16	6
Total billfishes	184	87	39	1116	570	204	1300	657	243

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 7.--Estimated catch and effort by Japanese longliners within 200, 100, and 50 miles of the Hawaiian Islands, 1966.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	9	2	1	62	5	2	71	7	3
February	20	5	1	88	28	12	108	33	13
March	20	7	3	35	11	4	55	18	7
April	60	22	10	7	1	1	67	23	11
May	33	11	5	115	55	20	148	66	25
June	168	59	24	22	10	3	190	69	27
July	30	10	3	2	1	0	32	11	3
August	0	0	0	2	1	1	2	1	1
September	6	1	1	66	4	1	72	5	2
October	4	2	1	90	7	1	94	9	2
November	2	1	*	131	16	5	133	17	5
December	1	1	0	108	6	1	109	7	1
Total	353	121	49	728	145	51	1081	266	100
Annual catch ²									
Albacore	1	0	0	256	24	8	257	24	8
Yellowfin tuna	67	21	9	102	17	6	169	38	15
Bigeye tuna	502	164	64	487	58	19	989	222	83
Bluefin tuna	0	0	0	1	*	0	1	0	0
Skipjack tuna	3	1	*	4	2	1	7	3	1
Total tunas	573	186	73	850	101	34	1423	287	107
Annual catch ²									
Blue marlin	77	27	11	50	14	5	127	41	16
Striped marlin	44	15	7	118	38	13	162	53	20
Swordfish	9	3	1	83	10	4	92	13	5
Black marlin	1	0	0	2	1	0	3	1	0
Spearfish & sailfish	9	3	1	10	2	1	19	5	2
Total billfishes	140	48	20	263	65	23	403	113	43

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 8.--Estimated catch and effort by Japanese longliners within 200, 100, and 50 miles of the Hawaiian Islands, 1967.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
	Monthly nominal effort ¹								
January	1	0	0	140	14	4	141	14	4
February	10	2	0	83	8	2	93	10	2
March	26	9	4	69	11	4	95	20	8
April	51	22	10	144	71	27	195	93	37
May	354	179	96	115	56	21	469	235	117
June	173	80	38	156	84	29	329	164	67
July	24	9	4	16	5	2	40	14	6
August	1	1	4	10	4	1	11	5	1
September	2	1	1	38	1	0	40	2	1
October	4	1	1	53	6	2	57	7	3
November	20	6	2	179	55	21	199	61	23
December	9	2	1	73	12	5	82	14	6
Total	675	312	157	1076	327	118	1751	639	275
	Annual catch ²								
Albacore	12	6	3	436	47	14	448	53	17
Yellowfin tuna	90	45	23	148	64	24	238	109	47
Bigeye tuna	678	262	117	570	145	54	1248	407	171
Bluefin tuna	0	0	0	1	*	0	1	0	0
Skipjack tuna	2	1	*	2	1	*	4	2	0
Total tunas	782	314	143	1157	257	92	1939	571	235
	Annual catch ²								
Blue marlin	112	53	27	85	41	15	197	94	42
Striped marlin	244	140	77	379	176	65	623	316	142
Swordfish	28	15	8	147	27	9	175	42	17
Black marlin	2	1	1	1	1	0	3	2	1
Spearfish & sailfish	22	11	6	10	4	2	32	15	8
Total billfishes	408	220	119	622	249	91	1030	469	210

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 9.--Estimated catch and effort by Japanese longliners within 200, 100, and 50 miles of the Hawaiian Islands, 1968.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
	Monthly nominal effort ¹								
January	12	4	2	198	43	16	210	47	18
February	26	10	4	183	45	16	209	55	20
March	33	15	7	134	76	32	167	91	39
April	382	137	57	57	33	12	439	170	69
May	237	108	49	413	234	85	650	342	134
June	148	78	40	171	87	29	319	165	69
July	3	2	1	26	15	6	29	17	7
August	0	0	0	0	0	0	0	0	0
September	2	*	0	35	1	0	37	1	0
October	12	3	1	113	28	9	125	31	10
November	47	23	10	268	114	43	315	137	53
December	72	29	13	146	36	13	218	65	26
Total	974	409	184	1744	712	261	2718	1121	445
	Annual catch ²								
Albacore	22	10	5	646	147	52	668	157	57
Yellowfin tuna	217	94	43	232	120	43	449	214	86
Bigeye tuna	658	241	100	726	246	89	1384	487	189
Bluefin tuna	0	0	0	1	*	*	1	0	0
Skipjack tuna	2	1	0	4	1	1	6	2	1
Total tunas	899	346	148	1609	514	185	2508	860	333
	Annual catch ²								
Blue marlin	112	46	20	125	63	23	237	109	43
Striped marlin	477	211	97	629	334	121	1106	545	218
Swordfish	19	9	4	247	110	47	266	119	51
Black marlin	2	1	0	2	1	0	4	2	0
Spearfish & sailfish	28	11	5	28	15	6	53	26	11
Total billfishes	635	278	126	1031	523	197	1666	801	323

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 10.--Estimated catch and effort by Japanese longliners within 200, 100, and 50 miles of the Hawaiian Islands, 1969.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 ml.	100 ml.	50 ml.	200 ml.	100 ml.	50 ml.	200 ml.	100 ml.	50 ml.
Monthly nominal effort ¹									
January	111	40	17	253	78	30	364	118	47
February	49	24	11	333	126	48	362	150	59
March	43	16	7	41	9	3	64	25	10
April	41	15	6	4	2	1	45	17	7
May	69	39	18	65	40	15	154	79	33
June	23	10	5	18	10	4	41	20	9
July	14	5	2	*	*	0	14	5	2
August	13	4	2	0	0	0	13	4	2
September	77	27	11	46	7	2	125	34	13
October	58	18	7	175	54	18	233	72	25
November	126	44	18	180	47	17	306	91	35
December	67	30	13	244	69	27	331	99	40
Total	731	272	117	1361	442	165	2092	714	282
Annual catch ²									
Albacore	22	7	3	512	90	33	534	97	36
Yellowfin tuna	184	71	32	199	82	31	383	153	63
Bigeye tuna	727	263	112	1181	409	157	1908	672	269
Bluefin tuna	0	0	0	5	1	0	5	1	0
Skipjack tuna	1	*	*	2	1	*	3	1	*
Total tunas	934	341	147	1899	583	221	2633	924	368
Annual catch ²									
Blue marlin	59	22	9	26	12	4	85	34	13
Striped marlin	124	49	21	144	68	25	268	117	46
Swordfish	18	7	3	143	42	16	161	49	19
Black marlin	1	0	0	1	0	*	2	0	0
Spearfish & sailfish	7	3	1	4	2	1	11	5	2
Total billfishes	209	81	34	318	124	46	527	205	80

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 11.--Estimated catch and effort by Japanese longliners within 200, 100, and 50 miles of the Hawaiian Islands, 1970.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 ml.	100 ml.	50 ml.	200 ml.	100 ml.	50 ml.	200 ml.	100 ml.	50 ml.
Monthly nominal effort ¹									
January	76	22	7	234	71	26	310	93	33
February	135	41	15	100	15	4	235	56	19
March	53	19	9	38	9	3	91	28	12
April	30	7	2	10	4	1	40	11	3
May	110	49	21	299	148	48	409	197	69
June	128	52	21	231	141	52	359	193	73
July	73	32	15	70	41	15	143	73	30
August	47	21	11	8	3	1	55	24	12
September	15	4	2	1	*	0	16	4	2
October	80	32	15	179	90	33	259	122	48
November	77	26	10	384	173	64	461	199	74
December	156	74	34	616	298	114	772	372	148
Total	980	379	162	2170	993	361	3150	1372	523
Annual catch ²									
Albacore	42	16	7	416	110	40	456	126	47
Yellowfin tuna	511	200	85	720	384	140	1231	584	225
Bigeye tuna	664	228	90	1061	453	168	1725	681	258
Bluefin tuna	1	1	*	3	1	*	4	2	*
Skipjack tuna	2	1	*	4	2	1	6	3	1
Total tunas	1220	446	182	2204	950	349	3424	1396	531
Annual catch ²									
Blue marlin	117	50	22	329	177	63	446	227	85
Striped marlin	214	93	41	753	398	143	967	491	184
Swordfish	28	10	4	123	38	13	151	48	17
Black marlin	1	*	*	3	2	1	4	2	1
Spearfish & sailfish	23	9	4	52	29	10	75	38	14
Total billfishes	383	162	71	1260	644	230	1643	806	301

¹Effort in vessel days, * = < 1 vessel day.²Catch in metric tons, * = < 1 mt.

Table 12.--Estimated catch and effort by Japanese longliners within 200, 100, and 50 miles of the Hawaiian Islands, 1971.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	146	42	18	505	236	110	651	278	129
February	113	15	2	285	79	20	398	94	22
March	6	2	*	42	12	5	47	14	5
April	3	*	0	3	2	1	6	2	1
May	16	1	0	33	25	3	49	26	3
June	5	1	0	61	42	12	66	43	12
July	9	2	0	28	2	1	37	4	1
August	18	2	0	0	0	0	18	2	0
September	13	0	0	42	17	9	55	17	9
October	105	18	5	118	42	18	223	60	23
November	49	6	*	234	147	72	283	153	72
December	68	31	12	202	102	28	270	133	40
Total	550	120	37	1553	706	279	2103	826	316
Annual catch ²									
Albacore	39	8	4	398	104	29	437	112	33
Yellowfin tuna	271	48	14	467	236	91	738	284	105
Bigeye tuna	428	54	15	821	375	148	1249	429	163
Bluefin tuna	0	0	0	1	0	0	1	0	0
Skipjack tuna	1	*	*	2	1	*	3	1	0
Total tunas	739	110	33	1689	716	268	2428	826	301
Annual catch ²									
Blue marlin	33	6	2	81	46	17	114	52	19
Striped marlin	62	17	6	261	169	76	323	166	82
Swordfish	5	1	0	63	24	8	68	25	8
Black marlin	2	1	1	4	3	1	6	4	2
Spearfish & sailfish	4	1	*	8	4	1	12	5	1
Total billfishes	106	25	9	417	246	103	523	272	112

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 13.--Estimated catch and effort by Japanese longliners within 200, 100, and 50 miles of the Hawaiian Islands, 1972.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
	Monthly nominal effort ¹								
January	22	6	2	205	30	3	227	36	5
February	56	6	0	135	14	2	191	20	2
March	32	8	4	216	23	2	248	31	6
April	5	1	0	2	0	0	7	1	0
May	43	11	4	154	54	2	197	65	6
June	18	1	0	65	41	2	83	42	2
July	7	0	0	0	0	0	7	0	0
August	8	0	0	20	2	*	28	2	*
September	13	2	1	0	0	0	13	2	1
October	60	25	9	102	38	16	162	63	25
November	10	5	2	94	37	17	104	42	19
December	88	55	22	704	308	116	792	363	138
Total	362	120	44	1697	547	160	2059	667	204
	Annual catch ²								
Albacore	44	28	12	478	80	15	522	108	27
Yellowfin tuna	118	51	19	260	106	15	378	157	34
Bigeye tuna	261	52	18	1284	445	164	1545	497	182
Bluefin tuna	0	0	0	2	0	0	2	0	0
Skipjack tuna	1	*	0	2	1	0	3	1	*
Total tunas	424	131	49	2026	632	194	2450	763	243
	Annual catch ²								
Blue marlin	15	3	1	62	31	3	77	34	4
Striped marlin	23	9	3	173	79	12	196	88	15
Swordfish	12	3	*	192	36	6	204	39	6
Black marlin	1	*	0	2	2	1	3	2	1
Spearfish & sailfish	5	1	0	8	1	0	13	2	0
Total billfishes	56	16	4	437	149	22	493	165	26

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 14.--Estimated catch and effort by Japanese longliners within 200, 100, and 50 miles of the Hawaiian Islands, 1973.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	47	16	8	297	129	58	344	145	66
February	58	7	2	47	16	11	105	23	13
March	45	0	0	58	10	3	103	10	3
April	13	0	0	11	5	1	24	5	1
May	83	1	0	62	8	0	145	9	0
June	42	3	0	39	5	0	81	8	0
July	7	7	5	3	2	1	10	9	6
August	3	0	0	2	1	0	5	1	0
September	1	0	0	5	0	0	6	0	0
October	45	19	11	67	27	12	112	46	23
November	63	14	1	138	55	23	201	69	24
December	185	25	2	234	63	22	419	88	24
Total	592	92	29	963	321	131	1555	413	160
Annual catch ²									
Albacore	115	10	3	348	117	48	463	135	51
Yellowfin tuna	181	34	12	133	34	8	314	68	20
Bigeye tuna	451	32	9	496	175	65	947	207	74
Bluefin tuna	0	0	0	2	*	0	2	0	0
Skipjack tuna	1	0	0	1	0	*	2	0	0
Total tunas	748	84	24	980	326	121	1728	410	145
Annual catch ²									
Blue marlin	15	3	1	18	4	1	33	7	2
Striped marlin	38	7	3	78	24	8	116	31	11
Swordfish	14	3	2	89	16	5	103	19	7
Black marlin	0	0	0	1	0	0	1	0	0
Spearfish & sailfish	13	1	*	10	2	*	23	3	0
Total billfishes	80	14	6	196	46	14	276	60	20

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 15.--Estimated catch and effort by Japanese longliners within 200, 100, and 50 miles of the Hawaiian Islands, 1974.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	213	58	15	150	86	52	363	144	67
February	42	9	1	40	4	2	82	13	3
March	51	25	6	37	11	5	88	36	11
April	16	2	0	10	4	1	26	6	1
May	93	1	0	3	1	0	96	2	0
June	308	21	1	11	7	0	319	28	1
July	187	12	4	103	5	0	290	17	0
August	23	12	1	15	3	0	38	15	1
September	15	1	0	14	0	0	29	1	0
October	91	23	3	2	0	0	93	23	3
November	78	27	10	18	1	0	96	28	10
December	172	19	1	30	6	0	202	25	1
Total	1289	210	38	433	128	60	1722	338	98
Annual catch ²									
Albacore	173	35	4	281	94	46	454	129	50
Yellowfin tuna	332	63	12	119	36	26	451	99	38
Bigeye tuna	715	92	14	95	30	15	810	122	29
Bluefin tuna	0	0	0	2	0	0	2	0	0
Skipjack tuna	2	0	0	1	0	0	3	0	0
Total tunas	1222	190	30	498	160	67	1720	350	117
Annual catch ²									
Blue marlin	59	9	2	24	3	0	63	12	2
Striped marlin	58	13	3	20	5	1	78	18	4
Swordfish	22	3	0	45	10	4	67	13	4
Black marlin	2	0	0	1	0	0	3	0	0
Spearfish & sailfish	38	7	1	7	1	0	45	8	1
Total billfishes	179	32	6	97	19	5	276	51	11

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 16.--Estimated catch and effort by Japanese longliners within 200, 100, and 50 miles of the Hawaiian Islands, 1975.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	92	12	*	69	42	23	161	54	23
February	66	5	0	52	33	11	118	38	11
March	8	3	0	33	28	11	41	31	11
April	2	0	0	0	0	0	2	0	0
May	39	0	0	0	0	0	39	0	0
June	19	0	0	25	3	1	44	3	1
July	13	0	0	18	1	0	31	1	0
August	10	3	0	4	1	0	14	4	0
September	3	0	0	0	0	0	3	0	0
October	7	6	5	152	141	111	159	147	116
November	13	13	11	214	191	111	227	204	122
December	70	4	0	261	140	74	331	144	74
Total	342	46	16	828	580	342	1170	626	358
Annual catch ²									
Albacore	79	8	1	170	65	34	249	73	35
Yellowfin tuna	81	7	1	171	115	69	252	122	70
Bigeye tuna	145	24	15	512	392	242	657	416	257
Bluefin tuna	0	0	0	2	2	1	2	2	1
Skipjack tuna	1	*	*	1	0	0	2	*	*
Total tunas	306	39	17	856	574	346	1162	613	363
Annual catch ²									
Blue marlin	6	1	*	14	6	4	20	7	4
Striped marlin	23	3	1	70	46	18	93	49	19
Swordfish	7	*	0	27	9	4	34	9	4
Black marlin	0	0	*	1	1	0	1	1	*
Spearfish & sailfish	7	0	*	7	4	2	14	4	2
Total billfishes	43	4	1	119	66	28	162	70	29

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 17.--Estimated catch and effort by Japanese longliners within 200, 100, and 50 miles of the Hawaiian Islands, 1976.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	14	6	4	400	167	66	414	173	70
February	119	78	44	427	213	81	546	291	125
March	67	30	14	225	126	50	292	156	64
April	91	35	16	8	5	2	99	40	18
May	159	59	27	4	0	0	163	59	27
June	203	75	33	7	3	1	210	78	34
July	7	3	1	1	*	*	8	3	1
August	1	0	*	3	1	*	4	1	0
September	23	11	5	139	78	32	162	89	37
October	60	29	14	191	94	36	251	123	50
November	17	11	5	108	49	18	125	60	23
December	62	39	22	343	160	64	405	199	86
Total	823	376	185	1856	896	350	2679	1272	535
Annual catch ²									
Albacore	95	55	31	912	357	140	1007	412	171
Yellowfin tuna	227	124	68	330	180	70	557	304	138
Bigeye tuna	673	279	132	1155	563	221	1628	842	353
Bluefin tuna	0	0	0	1	0	*	1	*	*
Skipjack tuna	1	0	*	1	1	0	2	1	*
Total tunas	996	458	231	2399	1101	431	3395	1559	662
Annual catch ²									
Blue marlin	23	10	5	22	12	5	45	22	10
Striped marlin	32	16	8	136	73	29	168	89	37
Swordfish	47	18	8	220	109	44	267	127	52
Black marlin	1	1	*	1	0	*	2	1	*
Spearfish & sailfish	7	3	2	8	4	2	15	7	4
Total billfishes	110	48	23	387	198	80	497	246	103

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 18.--Estimated catch and effort by Japanese longliners within 200, 100, and 50 miles of the Hawaiian Islands, 1977.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	100	58	32	406	209	80	506	267	112
February	159	100	58	113	53	18	272	153	76
March	20	13	8	33	18	7	53	31	15
April	14	5	2	0	0	0	14	5	2
May	104	36	15	6	0	0	110	36	15
June	141	48	20	21	5	2	162	53	22
July	21	9	4	43	25	9	64	34	13
August	74	26	11	3	1	0	77	27	11
September	85	29	12	50	24	9	135	53	21
October	62	22	10	28	5	2	90	27	12
November	19	6	3	90	33	12	109	39	15
December	43	19	8	664	312	114	707	331	122
Total	842	371	183	1457	685	253	2299	1056	436
Annual catch ²									
Albacore	47	20	11	446	162	61	493	182	72
Yellowfin tuna	206	120	68	304	156	57	510	276	125
Bigeye tuna	806	317	147	1510	709	262	2316	1026	409
Bluefin tuna	0	0	0	1	*	0	1	0	*
Skipjack tuna	1	*	*	1	0	0	2	0	0
Total tunas	1060	457	226	2262	1027	380	3322	1484	606
Annual catch ²									
Blue marlin	37	15	7	26	13	5	63	28	12
Striped marlin	31	15	8	113	61	23	144	76	31
Swordfish	25	9	4	57	27	11	82	36	15
Black marlin	1	1	*	2	1	*	3	2	*
Spearfish & sailfish	8	3	1	5	2	1	13	5	2
Total billfishes	102	43	20	203	104	40	305	147	60

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 19.--Estimated catch and effort by longliners of Taiwan within 200, 100, and 50 miles of the Hawaiian Islands, 1972.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0
June	0	0	0	33	16	6	33	16	6
July	0	0	0	20	7	3	20	7	3
August	0	0	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0
Total	0	0	0	53	23	9	53	23	9
Annual catch ²									
Albacore	0	0	0	99	39	14	99	39	14
Yellowfin tuna	0	0	0	17	7	3	17	7	3
Bigeye tuna	0	0	0	3	1	*	3	1	*
Bluefin tuna	0	0	0	0	0	0	0	0	0
Skipjack tuna	0	0	0	0	0	0	0	0	0
Total tunas	0	0	0	119	47	17	119	47	17
Annual catch ²									
Blue marlin	0	0	0	0	0	0	0	0	0
Striped marlin	0	0	0	3	1	*	3	1	*
Swordfish	0	0	0	0	0	0	0	0	0
Black marlin	0	0	0	0	0	0	0	0	0
Spearfish & sailfish	0	0	0	0	0	0	0	0	0
Total billfishes	0	0	0	3	1	*	3	1	*

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 20.--Estimated catch and effort by longliners of Taiwan within 200, 100, and 50 miles of the Hawaiian Islands, 1977.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	5	2	1	47	19	7	52	21	8
February	4	2	1	4	*	0	8	2	1
March	1	*	*	0	0	0	1	*	*
April	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0	0	0
September	6	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0
Total	10	4	2	51	19	7	61	23	9
Annual catch ²									
Albacore	7	1	1	34	7	2	41	8	3
Yellowfin tuna	2	1	1	4	2	1	6	3	2
Bigeye tuna	1	1	*	4	2	1	5	3	1
Bluefin tuna	0	0	0	0	0	0	0	0	0
Skipjack tuna	0	0	0	*	*	0	*	*	0
Total tunas	10	3	2	42	11	4	52	14	6
Annual catch ²									
Blue marlin	*	0	0	1	*	*	1	*	*
Striped marlin	*	0	0	1	*	*	1	*	*
Swordfish	*	0	0	*	0	0	*	0	0
Black marlin	0	0	0	0	0	0	0	0	0
Spearfish & sailfish	0	0	0	0	0	0	0	0	0
Total billfishes	*	0	0	2	*	*	2	*	*

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 21.--Estimated catch and effort by Japanese longliners around Guam and the Northern Mariana Islands, 1965.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 ml.	Within FCZ	Within 50 ml.	Within FCZ	Within 50 ml.	Within FCZ
Monthly nominal effort ¹						
January	2	13	19	155	21	168
February	3	17	11	87	14	104
March	5	32	17	122	22	154
April	1	4	3	27	4	31
May	*	1	6	49	6	50
June	1	4	6	41	7	45
July	1	8	1	5	2	13
August	1	7	1	4	2	11
September	1	9	*	1	1	10
October	17	103	10	37	27	140
November	4	27	4	20	8	47
December	8	50	10	55	18	105
Total	44	275	88	603	132	678
Annual catch ²						
Albacore	8	48	8	55	16	103
Yellowfin tuna	26	160	20	95	46	255
Bigeye tuna	6	41	15	96	21	137
Bluefin tuna	*	*	*	2	*	2
Skipjack tuna	*	*	*	*	*	0
Total tunas	40	249	43	248	83	497
Annual catch ²						
Blue marlin	6	36	8	40	14	76
Striped marlin	*	1	4	36	4	37
Swordfish	0	1	3	24	3	25
Black marlin	*	1	*	1	0	2
Spearfish & sailfish	*	2	1	7	1	9
Total billfishes	6	41	16	108	22	149

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 22.--Estimated catch and effort by Japanese longliners around Guam and the Northern Mariana Islands, 1966.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	1	6	4	33	5	39
February	*	2	4	30	4	32
March	3	22	5	17	8	39
April	6	36	6	37	12	73
May	3	22	6	43	9	65
June	0	1	4	42	4	43
July	*	3	3	18	3	21
August	3	18	5	24	8	42
September	4	26	5	25	9	51
October	9	55	5	19	14	74
November	3	20	1	5	4	25
December	2	15	3	16	5	31
Total	34	226	51	309	85	535
Annual catch ²						
Albacore	3	17	4	28	7	45
Yellowfin tuna	20	126	19	106	39	232
Bigeye tuna	5	31	6	34	11	65
Bluefin tuna	*	0	0	1	*	1
Skipjack tuna	*	*	*	*	*	0
Total tunas	28	174	29	169	57	343
Annual catch ²						
Blue marlin	4	29	6	39	10	68
Striped marlin	*	*	1	9	1	9
Swordfish	*	*	2	19	2	19
Black marlin	*	1	*	1	*	2
Spearfish & sailfish	*	3	1	5	1	8
Total billfishes	4	33	10	73	14	106

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 23.--Estimated catch and effort by Japanese longliners around Guam and the Northern Mariana Islands, 1967.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	2	15	11	86	13	101
February	7	44	13	80	20	124
March	3	19	5	31	8	50
April	4	26	10	46	14	72
May	5	29	7	42	12	70
June	*	3	8	65	8	68
July	0	3	1	4	1	7
August	1	7	2	9	3	16
September	0	2	*	1	0	3
October	*	3	*	0	*	3
November	0	0	*	2	*	2
December	3	16	12	102	15	118
Total	25	166	69	468	94	634
Annual catch ²						
Albacore	0	3	9	79	9	82
Yellowfin tuna	7	42	9	47	16	69
Bigeye tuna	7	44	13	81	20	125
Bluefin tuna	0	0	0	*	*	*
Skipjack tuna	0	*	*	*	*	0
Total tunas	14	89	31	207	45	296
Annual catch ²						
Blue marlin	3	17	5	27	8	44
Striped marlin	*	1	2	17	2	18
Swordfish	0	1	4	26	4	27
Black marlin	0	1	*	1	*	2
Spearfish & sailfish	*	2	1	5	1	7
Total billfishes	3	22	12	76	15	96

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 24.--Estimated catch and effort by Japanese longliners around Guam and the Northern Mariana Islands, 1968.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	*	3	8	64	8	67
February	6	37	11	66	17	103
March	12	74	14	84	26	158
April	3	20	9	67	12	87
May	2	12	3	14	5	26
June	2	14	4	33	6	47
July	1	10	6	51	7	61
August	2	15	1	4	3	19
September	2	10	1	6	3	16
October	*	3	1	3	1	6
November	1	6	1	10	2	16
December	2	10	10	83	12	93
Total	33	214	69	485	102	699
Annual catch ²						
Albacore	2	12	10	95	12	107
Yellowfin tuna	17	104	11	52	28	156
Bigeye tuna	8	48	9	52	17	100
Bluefin tuna	*	•	*	*	*	•
Skipjack tuna	*	1	•	*	*	1
Total tunas	27	165	30	199	57	364
Annual catch ²						
Blue marlin	3	20	4	25	7	45
Striped marlin	*	1	2	16	2	17
Swordfish	*	1	4	32	4	33
Black marlin	•	1	*	•	*	1
Spearfish & sailfish	*	3	1	3	1	6
Total billfishes	3	26	11	76	14	102

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 25.--Estimated catch and effort by Japanese longliners around Guam and the Northern Mariana Islands, 1969.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	1	6	22	165	23	171
February	5	31	11	56	16	87
March	5	32	7	39	12	71
April	1	5	4	32	5	37
May	0	2	1	7	1	9
June	0	0	2	16	2	16
July	1	6	1	11	2	17
August	*	2	3	21	3	23
September	0	0	0	0	0	0
October	1	5	3	11	4	16
November	1	6	3	21	4	27
December	4	24	6	33	10	57
Total	19	119	63	412	82	531
Annual catch ²						
Albacore	2	10	9	79	11	89
Yellowfin tuna	6	42	14	71	20	113
Bigeye tuna	5	34	14	72	19	106
Bluefin tuna	0	0	*	*	0	0
Skipjack tuna	*	0	0	*	*	*
Total tunas	13	86	37	222	50	308
Annual catch ²						
Blue marlin	1	7	3	17	4	24
Striped marlin	*	1	2	13	2	14
Swordfish	0	1	2	17	2	18
Black marlin	*	1	*	1	0	2
Spearfish & sailfish	*	*	0	1	0	1
Total billfishes	1	10	7	49	8	59

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 26.--Estimated catch and effort by Japanese longliners around Guam and the Northern Mariana Islands, 1970.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	4	24	8	54	12	78
February	4	24	22	167	26	191
March	2	15	42	226	44	241
April	1	7	8	64	9	71
May	3	16	7	66	10	82
June	1	7	7	66	8	73
July	1	3	1	5	2	8
August	1	7	5	27	6	34
September	2	12	4	23	6	35
October	2	13	8	45	10	58
November	1	4	9	39	10	43
December	0	1	25	88	25	89
Total	22	133	146	870	168	1003
Annual catch ²						
Albacore	1	7	17	92	18	99
Yellowfin tuna	10	68	44	220	54	288
Bigeye tuna	4	26	14	85	18	111
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	*	*	1	4	1	4
Total tunas	15	101	76	401	91	502
Annual catch ²						
Blue marlin	2	13	11	63	13	76
Striped marlin	*	1	9	71	9	72
Swordfish	0	1	5	37	5	38
Black marlin	*	*	0	3	*	3
Spearfish & sailfish	*	1	3	16	3	17
Total billfishes	2	16	28	190	30	206

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 27.--Estimated catch and effort by Japanese longliners around Guam and the Northern Mariana Islands, 1971.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	0	1	2	17	2	18
February	0	1	13	123	13	124
March	0	0	18	176	18	176
April	0	0	4	59	4	59
May	0	0	0	5	0	5
June	0	0	1	21	1	21
July	0	0	2	12	2	12
August	0	0	1	19	1	19
September	0	0	47	72	47	72
October	0	0	113	136	113	136
November	13	17	54	99	67	116
December	0	0	64	282	64	282
Total	13	19	319	1021	332	1040
Annual catch ²						
Albacore	0	0	71	178	71	178
Yellowfin tuna	6	8	95	216	101	224
Bigeye tuna	1	1	20	97	21	98
Bluefin tuna	0	0	*	*	*	0
Skipjack tuna	*	*	0	*	0	0
Total tunas	7	9	186	491	193	500
Annual catch ²						
Blue marlin	2	2	20	54	22	56
Striped marlin	*	*	6	48	6	48
Swordfish	*	*	4	28	4	28
Black marlin	0	0	2	5	2	5
Spearfish & sailfish	0	0	2	17	2	17
Total billfishes	2	2	34	152	36	154

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 28.--Estimated catch and effort by Japanese longliners around Guam and the Northern Mariana Islands, 1972.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	0	0	59	151	59	151
February	0	1	23	65	23	66
March	0	1	4	37	0	38
April	0	0	5	42	5	42
May	0	15	2	14	2	29
June	0	2	16	37	16	39
July	0	0	2	12	2	12
August	0	0	25	29	25	29
September	0	1	30	39	30	40
October	0	0	25	54	25	54
November	0	0	19	44	19	44
December	0	0	30	69	30	69
Total	0	20	240	593	240	613
Annual catch ²						
Albacore	0	*	82	168	82	168
Yellowfin tuna	0	5	70	111	70	116
Bigeye tuna	0	6	14	48	14	54
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	0	0	1	1	1	1
Total tunas	0	11	167	328	167	339
Annual catch ²						
Blue marlin	0	2	8	22	8	24
Striped marlin	0	0	3	20	3	20
Swordfish	0	*	4	20	4	20
Black marlin	0	0	1	2	1	2
Spearfish & sailfish	0	0	5	9	5	9
Total billfishes	0	2	21	73	21	75

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 29.--Estimated catch and effort by Japanese longliners around Guam and the Northern Mariana Islands, 1973.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	0	0	16	23	16	23
February	0	8	3	26	3	34
March	0	5	4	46	4	51
April	*	9	1	5	1	14
May	0	3	*	2	*	8
June	4	10	3	16	7	26
July	0	12	0	2	*	14
August	0	0	1	11	1	11
September	0	0	1	6	1	6
October	*	3	0	1	0	4
November	0	5	8	34	8	39
December	0	0	6	61	6	61
Total	4	55	43	233	47	288
Annual catch ²						
Albacore	1	5	22	100	23	105
Yellowfin tuna	1	22	3	21	4	43
Bigeye tuna	1	17	3	24	4	41
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	0	0	0	0	0	0
Total tunas	3	44	28	145	31	189
Annual catch ²						
Blue marlin	0	7	1	7	1	14
Striped marlin	0	1	1	11	1	12
Swordfish	*	1	1	9	1	10
Black marlin	0	0	*	*	0	0
Spearfish & sailfish	*	*	0	0	0	0
Total billfishes	0	9	3	27	3	36

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 30.--Estimated catch and effort by Japanese longliners around Guam and the Northern Mariana Islands, 1974.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	*	4	1	5	1	9
February	0	23	5	51	5	74
March	7	97	6	62	13	159
April	11	21	18	103	29	124
May	*	44	7	59	7	103
June	0	13	2	31	2	44
July	0	6	0	0	0	6
August	0	0	*	1	0	1
September	0	23	0	0	0	23
October	0	42	0	7	0	49
November	0	0	0	15	0	15
December	0	*	*	3	*	3
Total	18	273	39	337	57	610
Annual catch ²						
Albacore	1	70	1	20	2	90
Yellowfin tuna	13	111	4	28	17	139
Bigeye tuna	6	53	5	23	11	76
Bluefin tuna	0	0	*	0	*	0
Skipjack tuna	0	*	0	*	*	*
Total tunas	20	234	10	71	30	305
Annual catch ²						
Blue marlin	1	27	2	19	3	46
Striped marlin	*	3	6	63	6	66
Swordfish	*	2	4	29	4	31
Black marlin	0	*	*	*	0	*
Spearfish & sailfish	*	4	*	2	*	6
Total billfishes	1	36	12	113	13	149

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 31.--Estimated catch and effort by Japanese longliners around Guam and the Northern Mariana Islands, 1975.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	0	23	5	42	5	65
February	0	17	7	61	7	78
March	2	25	12	99	14	124
April	6	27	17	36	23	63
May	0	0	2	21	2	21
June	0	0	*	1	*	1
July	2	20	1	4	3	24
August	0	2	3	3	3	5
September	*	23	5	6	5	29
October	10	133	3	41	13	174
November	0	2	2	16	2	18
December	0	6	1	12	1	16
Total	20	278	58	342	78	620
Annual catch ²						
Albacore	5	58	14	90	19	148
Yellowfin tuna	7	100	7	48	14	148
Bigeye tuna	2	44	3	30	5	74
Bluefin tuna	0	0	0	1	0	1
Skipjack tuna	*	*	*	0	*	0
Total tunas	14	202	24	169	38	371
Annual catch ²						
Blue marlin	3	36	3	14	6	50
Striped marlin	0	0	3	21	3	21
Swordfish	*	1	5	36	5	37
Black marlin	0	0	0	*	0	0
Spearfish & sailfish	0	0	0	1	*	1
Total billfishes	3	37	11	72	14	109

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 32.--Estimated catch and effort by Japanese longliners around Guam and the Northern Mariana Islands, 1976.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	10	60	13	88	23	148
February	6	36	9	57	15	93
March	2	13	6	44	8	57
April	5	30	5	21	10	51
May	1	7	1	5	2	12
June	1	7	1	7	2	14
July	6	39	3	13	9	52
August	5	30	5	27	10	57
September	5	30	4	25	9	55
October	11	65	5	37	16	102
November	31	192	18	127	49	319
December	37	226	13	49	50	275
Total	120	735	83	500	203	1235
Annual catch ²						
Albacore	14	90	13	91	27	181
Yellowfin tuna	93	577	44	190	137	767
Bigeye tuna	41	252	21	95	62	347
Bluefin tuna	0	*	*	0	*	*
Skipjack tuna	0	3	*	1	*	4
Total tunas	148	922	78	377	226	1299
Annual catch ²						
Blue marlin	9	58	6	32	15	90
Striped marlin	*	2	1	8	1	10
Swordfish	2	10	3	20	5	30
Black marlin	0	1	*	1	*	2
Spearfish & sailfish	*	2	0	2	0	4
Total billfishes	11	73	10	63	21	136

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 33.--Estimated catch and effort by Japanese longliners around Guam and the Northern Mariana Islands, 1977.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	17	106	14	77	31	183
February	5	34	8	48	13	82
March	11	69	12	70	23	139
April	8	48	5	20	13	68
May	29	183	20	83	49	266
June	26	168	34	137	60	305
July	20	130	25	108	45	238
August	8	52	10	45	18	97
September	13	80	15	64	28	144
October	22	136	17	74	39	210
November	24	152	21	94	45	246
December	7	41	9	57	16	98
Total	190	1199	190	877	380	2076
Annual catch ²						
Albacore	7	49	12	109	19	158
Yellowfin tuna	217	1368	208	861	425	2229
Bigeye tuna	90	572	94	406	184	978
Bluefin tuna	0	0	*	1	0	1
Skipjack tuna	0	0	0	0	*	0
Total tunas	314	1989	314	1377	628	3366
Annual catch ²						
Blue marlin	14	87	15	63	29	150
Striped marlin	0	1	*	2	0	3
Swordfish	1	9	2	13	3	22
Black marlin	1	5	1	4	2	9
Spearfish & sailfish	*	2	0	1	0	3
Total billfishes	16	104	18	83	34	187

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 34.--Estimated catch and effort by longliners of Taiwan around Guam and the Northern Mariana Islands, 1967.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	0	0	0	0	0	0
July	2	12	2	10	4	22
August	0	0	0	0	0	0
September	0	0	0	0	0	0
October	0	0	0	0	0	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
Total	2	12	2	10	4	22
Annual catch ²						
Albacore	0	0	0	0	0	0
Yellowfin tuna	*	2	*	2	*	4
Bigeye tuna	*	1	*	1	*	2
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	0	0	0	0	0	0
Total tunas	*	3	*	3	*	6
Annual catch ²						
Blue marlin	*	1	*	1	*	2
Striped marlin	*	*	*	*	*	*
Swordfish	0	0	0	0	0	0
Black marlin	*	*	*	*	*	*
Spearfish & sailfish	*	*	*	*	*	*
Total billfishes	*	1	*	1	*	2

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 35.--Estimated catch and effort by foreign longliners based at American Samoa, 1965.

	Inside FCZ (A)				Outside FCZ (B)				Entire area (A+B)				Within 50 mi.			
	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total
	Monthly nominal effort ¹															
January	20	31	42	93	867	159	275	1301	987	190	317	1394	5	*	1	6
February	12	2	1	15	702	158	329	1189	714	160	330	1204	0	0	0	0
March	6	12	3	21	584	117	355	1056	590	129	358	1077	0	0	1	1
April	0	*	0	*	802	272	379	1453	802	272	379	1453	0	0	0	0
May	0	3	3	6	467	216	337	1020	467	219	340	1026	0	0	1	1
June	0	2	12	14	654	218	327	1199	654	220	339	1213	0	1	7	8
July	0	3	5	8	512	169	338	1019	512	172	343	1027	0	0	3	3
August	0	12	6	18	625	137	331	1093	625	149	337	1111	0	3	11	13
September	1	7	21	29	588	123	371	1082	589	130	392	1111	0	1	6	7
October	5	24	8	37	569	187	418	1174	574	211	426	1211	0	1	3	4
November	18	47	49	114	793	142	260	1195	811	189	309	1309	*	9	14	22
December	86	42	66	194	1001	139	443	1583	1087	181	509	1777	4	26	14	44
Total	146	185	216	549	8164	2037	4163	14364	8312	2222	4379	14913	9	40	53	102
Annual catch ²																
Albacore	124	143	171	438	9289	1559	4173	15021	9413	1702	4344	15459	6	30	42	78
Yellowfin tuna	21	27	40	88	2694	761	1604	5059	2715	788	1644	5147	2	5	11	18
Bigeye tuna	5	15	26	46	1448	423	1485	3356	1453	438	1511	3402	*	2	5	7
Bluefin tuna	0	*	*	*	3	3	3	9	3	3	3	9	0	*	0	*
Skipjack tuna	*	*	*	*	17	3	9	29	17	3	9	29	*	*	*	*
Total tunas	150	185	237	572	13451	2749	7274	23474	13601	2934	7511	24046	8	37	58	103
Annual catch ²																
Blue marlin	1	5	7	13	35	36	125	196	36	41	132	209	*	2	1	3
Striped marlin	*	*	3	3	13	3	56	72	13	3	59	75	*	*	*	*
Swordfish	*	0	3	3	5	3	25	33	5	3	28	36	*	*	*	*
Black marlin	*	3	5	8	2	36	31	69	2	39	36	77	0	0	0	0
Spearfish & sailfish	*	*	*	*	7	3	11	21	7	3	11	21	*	*	*	*
Total billfishes	1	8	18	27	62	81	248	391	63	89	266	418	*	2	1	3
Annual catch ²																
Wahoo	5	1	4	10	194	16	56	266	199	17	60	276	*	0	0	0

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 36.--Estimated catch and effort by foreign longliners based at American Samoa, 1966.

	Inside FCZ (A)				Outside FCZ (B)				Entire area (A+B)				Within 50 mi.			
	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total
	Monthly nominal effort ¹															
January	20	35	32	87	668	207	367	1242	688	242	399	1329	8	5	4	17
February	11	5	8	24	538	372	456	1366	549	377	464	1390	3	0	4	7
March	18	37	23	78	473	498	495	1466	491	535	518	1544	9	2	0	11
April	1	5	6	12	266	548	405	1219	267	553	411	1231	0	0	1	1
May	6	16	3	19	401	713	818	1932	401	729	821	1951	*	2	0	2
June	0	45	0	45	572	554	911	2037	572	599	911	2082	0	1	0	1
July	1	53	11	65	843	662	806	2311	844	715	817	2376	0	11	0	11
August	0	35	2	37	888	651	728	2267	888	686	730	2304	0	14	0	14
September	7	21	1	29	696	647	667	2010	703	668	668	2039	3	7	0	10
October	3	99	26	128	791	862	878	2531	794	961	904	2659	0	5	8	13
November	27	165	37	229	599	725	961	2285	626	890	998	2514	1	6	7	14
December	4	134	10	148	522	1021	839	2382	526	1155	849	2530	2	8	2	12
Total	92	650	159	901	7257	7460	8331	23048	7349	8110	8490	23949	26	61	26	113
Annual catch ²																
Albacore	52	425	105	582	8848	7047	9012	24907	8900	7472	9117	25489	11	34	15	60
Yellowfin tuna	19	88	25	132	2749	2343	2297	7389	2768	2631	2322	7521	7	7	4	18
Bigeye tuna	10	54	18	82	1544	1011	2613	5168	1554	1065	2631	5250	3	4	1	8
Bluefin tuna	0	1	0	1	14	3	9	26	14	4	9	27	0	*	0	*
Skipjack tuna	0	1	0	1	20	16	29	65	20	17	29	66	*	*	0	*
Total tunas	81	569	148	798	13175	10420	13960	37555	13256	10989	14108	38353	21	45	20	86
Annual catch ²																
Blue marlin	*	38	3	41	*	408	224	632	*	446	227	673	0	2	1	3
Striped marlin	*	3	3	6	*	104	73	177	*	107	76	183	*	*	1	1
Swordfish	*	5	2	7	*	31	39	70	*	36	41	77	*	1	*	1
Black marlin	*	2	2	4	*	60	92	152	*	62	94	156	0	*	0	0
Spearfish & sailfish	*	1	1	2	*	35	28	63	0	36	29	65	0	*	*	0
Total billfishes	*	49	11	60	*	638	456	1094	*	687	467	1154	*	3	2	5
Annual catch ²																
Wahoo	2	5	2	9	121	76	168	365	123	81	170	374	1	*	1	2

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 37.--Estimated catch and effort by foreign longliners based at American Samoa, 1967.

	Inside FCZ (A)				Outside FCZ (B)				Entire area (A+B)				Within 50 mi.			
	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total
	Monthly nominal effort ¹															
January	0	35	1	36	395	702	843	1940	395	737	844	1976	0	4	0	4
February	0	20	16	36	371	852	858	2081	371	872	874	2117	0	0	0	0
March	0	35	4	39	538	838	995	2371	538	873	999	2410	0	7	0	7
April	1	30	5	36	620	791	948	2359	621	933	953	2395	*	4	*	4
May	0	19	8	27	689	1037	894	2620	689	1056	902	2647	0	2	2	4
June	0	8	0	8	795	934	907	2636	795	942	907	2644	0	3	0	3
July	0	3	1	4	727	995	944	2666	727	998	945	2670	0	*	0	*
August	0	9	4	13	980	1049	1009	3038	980	1058	1013	3051	0	0	0	0
September	0	13	10	23	726	965	775	2466	726	978	785	2489	0	1	5	6
October	0	40	1	41	626	1241	922	2789	626	1281	923	2830	0	9	0	9
November	10	59	2	71	447	1014	916	2377	457	1073	918	2448	0	7	0	7
December	0	41	1	42	283	817	606	1706	283	858	607	1748	0	8	*	8
Total	11	312	53	376	7197	11235	10617	29049	7208	11547	10670	29425	*	49	9	58
Annual catch ²																
Albacore	8	150	19	177	7469	10869	9680	28019	7477	11019	9699	28195	*	24	3	27
Yellowfin tuna	1	41	8	50	1292	2389	2373	6054	1293	2430	2381	6104	*	6	3	9
Bigeye tuna	*	21	3	24	1153	2092	3128	6373	1153	2113	3131	6397	0	4	*	4
Bluefin tuna	0	*	*	*	8	11	9	28	8	11	9	28	0	*	0	*
Skipjack tuna	*	1	*	1	28	29	33	90	28	30	33	91	0	*	*	*
Total tunas	9	213	30	352	9950	15390	15223	40563	9959	15603	15253	40815	*	34	6	40
Annual catch ²																
Blue marlin	*	18	1	19	1	412	151	564	1	430	152	583	*	3	*	3
Striped marlin	*	*	*	*	1	134	55	190	1	134	55	190	0	*	*	*
Swordfish	0	*	*	*	*	37	16	53	*	37	16	53	0	*	0	*
Black marlin	*	2	1	3	*	68	57	125	*	70	58	128	0	*	*	*
Spearfish & sailfish	0	1	*	1	*	49	41	90	*	50	41	91	0	*	*	*
Total billfishes	*	21	2	23	2	700	320	1022	2	721	322	1045	*	3	*	3
Annual catch ²																
Wahoo	*	3	*	3	29	135	252	416	29	138	252	419	0	0	*	*

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 38.--Estimated catch and effort by foreign longliners based at American Samoa, 1968.

	Inside FCZ (A)				Outside FCZ (B)				Entire area (A+B)				Within 50 mi.			
	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total
	Monthly nominal effort ¹															
January	1	50	0	51	446	993	685	2126	449	1043	685	2177	0	6	0	6
February	1	42	1	44	293	984	746	2023	294	1026	747	2057	0	2	0	2
March	*	48	9	57	396	1146	805	2347	396	1194	814	2404	0	2	0	2
April	*	45	2	47	403	1058	685	2346	403	1103	687	2393	0	6	0	6
May	0	39	1	40	490	1291	946	2727	490	1330	947	2767	0	2	1	3
June	0	33	3	36	383	1003	1132	2518	383	1036	1135	2354	0	7	1	8
July	0	3	2	5	359	1030	985	2374	359	1033	987	2379	0	0	0	0
August	0	22	4	26	372	937	820	2129	372	959	824	2155	0	2	2	4
September	0	21	1	22	282	566	772	1620	282	587	773	1642	0	7	0	7
October	0	19	13	32	186	575	757	1518	186	594	770	1550	0	9	*	9
November	2	4	29	35	170	474	840	1484	172	478	869	1519	1	0	24	25
December	1	14	23	38	165	371	704	1240	166	385	727	1273	0	4	13	14
Total	5	340	88	433	3947	10428	10077	24452	3952	10768	10165	24895	1	47	38	96
Annual catch ²																
Albacore	3	153	39	195	3153	7938	6438	17529	3156	8091	6077	17720	*	19	20	39
Yellowfin tuna	2	58	15	75	1208	3667	3488	8363	1210	3725	3503	8438	*	5	7	12
Bigeye tuna	*	15	3	18	319	1401	1474	3194	319	1416	1477	3212	*	1	1	2
Bluefin tuna	0	*	1	1	5	14	12	31	5	14	13	32	0	*	*	*
Skipjack tuna	*	*	*	*	5	13	31	49	5	13	31	49	0	*	*	*
Total tunas	5	226	58	289	4690	13033	11443	29166	4695	13259	11501	29455	*	25	28	53
Annual catch ²																
Blue marlin	*	49	1	50	5	1026	45	1076	5	1075	46	1126	*	*	*	4
Striped marlin	*	1	*	1	4	230	20	254	4	231	20	255	0	*	*	*
Swordfish	*	2	*	2	1	87	10	98	1	89	10	100	0	*	*	*
Black marlin	0	9	*	9	*	168	26	194	*	177	26	203	0	1	*	1
Spearfish & sailfish	*	3	*	3	1	76	29	106	1	79	29	109	*	*	*	*
Total billfishes	*	64	1	65	11	1587	130	1728	11	1651	131	1793	*	5	*	5
Annual catch ²																
Mahoo	*	5	*	5	6	80	147	233	6	85	147	238	*	*	*	*

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 39.--Estimated catch and effort by foreign longliners based at American Samoa, 1969.

	Inside FCZ (A)				Outside FCZ (B)				Entire area (A+B)				Within 50 mi.			
	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total
	Monthly nominal effort ¹															
January	1	30	50	81	64	393	765	1222	65	423	815	1303	0	5	27	32
February	0	32	11	43	95	413	954	1462	95	445	965	1505	0	8	1	9
March	0	28	12	40	181	579	934	1694	181	607	946	1734	0	8	8	16
April	2	9	1	11	181	532	1012	1725	183	540	1013	1736	0	0	0	0
May	0	*	0	*	168	706	1064	1938	168	706	1064	1938	0	0	0	0
June	0	3	2	5	224	546	1191	1961	224	549	1193	1966	0	0	0	0
July	0	6	1	7	233	645	1328	2206	233	651	1329	2213	0	0	*	*
August	0	3	0	3	223	699	1214	2136	223	702	1214	2139	0	0	0	0
September	0	14	10	24	151	716	1134	2001	151	730	1144	2025	0	1	2	3
October	0	69	68	137	146	732	1381	2259	146	801	1449	2396	0	2	5	7
November	0	267	183	450	105	801	1172	2078	105	1068	1355	2528	0	9	1	10
December	0	163	47	210	45	725	1305	2075	45	888	1352	2285	0	9	3	12
Total	3	623	385	1011	1816	7487	13454	22757	1819	8110	13839	23758	0	42	47	89
Annual catch ²																
Albacore	1	501	249	751	1570	6395	10016	17981	1571	6896	10285	18732	0	23	16	44
Yellowfin tuna	1	103	85	189	746	2789	5636	9171	747	2892	5721	9360	0	7	17	24
Bigeye tuna	*	44	15	59	93	1467	2117	3677	93	1511	2132	3736	0	4	2	6
Bluefin tuna	0	1	2	3	4	19	11	34	4	20	13	37	0	0	1	1
Skipjack tuna	0	1	1	2	7	13	46	66	7	14	47	68	0	0	*	*
Total tunas	2	650	352	1004	2420	10683	17826	30929	2422	11333	18178	31933	0	39	36	75
Annual catch ²																
Blue marlin	*	194	7	191	53	1461	398	1912	53	1645	405	2103	0	15	1	16
Striped marlin	0	7	9	16	40	218	152	410	40	225	161	426	0	0	2	2
Swordfish	0	1	4	5	17	71	75	163	17	72	79	168	0	0	1	1
Black marlin	0	14	3	17	3	192	139	334	3	206	142	351	0	0	0	*
Spearfish & sailfish	0	11	1	12	8	306	134	448	8	317	135	460	0	1	0	1
Total billfishes	*	217	24	241	121	2248	898	3267	121	2465	922	3508	0	16	4	20
Annual catch ²																
Wahoo	0	*	4	4	6	27	152	185	6	27	156	199	0	0	0	*

¹Effort in vessel days, * = < 1 vessel day.²Catch in metric tons, * = < 1 mt.

Table 40.--Estimated catch and effort by foreign longliners based at American Samoa, 1970.

	Inside FCZ (A)				Outside FCZ (B)				Entire area (A+B)				Within 50 mi.									
	Japan		Korea		Japan		Korea		Japan		Taiwan		Korea		Japan		Taiwan		Korea		Total	
	Total	Effort	Total	Effort	Total	Effort	Total	Effort	Total	Effort	Total	Effort	Total	Effort	Total	Effort	Total	Effort	Total	Effort	Total	
January	0	38	11	49	62	1095	1193	2370	82	1133	1204	2419	0	3	3	6	0	0	0	0	0	
February	0	23	1	24	38	926	1280	2244	38	949	1281	2268	0	0	0	0	0	0	0	0	0	
March	0	8	10	18	112	1135	1216	2463	112	1143	1226	2481	0	0	0	0	0	0	0	0	0	
April	0	103	41	144	127	1057	1043	2227	127	1160	1084	2371	0	0	0	0	0	0	0	0	0	
May	0	5	2	7	99	1123	1212	2434	99	1128	1214	2441	0	0	0	0	0	0	0	0	0	
June	0	48	9	57	131	1181	1012	2324	131	1229	1021	2381	0	0	0	0	0	0	0	0	0	
July	0	7	2	9	124	1010	1083	2217	124	1017	1085	2226	0	0	0	0	0	0	0	0	0	
August	0	10	0	10	81	851	1121	2053	81	861	1121	2063	0	0	0	0	0	0	0	0	0	
September	0	55	1	56	60	764	991	1735	60	819	892	1791	0	0	0	0	0	0	0	0	0	
October	0	52	15	67	46	1100	998	2144	46	1152	1013	2211	0	0	0	0	0	0	0	0	0	
November	0	166	91	257	32	1281	1082	2395	32	1447	1173	2652	0	0	0	0	0	0	0	0	0	
December	0	164	170	334	32	953	1013	1998	32	1117	1183	2332	0	0	0	0	0	0	0	0	0	
Total	0	679	353	1032	934	12476	13184	26604	984	13155	13497	27636	0	69	7	76						
Annual catch ²																						
Albacore	0	433	173	606	952	10548	11770	23270	952	10961	11943	23876	0	33	2	35						
Yellowfin tuna	0	138	45	183	260	4241	4168	8669	260	4379	4213	8852	0	9	1	10						
Bigeye tuna	0	51	10	61	7	1859	1524	3390	7	1910	1534	3451	0	4	0	4						
Bluefin tuna	0	3	*	3	6	24	14	38	6	27	14	41	0	0	0	0						
Skipjack tuna	0	2	2	4	7	57	108	172	7	59	110	176	0	0	0	0						
Total tunas	0	627	230	857	1226	16729	17584	35539	1226	17356	17814	36396	0	46	3	49						
Annual catch ²																						
Blue marlin	0	40	17	57	86	836	594	1516	86	876	611	1573	0	3	0	3						
Striped marlin	0	6	5	11	53	184	249	486	53	190	254	497	0	1	0	1						
Swordfish	0	1	1	2	22	33	153	208	22	34	154	210	0	0	0	0						
Black marlin	0	6	2	8	3	106	151	260	3	112	153	268	0	1	0	1						
Spearfish & sailfish	0	2	2	4	18	97	260	365	18	89	262	369	0	0	0	0						
Total billfishes	0	55	27	82	182	1246	1407	2835	182	1301	1434	2917	0	5	0	5						
Annual catch ²																						
Wahoo	0	1	6	7	3	36	179	218	3	37	185	225	0	0	0	0						

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 41.--Estimated catch and effort by foreign longliners based at American Samoa, 1971.

	Inside FCZ (A)				Outside FCZ (B)				Entire area (A+B)				Within 50 mi.									
	Japan		Korea		Japan		Korea		Japan		Taiwan		Korea		Japan		Taiwan		Korea		Total	
	Total	Effort	Total	Effort	Total	Effort	Total	Effort	Total	Effort	Total	Effort	Total	Effort	Total	Effort	Total	Effort	Total	Effort	Total	
	Monthly nominal effort ¹																					
January	1	114	128	243	20	985	1018	2023	21	1099	1146	2266	*	15	15	30						
February	7	69	23	92	14	953	1053	2020	14	1022	1076	2112	0	13	5	18						
March	0	37	10	47	26	1157	881	2064	26	1154	891	2111	0	10	*	10						
April	0	17	1	18	11	1275	1061	2347	11	1292	1062	2365	0	1	0	1						
May	0	33	*	33	53	1145	1475	2673	53	1178	1475	2706	0	9	0	9						
June	0	18	1	19	76	1267	1518	2861	76	1285	1519	2880	0	5	*	5						
July	0	20	1	21	68	1565	1578	3211	68	1565	1579	3232	0	3	*	3						
August	0	1	4	5	45	1313	1514	2872	45	1314	1518	2877	0	*	*	*						
September	0	18	1	19	57	1095	1061	2213	57	1113	1062	2232	0	4	0	4						
October	0	35	3	38	77	1226	1126	2429	77	1261	1129	2467	0	*	0	*						
November	0	105	7	112	34	1208	1418	2660	34	1313	1425	2772	0	5	0	5						
December	0	119	3	122	40	1094	1392	2526	40	1213	1395	2648	0	21	*	21						
Total	1	586	182	769	521	14283	15095	29899	522	14869	15277	30668	*	86	20	106						
	Annual catch ²																					
Albacore	*	293	79	372	379	9660	11690	21729	379	9953	11769	22101	*	37	8	45						
Yellowfin tuna	*	74	14	88	86	3270	4392	9748	86	5344	4406	9836	*	8	1	9						
Bigeye tuna	*	22	2	24	10	1268	1088	2366	10	1290	1090	2390	*	3	*	3						
Bluefin tuna	0	*	*	*	4	39	15	54	*	39	15	54	0	*	0	*						
Skipjack tuna	*	*	*	*	2	20	60	82	2	20	60	82	*	*	*	*						
Total tunas	*	389	95	484	477	16257	17245	33979	477	16646	17340	34463	*	48	9	57						
	Annual catch ²																					
Blue marlin	*	73	22	95	95	1148	1235	2478	95	1221	1257	2573	*	15	4	19						
Striped marlin	0	10	5	15	34	426	859	1319	34	436	864	1334	0	1	1	2						
Swordfish	0	1	1	2	17	63	385	465	17	64	386	467	0	*	*	*						
Black marlin	0	5	2	7	1	126	516	643	1	131	518	650	0	3	*	3						
Spearfish & sailfish	0	*	3	3	3	61	1059	1093	3	61	1032	1096	0	0	1	1						
Total billfishes	*	89	33	122	150	1824	4024	5998	150	1913	4057	6120	*	19	6	25						
	Annual catch ²																					
Wahoo	0	5	1	6	9	28	293	290	9	33	258	296	0	*	*	*						

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 42.--Estimated catch and effort by foreign longliners based at American Samoa, 1972.

	Inside FCZ (A)				Outside FCZ (B)				Entire area (A+B)				Within 50 mi.			
	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total
	Monthly nominal effort ¹															
January	0	89	1	90	72	1200	1168	2440	72	1289	1169	2530	0	13	0	13
February	0	91	0	91	20	1281	1229	2530	20	1372	1229	2621	0	16	0	16
March	0	8	3	11	27	1655	1129	2811	27	1663	1132	2822	0	0	0	0
April	0	28	4	32	0	1723	1134	2857	0	1751	1138	2889	0	1	0	1
May	0	25	0	25	0	1763	1448	3211	0	1768	1448	3236	0	0	0	0
June	0	12	0	12	0	1424	1466	2890	0	1436	1466	2902	0	0	0	0
July	0	21	1	22	0	1374	1858	3232	0	1395	1859	3254	0	0	0	0
August	0	70	2	72	0	1229	1468	2697	0	1299	1470	2769	0	5	0	5
September	0	10	4	14	0	1095	1070	2165	0	1105	1074	2179	0	1	2	3
October	0	7	0	7	0	1031	946	1977	0	1038	946	1984	0	1	0	1
November	0	39	2	41	0	936	1181	2117	0	975	1183	2158	0	2	0	2
December	0	42	3	45	0	1221	1177	2398	0	1263	1180	2443	0	6	2	8
Total	0	442	20	462	119	15932	15274	31325	119	16374	15294	31787	0	45	4	49
Annual catch ²																
Albacore	0	170	6	176	60	10083	9849	19992	60	10253	9855	20168	0	19	1	20
Yellowfin tuna	0	81	9	90	63	6862	7679	14604	63	6943	7688	14694	0	8	1	9
Bigeye tuna	0	26	1	27	8	2296	1320	3624	8	2322	1321	3651	0	2	0	2
Bluefin tuna	0	*	0	*	0	16	17	33	0	16	17	33	0	0	0	0
Skipjack tuna	0	*	0	*	0	10	76	86	*	10	76	86	0	0	0	0
Total tunas	0	277	16	293	131	19267	18941	38339	131	19544	18957	38632	0	29	2	31
Annual catch ²																
Blue marlin	0	56	13	69	268	1172	3996	5436	268	1228	4009	5505	0	8	3	11
Striped marlin	0	8	3	11	12	437	3216	3665	12	445	3219	3676	0	*	*	*
Swordfish	0	2	3	5	8	80	1250	1338	8	82	1253	1343	0	0	1	1
Black marlin	0	6	2	8	4	165	1639	1808	4	171	1641	1816	0	1	0	1
Spearfish & sailfish	0	2	1	3	3	58	3106	3167	3	60	3107	3170	0	0	0	0
Total billfishes	0	74	22	96	295	1912	13207	15414	295	1986	13229	15510	0	9	4	13
Annual catch ²																
Whoo	0	0	0	*	1	20	166	191	1	24	166	191	0	0	0	0

¹Effort in vessel days, * = < 1 vessel day.
²Catch in metric tons, * = < 1 mt.

Table 43.--Estimated catch and effort by foreign longliners based at American Samoa, 1973.

	Inside FCZ (A)				Outside FCZ (B)				Entire area (A+B)				Within 50 mi.			
	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total
	Monthly nominal effort ¹															
January	0	37	4	41	0	1208	1290	2498	0	1245	1294	2539	0	3	0	3
February	0	72	13	85	0	1119	1279	2398	0	1191	1292	2483	0	1	0	1
March	0	25	3	28	0	1382	1448	2830	0	1407	1451	2858	0	1	0	1
April	0	68	7	75	0	1707	1946	3653	0	1775	1953	3728	0	14	*	14
May	0	20	15	35	0	2069	2951	5020	0	2089	2966	5055	0	0	0	0
June	0	42	32	74	0	2221	2851	5072	0	2263	2883	5146	0	0	0	0
July	0	28	11	39	0	2474	2684	5158	0	2502	2695	5197	0	1	1	2
August	0	38	0	38	0	2229	2793	5022	0	2267	2793	5060	0	1	0	1
September	0	65	10	75	0	1381	2365	3746	0	1446	2375	3821	0	14	0	14
October	0	66	35	101	0	1311	2115	3426	0	1377	2150	3527	0	1	1	2
November	0	109	12	121	0	1452	2367	3819	0	1561	2379	3940	0	11	6	17
December	0	173	2	175	0	1505	2468	3973	0	1678	2470	4148	0	30	1	31
Total	0	763	146	887	0	20058	26557	46615	0	20801	26701	47502	0	77	9	86
Annual catch ²																
Albacore	0	268	39	307	0	13118	16723	29841	0	13386	16762	30148	0	20	2	26
Yellowfin tuna	0	105	39	144	0	4296	7612	11908	0	4401	7651	12052	0	11	1	12
Bigeye tuna	0	35	9	44	0	2253	2918	5171	0	2288	2927	5215	0	3	*	3
Bluefin tuna	0	*	*	*	0	19	49	68	0	19	49	68	0	*	0	*
Skipjack tuna	0	1	*	1	0	22	107	129	0	23	107	130	0	*	*	*
Total tunas	0	409	87	496	0	19708	27409	47117	0	20117	27496	47613	0	38	3	41
Annual catch ²																
Blue marlin	0	93	13	106	0	1326	2393	3719	0	1419	2406	3825	0	12	*	12
Striped marlin	0	8	13	21	0	510	1795	2295	0	516	1798	2316	0	1	*	1
Swordfish	0	3	9	12	0	95	693	788	0	98	702	800	0	1	0	1
Black marlin	0	4	6	10	0	207	1090	1297	0	211	1096	1307	0	*	1	1
Spearfish & sailfish	0	4	2	6	0	124	1432	1556	0	128	1434	1562	0	1	*	1
Total billfishes	0	112	43	155	0	2262	7393	9655	0	2374	7436	9810	0	15	1	16
Annual catch ²																
Wahoo	0	2	1	3	0	32	380	412	0	34	381	415	0	1	0	1

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 44.--Estimated catch and effort by foreign longliners based at American Samoa, 1974.

	Inside FCZ (A)				Outside FCZ (B)				Entire area (A+B)				Within 50 mi.			
	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total
	Monthly nominal effort ¹															
January	0	111	12	123	0	1137	1562	2699	0	1248	1574	2822	0	27	4	31
February	0	64	5	69	0	801	1335	2136	0	865	1340	2205	0	15	*	15
March	0	35	1	36	0	1470	2419	3889	0	984	1471	2455	0	1	1	2
April	0	42	*	42	0	1498	1822	3320	0	1540	1822	3362	0	5	0	5
May	0	74	1	75	0	2131	1842	3973	0	2205	1843	4048	0	30	0	30
June	0	204	17	221	0	1705	3417	5122	0	1909	1729	3638	0	78	15	93
July	0	47	5	52	0	1729	1881	3610	0	1776	1886	3662	0	32	1	33
August	0	36	1	37	0	999	1475	2474	0	1035	1476	2511	0	18	*	18
September	0	45	22	67	0	926	1094	2020	0	971	1116	2087	0	12	1	13
October	0	118	21	139	0	1270	1475	2745	0	1388	1486	2874	0	15	1	16
November	0	125	34	159	0	1622	1553	3175	0	1747	1587	3334	0	18	1	19
December	0	27	9	36	0	1545	1724	3269	0	1572	1733	3305	0	1	*	1
Total	0	928	128	1056	0	16312	18945	35237	0	17240	19073	36313	0	252	23	275
Annual catch ²																
Albacore	0	266	22	288	0	7598	6755	14353	0	7864	6777	14641	0	76	5	81
Yellowfin tuna	0	125	24	149	0	2275	5945	8220	0	2400	5969	8369	0	50	15	65
Bigeye tuna	0	55	5	60	0	1416	2474	3890	0	1471	2479	3950	0	12	1	13
Bluefin tuna	0	*	*	*	0	18	34	52	0	18	34	52	0	*	0	*
Skipjack tuna	0	1	*	1	0	7	48	55	0	8	48	56	0	*	*	*
Total tunas	0	447	51	498	0	11314	15256	26570	0	11761	15307	27068	0	138	21	159
Annual catch ²																
Blue marlin	0	71	18	89	0	720	1528	2248	0	791	1546	2337	0	21	8	29
Striped marlin	0	14	4	18	0	304	1139	1443	0	318	1143	1461	0	3	1	4
Swordfish	0	3	1	4	0	98	437	535	0	101	438	539	0	1	*	1
Black marlin	0	11	3	14	0	124	814	938	0	135	817	952	0	4	1	5
Spearfish & sailfish	0	7	2	9	0	69	798	867	0	76	800	876	0	4	*	4
Total billfishes	0	106	28	134	0	1315	4716	6031	0	1421	4744	6165	0	33	10	43
Annual catch ²																
Wahoo	0	2	1	3	0	32	357	389	0	34	358	392	0	*	*	*

¹Effort in vessel days, * = < 1 vessel day.²Catch in metric tons, * = < 1 mt.

Table 45.--Estimated catch and effort by foreign longliners based at American Samoa, 1975.

	Inside FCZ (A)				Outside FCZ (B)				Entire area (A+B)				Within 50 mi.			
	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total	Japan	Taiwan	Korea	Total
	Monthly nominal effort ¹															
January	0	36	23	59	0	1145	1644	2789	0	1181	1667	2848	0	0	17	17
February	0	34	29	63	0	696	1129	1825	0	730	1158	1888	0	13	*	13
March	0	4	32	36	0	603	1344	1947	0	607	1376	1983	0	0	2	2
April	0	1	2	3	0	755	1329	2084	0	756	1331	2087	0	0	0	0
May	0	8	4	12	0	963	1183	2146	0	971	1187	2158	0	*	2	2
June	0	20	1	21	0	748	1215	1963	0	768	1216	1984	0	0	0	0
July	0	6	*	6	0	655	1404	2059	0	661	1404	2065	0	*	0	*
August	0	10	25	35	0	578	1143	1721	0	588	1168	1756	0	2	6	8
September	0	38	26	64	0	571	970	1541	0	609	996	1605	0	0	1	1
October	0	209	33	242	0	427	926	1353	0	636	959	1595	0	59	10	69
November	0	178	41	219	0	300	989	1289	0	478	1030	1508	0	58	9	67
December	0	31	64	95	0	366	935	1301	0	397	999	1396	0	3	30	33
Total	0	575	280	855	0	7807	14211	22018	0	8382	14491	22873	0	135	77	212
Annual catch ²																
Albacore	0	347	86	433	0	3981	3426	7407	0	4328	3512	7840	0	87	27	114
Yellowfin tuna	0	29	43	72	0	1782	5209	6991	0	1811	5252	7063	0	5	16	21
Bigeye tuna	0	26	31	57	0	935	4093	4988	0	961	4084	5045	0	4	5	9
Bluefin tuna	0	*	*	*	0	4	18	22	0	4	18	22	0	*	*	*
Skipjack tuna	0	*	*	*	0	4	13	17	0	4	13	17	0	*	*	*
Total tunas	0	402	160	562	0	6706	12719	19425	0	7108	12879	19987	0	96	48	144
Annual catch ²																
Blue marlin	0	21	17	38	0	259	673	932	0	280	690	970	0	5	5	10
Striped marlin	0	6	25	31	0	115	752	867	0	121	777	898	0	1	9	10
Swordfish	0	3	4	7	0	25	287	312	0	28	291	319	0	1	1	2
Black marlin	0	3	25	28	0	44	468	512	0	47	493	540	0	1	7	8
Spearfish & sailfish	0	1	5	6	0	16	559	575	0	17	564	581	0	*	1	1
Total billfishes	0	34	76	110	0	459	2739	3198	0	493	2815	3308	0	8	23	31
Annual catch ²																
Wahoo	0	1	1	2	0	10	131	141	0	11	132	143	0	*	*	*

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 46.--Estimated catch and effort by foreign longliners based at American Samoa, 1976.

	Inside FCZ (A)				Outside FCZ (B)				Entire area (A+B)				Within 50 mi.			
	Japan		Korea		Japan		Korea		Japan		Korea		Japan		Korea	
	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	
January	0	64	45	109	0	375	1033	1408	0	439	1078	1517	0	5	8	13
February	0	32	28	60	0	415	866	1281	0	447	894	1341	0	2	2	4
March	0	19	33	52	0	361	1153	1514	0	380	1186	1566	0	1	7	8
April	0	10	16	26	0	350	1022	1372	0	360	1038	1398	0	1	2	3
May	0	15	20	35	0	441	1275	1716	0	456	1295	1751	0	9	1	10
June	0	1	7	8	0	521	1371	1892	0	522	1378	1900	0	0	0	0
July	0	20	5	25	0	678	1561	2239	0	698	1566	2264	0	13	0	13
August	0	19	4	23	0	624	1540	2164	0	643	1544	2187	0	4	1	5
September	0	51	8	59	0	748	999	1747	0	799	1007	1806	0	8	1	9
October	0	92	21	113	0	860	1353	2213	0	952	1374	2326	0	10	2	12
November	0	153	30	183	0	890	1368	2258	0	1043	1398	2441	0	13	9	22
December	0	118	8	126	0	968	1528	2496	0	1086	1536	2622	0	19	0	19
Total	0	594	225	819	0	7231	15069	22300	0	7825	15294	23119	0	85	33	118
Annual catch ²																
Albacore	0	328	54	382	0	5763	8382	14145	0	6091	8436	14527	0	39	8	47
Yellowfin tuna	0	67	49	116	0	1374	5559	6933	0	1441	5608	7049	0	15	5	20
Bigeye tuna	0	29	48	77	0	629	3371	4000	0	658	3419	4077	0	5	3	8
Bluefin tuna	0	*	*	*	0	3	14	17	0	3	14	17	0	*	0	*
Skipjack tuna	0	*	*	*	0	5	16	21	0	5	16	21	0	*	0	*
Total tunas	0	424	151	575	0	7774	17342	25116	0	8198	17493	25691	0	59	16	75
Annual catch ²																
Blue marlin	0	44	12	56	0	256	764	1020	0	300	776	1076	0	7	1	8
Striped marlin	0	4	7	11	0	120	448	568	0	124	455	579	0	1	1	2
Swordfish	0	2	7	9	0	45	266	311	0	47	273	320	0	1	1	2
Black marlin	0	3	10	13	0	58	464	522	0	61	474	535	0	*	1	1
Spearfish & sailfish	0	3	13	16	0	49	605	654	0	52	618	670	0	*	1	1
Total billfishes	0	56	49	105	0	528	2547	3075	0	584	2596	3180	0	9	5	14
Annual catch ²																
Wahoo	0	2	11	13	0	24	311	335	0	26	322	348	0	*	1	1

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 47.--Estimated catch and effort by Japanese longliners in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1965.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	18	165	105	10	67	365
February	19	58	60	3	186	326
March	7	5	103	9	152	276
April	8	23	74	27	40	172
May	32	41	93	87	64	317
June	5	5	7	121	278	416
July	6	0	83	91	123	303
August	1	0	87	105	51	244
September	8	1	45	114	123	291
October	12	3	15	3	42	75
November	5	29	38	24	*	96
December	3	10	21	0	0	34
Total	124	340	731	594	1126	2915
Annual catch ²						
Albacore	14	10	1	16	47	88
Yellowfin tuna	13	150	368	614	977	2122
Bigeye tuna	17	230	372	195	400	1214
Bluefin tuna	*	0	0	*	*	*
Skipjack tuna	*	1	4	5	8	18
Total tunas	44	391	745	830	1432	3442
Annual catch ²						
Blue marlin	11	43	76	52	116	298
Striped marlin	44	54	46	3	8	155
Swordfish	5	3	11	11	6	36
Black marlin	*	2	6	6	9	23
Spearfish & sailfish	3	3	9	11	9	35
Total billfishes	63	105	148	83	148	547

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 48.--Estimated catch and effort by Japanese longliners in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1966.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	16	39	15	5	4	79
February	7	21	81	2	13	124
March	6	8	29	5	19	67
April	*	42	57	7	*	106
May	3	40	126	36	12	217
June	2	*	17	34	171	224
July	0	0	5	14	168	187
August	0	0	54	15	51	120
September	0	2	17	4	55	78
October	0	4	7	22	89	122
November	0	21	0	20	51	92
December	2	27	*	1	28	58
Total	36	204	408	165	661	1474
Annual catch ²						
Albacore	17	6	1	15	25	64
Yellowfin tuna	6	69	166	121	724	1086
Bigeye tuna	10	216	270	58	194	748
Bluefin tuna	0	0	*	*	*	*
Skipjack tuna	*	2	1	1	3	7
Total tunas	33	293	438	195	946	1905
Annual catch ²						
Blue marlin	2	35	43	11	82	173
Striped marlin	2	29	17	1	4	53
Swordfish	1	2	5	3	8	19
Black marlin	*	1	3	2	8	14
Spearfish & sailfish	*	3	7	4	12	26
Total billfishes	5	70	75	21	114	285

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 49.--Estimated catch and effort by Japanese longliners in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1967.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	10	34	7	2	7	60
February	28	51	142	1	9	231
March	35	4	262	0	40	341
April	5	132	71	7	21	236
May	16	15	91	40	134	296
June	13	1	4	21	141	180
July	6	0	67	69	25	167
August	0	0	67	27	13	107
September	*	0	44	24	38	106
October	1	0	8	2	80	91
November	0	23	5	3	10	41
December	0	11	109	4	2	126
Total	114	271	877	200	520	1982
Annual catch ²						
Albacore	66	14	1	2	9	92
Yellowfin tuna	5	80	380	179	455	1099
Bigeye tuna	9	302	614	73	150	1148
Bluefin tuna	*	0	0	0	0	0
Skipjack tuna	0	0	3	1	2	6
Total tunas	80	396	998	255	616	2345
Annual catch ²						
Blue marlin	9	65	96	22	63	255
Striped marlin	11	25	43	2	1	82
Swordfish	4	4	20	4	4	36
Black marlin	*	1	5	2	5	13
Spearfish & sailfish	4	5	20	3	9	41
Total billfishes	28	100	184	33	82	427

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 50.--Estimated catch and effort by Japanese longliners in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1968.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	5	11	83	2	1	102
February	3	35	38	52	*	128
March	12	22	59	52	20	161
April	9	13	51	135	35	243
May	24	4	55	63	93	239
June	12	2	77	82	100	273
July	46	2	26	25	71	170
August	38	0	44	8	34	124
September	0	*	25	2	10	37
October	2	*	5	13	16	36
November	12	1	0	6	18	37
December	34	*	5	10	9	54
Total	197	90	464	450	403	1604
Annual catch ²						
Albacore	37	4	*	10	12	63
Yellowfin tuna	26	29	277	340	331	1003
Bigeye tuna	38	81	217	187	117	640
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	*	*	6	9	2	17
Total tunas	101	114	500	546	462	1723
Annual catch ²						
Blue marlin	36	21	51	31	44	183
Striped marlin	24	9	17	3	5	58
Swordfish	2	1	6	11	4	24
Black marlin	*	*	3	3	3	9
Spearfish & sailfish	7	1	13	14	2	37
Total billfishes	69	32	90	62	58	311

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 51.--Estimated catch and effort by Japanese longliners in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1969.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	3	27	4	25	9	68
February	4	8	246	33	36	329
March	5	17	111	21	126	280
April	2	48	33	38	29	150
May	18	12	82	23	62	197
June	2	1	211	51	32	297
July	0	1	42	13	53	109
August	2	0	3	2	7	14
September	1	0	1	1	45	48
October	14	1	16	12	48	91
November	7	25	37	11	35	115
December	0	20	5	7	88	120
Total	58	160	791	237	572	1818
Annual catch ²						
Albacore	6	11	1	5	13	36
Yellowfin tuna	19	45	353	218	498	1133
Bigeye tuna	12	187	613	101	203	1116
Bluefin tuna	0	0	*	*	0	*
Skipjack tuna	0	1	3	3	1	8
Total tunas	37	244	970	327	715	2293
Annual catch ²						
Blue marlin	6	34	100	21	57	218
Striped marlin	6	13	24	3	4	50
Swordfish	1	2	13	6	5	27
Black marlin	*	*	6	1	3	10
Speerfish & sailfish	*	6	10	3	3	22
Total billfishes	13	55	153	34	72	327

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 52.--Estimated catch and effort by Japanese longliners in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1970.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	16	15	0	15	46
February	16	46	168	8	12	250
March	1	55	219	6	15	296
April	0	67	235	12	8	322
May	3	25	100	36	2	166
June	4	11	162	52	47	276
July	7	5	47	46	94	199
August	15	1	78	72	99	265
September	14	8	21	5	209	257
October	10	5	16	13	47	91
November	0	81	1	*	0	82
December	1	40	15	1	15	72
Total	71	360	1077	251	563	2322
Annual catch ²						
Albacore	15	16	2	2	2	37
Yellowfin tuna	16	202	879	253	466	1816
Bigeye tuna	14	351	595	74	153	1187
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	1	2	12	2	2	19
Total tunas	46	571	1488	331	623	3059
Annual catch ²						
Blue marlin	17	99	144	24	66	350
Striped marlin	3	40	32	2	4	81
Swordfish	1	5	20	5	6	37
Black marlin	*	1	5	2	3	11
Spearfish & sailfish	1	10	14	4	4	33
Total billfishes	22	155	215	37	83	512

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 53.—Estimated catch and effort by Japanese longliners in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1971.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	14	44	0	16	74
February	3	73	68	2	5	151
March	26	28	283	7	26	370
April	17	64	57	28	*	166
May	2	36	110	92	86	326
June	18	11	57	59	264	409
July	8	28	73	53	92	254
August	10	6	45	34	26	121
September	0	18	29	4	1	52
October	15	14	17	2	26	74
November	0	8	57	0	3	68
December	14	10	34	0	0	58
Total	113	310	874	281	545	2123
Annual catch ²						
Albacore	40	6	1	3	2	52
Yellowfin tuna	19	66	260	169	397	911
Bigeye tuna	18	279	469	116	188	1070
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	0	1	4	1	2	8
Total tunas	77	352	734	289	589	2041
Annual catch ²						
Blue marlin	22	53	49	9	35	168
Striped marlin	4	18	45	1	4	72
Swordfish	1	7	20	6	10	44
Black marlin	*	1	3	1	5	10
Spearfish & sailfish	*	4	13	3	5	25
Total billfishes	27	83	130	20	59	319

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 54.--Estimated catch and effort by Japanese longliners in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1972.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	1	3	81	0	0	85
February	7	1	39	*	25	72
March	0	44	134	1	17	196
April	4	31	208	22	3	268
May	7	69	65	24	81	246
June	*	30	144	88	75	337
July	0	24	152	108	93	377
August	0	33	64	63	153	313
September	1	3	45	34	159	242
October	0	3	88	25	35	151
November	0	9	11	5	4	29
December	*	19	15	0	10	44
Total	20	269	1046	370	655	2360
Annual catch ²						
Albacore	2	12	0	3	1	18
Yellowfin tuna	3	43	515	269	424	1254
Bigeye tuna	3	252	521	149	328	1253
Bluefin tuna	0	0	0	0	*	*
Skipjack tuna	0	1	3	2	1	7
Total tunas	8	308	1039	423	754	2532
Annual catch ²						
Blue marlin	2	72	114	40	88	316
Striped marlin	2	18	19	2	3	44
Swordfish	1	8	25	8	7	49
Black marlin	1	1	8	3	12	25
Spearfish & sailfish	*	4	6	2	3	15
Total billfish	6	103	172	55	113	449

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 55.--Estimated catch and effort by Japanese longliners in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1973.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	54	77	1	13	145
February	2	37	62	1	2	104
March	15	66	270	1	16	368
April	10	54	135	2	3	204
May	4	23	26	8	13	74
June	0	34	21	7	18	80
July	0	6	21	19	83	129
August	0	5	49	25	35	114
September	0	10	12	3	4	29
October	0	11	1	0	5	17
November	0	20	1	3	0	24
December	0	25	0	0	4	29
Total	31	345	675	70	196	1317
Annual catch ²						
Albacore	4	19	0	1	1	25
Yellowfin tuna	3	80	78	21	94	276
Bigeye tuna	7	303	360	48	80	798
Bluefin tuna	0	*	0	0	*	0
Skipjack tuna	0	1	1	*	*	2
Total tunas	14	403	439	70	175	1101
Annual catch ²						
Blue marlin	3	46	44	2	12	107
Striped marlin	3	16	25	1	1	46
Swordfish	3	7	31	2	2	45
Black marlin	0	2	2	*	2	6
Spearfish & sailfish	1	6	7	1	2	17
Total billfishes	10	77	109	6	19	221

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 56.--Estimated catch and effort by Japanese longliners in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1974.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	34	46	0	8	88
February	6	54	181	1	1	243
March	15	63	94	3	3	178
April	8	302	281	5	2	598
May	14	94	75	17	7	207
June	4	8	38	31	42	123
July	2	30	46	29	89	196
August	*	41	7	1	70	119
September	3	24	8	8	8	51
October	0	15	31	27	36	109
November	2	56	35	4	6	103
December	5	80	1	0	52	138
Total	59	801	843	126	324	2153
Annual catch ²						
Albacore	5	49	1	*	0	55
Yellowfin tuna	4	148	188	39	98	477
Bigeye tuna	10	380	373	46	149	958
Bluefin tuna	0	*	0	0	0	*
Skipjack tuna	0	2	2	*	*	4
Total tunas	19	579	564	85	247	1494
Annual catch ²						
Blue marlin	4	61	61	7	13	146
Striped marlin	6	11	15	1	1	34
Swordfish	5	9	32	2	4	52
Black marlin	0	1	4	*	1	6
Spearfish & sailfish	0	7	5	2	2	16
Total billfishes	15	89	117	12	21	254

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 57.--Estimated catch and effort by Japanese longliners in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1975.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	15	32	67	1	18	133
February	67	123	49	0	26	265
March	21	54	61	3	36	175
April	4	42	35	0	2	83
May	0	36	17	3	0	56
June	0	17	4	0	26	47
July	0	3	0	0	52	55
August	0	10	3	10	26	49
September	0	23	7	16	96	142
October	0	31	4	9	77	121
November	10	23	0	16	0	49
December	1	15	6	13	*	35
Total	118	409	253	71	359	1210
Annual catch ²						
Albacore	11	27	0	3	2	43
Yellowfin tuna	12	85	43	16	120	276
Bigeye tuna	53	319	102	39	136	649
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	0	0	1	*	0	1
Total tunas	76	431	146	58	258	969
Annual catch ²						
Blue marlin	3	17	7	2	8	37
Striped marlin	4	13	8	0	2	27
Swordfish	7	7	6	2	3	25
Black marlin	0	*	1	0	0	1
Spearfish & sailfish	1	4	5	3	1	14
Total billfishes	15	41	27	7	14	104

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 58.--Estimated catch and effort by Japanese longliners in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1976.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	7	19	11	11	47	95
February	24	57	7	0	26	114
March	19	49	102	1	62	233
April	10	33	77	8	34	162
May	0	29	10	7	64	110
June	0	28	50	35	22	135
July	0	29	53	32	32	146
August	3	29	21	5	12	70
September	0	18	128	4	15	165
October	*	10	31	11	86	138
November	4	1	11	13	15	44
December	0	2	3	0	33	38
Total	67	304	504	127	448	1450
Annual catch ²						
Albacore	16	16	1	1	1	35
Yellowfin tuna	6	68	119	67	275	535
Bigeye tuna	18	265	204	44	161	692
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	*	*	1	*	0	1
Total tunas	40	349	325	112	437	1263
Annual catch ²						
Blue marlin	3	34	48	9	31	125
Striped marlin	3	10	28	1	1	43
Swordfish	8	9	12	3	6	38
Black marlin	0	1	1	*	1	3
Spearfish & sailfish	1	3	5	1	1	11
Total billfishes	15	57	94	14	40	220

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 59.--Estimated catch and effort by Japanese longliners in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1977.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	96	11	*	*	104	211
February	64	35	49	0	36	183
March	17	73	31	1	99	221
April	4	20	34	1	21	80
May	0	37	11	1	6	55
June	*	55	1	0	7	63
July	0	14	2	1	31	48
August	0	4	8	15	7	34
September	0	0	3	3	54	60
October	0	*	0	3	152	155
November	*	0	1	*	129	130
December	7	6	33	4	78	128
Total	188	255	172	29	724	1368
Annual catch ²						
Albacore	57	14	1	1	7	80
Yellowfin tuna	7	41	39	12	609	708
Bigeye tuna	78	276	98	17	338	807
Bluefin tuna	*	0	0	0	0	*
Skipjack tuna	*	*	1	0	0	1
Total tunas	142	331	139	30	954	1596
Annual catch ²						
Blue marlin	4	23	8	2	56	93
Striped marlin	3	7	2	*	2	14
Swordfish	9	8	3	0	11	31
Black marlin	0	0	1	0	3	4
Spearfish & sailfish	0	1	0	*	2	3
Total billfishes	16	39	14	2	74	145

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 60.--Estimated catch and effort by longliners of Taiwan in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1967.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	0	0	0	26	0	26
June	0	0	0	0	0	0
July	0	0	0	0	0	0
August	0	0	16	55	10	81
September	0	10	0	10	9	29
October	0	56	0	0	0	56
November	0	1	0	29	0	30
December	0	0	0	0	0	0
Total	0	67	16	120	19	222
Annual catch ²						
Albacore	0	103	32	201	32	368
Yellowfin tuna	0	27	8	74	4	113
Bigeye tuna	0	34	10	81	6	131
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	0	0	0	0	0	0
Total tunas	0	164	50	356	42	612
Annual catch ²						
Blue marlin	0	3	0	11	1	15
Striped marlin	0	0	*	1	0	1
Swordfish	0	1	0	1	*	2
Black marlin	0	*	0	0	0	*
Spearfish & sailfish	0	0	0	0	0	0
Total billfishes	0	4	*	13	1	18

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 61.--Estimated catch and effort by longliners of Taiwan in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1968.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	0	0	0	1	1
February	0	3	0	18	24	45
March	0	0	0	20	12	32
April	0	0	0	58	19	77
May	0	0	0	46	*	46
June	0	10	0	2	10	22
July	0	0	3	4	33	40
August	0	0	0	0	46	46
September	0	0	0	2	17	19
October	0	0	1	31	14	46
November	0	0	2	30	17	49
December	0	0	0	3	6	9
Total	0	13	6	214	199	432
Annual catch ²						
Albacore	0	31	5	320	163	519
Yellowfin tuna	0	13	4	73	257	347
Bigeye tuna	0	5	2	34	51	92
Bluefin tuna	0	*	0	1	21	22
Skipjack tuna	0	0	0	0	0	0
Total tunas	0	49	11	428	492	980
Annual catch ²						
Blue marlin	0	2	*	12	9	23
Striped marlin	0	*	0	2	*	2
Swordfish	0	1	0	*	1	2
Black marlin	0	0	0	1	1	2
Speerfish & sailfish	0	0	0	0	0	0
Total billfishes	0	3	*	15	11	29

¹ Effort in vessel days, * = < 1 vessel day.

² Catch in metric tons, * = < 1 mt.

Table 62.--Estimated catch and effort by longliners of Taiwan in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1969.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	0	0	0	52	52
February	0	0	0	0	2	2
March	0	0	0	0	21	21
April	0	0	0	0	1	1
May	0	0	0	0	0	0
June	0	0	0	0	17	17
July	0	0	0	0	0	0
August	0	0	0	0	0	0
September	0	0	0	0	0	0
October	0	0	0	0	0	0
November	0	0	0	0	0	0
December	0	0	33	0	0	33
Total	0	0	33	0	93	126
Annual catch ²						
Albacore	0	0	21	0	73	94
Yellowfin tuna	0	0	27	0	52	79
Bigeye tuna	0	0	6	0	12	18
Bluefin tuna	0	0	0	0	4	4
Skipjack tuna	0	0	0	0	0	0
Total tunas	0	0	54	0	141	195
Annual catch ²						
Blue marlin	0	0	2	0	8	10
Striped marlin	0	0	0	0	*	0
Swordfish	0	0	0	0	*	*
Black marlin	0	0	0	0	2	2
Spearfish & sailfish	0	0	0	0	1	1
Total billfishes	0	0	2	0	11	13

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 63.--Estimated catch and effort by longliners of Taiwan in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1970.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	0	23	0	0	23
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	0	0	0	0	7	7
June	0	0	0	0	10	10
July	0	0	0	0	0	0
August	0	0	0	0	6	6
September	0	0	0	0	0	0
October	0	0	0	0	1	1
November	0	0	0	0	0	0
December	0	0	0	0	0	0
Total	0	0	23	0	24	47
Annual catch ²						
Albacore	0	0	21	0	23	44
Yellowfin tuna	0	0	19	0	16	35
Bigeye tuna	0	0	8	0	6	14
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	0	0	0	0	0	0
Total tunas	0	0	48	0	45	93
Annual catch ²						
Blue marlin	0	0	1	0	1	2
Striped marlin	0	0	0	0	*	*
Swordfish	0	0	0	0	0	*
Black marlin	0	0	*	0	*	0
Spearfish & sailfish	0	0	0	0	0	0
Total billfishes	0	0	1	0	1	2

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 64.--Estimated catch and effort by longliners of Taiwan in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1971.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	0	0	0	5	5
February	0	0	0	0	2	2
March	0	0	0	0	8	8
April	0	0	0	2	14	16
May	0	0	0	0	19	19
June	0	0	0	0	7	7
July	0	0	0	0	19	19
August	0	0	0	0	5	5
September	0	0	0	0	4	4
October	0	0	0	0	1	1
November	0	0	0	0	1	1
December	0	0	0	0	0	0
Total	0	0	0	2	85	87
Annual catch ²						
Albacore	0	0	0	1	63	64
Yellowfin tuna	0	0	0	2	133	135
Bigeye tuna	0	0	0	*	29	29
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	0	0	0	0	0	0
Total tunas	0	0	0	3	225	228
Annual catch ²						
Blue marlin	0	0	0	*	2	2
Striped marlin	0	0	0	0	*	*
Swordfish	0	0	0	0	1	1
Black marlin	0	0	0	0	0	0
Spearfish & sailfish	0	0	0	0	0	0
Total billfishes	0	0	0	*	3	3

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 65.--Estimated catch and effort by longliners of Taiwan in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1972.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	0	0	0	7	7
February	0	0	0	0	9	9
March	0	0	0	1	0	1
April	0	0	0	3	17	20
May	0	0	0	0	22	22
June	0	0	0	0	10	10
July	0	0	0	0	1	1
August	0	0	0	0	2	2
September	0	0	0	0	0	0
October	0	0	0	0	0	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
Total	0	0	0	4	68	72
Annual catch ²						
Albacore	0	0	0	1	27	28
Yellowfin tuna	0	0	0	4	87	91
Bigeye tuna	0	0	0	1	23	24
Bluefin tuna	0	0	0	0	*	*
Skipjack tuna	0	0	0	0	0	0
Total tunas	0	0	0	6	137	143
Annual catch ²						
Blue marlin	0	0	0	0	2	2
Striped marlin	0	0	0	0	0	*
Swordfish	0	0	0	0	*	0
Black marlin	0	0	0	0	0	0
Spearfish & sailfish	0	0	0	0	0	0
Total billfishes	0	0	0	0	2	2

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 66.--Estimated catch and effort by longliners of Taiwan in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1973.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	0	0	0	3	3
February	0	0	0	3	0	3
March	0	0	0	0	2	2
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	0	0	0	0	0	0
July	0	0	0	0	0	0
August	0	0	0	0	0	0
September	0	0	0	0	0	0
October	0	0	0	0	0	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
Total	0	0	0	3	5	8
Annual catch ²						
Albacore	0	0	0	2	1	3
Yellowfin tuna	0	0	0	*	1	1
Bigeye tuna	0	0	0	1	2	3
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	0	0	0	0	0	0
Total tunas	0	0	0	3	4	7
Annual catch ²						
Blue marlin	0	0	0	0	•	*
Striped marlin	0	0	0	0	0	0
Swordfish	0	0	0	0	0	0
Black marlin	0	0	0	0	0	0
Spearfish & sailfish	0	0	0	0	0	0
Total billfishes	0	0	0	0	*	•

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 67.--Estimated catch and effort by longliners of Taiwan in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1974.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	0	0	0	0	0
February	0	0	0	2	0	2
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	0	0	0	0	0	0
July	0	0	0	0	0	0
August	0	0	0	0	5	5
September	0	0	0	0	0	0
October	0	0	0	0	0	0
November	5	0	0	0	0	5
December	42	0	0	0	0	42
Total	47	0	0	2	5	54
Annual catch ²						
Albacore	32	0	0	*	*	32
Yellowfin tuna	4	0	0	*	1	5
Bigeye tuna	8	0	0	1	1	10
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	0	0	0	0	0	0
Total tunas	44	0	0	1	2	47
Annual catch ²						
Blue marlin	4	0	0	0	0	4
Striped marlin	1	0	0	0	0	1
Swordfish	*	0	0	0	0	*
Black marlin	0	0	0	0	0	0
Spearfish & sailfish	0	0	0	0	0	0
Total billfishes	5	0	0	0	0	5

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 68.--Estimated catch and effort by longliners of Taiwan in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1975.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	216	0	0	0	0	216
February	49	0	0	1	0	50
March	0	0	0	0	0	0
April	0	0	0	0	9	9
May	0	0	0	0	6	6
June	0	0	0	1	6	7
July	0	0	0	0	1	1
August	0	0	0	0	0	0
September	0	0	0	0	0	0
October	34	0	0	0	0	34
November	108	0	0	0	0	108
December	58	0	0	0	0	58
Total	465	0	0	2	22	489
Annual catch ²						
Albacore	427	0	0	*	6	433
Yellowfin tuna	72	0	0	1	11	84
Bigeye tuna	31	0	0	1	8	40
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	0	0	0	0	0	0
Total tunas	530	0	0	2	25	557
Annual catch ²						
Blue marlin	36	0	0	0	1	37
Striped marlin	9	0	0	0	0	9
Swordfish	5	0	0	*	0	5
Black marlin	3	0	0	0	0	3
Spearfish & sailfish	2	0	0	0	0	2
Total billfishes	55	0	0	*	1	56

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 69.--Estimated catch and effort by longliners of Taiwan in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1976.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	0	0	0	0	0
February	69	0	0	0	0	69
March	147	0	0	0	0	147
April	0	0	0	0	17	17
May	0	0	0	0	0	0
June	0	0	0	0	5	5
July	0	0	0	0	0	0
August	0	0	0	0	0	0
September	0	0	0	0	0	0
October	0	0	0	0	0	0
November	26	0	0	0	0	26
December	0	0	0	0	0	0
Total	242	0	0	0	22	264
Annual catch ²						
Albacore	210	0	0	0	8	218
Yellowfin tuna	51	0	0	0	16	67
Bigeye tuna	15	0	0	0	4	19
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	4	0	0	0	0	4
Total tunas	280	0	0	0	28	308
Annual catch ²						
Blue marlin	21	0	0	0	1	22
Striped marlin	5	0	0	0	0	5
Swordfish	*	0	0	0	0	0
Black marlin	0	0	0	0	0	0
Spearfish & sailfish	109	0	0	0	1	110
Total billfishes	135	0	0	0	2	137

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 70.--Estimated catch and effort by longliners of Taiwan in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1977.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	1	*	0	38	39
February	58	0	0	0	2	60
March	4	0	*	3	0	7
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	0	0	0	0	0	0
July	0	0	0	0	0	0
August	0	0	0	0	*	*
September	0	0	0	0	0	0
October	0	0	0	3	0	3
November	0	0	0	0	0	0
December	0	0	0	0	0	0
Total	62	1	*	6	40	109
Annual catch ²						
Albacore	42	*	0	2	*	44
Yellowfin tuna	5	*	*	1	53	59
Bigeye tuna	2	1	*	2	5	10
Bluefin tuna	0	0	0	*	0	*
Skipjack tuna	*	0	0	0	0	*
Total tunas	49	1	*	5	58	113
Annual catch ²						
Blue marlin	2	0	0	*	1	3
Striped marlin	1	*	0	0	0	1
Swordfish	*	0	0	0	*	*
Black marlin	0	0	0	0	0	0
Spearfish & sailfish	*	0	0	0	0	*
Total billfishes	3	*	0	*	1	4

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 71.--Estimated catch and effort by Japanese baitboats within 200, 100, and 50 miles of the Hawaiian Islands, 1972.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0
August	0	0	0	55	33	24	55	33	24
September	0	0	0	155	132	88	155	132	88
October	0	0	0	3	3	1	3	3	1
November	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0
Total	0	0	0	213	168	113	213	168	113
Annual catch ²									
Albacore	0	0	0	26	0	0	26	0	0
Yellowfin tuna	0	0	0	19	3	3	19	3	3
Bigeye tuna	0	0	0	105	63	37	105	63	37
Bluefin tuna	0	0	0	26	8	5	26	8	5
Skipjack tuna	0	0	0	1282	971	636	1282	971	636
Total tunas	0	0	0	1458	1045	681	1458	1045	681
Annual catch ²									
Frigate tuna	0	0	0	6	6	4	6	6	4
Others	0	0	0	31	31	22	31	31	22

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 72.--Estimated catch and effort by Japanese baitboats within 200, 100, and 50 miles of the Hawaiian Islands, 1973.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0
July	0	0	0	59	40	22	59	40	22
August	0	0	0	37	16	8	37	16	8
September	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0
Total	0	0	0	96	56	30	96	56	30
Annual catch ²									
Albacore	0	0	0	0	0	0	0	0	0
Yellowfin tuna	0	0	0	20	10	10	20	10	10
Bigeye tuna	0	0	0	109	80	43	109	80	43
Bluefin tuna	0	0	0	0	0	0	0	0	0
Skipjack tuna	0	0	0	823	451	192	823	451	192
Total tunas	0	0	0	952	541	245	952	541	245
Annual catch ²									
Frigate tuna	0	0	0	0	0	0	0	0	0
Others	0	0	0	12	11	7	12	11	7

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 73.--Estimated catch and effort by Japanese baitboats within 200, 100, and 50 miles of the Hawaiian Islands, 1974.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0
June	0	0	0	7	4	3	7	4	3
July	0	0	0	83	63	48	83	63	48
August	1	1	1	86	68	38	87	69	39
September	0	0	0	10	7	5	10	7	5
October	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0
Total	1	1	1	186	142	94	187	143	95
Annual catch ²									
Albacore	0	0	0	0	0	0	0	0	0
Yellowfin tuna	0	0	0	50	48	36	50	48	36
Bigeye tuna	0	0	0	147	66	47	147	66	47
Bluefin tuna	0	0	0	*	*	*	*	*	*
Skipjack tuna	0	0	0	1971	1593	1107	1971	1593	1107
Total tunas	0	0	0	2168	1707	1190	2168	1707	1190
Annual catch ²									
Frigate tuna	0	0	0	6	6	6	6	6	6
Others	0	0	0	19	16	11	19	16	11

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 74.--Estimated catch and effort by Japanese baitboats within 200, 100, and 50 miles of the Hawaiian Islands, 1975.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0
April	0	0	0	1	0	0	1	0	0
May	0	0	0	12	9	6	12	9	6
June	0	0	0	54	46	32	54	46	32
July	0	0	0	122	82	48	122	82	48
August	0	0	0	51	25	11	51	25	11
September	3	3	2	23	21	10	26	24	12
October	0	0	0	3	1	0	3	1	0
November	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0
Total	3	3	2	266	184	107	269	187	109
Annual catch ²									
Albacore	0	0	0	89	89	27	89	89	27
Yellowfin tuna	0	0	0	167	155	80	167	155	80
Bigeye tuna	0	0	0	71	53	36	71	53	36
Bluefin tuna	0	0	0	25	25	8	25	25	8
Skipjack tuna	0	0	0	1906	1301	804	1906	1301	804
Total tunas	0	0	0	2258	1623	955	2258	1623	955
Annual catch ²									
Frigate tuna	0	0	0	11	11	7	11	11	7
Others	0	0	0	83	81	46	83	81	46

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 75.--Estimated catch and effort by Japanese baitboats within 200, 100, and 50 miles of the Hawaiian Islands, 1976.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0
May	0	0	0	1	0	0	1	0	0
June	0	0	0	82	62	35	82	62	35
July	22	10	5	409	354	208	431	364	213
August	29	23	4	97	85	49	126	108	53
September	0	0	0	9	7	5	9	7	5
October	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0
Total	51	33	9	598	508	297	649	541	306
Annual catch ²									
Albacore	0	0	0	0	0	0	0	0	0
Yellowfin tuna	54	3	*	124	109	73	178	112	73
Bigeye tuna	89	*	0	92	76	43	181	76	43
Bluefin tuna	0	0	0	0	0	0	0	0	0
Skipjack tuna	315	242	56	4294	3847	2367	4609	4089	2423
Total tunas	458	245	56	4510	4032	2483	4968	4277	2539
Annual catch ²									
Frigate tuna	0	0	0	9	8	5	9	8	5
Others	0	0	0	28	27	13	28	27	13

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 76.--Estimated catch and effort by Japanese baitboats within 200, 100, and 50 miles of the Hawaiian Islands, 1977.

	Main Hawaiian Islands (A)			Northwestern Hawaiian Islands (B)			Total Hawaiian Islands (A + B)		
	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.	200 mi.	100 mi.	50 mi.
Monthly nominal effort ¹									
January	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0
April	0	0	0	20	16	9	20	16	9
May	0	0	0	14	13	10	14	13	10
June	32	17	12	409	258	165	441	275	177
July	14	10	2	208	65	27	222	75	29
August	6	1	*	36	26	15	42	27	15
September	0	0	0	17	7	4	17	7	4
October	0	0	0	11	5	3	11	5	3
November	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0
Total	52	28	14	715	390	233	767	418	247
Annual catch ²									
Albacore	0	0	0	49	2	0	49	2	0
Yellowfin tuna	25	*	0	337	253	169	362	253	169
Bigeye tuna	91	1	0	734	654	497	825	655	497
Bluefin tuna	0	0	0	0	0	0	0	0	0
Skipjack tuna	281	153	29	4375	2339	1347	4656	2492	1376
Total tunas	397	154	29	5495	3248	2013	5892	3402	2042
Annual catch ²									
Frigate tuna	1	1	*	16	11	6	17	12	6
Others	0	0	0	108	99	68	108	99	68

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 77.--Estimated catch and effort by Japanese baitboats around Guam and the Northern Mariana Islands, 1970.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	1	13	3	38	4	51
February	0	20	8	28	8	48
March	2	71	12	52	14	123
April	2	15	28	65	30	80
May	*	4	14	35	14	39
June	0	0	9	53	9	53
July	0	1	207	602	207	603
August	*	5	78	229	78	234
September	5	28	101	207	106	235
October	0	4	21	54	21	58
November	1	14	41	292	42	306
December	2	7	3	107	5	114
Total	13	182	525	1762	538	1944
Annual catch ²						
Albacore	0	0	*	14	*	14
Yellowfin tuna	*	16	54	414	54	430
Bigeye tuna	0	*	35	153	35	153
Bluefin tuna	0	0	1	4	1	4
Skipjack tuna	28	649	2903	8284	2931	8933
Total tunas	28	665	2993	8969	3021	9534
Annual catch ²						
Frigate tuna	0	0	0	0	0	0
Others	*	*	3	13	3	13

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 78.--Estimated catch and effort by Japanese baitboats around Guam and the Northern Mariana Islands, 1971.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	0	20	4	38	4	58
February	0	24	20	74	20	98
March	2	14	14	66	16	80
April	0	1	1	7	1	8
May	0	0	0	8	0	8
June	0	0	14	31	14	31
July	0	1	194	678	194	679
August	4	6	218	562	222	568
September	3	15	255	564	258	579
October	11	44	178	419	189	463
November	0	30	27	173	27	203
December	1	9	4	26	5	35
Total	21	164	929	2646	950	2810
Annual catch ²						
Albacore	0	0	0	2	0	2
Yellowfin tuna	*	46	38	184	38	230
Bigeye tuna	0	0	0	0	0	0
Bluefin tuna	0	0	0	12	0	12
Skipjack tuna	78	398	4454	12366	4532	12764
Total tunas	78	444	4492	12564	4570	13008
Annual catch ²						
Frigate tuna	0	0	*	0	0	0
Others	0	1	1	19	1	20

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 79.--Estimated catch and effort by Japanese baitboats around Guam and the Northern Mariana Islands, 1972.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 ml.	Within FCZ	Within 50 ml.	Within FCZ	Within 50 ml.	Within FCZ
Monthly nominal effort ¹						
January	1	4	5	17	6	21
February	0	2	9	20	9	22
March	*	2	10	28	10	30
April	0	2	12	47	12	49
May	1	1	3	8	4	9
June	0	0	97	299	97	299
July	3	10	251	527	254	537
August	9	18	188	487	197	505
September	9	17	47	116	56	133
October	2	12	14	45	16	57
November	16	31	10	46	26	77
December	6	19	*	8	6	27
Total	47	118	646	1648	693	1766
Annual catch ²						
Albacore	3	13	23	52	26	65
Yellowfin tuna	0	4	17	66	17	70
Bigeye tuna	0	0	4	16	4	16
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	131	284	2885	6971	3016	7255
Total tunas	134	301	2929	7105	3063	7406
Annual catch ²						
Frigate tuna	0	0	0	0	0	0
Others	1	1	1	2	2	3

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 80.--Estimated catch and effort by Japanese baitboats around Guam and the Northern Mariana Islands, 1973.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	0	2	0	13	0	15
February	*	2	3	18	3	20
March	0	8	6	73	6	81
April	0	6	7	32	7	38
May	0	0	4	14	4	14
June	0	0	13	41	13	41
July	0	5	233	532	233	537
August	8	15	202	470	210	485
September	4	4	49	134	53	138
October	0	1	16	54	16	55
November	1	2	64	140	65	142
December	*	9	27	82	27	91
Total	13	54	624	1603	637	1657
Annual catch ²						
Albacore	0	0	9	11	9	11
Yellowfin tuna	7	10	36	258	43	268
Bigeye tuna	0	1	0	6	0	7
Bluefin tuna	0	0	0	4	0	4
Skipjack tuna	78	223	3030	7099	3108	7322
Total tunas	85	234	3075	7378	3160	7612
Annual catch ²						
Frigate tuna	0	0	0	0	0	0
Others	0	0	*	2	0	2

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 81.--Estimated catch and effort by Japanese baitboats around Guam and the Northern Mariana Islands, 1974.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	*	6	26	34	26	40
February	0	3	15	74	15	77
March	*	3	2	55	2	58
April	0	3	20	45	20	48
May	0	0	0	0	0	0
June	0	0	7	26	7	26
July	5	11	195	556	200	567
August	0	2	23	59	23	61
September	3	17	63	127	66	144
October	2	11	107	199	109	210
November	1	8	39	138	40	146
December	1	3	28	62	29	65
Total	12	67	525	1375	537	1442
Annual catch ²						
Albacore	0	0	1	1	1	1
Yellowfin tuna	0	7	101	294	101	301
Bigeye tuna	0	0	0	0	0	0
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	8	76	1798	4627	1806	4703
Total tunas	8	83	1900	4922	1908	5005
Annual catch ²						
Frigate tuna	0	0	0	0	0	0
Others	0	0	23	39	23	39

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 82.—Estimated catch and effort by Japanese baitboats around Guam and the Northern Mariana Islands, 1975.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
Monthly nominal effort ¹						
January	0	1	15	44	15	45
February	1	3	22	36	23	39
March	3	20	35	81	38	101
April	4	21	66	137	70	158
May	2	77	5	30	7	107
June	1	9	188	391	189	400
July	1	10	85	254	86	264
August	0	8	132	260	132	268
September	1	22	51	154	52	176
October	*	8	4	56	4	64
November	1	10	52	151	53	161
December	1	17	38	102	39	119
Total	15	206	693	1696	708	1902
Annual catch ²						
Albacore	0	0	0	4	0	4
Yellowfin tuna	0	9	82	271	82	280
Bigeye tuna	0	1	2	6	2	7
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	68	1117	2867	6345	2935	7462
Total tunas	68	1127	2951	6626	3019	7753
Annual catch ²						
Frigate tuna	0	0	0	0	0	0
Others	0	3	16	31	16	34

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 83.--Estimated catch and effort by Japanese baitboats around Guam and the Northern Mariana Islands, 1976.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ	Within 50 mi.	Within FCZ
	Monthly nominal effort ¹					
January	0	6	22	78	22	84
February	0	2	7	30	7	32
March	0	0	4	17	4	17
April	*	9	0	14	0	23
May	0	0	1	6	1	6
June	0	0	2	7	2	7
July	1	5	77	264	78	269
August	0	0	25	76	25	76
September	0	3	16	33	16	36
October	2	3	11	35	13	38
November	*	1	6	122	6	123
December	*	21	1	62	1	83
Total	3	50	172	744	175	794
	Annual catch ²					
Albacore	0	0	0	0	0	0
Yellowfin tuna	0	25	33	249	33	274
Bigeye tuna	0	0	0	1	0	1
Bluefin tuna	0	0	0	*	0	0
Skipjack tuna	9	85	563	2303	572	2388
Total tunas	9	110	596	2553	605	2663
	Annual catch ²					
Frigate tuna	0	0	0	0	0	0
Others	0	*	2	13	2	13

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 84.--Estimated catch and effort by Japanese baitboats around Guam and the Northern Mariana Islands, 1977.

	Guam (A)		Northern Marianas (B)		Areas combined (A + B)	
	Within 50 ml.	Within FCZ	Within 50 ml.	Within FCZ	Within 50 ml.	Within FCZ
Monthly nominal effort ¹						
January	0	0	*	32	•	32
February	0	0	45	167	45	167
March	16	227	10	36	26	263
April	10	73	20	65	30	138
May	*	6	0	2	•	8
June	0	2	55	172	55	174
July	0	1	52	150	52	151
August	•	5	25	107	25	112
September	1	2	16	99	17	101
October	0	2	8	70	8	72
November	0	13	11	170	11	183
December	0	2	1	39	1	41
Total	27	333	243	1109	270	1442
Annual catch ²						
Albacore	0	0	*	5	*	5
Yellowfin tuna	0	13	63	431	63	444
Bigeye tuna	0	1	1	6	1	7
Bluefin tuna	0	1	0	8	0	9
Skipjack tuna	94	2044	846	2995	940	5039
Total tunas	94	2059	910	3445	1004	5504
Annual catch ²						
Frigate tuna	0	0	0	0	0	0
Others	0	7	15	70	15	77

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 85.--Estimated catch and effort by Japanese baitboats in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1971.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	0	0	0	0	0	0
July	0	0	0	0	0	0
August	12	0	0	0	0	12
September	0	0	0	0	0	0
October	0	0	0	0	0	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
Total	12	0	0	0	0	12
Annual catch ²						
Albacore	36	0	0	0	0	36
Yellowfin tuna	0	0	0	0	0	0
Bigeye tuna	0	0	0	0	0	0
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	409	0	0	0	0	409
Total tunas	445	0	0	0	0	445
Annual catch ²						
Frigate tuna	0	0	0	0	0	0
Others	0	0	0	0	0	0

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 86.--Estimated catch and effort by Japanese baitboats in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1972.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	3	0	0	0	0	3
July	0	0	0	0	0	0
August	6	0	0	0	0	6
September	32	2	0	0	0	34
October	0	0	2	0	18	20
November	0	0	0	0	0	0
December	0	0	0	0	0	0
Total	41	2	2	0	18	63
Annual catch ²						
Albacore	169	0	2	0	147	318
Yellowfin tuna	0	0	0	0	0	0
Bigeye tuna	0	0	0	0	0	0
Bluefin tuna	0	0	0	0	*	*
Skipjack tuna	1093	57	59	0	567	1776
Total tunas	1262	57	61	0	714	2094
Annual catch ²						
Frigate tuna	0	0	3	0	4	7
Others	0	0	0	0	0	0

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 87.--Estimated catch and effort by Japanese baitboats in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1973.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	0	0	0	0	0
February	1	0	0	0	0	1
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	0	0	0	0	0	0
July	41	0	0	0	0	41
August	52	0	0	0	0	52
September	7	0	0	0	0	7
October	4	0	0	0	0	4
November	0	0	0	0	0	0
December	0	0	0	0	0	0
Total	105	0	0	0	0	105
Annual catch ²						
Albacore	578	0	0	0	0	578
Yellowfin tuna	0	0	0	0	0	0
Bigeye tuna	0	0	0	0	0	0
Bluefin tuna	0	0	0	0	0	0
Skipjack tuna	2773	0	0	0	0	2773
Total tunas	3351	0	0	0	0	3351
Annual catch ²						
Frigate tuna	0	0	0	0	0	0
Others	0	0	0	0	0	0

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 88.--Estimated catch and effort by Japanese baitboats in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1974.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	*	0	0	0	0	*
June	1	0	0	0	0	1
July	67	0	0	0	0	67
August	6	0	0	0	0	6
September	1	2	0	0	0	
October	0	0	0	0	0	
November	0	0	10	0	1	11
December	0	0	0	0	0	0
Total	75	2	10	0	1	88
Annual catch ²						
Albacore	210	0	80	0	*	290
Yellowfin tuna	0	0	0	0	0	0
Bigeye tuna	0	0	0	0	0	0
Bluefin tuna	*	0	1	0	0	1
Skipjack tuna	1853	64	282	0	29	2228
Total tunas	2063	64	363	0	29	2519
Annual catch ²						
Frigate tuna	0	0	0	0	0	0
Others	0	0	0	0	0	0

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 89.--Estimated catch and effort by Japanese baitboats in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1975.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	0	0	0	2	2
February	0	0	12	0	2	14
March	19	0	8	0	0	27
April	168	0	0	0	0	168
May	0	0	0	0	0	0
June	23	0	0	0	0	23
July	205	2	0	0	0	207
August	37	2	6	0	0	45
September	15	0	0	0	4	19
October	31	0	0	0	0	31
November	2	0	0	0	0	2
December	1	0	0	0	0	1
Total	501	4	26	0	8	539
Annual catch ²						
Albacore	2534	*	172	0	0	2706
Yellowfin tuna	0	0	0	0	0	0
Bigeye tuna	0	0	0	0	0	0
Bluefin tuna	*	0	3	0	0	3
Skipjack tuna	12321	103	719	0	194	13337
Total tunas	14855	103	894	0	194	16046
Annual catch ²						
Frigate tuna	2	0	0	0	0	2
Others	0	0	0	0	0	0

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 90.--Estimated catch and effort by Japanese baitboats in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1976.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	1	0	0	0	0	1
February	0	0	0	0	0	0
March	1	0	0	0	0	1
April	0	0	0	0	0	0
May	1	0	0	0	0	1
June	1	0	0	0	0	1
July	82	3	0	0	0	85
August	27	2	17	0	0	46
September	5	0	6	1	71	83
October	3	0	0	0	8	11
November	1	0	0	0	0	1
December	0	0	0	0	2	2
Total	122	5	23	1	81	232
Annual catch ²						
Albacore	406	2	190	8	808	1414
Yellowfin tuna	0	0	0	0	0	0
Bigeye tuna	0	0	0	0	0	0
Bluefin tuna	4	0	2	0	3	9
Skipjack tuna	2984	112	563	27	2069	5755
Total tunas	3394	114	755	35	2880	7178
Annual catch ²						
Frigate tuna	1	0	*	0	0	1
Others	0	0	0	0	0	0

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.

Table 91.--Estimated catch and effort by Japanese baitboats in the FCZ around Wake Island, Johnston Atoll, Palmyra Island and Kingman Reef, Jarvis Island, and Howland and Baker Islands, 1977.

	Wake	Johnston	Palmyra- Kingman	Jarvis	Howland- Baker	Total
Monthly nominal effort ¹						
January	0	0	0	0	0	0
February	0	0	0	0	4	4
March	0	0	0	0	3	3
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	261	11	1	0	0	273
July	66	113	0	0	0	179
August	70	20	5	0	47	142
September	5	6	109	0	16	136
October	3	5	132	0	8	148
November	20	0	25	0	0	45
December	2	0	5	0	0	7
Total	427	155	277	0	78	937
Annual catch ²						
Albacore	2326	1092	2494	0	600	6512
Yellowfin tuna	0	0	0	0	0	0
Bigeye tuna	0	0	0	0	0	0
Bluefin tuna	5	8	34	0	0	47
Skipjack tuna	11570	4376	7330	0	2134	25410
Total tunas	13901	5476	9858	0	2734	31969
Annual catch ²						
Frigate tuna	2	6	39	0	0	47
Others	0	0	0	0	0	0

¹Effort in vessel days, * = < 1 vessel day.

²Catch in metric tons, * = < 1 mt.