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**SOUTH PACIFIC COMMISSION  
TUNA FISHERY YEARBOOK  
1993**

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739/94

Noumea, New Caledonia  
1994

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Original text: English

South Pacific Commission Cataloguing-in-publication data

South Pacific Commission tuna fishery yearbook 1993 /  
Tim Lawson, editor

1. Tuna fisheries -- Statistics I. Lawson, Tim II. South  
Pacific Commission. Tuna and Billfish Assessment  
Programme

639.2758

AACR2

Prepared for publication and printed  
at South Pacific Commission headquarters,  
Noumea, New Caledonia, 1994

## PREFACE

At the third meeting of the Standing Committee on Tuna and Billfish (SCTB) held in Noumea, New Caledonia, from 6 to 8 June 1990, the members of the committee called for the Tuna and Billfish Assessment Programme (TBAP) to compile fishery status reports, in order to facilitate the review by the SCTB of the TBAP work programme and to place the work of the TBAP in perspective.

The first status report, covering tuna fisheries in the SPC region during 1990, was presented as a working paper to the fourth meeting of the SCTB, held in Port Vila, Vanuatu, from 17 to 19 June 1991; this document was subsequently published as Tuna and Billfish Assessment Programme Technical Report No. 27. The status report covering 1991, which was presented to the fifth meeting of the SCTB, held in Honolulu, Hawaii, from 17 to 19 June 1992, was published as Tuna and Billfish Assessment Programme Technical Report No. 29. The third status report, covering 1992, was presented to the sixth meeting of the SCTB, held on Pohnpei, Federated States of Micronesia, from 16 to 18 June 1993; the third report was subsequently published as the SPC Tuna Fishery Yearbook, 1992.

The present document covers tuna fisheries in the SPC region during 1993. Historical statistics have been revised as new information has been made available. The reports are arranged by gear type and fishing nation. The industrial fishing methods employed in the SPC region, and discussed herein, include longline, pole-and-line, purse seine and troll. Driftnet fishing in the SPC area ceased in 1991. Artisanal and subsistence tuna fisheries, though important in some SPC member countries, are not considered. Trends in catch and effort are discussed, with emphasis on events during 1993 for those fleets for which such information is available.

In the tables of historical catch and effort statistics, consideration is given to the four main commercial species caught in the SPC region: albacore (*Thunnus alalunga*), bigeye (*Thunnus obesus*), skipjack (*Katsuwonus pelamis*) and yellowfin (*Thunnus albacares*). Catches of other species are not discussed explicitly, and discards are ignored. Catches are reported in whole weights.

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## INTRODUCTION

Estimates of annual catches, 1952–1993, by countries or territories fishing for tuna in the SPC statistical area (Figure 1) using driftnet, longline, pole-and-line, purse seine and troll are presented. Special reference is made to events that occurred during 1993, whenever such information is available.

The tables of statistics have been revised from those presented in Lawson (1993) as follows:

- historical statistics for Japanese distant-water longliners and purse seiners have been updated with revised data provided by the Fisheries Agency of Japan;
- historical statistics for Taiwanese longliners have also been updated, with revised data provided by National Taiwan University;
- historical statistics for Korean longliners, which previously covered the whole Pacific Ocean, have been revised to cover the SPC statistical area;
- statistics for Australian purse seiners fishing outside the Australian Fishing Zone (AFZ), which primarily cover vessels operated by a joint venture with the Federated States of Micronesia, have been included in the table for purse seiners of the Federated States of Micronesia;
- statistics covering covering coastal longliners (*palangriers côtiers*) and offshore longliners (*palangriers hauturiers*) of French Polynesia, which were previously presented in two separate tables, have also been combined;
- a table covering offshore longliners of mainland China has been added; and
- the table of statistics covering catches by Japanese fleets from 1922 to 1938 has been deleted from the present edition; these statistics are available in Lawson (1993).

Whenever possible, the annual catch estimates were obtained from the governments of the fishing nations. However, many of the statistics are from other sources. When no other statistics were available, an attempt was made to estimate catches from information held at SPC. Extensive use was made of the Regional Tuna Fisheries Database, which contains catch and effort data collected by SPC member countries from both domestic and foreign fleets operating in their exclusive economic zones (EEZs).

Caution should be used in interpreting the statistics presented herein; in particular, many estimates for 1993 should be considered as preliminary. Table 51 summarises the quality of the catch statistics for each fleet.

Maps depicting the distribution of fishing effort were produced from logsheet data held at SPC. Coverage of the distant-water fleets in high seas areas by logsheet data is generally poor; therefore, the maps should be interpreted with caution.

## DRIFTNET

### Japan

The fleet of Japanese driftnet vessels targeted albacore in the South Pacific during the 1982/83–1989/90 seasons (Table 1). The number of vessels active increased to 65 during the 1988/89 season, then declined to 20 vessels during the 1989/90 season following the decision by the Fisheries Agency of Japan to restrict fishing effort. No vessels have operated since the 1989/90 season. The catch of albacore peaked during the 1988/89 season at 13,263 mt.

### Korea

Only one driftnet vessel from Korea has fished in the South Pacific (Table 2). The vessel fished for albacore during the 1988/89 season, and caught 172 mt.

### Taiwan

Taiwanese driftnet vessels commenced fishing for albacore in the South Pacific during the 1987/88 season (Table 3). Fishing effort peaked during the 1988/89 season, resulting in a catch of albacore by 71 vessels of 8,520 mt. Fishing effort declined considerably during the 1989/90 season and ceased entirely after the 1990/91 season.

## LONGLINE

### Australia

The Australian longline fleet is comprised of three groups of vessels: domestic vessels, chartered foreign vessels under Australian registration, and Australian/Japanese joint-venture vessels. The domestic fleet is comprised of locally built vessels and ex-Japanese vessels.

Longlining by domestic vessels occurs primarily in the coastal waters of New South Wales and southern Queensland, generally within 60 nautical miles of the coast. Vessels normally return to port each day, although two- or three-day trips have become common. In contrast to the ex-Japanese and joint-venture and charter vessels, which shoot between 1,800 and 3,000 hooks per set, the Australian-built domestic vessels set only about 400 hooks on average. The hooking rate for the Australian-built vessels is usually greater than for the ex-Japanese vessels, in part because of greater selectivity by the domestic vessels of areas and days fished.

High-quality catches of yellowfin, bigeye and striped marlin (*Tetrapturus audax*) are flown to the fresh-chilled sashimi markets of Japan, while other species, such as broadbill swordfish (*Xiphius gladius*) and albacore, are sold on the domestic market (Bureau of Rural Resources 1989).

Statistics for the domestic vessels, including ex-Japanese vessels but excluding charter and joint-venture vessels, are presented in Table 4. The distribution of Australian domestic longline effort in 1993, based on logsheet data held at SPC, which are incomplete, is shown in Figure 2. Domestic

vessels caught an estimated 941 mt in 1993, including 53 per cent yellowfin, 21 per cent southern bluefin, and 15 per cent albacore.

### **China, People's Republic of**

The number of offshore longliners from mainland China increased dramatically from 72 vessels in 1992 to 319 vessels in 1993 (Table 5). Prior to 1993, these vessels were managed by Taiwanese interests; during 1993, many mainland Chinese vessels were managed directly by mainland Chinese companies.

The China National Fisheries Corporation reached an agreement with the Micronesian Maritime Authority during 1993 to operate up to 40 longliners in the Federated States of Micronesia.<sup>1</sup> The Marshall Islands Development Authority and the China Shanghai Corporation for Foreign Economic and Technical Cooperation signed a memorandum of understanding in 1993 to base a fleet of 50 mainland Chinese longliners on Majuro.<sup>2</sup> Several vessels were already based in Majuro in late 1993.

According to logsheet data held at SPC, mainland Chinese longliners caught at least 6,650 mt during 1993, including 47 per cent bigeye and 34 per cent yellowfin. The distribution of mainland Chinese longline effort in 1993, based on logsheet data held at SPC, is shown in Figure 3.

### **Federated States of Micronesia**

Two National Fisheries Corporation (NFC) longliners which were previously based in Yap moved to Pohnpei in November 1993; part of their catch was purchased by the Pohnpei Fisheries Corporation for processing.<sup>3</sup> Two more NFC longliners moved to Pohnpei from Chuuk in February 1994.<sup>4</sup>

During 1993, seven vessels were active, catching 103 mt, including 52 per cent yellowfin and 32 per cent bigeye (Table 6). The distribution of Federated States of Micronesia longline effort in 1993, based on logsheet data held at SPC, is shown in Figure 4.

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<sup>1</sup> Heberer, C.F. 1993. November Activity Report. Micronesian Maritime Authority, Pohnpei, Federated States of Micronesia. 10 pp.

<sup>2</sup> Pacific Report, Volume 6, Number 13, 12 July 1993, quoted in FFA News Digest, Number 5/93, September–October 1993, South Pacific Forum Fisheries Agency, Honiara, Solomon Islands.

<sup>3</sup> Heberer, C.F. 1993, op. cit.

<sup>4</sup> Heberer, C.F. 1994. February Activity Report. Micronesian Maritime Authority, Pohnpei, Federated States of Micronesia. 7 pp.

## Fiji

The Fijian longline fleet grew from 4 vessels in 1989 to 22 vessels in 1993. During 1993, the fleet included 16 domestic vessels and 6 Korean joint-venture vessels. The domestic vessels caught a total of 732 mt, while the Korean joint-venture vessels caught 550 mt, to give a total catch of 1,282 mt during 1993 (Table 7). The distribution of Fijian longline effort in 1993, based on logsheet data held at SPC, is shown in Figure 5.

Chartered Taiwanese vessels have operated in Fijian waters since 1975; these vessels are covered in the discussion of Taiwanese longliners below.

## French Polynesia

The French Polynesian domestic longline fleet is composed of three types of vessels: offshore longliners (*palangriers hauturiers*), which have operated since 1991; coastal longliners (*palangriers côtiers*), which began fishing in early 1992; the *poti-marara*, artisanal vessels which target other species in addition to tuna (Abbes et al. 1993).

The French Polynesian longline fleet, excluding the *poti-marara*, caught an estimated 1,700 mt during 1993, including 42 per cent albacore, 22 per cent yellowfin, 16 per cent billfish, and 10 per cent bigeye (Table 8).

The exact number of *poti-marara* has been difficult to determine; however, it has been estimated to be over 200. The catch of albacore by the *poti-marara* fleet during 1992 has been estimated at 160–170 mt.

## Japan

The Japanese longline fleet currently operating in the SPC statistical area consists of two groups of vessels: distant-water vessels and offshore vessels based in the SPC area.

Distant-water vessels (150–500 gross tonnes) have been active in the SPC area since the 1930s. After the restrictions on the movement of Japanese vessels, which were imposed following World War Two, were lifted in 1952, the number of distant-water vessels in the SPC area increased consistently. Catches in the SPC area reached 136,171 mt in 1963 (Table 9). During the 1970s and 1980s, the number of distant-water vessels declined as less efficient vessels were retired in response to rising costs of fishing.

The proportion of the Pacific Ocean catch taken by Japanese distant-water longliners in the SPC area averaged 44.5 per cent during 1962–1992. Distant-water longliners caught 45,087 mt in the SPC area during 1992, which represents 37.4 per cent of their Pacific Ocean catch.

Since late 1987, smaller vessels (all under 100 GRT, many around 20 GRT) have been based in Guam, Koror, Pohnpei and Yap. About 84 vessels caught an estimated 3,978 mt during 1993 (Table 10).

The distribution of Japanese longline effort in 1993, based on logsheet data held at SPC, which do not cover international waters, is shown in Figure 6.

## **Korea**

Korean distant-water longliners have been active in the SPC area since 1958. During the 1960s and early 1970s, Korean vessels targeted primarily albacore. From the late 1970s to the mid-1980s, yellowfin, bigeye and albacore made up varying proportions of the catch. Albacore catches have declined considerably from 1986 onwards (Table 11).

According to unraised logsheet data, aggregated by 5° latitude x 5° longitude by month for 1975–1980 and 1983–1987, the catch by Korean longliners in the SPC area represents 95.1 per cent of the Pacific Ocean catch, on average.

The statistics in Table 11 should be treated with caution; because of the variety of estimation methods used for different periods, the time series of catches may be inconsistent.

The total catch in the SPC area during 1992 was about 29,496 mt, including 59 per cent bigeye and 40 per cent yellowfin. The distribution of Korean longline effort in 1993, based on logsheet data held at SPC, which are incomplete, is shown in Figure 7.

## **Marshall Islands**

About ten Taiwanese longliners, some of which were registered in the United States but crewed by Taiwanese, fished from Majuro during 1991–1992. These vessels are considered under *Taiwan longline* below.

During 1993, five Marshallese longliners based in Majuro caught at least 110 mt (Table 12).

## **New Caledonia**

The fleet of longliners based in Noumea, New Caledonia, fishes almost exclusively in the waters of New Caledonia, targeting albacore both for the local market and for transshipment to canneries, and yellowfin and bigeye for the Japanese sashimi markets.

The fleet grew from one vessel in 1983 to seven vessels in 1990. During 1993, four vessels were active, exporting 1,338 mt, consisting of 56 per cent albacore, 29 per cent yellowfin and 7 per cent bigeye (Table 13). The distribution of New Caledonian longline effort in 1993, based on logsheet data held at SPC, is shown in Figure 8.

## **New Zealand**

Statistics reported by the Ministry of Agriculture and Fisheries to the fifth meeting of the South Pacific Albacore Research group in March 1993 indicate that 20 New Zealand longliners caught 706 mt of albacore in 1992, an increase from 325 mt caught by 14 vessels in 1991 (Table 14).

## Solomon Islands

Domestic longliners fished in Solomon Islands waters during 1973 and 1976–1985. Two vessels were active each year. The maximum catch was 818 mt in 1980, consisting of 69 per cent yellowfin and 12 per cent bigeye (Table 15).

## Taiwan (Republic of China)

The Taiwanese longliners fishing in the SPC statistical area fall into two groups. The smaller offshore vessels based in Chuuk, Guam, Koror, Majuro, Pohnpei and Yap, mostly 20–80 GRT, target yellowfin and bigeye for sashimi. The distant-water vessels, mostly 150–250 GRT, fish from base ports in American Samoa and Fiji and primarily target albacore for canning.

During 1993, 254 Taiwanese offshore longliners transshipped at least 5,994 mt from Chuuk, Guam, Koror, Pohnpei and Yap (Table 16).

Fishing effort by distant-water longliners doubled during 1992, while catch rates also increased; as a result, the total catch in the SPC area increased from 11,212 mt in 1992 to 33,057 mt in 1993 (Table 17). The catch in the SPC area during 1992 represents 97.0 per cent of the whole Pacific Ocean catch, compared to the 1967–1992 average of 91.8 per cent.

The distribution of Taiwanese longline effort in 1992, based on logsheet data held at SPC, which are incomplete, is shown in Figure 9. Few data covering the distant-water longliners are held at SPC, therefore Figure 9 probably does not accurately depict the full distribution of fishing effort of these vessels.

## Tonga

Tonga's first longliner, the *Lofa*, was built of GRP construction in Japan in 1981. Since fishing began, in 1982, catches have averaged 290 mt annually, with a peak in 1985 of 370 mt (Table 18). During 1992, 255 mt were caught, including 199 mt of albacore.

In 1992, the *Lofa* was transferred to the Seastar Fishing Company, a crown company. The company has obtained two additional vessels: the *Seastar 1* began fishing in June 1993, while the *Seastar 2* began fishing in February 1994. Three privately-owned longliners and one vessel operated by a USAID-funded project also fished during 1993.

## United States

During 1993, six American longliners based in Majuro transshipped at least 114 mt of bigeye and yellowfin (Table 19). The distribution of American longline effort in 1993, based on logsheet data held at SPC, which are incomplete, is shown in Figure 10.

## POLE-AND-LINE

### Australia

The number of Australian vessels fishing with pole-and-line has ranged from 5 to 20 vessels during 1976–1993. During 1993, 10 vessels caught 609 mt, continuing a decline which started after 1990, when 1,199 mt were caught (Table 20). The distribution of Australian pole-and-line effort in 1993, based on logsheet data held at SPC, is shown in Figure 11.

### Fiji

The Fijian pole-and-line fleet has consisted of vessels owned by Ika Corporation, chartered Japanese vessels, and other private vessels. The fishery is seasonal, usually from November to August. During 1993, nine vessels were active; the 1993 catch of 3,040 mt was below the 1980–1992 average catch of 4,266 mt (Table 21). The distribution of Fijian pole-and-line effort in 1993, based on logsheet data held at SPC, is shown in Figure 12.

### French Polynesia

The *bonitier* fleet of French Polynesia has been active since at least 1975 (Table 22). The number of vessels active declined from 55 vessels in 1990 to 24 in 1993. Therefore, the 1993 catch, 491 mt, was well below the 1979–1992 average of 908 mt.

### Japan

The Japanese pole-and-line fishery in the SPC area, which commenced in 1922, peaked at 154,296 mt in 1977 (Table 23). Thereafter, the fishery contracted in response to rising costs of fishing and reduced access to fishing grounds resulting from the implementation of EEZs by coastal states. Logbook data held at SPC cover 317 vessels in 1980, whereas only 39 vessels were active in the SPC area during 1992.

Total catches in the SPC area during the early 1990s have averaged 51,202 mt, compared to 111,726 mt during the 1980s. During 1990, the decline in the total catch was largely caused by a drop in catch rates. In 1991, catch rates increased, but fishing effort dropped. During 1992, fishing effort declined further, while catch rates were below the 1991 level; the catch dropped from 53,191 mt in 1991 to 45,640 mt in 1992. During 1992, 31.1 per cent of the Pacific Ocean catch was taken in the SPC area; the catch in the SPC area represented 43.3 per cent of the whole Pacific Ocean catch, on average, during 1972–1992.

The distribution of Japanese pole-and-line effort in the SPC region in 1993, based on logsheet data held at SPC, which do not cover international waters, is shown in Figure 13.

## **Kiribati**

The Kiribati pole-and-line fleet increased from one vessel in 1979 to six vessels in 1989, then declined to three vessels in 1991. Since 1987, part of the fleet has fished in the waters of Fiji on a seasonal basis, usually from November to April; in 1993, one vessel fished in the waters of Fiji during March and April.

During 1993, one vessel was active from January to October, a second from March to September, and a third during October and December. The catch during 1993 was 293 mt (Table 24).

## **New Caledonia**

The pole-and-line fleet was established in 1981 with one vessel; it expanded to three vessels in 1982 (Table 25). The fishery closed in 1983 due to economic conditions prevalent at the time (Hallier 1984).

## **New Zealand**

Three pole-and-line vessels were active in the waters of New Zealand during 1990–1991, while one New Zealand-registered vessel was active in the waters of Solomon Islands during 1991 (Table 26). The three vessels operating in the waters of New Zealand caught 1.2 mt of albacore in 1991, while the vessel operating in the waters of Solomon Islands caught 116 mt, including 114 mt of skipjack and 2 mt of yellowfin.

## **Palau**

The Van Camp Sea Food Company established cold-storage facilities at Koror in 1964 for the transshipment of tuna landed by Okinawan pole-and-line vessels owned by Van Camp. The fleet operated until 1982. According to logbook data held at SPC, the maximum number of vessels was reached in 1981, when 36 vessels were active (Table 27). Catches grew from 1,178 mt in 1964 to 8,442 mt in 1970; thereafter catches were variable.

A locally-owned 25 GRT pole-and-line vessel has operated in Palau since 1985. The vessel caught 75 mt during 1992.

## **Papua New Guinea**

Pole-and-line fishing in Papua New Guinea commenced out of Manus and Madang for a short period, then continued out of Kavieng, New Ireland, in 1970 (Tuna Programme 1983). The fishery grew from one joint-venture company and 2,430 mt caught in 1970 to four companies and 41,780 mt caught in 1974 (Table 28). Okinawan-style (59 GRT) pole-and-line vessels were predominant in the fishery, catching 90 per cent skipjack and operating in groups serviced by a mothership with freezer and storage facilities. The fishery ceased operations in 1981, then recommenced in October 1984 and continued until late 1985.



## Solomon Islands

Two companies, Solomon Taiyo Ltd and National Fisheries Development Corporation (NFD), developed the pole-and-line fishery in Solomon Islands. NFD was sold in 1990 to British Columbia Packers Ltd and is now operated in association with Mar Fishing Company, based in the Philippines.

Catches usually consist of about 95 per cent skipjack, 2 to 3 per cent yellowfin, with the remainder made up of rainbow runner (*Elegatis bipinnulatus*), dolphinfish (*Coryphaena hippurus*) and island bonito (*Euthynnus affinis*).

The total catch in 1993 was 17,832 mt, the lowest annual catch since 1982; the catch rate during 1993 was 3.0 mt per day, the lowest average catch rate since 1977 (Table 29). The distribution of Solomon Islands pole-and-line effort in 1993, based on logsheet data held at SPC, is shown in Figure 14.

## Tuvalu

In 1981, the National Fishing Corporation of Tuvalu (NAFICOT) received a 173 GRT pole-and-line vessel, *Te Tautai*, through bilateral aid from the Japanese Government. From the start of operations, April 1982, the *Te Tautai* operated in Fijian waters, managed under an agreement with Ika Corporation. The *Te Tautai* fished in Solomon Islands during most of 1987 and 1988; the annual catch peaked at 1,091 mt in Solomon Islands waters in 1988 (Table 30). From December 1989 to December 1992, the *Te Tautai* was under charter to the South Pacific Commission for the Regional Tuna Tagging Project; the vessel ceased fishing in 1993.

## PURSE SEINE

### Australia

The activities of Australian purse seiners off the east coast of Australia, in the SPC statistical area, go back to 1974 (Table 31), though it is known that purse seiners caught skipjack tuna before then. In most cases, skipjack catches have been incidental catches while targeting on southern bluefin. During the 1993 skipjack season, seven vessels caught 4,267 mt of skipjack.

Since at least 1988, Australian purse seiners have fished outside the Australian Fishing Zone (AFZ), in the waters of the Federated States of Micronesia, Papua New Guinea and Solomon Islands. During 1993, four vessels operated in the waters of the Federated States of Micronesia; three of these vessels fished under the Caroline Fishing Company, a three-way joint venture in the Federated States of Micronesia involving the State of Pohnpei, the National Fisheries Corporation, and Kailis and France Pty Ltd of Australia (Micronesian Maritime Authority 1990). Data covering the three Caroline Fishing Company vessels have been included in the table for purse seiners of the Federated States of Micronesia (Table 33). The catch by the single Australian purse seiner fishing outside the AFZ in 1993 was at least 1,710 mt (Table 32). The distribution of Australian purse seine effort in 1993, based on logsheet data held at SPC, which are incomplete, is shown in Figure 15.

## **Federated States of Micronesia**

Three purse seiners operated by the Yap Fishing Corporation (YFC) and three vessels operated under the Caroline Fishing Company began fishing in 1991 and caught 11,503 mt (Table 33). In 1992, a fourth vessel, which had fished under the United States multilateral treaty until September 1992, joined the YFC fleet.

During 1993, the seven vessels caught 16,779 mt, consisting of 67 per cent skipjack and 33 per cent yellowfin. The distribution of Federated States of Micronesia purse seine effort in 1993, based on logsheet data held at SPC, is shown in Figure 16.

## **Indonesia**

During 1987–1990, three French-built purse seiners (632–765 gross tonnes) operated by a French–Indonesian joint-venture company (Anon. 1988) operated in the waters of SPC member countries on a part-time basis, also fishing in Indonesian waters and on the high seas.

In 1988, their total annual catch was 13,000 mt (Table 34); 3,859 mt, or 30 per cent, were reported on logsheets to have been caught in the waters of SPC member countries.

## **Japan**

Trials by Japanese purse seiners in the SPC area began around 1960 (Matsuda and Ouchi 1984). Since 1985, the number of single seiners licensed by the Fisheries Agency of Japan to fish in the SPC area has been limited to 31 vessels; two or three other vessels with special licences for exploratory fishing have fished there occasionally (Anon. 1989c). At the outset of the fishery, almost all Japanese purse seiners were of the same type, 499 gross tonnes with a carrying capacity of 550 mt. In recent years several 550 mt capacity purse seiners have been replaced with vessels of 750 mt capacity.

Japanese group seiners operate with one catcher vessel, usually of 116 GRT, one or two carrier vessels of about 325 GRT, and an anchor vessel of 45 GRT. The fishery is seasonal, with vessels usually operating in the region from February to May. Group seiners first operated in the region in 1980, in the waters of the Federated States of Micronesia. The number of group seiners licensed by the Fisheries Agency of Japan to fish in the SPC area has been limited to seven.

The catch by Japanese seiners in 1993 was 151,000 mt, including 63 per cent skipjack and 37 per cent yellowfin (Table 35). The 1993 catch represents a decrease of 23,894 mt, or 14 per cent, over the 1992 catch. The distribution of Japanese purse seine effort in 1993, based on logsheet data held at SPC, which do not cover international waters, is shown in Figure 17.

## **Korea**

During 1993, the Korean purse seine fleet caught 148,000 mt, continuing the decline observed in 1992 (Table 36). The reduction in the annual catch was due in part to the June 1993 ban on transshipment at sea; under the ban, vessels are required to transship in port, therefore less fishing

effort is expended as vessels transit between the fishing grounds and port. The distribution of Korean purse seine effort in 1993, based on logsheet data held at SPC, which are incomplete, is shown in Figure 18.

### **Marshall Islands**

*Koorale*, the first purse seiner owned by the Marshall Islands Government (in a joint venture with an American captain), began fishing in December 1989. A second joint-venture vessel, *Bold Fleet*, was purchased in 1990. The Marshall Islands vessels are licensed to fish under the *Treaty on fisheries between certain Pacific Island states and the United States*; catch statistics for the Marshall Islands seiners are included in the statistics for American purse seiners (Table 43).

### **Mexico**

Two Mexican purse seiners fished under an agreement with the Federated States of Micronesia in 1984. The vessels fished for 167 days and caught 3,191 mt, for an average catch rate of 19.1 mt per day (Table 37).

### **New Zealand**

The purse seine fishery for skipjack in New Zealand takes place during the southern summer months. According to statistics provided by the Ministry of Agriculture and Fisheries, the New Zealand purse seine fleet, excluding chartered American vessels, caught 6,720 mt during 1991 (Table 38).

### **Philippines**

Two companies in the Philippines operate purse seiners in the waters of SPC member countries. During 1992, the Frabelle Fishing Corporation managed 13 vessels: seven vessels fished in the waters of Papua New Guinea, four in the waters of Solomon Islands, and five in the waters of the Philippines. During 1993, the Mar Fishing Company managed six vessels: three vessels fished in the waters of Papua New Guinea, two in the waters of Solomon Islands; and two in the waters of Indonesia.

An estimated 14 vessels fished in Papua New Guinea and Solomon Islands during 1992, catching 34,496 mt (Table 39). The distribution of Filipino purse seine effort in 1993, based on logsheet data held at SPC, which are incomplete, is shown in Figure 19.

### **Russia**

Year-round purse seining in the Western Pacific by the ex-Soviet Union fleet began in mid-1985. The fleet included five seiners of 85 m, 2,634 GRT and a carrying capacity of 940 mt. The fleet, which has varied from three to eight vessels, has fished continuously in the SPC area since 1985, with annual catches averaging 4,305 mt (Table 40).

During June – July and September – December 1992, three vessels caught 2,126 mt on the high seas between Papua New Guinea and the Federated States of Micronesia, and between Solomon Islands and Kiribati.

### **Solomon Islands**

The total catch by the three vessels active in 1993, including one group seiner and two single seiners, was 11,371 mt (Table 41). Catch rates increased slightly during 1993, while effort decreased slightly; the annual catch was therefore virtually the same as in 1992. The distribution of Solomon Islands purse seine effort in 1993, based on logsheet data held at SPC, is shown in Figure 20.

### **Taiwan**

During 1993, 43 vessels caught 171,988 mt, consisting of 64 per cent skipjack and 36 per cent yellowfin, an increase in the proportion of yellowfin. The 1993 catch represents a decrease of 48,012 mt, or 22 per cent, from 1992 (Table 42). The reduction in the annual catch was due in part to the June 1993 ban on transshipment at sea; under the ban, vessels are required to transship in port, therefore less fishing effort is expended as vessels transit between the fishing grounds and port. The distribution of Taiwanese purse seine effort in 1993, based on logsheet data held at SPC, which are incomplete, is shown in Figure 21.

### **United States**

The American purse seine fleet was already established in the SPC area by the time of the agreement concluded in 1980 between the American Tunaboat Association and three SPC member countries, Palau, the Federated States of Micronesia and the Marshall Islands: the agreement allowed American seiners to fish in the EEZs of the three countries from July 1980 to June 1982. Since the implementation of the multilateral treaty in June 1988, the American purse seine fleet has been permitted to fish in the EEZs of the 16 Pacific island countries party to the treaty.

According to logsheet data currently available at SPC, the fleet of 42 vessels caught 194,315 mt in 1993 (Table 43), a decrease of 9,568 mt, or 4.7 per cent, from 1992. The distribution of American purse seine effort in 1993, based on logsheet data held at SPC, is shown in Figure 22.

## **TROLL**

### **Australia**

The Australian troll fleet during the 1991/92 season included 25 vessels targeting southern bluefin off the east coast of Tasmania, an estimated 12 multi-purpose vessels operating off the south-east coast of New South Wales, and two vessels targeting albacore in the coastal waters from the south-east coast of New South Wales to the south-east of Tasmania. During the 1992/93 season, 46 vessels caught an estimated 34 mt (Table 44).

## **Canada and Fiji**

Several Canadian and Fijian trollers have participated in the southern albacore fishery, including two vessels licensed by Fiji in 1991. Catches of albacore by Canadian and Fijian vessels were estimated to be 103 mt in 1991 (Table 45).

## **French Polynesia**

Vessels based in French Polynesia trolling for albacore in the Sub-Tropical Convergence Zone have been active since 1989. During the 1992/93 season, four vessels caught 45 mt of albacore (Table 46).

## **New Zealand**

New Zealand trollers have fished for albacore since at least the 1973/74 season. In the past, the fishing grounds were located off the west coast of New Zealand and in the Tasman Sea; in recent years, a number of New Zealand vessels have fished in international waters to the east of New Zealand. During 1991/92, 247 vessels caught 3,856 mt of albacore (Table 47).

## **United States**

Surveys were conducted by the National Marine Fisheries Service in 1986 with a view to assessing the potential for an albacore fishery in southern waters. In response to the successful results from the surveys, 35 vessels participated in the fishery during the 1987/88 season (Table 48). The fishery peaked during the 1990/91 season, when 58 vessels caught 5,540 mt of albacore. The albacore catch declined to 3,016 mt during the 1991/92 season. The decline continued during the 1992/93 season, when 47 vessels caught 1,028 mt of albacore.

# **SOUTH-EAST ASIA**

## **Indonesia**

Annual catches of tuna and tuna-like species are believed to have increased consistently in Indonesia. The preliminary estimates of skipjack and yellowfin catches in eastern Indonesian waters in 1992, 123,607 mt and 73,837 mt respectively, both represent a six per cent increase over 1991 (Table 49).

## **Philippines**

Skipjack catches in the Philippines have increased considerably, though not consistently, from 20,000 mt in 1970 to 102,394 mt in 1991; in 1992, the skipjack catch declined by 19 per cent. During 1993, 85,232 mt of skipjack were caught (Table 50). Yellowfin catches have followed a similar pattern, increasing from 32,000 mt in 1970 to 95,594 mt in 1991; the yellowfin catch declined by 53 per cent in 1992. During 1993, 44,902 mt of yellowfin were caught.

## DISCUSSION

### Data quality

The quality of the estimates of annual catches presented in Tables 1–50 varies considerably (Table 51). Catch estimates of poor quality include those for all New Zealand fleets for 1993; Korean longline for all years; offshore longline fleets of Japan and Taiwan for most years; the longline fleets of Japan, Taiwan and Tonga for 1993; the Japanese pole-and-line fleet for 1993; the purse seine fleets of the Philippines and Russia for 1993; and domestic fisheries of Indonesia for 1993.

### Driftnet

The driftnet fishery operated from the 1982/83 season until the 1990/91 season. Catches peaked in the 1988/89 season, when 21,955 mt of albacore were caught (Table 52).

### Longline

The preliminary estimate of the total longline catch for 1992 has been revised downwards, from 129,542 mt (Lawson 1993) to 117,556 mt (Table 53). The decrease was the result of revisions of estimates for the fleets of Japan and Taiwan, based on statistics provided by government sources, and of a revision in the estimate for the Taiwanese fleet, which now represents the SPC area, rather than the whole Pacific Ocean.

The estimate of the longline catch during 1993 given in Table 53 should be treated with caution, because of the lack of 1993 statistics for the distant-water longline fleets. The estimate of the total longline catch during 1993 has been strongly influenced by preliminary estimates for the distant-water longline fleets, which have been carried over from 1992, therefore it may not reflect the actual trend.

### Pole-and-line

The revision of preliminary 1992 catch statistics for the Japanese fleet resulted in a downward revision of the total pole-and-line catch during 1992 from 76,053 mt (Lawson 1993) to 70,830 mt (Table 54).

Accurate statistics for the 1993 catch by the Japanese fleet are not yet available; however, if the Japanese catch during 1993 was similar to the catch during 1992, then the total pole-and-line catch during 1993 was probably about 67,105 mt (Table 54).

### Purse seine

The preliminary estimate of the total purse seine catch for 1992 has been revised downwards, from 876,865 mt (Lawson 1993) to 853,614 mt (Table 55). The decrease was caused by revisions of estimates for the fleets of Japan and Korea, based on new statistics provided by government sources.

The preliminary estimate of the catch by purse seiners during 1993 is 738,833 mt, which represents a decline of 114,781 mt, or 13 per cent, from 1992 (Table 55). A decline in the catch of skipjack

of 133,030 mt, or 21 per cent, was partly offset by an increase in the catch of yellowfin of 18,249 mt, or 8 per cent.

## **Troll**

An estimate of the catch of albacore by New Zealand trollers during the 1992/93 season is not yet available; however, the decline in the catch by American trollers during the 1992/93 season suggests that the total albacore catch by trollers declined considerably (Table 56).

## **CONCLUSION**

Preliminary estimates of catches in the SPC statistical area for 1992 presented in Lawson (1993) have been revised downwards for longline, pole-and-line and purse seine, while the estimate of the troll catch for the 1991/92 season has remained stable. Preliminary estimates of catches in the Philippines for 1992 have also been revised downwards. As a result, the estimates of the 1992 catch in the SPC area and in the SPC area plus Indonesia and the Philippines have both decreased.

The preliminary estimate of the annual catch in 1993 of the four principal species (albacore, bigeye, skipjack and yellowfin) in the SPC area is 931,685 mt (Table 57). The catch during 1993 represents a decrease of 117,359 mt, or 11 per cent, from the catch during 1992 of 1,049,044 mt.

The catch in the SPC area combined with the catch in the waters of Indonesia and the Philippines reached approximately 1,259,263 mt in 1993 (Table 58).

Trends in the catch by species and in the catch by gear type are shown in Figures 23 and 24 respectively. Trends in the catch by fishing nation are presented in Tables 59 and 60.

## **ACKNOWLEDGEMENTS**

Compilation of the statistics presented in this report has been possible through the co-operation of A. Coan (United States of America), R. Etaix-Bonnin (New Caledonia), R. Grainger (Food and Agriculture Organization), D. Harris (Guam), C. Heberer (Federated States of Micronesia), C.-C. Hsu (Republic of China), T. Koloa (Tonga), A. Kumar (Fiji), J.U. Lee (Republic of Korea), E. Ramos (Philippines), S. Resma (Philippines), F. Saheb (Fiji), S. Sharma (Fiji), T. Skousen (Australia), C.-L. Sun (Taiwan), S. Swerdloff (Tonga), M. Tkel (Palau), R. Tumoa (Kiribati), T. Ukenio (Kiribati), S. Yen (French Polynesia) and L. Zuanich (Guam). The meticulous editing of Caroline Nalo resulted, once again, in numerous improvements in the final draft.

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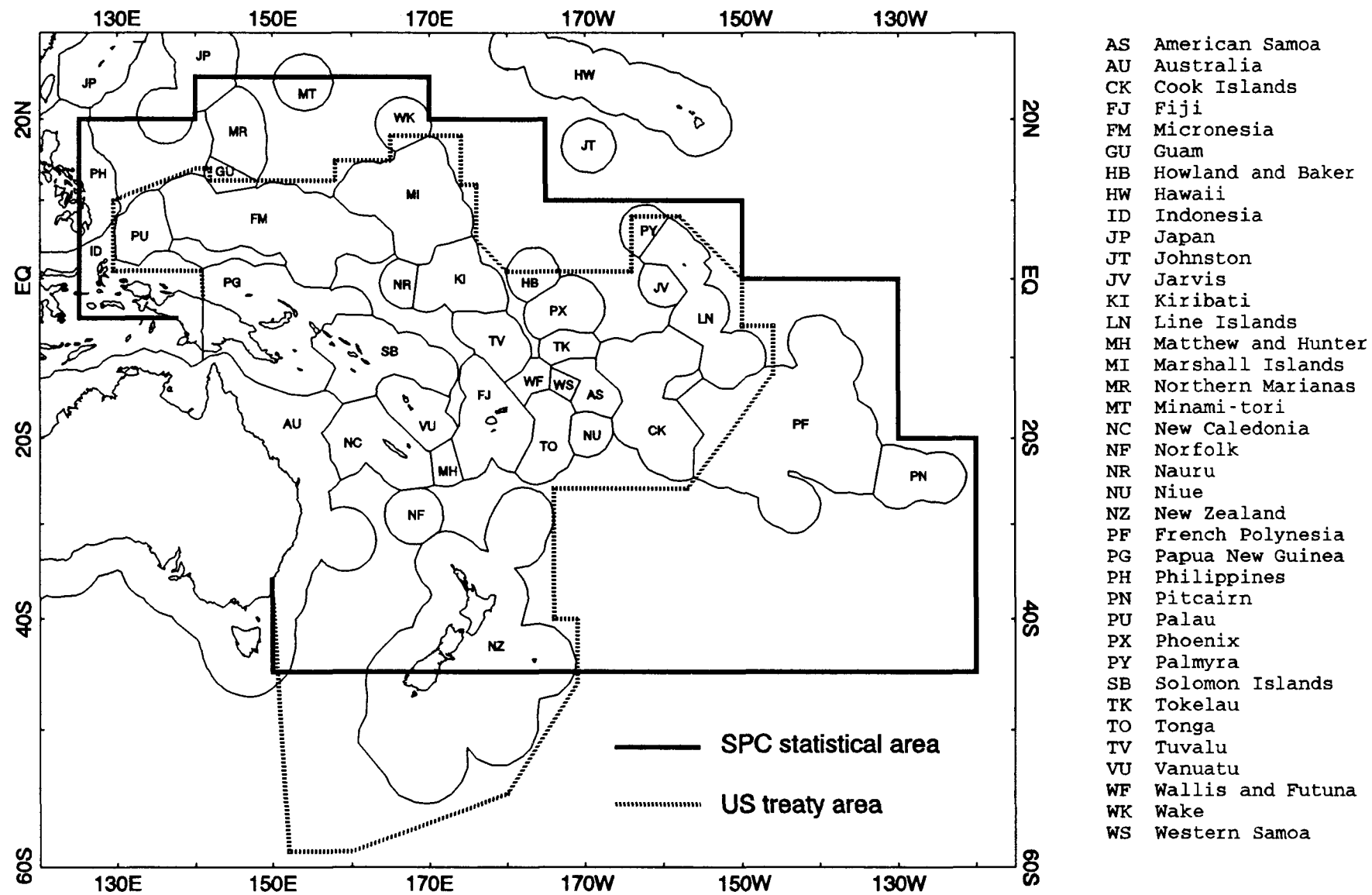
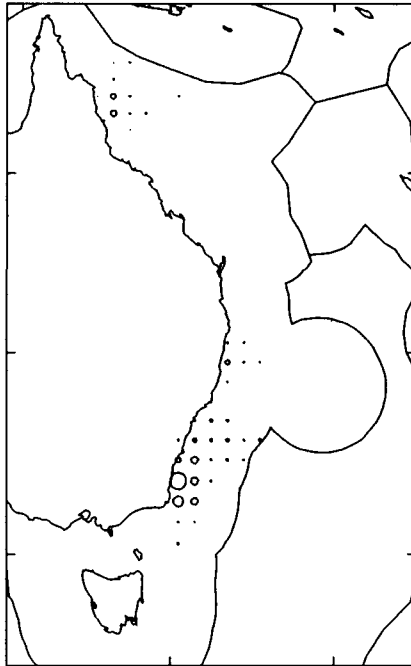
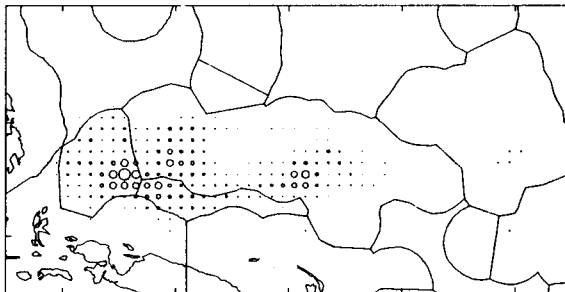


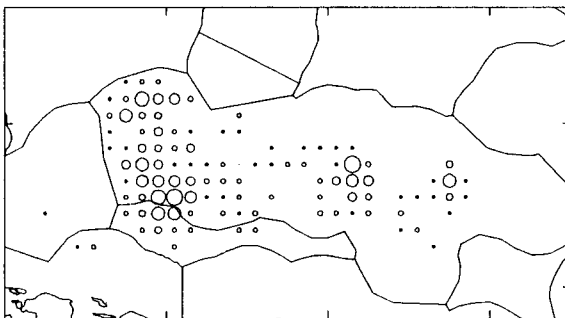
Figure 1. SPC statistical area



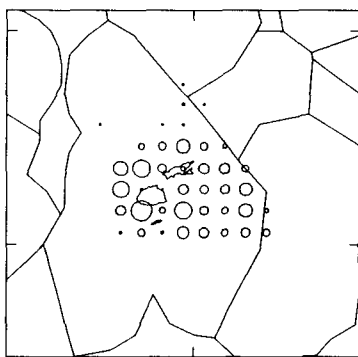
**Figure 2. Australian longline effort, 1993**



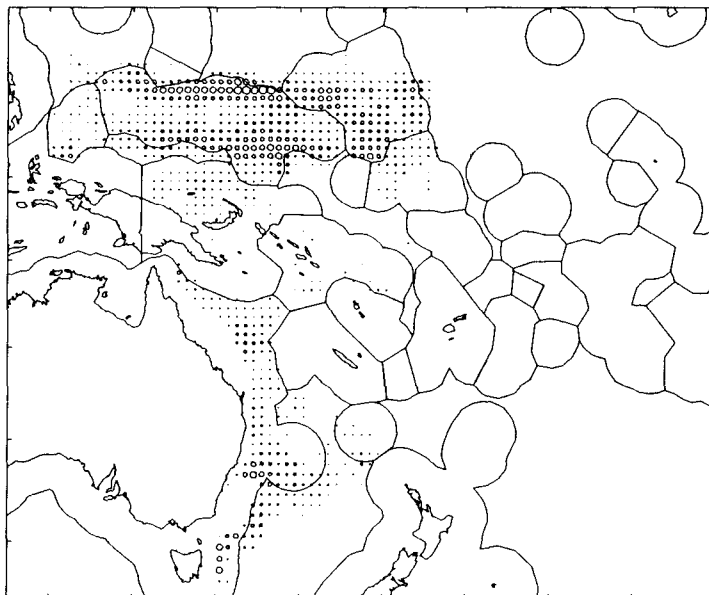
**Figure 3. People's Republic of China longline effort, 1993**



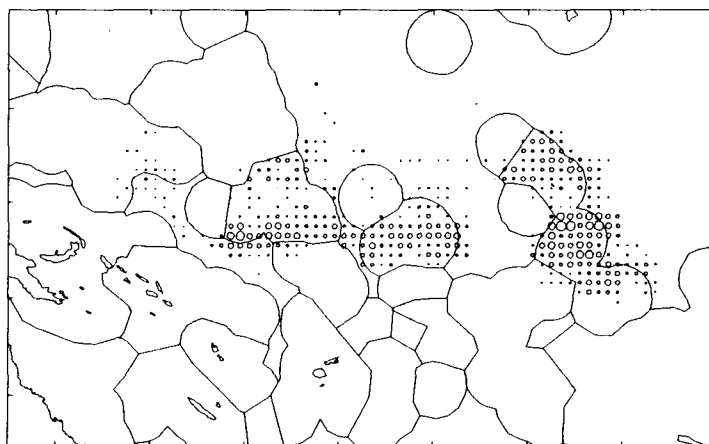
**Figure 4. Federated States of Micronesia longline effort, 1993**



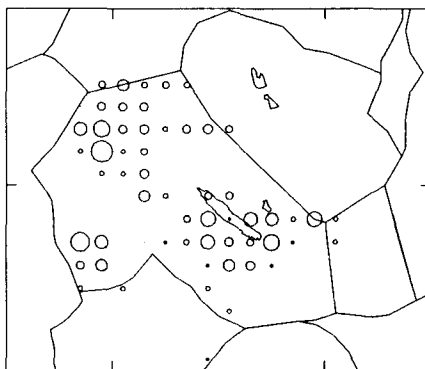
**Figure 5. Fiji longline effort, 1993**



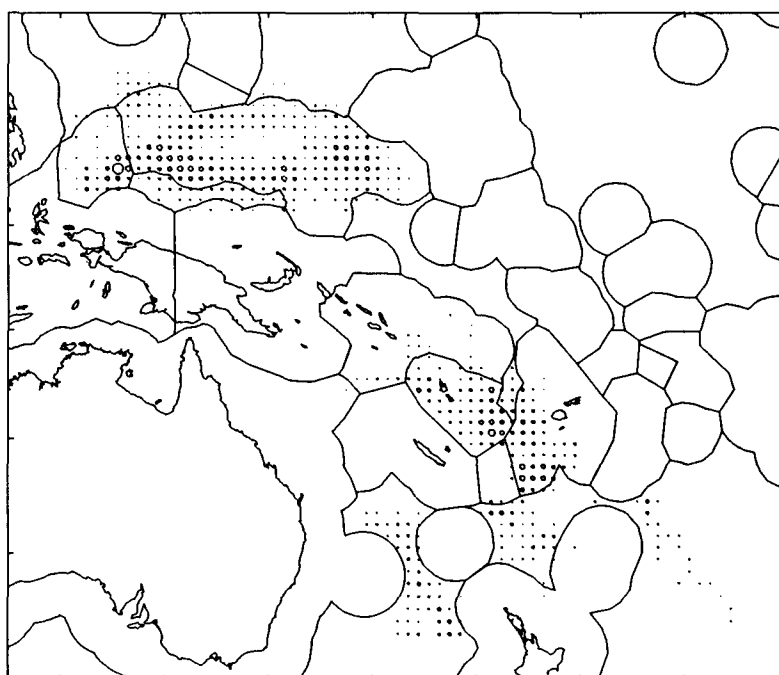
**Figure 6. Japanese longline effort, 1993**



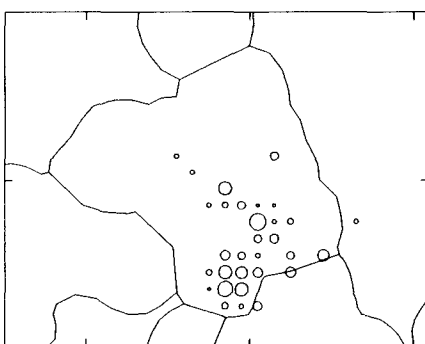
**Figure 7. Korean longline effort, 1993**



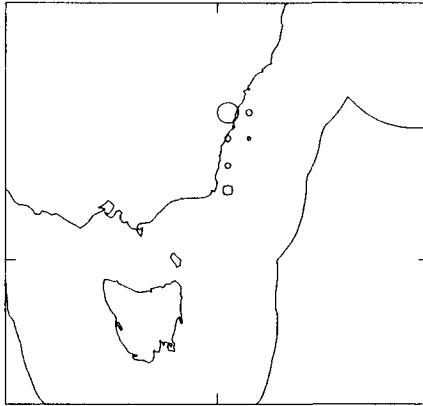
**Figure 8. New Caledonian  
longline effort, 1993**



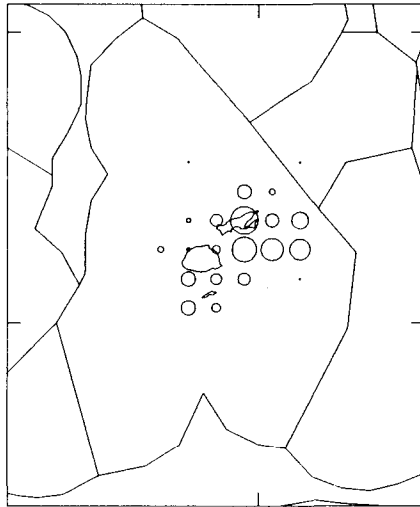
**Figure 9. Taiwanese longline effort, 1993**



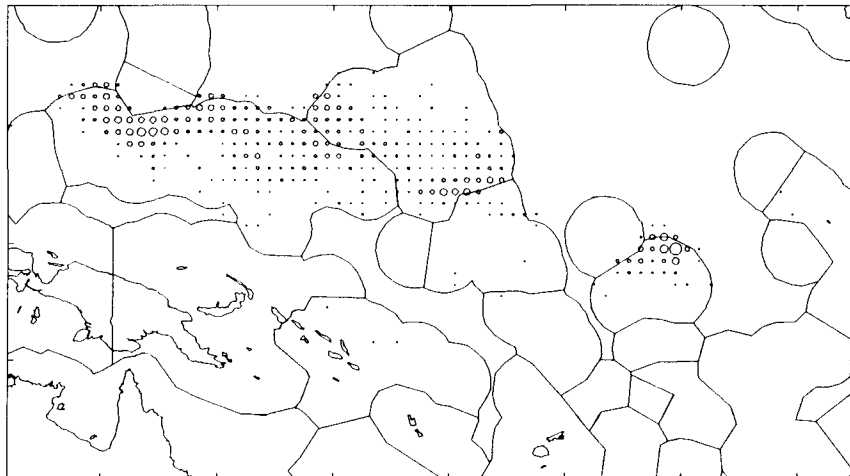
**Figure 10. American longline  
effort, 1993**



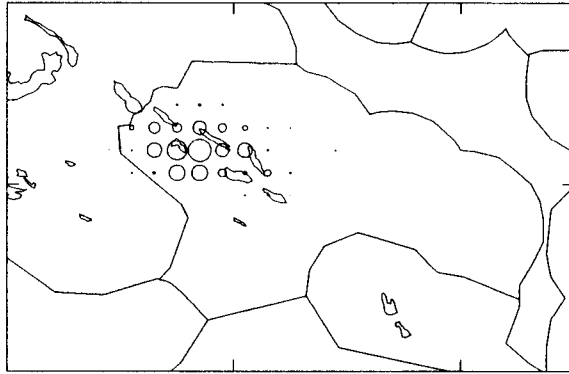
**Figure 11. Australian pole-and-line effort, 1993**



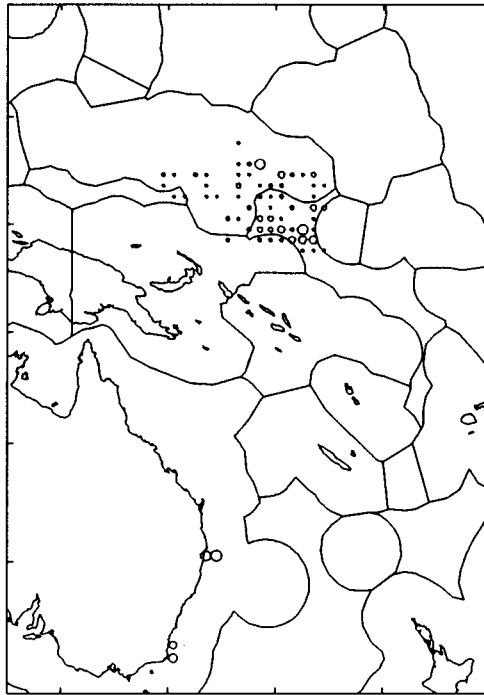
**Figure 12. Fiji pole-and-line effort, 1993**



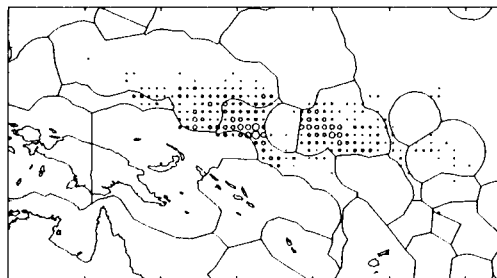
**Figure 13. Japanese pole-and-line effort, 1993**



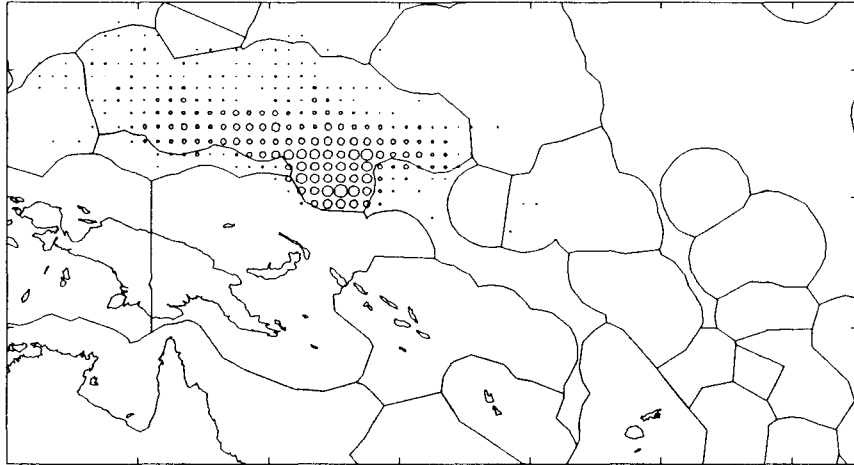
**Figure 14. Solomon Islands pole-and-line effort, 1993**



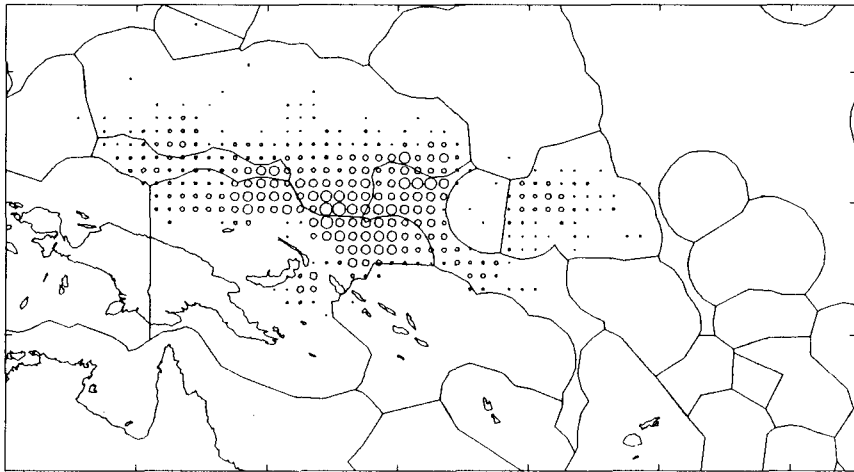
**Figure 15. Australian purse seine effort, 1993**



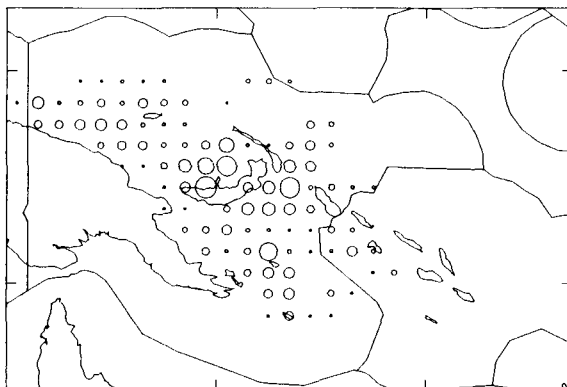
**Figure 16. Micronesian purse seine effort, 1993**



**Figure 17. Japanese purse seine effort, 1993**

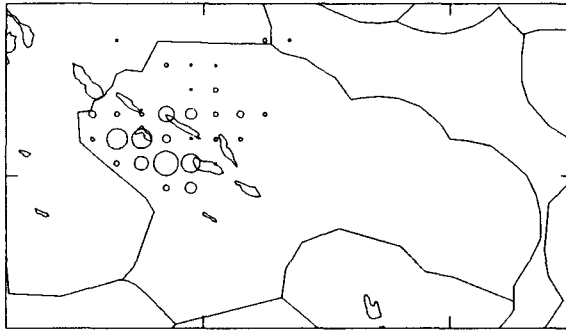


**Figure 18. Korean purse seine effort, 1993**

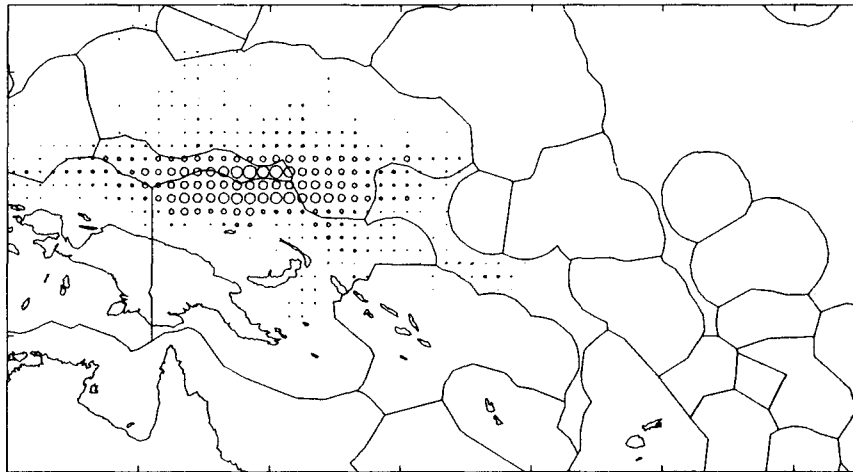


**Figure 19. Filipino purse seine effort, 1993**

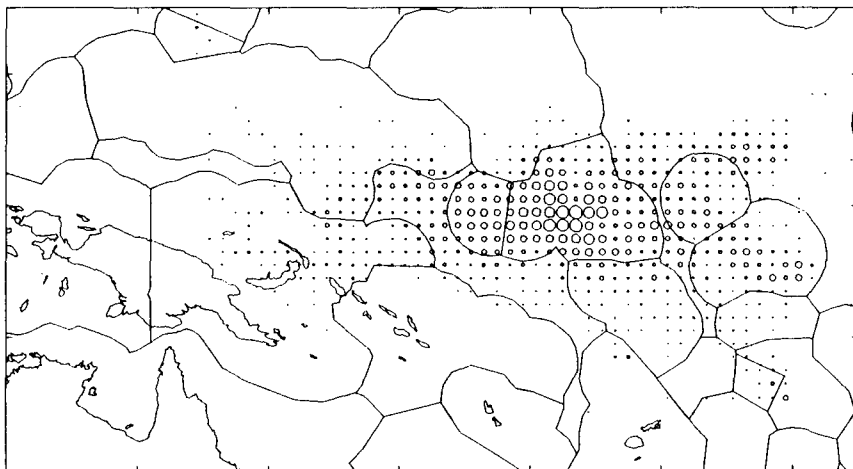




**Figure 20. Solomon Islands purse seine effort, 1993**



**Figure 21. Taiwanese purse seine effort, 1993**



**Figure 22. American purse seine effort, 1993**

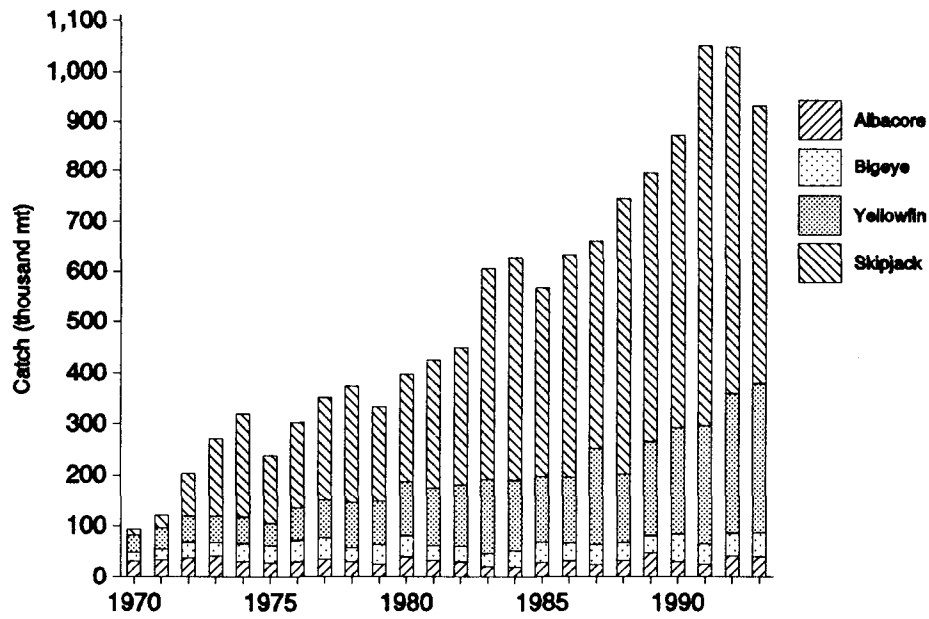


Figure 23. Annual catches by species in the SPC statistical area

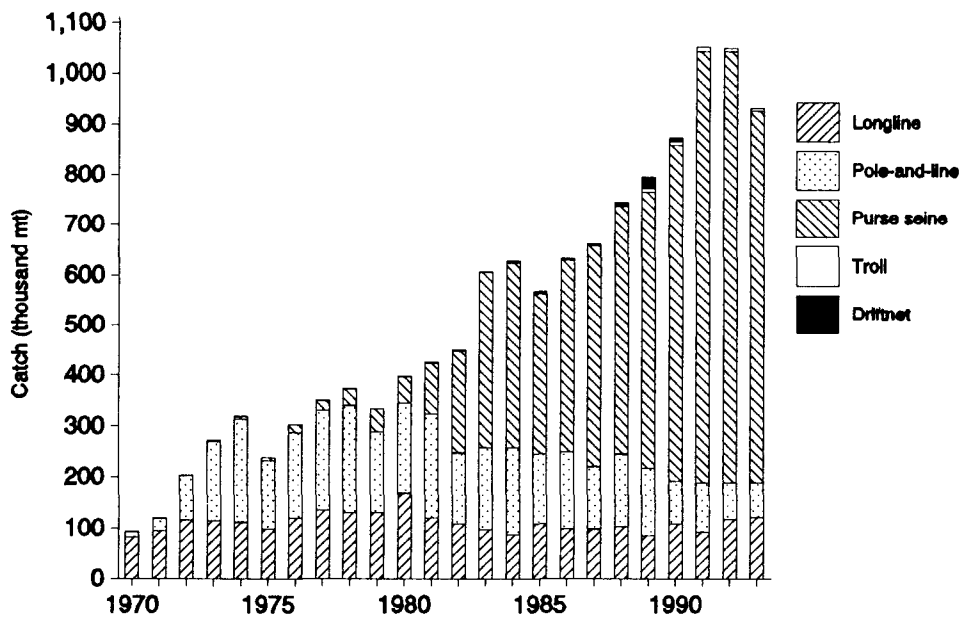


Figure 24. Annual catches by gear type in the SPC statistical area

**Table 1. Catches of albacore by driftnet vessels of Japan**

SEASON	VESSELS ACTIVE	DAYS FISHED	ALB	CPUE		
				TASMAN SEA	OFF NEW ZEALAND	EAST AREA
1982/83	..	...	32	...	...	...
1983/84	17	...	1,581	256	277	136
1984/85	15	...	1,928	585	351	...
1985/86	12	...	1,936	461	437	...
1986/87	11	...	919	517	168	...
1987/88	21	...	4,271	906	...	...
1988/89	65	3,247	13,263	602	373	895
1989/90	20	1,211	5,567	646	87	1,128

Units: ALB, metric tonnes; CPUE, number of fish per day

1. All statistics were reported at the Third South Pacific Albacore Research Workshop (SPAR 3) by the National Research Institute of Far Seas Fisheries (South Pacific Commission 1990; Watanabe 1990), except the number of days fished for 1988/89 and 1989/90 which were determined from data provided to the SPAR Database by the National Research Institute of Far Seas Fisheries (Watanabe, personal communication, October 1990).
2. The fishery ceased operating at the end of the 1989/90 season.

**Table 2. Catches of albacore by driftnet vessels of Korea**

SEASON	VESSELS ACTIVE	DAYS FISHED	—ALBACORE—	
			MT	CPUE
1988/89	1	...	172	...

1. The number of vessels and the catch of albacore in 1988/89 were provided by the National Fisheries Administration of Korea (Kim, personal communication, June 1989); the estimate is for the catch in the 'South Pacific'.

**Table 3. Catches of albacore by driftnet vessels of Taiwan**

SEASON	VESSELS ACTIVE	DAYS FISHED	—ALBACORE—	
			MT	CPUE
1987/88	7	...	1,000	...
1988/89	71	11,511	8,520	0.7
1989/90	12	...	1,859	...
1990/91	9	...	821	...

Units: CPUE, metric tonnes per day

1. The catch of albacore in 1987/88 was estimated by the Tuna and Billfish Assessment Programme and reported to SPAR 3 (South Pacific Commission 1990).
2. Statistics for 1988/89 are from catch and effort data provided by the Tuna Research Center, National Taiwan University (Hsu, personal communication, January 1991).
3. The catches of albacore in 1989/90 and 1990/91 and the number of vessels active for 1987/88–1990/91 were reported to SPAR 4 (South Pacific Commission 1991).
4. The Taiwanese driftnet fishery in the SPC region ceased at the end of the 1990/91 season.

**Table 4. Catch statistics for longliners of Australia**

YEAR	VESSELS ACTIVE	HOOKS	—ALBACORE—			—BIGEYE—			—YELLOWFIN—			—OTHER— MT	—TOTAL—	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%		MT	CPUE
1985	1	...	...	...	..	...	...	..	...	...	..	...	...	...
1986	12	85	-	-	-	-	-	-	8	1.17	89	1	9	1.53
1987	64	1,109	94	0.67	9	33	0.06	3	743	2.64	72	163	1,033	3.83
1988	61	1,042	82	0.66	11	24	0.05	3	502	1.99	67	144	752	3.07
1989	93	733	66	1.06	10	11	0.03	2	513	2.49	79	56	646	3.86
1990	94	718	73	0.65	11	13	0.03	2	518	3.41	81	38	642	4.32
1991	85	1,112	24	1.07	4	15	0.03	2	506	2.29	81	78	623	3.69
1992	89	1,488	154	...	15	15	...	1	726	...	68	167	1,062	...
1993	69	1,446	143	0.46	15	16	1.01	2	503	1.86	53	279	941	3.83

Units: HOOKS, thousands; CPUE, numbers of fish per 100 hooks

1. All statistics for 1985–1989 were determined from logbook data held at SPC, provided by the Australian Fisheries Management Authority (AFMA). It is estimated that coverage by logbooks was 50 per cent of actual landings during 1987 and 1988, and 70 per cent during 1989 (Dendrinis and Skousen 1991).
2. All statistics for 1990–1993 were provided by the Australian Fisheries Management Authority (Skousen, personal communication, May 1992, April 1993). Catch and the number of hooks have been raised from daily catch-and-effort logbooks provided to AFMA; coverage by logbooks was 85, 90 and 85 per cent in 1990, 1991 and 1992 respectively.
3. All statistics for 1985–1993 cover domestic vessels (including ex-Japanese vessels); they do not cover the activities of joint-venture vessels. The statistics above may differ from those published in the SPC Regional Tuna Bulletin, which are unraised and exclude joint-venture and ex-Japanese domestic vessels. Australian longliners caught 199 mt of southern bluefin during 1993; catches of southern bluefin are included in the table above under 'other'.
4. In accordance with the standard policy on confidentiality of data at the Australian Fisheries Management Authority, statistics for Australian longliners have not been included for the year during which the number of vessels covered by the data is less than five (1985).

**Table 5. Catch statistics for longliners of the People's Republic of China**

YEAR	VESSELS ACTIVE	HOOKS	ALBACORE			BIGEYE			YELLOWFIN			OTHER MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%		MT	CPUE
1991	34	...	-	-	-	380	0.29	43	341	0.32	38	167	888	0.72
1992	72	...	-	-	-	1,226	0.39	49	1,124	0.41	45	166	2,516	0.94
1993	319	...	1	0.00	0	3,131	0.32	47	2259	0.32	34	1,259	6,650	0.79

Units: HOOKS, thousands; CPUE, numbers of fish per 100 hooks

1. All statistics were determined from logbook data held at SPC. Coverage for 1991–1993 is unknown.

**Table 6. Catch statistics for longliners of the Federated States of Micronesia**

YEAR	VESSELS ACTIVE	HOOKS	ALBACORE			BIGEYE			YELLOWFIN			OTHER MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%		MT	CPUE
1991	2	...	-	-	-	1	0.16	11	6	1.45	67	2	9	2.05
1992	6	...	-	-	-	41	0.18	31	78	0.51	60	12	131	0.74
1993	7	...	-	-	-	33	0.16	32	54	0.38	52	16	103	0.61

Units: HOOKS, thousands; CPUE, numbers of fish per 100 hooks

1. All statistics were determined from logbook data held at SPC, provided by the Micronesian Maritime Authority.

Table 7. Catch statistics for longliners of Fiji

YEAR	VESSELS ACTIVE	HOOKS	ALBACORE			BIGEYE			YELLOWFIN			OTHER MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%		MT	CPUE
1989	4	...	3	...	6	14	...	26	10	...	19	26	53	...
1990	6	...	68	...	43	27	...	17	23	...	15	39	157	...
1991	9	...	208	0.95	36	123	0.26	21	106	0.35	18	136	573	2.12
1992	18	...	243	0.75	27	187	0.26	21	202	0.29	23	252	884	1.70
1993	22	...	463	0.77	36	204	0.21	16	319	0.32	25	296	1,282	1.82

Units: CPUE, numbers of fish per 100 hooks

1. All statistics for 1989–1992 were taken from Sharma (1993). The statistics do not cover Taiwanese vessels chartered by the Pacific Fishing Company Ltd (PAFCO), which are covered in Table 17.
2. The number of vessels active and catch estimates for 1993 were provided by the Fiji Fish Company Ltd (Saheb, personal communication, May 1994) and by the Pacific Fishing Company Ltd (Kumar, personal communication, April 1994). The statistics for 1993 cover landings by 16 Fijian vessels and six Korean joint-venture vessels at Fiji Fish, Levuka, and PAFCO, Suva.
3. CPUE estimates for 1991–1993 were determined from logbook data held at SPC; these data cover both Fijian and Korean joint-venture vessels.

Table 8. Catch statistics for longliners of French Polynesia

YEAR	VESSELS ACTIVE	HOOKS	ALBACORE			BIGEYE			YELLOWFIN			OTHER MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%		MT	CPUE
1990	..	...	...	...	..	...	...	..	...	...	..	...	...	...
1991	..	...	...	...	..	...	...	..	...	...	..	...	...	...
1992	19	...	174	...	32	51	...	9	137	...	25	178	540	...
1993	49	3,650	714	0.96	42	163	0.16	10	366	0.41	22	457	1,700	1.93

1. All statistics were provided by *Établissement pour la valorisation des activités aquacoles et maritimes* (EVAAM) (Yen, personal communication, January 1994, June 1994); these statistics cover both coastal longliners (*palangriers côtiers*) and offshore longliners (*palangriers hauturiers*). The catch of other species during 1993 included 275 mt of billfish; billfish CPUE during 1993 was 0.13 fish per 100 hooks.

Table 9. Catch statistics for distant-water longliners of Japan

YEAR	VESSELS ACTIVE	HOOKS	ALBACORE			BIGEYE			YELLOWFIN			OTHER MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%		MT	CPUE
1952	...	...	210	...	..	...	...	..	...	...	..	...	...	...
1953	...	...	1,091	...	..	...	...	..	...	...	..	...	...	...
1954	...	...	10,200	...	..	...	...	..	...	...	..	...	...	...
1955	...	...	8,420	...	..	...	...	..	...	...	..	...	...	...
1956	...	...	6,220	...	..	...	...	..	...	...	..	...	...	...
1957	...	...	9,764	...	..	...	...	..	...	...	..	...	...	...
1958	...	...	21,558	...	..	...	...	..	...	...	..	...	...	...
1959	...	...	19,344	...	..	...	...	..	...	...	..	...	...	...
1960	...	...	23,756	...	..	...	...	..	...	...	..	...	...	...
1961	...	...	25,628	...	..	...	...	..	...	...	..	...	...	...
1962	...	152,512	29,044	1.46	21	25,308	0.53	19	50,400	1.30	37	31,161	135,913	3.75
1963	...	159,882	21,575	1.03	16	28,474	0.57	21	51,052	1.26	37	35,070	136,171	3.36
1964	...	114,425	14,436	0.97	15	19,623	0.55	20	39,581	1.36	41	23,370	97,010	3.35
1965	...	135,484	15,501	0.88	15	21,878	0.52	21	40,004	1.16	38	27,445	104,828	3.01
1966	...	141,096	18,258	0.99	16	19,182	0.44	17	50,304	1.41	44	26,304	114,048	3.25
1967	...	107,332	13,626	0.97	19	14,531	0.44	21	23,258	0.85	33	18,573	69,988	2.65
1968	...	100,570	7,353	0.56	11	13,518	0.43	21	27,000	1.06	42	16,479	64,350	2.42
1969	...	101,872	5,181	0.39	8	16,954	0.54	26	28,205	1.09	44	14,458	64,798	2.34
1970	...	97,260	5,584	0.44	9	13,274	0.44	21	26,561	1.08	43	16,889	62,308	2.33
1971	...	112,168	4,621	0.32	7	15,702	0.45	24	25,310	0.89	39	19,062	64,695	2.02
1972	...	122,922	3,516	0.22	5	21,617	0.57	30	26,070	0.84	36	20,769	71,972	2.00
1973	...	102,923	2,909	0.22	5	14,920	0.47	24	27,758	1.06	45	16,703	62,290	2.10
1974	...	138,075	3,289	0.18	5	20,655	0.48	30	27,718	0.79	41	16,647	68,309	1.72
1975	...	114,272	2,057	0.14	4	19,009	0.54	34	24,236	0.84	44	9,883	55,185	1.70
1976	...	127,412	2,482	0.15	4	21,326	0.54	33	28,090	0.87	43	13,472	65,370	1.79
1977	...	111,838	1,427	0.10	2	23,805	0.69	33	39,918	1.37	55	7,631	72,781	2.34
1978	...	117,760	1,676	0.11	2	19,132	0.52	22	55,843	1.87	65	8,939	85,590	2.68
1979	...	144,701	2,162	0.11	3	25,444	0.57	31	44,608	1.22	54	10,939	83,153	2.06
1980	...	173,300	3,078	0.14	3	26,102	0.49	25	58,305	1.33	57	15,194	102,679	2.14
1981	...	176,333	4,814	0.21	6	19,336	0.35	23	47,921	1.07	56	13,684	85,755	1.81
1982	...	162,479	5,455	0.26	7	21,499	0.43	27	40,451	0.98	52	10,874	78,279	1.81
1983	...	128,714	4,815	0.29	6	20,308	0.51	27	41,769	1.28	56	7,732	74,624	2.21
1984	...	142,463	3,288	0.18	5	24,742	0.56	36	32,398	0.90	47	8,633	69,061	1.78
1985	...	146,338	3,498	0.18	5	30,187	0.66	40	34,575	0.93	45	7,964	76,224	1.90
1986	...	120,382	4,161	0.26	7	24,104	0.64	38	25,976	0.85	41	8,642	62,883	1.92
1987	...	109,793	3,282	0.23	6	23,377	0.69	42	22,682	0.81	41	6,451	55,792	1.86
1988	...	131,546	4,971	0.29	8	20,954	0.51	34	26,765	0.80	44	8,156	60,846	1.75
1989	...	128,957	4,581	0.27	8	21,307	0.53	38	22,256	0.68	40	7,583	55,727	1.61
1990	...	130,807	4,559	0.27	7	26,775	0.66	44	23,301	0.70	38	6,287	60,922	1.74
1991	...	104,448	3,266	0.24	8	17,468	0.54	40	16,672	0.63	39	5,792	43,198	1.53
1992	...	98,958	3,812	0.29	8	17,979	0.59	40	16,947	0.68	38	6,349	45,087	1.70
1993	...	...	3,812	...	8	17,979	...	40	16,947	...	38	6,349	45,087	...

Units: HOOKS, thousands; CPUE, numbers of fish per 100 hooks

1. Catches of albacore in 1952–1961 were reported by the National Research Institute of Far Seas Fisheries to SPAR 3 (South Pacific Commission 1990); these estimates are for the Pacific Ocean, south of the Equator.
2. Statistics for 1962–1992 were determined from data provided to SPC by the Fisheries Agency of Japan. The catch data provided by the Fisheries Agency of Japan are aggregated by 5° x 5° by month; the catch statistics in the table above are for an area approximating the SPC statistical area. The catch data provided by the Fisheries Agency of Japan are given in numbers of fish; these were converted to metric tonnes using the average weights (kg) on the next page.



Table 9 (continued)

SPECIES	WEIGHT
YELLOWFIN	25.36
ALBACORE	13.07
BIGEYE	31.05
SKIPJACK	4.46
BLUEFIN	40.35
STRIPED MARLIN	77.01
BLUE MARLIN	58.45
BLACK MARLIN	33.84
SWORDFISH	47.35
SAILFISH	10.98
SHARK	22.02
OTHER	47.72

3. Catch estimates for 1992 have been used as preliminary estimates for 1993.

Table 10. Catch statistics for offshore longliners of Japan

YEAR	VESSELS ACTIVE	HOOKS	ALBACORE			BIGEYE			YELLOWFIN			OTHER	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1987	...	...	...	...	0	1,615	...	54	1,277	...	43	108	3,000	...
1988	...	...	...	...	0	2,153	...	54	1,703	...	43	144	4,000	...
1989	...	...	29	...	1	2,255	...	51	1,977	...	45	179	4,440	...
1990	114	...	2	...	0	5,456	...	60	3,294	...	36	349	9,101	...
1991	122	...	1	...	0	3,939	...	49	3,779	...	47	357	8,076	...
1992	...	...	1	...	0	2,736	...	58	1,760	...	37	237	4,734	...
1993	84	...	4	...	0	2,329	...	59	1,407	...	35	238	3,978	...

- Catch statistics for 1987–1988 were estimated from the total annual amount of tuna transshipped in Guam, for all fleets combined, by the Port Authority of Guam, and provided by the Department of Commerce (Harris, personal communication, June 1991). It was assumed that 60 per cent of the total was transshipped by Japanese longliners. The species composition for 1989 was applied to 1987–1988.
- The numbers of vessels active and catches for 1990–1991 were determined from transshipment statistics provided by the Department of Commerce, Guam (Harris, personal communication, June 1991; Fitzgerald, personal communication, June 1992). Transshipment by vessels unloading in Koror, Pohnpei and Yap has been ignored.
- Catches for 1992 were determined from transshipment statistics provided by the Department of Commerce, Guam (Harris, personal communication, April 1993). During January–June 1992, 76 Japanese vessels transshipped 2,323 mt; the total amount transshipped during 1992 was estimated by doubling the amount transshipped during January–June. Small amounts of transshipment by Japanese vessels unloading in Pohnpei and Yap during 1992 have been included. Transshipment by vessels unloading in Koror has been ignored.
- Statistics for 1993 were estimated from logsheet data provided by the Micronesian Maritime Authority and the Palau Maritime Authority, and from transshipment statistics provided by the Guam Department of Commerce. These data cover vessels unloading in Guam, Koror and Pohnpei.

Table 11. Catch statistics for longliners of Korea

YEAR	VESSELS ACTIVE	HOOKS	ALBACORE			BIGEYE			YELLOWFIN			-OTHER-	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%		MT	CPUE
1958	...	...	146	...	..	...	...	..	...	...	..	...	...	...
1959	...	...	456	...	..	...	...	..	...	...	..	...	...	...
1960	...	...	610	...	..	...	...	..	...	...	..	...	...	...
1961	...	...	330	...	..	...	...	..	...	...	..	...	...	...
1962	...	...	599	...	..	...	...	..	...	...	..	...	...	...
1963	...	...	1,367	...	..	...	...	..	...	...	..	...	...	...
1964	19	...	2,911	...	..	...	...	..	...	...	..	...	...	...
1965	...	...	3,010	...	54	617	...	11	1,902	...	34	...	5,529	...
1966	...	...	10,062	...	65	2,555	...	17	2,853	...	18	...	15,470	...
1967	...	...	12,814	...	73	2,819	...	16	1,807	...	10	...	17,440	...
1968	...	...	9,374	...	63	529	...	4	5,040	...	34	...	14,943	...
1969	...	...	9,460	...	63	2,203	...	15	3,329	...	22	...	14,992	...
1970	...	...	10,320	...	72	2,203	...	15	1,902	...	13	...	14,425	...
1971	...	...	11,094	...	55	4,141	...	20	5,040	...	25	...	20,275	...
1972	...	...	13,416	...	43	6,872	...	22	11,222	...	36	...	31,510	...
1973	...	...	13,760	...	42	7,841	...	24	11,412	...	35	...	33,013	...
1974	270	...	8,283	...	23	12,725	...	36	14,364	...	41	...	35,372	...
1975	...	...	6,342	0.19	21	13,527	0.70	44	9,489	0.39	31	1,374	30,732	1.35
1976	...	...	8,981	0.70	18	20,078	0.56	41	15,319	0.63	32	4,203	48,581	1.96
1977	...	...	11,445	0.70	25	15,905	0.62	35	16,195	0.85	36	1,821	45,366	2.20
1978	...	...	11,315	1.40	28	7,954	0.65	20	13,912	1.07	35	6,533	39,714	3.29
1979	...	...	11,036	0.71	21	12,420	0.51	24	18,430	0.97	35	10,105	51,991	2.33
1980	...	...	9,641	0.61	20	13,113	0.38	28	22,788	0.87	48	2,031	47,573	1.90
1981	...	...	14,958	...	44	8,961	...	26	10,140	...	30	...	34,059	...
1982	...	...	12,473	...	41	8,820	...	29	9,100	...	30	...	30,393	...
1983	...	...	7,074	1.17	31	6,377	0.46	28	8,524	0.78	37	1,176	23,151	2.49
1984	...	...	5,194	0.68	24	7,064	0.47	33	6,825	0.59	32	2,123	21,206	1.84
1985	94	...	13,041	0.80	34	10,021	0.52	26	10,079	0.60	27	4,821	37,962	2.00
1986	...	...	15,528	0.96	40	9,743	0.54	25	9,030	0.68	23	4,192	38,493	2.28
1987	...	...	6,722	0.35	17	15,890	0.71	41	10,427	0.60	27	5,751	38,790	1.78
1988	...	...	6,045	...	19	12,025	...	37	11,846	...	36	2,744	32,660	...
1989	...	...	4,297	...	18	9,934	...	43	7,428	...	32	1,608	23,267	...
1990	182	...	2,780	...	10	18,263	...	66	6,563	...	24	...	27,606	...
1991	144	...	1,317	...	5	17,236	...	61	9,615	...	34	...	28,168	...
1992	167	...	187	...	1	17,399	...	59	11,910	...	40	...	29,496	...
1993	...	...	187	...	1	17,399	...	59	11,910	...	40	...	29,496	...

1. Catches of albacore for 1958–1964 were reported at SPAR 2 (South Pacific Commission 1989).
2. Catches for 1965–1974 were determined as follows: catches from FAO Yearbooks (Food and Agriculture Organization 1969–1993), for the whole Pacific Ocean, were multiplied by the average proportions of the Pacific Ocean catches taken in the SPC area. The average proportions of the Pacific Ocean catches taken in the SPC area were determined from data aggregated by 5° longitude x 5° latitude by month published in National Fisheries Research and Development Agency (1980, 1981, 1985, 1988, 1990) covering 1975–1980 and 1983–1987; the average proportions for albacore, bigeye, yellowfin and other species are 0.860, 0.881, 0.951 and 0.378 respectively.
3. Catches for 1975–1980 and 1983–1987 were determined as follows: the numbers of fish caught in an area approximating the SPC area, determined from unraised logbook data aggregated by 5° x 5° by month published in National Fisheries Research and Development Agency (1980, 1981, 1985, 1988, 1990), were multiplied by average weights and divided by coverage rates provided by the National Fisheries Research and Development Agency (Lee, personal communication, April 1993, May 1993). The average weights (kg) and coverage rates are presented below:

Table 11 (continued)

YEAR	AVERAGE WEIGHT				COVERAGE RATE			
	ALB	BET	YFT	OTH	ALB	BET	YFT	OTH
1975	19.9	54.2	38.5	43.8	0.029	0.134	0.077	0.108
1976	18.7	45.9	37.0	34.8	0.225	0.200	0.235	0.094
1977	14.3	33.0	28.0	41.9	0.342	0.503	0.574	0.323
1978	15.1	34.6	30.8	67.7	0.610	0.900	0.752	0.462
1979	14.5	34.0	27.4	76.6	0.271	0.401	0.419	0.307
1980	17.3	36.5	30.7	30.5	0.622	0.590	0.663	0.356
1983	14.8	29.7	23.9	28.2	0.653	0.566	0.581	0.539
1984	13.3	32.0	23.8	30.0	0.671	0.820	0.792	0.559
1985	12.9	32.6	24.5	34.5	0.381	0.820	0.702	0.292
1986	13.3	43.7	30.7	44.4	0.275	0.812	0.771	0.312
1987	15.6	40.7	30.1	47.7	0.386	0.854	0.823	0.461

4. Catches for 1981–1982 and 1990–1992 were determined as follows: catches of albacore and bigeye from FAO Yearbooks, for the whole Pacific Ocean and for all gear types, were multiplied by the average proportions of the Pacific Ocean catches of albacore and bigeye taken in the SPC area; catches of yellowfin were determined by subtracting catches by purse seiners (Table 36) from catches reported in FAO Yearbooks, for the whole Pacific Ocean and for all gear types, then multiplying by the average proportion of the Pacific Ocean catch of longline-caught yellowfin taken in the SPC area.
5. Catches for 1988–1989 were determined as follows: total longline catches, for the whole Pacific Ocean, provided by the National Fisheries Research and Development Agency (Lee, personal communication, April 1993), were multiplied by the average proportion of the Pacific Ocean catch of all species combined taken in the SPC area, 0.829; catches of albacore and bigeye from FAO Yearbooks, for the whole Pacific Ocean and for all gear types, were multiplied by the average proportions of the Pacific Ocean catches of albacore and bigeye taken in the SPC area; catches of other species taken from National Fisheries Research and Development Agency (1990), Table 4, page 36, for the whole Pacific Ocean, were multiplied by the average proportion of the Pacific Ocean catch of other species taken in the SPC area; catches of yellowfin were determined by subtracting catches in the SPC area of albacore, bigeye and other species from the total catch in the SPC area.
6. Estimates for 1992 have been used as preliminary estimates for 1993.
7. The numbers of vessels active in 1964, 1974, 1985 and 1990 were taken from Park et al. (1991). The numbers of vessels are for the whole Pacific Ocean. The number of vessels active for 1991 was taken from Katsuo-Maguro Tsushin No. 6326, 4 July 1991 (quoted in Forum Fisheries Agency News Digest, September–October 1991). The number of vessels active in 1992 was reported in Katsuo-Maguro Tsushin No. 6529, 12 May 1992 (quoted in Forum Fisheries Agency News Digest, July–August 1992).

Table 12. Catch statistics for longliners of the Marshall Islands

YEAR	VESSELS ACTIVE	HOOKS	ALBACORE			BIGEYE			YELLOWFIN			OTHER MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%		MT	CPUE
1992	4	...	-	-	-	5	...	36	9	...	64	-	14	...
1993	5	...	-	-	-	31	...	28	38	...	35	41	110	...

1. All statistics for 1992 were determined from transshipment data provided to SPC by the Marshall Islands Marine Resources Authority.
2. All statistics for 1993 were determined from logsheet data provided to SPC by the Marshall Islands Marine Resources Authority.

Table 13. Catch statistics for longliners of New Caledonia

YEAR	VESSELS ACTIVE	HOOKS	ALBACORE			BIGEYE			YELLOWFIN			OTHER MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%		MT	CPUE
1983	1	89	12	0.72	22	1	0.02	2	7	0.27	13	34	54	1.98
1984	2	300	112	1.90	57	9	0.08	5	25	0.30	13	49	195	2.60
1985	3	536	131	1.19	33	15	0.06	4	119	0.81	30	135	400	2.53
1986	2	646	179	1.38	33	17	0.07	3	151	0.61	28	202	549	2.70
1987	3	1,408	563	1.60	42	33	0.05	2	448	1.01	33	307	1,351	3.19
1988	4	1,020	584	3.73	45	18	0.05	1	436	2.00	34	259	1,297	6.56
1989	4	1,336	566	1.94	49	24	0.04	2	248	0.69	22	310	1,148	3.14
1990	7	2,707	1,053	1.97	53	54	0.04	3	551	0.53	28	327	1,985	2.82
1991	6	2,641	909	1.74	49	54	0.05	3	506	0.61	28	371	1,840	2.79
1992	4	...	520	...	56	110	...	12	230	...	25	70	930	...
1993	4	...	755	...	56	95	...	7	387	...	29	101	1,338	...

Units: HOOKS, thousands; CPUE, numbers of fish per 100 hooks

1. All statistics for 1983–1986 and CPUE for 1983–1991 were determined from logbook data held at SPC, provided by the *Service de la marine marchande et des pêches maritimes*.
2. The numbers of vessels active and catches for 1987–1993 and the numbers of hooks for 1987–1991 were provided by the *Service de la marine marchande et des pêches maritimes* (Etaix-Bonnin, personal communication, June 1991, April 1992, April 1993, March 1994). Preliminary catch estimates for 1992–1993 were determined from export data.

Table 14. Catch statistics for longliners of New Zealand

YEAR	VESSELS ACTIVE	HOOKS	ALBACORE			BIGEYE			YELLOWFIN			OTHER— MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%		MT	CPUE
1989	..	...	...	...	..	...	...	..	...	...	..	...	...	...
1990	13	...	249	...	..	...	...	..	...	...	..	...	...	...
1991	14	...	325	...	..	...	...	..	...	...	..	...	...	...
1992	20	...	706	...	..	...	...	..	...	...	..	...	...	...
1993	..	...	706	...	..	...	...	..	...	...	..	...	...	...

1. The numbers of vessels active and the catches of albacore for 1990–1992 were provided by the Ministry of Agriculture and Fisheries to SPAR 5 (Murray 1993). These statistics do not include catches by chartered Japanese vessels or Japanese vessels fishing under access agreements; catches for those vessels are covered in Table 9. The catches are for the fishing year, October–September; in the table above, the catches have been allocated to the later year (e.g., catches for October 1989 — September 1990 have been allocated to 1990).
2. Statistics for 1992 were used as preliminary estimates for 1993.

Table 15. Catch statistics for longliners of Solomon Islands

YEAR	VESSELS ACTIVE	HOOKS	ALBACORE			BIGEYE			YELLOWFIN			OTHER— MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%		MT	CPUE
1973	2	...	4	...	3	16	...	12	91	...	69	21	132	...
1974	0	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	0	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	2	...	6	...	3	25	...	12	146	...	69	35	212	...
1977	2	...	9	...	3	34	...	12	198	...	69	46	287	...
1978	2	...	9	...	3	36	...	12	207	...	69	48	300	...
1979	2	...	21	...	3	86	...	12	493	...	69	115	715	...
1980	2	...	25	...	3	98	...	12	564	...	69	131	818	...
1981	2	...	2	...	1	25	...	12	146	...	70	36	209	...
1982	2	...	8	...	2	24	...	6	306	...	76	65	403	...
1983	2	...	19	...	3	34	...	6	443	...	80	55	551	...
1984	2	...	19	...	5	57	...	16	213	...	58	76	365	...
1985	2	...	12	...	5	46	...	19	151	...	62	33	242	...

1. The total catches for 1973–1980 were taken from Anon. (1985); the species composition was estimated by applying the average species composition for 1981–1985, determined from logbook data held at SPC.
2. The total catches for 1981–1982 were taken from Anon. (1985); the species composition for 1981–1982 was determined from logbook data held at SPC.
3. All statistics for 1983–1985 were determined from logbook data held at SPC.

**Table 16. Catch statistics for offshore longliners of Taiwan**

YEAR	VESSELS ACTIVE	HOOKS	ALBACORE			BIGEYE			YELLOWFIN			OTHER MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%		MT	CPUE
1987	...	...	...	...	..	...	...	..	...	...	..	...	...	...
1988	...	...	...	...	..	...	...	..	...	...	..	...	...	...
1989	...	...	...	...	..	...	...	..	...	...	..	...	...	...
1990	...	...	...	...	..	2,619	...	45	2,953	...	51	216	5,788	...
1991	...	...	...	...	..	1,343	...	32	2,851	...	67	35	4,229	...
1992	...	...	...	...	..	2,708	...	44	3,332	...	55	64	6,104	...
1993	254	...	1	...	0	2,855	...	48	2,551	...	43	587	5,994	...

1. Catches for 1990 were estimated from transshipment statistics provided by the Guam Department of Commerce (Harris, personal communication, June 1991) and the Palau Maritime Authority. These statistics cover transshipment in Guam and Koror.
2. Catches for 1991 were estimated from transshipment statistics provided by the Guam Department of Commerce (Fitzgerald, personal communication, June 1992), the Palau Maritime Authority (Rechebei, personal communication, June 1992) and the Micronesian Maritime Authority. These statistics cover transshipment in Guam, Koror and Pohnpei. Transshipment by Taiwanese vessels in Majuro and Yap during 1991 has been ignored.
3. Catches for 1992 were estimated from transshipment statistics provided by the Guam Department of Commerce (Harris, personal communication, April 1993), the Micronesian Maritime Authority, the Marshall Islands Marine Resources Authority, and Ting Hong (Yap) Co., Ltd. (Chiu, personal communication, January 1993). These statistics cover transshipment in Guam, Koror, Majuro, Pohnpei and Yap.
4. Statistics for 1993 were estimated from logsheet data provided by the Micronesian Maritime Authority and the Palau Maritime Authority, and transshipment statistics provided by the Guam Department of Commerce. The coverage by logsheet data may be incomplete. These data cover vessels unloading in Chuuk, Guam, Koror, Pohnpei and Yap.

Table 17. Catch statistics for distant-water longliners of Taiwan

YEAR	VESSELS ACTIVE	HOOKS	ALBACORE			BIGEYE			YELLOWFIN			OTHER- MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%		MT	CPUE
1964	...	...	...	...	..	...	...	..	...	...	..	...	...	...
1965	...	...	...	...	..	...	...	..	...	...	..	...	...	...
1966	...	...	...	...	..	...	...	..	...	...	..	...	...	...
1967	...	17,791	13,824	4.39	75	1,834	0.39	10	1,994	0.53	11	849	18,501	5.44
1968	...	21,635	14,893	3.93	63	2,100	0.30	9	5,066	0.91	21	1,551	23,610	5.35
1969	...	15,470	9,750	3.68	57	1,099	0.21	6	4,744	1.26	28	1,625	17,218	5.51
1970	...	21,716	15,855	4.29	67	2,256	0.36	10	3,908	0.67	16	1,705	23,724	5.59
1971	...	34,836	18,580	3.37	60	2,009	0.21	7	8,859	1.27	29	1,362	30,810	4.94
1972	...	38,245	20,684	3.31	60	2,827	0.27	8	9,476	0.98	27	1,618	34,605	4.65
1973	...	49,741	24,810	3.09	65	3,373	0.22	9	8,279	0.68	22	1,759	38,221	4.07
1974	...	50,449	18,328	2.50	70	2,111	0.18	8	4,528	0.42	17	1,165	26,132	3.14
1975	...	45,806	18,821	2.78	77	1,454	0.12	6	3,167	0.32	13	964	24,406	3.27
1976	...	38,152	18,468	2.94	75	1,298	0.14	5	3,658	0.36	15	1,287	24,711	3.57
1977	...	44,268	22,345	3.57	77	1,293	0.10	4	2,718	0.25	9	2,772	29,128	4.00
1978	...	29,190	15,750	3.84	74	880	0.10	4	2,970	0.43	14	1,697	21,297	4.64
1979	...	28,064	11,401	2.76	68	1,076	0.15	6	2,927	0.49	18	1,295	16,699	3.72
1980	...	61,994	25,595	2.90	70	2,336	0.13	6	5,501	0.39	15	2,988	36,420	3.58
1981	...	34,557	11,008	2.31	75	1,031	0.10	7	1,654	0.21	11	1,033	14,726	2.74
1982	...	24,475	9,322	2.64	82	449	0.06	4	781	0.13	7	811	11,363	2.99
1983	...	16,388	7,452	3.27	87	231	0.05	3	513	0.13	6	387	8,583	3.55
1984	...	19,377	6,448	2.31	84	320	0.06	4	555	0.12	7	397	7,720	2.55
1985	...	12,866	5,365	2.96	85	203	0.06	3	567	0.20	9	213	6,348	3.26
1986	...	14,743	8,316	4.35	91	172	0.04	2	513	0.15	6	179	9,180	4.57
1987	...	19,653	9,633	3.41	90	185	0.03	2	640	0.13	6	224	10,682	3.59
1988	...	28,492	12,307	3.01	87	184	0.02	1	1,260	0.20	9	371	14,122	3.27
1989	...	30,522	7,399	1.77	84	362	0.03	4	752	0.11	8	347	8,860	1.94
1990	...	29,698	7,410	1.56	78	536	0.05	6	1,156	0.15	12	408	9,510	1.79
1991	...	36,694	9,366	1.87	84	549	0.05	5	751	0.08	7	546	11,212	2.05
1992	...	76,475	28,745	2.98	87	2,424	0.12	7	1,304	0.07	4	584	33,057	3.18
1993	...	...	28,745	...	87	2,424	...	7	1,304	...	4	584	33,057	...

Units: HOOKS, thousands; CPUE, numbers of fish per 100 hooks

1. Statistics for 1967–1992 were determined from raised logbook data aggregated by 5° longitude x 5° latitude by month provided to SPC by National Taiwan University (Hsu, personal communication, September 1993, May 1994) for an area approximating the SPC statistical area.
2. Statistics for 1992 were used as preliminary estimates for 1993.

Table 18. Catch statistics for longliners of Tonga

YEAR	VESSELS ACTIVE	HOOKS	ALBACORE			BIGEYE			YELLOWFIN			OTHER MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%		MT	CPUE
1982	1	...	106	0.87	42	18	0.09	7	81	0.45	32	47	252	1.76
1983	1	...	143	1.44	60	17	0.10	7	48	0.32	20	30	238	2.21
1984	1	...	135	1.49	44	28	0.19	9	55	0.46	18	89	307	2.98
1985	1	...	174	1.88	47	15	0.10	4	44	0.34	12	137	370	3.32
1986	1	...	206	3.76	68	12	0.12	4	33	0.34	11	52	303	4.92
1987	1	...	252	3.36	71	14	0.11	4	32	0.23	9	57	355	4.34
1988	1	...	242	3.07	76	6	0.08	2	26	0.23	8	45	319	3.94
1989	1	...	195	2.10	65	12	0.09	4	27	0.26	9	66	300	3.05
1990	1	380	152	2.06	66	11	0.10	5	27	0.27	12	39	229	2.84
1991	1	364	174	2.66	75	5	0.06	2	19	0.23	8	35	233	3.39
1992	1	446	199	2.46	78	5	0.04	2	19	0.18	7	32	255	3.06
1993	7	...	390	...	78	10	...	2	35	...	7	65	500	...

Units: HOOKS, thousands; CPUE, numbers of fish per 100 hooks

1. Total annual catches for 1982–1989 were provided by the Ministry of Fisheries, Nuku'alofa. The species composition for 1982–1989 was determined from logbook data held at SPC, provided by the Ministry of Fisheries.
2. CPUE for 1982–1992, and the numbers of hooks and catches for 1990–1992, were determined from data held at SPC, provided by the Ministry of Fisheries.
3. The number of vessels active during 1993 was obtained from RDA International (Swordloff, personal communication, March 1994). The total catch during 1993 is a best guess; the species composition during 1992 was used as a preliminary estimate of the species composition during 1993.

Table 19. Catch statistics for longliners of the United States

YEAR	VESSELS ACTIVE	HOOKS	ALBACORE			BIGEYE			YELLOWFIN			OTHER MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE	%		MT	CPUE
1991	3	...	...	...	..	72	...	47	79	...	52	2	153	...
1992	6	...	-	-	-	58	...	51	56	...	49	0	114	...
1993	6	...	-	-	-									

1. All statistics were determined from transshipment data provided to SPC by the Marshall Islands Marine Resources Authority. These statistics cover vessels based in Majuro, Marshall Islands; American longliners based in Honolulu fish outside the SPC statistical area and are therefore not covered in this report.



Table 20. Catch statistics for pole-and-line vessels of Australia

YEAR	VESSELS ACTIVE	DAYS FISHED	SKIPJACK			YELLOWFIN			OTHER	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1976	9	65	46	0.7	35	1	0.0	1	84	131	2.0
1977	20	134	31	0.2	3	-	-	-	1,165	1,196	8.9
1978	14	205	146	0.7	14	16	0.1	2	870	1,032	5.0
1979	10	66	-	-	0	-	-	-	268	268	4.1
1980	9	62	-	-	0	-	-	-	446	446	7.2
1981	17	192	108	0.6	11	-	-	-	867	975	5.1
1982	20	254	196	0.8	24	5	0.0	1	626	827	3.3
1983	13	151	109	0.7	44	-	-	-	141	250	1.7
1984	8	57	78	1.4	81	5	0.1	5	13	96	1.7
1985	..	...	...	...	..	...	...	..	...	...	...
1986	5	...	77	...	100	-	-	-	...	77	...
1987	5	...	59	...	100	-	-	-	...	59	...
1988	18	...	490	...	100	-	-	-	...	490	...
1989	15	...	399	...	86	63	...	14	...	462	...
1990	17	...	1,177	...	98	22	...	2	...	1,199	...
1991	16	...	1,042	...	99	10	...	1	...	1,052	...
1992	10	...	800	...	100	1	...	0	...	801	...
1993	10	461	438	1.0	72	9	0.0	1	162	609	1.3

Units: CPUE, metric tonnes per day

1. Statistics for 1976–1984 were determined from logbook data held at SPC, which were provided by the Australian Fisheries Management Authority. Catches of southern bluefin comprise 99 per cent of the catches listed as 'other'.
2. All statistics for 1986–1992 were provided by Heinz-Greenseas (Bateman, quoted in Ward, personal communication, June 1993); these statistics represent deliveries to the Heinz-Greenseas cannery in Eden, New South Wales. The fishing season usually commences in December; catches for December have been allocated to the following year.
3. All statistics for 1993 were provided by the Australian Fisheries Management Authority (Skousen, personal communication, April 1994); these statistics are based on raised logbook data.

Table 21. Catch statistics for pole-and-line vessels of Fiji

YEAR	VESSELS ACTIVE	DAYS FISHED	—SKIPJACK—			—YELLOWFIN—			—OTHER— MT	—TOTAL—	
			MT	CPUE	%	MT	CPUE	%		MT	CPUE
1976	2	...	658	2.4	89	84	0.3	11	-	742	2.7
1977	6	...	1,560	2.6	91	151	0.2	9	-	1,711	2.8
1978	6	...	2,115	2.6	84	409	0.7	16	-	2,524	3.3
1979	8	...	3,091	...	88	403	...	12	1	3,495	...
1980	11	...	2,263	1.9	91	233	0.2	9	4	2,500	2.0
1981	12	...	5,252	1.7	90	583	0.2	10	-	5,835	1.9
1982	14	...	3,675	2.2	83	753	0.4	17	5	4,433	2.5
1983	13	...	3,248	2.4	87	490	0.3	13	2	3,740	2.7
1984	11	...	3,992	3.3	87	580	0.4	13	-	4,572	3.7
1985	7	...	3,219	2.8	82	724	0.4	18	4	3,947	3.2
1986	6	...	2,288	2.1	73	823	0.6	26	4	3,115	2.8
1987	8	...	3,437	3.4	89	425	0.3	11	-	3,862	3.7
1988	8	...	3,406	2.9	88	464	0.3	12	-	3,870	3.2
1989	8	...	4,660	3.7	91	461	0.4	9	-	5,121	4.2
1990	10	...	3,196	2.9	87	478	0.3	13	-	3,674	3.2
1991	10	...	4,458	2.8	92	368	0.2	8	-	4,826	3.1
1992	11	...	3,705	2.2	90	395	0.2	10	5	4,105	2.4
1993	9	...	2,709	3.4	89	328	0.3	11	3	3,040	3.7

Units: CPUE, metric tonnes per day

1. Estimates of catches for 1976–1992, and the numbers of vessels in 1976–1978, 1983–1984 and 1990–1992, were provided by the Fiji Fisheries Division (Sharma, personal communication, May 1990, June 1991, March 1992, April 1993; Adams, personal communication, June 1991). The catch estimates represent landings at the Pacific Fishing Company Ltd cannery in Levuka. Catches by Kiribati and Tuvalu vessels which operated in Fijian waters under charter are excluded; catches for those vessels are reported in Tables 24 and 30 respectively. Catches by the *Ika 3*, formerly registered as a New Zealand vessel, are included. The catch estimates for 1991 also include 399 mt (389 mt skipjack and 10 mt yellowfin) caught by four vessels in the waters of Solomon Islands; these catches were determined from logsheet data held at SPC that were provided by the Solomon Islands Fisheries Division.
2. The number of vessels active and catch estimates for 1993 were provided by the Pacific Fishing Company Ltd (Kumar, personal communication, April 1993).
3. CPUE for 1976–1978 and 1980–1993 was determined from logbook data provided to SPC by the Fiji Fisheries Division.
4. The numbers of vessels active for 1979–1982 and 1985–1989 were taken from annual reports of the Fiji Fisheries Division.

Table 22. Catch statistics for pole-and-line vessels of French Polynesia

YEAR	VESSELS ACTIVE	DAYS FISHED	—SKIPJACK—			—YELLOWFIN—			—OTHER—	—TOTAL—	
			MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1975	..	...	...	84	..	...	10	..	..	...	...
1976	..	...	...	84	..	...	6	..	..	...	...
1977	..	...	...	75	..	...	17	..	..	...	...
1978	..	...	...	121	..	...	13	..	..	...	...
1979	..	9,832	535	54	70	161	16	21	73	769	78
1980	46	9,964	683	69	69	253	25	26	56	992	100
1981	51	9,528	529	56	51	472	50	46	34	1,035	109
1982	46	8,764	666	76	62	368	42	34	33	1,067	122
1983	46	7,820	598	76	66	238	30	26	67	903	115
1984	51	9,737	824	85	63	426	44	33	50	1,300	134
1985	49	9,253	593	64	66	243	26	27	67	903	98
1986	51	9,513	729	77	74	232	24	24	20	981	103
1987	64	8,791	729	83	80	149	17	16	29	907	103
1988	53	7,578	441	58	59	274	36	37	33	748	99
1989	56	7,980	567	71	72	187	23	24	33	787	99
1990	55	7,487	685	91	87	55	7	7	46	786	105
1991	31	6,539	614	94	81	105	16	14	41	760	116
1992	36	4,977	593	92	77	133	17	17	46	772	...
1993	24	3,747	385	78	78	83	28	17	23	491	...

Units: CPUE, kg per day

1. Catch estimates and days fished for 1979–1991 and CPUE for 1975–1991 are from Josse et al. (1993). These statistics are for the *bonitier* fleet based in Papeete; they do not cover *bonitiers* based elsewhere.
2. All statistics for 1992–1993 (except for the catch of yellowfin in 1993), and the numbers of vessels active for 1980–1991, were provided by *Établissement pour la valorisation des activités aquacoles et maritimes* (EVAAM) (Yen, personal communication, May 1992, June 1994). The number of days fished for 1992 covers vessels based in Papeete only; all other statistics for 1992–1993 cover vessels based in Papeete and those based elsewhere. The catch of yellowfin in 1993 was determined by multiplying the total catch for 1993 by the proportion of yellowfin in the 1992 catch. All statistics for 1993 are preliminary.

Table 23. Catch statistics for pole-and-line vessels of Japan

YEAR	VESSELS ACTIVE	DAYS FISHED	—SKIPJACK—			—YELLOWFIN—			—OTHER—	—TOTAL—	
			MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1972	...	13,163	62,718	4.8	98	1,144	0.1	2	332	64,194	4.9
1973	...	18,869	116,295	6.2	99	1,466	0.1	1	274	118,035	6.3
1974	...	23,572	140,995	6.0	98	1,255	0.1	1	974	143,224	6.1
1975	...	23,617	101,208	4.3	97	1,885	0.1	2	826	103,919	4.4
1976	...	20,075	111,192	5.5	98	2,377	0.1	2	467	114,036	5.7
1977	...	31,636	148,906	4.7	97	4,773	0.2	3	617	154,296	4.9
1978	...	21,185	130,455	6.2	99	1,453	0.1	1	329	132,237	6.2
1979	...	20,467	96,742	4.7	98	1,369	0.1	1	447	98,558	4.8
1980	317	19,646	109,467	5.6	98	1,607	0.1	1	317	111,391	5.7
1981	279	25,818	130,619	5.1	98	2,283	0.1	2	346	133,248	5.2
1982	117	21,699	108,449	5.0	97	2,689	0.1	2	830	111,968	5.2
1983	103	17,035	123,810	7.3	98	1,736	0.1	1	646	126,192	7.4
1984	94	17,040	127,861	7.5	99	1,564	0.1	1	306	129,731	7.6
1985	84	14,624	93,812	6.4	95	4,528	0.3	5	370	98,710	6.8
1986	83	11,641	106,008	9.1	99	1,269	0.1	1	273	107,550	9.2
1987	77	11,973	92,919	7.8	99	1,045	0.1	1	256	94,220	7.9
1988	63	10,040	104,950	10.4	99	906	0.1	1	278	106,134	10.6
1989	59	11,230	96,714	8.6	99	1,204	0.1	1	202	98,120	8.7
1990	62	10,126	53,226	5.3	97	1,365	0.1	2	184	54,775	5.4
1991	54	3,835	51,915	13.5	98	1,161	0.3	2	115	53,191	13.9
1992	39	3,763	43,436	11.5	95	1,661	0.4	4	543	45,640	12.1
1993	..	...	43,436	...	95	1,661	...	4	543	45,640	...

Units: CPUE, metric tonnes per day

1. All statistics for 1972–1979 were determined from unraised logbook data published by 1° x 1° square by the Fisheries Agency of Japan (Fisheries Agency of Japan, undated). Coverage by logbook data is considered to be high.
2. All statistics for 1980–1992 were determined from unraised logbook data provided to SPC by 1° x 1° square by the Fisheries Agency of Japan. Coverage by logbook data is considered to be high. The catch in the SPC area during 1992 represented 31 per cent of the total catch by the Japanese pole-and-line fishery; the total catch during 1992, determined from unraised logbook data, was 146,677 mt, including 121,992 mt of skipjack and 6,829 mt of yellowfin.
3. The numbers of vessels active during 1980–1992 were determined from logbook data held at SPC.
4. Catches for 1992 have been used as preliminary estimates for 1993.

Table 24. Catch statistics for pole-and-line vessels of Kiribati

YEAR	VESSELS ACTIVE	DAYS FISHED	SKIPJACK			YELLOWFIN			OTHER MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%		MT	CPUE
1979	1	...	...	...	..	...	...	..	..	...	...
1980	..	...	...	...	..	...	...	..	..	...	...
1981	2	264	354	1.3	63	210	0.8	37	..	564	2.1
1982	2	272	287	1.1	63	170	0.6	37	..	457	1.7
1983	4	783	1,355	1.7	85	239	0.3	15	..	1,594	2.0
1984	4	971	1,503	1.5	74	528	0.5	26	..	2,031	2.1
1985	4	831	216	0.3	30	503	0.6	70	..	719	0.9
1986	4	637	693	1.1	49	721	1.1	51	..	1,414	2.2
1987	4	445	278	0.6	64	156	0.4	33	..	434	1.0
1988	5	616	1,089	1.8	74	383	0.6	25	..	1,472	2.4
1989	6	...	1,434	...	63	848	...	37	..	2,282	...
1990	5	212	452	2.1	76	143	0.7	24	1	596	2.8
1991	3	182	157	0.9	69	67	0.4	29	4	228	1.3
1992	3	423	248	0.6	45	303	0.7	55	3	554	1.3
1993	3	...	132	...	45	161	...	55	..	293	...

Units: CPUE, metric tonnes per day

1. Anon. (1979) reported that the Kiribati Government took delivery of a 35 m skipjack pole-and-line vessel, *Nei Manganibuka*, in 1979. However, no catch statistics are given.
2. The numbers of vessels active, days fished and the total catches for 1981–1989 were provided by Te Mautari Inc. (Tekaata, personal communication, April 1993). The species composition for 1983–1988 was determined from logbook data held at SPC, provided by Te Mautari Inc. The species composition for 1981–1982 and 1989 was estimated as the average species composition during 1983–1988 and 1990–1992.
3. All statistics for 1990–1992 were provided by Te Mautari Inc. (Tekaata, personal communication, April 1993).
4. The number of vessels active and the total catch for 1993 were provided by the Fisheries Division (Tumoa, personal communication, January 1994), based on data from Te Mautari Inc. The species composition for 1992 was used as a preliminary estimate of the species composition for 1993.

**Table 25. Catch statistics for pole-and-line vessels of New Caledonia**

YEAR	VESSELS ACTIVE	DAYS FISHED	—SKIPJACK—			—YELLOWFIN—			—OTHER—	—TOTAL—	
			MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1981	1	40	226	5.7	99	3	0.1	1	-	229	5.7
1982	3	216	827	3.8	83	41	0.2	4	130	998	4.6
1983	3	113	414	3.7	84	25	0.2	5	53	492	4.4

Units: CPUE, metric tonnes per day

1. All statistics were determined from logbook data held at SPC.

**Table 26. Catch statistics for pole-and-line vessels of New Zealand**

YEAR	VESSELS ACTIVE	DAYS FISHED	—SKIPJACK—			—YELLOWFIN—			—OTHER—	—TOTAL—	
			MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1990	3	...	-	-	-	-	-	-	14	14	...
1991	4	...	114	...	97	2	...	2	1	117	...
1992	..	...	...	...	..	...	...	..	...	...	...
1993	..	...	...	...	..	...	...	..	...	...	...

1. Statistics for 1990 were provided by the Ministry of Agriculture and Fisheries (Murray, personal communication, May 1992). Three vessels operated in the waters of New Zealand and caught 13.676 mt of albacore (reported above as 'other').
2. Statistics for 1991 were determined from data provided by the Ministry of Agriculture and Fisheries and from logbook data held at SPC. Three vessels operated in the waters of New Zealand and caught 1.231 mt of albacore (reported above as 'other'), while one vessel fished for 53 days in the waters of Solomon Islands and caught 114 mt of skipjack and 2 mt of yellowfin.

Table 27. Catch statistics for pole-and-line vessels of Palau

YEAR	VESSELS ACTIVE	DAYS FISHED	SKIPJACK		YELLOWFIN		OTHER		TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	CPUE
1964	6	412	1,025	2.5	87	141	0.3	12	1,178	2.9
1965	31	1,399	2,497	1.8	91	173	0.1	6	2,742	2.0
1966	15	1,362	2,615	1.9	89	71	0.1	2	2,936	2.2
1967	20	1,399	3,354	2.4	95	52	0.0	1	3,529	2.5
1968	11	1,512	5,039	3.3	99	17	0.0	0	5,099	3.4
1969	9	1,193	4,629	3.9	88	133	0.1	3	5,259	4.4
1970	10	1,599	8,081	5.1	96	1	0.0	0	8,442	5.3
1971	20	1,639	2,133	1.3	92	10	0.0	0	2,318	1.4
1972	11	1,053	1,463	1.4	76	56	0.1	3	1,913	1.8
1973	12	1,160	2,309	2.0	84	41	0.0	1	2,749	2.4
1974	24	1,592	6,647	3.9	96	161	0.1	2	6,930	4.1
1975	21	1,790	5,971	3.3	90	298	0.2	5	6,615	3.7
1976	33	1,614	4,911	3.0	92	412	0.3	8	5,348	3.3
1977	23	1,119	3,592	3.2	89	420	0.4	10	4,044	3.6
1978	26	2,233	9,391	4.2	97	303	0.1	3	9,725	4.4
1979	21	1,752	5,687	3.2	100	1	0.0	0	5,692	3.2
1980	31	1,219	5,580	4.6	85	996	0.8	15	6,596	5.4
1981	36	1,651	6,931	4.2	73	2,480	1.5	26	9,433	5.7
1982	20	858	3,438	4.0	78	615	0.7	14	4,380	5.1
1983	-	-	-	-	-	-	-	-	-	-
1984	-	-	-	-	-	-	-	-	-	-
1985	1	...	82	...	85	15	...	15	97	...
1986	1	...	112	...	85	19	...	15	131	...
1987	1	...	139	...	86	22	...	14	161	...
1988	1	...	119	...	76	38	...	24	157	...
1989	1	...	72	...	94	5	...	6	77	...
1990	1	...	80	...	91	8	...	9	88	...
1991	-	-	-	-	-	-	-	-	-	-
1992	1	...	61	...	81	14	...	19	75	...
1993	1	...	61	...	81	14	...	19	75	...

Units: CPUE, metric tonnes per day

1. Statistics for 1964-1982 cover Okinawan vessels based in Palau; these statistics were determined from logbook data held at SPC.
2. Statistics for 1985-1992 cover a domestic pole-and-line vessel; these statistics were provided by the Palau Maritime Authority (Rechebei, personal communication, May 1993).
3. Statistics for 1992 have been used as preliminary estimates for 1993.

Table 28. Catch statistics for pole-and-line vessels of Papua New Guinea

YEAR	VESSELS ACTIVE	DAYS FISHED	SKIPJACK			YELLOWFIN			OTHER MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%		MT	CPUE
1970	5	511	2,354	4.6	97	74	0.1	3	2	2,430	4.8
1971	29	4,060	16,862	4.2	99	112	0.0	1	28	17,002	4.2
1972	45	4,950	11,785	2.4	88	1,345	0.3	10	202	13,332	2.7
1973	43	7,863	27,300	3.5	96	916	0.1	3	280	28,496	3.6
1974	47	9,408	40,214	4.3	96	1,416	0.2	3	150	41,780	4.4
1975	48	6,435	15,625	2.4	90	1,744	0.3	10	29	17,398	2.7
1976	40	7,901	24,358	3.1	74	8,563	1.1	26	93	33,014	4.2
1977	51	9,736	20,106	2.1	82	4,009	0.4	16	296	24,411	2.5
1978	48	9,941	45,760	4.6	94	3,099	0.3	6	61	48,920	4.9
1979	45	8,184	23,976	2.9	89	2,881	0.4	11	88	26,945	3.3
1980	50	9,484	30,976	3.3	91	3,018	0.3	9	102	34,096	3.6
1981	44	7,861	27,207	3.5	87	4,205	0.5	13	-	31,412	4.0
1982	0	-	-	-	-	-	-	-	-	-	-
1983	0	-	-	-	-	-	-	-	-	-	-
1984	..	683	2,470	3.6	90	274	0.4	10	...	2,744	4.0
1985	..	...	8,370	...	90	930	...	10	...	9,300	...

Units: CPUE, metric tonnes per day

1. All statistics for 1970–1981 were determined from logbook data held at SPC.
2. All statistics for 1984–1985 were taken from Anon. (1989b).



Table 29. Catch statistics for pole-and-line vessels of Solomon Islands

YEAR	VESSELS ACTIVE	DAYS FISHED	SKIPJACK			YELLOWFIN			OTHER MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%		MT	CPUE
1971	..	813	4,570	5.6	97	141	0.2	3	...	4,711	5.8
1972	..	3,356	7,668	2.3	97	237	0.1	3	...	7,905	2.4
1973	11	1,944	6,318	3.3	97	195	0.1	3	...	6,513	3.4
1974	11	2,182	10,022	4.6	97	310	0.1	3	...	10,332	4.7
1975	12	2,419	6,954	2.9	97	215	0.1	3	...	7,169	3.0
1976	14	3,495	15,326	4.4	97	474	0.1	3	...	15,800	4.5
1977	20	4,741	11,752	2.5	97	363	0.1	3	...	12,115	2.6
1978	20	4,656	16,931	3.6	97	524	0.1	3	...	17,455	3.7
1979	23	5,085	23,087	4.5	97	714	0.1	3	...	23,801	4.7
1980	22	4,993	21,278	4.3	97	658	0.1	3	...	21,936	4.4
1981	23	5,259	21,907	4.2	97	265	0.1	1	450	22,622	4.3
1982	25	4,858	16,565	3.4	96	237	0.0	1	520	17,322	3.6
1983	27	6,185	27,992	4.5	96	660	0.1	2	615	29,267	4.7
1984	30	6,397	29,984	4.7	98	397	0.1	1	218	30,599	4.8
1985	33	6,906	24,592	3.6	97	183	0.0	1	459	25,234	3.7
1986	35	7,663	38,287	5.0	99	358	0.0	1	178	38,823	5.1
1987	34	6,781	19,388	2.9	86	2,965	0.4	13	291	22,644	3.3
1988	34	8,030	27,479	3.4	91	2,251	0.3	7	371	30,101	3.7
1989	33	7,122	24,284	3.4	94	1,475	0.2	6	109	25,868	3.6
1990	33	6,112	19,166	3.1	89	2,309	0.4	11	82	21,557	3.5
1991	32	6,829	35,240	5.2	97	953	0.1	3	29	36,222	5.3
1992	32	6,100	18,226	3.0	92	1,246	0.2	6	264	19,736	3.2
1993	27	5,947	15,425	2.6	87	2,263	0.4	13	144	17,832	3.0

Units: CPUE, metric tonnes per day

1. Days fished, total catches and total CPUE for 1971–1980 were taken from Anon. (1989a). Catches of skipjack and yellowfin for 1971–1980 were estimated by applying a species composition of 97 per cent skipjack and 3 per cent yellowfin.
2. The numbers of vessels active during 1973–1980 were taken from Anon. (1985).
3. Estimates for 1981–1990 were provided by the Fisheries Department, Honiara; the catch estimates were determined from daily catch-and-effort logbook data corrected with unloading data.
4. All statistics for 1991–1993 were determined from logbook data held at SPC, provided by the Fisheries Department.

Table 30. Catch statistics for pole-and-line vessels of Tuvalu

YEAR	VESSELS ACTIVE	DAYS FISHED	SKIPJACK			YELLOWFIN			OTHER	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1982	1	68	163	2.4	75	53	0.8	25	-	216	3.2
1983	1	122	286	2.3	85	51	0.4	15	-	337	2.8
1984	1	...	513	4.5	95	27	0.2	5	-	540	4.7
1985	1	...	4	...	100	-	-	-	-	4	...
1986	1	...	378	1.7	97	12	0.1	3	-	390	1.7
1987	1	153	542	3.5	85	90	0.6	14	5	637	4.2
1988	1	190	1,069	5.6	98	21	0.1	2	1	1,091	5.7
1989	1	...	142	...	95	7	...	5	-	149	...
1990	1	198	64	0.3	65	26	0.1	27	8	98	0.5
1991	1	221	23	0.1	62	6	0.0	16	8	37	0.2
1992	1	164	6	0.0	67	2	0.0	22	1	9	0.1

Units: CPUE, metric tonnes per day

1. All statistics for 1982–1983 and 1987–1988 were determined from logbook data held at SPC; coverage by data at SPC for the Tuvalu pole-and-line vessel for these years is complete.
2. The total catches for 1984–1986 and 1989 were provided by the National Fishing Company of Tuvalu (NAFICOT) (Faulkner, personal communication, 1990); the species composition was determined from logbook data held at SPC for the Tuvaluan pole-and-line vessel for 1984–1986, and by assuming a species composition of 95 per cent skipjack and 5 per cent yellowfin for 1989. Catches while the vessel was under charter from October 1984 to May 1986 are excluded.
3. All statistics for 1990–1992 were determined from data collected while the vessel was under charter to SPC for the Regional Tuna Tagging Project. Catch estimates cover retained fish only and exclude fish tagged and released.

**Table 31. Catch statistics for purse seine vessels of Australia fishing in the Australian Fishing Zone**

YEAR	VESSELS ACTIVE	DAYS FISHED	—SKIPJACK—			—YELLOWFIN—			—OTHER—	—TOTAL—	
			MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1974	..	...	1,900	...	100	...	...	..	...	1,900	...
1975	4	...	...	...	..	...	...	..	...	...	...
1976	2	...	...	...	..	...	...	..	...	...	...
1977	1	...	...	...	..	...	...	..	...	...	...
1978	2	...	...	...	..	...	...	..	...	...	...
1979	1	...	...	...	..	...	...	..	...	...	...
1980	1	...	...	...	..	...	...	..	...	...	...
1981	5	98	339	3.5	14	-	-	-	2,129	2,468	25.2
1982	5	50	101	2.0	10	-	-	-	864	965	19.3
1983	5	28	110	3.9	12	-	-	-	791	901	32.2
1984	2	...	...	...	..	...	...	..	...	...	...
1985	1	...	...	...	..	...	...	..	...	...	...
1986	3	...	73	...	100	-	-	-	...	73	...
1987	1	...	94	...	100	-	-	-	...	94	...
1988	3	...	432	...	100	-	-	-	...	432	...
1989	6	...	858	...	100	-	-	-	...	858	...
1990	5	...	1,643	...	100	-	-	-	...	1,643	...
1991	7	...	4,148	...	100	-	-	-	...	4,148	...
1992	7	...	6,200	...	100	8	...	0	...	6,208	...
1993	7	298	4,267	14.3	88	6	0.0	0	564	4,837	16.2

Units: CPUE, metric tonnes per day

1. The catch of skipjack during the 1974/75 season was taken from Blackburn and Serventy (1981), quoted in Tuna Programme (1984).
2. Statistics for 1975–1985 were determined from logbook data held at SPC, provided by the Australian Fisheries Management Authority. In accordance with the standard policy on confidentiality of data at the Australian Fisheries Management Authority, statistics for Australian purse seiners have not been included for years during which the number of vessels covered by the data is less than five (1975–1980, 1984–1985).
3. All statistics for 1986–1992 were provided by Heinz-Greenseas (Bateman, quoted in Ward, personal communication, June 1993); these statistics represent deliveries to the Heinz-Greenseas cannery in Eden, New South Wales, and skipjack landed at Port Lincoln Tuna Processors. The fishing season usually commences in December; catches for December have been allocated to the following year.
4. All statistics for 1993 were provided by the Australian Fisheries Management Authority (Skousen, personal communication, April 1994); these statistics are based on raised logbook data.

**Table 32. Catch statistics for purse seine vessels of Australia fishing outside the Australian Fishing Zone**

YEAR	VESSELS ACTIVE	DAYS FISHED	—SKIPJACK—			—YELLOWFIN—			—OTHER—	—TOTAL—	
			MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1988	3	36	101	2.8	77	30	0.8	23	-	131	3.6
1989	1	22	148	6.7	91	15	0.7	9	-	163	7.4
1990	8	...	3,543	8.8	79	953	2.5	21	10	4,506	11.3
1991	6	...	3,876	10.6	72	1,353	3.7	25	140	5,369	14.7
1992	2	145	437	3.0	41	625	4.3	59	3	1,065	7.3
1993	1	163	1,311	8.0	77	399	2.4	23	-	1,710	10.5

Units: CPUE, metric tonnes per day

1. Statistics for 1988 include two vessels which fished in Solomon Islands waters and one vessel which fished in Papua New Guinea waters. The data for the vessels which fished in Solomon Islands were taken from Anon. (1989a); statistics for the vessel which fished in Papua New Guinea were determined from logbook data held at SPC.
2. All statistics for 1989–1993 were determined from logbook data held at SPC. They represent vessels which fished in the waters of the Federated States of Micronesia and Papua New Guinea. Coverage of the Australian fleet outside the AFZ by logsheet data held at SPC is unknown. Catches by vessels operating under the Caroline Fishing Company, an Australia — Federated States of Micronesia joint venture, are excluded; these vessels are covered in Table 33.

**Table 33. Catch statistics for purse seine vessels of the Federated States of Micronesia**

YEAR	VESSELS ACTIVE	DAYS FISHED	—SKIPJACK—			—YELLOWFIN—			—OTHER—	—TOTAL—	
			MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1991	6	...	8,448	...	73	2,867	...	25	188	11,503	...
1992	7	...	11,657	14.7	75	3,675	5.9	24	169	15,501	20.6
1993	7	...	11,227	10.4	67	5,552	4.3	33	...	16,779	14.8

Units: CPUE, metric tonnes per day

1. Catch statistics and the number of vessels active for 1991–1993 were provided by the Yap Fishing Corporation (McCoy, personal communication, April 1993) and the Micronesian Maritime Authority (Heberer, personal communication, May 1994, June 1994); these statistics cover vessels operating under the Yap Fishing Corporation and the Caroline Fishing Company, an Australia – Federated States of Micronesia joint venture.
2. All CPUE statistics were determined from logbook data held at SPC.

**Table 34. Catch statistics for purse seine vessels of Indonesia licensed to fish in the waters of SPC member countries**

YEAR	VESSELS ACTIVE	DAYS FISHED	SKIPJACK			YELLOWFIN			OTHER MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%		MT	CPUE
1984	..	...	...	...	..	...	...	..	...	...	...
1985	..	...	...	...	..	...	...	..	...	...	...
1986	3	...	7,121	8.7	83	1,441	1.7	17	...	8,562	10.5
1987	3	...	11,050	13.5	84	2,120	2.5	16	...	13,170	16.1
1988	3	...	11,050	13.5	85	1,950	2.3	15	...	13,000	15.8
1989	3	...	10,313	12.6	80	2,543	3.0	20	...	12,856	15.6
1990	3	..	...	...	...	..	...	...	..	...	...

Units: CPUE, metric tonnes per day

1. The total catch in 1988 was provided by PT Multi-Transpêche (Marcille, personal communication, 1989); the species composition was determined from logbook data held at SPC. An unknown proportion of the total catch was taken outside the SPC area.
2. Catches for 1986–1987 and 1989 were estimated by adjusting the catches during 1988 by the ratio of the catch rates in 1986–1987 and 1989 to the catch rates in 1988. An unknown proportion of the total catch was taken outside the SPC area.
3. Only a small proportion of the catch was taken inside the SPC area during 1990. The fleet has been inactive in the SPC area since 1991.

Table 35. Catch statistics for purse seiners of Japan

YEAR	VESSELS ACTIVE	DAYS FISHED	SKIPJACK			YELLOWFIN			OTHER	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1967	..	8	34	4.3	51	33	4.1	49	-	67	8.4
1968	..	51	140	2.7	39	217	4.3	61	1	358	7.0
1969	..	17	77	4.5	96	3	0.2	4	-	80	4.7
1970	..	78	333	4.3	73	123	1.6	27	-	456	5.8
1971	..	101	667	6.6	75	192	1.9	21	35	894	8.9
1972	..	54	539	10.0	69	188	3.5	24	55	782	14.5
1973	6	209	1,602	7.7	70	504	2.4	22	177	2,283	10.9
1974	7	382	2,436	6.4	72	743	1.9	22	213	3,392	8.9
1975	7	530	4,583	8.6	71	1,664	3.1	26	204	6,451	12.2
1976	10	842	10,353	12.3	74	3,304	3.9	24	291	13,948	16.6
1977	13	960	13,434	14.0	71	4,956	5.2	26	483	18,873	19.7
1978	16	1,445	23,249	16.1	74	7,654	5.3	24	447	31,350	21.7
1979	16	1,749	24,875	14.2	68	10,671	6.1	29	804	36,350	20.8
1980	18	1,548	30,571	19.7	75	9,385	6.1	23	626	40,582	26.2
1981	28	2,743	36,735	13.4	62	21,528	7.8	36	994	59,257	21.6
1982	39	4,091	70,000	17.1	70	28,777	7.0	29	1,607	100,384	24.5
1983	41	6,585	109,830	16.7	80	26,191	4.0	19	1,451	137,472	20.9
1984	48	7,263	110,052	15.2	78	30,836	4.2	22	521	141,409	19.5
1985	40	7,210	103,585	14.4	74	34,724	4.8	25	834	139,143	19.3
1986	40	6,303	108,846	17.3	73	39,724	6.3	27	607	149,177	23.7
1987	37	6,451	88,442	13.7	68	40,262	6.2	31	1,236	129,940	20.1
1988	40	7,071	140,573	19.9	84	25,485	3.6	15	507	166,565	23.6
1989	36	7,190	104,388	14.5	75	33,409	4.6	24	1,013	138,810	19.3
1990	38	6,665	126,424	19.0	79	31,137	4.7	20	1,899	159,460	23.9
1991	45	6,356	124,536	19.6	73	44,362	7.0	26	1,227	170,125	26.8
1992	37	7,243	125,492	17.3	72	46,930	6.5	27	2,472	174,894	24.1
1993	37	...	95,130	13.3	63	55,870	7.9	37	...	151,000	21.2

Units: 1967-1982 - EFFORT, days on which a set was made; CPUE, mt per day on which a set was made.  
1983-1993 - EFFORT, days fished and searched; CPUE, mt per day fished or searched.

1. Days fished, catch statistics and CPUE for 1967-1992 were determined from daily logbook data aggregated by 1° longitude x 1° latitude by month, provided by the National Research Institute of Far Seas Fisheries, Shimizu, Japan. During 1967-1991 all catches were made inside the SPC statistical area. During 1992, an additional 2,016 days were fished outside the SPC area, which resulted in an additional catch of 28,480 mt; the total catch by the Japanese purse seine fleet during 1992 was therefore 203,374 mt, including 139,034 mt of skipjack and 52,899 mt of yellowfin.
2. The total catch for 1993 was provided by an industry source. Single seiners caught 148,500 mt during 1993, while group seiners caught 2,500 mt. The species composition and CPUE for 1993 were determined from logbook data held at SPC.
3. The numbers of vessels active during 1973-1982 were determined from the number of single seiners given in Habib (1984) and the number of group seiners for which logbook data are held at SPC. The numbers of single seiners include one survey vessel in 1974-1975, two survey vessels in 1976, and three survey vessels in 1977-1982. The numbers of group seiners operating each year during 1980-1982 were 4, 4 and 6 respectively.
4. The numbers of vessels active for 1983-1993 were determined from data held at SPC. The numbers of group seiners each calendar year during 1983-1991 were 7, 7, 7, 7, 5, 7, 3, 5 and 0 respectively. The number of vessels active during the calendar year, given in the table above, will usually be greater than the number active during the licensing year (August-August), since vessels can change their name or be replaced between licensing years. The number of single seiners active during the 1990/91 licensing year was 32.

**Table 36. Catch statistics for purse seiners of Korea**

YEAR	VESSELS ACTIVE	DAYS FISHED	—SKIPJACK—			—YELLOWFIN—			—OTHER— MT	—TOTAL—	
			MT	CPUE	%	MT	CPUE	%		MT	CPUE
1980	2	...	500	...	100	-	-	-	...	500	...
1981	3	...	1,200	...	75	400	...	25	...	1,600	...
1982	10	...	10,000	...	83	2,000	...	17	...	12,000	...
1983	11	...	15,300	...	96	700	...	4	...	16,000	...
1984	12	...	13,500	...	99	100	...	1	...	13,600	...
1985	11	...	9,700	...	86	1,600	...	14	...	11,300	...
1986	13	...	25,300	...	91	2,400	...	9	...	27,700	...
1987	20	...	40,500	...	68	19,500	...	33	...	60,000	...
1988	23	...	62,056	...	79	16,496	...	21	...	78,552	...
1989	30	...	81,028	...	70	34,726	...	30	...	115,754	...
1990	..	...	131,741	...	76	41,602	...	24	...	173,343	...
1991	37	...	171,951	...	76	55,416	...	24	151	227,518	...
1992	36	...	115,290	...	63	66,982	...	37	15	182,287	...
1993	..	...	88,800	...	60	59,200	...	40	...	148,000	...

1. Statistics for 1983–1987 were taken from Park et al. (1991).
2. Total catches for 1988–1990 are Korean Government estimates quoted in Nambiar (1991). The species composition for 1988–1990 was taken from Park et al. (1991).
3. Catch estimates for 1991–1992 were provided by the National Fisheries Research and Development Agency (Lee, personal communication, April 1994); these statistics were published in the Statistical Yearbook of Agriculture, Forestry and Fisheries by the Ministry of Agriculture, Forestry and Fisheries, Republic of Korea.
4. The numbers of vessels active for 1991–1992, and the total catch for 1993, were provided by industry sources. The species composition for 1993 was determined from logbook data held at SPC.

**Table 37. Catch statistics for purse seiners of Mexico**

YEAR	VESSELS ACTIVE	DAYS FISHED	—SKIPJACK—			—YELLOWFIN—			—OTHER— MT	—TOTAL—	
			MT	CPUE	%	MT	CPUE	%		MT	CPUE
1984	2	167	2,017	12.1	63	1,174	7.0	37	...	3,191	19.1

Units: CPUE, metric tonnes per day

1. All statistics were determined from logbook data held at SPC.

**Table 38. Catch statistics for purse seiners of New Zealand**

YEAR	VESSELS ACTIVE	DAYS FISHED	—SKIPJACK—			—YELLOWFIN—			—OTHER—	—TOTAL—	
			MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1983	7	277	5,581	20.1	96	239	...	4	5	5,825	21.0
1984	5	226	3,999	17.7	91	231	...	5	159	4,389	19.4
1985	5	164	2,289	14.0	78	170	...	6	459	2,918	17.8
1986	4	183	4,875	26.6	89	...	...	..	622	5,497	30.0
1987	3	157	4,178	26.6	91	...	...	..	429	4,607	29.3
1988	4	166	2,907	17.5	84	...	...	..	565	3,472	20.9
1989	5	...	1,778	...	100	...	...	..	...	1,778	...
1990	5	...	4,879	...	100	...	...	..	...	4,879	...
1991	5	...	6,720	...	100	...	...	..	...	6,720	...
1992	..	...	6,720	...	100	...	...	..	...	6,720	...
1993	..	...	6,720	...	100	...	...	..	...	6,720	...

Units: CPUE, metric tonnes per day

1. Statistics for 1983–1988 were determined from logbook data held at SPC, provided by the Ministry of Agriculture and Fisheries.
2. All statistics for 1989–1991 were provided by the Ministry of Agriculture and Fisheries (Murray, personal communication, May 1992). The skipjack catches do not include those of chartered American vessels in the New Zealand zone (2,186 mt in 1989, 1,310 in 1990 and 184 mt in 1991); these catches are included in Table 43.
3. Statistics for 1991 were used as preliminary estimates for 1992 and 1993.



**Table 39. Catch statistics for purse seiners of the Philippines**

YEAR	VESSELS ACTIVE	DAYS FISHED	—SKIPJACK—			—YELLOWFIN—			—OTHER—	—TOTAL—	
			MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1982	1	118	766	6.5	58	475	4.0	36	90	1,331	11.3
1983	0	-	-	-	-	-	-	-	-	-	-
1984	3	276	775	2.8	48	846	3.1	52	-	1,621	5.9
1985	5	1,473	9,148	6.2	73	3,331	2.3	27	...	12,479	8.5
1986	5	1,609	6,989	4.3	81	1,630	1.0	19	...	8,619	5.4
1987	5	1,606	12,035	7.5	76	3,867	2.4	24	...	15,902	9.9
1988	9	...	8,356	8.9	70	3,419	4.1	29	114	11,889	13.0
1989	13	...	16,668	8.8	66	7,590	5.0	30	995	25,253	14.2
1990	13	...	16,466	7.9	69	7,309	3.7	30	255	24,030	11.7
1991	15	...	17,529	8.7	66	8,792	4.3	33	366	26,687	13.3
1992	14	...	22,199	10.8	64	11,141	5.5	32	1,156	34,496	16.8
1993	..	...	22,199	...	64	11,141	...	32	1,156	34,496	...

Units: CPUE, metric tonnes per day

1. All statistics for 1982–1984 and 1988–1992, and the numbers of vessels active for 1982–1992, were determined from logbook data held at SPC.
2. All statistics for 1985–1987 were provided by industry sources. A small proportion of the catch during 1985–1987 may have been taken outside the SPC area, in the waters of Malaysia and the Philippines.
3. Statistics for 1992 have been used as preliminary estimates for 1993.

Table 40. Catch statistics for purse seiners of Russia

YEAR	VESSELS ACTIVE	DAYS FISHED	SKIPJACK			YELLOWFIN			OTHER	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1985	5	344	1,604	4.7	76	507	1.5	24	...	2,111	6.1
1986	8	593	3,743	6.3	89	432	0.7	10	16	4,191	7.1
1987	5	738	5,614	7.6	62	3,381	4.6	38	15	9,010	12.2
1988	5	568	5,339	9.4	86	850	1.5	14	...	6,189	10.9
1989	5	385	3,400	8.8	69	1,535	4.0	31	...	4,935	12.8
1990	5	318	1,505	4.7	69	621	2.0	29	41	2,167	6.8
1991	4	218	2,601	11.9	70	1,114	5.1	30	...	3,715	17.0
1992	3	197	1,689	8.6	79	437	2.2	21	...	2,126	10.8
1993	..	...	1,689	...	79	437	...	21	...	2,126	...

Units: DAYS FISHED, days on which a set was made; CPUE, metric tonnes per day on which a set was made

1. The total catch, vessels active and days fished for 1985 and all statistics for 1986–1992 were provided by the Pacific Research Institute of Fisheries and Oceanography (TINRO) (Karyakin, personal communication, March 1992, April 1993). The species composition for 1985 was estimated using the average species composition for 1986–1987.
2. Statistics for 1992 have been used as preliminary estimates for 1993.

Table 41. Catch statistics for purse seiners of Solomon Islands

YEAR	VESSELS ACTIVE	DAYS FISHED	SKIPJACK			YELLOWFIN			OTHER	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1980	1	60	497	8.3	52	449	7.5	47	16	962	16.0
1981	1	129	1,486	11.5	52	1,342	10.4	47	45	2,873	22.3
1982	1	127	1,598	12.6	52	1,444	11.4	47	49	3,091	24.3
1983	1	173	2,800	16.2	52	2,530	14.6	47	85	5,415	31.3
1984	1	178	3,050	17.1	56	2,397	13.5	44	...	5,447	30.6
1985	1	188	2,824	15.0	49	2,882	15.3	50	57	5,763	30.7
1986	1	177	3,267	18.5	55	2,258	12.8	38	418	5,943	33.6
1987	2	217	3,580	16.5	43	3,837	17.7	46	868	8,285	38.2
1988	4	311	6,467	20.8	58	4,244	13.6	38	510	11,221	36.1
1989	4	327	5,951	18.2	58	4,205	12.9	41	164	10,320	31.6
1990	4	328	4,417	13.5	54	3,656	11.1	45	97	8,170	24.9
1991	3	254	7,052	27.8	66	3,619	14.2	34	24	10,695	42.1
1992	3	402	5,993	14.9	54	5,093	12.7	46	93	11,179	27.8
1993	3	371	4,655	12.5	41	5,663	15.3	50	1,053	11,371	30.6

Units: DAYS FISHED, days on which a set was made; CPUE, metric tonnes per day on which a set was made

1. The total catches for 1980–1986 and the number of days fished were taken from Anon. (1989a); the species composition was determined from logbook data held at SPC. The single vessel active during 1980–1986 was a group seiner.
2. Statistics for 1987–1988 were taken from Anon. (1989a). Data for 1987 cover one single seiner and one group seiner. Data for 1988 cover one group seiner, two single seiners and one Taiwanese single seiner on charter to Solomon Taiyo Ltd, but not two Australian vessels which conducted trials for a limited duration.
3. All statistics for 1989–1993 were determined from logbook data held at SPC. One group seiner and three single seiners were active during 1989–1990; two group seiners and one single seiner were active during 1991–1992; one group seiner and two single seiners were active during 1993.

**Table 42. Catch statistics for purse seiners of Taiwan**

YEAR	VESSELS ACTIVE	DAYS FISHED	SKIPJACK			YELLOWFIN			OTHER	TOTAL	
			MT	CPUE	%	MT	CPUE	%	MT	MT	CPUE
1983	3	...	9,840	...	82	2,160	...	18	...	12,000	...
1984	6	...	20,160	...	84	3,840	...	16	...	24,000	...
1985	7	...	23,520	...	84	4,480	...	16	...	28,000	...
1986	10	...	34,400	...	86	5,600	...	14	...	40,000	...
1987	13	...	44,720	...	86	7,280	...	14	...	52,000	...
1988	19	...	66,880	...	88	9,120	...	12	...	76,000	...
1989	25	...	84,000	...	84	16,000	...	16	...	100,000	...
1990	32	...	104,960	...	82	23,040	...	18	...	128,000	...
1991	39	...	140,800	...	80	35,200	...	20	...	176,000	...
1992	45	...	169,400	...	77	50,600	...	23	...	220,000	...
1993	43	...	109,324	...	64	61,375	...	36	1,289	171,988	...

1. The numbers of vessels active for 1983–1993 were estimated from logbook data held at SPC.
2. Total catches for 1983–1991 were estimated assuming each vessel caught 4,000 mt annually. Catches by species were determined by applying the species composition from logbook data held at SPC for Taiwanese purse seiners during 1983–1991.
3. The total catches for 1992 were provided by an industry source. The species composition for 1992 was determined from logbook data held at SPC.
4. The number of vessels active and catches for 1993 were provided by the National Taiwan University (Sun, personal communication, May 1994).

Table 43. Catch statistics for purse seiners of the United States

YEAR	VESSELS ACTIVE	DAYS FISHED	SKIPJACK			YELLOWFIN			OTHER MT	TOTAL	
			MT	CPUE	%	MT	CPUE	%		MT	CPUE
1976	3	...	500	...	71	200	...	29	...	700	...
1977	1	...	700	...	78	200	...	22	...	900	...
1978	2	...	800	...	80	200	...	20	...	1,000	...
1979	8	...	8,000	...	93	600	...	7	20	8,620	...
1980	14	...	9,900	...	90	1,100	...	10	...	11,000	...
1981	18	2,458	17,993	7.3	49	18,405	7.5	51	...	36,398	14.8
1982	29	4,447	51,622	11.6	62	32,006	7.2	38	...	83,628	18.8
1983	39	8,292	113,576	13.7	66	57,843	7.0	34	...	171,419	20.7
1984	52	10,459	116,971	11.2	68	54,985	5.3	32	...	171,956	16.4
1985	39	...	87,700	12.8	75	29,012	3.8	25	...	116,712	16.6
1986	36	...	93,500	17.9	72	36,608	8.4	28	...	130,108	26.3
1987	35	...	79,800	11.6	55	66,359	12.0	45	...	146,159	23.6
1988	32	...	99,400	14.8	80	25,211	3.1	20	...	124,611	17.9
1989	36	6,629	92,210	13.9	66	46,794	7.1	33	861	139,865	21.1
1990	43	6,394	106,053	16.6	65	57,701	9.0	35	300	164,054	25.7
1991	43	7,094	173,427	24.4	81	40,511	5.7	19	477	214,415	30.2
1992	45	7,353	157,707	21.4	77	45,339	6.2	22	837	203,883	27.7
1993	42	7,915	144,432	18.2	74	49,436	6.2	25	447	194,315	24.6

Units: CPUE, metric tonnes per day

1. Catch estimates for 1976–1980 and 1985–1988 were provided by the National Marine Fisheries Service (Sakagawa, personal communication, June 1991); these statistics represent landings of tuna caught in the Central and Western Pacific. Since trips that start late in one year may land their catch in the next, landings in each calendar year may contain some catches from the previous year.
2. All statistics for 1981–1984 and the number of vessels during 1985 were determined from data aggregated by 5° longitude x 5° latitude by month provided by the American Tunaboat Association.
3. Catch estimates for 1989–1993, CPUE estimates for 1985–1993, and the numbers of vessels active for 1988–1993 were determined from logbook data held at SPC.
4. All statistics for 1989–1993 cover two vessels owned in a joint venture between the Marshall Islands Government and an American captain.

**Table 44. Catches of albacore by trollers of Australia**

SEASON	VESSELS ACTIVE	DAYS FISHED	—ALBACORE—	
			MT	CPUE
1980/81	..	...	50	...
1981/82	..	...	50	...
1982/83	..	...	50	...
1983/84	..	...	50	...
1984/85	..	...	50	...
1985/86	..	...	50	...
1986/87	..	...	50	...
1987/88	..	...	50	...
1988/89	..	...	50	...
1989/90	..	...	50	...
1990/91	..	...	50	...
1991/92	39	...	100	...
1992/93	46	1,145	34	...

1. All statistics for the 1980/81-1991/92 seasons were presented to the Fifth Meeting of the South Pacific Albacore Research Group (South Pacific Commission 1993).
2. All statistics for the 1992/93 season were provided by the Australian Fisheries Management Authority (Skousen, personal communication, April 1994); these statistics are based on raised logbook data. Australian trollers also caught 19 mt of yellowfin, 13 mt of skipjack and 60 mt of other species during the 1992/93 season.

**Table 45. Catches of albacore by trollers of Canada and Fiji**

SEASON	VESSELS ACTIVE	DAYS FISHED	—ALBACORE—	
			MT	CPUE
1987/88	1	...	140	...
1988/89	2	...	162	...
1989/90	2	...	—	...
1990/91	3	...	103	...
1991/92	..	...	...	...
1992/93	..	...	...	...

1. Catch estimates were taken from Coan and Resnick (1991), wherein catches for Canada and Fiji were combined.
2. The numbers of Canadian vessels during the 1988/89–1990/91 seasons were 2, 2 and 1 respectively. The numbers of Fijian vessels during the 1987/88–1991/92 seasons were 1, 0, 0, 2 and 2 respectively (South Pacific Commission 1993).

**Table 46. Catches of albacore by trollers of French Polynesia**

SEASON	VESSELS ACTIVE	DAYS FISHED	—ALBACORE—	
			MT	CPUE
1988/89	2	...	90	...
1989/90	3	...	359	...
1990/91	4	...	326	...
1991/92	2	...	72	...
1992/93	4	122	45	73

Units: CPUE, number of fish per day

1. All statistics for the 1988/89–1989/90 seasons were provided by the United States National Marine Fisheries Service (South Pacific Commission 1993).
2. All statistics for the 1990/91–1992/93 seasons were provided by *Etablissement pour la valorisation des activités aquacoles et maritimes* (EVAAM) (Yen, personal communication, May 1992, June 1994; South Pacific Commission 1993).



**Table 47. Catches of albacore by  
trollers of New Zealand**

SEASON	VESSELS ACTIVE	DAYS FISHED	—ALBACORE—	
			MT	CPUE
1973/74	..	...	898	...
1974/75	..	...	646	...
1975/76	..	...	25	...
1976/77	..	...	621	...
1977/78	..	...	1,686	...
1978/79	..	...	814	...
1979/80	..	...	1,468	...
1980/81	..	...	2,085	...
1981/82	..	...	2,434	...
1982/83	..	...	744	276
1983/84	..	...	2,773	149
1984/85	..	...	3,253	238
1985/86	..	...	1,911	248
1986/87	100	...	1,227	374
1987/88	25	...	330	349
1988/89	200	...	5,161	520
1989/90	125	...	2,525	267
1990/91	229	...	2,464	174
1991/92	247	...	3,856	...
1992/93	...	...	3,856	...

Units: CPUE, kilogrammes per day

1. All statistics were provided by the Ministry of Agriculture and Fisheries (McKoy, personal communication, June 1990; Murray 1993; South Pacific Commission 1993).
2. The catch for the 1991/92 season includes a provisional estimate of the catch in the Sub-Tropical Convergence Zone of 700 mt (South Pacific Commission 1993).
3. Estimates of CPUE were determined from logbook data held at SPC, provided by the Ministry of Agriculture and Fisheries. The CPUE estimate for 1990/91 represents the period January—July.
4. Statistics for 1991/92 were used as preliminary estimates for 1992/93.

**Table 48. Catches of albacore by trollers of the United States**

YEAR	VESSELS ACTIVE	DAYS FISHED	—ALBACORE—	
			MT	CPUE
1986	2	...	89	...
1987	7	...	859	...
1988	35	...	3,339	...
1989	38	...	3,563	...
1990	38	...	3,758	...
1991	58	...	5,494	...
1992	53	...	2,864	...
1993	..	...	...	...

SEASON	VESSELS ACTIVE	DAYS FISHED	—ALBACORE—	
			MT	CPUE
1985/86	2	...	89	117
1986/87	7	...	751	339
1987/88	35	...	3,253	238
1988/89	38	...	3,068	236
1989/90	38	...	3,898	262
1990/91	58	...	5,540	195
1991/92	55	...	3,016	72
1992/93	47	4,401	1,028	45

Units: CPUE, fish per day

1. All statistics were provided by the United States National Marine Fisheries Service (Sakagawa, personal communication, June 1991; Coan and Resnick, 1991; National Marine Fisheries Service, 1993; South Pacific Commission 1993; Coan, personal communication, May 1994).

Table 49. Catches (mt) from domestic fisheries in Indonesia

YEAR	BB	HAN	LL	PS	UNCL	TOTAL
SKIPJACK						
1970	-	-	-	-	12,100	12,100
1971	-	-	-	-	12,400	12,400
1972	-	-	-	-	19,600	19,600
1973	-	-	-	-	22,300	22,300
1974	-	-	-	-	23,613	23,613
1975	-	-	-	-	23,316	23,316
1976	-	-	-	-	25,338	25,338
1977	-	-	-	-	26,376	26,376
1978	-	-	-	-	29,422	29,422
1979	-	-	-	-	36,310	36,310
1980	-	-	-	-	44,245	44,245
1981	-	-	-	-	46,919	46,919
1982	22,121	-	43	6,199	21,380	49,743
1983	-	-	-	-	64,332	64,332
1984	42,910	-	-	9,152	18,149	70,211
1985	43,999	-	-	10,187	18,132	72,318
1986	48,305	-	-	7,313	13,225	68,843
1987	49,271	-	-	7,459	13,490	70,220
1988	51,735	-	-	7,823	14,165	73,723
1989	64,763	-	-	7,559	14,873	87,195
1990	70,537	-	-	7,994	15,617	94,148
1991	...	...	...	...	...	116,721
1992	...	...	...	...	...	123,607
1993	...	...	...	...	...	123,607
YELLOWFIN						
1970	-	-	-	-	5,500	5,500
1971	-	-	-	-	5,700	5,700
1972	-	-	-	-	9,000	9,000
1973	-	-	-	-	10,200	10,200
1974	-	-	-	-	10,165	10,165
1975	-	-	-	-	11,062	11,062
1976	-	-	-	-	8,037	8,037
1977	-	-	-	-	10,859	10,859
1978	-	-	-	-	10,601	10,601
1979	-	-	-	-	14,663	14,663
1980	-	-	-	-	17,550	17,550
1981	-	-	-	-	21,889	21,889
1982	963	-	3,605	1,428	18,344	24,340
1983	-	-	-	-	20,200	20,200
1984	2,282	-	1,670	2,108	20,390	26,450
1985	2,344	-	2,466	2,107	22,670	29,587
1986	2,278	-	2,437	1,650	27,873	34,238
1987	2,323	-	-	1,683	28,430	32,436
1988	2,439	-	-	1,767	29,852	34,058
1989	4,707	2,726	5,124	2,520	31,345	46,422
1990	4,433	3,196	5,508	2,665	32,285	48,087
1991	...	...	...	...	...	69,724
1992	...	...	...	...	...	73,837
1993	...	...	...	...	...	73,837

KEY: BB pole-and-line; HAN handline; LL longline; PS purse seine; UNCL unclassified.

1. Statistics for 1970-1990 were taken from Indo-Pacific Tuna Programme (1991a, 1991b) for Area F71.
2. Estimates for 1991-1992 were provided by the Directorate General of Fisheries (Muranto, personal communication, May 1993). Estimates of the catch of yellowfin for 1991-1992 may include other tunas.
3. Statistics for 1992 were used as preliminary estimates for 1993.

Table 50. Catches (mt) from domestic fisheries in the Philippines

YEAR	BAG	GILL	HOOK	LL	PS	RIN	SEN	UNCL	TOTAL
SKIPJACK									
1970	-	-	-	-	-	-	-	20,000	20,000
1971	-	-	-	-	-	-	-	21,400	21,400
1972	-	-	-	-	-	-	-	23,500	23,500
1973	-	-	-	-	-	-	-	26,400	26,400
1974	-	-	-	-	-	-	-	29,456	29,456
1975	-	-	-	-	-	-	-	31,657	31,657
1976	150	10	-	-	4,518	4,972	165	19,359	29,174
1977	54	-	286	-	16,956	5,164	37	32,593	55,090
1978	1,302	14,286	13,178	2,665	6,987	7,585	14	3,701	49,718
1979	298	4,435	12,069	-	27,050	-	130	1,102	45,084
1980	197	4,908	10,633	-	15,004	-	45	391	31,178
1981	243	2,995	14,406	440	14,048	4,683	102	1,522	38,439
1982	364	2,437	7,735	530	26,607	4,081	80	8,961	50,795
1983	192	1,980	9,816	-	39,971	-	80	5,112	57,151
1984	63	1,221	11,481	652	29,976	-	104	1,174	44,671
1985	1,791	2,183	10,309	735	28,477	14,303	211	2,527	60,536
1986	978	2,851	13,683	590	38,982	18,343	72	1,469	76,968
1987	862	2,656	14,627	2,019	39,125	11,873	59	2,528	73,749
1988	-	-	-	-	-	-	-	55,940	55,940
1989	-	-	-	-	-	-	-	64,654	64,654
1990	1,304	174	1,200	114	49,555	17,558	-	29,800	99,705
1991	79	1	192	612	57,838	13,614	-	30,058	102,394
1992	74	6,249	7,264	717	43,607	18,721	1,168	5,379	83,179
1993	...	...	...	...	...	...	...	...	85,232
YELLOWFIN									
1970	-	-	-	-	-	-	-	32,000	32,000
1971	-	-	-	-	-	-	-	35,800	35,800
1972	-	-	-	-	-	-	-	37,200	37,200
1973	-	-	-	-	-	-	-	44,500	44,500
1974	-	-	-	-	-	-	-	51,732	51,732
1975	-	-	-	-	-	-	-	52,793	52,793
1976	270	9	161	1,232	5,902	1,854	2,727	32,323	44,478
1977	407	-	1,407	-	7,821	2,552	71	50,801	63,059
1978	831	6,431	32,607	874	4,188	1,019	849	230	47,029
1979	1,081	2,027	32,887	-	12,301	-	647	281	49,224
1980	651	2,301	32,108	-	12,463	-	68	432	48,023
1981	508	2,655	32,800	1,073	14,546	3,636	5	953	56,176
1982	122	1,386	29,738	1,897	16,347	1,329	48	1,055	51,922
1983	323	1,260	35,878	-	20,779	-	135	3,661	62,036
1984	752	2,161	31,005	1,284	22,989	-	84	649	58,924
1985	1,333	2,040	35,505	1,819	16,753	4,838	680	1,325	64,293
1986	350	2,137	36,188	2,411	12,671	4,920	9	824	59,510
1987	423	2,161	26,408	3,774	15,171	2,916	91	866	51,810
1988	-	-	-	-	-	-	-	57,060	57,060
1989	-	-	-	-	-	-	-	62,146	62,146
1990	694	811	2,746	214	21,571	8,192	-	46,874	81,102
1991	13	21	22,872	255	23,981	2,977	-	45,475	95,594
1992	122	1,758	24,181	1,219	12,105	2,716	1,118	1,807	45,026
1993	...	...	...	...	...	...	...	...	44,902

KEY: BAG bag net; PS purse seine; GILL gillnet; RIN ring net; HOOK hook and line; SEN seine net; LL longline; UNCL other and unclassified.

1. Statistics for 1970-1989 were taken from Indo-Pacific Tuna Programme (1991a) for Area F71; statistics for 1970-1987 were compiled by the Bureau of Fisheries and Aquatic Resources, while those for 1988-1989 were compiled by the Bureau of Agricultural Statistics.
2. Statistics for 1990 were taken from Indo-Pacific Tuna Programme (1991b) and for 1991 from Ardill (personal communication to Perotti, Food and Agriculture Organization of the United Nations, January 1993) for Area F71; these statistics were compiled by the Bureau of Agricultural Statistics.
3. Statistics for 1992-1993 were provided by the Bureau of Agricultural Statistics (Ramos, personal communication, April 1993, April 1994); statistics for 1993 are preliminary.

Table 51. Quality of estimates of annual catches presented in Tables 1—50

TABLE	FLEET	QUALITY OF ESTIMATES OF ANNUAL CATCHES
1	DRIFTNET, JAPAN	GOOD
2	DRIFTNET, KOREA	GOOD
3	DRIFTNET, TAIWAN	GOOD
4	LOGLINE, AUSTRALIA	1985-1989 POOR; 1989-1993 GOOD
5	LOGLINE, PEOPLE'S REPUBLIC OF CHINA	UNKNOWN
6	LOGLINE, FEDERATED STATES OF MICRONESIA	GOOD
7	LOGLINE, FIJI	GOOD
8	LOGLINE, FRENCH POLYNESIA	1990-1991 POOR; 1992-1993 GOOD
9	LOGLINE, JAPAN, DISTANT-WATER	1952-1961, 1993 POOR; 1962-1992 GOOD
10	LOGLINE, JAPAN, OFFSHORE	1987-1989, 1991-1993 POOR; 1990 GOOD
11	LOGLINE, KOREA	POOR
12	LOGLINE, MARSHALL ISLANDS	GOOD
13	LOGLINE, NEW CALEDONIA	GOOD
14	LOGLINE, NEW ZEALAND	ALBACORE GOOD; OTHER SPECIES POOR; 1993 POOR
15	LOGLINE, SOLOMON ISLANDS	GOOD
16	LOGLINE, TAIWAN, OFFSHORE	POOR
17	LOGLINE, TAIWAN, DISTANT-WATER	1964-1966, 1993 POOR; 1967-1992 GOOD
18	LOGLINE, TONGA	1982-1992 GOOD; 1993 POOR
19	LOGLINE, UNITED STATES	GOOD
20	POLE-AND-LINE, AUSTRALIA	GOOD
21	POLE-AND-LINE, FIJI	GOOD
22	POLE-AND-LINE, FRENCH POLYNESIA	GOOD
23	POLE-AND-LINE, JAPAN	1972-1992 GOOD; 1993 POOR
24	POLE-AND-LINE, KIRIBATI	1979-1980 POOR; 1981-1993 GOOD
25	POLE-AND-LINE, NEW CALEDONIA	GOOD
26	POLE-AND-LINE, NEW ZEALAND	UNKNOWN
27	POLE-AND-LINE, PALAU	GOOD
28	POLE-AND-LINE, PAPUA NEW GUINEA	GOOD
29	POLE-AND-LINE, SOLOMON ISLANDS	GOOD
30	POLE-AND-LINE, TUVALU	GOOD
31	PURSE SEINE, AUSTRALIA, INSIDE AFZ	1974-1985 UNKNOWN; 1986-1993 GOOD
32	PURSE SEINE, AUSTRALIA, OUTSIDE AFZ	UNKNOWN
33	PURSE SEINE, FEDERATED STATES OF MICRONESIA	GOOD
34	PURSE SEINE, INDONESIA	1984-1987, 1989-1990 POOR; 1988 GOOD
35	PURSE SEINE, JAPAN	GOOD
36	PURSE SEINE, KOREA	GOOD
37	PURSE SEINE, MEXICO	UNKNOWN
38	PURSE SEINE, NEW ZEALAND	1983-1991 GOOD; 1992-1993 POOR
39	PURSE SEINE, PHILIPPINES	1982-1984, 1988-1991, 1993 POOR; 1985-1987, 1992 GOOD
40	PURSE SEINE, RUSSIA	1985-1992 GOOD; 1993 POOR
41	PURSE SEINE, SOLOMON ISLANDS	GOOD
42	PURSE SEINE, TAIWAN	1983-1991 POOR; 1992-1993 GOOD
43	PURSE SEINE, UNITED STATES	GOOD
44	TROLL, AUSTRALIA	1980/81-1991/92 POOR; 1992/93 GOOD
45	TROLL, CANADA AND FIJI	1987/88-1990/91 GOOD; 1991/92-1992/93 POOR
46	TROLL, FRENCH POLYNESIA	GOOD
47	TROLL, NEW ZEALAND	1973/74-1991/92 GOOD; 1992/93 POOR
48	TROLL, UNITED STATES	GOOD
49	INDONESIA	1970-1992 UNKNOWN; 1993 POOR
50	PHILIPPINES	GOOD

**Table 52. Seasonal catches (mt) by drift net vessels in the SPC statistical area**

SEASON	ALBACORE	BIGEYE	SKIPJACK	YELLOWFIN	TOTAL
1982/83	32	-	-	-	32
1983/84	1,581	-	-	-	1,581
1984/85	1,928	-	-	-	1,928
1985/86	1,936	-	-	-	1,936
1986/87	919	-	-	-	919
1987/88	5,271	-	-	-	5,271
1988/89	21,955	-	-	-	21,955
1989/90	7,426	-	-	-	7,426
1990/91	821	-	-	-	821

**Table 53. Annual catches (mt) by longliners in the SPC statistical area**

YEAR	ALBACORE	BIGEYE	SKIPJACK	YELLOWFIN	TOTAL
1952	210	—	—	—	210
1953	1,091	—	—	—	1,091
1954	10,200	—	—	—	10,200
1955	8,420	—	—	—	8,420
1956	6,220	—	—	—	6,220
1957	9,764	—	—	—	9,764
1958	21,704	—	—	—	21,704
1959	19,800	—	—	—	19,800
1960	24,366	—	—	—	24,366
1961	25,958	—	—	—	25,958
1962	29,643	25,308	—	50,400	105,351
1963	22,942	28,474	—	51,052	102,468
1964	17,347	19,623	—	39,581	76,551
1965	18,511	22,495	—	41,906	82,912
1966	28,320	21,737	—	53,157	103,214
1967	40,264	19,184	—	27,059	86,507
1968	31,620	16,147	—	37,106	84,873
1969	24,391	20,256	—	36,278	80,925
1970	31,759	17,733	—	32,371	81,863
1971	34,295	21,852	—	39,209	95,356
1972	37,616	31,316	—	46,768	115,700
1973	41,483	26,150	—	47,540	115,173
1974	29,900	35,491	—	46,610	112,001
1975	27,220	33,990	—	36,892	98,102
1976	29,937	42,727	—	47,213	119,877
1977	35,226	41,037	—	59,029	135,292
1978	28,750	28,002	—	72,932	129,684
1979	24,620	39,026	—	66,458	130,104
1980	38,339	41,649	—	87,158	167,146
1981	30,782	29,353	—	59,861	119,996
1982	27,364	30,810	—	50,719	108,893
1983	19,515	26,968	—	51,304	97,787
1984	15,196	32,220	—	40,071	87,487
1985	22,221	40,487	—	45,535	108,243
1986	28,390	34,048	—	35,711	98,149
1987	20,546	41,147	—	36,249	97,942
1988	24,231	35,364	—	42,538	102,133
1989	17,136	33,919	—	33,211	84,266
1990	16,346	53,754	—	38,386	108,486
1991	15,590	41,113	—	35,152	91,855
1992	34,741	44,958	—	37,857	117,556
1993	35,921	46,727	—	38,136	120,784

**Table 54. Annual catches (mt) by pole-and-line vessels in the SPC statistical area**

YEAR	ALBACORE	BIGEYE	SKIPJACK	YELLOWFIN	TOTAL
1964	—	—	1,025	141	1,166
1965	—	—	2,497	173	2,670
1966	—	—	2,615	71	2,686
1967	—	—	3,354	52	3,406
1968	—	—	5,039	17	5,056
1969	—	—	4,629	133	4,762
1970	—	—	10,435	75	10,510
1971	—	—	23,565	263	23,828
1972	—	—	83,634	2,782	86,416
1973	—	—	152,222	2,618	154,840
1974	—	—	197,878	3,142	201,020
1975	—	—	129,758	4,142	133,900
1976	—	—	156,491	11,911	168,402
1977	—	—	185,947	9,716	195,663
1978	—	—	204,798	5,804	210,602
1979	—	—	153,118	5,529	158,647
1980	—	—	170,247	6,765	177,012
1981	—	—	193,133	10,501	203,634
1982	—	—	134,266	4,931	139,197
1983	—	—	157,812	3,439	161,251
1984	—	—	167,225	3,801	171,026
1985	—	—	130,888	7,126	138,014
1986	—	—	148,572	3,434	152,006
1987	—	—	117,491	4,852	122,343
1988	—	—	139,043	4,337	143,380
1989	—	—	128,272	4,250	132,522
1990	—	—	78,046	4,406	82,452
1991	—	—	93,563	2,672	96,235
1992	—	—	67,075	3,755	70,830
1993	—	—	62,586	4,519	67,105



**Table 55. Annual catches (mt) by purse seiners in the SPC statistical area**

YEAR	ALBACORE	BIGEYE	SKIPJACK	YELLOWFIN <sup>1</sup>	TOTAL
1967	—	—	34	33	67
1968	—	—	140	217	357
1969	—	—	77	3	80
1970	—	—	333	123	456
1971	—	—	667	192	859
1972	—	—	539	188	727
1973	—	—	1,602	504	2,106
1974	—	—	4,336	743	5,079
1975	—	—	4,583	1,664	6,247
1976	—	—	10,853	3,504	14,357
1977	—	—	14,134	5,156	19,290
1978	—	—	24,049	7,854	31,903
1979	—	—	32,875	11,271	44,146
1980	—	—	41,468	10,934	52,402
1981	—	—	57,753	41,675	99,428
1982	—	—	134,087	64,702	198,789
1983	—	—	257,037	89,663	346,700
1984	—	—	270,524	94,409	364,933
1985	—	—	240,370	76,706	317,076
1986	—	—	288,114	90,093	378,207
1987	—	—	290,013	146,606	436,619
1988	—	—	403,561	86,805	490,366
1989	—	—	400,742	146,817	547,559
1990	—	—	501,631	166,019	667,650
1991	—	—	661,088	193,234	854,322
1992	—	—	622,784	230,830	853,614
1993	—	—	489,754	249,079	738,833

1. Catches of yellowfin may include as much as 10 per cent bigeye.

**Table 56. Seasonal catches (mt) by troll vessels in the SPC statistical area**

SEASON	ALBACORE	BIGEYE	SKIPJACK	YELLOWFIN	TOTAL
1973/74	898	—	—	—	898
1974/75	646	—	—	—	646
1975/76	25	—	—	—	25
1976/77	621	—	—	—	621
1977/78	1,686	—	—	—	1,686
1978/79	814	—	—	—	814
1979/80	1,468	—	—	—	1,468
1980/81	2,135	—	—	—	2,135
1981/82	2,484	—	—	—	2,484
1982/83	794	—	—	—	794
1983/84	2,823	—	—	—	2,823
1984/85	3,303	—	—	—	3,303
1985/86	2,050	—	—	—	2,050
1986/87	2,028	—	—	—	2,028
1987/88	3,773	—	—	—	3,773
1988/89	8,531	—	—	—	8,531
1989/90	6,832	—	—	—	6,832
1990/91	8,483	—	—	—	8,483
1991/92	7,044	—	—	—	7,044
1992/93	4,963	—	—	—	4,963

**Table 57. Annual catches (mt) in the SPC statistical area by species**

YEAR	ALBACORE <sup>1</sup>	BIGEYE	SKIPJACK	YELLOWFIN	TOTAL
1952	210	—	—	—	210
1953	1,091	—	—	—	1,091
1954	10,200	—	—	—	10,200
1955	8,420	—	—	—	8,420
1956	6,220	—	—	—	6,220
1957	9,764	—	—	—	9,764
1958	21,704	—	—	—	21,704
1959	19,800	—	—	—	19,800
1960	24,366	—	—	—	24,366
1961	25,958	—	—	—	25,958
1962	29,643	25,308	—	50,400	105,351
1963	22,942	28,474	—	51,052	102,468
1964	17,347	19,623	1,025	39,722	77,717
1965	18,511	22,495	2,497	42,079	85,582
1966	28,320	21,737	2,615	53,228	105,900
1967	40,264	19,184	3,388	27,144	89,980
1968	31,620	16,147	5,179	37,340	90,286
1969	24,391	20,256	4,706	36,414	85,767
1970	31,759	17,733	10,768	32,569	92,829
1971	34,295	21,852	24,232	39,664	120,043
1972	37,616	31,316	84,173	49,738	202,843
1973	41,483	26,150	153,824	50,662	272,119
1974	30,798	35,491	202,214	50,495	318,998
1975	27,866	33,990	134,341	42,698	238,895
1976	29,962	42,727	167,344	62,628	302,661
1977	35,847	41,037	200,081	73,901	350,866
1978	30,436	28,002	228,847	86,590	373,875
1979	25,434	39,026	185,993	83,258	333,711
1980	39,807	41,649	211,715	104,857	398,028
1981	32,917	29,353	250,886	112,037	425,193
1982	29,848	30,810	268,353	120,352	449,363
1983	20,341	26,968	414,849	144,406	606,564
1984	19,600	32,220	437,749	138,281	627,850
1985	27,452	40,487	371,258	129,367	568,564
1986	32,376	34,048	436,686	129,238	632,348
1987	23,493	41,147	407,504	187,707	659,851
1988	33,275	35,364	542,604	133,680	744,923
1989	47,622	33,919	529,014	184,278	794,833
1990	30,604	53,754	579,677	208,811	872,846
1991	24,894	41,113	754,651	231,058	1,051,716
1992	41,785	44,958	689,859	272,442	1,049,044
1993	40,884	46,727	552,340	291,734	931,685

1. Catches of albacore include statistics by fishing season, rather than by calendar year, for driftnet vessels and trollers; catches were allocated to the calendar year in which the season ended.

**Table 58. Annual catches (mt) in the SPC statistical area and the waters of Eastern Indonesia and the Philippines by species<sup>1</sup>**

YEAR	ALBACORE <sup>1</sup>	BIGEYE	SKIPJACK	YELLOWFIN	TOTAL
1952	210	-	-	-	210
1953	1,091	-	-	-	1,091
1954	10,200	-	-	-	10,200
1955	8,420	-	-	-	8,420
1956	6,220	-	-	-	6,220
1957	9,764	-	-	-	9,764
1958	21,704	-	-	-	21,704
1959	19,800	-	-	-	19,800
1960	24,366	-	-	-	24,366
1961	25,958	-	-	-	25,958
1962	29,643	25,308	-	50,400	105,351
1963	22,942	28,474	-	51,052	102,468
1964	17,347	19,623	1,025	39,722	77,717
1965	18,511	22,495	2,497	42,079	85,582
1966	28,320	21,737	2,615	53,228	105,900
1967	40,264	19,184	3,388	27,144	89,980
1968	31,620	16,147	5,179	37,340	90,286
1969	24,391	20,256	4,706	36,414	85,767
1970	31,759	17,733	42,868	70,069	162,429
1971	34,295	21,852	58,032	81,164	195,343
1972	37,616	31,316	127,273	95,938	292,143
1973	41,483	26,150	202,524	105,362	375,519
1974	30,798	35,491	255,283	112,392	433,964
1975	27,866	33,990	189,314	106,553	357,723
1976	29,962	42,727	221,856	115,143	409,688
1977	35,847	41,037	281,547	147,819	506,250
1978	30,436	28,002	307,987	144,220	510,645
1979	25,434	39,026	267,387	147,145	478,992
1980	39,807	41,649	287,138	170,430	539,024
1981	32,917	29,353	336,244	190,102	588,616
1982	29,848	30,810	368,891	196,614	626,163
1983	20,341	26,968	536,332	226,642	810,283
1984	19,600	32,220	552,631	223,655	828,106
1985	27,452	40,487	504,112	223,247	795,298
1986	32,376	34,048	582,497	222,986	871,907
1987	23,493	41,147	551,473	271,953	888,066
1988	33,275	35,364	672,267	224,798	965,704
1989	47,622	33,919	680,863	292,846	1,055,250
1990	30,604	53,754	773,530	338,000	1,195,888
1991	24,894	41,113	973,766	396,376	1,436,149
1992	41,785	44,958	896,645	391,305	1,374,693
1993	40,884	46,727	761,179	410,473	1,259,263

1. Catches of albacore include statistics by fishing season, rather than by calendar year, for driftnet vessels and trollers; catches were allocated to the calendar year in which the season ended.

**Table 59. Annual catches (mt) of albacore, bigeye, skipjack and yellowfin in the SPC statistical area by fishing nation**

YEAR	AU	CH	FJ	FM	ID	JP	KI	KR MI	MX	NC	NZ	PF	PG	PH	PU	SB	SU	TO	TV	TW	US	TOTAL	
1952	-	-	-	-	-	210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
210																							
1953	-	-	-	-	-	1,091	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,091	
1954	-	-	-	-	-	10,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,200	
1955	-	-	-	-	-	8,420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,420	
1956	-	-	-	-	-	6,220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,220	
1957	-	-	-	-	-	9,764	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,764	
1958	-	-	-	-	-	21,558	-	146	-	-	-	-	-	-	-	-	-	-	-	-	-	21,704	
1959	-	-	-	-	-	19,344	-	456	-	-	-	-	-	-	-	-	-	-	-	-	-	19,800	
1960	-	-	-	-	-	23,756	-	610	-	-	-	-	-	-	-	-	-	-	-	-	-	24,366	
1961	-	-	-	-	-	25,628	-	330	-	-	-	-	-	-	-	-	-	-	-	-	-	25,958	
1962	-	-	-	-	-	104,752	-	599	-	-	-	-	-	-	-	-	-	-	-	-	-	105,351	
1963	-	-	-	-	-	101,101	-	1,367	-	-	-	-	-	-	-	-	-	-	-	-	-	102,468	
1964	-	-	-	-	-	73,640	-	2,911	-	-	-	-	-	-	1,166	-	-	-	-	-	-	77,717	
1965	-	-	-	-	-	77,383	-	5,529	-	-	-	-	-	-	2,670	-	-	-	-	-	-	85,582	
1966	-	-	-	-	-	87,744	-	15,470	-	-	-	-	-	-	2,686	-	-	-	-	-	-	105,900	
1967	-	-	-	-	-	51,482	-	17,440	-	-	-	-	-	-	3,406	-	-	-	-	17,652	-	89,980	
1968	-	-	-	-	-	48,228	-	14,943	-	-	-	-	-	-	5,056	-	-	-	-	22,059	-	90,286	
1969	-	-	-	-	-	50,420	-	14,992	-	-	-	-	-	-	4,762	-	-	-	-	15,593	-	85,767	
1970	-	-	-	-	-	45,875	-	14,425	-	-	-	-	2,428	-	8,082	-	-	-	-	22,019	-	92,829	
1971	-	-	-	-	-	46,492	-	20,275	-	-	-	-	16,974	-	2,143	4,711	-	-	-	29,448	-	120,043	
1972	-	-	-	-	-	115,792	-	31,510	-	-	-	-	13,130	-	1,519	7,905	-	-	-	32,987	-	202,843	
1973	-	-	-	-	-	165,454	-	33,013	-	-	-	-	28,216	-	2,350	6,624	-	-	-	36,462	-	272,119	
1974	1,900	-	-	-	-	197,091	-	35,372	-	-	898	-	41,630	-	6,808	10,332	-	-	-	24,967	-	318,998	
1975	-	-	-	-	-	154,642	-	29,358	-	-	646	-	17,369	-	6,269	7,169	-	-	-	23,442	-	238,895	
1976	47	-	742	-	-	179,124	-	44,378	-	-	25	-	32,921	-	5,323	15,977	-	-	-	23,424	700	302,661	
1977	31	-	1,711	-	-	237,219	-	43,545	-	-	621	-	24,115	-	4,012	12,356	-	-	-	26,356	900	350,866	
1978	162	-	2,524	-	-	239,462	-	33,181	-	-	1,686	-	48,859	-	9,694	17,707	-	-	-	19,600	1,000	373,875	
1979	-	-	3,494	-	-	205,871	-	41,886	-	-	814	696	26,857	-	5,688	24,401	-	-	-	15,404	8,600	333,711	
1980	-	-	2,496	-	-	238,515	-	46,042	-	-	1,468	936	33,994	-	6,576	23,569	-	-	-	33,432	11,000	398,028	
1981	497	-	5,835	-	-	263,236	564	35,659	-	229	2,085	1,001	31,412	-	9,411	25,173	-	-	-	13,693	36,398	425,193	
1982	352	-	4,428	-	-	277,320	457	42,393	-	868	2,434	1,034	-	1,241	4,053	20,182	-	205	216	10,552	83,628	449,363	
1983	269	-	3,738	-	-	328,491	1,594	37,975	-	459	6,564	836	-	-	-	34,478	-	208	337	20,196	171,419	606,564	
1984	133	-	4,572	-	-	332,322	2,031	32,683	-	3,191	146	7,003	1,250	2,744	1,621	-	36,117	-	218	540	31,323	171,956	627,850
1985	50	-	3,943	-	-	306,837	719	44,441	-	265	5,712	836	9,300	12,479	97	30,690	2,111	233	4	34,135	116,712	568,564	
1986	208	-	3,111	-	8,562	312,024	1,414	62,001	-	347	6,786	961	-	8,619	131	44,170	4,175	251	390	49,001	130,197	632,348	
1987	1,073	-	3,862	-	13,170	275,820	434	93,039	-	1,044	5,405	878	-	15,902	161	29,770	8,995	298	632	62,458	146,910	659,851	
1988	1,711	-	4,010	-	13,000	332,731	1,472	108,468	-	1,038	3,237	715	-	11,775	157	40,441	6,189	274	1,090	90,751	127,864	744,923	
1989	2,123	-	5,310	-	12,856	301,383	2,282	137,585	-	838	6,939	844	-	24,258	77	35,915	4,935	234	149	117,033	142,072	794,833	
1990	7,992	-	3,792	-	-	281,106	595	200,949	-	1,658	7,653	1,099	-	23,775	88	29,548	2,126	190	90	144,533	167,652	872,846	
1991	11,024	721	5,366	11,322	-	267,099	224	255,535	-	1,469	9,625	1,045	-	26,321	-	46,864	3,715	198	29	191,681	219,478	1,051,716	
1992	9,066	2,350	4,732	15,451	-	260,754	551	211,768	14	-	860	11,282	1,160	-	33,340	75	30,558	2,126	223	8	258,513	206,213	1,049,044
1993	7,126	5,391	4,023	16,866	-	238,575	293	177,496	69	-	1,237	11,282	1,756	-	33,340	75	28,006	2,126	435	-	208,579	195,010	931,685

See Table 61 for fishing nation codes.

**Table 60. Annual catches (mt) of albacore, bigeye, skipjack and yellowfin in the SPC statistical area and the waters of Eastern Indonesia and the Philippines**

YEAR	AU	CH	FJ	FM	ID	JP	KI	KR	MI	MX	NC	NZ	PF	PG	PH	PU	SB	SU	TO	TV	TW	US	TOTAL
1952	-	-	-	-	-	210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
210																							
1953	-	-	-	-	-	1,091	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,091
1954	-	-	-	-	-	10,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,200
1955	-	-	-	-	-	8,420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,420
1956	-	-	-	-	-	6,220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,220
1957	-	-	-	-	-	9,764	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,764
1958	-	-	-	-	-	21,558	-	146	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21,704
1959	-	-	-	-	-	19,344	-	456	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19,800
1960	-	-	-	-	-	23,756	-	610	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24,366
1961	-	-	-	-	-	25,628	-	330	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25,958
1962	-	-	-	-	-	104,752	-	599	-	-	-	-	-	-	-	-	-	-	-	-	-	-	105,351
1963	-	-	-	-	-	101,101	-	1,367	-	-	-	-	-	-	-	-	-	-	-	-	-	-	102,468
1964	-	-	-	-	-	73,640	-	2,911	-	-	-	-	-	-	-	1,166	-	-	-	-	-	-	77,717
1965	-	-	-	-	-	77,383	-	5,529	-	-	-	-	-	-	-	2,670	-	-	-	-	-	-	85,582
1966	-	-	-	-	-	87,744	-	15,470	-	-	-	-	-	-	-	2,686	-	-	-	-	-	-	105,900
1967	-	-	-	-	-	51,482	-	17,440	-	-	-	-	-	-	-	3,406	-	-	-	-	17,652	-	89,980
1968	-	-	-	-	-	48,228	-	14,943	-	-	-	-	-	-	-	5,056	-	-	-	-	22,059	-	90,286
1969	-	-	-	-	-	50,420	-	14,992	-	-	-	-	-	-	-	4,762	-	-	-	-	15,593	-	85,767
1970	-	-	-	-	17,600	45,875	-	14,425	-	-	-	-	-	2,428	52,000	8,082	-	-	-	-	22,019	-	162,429
1971	-	-	-	-	18,100	46,492	-	20,275	-	-	-	-	-	16,974	57,200	2,143	4,711	-	-	-	29,448	-	195,343
1972	-	-	-	-	28,600	115,792	-	31,510	-	-	-	-	-	13,130	60,700	1,519	7,905	-	-	-	32,987	-	292,143
1973	-	-	-	-	32,500	165,454	-	33,013	-	-	-	-	-	28,216	70,900	2,350	6,624	-	-	-	36,462	-	375,519
1974	1,900	-	-	-	33,778	197,091	-	35,372	-	-	-	898	-	41,630	81,188	6,808	10,332	-	-	-	24,967	-	433,964
1975	-	-	-	-	34,378	154,642	-	29,358	-	-	-	646	-	17,369	84,450	6,269	7,169	-	-	-	23,442	-	357,723
1976	47	-	742	-	33,375	179,124	-	44,378	-	-	-	25	-	32,921	73,652	5,323	15,977	-	-	-	23,424	700	409,688
1977	31	-	1,711	-	37,235	237,219	-	43,545	-	-	-	621	-	24,115	118,149	4,012	12,356	-	-	-	26,356	900	506,250
1978	162	-	2,524	-	40,023	239,462	-	33,181	-	-	-	1,686	-	48,859	96,747	9,694	17,707	-	-	-	19,600	1,000	510,645
1979	-	-	3,494	-	50,973	205,871	-	41,886	-	-	-	814	696	26,857	94,308	5,688	24,401	-	-	-	15,404	8,600	478,992
1980	-	-	2,496	-	61,795	238,515	-	46,042	-	-	-	1,468	936	33,994	79,201	6,576	23,569	-	-	-	33,432	11,000	539,024
1981	497	-	5,835	-	68,808	263,236	564	35,659	-	-	229	2,085	1,001	31,412	94,615	9,411	25,173	-	-	-	13,693	36,398	588,616
1982	352	-	4,428	-	74,083	277,320	457	42,393	-	-	868	2,434	1,034	-	103,958	4,053	20,182	-	205	216	10,552	83,628	626,163
1983	269	-	3,738	-	84,532	328,491	1,594	37,975	-	-	459	6,564	836	-	119,187	-	34,478	-	208	337	20,196	171,419	810,283
1984	133	-	4,572	-	96,661	332,322	2,031	32,683	-	3,191	146	7,003	1,250	2,744	105,216	-	36,117	-	218	540	31,323	171,956	828,106
1985	50	-	3,943	-	101,905	306,837	719	44,441	-	-	265	5,712	836	9,300	137,308	97	30,690	2,111	233	4	34,135	116,712	795,298
1986	208	-	3,111	-	111,643	312,024	1,414	62,001	-	-	347	6,786	961	-	145,097	131	44,170	4,175	251	390	49,001	130,197	871,907
1987	1,073	-	3,862	-	115,826	275,820	434	93,039	-	-	1,044	5,405	878	-	141,461	161	29,770	8,995	298	632	62,458	146,910	888,066
1988	1,711	-	4,010	-	120,781	332,731	1,472	108,468	-	-	1,038	3,237	715	-	124,775	157	40,441	6,189	274	1,090	90,751	127,864	965,704
1989	2,123	-	5,310	-	146,473	301,383	2,282	137,585	-	-	838	6,939	844	-	151,058	77	35,915	4,935	234	149	117,033	142,072	1,055,250
1990	7,992	-	3,792	-	142,235	281,106	595	200,949	-	-	1,658	7,653	1,099	-	204,582	88	29,548	2,126	190	90	144,533	167,652	1,195,888
1991	11,024	721	5,366	11,322	186,445	267,099	224	255,535	-	-	1,469	9,625	1,045	-	224,309	-	46,864	3,715	198	29	191,681	219,478	1,436,149
1992	9,066	2,350	4,732	15,451	197,444	260,754	551	211,768	14	-	860	11,282	1,160	-	161,545	75	30,558	2,126	223	8	258,513	206,213	1,374,693
1993	7,126	5,391	4,023	16,866	197,444	238,575	293	177,496	69	-	1,237	11,282	1,756	-	163,474	75	28,006	2,126	435	-	208,579	195,010	1,259,263

See Table 61 for fishing nation codes.

**Table 61. Fishing nation codes**

CODE	FISHING NATION
AU	Australia
CH	Peoples Republic of China
FJ	Fiji
FM	Federated States of Micronesia
ID	Indonesia
JP	Japan
KI	Kiribati
KR	Republic of Korea
MI	Marshall Islands
MX	Mexico
NC	New Caledonia
NZ	New Zealand
PF	French Polynesia
PG	Papua New Guinea
PH	Philippines
PU	Palau
SB	Solomon Islands
SU	Russia
TO	Tonga
TV	Tuvalu
TW	Republic of China (Taiwan)
US	United States of America