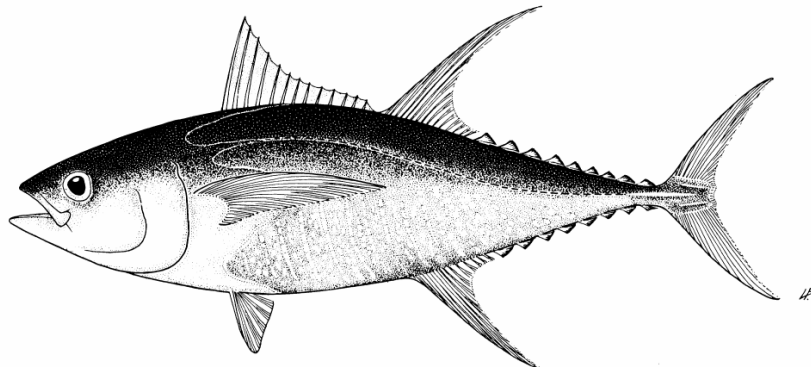


WCPFC-SC1 **ST IP-1**



## ESTIMATES OF ANNUAL CATCHES IN THE WCPFC CONVENTION AREA

**Tim Lawson and Peter Williams**



Oceanic Fisheries Programme  
Secretariat of the Pacific Community  
Noumea, New Caledonia

August 2005

## INTRODUCTION

Estimates of annual catches in the WPFC Convention Statistical Area (CSA, Figure 1) are presented for target tuna species, i.e., albacore (*Thunnus alalunga*) bigeye (*Thunnus obesus*), skipjack (*Katsuwonus pelamis*) and yellowfin (*Thunnus albacares*), and major billfish species, i.e., black marlin (*Makaira indica*), blue marlin (*Makaira mazara*), striped marlin (*Tetrapturus audax*) and swordfish (*Xiphias gladius*). Preliminary estimates of average catches in recent years of other non-target fish species, determined from observer data, are also presented. Estimates of catches of southern bluefin tuna (*Thunnus maccoyii*), which are compiled by the Commission for the Conservation of Southern Bluefin Tuna (CCSBT), and catches of small tunas in the domestic fisheries of Indonesia and the Philippines are not presented. Estimates of the mortality of species of special interest (i.e., marine mammals, marine reptiles and seabirds) are discussed in Molony (2005).

### Target Tuna Species

Tables 1 and 2 and Figures 2 and 3 present estimates of annual catches of target tunas in the Convention Statistical Area.

Tables 3–6 present estimates of annual catches of target tunas in the WCPO Area and the EPO Area (Figure 1) by gear type. Tables 7–9 present estimates of annual catches of target tunas for the WCPO, the EPO and the Pacific Ocean by species.

Table 10 and 11, and Figures 4 and 5, present global catches of target tunas, by species and ocean area respectively.

### Major Billfish Species

Table 12 presents estimates of commercial catches of the four major billfish species by gear type. Table 13 and Figure 6 present estimates of billfish catches for all gear types combined.

### Other Non-Target Species and Species Groups

Estimates of other major non-target species and species groups for the longline and purse-seine fisheries in the Convention Statistical Area were determined from observer data held by the SPC Oceanic Fisheries Programme. Tables 14 and 15 present observer coverage.

For longline, observer coverage from 1990 to 2003 has been 0.55% of total effort. Coverage of the distant-water longline fleets by data held by the OFP is less than 0.1% and no observer data covering the fleets of Indonesia, the Philippines and Vietnam, the Japanese coastal fleet and the Chinese Taipei fleet based in domestic ports are held by the OFP.

For purse-seine, observer coverage from 1994 to 2003 has been 2.63%. Coverage rates for sets on unassociated and associated schools has been similar.

Catches for each species or species group were estimated by multiplying the catch rate determined from the observer data by the average annual effort during the period from 2001 to 2003, for each sector of the longline fishery for which observer data are available and each school association for the purse-seine fishery. Catch rates were estimated from the observer data by dividing the sum of the observed catch by the sum of the observed effort, for each sector for longline and each school

association for purse-seine, during the entire period covered by observer data. The catch rates therefore approximate averages during 1990–2003 for longline and 1994–2003 for purse-seine.

Catch estimates for longline and purse-seine are presented in Table 16. The longline estimates ignore the fleets of Indonesia, the Philippines and Vietnam, the Japanese coastal fleet and the Chinese Taipei fleet based in domestic ports, for which no observer data are held by the OFP, and the fleets targeting sharks, for which it is currently not possible to estimate total effort. The purse-seine estimates ignore the Japanese coastal fleet, for which total effort data are not held by the OFP.

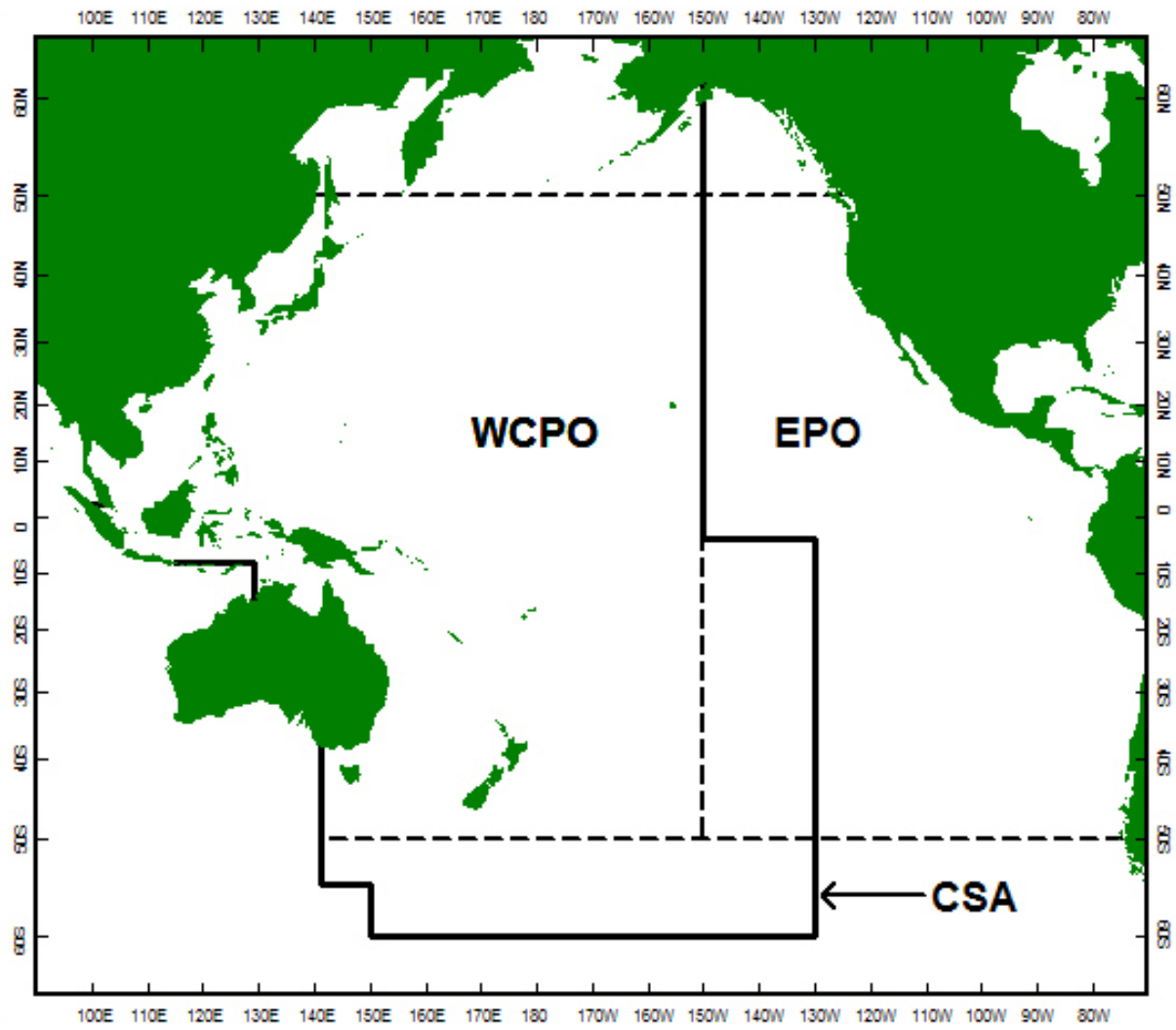
The average annual catches of target tunas during 2001–2003 were also estimated from the observer data. Comparing the estimates for target tunas that were determined from observer data to estimates determined from other sources and presented in Table 1 may indicate bias in the estimates of the estimates for the other non-target species and species groups determined from observer data. The longline catches represented by the estimates determined from observer data (i.e., all longline fleets except those of Indonesia, the Philippines and Vietnam, the Japanese coastal fleet and the Chinese Taipei fleet based in domestic ports) account for 76.0% of the total longline catch in the CSA. For the sectors represented by the estimate of the catch of target tunas determined from observer data, the estimate was 10.4% greater than the estimate determined from other sources. The estimate of the catch of target tunas in the CSA determined from observer data therefore represents  $76.0\% * 110.4\% = 83.9\%$  of the estimate determined from other sources, and this suggests that the estimates in Table 16 may under-estimate longline catches of non-target species in the CSA by 16.1%. For purse-seine, the estimate of the average annual catch of target tunas during 2001–2003 determined from observer data was 26.3% greater than the estimate determined from other sources.

Figure 7 presents the species group composition for longliners and Figure 8 presents the species group composition for longliners and purse seiners combined, determined from observer data. The catch of sharks and rays and other non-target species accounted for 26.5% and 1.2% of the total catch by longliners and purse seiners respectively.

The estimation of catches of non-target species in the CSA is problematic, primarily due to the low level of observer coverage, especially for the distant-water longline fleets. The estimates can be expected to improve as more observer data are collected. In the meantime, it may be possible to improve the estimates by (a) stratifying the estimates of longline catch rates by geographic area, time period and depth, within sectors, and (b) stratifying the estimates of purse-seine catch rates by geographic area or flag, and year, for each school association. The reliability of the estimates should be quantified with standard errors determined from resampling of the observer data. Bias in the catch estimates determined from observer data should be investigated through more detailed comparisons with estimates for target tunas determined from other sources.

## REFERENCE

Molony, B. 2005. Estimates of the mortality of non-target species with an initial focus on seabirds, turtles and sharks. Working Paper EB WP-1. First meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. Oceanic Fisheries Programme, Secretariat of the Pacific Community, Noumea, New Caledonia.



**Figure 1. WCPFC Convention Statistical Area (CSA), the Western and Central Pacific Ocean (WCPO) Area and the Eastern Pacific Ocean (EPO) Area**

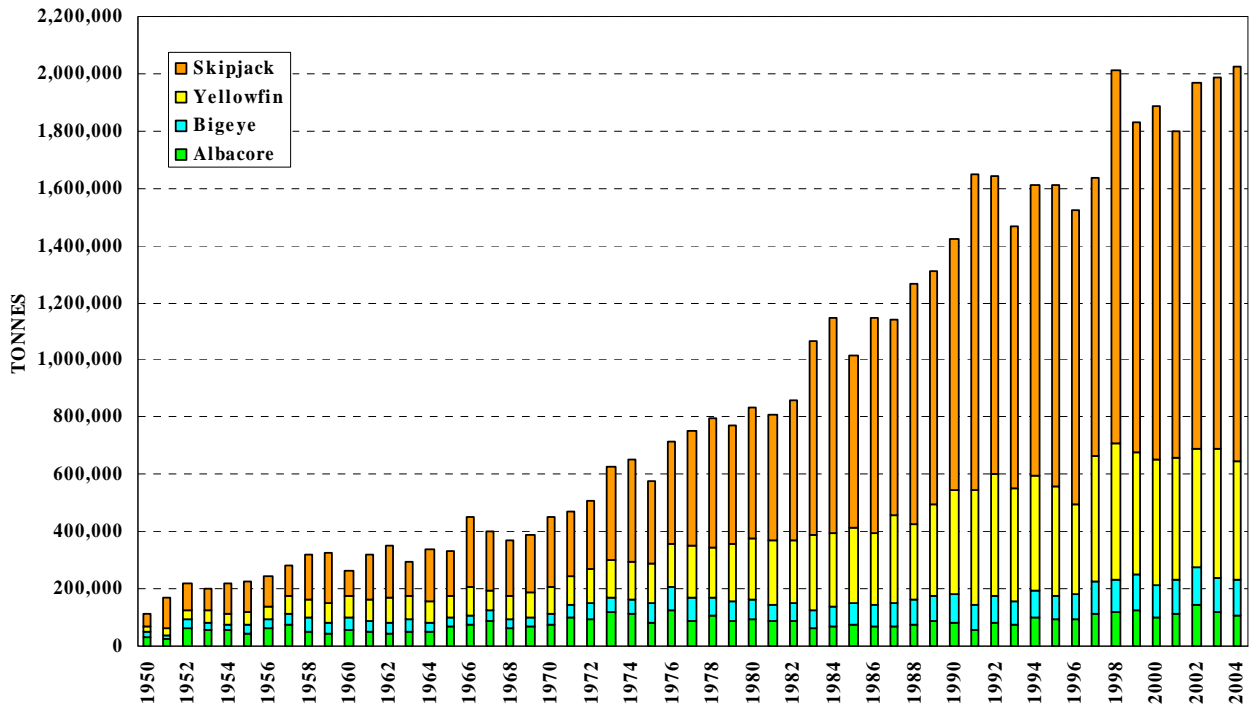


Figure 2. Catches of tuna in the WCPFC Convention Statistical Area, by species

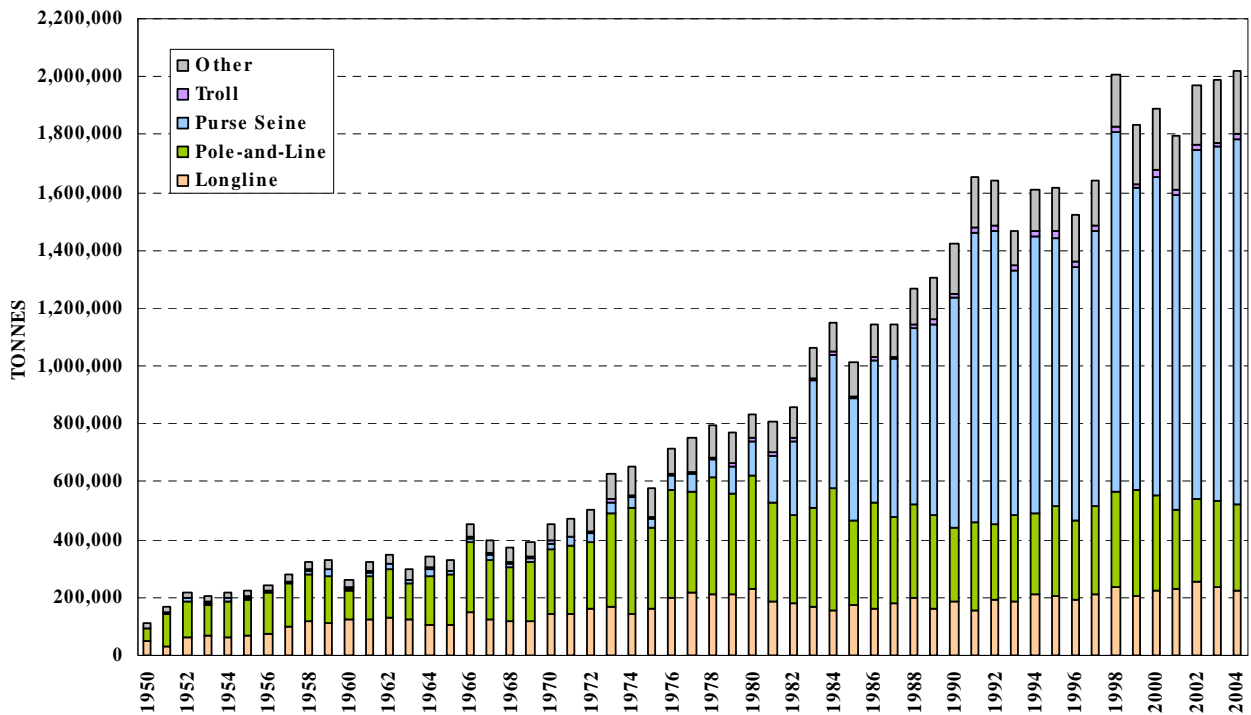


Figure 3. Catches of tuna in the WCPFC Convention Statistical Area, by gear type

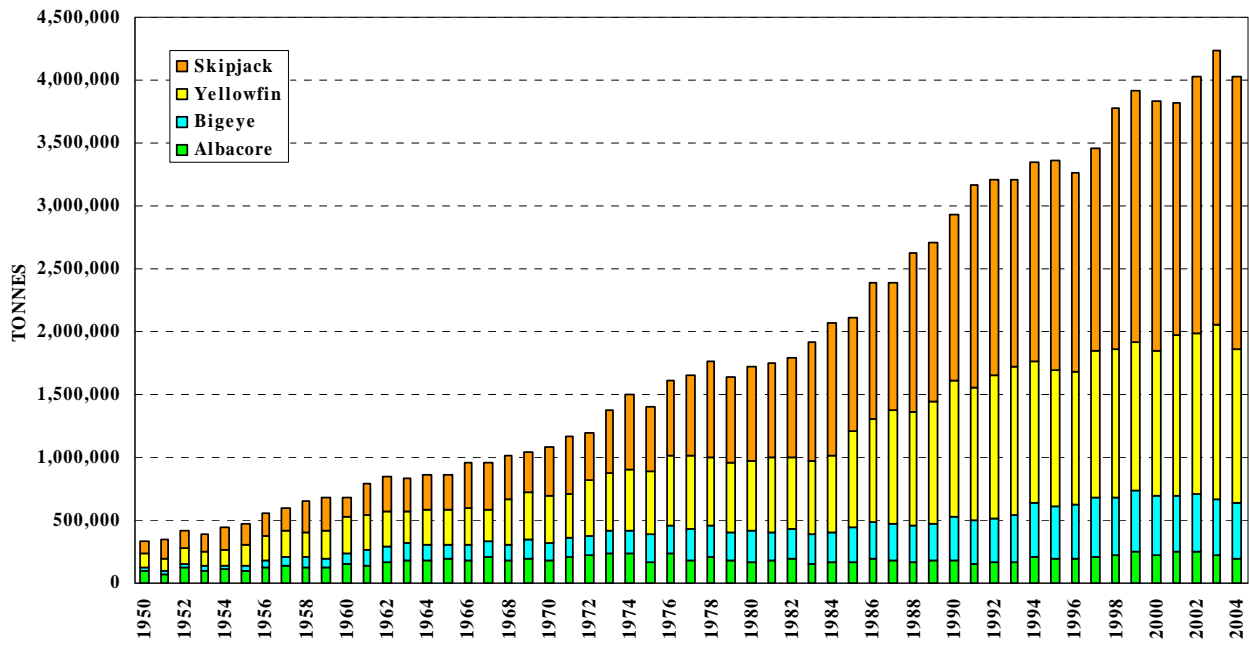


Figure 4. Global catches of tuna, by species, including preliminary estimates for 2004

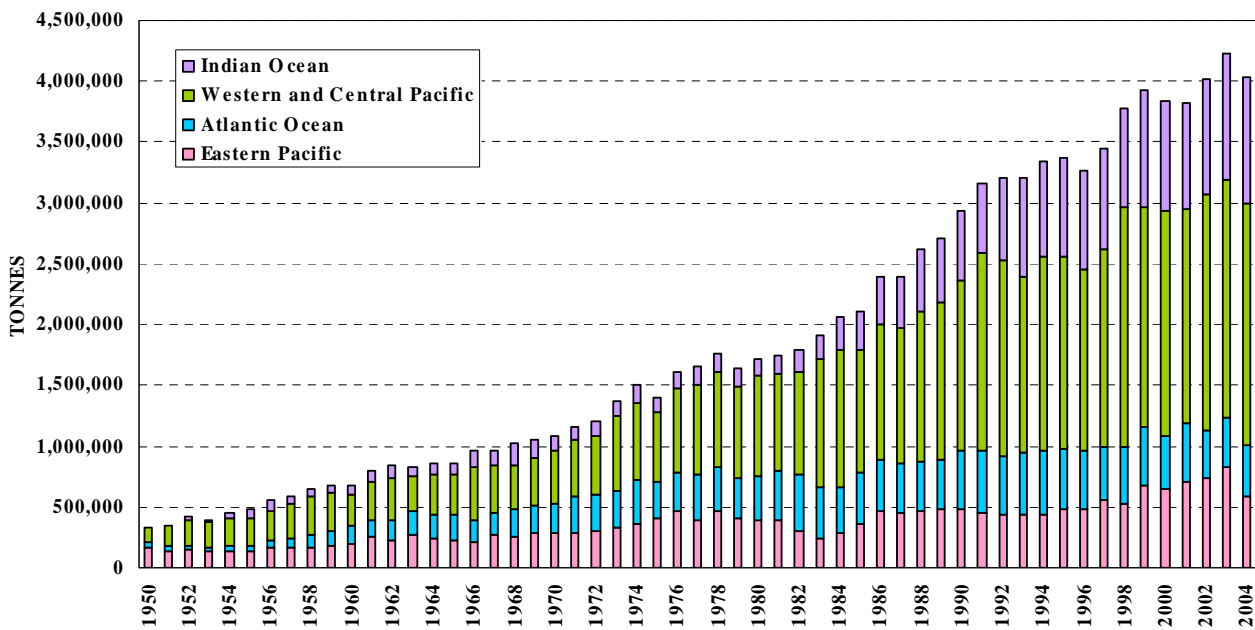


Figure 5. Global catches of tuna, by ocean area, including preliminary estimates for 2004

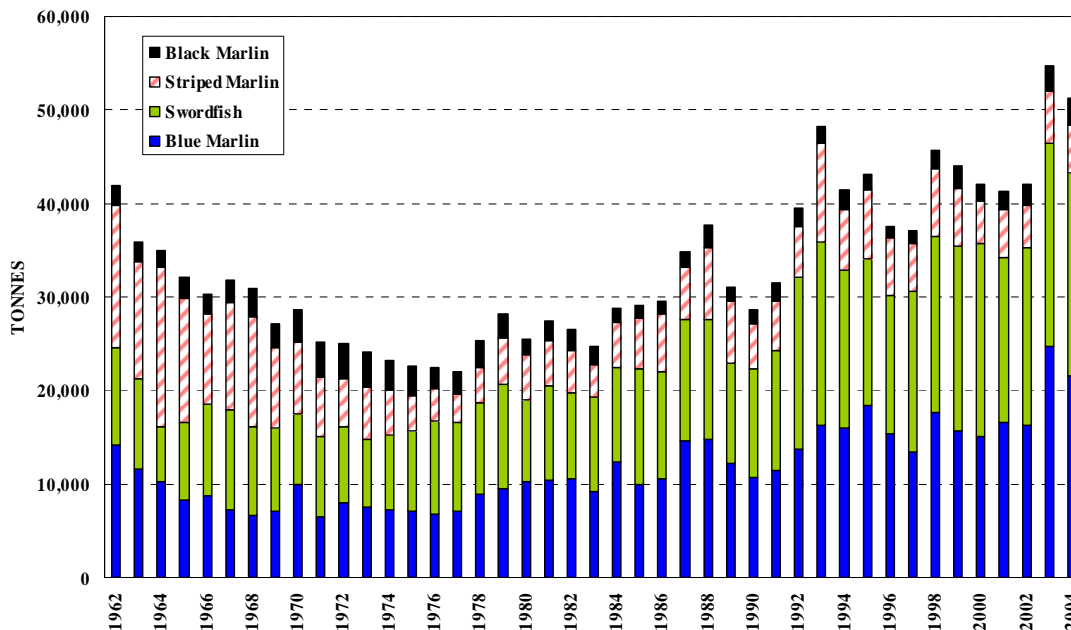


Figure 6. Commercial catches of billfish in the WCPFC Convention Statistical Area, by species

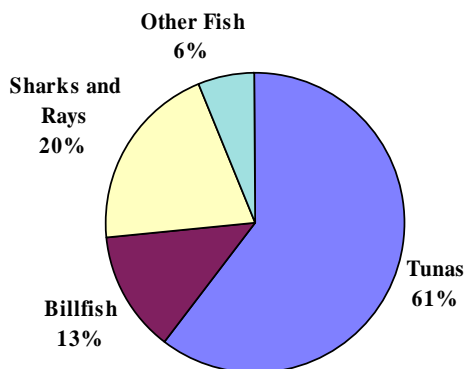


Figure 7. Composition of species groups in the average catch by longliners in the WCPFC Convention Statistical Area during 2001–2003, determined from observer data

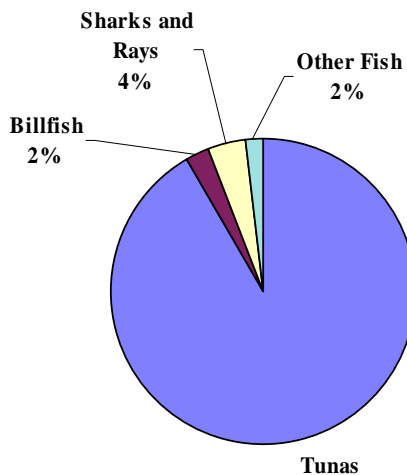


Figure 8. Composition of species groups in the average catch by longliners and purse seiners in the WCPFC Convention Statistical Area during 2001–2003, determined from observer data

**Table 1. Total catches in the WCPFC Convention Statistical Area by species.**  
 Symbols: '0' = effort, but no catch. Estimates for 2004 are preliminary.

| YEAR | ALBACORE |    | BIGEYE  |    | SKIPJACK  |    | YELLOWFIN |    | TOTAL     |
|------|----------|----|---------|----|-----------|----|-----------|----|-----------|
|      | TONNES   | %  | TONNES  | %  | TONNES    | %  | TONNES    | %  |           |
| 1950 | 29,603   | 27 | 18,890  | 17 | 39,903    | 36 | 22,562    | 20 | 110,958   |
| 1951 | 25,908   | 15 | 14,632  | 9  | 106,576   | 63 | 21,115    | 13 | 168,231   |
| 1952 | 64,564   | 30 | 27,494  | 13 | 92,302    | 42 | 33,152    | 15 | 217,512   |
| 1953 | 56,718   | 28 | 26,044  | 13 | 80,321    | 39 | 40,498    | 20 | 203,581   |
| 1954 | 54,007   | 25 | 18,664  | 9  | 104,161   | 47 | 42,694    | 19 | 219,526   |
| 1955 | 45,568   | 20 | 29,034  | 13 | 108,251   | 48 | 42,360    | 19 | 225,213   |
| 1956 | 61,102   | 25 | 33,650  | 14 | 107,189   | 44 | 43,277    | 18 | 245,218   |
| 1957 | 73,851   | 26 | 40,712  | 15 | 106,941   | 38 | 58,557    | 21 | 280,061   |
| 1958 | 52,009   | 16 | 48,638  | 15 | 157,383   | 49 | 62,758    | 20 | 320,788   |
| 1959 | 40,954   | 13 | 41,525  | 13 | 177,274   | 54 | 66,910    | 20 | 326,663   |
| 1960 | 56,608   | 22 | 43,705  | 17 | 89,938    | 34 | 72,846    | 28 | 263,097   |
| 1961 | 51,513   | 16 | 37,998  | 12 | 156,736   | 49 | 75,797    | 24 | 322,044   |
| 1962 | 46,252   | 13 | 35,179  | 10 | 181,624   | 52 | 87,399    | 25 | 350,454   |
| 1963 | 53,067   | 18 | 42,533  | 14 | 122,703   | 41 | 78,697    | 26 | 297,000   |
| 1964 | 50,374   | 15 | 30,696  | 9  | 182,785   | 54 | 76,903    | 23 | 340,758   |
| 1965 | 69,965   | 21 | 29,922  | 9  | 155,060   | 47 | 77,382    | 23 | 332,329   |
| 1966 | 74,843   | 17 | 31,944  | 7  | 249,255   | 55 | 97,418    | 21 | 453,460   |
| 1967 | 88,998   | 22 | 35,345  | 9  | 204,522   | 51 | 69,655    | 17 | 398,520   |
| 1968 | 63,731   | 17 | 28,385  | 8  | 194,919   | 53 | 83,363    | 23 | 370,398   |
| 1969 | 71,236   | 18 | 32,055  | 8  | 203,303   | 52 | 85,119    | 22 | 391,713   |
| 1970 | 72,647   | 16 | 40,093  | 9  | 242,257   | 54 | 97,224    | 21 | 452,221   |
| 1971 | 98,402   | 21 | 43,192  | 9  | 228,601   | 48 | 102,676   | 22 | 472,871   |
| 1972 | 94,445   | 19 | 57,164  | 11 | 237,664   | 47 | 116,148   | 23 | 505,421   |
| 1973 | 122,017  | 19 | 48,966  | 8  | 328,313   | 52 | 128,375   | 20 | 627,671   |
| 1974 | 110,212  | 17 | 52,800  | 8  | 356,198   | 55 | 131,269   | 20 | 650,479   |
| 1975 | 79,745   | 14 | 69,088  | 12 | 288,337   | 50 | 141,185   | 24 | 578,355   |
| 1976 | 124,498  | 17 | 82,183  | 11 | 357,571   | 50 | 152,498   | 21 | 716,750   |
| 1977 | 85,214   | 11 | 82,622  | 11 | 402,576   | 53 | 183,256   | 24 | 753,668   |
| 1978 | 106,536  | 13 | 64,956  | 8  | 449,369   | 56 | 175,789   | 22 | 796,650   |
| 1979 | 86,070   | 11 | 72,890  | 9  | 412,846   | 54 | 198,409   | 26 | 770,215   |
| 1980 | 91,085   | 11 | 70,403  | 8  | 458,525   | 55 | 215,220   | 26 | 835,233   |
| 1981 | 86,022   | 11 | 57,812  | 7  | 435,719   | 54 | 227,272   | 28 | 806,825   |
| 1982 | 87,950   | 10 | 61,632  | 7  | 485,986   | 57 | 222,389   | 26 | 857,957   |
| 1983 | 63,857   | 6  | 63,494  | 6  | 677,592   | 64 | 259,358   | 24 | 1,064,301 |
| 1984 | 71,539   | 6  | 69,183  | 6  | 750,133   | 65 | 256,002   | 22 | 1,146,857 |
| 1985 | 76,337   | 8  | 74,859  | 7  | 600,450   | 59 | 261,341   | 26 | 1,012,987 |
| 1986 | 69,133   | 6  | 72,886  | 6  | 748,819   | 65 | 253,077   | 22 | 1,143,915 |
| 1987 | 65,871   | 6  | 86,654  | 8  | 681,300   | 60 | 307,073   | 27 | 1,140,898 |
| 1988 | 75,907   | 6  | 84,048  | 7  | 839,452   | 66 | 268,330   | 21 | 1,267,737 |
| 1989 | 88,299   | 7  | 85,476  | 7  | 815,170   | 62 | 318,402   | 24 | 1,307,347 |
| 1990 | 84,585   | 6  | 99,078  | 7  | 880,363   | 62 | 359,422   | 25 | 1,423,448 |
| 1991 | 59,217   | 4  | 82,348  | 5  | 1,106,474 | 67 | 403,269   | 24 | 1,651,308 |
| 1992 | 79,433   | 5  | 98,921  | 6  | 1,037,618 | 63 | 424,702   | 26 | 1,640,674 |
| 1993 | 74,017   | 5  | 85,468  | 6  | 915,159   | 62 | 391,712   | 27 | 1,466,356 |
| 1994 | 98,719   | 6  | 94,570  | 6  | 1,014,400 | 63 | 400,225   | 25 | 1,607,914 |
| 1995 | 93,070   | 6  | 84,654  | 5  | 1,056,119 | 65 | 379,518   | 24 | 1,613,361 |
| 1996 | 93,610   | 6  | 85,547  | 6  | 1,026,991 | 67 | 315,479   | 21 | 1,521,627 |
| 1997 | 115,454  | 7  | 110,320 | 7  | 976,448   | 60 | 436,226   | 27 | 1,638,448 |
| 1998 | 116,125  | 6  | 118,195 | 6  | 1,304,383 | 65 | 470,843   | 23 | 2,009,546 |
| 1999 | 128,325  | 7  | 124,754 | 7  | 1,156,929 | 63 | 421,783   | 23 | 1,831,791 |
| 2000 | 97,462   | 5  | 117,493 | 6  | 1,235,540 | 65 | 437,300   | 23 | 1,887,795 |
| 2001 | 114,385  | 6  | 116,446 | 6  | 1,138,733 | 63 | 427,522   | 24 | 1,797,086 |
| 2002 | 141,635  | 7  | 132,401 | 7  | 1,282,616 | 65 | 413,512   | 21 | 1,970,164 |
| 2003 | 119,984  | 6  | 120,345 | 6  | 1,297,513 | 65 | 449,356   | 23 | 1,987,198 |
| 2004 | 105,962  | 5  | 125,940 | 6  | 1,376,670 | 68 | 413,201   | 20 | 2,021,773 |



**Table 2. Total catches in the WCPFC Convention Statistical Area by gear type.** Symbols: ‘...’ = missing data; ‘0’ = effort, but no catch. Estimates for 2004 are preliminary.

| YEAR | LONGLINE |    | POLE-AND-LINE |    | PURSE SEINE |     | TROLL  |   | OTHER   |    | TOTAL     |
|------|----------|----|---------------|----|-------------|-----|--------|---|---------|----|-----------|
|      | TONNES   | %  | TONNES        | %  | TONNES      | %   | TONNES | % | TONNES  | %  |           |
| 1950 | 47,862   | 43 | 47,694        | 43 | ...         | ... | ...    | - | 15,402  | 14 | 110,958   |
| 1951 | 33,090   | 20 | 112,343       | 67 | 3,781       | 2   | 2,696  | 2 | 16,321  | 10 | 168,231   |
| 1952 | 64,248   | 30 | 125,000       | 57 | 7,474       | 3   | 3,252  | 1 | 17,538  | 8  | 217,512   |
| 1953 | 69,792   | 34 | 106,095       | 52 | 5,288       | 3   | 3,926  | 2 | 18,480  | 9  | 203,581   |
| 1954 | 64,743   | 29 | 122,510       | 56 | 8,918       | 4   | 3,851  | 2 | 19,504  | 9  | 219,526   |
| 1955 | 68,894   | 31 | 124,743       | 55 | 6,143       | 3   | 4,635  | 2 | 20,798  | 9  | 225,213   |
| 1956 | 71,913   | 29 | 143,559       | 59 | 3,777       | 2   | 3,972  | 2 | 21,997  | 9  | 245,218   |
| 1957 | 101,508  | 36 | 148,525       | 53 | 4,441       | 2   | 2,130  | 1 | 23,457  | 8  | 280,061   |
| 1958 | 115,896  | 36 | 160,750       | 50 | 14,092      | 4   | 5,161  | 2 | 24,889  | 8  | 320,788   |
| 1959 | 109,259  | 33 | 165,518       | 51 | 21,293      | 7   | 4,197  | 1 | 26,396  | 8  | 326,663   |
| 1960 | 127,140  | 48 | 98,956        | 38 | 5,224       | 2   | 3,701  | 1 | 28,076  | 11 | 263,097   |
| 1961 | 121,451  | 38 | 150,709       | 47 | 14,540      | 5   | 5,287  | 2 | 30,057  | 9  | 322,044   |
| 1962 | 129,538  | 37 | 166,141       | 47 | 18,875      | 5   | 4,003  | 1 | 31,897  | 9  | 350,454   |
| 1963 | 122,770  | 41 | 125,048       | 42 | 11,934      | 4   | 3,273  | 1 | 33,975  | 11 | 297,000   |
| 1964 | 103,413  | 30 | 167,137       | 49 | 29,012      | 9   | 4,924  | 1 | 36,272  | 11 | 340,758   |
| 1965 | 105,983  | 32 | 176,158       | 53 | 8,621       | 3   | 3,139  | 1 | 38,428  | 12 | 332,329   |
| 1966 | 148,090  | 33 | 241,722       | 53 | 16,913      | 4   | 5,320  | 1 | 41,415  | 9  | 453,460   |
| 1967 | 127,059  | 32 | 205,252       | 52 | 14,508      | 4   | 7,646  | 2 | 44,055  | 11 | 398,520   |
| 1968 | 118,992  | 32 | 183,982       | 50 | 15,143      | 4   | 4,734  | 1 | 47,547  | 13 | 370,398   |
| 1969 | 120,247  | 31 | 204,410       | 52 | 9,442       | 2   | 7,127  | 2 | 50,487  | 13 | 391,713   |
| 1970 | 139,939  | 31 | 226,510       | 50 | 20,912      | 5   | 8,025  | 2 | 56,835  | 13 | 452,221   |
| 1971 | 141,937  | 30 | 237,768       | 50 | 29,501      | 6   | 2,497  | 1 | 61,168  | 13 | 472,871   |
| 1972 | 158,651  | 31 | 230,732       | 46 | 34,292      | 7   | 7,200  | 1 | 74,546  | 15 | 505,421   |
| 1973 | 166,306  | 26 | 323,198       | 51 | 41,304      | 7   | 10,790 | 2 | 86,073  | 14 | 627,671   |
| 1974 | 145,133  | 22 | 365,751       | 56 | 36,661      | 6   | 7,606  | 1 | 95,328  | 15 | 650,479   |
| 1975 | 163,810  | 28 | 275,166       | 48 | 35,142      | 6   | 6,606  | 1 | 97,631  | 17 | 578,355   |
| 1976 | 197,461  | 28 | 375,742       | 52 | 47,006      | 7   | 7,363  | 1 | 89,178  | 12 | 716,750   |
| 1977 | 218,127  | 29 | 348,276       | 46 | 60,174      | 8   | 6,779  | 1 | 120,312 | 16 | 753,668   |
| 1978 | 211,797  | 27 | 404,263       | 51 | 58,476      | 7   | 11,107 | 1 | 111,007 | 14 | 796,650   |
| 1979 | 211,144  | 27 | 345,119       | 45 | 98,456      | 13  | 10,042 | 1 | 105,454 | 14 | 770,215   |
| 1980 | 227,212  | 27 | 392,023       | 47 | 120,469     | 14  | 9,991  | 1 | 85,538  | 10 | 835,233   |
| 1981 | 188,397  | 23 | 341,756       | 42 | 162,276     | 20  | 8,136  | 1 | 106,260 | 13 | 806,825   |
| 1982 | 177,297  | 21 | 309,009       | 36 | 254,335     | 30  | 10,642 | 1 | 106,674 | 12 | 857,957   |
| 1983 | 169,875  | 16 | 336,679       | 32 | 441,482     | 41  | 9,487  | 1 | 106,778 | 10 | 1,064,301 |
| 1984 | 156,608  | 14 | 422,417       | 37 | 456,134     | 40  | 12,157 | 1 | 99,541  | 9  | 1,146,857 |
| 1985 | 172,643  | 17 | 293,531       | 29 | 421,154     | 42  | 9,447  | 1 | 116,212 | 11 | 1,012,987 |
| 1986 | 163,988  | 14 | 366,454       | 32 | 486,709     | 43  | 12,462 | 1 | 114,302 | 10 | 1,143,915 |
| 1987 | 180,216  | 16 | 297,897       | 26 | 544,550     | 48  | 9,522  | 1 | 108,713 | 10 | 1,140,898 |
| 1988 | 198,814  | 16 | 325,719       | 26 | 604,480     | 48  | 14,924 | 1 | 123,800 | 10 | 1,267,737 |
| 1989 | 163,659  | 13 | 320,092       | 24 | 658,952     | 50  | 16,411 | 1 | 148,233 | 11 | 1,307,347 |
| 1990 | 183,905  | 13 | 255,678       | 18 | 795,108     | 56  | 16,463 | 1 | 172,294 | 12 | 1,423,448 |
| 1991 | 157,166  | 10 | 303,792       | 18 | 1,002,587   | 61  | 18,303 | 1 | 169,460 | 10 | 1,651,308 |
| 1992 | 193,449  | 12 | 258,438       | 16 | 1,015,024   | 62  | 17,008 | 1 | 156,755 | 10 | 1,640,674 |
| 1993 | 188,306  | 13 | 298,232       | 20 | 842,651     | 57  | 16,545 | 1 | 120,622 | 8  | 1,466,356 |
| 1994 | 209,460  | 13 | 278,421       | 17 | 960,324     | 60  | 15,499 | 1 | 144,210 | 9  | 1,607,914 |
| 1995 | 204,534  | 13 | 308,529       | 19 | 929,730     | 58  | 23,677 | 1 | 146,891 | 9  | 1,613,361 |
| 1996 | 194,573  | 13 | 272,330       | 18 | 876,498     | 58  | 18,743 | 1 | 159,483 | 10 | 1,521,627 |
| 1997 | 211,592  | 13 | 301,516       | 18 | 953,892     | 58  | 19,769 | 1 | 151,679 | 9  | 1,638,448 |
| 1998 | 236,225  | 12 | 331,199       | 16 | 1,238,475   | 62  | 19,866 | 1 | 183,781 | 9  | 2,009,546 |
| 1999 | 205,641  | 11 | 364,256       | 20 | 1,047,788   | 57  | 13,659 | 1 | 200,447 | 11 | 1,831,791 |
| 2000 | 224,956  | 12 | 326,157       | 17 | 1,099,009   | 58  | 25,877 | 1 | 211,796 | 11 | 1,887,795 |
| 2001 | 232,831  | 13 | 272,092       | 15 | 1,088,345   | 61  | 18,096 | 1 | 185,722 | 10 | 1,797,086 |
| 2002 | 252,349  | 13 | 289,758       | 15 | 1,205,831   | 61  | 16,431 | 1 | 205,795 | 10 | 1,970,164 |
| 2003 | 235,951  | 12 | 295,701       | 15 | 1,224,078   | 62  | 16,191 | 1 | 215,277 | 11 | 1,987,198 |
| 2004 | 225,786  | 11 | 297,515       | 15 | 1,263,161   | 62  | 15,510 | 1 | 219,801 | 11 | 2,021,773 |

**Table 3. Total catches of albacore in the Pacific Ocean.** Symbols: ‘-’ = no effort, hence no catch; ‘0’ = effort, but no catch. Estimates for 2004 are preliminary.

| YEAR | SOUTH PACIFIC OCEAN |               |       |        |          | NORTH PACIFIC OCEAN |               |        |        |          | TOTAL   |
|------|---------------------|---------------|-------|--------|----------|---------------------|---------------|--------|--------|----------|---------|
|      | LONGLINE            | POLE-AND-LINE | TROLL | OTHER  | SUBTOTAL | LONGLINE            | POLE-AND-LINE | TROLL  | OTHER  | SUBTOTAL |         |
| 1950 | -                   | ...           | -     | -      | -        | 16,740              | 12,863        | 32,746 | 5,835  | 68,184   | 68,184  |
| 1951 | -                   | ...           | -     | -      | -        | 11,408              | 14,500        | 15,629 | 6,577  | 48,114   | 48,114  |
| 1952 | 154                 | ...           | -     | -      | 154      | 26,733              | 41,787        | 23,914 | 1,764  | 94,198   | 94,352  |
| 1953 | 803                 | ...           | -     | -      | 803      | 27,800              | 32,921        | 15,745 | 341    | 76,807   | 77,610  |
| 1954 | 9,578               | ...           | -     | -      | 9,578    | 20,971              | 28,069        | 12,246 | 208    | 61,494   | 71,072  |
| 1955 | 8,625               | ...           | -     | -      | 8,625    | 16,286              | 24,236        | 13,264 | 721    | 54,507   | 63,132  |
| 1956 | 7,281               | ...           | -     | -      | 7,281    | 14,347              | 42,810        | 18,768 | 539    | 76,464   | 83,745  |
| 1957 | 8,757               | ...           | -     | -      | 8,757    | 21,057              | 49,500        | 21,173 | 538    | 92,268   | 101,025 |
| 1958 | 18,636              | ...           | -     | -      | 18,636   | 18,439              | 22,175        | 14,929 | 180    | 55,723   | 74,359  |
| 1959 | 17,841              | ...           | -     | -      | 17,841   | 15,807              | 14,252        | 21,202 | 67     | 51,328   | 69,169  |
| 1960 | 22,248              | 45            | -     | -      | 22,293   | 17,373              | 25,156        | 20,105 | 769    | 63,403   | 85,696  |
| 1961 | 23,742              | 0             | -     | -      | 23,742   | 17,442              | 21,476        | 12,059 | 1,631  | 52,608   | 76,350  |
| 1962 | 35,219              | 0             | -     | -      | 35,219   | 15,771              | 9,814         | 19,753 | 1,926  | 47,264   | 82,483  |
| 1963 | 31,095              | 16            | -     | -      | 31,111   | 13,471              | 28,852        | 25,145 | 1,438  | 68,906   | 100,017 |
| 1964 | 22,824              | 0             | -     | -      | 22,824   | 15,488              | 27,269        | 18,391 | 1,271  | 62,419   | 85,243  |
| 1965 | 25,455              | 0             | -     | -      | 25,455   | 13,965              | 41,908        | 16,557 | 863    | 73,293   | 98,748  |
| 1966 | 38,661              | 0             | -     | -      | 38,661   | 25,329              | 24,430        | 15,377 | 1,285  | 66,421   | 105,082 |
| 1967 | 43,952              | 0             | 5     | -      | 43,957   | 29,516              | 34,594        | 17,975 | 1,316  | 83,401   | 127,358 |
| 1968 | 32,368              | 0             | 14    | -      | 32,382   | 24,670              | 21,503        | 21,462 | 2,327  | 69,962   | 102,344 |
| 1969 | 24,805              | 0             | 0     | -      | 24,805   | 18,654              | 34,908        | 20,192 | 1,814  | 75,568   | 100,373 |
| 1970 | 34,734              | 100           | 50    | -      | 34,884   | 17,747              | 28,679        | 21,422 | 1,595  | 69,443   | 104,327 |
| 1971 | 38,519              | 100           | 0     | -      | 38,619   | 13,123              | 55,028        | 22,272 | 3,234  | 93,657   | 132,276 |
| 1972 | 39,122              | 122           | 268   | -      | 39,512   | 16,094              | 52,876        | 27,521 | 1,447  | 97,938   | 137,450 |
| 1973 | 46,699              | 141           | 484   | -      | 47,324   | 16,843              | 64,121        | 17,053 | 880    | 98,897   | 146,221 |
| 1974 | 33,033              | 812           | 898   | -      | 34,743   | 13,862              | 73,527        | 21,509 | 1,391  | 110,289  | 145,032 |
| 1975 | 22,844              | 105           | 646   | -      | 23,595   | 14,164              | 51,170        | 19,043 | 1,198  | 85,575   | 109,170 |
| 1976 | 28,952              | 100           | 25    | -      | 29,077   | 17,787              | 81,592        | 16,183 | 3,242  | 118,804  | 147,881 |
| 1977 | 38,014              | 100           | 621   | -      | 38,735   | 17,158              | 36,782        | 10,022 | 2,191  | 66,153   | 104,888 |
| 1978 | 32,888              | 100           | 1,686 | -      | 34,674   | 13,400              | 58,595        | 16,636 | 7,211  | 95,842   | 130,516 |
| 1979 | 26,157              | 100           | 814   | -      | 27,071   | 14,557              | 45,814        | 7,302  | 4,188  | 71,861   | 98,932  |
| 1980 | 30,967              | 101           | 1,468 | -      | 32,536   | 15,513              | 43,902        | 7,768  | 4,693  | 71,876   | 104,412 |
| 1981 | 32,693              | 0             | 2,085 | 5      | 34,783   | 18,557              | 26,983        | 12,837 | 11,476 | 69,853   | 104,636 |
| 1982 | 28,347              | 1             | 2,434 | 6      | 30,788   | 17,664              | 29,942        | 6,713  | 13,900 | 68,219   | 99,007  |
| 1983 | 24,309              | 0             | 744   | 39     | 25,092   | 15,988              | 20,604        | 9,584  | 7,572  | 53,748   | 78,840  |
| 1984 | 20,340              | 2             | 2,773 | 1,589  | 24,704   | 15,564              | 27,369        | 9,354  | 18,705 | 70,992   | 95,696  |
| 1985 | 27,138              | 0             | 3,253 | 1,937  | 32,328   | 14,564              | 22,844        | 6,471  | 14,850 | 58,729   | 91,057  |
| 1986 | 32,637              | 0             | 2,003 | 1,946  | 36,586   | 13,047              | 14,611        | 4,738  | 10,986 | 43,382   | 79,968  |
| 1987 | 21,969              | 9             | 2,134 | 930    | 25,042   | 15,285              | 19,423        | 2,870  | 11,715 | 49,293   | 74,335  |
| 1988 | 28,284              | 0             | 4,296 | 5,283  | 37,863   | 15,316              | 8,110         | 4,367  | 18,913 | 46,706   | 84,569  |
| 1989 | 18,224              | 0             | 8,370 | 21,968 | 48,562   | 13,878              | 11,262        | 2,000  | 19,512 | 46,652   | 95,214  |
| 1990 | 19,366              | 245           | 6,975 | 7,538  | 34,124   | 16,173              | 14,114        | 2,905  | 26,114 | 59,306   | 93,430  |
| 1991 | 23,385              | 14            | 7,805 | 1,489  | 32,693   | 17,498              | 6,563         | 1,984  | 11,657 | 37,702   | 70,395  |
| 1992 | 30,592              | 11            | 6,578 | 65     | 37,246   | 19,423              | 15,029        | 4,934  | 17,233 | 56,619   | 93,865  |
| 1993 | 30,230              | 74            | 4,296 | 70     | 34,670   | 30,549              | 12,845        | 6,748  | 2,870  | 53,012   | 87,682  |
| 1994 | 34,286              | 67            | 7,164 | 89     | 41,606   | 30,742              | 30,524        | 13,134 | 3,647  | 78,047   | 119,653 |
| 1995 | 29,380              | 139           | 7,708 | 104    | 37,331   | 32,877              | 23,084        | 10,758 | 1,801  | 68,520   | 105,851 |
| 1996 | 23,862              | 57            | 7,367 | 156    | 31,442   | 39,289              | 22,623        | 21,849 | 692    | 84,453   | 115,895 |
| 1997 | 27,178              | 21            | 4,679 | 133    | 32,011   | 47,893              | 35,115        | 18,674 | 2,715  | 104,397  | 136,408 |
| 1998 | 37,828              | 47            | 6,258 | 85     | 44,218   | 47,831              | 27,878        | 20,074 | 2,665  | 98,448   | 142,666 |
| 1999 | 31,939              | 138           | 3,391 | 74     | 35,542   | 46,061              | 55,044        | 13,672 | 10,808 | 125,585  | 161,127 |
| 2000 | 33,978              | 102           | 5,868 | 139    | 40,087   | 43,522              | 21,853        | 15,245 | 4,719  | 85,339   | 125,426 |
| 2001 | 47,506              | 37            | 5,568 | 199    | 53,310   | 41,126              | 29,411        | 16,738 | 2,990  | 90,265   | 143,575 |
| 2002 | 58,088              | 18            | 4,824 | 152    | 63,082   | 24,829              | 49,956        | 16,323 | 6,929  | 98,037   | 161,119 |
| 2003 | 56,280              | 12            | 5,164 | 138    | 61,594   | 28,112              | 34,778        | 24,886 | 4,942  | 92,718   | 154,312 |
| 2004 | 51,967              | 12            | 4,623 | 138    | 56,740   | 24,682              | 34,778        | 25,946 | 4,942  | 90,348   | 147,088 |

**Table 4. Total catches of bigeye in the Pacific Ocean.** Symbols: '...' = missing data; '-' = no effort, hence no catch; '0' = effort, but no catch.. Estimates for 2004 are preliminary.

| YEAR | WESTERN AND CENTRAL PACIFIC OCEAN |               |             |        |          | EASTERN PACIFIC OCEAN |               |             |       |          | TOTAL   |
|------|-----------------------------------|---------------|-------------|--------|----------|-----------------------|---------------|-------------|-------|----------|---------|
|      | LONGLINE                          | POLE-AND-LINE | PURSE SEINE | OTHER  | SUBTOTAL | LONGLINE              | POLE-AND-LINE | PURSE SEINE | OTHER | SUBTOTAL |         |
| 1950 | 18,244                            | 646           | ...         | ...    | 18,890   | ...                   | ...           | ...         | ...   | ...      | 18,890  |
| 1951 | 12,808                            | 729           | 1,095       | ...    | 14,632   | ...                   | ...           | ...         | ...   | ...      | 14,632  |
| 1952 | 24,355                            | 2,100         | 1,039       | ...    | 27,494   | ...                   | ...           | ...         | ...   | ...      | 27,494  |
| 1953 | 23,025                            | 2,400         | 619         | ...    | 26,044   | ...                   | ...           | ...         | ...   | ...      | 26,044  |
| 1954 | 16,204                            | 2,100         | 360         | ...    | 18,664   | 1,610                 | ...           | ...         | ...   | 1,610    | 20,274  |
| 1955 | 24,749                            | 4,000         | 285         | ...    | 29,034   | 1,810                 | ...           | ...         | ...   | 1,810    | 30,844  |
| 1956 | 28,342                            | 4,400         | 908         | ...    | 33,650   | 2,408                 | ...           | ...         | ...   | 2,408    | 36,058  |
| 1957 | 35,463                            | 5,200         | 49          | ...    | 40,712   | 9,698                 | ...           | ...         | ...   | 9,698    | 50,410  |
| 1958 | 44,390                            | 4,200         | 48          | ...    | 48,638   | 10,592                | ...           | ...         | ...   | 10,592   | 59,230  |
| 1959 | 39,789                            | 1,700         | 36          | ...    | 41,525   | 11,515                | 0             | 1           | ...   | 11,516   | 53,041  |
| 1960 | 42,147                            | 1,500         | 58          | ...    | 43,705   | 17,722                | 0             | 24          | ...   | 17,746   | 61,451  |
| 1961 | 36,135                            | 1,800         | 63          | ...    | 37,998   | 52,431                | 106           | 105         | -     | 52,642   | 90,640  |
| 1962 | 34,206                            | 800           | 173         | ...    | 35,179   | 45,050                | 318           | 302         | -     | 45,670   | 80,849  |
| 1963 | 40,727                            | 1,800         | 6           | ...    | 42,533   | 66,617                | 140           | ...         | -     | 66,757   | 109,290 |
| 1964 | 29,328                            | 1,100         | 231         | 0      | 30,659   | 46,279                | 127           | ...         | -     | 46,406   | 77,065  |
| 1965 | 28,388                            | 1,300         | 201         | 0      | 29,889   | 29,164                | 231           | ...         | -     | 29,395   | 59,284  |
| 1966 | 30,713                            | 1,100         | 9           | 0      | 31,822   | 34,800                | 292           | 210         | -     | 35,302   | 67,124  |
| 1967 | 31,392                            | 2,800         | 60          | 0      | 34,252   | 35,878                | 1,305         | 1,697       | -     | 38,880   | 73,132  |
| 1968 | 25,140                            | 2,300         | 183         | 0      | 27,623   | 35,233                | 116           | 4,618       | -     | 39,967   | 67,590  |
| 1969 | 30,045                            | 1,700         | 48          | 0      | 31,793   | 52,071                | 0             | 1,093       | -     | 53,164   | 84,957  |
| 1970 | 34,348                            | 1,600         | 726         | 2,756  | 39,430   | 33,341                | 0             | 2,410       | -     | 35,751   | 75,181  |
| 1971 | 36,798                            | 900           | 876         | 3,036  | 41,610   | 29,804                | 75            | 4,359       | 18    | 34,256   | 75,866  |
| 1972 | 49,334                            | 1,762         | 865         | 3,478  | 55,439   | 36,128                | 126           | 3,972       | -     | 40,226   | 95,665  |
| 1973 | 40,285                            | 1,258         | 1,078       | 4,160  | 46,781   | 50,777                | 236           | 3,342       | -     | 54,355   | 101,136 |
| 1974 | 41,787                            | 1,039         | 1,389       | 4,620  | 48,835   | 36,961                | 0             | 1,554       | -     | 38,515   | 87,350  |
| 1975 | 57,623                            | 1,334         | 1,328       | 4,743  | 65,028   | 41,733                | 36            | 6,574       | -     | 48,343   | 113,371 |
| 1976 | 68,514                            | 3,423         | 1,312       | 3,882  | 77,131   | 54,290                | 75            | 17,214      | 7     | 71,586   | 148,717 |
| 1977 | 66,249                            | 3,325         | 1,587       | 5,439  | 76,600   | 74,086                | 2             | 11,162      | -     | 85,250   | 161,850 |
| 1978 | 50,375                            | 3,337         | 1,151       | 3,699  | 58,562   | 70,659                | 0             | 18,539      | -     | 89,198   | 147,760 |
| 1979 | 57,186                            | 2,540         | 2,031       | 4,315  | 66,072   | 55,435                | 0             | 12,097      | 1     | 67,533   | 133,605 |
| 1980 | 56,520                            | 2,278         | 2,159       | 4,029  | 64,986   | 64,335                | 0             | 21,939      | 130   | 86,404   | 151,390 |
| 1981 | 41,564                            | 2,596         | 4,475       | 4,767  | 53,402   | 53,416                | 0             | 14,922      | 2     | 68,340   | 121,742 |
| 1982 | 45,204                            | 4,108         | 4,900       | 4,566  | 58,778   | 53,365                | 42            | 6,939       | 0     | 60,346   | 119,124 |
| 1983 | 41,412                            | 4,055         | 9,182       | 4,853  | 59,502   | 60,043                | 39            | 4,575       | 97    | 64,754   | 124,256 |
| 1984 | 46,429                            | 3,465         | 8,658       | 5,039  | 63,591   | 46,394                | 2             | 8,860       | 17    | 55,273   | 118,864 |
| 1985 | 51,261                            | 4,326         | 6,987       | 5,892  | 68,466   | 66,325                | 2             | 6,056       | 21    | 72,404   | 140,870 |
| 1986 | 46,741                            | 2,865         | 7,758       | 6,222  | 63,586   | 102,425               | 0             | 2,685       | 9     | 105,119  | 168,705 |
| 1987 | 59,133                            | 3,134         | 10,139      | 5,390  | 77,796   | 100,121               | 0             | 1,177       | 16    | 101,314  | 179,110 |
| 1988 | 48,934                            | 4,125         | 6,963       | 6,179  | 66,201   | 72,758                | 5             | 1,535       | 6     | 74,304   | 140,505 |
| 1989 | 52,854                            | 4,298         | 11,044      | 6,758  | 74,954   | 70,963                | 0             | 2,031       | 0     | 72,994   | 147,948 |
| 1990 | 65,229                            | 3,918         | 11,047      | 8,747  | 88,941   | 98,871                | 0             | 5,920       | 15    | 104,806  | 193,747 |
| 1991 | 46,027                            | 1,991         | 11,389      | 10,434 | 69,841   | 104,194               | 31            | 4,870       | 21    | 109,116  | 178,957 |
| 1992 | 61,825                            | 1,757         | 15,207      | 7,591  | 86,380   | 84,800                | 0             | 7,179       | 21    | 92,000   | 178,380 |
| 1993 | 55,905                            | 2,330         | 11,964      | 6,914  | 77,113   | 72,473                | 0             | 9,657       | 59    | 82,189   | 159,302 |
| 1994 | 63,371                            | 2,951         | 9,748       | 9,170  | 85,240   | 71,359                | 0             | 34,900      | 808   | 107,067  | 192,307 |
| 1995 | 53,290                            | 3,776         | 10,456      | 9,140  | 76,662   | 58,256                | 0             | 45,319      | 1,381 | 104,956  | 181,618 |
| 1996 | 43,550                            | 3,864         | 20,767      | 10,186 | 78,367   | 46,957                | 0             | 61,312      | 746   | 109,015  | 187,382 |
| 1997 | 57,800                            | 3,611         | 33,458      | 9,465  | 104,334  | 52,571                | 0             | 64,270      | 23    | 116,864  | 221,198 |
| 1998 | 74,076                            | 2,446         | 21,082      | 11,421 | 109,025  | 46,347                | 0             | 44,128      | 617   | 91,092   | 200,117 |
| 1999 | 65,281                            | 2,176         | 38,327      | 12,303 | 118,087  | 36,405                | 0             | 51,158      | 541   | 88,104   | 206,191 |
| 2000 | 61,078                            | 2,988         | 29,620      | 13,221 | 106,907  | 47,511                | 0             | 94,083      | 269   | 141,863  | 248,770 |
| 2001 | 63,884                            | 2,349         | 28,043      | 12,107 | 106,383  | 68,697                | 0             | 61,259      | 47    | 130,003  | 236,386 |
| 2002 | 78,761                            | 2,805         | 27,145      | 13,634 | 122,345  | 72,778                | 0             | 57,412      | 30    | 130,220  | 252,565 |
| 2003 | 70,600                            | 1,786         | 26,080      | 14,322 | 112,788  | 58,892                | 0             | 54,103      | 21    | 113,016  | 225,804 |
| 2004 | 75,014                            | 1,809         | 24,790      | 14,646 | 116,259  | 39,729                | 0             | 66,944      | 6     | 106,679  | 222,938 |

**Table 5. Total catches of skipjack in the Pacific Ocean.** Symbols: ‘...’ = missing data; ‘0’ = effort, but no catch. Estimates for 2004 are preliminary.

| YEAR | WESTERN AND CENTRAL PACIFIC OCEAN |               |             |        |           | EASTERN PACIFIC OCEAN |             |        |          | TOTAL     |
|------|-----------------------------------|---------------|-------------|--------|-----------|-----------------------|-------------|--------|----------|-----------|
|      | LONGLINE                          | POLE-AND-LINE | PURSE SEINE | OTHER  | SUBTOTAL  | POLE-AND-LINE         | PURSE SEINE | OTHER  | SUBTOTAL |           |
| 1950 | 34                                | 33,386        | ...         | 6,483  | 39,903    | 49,534                | 5,741       | 1,299  | 56,574   | 96,477    |
| 1951 | 12                                | 96,214        | 1,748       | 6,926  | 104,900   | 45,617                | 5,790       | 1,109  | 52,516   | 157,416   |
| 1952 | 54                                | 78,518        | 3,716       | 7,400  | 89,688    | 32,724                | 4,806       | 905    | 38,435   | 128,123   |
| 1953 | 1                                 | 65,546        | 3,371       | 7,908  | 76,826    | 50,812                | 5,171       | 0      | 55,983   | 132,809   |
| 1954 | 0                                 | 88,073        | 4,534       | 8,453  | 101,060   | 61,221                | 8,519       | 2      | 69,742   | 170,802   |
| 1955 | 157                               | 92,524        | 2,906       | 9,038  | 104,625   | 51,558                | 6,503       | 2      | 58,063   | 162,688   |
| 1956 | 0                                 | 91,950        | 2,145       | 9,666  | 103,761   | 64,971                | 3,204       | 0      | 68,175   | 171,936   |
| 1957 | 17                                | 92,156        | 2,813       | 10,339 | 105,325   | 54,414                | 873         | 13     | 55,300   | 160,625   |
| 1958 | 0                                 | 131,441       | 10,698      | 11,060 | 153,199   | 67,594                | 5,481       | 31     | 73,106   | 226,305   |
| 1959 | 33                                | 145,447       | 16,941      | 11,834 | 174,255   | 60,853                | 17,957      | 915    | 79,725   | 253,980   |
| 1960 | 0                                 | 70,428        | 3,728       | 12,663 | 86,819    | 28,929                | 16,649      | 481    | 46,059   | 132,878   |
| 1961 | 0                                 | 127,011       | 11,693      | 13,553 | 152,257   | 28,995                | 45,706      | 428    | 75,129   | 227,386   |
| 1962 | 4                                 | 152,387       | 11,674      | 14,509 | 178,574   | 17,660                | 58,939      | 503    | 77,102   | 255,676   |
| 1963 | 0                                 | 94,757        | 9,592       | 15,534 | 119,883   | 17,138                | 82,404      | 2,389  | 101,931  | 221,814   |
| 1964 | 5                                 | 137,106       | 25,006      | 16,634 | 178,751   | 10,306                | 51,759      | 3,609  | 65,674   | 244,425   |
| 1965 | 11                                | 129,933       | 4,657       | 17,815 | 152,416   | 19,867                | 64,056      | 1,046  | 84,969   | 237,385   |
| 1966 | 52                                | 215,600       | 10,949      | 19,083 | 245,684   | 14,083                | 50,264      | 1,960  | 66,307   | 311,991   |
| 1967 | 101                               | 168,846       | 10,931      | 20,444 | 200,322   | 18,016                | 104,928     | 5,041  | 127,985  | 328,307   |
| 1968 | 60                                | 162,379       | 7,587       | 21,907 | 191,933   | 7,339                 | 59,642      | 10,130 | 77,111   | 269,044   |
| 1969 | 148                               | 168,084       | 5,057       | 23,478 | 196,767   | 6,970                 | 46,019      | 11,917 | 64,906   | 261,673   |
| 1970 | 1,656                             | 197,873       | 10,585      | 25,488 | 235,602   | 7,470                 | 47,467      | 7,257  | 62,194   | 297,796   |
| 1971 | 1,491                             | 180,945       | 17,034      | 26,847 | 226,317   | 11,680                | 94,502      | 6,703  | 112,885  | 339,202   |
| 1972 | 1,545                             | 172,827       | 21,664      | 35,534 | 231,570   | 6,555                 | 29,804      | 1,144  | 37,503   | 269,073   |
| 1973 | 1,873                             | 253,217       | 23,299      | 40,083 | 318,472   | 9,135                 | 39,248      | 638    | 49,021   | 367,493   |
| 1974 | 2,113                             | 289,202       | 15,630      | 43,298 | 350,243   | 7,629                 | 79,416      | 510    | 87,555   | 437,798   |
| 1975 | 1,908                             | 218,271       | 18,409      | 44,530 | 283,118   | 13,848                | 120,358     | 527    | 134,733  | 417,851   |
| 1976 | 2,069                             | 276,582       | 28,495      | 44,159 | 351,305   | 11,256                | 124,958     | 713    | 136,927  | 488,232   |
| 1977 | 3,122                             | 294,641       | 40,085      | 59,274 | 397,122   | 7,521                 | 84,606      | 1,984  | 94,111   | 491,233   |
| 1978 | 3,235                             | 331,401       | 43,120      | 63,325 | 441,081   | 6,048                 | 172,293     | 1,334  | 179,675  | 620,756   |
| 1979 | 2,204                             | 285,859       | 65,069      | 52,202 | 405,334   | 6,345                 | 133,695     | 1,463  | 141,503  | 546,837   |
| 1980 | 638                               | 333,457       | 82,586      | 34,283 | 450,964   | 5,226                 | 130,912     | 1,971  | 138,109  | 589,073   |
| 1981 | 798                               | 294,292       | 94,889      | 40,587 | 430,566   | 5,906                 | 119,165     | 931    | 126,002  | 556,568   |
| 1982 | 1,066                             | 262,244       | 173,826     | 41,394 | 478,530   | 3,760                 | 100,498     | 411    | 104,669  | 583,199   |
| 1983 | 2,146                             | 299,762       | 323,235     | 44,387 | 669,530   | 4,387                 | 56,851      | 911    | 62,149   | 731,679   |
| 1984 | 874                               | 379,474       | 331,330     | 30,043 | 741,721   | 2,884                 | 59,859      | 870    | 63,613   | 805,334   |
| 1985 | 1,202                             | 250,010       | 308,047     | 35,929 | 595,188   | 946                   | 50,829      | 226    | 52,001   | 647,189   |
| 1986 | 1,463                             | 336,695       | 368,138     | 33,034 | 739,330   | 1,921                 | 65,635      | 192    | 67,748   | 807,078   |
| 1987 | 2,354                             | 262,466       | 375,079     | 35,188 | 675,087   | 2,233                 | 64,019      | 214    | 66,466   | 741,553   |
| 1988 | 1,973                             | 301,031       | 497,052     | 30,443 | 830,499   | 4,325                 | 87,113      | 689    | 92,127   | 922,626   |
| 1989 | 2,575                             | 289,706       | 482,785     | 33,909 | 808,975   | 2,941                 | 94,935      | 1,055  | 98,931   | 907,906   |
| 1990 | 1,294                             | 224,592       | 603,347     | 42,503 | 871,736   | 824                   | 74,370      | 1,926  | 77,120   | 948,856   |
| 1991 | 1,546                             | 282,397       | 769,631     | 44,092 | 1,097,666 | 1,717                 | 62,229      | 1,949  | 65,895   | 1,163,561 |
| 1992 | 1,155                             | 226,589       | 739,913     | 61,769 | 1,029,426 | 1,956                 | 84,283      | 1,115  | 87,354   | 1,116,780 |
| 1993 | 1,065                             | 270,671       | 588,595     | 44,559 | 904,890   | 3,772                 | 83,829      | 2,333  | 89,934   | 994,824   |
| 1994 | 1,499                             | 231,385       | 731,853     | 43,058 | 1,007,795 | 3,240                 | 70,127      | 799    | 74,166   | 1,081,961 |
| 1995 | 1,410                             | 266,736       | 729,736     | 45,934 | 1,043,816 | 5,253                 | 127,045     | 1,992  | 134,290  | 1,178,106 |
| 1996 | 4,692                             | 230,576       | 737,471     | 47,731 | 1,020,470 | 2,555                 | 103,976     | 1,563  | 108,094  | 1,128,564 |
| 1997 | 4,750                             | 250,685       | 665,579     | 46,147 | 967,161   | 3,260                 | 153,456     | 223    | 156,939  | 1,124,100 |
| 1998 | 4,870                             | 287,945       | 945,752     | 57,347 | 1,295,914 | 1,684                 | 140,631     | 296    | 142,611  | 1,438,525 |
| 1999 | 4,108                             | 293,269       | 791,740     | 62,028 | 1,151,145 | 2,044                 | 261,564     | 1,494  | 265,102  | 1,416,247 |
| 2000 | 5,468                             | 287,842       | 863,672     | 63,547 | 1,220,529 | 236                   | 205,240     | 73     | 205,549  | 1,426,078 |
| 2001 | 5,436                             | 228,336       | 844,981     | 52,430 | 1,131,183 | 570                   | 143,948     | 1,183  | 145,701  | 1,276,884 |
| 2002 | 4,080                             | 224,146       | 993,445     | 54,112 | 1,275,783 | 496                   | 153,633     | 212    | 154,341  | 1,430,124 |
| 2003 | 4,464                             | 247,291       | 982,892     | 56,120 | 1,290,767 | 416                   | 275,089     | 676    | 276,181  | 1,566,948 |
| 2004 | 4,615                             | 248,868       | 1,059,061   | 57,294 | 1,369,838 | 481                   | 196,911     | 43     | 197,435  | 1,567,273 |

**Table 6. Total catches of yellowfin in the Pacific Ocean.** Symbols: ‘...’ = missing data; ‘-’ = no effort, hence no catch; ‘0’ = effort, but no catch. Estimates for 2004 are preliminary.

| YEAR | WESTERN AND CENTRAL PACIFIC OCEAN |               |             |         |          | EASTERN PACIFIC OCEAN |               |             |       |          | TOTAL   |
|------|-----------------------------------|---------------|-------------|---------|----------|-----------------------|---------------|-------------|-------|----------|---------|
|      | LONGLINE                          | POLE-AND-LINE | PURSE SEINE | OTHER   | SUBTOTAL | LONGLINE              | POLE-AND-LINE | PURSE SEINE | OTHER | SUBTOTAL |         |
| 1950 | 12,844                            | 799           | ...         | 8,919   | 22,562   | -                     | 65,921        | 15,856      | 879   | 82,656   | 105,218 |
| 1951 | 8,862                             | 900           | 938         | 9,395   | 20,095   | -                     | 65,499        | 6,598       | 727   | 72,824   | 92,919  |
| 1952 | 17,453                            | 2,595         | 2,565       | 9,901   | 32,514   | -                     | 66,108        | 13,735      | 1,067 | 80,910   | 113,424 |
| 1953 | 23,139                            | 5,228         | 1,260       | 10,440  | 40,067   | -                     | 43,920        | 16,121      | ...   | 60,041   | 100,108 |
| 1954 | 22,662                            | 4,268         | 4,001       | 11,013  | 41,944   | 209                   | 46,541        | 7,625       | ...   | 54,375   | 96,319  |
| 1955 | 22,800                            | 3,983         | 2,944       | 11,624  | 41,351   | 427                   | 50,811        | 13,086      | ...   | 64,324   | 105,675 |
| 1956 | 25,336                            | 4,399         | 724         | 12,274  | 42,733   | 967                   | 58,828        | 21,470      | ...   | 81,265   | 123,998 |
| 1957 | 41,911                            | 1,669         | 1,496       | 12,967  | 58,043   | 5,854                 | 58,402        | 15,544      | ...   | 79,800   | 137,843 |
| 1958 | 41,804                            | 2,934         | 3,338       | 13,705  | 61,781   | 4,927                 | 46,776        | 20,560      | ...   | 72,263   | 134,044 |
| 1959 | 42,802                            | 4,119         | 4,316       | 14,495  | 65,732   | 3,437                 | 27,441        | 30,050      | 670   | 61,598   | 127,330 |
| 1960 | 53,617                            | 1,872         | 1,438       | 15,337  | 72,264   | 5,934                 | 22,151        | 79,425      | 458   | 107,968  | 180,232 |
| 1961 | 52,717                            | 3,259         | 2,777       | 16,236  | 74,989   | 12,500                | 15,220        | 80,058      | 949   | 108,727  | 183,716 |
| 1962 | 58,049                            | 4,225         | 6,975       | 17,197  | 86,446   | 10,211                | 11,052        | 56,271      | 706   | 78,240   | 164,686 |
| 1963 | 55,673                            | 2,071         | 2,277       | 18,223  | 78,244   | 18,973                | 7,041         | 48,004      | 688   | 74,706   | 152,950 |
| 1964 | 47,994                            | 5,073         | 3,647       | 19,319  | 76,033   | 16,975                | 3,989         | 78,318      | 738   | 100,020  | 176,053 |
| 1965 | 49,232                            | 3,434         | 3,752       | 20,492  | 76,910   | 15,620                | 6,983         | 65,348      | 312   | 88,263   | 165,173 |
| 1966 | 65,942                            | 2,192         | 5,844       | 21,747  | 95,725   | 9,097                 | 5,302         | 68,982      | 507   | 83,888   | 179,613 |
| 1967 | 36,436                            | 3,125         | 3,428       | 23,091  | 66,080   | 9,286                 | 4,511         | 65,441      | 1,491 | 80,729   | 146,809 |
| 1968 | 46,969                            | 2,706         | 7,106       | 24,531  | 81,312   | 14,986                | 4,306         | 86,541      | 3,223 | 109,056  | 190,368 |
| 1969 | 51,684                            | 2,714         | 3,857       | 26,074  | 84,329   | 15,329                | 7,194         | 113,664     | 1,869 | 138,056  | 222,385 |
| 1970 | 55,481                            | 2,674         | 9,322       | 28,135  | 95,612   | 12,643                | 4,260         | 139,386     | 4,856 | 161,145  | 256,757 |
| 1971 | 56,927                            | 2,866         | 10,840      | 30,977  | 101,610  | 8,013                 | 5,301         | 104,863     | 2,496 | 120,673  | 222,283 |
| 1972 | 60,251                            | 7,465         | 11,759      | 34,910  | 114,385  | 16,859                | 6,059         | 164,297     | 1,060 | 188,275  | 302,660 |
| 1973 | 61,818                            | 7,458         | 16,900      | 41,296  | 127,472  | 11,697                | 3,933         | 194,200     | 659   | 210,489  | 337,961 |
| 1974 | 57,490                            | 6,582         | 19,574      | 46,307  | 129,953  | 7,190                 | 8,188         | 191,625     | 1,230 | 208,233  | 338,186 |
| 1975 | 68,416                            | 7,801         | 15,386      | 47,964  | 139,567  | 10,640                | 5,630         | 183,029     | 568   | 199,867  | 339,434 |
| 1976 | 76,363                            | 17,186        | 17,076      | 39,795  | 150,420  | 15,632                | 3,280         | 215,106     | 353   | 234,371  | 384,791 |
| 1977 | 92,680                            | 15,257        | 18,493      | 54,556  | 180,986  | 12,355                | 1,841         | 184,922     | 263   | 199,381  | 380,367 |
| 1978 | 108,555                           | 12,767        | 14,202      | 37,876  | 173,400  | 10,188                | 3,887         | 158,800     | 1,120 | 173,995  | 347,395 |
| 1979 | 105,065                           | 11,638        | 31,353      | 44,955  | 193,011  | 11,473                | 4,790         | 170,648     | 225   | 187,136  | 380,147 |
| 1980 | 119,942                           | 13,168        | 35,702      | 43,055  | 211,867  | 13,477                | 1,480         | 143,042     | 849   | 158,848  | 370,715 |
| 1981 | 93,125                            | 19,269        | 62,715      | 49,874  | 224,983  | 7,999                 | 1,477         | 168,235     | 805   | 178,516  | 403,499 |
| 1982 | 84,014                            | 13,835        | 75,340      | 47,644  | 220,833  | 10,961                | 1,538         | 114,754     | 283   | 127,536  | 348,369 |
| 1983 | 83,662                            | 13,266        | 109,061     | 50,296  | 256,285  | 10,894                | 4,007         | 83,928      | 1,182 | 100,011  | 356,296 |
| 1984 | 70,258                            | 13,558        | 115,710     | 52,855  | 252,381  | 10,345                | 2,991         | 135,785     | 357   | 149,478  | 401,859 |
| 1985 | 73,818                            | 18,156        | 105,977     | 60,369  | 258,320  | 13,198                | 1,069         | 211,460     | 308   | 226,035  | 484,355 |
| 1986 | 62,609                            | 13,074        | 110,316     | 63,935  | 249,934  | 22,807                | 2,537         | 260,512     | 293   | 286,149  | 536,083 |
| 1987 | 73,975                            | 13,243        | 159,103     | 57,021  | 303,342  | 18,911                | 5,107         | 262,007     | 335   | 286,360  | 589,702 |
| 1988 | 84,169                            | 13,433        | 100,426     | 64,282  | 262,310  | 14,659                | 3,723         | 277,293     | 958   | 296,633  | 558,943 |
| 1989 | 65,089                            | 15,169        | 164,892     | 68,395  | 313,545  | 17,032                | 4,145         | 277,995     | 564   | 299,736  | 613,281 |
| 1990 | 71,098                            | 13,103        | 180,559     | 89,476  | 354,236  | 34,634                | 2,675         | 263,251     | 1,724 | 302,284  | 656,520 |
| 1991 | 57,368                            | 12,921        | 221,288     | 105,402 | 396,979  | 30,729                | 2,856         | 231,257     | 1,247 | 266,089  | 663,068 |
| 1992 | 69,961                            | 15,225        | 259,615     | 74,945  | 419,746  | 18,526                | 3,789         | 228,121     | 3,276 | 253,712  | 673,458 |
| 1993 | 64,493                            | 12,698        | 242,069     | 67,925  | 387,185  | 23,808                | 4,950         | 219,494     | 3,700 | 251,952  | 639,137 |
| 1994 | 70,629                            | 13,742        | 218,639     | 90,831  | 393,841  | 29,545                | 3,625         | 208,409     | 1,978 | 243,557  | 637,398 |
| 1995 | 78,596                            | 15,050        | 189,359     | 91,350  | 374,355  | 20,054                | 1,268         | 215,434     | 2,570 | 239,326  | 613,681 |
| 1996 | 74,467                            | 15,492        | 118,260     | 101,177 | 309,396  | 16,426                | 3,761         | 238,606     | 1,356 | 260,149  | 569,545 |
| 1997 | 68,061                            | 12,362        | 254,854     | 95,452  | 430,729  | 21,448                | 4,418         | 244,878     | 2,004 | 272,748  | 703,477 |
| 1998 | 63,664                            | 13,110        | 271,583     | 114,634 | 462,991  | 14,196                | 5,084         | 253,959     | 2,183 | 275,422  | 738,413 |
| 1999 | 58,861                            | 13,817        | 217,720     | 125,626 | 416,024  | 10,642                | 1,783         | 281,920     | 3,617 | 297,962  | 713,986 |
| 2000 | 74,865                            | 13,745        | 205,717     | 134,651 | 428,978  | 22,766                | 2,386         | 254,988     | 2,029 | 282,169  | 711,147 |
| 2001 | 71,443                            | 12,163        | 215,321     | 120,773 | 419,700  | 28,482                | 3,785         | 382,402     | 1,205 | 415,874  | 835,574 |
| 2002 | 70,974                            | 13,357        | 184,241     | 137,430 | 406,002  | 22,437                | 954           | 412,285     | 773   | 436,449  | 842,451 |
| 2003 | 71,294                            | 12,039        | 215,106     | 144,562 | 443,001  | 22,192                | 478           | 380,523     | 2,071 | 405,264  | 848,265 |
| 2004 | 68,349                            | 12,253        | 179,310     | 147,597 | 407,509  | 2,041                 | 1,905         | 268,356     | 1,442 | 273,744  | 681,253 |

**Table 7. Total catches of albacore, bigeye, skipjack and yellowfin in the WCPO.**  
Estimates for 2004 are preliminary.

| YEAR | ALBACORE |    | BIGEYE  |    | SKIPJACK  |    | YELLOWFIN |    | TOTAL     |
|------|----------|----|---------|----|-----------|----|-----------|----|-----------|
|      | TONNES   | %  | TONNES  | %  | TONNES    | %  | TONNES    | %  |           |
| 1950 | 29,603   | 27 | 18,890  | 17 | 39,903    | 36 | 22,562    | 20 | 110,958   |
| 1951 | 25,908   | 16 | 14,632  | 9  | 104,900   | 63 | 20,095    | 12 | 165,535   |
| 1952 | 64,564   | 30 | 27,494  | 13 | 89,688    | 42 | 32,514    | 15 | 214,260   |
| 1953 | 56,718   | 28 | 26,044  | 13 | 76,826    | 38 | 40,067    | 20 | 199,655   |
| 1954 | 54,007   | 25 | 18,664  | 9  | 101,060   | 47 | 41,944    | 19 | 215,675   |
| 1955 | 45,568   | 21 | 29,034  | 13 | 104,625   | 47 | 41,351    | 19 | 220,578   |
| 1956 | 61,102   | 25 | 33,650  | 14 | 103,761   | 43 | 42,733    | 18 | 241,246   |
| 1957 | 73,851   | 27 | 40,712  | 15 | 105,325   | 38 | 58,043    | 21 | 277,931   |
| 1958 | 52,009   | 16 | 48,638  | 15 | 153,199   | 49 | 61,781    | 20 | 315,627   |
| 1959 | 40,954   | 13 | 41,525  | 13 | 174,255   | 54 | 65,732    | 20 | 322,466   |
| 1960 | 56,608   | 22 | 43,705  | 17 | 86,819    | 33 | 72,264    | 28 | 259,396   |
| 1961 | 51,513   | 16 | 37,998  | 12 | 152,257   | 48 | 74,989    | 24 | 316,757   |
| 1962 | 46,252   | 13 | 35,179  | 10 | 178,574   | 52 | 86,446    | 25 | 346,451   |
| 1963 | 53,067   | 18 | 42,533  | 14 | 119,883   | 41 | 78,244    | 27 | 293,727   |
| 1964 | 50,339   | 15 | 30,659  | 9  | 178,751   | 53 | 76,033    | 23 | 335,782   |
| 1965 | 69,954   | 21 | 29,889  | 9  | 152,416   | 46 | 76,910    | 23 | 329,169   |
| 1966 | 74,739   | 17 | 31,822  | 7  | 245,684   | 55 | 95,725    | 21 | 447,970   |
| 1967 | 85,579   | 22 | 34,252  | 9  | 200,322   | 52 | 66,080    | 17 | 386,233   |
| 1968 | 60,897   | 17 | 27,623  | 8  | 191,933   | 53 | 81,312    | 22 | 361,765   |
| 1969 | 70,267   | 18 | 31,793  | 8  | 196,767   | 51 | 84,329    | 22 | 383,156   |
| 1970 | 69,793   | 16 | 39,430  | 9  | 235,602   | 53 | 95,612    | 22 | 440,437   |
| 1971 | 93,790   | 20 | 41,610  | 9  | 226,317   | 49 | 101,610   | 22 | 463,327   |
| 1972 | 91,486   | 19 | 55,439  | 11 | 231,570   | 47 | 114,385   | 23 | 492,880   |
| 1973 | 120,406  | 20 | 46,781  | 8  | 318,472   | 52 | 127,472   | 21 | 613,131   |
| 1974 | 107,877  | 17 | 48,835  | 8  | 350,243   | 55 | 129,953   | 20 | 636,908   |
| 1975 | 78,958   | 14 | 65,028  | 11 | 283,118   | 50 | 139,567   | 25 | 566,671   |
| 1976 | 123,171  | 18 | 77,131  | 11 | 351,305   | 50 | 150,420   | 21 | 702,027   |
| 1977 | 81,478   | 11 | 76,600  | 10 | 397,122   | 54 | 180,986   | 25 | 736,186   |
| 1978 | 101,146  | 13 | 58,562  | 8  | 441,081   | 57 | 173,400   | 22 | 774,189   |
| 1979 | 84,941   | 11 | 66,072  | 9  | 405,334   | 54 | 193,011   | 26 | 749,358   |
| 1980 | 90,052   | 11 | 64,986  | 8  | 450,964   | 55 | 211,867   | 26 | 817,869   |
| 1981 | 84,312   | 11 | 53,402  | 7  | 430,566   | 54 | 224,983   | 28 | 793,263   |
| 1982 | 85,301   | 10 | 58,778  | 7  | 478,530   | 57 | 220,833   | 26 | 843,442   |
| 1983 | 61,982   | 6  | 59,502  | 6  | 669,530   | 64 | 256,285   | 24 | 1,047,299 |
| 1984 | 70,451   | 6  | 63,591  | 6  | 741,721   | 66 | 252,381   | 22 | 1,128,144 |
| 1985 | 75,310   | 8  | 68,466  | 7  | 595,188   | 60 | 258,320   | 26 | 997,284   |
| 1986 | 68,421   | 6  | 63,586  | 6  | 739,330   | 66 | 249,934   | 22 | 1,121,271 |
| 1987 | 62,851   | 6  | 77,796  | 7  | 675,087   | 60 | 303,342   | 27 | 1,119,076 |
| 1988 | 70,260   | 6  | 66,201  | 5  | 830,499   | 68 | 262,310   | 21 | 1,229,270 |
| 1989 | 84,738   | 7  | 74,954  | 6  | 808,975   | 63 | 313,545   | 24 | 1,282,212 |
| 1990 | 81,726   | 6  | 88,941  | 6  | 871,736   | 62 | 354,236   | 25 | 1,396,639 |
| 1991 | 57,367   | 4  | 69,841  | 4  | 1,097,666 | 68 | 396,979   | 24 | 1,621,853 |
| 1992 | 67,487   | 4  | 86,380  | 5  | 1,029,426 | 64 | 419,746   | 26 | 1,603,039 |
| 1993 | 68,267   | 5  | 77,113  | 5  | 904,890   | 63 | 387,185   | 27 | 1,437,455 |
| 1994 | 93,888   | 6  | 85,240  | 5  | 1,007,795 | 64 | 393,841   | 25 | 1,580,764 |
| 1995 | 91,176   | 6  | 76,662  | 5  | 1,043,816 | 66 | 374,355   | 24 | 1,586,009 |
| 1996 | 91,328   | 6  | 78,367  | 5  | 1,020,470 | 68 | 309,396   | 21 | 1,499,561 |
| 1997 | 112,344  | 7  | 104,334 | 6  | 967,161   | 60 | 430,729   | 27 | 1,614,568 |
| 1998 | 111,028  | 6  | 109,025 | 6  | 1,295,914 | 65 | 462,991   | 23 | 1,978,958 |
| 1999 | 124,679  | 7  | 118,087 | 7  | 1,151,145 | 64 | 416,024   | 23 | 1,809,935 |
| 2000 | 95,203   | 5  | 106,907 | 6  | 1,220,529 | 66 | 428,978   | 23 | 1,851,617 |
| 2001 | 110,839  | 6  | 106,383 | 6  | 1,131,183 | 64 | 419,700   | 24 | 1,768,105 |
| 2002 | 136,504  | 7  | 122,345 | 6  | 1,275,783 | 66 | 406,002   | 21 | 1,940,634 |
| 2003 | 111,873  | 6  | 112,788 | 6  | 1,290,767 | 66 | 443,001   | 23 | 1,958,429 |
| 2004 | 100,897  | 5  | 116,259 | 6  | 1,369,838 | 69 | 407,509   | 20 | 1,994,503 |

**Table 8. Total catches of albacore, bigeye, skipjack and yellowfin in the EPO.**

Symbols: '...' = missing data. Estimates for 2004 are preliminary.

| YEAR | ALBACORE |    | BIGEYE  |     | SKIPJACK |    | YELLOWFIN |    | TOTAL   |
|------|----------|----|---------|-----|----------|----|-----------|----|---------|
|      | TONNES   | %  | TONNES  | %   | TONNES   | %  | TONNES    | %  |         |
| 1950 | 32,746   | 19 | ...     | ... | 56,574   | 33 | 82,656    | 48 | 171,976 |
| 1951 | 15,629   | 11 | ...     | ... | 52,516   | 37 | 72,824    | 52 | 140,969 |
| 1952 | 25,216   | 17 | ...     | ... | 38,435   | 27 | 80,910    | 56 | 144,561 |
| 1953 | 15,911   | 12 | ...     | ... | 55,983   | 42 | 60,041    | 46 | 131,935 |
| 1954 | 12,393   | 9  | 1,610   | 1   | 69,742   | 50 | 54,375    | 39 | 138,120 |
| 1955 | 13,841   | 10 | 1,810   | 1   | 58,063   | 42 | 64,324    | 47 | 138,038 |
| 1956 | 19,234   | 11 | 2,408   | 1   | 68,175   | 40 | 81,265    | 48 | 171,082 |
| 1957 | 21,471   | 13 | 9,698   | 6   | 55,300   | 33 | 79,800    | 48 | 166,269 |
| 1958 | 14,904   | 9  | 10,592  | 6   | 73,106   | 43 | 72,263    | 42 | 170,865 |
| 1959 | 21,024   | 12 | 11,516  | 7   | 79,725   | 46 | 61,598    | 35 | 173,863 |
| 1960 | 23,292   | 12 | 17,746  | 9   | 46,059   | 24 | 107,968   | 55 | 195,065 |
| 1961 | 15,862   | 6  | 52,642  | 21  | 75,129   | 30 | 108,727   | 43 | 252,360 |
| 1962 | 22,659   | 10 | 45,670  | 20  | 77,102   | 34 | 78,240    | 35 | 223,671 |
| 1963 | 29,799   | 11 | 66,757  | 24  | 101,931  | 37 | 74,706    | 27 | 273,193 |
| 1964 | 22,586   | 10 | 46,406  | 20  | 65,674   | 28 | 100,020   | 43 | 234,686 |
| 1965 | 17,939   | 8  | 29,395  | 13  | 84,969   | 39 | 88,263    | 40 | 220,566 |
| 1966 | 17,938   | 9  | 35,302  | 17  | 66,307   | 33 | 83,888    | 41 | 203,435 |
| 1967 | 22,524   | 8  | 38,880  | 14  | 127,985  | 47 | 80,729    | 30 | 270,118 |
| 1968 | 26,249   | 10 | 39,967  | 16  | 77,111   | 31 | 109,056   | 43 | 252,383 |
| 1969 | 22,646   | 8  | 53,164  | 19  | 64,906   | 23 | 138,056   | 50 | 278,772 |
| 1970 | 26,809   | 9  | 35,751  | 13  | 62,194   | 22 | 161,145   | 56 | 285,899 |
| 1971 | 24,517   | 8  | 34,256  | 12  | 112,885  | 39 | 120,673   | 41 | 292,331 |
| 1972 | 29,548   | 10 | 40,226  | 14  | 37,503   | 13 | 188,275   | 64 | 295,552 |
| 1973 | 18,763   | 6  | 54,355  | 16  | 49,021   | 15 | 210,489   | 63 | 332,628 |
| 1974 | 25,257   | 7  | 38,515  | 11  | 87,555   | 24 | 208,233   | 58 | 359,560 |
| 1975 | 23,051   | 6  | 48,343  | 12  | 134,733  | 33 | 199,867   | 49 | 405,994 |
| 1976 | 20,577   | 4  | 71,586  | 15  | 136,927  | 30 | 234,371   | 51 | 463,461 |
| 1977 | 13,455   | 3  | 85,250  | 22  | 94,111   | 24 | 199,381   | 51 | 392,197 |
| 1978 | 19,961   | 4  | 89,198  | 19  | 179,675  | 39 | 173,995   | 38 | 462,829 |
| 1979 | 6,777    | 2  | 67,533  | 17  | 141,503  | 35 | 187,136   | 46 | 402,949 |
| 1980 | 7,451    | 2  | 86,404  | 22  | 138,109  | 35 | 158,848   | 41 | 390,812 |
| 1981 | 15,525   | 4  | 68,340  | 18  | 126,002  | 32 | 178,516   | 46 | 388,383 |
| 1982 | 6,441    | 2  | 60,346  | 20  | 104,669  | 35 | 127,536   | 43 | 298,992 |
| 1983 | 9,905    | 4  | 64,754  | 27  | 62,149   | 26 | 100,011   | 42 | 236,819 |
| 1984 | 17,766   | 6  | 55,273  | 19  | 63,613   | 22 | 149,478   | 52 | 286,130 |
| 1985 | 8,750    | 2  | 72,404  | 20  | 52,001   | 14 | 226,035   | 63 | 359,190 |
| 1986 | 5,378    | 1  | 105,119 | 23  | 67,748   | 15 | 286,149   | 62 | 464,394 |
| 1987 | 3,907    | 1  | 101,314 | 22  | 66,466   | 15 | 286,360   | 63 | 458,047 |
| 1988 | 5,447    | 1  | 74,304  | 16  | 92,127   | 20 | 296,633   | 63 | 468,511 |
| 1989 | 3,002    | 1  | 72,994  | 15  | 98,931   | 21 | 299,736   | 63 | 474,663 |
| 1990 | 3,842    | 1  | 104,806 | 21  | 77,120   | 16 | 302,284   | 62 | 488,052 |
| 1991 | 4,157    | 1  | 109,116 | 25  | 65,895   | 15 | 266,089   | 60 | 445,257 |
| 1992 | 6,268    | 1  | 92,000  | 21  | 87,354   | 20 | 253,712   | 58 | 439,334 |
| 1993 | 6,013    | 1  | 82,189  | 19  | 89,934   | 21 | 251,952   | 59 | 430,088 |
| 1994 | 12,105   | 3  | 107,067 | 25  | 74,166   | 17 | 243,557   | 56 | 436,895 |
| 1995 | 9,589    | 2  | 104,956 | 22  | 134,290  | 28 | 239,326   | 49 | 488,161 |
| 1996 | 11,328   | 2  | 109,015 | 22  | 108,094  | 22 | 260,149   | 53 | 488,586 |
| 1997 | 11,003   | 2  | 116,864 | 21  | 156,939  | 28 | 272,748   | 49 | 557,554 |
| 1998 | 16,715   | 3  | 91,092  | 17  | 142,611  | 27 | 275,422   | 52 | 525,840 |
| 1999 | 19,310   | 3  | 88,104  | 13  | 265,102  | 40 | 297,962   | 44 | 670,478 |
| 2000 | 15,408   | 2  | 141,863 | 22  | 205,549  | 32 | 282,169   | 44 | 644,989 |
| 2001 | 21,049   | 3  | 130,003 | 18  | 145,701  | 20 | 415,874   | 58 | 712,627 |
| 2002 | 17,213   | 2  | 130,220 | 18  | 154,341  | 21 | 436,449   | 59 | 738,223 |
| 2003 | 27,024   | 3  | 113,016 | 14  | 276,181  | 34 | 405,264   | 49 | 821,485 |
| 2004 | 10,413   | 2  | 106,679 | 18  | 197,435  | 34 | 273,744   | 47 | 588,271 |

**Table 9. Total catches of albacore, bigeye, skipjack and yellowfin in the Pacific Ocean.** Estimates for 2004 are preliminary.

| YEAR | ALBACORE |    | BIGEYE  |    | SKIPJACK  |    | YELLOWFIN |    | TOTAL     |
|------|----------|----|---------|----|-----------|----|-----------|----|-----------|
|      | TONNES   | %  | TONNES  | %  | TONNES    | %  | TONNES    | %  |           |
| 1950 | 62,349   | 22 | 18,890  | 7  | 96,477    | 34 | 105,218   | 37 | 282,934   |
| 1951 | 41,537   | 14 | 14,632  | 5  | 157,416   | 51 | 92,919    | 30 | 306,504   |
| 1952 | 89,780   | 25 | 27,494  | 8  | 128,123   | 36 | 113,424   | 32 | 358,821   |
| 1953 | 72,629   | 22 | 26,044  | 8  | 132,809   | 40 | 100,108   | 30 | 331,590   |
| 1954 | 66,400   | 19 | 20,274  | 6  | 170,802   | 48 | 96,319    | 27 | 353,795   |
| 1955 | 59,409   | 17 | 30,844  | 9  | 162,688   | 45 | 105,675   | 29 | 358,616   |
| 1956 | 80,336   | 19 | 36,058  | 9  | 171,936   | 42 | 123,998   | 30 | 412,328   |
| 1957 | 95,322   | 21 | 50,410  | 11 | 160,625   | 36 | 137,843   | 31 | 444,200   |
| 1958 | 66,913   | 14 | 59,230  | 12 | 226,305   | 47 | 134,044   | 28 | 486,492   |
| 1959 | 61,978   | 12 | 53,041  | 11 | 253,980   | 51 | 127,330   | 26 | 496,329   |
| 1960 | 79,900   | 18 | 61,451  | 14 | 132,878   | 29 | 180,232   | 40 | 454,461   |
| 1961 | 67,375   | 12 | 90,640  | 16 | 227,386   | 40 | 183,716   | 32 | 569,117   |
| 1962 | 68,911   | 12 | 80,849  | 14 | 255,676   | 45 | 164,686   | 29 | 570,122   |
| 1963 | 82,866   | 15 | 109,290 | 19 | 221,814   | 39 | 152,950   | 27 | 566,920   |
| 1964 | 72,925   | 13 | 77,065  | 14 | 244,425   | 43 | 176,053   | 31 | 570,468   |
| 1965 | 87,893   | 16 | 59,284  | 11 | 237,385   | 43 | 165,173   | 30 | 549,735   |
| 1966 | 92,677   | 14 | 67,124  | 10 | 311,991   | 48 | 179,613   | 28 | 651,405   |
| 1967 | 108,103  | 16 | 73,132  | 11 | 328,307   | 50 | 146,809   | 22 | 656,351   |
| 1968 | 87,146   | 14 | 67,590  | 11 | 269,044   | 44 | 190,368   | 31 | 614,148   |
| 1969 | 92,913   | 14 | 84,957  | 13 | 261,673   | 40 | 222,385   | 34 | 661,928   |
| 1970 | 96,602   | 13 | 75,181  | 10 | 297,796   | 41 | 256,757   | 35 | 726,336   |
| 1971 | 118,307  | 16 | 75,866  | 10 | 339,202   | 45 | 222,283   | 29 | 755,658   |
| 1972 | 121,034  | 15 | 95,665  | 12 | 269,073   | 34 | 302,660   | 38 | 788,432   |
| 1973 | 139,169  | 15 | 101,136 | 11 | 367,493   | 39 | 337,961   | 36 | 945,759   |
| 1974 | 133,134  | 13 | 87,350  | 9  | 437,798   | 44 | 338,186   | 34 | 996,468   |
| 1975 | 102,009  | 10 | 113,371 | 12 | 417,851   | 43 | 339,434   | 35 | 972,665   |
| 1976 | 143,748  | 12 | 148,717 | 13 | 488,232   | 42 | 384,791   | 33 | 1,165,488 |
| 1977 | 94,933   | 8  | 161,850 | 14 | 491,233   | 44 | 380,367   | 34 | 1,128,383 |
| 1978 | 121,107  | 10 | 147,760 | 12 | 620,756   | 50 | 347,395   | 28 | 1,237,018 |
| 1979 | 91,718   | 8  | 133,605 | 12 | 546,837   | 47 | 380,147   | 33 | 1,152,307 |
| 1980 | 97,503   | 8  | 151,390 | 13 | 589,073   | 49 | 370,715   | 31 | 1,208,681 |
| 1981 | 99,837   | 8  | 121,742 | 10 | 556,568   | 47 | 403,499   | 34 | 1,181,646 |
| 1982 | 91,742   | 8  | 119,124 | 10 | 583,199   | 51 | 348,369   | 30 | 1,142,434 |
| 1983 | 71,887   | 6  | 124,256 | 10 | 731,679   | 57 | 356,296   | 28 | 1,284,118 |
| 1984 | 88,217   | 6  | 118,864 | 8  | 805,334   | 57 | 401,859   | 28 | 1,414,274 |
| 1985 | 84,060   | 6  | 140,870 | 10 | 647,189   | 48 | 484,355   | 36 | 1,356,474 |
| 1986 | 73,799   | 5  | 168,705 | 11 | 807,078   | 51 | 536,083   | 34 | 1,585,665 |
| 1987 | 66,758   | 4  | 179,110 | 11 | 741,553   | 47 | 589,702   | 37 | 1,577,123 |
| 1988 | 75,707   | 4  | 140,505 | 8  | 922,626   | 54 | 558,943   | 33 | 1,697,781 |
| 1989 | 87,740   | 5  | 147,948 | 8  | 907,906   | 52 | 613,281   | 35 | 1,756,875 |
| 1990 | 85,568   | 5  | 193,747 | 10 | 948,856   | 50 | 656,520   | 35 | 1,884,691 |
| 1991 | 61,524   | 3  | 178,957 | 9  | 1,163,561 | 56 | 663,068   | 32 | 2,067,110 |
| 1992 | 73,755   | 4  | 178,380 | 9  | 1,116,780 | 55 | 673,458   | 33 | 2,042,373 |
| 1993 | 74,280   | 4  | 159,302 | 9  | 994,824   | 53 | 639,137   | 34 | 1,867,543 |
| 1994 | 105,993  | 5  | 192,307 | 10 | 1,081,961 | 54 | 637,398   | 32 | 2,017,659 |
| 1995 | 100,765  | 5  | 181,618 | 9  | 1,178,106 | 57 | 613,681   | 30 | 2,074,170 |
| 1996 | 102,656  | 5  | 187,382 | 9  | 1,128,564 | 57 | 569,545   | 29 | 1,988,147 |
| 1997 | 123,347  | 6  | 221,198 | 10 | 1,124,100 | 52 | 703,477   | 32 | 2,172,122 |
| 1998 | 127,743  | 5  | 200,117 | 8  | 1,438,525 | 57 | 738,413   | 29 | 2,504,798 |
| 1999 | 143,989  | 6  | 206,191 | 8  | 1,416,247 | 57 | 713,986   | 29 | 2,480,413 |
| 2000 | 110,611  | 4  | 248,770 | 10 | 1,426,078 | 57 | 711,147   | 28 | 2,496,606 |
| 2001 | 131,888  | 5  | 236,386 | 10 | 1,276,884 | 51 | 835,574   | 34 | 2,480,732 |
| 2002 | 153,717  | 6  | 252,565 | 9  | 1,430,124 | 53 | 842,451   | 31 | 2,678,857 |
| 2003 | 138,897  | 5  | 225,804 | 8  | 1,566,948 | 56 | 848,265   | 31 | 2,779,914 |
| 2004 | 111,310  | 4  | 222,938 | 9  | 1,567,273 | 61 | 681,253   | 26 | 2,582,774 |



**Table 10. Global catches of albacore, bigeye, skipjack and yellowfin.** Estimates for the Atlantic and Indian Oceans for 2004 have been carried over from 2003.

| YEAR | ALBACORE |    | BIGEYE  |    | SKIPJACK  |    | YELLOWFIN |    | TOTAL     |
|------|----------|----|---------|----|-----------|----|-----------|----|-----------|
|      | TONNES   | %  | TONNES  | %  | TONNES    | %  | TONNES    | %  |           |
| 1950 | 101,978  | 30 | 19,698  | 6  | 106,846   | 32 | 109,760   | 32 | 338,282   |
| 1951 | 75,692   | 22 | 16,283  | 5  | 161,559   | 46 | 98,196    | 28 | 351,730   |
| 1952 | 122,244  | 29 | 29,792  | 7  | 140,733   | 34 | 123,799   | 30 | 416,568   |
| 1953 | 103,840  | 26 | 30,648  | 8  | 146,927   | 37 | 114,228   | 29 | 395,643   |
| 1954 | 109,209  | 24 | 30,056  | 7  | 185,079   | 41 | 125,411   | 28 | 449,755   |
| 1955 | 94,174   | 20 | 45,391  | 10 | 177,583   | 37 | 159,104   | 33 | 476,252   |
| 1956 | 126,868  | 23 | 51,672  | 9  | 187,216   | 33 | 195,441   | 35 | 561,197   |
| 1957 | 143,493  | 24 | 71,120  | 12 | 177,585   | 30 | 199,929   | 34 | 592,127   |
| 1958 | 127,689  | 20 | 75,173  | 12 | 242,572   | 37 | 203,766   | 31 | 649,200   |
| 1959 | 128,248  | 19 | 70,639  | 10 | 270,461   | 40 | 214,553   | 31 | 683,901   |
| 1960 | 154,996  | 23 | 86,651  | 13 | 151,229   | 22 | 291,624   | 43 | 684,500   |
| 1961 | 137,277  | 17 | 122,600 | 16 | 247,048   | 31 | 283,407   | 36 | 790,332   |
| 1962 | 165,128  | 19 | 122,393 | 14 | 282,753   | 33 | 276,866   | 33 | 847,140   |
| 1963 | 174,481  | 21 | 148,575 | 18 | 259,972   | 31 | 251,077   | 30 | 834,105   |
| 1964 | 182,633  | 21 | 118,363 | 14 | 282,413   | 33 | 278,823   | 32 | 862,232   |
| 1965 | 191,634  | 22 | 117,585 | 14 | 286,976   | 33 | 268,567   | 31 | 864,762   |
| 1966 | 183,144  | 19 | 115,895 | 12 | 365,326   | 38 | 293,668   | 31 | 958,033   |
| 1967 | 204,943  | 21 | 122,684 | 13 | 385,693   | 40 | 251,802   | 26 | 965,122   |
| 1968 | 177,330  | 17 | 128,392 | 13 | 350,207   | 34 | 361,271   | 36 | 1,017,200 |
| 1969 | 189,663  | 18 | 150,703 | 14 | 326,490   | 31 | 380,314   | 36 | 1,047,170 |
| 1970 | 180,290  | 17 | 142,800 | 13 | 390,263   | 36 | 371,117   | 34 | 1,084,470 |
| 1971 | 213,681  | 18 | 152,458 | 13 | 457,888   | 39 | 336,337   | 29 | 1,160,364 |
| 1972 | 216,381  | 18 | 161,100 | 13 | 381,516   | 32 | 438,159   | 37 | 1,197,156 |
| 1973 | 237,637  | 17 | 174,000 | 13 | 489,239   | 36 | 470,261   | 34 | 1,371,137 |
| 1974 | 235,114  | 16 | 178,049 | 12 | 607,345   | 40 | 484,850   | 32 | 1,505,358 |
| 1975 | 172,520  | 12 | 210,756 | 15 | 511,076   | 37 | 503,982   | 36 | 1,398,334 |
| 1976 | 236,021  | 15 | 221,778 | 14 | 604,202   | 37 | 551,275   | 34 | 1,613,276 |
| 1977 | 182,878  | 11 | 251,163 | 15 | 640,152   | 39 | 575,315   | 35 | 1,649,508 |
| 1978 | 212,475  | 12 | 249,717 | 14 | 767,196   | 43 | 537,439   | 30 | 1,766,827 |
| 1979 | 184,130  | 11 | 212,950 | 13 | 679,952   | 42 | 557,536   | 34 | 1,634,568 |
| 1980 | 173,068  | 10 | 249,340 | 14 | 752,748   | 44 | 546,211   | 32 | 1,721,367 |
| 1981 | 174,357  | 10 | 223,851 | 13 | 742,239   | 42 | 606,098   | 35 | 1,746,545 |
| 1982 | 189,637  | 11 | 235,483 | 13 | 795,714   | 44 | 570,167   | 32 | 1,791,001 |
| 1983 | 158,788  | 8  | 232,963 | 12 | 937,577   | 49 | 585,932   | 31 | 1,915,260 |
| 1984 | 164,989  | 8  | 233,144 | 11 | 1,045,908 | 51 | 620,922   | 30 | 2,064,963 |
| 1985 | 170,704  | 8  | 271,002 | 13 | 907,448   | 43 | 763,295   | 36 | 2,112,449 |
| 1986 | 192,265  | 8  | 291,239 | 12 | 1,079,806 | 45 | 825,376   | 35 | 2,388,686 |
| 1987 | 178,594  | 7  | 299,346 | 13 | 1,025,199 | 43 | 891,185   | 37 | 2,394,324 |
| 1988 | 173,098  | 7  | 279,850 | 11 | 1,263,640 | 48 | 904,971   | 35 | 2,621,559 |
| 1989 | 175,455  | 6  | 294,892 | 11 | 1,269,634 | 47 | 973,800   | 36 | 2,713,781 |
| 1990 | 183,121  | 6  | 351,274 | 12 | 1,317,461 | 45 | 1,082,796 | 37 | 2,934,652 |
| 1991 | 146,929  | 5  | 350,631 | 11 | 1,613,035 | 51 | 1,054,263 | 33 | 3,164,858 |
| 1992 | 163,940  | 5  | 347,781 | 11 | 1,549,551 | 48 | 1,143,833 | 36 | 3,205,105 |
| 1993 | 166,197  | 5  | 370,461 | 12 | 1,485,123 | 46 | 1,182,464 | 37 | 3,204,245 |
| 1994 | 202,095  | 6  | 431,238 | 13 | 1,588,346 | 47 | 1,124,518 | 34 | 3,346,197 |
| 1995 | 191,226  | 6  | 423,459 | 13 | 1,664,839 | 49 | 1,085,230 | 32 | 3,364,754 |
| 1996 | 192,830  | 6  | 431,974 | 13 | 1,588,499 | 49 | 1,049,431 | 32 | 3,262,734 |
| 1997 | 210,059  | 6  | 473,191 | 14 | 1,604,770 | 46 | 1,165,611 | 34 | 3,453,631 |
| 1998 | 225,611  | 6  | 452,573 | 12 | 1,925,348 | 51 | 1,177,184 | 31 | 3,780,716 |
| 1999 | 250,299  | 6  | 479,331 | 12 | 2,003,985 | 51 | 1,188,977 | 30 | 3,922,592 |
| 2000 | 220,319  | 6  | 480,232 | 13 | 1,986,750 | 52 | 1,151,322 | 30 | 3,838,623 |
| 2001 | 243,572  | 6  | 446,129 | 12 | 1,852,167 | 48 | 1,279,940 | 33 | 3,821,808 |
| 2002 | 246,753  | 6  | 458,275 | 11 | 2,033,928 | 51 | 1,286,641 | 32 | 4,025,597 |
| 2003 | 224,204  | 5  | 449,257 | 11 | 2,175,958 | 51 | 1,380,051 | 33 | 4,229,470 |
| 2004 | 196,617  | 5  | 446,391 | 11 | 2,176,283 | 54 | 1,213,039 | 30 | 4,032,330 |

**Table 11. Catches of albacore, bigeye, skipjack and yellowfin by ocean area.** Estimates for the Atlantic and Indian Oceans for 2004 have been carried over from 2003.

| YEAR | WCPO      |    | EPO     |    | ATLANTIC  |    | INDIAN      |    | TOTAL     |
|------|-----------|----|---------|----|-----------|----|-------------|----|-----------|
|      | TONNES    | %  | TONNES  | %  | TONNES    | %  | TONNES      | %  |           |
| 1950 | 110,958   | 33 | 171,976 | 51 | 42,335    | 13 | 13,013      | 4  | 338,282   |
| 1951 | 165,535   | 47 | 140,969 | 40 | 37,617    | 11 | 7,609       | 2  | 351,730   |
| 1952 | 214,260   | 51 | 144,561 | 35 | 39,012    | 9  | 18,735      | 4  | 416,568   |
| 1953 | 199,655   | 50 | 131,935 | 33 | 38,735    | 10 | 25,318      | 6  | 395,643   |
| 1954 | 215,675   | 48 | 138,120 | 31 | 48,408    | 11 | 47,552      | 11 | 449,755   |
| 1955 | 220,578   | 46 | 138,038 | 29 | 43,120    | 9  | 74,516      | 16 | 476,252   |
| 1956 | 241,246   | 43 | 171,082 | 30 | 52,942    | 9  | 95,927      | 17 | 561,197   |
| 1957 | 277,931   | 47 | 166,269 | 28 | 77,396    | 13 | 70,531      | 12 | 592,127   |
| 1958 | 315,627   | 49 | 170,865 | 26 | 100,474   | 15 | 62,234      | 10 | 649,200   |
| 1959 | 322,466   | 47 | 173,863 | 25 | 122,384   | 18 | 65,188      | 10 | 683,901   |
| 1960 | 259,396   | 38 | 195,065 | 28 | 145,384   | 21 | 84,655      | 12 | 684,500   |
| 1961 | 316,757   | 40 | 252,360 | 32 | 135,231   | 17 | 85,984      | 11 | 790,332   |
| 1962 | 346,451   | 41 | 223,671 | 26 | 169,697   | 20 | 107,321     | 13 | 847,140   |
| 1963 | 293,727   | 35 | 273,193 | 33 | 188,394   | 23 | 78,791      | 9  | 834,105   |
| 1964 | 335,782   | 39 | 234,686 | 27 | 201,987   | 23 | 89,777      | 10 | 862,232   |
| 1965 | 329,169   | 38 | 220,566 | 26 | 222,199   | 26 | 92,828      | 11 | 864,762   |
| 1966 | 447,970   | 47 | 203,435 | 21 | 181,817   | 19 | 124,811     | 13 | 958,033   |
| 1967 | 386,233   | 40 | 270,118 | 28 | 184,929   | 19 | 123,842     | 13 | 965,122   |
| 1968 | 361,765   | 36 | 252,383 | 25 | 228,018   | 22 | 175,034     | 17 | 1,017,200 |
| 1969 | 383,156   | 37 | 278,772 | 27 | 236,695   | 23 | 148,547     | 14 | 1,047,170 |
| 1970 | 440,437   | 41 | 285,899 | 26 | 237,191   | 22 | 120,943     | 11 | 1,084,470 |
| 1971 | 463,327   | 40 | 292,331 | 25 | 290,960   | 25 | 113,746     | 10 | 1,160,364 |
| 1972 | 492,880   | 41 | 295,552 | 25 | 301,937   | 25 | 106,787     | 9  | 1,197,156 |
| 1973 | 613,131   | 45 | 332,628 | 24 | 306,180   | 22 | 119,198     | 9  | 1,371,137 |
| 1974 | 636,908   | 42 | 359,560 | 24 | 360,996   | 24 | 147,894     | 10 | 1,505,358 |
| 1975 | 566,671   | 41 | 405,994 | 29 | 301,679   | 22 | 123,990     | 9  | 1,398,334 |
| 1976 | 702,027   | 44 | 463,461 | 29 | 316,953   | 20 | 130,835     | 8  | 1,613,276 |
| 1977 | 736,186   | 45 | 392,197 | 24 | 372,569   | 23 | 148,556     | 9  | 1,649,508 |
| 1978 | 774,189   | 44 | 462,829 | 26 | 368,658   | 21 | 161,151     | 9  | 1,766,827 |
| 1979 | 749,358   | 46 | 402,949 | 25 | 338,014   | 21 | 144,247     | 9  | 1,634,568 |
| 1980 | 817,869   | 48 | 390,812 | 23 | 368,053   | 21 | 144,633     | 8  | 1,721,367 |
| 1981 | 793,263   | 45 | 388,383 | 22 | 414,704   | 24 | 150,195     | 9  | 1,746,545 |
| 1982 | 843,442   | 47 | 298,992 | 17 | 467,020   | 26 | 181,547     | 10 | 1,791,001 |
| 1983 | 1,047,299 | 55 | 236,819 | 12 | 427,425   | 22 | 203,717     | 11 | 1,915,260 |
| 1984 | 1,128,144 | 55 | 286,130 | 14 | 371,660   | 18 | 279,029     | 14 | 2,064,963 |
| 1985 | 997,284   | 47 | 359,190 | 17 | 429,527   | 20 | 326,448     | 15 | 2,112,449 |
| 1986 | 1,121,271 | 47 | 464,394 | 19 | 422,657   | 18 | 380,364     | 16 | 2,388,686 |
| 1987 | 1,119,076 | 47 | 458,047 | 19 | 397,709   | 17 | 419,492     | 18 | 2,394,324 |
| 1988 | 1,229,270 | 47 | 468,511 | 18 | 409,025   | 16 | 514,753     | 20 | 2,621,559 |
| 1989 | 1,282,212 | 47 | 474,663 | 17 | 418,852   | 15 | 538,054     | 20 | 2,713,781 |
| 1990 | 1,396,639 | 48 | 488,052 | 17 | 482,619   | 16 | 567,342     | 19 | 2,934,652 |
| 1991 | 1,621,853 | 51 | 445,257 | 14 | 518,160   | 16 | 579,588     | 18 | 3,164,858 |
| 1992 | 1,603,039 | 50 | 439,334 | 14 | 480,663   | 15 | 682,069     | 21 | 3,205,105 |
| 1993 | 1,437,455 | 45 | 430,088 | 13 | 522,405   | 16 | 814,297     | 25 | 3,204,245 |
| 1994 | 1,580,764 | 47 | 436,895 | 13 | 533,732   | 16 | 794,806     | 24 | 3,346,197 |
| 1995 | 1,586,009 | 47 | 488,161 | 15 | 491,028   | 15 | 799,556     | 24 | 3,364,754 |
| 1996 | 1,499,561 | 46 | 488,586 | 15 | 472,209   | 14 | 802,378     | 25 | 3,262,734 |
| 1997 | 1,614,568 | 47 | 557,554 | 16 | 442,626   | 13 | 838,883     | 24 | 3,453,631 |
| 1998 | 1,978,958 | 52 | 525,840 | 14 | 462,087   | 12 | 813,831     | 22 | 3,780,716 |
| 1999 | 1,809,935 | 46 | 670,478 | 17 | 491,646   | 13 | 950,533     | 24 | 3,922,592 |
| 2000 | 1,851,617 | 48 | 644,989 | 17 | 445,446   | 12 | 896,571     | 23 | 3,838,623 |
| 2001 | 1,768,105 | 46 | 712,627 | 19 | 473,821   | 12 | 867,255     | 23 | 3,821,808 |
| 2002 | 1,940,634 | 48 | 738,223 | 18 | 389,478   | 10 | 957,262     | 24 | 4,025,597 |
| 2003 | 1,958,429 | 46 | 821,485 | 19 | 417,861   | 10 | 1,031,695   | 24 | 4,229,470 |
| 2004 | 1,994,503 | 49 | 588,271 | 15 | (417,861) | 10 | (1,031,695) | 26 | 4,032,330 |

Table 12. Commercial catches of billfish in the WCPFC Convention Statistical Area, by gear type and species

| YEAR | LONGLINE    |              |                |            |           | PURSE SEINE |              |           | OTHER COMMERCIAL GEARS |              |                |            |           | TOTAL  |
|------|-------------|--------------|----------------|------------|-----------|-------------|--------------|-----------|------------------------|--------------|----------------|------------|-----------|--------|
|      | BLUE MARLIN | BLACK MARLIN | STRIPED MARLIN | SWORD-FISH | SUB-TOTAL | BLUE MARLIN | BLACK MARLIN | SUB-TOTAL | BLUE MARLIN            | BLACK MARLIN | STRIPED MARLIN | SWORD-FISH | SUB-TOTAL |        |
| 1950 | ...         | ...          | ...            | ...        | ...       | -           | -            | -         | -                      | -            | -              | -          | -         | ...    |
| 1951 | ...         | ...          | ...            | ...        | ...       | -           | -            | -         | -                      | -            | -              | -          | -         | ...    |
| 1952 | ...         | ...          | ...            | ...        | ...       | -           | -            | -         | -                      | -            | -              | -          | -         | ...    |
| 1953 | ...         | ...          | ...            | ...        | ...       | -           | -            | -         | -                      | -            | -              | -          | -         | ...    |
| 1954 | ...         | ...          | ...            | ...        | ...       | -           | -            | -         | -                      | -            | -              | -          | -         | ...    |
| 1955 | ...         | ...          | ...            | ...        | ...       | -           | -            | -         | -                      | -            | -              | -          | -         | ...    |
| 1956 | ...         | ...          | ...            | ...        | ...       | -           | -            | -         | -                      | -            | -              | -          | -         | ...    |
| 1957 | ...         | ...          | ...            | ...        | ...       | -           | -            | -         | -                      | -            | -              | -          | -         | ...    |
| 1958 | ...         | ...          | ...            | ...        | ...       | -           | -            | -         | -                      | -            | -              | -          | -         | ...    |
| 1959 | ...         | ...          | ...            | ...        | ...       | -           | -            | -         | -                      | -            | -              | -          | -         | ...    |
| 1960 | ...         | ...          | ...            | ...        | ...       | -           | -            | -         | -                      | -            | -              | -          | -         | ...    |
| 1961 | ...         | ...          | ...            | ...        | ...       | -           | -            | -         | -                      | -            | -              | -          | -         | ...    |
| 1962 | 14,197      | 2,091        | 15,207         | 10,354     | 41,849    | -           | -            | -         | -                      | -            | -              | -          | -         | 41,849 |
| 1963 | 11,583      | 2,100        | 12,384         | 9,741      | 35,808    | -           | -            | -         | -                      | -            | -              | -          | -         | 35,808 |
| 1964 | 10,240      | 1,714        | 17,039         | 5,958      | 34,951    | -           | -            | -         | -                      | -            | -              | -          | -         | 34,951 |
| 1965 | 8,303       | 2,253        | 13,334         | 8,213      | 32,102    | -           | -            | -         | -                      | -            | -              | -          | -         | 32,102 |
| 1966 | 8,763       | 2,057        | 9,614          | 9,838      | 30,272    | -           | -            | -         | -                      | -            | -              | -          | -         | 30,272 |
| 1967 | 7,287       | 2,362        | 11,506         | 10,643     | 31,798    | 0           | 0            | 0         | -                      | -            | -              | -          | -         | 31,798 |
| 1968 | 6,673       | 2,951        | 11,783         | 9,504      | 30,911    | 1           | 1            | 2         | -                      | -            | -              | -          | -         | 30,913 |
| 1969 | 7,091       | 2,619        | 8,500          | 8,945      | 27,155    | 1           | 1            | 2         | -                      | -            | -              | -          | -         | 27,158 |
| 1970 | 9,977       | 3,544        | 7,594          | 7,578      | 28,692    | 7           | 18           | 25        | -                      | -            | -              | -          | -         | 28,717 |
| 1971 | 6,450       | 3,776        | 6,373          | 8,615      | 25,215    | 9           | 21           | 29        | -                      | -            | -              | -          | -         | 25,244 |
| 1972 | 7,957       | 3,696        | 5,194          | 8,111      | 24,957    | 9           | 20           | 29        | -                      | -            | -              | -          | -         | 24,986 |
| 1973 | 7,483       | 3,794        | 5,550          | 7,304      | 24,131    | 11          | 25           | 36        | -                      | -            | -              | -          | -         | 24,167 |
| 1974 | 7,253       | 3,115        | 4,789          | 7,990      | 23,146    | 14          | 28           | 43        | -                      | -            | -              | -          | -         | 23,189 |
| 1975 | 7,078       | 3,280        | 3,764          | 8,518      | 22,640    | 16          | 30           | 46        | -                      | -            | -              | -          | -         | 22,686 |
| 1976 | 6,709       | 2,242        | 3,497          | 9,955      | 22,403    | 20          | 30           | 50        | -                      | -            | -              | -          | -         | 22,453 |
| 1977 | 7,020       | 2,426        | 2,948          | 9,583      | 21,976    | 28          | 50           | 78        | -                      | -            | -              | -          | -         | 22,055 |
| 1978 | 8,862       | 2,787        | 3,744          | 9,871      | 25,264    | 31          | 37           | 68        | -                      | -            | -              | -          | -         | 25,332 |
| 1979 | 9,415       | 2,395        | 5,059          | 11,178     | 28,047    | 47          | 69           | 116       | -                      | -            | -              | -          | -         | 28,163 |
| 1980 | 10,245      | 1,553        | 4,822          | 8,740      | 25,361    | 55          | 67           | 122       | -                      | -            | -              | -          | -         | 25,483 |
| 1981 | 10,331      | 2,010        | 4,773          | 10,111     | 27,224    | 97          | 111          | 207       | -                      | -            | -              | -          | -         | 27,432 |
| 1982 | 10,400      | 2,023        | 4,536          | 9,215      | 26,173    | 142         | 168          | 310       | 9                      | 0            | 0              | 0          | 9         | 26,492 |
| 1983 | 9,004       | 1,740        | 3,476          | 10,109     | 24,329    | 177         | 216          | 393       | 15                     | 0            | 0              | 0          | 15        | 24,736 |
| 1984 | 12,197      | 1,317        | 4,837          | 9,975      | 28,324    | 214         | 243          | 457       | 26                     | 0            | 0              | 0          | 26        | 28,807 |
| 1985 | 9,667       | 1,047        | 5,510          | 12,416     | 28,640    | 184         | 207          | 391       | 26                     | 0            | 0              | 0          | 26        | 29,057 |
| 1986 | 10,349      | 1,120        | 6,175          | 11,474     | 29,118    | 168         | 197          | 365       | 28                     | 0            | 0              | 0          | 28        | 29,511 |
| 1987 | 14,403      | 1,533        | 5,559          | 12,936     | 34,432    | 191         | 221          | 412       | 22                     | 0            | 0              | 0          | 22        | 34,866 |
| 1988 | 14,553      | 2,294        | 7,612          | 12,809     | 37,268    | 204         | 218          | 422       | 33                     | 0            | 0              | 0          | 33        | 37,723 |
| 1989 | 11,893      | 1,208        | 6,645          | 10,694     | 30,440    | 256         | 283          | 539       | 45                     | 0            | 0              | 0          | 45        | 31,024 |
| 1990 | 10,356      | 1,166        | 4,901          | 11,551     | 27,973    | 308         | 335          | 642       | 77                     | 1            | 1              | 0          | 79        | 28,695 |
| 1991 | 11,036      | 1,507        | 5,278          | 12,811     | 30,632    | 338         | 397          | 735       | 92                     | 1            | 1              | 0          | 94        | 31,461 |
| 1992 | 13,372      | 1,672        | 5,379          | 18,353     | 38,775    | 278         | 327          | 605       | 90                     | 1            | 1              | 0          | 92        | 39,472 |
| 1993 | 15,912      | 1,447        | 10,615         | 19,663     | 47,638    | 238         | 272          | 510       | 71                     | 1            | 1              | 0          | 73        | 48,220 |
| 1994 | 15,691      | 1,868        | 6,365          | 16,885     | 40,810    | 250         | 301          | 551       | 83                     | 1            | 1              | 0          | 85        | 41,446 |
| 1995 | 18,115      | 1,355        | 7,372          | 15,558     | 42,400    | 254         | 297          | 551       | 93                     | 1            | 1              | 0          | 95        | 43,046 |
| 1996 | 14,598      | 967          | 5,990          | 14,860     | 36,416    | 272         | 317          | 589       | 487                    | 1            | 56             | 0          | 544       | 37,549 |
| 1997 | 12,630      | 990          | 5,092          | 17,307     | 36,019    | 256         | 312          | 568       | 467                    | 1            | 40             | 0          | 508       | 37,095 |
| 1998 | 17,049      | 1,703        | 7,203          | 18,811     | 44,767    | 259         | 331          | 590       | 328                    | 1            | 27             | 0          | 356       | 45,713 |
| 1999 | 14,974      | 2,118        | 6,079          | 19,886     | 43,057    | 223         | 299          | 521       | 418                    | 1            | 30             | 0          | 449       | 44,027 |
| 2000 | 14,476      | 1,510        | 4,496          | 20,632     | 41,114    | 246         | 342          | 588       | 347                    | 1            | 15             | 0          | 363       | 42,065 |
| 2001 | 16,005      | 1,655        | 5,007          | 17,617     | 40,284    | 231         | 340          | 571       | 372                    | 1            | 45             | 0          | 418       | 41,272 |
| 2002 | 15,733      | 1,895        | 4,499          | 18,883     | 41,011    | 256         | 357          | 613       | 338                    | 1            | 30             | 0          | 369       | 41,993 |
| 2003 | 24,158      | 2,215        | 5,536          | 21,686     | 53,594    | 295         | 418          | 713       | 331                    | 0            | 31             | 0          | 362       | 54,669 |
| 2004 | 20,913      | 2,528        | 5,033          | 21,716     | 50,189    | 299         | 396          | 694       | 331                    | 0            | 31             | 0          | 362       | 51,245 |

Table 13. Commercial catches of billfish in the WCPFC Convention Statistical Area, by species

| YEAR | BLUE MARLIN |     | BLACK MARLIN |     | STRIPED MARLIN |     | SWORDFISH |     | TOTAL  |
|------|-------------|-----|--------------|-----|----------------|-----|-----------|-----|--------|
|      | TONNES      | %   | TONNES       | %   | TONNES         | %   | TONNES    | %   |        |
| 1950 | ...         | ... | ...          | ... | ...            | ... | ...       | ... | ...    |
| 1951 | ...         | ... | ...          | ... | ...            | ... | ...       | ... | ...    |
| 1952 | ...         | ... | ...          | ... | ...            | ... | ...       | ... | ...    |
| 1953 | ...         | ... | ...          | ... | ...            | ... | ...       | ... | ...    |
| 1954 | ...         | ... | ...          | ... | ...            | ... | ...       | ... | ...    |
| 1955 | ...         | ... | ...          | ... | ...            | ... | ...       | ... | ...    |
| 1956 | ...         | ... | ...          | ... | ...            | ... | ...       | ... | ...    |
| 1957 | ...         | ... | ...          | ... | ...            | ... | ...       | ... | ...    |
| 1958 | ...         | ... | ...          | ... | ...            | ... | ...       | ... | ...    |
| 1959 | ...         | ... | ...          | ... | ...            | ... | ...       | ... | ...    |
| 1960 | ...         | ... | ...          | ... | ...            | ... | ...       | ... | ...    |
| 1961 | ...         | ... | ...          | ... | ...            | ... | ...       | ... | ...    |
| 1962 | 14,197      | 34  | 2,091        | 5   | 15,207         | 36  | 10,354    | 25  | 41,849 |
| 1963 | 11,583      | 32  | 2,100        | 6   | 12,384         | 35  | 9,741     | 27  | 35,808 |
| 1964 | 10,240      | 29  | 1,714        | 5   | 17,039         | 49  | 5,958     | 17  | 34,951 |
| 1965 | 8,303       | 26  | 2,253        | 7   | 13,334         | 42  | 8,213     | 26  | 32,102 |
| 1966 | 8,763       | 29  | 2,057        | 7   | 9,614          | 32  | 9,838     | 32  | 30,272 |
| 1967 | 7,287       | 23  | 2,362        | 7   | 11,506         | 36  | 10,643    | 33  | 31,798 |
| 1968 | 6,675       | 22  | 2,952        | 10  | 11,783         | 38  | 9,504     | 31  | 30,913 |
| 1969 | 7,093       | 26  | 2,619        | 10  | 8,500          | 31  | 8,945     | 33  | 27,158 |
| 1970 | 9,984       | 35  | 3,562        | 12  | 7,594          | 26  | 7,578     | 26  | 28,717 |
| 1971 | 6,459       | 26  | 3,797        | 15  | 6,373          | 25  | 8,615     | 34  | 25,244 |
| 1972 | 7,966       | 32  | 3,716        | 15  | 5,194          | 21  | 8,111     | 32  | 24,986 |
| 1973 | 7,494       | 31  | 3,819        | 16  | 5,550          | 23  | 7,304     | 30  | 24,167 |
| 1974 | 7,267       | 31  | 3,143        | 14  | 4,789          | 21  | 7,990     | 34  | 23,189 |
| 1975 | 7,094       | 31  | 3,310        | 15  | 3,764          | 17  | 8,518     | 38  | 22,686 |
| 1976 | 6,730       | 30  | 2,272        | 10  | 3,497          | 16  | 9,955     | 44  | 22,453 |
| 1977 | 7,048       | 32  | 2,476        | 11  | 2,948          | 13  | 9,583     | 43  | 22,055 |
| 1978 | 8,892       | 35  | 2,825        | 11  | 3,744          | 15  | 9,871     | 39  | 25,332 |
| 1979 | 9,461       | 34  | 2,464        | 9   | 5,059          | 18  | 11,178    | 40  | 28,163 |
| 1980 | 10,300      | 40  | 1,620        | 6   | 4,822          | 19  | 8,740     | 34  | 25,483 |
| 1981 | 10,428      | 38  | 2,120        | 8   | 4,773          | 17  | 10,111    | 37  | 27,432 |
| 1982 | 10,550      | 40  | 2,191        | 8   | 4,536          | 17  | 9,215     | 35  | 26,492 |
| 1983 | 9,196       | 37  | 1,956        | 8   | 3,476          | 14  | 10,109    | 41  | 24,736 |
| 1984 | 12,436      | 43  | 1,559        | 5   | 4,837          | 17  | 9,975     | 35  | 28,807 |
| 1985 | 9,877       | 34  | 1,254        | 4   | 5,510          | 19  | 12,416    | 43  | 29,057 |
| 1986 | 10,545      | 36  | 1,317        | 4   | 6,175          | 21  | 11,474    | 39  | 29,511 |
| 1987 | 14,616      | 42  | 1,755        | 5   | 5,559          | 16  | 12,936    | 37  | 34,866 |
| 1988 | 14,789      | 39  | 2,512        | 7   | 7,612          | 20  | 12,809    | 34  | 37,723 |
| 1989 | 12,195      | 39  | 1,490        | 5   | 6,645          | 21  | 10,694    | 34  | 31,024 |
| 1990 | 10,740      | 37  | 1,502        | 5   | 4,902          | 17  | 11,551    | 40  | 28,695 |
| 1991 | 11,465      | 36  | 1,905        | 6   | 5,279          | 17  | 12,811    | 41  | 31,461 |
| 1992 | 13,740      | 35  | 1,999        | 5   | 5,380          | 14  | 18,353    | 46  | 39,472 |
| 1993 | 16,221      | 34  | 1,721        | 4   | 10,616         | 22  | 19,663    | 41  | 48,220 |
| 1994 | 16,025      | 39  | 2,170        | 5   | 6,366          | 15  | 16,885    | 41  | 41,446 |
| 1995 | 18,462      | 43  | 1,653        | 4   | 7,373          | 17  | 15,558    | 36  | 43,046 |
| 1996 | 15,357      | 41  | 1,286        | 3   | 6,046          | 16  | 14,860    | 40  | 37,549 |
| 1997 | 13,353      | 36  | 1,303        | 4   | 5,132          | 14  | 17,307    | 47  | 37,095 |
| 1998 | 17,636      | 39  | 2,035        | 4   | 7,230          | 16  | 18,811    | 41  | 45,713 |
| 1999 | 15,615      | 35  | 2,418        | 5   | 6,109          | 14  | 19,886    | 45  | 44,027 |
| 2000 | 15,069      | 36  | 1,853        | 4   | 4,511          | 11  | 20,632    | 49  | 42,065 |
| 2001 | 16,608      | 40  | 1,996        | 5   | 5,052          | 12  | 17,617    | 43  | 41,272 |
| 2002 | 16,327      | 39  | 2,253        | 5   | 4,529          | 11  | 18,883    | 45  | 41,993 |
| 2003 | 24,784      | 45  | 2,633        | 5   | 5,567          | 10  | 21,686    | 40  | 54,669 |
| 2004 | 21,543      | 42  | 2,923        | 6   | 5,064          | 10  | 21,716    | 42  | 51,245 |

**Table 14. Observed longline effort (million hooks), total longline effort (million hooks) and coverage (%), by fishery sector and time period.** The estimate of coverage for Japanese vessels in the waters of New Zealand during 1995–1999 may be related to inconsistencies in the classification of charter vessels as foreign or domestic vessels.

| SECTOR                               | 1990 – 1994 |           |      | 1995 – 1999 |           |        | 2000 – 2003 |           |       | 1990 – 2003 |           |       |
|--------------------------------------|-------------|-----------|------|-------------|-----------|--------|-------------|-----------|-------|-------------|-----------|-------|
|                                      | Observed    | Total     | %    | Observed    | Total     | %      | Observed    | Total     | %     | Observed    | Total     | %     |
| Australia - Domestic                 | 0.000       | 48.327    | 0.00 | 0.000       | 38.729    | 0.00   | 0.828       | 47.291    | 1.75  | 0.828       | 134.347   | 0.62  |
| Australia - Japan                    | 6.325       | 128.410   | 4.93 | 2.107       | 89.465    | 2.36   | 0.000       | 70.527    | 0.00  | 8.432       | 288.402   | 2.92  |
| Distant-Water - Albacore             | 0.000       | 528.006   | 0.00 | 0.564       | 521.456   | 0.11   | 0.000       | 408.672   | 0.00  | 0.564       | 1,458.134 | 0.04  |
| Distant-Water - Yellowfin and Bigeye | 0.000       | 785.589   | 0.00 | 0.202       | 673.342   | 0.03   | 0.035       | 724.567   | 0.01  | 0.237       | 2,183.498 | 0.01  |
| Hawaii                               | 0.514       | 48.019    | 1.07 | 3.395       | 77.200    | 4.40   | 3.034       | 94.131    | 3.22  | 6.943       | 219.350   | 3.17  |
| Indonesia - Domestic                 | 0.000       | 93.424    | 0.00 | 0.000       | 136.448   | 0.00   | 0.000       | 179.378   | 0.00  | 0.000       | 409.250   | 0.00  |
| New Zealand - Domestic               | 0.036       | 12.066    | 0.30 | 0.776       | 27.915    | 2.78   | 9.118       | 39.617    | 23.02 | 9.930       | 79.598    | 12.48 |
| New Zealand - Japan                  | 3.253       | 57.819    | 5.63 | 3.588       | 2.614     | 137.26 | 0.000       | 2.589     | 0.00  | 6.841       | 63.022    | 10.85 |
| Offshore - Albacore                  | 0.016       | 30.725    | 0.05 | 0.880       | 110.822   | 0.79   | 0.530       | 262.130   | 0.20  | 1.426       | 403.677   | 0.35  |
| Offshore - Tropical                  | 0.357       | 231.934   | 0.15 | 1.674       | 442.049   | 0.38   | 0.813       | 429.120   | 0.19  | 2.844       | 1,103.103 | 0.26  |
| Philippines - Domestic               | 0.000       | 36.662    | 0.00 | 0.000       | 44.504    | 0.00   | 0.000       | 61.929    | 0.00  | 0.000       | 143.095   | 0.00  |
| Shark Target                         | 0.000       | n/a       | n/a  | 0.213       | n/a       | n/a    | 0.397       | n/a       | n/a   | 0.610       | n/a       | n/a   |
| Chinese Taipei - Domestic            | 0.000       | 154.519   | 0.00 | 0.000       | 194.225   | 0.00   | 0.000       | 131.663   | 0.00  | 0.000       | 480.407   | 0.00  |
| Total                                | 10.501      | 2,155.500 | 0.49 | 13.399      | 2,358.769 | 0.57   | 14.755      | 2,451.614 | 0.60  | 38.655      | 6,965.883 | 0.55  |

**Table 15. Observed purse-seine effort (days fished), total purse-seine effort (days fished) and coverage (%), by school association and year**

| YEAR  | UNASSOCIATED SCHOOLS |         |      | ASSOCIATED SCHOOLS |         |      | ALL SCHOOLS |         |      |
|-------|----------------------|---------|------|--------------------|---------|------|-------------|---------|------|
|       | Observed             | Total   | %    | Observed           | Total   | %    | Observed    | Total   | %    |
| 1994  | 515                  | 34,277  | 1.50 | 80                 | 34,458  | 0.23 | 595         | 68,735  | 0.87 |
| 1995  | 871                  | 35,312  | 2.47 | 508                | 37,244  | 1.37 | 1,380       | 72,556  | 1.90 |
| 1996  | 1,114                | 30,833  | 3.61 | 1,068              | 48,025  | 2.22 | 2,182       | 78,858  | 2.77 |
| 1997  | 952                  | 24,286  | 3.92 | 1,517              | 47,662  | 3.18 | 2,469       | 71,948  | 3.43 |
| 1998  | 1,258                | 32,154  | 3.91 | 1,415              | 49,991  | 2.83 | 2,673       | 82,145  | 3.25 |
| 1999  | 328                  | 24,629  | 1.33 | 1,108              | 54,058  | 2.05 | 1,436       | 78,687  | 1.82 |
| 2000  | 482                  | 23,578  | 2.04 | 1,406              | 32,917  | 4.27 | 1,888       | 56,495  | 3.34 |
| 2001  | 1,030                | 23,903  | 4.31 | 1,325              | 30,616  | 4.33 | 2,355       | 54,519  | 4.32 |
| 2002  | 1,128                | 23,995  | 4.70 | 1,132              | 34,955  | 3.24 | 2,260       | 58,950  | 3.83 |
| 2003  | 381                  | 27,853  | 1.37 | 575                | 40,549  | 1.42 | 956         | 68,402  | 1.40 |
| Total | 8,058                | 280,820 | 2.87 | 10,136             | 410,475 | 2.47 | 18,194      | 691,295 | 2.63 |

**Table 16. Estimates of average annual catches (tonnes) of non-target species and species groups by longliners and purse seiners in the Convention Statistical Area during 2001–2003, determined from observer data**

| CATEGORY        | SPECIES OR GROUP       | LONGLINE |       | PURSE SEINE |       | TOTAL   |       |
|-----------------|------------------------|----------|-------|-------------|-------|---------|-------|
|                 |                        | TONNES   | %     | TONNES      | %     | TONNES  | %     |
| Sharks and Rays | Blue shark             | 35,843   | 40.1  | 2           | 0.0   | 35,845  | 33.7  |
|                 | Mako sharks            | 3,935    | 4.4   | 26          | 0.2   | 3,961   | 3.7   |
|                 | Oceanic whitetip shark | 6,362    | 7.1   | 403         | 2.4   | 6,765   | 6.4   |
|                 | Silky shark            | 13,621   | 15.2  | 704         | 4.2   | 14,325  | 13.5  |
|                 | Whale shark            | 0        | 0.0   | 250         | 1.5   | 250     | 0.2   |
|                 | Other sharks and rays  | 9,069    | 10.1  | 1,474       | 8.7   | 10,543  | 9.9   |
| Other Fish      | Barracudas             | 998      | 1.1   | 100         | 0.6   | 1,097   | 1.0   |
|                 | Common dolphinfish     | 1,499    | 1.7   | 574         | 3.4   | 2,073   | 1.9   |
|                 | Escolars               | 3,710    | 4.1   | 0           | 0.0   | 3,710   | 3.5   |
|                 | Lancetfishes           | 525      | 0.6   | 0           | 0.0   | 525     | 0.5   |
|                 | Ocean sunfish          | 1,387    | 1.6   | 0           | 0.0   | 1,388   | 1.3   |
|                 | Oilfish                | 1,153    | 1.3   | 7           | 0.0   | 1,160   | 1.1   |
|                 | Opah                   | 3,403    | 3.8   | 0           | 0.0   | 3,403   | 3.2   |
|                 | Pomfrets               | 394      | 0.4   | 4           | 0.0   | 398     | 0.4   |
|                 | Rainbow runner         | 23       | 0.0   | 3,889       | 23.0  | 3,911   | 3.7   |
|                 | Wahoo                  | 3,111    | 3.5   | 239         | 1.4   | 3,350   | 3.1   |
|                 | Other fish             | 4,438    | 5.0   | 9,261       | 54.7  | 13,699  | 12.9  |
| Total           |                        | 89,470   | 100.0 | 16,933      | 100.0 | 106,403 | 100.0 |