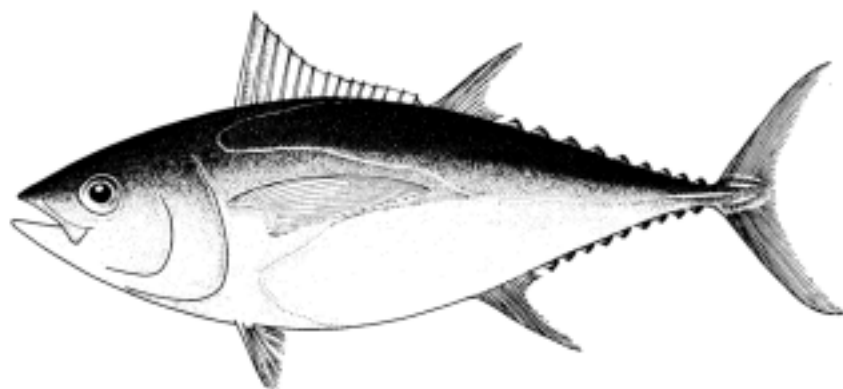




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## **National Tuna Fisheries Report of China in the WCPO**



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## **Tuna Fishery Report of China in WCPO**

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### **1. Brief information to the fishery**

China's (Mainland) began to develop the distant water longline fishery in the late 1980's. In 1988 seven longliners, reconstructed from inshore trawlers, arrived in WCPO waters. This fleet rapidly increased to a peak of 457 vessels in 1994 that caught a nominal 12,885 metric tons. The fleet then steadily reduced, due to inefficient fishing and poor returns, until in 1999 it bottomed out at 66 vessels that caught 1024 tons. Since 1999 the fleet has been more stable at around 110-120 vessels and in the year 2001 there were 117 vessels, which caught 7682 metric tons. In 2002, 125 tuna fishing vessels including two purse seiners, were in active in WCPO, with the total catch of 15300 metric tons.

China began to develop tuna purse seine fishery in WCPO water later in 2001. The tuna purse seiner started operation in June that year and fished for 210 days with a total catch of 3090 MT of Skipjack and yellowfin tuna. In 2002, other tuna purse seiners joined in Chinese fleet in WCPO. Up to now, there are four tuna purse seiners active in WCPO waters, which belong to two fishing companies.

Most small scale tuna longliners were mainly operating inside the EEZ waters of Palau, Fiji and Micronesia. As usual, small scale longliner operates 800-1000 hooks every day, with 5-7 hooks each basket, large scale tuna longliners operates 2500 – 3000 hooks every day, with 7 – 15 hooks per basket depending on the fishing season.

The total fishing efforts of Chinese tuna fleet in WCPO waters in 2001 and 2002 are respectively 26,103 thousand hooks and 22,850 thousand hooks for longline and 210 days and 212 days staying at the sea for purse seine.

Purse seiner was operating at tropic waters between 07N-10S and 147E-175E.

### **2. Total Catch, for all species and all gears combined ( 1998-2002)**

Total catch of tuna and tuna-like species caught by Chinese fleet in WCPO from 1998 to 2002 is shown in table 1. Big increase of the total catch in 1999 (8333 metric tons) compared with that in 1998(1024 metric tons) is mainly attributed to the increase of fishing boats. Total catch in 2000 reduced to 7291 metric tons, 12.5% lower than that in previous year. During last three years, total catch of longline fishing has been roughly maintained at relatively stable level, between 7290 – 7940 metric tons, with the average 7638 metric tons, though slight increase trend occurred. The increase of total catch of Chinese fleet after 2001 is attributed to the joining of tuna purse seiners. In 2002, total catch reached 15300 metric tons, 48% of which is caught by purse seine fishery.

**Table 1 Nominal Catch of tuna and tuna-like species  
in WCPO waters from 1998-2002 Unit : MT**

Year	Purse seine	Longline	Total
1998	0	1024	1024
1999	0	8333	8333
2000	0	7291	7291
2001	3090	7682	10772
2002	7360	7941	15301

### 3. Fleet Structure

Before 2001, longlining was the only fishing method by Chinese fleet for tuna and tuna-like species. The size the longliners ranged from 50 to 500GRT, with 24-30m LOA in dominance, which is equivalent to 50-149 GRT ( Table 2). Before 1998, almost all the tuna longliners operating in WCPO waters belonged to small-scale type, with the dimension between 50 -149 GRT, and 24m - 30m in LOA. All those small-scale boats were reconstructed from trawlers operated in inshore waters and made of steel, wood or concrete cements in the hull. Before 2001, all the large scale longliners (over 40 m in LOA) are introduced from outside Mainland of China.

China developed tuna purse seine fishery in 2001. Two purse seiners were in active in 2002. At present, there are four tuna purse seiners operating in WCPO, of which 2 are between 900-1000GRT, and 2 are larger than 1000GRT.

**Table 2 Number of Chinese tuna fishing boats in the WCPO waters**

Year	LL	PS	total
1998	66	0	66
1999	115	0	115
2000	106	0	106
2001	116	1	117
2002	123	2	125

**Table 3 Tuna Fishing Fleets in the WCPO waters from 1990 to 2001**

Year	24m-30m	30m-40m	40m-50m	>50m	total
1998					66
1999	100	4	8	3	115
2000	90	5	8	3	106
2001	90	7	16	4	117
2002	90	8	16	7	125

### 4. Catch by Species for each gear type

Bigeye tuna and yellowfin tuna have been the main targeting species by Chinese tuna longline fleet since its operation; the proportion of the two species in the catch has been over 40% and 30% before 1998. Since 1999, albacore catch has rapidly increased and become one of the three main species caught by the fleet as a result seasonal shift of large-scale longliners to north Pacific Ocean (Table4). In 2002, proportion of bigeye tuna (2312MT), yellowfin tuna ( 1844MT) and albacore (2920MT) in the total longline catch (7941MT) accounts for 29%,23% and 36.7% respectively, slightly different from that in previous year (29%,25% and 35% respectively) .

Skipjack is the dominant species caught by purse seiners and accounts for 92.5% in the total catch of the purse seiners in 2002.

**Table 4 Nominal Catch of tuna and tuna-like species  
in WCPO waters from 1998-2002 Unit : MT**

Year/Specie		ABL	BET	YFT	SWD	BIL	SKJ	Others	Total
1998	LL	6	740	222				56	1024
1999	LL	3473	1805	2237	396	114	160	148	8333
2000	LL	2056	1981	2207	142.8	528	-	375.8	7290.8
2001	LL	2711	2227	1919	286.2	240.6		298.1	7682
	PS			340			2750		3090
	Total	2711	2227	2259	286.2	240.6	2750	298.1	10772
2002	LL	2920	2312	1844	220	183		462	7941
	PS			547			6813	0	7360
	Total	2920	2312	2391	220	183	6813	462	15301

## 5. Final Market destination of catches/disposal of catch

Bigeye and yellowfin tuna caught by small scale tuna longliners operated in the Exclusive Economic Zone (EEZ) of Pacific Island countries, including Palau, Micronesia, Marshall Islands, Fiji, Samoa, are all exported to Japanese sashimi market if the quality is met the requirement. Other species caught as by-catch are sold at local market. Albacore caught by larger boats generally operating in the high seas of Southern Pacific Ocean are usually processed for canned products and sold to the U.S.A. market. Catch of purse seiner are sold to Thailand.

## 6. Onshore developments (transshipment, processing ect)

In 2002, one 3000 ton deep frozen store was constructed in Shangdong Province by introducing Japanese technology. Some companies have imported equipments from Japan to process frozen tuna products for Japanese sashimi market.

## 7. Future prospects and developments

*Observer program* China began to carry out observer program in ICCAT water in 2001, and decided to extend the observer program to IOTC and Pacific Ocean in 2002. The Tuna Technical Working Group (TTWG) of Shanghai Fisheries University has sent observers to ICCAT and IOTC waters. But, one observer prepared by TTWG for Pacific tuna fleet failed to go on board in 2002 because of some technical problem. In order to ensure the smooth carrying out of the tuna fishery observer program, Chinese tuna working group, which consists of all tuna fishing enterprises and some fisheries universities and institutes, are drafting a self-management regulation about accepting observers. In June 2003, two observers left for Chinese tuna fleet in East Pacific.

### *Data collection and report*

“Tuna Working Group” is constructing tuna fishery database. All the fishing companies report by month the catch data to tuna working group office for analysis. The technical tuna-working group of Shanghai Fisheries University will further arrange and analyze the data from the “Tuna working group” and submit them to regional tuna fisheries management organization as required. So far, except the data collected by observer program, there lack of size frequency data from fishing companies. Some efforts are needed to collect such kind of data.