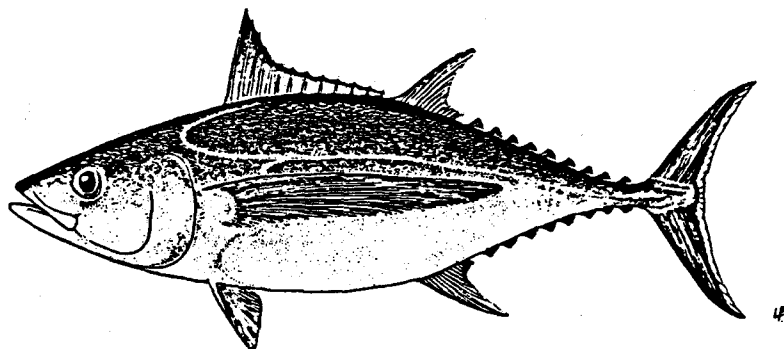


**A REVIEW OF JAPANESE ALBACORE FISHERIES  
IN THE SOUTH PACIFIC**

**Yoh Watanabe and Yasuo Nishikawa  
National Research Institute of Far Seas Fisheries  
Shimizu, Japan**



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1. Introduction

Japanese albacore fisheries were developed by pole and line fishery in waters adjacent to Japan in the latter half of the 1940s. Then, as longline fishery expanded their fishing grounds in the eastern North Pacific, South Pacific, Indian and Atlantic Oceans in the 1950s, catches of albacore by Japanese fishing boats increased rapidly. In the early 1970s, large-mesh driftnet fishery joined albacore fisheries, then squid driftnet fishery also started to catch albacore as by-catch around the early of 1980s. In 1976, total catch of albacore by Japanese fishing vessels recorded over 100,000 tons from the North Pacific Ocean. Recent albacore catch ranges 40,000 to 50,000 tons per year from the North and South Pacific Ocean.

This report describes a general trend of Japanese albacore fisheries in the South Pacific Ocean based on the data from 1952 to 1989. The catches of southern albacore by various type of Japanese fisheries and research vessels were shown in Table 1.

2. Japanese Albacore Fisheries

1) Longline fishery

Japanese longline fishery started from 1952 in the South Pacific Ocean, the albacore catch rapidly increased above 20,000 tons in 1958 and 39,000 tons in 1962. From 23,000 tons in 1966, catch decreased year after year. In 1975 the catch was 1,045 tons as 1/40 of the peak year. After that, it was slightly increasing. Recently, the catch of albacore was fairly stable ranging 3,600 tons to 4,900 tons. Preliminary statistics for 1988 was 6,900 tons, about 70 % increase compared to the last year.

Catch in number and CPUE ( number of albacore per 1,000 nominal hooks ) trend of the South Pacific Ocean Region, south of 5 N and west of 130 W, from 1971 to 1987 were shown in Figure 1. Both catch and CPUE in the first half decreased year by year and reached the bottom in 1977. Then, it turned to increase rapidly and reached the same level with 1971. However, it should

be mentioned that the CPUE trends probably does not reflect the albacore stock since the nominal fishing effort is used.

## 2) Pole and line fishery

The first albacore catch from the South Pacific Ocean by Japanese pole and line fishery was recorded by one of the large sized boats (380 GT) operated in the areas near the North Island of New Zealand during early and middle of December 1961 and she caught 9 tons albacore (4-10 kg) and 9 tons skipjack (5-8 kg) (Tohoku Regional Fisheries Research Laboratory, no date). Other records were in the Tasman Sea ( 35-43 S, 169-173 E ), February 15 to March 4, 1962 by Hoko Maru No. 15 (315 GT). She caught 6,236 albacore (4-10 kg) in the waters from 18.2 to 20.1 °C (Inoue and Yatomi, 1973). From February 15 to 25, 1964, one boat fished 16 tons of albacore (2-10 kg) and 90 tons skipjack (2-6 kg) in the waters westward from the North Islands of New Zealand ( areas around 38 S, 169-171 E ) where sea surface temperature was 19.6-20.2°C (Tohoku Regional Fisheries Research Laboratory, no date). Other information on activity of Japanese pole and line fishery targeting southern albacore are under review at present.

## 3) Driftnet fishery

Japanese large-mesh driftnet fishery that aim at albacore in the South Pacific Ocean started the operations from 1983 as a partly side job of North Pacific large-mesh driftnet and squid driftnet fisheries in the northern winter season. Until last two years, from 9 to 20 fishing boats operated in every fishing season and seasonal albacore catch fluctuated from 900 to 4,200 tons. In 1988/89 season, number of Japanese driftnet boats targeting southern albacore increased rapidly from 20 to 64 in 1988/89 season and their albacore catch grew to around triple of the previous catch. Nineteen driftnetters operated for search of southern albacore in 1989/90 season, following the government order to reduce the fishing effort. Preliminary albacore catch in 1989/90 season were 5,437 tons with 844,214 fish.

## 3. References

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Tohoku Regional Fisheries Research Laboratory (no date) Map of skipjack fishing grounds in tropical waters (1970 & 1971). 32pp.

Tohoku Regional Fisheries Research Laboratory (no date) Map of skipjack fishing grounds in tropical waters (1972 & 1973). 40pp.

Table 1. Catches of southern albacore by Japanese commercial and research fisheries, 1952-1989.

Year	Longline Catch (ton)	Pole and line				Driftnet			
		Commercial		Research		Commercial		Research	
		No. of vessel	Catch (ton)	No. of vessel	Catch (ton)	No. of vessel	Catch (ton)	No. of vessel	Catch (ton)
1952	210								
1953	1,091								
1954	10,200								
1955	8,420								
1956	6,220								
1957	9,764								
1958	21,558								
1959	19,344								
1960	23,756	2	45						
1961	25,628								
1962	38,880								
1963	33,500	1	16						
1964	21,435								
1965	19,305								
1966	23,401								
1967	16,640								
1968	7,707								
1969	5,559								
1970	6,560								
1971	4,339								
1972	2,796								
1973	2,381								
1974	1,847								
1975	1,045								
1976	1,906								
1977	2,240								
1978	2,520								
1979	2,350								
1980	2,488								
1981	4,856			1	19				
1982	4,900			1	8				
1983	4,928			1	1				
1984	3,607				2	17	1,563	1	32
1985	3,746					15	1,905	1	18
1986	4,466					12	1,919	2	23
1987	4,085					9	895	2	17
1988	6,894					20	4,233	2	24
1989						64	13,161	1	38
						19	5,437	1	102
									230

Remarks : Period of surface fishing 1983---1983/84  
1984---1984/85

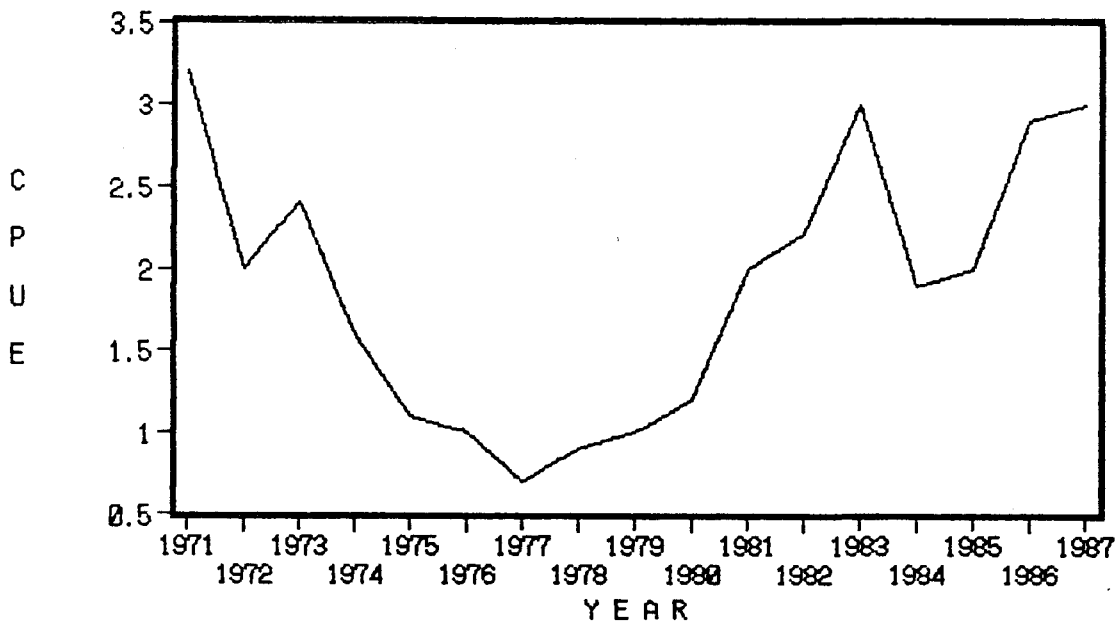
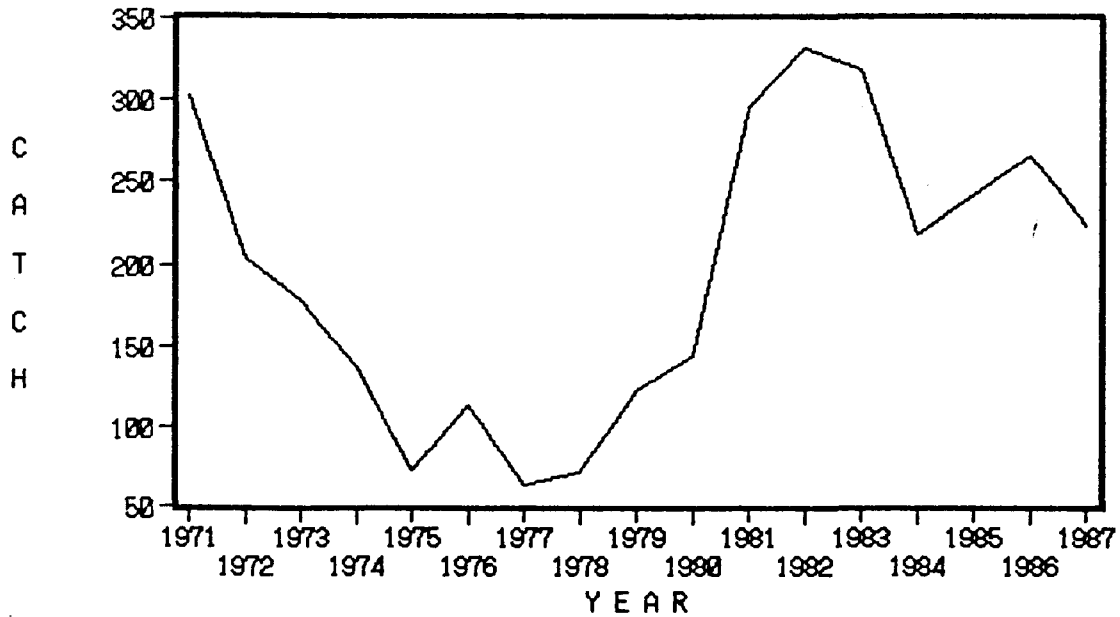
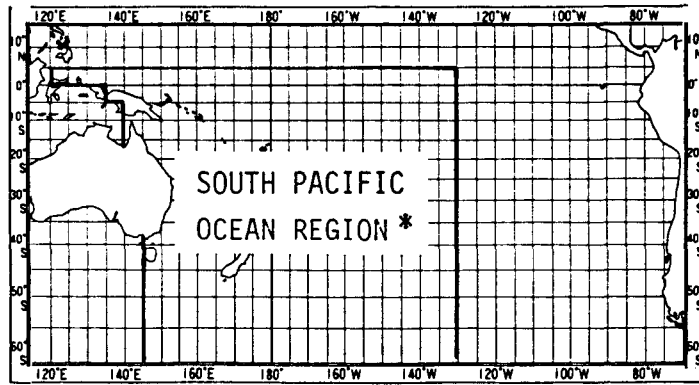


Figure 1. Catch and CPUE (number of albacore per 1,000 nominal hooks) trends of Japanese longline fishery in the South Pacific Ocean Region, 1971-1987.

\* Division such as South Pacific Ocean Region is only used in NRIPSP