

CATCH STATISTICS OF JAPANESE ATLANTIC TUNA PURSE SEINE FISHERY,1974 and 1975

by

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SUMMARY

The catch and effort data, together with the biological samplings, have been collected and compiled from the Japanese purse seine fleet in the Atlantic Ocean since their first operation in 1964. Presented here are the catch and effort statistics in 1974 and 1975, and annual changes in amount of catch and fishing effort and catch per effort up to the current year. The Japanese purse seine fleet withdrew from the eastern Atlantic in February 1975, and since then no Japanese tuna purse seine fishing has been done up to the present.

RESUME

Des données de capture et d'effort, ainsi que d'échantillonnage biologique, ont été réunies et compilées sur la flottille japonaise de senneurs qui pêchent dans l'Atlantique, et ce depuis le début de ses opérations. Le présent document fait état des statistiques de capture et d'effort pour 1974 et 1975, ainsi que des variations d'une année à l'autre du volume de la prise, de l'intensité de l'effort et du niveau de capture par unité d'effort jusqu'à l'année en cours. La flottille japonaise de senneurs s'est retirée de l'Atlantique Est au mois de février 1975, et les senneurs japonais n'ont pêché aucun thonidé depuis lors.

RESUMEN

Los datos de esfuerzo y captura, junto con los muestreos biológicos, han sido recogidos y recopilados de la flota japonesa de embarcaciones de cerco que opera en el Atlántico, desde su primera operación en 1964. En este documento se presentan las estadísticas de esfuerzo y captura para 1974 y 1975, y los cambios anuales en el volumen de captura y esfuerzo y en la captura por esfuerzo, hasta el año en curso. La flota japonesa de embarcaciones de cerco se retiró del Atlántico oriental en Febrero 1975, y los japoneses no han vuelto a pescar túnidos con red de cerco desde entonces.

Appendix and Tables 2, 3 reproduced in Data Record Vol. 7.

Appendice et Tableaux 2, 3 reproduits dans le Vol. 7 du Recueil de Données.

Appendice y Cuadros 2, 3 reproducidos en Vol. 7 de la Colección de Datos Estadísticas.

1. Number of boats operated

The Japanese purse seine fleet comprises single-boat and double-boat seiners. The size of vessel is officially recorded in gross tonnage and, in case of double-boat seiners, in that of larger net operating boat. Table 1 lists gross and capacity tons of the seiners in the Atlantic in 1974 and 1975 for convenience of referring to the ICCAT single-boat statistics. Names and sizes of seiners operated in the preceding years were already listed by Honma and Suzuki (1972, 1973 and 1974).

2. Catch and effort statistics

Recording format of catch and effort was described by Honma and Suzuki (1972). Compiled from the logbooks are number of boats, number of days of operation and catch by species in the whole Ocean (Tables 2 and 3), and number of hauls and amount of catch by 1 degree square (Appendix Table).

Total catch was 1,918 tons in 1974 and 291 tons in 1975. Two species were contributing the total catch: yellowfin tuna and skipjack. The main fishing seasons were from May to September in the FIS area 1 and from August to January in the FIS area 2 (Fig. 1). No boat operated in the FIS area 3.

3. Brief review of the Japanese Atlantic purse seine fishery

The fishing activities until 1973 was already reported by Honma and Suzuki (1974). In 1974, there was no operation by double-boat seiner, and two single-boat seiners were active in the Atlantic. A large-sized single boat seiner of 999 gross tons operated only during the period from August to September, and the other 499-tonner throughout the year. In 1975, the smaller seiner alone operated and left the Atlantic in February, since when no Japanese purse seiner has participated in the Atlantic up to date. It is said that this withdrawal was due to economical factors including the price of the fish.

As are shown in Table 3 and Fig. 2, the amount of catch reached its peak of about 16,000 tons in 1968 and later on until 1972, fluctuated between 6,000 tons and 9,000 tons. From 1973 onward, the catch decreased rapidly, being 3,300 tons in 1973, 1,900 tons in 1974 and 290 tons for the first two months in 1975. Yellowfin tuna exceeded skipjack in amount of catch until 1969 but skipjack dominated in and after 1970. Sharp decline of large-sized yellowfin tuna was accounted for the change of species composition of catch (Fig. 2). Another major species is frigate mackerels that have constituted 2 to 15 percent of the total catch. Bigeye tuna were caught only 4 percent or less (Table 3).

The annual CPUE for all species combined, calculated from the total catch and "number of days of operation", indicates that 1) yellowfin tuna were accounted for the yearly fluctuation of the total CPUE until 1969, 2) for the next two years CPUE's of skipjack contributed for the total CPUE, and 3) from 1972 onward the CPUE's of skipjack and yellowfin tuna were almost the same, 6-7 tons per "days of operation".

References

- Honma, M. and Z. Suzuki 1972. "Catch statistics and sample length composition in Japanese Atlantic tuna purse seine fishery, 1970". ICCAT SCRS/72/8.
- Honma, M. and Z. Suzuki 1973. "Ditto, 1971 and 1972, with a brief review of the fishery since 1964". Ibid./73/16.
- Honma, M. and Z. Suzuki 1974. "Ditto, 1973". Ibid./74/19.

Table 1. Names and sizes of Japanese purse seiners in the Atlantic Ocean, 1974 and 1975.

Type	Name	Gross ton	Carrying capacity(ton)
Single-boat	Nippon Maru	999.09	551.08
	Genpuku Maru No. 82	499.66	225.

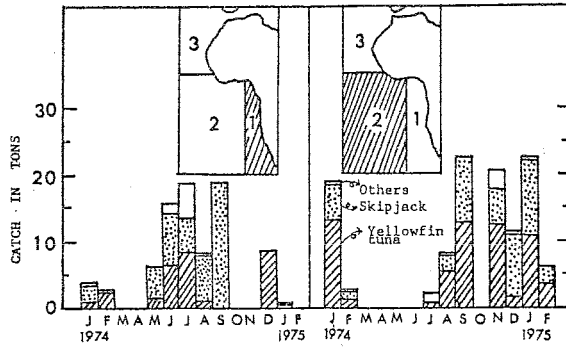


Fig. 1. Monthly catch of tunas by Japanese purse seiners in FIS Areas 1 and 2, in 1974 and 1975.

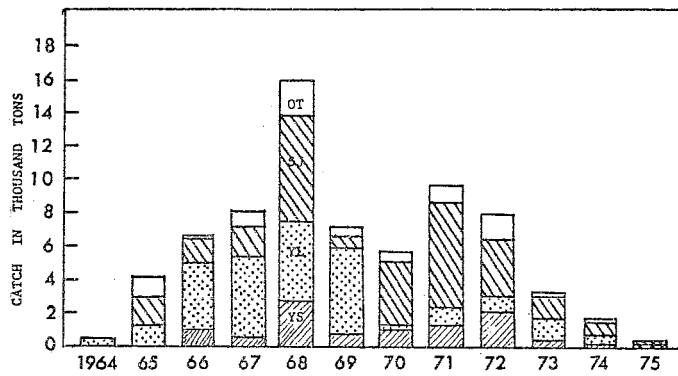


Fig. 2. Yearly catch by species of the Japanese Atlantic purse seine fishery, 1964 - 1975.

YS : Small-sized yellowfin tuna, less than 20 kg in body weight.
 YL : Large-sized yellowfin tuna, 20 kg or greater in body weight.
 SJ : Skipjack,
 OT : Others and unidentified.

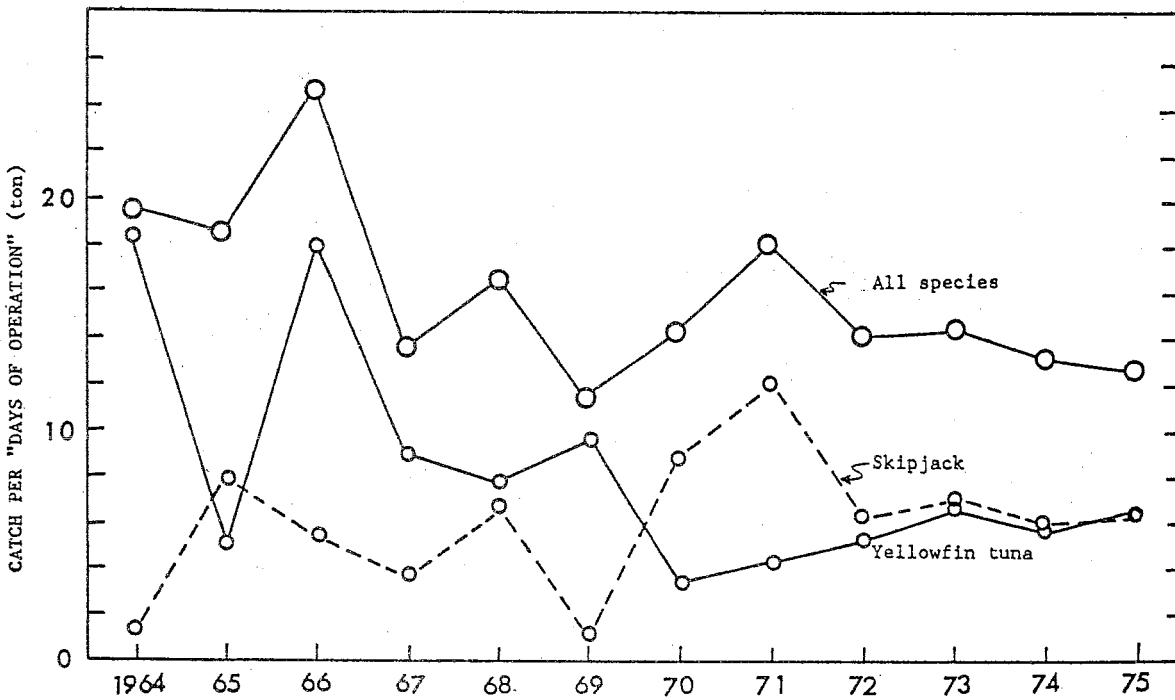


Fig. 3. Yearly averages of catch per "days of operation" in the Japanese Atlantic purse seine fishery, 1964 - 1975.