

NATIONAL REPORT OF CHINA (TAIWAN), 1977

by

Tuna Research Group

The preliminary estimates of the catch in 1978, from January to August, are given in Table 2.

#### 1. Effort

In 1977, a total of 234 tuna longline boats operated in the Atlantic Ocean (Table 1). The total hooks used in the area were 62,526,787 hooks.

The total number of boats operated in the previous year, 1976, in the area was 230, with a total hooks of 55,015,260 hooks.

No significant increase in effort was observed in 1977.

#### 2. Catch

The total catch was slightly decreased from 37,665 tons in 1976 to 36,670 tons in 1977 (Table 2).

The catch of albacore was 29,815 tons and made up 81.3 % of the total catch; the albacore catch in the previous year, 1976, was 29,437 tons.

The catch of bigeye was 2,978 tons in 1977 (8.1 % of the total catch); the catch of bigeye in 1976 was 3,300 tons.

The yellowfin catch decreased from 1,700 tons in 1976 to 329 tons in 1977.

#### 3. Statistics

##### (1) Task I - catch and effort statistics

Landing reports made at the baseports in the Atlantic were collected by the Taiwan Fisheries Bureau. Based on these reports, the T. F. B. compiled the yearly catch statistics and the number of boats operated in the Atlantic.

##### (2) Task II - effort statistics

According to the regulation, all the fishing boats operating in the high-seas have to report their positions daily by telex. It was based on these daily position reports, the Tuna Research Center, located at the Institute of Oceanography, National Taiwan University, compiled the monthly number of boats and hooks used in each 5° x 5° area.

##### (3) Task III - catch statistics

Logbooks were collected by the T. F. B. The coverage rate in the Atlantic increased from 14 % in 1976 to 20 % in 1977. The monthly catches, by species, in each small area (5° x 5°) were compiled and expanded by the T. R. C., based on the monthly number of hooks used in each small area.

#### 4. Size-frequency data

Length measurement on board started in January 1977. The number of fish, by species, measured in 1977 and 1978, up to May, are shown in Table 3. Processing of size data are now underway; it is expected that they will be ready to send to the ICCAT Secretariat in a few months.

Table 2. Catch (MT) of tunas and tuna-like fishes in the Atlantic Ocean, 1977-1978.\*

|       | total  | bluefin | yellowfin | albacore | bigeye | skipjack | billfishes | others** |
|-------|--------|---------|-----------|----------|--------|----------|------------|----------|
| 1977  | 36,670 | 3       | 329       | 29,815   | 2,978  | -        | 869        | 2,676    |
| 1978* | 31,305 | 129     | 455       | 25,965   | 2,459  | 31***    | 853        | 1,715    |

\* Preliminary estimates for 1978, from January to August.

\*\* Including sharks and others.

\*\*\* Including bonito.

Table 1. Number of tuna longline boats operated in the Atlantic Ocean, 1972-1977.

| size class* | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 |
|-------------|------|------|------|------|------|------|
| 100-200     | 15   | 23   | 25   | 20   | 41   | 45   |
| 200-500     | 126  | 141  | 191  | 141  | 187  | 186  |
| 500-1000    | 1    | 1    | 1    | 2    | 1    | 2    |
| 1000-       | 2    | 1    | 1    | 2    | 1    | 1    |
| total       | 144  | 166  | 218  | 165  | 250  | 234  |

\* expressed in gross tonnage

Table 3. Number of fish, by species, measured in 1977 and 1978 (up to May)

| species    | 1977   | 1978  |
|------------|--------|-------|
| albacore   | 13,765 | 5,294 |
| yellowfin  | 177    | 132   |
| bigeye     | 1,624  | 532   |
| bluefin    | 18     | 0     |
| skipjack   | 11     | 69    |
| billfishes | 183    | 113   |