REVIEW OF THE PELAGIC WET-FISHERIES FOR 1975

Total commercial landings of pelagic species reached a record high in 1975 when 190,075 short tons were landed (Table 1). The major contribution was again the anchovy, comprising 83% of the total. The lower landing of figures for 1974 reflected the late start made by the anchovy fishermen during the 1974-75 season. Landings of Pacific sardine and Pacific mackerel were minimal, due to the compliance by fishermen with the moratoria on these species. Jack mackerel landings were slightly up from 1974 although prices were lower in 1975. Market squid landings dropped considerably due to unavailability of the animals in Monterey Bay. Total landings of Pacific herring were only about half of those in 1974. This difference was due to the changing of harvest regulations in Tomales and San Francisco Bays.

TABLE 1 Landings of Pelagic Wet Fishes in California in Short Tons 1964-75

| Year | Sardine | Anchovy | Pacific Mackerel | Jack Mackerel | Herring | Market Squid | Total |
|------|---------|---------|---------------------|------------------|---------|-----------------|---------|
| 1964 | 6,569 | 2,488 | 13,414 | 44,846 | 175 | 8,217 | 75,709 |
| 1965 | 962 | 2,866 | 3,525 | 33,333 | 258 | 9,310 | 50,254 |
| 1966 | 439 | 31,140 | 2,315 | 20,431 | 121 | 9,512 | 63,958 |
| 1967 | 74 | 34,805 | 583 | 19,090 | 136 | 9,801 | 64,489 |
| 1968 | 62 | 15,538 | 1,567 | 27,834 | 179 | 12,466 | 57,646 |
| 1969 | 53 | 67,639 | 1,179 | 25,961 | 85 | 10,390 | 105,307 |
| 1970 | 221 | 96,243 | 311 | 23,873 | 158 | 12,295 | 133,101 |
| 1971 | 149 | 44,853 | 78 | 29,941 | 120 | 15,756 | 90,947 |
| 1972 | 186 | 69,101 | 54 | 25,559 | 63 | 10,030 | 104,993 |
| 1973 | 76 | 131,919 | 28 | 10,308 | 1,410 | 6,031 | 149,772 |
| 1974 | 7 | 82,585 | 67 | 12,729 | 2,630 | 14,452 | 112,470 |
| 1975 | 3 | 158,510 | 144 | 18,390 | 1,217 | 11,811 | 190,075 |

Northern Anchovy

The 1974–75 anchovy season began in the northern area on August 1, with a price to the fisherman of \$42.50 per ton, which dropped to \$30.25 per ton at season's end. The Monterey-based fleet consisted of 15 boats, two of which were purse seiners; and the remaining, lampara boats. Fishing effort was moderate until March when prices fell and unfavorable weather prevailed. The final landings totaled 6.669 tons.

The San Pedro-based fleet did not begin fishing until November when the price dispute with the canneries was resolved, although Port Hueneme boats fished as soon as the season opened on September 15. The San Pedro fleet numbered 38; of these, three were lampara and the rest purse seiners. Fishing effort was restrained by daily limits imposed by the canneries, although the quota of 100,000 tons was filled by May 2, when the Fish and Game Commission allowed an additional 15,000 tons with no additional limitations or provisions. At the conclusion of the season, the southern area fishermen caught 9,918 tons of the additional allowed 15,000 tons. The combined total for the two areas amounted to 116,587 tons of anchovies (Table 2).

TABLE 2 Anchovy Landings for Reduction in the Southern and Northern Permit Areas 1965-66 through 1975-76 in Short Tons

| Season | Southern Permit Area | Northern Permit Area | Totals |
|----------------------|-------------------------|-------------------------|---------|
| 1965–66 ^A | 16,468 | 375 | 16,843 |
| 1966–67 ^B | 29,589 | 8,021 | 37,610 |
| 1967–68 ^C | 852 | 5,651 | 6,503 |
| 1968–69 ^D | 25,314 | 2,736 | 28,050 |
| 969-70 | 81,453 | 2,020 | 83,473 |
| 970–71 | 80,095 | 657 | 80,752 |
| 971–72 | 52,052 | 1,374 | 53,426 |
| 972-73 | 73,167 | 2,352 | 75,519 |
| 973_74 ^C | 109,207 | 11,380 | 120,587 |
| 974–75 ^E | 109,918 | 6,669 | 116,587 |
| .975–76 ^F | 135,615 | 5,295 | 140,906 |

- A = November 12, 1965 through April 30, 1966.
- B = October 1, 1966 through April 30, 1967. C = September 15, 1967 through May 15, 1968.
- D = August 1 through May 15.
- C = August 1 through April 30 in southern permit area.
- E = August 1, 1974 through May 15, 1975. F = August 1, 1975 through May 15, 1976.

Age analysis of the sampled catch indicated an unusually high percentage (9.6%) of fish from the 1970 year-class (age group IV). This year-class contributed significantly to catch during the 1971-72, 1972-73, and 1973-74 seasons. The dominant year-class for the 1974-75 season was the 1972 year-class (age group II), consisting of nearly 40% of the sampled catch.

The 1975-76 season opened in the north with moderate fishing effort. The Monterey fleet numbered 5 purse seiners and 2 lampara boats. Initial anchovy price was quoted at \$28 per ton. Final landings totaled 5.291 tons.

The San Pedro-based fleet numbered 50 boats consisting of 7 lampara and 43 purse seiners. The increase in boats reflects a serious interest in the anchovy fishery. The southern area fishermen began fishing promptly with the price established at \$30 per ton. Considerable fishing effort was expended during the fall although daily limits were imposed. Fishing locations shifted from San Pedro Channel to waters off Ventura during November. Large concentrations of anchovies were observed in this area during an earlier acoustic survey conducted by the ALASKA. Final southern area landings totaled a record 135,615 tons (Table 2).

Pacific Sardine

The 1974 moratorium on Pacific sardine limited landings to 7 tons in 1974 and 3 tons during 1975. These landings allowed by law, represent an incidental catch in mixed loads. All indications imply the sardine population is still in a depressed state.

Pacific Mackerel

Compliance of the fishermen to the 1972 Pacific mackerel moratorium resulted in total landings of 67 tons and 144 tons during 1974 and 1975 respectively. Presently, increased numbers of Pacific mackerel appeared in jack mackerel loads. The fishermen are allowed up to 18% by weight as incidental catch. These observations and others imply an increasing population of Pacific mackerel.

Iack Mackerel

Jack mackerel landings for 1974 remained below average, totaling 12,729 tons. A possible cause for the

TABLE 3

Commercial Landings of Jack Mackerel in California
in Tons 1963–75

| Year | Annual landings | Mean annual landings | |
|------|-----------------|-------------------------|--|
| 1963 | 47,721 | | |
| 1964 | 44,846 | 46,284 (1963-64) | |
| 1965 | 33,333 | 41,967 (1963-65) | |
| 1966 | 20,431 | 36,583 (1963–66) | |
| 1967 | 19,090 | 33,084 (1963-67) | |
| 1968 | 27,834 | 32,209 (1963-68) | |
| 1969 | 25,961 | 31,317 (1963-69) | |
| 1970 | 23,873 | 30,386 (1963-70) | |
| 1971 | 29,941 | 30,337 (1963-71) | |
| 1972 | 25,559 | 29,589 (1963-72) | |
| 1973 | 10,308 | 28,082 (1963-73) | |
| 1974 | 12,729 | 26,802 (1963-74) | |
| 1975 | 18,390 | 26,155 (1963-75) | |

decline is the emphasis towards the more profitable bluefin tuna and bonito. Fishing areas centered near San Clemente Island and Cortes Bank. Jack mackerel price stabilized at \$115 per ton in 1974, but dropped to \$85 in 1975.

The 1975 landing reached 18,390 tons with the majority of the total being caught in the last 5 months (Table 3). Availability of the fish and increased cannery orders accounted for this renewed interest. Fishing areas included Santa Catalina Island, San Clemente Island and Cortes Bank.

Market Squid

Market squid landings during 1974 reached 14,452 tons but fell to 11,811 tons in 1975. This decrease was the result of low landings in the Monterey area. Squid prices ranged from \$40 to \$200 per ton during both years with the common price ranging between \$60 to \$80 per ton.

Pacific Herring

During 1974, herring landings totaled 2,630 tons while 1975 landings amounted to 1,217 tons. The decrease in catch was due to a change in harvest regulations in Tomales and San Francisco Bays.

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