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FISH BULLETIN 170  
California Marine Fish Landings For 1976



by  
*M.S. Oliphant*  
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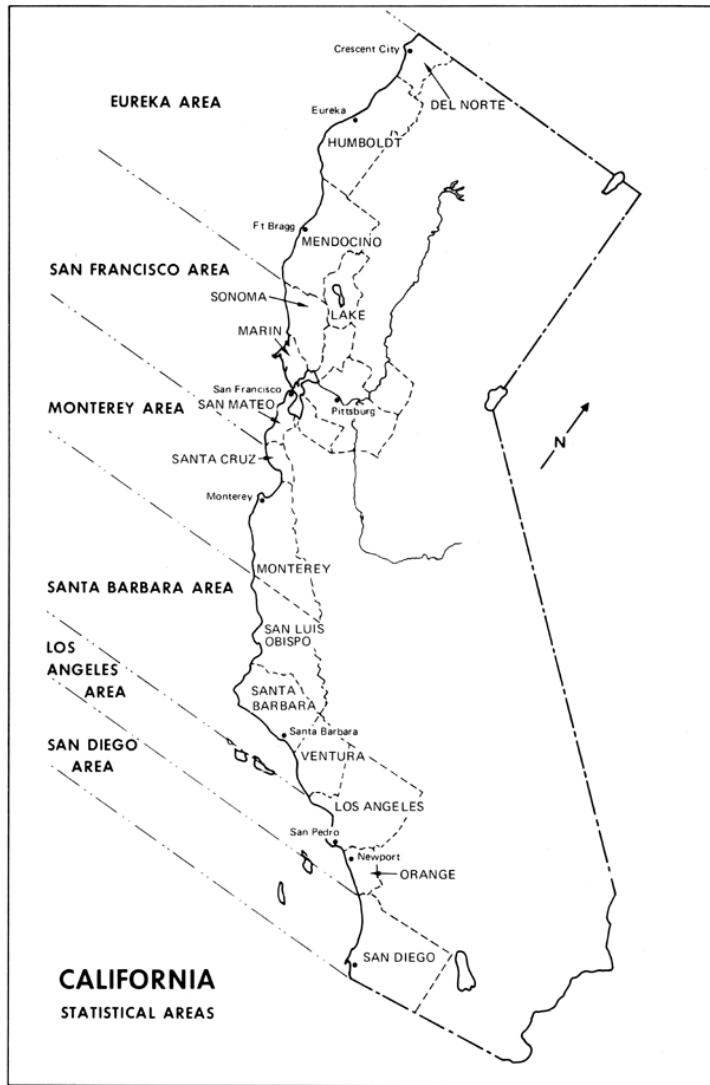


Figure 1. Geographical areas used to summarize California fisheries statistics.

*Figure 1. Geographical areas used to summarize California fisheries statistics*

MARINE FISH LANDINGS 1976

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## **1. INTRODUCTION**

Landing bulletins provide basic catch records of amounts and values of marine resources taken by California's commercial fisheries plus summarizations of catches by the passenger carrying fishing industry. Small quantities of freshwater fish taken commercially in inland areas also are detailed. These figures are of local, national, and international significance to those interested in the wise utilization and management of California's living marine and freshwater resources.

This report for 1976 is the 36th in a series stemming from the first gathering of commercial fisheries landing data by the California Department of Fish and Game in 1916 and the subsequent first publication of these catch data in 1929 for the years 1926 and 1927.

California's fishery statistics are based on a system where fish dealers, processors, and operators of passenger carrying fishing vessels send duplicate copies of their landing records to the department. Fish Bulletin 86, which reported the catch for 1950, describes fully the system and methods used in collecting commercial fish records. Basic principles remain the same today as then, although some methods and equipment changed. Parke Young (1969) described the passenger carrying vessel industry in Fish Bulletin 145.

Credit for this publication is due largely to the cooperative efforts of the fishing industry, wholesale fish dealers, fishermen, canners, processors, and department personnel responsible for the market receipt system who have, through their efforts, provided the most accurate statistics possible. My utmost appreciation is extended to this large group of people without which this publication would not be possible.

Portions of the salmon statistics were collected under the Anadromous Fish Act Project: California AFC-12, Ocean Salmon Study and supported by the National Marine Fisheries Service, Department of Commerce, Washington, D.C.

## **2. EXPLANATION OF TABLES**

Tables in this bulletin summarize statistics of the various fishery operations in California during 1976. Five types of activity are being reported this year: landings by commercial fishermen in California, commercial passenger carrying fishing vessel landings, imports of tuna from other states or foreign countries destined for processing in California, landings of marine inshore species used for bait, and catches of boats supplying live bait for sportfishing. In addition, the species composition of the 1976 ocean salmon landings is reported.

Statistics presented in this publication do not encompass all fishing activities in California since not all of these functions are reported to us. For example, recreational fishing from private boats or from shore is not reported, nor is the quantity of fish imported for use in a fresh state compiled.

Preliminary landing data are published annually in the circular series which enumerates certain fishery products produced from the catch. The 1976 figures are contained in Circular Number 51, "Statistical Report of Fresh, Canned, Cured and Manufactured Fishery Products for 1976" (Oliphant 1978).

In years to come the tables will be printed in metric values; however, for this bulletin the following necessary factors for conversion are provided.

1 Pound = 453.59 Grams

1 Pound = 0.453 Kilogram

1 Ton (Net or Short) = 0.907 Metric Ton

### **2.1. SOURCE OF DATA**

Data concerning each commercial landing, inshore bait delivery, and import are recorded on receipts by fish dealers or processors at the time of delivery. Copies of these documents are transmitted to the department twice each month. For each transaction the dealer must provide data concerning the species, weight, and price paid to the fishermen. The data of the transaction, the fisherman's name, the fishing boat registration number, and intended use of the fish (canning, fresh, etc.) also are required. In addition, type of gear used and the specific area where the fish were caught are reported.

Commercial passenger carrying fishing vessels catch data are obtained from logs completed by the boat operator. The required log for each trip indicates the number of each species taken, number of anglers on board, number of hours fished, and the specific area fished. The date, boat name, and boat registration number also are furnished. Copies of these records are sent to the Department monthly.

Operators of boats supplying live bait keep a voluntary daily log showing number of sets, species caught, area fished, and number of scoops of bait sold. Copies of these logs are furnished the Department monthly. While these records represent most live bait landings, the reported catch should be regarded as minimal.

Clerical personnel at field offices in Eureka, Menlo Park, Long Beach and San Diego maintain contact with fish dealers, local Fish and Game wardens, and field biologists to insure that the records are accurate and transmitted promptly. All data received by the department are carefully edited for completeness and coded to facilitate processing. The information is then punched into cards and summarized with electric tabulating machines.

## **2.2. STATISTICAL AREAS**

California is divided into seven areas for the purpose of reporting fisheries statistics (Figure 1) Each statistical area is named for a major port within its boundaries.

Prior to 1972 commercial fish landings from inland waters were included with San Francisco totals and in the statewide summaries. In the 1972 bulletin, the separation of all inland commercial fish landings resulted in Appendix I and II.

## **2.3. SPECIES**

The common and scientific names of species reported here are those designated by the department (Gates and Frey 1974). Some species are reported only collectively when, for economic or other reasons, their separation is not practical (Table 1).

Salmon landings reported in the tables are for all species combined. However, biologists from the department's Anadromous Fisheries Branch sample the commercial and sport salmon fisheries to determine species composition of catches and to obtain volume estimates of the unreported skiff catch. The sampling methods and results for 1952 through 1965 were detailed by Jensen and Swartzell (1967); since 1966, results have been presented annually in the landing bulletins.

The miscellaneous fish category, as reported in the 1976 landings tables, consists of small volume deliveries of the following species: lamprey, California moray, striped mullet, Pacific halibut, sargo, American shad, spotted cabrilla, and wolf-eel. Reporting of skate and ray species on market receipts was poor; the reported species consisted of skates, rays, stingrays, and shovelnose guitarfish. Miscellaneous mollusks consisted of mussels, quahogs, sea snails, softshell claims, and Washington clams.

Due to increasing requests for marine plant harvest information, a table of kelp and agar landings is presented in Appendix III. This is an updated, expanded version of the table presented by Frey (1971) on giant kelp, *Macrocystis* spp., landings by open and leased beds dating back to 1916.

## **2.4. CONDITION**

Most fish and shellfish are landed in a round condition; however, some species, such as barracuda, salmon, and white sea bass may be eviscerated before being brought ashore. Some species, such as swordfish, are also headed at sea. The condition of fish landed or shipped into the state cannot always be determined, so the tables represent summarized weights as reported to the Department without regard to condition.

Since 1963, oyster landings have been reported as packed weight rather than weight in the shell. Packed weight is estimated to be 15.5% of the live weight for Pacific oysters and 10.9% for eastern oysters. Landings reported in measurements other than weight are equated to pounds using conversion factors determined by periodic sampling.

Abalone number to weight conversion factors were reexamined during the 1970–71 abalone season by a Department biological team. These conversion factors, rounded off to whole numbers were used in 1972. The same factors are used in this bulletin and are as follows:

|                  |                       |
|------------------|-----------------------|
| Abalone, red     | 45 pounds per dozen   |
| Abalone, pink    | 25 pounds per dozen   |
| Abalone, green   | 25 pounds per dozen   |
| Abalone, black   | 25 pounds per dozen   |
| Abalone, white   | 20 pounds per dozen   |
| Clam, Washington | 7 pounds per dozen    |
| Crab, Dungeness  | 2 pounds each         |
| Live bait        | 12.5 pounds per scoop |

## **2.5. VALUE**

Value is computed from prices paid to fishermen. Area value figures are ascertained by summing the value of all individual landings in that area. The value for an individual port within an area is calculated from weights of each species landed at that port and the average price paid for the species in that area. When the price paid for an individual landing is not specified, the average price paid for the species in the area is used.

## **2.6. INSHORE BAIT**

The inshore bait fishery takes numerous species of fish and invertebrates from bays, rivers, and intertidal regions. Records of this fishery have been published as a separate summary in landing bulletins since 1963. Conversion factors used for inshore bait for 1975 were as follows:

|                           |                        |
|---------------------------|------------------------|
| Crab, sand                | 0.041 pound per dozen  |
|                           | 4.5 pounds per gallon  |
| Crab, shore               | 0.013 pound per dozen  |
| Mudsucker                 | 0.465 pound per dozen  |
| Mussel                    | 80.000 pounds per sack |
| Sculpin, Pacific staghorn | 0.465 pound per dozen  |
| Shrimp, ghost             | 0.128 pound per dozen  |

## **2.7. REFERENCES**

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## **3. TABLES**

TABLE 1  
Common and Scientific Names of Species Reported in the 1976 Catch

| Common name                    | Scientific name  | Common name                | Scientific name                        |  |  |
|--------------------------------|--|----------------------------|--|--|--|
| <b>FISHES</b>                  |  |                            |  |  |  |
| Anchoa, northern.....          | <i>Engraulis mordax</i>                                  | Sucker, western.....       | <i>Catostomus occidentalis</i>         |  |  |
| Bass, California.....          | <i>Sphyraena argentea</i>                                | Swordfish.....             | <i>Xiphias gladius</i>                 |  |  |
| Bass, rock.....                |  | Tuna.....                  |  |  |  |
| Kelp bass.....                 | <i>Paralabrax clathratus</i>                             | Albacore.....              | <i>Thunnus alalunga</i>                |  |  |
| Sand bass, barred.....         | <i>Paralabrax nebulosus</i>                              | Bigeye.....                | <i>Thunnus obesus</i>                  |  |  |
| Sand bass, spotted.....        | <i>Paralabrax maculatusfasciatus</i>                     | Bluefin.....               | <i>Thunnus thynnus</i>                 |  |  |
| Blackfish, Sacramento.....     | <i>Orthodon microlepidotus</i>                           | Skipjack, tuna.....        | <i>Euthynnus pelamis</i>               |  |  |
| Bonito, Pacific.....           | <i>Sarda chiliensis</i>                                  | Skipjack, black.....       | <i>Euthynnus lineatus</i>              |  |  |
| Butterfish, Pacific.....       | <i>Pepirus simillimus</i>                                | Yellowfin.....             | <i>Thunnus albacares</i>               |  |  |
| Cabezon.....                   | <i>Scorpaenichthys marmoratus</i>                        | Turbot.....                |  |  |  |
| Carp.....                      | <i>Cyprinus carpio</i>                                   | Curlfin.....               | <i>Pleuronichthys decurrens</i>        |  |  |
| Crabber.....                   |  | Diamond.....               | <i>Hypopsetta guttulata</i>            |  |  |
| White.....                     | <i>Gymnoemus lineatus</i>                                | Horneyhead.....            | <i>Pleuronichthys verticalis</i>       |  |  |
| Quinnongfish.....              | <i>Seriola polita</i>                                    | Wahoo.....                 | <i>Carenchus solanderi</i>             |  |  |
| Dolphinfish.....               | <i>Coryphaena hippurus</i>                               | Whitefish, ocean.....      | <i>Caulophilus princeps</i>            |  |  |
| Eel, wolf.....                 | <i>Anarrhichthys ocellatus</i>                           | Yellowtail.....            | <i>Seriola dorsalis</i>                |  |  |
| Flounder.....                  |  |                            |  |  |  |
| Arrowtooth.....                | <i>Atheresthes stoma</i>                                 | <b>CRUSTACEANS</b>         |  |  |  |
| Starry.....                    | <i>Platichthys stellatus</i>                             | Crab.....                  | <i>Cancer magister</i>                 |  |  |
| Flying fish.....               | <i>Cypselurus spp.</i>                                   | Dungeness.....             | <i>Pleuroncodes planipes</i>           |  |  |
| Grenadiers.....                |  | Pelagic red.....           | <i>Cancer spp.</i>                     |  |  |
| California.....                | <i>Nezumia stegidolepis</i>                              | Rock.....                  | <i>Emerita analoga</i>                 |  |  |
| Pacific.....                   | <i>Coryphaenoides acrolepis</i>                          | Sand.....                  | <i>Pacifastacus leniusculus</i>        |  |  |
| Grouper.....                   |  | Crayfish.....              | <i>Procambarus clarkii</i>             |  |  |
| Hake, Pacific.....             | <i>Micropogonias punctatus</i>                           | Lobster, spiny.....        | <i>Panulirus interruptus</i>           |  |  |
| Halibut, California.....       | <i>Medialuna californiensis</i>                          | Prawn.....                 |  |  |  |
| Halibut, California.....       | <i>Paralichthys californicus</i>                         | Ridgeback.....             | <i>Eusicyonia ingentus</i>             |  |  |
| Hardhead.....                  | <i>Mylopharodon conocephalus</i>                         | Spot.....                  | <i>Pandalus platyceros</i>             |  |  |
| Herring, Pacific.....          | <i>Clupea harengus pallasi</i>                           | Shrimp.....                |  |  |  |
| Herring, Pacific.....          | <i>Lavinia exilisuda</i>                                 | Bay.....                   | <i>Crangon spp.</i>                    |  |  |
| Hitch.....                     |  | Brine.....                 | <i>Acartia salina</i>                  |  |  |
| Lingcod.....                   |  | Cloud, bay.....            | <i>Callianassa californiensis</i>      |  |  |
| Mackerel.....                  |  | Ocean, Pacific.....        | <i>Pandalus jordani</i>                |  |  |
| Jack.....                      | <i>Trachurus symmetricus</i>                             | Red.....                   | <i>Hippolytis californica</i>          |  |  |
| Pacific.....                   | <i>Scomber japonicus</i>                                 |                            |  |  |  |
| Mony, California.....          | <i>Scomber mordax</i>                                    | <b>MOLLUSKS</b>            |  |  |  |
| Mudskipper, longjaw.....       | <i>Periophthalmodon maculatus</i>                        | Abaalone.....              |  |  |  |
| Mullet, striped.....           | <i>Mugil cephalus</i>                                    | Black.....                 | <i>Halocynthia cracherodii</i>         |  |  |
| Opah.....                      | <i>Lampris regius</i>                                    | Flat.....                  | <i>Halocynthia walensis</i>            |  |  |
| Perch, ocean.....              | Members of family Embi-                                  | Green.....                 | <i>Halocynthia fulgens</i>             |  |  |
| Rockfish.....                  | otocidae   | Pink.....                  | <i>Halocynthia corrugata</i>           |  |  |
| Sablefish.....                 | <i>Anoplopoma fimbria</i>                                | Pinto.....                 | <i>Halocynthia kamtschatkana</i>       |  |  |
| Salmon.....                    |  | Red.....                   | <i>Halocynthia rufescens</i>           |  |  |
| King.....                      | <i>Oncorhynchus tshawytscha</i>                          | Threaded.....              | <i>Halocynthia assimilis</i>           |  |  |
| Brook.....                     | <i>Oncorhynchus mykiss</i>                               | White.....                 | <i>Halocynthia sorensoni</i>           |  |  |
| Silver.....                    | <i>Oncorhynchus kisutch</i>                              | Clam.....                  |  |  |  |
| Sanddab.....                   | <i>Citharichthys sordidus</i>                            | Freshwater.....            | <i>Corbicula fluminea</i>              |  |  |
| Sardine, Pacific.....          | <i>Sardinops sagax caeruleus</i>                         | Cap.....                   | <i>Tresus nuttallii</i>                |  |  |
| Sculpin.....                   | <i>Scorpaena guttata</i>                                 | Jackknife, California..... | <i>Argopecten tectorum</i>             |  |  |
| Sculpin, Pacific staghorn..... |  | Littleneck.....            | <i>Pecten stamineus</i>                |  |  |
| Sea bass, giant.....           | <i>Leptocottus armatus</i>                               | Purple.....                | <i>Sanguinolaria nuttalli</i>          |  |  |
| Seabass, white.....            | <i>Stereolepis gigas</i>                                 | Quahog, northern.....      | <i>Mercenaria mercenaria</i>           |  |  |
| Shad, American.....            | <i>Cynoscion nobilis</i>                                 | Softshell.....             | <i>Mya arenaria</i>                    |  |  |
| Shad, threadfin.....           | <i>Alosa sapidissima</i>                                 | Washington, common.....    | <i>Saxidomus nuttalli</i>              |  |  |
| Shark.....                     | <i>Dorosoma petenense</i>                                | Mussel.....                |  |  |  |
| Members of family Alopidae,    |  | Bay.....                   | <i>Mytilus edulis</i>                  |  |  |
| Citharichthysidae, Lamnidae    |  | Seamussel.....             | <i>Mytilus californianus</i>           |  |  |
| and Sphindidae.....            |  | Octopi.....                | <i>Polypus spp.</i>                    |  |  |
| Sheepshead, California.....    | <i>Pimelometopon pulchrum</i>                            | Oyster.....                |  |  |  |
| Skates and Rays.....           | Members of family Rhinobatidae, Rajidae and Myliobatidae | Eastern.....               | <i>Crassostrea virginica</i>           |  |  |
| Smelt.....                     |  | Giant Pacific.....         | <i>Crassostrea gigas</i>               |  |  |
| Jacksmelt.....                 | <i>Atherinopsis californiensis</i>                       | Small, sea.....            | <i>Astrea spp.</i>                     |  |  |
| Night.....                     | <i>Spirinchus starksii</i>                               | Squid, market.....         | <i>Loligo opalescens</i>               |  |  |
| Surf.....                      | <i>Hypomesus pretiosus</i>                               |                            |  |  |  |
| Whitebait.....                 | <i>Allosmerus elongatus and Spirinchus starksii</i>      |                            |  |  |  |
| Sole.....                      |  | <b>ECHINODERM</b>          |  |  |  |
| Butter.....                    | <i>Iopsetta isolepis</i>                                 | Sea Urchin.....            | <i>Strongylocentrotus franciscanus</i> |  |  |
| Dover.....                     | <i>Microstomus pacificus</i>                             |                            |  |  |  |
| English.....                   | <i>Parophrys vetulus</i>                                 |                            |  |  |  |
| Petrale.....                   | <i>Eopsetta jordani</i>                                  |                            |  |  |  |
| Rex.....                       | <i>Glyptocephalus zachirus</i>                           |                            |  |  |  |
| Rock.....                      | <i>Lepidopsetta bilineata</i>                            |                            |  |  |  |
| Sand.....                      | <i>Psettichthys melanostictus</i>                        |                            |  |  |  |
| <b>AMPHIBIA</b>                |  |                            |  |  |  |
| Bullfrog.....                  |  | <i>Rana catesbeiana</i>    |  |  |  |

TABLE 1  
Common and Scientific Names of Species Reported in the 1976 Catch

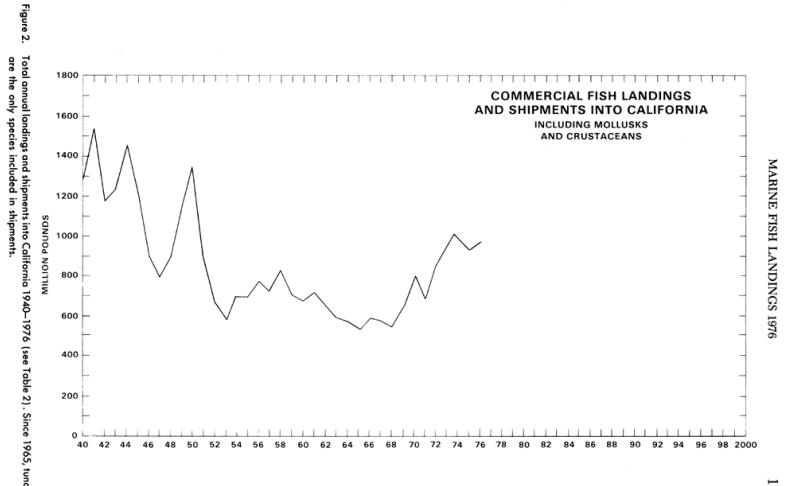


Figure 2. Total annual landings and shipments into California 1940–1976 (see Table 2). Since 1965, tunas are the only species included in shipments

**TABLE 2**  
**Total Annual Landings and Shipments Into California of Commercial Fish, Mollusks,  
 and Crustaceans; Includes Sardine Deliveries to Reduction Ships  
 During 1930 Through 1938**

| Year      | Thousands<br>of pounds | Year        | Thousands<br>of pounds |
|-----------|------------------------|-------------|------------------------|
| 1916..... | 95,003                 | 1946.....   | 919,822                |
| 1917..... | 209,877                | 1947.....   | 795,499                |
| 1918..... | 261,134                | 1948.....   | 900,467                |
| 1919..... | 266,270                | 1949.....   | 1,135,339              |
| 1920..... | 222,004                | 1950.....   | 1,366,676              |
| 1921..... | 135,348                | 1951.....   | 904,114                |
| 1922..... | 182,243                | 1952.....   | 694,996                |
| 1923..... | 253,975                | 1953.....   | 618,919                |
| 1924..... | 340,446                | 1954.....   | 713,410                |
| 1925..... | 437,502                | 1955.....   | 710,713                |
| 1926..... | 394,964                | 1956.....   | 772,551                |
| 1927..... | 487,166                | 1957.....   | 738,550                |
| 1928..... | 583,527                | 1958.....   | 832,919                |
| 1929..... | 856,854                | 1959.....   | 713,423                |
| 1930..... | 702,189                | 1960.....   | 694,663                |
| 1931..... | 502,390                | 1961.....   | 725,253                |
| 1932..... | 556,139                | 1962.....   | 663,107                |
| 1933..... | 821,905                | 1963.....   | 592,899                |
| 1934..... | 1,390,798              | 1964.....   | 591,131                |
| 1935..... | 1,448,017              | * 1965..... | 544,480                |
| 1936..... | 1,764,900              | 1966.....   | 591,533                |
| 1937..... | 1,362,984              | 1967.....   | 589,028                |
| 1938..... | 1,310,596              | 1968.....   | 567,214                |
| 1939..... | 1,486,535              | 1969.....   | 672,793                |
| 1940..... | 1,297,518              | 1970.....   | 798,415                |
| 1941..... | 1,525,892              | 1971.....   | 687,995                |
| 1942..... | 1,173,414              | † 1972..... | 845,699                |
| 1943..... | 1,234,049              | 1973.....   | 1,006,431              |
| 1944..... | 1,459,456              | 1974.....   | 938,118                |
| 1945..... | 1,216,501              | 1975.....   | 979,826                |
|           |                        | 1976.....   | 1,047,761              |

\* Beginning in 1965 only tuna shipments are recorded.

† Beginning in 1972 commercial freshwater fish landings are reported separately and not included in these totals.

**TABLE 2**  
**Total Annual Landings and Shipments Into California of Commercial Fish, Mollusks, and Crustaceans; Includes Sardine Deliveries to Reduction Ships During 1930 Through 1938**

**TABLE 3**  
**LANDINGS AND SHIPMENTS OF LEADING SPECIES RANKED BY POUNDS \***

| 1975                    |      |                         | 1976      |                         |                         |           |           |
|-------------------------|------|-------------------------|-----------|-------------------------|-------------------------|-----------|-----------|
| Species                 | Rank | Thousands<br>of pounds  | Species   | Rank                    | Thousands<br>of pounds  |           |           |
|                         |      | Thousands<br>of dollars |           |                         | Thousands<br>of dollars |           |           |
| Anchovy, northern ..... | 1    | 317,021                 | \$5,008   | Yellowfin tuna .....    | 1                       | 300,516   | \$90,672  |
| Skipjack tuna .....     | 2    | 261,887                 | 69,762    | Anchovy, northern ..... | 2                       | 249,839   | 4,628     |
| Skipjack tuna .....     | 3    | 120,925                 | 29,357    | Skipjack tuna .....     | 3                       | 198,608   | 58,707    |
| Albacore tuna .....     | 4    | 57,767                  | 21,744    | Albacore tuna .....     | 4                       | 71,845    | 43,984    |
| Jack mackerel .....     | 5    | 36,779                  | 1,693     | Jack mackerel .....     | 5                       | 44,893    | 2,080     |
| Pacific bonito .....    | 6    | 31,873                  | 3,895     | Rockfish .....          | 6                       | 24,603    | 3,977     |
| Rockfish .....          | 7    | 23,624                  | 3,214     | Dover sole .....        | 7                       | 22,757    | 3,068     |
| Squid, market .....     | 8    | 23,622                  | 826       | Bluefin tuna .....      | 8                       | 20,570    | 6,144     |
| Dover sole .....        | 9    | 22,688                  | 2,507     | Squid, market .....     | 9                       | 20,306    | 747       |
| Bluefin tuna .....      | 10   | 17,835                  | 4,369     | Dungeness crab .....    | 10                      | 15,727    | 10,275    |
| Sablefish .....         | 11   | 14,132                  | 1,400     | Sablefish .....         | 11                      | 13,331    | 1,259     |
| Sea urchin .....        | 12   | 7,567                   | 615       | Sea urchin .....        | 12                      | 11,106    | 1,039     |
| Salmon .....            | 13   | 6,925                   | 6,972     | Pacific bonito .....    | 13                      | 8,897     | 1,222     |
| Ocean shrimp .....      | 14   | 4,998                   | 665       | Salmon .....            | 14                      | 7,786     | 10,707    |
| English sole .....      | 15   | 4,314                   | 797       | Pacific herring .....   | 15                      | 4,820     | 483       |
| Dungeness crab .....    | 16   | 3,935                   | 2,792     | English sole .....      | 16                      | 4,283     | 874       |
| Petrale sole .....      | 17   | 3,270                   | 783       | Ocean shrimp .....      | 17                      | 3,501     | 683       |
| Lingcod .....           | 18   | 3,190                   | 452       | Lingcod .....           | 18                      | 3,120     | 458       |
| Pacific herring .....   | 19   | 2,344                   | 220       | Petrale sole .....      | 19                      | 2,577     | 814       |
| Avalone .....           | 20   | 2,138                   | 1,388     | Rex sole .....          | 20                      | 2,013     | 411       |
| All Others .....        | —    | 13,202                  | 5,909     | All Others .....        | —                       | 16,263    | 7,217     |
| Totals .....            | —    | 979,826                 | \$164,338 | Totals .....            | —                       | 1,047,761 | \$249,449 |

\* Only tunas are included in the shipments.

**TABLE 3**  
**LANDINGS AND SHIPMENTS OF LEADING SPECIES RANKED BY POUNDS**

**TABLE 4**  
**Number of Licensed Commercial Fishermen**

| Area of residence   | License year* |               |
|---|---------------|---------------|
|   | 1975-76       | 1976-77       |
| Eureka .....  | 2,261         | 2,689         |
| Sacramento .....  | 788           | 940           |
| San Francisco .....   | 2,821         | 2,936         |
| Monterey .....  | 1,319         | 1,450         |
| Santa Barbara .....   | 1,612         | 1,700         |
| Los Angeles .....   | 2,477         | 2,414         |
| San Diego .....   | 1,813         | 1,728         |
| Alaska, Washington and Oregon fishermen licensed in California..... | 784           | 965           |
| Mexican nationals licensed in California .....                      | 15            | 56            |
| Other.....  | 69            | 88            |
| <b>Totals .....</b>   | <b>13,959</b> | <b>14,966</b> |

\* April 1 to March 31.

**TABLE 4**  
**Number of Licensed Commercial Fishermen**

**TABLE 5**  
**Number of Registered Fishing Boats by Length**

| Length group in feet | License year * |         | Length group in feet | License year * |         |
|----------------------|----------------|---------|----------------------|----------------|---------|
|                      | 1975-76        | 1976-77 |                      | 1975-76        | 1976-77 |
| 0-10 .....           | 1              | 3       | 101-105 .....        | 6              | 4       |
| 11-15 .....          | 144            | 165     | 106-110 .....        | 3              | 3       |
| 16-20 .....          | 1,287          | 1,391   | 111-115 .....        | 3              | 3       |
| 21-25 .....          | 1,322          | 1,475   | 116-120 .....        | 8              | 6       |
| 26-30 .....          | 884            | 983     | 121-125 .....        | 4              | 4       |
| 31-35 .....          | 716            | 722     | 126-130 .....        | 1              | 2       |
| 36-40 .....          | 916            | 924     | 131-135 .....        | 5              | 5       |
| 41-45 .....          | 472            | 488     | 136-140 .....        | 9              | 8       |
| 46-50 .....          | 343            | 352     | 141-145 .....        | 1              | 1       |
| 51-55 .....          | 157            | 175     | 146-150 .....        | 0              | 0       |
| 56-60 .....          | 162            | 179     | 151-155 .....        | 14             | 16      |
| 61-65 .....          | 133            | 138     | 156-160 .....        | 3              | 3       |
| 66-70 .....          | 45             | 42      | 161-165 .....        | 4              | 3       |
| 71-75 .....          | 42             | 42      | 166-170 .....        | 3              | 2       |
| 76-80 .....          | 37             | 28      | 171-175 .....        | 5              | 5       |
| 81-85 .....          | 20             | 24      | 176-180 .....        | 1              | 0       |
| 86-90 .....          | 13             | 8       | 181 and over .....   | 40             | 44      |
| 91-95 .....          | 8              | 10      | Total .....          | 6,818 †        | 7,263 ‡ |
| 96-100 .....         | 6              | 5       |                      |                |         |

\* April 1 to March 31.

† The owners of 418 boats were issued fishing party licenses in 1975-76.

‡ The owners of 397 boats were issued fishing party licenses in 1976-77.

Amendment to 1974 and 1975 bulletins.

The owners of 489 boats were issued fishing party licenses in 1973-74.

The owners of 472 boats were issued fishing party licenses in 1974-75.

**TABLE 5**  
**Number of Registered Fishing Boats by Length**

**TABLE 6**  
**Origin of Shipments Received for Processing in California During 1976\***

| SHIPPED FROM:                          | Species            | Pounds shipped to each area |           |                    |
|--|--------------------|-----------------------------|-----------|--------------------|
|  |                    | Los Angeles                 | San Diego | Total pounds       |
| Continental United States:             |                    |                             |           |                    |
| Tuna, skipjack black .....             | 43,046             | -                           |           | 43,046             |
| Oregon, Washington, Canada and Alaska: |                    |                             |           |                    |
| Tuna, yellowfin.....                   | -                  | 6,133                       |           | 6,133              |
| Tuna, albacore .....                   | 6,886,156          | 1,582,181                   |           | 8,468,337          |
| Mexico and Central America:            |                    |                             |           |                    |
| Tuna, yellowfin.....                   | 3,903,456          | 6,709,328                   |           | 9,912,784          |
| Tuna, skipjack.....                    | 3,029,684          | 3,768,659                   |           | 6,798,343          |
| Tuna, bluefin.....                     | 562,520            | 1,218,225                   |           | 1,780,745          |
| Tuna, albacore .....                   | 51,233             | 40,511                      |           | 91,744             |
| Tuna, skipjack black .....             | 69,356             | 282,072                     |           | 351,428            |
| Japan:                                 |                    |                             |           |                    |
| Tuna, yellowfin.....                   | 2,743,443          | 467,291                     |           | 3,210,734          |
| Tuna, skipjack .....                   | 15,856,260         | 6,274,855                   |           | 21,831,115         |
| Tuna, albacore .....                   | 21,040,872         | 2,245,482                   |           | 23,286,354         |
| Tuna, bigeye .....                     | 64,260             | -                           |           | 64,260             |
| China Formosa:                         |                    |                             |           |                    |
| Tuna, yellowfin.....                   | 5,805,624          | 865,674                     |           | 6,671,298          |
| Tuna, skipjack .....                   | 256,586            | -                           |           | 256,586            |
| Tuna, albacore .....                   | 2,980,584          | 305,305                     |           | 3,285,889          |
| Malaya:                                |                    |                             |           |                    |
| Tuna, yellowfin.....                   | 117,716            | -                           |           | 117,716            |
| Tuna, skipjack .....                   | 827,792            | -                           |           | 827,792            |
| Tuna, albacore .....                   | 3,854,813          | -                           |           | 3,854,813          |
| South Pacific Islands:                 |                    |                             |           |                    |
| Tuna, yellowfin.....                   | 2,763,519          | 420,200                     |           | 3,183,719          |
| Tuna, skipjack .....                   | 28,872,624         | 4,965,206                   |           | 33,837,830         |
| Tuna, albacore .....                   | 3,638,314          | -                           |           | 3,638,314          |
| Tuna, bigeye .....                     | -                  | 280                         |           | 280                |
| Africa:                                |                    |                             |           |                    |
| Tuna, yellowfin.....                   | 879,322            | -                           |           | 879,322            |
| Tuna, skipjack .....                   | 6,765,830          | -                           |           | 6,765,830          |
| Tuna, bigeye .....                     | 85,698             | -                           |           | 85,698             |
| Tuna, skipjack black .....             | 18,182             | -                           |           | 18,182             |
| Philippines:                           |                    |                             |           |                    |
| Tuna, yellowfin.....                   | 116,894            | 326,952                     |           | 443,846            |
| Tuna, skipjack .....                   | 994,503            | 718,304                     |           | 1,712,807          |
| Korea:                                 |                    |                             |           |                    |
| Tuna, yellowfin.....                   | 19,348             | 6,401                       |           | 25,749             |
| Tuna, skipjack .....                   | 3,168,023          | 715,640                     |           | 3,883,663          |
| Tuna, albacore .....                   | 1,460,420          | -                           |           | 1,460,420          |
| <b>TOTAL POUNDS .....</b>              | <b>115,876,078</b> | <b>30,918,699</b>           |           | <b>146,794,777</b> |

\* Beginning in 1965 only tuna shipments are recorded.

**TABLE 6**  
**Origin of Shipments Received for Processing in California During 1976**

TABLE 7  
Origin of Commercial Fish Landings and Volume of Shipments into California During 1976

| Species               | Landing of catches from |                       |                       |               |        |              |   | Tuna Shipments * | Grand Total |
|-----------------------|-------------------------|-----------------------|-----------------------|---------------|--------|--------------|---|------------------|-------------|
|                       | California waters       | Waters north of state | Waters south of state | South Pacific | Africa | Total pounds |   |                  |             |
| <b>Fish:</b>          |                         |                       |                       |               |        |              |   |                  |             |
| Archae, northern      | 246,534,717             | —                     | —                     | —             | —      | 249,162,707  | — | 246,534,717      |             |
| Barracuda, California | 161,738                 | —                     | 353                   | —             | —      | 162,091      | — | 162,091          |             |
| Bonito, Pacific       | 3,882,312               | —                     | 5,014,547             | —             | —      | 8,896,859    | — | 8,896,859        |             |
| Butterfish, Pacific   | 1,277                   | —                     | —                     | —             | —      | 1,277        | — | 1,277            |             |
| Cabezon               | 19,166                  | —                     | —                     | —             | —      | 19,166       | — | 19,166           |             |
| Croaker, white        | 497,961                 | —                     | —                     | —             | —      | 497,961      | — | 497,961          |             |
| Dolphinfish           | 6,431                   | —                     | 3,485                 | —             | —      | 9,916        | — | 9,916            |             |
| Edo                   | 1,522                   | —                     | —                     | —             | —      | 1,522        | — | 1,522            |             |
| Flounder              | 1,181,737               | —                     | —                     | —             | —      | 1,181,737    | — | 1,181,737        |             |
| Flounder, arrowtooth  | 185,228                 | —                     | —                     | —             | —      | 185,228      | — | 185,228          |             |
| Flyingfish            | 98,176                  | —                     | —                     | —             | —      | 98,176       | — | 98,176           |             |
| Grenadiers            | 92,053                  | —                     | —                     | 9,600         | —      | 92,053       | — | 92,053           |             |
| Groupers              | —                       | —                     | —                     | —             | —      | —            | — | —                | —           |
| Hake, Pacific         | 28,521                  | —                     | —                     | —             | —      | 28,521       | — | 28,521           |             |
| Halibut               | 13,006                  | —                     | 13,170                | —             | —      | 26,176       | — | 26,176           |             |
| Hake, California      | 627,574                 | 30                    | 796                   | —             | —      | 628,400      | — | 628,400          |             |
| Herring, Pacific      | 4,050                   | —                     | —                     | —             | —      | 4,050        | — | 4,050            |             |
| Lingcod               | 3,130,230               | 70                    | —                     | —             | —      | 3,130,290    | — | 3,130,290        |             |
| Mackerel, jack        | 44,863,031              | —                     | —                     | —             | —      | 44,863,031   | — | 44,863,031       |             |
| Mackerel, Pacific     | 33,729                  | —                     | —                     | —             | —      | 33,729       | — | 33,729           |             |
| Mullet                | —                       | —                     | —                     | —             | —      | —            | — | —                | —           |
| Ophah                 | 3,307                   | —                     | —                     | —             | —      | 3,307        | — | 3,307            |             |
| Perch                 | 2,455                   | —                     | —                     | 543           | —      | 2,455        | — | 2,455            |             |
| Quinnfish             | 12,494                  | —                     | —                     | —             | —      | 142,037      | — | 142,037          |             |
| Rockfish              | 24,568,382              | 645                   | 34,152                | —             | —      | 24,603,179   | — | 24,603,179       |             |
| Sablefish             | 13,331,261              | —                     | —                     | —             | —      | 13,331,261   | — | 13,331,261       |             |
| Salmon                | 7,776,520               | 9,768                 | —                     | —             | —      | 7,786,288    | — | 7,786,288        |             |
| Sardine               | 1,282                   | —                     | —                     | —             | —      | 1,282        | — | 1,282            |             |
| Sardine, Pacific      | 16,190                  | —                     | —                     | —             | —      | 16,190       | — | 16,190           |             |
| Sculpin               | 34,152                  | —                     | 139,233               | —             | —      | 173,675      | — | 173,675          |             |
| Sea bass, giant       | 5,884                   | —                     | 50,244                | —             | —      | 56,128       | — | 56,128           |             |
| Sea bass, white       | 180,510                 | —                     | 80,933                | —             | —      | 169,073      | — | 169,073          |             |
| Shark                 | 77,294                  | —                     | 88,940                | —             | —      | 166,294      | — | 166,294          |             |
| Sheephead, California | 7,999                   | —                     | 326                   | —             | —      | 8,325        | — | 8,325            |             |
| Skate                 | 161,137                 | —                     | —                     | —             | —      | 161,137      | — | 161,137          |             |
| Smelt, top or jack    | 11,256                  | —                     | —                     | —             | —      | 11,256       | — | 11,256           |             |
| Smelt, true           | 270,153                 | —                     | —                     | —             | —      | 276,163      | — | 276,163          |             |
| Smelt, whitebait      | 251,253                 | —                     | —                     | —             | —      | 251,253      | — | 251,253          |             |
| Sole, Dover           | 22,756,812              | —                     | —                     | —             | —      | 22,756,812   | — | 22,756,812       |             |
| Sole, English         | 4,262,998               | —                     | —                     | —             | —      | 4,262,998    | — | 4,262,998        |             |

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TABLE 7  
Origin of Commercial Fish Landings and Volume of Shipments into California During 1976

|                           |             |         |             |         |           |             |             |               |
|---------------------------|-------------|---------|-------------|---------|-----------|-------------|-------------|---------------|
| Sole, petrale             | 2,977,531   | 26      | —           | —       | —         | 2,977,557   | —           | 2,977,557     |
| Sole, rex                 | 2,012,820   | —       | —           | —       | —         | 2,012,820   | —           | 2,012,820     |
| Sole, sand                | 246,407     | —       | —           | —       | —         | 246,407     | —           | 246,407       |
| Sole, miscellaneous       | 45,458      | —       | —           | —       | —         | 45,458      | —           | 45,458        |
| Swordfish                 | 65,617      | —       | 16,806      | —       | —         | 83,623      | —           | 83,623        |
| Tuna, albacore            | 17,861,351  | 151,186 | 9,746,839   | —       | —         | 27,759,376  | 44,065,871  | 71,845,547    |
| Tuna, bigeye              | —           | —       | 1,000,030   | —       | 231,636   | 1,000,030   | —           | 1,000,030     |
| Tuna, yellowfin           | 2,229,024   | —       | 16,530,421  | —       | —         | 18,785,445  | 1,790,745   | 20,570,190    |
| Tuna, skipjack            | 699,999     | —       | 120,768,166 | 237,575 | 997,312   | 122,694,005 | 75,913,966  | 190,604,118   |
| Tuna, skipjack, black     | —           | —       | 930,460     | —       | —         | —           | 412,584     | 1,343,116     |
| Tuna, yellowfin           | 458,460     | —       | 273,924,995 | 149,830 | 1,500,304 | 276,064,610 | 24,451,301  | 300,513,911   |
| Turbot                    | 29,590      | —       | —           | —       | —         | 29,590      | —           | 29,590        |
| Wahoo                     | —           | —       | 12,575      | —       | —         | 12,575      | —           | 12,575        |
| Yellowtail                | 77,223      | —       | 386,708     | —       | —         | 473,031     | —           | 473,031       |
| Miscellaneous             | 4,114       | —       | 120         | —       | —         | 4,234       | —           | 4,234         |
| <b>Crustacean:</b>        |             |         |             |         |           |             |             |               |
| Crab, Dungeness           | 15,726,774  | —       | —           | 35,000  | —         | 15,726,774  | —           | 15,726,774    |
| Crab, pelagic red         | —           | —       | —           | —       | —         | —           | —           | —             |
| Crab, rock                | 1,227,766   | —       | —           | —       | —         | 1,227,766   | —           | 1,227,766     |
| Lobster, California spiny | 292,534     | —       | —           | —       | —         | 292,534     | —           | 292,534       |
| Prawn, ridgeback          | 3,130       | —       | —           | —       | —         | 3,130       | —           | 3,130         |
| Prawn, spot               | 112,069     | —       | —           | —       | —         | 112,069     | —           | 112,069       |
| Shrimp, Pacific Ocean     | 3,460,664   | 33,894  | —           | —       | —         | 3,460,788   | —           | 3,460,788     |
| Miscellaneous crustacean  | 1,580       | —       | —           | —       | —         | 1,580       | —           | 1,580         |
| <b>Echinoderm:</b>        |             |         |             |         |           |             |             |               |
| Sea Urchin                | 11,106,426  | —       | —           | —       | —         | 11,106,426  | —           | 11,106,426    |
| <b>Mollusk:</b>           |             |         |             |         |           |             |             |               |
| Abalone, black            | 356,731     | —       | —           | —       | —         | 356,731     | —           | 356,731       |
| Abalone, green            | 126,488     | —       | —           | —       | —         | 126,488     | —           | 126,488       |
| Abalone, pink             | 431,143     | —       | —           | —       | —         | 431,143     | —           | 431,143       |
| Abalone, red              | 75,921      | —       | —           | —       | —         | 75,921      | —           | 75,921        |
| Abalone, steamed          | 2,907       | —       | —           | —       | —         | 2,907       | —           | 2,907         |
| Abalone, white            | 81,907      | —       | —           | —       | —         | 81,907      | —           | 81,907        |
| Mussel                    | 2,357       | —       | —           | —       | —         | 2,357       | —           | 2,357         |
| Octopus                   | 8,182       | 36      | —           | —       | —         | 8,182       | —           | 8,182         |
| Oyster, eastern           | 5,996       | —       | —           | —       | —         | 5,996       | —           | 5,996         |
| Oyster, giant Pacific     | 710,360     | —       | —           | —       | —         | 710,360     | —           | 710,360       |
| Snail, sea                | 13,724      | —       | —           | —       | —         | 13,724      | —           | 13,724        |
| Squid, market             | 20,306,005  | —       | —           | —       | —         | 20,306,005  | —           | 20,306,005    |
| Miscellaneous mollusk     | 1,145       | —       | —           | —       | —         | 1,145       | —           | 1,145         |
| Total pounds              | 467,449,270 | 195,635 | 430,205,633 | 387,465 | 5,729,252 | 900,967,215 | 146,794,777 | 1,047,761,992 |

\* For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

MARINE FISH LANDINGS  
1976

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TABLE 7—Cont'd.

TABLE 8  
Monthly Landings and Shipments Into California during 1976

| Species                | January    | February  | March      | April      | May       | June      | July      | August    | September  | October    | November   | December   | Total Pounds |
|------------------------|------------|-----------|------------|------------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|--------------|
| <b>LANDINGS:</b>       |            |           |            |            |           |           |           |           |            |            |            |            |              |
| Fish                   |            |           |            |            |           |           |           |           |            |            |            |            |              |
| Anchovy, Northern      | 36,704,300 | 3,417,096 | 23,364,456 | 35,770,328 | 3,630,770 | 254,010   | 383,320   | 908,800   | 15,063,225 | 22,127,500 | 60,042,632 | 45,129,350 | 249,838,707  |
| Barracuda, California  | 34,305     | 10,350    | 9          | 8,319      | 31,025    | 32,960    | 16,109    | 6,307     | 744        | 1,368      | 3,281      | 27,281     | 162,091      |
| Bonito, Pacific        | 2,650      | 14,762    | 15,004     | 33,300     | 81,363    | 155,570   | 2,255,302 | 3,910,454 | 1,860,261  | 306,316    | 188,902    | 80,890     | 8,896,850    |
| Bream, Pacific         | 1,300      | 3,010     | 1,107      | 7,788      | 7,345     | 1,307     | 1,020     | 1,020     | 1,020      | 1,020      | 1,020      | 1,020      | 1,020        |
| Cabezon                | 2,887      | 2,582     | 1,168      | 7,938      | 1,008     | 1,235     | 731       | 595       | 649        | 1,015      | 4,276      | 2,178      | 19,166       |
| Croker, white          | 45,806     | 61,123    | 45,367     | 37,219     | 27,090    | 60,516    | 27,622    | 38,968    | 55,396     | 34,225     | 29,257     | 38,080     | 497,961      |
| Dolphinfish            | —          | 298       | 832        | 304        | 407       | 237       | 1,348     | 3,943     | 1,177      | 1,439      | 233        | 9,916      | —            |
| Dorado                 | —          | 41        | 163        | 614        | 185       | —         | 11        | 68        | —          | —          | —          | 1,002      | —            |
| Flounder               | 79,012     | 79,999    | 79,938     | 13,962     | 44,409    | 87,741    | 94,719    | 204,524   | 258,512    | 151,756    | 68,975     | 18,336     | 1,181,737    |
| Flounder, arrowtooth   | 7,456      | 5,805     | 6,194      | 9,747      | 33,985    | 23,442    | 25,532    | 16,656    | 12,211     | 16,288     | 19,473     | 9,500      | 185,238      |
| Flyingfish             | —          | —         | 150        | 11,470     | 39,343    | 31,194    | 16,015    | 4         | —          | 7,716      | 3,728      | 5,816      | 96,176       |
| Gentoo                 | 4,615      | 212       | 1,519      | 304        | 6,493     | 8,578     | 190       | 575       | —          | 3,049      | 430        | 435        | 25,521       |
| Gupper                 | 5,640      | —         | 3,760      | —          | —         | —         | —         | —         | —          | —          | —          | —          | 9,600        |
| Hake, Pacific          | 4,725      | 1,200     | 815        | 2,031      | 6,493     | 1,200     | 1,200     | 1,200     | 1,200      | 1,200      | 1,200      | 1,200      | 1,200        |
| Halibut                | 21         | —         | 42         | 35         | 2,303     | 1,200     | 1,200     | 1,200     | 1,200      | 1,200      | 1,200      | 1,200      | 1,200        |
| Halibut, California    | 44,469     | 47,970    | 51,659     | 18,118     | 21,614    | 62,494    | 50,928    | 75,171    | 12,278     | 53,006     | 60,524     | 45,059     | 699,460      |
| Herring, Pacific       | 2,363,771  | 1,910,681 | 381,271    | —          | —         | —         | —         | —         | 15         | —          | —          | —          | 4,815,691    |
| Lingcod                | 130,828    | 95,428    | 134,671    | 177,079    | 416,904   | 523,901   | 410,231   | 477,040   | 245,226    | 218,560    | 188,372    | 122,045    | 3,120,290    |
| Mackerel, jack         | 6,380,259  | 6,101,519 | 4,500,956  | 2,958,259  | 2,761,259 | 2,965,259 | 4,826,259 | 4,907,259 | 2,700,259  | 1,696,259  | 3,195,259  | 3,171,441  | 44,441,114   |
| Mackerel, Pacific      | 3,078      | —         | 2,207      | 1,532      | 8,798     | 31,293    | 71,098    | 21,133    | 18,560     | 14,179     | 11,185     | 16,294     | 333,739      |
| Mullet                 | —          | —         | 513        | 1,088      | 1,154     | —         | —         | —         | —          | —          | —          | —          | 3,307        |
| Oph                    | —          | —         | —          | —          | —         | —         | —         | —         | —          | —          | —          | —          | 2,456        |
| Perc                   | 10,138     | 11,220    | 19,973     | 28,187     | 2,433     | 2,123     | 11,290    | 21,132    | 9,829      | 5,811      | 7,117      | 13,410     | 14,917       |
| Rockfish               | 1,983      | 980       | 1,548      | 60         | 3,008     | 2,919     | 62        | 59        | 59         | 515        | 346        | 1,180      | 13,914       |
| Salmon                 | 2,210,499  | 1,750,969 | 1,632,575  | 1,654,477  | 2,044,056 | 2,452,958 | 2,299,959 | 2,272,639 | 1,858,960  | 2,326,729  | 1,954,025  | 2,095,494  | 24,603,179   |
| Sandab                 | 1,443,410  | 881,148   | 881,904    | 71,000     | 1,924,192 | 1,924,192 | 1,200,192 | 1,200,192 | 1,200,192  | 1,485,192  | 1,184,672  | 1,194,565  | 2,776,298    |
| Sandab, Pacific        | 110,590    | 80,953    | 110,280    | 95,304     | 123,041   | 117,477   | 165,704   | 179,482   | 125,300    | 76,361     | 69,996     | 39,374     | 1,283,872    |
| Sculpin                | 739        | 780       | 1,629      | 1,791      | 1,372     | 68,880    | 55,923    | 30,343    | 4,126      | 3,497      | 5,511      | 1,093      | 173,676      |
| Sea bass, giant        | 12,355     | 5,255     | 5,048      | 4,827      | 15,252    | 657       | 1,653     | 861       | 1,098      | 648        | 3,110      | 3,967      | 56,128       |
| Seabass, white         | 79,721     | 91,466    | 47,708     | 38,541     | 86,263    | 173,910   | 319,978   | 55,154    | 14,671     | 32,281     | 76,469     | 43,111     | 1,058,673    |
| Seal                   | 73,520     | 40,631    | 37,018     | 33,294     | 49,903    | 87,425    | 18,120    | 74,173    | 67,402     | 88,620     | 107,703    | 81,204     | 968,034      |
| Sheepshead, California | 8          | 688       | 325        | 365        | 779       | 966       | 1,116     | 345       | 456        | 659        | 595        | 1,956      | 5,323        |
| Skate                  | 15,306     | 7,789     | 9,666      | 12,369     | 22,961    | 17,393    | 9,958     | 19,053    | 18,283     | 15,459     | 8,469      | 4,166      | 161,137      |
| Smelt, top or jack     | 163        | —         | 120        | 851        | 296       | 104       | 73        | —         | —          | 30         | 4,094      | 5,725      | 11,256       |
| Smelt, top, California | 8,074      | 11,446    | 4,827      | 4,706      | 35,706    | 187,400   | 50,120    | 60,240    | 60,240     | 8,599      | 4,005      | 3,673      | 371,513      |
| Spiny, whitebait       | 694        | 13,950    | 32,322     | 62,321     | 43,120    | 76,495    | 16,548    | 4,699     | 435        | —          | —          | —          | 251,233      |
| Sole, Dover            | 831,983    | 749,338   | 1,645,192  | 1,707,043  | 2,193,294 | 2,639,285 | 2,526,560 | 3,139,949 | 2,007,773  | 2,268,915  | 1,730,494  | 1,233,964  | 22,750,812   |
| Sole, English          | 559,462    | 297,206   | 334,559    | 345,407    | 324,285   | 160,043   | 307,169   | 353,594   | 634,946    | 458,544    | 365,729    | 564,491    | 4,029,659    |
| Sole, petrale          | 604,338    | 184,014   | 306,559    | 213,65     | 245,193   | 175,945   | 178,200   | 215,704   | 187,716    | 174,929    | 21,865     | 266,470    | 2,977,537    |
| Sole, sand             | 302,470    | 184,014   | 150,059    | 139,276    | 154,700   | 154,700   | 154,700   | 154,700   | 154,700    | 154,700    | 154,700    | 154,700    | 2,612,520    |
| Sole, sand             | 19,975     | 24,262    | 16,046     | 13,045     | 15,553    | 10,442    | 7,556     | 47,393    | 31,712     | 38,798     | 13,099     | 11,714     | 949,497      |
| Sole, miscellaneous    | 7,435      | 3,879     | 2,953      | 404        | 1,875     | 1,743     | 1,261     | 2,518     | 748        | 1,548      | 5,234      | 4,458      | 33,458       |
| Swordfish              | —          | 5,049     | —          | —          | —         | 10,056    | 4,968     | 3,945     | 3,059      | 23,643     | 14,291     | 13,538     | 83,093       |

TABLE 8  
Monthly Landings and Shipments Into California during 1976

|                           |            |            |             |            |            |            |            |            |            |            |             |             |               |
|---------------------------|------------|------------|-------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|---------------|
| Tuna, albacore            | 136,697    | 206,497    | 61,092      | —          | 223        | 55,030     | 1,582,066  | 9,062,565  | 10,233,426 | 4,196,727  | 1,598,759   | 638,304     | 27,759,976    |
| Tuna, bigeye              | —          | 816,846    | 822,365     | —          | —          | —          | 204        | —          | 141,731    | —          | 37,280      | 1,829,966   | —             |
| Tuna, bonito              | 369        | 562,259    | 32,920,344  | 312,120    | 7,234      | 2,389,045  | 1,097,000  | 4,417,726  | 2,600,292  | 1,633,692  | 2,927,771   | 18,445,445  | —             |
| Tuna, skipjack            | 5,199,075  | 5,162,259  | 20,265,532  | 10,388,465 | 20,265,532 | 16,008,054 | 9,006,644  | 2,900,292  | 4,416,487  | 5,041,099  | 8,962,154   | 5,941,106   | 125,694,052   |
| Tuna, skipjack, black     | 4,515      | —          | —           | 49,495     | 1,932      | 251,953    | —          | —          | —          | —          | 122,213     | 332,087     | 930,460       |
| Tuna, Yellowfin           | 2,970,907  | 7,589,265  | 581,43,848  | 12,901,803 | 24,666,153 | 31,572,077 | 34,286,049 | 23,751,218 | 24,994,565 | 20,987,883 | 22,100,966  | 12,157,576  | 276,064,610   |
| Turbot                    | 6,028      | 2,135      | 2,365       | 2,397      | 1,810      | 2,464      | 3,929      | 829        | 1,247      | 49         | 1,600       | 12,575      | —             |
| Walleye                   | 1,110      | 3,058      | 1,010       | 1,010      | 1,010      | 1,010      | 1,010      | 1,010      | 1,010      | 1,010      | 1,010       | 1,010       | —             |
| Yellowtail                | 77,983     | 44,241     | 10,561      | 1,100      | 14,053     | 16,556     | 116,537    | 34,146     | 51,014     | 18,421     | 60,961      | 40,458      | 475,531       |
| Miscellaneous             | 733        | 164        | 53          | 141        | 966        | 823        | 148        | 208        | 53         | 261        | 672         | 610         | 4,254         |
| Crab                      | —          | —          | —           | —          | —          | —          | —          | —          | —          | —          | —           | —           | —             |
| Crab, Dungeness           | 4,991,099  | 2,763,656  | 3,365,697   | 2,146,099  | 1,268,700  | 484,826    | 142,897    | 36,632     | —          | 2,040      | 378,947     | 149,388     | 15,726,774    |
| Crab, pelagic red         | —          | 32,000     | —           | —          | —          | —          | —          | —          | —          | —          | —           | —           | 32,000        |
| Crab, rock                | 105,562    | 102,418    | 91,042      | 77,669     | 81,602     | 74,272     | 114,789    | 112,642    | 101,790    | 130,626    | 114,205     | 131,145     | 1,257,655     |
| Lobster, California spiny | 27         | 29,461     | 15,749      | 8          | 932        | 786        | 89         | —          | 259        | —          | —           | —           | 3,130         |
| Prawn, ridgeback          | 371        | —          | —           | —          | —          | —          | —          | —          | —          | —          | —           | —           | —             |
| Prawn, spot               | 14,248     | 21,107     | 1,067       | 411        | 532        | 1,429      | 6,440      | 6,628      | 4,656      | 7,843      | 16,272      | 31,416      | 112,069       |
| Shrimp, Pacific Ocean     | —          | 13         | —           | 134,270    | 179,806    | 568,705    | 595,215    | 525,502    | 375,182    | 1,124,320  | —           | —           | 3,500,558     |
| Miscellaneous crustacean  | 1          | 41         | 228         | 510        | 95         | 332        | 273        | —          | —          | 70         | —           | —           | 1,500         |
| Echinoderms               | —          | —          | —           | —          | —          | —          | —          | —          | —          | —          | —           | —           | —             |
| Sea urchin                | 1,240,386  | 644,891    | 607,871     | 499,497    | 553,110    | 599,753    | 611,969    | 702,722    | 994,416    | 1,459,897  | 1,238,250   | 1,554,064   | 11,106,426    |
| Mollusk                   | —          | —          | —           | —          | —          | —          | —          | —          | —          | —          | —           | —           | —             |
| Absalone, black           | 34,481     | —          | 30,493      | 12,925     | 7,139      | 70,412     | 54,280     | —          | 41,925     | 25,461     | 22,826      | 27,079      | 356,731       |
| Absalone, green           | 17,888     | —          | 35,911      | 5,942      | 6,102      | 40,738     | 45,985     | 281        | 10,462     | 12,111     | 11,327      | 14,009      | 128,999       |
| Absalone, pink            | 84,731     | —          | 35,901      | 59,041     | 54,127     | 40,738     | 45,985     | 281        | 29,547     | 35,470     | 33,017      | 30,493      | 451,143       |
| Absalone, red             | 110,072    | —          | 55,420      | 47,094     | 59,925     | 67,452     | 54,632     | 134        | 55,374     | 94,956     | 60,677      | 93,962      | 735,311       |
| Absalone, threaded        | 350        | —          | 428         | 47,142     | 522        | 359        | 130        | —          | 146        | 366        | 3,907       | —           | —             |
| Absalone, white           | 16,998     | —          | 4,240       | 6,783      | 9,369      | 6,200      | 11,508     | —          | 8,821      | 3,376      | 9,199       | 6,197       | 81,907        |
| Manila clam               | 250        | 1,345      | 719         | —          | —          | —          | —          | —          | —          | —          | —           | —           | 2,357         |
| Octopus                   | 6,237      | 4,291      | 3,963       | 3,063      | 3,636      | 4,718      | 5,071      | 7,724      | 8,700      | 10,869     | 8,517       | 14,469      | 81,618        |
| Oyster, Eastern           | 671        | 433        | 87          | 445        | 41,244     | 41,244     | 44,841     | 44,841     | 44,841     | 44,841     | 44,841      | 44,841      | 5,956         |
| Oyster, giant Pacific     | 56,046     | 33,094     | 49,377      | 61,244     | 66,319     | 46,265     | 45,877     | 44,974     | 45,836     | 53,353     | 84,389      | 102,731     | 710,360       |
| Squid, sea                | 546        | 770        | 900         | 870        | 1,345      | 1,059      | 1,282      | 1,673      | 1,221      | 1,030      | 1,354       | 1,674       | 13,724        |
| Squid, market             | 5,988,296  | 2,360,903  | 50,133      | 751,003    | 633,185    | 1,964,614  | 879,314    | 2,440,862  | 947,859    | 1,512,441  | 1,574,538   | 3,400,933   | 20,306,008    |
| Miscellaneous mollusk     | 133        | —          | 216         | 53         | 29         | 21         | 32         | —          | —          | 305        | 333         | 8           | 1,145         |
| Total Pounds              | 76,497,894 | 36,171,540 | 126,672,992 | 71,909,335 | 63,406,594 | 68,718,851 | 66,981,303 | 60,908,198 | 75,309,292 | 68,226,143 | 107,068,682 | 79,204,411  | 900,967,815   |
| GRAND TOTAL               | 83,296,578 | 42,836,578 | 134,104,685 | 80,365,433 | 73,671,799 | 76,859,634 | 79,129,833 | 75,988,519 | 88,643,423 | 82,074,506 | 119,243,318 | 111,505,544 | 1,047,761,992 |

\*For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 8—Cont'd.

TABLE 9  
Monthly Landings of Commercial Fishing Boats in the Eureka Area during 1976

| Species                   | January | February | March     | April     | May       | June      | July      | August    | September | October   | November  | December | Total Pounds |
|---------------------------|---------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|--------------|
| <b>LANDINGS FROM:</b>     |         |          |           |           |           |           |           |           |           |           |           |          |              |
| <b>California waters:</b> |         |          |           |           |           |           |           |           |           |           |           |          |              |
| Fishermen                 | —       | —        | —         | —         | —         | —         | —         | —         | —         | —         | —         | —        | 14           |
| Cod, copper               | —       | —        | —         | —         | —         | —         | —         | —         | —         | —         | —         | —        | 16           |
| Cod, white                | —       | —        | —         | —         | —         | —         | —         | —         | —         | —         | —         | —        | 502          |
| Eel                       | —       | —        | —         | —         | —         | —         | —         | —         | —         | —         | —         | —        | 130          |
| Pollard                   | 9,859   | 6,094    | 31,127    | 3,263     | 26,279    | 75,906    | 77,062    | 107,493   | 173,403   | 82,931    | 48,628    | 10,439   | 632,944      |
| Flounder, arrowtooth      | 6,876   | 5,905    | 4,744     | 9,637     | 33,985    | 23,115    | 24,477    | 16,606    | 12,211    | 16,284    | 19,473    | 8,508    | 181,708      |
| Grenadiers                | 4,618   | 212      | 1,179     | 304       | 12,278    | 9,490     | 2,590     | 32,374    | 11,408    | 7,716     | 3,728     | 5,816    | 91,713       |
| Hake, Pacific             | —       | —        | —         | —         | —         | —         | —         | —         | —         | 770       | —         | —        | 770          |
| Hake, California          | —       | —        | —         | —         | —         | —         | —         | —         | —         | 50        | —         | —        | 130          |
| Herring, Pacific          | 17,776  | 5,358    | —         | —         | —         | —         | —         | —         | —         | —         | —         | —        | 25,234       |
| Lingcod                   | 53,228  | 29,980   | 34,591    | 57,995    | 160,876   | 175,996   | 220,381   | 321,707   | 161,862   | 171,203   | 111,718   | 60,931   | 1,560,469    |
| Mackerel, jack            | —       | —        | —         | —         | —         | —         | 298       | 1,455     | 6,580     | 1,540     | —         | —        | 9,873        |
| Percy, blue               | 656     | 1,157    | 5,633     | 15,104    | 1,170     | 574       | 46        | 1,424     | 3,287     | 163       | —         | 396      | 5,539        |
| Rockfish                  | 801,653 | 327,618  | 313,479   | 363,357   | 815,332   | 1,049,564 | 1,041,022 | 1,333,407 | 841,269   | 1,038,515 | 810,888   | 981,931  | 9,715,675    |
| Sablefish                 | 404,168 | 191,613  | 273,497   | 253,414   | 376,577   | 487,947   | 523,259   | 710,443   | 460,135   | 612,169   | 476,151   | 458,277  | 5,227,860    |
| Salmon                    | —       | —        | —         | —         | 35,541    | 1,080,233 | 1,397,153 | 1,394,503 | 260,796   | 61,654    | —         | —        | 4,649        |
| Sanddab                   | 31,100  | 20,400   | 37,708    | 34,472    | 31,478    | 47,881    | 61,247    | 100,772   | 60,271    | 45,037    | 29,684    | 16,326   | 320,017      |
| Shark                     | 3,746   | 2,128    | 2,288     | 1,835     | 9,745     | 3,692     | 880       | 11,777    | 9,271     | 11,922    | 3,963     | 7,023    | 39,631       |
| Skate                     | 7,250   | 875      | 2,288     | 1,835     | 9,745     | 3,692     | 880       | 11,777    | 9,271     | 11,922    | 3,963     | 7,023    | 46,490       |
| Smelt, true               | —       | 223      | —         | —         | 79        | 100,734   | 58,074    | 58,074    | 58,074    | 58,074    | 58,074    | 100      | 300,739      |
| Smelt, whitebait          | 688     | 11,768   | 29,265    | 55,905    | 38,309    | 74,343    | 15,051    | 4,029     | 59,697    | —         | —         | —        | 229,371      |
| Sole, Dover               | 688,831 | 510,817  | 1,105,564 | 1,418,746 | 1,836,344 | 2,100,161 | 2,015,611 | 2,627,610 | 1,655,727 | 1,888,544 | 1,387,122 | 978,656  | 18,223,733   |
| Sole, English             | 189,439 | 130,299  | 226,897   | 222,513   | 135,038   | 73,961    | 104,531   | 291,408   | 239,958   | 229,415   | 159,464   | 93,295   | 2,066,198    |
| Sole, green               | 371,173 | 75,995   | 74,426    | 12,875    | 59,500    | 47,500    | 101,000   | 101,000   | 101,000   | 101,000   | 114,000   | 114,000  | 1,410,361    |
| Sole, red                 | 233,539 | 100,475  | 104,490   | 94,681    | 129,000   | 129,000   | 71,715    | 134,512   | 110,588   | 125,968   | 87,894    | 66,274   | 1,410,361    |
| Sole, sand                | 5,019   | 5,597    | 10,494    | 4,309     | 8,091     | 8,445     | 3,577     | 4,903     | 16,141    | 15,733    | 7,206     | 6,896    | 91,781       |
| Sole, miscellaneous       | —       | 118      | —         | —         | 944       | 6         | —         | —         | 34        | 6,170     | 2,888     | 8,179    | 18,333       |
| Tuna, albacore            | —       | —        | —         | —         | —         | 5,626     | 134,453   | 2,079,769 | 1,961,137 | 743,111   | 32,826    | 9,190    | 4,917,717    |
| Tuna, skipper             | 2,009   | 513      | 35        | 2,992     | 345       | 966       | 468       | 1,327     | 111       | 111       | 225       | 130      | 5,718        |
| Miscellaneous             | 454     | —        | —         | —         | 70        | 195       | 16        | 42        | 36        | —         | —         | —        | 734          |

FISH BULLETIN 170

TABLE 9  
Monthly Landings of Commercial Fishing Boats in the Eureka Area during 1976

|                             |           |           |           |           |           |           |           |           |           |           |           |            |
|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| <b>Crustacean:</b>          |           |           |           |           |           |           |           |           |           |           |           |            |
| Crab, Dungeness .....       | 4,953,908 | 2,730,544 | 3,323,425 | 2,132,101 | 1,250,855 | 457,845   | 142,456   | 36,632    | 325,532   | 375,182   | 1,128,325 | —          |
| Shrimp, Pacific Ocean ..... | —         | —         | —         | 111,681   | 156,704   | 568,654   | 598,392   | —         | —         | —         | —         | 6,043      |
| <b>Echinoderm:</b>          |           |           |           |           |           |           |           |           |           |           |           |            |
| Sea urchin .....            | —         | —         | —         | —         | —         | —         | —         | —         | —         | —         | 27,949    | 46,902     |
| <b>Mollusk:</b>             |           |           |           |           |           |           |           |           |           |           |           |            |
| Octopus .....               | 6,177     | 3,770     | 3,709     | 2,855     | 3,217     | 4,310     | 3,742     | 6,954     | 8,027     | 9,435     | 7,373     | 13,432     |
| Oyster, giant Pacific ..... | 41,242    | 43,933    | 39,193    | 45,687    | 46,456    | 28,084    | 22,202    | 20,375    | 25,594    | 32,564    | 51,148    | 70,312     |
| Miscellaneous mollusk ..... | —         | —         | 162       | —         | —         | —         | —         | —         | —         | —         | 51        | 589        |
| Total Pounds .....          | 7,845,529 | 4,206,968 | 5,626,822 | 4,941,714 | 6,397,539 | 7,490,932 | 6,565,618 | 6,782,292 | 6,261,343 | 6,270,626 | 3,352,947 | 2,967,061  |
|                             |           |           |           |           |           |           |           |           |           |           |           | 70,694,391 |

MARINE FISH LANDINGS 1976

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TABLE 9—Cont'd.

TABLE 10  
Monthly Landings of Commercial Fishing Boats in the San Francisco Area during 1976

| Species                                 | January   | February  | March   | April   | May     | June    | July    | August  | September | October | November | December | Total Pounds |
|---|-----------|-----------|---------|---------|---------|---------|---------|---------|-----------|---------|----------|----------|--------------|
| <b>LANDINGS FROM California waters:</b> |           |           |         |         |         |         |         |         |           |         |          |          |              |
| <b>Fish:</b>                            |           |           |         |         |         |         |         |         |           |         |          |          |              |
| Anchoa, northern                        | 6,000     | —         | —       | 53,300  | 127,570 | 101,080 | 69,150  | 74,830  | 106,750   | 31,800  | 63,500   | —        | 634,000      |
| Bonito, Pacific                         | —         | —         | 320     | —       | —       | 120     | —       | 13      | 104       | —       | —        | 128      | 117          |
| Cod, Pacific                            | —         | —         | 340     | —       | —       | 180     | 183     | 224     | —         | —       | —        | —        | 389          |
| Croaker, white                          | 2,394     | 2,534     | 4,334   | 1,771   | 4,335   | 6,022   | 4,302   | 7,891   | 6,413     | 3,649   | 350      | 2,307    | 46,892       |
| Edel                                    | —         | —         | —       | —       | —       | —       | —       | —       | 10        | —       | —        | —        | 10           |
| Flounder                                | 42,101    | 55,742    | 31,143  | 3,019   | 4,852   | 4,080   | 5,940   | 75,820  | 72,745    | 60,115  | 12,813   | 1,810    | 369,690      |
| Pacific arrowtooth                      | 580       | —         | 1,260   | 110     | —       | 330     | 1,055   | —       | —         | 65      | —        | —        | 3,220        |
| Grenadiers                              | —         | —         | 340     | —       | —       | —       | —       | —       | —         | —       | —        | —        | 340          |
| Hake, Pacific                           | —         | —         | —       | 26      | 160     | —       | —       | —       | —         | —       | —        | —        | 210          |
| Herring, California                     | 6,908     | 9,259     | 4,061   | 868     | 288     | 170     | 1,003   | 4,773   | 2,143     | 5,083   | 1,367    | 2,918    | 38,322       |
| Herring, Pacific                        | 2,250,405 | 1,608,353 | 381,271 | —       | 152,248 | 213,900 | 118,187 | 97,472  | 44,974    | 38,699  | 47,968   | —        | 50,192       |
| Lingcod                                 | 40,289    | 40,736    | 41,003  | 55,430  | —       | —       | —       | 350     | 700       | —       | —        | —        | 917,585      |
| Mackerel, jack                          | 40,698    | —         | —       | —       | —       | —       | —       | 1,407   | 3,000     | 1,432   | 2,533    | 2,763    | 6,744        |
| Perch                                   | 6,002     | 7,262     | 6,635   | 3,649   | —       | —       | —       | —       | —         | —       | —        | —        | 1,050        |
| Rockfish                                | 298,357   | 290,500   | 156,737 | 157,581 | 14,003  | 330,238 | 154,220 | 161,892 | 156,372   | 304,596 | 250,203  | 144,081  | 2,436,344    |
| Sabatfish                               | 42,700    | 38,185    | 66,573  | 34,685  | 24,380  | 47,096  | 44,271  | 45,347  | 49,115    | 147,805 | 127,011  | 73,801   | 741,969      |
| Salmon                                  | —         | —         | —       | 244,926 | 489,443 | 513,021 | 230,609 | 117,945 | 129,043   | 485     | —        | —        | 1,725,472    |
| Sardines                                | 75,174    | 47,700    | 67,206  | 47,346  | 72,962  | 49,727  | 87,215  | 63,715  | 38,890    | 22,430  | 30,184   | 17,211   | 619,487      |
| Seascale, white                         | —         | —         | —       | —       | —       | —       | —       | 36      | 243       | —       | —        | 633      | 991          |
| Shark                                   | 19,667    | 13,979    | 4,711   | 155     | 628     | 4,055   | 8,874   | 17,175  | 11,086    | 25,174  | 6,477    | 16,421   | 128,397      |
| Skate                                   | 510       | 400       | —       | 200     | 35      | —       | 1,575   | 1,705   | 1,300     | 1,216   | 300      | 600      | 7,981        |
| Smelt, top or jack                      | —         | 120       | —       | —       | —       | —       | —       | —       | —         | —       | —        | —        | 152          |
| Smelt, true                             | 1,424     | 515       | 498     | 3,275   | 5,966   | 9,289   | 3,654   | 845     | 110       | 42      | —        | —        | 25,818       |
| Smelt, whitebait                        | —         | 2,182     | 3,260   | 6,366   | 5,340   | 2,062   | 1,267   | 670     | —         | —       | —        | —        | 21,447       |
| Sole, Dover                             | 128,108   | 216,676   | 461,710 | 195,431 | 200,049 | 234,182 | 217,288 | 228,091 | 192,351   | 281,699 | 206,359  | 172,711  | 2,730,977    |
| Sole, English                           | 257,071   | 67,679    | 43,847  | 43,246  | 37,211  | 49,450  | 70,224  | 195,071 | 124,053   | 124,553 | 120,359  | 171,260  | 1,366,077    |
| Sole, flat                              | 249,039   | 71,986    | 67,670  | 37,000  | 54,509  | 62,025  | 47,071  | 32,584  | 32,259    | 72,173  | 10,258   | —        | 954,500      |
| Sole, rex                               | 48,081    | 41,551    | 26,543  | 15,619  | 6,601   | 16,544  | 9,034   | 26,622  | 36,696    | 35,027  | 41,137   | 65,598   | 369,653      |
| Sole, green                             | 12,619    | 16,630    | 8,514   | 3,603   | 1,665   | 510     | 3,290   | 42,732  | 15,310    | 23,470  | 4,146    | 4,245    | 18,531       |
| Sole, miscellaneous                     | 5,717     | 1,485     | 415     | —       | —       | 105     | 170     | 170     | 170       | 460     | 805      | 2,025    | 12,854       |
| Surfclod                                | —         | —         | —       | —       | —       | —       | —       | —       | —         | —       | —        | —        | 489          |
| Tuna, albacore                          | 115       | —         | —       | —       | —       | —       | 66,160  | 979,283 | 1,250,827 | 585,530 | 320,097  | 17,844   | 3,189,856    |
| Turbot                                  | 1,432     | 757       | 1,329   | 680     | 30      | 85      | 51      | 90      | 1,950     | 1,525   | 75       | 165      | 8,200        |
| Miscellaneous                           | 116       | 47        | 51      | —       | —       | —       | 29      | 42      | 27        | 124     | 30       | 297      | 669          |

FISH BULLETIN 170

TABLE 10  
Monthly Landings of Commercial Fishing Boats in the San Francisco Area during 1976

| Crustacean:                 |           |           |           |         |           |           |           |           |           |           |           |           |            |
|-----------------------------|-----------|-----------|-----------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Crab, Dungeness .....       | 36,700    | 39,355    | 37,738    | 13,238  | 17,024    | 25,072    | 50        | —         | —         | 5,040     | 376,565   | 137,873   | 685,655    |
| —                           | —         | —         | —         | —       | —         | —         | —         | —         | —         | —         | 40        | —         | 84         |
| Prawn, spot .....           | —         | —         | —         | 20      | —         | —         | —         | —         | —         | —         | —         | —         | 20         |
| Shrimp, Pacific Ocean ..... | —         | —         | 495       | —       | —         | —         | —         | —         | —         | —         | —         | —         | 495        |
| Other crustacean .....      | —         | 40        | 105       | 10      | 95        | 332       | 273       | —         | —         | —         | —         | 70        | 995        |
| Echinoderms:                |           |           |           |         |           |           |           |           |           |           |           |           |            |
| Sea urchin .....            | 1,300     | 1,336     | 3,431     | 2,817   | —         | 635       | 575       | 1,481     | 330       | 1,225     | 1,375     | 5,437     | 19,942     |
| Mollusk:                    |           |           |           |         |           |           |           |           |           |           |           |           |            |
| Ahalone, red .....          | 3,355     | —         | 3,917     | 3,141   | 4,392     | 9,275     | 12,190    | —         | 8,531     | 7,310     | 2,240     | 8,612     | 62,953     |
| Ahalone, threaded .....     | —         | —         | —         | —       | —         | —         | —         | —         | —         | 2         | —         | 10        | 12         |
| Octopus .....               | 250       | 1,345     | 719       | —       | —         | —         | —         | —         | —         | —         | —         | 43        | 2,357      |
| Octopus .....               | 265       | 284       | 245       | 120     | 180       | 163       | 691       | 592       | 435       | 281       | 319       | 406       | 3,961      |
| Oyster, eastern .....       | 571       | 438       | 507       | 445     | 507       | 476       | 454       | 454       | 510       | 490       | 499       | 585       | 5,986      |
| Oyster, giant Pacific ..... | 13,396    | 9,235     | 9,704     | 15,857  | 19,883    | 18,181    | 23,075    | 24,599    | 20,242    | 20,974    | 33,184    | 34,419    | 241,349    |
| Clam .....                  | —         | —         | —         | —       | —         | —         | —         | —         | —         | —         | —         | 31        | 31         |
| Miscellaneous mollusk ..... | —         | —         | —         | —       | —         | —         | —         | —         | —         | 321       | —         | —         | 321        |
| Total Pounds .....          | 3,536,272 | 2,660,129 | 1,446,502 | 976,519 | 1,356,409 | 1,696,005 | 1,220,673 | 2,249,022 | 2,286,791 | 1,671,205 | 1,722,628 | 1,098,263 | 21,904,418 |

MARINE FISH LANDINGS 1976

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TABLE 10  
*Monthly Landings of Commercial Fishing Boats in the San Francisco Area during 1976*

TABLE 11

Monthly Landings of Commercial Fishing Boats in the Monterey Area during 1976

| Species                                     | January   | February | March   | April   | May     | June    | July    | August  | September | October | November  | December  | Total<br>Pounds |
|---|-----------|----------|---------|---------|---------|---------|---------|---------|-----------|---------|-----------|-----------|-----------------|
| <b>LANDINGS FROM:<br/>California Waters</b> |           |          |         |         |         |         |         |         |           |         |           |           |                 |
| <b>Fish:</b>                                |           |          |         |         |         |         |         |         |           |         |           |           |                 |
| Zander, northern                            | 1,221,000 | 347,500  | 490,000 | 83,700  | 3,800   | 19,280  | —       | 701,470 | 1,143,740 | 434,000 | 3,457,332 | 2,048,200 | 9,950,022       |
| Bonito, Pacific                             | —         | —        | 35      | 907     | 1,484   | 723     | 30      | —       | 78        | 13      | 15        | 179       | 285             |
| Butterfish, Pacific                         | —         | —        | —       | —       | 59      | 104     | —       | 225     | 150       | 26      | 450       | —         | 3,655           |
| Cod, Pacific                                | 34        | 311      | 259     | —       | —       | —       | —       | —       | —         | 113     | 311       | 413       | 1,980           |
| Croaker, white                              | 10,622    | 4,697    | 634     | 4,999   | 2,623   | 2,504   | 4,967   | 452     | 18,804    | 10,444  | 13,546    | 13,194    | 87,456          |
| Eel   | —         | —        | —       | —       | —       | —       | —       | 45      | —         | 3       | —         | —         | 48              |
| Flounder                                    | 25,195    | 14,366   | 10,400  | 3,829   | 12,591  | 6,842   | 6,481   | 19,715  | 11,385    | 6,965   | 3,465     | 3,333     | 154,578         |
| Hake, Pacific                               | 4,049     | 4,029    | 4,430   | 1,820   | 1,000   | 1,000   | 1,000   | 375     | —         | —       | —         | —         | 8,230           |
| Halibut, California                         | 2,716     | 2,136    | 5,467   | 439     | 3,348   | 4,723   | 3,533   | 10,737  | 2,073     | 734     | 580       | 326       | 36,612          |
| Herring, Pacific                            | 109,500   | 213,000  | —       | —       | 35,821  | 75,840  | —       | —       | —         | —       | —         | —         | 454,161         |
| Lingcod                                     | 10,466    | 8,230    | 16,370  | 18,813  | 14,861  | 42,012  | 16,745  | 6,354   | 4,698     | 5,751   | 10,269    | 8,261     | 162,930         |
| Mackerel, jack                              | —         | —        | —       | —       | —       | 6,960   | 2,943   | 9,104   | 5,650     | —       | 84,515    | —         | 100,570         |
| Mackerel, Pacific                           | —         | —        | —       | —       | —       | —       | —       | —       | 4,600     | —       | —         | —         | 4,600           |
| Ophid                                       | —         | —        | —       | —       | —       | —       | —       | —       | 2,296     | 138     | —         | —         | 2,434           |
| Pike  | 193       | 138      | 286     | 214     | —       | —       | —       | 56      | —         | —       | —         | —         | 297             |
| Rockfish                                    | 496,246   | 388,911  | 553,549 | 533,618 | 604,052 | 448,723 | 413,071 | 186,004 | 180,079   | 447,743 | 307,494   | 320,638   | 4,932,422       |
| Sablefish                                   | 987,766   | 440,167  | 489,017 | 390,813 | 572,037 | 354,134 | 306,773 | 327,662 | 793,947   | 688,003 | 376,784   | 660,023   | 7,115,251       |
| Salmon                                      | —         | —        | —       | —       | 160,994 | 325,459 | 227,484 | 117,138 | 143,276   | 36,893  | —         | —         | 1,009,241       |
| Sardine                                     | 4,170     | 8,055    | 5,184   | 12,749  | 13,451  | 19,328  | 13,541  | 25,417  | 25,417    | 8,822   | 9,713     | 5,195     | 14,556          |
| Seabass, white                              | 52        | 53       | —       | —       | 156     | —       | 1,187   | 323     | 840       | 833     | 621       | 91        | 4,158           |
| Shark                                       | 12,885    | 4,002    | 2,314   | 606     | 1,324   | 11,788  | 5,665   | 7,019   | 7,070     | 19,660  | 22,740    | 6,359     | 94,422          |
| Skate                                       | 6,090     | 5,361    | 6,439   | 10,449  | 13,027  | 12,004  | 7,066   | 5,339   | 11,028    | 12,198  | 8,027     | 3,466     | 100,494         |
| Smelt, top or jack                          | —         | —        | —       | 284     | 171     | 104     | —       | —       | —         | 30      | 350       | —         | 349             |
| Smelt, true                                 | 6,216     | 11,014   | 3,783   | 153     | 946     | 98      | —       | 1,612   | 368       | —       | 290       | —         | 23,750          |
| Smelt, whitebait                            | —         | —        | —       | —       | —       | —       | —       | —       | 435       | —       | —         | —         | 435             |

FISH BULLETIN 170

TABLE 11  
Monthly Landings of Commercial Fishing Boats in the Monterey Area during 1976

|                        |           |           |           |           |           |           |           |           |           |           |           |           |            |
|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Sole, Dover            | 4,290     | 19,735    | 70,965    | 73,919    | 188,029   | 253,988   | 332,006   | 947,943   | 146,979   | 127,503   | 127,043   | 81,525    | 1,613,215  |
| Sole, English          | 28,603    | 29,143    | 29,561    | 43,220    | 29,071    | 34,165    | 20,040    | 17,205    | 36,090    | 42,563    | 72,026    | 64,580    | 436,467    |
| Sole, petrale          | 20,464    | 23,647    | 27,853    | 25,684    | 21,444    | 25,104    | 8,717     | 5,828     | 13,076    | 15,900    | 21,898    | 12,590    | 22,047     |
| Sole, sand             | 51,508    | 23,776    | 12,919    | 21,819    | 12,919    | 9,562     | 1,267     | 688       | 7,575     | 7,145     | 11,207    | 20,220    | 146,045    |
| Sole, sand             | 1,361     | 1,069     | 636       | 2,198     | 2,644     | 948       | 92        | —         | —         | —         | 265       | 70        | 9,213      |
| Sole, Miscellaneous    | —         | —         | 435       | 28        | 142       | 397       | —         | 110       | 39        | 85        | 144       | 80        | 1,460      |
| Swordfish              | —         | —         | —         | —         | —         | —         | —         | 856       | 2,238     | 590       | —         | —         | 3,694      |
| Tuna, albacore         | —         | —         | —         | —         | —         | —         | 170,781   | 3,074,646 | 1,724,261 | 3,066,227 | 190,108   | 13,186    | 5,019,591  |
| Turbot                 | —         | —         | —         | 60        | —         | —         | —         | —         | 1,038     | —         | 115       | —         | 1,153      |
| Turpock                | —         | —         | —         | 2         | —         | 200       | —         | 45        | 66        | —         | 4         | —         | 345        |
| Miscellaneous          | —         | —         | —         | —         | —         | —         | —         | —         | —         | —         | —         | —         | 857        |
| Crab, Dungeness        | —         | —         | —         | —         | —         | —         | —         | —         | —         | —         | —         | —         | 1,125      |
| Prawn, spot            | 5,347     | 1,914     | 1,067     | 188       | —         | —         | —         | —         | 2,503     | 3,842     | —         | 3,935     | 4,680      |
| Crab, Dungeness        | —         | —         | —         | —         | —         | —         | —         | —         | —         | —         | —         | —         | 23,476     |
| Mollusk:               |           |           |           |           |           |           |           |           |           |           |           |           |            |
| Absalone, red          | 844       | —         | —         | —         | —         | —         | 135       | 246       | —         | 150       | —         | —         | 1,365      |
| Clams                  | 88        | 155       | —         | —         | 85        | 209       | 611       | 27        | 194       | 1,072     | 758       | 512       | 3,722      |
| Squid, market          | —         | 50        | —         | 50,300    | 472,285   | 852,987   | 25,000    | 230,200   | 897,690   | 1,512,030 | 979,484   | 1,800     | 5,021,817  |
| Total pounds           | 3,000,093 | 1,535,145 | 1,757,575 | 1,441,757 | 2,117,812 | 2,522,243 | 1,735,930 | 5,226,337 | 5,040,011 | 3,647,519 | 5,906,928 | 3,269,763 | 37,221,113 |
| Waters north of State: |           |           |           |           |           |           |           |           |           |           |           |           |            |
| Fish:                  |           |           |           |           |           |           |           |           |           |           |           |           |            |
| Tuna, albacore         | —         | —         | —         | —         | —         | —         | —         | —         | 17,770    | —         | —         | —         | 17,770     |
| Total pounds           | —         | —         | —         | —         | —         | —         | —         | —         | —         | —         | —         | —         | 17,770     |
| Grand Total            | 3,000,093 | 1,535,145 | 1,757,575 | 1,441,757 | 2,117,812 | 2,522,243 | 1,735,930 | 5,244,197 | 5,040,011 | 3,647,519 | 5,906,928 | 3,269,763 | 37,228,883 |

MARINE FISH LANDINGS 1976

TABLE 11—Cont'd.

TABLE 12  
Monthly Landings of Commercial Fishing Boats in the Santa Barbara Area during 1976

| Species                 | January   | February | March   | April     | May     | June    | July    | August  | September | October   | November   | December  | Total Pounds |         |
|-------------------------|-----------|----------|---------|-----------|---------|---------|---------|---------|-----------|-----------|------------|-----------|--------------|---------|
| <b>LANDINGS FROM:</b>   |           |          |         |           |         |         |         |         |           |           |            |           |              |         |
| <b>Civilian waters:</b> |           |          |         |           |         |         |         |         |           |           |            |           |              |         |
| <b>Fish:</b>            |           |          |         |           |         |         |         |         |           |           |            |           |              |         |
| Anchoa, northern        | 6,247,900 | 150,750  | 22,956  | 2,117,100 | 204,500 | 30,900  | 123,976 | 84,600  | 3,741,700 | 7,345,900 | 11,273,600 | 7,354,200 | 38,620,054   |         |
| Barracuda, California   | 8,900     | —        | —       | —         | —       | —       | 186     | 148     | 98        | 405       | 1,013      | 5         | 10,967       |         |
| Bonito, Pacific         | —         | —        | —       | —         | —       | —       | 66,768  | 55,122  | 20,853    | 279       | 418        | 1,367     | 144,987      |         |
| Bonvaffin, Pacific      | 18        | —        | 42      | 57        | 18      | —       | —       | 2,388   | 50        | —         | —          | 3         | 2,944        |         |
| Cod, Pacific            | 2,853     | 2,271    | 580     | 538       | 948     | 1,115   | 627     | 183     | 273       | 904       | 4,056      | 1,693     | 15,275       |         |
| Croaker, white          | 10,175    | 6,137    | 5,817   | 9,079     | 11,386  | 9,492   | 14,432  | 19,670  | 10,229    | 8,866     | 12,788     | 9,826     | 127,887      |         |
| Dolphinfish             | —         | —        | 31      | 163       | 589     | 60      | —       | —       | 38        | —         | —          | —         | 38           |         |
| Eel                     | —         | —        | —       | —         | —       | —       | —       | 11      | 10        | —         | —          | —         | —            |         |
| Flounder                | 1,833     | 3,797    | 7,252   | 3,931     | 1,282   | 1,282   | 5,621   | 1,477   | 973       | —         | 1,724      | 3,959     | 3,972        |         |
| Hake, Pacific           | —         | —        | 271     | 5,823     | 2,853   | —       | —       | —       | 344       | —         | —          | 9,591     | —            |         |
| Halibut, California     | 20,213    | 19,339   | 20,589  | 6,492     | 9,103   | 48,206  | 70,217  | 49,746  | 34,632    | 39,105    | 33,410     | 35,099    | 406,171      |         |
| Herring, Pacific        | —         | —        | 32,689  | 44,615    | 88,699  | 91,756  | 54,635  | 51,296  | 33,155    | 15        | —          | —         | 15           |         |
| Lingcod                 | 16,820    | 16,547   | —       | —         | —       | —       | —       | —       | 12,907    | 18,404    | 15,598     | 478,129   | —            |         |
| Mackerel, jack          | 33,000    | 498,500  | 751,220 | 889,650   | 865,500 | 73,863  | 6       | 528,318 | 110       | 55,300    | 71,690     | 218,100   | 3,973,267    | —       |
| Mackerel, Pacific       | —         | —        | —       | —         | —       | —       | 298     | 206     | 1,510     | 226       | —          | —         | 2,342        |         |
| Ophah                   | —         | —        | —       | —         | —       | —       | —       | —       | —         | —         | —          | —         | 24           |         |
| Percula                 | 2,167     | 1,091    | 3,294   | 3,033     | 443     | 118     | 1,949   | 3,822   | 2,619     | 2,364     | 2,134      | 3,447     | 26,461       |         |
| Greenfish               | —         | —        | —       | —         | —       | —       | —       | —       | —         | —         | —          | —         | 34           |         |
| Rockfish                | 382,800   | 569,674  | 396,294 | 399,545   | 604,159 | 547,934 | 573,763 | 502,774 | 573,010   | 388,133   | 436,256    | 466,154   | 5,843,930    | —       |
| Sablefish               | 5,999     | 7,180    | 19,058  | 35,271    | 32,963  | 53,149  | 31,280  | 9,148   | 8,305     | 6,357     | 4,406      | 664       | 213,468      | —       |
| Salmon                  | —         | —        | —       | —         | —       | —       | —       | —       | —         | —         | —          | —         | —            |         |
| Salmonella              | 946       | 99       | 142     | 728       | 441     | 1,404   | 1,404   | 600     | 449       | 382       | 347        | 355       | 373          | 210,577 |
| Sculpin                 | 3         | —        | —       | 45        | —       | 95      | 162     | —       | —         | 50        | —          | —         | 67           | —       |
| Seabass, giant          | —         | —        | 85      | 14        | 1,697   | 432     | 108     | —       | —         | —         | —          | —         | —            |         |
| Seabass, white          | 373       | 1,253    | 397     | 987       | 1,798   | 7,740   | 2,806   | 1,718   | 3,196     | 2,501     | 1,483      | 102       | 24,624       | —       |
| Shark                   | 8,400     | 6,305    | 3,710   | 11,631    | 2,125   | 28,256  | 45,921  | 20,221  | 25,167    | 14,428    | 39,885     | 15,282    | 241,531      | —       |
| Sheepshead, California  | —         | 56       | —       | —         | —       | —       | —       | —       | —         | 164       | 132        | 76        | 1,492        | —       |
| Skate                   | 1,456     | 1,153    | 924     | 85        | 14      | 1,697   | 432     | 108     | —         | 188       | 127        | —         | 6,194        | —       |
| Smelt, top or jack      | —         | —        | —       | —         | —       | —       | 73      | —       | —         | —         | —          | —         | 73           | —       |
| Smelt, true             | —         | —        | —       | —         | —       | —       | 1       | —       | —         | —         | —          | —         | 1            | —       |
| Sole, Dover             | 795       | 1,680    | 7,458   | 18,612    | 28,644  | 50,389  | 24,055  | 36,005  | 12,470    | 969       | —          | —         | 181,077      | —       |
| Sole, English           | 80,834    | 67,779   | 33,123  | 33,548    | 31,815  | 11,457  | 11,745  | 18,932  | 33,445    | 57,693    | 40,175     | 36,162    | 456,698      | —       |
| Sole, Girelle           | 43,002    | 27,100   | 26,157  | 45,782    | 68,120  | 31,257  | 27,145  | 54,555  | 74,012    | 32,249    | 15,249     | 11,111    | 476,969      | —       |
| Sole, rex               | 12,210    | 7,534    | 4,767   | 7,250     | 8,130   | 6,402   | 6,058   | 4,783   | 4,215     | 5,614     | 7,888      | 3,513     | 78,124       | —       |
| Sole, sand              | 876       | 946      | 632     | 2,025     | 3,155   | 539     | 597     | 135     | 261       | 595       | 1,498      | 403       | 11,602       | —       |

FISH BULLETIN

TABLE 12  
Monthly Landings of Commercial Fishing Boats in the Santa Barbara Area during 1976

|                           |            |           |           |           |           |           |           |           |           |           |            |            |            |
|---------------------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|
| Sole, miscellaneous       | 1,497      | 2,328     | 1,211     | 255       | 618       | 1,225     | 961       | 453       | 409       | 776       | 1379       | 92         | 11,194     |
| Swordfish                 |            |           |           |           |           |           | 371       | 474       | 531       | 331       | 6,797      | 2,100      | 333        |
| Tuna, albacore            | 5,932      | —         | —         | —         | —         | 1,773     | 9,761     | 564,285   | 900,738   | 386,304   | 95,107     | 84,794     | 1,739,460  |
| Tuna, skipjack            |            |           |           |           |           |           |           |           |           | 157       | 130        | 101        | 246        |
| Turbot                    | 2,587      | 865       | 1,005     | 1,857     | 1,389     | 318       | 753       | 46        | 657       | 45        | 45         | 961        | 12,256     |
| Yellowtail                | —          | —         | —         | —         | 111       | 41        | 42        | 17        | 9         | —         | —          | 953        | 4,202      |
| Miscellaneous             | —          | —         | —         | —         | —         | —         | —         | —         | —         | —         | —          | —          | 233        |
| <b>Crustacean</b>         |            |           |           |           |           |           |           |           |           |           |            |            |            |
| Crab, Dungeness           | 454        | 3,757     | 4,534     | 760       | 821       | 1,909     | 191       | —         | —         | 1,267     | 2,472      | —          | 16,185     |
| Crab, rock                | 57,823     | 101,001   | 45,184    | 34,443    | 34,486    | 28,802    | 44,583    | 43,757    | 40,804    | 154,693   | 59,270     | 60,077     | 578,900    |
| Lobster, California spiny | 20,010     | 10,098    | 5,516     | —         | —         | —         | —         | —         | —         | 15,015    | 13,974     | 11,098     | 81,374     |
| Prawn, ridgeback          | 371        | —         | 8         | 682       | 938       | 765       | 89        | —         | 259       | —         | —          | —          | 3,150      |
| Shrimp, spiny             | 8,901      | 19,13     | —         | 260       | 352       | 1,092     | 51        | —         | 6,628     | 2,153     | 4,001      | 12,337     | 26,735     |
| Shrimp, Pacific Ocean     | —          | —         | —         | 610       | 1,092     | 51        | 123       | —         | —         | —         | —          | —          | 1,909      |
| Miscellaneous crustacean  | 1          | 1         | 123       | 500       | —         | —         | —         | —         | 30        | —         | —          | —          | 655        |
| <b>Echinoderms</b>        |            |           |           |           |           |           |           |           |           |           |            |            |            |
| Sea urchin                | 1,492,796  | 625,535   | 596,990   | 496,110   | 553,110   | 397,055   | 606,760   | 683,910   | 902,666   | 1,354,811 | 1,201,033  | 1,331,870  | 10,472,563 |
| <b>Mollusks</b>           |            |           |           |           |           |           |           |           |           |           |            |            |            |
| Absalone, black           | 28,435     | —         | 25,995    | 11,927    | 4,786     | 56,070    | 59,643    | —         | 31,518    | 30,231    | 8,955      | 19,799     | 267,579    |
| Absalone, green           | 128        | —         | 74        | 20        | 12        | 188       | 120       | —         | 68        | 54        | 24         | 263        | 1,251      |
| Absalone, pink            | 24,113     | —         | 20,603    | 20,449    | 15,448    | 20,449    | 275       | 13,740    | 13,740    | 13,740    | 11,130     | 11,130     | 11,130     |
| Absalone, red             | 58,783     | —         | 58,531    | 41,462    | 47,233    | 64,419    | 64,419    | 41,460    | 79,642    | 50,446    | 73,834     | 60,446     | 604,275    |
| Absalone, threaded        | 309        | —         | 366       | 137       | 433       | 359       | 112       | —         | 61        | 129       | 288        | 414        | 2,610      |
| Absalone, white           | 467        | —         | 143       | 12        | 21        | 135       | 720       | —         | 372       | 329       | 560        | 187        | 2,946      |
| Octopus                   | 6          | 82        | 88        | 106       | —         | —         | 27        | 151       | 44        | 111       | 15         | 106        | —          |
| Oyster, giant Pacific     | 1,400,400  | —         | 480       | —         | —         | —         | —         | —         | —         | —         | —          | —          | 2,344      |
| SQL, market               | 1,400,400  | 128,200   | 11,810    | 538,655   | 118,150   | 321,400   | 473       | 1,269     | 58        | —         | 53         | 678,208    | 3,385,800  |
| Miscellaneous mollusk     | 24         | —         | 49        | 52        | 30        | 14        | 32        | —         | 30        | 14        | 8          | 14         | 257        |
| <b>Total Pounds</b>       |            |           |           |           |           |           |           |           |           |           |            |            |            |
| Waters under State of:    | 10,027,090 | 2,230,900 | 2,106,507 | 4,793,698 | 2,907,309 | 2,308,000 | 1,927,005 | 2,807,503 | 6,263,281 | 9,192,728 | 13,467,547 | 10,421,479 | 69,072,990 |
| Fish:                     | —          | —         | —         | —         | —         | —         | —         | —         | —         | —         | —          | —          | —          |
| Tuna, albacore            | —          | —         | 1,279     | —         | —         | —         | —         | —         | 275       | —         | —          | —          | 1,654      |
| Total pounds              | —          | —         | 1,279     | —         | —         | —         | —         | —         | 275       | —         | —          | —          | 1,654      |
| Gross Total               | 10,027,090 | 9,730,900 | 9,167,896 | 4,793,698 | 9,307,309 | 3,306,000 | 1,927,005 | 2,807,503 | 6,263,281 | 9,192,728 | 13,467,547 | 10,421,479 | 69,072,946 |

TABLE 12—*Cont'd.*

TABLE 13

Monthly Landings of Commercial Fish into the Los Angeles Area during 1976

| Species                   | January    | February  | March      | April      | May       | June      | July      | August    | September  | October    | November   | December   | Total<br>Pounds |
|---------------------------|------------|-----------|------------|------------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|-----------------|
| <b>LANDINGS FROM:</b>     |            |           |            |            |           |           |           |           |            |            |            |            |                 |
| <b>California waters:</b> |            |           |            |            |           |           |           |           |            |            |            |            |                 |
| Fish                      |            |           |            |            |           |           |           |           |            |            |            |            |                 |
| Anchovy, northern         | 32,229,600 | 2,918,766 | 22,851,500 | 33,516,228 | 3,297,000 | 105,700   | 19,302    | 77,580    | 10,070,956 | 14,315,800 | 45,246,200 | 35,865,550 | 200,655,533     |
| Baitfish, California      | 10,230     | —         | 7,450      | 2,570      | 2,260     | 130       | 57        | 283       | —          | 3,985      | 57,250     | 18,771,12  | 187,771,12      |
| Bonito, Pacific           | 2,501      | 65        | 335        | 185        | 74,906    | 149,375   | 1,372,046 | 1,198,543 | 375,778    | 313,800    | 158,447    | 55,620     | 3,700,601       |
| Butterfish, Pacific       | 1,514      | 6,209     | 11,833     | 6,965      | 1,382     | 2,583     | 16,246    | 1,916     | 564        | 3,616      | 3,207      | 5,591      | 61,424          |
| Cod, Pacific              | —          | —         | —          | —          | —         | —         | —         | —         | —          | —          | —          | —          | 9               |
| Croaker, white            | 21,743     | 47,712    | 34,418     | 21,090     | 8,701     | 42,200    | 3,541     | 10,240    | 19,262     | 11,261     | 2,840      | 8,765      | 232,178         |
| Dolphinfish               | —          | —         | —          | —          | —         | —         | 4         | 16        | 49         | 21         | 8          | —          | 129             |
| Drum                      | —          | —         | —          | —          | —         | —         | —         | —         | —          | —          | —          | —          | 98              |
| Flyingfish                | —          | —         | —          | 150        | 11,470    | 39,343    | 31,194    | 16,015    | 4          | —          | —          | —          | 98,176          |
| Hake, Pacific             | 685        | 775       | 415        | 160        | 620       | 4,565     | —         | —         | —          | 1,935      | 450        | 435        | 10,020          |
| Halibut                   | —          | —         | —          | —          | —         | —         | —         | —         | —          | —          | —          | —          | —               |
| Harmless, California      | 8,924      | 10,963    | 10,944     | 7,733      | 5,085     | 7,040     | 924       | 740       | 337        | 70         | 1,709      | 3,958      | 7,908           |
| Lingcod                   | —          | 135       | —          | —          | —         | —         | 130       | 81        | —          | —          | 6,121      | 4,213      | 10,334          |
| Mackerel, jack            | 6,254,411  | 5,612,113 | 3,747,276  | 2,043,663  | 1,899,635 | 2,501,473 | 4,852,300 | 4,007,245 | 2,265,727  | 1,630,864  | 3,601,121  | 2,868,495  | 40,755,117      |
| Mackerel, Pacific         | —          | —         | 1,613      | 1,532      | 8,788     | 30,473    | 22,424    | 13,253    | 13,253     | 13,253     | 10,950     | 167,944    | 343,500         |
| Perch                     | 448        | 1,476     | 1,047      | 1,137      | 615       | 782       | 291       | 1,096     | 635        | 532        | 171        | 1,214      | 9,432           |
| Queenfish                 | 1,665      | 980       | 1,540      | 60         | 715       | 2,005     | 2,155     | 535       | 90         | 915        | 940        | 1,190      | 12,610          |
| Rockfish                  | 120,282    | 90,639    | 58,269     | 50,217     | 64,496    | 48,484    | 50,367    | 37,725    | 31,825     | 45,137     | 54,423     | 74,294     | 725,550         |
| Sanddab                   | 588        | 62        | 317        | 550        | 141       | 1,043     | 252       | 27        | 1,153      | 1,153      | 110        | —          | 5,659           |
| Salmon                    | —          | 157       | 50         | 132        | 1,730     | 1,518     | 9,590     | 16,017    | 4,605      | 4,53017    | 288        | 6,732      | 62,343          |
| Sardine                   | —          | —         | 25         | —          | —         | —         | —         | —         | —          | —          | 54         | 59         | 138             |
| Sardine, Pacific          | —          | —         | —          | —          | —         | —         | —         | —         | —          | —          | —          | —          | 16,190          |
| Sole, flathead            | 144        | 306       | 106        | 237        | 148       | —         | 206       | 218       | 516        | —          | 222        | 220        | 3,271           |
| Sea bass, giant           | —          | —         | —          | —          | —         | —         | —         | —         | —          | —          | 160        | —          | 1,213           |
| Seabass, white            | —          | 157       | 50         | 132        | 1,730     | 1,518     | 9,590     | 16,017    | 4,605      | 4,53017    | 288        | 6,732      | 62,343          |
| Shark                     | 4,410      | 4,789     | 9,474      | 5,912      | 11,381    | 27,913    | 25,764    | 22,290    | 10,174     | 11,406     | 16,189     | 15,558     | 166,260         |
| Sheepshead, California    | 8          | 269       | 149        | 39         | 430       | 550       | 369       | 327       | 189        | 290        | 463        | 1,820      | 4,953           |
| Skate                     | —          | —         | 18         | —          | —         | —         | —         | —         | —          | —          | —          | —          | 4,18            |
| Sole, top or jack         | —          | —         | —          | —          | 353       | 125       | —         | —         | —          | —          | —          | 3,795      | 5,725           |
| Sole, red                 | 370        | 45        | 15         | 50         | 1,049     | 1,690     | 258       | 58        | 58         | 5,550      | 4,313      | 1,965      | 15,047          |
| Sole, Dover               | —          | 250       | 455        | 335        | 235       | 575       | —         | —         | 40         | —          | —          | —          | 1,920           |
| Sole, English             | 3,515      | 2,305     | 895        | 880        | 1,150     | 830       | —         | —         | 460        | 4,790      | 1,475      | 1,245      | 17,545          |
| Sole, petrale             | —          | 340       | 150        | 618        | 454       | 605       | —         | —         | 55         | 15         | 33         | 30         | 2,330           |
| Sole, ree                 | 1,690      | 305       | 1,330      | 825        | 760       | 885       | —         | —         | 275        | 1,145      | 450        | 805        | 5,640           |
| Sole, miscellaneous       | 32         | 5         | —          | —          | 20        | —         | 74        | 188       | 98         | 62         | —          | —          | 461             |

FISH BULLETIN 170

TABLE 13  
Monthly Landings of Commercial Fish into the Los Angeles Area during 1976

|                               |            |            |            |            |           |           |           |           |            |            |            |            |             |             |
|-------------------------------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|-------------|-------------|
| Swordfish                     | —          | —          | —          | —          | —         | 6,637     | 2,096     | 1,638     | 487        | 10,076     | 8,345      | 1,675      | 34,954      |             |
| Tuna, albacore                | —          | —          | —          | —          | —         | 11,772    | 209,981   | 377,044   | 508,395    | 211,612    | 18,992     | 1,267,398  | 1,267,398   |             |
| Tuna, bluefin                 | —          | —          | —          | —          | —         | 6,800     | 92,295    | 48,386    | 18,305     | 71,125     | 44,028     | 2,130,793  | 2,130,793   |             |
| Tuna, yellowfin               | —          | 11,830     | 62,954     | 3,135      | 5,310     | 6,147     | 1,864     | —         | 90,755     | 105,930    | 3,625      | 291,247    | 291,247     |             |
| Yellowtail                    | —          | —          | —          | —          | 237       | 578       | 327       | 668       | 431        | 80         | 1,359      | 7,707      | 7,707       |             |
| Miscellaneous                 | 45         | —          | —          | —          | —         | 549       | —         | 6         | —          | 315        | 1,070      | 45         | 660         | 660         |
| <b>Crustacean:</b>            |            |            |            |            |           |           |           |           |            |            |            |            |             |             |
| Crab, rock                    | 41,133     | 37,277     | 38,631     | 34,992     | 40,356    | 39,018    | 65,340    | 60,445    | 56,861     | 51,260     | 50,644     | 58,007     | 370,804     |             |
| Shrimp, California spiny      | 5,772      | 5,441      | 8,282      | —          | —         | —         | —         | —         | —          | 27,270     | 21,734     | 18,396     | 92,675      |             |
| <b>Echinoids:</b>             |            |            |            |            |           |           |           |           |            |            |            |            |             |             |
| Sea urchin                    | —          | —          | —          | —          | —         | —         | —         | —         | —          | 11,980     | 31,910     | 99,610     | 143,300     |             |
| <b>Molluscs:</b>              |            |            |            |            |           |           |           |           |            |            |            |            |             |             |
| Abalone, black                | 5,976      | —          | 4,498      | 836        | 2,351     | 14,084    | 24,424    | —         | 8,933      | 5,518      | 12,888     | 6,178      | 88,695      |             |
| Abalone, green                | 13,463     | —          | 10,575     | 8,846      | 5,863     | 10,030    | 16,576    | —         | 5,796      | 5,246      | 8,897      | 9,581      | 100,000     |             |
| Abalone, purple               | 30,514     | —          | 13,450     | 15,264     | 8,965     | 18,086    | 18,712    | —         | 4,751      | 4,531      | 10,259     | 16,164     | 161,642     |             |
| Abalone, red                  | 331        | —          | 15         | 1,664      | 93        | 1,153     | 1,004     | —         | 716        | 158        | 960        | 3,007      | 9,121       |             |
| Abalone, white                | 9,614      | —          | 4,162      | 6,659      | 6,738     | 5,404     | 9,906     | —         | 2,164      | 1,305      | 7,145      | 3,812      | 56,909      |             |
| Octopus                       | —          | —          | —          | —          | —         | —         | —         | —         | —          | —          | 17         | 13         | 30          |             |
| Squid                         | 546        | 770        | 900        | 670        | 1,245     | 1,053     | 1,270     | 1,000     | 1,099      | 1,030      | 1,100      | 969        | 13,930      |             |
| Squid, market                 | 4,569,634  | 2,209,704  | 38,323     | 172,100    | 44,730    | 589,892   | 845,792   | 7,528     | 46,170     | —          | 2,700,595  | 2,700,595  | 114,340     | 114,340     |
| Miscellaneous mollusk         | 75         | —          | —          | —          | —         | —         | —         | —         | 275        | —          | —          | —          | 350         |             |
| Total Pounds                  | 43,326,459 | 10,976,608 | 26,913,406 | 35,908,071 | 5,555,535 | 3,708,130 | 7,724,088 | 6,255,961 | 14,441,101 | 18,271,918 | 49,539,324 | 42,089,840 | 264,709,000 | 264,709,000 |
| <b>Waters north of State:</b> |            |            |            |            |           |           |           |           |            |            |            |            |             |             |
| <b>Fish:</b>                  |            |            |            |            |           |           |           |           |            |            |            |            |             |             |
| Tuna, albacore                | —          | —          | —          | —          | —         | —         | —         | —         | 13,960     | 37,515     | —          | —          | 51,475      |             |
| Total Pounds                  | —          | —          | —          | —          | —         | —         | —         | —         | 13,960     | 37,515     | —          | —          | 51,475      |             |
| <b>Waters south of state:</b> |            |            |            |            |           |           |           |           |            |            |            |            |             |             |
| <b>Fish:</b>                  |            |            |            |            |           |           |           |           |            |            |            |            |             |             |
| Barracuda, California         | —          | —          | —          | —          | —         | —         | —         | —         | —          | —          | —          | —          | 18          |             |
| Bass, Pacific                 | 250        | 14,900     | 11,455     | 32,985     | —         | 3,265     | 596,101   | 1,538,060 | 1,378,985  | —          | 8,150      | —          | 3,684,901   |             |
| Dolphinfish                   | —          | —          | —          | —          | —         | —         | —         | —         | —          | —          | —          | —          | 310         |             |
| Grouper                       | 5,540      | —          | 3,760      | —          | —         | —         | —         | —         | —          | —          | —          | —          | 9,600       |             |
| Haddock                       | —          | —          | —          | —          | —         | —         | —         | —         | —          | —          | —          | —          | 13,770      |             |
| Halibut, California           | —          | —          | —          | —          | 7         | —         | 30        | —         | —          | —          | —          | —          | 47          |             |
| Perch                         | —          | —          | —          | —          | 50        | —         | —         | —         | —          | —          | 10         | —          | 50          |             |
| Rockfish                      | —          | —          | —          | 3,240      | —         | —         | —         | —         | —          | —          | —          | —          | 3,829       |             |
| Sea lion, giant               | 9,744      | 2,880      | 3,040      | 306        | 1,770     | —         | —         | 638       | —          | —          | 159        | —          | 1,730       |             |
| Seasab, white                 | 45,783     | 41,071     | 24,244     | 1,751      | 36,459    | 66,795    | 157,954   | 40        | —          | —          | 1,074      | 4,550      | 415,436     |             |
| Shark                         | 7,305      | 5,943      | 6,536      | 1,390      | 4,220     | 230       | 194       | 54        | —          | —          | 1,557      | 13,965     | 40,444      |             |
| Sheephead, California         | —          | 100        | 40         | 156        | —         | —         | —         | —         | —          | —          | —          | —          | 358         |             |
| Swordfish                     | —          | —          | —          | —          | —         | —         | 234       | 1,038     | —          | —          | —          | —          | —           |             |
| Tuna, pacific                 | 94,239     | 12,790     | 320        | —          | —         | 965       | 94,796    | 479,170   | 991,201    | 338,335    | 41,174     | 124,103    | 2,070,073   |             |
| Tuna, bigeye                  | —          | 585,210    | 822,365    | —          | —         | —         | —         | —         | 63,600     | —          | 41,240     | 37,280     | 154,995     |             |

TABLE 13—*Cont'd.*

TABLE 13—Continued  
Monthly Landings of Commercial Fish into the Los Angeles Area during 1976

| Species                       | January           | February          | March              | April             | May               | June              | July              | August            | September         | October           | November          | December          | Total Pounds       |
|-------------------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| Tuna, bluefin                 | 194,039           | 427,273           | 312,150            | 2,105,704         | 818,356           | 2,431,548         | 3,985,458         | 734,566           | 341,717           | 32,008            | 11,470,227        |                   |                    |
| Tuna, skipjack                | 5,112,979         | 2,860,000         | 21,100             | 8,127,479         | 14,987,978        | 9,786,222         | 6,130,909         | 2,982,198         | 2,050,928         | 4,642,194         | 3,070,023         | 34,323,023        |                    |
| Tuna, skipjack, black         | 4,515             | 179,460           | —                  | 49,405            | 1,935             | 251,955           | —                 | —                 | —                 | 47,280            | 300,020           | 83,660            |                    |
| Tuna, yellowfin               | 2,992,576         | 5,959,747         | 51,125,304         | 12,031,915        | 22,345,786        | 34,065,152        | 24,260,095        | 20,641,552        | 18,844,996        | 14,791,885        | 18,222,141        | 7,850,053         | 223,0196           |
| Wahoo                         | —                 | —                 | 2,000              | 640               | 1,986             | 3,325             | 90,052            | 1,068             | 34,685            | —                 | 18,365            | 6,195             |                    |
| Yellowtail                    | 50,412            | 24,017            | 1,963              | —                 | —                 | —                 | —                 | —                 | —                 | —                 | 18,782            | 249,286           |                    |
| Miscellaneous                 | 130               | —                 | —                  | —                 | —                 | —                 | —                 | —                 | —                 | —                 | —                 | 120               |                    |
| <b>Crustaceans</b>            |                   |                   |                    |                   |                   |                   |                   |                   |                   |                   |                   |                   |                    |
| Crab, pelagic red             | —                 | 38,000            | —                  | —                 | —                 | —                 | —                 | —                 | —                 | —                 | —                 | 32,000            |                    |
| <b>Total Pounds</b>           | <b>8,179,248</b>  | <b>9,736,398</b>  | <b>73,802,71</b>   | <b>20,508,952</b> | <b>37,435,373</b> | <b>36,111,895</b> | <b>32,497,924</b> | <b>26,496,443</b> | <b>23,174,175</b> | <b>17,815,734</b> | <b>23,406,910</b> | <b>11,436,000</b> | <b>325,591,923</b> |
| <b>South Pacific Islands:</b> |                   |                   |                    |                   |                   |                   |                   |                   |                   |                   |                   |                   |                    |
| <b>Fish:</b>                  |                   |                   |                    |                   |                   |                   |                   |                   |                   |                   |                   |                   |                    |
| Tuna, skipjack                | —                 | —                 | —                  | —                 | —                 | —                 | —                 | —                 | —                 | —                 | 237,575           | —                 |                    |
| Tuna, yellowfin               | —                 | —                 | —                  | —                 | —                 | —                 | —                 | —                 | —                 | —                 | 149,530           | —                 |                    |
| <b>Total Pounds</b>           | <b>—</b>          | <b>—</b>          | <b>—</b>           | <b>—</b>          | <b>—</b>          | <b>—</b>          | <b>—</b>          | <b>—</b>          | <b>—</b>          | <b>—</b>          | <b>387,405</b>    | <b>—</b>          | <b>387,405</b>     |
| <b>Africa:</b>                |                   |                   |                    |                   |                   |                   |                   |                   |                   |                   |                   |                   |                    |
| <b>Fish:</b>                  |                   |                   |                    |                   |                   |                   |                   |                   |                   |                   |                   |                   |                    |
| Tuna, bigeye                  | —                 | 93,656            | —                  | —                 | —                 | —                 | —                 | —                 | —                 | —                 | —                 | 231,936           |                    |
| Tuna, bluefin                 | —                 | 801,000           | 196,282            | —                 | —                 | —                 | —                 | —                 | —                 | —                 | —                 | 997,312           |                    |
| Tuna, skipjack                | —                 | 1,153,990         | 346,314            | —                 | —                 | —                 | —                 | —                 | —                 | —                 | —                 | 1,500,304         |                    |
| <b>Total Pounds</b>           | <b>—</b>          | <b>2,186,656</b>  | <b>542,696</b>     | <b>—</b>          | <b>2,729,252</b>  |                    |
| <b>Shipments*</b>             |                   |                   |                    |                   |                   |                   |                   |                   |                   |                   |                   |                   |                    |
| <b>Fish:</b>                  |                   |                   |                    |                   |                   |                   |                   |                   |                   |                   |                   |                   |                    |
| Tuna, albacore                | 928,286           | 422,951           | 2,587,518          | 2,446,617         | 1,062,495         | 2,918,490         | 6,683,474         | 6,508,710         | 8,443,656         | 1,890,525         | 3,588,915         | 8,433,765         | 30,912,392         |
| Tuna, bigeye                  | —                 | —                 | —                  | —                 | —                 | —                 | —                 | —                 | —                 | —                 | 87,433            | 62,225            | 149,958            |
| Tuna, bluefin                 | —                 | —                 | —                  | —                 | —                 | —                 | —                 | —                 | —                 | —                 | —                 | —                 | 462,260            |
| Tuna, skipjack                | 3,127,073         | 4,738,118         | 2,344,382          | 1,273,887         | 8,444,105         | 3,659,322         | 2,188,681         | 4,906,197         | 4,906,311         | 8,248,054         | 5,847,672         | 9,973,401         | 59,472,022         |
| Tuna, skipjack, black         | —                 | —                 | —                  | —                 | 43,046            | —                 | —                 | —                 | —                 | —                 | —                 | —                 | 130,584            |
| Tuna, yellowfin               | 1,303,046         | 1,009,132         | 1,654,943          | 2,746,144         | —                 | 661,166           | 1,082,154         | 2,451,399         | 1,901,705         | 1,328,712         | 794,234           | 18,182            | 69,256             |
| <b>Total Pounds</b>           | <b>5,338,404</b>  | <b>6,219,201</b>  | <b>6,587,243</b>   | <b>6,309,694</b>  | <b>10,153,756</b> | <b>7,630,156</b>  | <b>11,323,754</b> | <b>12,528,613</b> | <b>9,095,199</b>  | <b>10,925,513</b> | <b>10,214,492</b> | <b>19,333,743</b> | <b>115,876,078</b> |
| <b>Grand Total</b>            | <b>56,364,111</b> | <b>29,117,563</b> | <b>107,943,616</b> | <b>62,368,717</b> | <b>33,153,64</b>  | <b>47,450,191</b> | <b>31,333,768</b> | <b>45,260,971</b> | <b>51,752,281</b> | <b>47,013,685</b> | <b>63,548,131</b> | <b>72,379,583</b> | <b>769,245,139</b> |

\* For origin of shipments refer to Table 6. Beginning in 1968 only tuna shipments are recorded.

TABLE 13  
Monthly Landings of Commercial Fish into the Los Angeles Area during 1976

TABLE 14  
Monthly Landings and Shipments of Commercial Fish Into the San Diego Area during 1976

| Species                 | January | February | March   | April   | May    | June   | July   | August | September | October | November | December | Total Pounds |
|-------------------------|---------|----------|---------|---------|--------|--------|--------|--------|-----------|---------|----------|----------|--------------|
| <b>LANDINGS FROM:</b>   |         |          |         |         |        |        |        |        |           |         |          |          |              |
| California waters:      |         |          |         |         |        |        |        |        |           |         |          |          |              |
| Fish:                   |         |          |         |         |        |        |        |        |           |         |          |          |              |
| Anchovy, northern       | —       | 78       | —       | 821     | 1,459  | 6,496  | 3,253  | 945    | 83        | 285     | 88       | 14       | 208          |
| Barracuda               | 70      | 11       | —       | 350     | 6,963  | 5,045  | 15,483 | 631    | 2,333     | 2,324   | 2,668    | 13,489   | 36,322       |
| Bonito, Pacific         | 99      | 68       | —       | 350     | 6,963  | 5,045  | 15,483 | 631    | 2,333     | 2,324   | 2,668    | 134      | 742          |
| Butterfish, Pacific     | —       | —        | —       | —       | —      | —      | —      | 125    | 423       | 60      | —        | —        | —            |
| Cod, Chile              | 872     | 85       | 164     | 280     | 45     | —      | 380    | 715    | 76        | 5       | 33       | 391      | 3,646        |
| Dolphinfish             | —       | 298      | 832     | —       | —      | —      | 159    | 698    | 2,303     | 476     | 1,439    | 60       | 6,264        |
| Flounder                | —       | —        | —       | 42      | 35     | 1,279  | 1,215  | 984    | 674       | 498     | —        | 2        | 2            |
| Halibut                 | 21      | —        | —       | —       | —      | —      | —      | —      | —         | 561     | 629      | 5,938    | —            |
| Herring, California     | 5,725   | 6,151    | 11,215  | 23,256  | 150    | 1,833  | 2,346  | 2,247  | 521       | 1,862   | 939      | 5,068    | 44,121       |
| Lingcod                 | —       | —        | 22      | 236     | —      | —      | —      | 141    | 17        | 10      | 156      | 156      | 447          |
| Mackerel, jack          | 2,548   | 2,906    | 4,056   | 2,921   | 19     | 155    | 75     | 16     | —         | 535     | 500      | 975      | 14,406       |
| Mackerel, Pacific       | 63      | —        | 624     | —       | —      | 1,120  | 708    | 413    | —         | —       | 9        | 450      | 3,367        |
| Mullet                  | —       | —        | —       | —       | 513    | 1,028  | 1,154  | —      | —         | 615     | —        | —        | 3,297        |
| Percifish               | 62      | 245      | 78      | —       | 907    | 714    | 1,247  | 1,888  | 693       | 132     | 1,896    | 1,613    | 8,545        |
| Queenfish               | —       | —        | —       | —       | —      | —      | —      | 70     | —         | —       | —        | —        | 70           |
| Rockfish                | 130,937 | 77,978   | 119,468 | 109,844 | 81,634 | 57,494 | 37,413 | 38,695 | 70,593    | 104,620 | 77,534   | 107,746  | 1,013,960    |
| Sablefish               | 2,059   | 2,781    | 3,444   | 2,568   | 2,346  | 3,025  | 2,214  | 4,700  | 1,977     | 566     | 304      | —        | 36,024       |
| Sardine                 | —       | —        | —       | —       | —      | 266    | —      | —      | —         | —       | —        | —        | 256          |
| Sanddab                 | —       | —        | —       | 12      | 63     | —      | —      | —      | —         | —       | —        | 56       | 131          |
| Sculpin                 | 592     | 472      | 1,514   | 1,354   | 1,284  | 12,276 | 6,151  | 103    | 1,373     | 1,384   | 4,068    | 117      | 30,828       |
| Sea bass, giant         | 358     | —        | 39      | 24      | 139    | 50     | 831    | 288    | 1,034     | 538     | 310      | 289      | 3,700        |
| Seabass, white          | 4,988   | 22,331   | 2,263   | 732     | 2,045  | 2,045  | 8,521  | 16,921 | 17,731    | 16,116  | 12,259   | 12,259   | 102,024      |
| Shark                   | 4,193   | 2,898    | 3,849   | 9,810   | 6,478  | 13,519 | 34,020 | 7,099  | 2,619     | 3,929   | 7,707    | 6,942    | 103,063      |
| Sheepshead, California  | 240     | 136      | 40      | 44      | 158    | 674    | 18     | 9      | 205       | —       | —        | —        | 1,244        |
| Smelt, mackerel or jack | 163     | —        | —       | —       | —      | —      | —      | —      | —         | 39      | —        | —        | 202          |
| Snell, true             | —       | —        | —       | —       | —      | —      | —      | 13     | —         | —       | —        | 8        | 8            |
| Sole, English           | —       | —        | —       | —       | —      | —      | —      | —      | —         | —       | —        | —        | 231          |
| Sole, petrale           | 121     | 34       | 16      | —       | —      | —      | —      | —      | —         | 60      | —        | —        | —            |
| Sole, miscellaneous     | 199     | 83       | 202     | 121     | 151    | 10     | 176    | 35     | 46        | 35      | 28       | 54       | 1,126        |
| Swordfish               | —       | —        | —       | —       | 8,594  | 463    | 331    | —      | —         | 2,190   | 3,946    | 1,039    | 16,553       |
| Tuna, albacore          | 579     | —        | 2,376   | —       | 223    | 11,309 | 37,819 | 98,780 | 261,208   | 426,598 | 226,334  | 100,372  | 1,185,593    |
| Tuna, bluefin           | 309     | —        | —       | —       | —      | 23     | 163    | 110    | 131,205   | 242     | 179      | 179      | 182,231      |
| Tuna, yellowfin         | —       | —        | —       | —       | —      | —      | —      | 9,970  | 1,001     | 1,228   | 2,114    | 1,228    | 17,771       |
| Turbot                  | —       | —        | —       | —       | —      | —      | —      | —      | 11        | 190,252 | 1,009    | 5,653    | 1,278        |
| Yellowtail              | 4,160   | 8,995    | 117     | —       | 11,257 | 3,571  | 5,831  | 6,324  | 2,661     | 10,268  | 14,652   | 985      | 68,838       |
| Miscellaneous           | —       | —        | 117     | —       | —      | 297    | —      | 52     | 132       | 257     | 456      | 456      | 1,311        |

MARINE FISH LANDINGS  
1976

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TABLE 14  
Monthly Landings and Shipments of Commercial Fish Into the San Diego Area during 1976

TABLE 14—Continued  
Monthly Landings and Shipments of Commercial Fish Into the San Diego Area during 1976

| Species                       | January | February  | March      | April     | May       | June       | July       | August    | September  | October   | November  | December  | Total Pounds |
|-------------------------------|---------|-----------|------------|-----------|-----------|------------|------------|-----------|------------|-----------|-----------|-----------|--------------|
| <b>Crustacean:</b>            |         |           |            |           |           |            |            |           |            |           |           |           |              |
| Crab, rock                    | 6,606   | 7,090     | 6,794      | 8,234     | 6,763     | 6,452      | 7,866      | 8,440     | 4,341      | 5,107     | 4,052     | 6,241     | 77,986       |
| Lobster, California spiny     | 8,212   | 6,242     | 5,151      | —         | —         | —          | —          | —         | —          | 53,107    | 30,450    | 14,723    | 115,485      |
| <b>Echinoderm:</b>            |         |           |            |           |           |            |            |           |            |           |           |           |              |
| Starfish                      | 46,300  | 18,020    | 7,520      | 575       | —         | 2,063      | 4,234      | 17,331    | 61,420     | 91,881    | 75,981    | 70,245    | 395,570      |
| <b>Mollusk:</b>               |         |           |            |           |           |            |            |           |            |           |           |           |              |
| Abalone, black                | 50      | —         | —          | 162       | 2         | 258        | 213        | —         | 804        | 112       | 983       | 1,102     | 3,696        |
| Abalone, green                | 4,267   | —         | 2,259      | 533       | 1,136     | 2,455      | 4,133      | —         | 3,688      | 5,513     | 2,396     | 3,929     | 30,599       |
| Abalone, purple               | 42,254  | —         | 5,945      | 2,011     | 1,745     | 2,525      | 6          | 5,887     | 15,657     | 1,554     | 5,529     | 6,739     | 71,789       |
| Abalone, red                  | 6,767   | —         | 2,957      | 447       | 7,763     | 9,537      | 6,793      | —         | 4,527      | 7,976     | 7,031     | 8,409     | 61,907       |
| Abalone, threaded             | 41      | —         | 62         | 5         | 87        | 40         | 8          | —         | 3          | 15        | 18        | 6         | 285          |
| Abalone, white                | 6,017   | —         | 4          | 112       | 2,601     | 667        | 1,032      | —         | 6,285      | 1,742     | 1,494     | 2,198     | 22,152       |
| Oyster                        | —       | —         | —          | —         | —         | —          | —          | —         | —          | —         | —         | —         | 71           |
| Small sea                     | —       | —         | —          | —         | —         | 4          | 12         | 73        | 131        | —         | 118       | 125       | 463          |
| Squid, market                 | 18,262  | 22,949    | —          | 5         | —         | 333        | 5,549      | 1,305     | 3,411      | 401       | —         | —         | 51,912       |
| Miscellaneous mollusk         | 34      | —         | —          | —         | 9         | —          | —          | —         | —          | —         | —         | —         | 35           |
| Total Pounds                  | 278,267 | 181,323   | 181,903    | 145,169   | 145,199   | 158,889    | 215,860    | 217,672   | 782,314    | 755,397   | 496,683   | 358,272   | 3,917,630    |
| <b>Waters south of State:</b> |         |           |            |           |           |            |            |           |            |           |           |           |              |
| Fishery:                      |         |           |            |           |           |            |            |           |            |           |           |           |              |
| Bonito, California            | 44      | —         | —          | 71        | —         | 29         | 131        | 70        | —          | —         | —         | —         | 335          |
| Bonito, Pacific               | —       | 539       | 1,214      | —         | 94        | 96         | 175,510    | 1,018,092 | 83,210     | 9,900     | 22,417    | 18,171    | 1,329,466    |
| Dolphinfish                   | —       | —         | —          | —         | 407       | 78         | 650        | 1,293     | 572        | —         | 175       | —         | 3,175        |
| Hallibut, California          | 206     | 102       | 93         | —         | 114       | 84         | 50         | 9         | —          | 91        | —         | —         | 749          |
| Porgy                         | —       | —         | —          | —         | —         | —          | —          | —         | —          | 493       | —         | —         | 493          |
| Rock-fish                     | 2,192   | 343       | 1,519      | —         | 427       | 53,442     | 50,772     | 29,310    | 2,224      | 1,798     | 1,221     | 776       | 139,523      |
| Sculpin                       | —       | —         | —          | —         | —         | 13,343     | 302        | 57        | 64         | 210       | 528       | 25,599    | —            |
| Sea bass, giant               | 2,611   | 5,217     | 1,506      | 4,361     | —         | —          | —          | —         | —          | —         | —         | —         | —            |
| Sole, white                   | 20,181  | 10,409    | 20,114     | 34,695    | 42,001    | 9,161      | 139,699    | 20,797    | 4,027      | 1,298     | 20,141    | 5,224     | 446,907      |
| Shark                         | 12,927  | 1,439     | 6,210      | 3,776     | 3,132     | 2,084      | —          | —         | —          | 3,160     | 9,697     | 4,723     | 48,496       |
| Swordfish                     | —       | 5,049     | —          | —         | —         | —          | —          | —         | —          | —         | 10,491    | —         | 15,540       |
| Tuna, albacore                | 105,832 | 193,747   | 57,007     | —         | —         | 35,891     | 954,372    | 1,478,994 | 3,046,511  | 1,017,630 | 448,814   | 269,314   | 7,666,112    |
| Tuna, bigeye                  | —       | —         | —          | —         | —         | —          | —          | —         | —          | —         | —         | —         | 333          |
| Tuna, bluefin                 | —       | 368,183   | 58,732     | —         | —         | 197,215    | 755,765    | 1,505,513 | 1,867,934  | 188,759   | 397,880   | 213       | 5,000,194    |
| Tuna, skipjack                | 86,094  | 1,363,933 | 7,537,466  | 2,270,996 | 5,286,066 | 6,820,871  | 2,863,853  | 1,595,407 | 1,329,888  | 2,540,099 | 4,056,944 | 2,881,103 | 38,632,737   |
| Tuna, skipjack, black         | 45,321  | 463,998   | 6,609,276  | 866,756   | 2,315,097 | 7,500,778  | 10,036,090 | 3,109,655 | 5,798,595  | 6,089,059 | 3,718,587 | 4,521,000 | 50,800,000   |
| Tuna, yellowfin               | 1,410   | —         | 1,143      | —         | 1,720     | —          | —          | 333       | 79         | 46        | 1,900     | 6,380     | —            |
| Yellowtail                    | 23,411  | 11,229    | 4,581      | 460       | 531       | 9,065      | 20,998     | 16,062    | 13,237     | 7,919     | 23,214    | 19,615    | 149,422      |
| Total Pounds                  | 311,676 | 2,435,181 | 14,299,881 | 3,181,276 | 7,657,176 | 14,717,722 | 14,996,412 | 8,775,264 | 12,006,179 | 9,881,016 | 8,788,540 | 7,561,733 | 104,612,056  |

TABLE 14  
Monthly Landings and Shipments of Commercial Fish Into the San Diego Area during 1976

| SHIPMENTS              |           |           |            |           |           |            |            |            |            |            |             |
|------------------------|-----------|-----------|------------|-----------|-----------|------------|------------|------------|------------|------------|-------------|
| FISH                   | 26,232    | —         | —          | 119,666   | —         | 190,281    | —          | 1,355,887  | 295,805    | —          | 159,407     |
| Tuna, albacore         | —         | —         | —          | —         | —         | —          | —          | —          | —          | —          | 4,173,479   |
| Tuna, bigeye           | —         | —         | —          | —         | —         | —          | —          | —          | —          | —          | 9,393       |
| Tuna, longtail         | —         | —         | —          | —         | —         | —          | —          | —          | —          | —          | 110,996     |
| Tuna, skipjack         | 781,709   | 214,261   | 727,814    | 1,264,568 | 43,724    | 250,190    | 266,789    | 256,664    | 1,952,536  | 1,266,086  | 435,354     |
| Tuna, yellowfin, black | —         | —         | —          | —         | —         | —          | —          | —          | —          | —          | 16,442,664  |
| Tuna, yellowfin        | 634,339   | 232,576   | 116,606    | 290,078   | 63,735    | 106,396    | 658,009    | 941,157    | 937,472    | 1,656,464  | 1,305,283   |
| Total Pounds           | 1,442,280 | 446,837   | 844,450    | 1,946,384 | 107,459   | 555,867    | 924,798    | 2,553,708  | 4,264,932  | 2,922,550  | 1,960,044   |
| Grand Total            | 2,032,483 | 3,063,543 | 15,386,384 | 5,272,829 | 7,909,834 | 15,432,478 | 16,137,070 | 11,546,644 | 17,053,425 | 13,558,963 | 11,245,237  |
|                        |           |           |            |           |           |            |            |            |            |            | 30,918,699  |
|                        |           |           |            |           |           |            |            |            |            |            | 139,448,183 |

\* For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments were recorded.

MARINE FISH LANDINGS 1976

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TABLE 14—Cont'd.

**TABLE 15**  
**Value of Landings and Shipments of Commercial Fish Into California by Area, 1976**

| Species                     | Eureka      | San Francisco | Monterey    | Santa Barbara | Los Angeles | San Diego | Total        |
|-----------------------------|-------------|---------------|-------------|---------------|-------------|-----------|--------------|
| <b>LANDINGS:</b>            |             |               |             |               |             |           |              |
| <b>Fish:</b>                |             |               |             |               |             |           |              |
| Anchovy, northern.....      | —           | \$34,000      | 9,950,022   | 38,628,084    | 200,626,393 | 208       | 249,838,707  |
| Barracuda, California ..... | —           | \$53,934      | \$199,283   | \$745,167     | \$3,626,062 | \$65      | \$4,627,511  |
| Bonito, Pacific.....        | —           | —             | —           | 10,567        | 137,730     | 13,794    | 162,091      |
| Butterfish, Pacific.....    | —           | 117           | 285         | \$2,977       | \$58,240    | \$5,802   | \$67,019     |
| Cabezon .....               | 16          | 986           | 1,580       | 16,273        | 9           | —         | 13,166       |
| Croaker, white .....        | \$5         | \$124         | \$313       | \$1,838       | \$3         | —         | \$2,303      |
| Dolphinfish .....           | 502         | 46,892        | 87,456      | 127,887       | 232,178     | 3,046     | 497,961      |
| Eel .....                   | \$51        | \$12,555      | \$15,290    | \$29,699      | \$37,704    | \$846     | \$96,145     |
| Flyingfish .....            | —           | —             | —           | 38            | 439         | 9,439     | 9,916        |
| Grenadiers .....            | 130         | 10            | 48          | 864           | —           | —         | 1,052        |
| Hake, Pacific .....         | \$20        | \$1           | \$6         | \$91          | —           | —         | \$118        |
| Herring, Pacific .....      | 652,144     | \$69,690      | 124,378     | 35,212        | 98          | 2         | 1,181,737    |
| Flounder .....              | \$79,845    | \$45,573      | \$25,223    | \$5,412       | \$30        | \$1       | \$157,844    |
| Flounder, arrowtooth .....  | 181,708     | 3,520         | —           | —             | —           | —         | 185,228      |
| Halfmoon .....              | \$12,636    | \$246         | —           | —             | —           | —         | \$12,932     |
| Mackerel, jack .....        | 9,873       | 1,050         | 108,278     | 3,973,537     | 40,785,617  | 14,606    | 44,893,081   |
| Mackerel, Pacific .....     | \$594       | \$56          | \$7,230     | \$310,246     | \$1,757,328 | \$4,885   | \$2,080,539  |
| Mullet .....                | —           | —             | 4,600       | 2,242         | 343,500     | 3,987     | 353,729      |
| Opah .....                  | —           | —             | \$230       | \$325         | \$17,636    | \$968     | \$18,659     |
| Perch .....                 | 53,029      | 43,120        | 857         | 26,481        | 9,482       | 9,038     | 142,037      |
| Queenfish .....             | \$15,377    | \$23,906      | \$323       | \$11,560      | \$2,747     | \$3,223   | \$57,136     |
| Rockfish .....              | —           | —             | —           | 34            | 12,810      | 70        | 12,914       |
| Sablefish .....             | 9,719,321   | 2,436,244     | 4,832,422   | 5,843,930     | 726,679     | 1,044,583 | 24,603,179   |
| Salmon .....                | \$1,354,988 | \$405,515     | \$758,380   | \$938,124     | \$208,604   | \$307,972 | 24,976,593   |
| Sea Bass, giant.....        | 5,200       | 74,099        | 71,115,240  | 21,038        | 6,939       | 26,624    | 13,100       |
| Sheepshead, California..    | \$513,519   | 74,963        | 268         | \$14,911      | \$499       | \$3,764   | \$1,235,914  |
| Seabass, white .....        | \$4,940,193 | 1,725,479     | 1,009,241   | 210,577       | 602         | 296       | 7,786,298    |
| Smelt, top or jack.....     | \$6,382,055 | \$2,455,730   | \$1,500,969 | \$366,280     | \$756       | \$443     | \$10,707,243 |
| Smelt, true .....           | \$20,017    | 619,487       | 148,356     | 5,743         | 138         | 131       | 1,293,872    |
| Smelt, whitebait .....      | \$109,125   | \$131,178     | \$24,343    | \$1,432       | \$34        | \$57      | \$266,169    |
| Sardine, Pacific .....      | —           | —             | —           | —             | 16,190      | —         | 16,190       |
| Sculpin .....               | —           | —             | —           | —             | 688         | —         | \$688        |
| Shark .....                 | 39,631      | 128,397       | 94,422      | 241,531       | 3,271       | 170,351   | 173,675      |
| Skate .....                 | \$7,040     | \$16,939      | \$11,199    | \$64,612      | \$58,074    | \$47,181  | \$205,045    |
| Smelt, top or jack.....     | —           | 152           | 849         | 73            | 9,980       | 202       | 11,256       |
| Smelt, true .....           | —           | 22            | \$223       | \$7           | \$1,048     | \$71      | \$1,371      |
| Smelt, whitebait .....      | 308,739     | 25,618        | 23,750      | 1             | 18,047      | 8         | 376,163      |
| —                           | \$32,022    | \$3,825       | \$4,921     | —             | \$2,175     | \$2       | \$42,945     |
| —                           | 229,371     | 21,447        | 435         | —             | —           | —         | 251,253      |
| —                           | \$39,464    | \$3,582       | \$108       | —             | —           | —         | \$43,154     |

**TABLE 15**  
**Value of Landings and Shipments of Commercial Fish Into California by Area, 1976**

**TABLE 15—Continued**  
**Value of Landings and Shipments of Commercial Fish Into California by Area, 1976**

| <i>Species</i>                  | <i>Eureka</i> | <i>San Francisco</i> | <i>Monterey</i> | <i>Santa Barbara</i> | <i>Los Angeles</i> | <i>San Diego</i> | <i>Total</i> |
|---------------------------------|---------------|----------------------|-----------------|----------------------|--------------------|------------------|--------------|
| Sole, Dover .....               | 18,223,733    | 2,736,867            | 1,613,215       | 181,077              | 1,920              | —                | 22,756,812   |
|                                 | \$2,444,627   | \$380,528            | \$221,417       | \$21,222             | \$288              | —                | \$3,068,082  |
| Sole, English .....             | 2,066,196     | 1,306,077            | 436,467         | 456,698              | 17,545             | 13               | 4,282,998    |
|                                 | \$423,023     | \$280,027            | \$76,928        | \$91,088             | \$2,664            | 5                | \$873,735    |
| Sole, petrale.....              | 1,286,130     | 994,950              | 222,847         | 471,069              | 2,330              | 231              | 2,977,557    |
|                                 | \$356,280     | \$272,958            | \$87,903        | \$126,598            | \$583              | 138              | \$814,360    |
| Sole, rex .....                 | 1,410,361     | 369,653              | 146,046         | 78,124               | 8,640              | —                | 2,012,820    |
|                                 | \$290,961     | \$78,988             | \$22,443        | \$15,913             | \$1,714            | —                | \$410,719    |
| Sole, sand .....                | 5,041         | 1,881,471            | 3,213           | 11,582               | —                  | —                | 249,377      |
|                                 | \$22,786      | \$33,109             | \$2,017         | \$9,753              | —                  | —                | \$60,665     |
| Sole, miscellaneous .....       | 18,333        | 12,854               | 1,460           | 11,194               | 481                | 1,136            | 45,458       |
|                                 | \$2,700       | \$2,714              | \$347           | \$2,347              | \$155              | \$577            | \$8,840      |
| Swordfish .....                 | —             | 489                  | 3,684           | 11,137               | 36,220             | 32,093           | 83,623       |
|                                 | —             | \$1,223              | \$10,752        | \$32,284             | \$103,926          | \$81,937         | \$230,122    |
| Tuna, albacore .....            | 4,917,997     | 3,271,797            | 5,496,731       | 1,733,002            | 3,488,144          | 8,851,705        | 27,759,376   |
|                                 | \$2,243,844   | \$1,501,185          | \$2,475,527     | \$802,450            | \$1,633,414        | \$4,069,860      | \$12,723,280 |
| Tuna, bigeye .....              | —             | —                    | —               | —                    | 1,781,831          | 78,335           | 1,859,966    |
|                                 | —             | —                    | —               | —                    | \$518,495          | \$23,948         | \$542,443    |
| Tuna, bluefin .....             | —             | —                    | —               | —                    | 13,607,020         | 5,182,445        | 18,789,445   |
|                                 | —             | —                    | —               | —                    | \$4,141,452        | \$1,068,125      | \$5,209,597  |
| Tuna, skipjack .....            | —             | —                    | 1,153           | 246                  | \$4,014,145        | 38,678,508       | 122,694,052  |
|                                 | —             | —                    | \$323           | \$72                 | \$22,455,853       | \$10,530,634     | \$32,989,882 |
| Tuna, skipjack, black .....     | —             | —                    | —               | —                    | \$34,660           | 95,800           | 930,460      |
|                                 | —             | —                    | —               | —                    | \$83,287           | \$7,185          | \$90,472     |
| Tuna, yellowfin .....           | —             | —                    | —               | —                    | 224,982,777        | 51,082,033       | 276,064,610  |
|                                 | —             | —                    | —               | —                    | \$66,378,627       | \$15,231,177     | \$81,609,804 |
| Turbot .....                    | 8,718         | 8,300                | 345             | 12,226               | —                  | 1                | 29,590       |
|                                 | \$1,963       | \$1,437              | \$50            | \$1,718              | —                  | —                | \$5,168      |
| Wahoo .....                     | —             | —                    | —               | —                    | 6,195              | 6,380            | 12,575       |
|                                 | —             | —                    | —               | —                    | \$1,440            | \$2,271          | \$3,711      |
| Yellowtail .....                | —             | —                    | —               | 1,065                | 256,603            | 218,260          | 475,931      |
|                                 | —             | —                    | —               | \$291                | \$32,533           | \$52,477         | \$105,766    |
| Miscellaneous .....             | 734           | 669                  | 487             | 253                  | 780                | 1,211            | 1,234        |
|                                 | \$67          | \$1,845              | \$50            | \$56                 | \$186              | \$356            | \$2,560      |
| <b>Crustacean:</b>              |               |                      |                 |                      |                    |                  |              |
| Crab, Dungeness .....           | 15,023,809    | 685,655              | 1,125           | 16,185               | —                  | —                | 15,726,774   |
|                                 | \$9,699,828   | \$559,208            | \$956           | \$15,293             | —                  | —                | \$10,275,285 |
| Crab, pelagic red .....         | —             | —                    | —               | —                    | 32,000             | —                | 32,000       |
|                                 | —             | —                    | —               | —                    | \$720              | —                | \$720        |
| Crab, rock .....                | —             | 84                   | —               | 578,892              | 570,804            | 77,986           | 1,227,766    |
|                                 | —             | \$11                 | —               | \$157,410            | \$159,945          | \$24,597         | \$341,963    |
| Lobster, California spiny ..... | —             | —                    | —               | 81,074               | 92,675             | 118,485          | 299,534      |
|                                 | —             | —                    | —               | \$177,520            | \$220,949          | \$264,700        | \$663,178    |
| Prawn, ridgeback .....          | —             | —                    | —               | 3,130                | —                  | —                | 3,130        |
|                                 | —             | —                    | —               | \$1,983              | —                  | —                | \$1,983      |
| Prawn, spot .....               | —             | 20                   | 23,476          | 88,573               | —                  | —                | 112,069      |
|                                 | —             | \$16                 | \$55,820        | \$126,331            | —                  | —                | \$182,167    |
| Shrimp, Pacific ocean .....     | 3,498,384     | 495                  | —               | 1,909                | —                  | —                | 3,500,788    |
|                                 | \$681,797     | \$79                 | —               | \$1,007              | —                  | —                | \$682,883    |
| Miscellaneous crustacean .....  | —             | 925                  | —               | 635                  | —                  | —                | 1,580        |
|                                 | —             | \$740                | —               | \$169                | —                  | —                | \$909        |
| <b>Echinoderm:</b>              |               |                      |                 |                      |                    |                  |              |
| Sea urchin .....                | 74,851        | 19,942               | —               | 10,472,563           | 143,500            | 395,570          | 11,106,426   |
|                                 | \$7,333       | \$3,968              | —               | \$978,387            | \$13,949           | \$34,979         | \$1,038,636  |
| <b>Mollusk:</b>                 |               |                      |                 |                      |                    |                  |              |
| Abalone, black .....            | —             | —                    | —               | 267,379              | 85,686             | 3,686            | 356,751      |
|                                 | —             | —                    | —               | \$97,235             | \$32,648           | \$1,519          | \$131,402    |
| Abalone, green .....            | —             | —                    | —               | 1,231                | 88,659             | 30,598           | 120,489      |
|                                 | —             | —                    | —               | \$1,384              | \$83,331           | \$29,915         | \$114,630    |
| Abalone, pink .....             | —             | —                    | —               | 181,712              | 161,642            | 87,789           | 431,143      |
|                                 | —             | —                    | —               | \$176,955            | \$154,686          | \$79,502         | \$411,143    |
| Abalone, red .....              | —             | 62,953               | 1,365           | 604,275              | 9,121              | 61,907           | 739,621      |
|                                 | —             | \$70,590             | \$1,393         | \$566,548            | \$8,070            | \$56,908         | \$703,509    |

**TABLE 15**  
**Value of Landings and Shipments of Commercial Fish Into California by Area, 1976**

**TABLE 15—Continued**  
**Value of Landings and Shipments of Commercial Fish Into California by Area, 1976**

| Species                     | Eureka       | San Francisco | Monterey    | Santa Barbara | Los Angeles   | San Diego    | Total         |
|-----------------------------|--------------|---------------|-------------|---------------|---------------|--------------|---------------|
| Abalone, threaded .....     | —            | 12            | —           | 2,610         | —             | 285          | 2,907         |
| Abalone, white .....        | —            | \$8           | —           | \$1,344       | —             | \$144        | \$1,496       |
| —                           | —            | —             | —           | 2,946         | 56,809        | 22,152       | 81,907        |
| —                           | —            | —             | —           | \$4,582       | \$64,957      | \$21,813     | \$91,352      |
| Mussel .....                | —            | 2,357         | —           | —             | —             | —            | 2,357         |
| —                           | —            | 5,777         | —           | —             | —             | —            | 5,777         |
| Octopus.....                | 73,007       | 3,981         | 3,722       | 777           | 30            | 71           | 81,818        |
| \$19,249                    | \$1,033      | \$1,713       | \$181       | \$25          | \$38          | \$22,239     | \$22,239      |
| Oyster, eastern .....       | —            | 5,906         | —           | —             | —             | —            | 5,906         |
| —                           | —            | \$24,704      | —           | —             | —             | —            | \$24,704      |
| Oyster, giant Pacific ..... | 466,667      | 241,349       | —           | 2,344         | —             | —            | 466,667       |
| \$653,334                   | \$337,889    | \$3,282       | \$3,282     | \$—           | \$—           | \$—          | \$994,505     |
| Snail, sea .....            | 589          | 81            | —           | —             | 12,591        | 463          | 13,724        |
| \$35                        | \$38         | \$—           | \$—         | \$2,523       | \$143         | \$2,739      | \$—           |
| Squid, market .....         | —            | —             | 5,021,817   | 3,388,936     | 11,843,340    | 51,912       | 20,306,005    |
| \$—                         | \$—          | \$345,690     | \$74,139    | \$322,999     | \$3,738       | \$746,566    | \$—           |
| Miscellaneous mollusk..     | 162          | 321           | —           | 257           | 350           | 55           | 1,145         |
| \$31                        | \$97         | \$—           | \$308       | \$347         | \$22          | \$—          | \$905         |
| Total pounds .....          | 70,668,853   | 21,966,366    | 37,235,883  | 69,074,546    | 593,469,081   | 108,529,486  | 900,967,215   |
| Total value.....            | \$25,635,716 | \$7,380,506   | \$6,589,482 | \$6,457,193   | \$158,663,275 | \$33,064,686 | \$182,789,254 |
| <b>SHIPMENTS*</b>           |              |               |             |               |               |              |               |
| Fish:                       |              |               |             |               |               |              |               |
| Tuna, albacore .....        | —            | —             | —           | —             | 39,912,392    | 4,173,479    | 44,085,871    |
| Tuna, bigeye .....          | —            | —             | —           | —             | \$28,462,231  | \$2,798,902  | \$31,261,133  |
| Tuna, bluefin.....          | —            | —             | —           | —             | 149,958       | 280          | 150,238       |
| Tuna, skipjack .....        | —            | —             | —           | —             | \$52,505      | \$104        | \$52,609      |
| Tuna, skipjack, black....   | —            | —             | —           | —             | 562,520       | 1,218,225    | 1,780,745     |
| Tuna, yellowfin.....        | —            | —             | —           | —             | \$166,138     | \$361,776    | \$527,914     |
| Total pounds .....          | —            | —             | —           | —             | 59,471,302    | 16,442,664   | 75,913,966    |
| Total value.....            | —            | —             | —           | —             | \$20,023,531  | \$5,694,027  | \$25,717,558  |
| Grand total pounds.....     | 70,668,853   | 21,966,366    | 37,235,883  | 69,074,546    | 709,345,159   | 139,448,185  | 1,047,761,992 |
| Grand total value.....      | \$25,635,716 | \$7,380,506   | \$6,589,482 | \$6,457,193   | \$158,663,275 | \$44,723,581 | \$249,449,753 |

\* For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

**TABLE 15**  
**Value of Landings and Shipments of Commercial Fish Into California by Area, 1976**

**TABLE 16**  
**Value of Landings by Port, Eureka Area, 1976**

|                            | Pounds     | Value        |
|----------------------------|------------|--------------|
| <b>Eureka</b>              |            |              |
| Dungeness crab .....       | 6,653,037  | \$4,295,403  |
| Salmon .....               | 1,902,114  | 2,504,011    |
| Dover sole .....           | 11,167,360 | 1,498,048    |
| Albacore .....             | 2,312,144  | 1,054,919    |
| Giant Pacific oyster ..... | 466,667    | 663,334      |
| Rockfish .....             | 4,104,355  | 560,022      |
| Pacific ocean shrimp ..... | 1,650,781  | 323,473      |
| Sablefish .....            | 2,443,309  | 239,998      |
| Petrale sole .....         | 641,073    | 177,588      |
| English sole .....         | 760,188    | 155,637      |
| Rex sole .....             | 684,059    | 141,123      |
| Lingcod .....              | 448,560    | 65,468       |
| Sandab .....               | 922,347    | 46,659       |
| Flounder .....             | 330,306    | 40,440       |
| True smelt .....           | 299,624    | 30,972       |
| Whitebait smelt .....      | 149,532    | 25,728       |
| Perch .....                | 20,904     | 8,068        |
| Arrowtooth flounder .....  | 76,060     | 5,310        |
| Sand sole .....            | 21,229     | 5,270        |
| Grenadiers .....           | 89,000     | 4,888        |
| Octopus .....              | 10,690     | 2,818        |
| Pacific herring .....      | 23,134     | 2,362        |
| Turbot .....               | 7,868      | 1,772        |
| All other species .....    | 6,199      | 933          |
| Port totals .....          | 34,507,440 | \$11,845,144 |
| <b>Crescent City</b>       |            |              |
| Dungeness crab .....       | 6,544,602  | \$4,225,394  |
| Salmon .....               | 785,162    | 935,981      |
| Dover sole .....           | 3,238,006  | 434,363      |
| Albacore .....             | 570,127    | 260,121      |
| Pacific ocean shrimp ..... | 1,303,565  | 254,051      |
| English sole .....         | 977,277    | 200,083      |
| Rockfish .....             | 1,004,087  | 142,005      |
| Petrale sole .....         | 221,987    | 61,494       |
| Lingcod .....              | 410,372    | 59,894       |
| Rex sole .....             | 280,577    | 57,884       |
| Sablefish .....            | 562,942    | 55,296       |
| Sandab .....               | 254,433    | 53,393       |
| Flounder .....             | 316,409    | 38,738       |
| Sand sole .....            | 70,359     | 17,468       |
| Arrowtooth flounder .....  | 95,267     | 6,651        |
| Whitebait smelt .....      | 38,007     | 6,539        |
| Perch .....                | 24,225     | 6,409        |
| Octopus .....              | 18,721     | 4,934        |
| Skate .....                | 41,581     | 3,861        |
| Shark .....                | 6,305      | 1,100        |
| All other species .....    | 20,356     | 2,869        |
| Port totals .....          | 16,784,367 | \$6,828,528  |
| <b>Fort Bragg</b>          |            |              |
| Salmon .....               | 1,595,281  | \$2,217,157  |
| Albacore .....             | 2,021,281  | 922,213      |
| Dungeness crab .....       | 1,081,933  | 698,529      |
| Rockfish .....             | 4,546,405  | 643,019      |
| Dover sole .....           | 3,818,367  | 512,216      |
| Sablefish .....            | 2,221,629  | 218,224      |
| Petrale sole .....         | 423,070    | 117,198      |
| Pacific ocean shrimp ..... | 535,038    | 104,273      |
| Lingcod .....              | 685,736    | 100,084      |
| Rex sole .....             | 445,725    | 91,954       |
| English sole .....         | 326,733    | 67,303       |
| Octopus .....              | 43,626     | 11,497       |
| Sandab .....               | 43,237     | 9,073        |
| Sea urchin .....           | 74,851     | 7,353        |
| Whitebait smelt .....      | 41,832     | 7,197        |
| Shark .....                | 30,787     | 5,487        |
| All other species .....    | 42,343     | 3,906        |
| Port totals .....          | 17,979,874 | \$5,736,683  |

**TABLE 16**  
**Value of Landings by Port, Eureka Area, 1976**

**TABLE 16—Continued**  
**Value of Landings by Port, Eureka Area, 1976**

|                          | <i>Pounds</i>     | <i>Value</i>        |
|--------------------------|-------------------|---------------------|
| <b>Trinidad</b>          |                   |                     |
| Dungeness crab .....     | 744,237           | \$480,502           |
| Salmon .....             | 212,480           | 248,208             |
| Rockfish .....           | 12,610            | 1,872               |
| Lingcod .....            | 12,337            | 1,830               |
| All other species .....  | 583               | 90                  |
| Port totals .....        | 982,447           | \$732,502           |
| <b>Albion</b>            |                   |                     |
| Salmon .....             | 218,702           | \$304,908           |
| Rockfish .....           | 44,083            | 6,945               |
| Albacore .....           | 13,109            | 5,981               |
| All other species .....  | 3,220             | 471                 |
| Port totals .....        | 279,084           | \$318,305           |
| <b>All other ports</b>   |                   |                     |
| Salmon .....             | 126,364           | \$172,790           |
| Rockfish .....           | 7,811             | 1,135               |
| All other species .....  | 1,466             | 629                 |
| Totals .....             | 135,641           | \$174,554           |
| Eureka area totals ..... | <b>70,668,853</b> | <b>\$25,635,716</b> |

*TABLE 16*  
*Value of Landings by Port, Eureka Area, 1976*

**TABLE 17**  
**Value of Landings by Port, San Francisco Area, 1976**

|                         | Pounds     | Value       |
|-------------------------|------------|-------------|
| <b>Bodega Bay</b>       |            |             |
| Salmon.....             | 859,474    | \$1,221,756 |
| Albacore.....           | 522,905    | 239,922     |
| Dungeness crab.....     | 233,458    | 190,404     |
| Dover sole.....         | 1,184,637  | 164,709     |
| Rockfish.....           | 680,962    | 107,870     |
| Pacific herring.....    | 665,689    | 66,367      |
| English sole.....       | 286,990    | 61,532      |
| Sablefish.....          | 283,604    | 28,653      |
| Rex sole.....           | 111,522    | 23,830      |
| Lingcod.....            | 165,590    | 23,758      |
| Petrale sole.....       | 76,212     | 20,908      |
| Whitebait smelt.....    | 21,261     | 3,551       |
| True smelt.....         | 21,160     | 3,138       |
| Sanddab.....            | 14,292     | 3,026       |
| Flounder.....           | 24,420     | 2,991       |
| Shark.....              | 9,610      | 1,299       |
| White croaker.....      | 4,340      | 1,162       |
| All other species.....  | 10,813     | 2,065       |
| Port totals.....        | 5,176,939  | \$2,166,941 |
| <b>San Francisco</b>    |            |             |
| Rockfish.....           | 1,645,525  | \$280,909   |
| Petrale sole.....       | 904,635    | 249,181     |
| Pacific herring.....    | 2,477,209  | 246,971     |
| Dover sole.....         | 1,830,706  | 212,826     |
| Albacore.....           | 970,761    | 208,134     |
| Dungeness crab.....     | 205,369    | 167,495     |
| Salmon.....             | 113,019    | 158,539     |
| Sanddab.....            | 582,665    | 123,381     |
| Lingcod.....            | 722,946    | 103,724     |
| Rex sole.....           | 252,671    | 53,991      |
| Sablefish.....          | 452,585    | 45,756      |
| Flounder.....           | 323,538    | 39,867      |
| Sand sole.....          | 127,091    | 30,748      |
| California halibut..... | 12,981     | 9,864       |
| Shark.....              | 45,301     | 5,951       |
| Northern anchovy.....   | 69,830     | 5,940       |
| White croaker.....      | 21,943     | 5,875       |
| Perch.....              | 5,088      | 2,894       |
| Turbot.....             | 6,616      | 1,145       |
| All other species.....  | 16,537     | 3,616       |
| Port totals.....        | 10,691,790 | \$2,048,698 |
| <b>Sausalito</b>        |            |             |
| Albacore.....           | 1,289,966  | \$591,870   |
| Salmon.....             | 327,076    | 459,405     |
| Pacific herring.....    | 1,000,994  | 99,796      |
| Northern anchovy.....   | 506,620    | 12,081      |
| Dungeness crab.....     | 14,935     | 12,115      |
| Rockfish.....           | 42,263     | 7,134       |
| All other species.....  | 7,045      | 1,266       |
| Port totals.....        | 3,189,619  | \$1,214,667 |

**TABLE 17**  
**Value of Landings by Port, San Francisco Area, 1976**

TABLE 17—Continued  
Value of Landings by Port, San Francisco Area, 1976

|                                 | Pounds     | Value       |
|---------------------------------|------------|-------------|
| <b>Princeton</b>                |            |             |
| Salmon .....                    | 185,662    | \$269,393   |
| Albacore .....                  | 274,077    | 125,754     |
| Dungeness crab .....            | 150,438    | 122,695     |
| Red abalone .....               | 62,953     | 70,590      |
| California halibut .....        | 22,021     | 16,733      |
| Rockfish .....                  | 54,367     | 10,593      |
| English sole .....              | 48,326     | 10,361      |
| Shark .....                     | 43,983     | 5,627       |
| Northern anchovy .....          | 57,750     | 4,913       |
| Sanddab .....                   | 22,530     | 4,771       |
| Sea urchin .....                | 19,942     | 3,968       |
| Petrale sole .....              | 14,103     | 3,869       |
| Lingcod .....                   | 23,301     | 3,343       |
| Dover sole .....                | 21,524     | 2,993       |
| Flounder .....                  | 18,805     | 2,303       |
| Sand sole .....                 | 6,035      | 1,460       |
| Rex sole .....                  | 5,460      | 1,167       |
| White seabass .....             | 991        | 1,023       |
| All other species .....         | 20,188     | 2,706       |
| Port totals .....               | 1,052,456  | \$664,162   |
| <b>Oakland</b>                  |            |             |
| Albacore .....                  | 982,309    | \$450,709   |
| Salmon .....                    | 110,130    | 155,640     |
| Dungeness crab .....            | 6,146      | 5,013       |
| Swordfish .....                 | 489        | 1,223       |
| All other species .....         | 1,653      | 525         |
| Port totals .....               | 1,100,787  | \$613,110   |
| <b>Point Reyes</b>              |            |             |
| Giant Pacific oyster .....      | 210,544    | \$294,762   |
| Salmon .....                    | 93,533     | 135,914     |
| Dungeness crab .....            | 24,289     | 19,810      |
| All other species .....         | 935        | 143         |
| Port totals .....               | 329,301    | \$450,629   |
| <b>Tomales Bay</b>              |            |             |
| Giant Pacific oyster .....      | 30,805     | \$43,127    |
| Eastern oyster .....            | 5,996      | 24,704      |
| Pacific herring .....           | 212,339    | 21,170      |
| Shark .....                     | 26,737     | 3,653       |
| Perch .....                     | 4,596      | 2,482       |
| California halibut .....        | 1,888      | 1,434       |
| All other species .....         | 7,494      | 1,932       |
| Port totals .....               | 289,855    | \$98,502    |
| <b>Berkeley</b>                 |            |             |
| Salmon .....                    | 30,814     | \$46,665    |
| Dungeness crab .....            | 49,950     | 40,738      |
| Perch .....                     | 3,318      | 1,842       |
| Rockfish .....                  | 6,314      | 1,032       |
| All other species .....         | 6,532      | 1,451       |
| Port totals .....               | 96,928     | \$91,728    |
| <b>Richmond</b>                 |            |             |
| Perch .....                     | 22,125     | \$12,284    |
| Salmon .....                    | 3,569      | 5,342       |
| White croaker .....             | 16,975     | 4,545       |
| All other species .....         | 862        | 152         |
| Port totals .....               | 43,531     | \$22,323    |
| All other ports                 |            |             |
| Perch .....                     | 6,930      | \$3,814     |
| Salmon .....                    | 1,905      | 2,816       |
| All other species .....         | 6,325      | 3,116       |
| Totals .....                    | 15,160     | \$9,746     |
| San Francisco area totals ..... | 21,986,366 | \$7,380,506 |

TABLE 17  
Value of Landings by Port, San Francisco Area, 1976

**TABLE 18**  
**Value of Landings by Port, Monterey Area, 1976**

|                                  | Pounds            | Value              |
|----------------------------------|-------------------|--------------------|
| <b>Moss Landing</b>              |                   |                    |
| Albacore.....                    | 4,309,667         | \$1,938,565        |
| Salmon.....                      | 550,244           | 815,684            |
| Dover sole.....                  | 1,539,010         | 211,923            |
| Northern anchovy.....            | 9,715,912         | 194,594            |
| Rockfish.....                    | 1,301,362         | 189,314            |
| Sablefish.....                   | 784,857           | 71,839             |
| Market squid.....                | 375,400           | 25,842             |
| Petrale sole.....                | 83,140            | 21,565             |
| English sole.....                | 96,625            | 17,030             |
| Sanddab.....                     | 50,312            | 8,255              |
| Lingcod.....                     | 38,548            | 6,069              |
| Rex sole.....                    | 33,251            | 5,269              |
| California halibut.....          | 5,862             | 4,980              |
| Flounder.....                    | 21,537            | 4,293              |
| Shark.....                       | 27,628            | 3,192              |
| True smelt.....                  | 13,258            | 2,747              |
| Pacific herring.....             | 24,560            | 2,573              |
| Sand sole.....                   | 9,173             | 2,008              |
| White croaker.....               | 7,992             | 1,397              |
| Skate.....                       | 16,052            | 1,174              |
| All other species.....           | 7,878             | 2,612              |
| Port totals.....                 | 19,012,268        | \$3,530,234        |
| <b>Monterey</b>                  |                   |                    |
| Sablefish.....                   | 6,330,133         | \$579,405          |
| Rockfish.....                    | 3,374,932         | 540,294            |
| Albacore.....                    | 11,57,694         | 520,751            |
| Salmon.....                      | 280,045           | 421,029            |
| Market squid.....                | 4,646,357         | 319,844            |
| English sole.....                | 339,842           | 59,898             |
| Spot prawn.....                  | 23,364            | 55,554             |
| Pacific herring.....             | 409,560           | 42,907             |
| Petrale sole.....                | 138,813           | 36,006             |
| Rex sole.....                    | 112,495           | 17,827             |
| Lingcod.....                     | 111,315           | 17,526             |
| Sanddab.....                     | 95,735            | 15,709             |
| White croaker.....               | 67,326            | 11,771             |
| Swordfish.....                   | 3,684             | 10,752             |
| California halibut.....          | 12,163            | 10,332             |
| Dover sole.....                  | 74,205            | 10,185             |
| Flounder.....                    | 46,297            | 9,620              |
| Jack mackerel.....               | 106,708           | 7,119              |
| Shark.....                       | 54,823            | 6,585              |
| Skate.....                       | 73,937            | 5,406              |
| Northern anchovy.....            | 234,010           | 4,687              |
| True smelt.....                  | 9,941             | 1,915              |
| Octopus.....                     | 3,631             | 1,680              |
| Blue whiting.....                | 1,265             | 1,293              |
| White seabass.....               | 1,353             | 1,324              |
| All other species.....           | 16,345            | 2,238              |
| Port totals.....                 | 17,725,393        | \$2,711,757        |
| <b>Santa Cruz</b>                |                   |                    |
| Salmon.....                      | 178,952           | \$264,256          |
| Rockfish.....                    | 156,128           | 28,772             |
| California halibut.....          | 18,787            | 15,959             |
| Albacore.....                    | 29,370            | 13,211             |
| Flounder.....                    | 56,744            | 11,310             |
| Pacific butterfish.....          | 2,786             | 3,583              |
| White seabass.....               | 2,470             | 2,417              |
| White croaker.....               | 12,138            | 2,128              |
| Lingcod.....                     | 13,067            | 2,077              |
| Shark.....                       | 11,971            | 1,492              |
| All other species.....           | 18,809            | 2,382              |
| Port totals.....                 | 501,222           | \$347,491          |
| <b>Monterey area totals.....</b> | <b>37,238,883</b> | <b>\$6,539,482</b> |

**TABLE 18**  
**Value of Landings by Port, Monterey Area, 1976**

TABLE 19  
Value of Landings by Port, Santa Barbara Area, 1976

|                               | Pounds     | Value       |
|-------------------------------|------------|-------------|
| <b>Santa Barbara</b>          |            |             |
| Sea urchin.....               | 7,054,949  | \$659,100   |
| Red abalone.....              | 532,346    | 499,110     |
| Rockfish.....                 | 1,400,492  | 223,555     |
| California halibut.....       | 224,364    | 202,452     |
| Pink abalone.....             | 167,927    | 163,531     |
| California spiny lobster..... | 74,064     | 161,582     |
| Black abalone.....            | 267,106    | 97,136      |
| Rock crab.....                | 339,998    | 92,451      |
| Spot prawn.....               | 51,728     | 73,779      |
| English sole.....             | 217,904    | 43,461      |
| Shark.....                    | 136,192    | 36,738      |
| White seabass.....            | 15,161     | 13,002      |
| Salmon.....                   | 7,775      | 12,279      |
| Petrale sole.....             | 44,061     | 11,841      |
| Swordfish.....                | 3,893      | 11,285      |
| Pacific bonito.....           | 57,620     | 6,638       |
| Albacore.....                 | 12,102     | 5,694       |
| Sablefish.....                | 68,981     | 4,918       |
| Rex sole.....                 | 12,607     | 2,568       |
| Ridgeback prawn.....          | 3,130      | 1,983       |
| White croaker.....            | 8,138      | 1,890       |
| Market squid.....             | 84,140     | 1,840       |
| Green abalone.....            | 1,194      | 1,342       |
| Threaded abalone.....         | 2,601      | 1,339       |
| All other species.....        | 38,297     | 6,115       |
| Port totals.....              | 10,826,970 | \$2,335,139 |
| <b>Morro Bay</b>              |            |             |
| Albacore.....                 | 1,555,466  | \$720,243   |
| Rockfish.....                 | 2,832,661  | 453,388     |
| Salmon.....                   | 105,927    | 187,455     |
| Petrale sole.....             | 315,146    | 84,694      |
| Lingcod.....                  | 356,020    | 54,564      |
| Red abalone.....              | 45,578     | 42,732      |
| English sole.....             | 145,505    | 29,021      |
| California halibut.....       | 27,340     | 24,670      |
| Spot prawn.....               | 10,354     | 14,768      |
| Dover sole.....               | 88,166     | 10,333      |
| Rex sole.....                 | 42,992     | 8,757       |
| Dungeness crab.....           | 8,381      | 7,919       |
| Perch.....                    | 16,042     | 7,158       |
| Sablefish.....                | 70,070     | 4,895       |
| Shark.....                    | 18,979     | 4,712       |
| White croaker.....            | 19,237     | 4,467       |
| Rock crab.....                | 15,482     | 4,210       |
| Giant Pacific oyster.....     | 2,344      | 3,282       |
| All other species.....        | 20,697     | 4,449       |
| Port totals.....              | 5,696,387  | \$1,671,717 |
| <b>Port Hueneme</b>           |            |             |
| Northern anchovy.....         | 38,627,228 | \$748,150   |
| Jack mackerel.....            | 3,966,567  | 309,701     |
| Sea urchin.....               | 972,558    | 90,860      |
| California halibut.....       | 83,658     | 75,488      |
| Market squid.....             | 3,303,513  | 72,271      |
| Rockfish.....                 | 61,077     | 12,231      |
| Shark.....                    | 38,105     | 10,033      |
| Pacific bonito.....           | 85,310     | 9,795       |
| California spiny lobster..... | 1,087      | 2,371       |
| White seabass.....            | 2,363      | 2,026       |
| Rock crab.....                | 3,885      | 1,056       |
| All other species.....        | 5,855      | 1,408       |
| Port totals.....              | 47,151,506 | \$1,335,490 |

TABLE 19  
Value of Landings by Port, Santa Barbara Area, 1976

TABLE 19—Continued  
Value of Landings by Port, Santa Barbara Area, 1976

|                                       | Pounds            | Value              |
|---------------------------------------|-------------------|--------------------|
| <b>Avila</b>                          |                   |                    |
| Rockfish .....                        | 1,323,588         | \$204,681          |
| Salmon .....                          | 96,875            | 166,546            |
| Albacore .....                        | 156,197           | 72,326             |
| Rock crab .....                       | 210,261           | 57,173             |
| California halibut .....              | 59,151            | 53,374             |
| Spot prawn .....                      | 26,491            | 37,784             |
| Petrale sole .....                    | 111,788           | 30,043             |
| Red abalone .....                     | 25,611            | 24,012             |
| Lingcod .....                         | 120,461           | 18,462             |
| English sole .....                    | 91,467            | 18,243             |
| Dover sole .....                      | 84,633            | 9,919              |
| Shark .....                           | 29,421            | 7,986              |
| Dungeness crab .....                  | 7,796             | 7,366              |
| Sablefish .....                       | 74,397            | 5,197              |
| Flounder .....                        | 32,227            | 4,951              |
| Rex sole .....                        | 22,525            | 4,588              |
| White seabass .....                   | 5,197             | 4,457              |
| Perch .....                           | 8,176             | 3,681              |
| White croaker .....                   | 12,708            | 2,981              |
| Sand sole .....                       | 11,586            | 2,737              |
| Turbot .....                          | 11,007            | 1,547              |
| Cabezon .....                         | 12,483            | 1,425              |
| All other species .....               | 10,496            | 1,880              |
| Port totals .....                     | 2,544,542         | \$741,299          |
| <b>Oxnard</b>                         |                   |                    |
| Sea urchin .....                      | 2,439,856         | \$227,941          |
| Rockfish .....                        | 167,930           | 33,713             |
| Swordfish .....                       | 6,657             | 19,298             |
| California spiny lobster .....        | 6,223             | 13,576             |
| Pink abalone .....                    | 12,960            | 12,621             |
| California halibut .....              | 9,262             | 8,448              |
| White abalone .....                   | 2,637             | 4,132              |
| Albacore .....                        | 5,736             | 4,045              |
| White seabass .....                   | 1,429             | 1,225              |
| Rock crab .....                       | 4,445             | 1,209              |
| Shark .....                           | 4,367             | 1,182              |
| All other species .....               | 4,541             | 2,045              |
| Port totals .....                     | 2,669,163         | \$329,435          |
| <b>Ventura</b>                        |                   |                    |
| White croaker .....                   | 87,179            | \$20,246           |
| Rockfish .....                        | 57,882            | 10,756             |
| Shark .....                           | 14,467            | 3,961              |
| California barracuda .....            | 8,900             | 2,507              |
| California halibut .....              | 2,296             | 2,072              |
| Rock crab .....                       | 4,821             | 1,311              |
| All other species .....               | 10,433            | 3,260              |
| Port totals .....                     | 185,978           | \$44,113           |
| <b>Santa Barbara area totals.....</b> | <b>69,074,546</b> | <b>\$6,457,193</b> |

TABLE 19  
Value of Landings by Port, Santa Barbara Area, 1976

**TABLE 20**  
**Value of Landings and Shipments by Port, Los Angeles Area, 1976**

|                                | Pounds             | Value                |
|--------------------------------|--------------------|----------------------|
| <b>Terminal Island</b>         |                    |                      |
| <b>Landings:</b>               |                    |                      |
| Yellowfin tuna .....           | 224,292,940        | \$66,175,157         |
| Skipjack tuna .....            | 83,968,618         | 22,446,683           |
| Bluefin tuna .....             | 12,793,551         | 3,861,228            |
| Northern anchovy .....         | 199,755,000        | 3,610,313            |
| Albacore .....                 | 3,290,505          | 1,540,865            |
| Jack mackerel .....            | 26,464,145         | 1,140,260            |
| Pacific bonito .....           | 5,825,507          | 799,234              |
| Bigeye tuna .....              | 1,781,631          | 518,495              |
| Black skipjack tuna .....      | 834,660            | 83,287               |
| Market squid .....             | 927,300            | 25,212               |
| Pacific mackerel .....         | 264,340            | 13,572               |
| Rockfish .....                 | 6,242              | 1,971                |
| All other species .....        | 16,179             | 773                  |
| Total landings.....            | <u>560,220,618</u> | <u>\$100,217,050</u> |
| <b>Shipments:</b>              |                    |                      |
| Albacore .....                 | 39,912,392         | \$28,462,231         |
| Skipjack tuna .....            | 58,296,293         | 19,627,915           |
| Yellowfin tuna .....           | 15,649,322         | 6,280,686            |
| Bluefin tuna .....             | 562,520            | 166,138              |
| Bigeye tuna .....              | 149,958            | 52,505               |
| Black skipjack tuna .....      | 130,384            | 16,513               |
| Total shipments .....          | <u>114,701,069</u> | <u>\$54,605,988</u>  |
| Port totals .....              | <u>674,921,687</u> | <u>\$154,823,038</u> |
| <b>San Pedro</b>               |                    |                      |
| <b>Landings:</b>               |                    |                      |
| Jack mackerel .....            | 10,052,330         | \$433,124            |
| White seabass .....            | 466,015            | 293,580              |
| Market squid .....             | 10,658,447         | 290,783              |
| Bluefin tuna .....             | 813,401            | 245,493              |
| Pacific bonito .....           | 1,550,977          | 212,757              |
| Yellowfin tuna .....           | 483,236            | 142,573              |
| Pink abalone .....             | 148,312            | 141,929              |
| Rockfish .....                 | 478,774            | 131,995              |
| Rock crab .....                | 349,500            | 97,934               |
| California spiny lobster ..... | 35,474             | 84,575               |
| Albacore .....                 | 156,423            | 73,249               |
| Green abalone .....            | 77,489             | 72,302               |
| California halibut .....       | 93,835             | 70,540               |
| White abalone .....            | 56,629             | 64,731               |
| California barracuda .....     | 135,234            | 57,184               |
| Yellowtail .....               | 256,138            | 52,442               |
| Shark .....                    | 153,199            | 42,961               |
| Swordfish .....                | 14,756             | 42,339               |
| White croaker .....            | 229,241            | 37,227               |
| Pacific butterfish .....       | 61,174             | 33,193               |
| Black abalone .....            | 76,214             | 29,038               |
| Flyingfish .....               | 67,247             | 21,180               |
| Skipjack tuna .....            | 45,527             | 12,170               |
| Giant sea bass .....           | 25,592             | 11,074               |
| Sea urchin .....               | 94,495             | 9,185                |
| Northern anchovy .....         | 479,265            | 8,662                |
| Red abalone .....              | 9,087              | 8,040                |
| Halfmoon .....                 | 20,238             | 5,393                |
| Grouper .....                  | 9,609              | 4,800                |
| Pacific mackerel .....         | 57,411             | 2,948                |
| English sole .....             | 17,545             | 2,664                |
| Sea snail .....                | 11,195             | 2,243                |
| True smelt .....               | 18,047             | 2,175                |
| Perch .....                    | 6,089              | 1,754                |
| Rex sole .....                 | 8,640              | 1,714                |

**TABLE 20**  
**Value of Landings and Shipments by Port, Los Angeles Area, 1976**

TABLE 20—Continued  
Value of Landings and Shipments by Port, Los Angeles Area, 1976

|                                | Pounds     | Value       |
|--------------------------------|------------|-------------|
| <b>San Pedro—Continued</b>     |            |             |
| <b>Landings—Continued</b>      |            |             |
| Wahoo .....                    | 6,195      | 1,440       |
| Sculpin .....                  | 2,406      | 1,336       |
| Queenfish .....                | 12,810     | 1,301       |
| Top or jack smelt .....        | 9,980      | 1,048       |
| All other species .....        | 57,239     | 4,596       |
| Total landings .....           | 27,305,406 | \$2,754,552 |
| <b>Shipments*</b>              |            |             |
| Skipjack tuna .....            | 1,175,009  | \$395,616   |
| Total shipments .....          | 1,175,009  | \$395,616   |
| Port totals .....              | 28,480,415 | \$3,150,168 |
| <b>Wilmington</b>              |            |             |
| <b>Landings:</b>               |            |             |
| Jack mackerel.....             | 4,268,210  | \$183,904   |
| Yellowfin tuna .....           | 206,277    | 60,860      |
| California spiny lobster ..... | 5,629      | 13,420      |
| Flyingfish.....                | 25,780     | 8,119       |
| Market squid.....              | 257,085    | 6,990       |
| Shark.....                     | 17,772     | 4,977       |
| Pink abalone .....             | 4,573      | 4,376       |
| Rock crab .....                | 8,415      | 2,358       |
| Green abalone .....            | 2,075      | 1,560       |
| Pacific mackerel .....         | 21,740     | 1,116       |
| All other species .....        | 13,007     | 2,464       |
| Port totals .....              | 4,830,563  | \$290,534   |
| <b>Newport Beach</b>           |            |             |
| <b>Landings:</b>               |            |             |
| Swordfish.....                 | 14,398     | \$41,312    |
| Albacore.....                  | 38,865     | 18,200      |
| Rockfish .....                 | 46,757     | 14,778      |
| Pink abalone .....             | 5,261      | 5,035       |
| Green abalone .....            | 5,333      | 5,013       |
| Shark.....                     | 15,524     | 4,497       |
| Black abalone .....            | 5,564      | 2,120       |
| California spiny lobster ..... | 869        | 2,072       |
| All other species .....        | 3,003      | 1,694       |
| Port totals .....              | 135,574    | \$94,721    |
| <b>Redondo Beach</b>           |            |             |
| <b>Landings:</b>               |            |             |
| Blue crab .....                | 171,134    | \$47,954    |
| California spiny lobster ..... | 4,839      | 11,537      |
| Rockfish .....                 | 15,221     | 4,890       |
| Sea urchin .....               | 34,820     | 3,385       |
| Pink abalone .....             | 2,090      | 2,000       |
| Green abalone .....            | 1,330      | 1,250       |
| All other species .....        | 9,648      | 3,792       |
| Port totals .....              | 239,082    | \$74,808    |
| <b>Long Beach</b>              |            |             |
| <b>Landings:</b>               |            |             |
| California spiny lobster ..... | 16,930     | \$40,363    |
| Rockfish .....                 | 36,669     | 11,579      |
| Northern anchovy .....         | 386,128    | 6,979       |
| Flyingfish.....                | 4,365      | 1,375       |
| Pink abalone .....             | 1,166      | 1,116       |
| Green abalone .....            | 1,137      | 1,069       |
| All other species .....        | 7,307      | 1,264       |
| Port totals .....              | 453,702    | \$63,745    |
| <b>Dana Point</b>              |            |             |
| <b>Landings:</b>               |            |             |
| California spiny lobster ..... | 9,360      | \$22,316    |
| Rockfish .....                 | 47,757     | 15,115      |
| White seabass .....            | 5,126      | 5,128       |
| Shark.....                     | 13,324     | 3,773       |
| Swordfish .....                | 943        | 2,706       |
| California halibut .....       | 1,738      | 1,312       |
| All other species .....        | 15,539     | 3,104       |
| Port totals .....              | 96,817     | \$53,464    |

TABLE 20  
Value of Landings and Shipments by Port, Los Angeles Area, 1976

TABLE 20—Continued  
Value of Landings and Shipments by Port, Los Angeles Area, 1976

|                                      | Pounds             | Value                |
|--------------------------------------|--------------------|----------------------|
| <b>Avalon</b>                        |                    |                      |
| <b>Landings:</b>                     |                    |                      |
| California spiny lobster .....       | 17,443             | \$41,586             |
| Rockfish .....                       | 10,788             | 3,407                |
| Swordfish .....                      | 745                | 2,138                |
| All other species .....              | 2,527              | 1,603                |
| Port totals .....                    | 31,503             | \$48,734             |
| <b>Santa Monica</b>                  |                    |                      |
| <b>Landings:</b>                     |                    |                      |
| Swordfish .....                      | 5,196              | \$14,909             |
| Rockfish .....                       | 48,351             | 13,561               |
| All other species .....              | 5,287              | 1,901                |
| Port totals .....                    | 58,834             | \$30,371             |
| <b>Malibu</b>                        |                    |                      |
| <b>Landings:</b>                     |                    |                      |
| Rockfish .....                       | 16,275             | \$5,077              |
| Rock crab .....                      | 15,973             | 4,476                |
| California halibut .....             | 5,732              | 4,327                |
| California spiny lobster .....       | 1,545              | 3,683                |
| All other species .....              | 3,393              | 858                  |
| Port totals .....                    | 42,918             | \$18,421             |
| <b>Playa Del Ray</b>                 |                    |                      |
| <b>Landings:</b>                     |                    |                      |
| Rock crab .....                      | 21,510             | \$6,027              |
| Rockfish .....                       | 18,279             | 5,736                |
| California spiny lobster .....       | 495                | 1,180                |
| All other species .....              | 11,469             | 1,356                |
| Port totals .....                    | 51,753             | \$14,299             |
| <b>All other ports</b>               |                    |                      |
| <b>Landings:</b>                     |                    |                      |
| All other species .....              | 2,311              | \$972                |
| Totals .....                         | 2,311              | \$972                |
| <b>Los Angeles area totals .....</b> | <b>709,345,159</b> | <b>\$158,663,275</b> |

\* Beginning in 1965 only tuna shipments are recorded.

TABLE 20  
Value of Landings and Shipments by Port, Los Angeles Area, 1976

**TABLE 21**  
**Value of Landings and Shipments by Port, San Diego Area 1976**

|                                | Pounds      | Value        |
|--------------------------------|-------------|--------------|
| <b>San Diego</b>               |             |              |
| <b>Landings:</b>               |             |              |
| Yellowfin tuna .....           | 51,081,891  | \$15,231,135 |
| Skipjack tuna .....            | 38,678,508  | 10,530,634   |
| Albacore.....                  | 8,847,758   | 4,068,045    |
| Bluefin tuna .....             | 5,182,425   | 1,509,125    |
| White seabass .....            | 533,613     | 333,642      |
| Rockfish .....                 | 930,785     | 274,426      |
| California spiny lobster ..... | 106,541     | 238,016      |
| Pacific bonito .....           | 1,357,452   | 191,310      |
| Pink abalone .....             | 87,766      | 79,481       |
| Swordfish .....                | 30,834      | 78,782       |
| Sculpin .....                  | 170,286     | 72,104       |
| Red abalone .....              | 61,892      | 56,884       |
| Yellowtail .....               | 208,096     | 50,481       |
| Shark.....                     | 126,299     | 39,112       |
| Sea urchin .....               | 391,032     | 34,578       |
| Green abalone .....            | 30,578      | 29,894       |
| Rock crab .....                | 77,117      | 24,323       |
| Bigeye tuna.....               | 78,335      | 23,948       |
| White abalone .....            | 22,152      | 21,813       |
| California halibut.....        | 29,552      | 21,260       |
| Giant sea bass .....           | 28,060      | 13,075       |
| Black skipjack tuna.....       | 95,800      | 7,185        |
| California barracuda .....     | 11,911      | 3,010        |
| Jack mackerel .....            | 14,696      | 4,885        |
| Sablefish .....                | 25,567      | 3,698        |
| Market squid.....              | 50,839      | 3,672        |
| Dolphinfish .....              | 9,008       | 2,592        |
| Wahoo .....                    | 5,237       | 1,864        |
| Perch .....                    | 4,585       | 1,635        |
| Black abalone .....            | 3,686       | 1,519        |
| Mullet .....                   | 3,307       | 1,488        |
| All other species .....        | 11,642      | 3,994        |
| Total landings .....           | 108,299,160 | \$32,959,760 |
| <b>Shipments:*</b>             |             |              |
| Skipjack tuna .....            | 16,442,664  | \$5,694,027  |
| Albacore.....                  | 4,173,779   | 2,798,902    |
| Bluefin tuna .....             | 8,635,979   | 2,781,520    |
| Bluefin tuna .....             | 1,215,225   | 367,776      |
| Black skipjack tuna .....      | 282,072     | 22,566       |
| All other species .....        | 290         | 104          |
| Total shipments .....          | 30,918,699  | \$11,658,895 |
| Port totals .....              | 139,217,859 | \$44,618,653 |
| <b>Oceanside</b>               |             |              |
| <b>Landings:</b>               |             |              |
| Rockfish .....                 | 88,729      | \$25,144     |
| California spiny lobster ..... | 4,878       | 10,883       |
| California halibut .....       | 14,729      | 10,596       |
| Shark.....                     | 17,210      | 5,538        |
| White seabass .....            | 7,097       | 4,423        |
| Swordfish .....                | 954         | 2,436        |
| Halfmoon.....                  | 5,729       | 1,971        |
| Perch .....                    | 4,453       | 1,588        |
| Albacore.....                  | 3,415       | 1,570        |
| All other species .....        | 23,435      | 4,899        |
| Port totals .....              | 170,627     | \$70,058     |
| <b>La Jolla</b>                |             |              |
| <b>Landings:</b>               |             |              |
| California spiny lobster ..... | 6,369       | \$14,229     |
| Rockfish .....                 | 25,069      | 7,402        |
| White seabass .....            | 8,411       | 5,242        |
| Shark.....                     | 8,080       | 2,531        |
| Yellowtail.....                | 6,082       | 1,471        |
| All other species .....        | 5,039       | 2,431        |
| Port totals .....              | 59,000      | \$33,306     |

\* Beginning in 1965 only tuna shipments are recorded.

**TABLE 21**  
**Value of Landings and Shipments by Port, San Diego Area 1976**

**TABLE 21—Continued**  
**Value of Landings and Shipments by Port, San Diego Area 1976**

|                                | <i>Pounds</i> | <i>Value</i> |
|--------------------------------|---------------|--------------|
| All Other Ports                |               |              |
| Landings:                      |               |              |
| California spiny lobster ..... | 699           | \$1,562      |
| Totals .....                   | 699           | \$1,562      |
| San Diego area totals .....    | 139,448,185   | \$44,723,581 |

*TABLE 21*  
*Value of Landings and Shipments by Port, San Diego Area 1976*

TABLE 22  
Statewide Catch by Species of Commercial Passenger Carrying Vessels  
(Not including anchored barges)  
1967-1976 \*

| Species                      | 1967      | 1968      | 1969      | 1970      | 1971      | 1972      | 1973      | 1974      | 1975      | 1976      | MARINE FISH LANDINGS<br>1976 |
|------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------------------------|
| Barracuda, California        | 470,490   | 372,945   | 356,518   | 373,801   | 50,474    | 38,943    | 95,483    | 55,264    | 96,399    | 107,537   |                              |
| Bass, kelp and sand          | 1,003,914 | 1,317,963 | 1,246,175 | 922,269   | 945,151   | 842,681   | 605,279   | 618,054   | 499,691   | 655,810   |                              |
| Bonito, Pacific              | 349,958   | 1,102,936 | 1,130,241 | 681,398   | 152,795   | 418,584   | 472,451   | 141,619   | 80,438    | 197,388   |                              |
| Cabrilla, California         | 7,119     | 1,044     | 1,037     | 453       | 72        | 11,452    | 4,534     | 1,564     | 1,445     | 1,075     |                              |
| Halibut, California          | 63,588    | 54,663    | 27,634    | 29,968    | 10,958    | 8,140     | 9,922     | 10,956    | 9,118     | 10,075    |                              |
| Lingcod                      | 43,559    | 42,449    | 32,693    | 61,833    | 63,238    | 103,965   | 80,778    | 79,685    | 87,766    | 80,863    |                              |
| Mackerel, jack               | 16,236    | 13,588    | 11,272    | 15,725    | 10,611    | 5,913     | 15,789    | 12,467    | 5,677     | 5,504     |                              |
| Mackerel, Pacific            | 78,761    | 78,921    | 18,281    | 128,301   | 20,919    | 24,938    | 18,121    | 10,619    | 120,139   | 81,141    |                              |
| Rockfish                     | 1,894,057 | 2,102,859 | 1,978,961 | 2,063,381 | 2,222,944 | 3,054,959 | 3,270,244 | 4,045,122 | 3,925,494 | 3,997,114 |                              |
| Salmon                       | 84,949    | 127,584   | 111,389   | 98,363    | 130,812   | 151,595   | 124,676   | 107,542   | 73,857    | 66,099    |                              |
| Sculpin                      | 63,280    | 59,863    | 63,011    | 82,922    | 84,913    | 65,896    | 83,475    | 85,956    | 81,438    | 47,524    |                              |
| Solefish, white              | 4,202     | 4,202     | 4,007     | 3,909     | 3,909     | 7,933     | 4,031     | 4,031     | 4,031     | 5,217     |                              |
| Sheepshead, California       | 42,676    | 33,075    | 49,626    | 39,464    | 38,300    | 33,541    | 46,524    | 30,379    | 30,496    | 32,958    |                              |
| Tuna, albacore               | 96,497    | 129,710   | 48,887    | 112,106   | 160,361   | 86,890    | 9,958     | 12,514    | 81,566    | 84,973    |                              |
| Tuna, yellowfin              | 1,261     | 1,470     | 1,470     | 1,333     | 1,470     | 1,470     | 5,547     | 5,547     | 5,547     | 5,547     |                              |
| Whitefish, ocean             | 18,184    | 33        | 474       | 40,993    | 29,800    | 34,630    | 45,395    | 25,301    | 38,165    | 38,303    |                              |
| Yellowtail                   | 31,392    | 58,049    | 79,202    | 97,376    | 44,608    | 59,031    | 221,297   | 131,149   | 19,742    | 28,962    |                              |
| All others                   | 145,074   | 205,410   | 211,327   | 296,375   | 431,729   | 305,283   | 359,255   | 228,308   | 254,435   | 133,744   |                              |
| Total number of fish         | 4,444,164 | 5,731,201 | 5,725,575 | 5,620,803 | 4,694,435 | 5,462,405 | 5,923,478 | 5,691,616 | 5,354,651 | 5,149,493 |                              |
| Total number of anglers      | 780,102   | 849,654   | 809,811   | 873,327   | 728,126   | 792,618   | 880,100   | 809,100   | 748,052   | 735,674   |                              |
| Total number of angler hours | 3,880,630 | 4,294,902 | 4,034,066 | 4,442,856 | 3,775,396 | 4,075,967 | 4,382,184 | 3,875,750 | 3,539,066 | 3,539,513 |                              |

\* See Fish Bulletin 121 for historical records 1936-1961.

MARINE FISH LANDINGS  
1976

TABLE 22  
Statewide Catch by Species of Commercial Passenger Carrying Vessels (Not including anchored barges)  
1967-1976

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**TABLE 23**  
**Inshore Bait Landings by Area, Pounds, and Value, 1976**

| Species                           | Sacramento | San Francisco<br>and Monterey | Los Angeles | San Diego | Statewide * |
|-----------------------------------|------------|-------------------------------|-------------|-----------|-------------|
| Clams:                            |            |                               |             |           |             |
| Freshwater.....                   | 185,866    | 200                           | —           | —         | 186,066     |
|                                   | \$36,481   | \$110                         | —           | —         | \$36,591    |
| Jackknife.....                    | —          | —                             | 10,384      | 264       | 10,648      |
| Purple .....                      | —          | —                             | \$11,497    | \$274     | \$11,771    |
|                                   | —          | —                             | 3,610       | 14,841    | 18,451      |
|                                   | —          | —                             | \$3,366     | \$9,564   | \$12,930    |
| Crab:                             |            |                               |             |           |             |
| Sand.....                         | —          | —                             | 8,029       | —         | 8,029       |
|                                   | —          | —                             | \$20,408    | —         | \$20,408    |
| Mudsucker, longjaw.....           | —          | 6,371                         | —           | —         | 6,371       |
|                                   | —          | \$7,794                       | —           | —         | \$7,794     |
| Mussels (bay and seamussel) ..... | —          | —                             | 32,591      | 12,388    | 44,979      |
|                                   | —          | —                             | \$7,637     | \$2,472   | \$10,109    |
| Sculpin, staghorn .....           | 394        | 185                           | —           | —         | 579         |
|                                   | \$1,352    | \$1,004                       | —           | —         | \$2,356     |
| Shad, threadfin .....             | —          | —                             | —           | —         | 748         |
| Crayfish .....                    | 263        | —                             | —           | —         | 263         |
|                                   | \$210      | —                             | —           | —         | \$210       |
| Shrimp:                           |            |                               |             |           |             |
| Bay.....                          | 81,624     | 17,165                        | —           | —         | 98,789      |
|                                   | \$148,517  | \$35,544                      | —           | —         | \$184,061   |
| Brine.....                        | 102,995    | 442,178                       | —           | 99,338    | 644,511     |
|                                   | \$6,180    | \$663,643                     | —           | \$195,673 | \$865,496   |
| Ghost.....                        | —          | —                             | 4,632       | 1,398     | 6,030       |
| Red .....                         | —          | —                             | \$18,677    | \$5,028   | \$24,705    |
| Miscellaneous .....               | —          | —                             | 1,091       | —         | 1,091       |
|                                   | —          | —                             | \$3,823     | —         | \$3,823     |
| Total .....                       | 371,142    | 466,099                       | 60,338      | 128,229   | 1,026,568   |
|                                   | \$192,740  | \$708,095                     | \$65,408    | \$213,011 | \$1,180,021 |

\* Some figures are reported statewide only to avoid revealing the business of an individual in an area.

**TABLE 23**  
**Inshore Bait Landings by Area, Pounds, and Value, 1976**

**TABLE 24**  
**Recorded Catch of Live Bait for Saltwater Sportfishing 1972-1976**

| Species                   | Thousands of pounds * |        |        |        |        |
|---------------------------|-----------------------|--------|--------|--------|--------|
|                           | 1972                  | 1973   | 1974   | 1975   | 1976   |
| Anchovy, northern .....   | 11,700                | 12,432 | 11,299 | 12,295 | 13,674 |
| Mackerel, jack .....      | 5                     | 120    | T      | T      | T      |
| Mackerel, Pacific .....   | —                     | 75     | —      | T      | T      |
| Sardine, adult .....      | T                     | —      | —      | —      | —      |
| Sardine, juvenile .....   | T                     | —      | —      | —      | —      |
| Squid, market .....       | —                     | 66     | T      | 40     | 30     |
| Miscellaneous †.....      | 16                    | 80     | 51     | 31     | 20     |
| Total pounds.....         | 11,721                | 12,773 | 11,350 | 13,366 | 13,724 |
| Number of vessels † ..... | 12                    | 11     | 14     | 13     | 13     |

\* Weights are estimated from voluntary records. They should be regarded as minimal, as some fishermen do not supply catch information.

T Less than 500 pounds.

† Consists primarily of queenfish and white croaker.

‡ The number of live bait fishing vessels reported here should be considered minimal because some fishing operations utilize more than one vessel simultaneously or alternately, while others do not volunteer catch information at all.

**TABLE 24**  
**Recorded Catch of Live Bait for Saltwater Sportfishing 1972-1976**

TABLE 25  
California Ocean Recreational Salmon Landings and Success<sup>1</sup> by Fishery, Port,  
Month and Species, in Numbers of Fish—1976

|                 | February |        |        | March |        |        | April |        |        | May    |        |        | June  |        |        | July  |        |        |       |        |   |
|-----------------|----------|--------|--------|-------|--------|--------|-------|--------|--------|--------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|---|
|                 | King     |        | Silver | King  |        | Silver | King  |        | Silver | King   |        | Silver | King  |        | Silver | King  |        | Silver | King  |        |   |
|                 | King     | Silver |        | King  | Silver |        | King  | Silver |        | King   | Silver |        | King  | Silver |        | King  | Silver |        | King  | Silver |   |
| Crescent City   |          |        |        |       |        |        |       |        |        |        |        |        |       |        |        |       |        |        |       |        |   |
| Partyboat ..... | 0        | 0      | a      | 0     | 0      | a      | 0     | 0      | a      | 0      | 16     | a      | 0     | 140    | 0.5    | 400   | a      | 0      | 9,119 | 0.82   |   |
| Skiff .....     | —        | —      | a      | —     | —      | a      | —     | —      | a      | —      | —      | a      | 0     | 2,905  | 0.66   | 1,134 | 0      | 0      | 0     | 0      |   |
| Eureka          |          |        |        |       |        |        |       |        |        |        |        |        |       |        |        |       |        |        |       |        |   |
| Partyboat ..... | 0        | 0      | a      | 0     | 0      | a      | 0     | 0      | a      | 15     | 173    | 2.8    | 128   | 350    | 1.2    | 132   | 522    | 0.6    | 7,097 | 0.75   |   |
| Skiff .....     | —        | —      | a      | —     | —      | a      | —     | —      | a      | —      | —      | a      | 3,570 | 8,179  | 1.23   | 2,380 | 0      | 0      | 0     | 0      |   |
| Fort Bragg      |          |        |        |       |        |        |       |        |        |        |        |        |       |        |        |       |        |        |       |        |   |
| Partyboat ..... | 0        | 0      | a      | 0     | 0      | a      | 0     | 0      | a      | 18     | 254    | a      | 71    | 992    | 1.2    | 173   | 1,511  | 0.7    | 0     | 0      |   |
| Skiff .....     | —        | —      | a      | —     | —      | a      | —     | —      | a      | —      | —      | a      | 216   | 570    | 0.44   | 1,296 | 2,760  | 0.53   | 0     | 0      | 0 |
| San Francisco   |          |        |        |       |        |        |       |        |        |        |        |        |       |        |        |       |        |        |       |        |   |
| Partyboat ..... | 1,702    | 0      | 0.4    | 904   | 0      | 0.2    | 5,430 | 710    | 1.2    | 10,492 | 5,226  | 1.5    | 7,557 | 2,612  | 1.2    | 3,745 | 1,916  | 0.7    | 0     | 0      |   |
| Skiff .....     | 495      | 0      | 0.27   | 125   | 0      | 0.28   | 573   | 49     | 0.44   | 1,539  | 424    | 0.81   | 1,598 | 362    | 0.80   | 1,949 | 1,104  | 0.59   | 0     | 0      |   |
| Monterey        |          |        |        |       |        |        |       |        |        |        |        |        |       |        |        |       |        |        |       |        |   |
| Partyboat ..... | 212      | 29     | b      | 231   | 32     | b      | 336   | 46     | b      | 687    | 89     | b      | 544   | 73     | 2.1    | 158   | 0      | 0.5    | 0     | 0.81   |   |
| Skiff .....     | 217      | 0      | 0.83   | 61    | 0      | 0.11   | 275   | 0      | 0.48   | 320    | 107    | 0.30   | 440   | 121    | 0.82   | 1,008 | 137    | 0      | 0     | 0      |   |
| Statewide       |          |        |        |       |        |        |       |        |        |        |        |        |       |        |        |       |        |        |       |        |   |
| Partyboat ..... | 2,004    | 29     | 0.4    | 1,035 | 32     | 0.2    | 5,786 | 765    | 1.2    | 11,172 | 5,738  | 1.5    | 8,301 | 4,097  | 1.2    | 4,178 | 4,182  | 0.6    | 0     | 0      |   |
| Skiff .....     | 682      | 0      | 0.25   | 186   | 0      | 0.18   | 646   | 49     | 0.45   | 1,809  | 531    | 0.6    | 5,624 | 12,137 | 0.9    | 7,635 | 20,217 | 0.7    | 0     | 0      |   |

TABLE 25  
California Ocean Recreational Salmon Landings and Success by Fishery, Port, Month and Species, in Numbers of Fish—1976

**TABLE 25**  
**California Ocean Recreational Salmon Landings and Success<sup>1</sup> by Fishery, Port,  
Month and Species, in Numbers of Fish—1976**

|                            | August |        | September      |       | October |           | November |        | December         |       | Season |           |
|----------------------------|--------|--------|----------------|-------|---------|-----------|----------|--------|------------------|-------|--------|-----------|
|                            | King   | Silver | Fish /day      | King  | Silver  | Fish /day | King     | Silver | Fish /day        | King  | Silver | Fish /day |
|                            |        |        |                |       |         |           |          |        |                  |       |        |           |
| Crescent City<br>Partyboat | 0      | 0      | 4 <sup>a</sup> | 0     | 0       | 0         | 0        | 0      | 0                | 0     | 0      | 0         |
| .....<br>Skiff             | 1,573  | 3,705  | 0.64           | 264   | 594     | 0.31      | -        | -      | -                | -     | -      | 2,991     |
| Eureka<br>Partyboat        | 67     | 108    | 0.3            | 23    | 8       | 0.3       | 0        | 0      | 0                | 0     | 0      | 325       |
| .....<br>Skiff             | 752    | 3,233  | 0.7            | 96    | 172     | 0.62      | -        | -      | -                | -     | -      | 6,746     |
| Fort Bragg<br>Partyboat    | 245    | 199    | 0.5            | 6     | 5       | 0.4       | 1        | 1      | 0                | 0     | 0      | 0         |
| .....<br>Skiff             | 298    | 1,251  | 0.44           | 0     | 0       | 0.4       | -        | -      | -                | -     | -      | 1,810     |
| San Francisco<br>Partyboat | 5,685  | 168    | 0.6            | 3,652 | 25      | 0.6       | 6,539    | 0      | 0.9              | 1,689 | 0      | 47,495    |
| .....<br>Skiff             | 3,612  | 512    | 0.59           | 1,280 | 179     | 0.45      | 4,166    | 0      | 0.78             | 858   | 0      | 16,265    |
| Monterey<br>Partyboat      | 69     | 0      | b              | 5     | 0       | 0.20      | 105      | 0      | 0.5 <sup>b</sup> | 19    | 0      | 0         |
| .....<br>Skiff             | 118    | 7      | 0.43           | 28    | 0       | 0         | 0.5      | 0      | 0.49             | 28    | 0      | 2,207     |
| Statewide<br>Partyboat     | 6,066  | 475    | 0.6            | 3,986 | 38      | 0.6       | 6,345    | 1      | 0.9              | 1,708 | 0      | 0         |
| .....<br>Skiff             | 6,553  | 8,709  | 0.6            | 1,668 | 945     | 0.4       | 4,921    | 0      | 0.77             | 886   | 0      | 30,412    |
|                            |        |        |                |       |         |           |          |        |                  |       |        | 50,581    |
|                            |        |        |                |       |         |           |          |        |                  |       |        | 42,588    |
|                            |        |        |                |       |         |           |          |        |                  |       |        | 0.68      |

<sup>1</sup> Salmon per angler day, species combined.

<sup>a</sup> No sampling.

<sup>b</sup> Sampling not consistent with other ports.

TABLE 26  
California Commercial Troll Salmon Landings by Port-Area, Month and Species, in Pounds<sup>1</sup> and Numbers—1976

|                      | April   |         | May       |         | June      |         | July      |         | August  |         | September |         | Season    |         |         |
|----------------------|---------|---------|-----------|---------|-----------|---------|-----------|---------|---------|---------|-----------|---------|-----------|---------|---------|
|                      | Pounds  | Numbers | Pounds    | Numbers | Pounds    | Numbers | Pounds    | Numbers | Pounds  | Numbers | Pounds    | Numbers | Pounds    | Numbers |         |
| <b>Crescent City</b> |         |         |           |         |           |         |           |         |         |         |           |         |           |         |         |
| King                 | 375     | 55      | 54,958    | 4,129   | 86,437    | 9,884   | 54,006    | 2,977   | 31,369  | 3,382   | 3,989     | 534     | 181,045   | 20,971  |         |
| Silver               | 0       | 0       | 94,347    | 24,964  | 330,915   | 77,293  | 151,020   | 0       | 26,460  | 23,317  | 3,729     | 4,539   | 608       | 604,138 | 133,054 |
| Pink                 | 0       | 0       | 0         | 0       | 0         | 0       | 0         | 0       | 0       | 0       | 0         | 0       | 0         | 0       |         |
| <b>Eureka</b>        |         |         |           |         |           |         |           |         |         |         |           |         |           |         |         |
| King                 | 19,513  | 2,606   | 440,158   | 53,950  | 370,728   | 40,957  | 469,825   | 65,864  | 8,250   | 1,040   | 6,949     | 966     | 1,315,329 | 165,415 |         |
| Silver               | 0       | 0       | 351,796   | 105,217 | 378,940   | 83,447  | 35,261    | 9,184   | 43,186  | 7,007   | 0         | 0       | 0         | 795,214 | 204,655 |
| Pink                 | 0       | 0       | 0         | 0       | 0         | 0       | 0         | 0       | 0       | 0       | 0         | 0       | 0         | 0       |         |
| <b>Fort Bragg</b>    |         |         |           |         |           |         |           |         |         |         |           |         |           |         |         |
| King                 | 15,938  | 1,844   | 105,891   | 13,598  | 316,204   | 31,835  | 584,277   | 53,956  | 115,646 | 9,906   | 46,437    | 4,178   | 112,4713  | 115,963 |         |
| Silver               | 0       | 6       | 65,131    | 21,599  | 513,970   | 104,420 | 177,703   | 0       | 29,613  | 41,083  | 6,227     | 0       | 0         | 815,587 | 180,229 |
| Pink                 | 15      | 4       | 32        | 6       | 0         | 0       | 0         | 0       | 0       | 0       | 0         | 47      | 0         | 0       |         |
| <b>San Francisco</b> |         |         |           |         |           |         |           |         |         |         |           |         |           |         |         |
| King                 | 244,926 | 28,915  | 384,677   | 42,826  | 291,010   | 31,454  | 171,338   | 17,023  | 97,445  | 8,195   | 120,891   | 10,456  | 1,310,287 | 138,231 |         |
| Silver               | 0       | 0       | 104,770   | 24,886  | 222,903   | 44,596  | 59,271    | 9,727   | 20,271  | 2,980   | 8,837     | 1,141   | 415,195   | 85,246  |         |
| Pink                 | 0       | 0       | 0         | 0       | 0         | 0       | 0         | 0       | 0       | 0       | 0         | 0       | 0         | 0       |         |
| <b>Monterey</b>      |         |         |           |         |           |         |           |         |         |         |           |         |           |         |         |
| King                 | 186,074 | 23,269  | 291,104   | 30,053  | 176,284   | 18,239  | 102,433   | 9,500   | 202,772 | 14,271  | 53,818    | 4,254   | 1,012,487 | 99,626  |         |
| Silver               | 0       | 0       | 72,860    | 16,777  | 84,275    | 16,852  | 32,595    | 7,754   | 0       | 0       | 0         | 0       | 206,710   | 41,384  |         |
| Pink                 | 0       | 0       | 0         | 0       | 0         | 0       | 0         | 0       | 0       | 0       | 0         | 0       | 0         | 0       |         |
| <b>Statewide</b>     |         |         |           |         |           |         |           |         |         |         |           |         |           |         |         |
| King                 | 466,826 | 56,694  | 1,256,718 | 144,396 | 1,240,683 | 132,359 | 1,299,181 | 149,387 | 455,479 | 36,794  | 232,004   | 30,410  | 4,943,891 | 539,930 |         |
| Silver               | 0       | 0       | 676,726   | 193,157 | 1,530,022 | 323,608 | 495,643   | 82,698  | 128,282 | 20,566  | 13,176    | 1,749   | 2,943,849 | 621,778 |         |
| Pink                 | 15      | 4       | 32        | 6       | 0         | 0       | 0         | 0       | 0       | 0       | 0         | 47      | 0         | 0       |         |

<sup>1</sup> Dressed, head on.

TABLE 26  
California Commercial Troll Salmon Landings by Port-Area, Month and Species, in Pounds and Numbers—1976

**APPENDIX I**  
**Monthly Landings From Inland Waters During 1976**

| Species               | January | February | March  | April  | May   | June   | July    | August  | September | October | November | December | Total Pounds |
|-----------------------|---------|----------|--------|--------|-------|--------|---------|---------|-----------|---------|----------|----------|--------------|
| <b>LANDINGS:</b>      |         |          |        |        |       |        |         |         |           |         |          |          |              |
| Fish:                 |         |          |        |        |       |        |         |         |           |         |          |          |              |
| Blackfish, Sacramento | 26,115  | 6,500    | 16,100 | 8,925  | —     | —      | —       | —       | 1,603     | 1,537   | 450      | 817      | 62,497       |
| Carp                  | 22,400  | 9,000    | 20,900 | 12,500 | —     | —      | —       | —       | 2,300     | 2,300   | —        | —        | 31,730       |
| Hardhead              | 49,631  | 21,000   | 32,700 | 19,575 | 6,200 | 33,200 | 48,800  | 35,200  | 36,300    | 42,300  | 35,200   | 10,000   | 370,065      |
| Hitch                 | 9,740   | 5,200    | 2,810  | 5,250  | 300   | 1,100  | 325     | 5,250   | 1,275     | 4,379   | 3,338    | 3,642    | 36,065       |
| Shad, American        | —       | —        | —      | —      | —     | —      | —       | —       | —         | —       | —        | —        | —            |
| Sucker                | 1,913   | 267      | 90     | 270    | 250   | 925    | 775     | 425     | 1,300     | 1,299   | 1,132    | 1,066    | 9,713        |
| Crustacean:           |         |          |        |        |       |        |         |         |           |         |          |          |              |
| Crayfish              | 90      | —        | —      | 40     | 1,172 | 10,744 | 944,231 | 171,770 | 143,288   | 33,476  | 1,103    | 451      | 606,359      |
| Mollusk:              |         |          |        |        |       |        |         |         |           |         |          |          |              |
| Clam, Freshwater      | 378     | 455      | 725    | 991    | —     | 391    | 298     | 770     | 1,013     | 825     | 90       | —        | 5,656        |
| Clam, Unclassified    | —       | —        | —      | —      | —     | —      | —       | —       | —         | —       | 347      | 54       | 391          |
| Amphibia:             |         |          |        |        |       |        |         |         |           |         |          |          |              |
| Frog                  | —       | 86       | 157    | —      | 688   | —      | 796     | 180     | 551       | 70      | —        | —        | 2,468        |
| Total pounds          | 116,432 | 43,376   | 68,272 | 35,296 | 8,200 | 46,360 | 295,223 | 216,690 | 185,324   | 94,496  | 41,560   | 16,000   | 1,145,781    |

**APPENDIX I**  
**Monthly Landings From Inland Waters During 1976**

**APPENDIX II**  
**Value of Landings From Inland Waters by County during 1976**

| <i>County and species</i>   | <i>Pounds</i> | <i>Value</i> | <i>County and species</i> | <i>Pounds</i> | <i>Value</i> |
|-----------------------------|---------------|--------------|---------------------------|---------------|--------------|
| <b>Alameda</b>              |               |              | <b>San Francisco</b>      |               |              |
| Crayfish.....               | 1,829         | \$2,350      | Clam, unclassified.....   | 247           | \$129        |
| Frog.....                   | 2,004         | 2,222        | Frog.....                 | 129           | 143          |
| County totals .....         | 3,833         | \$4,572      | County totals .....       | 376           | \$272        |
| <b>Colusa</b>               |               |              | <b>Santa Cruz</b>         |               |              |
| Clam, unclassified.....     | 54            | \$28         | Crayfish.....             | 37            | \$37         |
| County totals .....         | 54            | \$28         | County totals .....       | 37            | \$37         |
| <b>Lake</b>                 |               |              | <b>Solano</b>             |               |              |
| Blackfish, Sacramento ..... | 25,460        | \$7,638      | Crayfish.....             | 332,049       | \$171,362    |
| Carp.....                   | 50,030        | 5,003        | County totals .....       | 332,049       | \$171,362    |
| Hardhead .....              | 38,390        | 3,839        | <b>Stanislaus</b>         |               |              |
| Hitch .....                 | 1,550         | 465          | Blackfish, Sacramento ..  | 26,682        | \$8,004      |
| County totals .....         | 115,430       | \$16,945     | Carp.....                 | 1,408         | 141          |
| <b>Mendocino</b>            |               |              | Hardhead .....            | 6             |              |
| Shad, American.....         | 65            | \$4          | Hitch .....               | 2,267         | 680          |
| County totals .....         | 65            | \$4          | Sucker .....              | 1,060         | 318          |
| <b>Merced</b>               |               |              | County totals .....       | 31,423        | \$9,143      |
| Blackfish, Sacramento ..... | 10,355        | \$3,107      | <b>Yolo</b>               |               |              |
| Carp.....                   | 300           | 30           | Crayfish.....             | 483           | \$249        |
| Hardhead .....              | 331,670       | 33,167       | County totals .....       | 483           | \$249        |
| Hitch .....                 | 32,822        | 9,847        | Grand total .....         | 1,145,781     | \$394,100    |
| Sucker .....                | 8,652         | 2,596        | <b>Recap</b>              |               |              |
| County totals .....         | 383,799       | \$48,747     | Blackfish, Sacramento ..  | 62,497        | \$18,749     |
| <b>Sacramento</b>           |               |              | Carp.....                 | 51,738        | 5,174        |
| Crayfish.....               | 271,961       | \$140,352    | Hardhead .....            | 370,066       | 37,000       |
| Frog.....                   | 335           | 311          | Hitch .....               | 36,639        | 10,999       |
| County totals .....         | 272,296       | \$140,663    | Shad, American .....      | 55            | 4            |
| <b>San Diego</b>            |               |              | Sucker .....              | 9,712         | 2,914        |
| Clam, Freshwater .....      | 5,936         | \$2,078      | Crayfish.....             | 606,359       | 314,350      |
| County totals .....         | 5,936         | \$2,078      | Clam, freshwater .....    | 5,936         | 2,078        |
|                             |               |              | Clam, unclassified.....   | 301           | 157          |
|                             |               |              | Frog .....                | 2,468         | 2,676        |
|                             |               |              | Grand total .....         | 1,145,781     | \$394,100    |

## *APPENDIX II*

### *Value of Landings From Inland Waters by County during 1976*

**APPENDIX III**  
**KELP HARVEST IN TONS**

| <i>Year</i> | <i>Open beds</i> | <i>Leased beds</i> | <i>Total tons</i> |
|-------------|------------------|--------------------|-------------------|
| 1916.....   | 134,537.00       | —                  | 134,537.00        |
| 1917.....   | 394,974.00       | —                  | 394,974.00        |
| 1918.....   | 395,098.00       | —                  | 395,098.00        |
| 1919.....   | 16,673.00        | —                  | 16,673.00         |
| 1920.....   | 25,464.00        | —                  | 25,464.00         |
| 1931.....   | —                | 260.00             | 260.00            |
| 1932.....   | 301.61           | 10,013.08          | 10,314.69         |
| 1933.....   | 52.75            | 21,568.65          | 21,621.40         |
| 1934.....   | 1,827.21         | 14,052.57          | 15,879.78         |
| 1935.....   | —                | 30,601.83          | 30,601.83         |
| 1936.....   | 14,336.70        | 34,980.34          | 49,317.04         |
| 1937.....   | 9,612.70         | 34,340.63          | 43,953.35         |
| 1938.....   | 18,284.06        | 29,413.25          | 47,697.31         |
| 1939.....   | 25,546.30        | 31,189.70          | 56,736.00         |
| 1940.....   | 33,322.20        | 25,682.20          | 59,004.40         |
| 1941.....   | 36,103.00        | 19,614.00          | 55,717.00         |
| 1942.....   | 44,880.11        | 17,017.65          | 61,897.76         |
| 1943.....   | 19,547.44        | 28,410.86          | 47,958.30         |
| 1944.....   | 22,710.50        | 30,319.40          | 53,029.90         |
| 1945.....   | 37,541.30        | 21,639.90          | 59,181.20         |
| 1946.....   | 60,384.90        | 30,683.60          | 91,068.50         |
| 1947.....   | 46,028.80        | 28,207.80          | 74,236.60         |
| 1948.....   | 50,966.10        | 27,675.00          | 78,641.10         |
| 1949.....   | 56,076.00        | 27,270.00          | 83,346.00         |
| 1950.....   | 49,955.00        | 50,647.00          | 100,602.00        |
| 1951.....   | 30,318.00        | 84,442.00          | 114,760.00        |
| 1952.....   | 37,906.00        | 72,252.50          | 110,158.50        |
| 1953.....   | 37,172.50        | 89,476.50          | 126,649.00        |
| 1954.....   | 40,269.00        | 65,946.50          | 106,215.50        |
| 1955.....   | 38,992.00        | 85,071.00          | 124,063.00        |
| 1956.....   | 35,476.50        | 82,339.00          | 117,815.50        |
| 1957.....   | 32,810.75        | 61,396.50          | 94,207.25         |
| 1958.....   | 41,105.75        | 72,955.75          | 114,061.50        |
| 1959.....   | 42,289.65        | 47,309.45          | 89,599.10         |
| 1960.....   | 61,914.95        | 58,384.85          | 120,299.80        |
| 1961.....   | 71,982.70        | 57,303.30          | 129,256.00        |
| 1962.....   | 86,227.70        | 54,005.10          | 140,232.80        |
| 1963.....   | 57,517.00        | 63,514.80          | 121,031.80        |
| 1964.....   | 35,592.90        | 91,660.85          | 127,233.75        |
| 1965.....   | 33,464.10        | 101,664.90         | 133,129.00        |
| 1966.....   | 11,100.70        | 108,363.20         | 119,463.90        |
| 1967.....   | 9,331.00         | 122,164.00         | 131,495.00        |
| 1968.....   | 20,388.20        | 114,465.15         | 134,853.35        |
| 1969.....   | 10,028.70        | 121,210.50         | 131,239.20        |
| 1970.....   | 8,058.00         | 118,981.00         | 127,039.00        |
| 1971.....   | 19,476.00        | 136,083.00         | 155,559.00        |
| 1972.....   | 12,332.00        | 150,179.00         | 162,511.00        |
| 1973.....   | 24,539.00        | 128,511.00         | 153,050.00        |
| 1974.....   | 37,994.12        | 132,187.00         | 170,181.12        |
| 1975.....   | 30,213.60        | 141,354.00         | 171,597.60        |
| 1976.....   | 27,279.48        | 131,092.00         | 155,371.48        |

\* No data available 1921-1930

*Photoelectronic composition by  
CALIFORNIA OFFICE OF STATE PRINTING*

79356—800 7-79 3,500 LDA

**APPENDIX III**  
**KELP HARVEST IN TONS**

*Photoelectronic composition by CALIFORNIA OFFICE OF STATE PRINTING*