UC San Diego

Fish Bulletin

Title

Fish Bulletin No. 105. The Marine Fish Catch of California For the Years 1955 and 1956 with Rockfish Review

Permalink https://escholarship.org/uc/item/6d51q168

Author Staff of the Marine Resources Operations

Publication Date

1958

STATE OF CALIFORNIA DEPARTMENT OF FISH AND GAME FISH BULLETIN No. 105 The Marine Fish Catch of California For the Years 1955 and 1956 with Rockfish Review



BY THE STAFF OF THE MARINE RESOURCES OPERATIONS 1958



Figure 1

TABLE OF CONTENTS

| 사실 수 있는 것은 |
|---|
| Rockfish Review |
| List of Common and Scientific Names of Fishes, Crustaceans, and Mollusks |
| Explanation of Tables |
| Tables: |
| Annual Landings and Shipments, 1916 Through 1956 |
| Commercial Fish Landings and Shipments, 1955 and 1956 |
| Value of Commercial Fish Landings and Shipments, 1955 and 1956 |
| Licensed Commercial Fishermen |
| Registered Commercial Vessels |
| Origin of Shipments, 1955 |
| Origin of Commercial Fish Landings, 1955 |
| Monthly Landings and Shipments, 1955—Statewide |
| Monthly Landings and Shipments, 1955, by Regions |
| Value and Poundage, Annual Landings by Region, 1955 |
| Value and Poundage by Ports and Regions, 1955 |
| Origin of Shipments, 1956 |
| Origin of Commercial Fish Landings, 1956 |
| Monthly Landings and Shipments, 1956—Statewide |
| Monthly Landings and Shipments, 1956, by Regions |
| Value and Poundage, Annual Landings by Regions, 1956 |
| Value and Poundage by Ports and Regions, 1956 |
| Sport Catch, 1947-1956 |
| Live Bait Catch, 1952-1956 |
| |

FOREWORD

This bulletin includes records of the pounds of fish landed in the different areas of the State and their value to the fishermen. It is prepared to meet the numerous requests for such data received throughout the year from members of the fishing industry, harbor commissions, scientists, and persons in other related fields for use in their studies and reports.

This is the seventeenth in the series of fish bulletins dealing with fish catch. The first published in 1929, contained records of the State's commercial fish catch for 1926 and 1927. Data for subsequent years have been published annually or biennially. It is desirable to present the tables in a similar manner from year to year in order to maintain continuity of records. However, due to changing conditions in fisheries problems a certain amount of flexibility in presentation and context of the tables is desirable. This year for the first time the important species of sole (flatfish) are separated in the record. Although this bulletin carries the title "Marine Fish Catch" small poundages of fresh water commercial landings are also included.

Through the continued cooperation of the Wildlife Protection Branch the accuracy and completeness of the records is insured.

January, 1958

1. ROCKFISH REVIEW

By J. B. PHILLIPS Marine Resources Operations California Department of Fish and Game

1.1. INTRODUCTION

The largest and most colorful family of fishes known to inhabit the waters of California are found in our coastal sea. Scientists have given this family of fishes the name Scorpaenidae. You and I know them best as rockfish.

There are 52 different kinds of rockfish in the ocean waters of the State. Each year these provide food and gainful employment for a large segment of our population, as well as healthful recreation for thousands of individuals.

California Department of Fish and Game marine biologists are gathering facts which will be used to improve this important fishery. These facts are necessary to maintain it at a high level for future generations of fishermen.

Tremendous strides toward attaining these objectives have already been made. For example, Fish Bulletin No. 104 was recently published. This publication standardizes scientific terminology and creates order out of a confusing abundance of scientific names. It also contains a photograph and a detailed description of each kind of California rockfish and tells how it can be accurately identified.

The next important step is to strive for improvement of rockfish catch records, a large proportion of which are classified as simply "Rockfish." A standard "grouping" system is proposed for recording future market landings throughout the State (Table 5). Considerable field work will be necessary on this project because of the frequent admixture of species in a catch, and because of the diversity of common names in use for many years at different fishing ports.

In general, the important species caught by sport fishermen in inshore waters are different from those caught by commercial fishermen operating in offshore waters. Therefore, adjustments in the proposed catch record system will no doubt be necessary, as sport catch records are improved.

Accurate catch records for each kind of rockfish, will enable biologists to detect and evaluate important fluctuations.

1.2. PAST DEVELOPMENTS IN THE CATCH

1.2.1. Commercial

Various kinds of rockfish were commercially important in California as early as 1875. By 1900 the catch totaled between one and two million pounds. An increased demand for food during World War I resulted in a catch of eight million pounds by 1918.

After a postwar slump, landings increased from 4 million pounds in 1922 to about 7 million pounds per year during the period 1926–1931. Following this period, the catch declined steadily to a low of 1¹/₂ million pounds in 1942. This decline began after the stock market crash, but was too long (11 years) to be attributed entirely to its effects.

Three reasons for this drop in landings are: the meteoric expansion of the California sardine fishery during 1932–1936, the unprecedented demand for soupfin shark livers during the period 1937–1943, and the military restrictions on vessel cruises that went into effect at the start of World War II.

TABLE 1

Total Annual Rockfish Landings in the Northern, Central, and Southern California Areas,* 1916-1956, Inclusive

| | Pounds | | | | |
|------|--------------------|------------------------|------------------------|----------------------|--|
| Year | Northern | Central | Southern | Total | |
| 916 | 14 279 | 2.773.638 | 2,131,035 | 4.918.95 | |
| 917 | 28.082 | 4,307,400 | 3,438,544 | 7.774.020 | |
| 918 | 65.511 | 5.041.638 | 3,135,605 | 8,242,75 | |
| 919 | 15,075 | 3,508,089 | 1,874,945 | 5,398,109 | |
| 920 | 20,454 | 3,576,177 | 2,036,446 | 5,633,077 | |
| 921 | 30,672 | 2,952,000 | 1,778,986 | 4,761,65 | |
| 922 | 22,872 | 2,538,683 | 1,750,459 | 4,312,01 | |
| 923 | 7,473 | 2,743,770 | 2,345,379 | 5,096,62 | |
| 924 | 20,477 | 1,578,083 | 3,144,325 | 4,742,88 | |
| 925 | 66,414 | 1,973,220 | 3,448,987 | 5,488,62 | |
| 926 | 65,506 | 3,194,390 | 4,281,073 | 7,540,96 | |
| 927 | 124,346 | 2,713,534 | 3,552,724 | 6,390,60 | |
| 928 | 107,264 257,819 | 3,284,602 2,715,208 | 3,028,043 3,063,382 | 6,419,90 6.036.40 | |
| 929 | 257,819 | 2,715,208 | 3,063,382 | 6,036,40 | |
| 930 | 250,968 | 3,853,466 | 3,120,930 | 7,225,36 | |
| 931 | 105,950 | 3,605,088 | 3,566,658 | 7,277,69 | |
| 932 | 89,232 | 3,043,780 | 2,503,307 | 5,636,31 | |
| 933 | 31,119 | 2,756,025 | 2,000,630 | 4,787,77 | |
| 934 | 116,182 | 2,598,479 | 1,889,370 | 4,604,03 | |
| 935 | 160,321 | 3,036,733 | 1,634,120 | 4,831,17 | |
| 936 | 187,424 | 3,481,605 | 934,875 | 4,603,90 | |
| 937 | 133,417 | 3,142,243 | 1,015,554 | 4,291,21 | |
| 938 | 547,603 | 2,407,904 | 681,630 | 3,637,13 | |
| 939 | 755,440 | 1,718,643 | 859,043 | 3,333,12 | |
| 940 | 583,605 | 2,113,302 | 873,729 | 3,570,63 | |
| 941 | 456,083 | 1,913,120 | 1,036,419 | 3,405,62 | |
| 942 | 271,959 | 726,068 | 425,413 | 1,423,44 | |
| 943 | 1,375,468 | 887,535 | 499,189 | 2,762,19 | |
| 944 | 5,525,923 | 800,666 | 95,641 | 6,422,23 | |
| 945 | 11,718,824 | 1,362,287 | 204,863 | 13,285,97 | |
| 946 | 9,464,778 | 1,341,089 | 355,355 | 11,161,22 | |
| 947 | 6,356,942 | 1,732,780 | 408,862 | 8,498,58 | |
| 948 | 3,952,240 | 1,954,521 | 634,215 | 6,540,97 | |
| 949 | 3,290,741 | 1,868,638 | 908,498 | 6,067,87 | |
| 950 | 3,744,222 | 3,428,393 | 943,294 | 8,115,90 | |
| 951 | 4,573,598 | 5,380,488 | 1,037,966 | 10,992,05 | |
| 952 | 2,635,194 | 7,277,538 | 807.453 | 10,720,18 | |
| 953 | 3,091,672 | 8,477,957 | 658,601 | 12,228,23 | |
| 954 | 3,193,209 | 8,161,586 | 1,285,337 | 12,640,13 | |
| 955 | 2,967,837 | 5,722,645 | 3,991,215 | 12,681,69 | |
| 956 | 3,118,829 | 8,558,692 | 3,265,994 | 14,943,51 | |

* Northern Area—California State boundary south to Sonoma County line. Central—Sonoma County south to San Luis Obispo County line. Southern—San Luis Obispo County south to international boundary.

TABLE 1

Total Annual Rockfish Landings in the Northern, Central, and Southern California Areas, 1916–1956, Inclusive

The sardine catch expanded from 200,000 tons in 1932 to a high of 735,000 tons in 1936. Many setline fishermen deserted the rockfish fishery for the more profitable sardine purse seine fishery. Others began fishing for soupfin sharks during the period 1937–1943, when soupfin livers commanded extremely high prices because of their Vitamin A potency.

A need for fishery products caused military restrictions to be relaxed, however, and the rockfish catch doubled each year to a high of 13 million pounds in 1945. This increase in annual landings indicated that the stocks had not yet been overfished. When World War II ended, military orders were withdrawn and production dropped to 6 million pounds in 1949. The catch has climbed steadily since then to an all-time high of nearly 15 million pounds in 1956 (Figure 2).

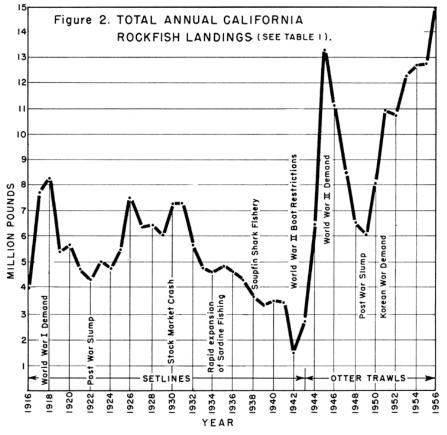


Figure 2. TOTAL ANNUAL CALIFORNIA ROCKFISH LANDINGS (SEE TABLE 1)

Before 1941 the yearly landings of rockfish were larger for California than for Oregon, Washington, and Alaska combined. Before 1940, landings in the Pacific Northwest were less than 1 million pounds, but increased demands during World War II skyrocketed the catch to 43 million pounds in 1945—an all-time high. Landings declined during 1946 and have fluctuated between 12 and 20 million pounds per year since 1947 (Figure 3). The Alaska rockfish resources are relatively unexploited at present.

DEPARTMENT OF FISH AND GAME

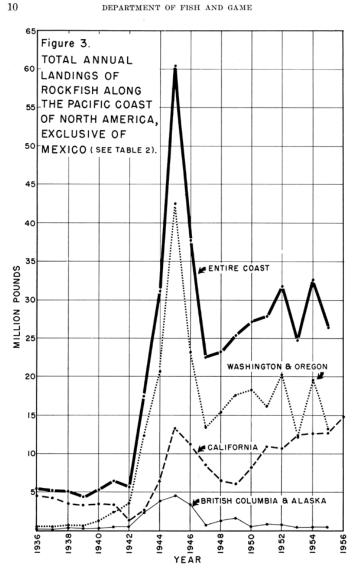


Figure 3. TOTAL ANNUAL LANDINGS OF ROCKFISH ALONG THE PACIFIC COAST OF NORTH AMERICA, EXCLUS-IVE OF MEXICO (SEE TABLE 2)

| TABLE 2 |
|--|
| Total Annual Landings of Rockfish Along the Pacific Coast of North America Exclusive of Mexico |
| (Figures in thousands of pounds) |

| Year | California | Washington and Oregon | British Columbia and Alaska | Total Coast |
|--------------------------------------|---|---|---|--|
| 1936 1937 1938 1939 | 4,604 4,291 3,637 3,333 | $644 \\ 625 \\ 733 \\ 722$ | 350 199 696 297 | 5,598 5,118 5,066 4,352 |
| 1940 | 3,571 3,406 1,423 2,762 6,422 | 1,287 2,428 3,559 12,307 20,792 | $348 \\ 575 \\ 683 \\ 2,462 \\ 3,928$ | 5,200 6,409 5,663 17,531 31,142 |
| 1945 1946 1947 | $13,286 \\11,161 \\8,499 \\6,541 \\6,068$ | $\begin{array}{r} 42,607\\ 23,315\\ 13,318\\ 15,414\\ 17,704 \end{array}$ | 4,554 3,494 830 1,245 1,573 | 60,447 37,970 22,647 23,200 25,345 |
| 1950 1951 1952 1953 1954 | | $18,304 \\ 16,013 \\ 20,220 \\ 12,047 \\ 19,513$ | 678 946 921 457 519 | 27,098 27,951 31,861 24,732 32,672 |
| 1955 1956 | 12,682 14,944 | 13,141 | 494 | 26,317 14,944 |

TABLE 2

Total Annual Landings of Rockfish Along the Pacific Coast of North America Exclusive of Mexico

Success of the Oregon and Washington fishery has been due to the development of a market for a rockfish called Pacific ocean perch, Sebastodes alutus. Steady utilization of this species began in 1945 and has, in recent years, comprised about 40 percent (6 to 7 million pounds) of the annual Pacific Northwest rockfish catch. Pacific ocean perch are not found in quantity off California. In 1955 only 60,000 pounds were landed, principally in the Eureka region. This amounted to about one-half of one percent of the total statewide rockfish catch.

This increase in the Northwest followed a sensational rise in the catch of a similar fish, Sebastes marinus, that abounds in the north Atlantic ocean. This species was called redfish or rosefish until 1951 when the "trade" was permitted to market it as ocean perch, a more acceptable name. The annual landings of this rockfish were of minor importance until the mid-thirties when a market for frozen fillets was developed. Concomitant with a decline in the haddock catch, ocean perch landings increased rapidly from about 118,000 pounds in 1930, to 17,000,000 in 1935, and then to a peak of 178,000,000 in 1946. This increase was obtained by expanding the fishing area from the Gulf of Maine to the productive Nova Scotia grounds.

1.2.2. Sport

The rockfish sport catch has increased phenomenally during the past few years. This increase is startling when compared to the total sport catch of all other kinds of fish reported by nearly 600 party boat operators. Many are taken from shore, skiffs, piers, and private boats, and by skindivers. These landings are not recorded.

Before World War II the rockfish sport catch was relatively stable. Since the war, however, the catch has soared to an undreamed of 60 percent of the total sport catch of all fish.

| | Numbe | | |
|---------|--------------------------|-----------|---------|
| Year | Total catch ¹ | Rockfish | Percent |
| 936 | 1,313,473 | 204,627 | 15.58 |
| 937 | 1.344.139 | 243,125 | 18.09 |
| 038 | 1,281,608 | 239.312 | 18.67 |
| 039 | 1,724,204 | 209,453 | 12.15 |
| 40 | 1.872.838 | 301,355 | 16.09 |
| 41-1946 | No available records | | |
| 47 | 2.070,432 | 193.377 | 9.34 |
| 48 | 2,110,019 | 410.271 | 19.44 |
| 949 | 2,339,794 | 570,637 | 24.39 |
| 050 | 2,190,413 | 679,164 | 31.01 |
| 51 | 2,350,644 | 721,808 | 30.71 |
| 052 | 2,305.875 | 706.004 | 30.62 |
| 953 | 2,280,158 | 696,480 | 30.55 |
| 054 | 3,274,537 | 1,149,367 | 35.10 |
| 955 | 3,113,883 | 1.737.707 | 55.81 |
| 956 | 3.262,995 | 2,036,708 | 62.42 |

| TABLE 3 | | | | | | | | |
|------------|----------|-------|----------|------|-------|-------|------|-------|
| Party Boat | Rockfish | Catch | Compared | With | Total | Party | Boat | Catch |

¹ Includes rockfish.

TABLE 3

Party Boat Rockfish Catch Compared With Total Party Boat Catch

The question arises, what caused this tremendous increase in sport landings? There are a number of causes. Traditionally important game and food fishes off Southern California have not been plentiful in recent years. The number of anglers has increased. Their desire to take something home for display and food purposes has not changed. Satisfaction of the anglers' desire is obtained by party boat captains who turn to the rockfish holes.

Increased catches occurred throughout the fishery during the last few years (Figure 4). The Southern California sport fishery has increased disproportionately, accounting for the bulk of the landings.

Records reveal that the rockfish portion of the total sport catch increased from 10 to 15 percent before the war to 20 to 30 percent after the war. However, 1955 and 1956 rockfish sport catches spiraled upward to comprise 55 and 62 percent of the total sport take.

Even though rockfish are the most abundant group in the sport landings, each species in this group must be studied separately so that a firm approach can be made to biological and managerial problems.

1.3. GEAR

1.3.1. Commercial Fishing

Setlines and trawl nets have played an important part in the development of the commercial rockfish fishery off California. Setlines, used as early as 1875, were the most important gear before the introduction of the balloon trawl from the Pacific Northwest late in 1943. Rockfish taken by trawlers were incidental to the catch of flatfish before the balloon trawl was introduced.

1.3.2. *Setlines*

Setlines are fished as longlines or as drop lines, from relatively small boats. The longline consists of a number of units, each with 200 or 300 hooks that are baited and fastened together in a long string. This

string, sometimes over a mile long, is weighted at both ends so that it will lie flat and fish on the bottom.

The drop line is a single unit weighted at the bottom. It has 75 to 200 hooks and is fished from a boat like a deepwater handline. One or more drop lines can be fished at the same time by using a buoy to support the upper ends.

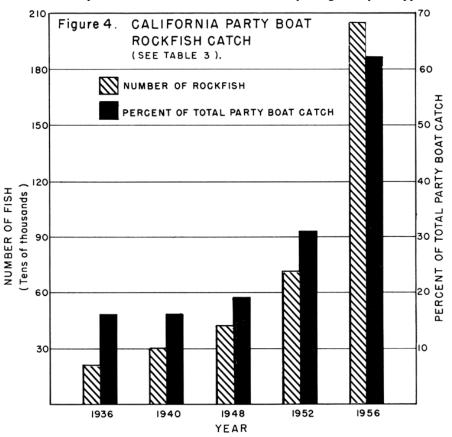


Figure 4. CALIFORNIA PARTY BOAT ROCKFISH CATCH (SEE TABLE 3)

1.3.3. Trawl Nets

An otter trawl net resembles a large, wedge-shaped sack that is widely open at the forward end and narrows toward the closed posterior end. An otter board or door is attached at an angle to each wing of the mouth, so that when the net is towed on the bottom of the sea the boards will veer outward and keep the mouth of the net open. The balloon trawl has a high mouth and is made of lighter material. Also, floats are added to the cork line so that the lead line will just skim or ride six to eight inches above the irregular bottom over which rockfish are found.

1.3.4. Sportfishing

Most sportfishermen use rod and reel or hand lines to catch rockfish. A few use heavy cotton line on a reel that is fastened to the rail of the vessel. With each type of gear several hooks are placed at intervals

on leaders or droppers according to the fisherman's preference. The majority of these hooks are baited with cut bait and fished at or near the bottom.

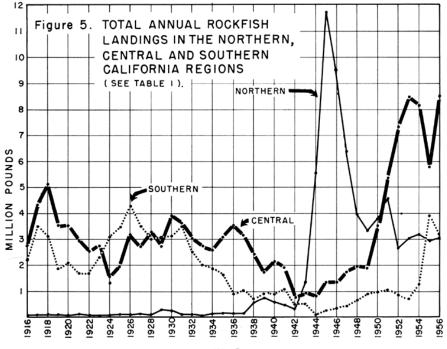
In certain localities fishermen will fish near the surface with a lure or flashing type of attractor in order to induce the fish to strike. In other localities the same type of gear is fished near the bottom. Some rockfish are taken by skindivers using a spear or some other type of impaling gear.

1.4. AREAS OF LANDING

1.4.1. Commercial

To evaluate the within-state commercial rockfish landings, California catches are assigned to three major geographical areas: Northern California, Central California, and Southern California (Figure 5). Northern California catches include those made from the Oregon border to Pt. Arena while Central California include those made from Pt. Arena to Piedras Blancas, and Southern California include those made from Piedras Blancas to the Mexican border. The main landing ports in Northern California are Crescent City, Eureka, Fields Landing, and Fort Bragg. In Central California they are Bodega Bay, Pt. Reyes, San Francisco, Santa Cruz, and Monterey, and in Southern California they are Morro Bay, Avila, Santa Barbara, Santa Monica, San Pedro, and San Diego.

During the period 1916 to 1931, the Central California and Southern California areas were nearly equal in importance. The annual catch from each averaged 3 million pounds. After 1931, there was a steady downward trend in Southern California catches to a low of 82,000



YEAR

Figure 5. TOTAL ANNUAL ROCKFISH LANDINGS IN THE NORTHERN, CENTRAL AND SOUTHERN CALI-FORNIA REGIONS (SEE TABLE 1)

pounds in 1944. A similar decline, though not as pronounced, occurred in Central California. Experienced fishermen feel that the severity of the decline in Southern California was due primarily to overfishing. An increased catch in the Central California region after 1943 was caused by the introduction of the balloon trawl. A similar increase did not occur to the south because trawl nets were prohibited in a large part of that area. Increased catches in Southern California during more recent years are due to the introduction of the otter trawl at Morro Bay.

| Port | Total pounds | Port | Total pounds |
|----------|--|-------|--|
| Monterey | 2,262,881 2,264,308 1,243,937 932,577 896,246 578,439 | Avila | $\begin{array}{r} 154.224\\ 152.874\\ 90.187\\ 71.314\\ 49.473\\ 46.040\\ 57.430\\ \hline 14.943.515\end{array}$ |

TABLE 4 Rockfish Landings at California Ports—1956

TABLE 4 Rockfish Landings at California Ports—1956

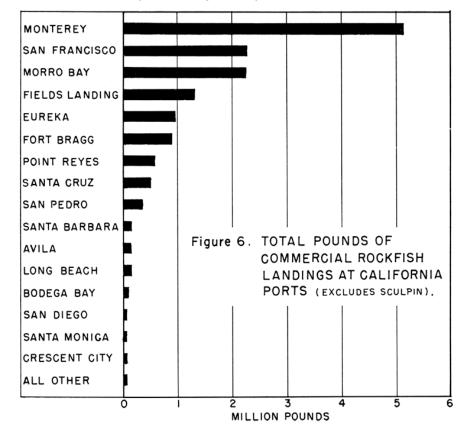


Figure 6. TOTAL POUNDS OF COMMERCIAL ROCKFISH LANDINGS AT CALIFORNIA PORTS (EXCLUDES SCULPIN)

Annual landings in the Northern California region were less than a million pounds until the balloon trawl was introduced. The efficiency of this net was demonstrated during the next two years, and in 1945 peak landings of 11,500,000 pounds were made at northern ports. A moderate increase to about 5 million pounds in 1951 was due to the Korean War demand. Since the war, landings of rockfish at Northern California ports have stabilized at about 3 million pounds per year.

San Francisco, Monterey, and Morro Bay were the three most important ports of landing for rockfish during 1956 (Figure 6). These ports accounted for 64 percent of the total rockfish catch. The next three most important ports are Fields Landing, Eureka, and Fort Bragg. Rockfish landings at all six ports accounted for 85 percent of the total catch.

1.4.2. Sport

The party boat catch is assigned to two major areas, Northern and Southern California. The most valuable rockfish center within the northern area lies between San Simeon and Avila. This area provided 25,273 sportfishermen with 543,304 fish during 1956. The southern "hotspot" in Santa Monica Bay furnished 52,767 anglers with a 705,333 rockfish haul.

Before 1951, Northern California "party boaters" reeled in twice as many rockfish as did the southerners. Nowadays, however, the reverse is true.

1.5. IMPORTANCE OF SPECIES

Fifty-four species of rockfish belonging to the genus Sebastodes live in the ocean waters along the Pacific Coast of North America. Forty-nine of these are found in California waters.

Six species, for many years, comprised the greatest part of our commercial catch. These are bocaccio and chilipepper, and the canary, vermilion, yellowtail, and black rockfish. At present, bocaccio is the dominant species in the statewide commercial catch. The six next important species are: olive, dark-blotched, widow, splitnose, and turkey-red rockfish, plus the Pacific ocean perch.

Eight species that are undesirable from a commercial standpoint because of their small size are shortbelly, stripetail, sharpchin, calico, greenstriped, halfbanded, squarespot, and pygmy rockfish. Some of these undesirable species are present in abundance on the fishing grounds. They are found in the stomachs of larger rockfish and at times appear in quantity in the "trashfish" landings.

The shortspine and longspine channel rockfish are the only species of genus Sebastolobus found along the Pacific Coast. The shortspine is large enough to be of some commercial importance in California. It is sometimes taken in deep water by longline and trawl net fishermen. Although the flesh is tasty, not more than about 50,000 pounds a year are landed in California. The yield of fillets from the shortspine and longspine is poor because of the large, thorny head and slender body. Occasional market landings of these two species are inappropriately called idiots, channel cod, or rock cod. The longspine is small in size and occasionally taken when fishing in depths of 300 fathoms or more.

The sculpin, Scorpaena guttata, is the sole representative of the genus Scorpaena in the ocean waters of California and is rarely caught north of Pt. Arguello. It is well known by its common name and is thus accurately recorded in statistical records. Commercial landings, however, are not great, amounting to about 100,000 pounds annually in recent years.

1.5.1. Sport

Many rockfishes are difficult to identify. As a result sport catch statistics provide only an estimate of the importance of individual species. These data indicate that blue rockfish are the most important species in northern sport catches, while bocaccio are more important to the south.

1.6. PRODUCTS

A Monterey sardine canner experimentally canned rockfish in 1941 but the venture failed. Small amounts have been salted and a few are marketed fresh dressed, particularly in Southern California.

A large part of the Pacific Coast rockfish catch is marketed as skinned fillets.

Seventy percent of the round weight is lost in the filleting process. This portion is reduced to meal for livestock feeding or ground with "trashfish" and used for mink and trout food. In 1955 California landings of "trashfish" for mink food totaled about one million pounds, most of which was landed in the Eureka and Fort Bragg areas. Samples of this catch indicated that about 10 percent of the total consisted of unmarketable rockfish.

1.6.1. Freezing

An important problem of concern in recent years has been to determine the freezer storage life of fillets from various rockfishes. Preliminary work on this problem has been conducted by the U. S. Fish and Wildlife Service in their Seattle laboratory. Several species were filleted and tested for intial palatability and appearance after having been frozen for varying periods of time (Miyauchi, D. T., and M. E. Standsby, 1952). These tests were limited to one lot of samples for each species, but the relative comparisons between species are of considerable interest. Fillet samples were tested from eight Pacific Coast species: Pacific ocean perch, and chilipepper, bocaccio, and splitnose, canary, vermilion, turkey-red, and channel rockfish. Tests were also made on the Atlantic ocean perch for comparison.

All lots of fillets from the various rockfish were tested prior to freezing and storage and found to differ in appearance, texture, and flavor. Flavor was rated as either good or very good for all species. After having been held in cold storage at 0° F. for varying periods of time, there were striking changes in appearance and flavor of some of the fillets. Pacific ocean perch was judged as having the best cold storage quality and the longest cold storage life (32 weeks). Bocaccio was second best (29 weeks). Vermilion rockfish deteriorated so rapidly that they were considered unsuitable for frozen storage. The remaining species tested had an acceptable cold storage life of 20 to 24 weeks. Atlantic ocean perch fillets were quite similar to those of Pacific ocean perch in appearance, flavor, and texture throughout the storage period. They had an acceptable cold storage life of 29 weeks.

On the basis of these tests the armed forces are specifying, by both common and scientific name, the rockfish they will accept. At the top of the list are Pacific ocean perch and bocaccio. Both of these species have a long freezer life and can thus be shipped overseas. Species with a shorter freezer life are destined for forces stationed in this country. However, an antifish attitude, due to uncertainties in quality of the packaged domestic product, exists among servicemen. This attitude has been reported from Army installations in Japan. Servicemen were relatively satisfied with fish obtained from Japanese waters, but domestic frozen fish shipped overseas for armed forces consumption did not "go over." Consequently, the office of the Quartermaster General has proposed a long-range frozen fish research program (Petersen, 1955). The main purpose of this program is: to determine relative consumer preference for various species of fish caught during different periods of the fishing season; to note their storage life; and to find a usable method for determining freshness in frozen fish.

1.7. REGULATIONS

California has very few laws that affect sport or commercial fishing for rockfish. Commercial setlines and longlines are permitted in all ocean waters of the State except the bays of Humboldt, San Francisco, San Pablo, Morro, and San Diego, and small areas in the northern and southern sections of Monterey Bay. Also the waters surrounding Santa Catalina Island are closed to commercial fishing.

Drag net operations are not permitted within three miles of the mainland anywhere in the State, and the use or possession of these nets is prohibited south of the Santa Barbara-Ventura County line. Minimum legal size mesh permitted in drag nets is four and one-half inches inside stretch measure.

No size, bag or seasonal limits apply to the commercial taking of rockfish in California.

Sportfishermen are restricted to 20 rockfish per day to conserve the easily accessible sport species found near rocky inshore areas.

1.8. RESEARCH

1.8.1. Age and Growth

Wales (1952), in a study of the blue rockfish, Sebastodes mystinus, used scales for determining the ages of specimens caught off Pacific Grove, California. He found that seven age groups were represented, but only the first four annuli on the scales could be easily recognized.

In the Washington State Department of Fisheries Annual Report for 1950, it is briefly noted that the copper rockfish, Sebastodes caurinus, will attain an age of over 20 years.

Perlmutter and Clarke (1949), studied immature Atlantic ocean perch and found that opercular bones, otoliths, and scales had growth bands, but scales proved the best for interpreting growth. They found that the scales do not form until the spring following the year of birth (hatching takes place from mid-May to September) necessitating the addition of one year to the total age indicated by annuli on the

scales. Growth is slow in this species. Fish with nine annuli on their scales were found to have an average length, snout to fork of tail, of only eight and one-half inches. Superficial examination of scales from larger fish indicated that they must be 20 years of age or older. Veschezerov (1944) reported comparable growth for rosefish, sebastes marinus, in Barents Sea.

1.8.2. Maturity and Fecundity

Wales (1952) found that first maturity in the blue rockfish, Sebastodes mystinus, occurs in the third and fourth years in males, and in the fourth and fifth years in females. A 16-inch female contained 524,000 eggs.

Perlmutter and Clarke (1949) found that first maturity in the Atlantic ocean perch, does not occur until the ninth or tenth year.

Clemens and Wilby (1946) noted that a specimen of "red snapper," Sebastodes ruberrimus, weighing 19¹/₂ pounds contained approximately 2,700,000 eggs. It was also noted that a large orange rockfish, S. pinniger, may contain as many as 600,000 eggs.

1.8.3. Spawning

Fertilization is internal in the species of the genus Sebastodes found along the Pacific Coast of North America and those found along the coast of Japan and the embryos develop within the body of the female until time of hatching. The same condition exists in Sebastes marinus of the Atlantic coast.

Sculpin eggs are fertilized externally. They are laid in floating masses resembling bilobed balloons.

It appears that the eggs are fertilized externally in the channel rockfish, Sebastolobus alascanus and Sebastolobus altivelis, however, little is known about the spawning habits of these two species.

Surveys conducted by the California Cooperative Sardine Research Program show that the larvae of a number of species of rockfish in the genus Sebastodes occur in great abundance throughout the year, in some cases as far as 300 miles off the coast of California.

For blue rockfish taken in Monterey Bay, Wales (1952) noted that the larvae hatched November to January. Alverson (1953) noted a mid-winter hatching period, probably during the months of January and February, for Pacific ocean perch in Pacific Northwest waters. Clemens and Wilby (1946) noted embryos about ready to hatch in February and March in specimens of canary rockfish from off Vancouver Island.

Phillips (unpublished) has noted a December to March hatching period in central Californian waters for several species including: bocaccio and chilipepper, and widow, speckled, cow, yellowtail, canary, vermilion, shortbelly, and stripetail rockfish. In some other species it appears that the hatching period may occur later.

Okada (1955) found that the hatching period for several species of Japanese Sebastodes was January to May. Perlmutter and Clarke (1949) cite a mid-May to September hatching period for Atlantic ocean perch taken in the Gulf of Maine.

1.8.4. Rearing Larvae

Morris (1956) reared the larvae of bocaccio, chilipepper, shortbelly rockfish, and stripetail rockfish for periods of 7 to 12 days. None survived the transition from the yolk sac stage although a few larvae of each species had ingested some small Artemia (brine shrimp).

The larvae were stripped from fish that had been caught in 100 fathoms of water off Monterey, California and were reared in salt water aquaria at the Hopkins Marine Station, Pacific Grove, California. The ovarian phase of development was apparently complete because the larvae began to swim within a few seconds after they were placed in water. At this stage the embryos are sufficiently pigmented with black so as to give the ready-to-hatch eggs a dark gray appearance.

If rockfish larvae could be reared successfully beyond this critical stage, and proper natural food made available before starvation occurs, it would be possible to illustrate all stages of development in the different species. With this knowledge, annual spawning success could be determined by means of plankton hauls and thus valuable information would be obtained for use in the management of our rockfish resources.

1.8.5. *Tagging*

Very little tagging of Pacific Coast rockfish has been undertaken. In 1929–1930, Wales (1952) tagged 1,050 blue rockfish which had been caught close to shore off Pacific Grove, California. Non-corrosive, metal strap tags were attached to the opercle. Although a total of 17 tagged fish was recaptured by hook and line fishing within 10 months, no definite information concerning the movements of this species was gained.

Tagging the species of adult rockfish found in comparatively shallow water, which are of primary interest to sportsmen, will not be difficult. However, tagging the commercially important species caught in deep water is a problem because of the difference in pressure between the surface and the deeper water.

Washington biologists, during the summer of 1956, started tagging "bloated" true cod, Gadus macrocephalus. brought up from deep water. These fish were deflated by puncturing the air bladder and applying pressure to the body walls (Pacific Fisherman, 1956b). It is not certain that such a method would work on rockfishes because expansion of gases in the air bladder often pushes the stomach out of place, inverting it into the throat. Also, the eyes frequently are popped. Various schemes for tagging such fish without bringing them to the surface have been considered. One of these proposals is to use detachable, marked hooks.

U. S. Fish and Wildlife Service biologists at Woods Hole, Massachusetts, considered various means by which the Atlantic ocean perch might be tagged. This species normally occurs in depths of 40–200 fathoms and is in a "bloated" condition when brought to the surface. Before any tagging of these deep living fish was attempted it was decided to investigate rumors that ocean perch occur near the surface in the late summer off Eastport, Maine. A check revealed hundreds of ocean perch feeding at or near the surface on small pelagic shrimp, Meganyctiphanes.

In three days of hook and line fishing during August, 1956, 317 rockfish were tagged. Biologists hope to eventually tag several thousand in this manner. The tag used was a brilliant yellow disc, pinned through the gill cover on the left side of the fish (Commercial Fisheries Review, 1956a).

It is possible that in some areas along the coast of California where upwelling of cold subsurface water occurs, deep water rockfish may be found near the surface, and thus tagging could be conducted on relatively normal fish. Also, since the immature of deep water species are found in shallower water, exploratory work may reveal areas of concentration of immature fish large enough to be tagged before they move into deeper water.

1.8.6. Racial Studies

No racial studies on the species of Pacific Coast rockfish have been reported. Perlmutter and Clarke (1949) subdivided the stock of Atlantic ocean perch occurring in the Gulf of Maine and off the western Nova Scotian coast into six population units. These units were determined by noting the centers of fishing, and the size composition of the catch in each center, and the degree of infestation of the fish with the copepod, Sphyrion lumpi.

1.8.7. Exploratory Fishing

No exploratory fishing has been conducted off the coast of California for new rockfish grounds, except by commercial fishermen. However, in the Pacific Northwest an uncharted seamount, on which there was an abundance of rockfish, was discovered during an exploratory cruise for albacore. The U. S. Fish and Wildlife Service vessel JOHN N. COBB ran over this uncharted seamount on August 3, 1950, about 280 miles west of Willapa Harbor, Washington. Soundings showed the shallowest portion to be 22 fathoms beneath the surface of the sea. There was also a large area 70 fathoms deep, surrounded by waters of 1,400 to 1,600 fathoms. Longline gear set at 70 fathoms yielded a good catch of large turkey-red rockfish, averaging 15 pounds each.

While passing over the seamount again on September 15, 1950, longline gear was fished at 40–160 fathoms. This time, in addition to turkey-reds, two unidentified species of rockfish were taken together with four Pacific halibut. Bottom samples and depth recorder traces indicated a rough, hard bottom with some fairly flat ledges, but unsuitable for trawling (Commercial Fisheries Review, 1950a).

1.9. CATCH STATISTICS

A program designed to improve a fishery must be based on reliable catch statistics. It is sometimes very difficult to obtain reliable rockfish catch information.

The multiplicity of species in the landings and the variation in common names within and between ports make it difficult for party boat skippers and market dealers alike to accurately report the species landed.

Uniform reporting of species in the commercial rockfish landings will be simplified if the "standard grouping" system proposed by the author can be effected. This system (Table 5) is designed to permit correct recording of the more important individual species. Less important species are grouped in what is considered "normal" combinations. In the future, if any species in a combination becomes important, it can be separated by its authorized common name. This procedure may be necessary in order to adapt a uniform rockfish reporting system to the sport catch. An improved reporting system will enable fishery biologists to evaluate trends in the total catch and to establish a sound basis for a better catch.

| Bocaccio | Sebastodes paucispinis Sebastodes goodei Sebastodes flaridus Sebastodes entomelas Sebastodes entomelas Sebastodes crameri Sebastodes rubrivindus Sebastodes rubrivindus Sebastodes rubrivindus Sebastodes auriculatus Sebastodes euriculatus Sebastodes constellatus Sebastodes constellatus Sebastodes constellatus Sebastodes conseus Sebastodes enso Sebastodes enso Sebastodes enso Sebastodes enso Sebastodes enso Sebastodes enso Sebastodes enso Sebastodes enso Sebastodes helevomaculatus Sebastodes diploproa Sebastodes melanops Sebastodes mustinus |
|--|--|
| Yellowtail rockfish Olive rockfish Speckled rockfish Dark-blotched rockfish Canary rockfish Turkey-red rockfish Flag rockfish Brown rockfish Whitebelly rockfish Copper rockfish Copper rockfish Starry rockfish Pink rockfish Honeycomb rockfish Starry rockfish Starry rockfish Brown rockfish Brown rockfish Brown rockfish Swordspine rockfish Swordspine rockfish Splitnose rockfish Splitnose rockfish Black rockfish | Sebastodes flavidus Sebastodes serranoides Sebastodes entomelas Sebastodes entomelas Sebastodes niniger Sebastodes miniger Sebastodes ruberrimus Sebastodes ruberrimus Sebastodes entoriutus Sebastodes excillaris Sebastodes carrinus Sebastodes constellatus Sebastodes constellatus Sebastodes constellatus Sebastodes eons Sebastodes eons Sebastodes eons Sebastodes helvomaculatus Sebastodes diploproa Sebastodes alutus Sebastodes alutus |
| Olive rockfish Widow rockfish Dark-blotched rockfish Canary rockfish Vermilion rockfish Turkey-red rockfish Flag rockfish Brown rockfish Whitebelly rockfish Copper rockfish Greenspotted rockfish Starry rockfish Rosy rockfish Pink rockfish Now rockfish Rosy rockfish Swordspine rockfish Splitnose rockfish Paicfic ocean perch Black rockfish | Sebastodes serranoides Sebastodes entomelas Sebastodes ovalis Sebastodes crameri Sebastodes crameri Sebastodes rubervindus Sebastodes rubrivindus Sebastodes auriculatus Sebastodes caurinus Sebastodes constellatus Sebastodes constellatus Sebastodes constellatus Sebastodes eonstellatus Sebastodes entervieweitus Sebastodes diploproa |
| Widow rockfish Speekled rockfish Dark-blotched rockfish Vermilion rockfish Turkey-red rockfish Flag rockfish Brown rockfish Whitebelly rockfish Copper rockfish Greenspotted rockfish Starry rockfish Rosy rockfish Nosy rockfish Honeycomb rockfish Swordspine rockfish Splitnose rockfish Paicfic ocean perch Black rockfish | Sebastodes entomelas Sebastodes crameri Sebastodes crameri Sebastodes crameri Sebastodes nubritinuts Sebastodes ruberrimus Sebastodes vezillaris Sebastodes vezillaris Sebastodes caurinus Sebastodes constellatus Sebastodes constellatus Sebastodes constellatus Sebastodes eos Sebastodes unbrosus Sebastodes inbrosus Sebastodes helvomaculatus Sebastodes diploproa Sebastodes alutus Sebastodes alutus |
| Speckled rockfish | Sebastodes ovalis Sebastodes crameri Sebastodes pinniger Sebastodes miniatus Sebastodes rubervinutus Sebastodes auriculatus Sebastodes auriculatus Sebastodes excillaris Sebastodes constellatus Sebastodes constellatus Sebastodes constellatus Sebastodes unbrosus Sebastodes unbrosus Sebastodes helvomaculatus Sebastodes diploproa Sebastodes diploproa |
| Dark-blotched rockfish. Canary rockfish. Vermilion rockfish. Turkey-red rockfish. Flag rockfish. Brown rockfish. Copper rockfish. Greenspotted rockfish. Starry rockfish. Rosy rockfish. Nosy rockfish. Nosy rockfish. Nosy rockfish. Swordspine rockfish. Swordspine rockfish. Rosethorn rockfish. Splitnose rockfish. Pacific ocean perch. Black rockfish. | Sebastodes crameri Sebastodes pinniger Sebastodes miniatus Sebastodes ruberrintus Sebastodes rubrivinctus Sebastodes auriculatus Sebastodes caurinus Sebastodes constellatus Sebastodes constellatus Sebastodes constellatus Sebastodes umbrosus Sebastodes umbrosus Sebastodes helvomaculatus Sebastodes diploproa Sebastodes diploproa Sebastodes alutus |
| Canary rockfish Vermilion rockfish Flag rockfish Flag rockfish Brown rockfish Whitebelly rockfish Greenspotted rockfish Starry rockfish Pink rockfish Honeycomb rockfish Honeycomb rockfish Rosethorn rockfish Splitnose rockfish Palick rockfish Splitnose rockfish Palick rockfish | Sebastodes pinniger Sebastodes miniatus Sebastodes ruberrimus Sebastodes rubrivinctus Sebastodes vezillaris Sebastodes caurinus Sebastodes constellatus Sebastodes constellatus Sebastodes eos Sebastodes eos Sebastodes unbrosus Sebastodes helvomaculatus Sebastodes diploproa Sebastodes alutus Sebastodes alutus |
| Vermilion rockfish Turkey-red rockfish Flag rockfish Brown rockfish Copper rockfish Copper rockfish Greenspotted rockfish Starty rockfish Pink rockfish Pink rockfish Honeycomb rockfish Swordspine rockfish Splitnose rockfish Splitnose rockfish Palek rockfish | Sebastodes miniatus Sebastodes ruberrimus Sebastodes rubervindus Sebastodes auriculatus Sebastodes eaurinus Sebastodes excillaris Sebastodes constellatus Sebastodes constellatus Sebastodes unbrosus Sebastodes unbrosus Sebastodes helvomaculatus Sebastodes diploproa Sebastodes diploproa Sebastodes alutus |
| Turkey-red rockfish. Flag rockfish. Brown rockfish. Whitebelly rockfish. Copper rockfish. Greenspotted rockfish. Starry rockfish. Pink rockfish. Pink rockfish. Honeycomb rockfish. Swordspine rockfish. Splitnose rockfish. Pacific ocean perch. Black rockfish. | Sebastodes ruberrimus Sebastodes rubrivindus Sebastodes auriculatus Sebastodes auriculatus Sebastodes caurinus Sebastodes constellatus Sebastodes constellatus Sebastodes eos Sebastodes eos Sebastodes envos Sebastodes rhodochloris Sebastodes helvomaculatus Sebastodes diploproa Sebastodes alutus |
| Flag rockfish. Brown rockfish. Copper rockfish. Copper rockfish. Starry rockfish. New rockfish. Pink rockfish. Pink rockfish. Swordspine rockfish. Swordspine rockfish. Splitnose rockfish. Splitnose rockfish. Pacific ocean perch. Black rockfish. | Sebastodes rubrivinctus Sebastodes auriculatus Sebastodes vezillaris Sebastodes caurinus Sebastodes constellatus Sebastodes constellatus Sebastodes eos Sebastodes eos Sebastodes inbrosus Sebastodes helvomaculatus Sebastodes diploproa Sebastodes alutus Sebastodes alutus |
| Brown rockfish. Copper rockfish Copper rockfish Greenspotted rockfish. Starty rockfish. Pink rockfish. Pink rockfish. Honeycomb rockfish. Swordspine rockfish. Splitnose rockfish. Pacific ocean perch. Black rockfish. | Sebastodes auriculatus Sebastodes vexillaris Sebastodes caurinus Sebastodes chlorostictus Sebastodes constellatus Sebastodes rosaceus Sebastodes umbrosus Sebastodes umbrosus Sebastodes helvomaculatus Sebastodes diploproa Sebastodes alutus Sebastodes alutus |
| Whitebelly rockfish Copper rockfish Greenspotted rockfish Starry rockfish Pink rockfish Honeycomb rockfish Swordspine rockfish Rosethorn rockfish Splitnose rockfish Pacific ocean perch Black rockfish | Sebastodes caurinus Sebastodes chlorostictus Sebastodes constellatus Sebastodes constellatus Sebastodes unbrosus Sebastodes unbrosus Sebastodes helvomaculatus Sebastodes diploproa Sebastodes alutus Sebastodes anelanops |
| Greenspotted rockfish Starry rockfish Rosy rockfish Honeycomb rockfish Swordspine rockfish Rosethorn rockfish Splitnose rockfish Pacific ocean perch Black rockfish | Sebastodes chlorostictus Sebastodes constellatus Sebastodes rosaceus Sebastodes eos Sebastodes umbrosus Sebastodes helvomaculatus Sebastodes diploproa Sebastodes alutus Sebastodes melanops |
| Starry rockfish Rosy rockfish Pink rockfish Honeycomb rockfish Swordspine rockfish Rosethorn rockfish Splitnose rockfish Pacific ocean perch Black rockfish | Sebastodes constellatus Sebastodes rosaceus Sebastodes eos Sebastodes umbrosus Sebastodes rhodochloris Sebastodes helvomaculatus Sebastodes alutus Sebastodes alutus |
| Rosty rockfish Pink rockfish Honeycomb rockfish Swordspine rockfish Rosethorn rockfish Splitnose rockfish Pacific ocean perch Black rockfish | Sebastodes rosaceus Sebastodes eos Sebastodes umbrosus Sebastodes rhodochloris Sebastodes helvomaculatus Sebastodes diploproa Sebastodes alutus Sebastodes melanops |
| Pink rockfish Honeycomb rockfish Swordspine rockfish Rosethorn rockfish Splitnose rockfish Pacific ocean perch Black rockfish | Sebastodes eos Sebastodes umbrosus Sebastodes rhodochloris Sebastodes helvomaculatus Sebastodes diploproa Sebastodes alutus Sebastodes melanops |
| Honeycomb rockfish | Sebastodes umbrosus Sebastodes rhodochloris Sebastodes helvomaculatus Sebastodes diploproa Sebastodes alutus Sebastodes melanops |
| Swordspine rockfish Rosethorn rockfish Splitnose rockfish Pacific ocean perch Black rockfish | Sebastodes rhodochloris Sebastodes helvomaculatus Sebastodes diploproa Sebastodes alutus Sebastodes melanops |
| Rosethorn rockfish Splitnose rockfish Pacific ocean perch Black rockfish | Sebastodes helvomaculatus Sebastodes diploproa Sebastodes alutus Sebastodes melanops |
| Splitnose rockfish Pacific ocean perch Black rockfish | Sebastodes diploproa Sebastodes alutus Sebastodes melanops |
| Pacific ocean perch Black rockfish | Sebastodes alutus Sebastodes melanops |
| Black rockfish | Sebastodes melanops |
| | |
| | Seduciones myserinas |
| Gopher rockfish | Sebastodes carnatus |
| Black-and-yellow | Sebastodes chrysomelas |
| Kelp rockfish | Sebastodes atrovirens |
| Grass rockfish | Sebastodes rastrelliger |
| China rockfish | Sebastodes nebulosus |
| Treefish | Sebastodes serriceps |
| Cow rockfish | Sebastodes levis |
| Silvergray rockfish | Sebastodes brevispinis |
| | Sebastodes aurora |
| | Sebastodes nigrocinctus Sebastodes proriger |
| | Sebastodes proriger Sebastodes aleutianus |
| Quillback rockfish | Sebastodes maliger |
| Coral-red rockfish | Sebastodes macdonaldi |
| Blackgill rockfish | Sebastodes melanostomus |
| Bronzespotted rockfish | Sebastodes gilli |
| Shortbelly rockfish | Sebastodes jordani |
| Stripetail rockfish | Sebastodes saxicola |
| | Sebastodes dalli |
| Halfbanded rockfish | Sebastodes semicinctus |
| | Sebastodes zacentrus |
| | Sebastodes hopkinsi |
| | Sebastodes wilsoni Sebastodes elongatus |
| | Aurora rockfish Tiger rockfish Redstripe rockfish Rougheye rockfish Quillback rockfish Dalackgill rockfish Bronzespotted rockfish Shortbelly rockfish Stripetail rockfish Calico rockfish |

TABLE 5

 TABLE 5

 Proposed Standardized Group Names for Reporting Commercial Rockfish Landings

1.10. REFERENCES

- Alverson, Dayton L. 1951. Deep-water trawling survey off the coast of Washington (August 27–October 18, 1951). U. S. Fish and Wildl. Serv., Comm. Fish. Rev., vol. 13, no. 11, pp. 1–16.
- 1953. Notes on the Pacific ocean perch. Wash. Dept. Fish., Fish. Res. Paps., vol. 1, no. 1, pp. 22-24.

1954. How high can perch climb? Pac. Fisher., vol. 52, no. 11, p. 25–28, Oct.

Clark, Frances N. 1935. Channel rockfish (Sebastolobus alascanus). Calif. Fish and Game, vol. 21, no. 1, pp. 85-86.

Clark, G. H. 1935. San Francisco trawl fishery. Calif. Fish and Game, vol. 21, no. 1, p. 22-37.

Cleaver, F. C. 1951. Rockfish. In Fisheries statistics of Oregon, Oregon Fish Comm., Contrib. no. 16, pp. 15–16.

Clemens, W. A., and G. V. Wilby 1946. Fishes of the Pacific coast of Canada. Canada Fish. Res. Bd., Bull. 68, 368 pp., 253 figs.

Commercial Fisheries Review 1950a. Red rockfish grounds discovered on uncharted seamount. U. S. Fish and Wildl. Serv., Comm. Fish Rev., vol. 12, no. 8, pp. 18.

1950b. Limit of expansion for East Coast rosefish fishery reached. Ibid. vol. 12, no. 10, pp. 30.

1951. "Ocean perch (rosefish)" designated by Service as name for rosefish. Ibid. vol. 13, no. 4, pp. 41-42.

1956a. Biologists tag first ocean perch. Ibid. vol. 18, no. 10, p. 28.

- 1956b. Antibiotics for fishery products preservation. Ibid. vol. 18, no. 12, pp. 27-28.
- Daugherty, Anita E. 1949. Sculpin. In The commercial fish catch of California for the year 1947 with an historical reveiew 1916–1947. Calif. Div. Fish and Game, Fish Bull. 74, pp. 122–124.

David, Lore R. 1939. Embryonic and early larval stages of the grunion, Leuresthes tenuis, and of the sculpin, Scorpaena guttata. Copeia, no. 2, pp. 75–81.

Firth, F. E. 1931. A note on spawning rosefish, Sebastes marinus (Linnaeus). Copeia, no. 2, p. 65.

Holmberg, Edwin K. 1948. Deep dragging by Eureka otter trawlers. Calif. Fish and Game, vol. 34, no. 4, pp. 218-219.

Langlois, Jack D. 1956. How the modern antibiotics help prevent fish spoilage. Pan American Fisher., vol. 11, no. 1, p. 14, Aug.

- Malaspina, Alex S. 1956. What antibiotics promise—higher fish quality over longer periods. (Condensed from paper delivered to New England Fish. Tech. Meet.) Pac. Fisher., vol. 54, no. 5, p. 20, April.
- Marine Research Committee 1952. Other fishes. In California Cooperative Sardine Research Program, Prog. Rept., 1 January 1951 to 30 June 1952, pp. 38–43.
- Miyauchi, D. T., and M. E. Stansby 1952. Freezing and cold storage of Pacific Northwest fish and shellfish. Pt. 1. Storage life of various rockfish fillets. U. S. Fish. and Wildl. Serv., Comm. Fish. Rev., vol. 14, no. 12a (suppl.), pp. 24–28.

Morris, Robert W. 1956. Early larvae of four species of rockfish, Scbastodes. Calif. Fish and Game, vol. 42, no. 2, pp. 149-153.

Okada, Y. 1955. Fishes of Japan. Tokyo, Maruzen Co., Ltd., 434 pp. + 28 pp. index, 391 figs.

Orton, Grace L. 1955. Early developmental stages of the California scorpionfish, Scorpaena guttata. Copeia, no. 3, pp. 210-214.

Pacific Fisherman 1942a. Immediate effects of war on Pacific Coast fisheries. Pac. Fisher., vol. 40, no. 1, pp. 14-15, Jan.

1942b. Fishing is interrupted in Southern California. Ibid. vol. 40, no. 1, p. 15, Jan.

1944. The rise of Pacific trawl fishing. Ibid. vol. 42, no. 10, pp. 45-74, Aug.

1947a. Canned rockfish runs into soft spot in market. Ibid. vol. 45, no. 4, p. 41, Mar.

1947b. Enormous fillet import flood is threatened. Ibid. vol. 45, no. 4, p. 77, Mar.

1947c. Price of fish keeping draggers at their docks. Ibid. vol. 45, no. 4, p. 79, Mar.

1951. Pacific ocean perch-opportunity to compete but no golden bonanza. Ibid. vol. 49, no. 9, pp. 19-21, Aug.

1956a. Cod-taggers must "vent" fish of expanded gases. Ibid. vol. 54, no. 10, p. 39, Sept.

1956b. Antibiotic protection for fish cleared in Canada. Ibid. vol. 54, no. 12, p. 18, Nov.

1957. 1956-trends-1957. Ibid. Yearbook no., vol. 55, no. 2, pp. 165-166.

Pacific Marine Fisheries Commission 1952. [Tables of fisheries landings for various fisheries of the Pacific Coast.] Compiled by John T. Gharrett. 24 pp. (ditto).

1956. [Tables of fisheries landings for various fisheries of the Pacific Coast.] Compiled by M. C. James. 24 pp. (ditto).

Pan American Fisherman 1956. New process helps keep fish fresh. Pan. Amer. Fisher., vol. 11, no. 4, p. 8, Nov.

Perlmutter, Alfred, and George M. Clarke 1949. Age and growth of immature rosefish (Sebates marinus) in the Gulf of Maine and off Western Nova Scotia. U. S. Fish and Wildl. Serv., Fish. Bull. 45, vol. 51, pp. 206–228.

Peterson, Stanley R. 1955. Outlines of a long-range frozen fish program for the armed forces. U. S. Fish and Wildl. Serv., Comm. Fish. Rev., vol. 17, no. 1, pp. 1–7.

Phillips, J. B. 1937. Rockfish. In The commercial fish catch of California for the year 1935. Calif. Div. Fish and Game, Fish Bull. 49, pp. 42–47.

1939. The rockfish of the Monterey wholesale fish markets. Calif. Fish and Game, vol. 25, no. 3, pp. 214–225.

1949. Rockfish. In The commercial fish catch of California for the year 1947 with an historical review 1916–1947. Calif. Div. Fish and Game, Fish. Bull. 74, pp. 116–120.

Powell, Donald E. 1950. New seamount discovered. *In* Preliminary report on 1950 North Pacific albacore tuna explorations of the *John N. Cobb.* U. S. Fish and Wildl. Serv., Comm. Fish. Rev., vol. 12, no. 12, p. 5.

Ripley, Wm. Ellis 1949. Bottom fish. *In* The commercial fish catch of California for the year 1947 with an historical review 1916–1947. Calif. Div. Fish and Game, Fish. Bull. 74, pp. 63–75.

Schaefers, E. A., K. A. Smith and M. R. Greenwood 1955. Bottom fish and shellfish explorations in the Prince William Sound area, Alaska, 1954. U. S. Fish and Wildl. Serv., Comm. Fish. Rev., vol. 17, no. 4, pp. 6–28.

Scofield, W. L. 1945. The "balloon" type otter trawl for rockfishes. Calif. Fish and Game, vol. 31, no. 1, pp. 12–15.

1947. Drift and set line fishing gear in California. Calif. Div. Fish and Game, Fish. Bull. 66, 38 pp.

1948. Trawling gear in California. Calif. Div. Fish and Game, Fish. Bull. 72, 60 pp.

- Standsby, Maurice E., and John Dassow 1949. Storage life of whole and split rockfish fillets. U. S. Fish and Wildl. Serv., Comm. Fish. Rev., vol. 11, no. 7, pp. 1–8.
- Stern, Joseph A., Harmon L. Liebman, Robert E. Munkelt and Byron Hatherell 1956. Potential application of antibiotics in the salmon canning industry. Pac. Fisher., vol. 54, no. 12, pp. 13–18, Nov.
- Tåning, Å. Vedel 1949. On the breeding places and abundance of the red fish (Sebastes) in the north Atlantic. Cons. Perm. Internat. Explor. Mer., Jour., vol. 16, no. 1, pp. 85–95.

Wales, Joseph H. 1952. Life history of the blue rockfish, Sebastodes mystinus, Calif. Fish and Game, vol. 38, no. 4, pp. 485–498.

Washington Department of Fisheries 1950. Rockfish. Wash. Dept. Fish., Ann. Rept., pp. 47-49.

2. LIST OF COMMON AND SCIENTIFIC NAMES OF FISHES, CRUSTA-CEANS, AND MOLLUSKS

Common name Anchovy Barracuda, California Bonito Cabezon Cabrilla Carp Corvina, shortfin Croaker, white (kingfish) Small amounts of queenfish Dolphinfish Eel California moray Monkeyface-eel Rock-eel Flounder Starry flounder Small amounts of other flatfishes Flyingfish Grouper Hake Halfmoon Halibut, arrowtooth Halibut, California Halibut, Pacific Hardhead Greaser blackfish Hardhead Herring, Pacific Lingcod Mackerel, jack Mackerel, Pacific Needlefish, California Opaleye Perch Surfperch Pompano, California Ratfish Rock bass Kelp bass Sand bass Rockfish Sablefish Salmon King Silver Sanddab Small amounts of other species Sardine Sargo, California Sculpin Sculpin, staghorn Sea bass, black Seabass, white Seatrout, greenling Shad

Scientific name Engraulis mordax Sphyraena argentea Sarda chiliensis Scorpaenichthys marmoratus Epinephelus analogus Cyprinus carpio Cynoscion parvipinnis Genyonemus lineatus Seriphus politus Coryphaena hippurus Gymnothorax mordax Cebidichthys violaceus Xiphister mucosus Platichthys stellatus Cypselurus californicus Species of Mycteroperca Merluccius productus Medialuna californiensis Atheresthes stomias Paralichthys californicus Hippoglosus stenolepis Orthodon microlepidotus Mylopharodon conocephalus Clupea pallasi Ophiodon elongatus Trachurus symmetricus Pneumatophorus diego Strongylura exilis Girella nigricans Members of family Embiotocidae Palometa simillima Hydrolagus colliei Paralabrax clathratus Paralabrax nebulifer All species of Sebastodes and Sebastolobus Anoplopomo fimbria Oncorhynchus tshawytscha Oncorhynchus kisutch Citharichthys sordidus Sardinops caerulea Anisotremus davidsoni

Anisotremus davidsoni Scorpaena guttata Leptocottus armatus Stereolepis gigas Cynoscion nobilis Hexagrammos decagrammus Alosa sapidissima

| Shark Basking | Cetorhinus maximus |
|----------------------------------|--------------------------------|
| Bonito | Isurus glaucus |
| | |
| Dogfish | Squalus acanthias |
| Leopard | Triakis semifasciata |
| Soupfin | Galeorhinus zyopterus |
| Thresher | Alopias vulpinus |
| Varying amounts of er species | |
| Sheep-head | Pimelometopon pulchrum |
| Sierra | Scomberomorus sierra |
| Skate | |
| Big | Raja binoculata |
| California | Raja inornata |
| Longnose | Raja rhina |
| Smelt | |
| Grunion | Leuresthes tenuis |
| Jacksmelt | Atherinopsis californiensis |
| Surf | Hypomesus pretiosus |
| Topsmelt | Atherinops affinis |
| Sole | |
| Dover | Microstomus pacificus |
| English | Parophrys vetulus |
| Petrale | Eopsetta jordani |
| Rex | Glyptocephalus zachirus |
| Sand | Psettichthys melanostictus |
| Varying amounts of er species | of oth- |
| Splittail | Pogonichthys macrolepidotus |
| Squawfish | Ptychocheilus grandis |
| Sturgeon | Member of family Acipenserida |
| Swordfish | Xiphias gladius |
| Tomcod | Microgadus proximus |
| Tuna | • |
| Albacore | Thunnus germo |
| Bigeye | Parathunnus sibi |
| Bluefin | Thunnus saliens |
| Skipjack | Katsuwonus pelamis |
| Yellowfin | Neothunnus macropterus |
| Turbot | |
| Curlfin | Pleuronichthys decurrens |
| Diamond | Hypsopsetta guttulata |
| Hornyhead | Pleuronichthys verticalis |
| Small amounts of o | |
| species | |
| Wahoo | Acanthocybium solandri |
| Whitebait | Allosmerus elongatus |
| | Spirinchus starksi |
| | Young of several other species |
| Whitefish, ocean | Caulolatilus princeps |
| Yellowtail | Seriola dorsalis |
| Crab | Cancer magister |
| Crab, rock | Other species of Cancer |
| Lobster, spiny | Panulirus interruptus |
| Prawn | Pandalus species |
| Shrimp, bay | Crago franciscorum |
| | Crago nigricauda |
| Shrimp, ocean | Pandalus jordani |
| | |

| Common name | Scientific name |
|----------------|------------------------|
| Abalone | |
| Pink | Haliotis corrugata |
| Red | Haliotis rufescens |
| Southern green | Haliotis fulgens |
| White | Haliotis sorenseni |
| Clam | |
| Gaper | Schizothaerus nuttalli |
| Jackknife | Tagelus californianus |
| Pismo | Tivela stultorum |
| Washington | Saxidomus nuttalli |
| Octopus | Paroctopus appollyon |
| Oyster | |
| Eastern | Crassostrea virginica |
| Kumamoto | Crassostrea gigas var. |
| Native | Ostrea lurida |
| Pacific, giant | Crassostrea gigas |
| Squid | Loligo opalescens |

3. EXPLANATION OF TABLES

Tables published in this bulletin supply the complete available record of all fish, mollusks, and crustaceans landed in California by commercial fishing vessels or shipped into California for processing.

Fishing vessels possessing California Fish and Game plates and delivering fish to foreign ports for transshipment to California cannot always be identified and the bulk of their landings cannot be separated in the record. Shipment figures are complete for fish that are processed. Statistics on shipments of fish destined for sale, either fresh or frozen, or for transshipment are not included because our records are incomplete.

Condition or extent of cleaning is not always indicated on the source documents (fish receipts) and for the various species this cannot be ascertained. We therefore use the weight as given by the dealer.

Mollusks and crustaceans are often purchased by number or container size rather than by weight. It is desirable to show all catch figures in round weight. Hence appropriate average conversion factors have been developed as follows:

Crab, market 2 lbs. each Abalone, red 50 lbs. per doz. Abalone, pink 35 lbs. per doz. Abalone, southern green 35 lbs. per doz. Clams, Mexican Pismo 8 lbs. round wt. per 1 lb cleaned wt. Clams, Washington 7 lbs. per doz. Oyster, eastern 30 lbs. per hundred Oyster, giant Pacific 50 lbs. per hundred

The value of the species of fish is based on the value to the fishermen at the time of delivery. When the price per pound is not indicated on the fish receipt, an average price is calculated for each region and

applied to the unpriced fish. The statistical regions and counties contained therein are shown in Figure 1.

Occasionally small poundages of fish are sold in counties away from the coastal regions. In these instances credit is given to the nearest port and region. Halibut delivered to the San Francisco region in previous years was prorated and published as 90 percent Pacific halibut and 10 percent California halibut. Recent investigation indicates that 90 to 99 percent of the landings are California halibut, instead of Pacific halibut. Hence, all halibut landed in the San Francisco region is published as California halibut except when the variety is specifically designated as Pacific or Northern by the fish dealers.

Most notable change in this year's bulletin is the separation of the more important species of sole. Dover, English, petrale, rex and sand sole are recorded individually. Arrowtooth halibut, also separated, was formerly combined with the aforementioned species in the general sole category. This change was made to answer requests for the pounds and value of the separate species of sole. Changes cause problems, in this case anyone wanting to make comparisons with previous years sole landings would have to combine the species mentioned above with the general category, sole unclassified.

The trend in total landings is shown in Table 6 and Figure 7 for the years 1916–1955. The pounds and value for 1955 and 1956 are compared in Tables 7 and 8 and Figures 8 and 9. The number of licensed fishermen and boats registered yearly are given in Tables 9 through 13. The term "yearly" is used as it distinguishes license year April 1 through March 31 from calendar year as used in the remaining tables.

Detail poundages by species and regions for 1955 are included in Tables 14–23, and for 1956 in Tables 32–41. Value figures for 1955 are given in Tables 24–31 and for 1956 in Tables 42–49. The catch of the most important fish taken by party boat sportfishermen is given by numbers in Table 50 for the years 1947–1956. The live bait catch for 1952 through 1956 is included in Table 51.

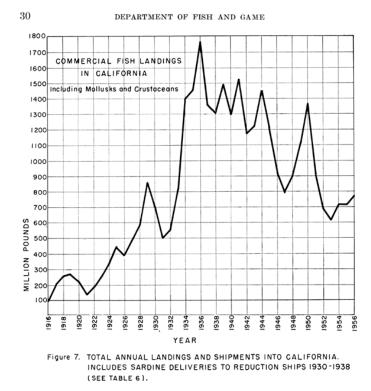


Figure 7. TOTAL ANNUAL LANDINGS AND SHIPMENTS INTO CALIFORNIA. INCLUDES SARDINE DELIVER-IES TO REDUCTION SHIPS 1930–1938 (SEE TABLE 6)

THE MARINE FISH CATCH OF CALIFORNIA

TABLE 6 Total Annual Landings and Shipments Into California of Commercial Fish, Mollusks, and Crustaceans Includes Sardine Deliveries to Reduction Ships During 1930 Through 1938 Year Pounds Year Pounds 95,002,695209,876,670 261,134,265 266,270,240 222,004,376 $\substack{1,764,900,136\\1,362,983,717\\1,310,595,651\\1,486,534,906\\1,297,517,441}$ 1916 1917 1918 1919 1920 1936. 1937. 1938. 1939. 1939. $\begin{array}{c} 135,347,826\\ 182,343,333\\ 253,874,581\\ 340,445,919\\ 437,502,232 \end{array}$ 1941. 1942. 1943. 1944. 1945. 1,529,147,6451,173,414,0781,234,049,1191,459,445,8591,216,467,4331921. 1922. 1923. 1924. 1925. 394,964,393 487,166,143 583,526,751 856,854,055 702,188,795 1946. 1947. 1948. 1949. 1950. 1926. 1927. 1928. 1929. 1930. 919,850,476 795,498,998 795,498,998 900,540,206 ,135,325,345 ,366,596,282 502,389,875556,139,053821,805,0071,390,798,6501,448,016,5841951 1952 1953 1954 1955 1955 904,088,178 694,976,990 618,898,616 713,406,246 710,713,523 772,548,722 1931 1932 1933 1934 1935

TABLE 6 Total Annual Landings and Shipments Into California of Commercial Fish, Mollusks, and Crustaceans Includes Sardine Deliveries to Reduction Ships During 1930 Through 1938

31

DEPARTMENT OF FISH AND GAME

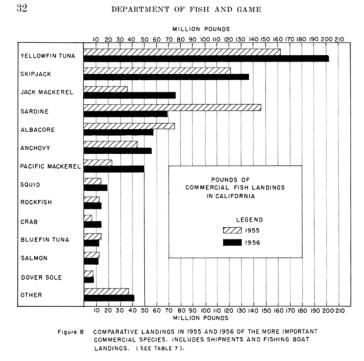


Figure 8 COMPARATIVE LANDINGS IN 1955 AND 1956 OF THE MORE IMPORTANT COMMERCIAL SPE-CIES. INCLUDES SHIPMENTS AND FISHING BOAT LANDINGS. (SEE TABLE 7)

TABLE 7 Total Commercial Fish Landings and Shipments Into California

| 1955 | | 1956 | | |
|---|--|---|--|--|
| Species | Pounds | Species | Pounds | |
| Yellowfin tuna Sardine Skipjack Albacore Anchovy | $\begin{array}{r} 162,818,007\\ 145,607,749\\ 120,524,979\\ 73,846,973\\ 44,691,582 \end{array}$ | Yellowfin tuna Skipjack Jack mackerel. Sardine Albacore | 203,885,489 135,995,434 75,762,110 69,561,145 57,377,986 | |
| Jack mackerel. Pacific mackerel. Squid. Bluefin tuna. Rockfish. | 35,754,707 23,311,211 14,271,968 13,952,523 12,681,697 | Anchovy. Pacific mackerel. Squid. Rockfish. Crab. | 56,920,585 50,013,009 19,483,984 14,943,515 14,320,459 | |
| Salmon Dover sole | $\substack{12,416,795\\8,185,501\\6,119,320\\4,185,875\\4,134,779}$ | Bluefin tuna Salmon Dover sole. Giant Pacific oyster Abalone | 12,788,843 11,602,753 8,268,424 6,101,220 4,284,063 | |
| Petrale sole | 3,619,503 2,518,207 1,946,521 1,635,067 1,578,976 | English sole Sablefish Petrale sole Pacific herring Hake | 3,824,952 3,471,819 2,830,058 1,735,776 1,376,217 | |
| California barracuda. Rex sole. All others. | 1,140,959 1,094,437 14,676,187 | Pismo clam Ocean shrimp Rex sole. White seabass. Shark. Arrowtooth halibut. All others. | 1,274,312 1,168,519 1,147,373 1,090,710 1,085,314 1,070,597 11,164,056 | |
| Total pounds | 710,713,523 | Total pounds | 772,548,722 | |

2 - 72272

 TABLE 7

 Total Commercial Fish Landings and Shipments Into California

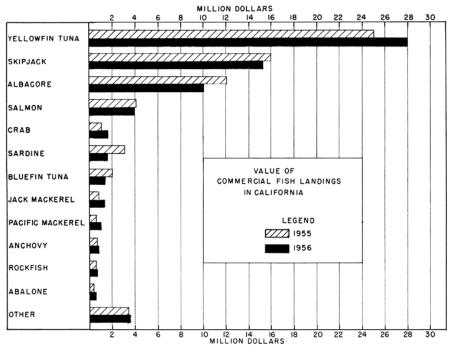


Figure 9. COMPARATIVE VALUES IN 1955 AND 1956 OF THE MORE IMPORTANT COMMERCIAL SPECIES. INCLUDES SHIPMENTS AND FISHING BOAT LANDINGS. (SEE TABLE 8).

Figure 9. COMPARATIVE VALUES IN 1955 AND 1956 OF THE MORE IMPORTANT COMMERCIAL SPECIES. INCLUDES SHIPMENTS AND FISHING BOAT LANDINGS. (SEE TABLE 8)

TABLE 8

| 1955 | | 1956 | |
|---|---|--|---|
| Species | Value | Species | Value |
| Yellowfin tuna Skipjack Albacore Salmon Sardine Bluefin tuna Crab Jack mackerel Anchovy Pacific mackerel Pacific mackerel | $\begin{array}{r} 4,087,719\\ 3,069,453\\ 1,985,392\\ 976,305\\ 711,724\\ 596,584\\ 531,657\end{array}$ | Yellowfin tuna | \$28,003,747 15,544,901 10,075,357 4,030,755 1,816,116 1,673,705 1,669,979 1,531,587 1,065,512 721,792 |
| Rockfish Spiny lobster Abalone Dover sole All others | 423,253 395,452 | RockfishAbalone Dover soleSpiny lobsterAll othersAll others | 630,848 480,584 391,299 384,722 3,084,101 |
| Total value | \$69,114,444 | Total value | \$71,105,005 |

Value of Commercial Fish Landings and Shipments Into California

TABLE 8

Value of Commercial Fish Landings and Shipments Into California

| 1947-1948 | $\begin{array}{c} 12,894\\ 14,261\\ 14,962\\ 14,600\\ 13,193 \end{array}$ | 1952-1953 1953-1954 1954-1955 1955-1956 1956-1957 | 11,566 11,372 11,647 10,277 9,811 |
|-----------|---|---|---|
|-----------|---|---|---|

TABLE 9 Yearly Number of Licensed Commercial Fishermen in California

TABLE 9

Yearly Number of Licensed Commercial Fishermen in California TABLE 10

Number of Commercial Fishermen Licensed by Region and License Year

| | Number of fishermen | |
|---------------------|---|--|
| Region of residence | 1955-1956 | 1956-1957 |
| Eureka | $\begin{array}{r} 843\\ 472\\ 1,309\\ 958\\ 458\\ 3,162\\ 2,502\\ 528\\ 31\\ 13\end{array}$ | $1,016 \\ 383 \\ 1,413 \\ 905 \\ 479 \\ 2,685 \\ 2,299 \\ 599 \\ 18 \\ 14$ |
| Totals | 10,277 | 9,811 |

TABLE 10

Number of Commercial Fishermen Licensed by Region and License Year

| TABLE 11 |
|----------|
|----------|

| Season | Under 40 feet | 40 to 84 feet | 85 feet and over | Total |
|---|---|---|--|--|
| 1947-1948 1948-1949 1949-1950 1950-1951 1951-1952 1952-1953 1953-1954 1953-1954 1954-1955 1955-1956 1956-1957 1957 | 3,639 4,088 4,294 4,127 3,599 3,589 3,167 2,949 2,886 | $\begin{array}{c} 1,201\\ 1,378\\ 1,595\\ 1,710\\ 1,631\\ 1,583\\ 1,595\\ 1,595\\ 1,520\\ 1,297\\ 1,267\end{array}$ | $\begin{array}{c} 202\\ 256\\ 271\\ 266\\ 279\\ 272\\ 246\\ 215\\ 204\\ 199\\ \end{array}$ | 5,042 5,722 6,160 6,103 5,837 5,454 5,430 4,902 4,450 4,352 |

Yearly Number of Fishing Boats, Grouped According to Length

TABLE 11 Yearly Number of Fishing Boats, Grouped According to Length

TABLE 12

Number of Fishing Boats, Grouped by Length and Region of Home Port During the 1955-1956 Season

| | | Numb | er of boats, | grouped by | length | | Total number |
|--|--|------------------|---|------------------|------------------|----------------------|--------------------------------|
| Region of home port | Up to 24 feet | 25 to 39 feet | 40 to 64 feet | 65 to 84 feet | 85 to 99 feet | 100 feet and over | of boats for each region |
| Eureka Sacramento | $ \begin{array}{r} 145 \\ 30 \end{array} $ | $247 \\ 164$ | 84 9 | 4 | 1 | 2 | 483 204 |
| San Francisco Monterey | $52 \\ 146$ | 518 237 | $167 \\ 62$ | 4 21 | 2 | 2 | 743 468 |
| Santa Barbara Los Angeles | 35 199 | $126 \\ 637$ | $\frac{72}{367}$ | 1 88 | 35 | 17 | 234 1,343 |
| San Diego Alaska, Washington and Oregon | $^{123}_{2}$ | $234 \\ 54$ | $ \begin{array}{r} 163 \\ 210 \end{array} $ | 20 24 | 36 | 106 3 | 682 293 |
| Total number of boats | 732 | 2,217 | 1,134 | 163 | 74 | 130 | 14,450 |

¹ The owners of 809 of these vessels were issued fishing party permits.

TABLE 12

Number of Fishing Boats, Grouped by Length and Region of Home Port During the 1955–1956 Season TABLE 13

Number of Fishing Boats, Grouped by Length and Region of Home Port During the 1956-1957 Season

| | | Numb | er of boats, | grouped by | length | | Total number |
|-------------------------------|---|-------------------|------------------|------------------|------------------|----------------------|--------------------------------|
| Region of home port | Up to 24 feet | 25 to 39 feet | 40 to 64 feet | 65 to 84 feet | 85 to 99 feet | 100 feet and over | of boats for each region |
| Eureka Sacramento | $\begin{array}{c} 191\\ 31 \end{array}$ | $270 \\ 156$ | 90 5 | 4 | 1 | 2 | $558 \\ 192$ |
| San Francisco | 101 | $\frac{499}{242}$ | 157 | 10 21 | 2 | | 767 |
| Monterey Santa Barbara | $130 \\ 33$ | 242 136 | 65 | 21 | 2 | | 473 237 |
| Los Angeles | 169 | 535 | 340 | 73 | 34 | 19 | 1,170 |
| San Diego | 99 | 215 | 166 | 24 | 35 | 102 | 641 |
| Alaska, Washington and Oregon | 3 | 76 | 213 | 18 | 3 | 1 | 314 |
| Total number of boats | 757 | 2,129 | 1,114 | 153 | 75 | 124 | 14,352 |

¹ The owners of 722 of these vessels were issued fishing party permits.

TABLE 13

Number of Fishing Boats, Grouped by Length and Region of Home Port During the 1956–1957 Season

TABLE 14

Origin of Shipments of Fresh Fish Into California During 1955

| | | | Shipped to | | | |
|---|--|--------------------|----------------------------|--|------------------------------------|--|
| Shipped from | San Francisco region | Monterey region | Santa Barbara region | Los Angeles region | San Diego region | Total pounds |
| Continental United States: Eel | 21,568 | | | 508 23,007 114,180 | | 508 21,568 23,007 120,330 |
| Oregon, Washington, Canada and Alaska: Halibut, Pacific. Sablefish. Salmon. Shad. Sturgeon. Miscellaneous fish | 40,529 221,689 81,656 6,285 10.940 | | | 230.781 356,651 21,665 95 | | 40,529 452,470 438,307 6,285 21,665 11,035 |
| South of the international bound- ary: Cabrilla | | | | | 982 921 10,460 909 674 | $16,344 \\ 10,465 \\ 10,460 \\ 909 \\ 674$ |
| Seabass, white Tuna, albacore Tuna, skipjack Tuna, yellowfin Wahoo Mollusk: Clam, Pismo | | | | 156,791 87,014 132 1,578,976 | 263 3,193 215,777 64,395 | 263 3,193 372,568 151,409 132 1,578,976 |
| South America: Bonito Tuna, albacore Tuna, bigeye Tuna, skipjack Tuna, yellowfin | 12,186 1,136,739 | | | 2.935 392.641 5.896 10,028.686 3,457,755 | 2,876 6,571,123 3,866,642 | 2,935 395,517 20,612 18,113,039 7,597,719 |
| Japan: Salmon Swordfish Tuna, albacore Tuna, bigeye Tuna, skipjack Tuna, yellowfin | 4,787,991 100,277 | | | 746 1,081 38,788,908 391,645 148,416 22,902,224 | 869,066 | 746 1,081 44,445,965 491,922 148,416 32,754,008 |
| Australia: Tuna, bluefin | | | | 343,346 | | 343,346 |
| Total pounds | 13,986,723 | 602,630 | 2,340,784 | 79,058,985 | 11,607,281 | 107,596,403 |

Recapitulation

| | Pounds | | Pounds |
|------------------|--|---|--|
| Bonito | 2,935 16,344 508 10,465 10,460 | Sturgeon | 21,665 1,081 44,844,675 512,534 343,346 |
| Halibut, Pacific | 909 452,470 439,053 674 | Tuna, skipjack. Tuna, yellowfin. Wahoo. Miscellaneous fish. Moltusk: Clam, Pismo. Total pounds. | 18,634,023 40,526,143 132 131,365 1,578,976 107,596,403 |

TABLE 14Origin of Shipments of Fresh Fish Into California During 1955

38

TABLE 15

Origin of the Commercial Fish Landings and Shipments Into California During 1955 Fishing Boat Landings

| | | Fishing bo | at landings | | | Total pounds of |
|--|--|--------------------------------------|---|---|--|---|
| Species | California | North of the state boundary | South of the inter- national boundary | Total fishing boat landings | Shipments | fishing boat landings and shipments combined |
| Anchovy | $44,691,582 \\ 322,831 \\ 40,354 \\ 6,944$ | | 818,128 96,636 | 44,691,582 1,140,959 136,990 6,944 | 2,935 | 44,691,582 1,140,959 139,925 6,944 |
| Cabrilla Carp Croaker, white (kingfish) | 734,518 818,997 | | 100,769 | 100,769 734,518 819,488 | 16,344 | 117,113 734,518 819,488 |
| Eel Flounder Flyingfish | 646,948 22,565 | 3,232 | | 650,180 22,565 | 508 | 508 650,180 22,565 |
| Grouper Hake Halibut, arrowtooth Halibut, California | 883,007 34,050 684,123 363,834 | 73,538 | 245,520 360 145,968 | 245,520 956,545 34,410 748,249 509,802 | 10,465 | 255,985 956,545 34,410 748,249 520,262 |
| Halibut, Pacific. Hardhead Herring, Pacific. Lingcod Mackerel, jack. | 51,942 64,436 1,946,521 934,200 35,754,707 | 30,726 | | 51,942 64,436 1,946,521 964,926 35,754,707 | 40,529 | 92,471 64,436 1,946,521 964,926 35,754,707 |
| Mackerel, Pacific Opaleye Pereh Pompano, California Ratfish | 23,310,005 6,117 136,554 79,294 18,533 | | 297 | $23,310,302 \\ 6,117 \\ 136,554 \\ 79,304 \\ 18,533$ | 909 | $23,311,211 \\ 6,117 \\ 136,554 \\ 79,304 \\ 18,533$ |
| Rock bass Rockfish Sablefish Salmon Sandab | 12,345,411 2,010,112 11,939,364 778,839 | 269,001 55,625 38,378 2,688 | 5,862 67,285 | 5,862 12,681,697 2,065,737 11,977,742 781,527 | 452,470 439,053 | 5,862 12,681,697 2,518,207 12,416,795 781,527 |
| Sardine Sargo, California Sculpin Sculpin, staghorn Sea bass, black | 145,607,749 695 105,174 1,201 7,663 | | 2,851 357,824 | 145,607,749 695 108,025 1,201 365,487 | 674 | 145,607,749 695 108,699 1,201 365,487 |
| Seabass, white Seatrout, greenling Shad Shark Sheep-head | $544,953 \\ 752 \\ 478,454 \\ 546,968 \\ 10,966$ | | 369,912 | $914,865 \\ 752 \\ 478,454 \\ 576,201 \\ 13,152$ | 263 27,853 | $915,128 \\ 752 \\ 506,307 \\ 576,201 \\ 13,152$ |
| Sierra Skate Smelt Sole, Dover Sole, English | 152,622 780,172 7,204,089 4,111,676 | 981,412 23,103 | 4,240 | 4,240 152,622 780,172 8,185,501 4,134,779 | | 4,240 152,622 780,172 8,185,501 4,134,779 |
| Sole, petrale Sole, rex Sole, sand Sole, unclassified Splittail | 3,340,980 1,070,834 91,590 19,452 1,590 | 278,523 23,603 982 | | 3,619,503 1,094,437 92,572 19,452 1,590 | | 3,619,503 1,094,437 92,572 19,452 1,590 |
| Squawfish Sturgeon Swordfish Tomcod Tuna, albacore | 114 112,647 2,869 9,312,029 | | 22,012 | 114 134,659 2,869 29,002,298 | 21,665 1,081 44,844,675 | $\begin{array}{r} 114\\21,665\\135,740\\2,869\\73,846,973\end{array}$ |
| Tuna, bigeye Tuna, bluefin Tuna, skipjack Tuna, yellowfin Turbot | 2,477,735 1,236 99,981 | 505 | 11,131,442 101,889,720 122,291,864 | $13,609,177\\101,890,956\\122,291,864\\100,486$ | 512,534 343,346 18,634,023 40,526,143 | 512,534 13,952,523 120,524,979 162,818,007 100,486 |

 TABLE 15

 Origin of the Commercial Fish Landings and Shipments Into California During 1955 Fishing Boat Landings

TABLE 15—Continued

Origin of the Commercial Fish Landings and Shipments Into California During 1955 Fishing Boat Landings

| | | Fishing bo | at landings | | | Total pounds of |
|--|---|-----------------------------------|---|--|------------------------|---|
| Species | California | North of the state boundary | South of the inter- national boundary | Total fishing boat landings | Shipments ¹ | fishing boat landings and shipments combined |
| Wahoo Whitebait Whitefish. ocean Yellowtail. Miscellaneous fish | 214,558 1,267 5,570 4,486 | | 22,862 1,045 158,752 | 22,862 214,558 2,312 164,322 4,486 | 132 131,365 | 22,994 214,558 2,312 164,322 135,851 |
| Crustacean: Crab Crab.rock Lobster, spiny Prawn Shrimp, bay Shrimp, ceean | 6,113,884 54,051 855,416 1,164 682,731 838,556 | 5,436 | 3,709 | | | |
| Mollusk: Abalone Clam, gaper Clam, jackknife Clam, Dismo Clam, Washington | 4,185,875 2,002 36,837 7,491 | | | 4,185,875 2,002 36,837 7,491 | 1,578,976 | 4,185,875 2,002 36,837 1,578,976 7,491 |
| Octopus Oyster, eastern Oyster, native Oyster, giant Pacific Squid. Miscellaneous mollusk | 26,346 140,918 18,560 1,635,067 14,271,968 169 | | | $\begin{array}{r} 26,346\\ 140,918\\ 18,560\\ 1,635,067\\ 14,271,968\\ 169\end{array}$ | | $26,346 \\ 140,918 \\ 18,560 \\ 1,635,067 \\ 14,271,968 \\ 169$ |
| Total pounds | 343,806,895 | 1,850,978 | 257,459,247 | 603,117,120 | 107,596,403 | 710,713,523 |

¹ For origin of shipments refer to Table 14.

 TABLE 15

 Origin of the Commercial Fish Landings and Shipments Into California During 1955 Fishing Boat Landings

| Species | January | February | March | April | May | June | July | August | September | October | November | December | Total pounds |
|--|--|--|---|---|--|--|--|--|--|---|---|--|---|
| shing boat landings: Anchovy. Barracuda, California Bonito. Cabeeson | 5,340,379 36,508 77,929 2,366 24,973 | 4,648,070 174,649 11,639 1,517 8,473 | 7,021,713 154,617 975 805 17,209 | 5.920.498 28,766 37 2,755 | 7,640,775 160,765 2,275 244 5,867 | 2,805,430 112,106 1,805 550 12,906 | 2,958,098 48,516 399 210 | 3,319,361 66,639 108 371 3,199 | 873,880 83,993 585 125 | 469,477 86,197 4,028 230 6,345 | 1,934,016 58,750 25,056 381 10,015 | 1,759,885 129,450 12,191 9 9,027 | 44,691,582 1,140,959 136,990 6,944 100,769 |
| Carp Croaker, white (kingfish) Flounder. Flyingfish Grouper | 48,985 14,298 21,181 77,418 | 43,639 14,175 94,895 35,522 | 46,285 68,063 77,413 21,315 | 75,891 47,361 24,175 7,660 | 82,931 235,054 92,276 4,663 2,779 | 38,115 58,788 34,611 10,809 25,695 | 31,967 65,809 48,099 3,874 580 | 25,008 45,834 107,926 688 3,048 | 70,118 126,326 80,902 2,531 | 92,325 79,237 35,012 17,095 | 62,833 38,252 24,856 18,141 | 116,421 26,231 8,834 36,267 | 734,518 819,488 650,180 22,565 245,520 |
| Hake Halfmoon Halbut, Arrowtooth Halbut, California Halbut, Parife | 22,607 1,100 18,500 73,079 | 3,975 3,759 5,588 63,509 | 28,420 3,891 32,035 53,075 | 75,821 620 89,233 38,522 | 37,347 2,412 23,346 28,103 24,344 | 100,765 2,775 94,179 27,364 10,680 | 152,635 1,477 102,190 47,531 9,655 | 205,030 1,379 159,638 43,269 210 | 138,227 2,982 75,558 24,545 6,922 | 112,561 6,849 87,354 41,544 131 | 51,759 1,831 44,769 31,131 | 27,378 5,335 15,559 37,730 | 956,545 34,410 748,249 509,802 51,942 |
| Hardhead Herring, Pacific Lingcod. Mackeral, jack. Mackeral, Pacific | 5.814 595,059 19,933 104,594 97,059 | 6,642 526,911 43,695 1,294,171 1,048,755 | 13,938 107,502 93,591 1,024,073 2,022,962 | 2,509 94,190 85,644 1,157,081 160,251 | 5,879 230,985 86,255 475,598 1,155,114 | 64 109,985 160,689 268,846 1,541,328 | 50 184,819 127,380 8,192,790 2,872,882 | 34,277 122,279 4,099,329 3,654,873 | 54 37,615 84,145 632,700 1,700,620 | 3,786 3,004 80,377 1,441,070 2,377,729 | 11,248 36,922 7,203,188 2,736,526 | 14,031 22,154 24,016 9,861,267 3,942,203 | 64,436 1,946,521 964,926 35,754,707 23,310,302 |
| Opaleye. Pereh Pompano, California. Ratfish Rock bass. | 228 7,580 77 650 1,920 | 233 8,730 614 100 2,142 | 471 34,538 4,635 2,400 837 | 28,892 11,123 2,255 | 1,205 11,319 5,750 95 | 859 810 4,593 250 | 118 10,728 17,170 933 | 20,818 9,992 375 | 648 11,381 5,584 110 | 980 5,655 9,988 400 383 | 827 3,479 2,996 2,665 | 548 3,943 1,213 3,100 | 6,117 136,551 79,304 18,533 8,862 |
| Rockfish Sablefish Salmon | 1,004,318 138,693 3,974 58,235 1,051,614 | 1,264,196 144,019 903 56,048 93,400 | 1,425,816 272,643 891 85,462 122,435 | 923,439 220,831 15,606 56,734 64,342 | 1,021,824 140,767 1,254,529 69,077 171,943 | 1,168,138 232,077 2,774,558 73,043 201,904 | 827,308 183,188 2,559,796 61,731 231,133 | 1,036,547 147,516 2,269,494 98,502 412,798 | 1,090,659 180,819 3,092,829 76,106 625,299 | 1,233,934 139,659 136 58,958 27,615,620 | 909,411 143,651 2,052 56,505 74,145,099 | 776,107 121,874 2,974 31,126 40,872,163 | 12,681,997 2,065,737 11,977,742 781,527 145,907,749 |
| Sargo, California Sculpin Sculpin, staghorn Sea bass, black | 6,399 60 18,402 | 3,636 | 9,035 | 2,189 | 5,103 | 675 24,880 53,968 | 23,916 | 20 19,987 16,243 | \$,999 125 3,746 | 1,432 305 45,647 | 2,977 403 57,962 | 2,501 308 51,059 21,350 | 695 108,025 1,201 365,487 914,865 |

TABLE 16Monthly Landings and Shipments Into California During 1955

| THE N | MARINE | FISH | CATCH | OF | CALIFORNIA | 41 |
|-------|--------|------|-------|----|------------|----|
|-------|--------|------|-------|----|------------|----|

| $\begin{array}{c} 752 \\ 478,454 \\ 576,201 \\ 13,152 \\ 4,240 \end{array}$ | 152,622 780,172 8,185,501 4,134,779 3,619,503 | $\begin{array}{c} 1,094.437\\92.572\\19.452\\1.590\\1.14\end{array}$ | $\begin{array}{c} 134.659\\ 2.869\\ 2.9,002,298\\ 13,609,177\\ 101,890,956\end{array}$ | $122,291,864 \\100,486 \\22,862 \\214,558 \\2.312 \\164,322 \\164,322 \\4,486 \\4,486 \\$ | $\begin{array}{c} 6,119,320\\ 54,051\\ 859,125\\ 1,164\\ 682,731\\ 838,656\end{array}$ | $^{4,185,875}_{2,002}$ $^{2,002}_{7,491}$ $^{2,491}_{26,346}$ | $140,918 \\ 18.560 \\ 1,635,067 \\ 14,271,968 \\ 14,271,968 \\ 169 \\ 169 \\ 169 \\ 169 \\ 169 \\ 169 \\ 169 \\ 169 \\ 169 \\ 169 \\ 169 \\ 169 \\ 169 \\ 169 \\ 169 \\ 160 \\ 100 \\ 1$ | 603,117,120 |
|---|---|--|--|--|--|---|--|------------------------|
| 138,601 | 9,358 17,348 193,325 195,403 214,588 | 66,288 4,056 185 | $\substack{1,516,259\\1,251,091\\16,722,788}$ | $\begin{array}{c} 17,656,327\\ 6,810\\ 6,810\\ 4,726\\ 22,938\\ 22,938\\ 56\end{array}$ | $^{1,814.709}_{0.710}$ $^{139.897}_{1294}$ 15,427 | 330,230 40 684 1,418 | 14,238 385 399,060 141,605 | 98,824,004 |
| 36 40,178 1,587 | $8,255\\22,654\\277,136\\250,955\\568,139$ | 98,895 3,763 313 | $\begin{array}{c} 5,410\\ 2,432,023\\ 861,714\\ 13,975,091\end{array}$ | 16,099,631 7,450 965 13,186 | $\begin{array}{c} 1,686,030\\ 3,290\\ 143,726\\ 11,177\\ 11,177\end{array}$ | 407,705 100 979 416 461 | $^{13,676}_{197,809}_{1,457,480}$ | 44,545,047 126,269,543 |
| 87 34,643 814 150 | $9,928\\20,371\\1,110,387\\369,542\\321,252$ | 103,480 5,664 571 | $\substack{39,004\\108}\\4,053,530\\425,665\\1,113,588$ | 1,343,476 8,549 8,549 692 11,470 11,470 | $^{5,342}_{217,090}$ | 346,420 1,966 1,966 237 441 | $^{14,082}_{564}$ $^{564}_{175,171}$ 608,775 | |
| 59 60,666 76 | ${}^{9,388}_{46,729}$ ${}^{46,729}_{804,626}$ ${}^{513,960}_{349,875}$ | 88,696 16,106 1,254 | $52,557\\1,678\\5,285,944\\847,589\\1,827,252$ | 2,377,468 13,010 4,389 15,501 | 3,112 200 97,289 112,121 | 480,068 3,134 518 | $^{11,656}_{1,682}_{94,710}_{94,710}_{1,505,140}$ | 23,863,750 |
| 123 31,732 832 | $13,335\\58,481\\1,012,549\\459,545\\432,241$ | 80,470 21,283 1,126 | $34,636\\455\\7,203,181\\7,247,069\\9,386,385$ | $16,240,149 \\ 7,967 \\ 9,864 \\ 1,424 \\ 1,424 \\ 54$ | 286 3,387 3,387 113,794 165,222 | 384,218 6,042 1,355 | $^{4,228}_{5,172}$ $^{49,706}_{1,445,905}$ $^{1,445,905}_{33}$ | 60,526,009 |
| 193 26,709 225 | $4,418\\55,457\\1,127,744\\255,862\\288,575$ | 73,802 87 1,628 | 3,052 8,493,982 1,050,735 5,000,107 | ${ { 11,520,059 \atop { 1,092 \atop { 5,174 \atop { 16,807 \atop { 286 \atop { 186 \atop {186 \atop {186$ | 277,339 4,112 91,273 216,264 | $\begin{array}{c} 422,664\\ 116\\ 6,408\\ 1,234\end{array}$ | | 48,853,715 |
| 35,630 35,630 | $4,595\\55,073\\1,353,544\\295,104\\367,573$ | 95,110 1,269 2,845 | $\substack{16,002\\1,372,014\\6,841,277}$ | 25,562,482 875 45,823 45,823 11,290 2,588 | $^{183,168}_{4,594}$ $^{23}_{92,586}$ $^{23}_{247,401}$ | 521,148 220 4,929 1,414 | 9,930 4,084 44,184 968,067 | 48,193,485 |
| 351,020 52,427 61 110 | $^{19,135}_{98,073}\\^{861,892}_{861,892}\\^{450,068}_{182,006}$ | 70,578 8,206 1,117 82 | 119,477 8,530,329 | $\begin{array}{c} 12,282,536\\ 10,670\\ 10,670\\ 27,467\\ 27,467\\ 7,406\\ 7,406\end{array}$ | 128,326 4,002 76,578 91,523 | 509.395 4,090 1,668 | 11,400 1,403 1,4191 1,411,040 | 38,472,038 |
| 113,396 29,305 580 | $^{9,836}_{869,399}$ $^{111,320}_{869,399}$ $^{313,805}_{313,805}$ | $\begin{array}{c} 97,857 \\ 3.053 \\ 1,251 \\ 1,251 \\ 25 \\ 25 \end{array}$ | 97 12,289,126 | 8,037,519 3,136 16,704 1,512 1,512 | 155,126 1,834 42,935 | 212,778 300 3,417 2,255 1,474 | $\substack{13,452\\165\\115,845\\4,985,723\\3\end{array}$ | 36,807,586 |
| $ \begin{array}{c} 61\\ 13,292\\ 56,180\\ 1,805\\ 3,980 \end{array} $ | 22,295 159,035 477,787 366,429 187,733 | 129,855 4,827 5,997 22 | 137,617 | 3,668.043 6,709 1.470 12,581 26,508 26,508 | $\begin{array}{c} 429,891\\ 3,049\\ 102,443\\ 38,985\end{array}$ | 387,236 516 2,487 2,693 5,855 | $^{14,855}_{77}_{141,767}_{409,555}$ | 29,750,393 |
| 33,051 3,060 | $\begin{array}{c} 22,684\\ 106,247\\ 65,047\\ 350,424\\ 129,280 \end{array}$ | $\begin{array}{c} 87.793\\ 14.250\\ 2.193\\ 681\\ 7\end{array}$ | 531 54,517 6,159,204 | 2,811,549 19,453 36,149 6,833 353 | $\begin{array}{c} 594,401\\ 6,349\\ 6,349\\ 110,476\\ 30,686\end{array}$ | 1,399 3,749 | 12,045 170,466 304,180 | 20,798,260 |
| 193 37,079 2,194 | $\begin{array}{c} 19,395\\ 29,384\\ 32,065\\ 313,682\\ 388,664\\ \end{array}$ | 101,613 10,008 972 831 | 1,377 241,689 9,944,875 | 4,692,625 14,765 38,391 45,330 | 850,044 8270 $8,270$ $145,493$ 75 $22,398$ | $184,013 \\ 150 \\ 1,302 \\ 6.759$ | $^{13,261}_{\begin{array}{c} 678\\ 678\\ 155,310\\ 20,545\\ 37\end{array}}$ | 26,213,290 |
| Seatrout, greenling Shad Shark. Sheep-head | Skate Smelt. Sole, Dover. Sole, English. Sole, Petrale. | Sole, rex Sole, sand Splitunclassified Splitunclassified Squawfish | Swordfish Tomcod Tuna, albacore. Tuna, bluefin . Tuna, skipjack | Tuna, yellowfin. Turbot. Witebat. Whitebati. Whetsah, ocean. Miseellareous fish. | Crustaceau: Crash. rock. Crash. rock. Poster, suity. Poster, suity. Shrimp, no. | Mollusk: Abatone. Clam, gaper. Clam, jæckinfe Octopus. | Oyster, castern Oyster, native Oyster, giant Pacific Squid Miseellaneous mollusk | Total pounds |

TABLE 16—Cont'd.

| Monthly Landings and Shipments Into California During 1955 | | | | | | | | | | | | | |
|--|------------|------------|------------|-------------|----------------|------------|--------------|-----------------|------------|-----------|-----------|-------------|--------------------|
| Species | January | February | March | April | May | June | July | August | September | October | November | December | Total pounds |
| hipments' Bonito. | | | | | | 2,935 | | | | | | | 2.935 |
| Cabrilla | | | | | 9,542 | 2,935 | 4.202 | ******** | | | | | 16,344 |
| Eel | | | | | | | | | | | 508 | | 508 |
| Grouper Halibut, California | 2,130 | | 5,003 | 27 3,327 | 4,370 | 3,053 | 3,015 | ******* | | | | | 10,465 10,460 |
| Halibut, Pacific | 3,070 | | 3,011 | | | 3,413 | | 3,045 | | 13,990 | 14,000 | | 40,529 |
| Mackerel, Pacific Sablefish | 18,735 | | 48,689 | 36.094 | 83,744 | 12,065 | 56,288 | 909 52 928 | 43,580 | 32,281 | 26,722 | 41,343 | 909 452,470 |
| Salmon | 36,000 | 85,168 | 72,480 | 993 | 83,063 | 6,907 | 4,673 | 59,542 | 39,386 | 44,841 | 20,722 | 6,000 | 439,053 |
| Seulpin | | | | | | | | 674 | | | | | 674 |
| Seabass, white | | | | 263 | | | | | | | | | 263 |
| Shad | | | | | 6,806 1,724 | 10,647 | 4,115 610 | 6,285 10,493 | 1,334 | 1,149 | | 4,490 | 27,853 21,665 |
| Sturgeon Swordfish | | 125 | | | 140 | | 202 | 614 | | 1,149 | | 4,490 | 1.051 |
| Tuna, albacore | 4,488,611 | 5,364,268 | 5,887,901 | 5,715,333 | 4,156,850 | 2,104,395 | 5,099,872 | 7,232,490 | 427,269 | 247,492 | 1,696,469 | 2,423,755 | 44,844,675 |
| Tuna, bigrye | | 12,186 | | | | 40,600 | 316.330 | 58,635 | | | | \$4,783 | 512,534 |
| Tuna, bluefin. Tuna, skipjaek | 162,384 | 1.071.947 | 3.091.955 | 180,962 | 1.600.542 | 2.326.297 | 2.328.231 | 1.771.292 | | 1.722.983 | 239,734 | 1.087.777 | 343,346 18,634,023 |
| Tuna, yellowfin | 2,654,065 | 1,370,369 | 3,310,275 | | 4,887,922 | 6,392,678 | 4,051,913 | 5,614,520 | 1,537,071 | 696,255 | 2,750,624 | 3,375,497 | 40,526,143 |
| Wahoo Miseellaneous fish | 17,750 | 2,195 | 28,700 | | 132 30.900 | ******* | | ***** | | | 29,900 | 3,000 | 132 131,365 |
| | 17,780 | 2,190 | 28,700 | | 30,900 | | ******* | 500 | | 18,420 | 29,900 | 3,000 | 131,999 |
| Mollusk: Clam. Pismo. | 54,816 | 332,160 | | | | | 552,000 | | 640.000 | | | | 1,578,976 |
| | | | | | | | | | | | | | |
| Total pounds. | 9,421,240 | 8,238,418 | 12,448,014 | 11,231,540 | 10,865,735 | 10,907,455 | 12,421,451 | 14,811,897 | 2,688,640 | 2,777,411 | 4,757,957 | 7,026,645 | 107,596,403 |
| Grand total fishing boat landings and shipments | 35,634,530 | 29,036,678 | 42,198,407 | 48.609.126 | 49,337,773 | | 61,275,166 | | 26.552.390 | | | 105,850,649 | |

TABLE 16Monthly Landings and Shipments Into California During 1955

| Species | January | February | March | April | May | June | July | August | September | October | November | December | Total pounds |
|--|---------------------------------------|--|--|---------------------------------------|--|---|---------------------------------------|---|--|---|--|---------------------------------------|---|
| ishing boat landings from California waters: | | | | | | | | | | | | | |
| Flounder Hake Halibut, arrowtooth Halibut, Pacific Herring, Pacific | 22,057 | 1,217 655 5,068 42,471 | 9,953 17,725 25,384 | 897 70,359 83,974 | 29,334 10,462 23,121 24,344 | 19,432 43,686 74,923 10,680 | 69,307 80,371 | 36,257 88,317 139,707 210 | 24,262 44,509 61,594 6,922 | 5,496 95,746 86,534 131 | 7,845 35,737 42,069 | 654 22,588 13,042 | 175,045 521,148 652,817 51,942 |
| Lingeod. Mackerel, jack | 3.446 | 11,954 | 37,980 | 22,659 | 44,110 | 91,561 | 85,342 | 68,811 | 36,629 | 34,822 | 8,013 | 805 | 79,227 446,153 |
| Mackrey, jack Pereh. Roekfish Sablefish | 2,426 143,868 52,888 | 2,075 202,637 51,653 | 7,710 214,581 165,206 | 8,181 136,287 155,087 | 224,721 86,065 | 270,078 149,482 | 1,458 335,716 115,673 | 6,889 421,801 40,909 | 5,192 297,447 58,037 | 185 1,827 315,203 72,856 | 1,138 111,627 28,816 | 604 24,770 10,821 | 190 37,500 2,698,836 987,493 |
| Salmon Sanddab. Shark Skate | 35 | 5,921 43 100 44 | 7,162 305 | 6,458 10,618 40 400 430 | 3,145 | 1,195,003 29,654 7,853 | 1,511,490 24,425 2,524 2,529 | 983,913 22,071 7.534 | 550,987 11,480 7,584 | 7,354 | 7,581 | | 4,773,263 154,496 484 6,172 29,994 |
| Sole, Dover | 23,409 41,046 243,598 21,456 | 1,861 62,152 24,478 11,138 905 | 167,329 87,520 42,339 36,017 1,090 | 663,024 66,652 42,819 38,421 | 715,305 142,764 49,137 43,433 | 1,044,516 119,967 131,543 55,770 | 1,020,507 120,890 146,417 | 896,776 103,571 145,135 47,067 | 645,018 97,562 151,135 40,897 | 1,062,771 121,314 201,238 56,132 | 228,163 80,832 84,547 27,811 990 | 176,959 31,432 62,978 11,042 | 6,645,637 1,075,702 1,325,396 439,587 2,539 |
| Sole, unclassified. Turna, albacore. Turbot Whitebait Miscellaneous fab. | 720 | 45 781 6,009 | 3,429 556 9,891 | 25 14,604 | 1,172 24,274 | 23,087 | 10,0%5 | 4,798 | 10,425 | 12,232 | 669 | 517 | 3,545 57,368 4,452 95,409 74 |
| Crustacean: Crab | 418,883 | 410,694 | 321,065 | 114,483 | 87,694 35,066 | 79,594 97,732 | 29,152 130,758 | 124,591 | 112,121 | | | 78,473 | 1,540,028 506,433 |
| Mollusk: Clam, Washington Octopus. Miscellaneous mollusk. | 613 | 777 | 2,653 | 2,250 | | | 235 | | | | 416 | 448 20 | 7,378 255 3 |
| Total pounds | | 842,179 | 1,158,343 | 1,437,845 | | 3,414,580 | | | | | 700,963 | | 22,318,566 |

TABLE 17Monthly Landings of the Commercial Fishing Boats in the Eureka Region During 1955

| | | | | | ABLE 17- | | | | | | | | |
|---|-----------|----------|-----------------------------------|----------------------------|---------------------------|----------------------------|------------------------------------|---|--|-------------------------------|---------------------|----------|--|
| Monthly Landings of the Commercial Fishing Boals in the Eureka Region During 1955 | | | | | | | | | | | | | |
| Species | January | February | March | April | May | June | July | August | September | October | November | December | Total pounds |
| shing boat landings from waters north of the state boundary: Flounder | | | 484 | 112 3.100 | | 7.939 | 2,218 | | 42 | | | | 3,232 |
| fake falibut, arrowtooth lingeod Rockfish | | | 5,956 130 27,494 | 4,784 441 3,959 | 4,742 20,679 | 15,215 9,164 91,894 | 0,090 12,614 2,713 18,313 | 11,955 12,279 2,892 33,123 | 31,102 13,278 9,035 70,842 | 1,500 1,822 | 2,257 108 884 | | 64,126 30,726 269,001 |
| Sablefish. Salmon. Sanddab. Sole, Dover. Sole, English. | | | 10,568 108 135,907 3,098 | 13,097 | 6,631 121,786 4,725 | 12,128 273,083 2,121 | 2,625 9,634 79,147 2,042 | 2,712 13,804 402 66,589 1,414 | 7,118 14,940 1,200 101,813 4,705 | 668 978 10,048 2,870 | 5.220 | | 55,625 38,378 2,688 981,412 23,103 |
| Sole, petrale. Sole, rex. Sole, sand Turbot. | | | 1,898 1,165 144 216 | 1,059 710 138 289 | 49,147 2,896 | 89,781 7,110 | | 29,730 1,355 | 73,586 7,314 | 13,837 1,600 700 | | | 278,523 23,603 982 505 |
| Crustacean: Crub Shrimp, ocean | | | | | 1,582 100 | 3,854 | | | | | | | 5,435 100 |
| Total pounds | | | 195,098 | 213,169 | 212,585 | 512,289 | 158,273 | 176,355 | 337,979 | 34,713 | 10,517 | | 1,850,978 |
| Grand totals, Eureka region | 1,034,719 | 842,179 | 1,353,441 | 1,651,014 | 2,306,786 | 3,956,869 | 3,944,929 | 3,314,828 | 2,499,799 | 2,116,207 | 711,480 | 437,293 | 24,169,544 |

TABLE 17Monthly Landings of the Commercial Fishing Boats in the Eureka Region During 1955

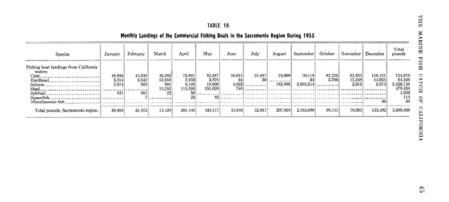


 TABLE 18

 Monthly Landings of the Commercial Fishing Boats in the Sacramento Region During 1955

| | | | | | TABLE | 10 | | | | | | | |
|---|-------------------|------------------|-------------------|-------------------|-------------------|--------------------|------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|
| | | | | | | | | | | | | | |
| | Moni | hly Landin | gs and Ship | ments of Co | mmercial F | ish Into th | e San Franc | isco Region | During 19 | 55 | | | |
| Species | January | February | March | April | May | June | July | August | September | October | November | December | Total pounds |
| ishing boat landings from California | | | | | | | | | | | | | |
| waters: Anchovy | | | | | 41,835 | 25,830 | | 23,510 | 85,715 | 18,500 | | | 206,650 |
| Caberon Croaker, white (kingfish) | | 392 220 | | 52 | 284 | 108 | | 1,072 | 6,137 | 72 | 32 | | 759 8,114 |
| Flounder | 10,113 | 82,550 | 52,851 | 14,703 | 44,997 1,385 | 7,820 | 1,870 | 68,340 30,195 | 39,632 3,670 | 24,652 3,840 | 10,774 1,400 | 2,685 | 360,987 41,245 |
| Halibut, arrowtooth | 1,770 | 520 12.708 | 605 713 | 475 | 225 464 | 4,041 | 9,205 | 7,652 | 686 729 | 820 1,150 | 2,700 | 2,517 320 | 31,306 41,754 |
| Halibut, California. Herring, Pacific. | 558,806 | 482,140 | 83,867 | | 600 | 45.547 | 36,751 | | 23.703 | 28.938 | 10.065 | 22,154 9,080 | 1,147,567 |
| Lingeod. Maekerel, jack | 7,404 | 16,651 | 35,059 | 53,745 | 25,510 | 10,017 | 35,401 | 43,114 | 23,193 | 175 | | 9,050 | 175 |
| Perch | 1,125 | 1,670 | 14,713 | 12,665 | | 810 140 | 1,704 | 1,253 | 1,231 | 1,082 | 639 | 754 | 37,646 |
| Pompano, California. Rockfish | 171,308 | 164,909 | 141,941 | 60,980 | 22,758 | 65,230 | 48,820 13,985 | 53,206 60,400 | 151,860 42,755 | 257,114 27,454 | 217,897 51,170 | 206,584 52,336 | 1,562,607 346,047 |
| Sablefish Salmon | 16,792 | 18,570 | 30,078 | 11,070 | 13,655 362,482 | 7,782 1,293,731 | 892,445 | 995,002 | 42,730 392,368 | 21,101 | 31,170 | 32,530 | 3,936,028 |
| Sanddab | 41,444 | 44,251 | 58,105 | 31,801 | 23,215 | 27,429 | 9,653 | 56,380 | 40,514 | 33,191 | 42,087 | 24,232 | 435,302 |
| Seulpin, staghorn | 30 | 35 | | | | | 919 | 26 5,419 | 532 8,920 | 705 | 3.100 | 2.077 | 1,329 |
| Shark. Skate. | 15,355 15,334 | 13,578 20,420 | 3,831 20,281 | 364 8,455 | 14,710 | 1,332 4,410 | | 11,490 | 7,108 | 8,595 | 5,725 | | 122,293 |
| Smelt. Sole, Dover | 9,143 | 97,492 63,185 | 148,032 | 66,616 21,656 | 25,804 | 24,875 35,405 | 13,505 26,500 | 21,758 47,449 | 24,705 54,075 | 5,522 37,568 | 4,500 | 5,753 16,366 | 447,705 |
| Sole, English | 241,966 | 242,400 | 208,017 | 179,467 | 214,437 44,013 | 111,345 | 71,910 88,079 | 296,703 237,386 | 321,542 77,235 | 174,572 | 143,948 412,017 | 124,521 132,967 | 2,330,860 |
| Sole, petrale Sole, rex | 113,684 55,116 | 79,049 57,037 | 100,269 74,896 | 109,347 52,281 | 21,413 | 30,058 | 19,915 | 27,682 | 34,295 | 38,172 | 65,595 | 47,179 | 323,641 |
| Sole, sand | 7,168 | 13,543 | | 2,771 | 8,205 | 1,269 | 65 | 21,283 | 16,105 314 | 4,964 | 2,773 | 1,523 | 82,864 900 |
| Sole, unclassified Tomcod | | 531 | | 170 | | | | 455 | 1,678 | 105 | | | 2,869 |
| Tuna, albacore Turbot | 8,943 | 15,527 | 5,817 | 2,744 | 9,038 | 875 | 605 | 7,721 7,590 | 471,875 12,898 | 1,929,631 8,441 | 61,884 6,781 | 4,410 | 83,639 |
| Whitebait. | 3,146 | 4,449 | 30 | 1,805 | 2,083 | 6 632 | 3,778 | 1,168 | 394 | | 955 | 4,708 | 29,159 |

 TABLE 19

 Monthly Landings and Shipments of Commercial Fish Into the San Francisco Region During 1955

| Crustacean: Crab. Shrimp, bay. Shrimp, eean. Abalone. | 22,398 | 163,923 30,686 | 88,390 38,985 | 20.677 42,935 705 | 27.626 76.578 55.165 770 | 90,823 92,586 149,479 1,615 | 247,535 91,273 85,406 3,125 | 286 113,794 40,631 6,239 | 97,289 | 49,603 | 1,683,012 11,177 1 075 | 1,720,358 15,427 575 | 4,466,563 682,731 330,681 23,664 |
|--|----------------------------|---------------------------------------|-----------------------|---------------------------|-------------------------------------|--------------------------------------|--------------------------------------|-----------------------------------|------------------------------|---------------------------------------|------------------------------|----------------------------|--|
| Mollusk: Clam, Washington, Octopus, Oyster, eastern. Oyster, native | 2.965 13,261 678 | 39 1.851 12,045 | 2.170 14.855 77 | 5 759 13,432 165 | 760 11,400 1,403 | 1,140 9,930 4,084 | 13 493 8,095 3,586 | 785 4,228 5,172 | 192 11,636 1,682 | 16 10 14,082 564 | 13,676 | 568 14,238 383 | 113 11,694 140,918 18,590 |
| Oyster, giant Pacific Squid Miscellaneous mollusk | 15,310 | 24,216 | 18,017 | 21,595 | 15,691 2,500 | 11,384 | 10,048 | 8,506 | 12,960 | 16,371 | 13,109 | 12,255 | 179,462 2,500 20 |
| Total pounds | 1,790,175 | 1,664,670 | 1,319,589 | 732,658 | 1,090,400 | 2,167,382 | 1,693,063 | 2,206,677 | 1.950,858 | 2,772,395 | 2,822,739 | 2,428,345 | 22,638,951 |
| Soling boat landings from waters south of the International Bound- ary: Tuna, albacore Tuna, bluefin. Tuna, skipjack Tuna, yellowfin | | | | | | | | | 244.491 48,509 121,487 | 611 192.468 20.320 11.684 | | | 611 435,959 68,829 133,171 |
| Total pounds | | | | | | | | | 414,487 | 225,083 | | | 639,570 |
| hipments: Halibut, Pacific | 3,070 18,736 562,112 | 37,212 387,009 | 13,689 3,184 | 35.094 651 | 43,421 5,393 6,805 459,939 | 3,413 11,795 10,647 249,247 | 29,288 4,115 500,410 | 15.016 6.285 | | 13,990 22,061 14,200 150,133 | 14,000 15,022 288,988 | 10.553 6,000 | 40,529 221,689 81,556 27,853 4,787,991 |
| Tuna, bigeye Tuna, skipjack. Tuna, yellowfin Miseellaneous fish | 768.679 5,000 | 12,186 337,648 270,224 2,040 | 87,941 185,763 | 612,469 | 711,150 661,383 3,150 | 1.165.590 | 100,277 295,130 | \$45,605 | 629,553 | 541,822 | 943,445 3,900 | 941.049 3,000 | 112,463 1.136,739 7.560,713 17,090 |
| Total pounds | 1.357,597 | 1,046,319 | 293,588 | 1,291,329 | 1,891,242 | 1,440,692 | 929,220 | 1,643,936 | 650,583 | 742,205 | 1,265,355 | 1,434,656 | 13,986,723 |
| | | | | | The second second | | | | | | 1.055.09.1 | | |

TABLE 19—Cont'd.

| | | | | | | | | | | | | | | 48 |
|--|--|--|---|--|---|--|--|--|---|--|--|--|---|-----------|
| | | | | | TABLE | 20 | | | | | | | | |
| | Me | nthly Landi | ngs and Shi | ipments of | Commercial | Fish Into 1 | he Montere | y Region E | uring 1955 | | | | | |
| Species | January | February | March | April | Мау | June | July | August | September | October | November | December | Total pounds | |
| Fishing boat landings from California waters: Anchory. Cabeton. Croaker, white (kingfish). Floweder. Hake. | 23,610 1,968 3,921 9,108 550 | 367,670 1,029 2,632 11,128 3,320 | 782,280 762 10,826 13,585 2,765 | 995,725 16 19,147 8,463 2,362 | 1,224,050 18 55,219 17,649 25,410 | 807,150 16 18,839 7,359 49,140 | 872,430 7 49,188 4,921 73,208 | 835,400 342 27,788 3,329 74,563 | 236,400 96 79,586 16,966 58,946 | 39,500 7 57,974 4,864 12,285 | 699,320 308 7,838 6,237 12,365 | 9 2,409 5,212 4,790 | 6,883,535 4,578 335,367 108,841 319,704 | DEPARTMEN |
| Halibut, California Herring, Pacific Lingeod Mackerel, jack Mackerel, Pacific | 3,711 116 5,834 | 2,410 2,300 12,082 | 2,203 23,635 17,571 | 1,305 94,190 3,895 | 1,778 230,385 4,421 200 | 5,086 109,985 8,149 19,809 | 4,047 184,220 1,050 14,737 330 | 6,387 34,277 3,439 60,892 | 908 37,615 11,359 28,562 | 489 3,004 8,013 4,722 | 1,124 16,095 268 | 1,699 | 31,147 719,727 104,275 129,190 330 | MENT OF |
| Perch. Pompano, California Ratioh. Rockfish Sablefish | 1,606 4 650 368,437 66,940 | 1,908 37 100 452,255 69,155 | 3,318 694 2,400 557,102 65,316 | 7,790 8,038 2,255 275,138 36,048 | 10,691 5,750 225,728 26,606 | 3,018 250 372,345 53,725 | 3,157 16,740 933 242,729 42,942 | 9,333 8,755 253,907 33,852 | 1,854 3,099 383,593 72,704 | 829 7,297 400 391,418 35,951 | 879 473 2,695 325,116 57,404 | 1,137 12 3,100 310,270 \$5,336 | 31,811 | FISH A |
| Salmon | 7,339 2 724 1,197 | 3,219 | 11,960 218 404 | 9,249 993 28 | 244,744 17,874 732 112 | 137,474 13,141 37 1,267 | 115,710 19,267 1,078 1,170 7,121 | 72,538 15,165 1,005 587 848 | 36,003 20,007 \$74 1,917 270 | 14,243 934,500 114 338 | 6,096 149 657 | 3,198 | 606,469 140,729 937,160 6,641 116,095 | ND GAME |
| Skate Smelt. Sole, Dover Sole, English Sole, etrale | 1,700 18,535 23,050 2,587 | 150 8,445 32,322 2,418 | 735 3,680 59,829 6,825 | 500 35,484 62,951 14,479 | 750 69,412 2,930 81,111 10,213 | 150 19,600 320 57,687 4,373 | 150 35,334 845 49,511 11,550 | 1,790 23,640 1,355 41,655 12,568 | 2,200 8,995 720 80,118 38,544 | 1,325 11,694 48,330 10,130 | 2,445 11,326 21,326 7,254 | 4,825 9,245 30,569 6,480 | 16,720 255,392 6,170 588,459 127,421 | - |
| Sole, proxi Sole, urchasified. Turbot. Whitebait Miscellaneous fish. | 9,599 915 32,584 | 7,965 310 25,691 | 5,621 926 2,660 | 992 622 78 294 50 | 1,165 179 460 1,110 | 16,104 | 1,196 1,284 267 487 2,944 | 3,639 613 103,503 407 3,898 | 5,514 757 977,753 100 3,995 | 4,474 43 959,974 108 692 | | | 52,305 6,052 2,079,841 1,640 89,990 50 | |

 TABLE 20

 Monthly Landings and Shipments of Commercial Fish Into the Monterey Region During 1955

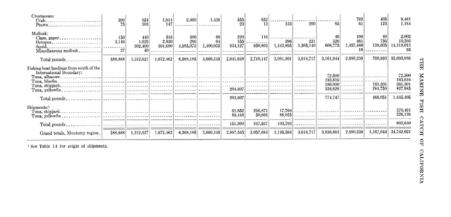


TABLE 20—Cont'd.

| | Moni | hly Landing | s and Shipr | nents of Co | TABLE mmercial F | | Santa Bart | bara Region | During 19 | 55 | | | |
|--|--------------------------------|--------------------------------------|---|----------------------------|------------------------------------|------------------------------------|---|--|---|---|--|--|--|
| Species | January | February | March | April | May | June | July | August | September | October | November | December | Total pounds |
| ishing boat landings from California waters: Anchovy: Barracuda, California. Caberon. Croaker, white (kingfish). Flounder. | 1,250,090 85 31 1,272 | 92,600 585 96 7,759 | 154,440 2,920 133 8,219 540 | 197,460 21 13,026 | 616,230 226 3,679 | 177,600 543 1,071 | 121,900 203 3,378 | 407,740 29 4,261 | 71,400 29 8,443 | 56,440 223 7,611 | 49.760 73 3,175 | 36,000 629 263 | 3,261,660 3,591 1,607 61,251 2,075 |
| Halibut, California Lingood. Mackerel, jack Mackerel, Pacific. Perch. | 24,023 3,229 2,423 | 17,270 3,008 | 13,284 2,611 8,797 | 9,958 4,897 256 | 16,128 7,454 | 7,392 6,228 2,005 1,923 | 6,321 1,514 592 2,140 4,409 | 7,668 4,023 64,375 1,239 3,343 | 4,980 3,418 297,783 755,170 3,104 | 3,415 7,012 1,175,175 163,798 1,917 | 7,813 2,578 3,253,755 45,775 823 | 18,085 1,609 5,015,825 133,800 1,448 | 136,337 47,671 9,809,510 1,103,845 29,597 |
| Pompano, California Roekfish Sablefish Salmees Sanddab | 257,574 2,059 1,907 | 372,999 4,649 1,168 | 403,574 812 3,101 | 394,639 2,200 224 | 442,180 5,801 102,106 901 | 301,581 8,993 143,178 102 | 12 142,868 6,917 29,514 6,735 | 739 239,995 9,418 21,311 2,581 | 1,059 161,357 205 5,017 1,335 | 457 228,501 2,351 136 140 | 15 227,249 6,080 40 135 | 205,315 3,311 494 | 2,279 3,378,233 52,487 301,305 18,824 |
| Sardine. Sea bass, black | 50,800 | | | | | 87,000 | 148,955 | 212,400 | 366,800 | 26,232,780 | 9,860,910 | 2,772,260 | 39,731,905 |
| Seabass, white Seatrout, greenling Shark | 99 193 2,527 | 142 | 95 61 30,393 | 622 9,444 | 904 20,334 | 1,125 | 16,300 193 2,005 | 22,365 123 8,571 | 25,888 59 36,103 | 19.914 87 2,843 | 4,838 36 2,807 | 154 | 92,446 752 139,884 |
| Sheep-head Skade Skade Skale Ske, Dover. Sole, English | 494 2,121 7,620 | 879 395 13,550 | 262 230 70 7,935 | 343 | 217 77 505 7,030 | 56 140 219 3,984 | 3,559 745 11,509 | 2,922 280 16,200 | 2,557 | 161 22,456 | 48 545 3,495 | 10 458 4 8,881 | 1,749 3,765 10,035 1,749 116,655 |
| Sole, petrale | 5.102 | 23,335 11,633 302 1,029 | 36,402 12,156 490 1,478 120 | 21,731 5,453 379 | 29,496 1,671 93 | 31,182 659 271 | | 7.421 727 101 10.223 7 | 9,374 675 71 1,173 45,444 | 18,523 3,102 41 677 48,980 10 | 63,705 2,947 38 11,304 | 12,163 1,281 2,533 | 305.787 55.301 6,187 3,514 1,850 116,003 10,250 469 |

 TABLE 21

 Monthly Landings and Shipments of Commercial Fish Into the Santa Barbara Region During 1955

| Trustacean: Crab Crab.rock Lobster, spiny Shrimp, ocean | 6,608 2,416 42,633 | 18,930 2,348 37,243 | 18,562 550 37,328 | 17,506 | 9,985 1,597 1,192 | | 60 | | | 198 23,103 | 2,226 40 21,361 | 15,473 612 39,246 | 97.832 9,043 200,914 1,442 |
|---|--------------------------|---------------------------|---------------------------|-------------------------|--------------------------|---|-------------------------------|--------------------------|--------------------------|--------------------------|-----------------------|--------------------------|---|
| Mollusk: Atadone Octopus. Oyster, giant Pacific. Squid. Miscellancous mollusk. | 42,760 644 140,000 | | 127,686 853 123,750 | 76,936 426 94,230 | 132,233 769 28,500 | 217,009 70 32,900 14,000 14 | 178,146 506 36,500 4 | 247,225 274 41,200 | 340,169 105 81,750 | 206,054 80 158,800 | 274,166 | 201,602 54 286,805 | 2,044,046 4,025 1,455,605 14,000 18 |
| Total pounds | 1,923,413 | 773,757 | 996,854 | 853,782 | 1,429,435 | 1,061,241 | 749,816 | 1,336,759 | 2,233,498 | 28,385,385 | 14,029,537 | 8,862,210 | 62,635,687 |
| hing boat landings from waters south of the International Bound- ary: Tuna, albacore | | | | | | | | 3,269 | | | | | 3,269 |
| Total pounds | | | | | | | | 3,269 | | | | | 3,269 |
| pments;1 Tuna, bigoye Tuna, yellowfin | 94,736 | 42,269 | 249,125 | 215,918 | 254,292 | 311,829 | 115,639 | 2,530 280,965 | 178,600 | 154,433 | 300,148 | 140,300 | 2,530 2,338,254 |
| Total pounds | 94,736 | 42,269 | 249,125 | 215,918 | 254,292 | 311,829 | 115,639 | 283,495 | 178,600 | 154,433 | 300,148 | 140,300 | 2,340,784 |
| Grand totals, Santa Barbara region | 2,018,149 | 816,026 | 1,245,979 | 1,069,700 | 1,683,727 | 1,373,070 | 865,455 | 1,623,523 | 2,412,098 | 28,539,818 | 14,329,685 | 9,002,510 | 64,979,740 |
| ce Table 14 for origin of shipmen | ts. | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

TABLE 21—Cont'd.

| | Mor | ithly Landin | gs and Ship | pments of C | TABLE ommercial | | ie Los Ange | les Region | During 19 | 55 | | | |
|---|-----------------------------|--|--|---|--|--|--|--|--|--|--|--|--|
| Species | January | February | March | April | May | June | July | August | September | October | November | December | Total pounds |
| ishing boat landings from California waters: Anchory Barracuda, California Bonito. Carp. Croaker. white (kingfish). | 32,090 | 830 | 6,084,993 126 550 48,153 | 4,727,313 1,241 | 5,758,660 32,450 344 174,898 | 1,794,650 59,118 1,505 104 38,130 | 1,963,768 45,775 399 13,262 | 2,052,711 526 11 | 480,365 | 348,855 | 213 | 265 24 | 139,502 35,697 448 |
| Pryingfah Halo Haldmoon Haldput, California Lingcod. | 1,100 | 3,399 12,750 | | 620 17,233 | 4,663 110 2,412 | 2,775 5,029 40 | 3,874 3,874 800 1,477 10,654 | 11,127 688 1,379 2,624 | 27,311 2,531 2,982 2,050 | 13,425 6,849 1,005 5 | 26,950 | | 403,669 22,565 910 34,050 84,533 395 |
| Mackerel, jack Mackerel, Pacific. Opaleyre. Pompano, California. Rockfish | 104,594 75,238 | 1,294,171 1,007,551 233 577 48,812 | 1.024.073 2,017,424 471 3,941 55,556 | 1,157,081 159,999 3,085 21,887 | 471,378 1,152,559 1,205 620 65,651 | 247,632 1,526,151 859 1,425 34,703 | 8,177,311 2,869,452 118 418 34,517 | 3,948,465 3,596,642 501 28,855 | 306,350 935,118 648 1,426 24,538 | 260,813 2,197,955 980 2,234 33,065 | 3,949,165 2,673,742 827 2,508 20,042 | 4,845,442 3,796,690 548 1,201 24,781 | 25,785,875 22,038,521 6,117 18,009 438,881 |
| Sablefah. Salmon. Sasdidab Sardine. Sargo, California. | 983 1.000.812 | 1,489 93,400 | 630 5,026 122,435 | 3,078 4,842 64,342 | 2,009 203 4,558 171,943 | 257 347 2,717 114,904 675 | 1,046 535 1,650 81,100 | 225 1,902 199,392 20 | 1,570 257,925 | 234 3,052 448,340 | 103 636 64,284,189 | 70 1,063 38,099,902 | 7,666 1,085 29,488 104,938,684 695 |
| Sculpin Sea baas, black Seabaas, white Shark Sheep-bead | | 660 34 7,844 2,967 1,869 | 2,161 34 17,127 4,518 664 | 889 66 7,595 4,513 | 3,744 244 41,886 6,448 61 | 19,279 653 55,162 11,740 22 | 20,718 2,179 20,508 14,112 225 | 15,609 119 17,122 10,158 112 | 4,669 777 70,561 6,866 76 | 1,178 464 14,382 6,362 87 | 2,922 614 2,127 6 | 1,868 42 2,590 3,078 80 | 79,335 4,612 256,900 76,705 3,687 |
| Skate | 181 1,530 57 1,377 | 1,618 265 727 | 1,049 6,706 158 | | 310 640 663 | 35 2,595 179 2,287 | 44 530 30 522 769,228 | 55 2,627 54 21,567 1,264,562 | 80 2,886 25,983 768,005 | 8 1,847 20 13,581 165,144 | 4,949 | 10 2,346 | 3,528 37,045 1,907 66,602 3,420,705 |
| Tuna, Bluefin. Tuna, skipjack. Whitefuh, ocean | | | | | 33,096 | 854,514 78 | | 431,881 | 91,167 | 220 | 22,200 635 | | 1,917,129 635 854 |

TABLE 22Monthly Landings and Shipments of Commercial Fish Into the Los Angeles Region During 1955

| Yellowtail. Miscellaneous fish | | | | 210 21 | 569 387 | 370 2,431 | 141 231 | 372 32 | | | | | 1,662 3,102 |
|---|----------------------------------|----------------------------|---------------------------------|------------------------|------------------------|-------------------------|---------------------|--------------------------|------------------------|------------------------------------|----------------------------|--------------------------|---|
| Crustacean: Crab, rock Lobster, spiny | 3,318 85,903 | 2,463 57,948 | 1,947 51,193 | 1,834 | 2,405 | 3,312 | | 3,387 | 2,920 | 2.852 110,882 | 2,142 78,701 | 3,236 74,853 | $33,928 \\ 462,480$ |
| Abalone. Octopus. Squid. | 123,035 20,545 | 30 1,780 | 219,020 | 105,048 | 335,803 45 8,505 | 229,499 49 19,940 | 196,150 63,150 | 49,344 | 68,606 | 106,685 25 | 101,171 | 76,015 20 3,000 | 1,610,376 169 137,455 |
| Total pounds | 5,757,825 | 6,762,582 | 9,709,264 | 6,305,621 | 8,285,803 | 5,011,375 | 14,573,377 | 11,664,079 | 3,055,425 | 3,740,699 | 72,708,525 | 48,801,786 | 196,439,361 |
| ishing boat landings from waters south of the international bound- | | | | | | | | | | | | | |
| ary: Barraeuda, California Bonito Cabrilla. Croaker, white (kingfish) | 25,827 38,732 24,973 | 169,389 10,809 5,928 | 150,103 425 17,209 491 | 26,302 2,755 | 5,867 | 2,055 300 12,905 | 2,281 | 64,471 3,199 | 82,606 570 | 75,687 1,935 6,345 | 37,370 22,146 10,015 | 96,955 2,195 9,027 | 733,045 77,112 98,224 491 |
| Grouper | 77,418 | 30,476 | 21,315 | 7,660 | 2,563 | 25,695 | | 3,048 | | 17,095 | 18,141 | 36,267 | 239,678 |
| Halfmoon. Halibut, California. Mackerel, Pacific. Pompano, California. Rock Bass. | 6,230 | | 837 | 462 | | 1,900 | | | | | 5,708 | | 250 84,569 117 10 5,862 |
| Rockfish | 15,310 | 19,025 | 7,220 | 5,885 | 108 | 4,270 | | 200 | 290 | 4,010 | 3,725 | 615 | 60,550 158 |
| Sculpin | 18,305 7,850 990 | 20,928 8,026 2,244 | 38,563 1,009 1,057 | 37,471 324 515 | 14,377 | 52,980 198 200 | 77 24,449 100 | 14,724 117,055 100 | 650 60,682 1,195 | 43,281 24,898 3,340 | 53,713 22,261 5,470 | 46,382 8,659 1,225 | 341,451 273,221 16,496 |
| Sheep-head | | | | 580 | 110 | 1,619 | | | | 150 10,473 185,194 49,514 | 338,847 794,154 | | 940 4,240 11,900 3,390,034 10,147,934 |
| Tuna, bluefin Tuna, skipjack Tuna, svelowfin | 47,820 5,123,310 2,593,543 | | 9,125,660 | 9,808,732 7,290,468 | 6,433,691 8,834,267 | 4,058,903 | 2,498,484 | 5,117,246 10,272,879 | 380,792 538,890 | 39,474 77,656 | 7,873,653 9,157,674 | 9,137,678 | 65,442,248 78,282,731 |
| Wahoo. Yellowtail | 2,495 | 5,232 | 1,470 24,883 | 1,194 | 11,909 524 | 612 | 720 | 650 | 14,789 | 5,458 | 8,267 | 15,393 | 13,379 80,218 |
| Crustacean: Lobster, spiny | | | | | | | | | | 317 | 180 | 3,103 | 3,600 |
| Total pounds. | 7.984,789 | 8.929.346 | 12,758,914 | 17,182,348 | 15,343,141 | 21,785,373 | 11,427,578 | 22,095,196 | 1,903,313 | 566,615 | 18,351,324 | 20.082.632 | 159.310.569 |

TABLE 22—Cont'd.

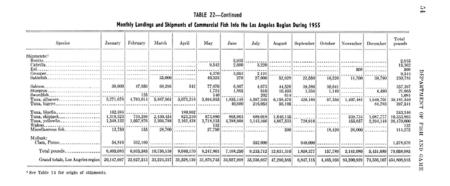


TABLE 22Monthly Landings and Shipments of Commercial Fish Into the Los Angeles Region During 1955

| | Ma | nthly Landi | ngs and Shi | ipments of | TABLE Commercial | | the San Die | go Region I | During 195 | 5 | | | |
|--|------------------------------|-----------------|----------------------------------|----------------------------|----------------------------------|---|-------------------------------|----------------------------------|---------------------------------|--------------------------------|-----------------------------|------------------------------|--|
| Species | January | February | March | April | May | June | July | August | September | October | November | December | Total pounds |
| ishing boat landings from California waters: Anchovy. Barraeuda, California. Bonito. Creaker, white (kingfish). Halibet, California. | | 159 | | 1,223 10 8,464 | 126,475 2,275 974 2,605 | 200 50,896 640 1,345 | 460 | \$29 97 1,586 492 | 155 4,849 4,602 | 6,182 1,788 155 4,587 | 497 257 4,815 | 716 9,341 | 6.382 179,738 4,657 10,596 69,663 |
| Lingrod, Mackerel, jack Mackerel, Pacific Roekfish Sablefish | 21,765 | 11,024 | AA38 13,877 33 | 36 252 24,673 251 | 4,620 2,555 20,107 | 13,192 27,860 10 | 150 960 4,213 | 25,597 56,992 3,459 | 10,332 639 | 87 15.976 2,301 145 | 15 17,009 2,871 | 11,713 3,127 | 138 29.767 167,309 106,816 439 |
| Salmon Seulpin Sea baas, black Seabaas, white Shark | 761 97 2,530 12,449 | | 6,875 125 16,976 13,846 | 1,300 720 14,371 | 1,251 120 61,313 25,514 | 5,991 335 37,759 8,769 | 468 505 2,479 2,342 | 4,378 1,220 3,113 5,123 | 1,300 454 29,691 6,112 | 204 38 11,040 15,156 | 55 73 4,819 22,613 | 633 39 1,666 24,514 | 468 25,839 2,862 187,637 133,627 |
| Sheep-head State Sole, petrale Sole, unclassified Swordfish | | | 6 | 112 | 182 | 400 2.374 | 301 252 | 143 12,584 | 112 23,824 | 641 327 7,074 | 1,533 85 28 461 | 1,629 | 5,530 144 512 3,534 44,195 |
| Tuna, albacore Tuna, skipjack. Whitefish, ocean. Yellowtail. Miscellaneous fish | | 42 | | 93 | 46.751 | 7,026 322,183 601 50 976 148 | 456,663 172,700 63 5 | 464,362 18,972 110 344 | | 128,164 | 63,351 | 200 | 1,167,001 560,606 601 413 3,908 735 |
| Crustacean: Crab, rock Lobster, spiny | 2,536 13,957 | 1,538 15,285 | 552 13,922 | | | | | | 192 | 2,292 82,709 | 1,108 43,434 | 2,862 22,695 | 11,080 192,022 |
| Mollusk: Abalone, Clam, jackknife, Miscellaneous mollusk | 18,218 1,302 | 1,399 | 40,530 2,487 | 30,089 3,417 | 40,589 4,090 | 72,963 4,929 | 45,243 6,408 | 81,410 6,042 33 | 65,018 3,134 | 30,396 1,565 | 31,293 979 | \$2,038 684 | 507,789 36,837 33 |
| Total pounds. | 88,824 | 62,661 | 127,885 | 85,072 | 341,692 | \$\$8,380 | 693,413 | 685,585 | 197,921 | 311,271 | 195,316 | 131.857 | 3,480.878 |

 TABLE 23

 Monthly Landings and Shipments of Commercial Fish Into the San Diego Region During 1955

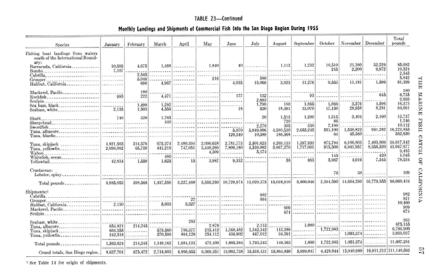


 TABLE 23

 Monthly Landings and Shipments of Commercial Fish Into the San Diego Region During 1955

TABLE 24

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish Into California During 1955

| | Eureka | region | Sacrame | nto region | San Franc | isco region | Montere | ey region |
|--|------------------------|-------------------|-----------|------------|----------------------|------------------|----------------------|-------------------|
| Species | Pounds | Value | Pounds | Value | Pounds | Value | Pounds | Value |
| Fishing boat landings: Anchovy | | | | | 206,650 | \$7,357 | 6,883,535 | \$90,174 |
| Barracuda, California | | | | | 200,000 | \$1,001 | 0,000,000 | \$30,174 |
| Bonito | | | | | 759 | 19 | | 150 |
| Cabezon Cabrilla | | | | | 759 | 19 | 4,578 | 150 |
| Carp | | | 734,070 | \$44.045 | | | | |
| Carp Croaker, white (kingfish) | | | | | 8,114 | 797 | 335,367 | 20,957 |
| Flounder Flyingfish | 178,277 | \$7,505 | | | 360,987 | 14,693 | 108,841 | 6,454 |
| Grouper | | | | | | | | |
| | | 0.004 | | | | 107 | 010 501 | 0.040 |
| Hake Halfmoon | 594,686 | 9,991 | | | 41,245 | 425 | 319,704 | 2,942 |
| Halfmoon Halibut, arrowtooth Halibut, California Halibut, Pacific | 716,943 | 14,124 | | | 31,306 | 860 | | |
| Halibut, California | F1 040 | 10.010 | | | 41,754 | 8,559 | 31,147 | 6,467 |
| Hanbut, Pacifie | 51,942 | 10,019 | | | | | | |
| Hardhead Herring, Pacific | | | 64,436 | 27,707 | | | | |
| Herring, Pacific | 79,227 476,879 | $2,060 \\ 33,382$ | | | 1,147,567 335,568 | 27,886 23,423 | 719,727 104,275 | 19,740 10,271 |
| Lingcod Mackerel, jack Mackerel, Pacific | 190 | 20 | | | 175 | 20,420 | 129,190 | 7.623 |
| Mackerel, Pacific | | | | | | | 330 | 33 |
| Opaleye | | | | | | | | |
| Perch Pompano, California | 37,500 | 5,042 | | | 37,646 | 5,535 | $31,811 \\ 58,858$ | 3,335 |
| Pompano, California | | | | | 148 | 56 | 58,858 18,533 | 14,337 |
| Rathsh Rock bass | | | | | | | 18,533 | 222 |
| | | | | | | | | 100.01 |
| Rockfish Sablefish | 2,967,837 1,043,118 | 91,691 95,863 | | | 1,562,607 346,047 | 58,755 10,589 | 4,160,038 615,980 | 182,317 20,882 |
| Salmon | 4,811,641 | 1,681,535 | 2,320,746 | 600,841 | 3,936,028 | 1,348,893 | 606,469 | 216,667 |
| Sanddab | 157,184 | 8,299 | | | 435,302 | 19,414 | 140.729 | 8,965 |
| Sardine | | | | | | | 937,160 | 22,398 |
| Sargo, California | | | | | | | | |
| Sculpin Sculpin, staghorn | | | | | 1.201 | 60 | | |
| Sea bass, black | | | | | 1,201 | 00 | | |
| Seabass, white | | | | | 1,329 | 437 | 6,641 | 1,686 |
| Seatrout, greenling | | | | | | | | |
| Shad | | | 478,454 | 29,282 | | | | |
| Shark Sheep-head | 484 | 28 | | | 60,173 | 3,170 | 116,095 | 6,594 |
| Sierra | | | | | | | | |
| 01-1- | 0.170 | | | | 100.000 | 1 500 | 16,720 | 182 |
| Skate | 6,172 29,994 | 74 2,310 | | | $122,293 \\ 447,706$ | 1,590 24,418 | 255.392 | 14,835 |
| Sole, Dover Sole, English | 7,627,049 1,098,805 | 376,013 | | | 550.533 | 19.214 | $^{6,170}_{588,459}$ | 139 |
| Sole, English | 1,098,805 | 64,611 | | | 2,330,860 | 124,235 | 588,459 | 41,663 |
| Sole, petrale | 1,603,919 | 136,333 | | | 1,581,864 | 142,938 | 127,421 | 12,806 |
| Sole, rex | 463,190 | 25,522 | | | 523,641 | 23,302 | 52,305 | 2,595 |
| Sole, sand Sole, unclassified | 3,521 3,545 | 269 191 | | | 82,864 900 | 7,135 | 6,052 | 488 |
| Splittail | 3,343 | 191 | 1,590 | 490 | 900 | 90 | 0,032 | *00 |
| Squawfish | | | 114 | 5 | | | | |
| Swordfish | | | | | | | | |
| Tomeod | | | | | 2,869 | 96 | | |
| Tuna, albacore | 57,368 | 8,823 | | | 2,471,722 | 351,479 | 2,152,341 | 315,318 22,640 |
| Tuna, bluefin Tuna, skipjack | | | | | 436,959 68,829 | 57,504 8,211 | 183,619 361,301 | 45,632 |
| | | | | | 199.174 | 10.072 | 827,985 | 119,064 |
| Tuna, yellowfin Turbot | 4,957 | 299 | | | 133,171 83,639 | 19,976 3,488 | 827,985 | 119,064 |
| Wahoo | | | | | | | | |
| Whitebait | 95,409 | 8,492 | | | 29,159 | 3,246 | 89,990 | 5,913 |
| Whitefish, ocean Yellowtail | | | | | | | | |
| Miscellaneous fish | 74 | 4 | 56 | 6 | | | 50 | 1 |

The Value, by Region, of the Annual Lan ial Fish Into California During 1955

| 3,521 3,545 | 269 191 | 1,590 114 | 490 5 | 82,864 900 | 23,302 7,135 90 |
|----------------|------------|----------------|----------|--|----------------------------------|
| 57,368 | 8,823 | | | $\substack{2,869\\2,471,722\\436,959\\68,829}$ | 96 351,479 57,504 8,211 |
| 4,957 | 299 | | | 133,171 83,639 | 19,976 3,488 |
| 95,409 74 | 8,492 | 56 | 6 | 29,159 | 3,246 |
| | | | | | |
| ndings | - | ABLE Shipmo | | ^c Comn | nercia |
| | | | | | |

TABLE 24—Continued

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish Into California During 1955

| | Santa Barl | oara region | Los Ange | eles region | San Die | go region | To | tal |
|--|--|-----------------------------|---------------------------|-------------------------------------|-----------------------|-----------------------------------|---------------------------------------|-------------------------------|
| Species | Pounds | Value | Pounds | Value | Pounds | Value | Pounds | Value |
| Fishing boat landings: Anchovy Barracuda, California | 3,261,660 3,591 | \$59,362 901 | 34,333,355 872,548 | \$439,467 140,219 | 6,382 264,820 | \$224 36,420 | 44,691,582 1,140,959 | \$596,584 177,540 |
| Bonito Cabezon Cabrilla | 1,607 | 80 | 112,809 98,224 | 6,690 14,615 | 24,181 2,545 | 1,318 305 | 136,990 6,944 100,769 | 8,008 249 14,920 |
| Carp Croaker, white (kingfish) Flounder | 61,251 2,075 | 3,503 133 | 448 404,160 | 27 16,431 | 10,596 | 1,069 | 734,518 819,488 650,180 | 44,072 42,757 28,785 |
| Flyingfish Grouper | | | $22,565 \\ 239,678$ | $1,869 \\ 46,665$ | 5,842 | 929 | $22,565 \\ 245,520$ | 1,869 47,594 |
| Hake Halfmoon Halibut, arrowtooth | | | 910 34,410 | 16 8,410 | | | 956,545 34,410 748,249 | 13,374 8,410 14,984 |
| Halibut, California Halibut, Pacific | 136,337 | 32,313 | 169,502 | 35,375 | 131,062 | 26,772 | 509,802 51,942 | 109,486 10,019 |
| Hardhead Herring, Pacific | 47,671 | 4,352 | 395 | | 138 | 17 | 64,436 1,946,521 964,926 | 27,707 49,686 |
| Lingcod Mackerel, jack Mackerel, Pacific | 9,809,510 1,103,845 | 4,352 151,066 17,331 | 25,785,875 22,038,638 | 551,817 506,888 | 29,767 167,489 | $1,191 \\ 7,336$ | 964,926 35,754,707 23,310,302 | 71,494 711,724 531,588 |
| Opaleye Perch Pompano, California | 29,597 2,279 | 3,444 550 | 6,117 18,019 | 920 4,959 | | | $6,117 \\ 136,554 \\ 79,304$ | 920 17,356 19,902 |
| RatfishRock bass | | | 5,862 | 928 | | | 18,533 5,862 | 222 |
| Rockfish Sablefish Salmon | 3,378,233 52,487 301,305 18,824 | 120,611 2,288 105,057 | 499,431 7,666 1,085 | $51,588 \\ 449 \\ 468$ | 113,551 439 468 | 8,889 56 214 | 12,681,697 2,065,737 11,977,742 | 513,85 130,12 3,953,675 |
| Sanddab Sardine | 18,824 39,731,905 | 954 675,442 | 29,488 104,938,684 | 5,358 2,371,613 | | | 11,977,742 781,527 145,607,749 | 42,990 3,069,453 |
| Sargo, California Seulpin Seulpin, staghorn | | | 695 79,493 | $139 \\ 18,284$ | 28,532 | 5,712 | 695 108,025 1,201 | 139 23,996 66 |
| Sea bass, black Seabass, white | $189 \\ 92,446$ | 28 20,200 | 346,063 532,121 | $51,356 \\ 126,020$ | 19,235 282,328 | $2,629 \\ 69,919$ | 365,487 914,865 | 54,013 218,265 |
| Seatrout, greenling Shad Shark | 752 | 38 9,159 | 93,201 | 11,930 | 166,364 | 17,211 | 752 478,454 576,201 | 31 29,283 48,093 |
| Shark Sheep-head Sierra | 1,749 | 174 | $4,627 \\ 4,240$ | 281 549 | 6,776 | 504 | $13,152 \\ 4,240$ | 959 549 |
| Skate Smelt Sole, Dover | 3,765 10,035 1,749 | 229 478 86 | $3,528 \\ 37,045$ | $^{328}_{1,520}$ | 144 | | 152,622 780,172 8,185,501 | 2,417 43,561 395,452 |
| Sole, English Sole, petrale | $116,655 \\ 305,787$ | 9,088 29,172 | | | 512 | 61 | 4,134,779 3,619,503 | 239,597 321,310 |
| Sole, rex Sole, sand Sole, unclassified | 55,301 6,187 3,514 | 2,920 560 240 | 1,907 | 187 | 3,534 | 411 | 1,094,437 92,572 19,452 | 54,339 7,964 1,607 |
| Splittail Squawfish | | | | | | | 1,590 114 | 490 |
| Swordfish Tomeod Tuna, albacore | 1,850 119,272 | 775 | 78,502 6,810,739 | 34,157 1,127,857 | 54,307 17,390,856 | 23,395 2,878,189 | $134,659 \\ 2,869 \\ 29,002,298$ | 58,327 96 4,699,715 |
| Tuna, aloacore Tuna, bluefin Tuna, skipjack | | | 12,065,063 65,442,883 | 1,127,857 1,727,716 8,821,712 | 923,536 36,017,943 | 2,878,189 132,897 4,819,201 | 13,609,177 101,890,956 | 1,940,753 |
| Tuna, yellowfin Turbot | 10,250 | 525 | 78,282,731 | | 43,047,977 | 6,582,036 | 122,291,864 100,486 | 4,380 |
| Wahoo Whitebait Whitefish, ocean | | | 13,379 854 | 4,403 | 9,483 1,458 | 3,319 136 | 22,862 214,558 2,312 | 7,72 17,65 19 |
| Yellowtail Miscellaneous fish | 469 | 26 | 81,880 3,102 | 7,295 334 | 82,442 735 | $6,166 \\ 140$ | $164,322 \\ 4,486$ | 13,46 51 |

The Value, by Region, of the Annual Landings and Commercial Fish Into California During 1955

| TABLE 24 | |
|-----------|----|
| Shipments | of |

TABLE 24—Continued The Value, by Region, of the Annual Landings and Shipments of Commercial Fish Into California During 1955

| | | into cui | | ing 1755 | | | | |
|--|------------|-------------|-----------|------------|------------------------------|---------------------------|--------------------|----------------|
| | Eureka | region | Sacramer | nto region | San Franc | isco region | Montere | y region |
| Species | Pounds | Value | Pounds | Value | Pounds | Value | Pounds | Value |
| Crustacean: Crab | 1,545,464 | \$274,009 | | | 4,466,563 | \$681,151 | 9,461 | \$1,872 |
| Crab, rock Lobster, spiny | | | | | | | | 46/ |
| Prawn Shrimp, bay Shrimp, ocean | 506,533 | 48,324 | | | 682,731 330,681 | \$50,913 23,276 | 1,164 | 40 |
| Mollusk: Abalone Clam, gaper | | | | | 23,664 | 3,313 | 2.002 | 18 |
| Clam, jackknife Clam, Washington | 7,378 | 853 | | | 113 | | | |
| Octopus | | 14 | | | 11,694 | 427 | 10,203 | 1,02 |
| Oyster, eastern Oyster, native Oyster, giant Pacific | | | | | 140,918 18,560 179,462 | 36,188 3,007 19,920 | | |
| Squid Miscellaneous mollusk | | | | | 2,500 20 | 75 2 | 14,118,013 95 | 230,12 2 |
| Total pounds and value | 24,169,544 | \$2,905,700 | 3,599,466 | \$702,376 | 23,278,521 | \$3,136,163 | 34,139,391 | \$1,457,25 |
| hipments:1 | | | | | | | | |
| Bonito Cabrilla | | | | | | | | |
| Eel | | | | | | | | |
| Grouper Halibut, California | | | | | | | | |
| Halibut, Pacific | | | | | 40,529 | 8,106 | | |
| Sablefish Salmon | | | | | $221,689 \\ 81,656$ | $38,174 \\ 24,930$ | | |
| Seulpin | | | | | | | | |
| Seabass, whiteShad | | | | | | 29,246 | | |
| Sturgeon Swordfish | | | | | | | | |
| Tuna, albacore | | | | | 4,787,991 | 798,158 | | |
| Tuna, bigeye Tuna, bluefin | | | | | 112,463 | 12,405 | | |
| Tuna, skipjack Tuna, yellowfin | | | | | 1,136,739 7,560,713 | 139,705 1,069,841 | 376,491 226,139 | 46,27 31,99 |
| Wahoo Miscellaneous fish | | | | | 17,090 | 3,994 | | |
| Mollusk: Clam, Pismo | | | | | | | | |
| Total pounds and value | | | | | 13,986,723 | \$2,124,559 | 602,630 | \$78,27 |
| Total pounds and value | | | | | | | | |

¹ See Table 14 for origin of shipments.

60

TABLE 24

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish Into California During 1955

TABLE 24—Continued

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish Into California During 1955

| Crustacean: 97,832 \$19,273 33,928 \$33,359 11,080 \$284 6,119,320 \$976,51 Crab | | Santa Barb | ara region | Los Angel | es region | San Dieg | o region | To | tal |
|--|------------------------|------------|-------------|-------------|--------------|-------------|--------------|-------------|-----------|
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | Species | Pounds | Value | Pounds | Value | Pounds | Value | Pounds | Value |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | Crustacean: | | | | | | | | |
| Lobster, spiny | | | | | | | | | \$976,30 |
| Prawn | | | | | | | | | 3,86 |
| Shrimp, bay Shrimp, ceean 1,442 144 Strimp, ceean 682,731 504 Mollusk: Abalone 2,044,046 260,168 1,610,376 119,635 507,789 40,137 4,185,875 423,200 Clam, gaper. 2,002 200< | Lobster, spiny | 200,914 | 93,263 | 466,080 | 237,281 | | | | |
| Shrimp, ocean. 1,442 144 | | | | | | | | | 50.0 |
| Mollusk: Abalone 2,044,046 260,168 1,610,376 119,635 507,789 40,137 4,185,575 423, 2,002 Clam, jackknife | | | 144 | | | | | | 71.7 |
| Abalone 2.044,046 200,168 1,610,376 119,635 507,789 40,137 4,185,875 423, 2,002 Clam, jackknife 2.002 36,837 13,217 36,837 13,217 36,837 13,217 36,837 13,217 36,837 13,217 36,837 13,217 36,837 13,217 36,837 13,217 36,837 13,217 36,837 13,217 36,837 13,217 36,837 13,217 36,837 13,217 36,837 13,217 36,837 13,217 36,836 36,837 13,217 36,856 36,837 13,216 14,018 36,37 14,018 36,37 14,018 36,37 14,271,968 234,27 14,271,968 234,27 14,271,968 234,27 14,271,968 234,27 160 33 5 166 234,27 160 242 234,27 163,27 166,38 163,194 16,344 2,2 244 26,356 244 26,356 244 26,356 252,144 16,351,144 16,341,142 < | | | | | | | | , | ,. |
| Clam, gaber. 2002 Clam, gaber. 36,837 Clam, gaber. 36,837 Clam, Washington. 4,025 Oyster, gaine. 4,025 Oyster, native. 20,346 Oyster, native. 1,455,605 Oyster, native. 1,455,605 Oyster, gaine Pacific. 1,455,605 Squid. 14,000 Miscellaneous mollusk. 18 Total pounds and value. 62,638,956 Stopper. 2,035 Schröften. 2,035 Schröften. 2,035 Schröften. 2,035 Stopper. 2,035 Schröften. 2,035 Schröften. 2,035 Schröften. 2,035 Stopper. 2,035 Schröften. 2,035 Stopper. 9,0541 Halibut, California. 20,0781 Halibut, California. 20,0781 Sublefish 20,0781 Sublefish 21,665 Striger. 21,665 Sturgeon. 2,633 Stu | | 0.011.010 | 020 100 | 1 010 070 | 110 007 | 507 700 | 40.107 | 4 405 075 | 100.0 |
| Cham, jackknife 36,837 13,217 36,8367 13,33 140,018 36,37 36,371 36,371 36,371 36,367 37,401 33 5 160,67 39,371 36,371 36,367 37,401 33 5 160,82 36,371 36,371 36,371 36,371 36,371 36,371 36,371 36,371 36,371 36,371 36,371 36,371 36,371 37,401 36,373 37,401 36,373 37,401 36,371 37,493 36,371 | | | 260,168 | 1,610,376 | 119,635 | 507,789 | 40,137 | | 423,2 |
| Cham, Washington. 4,025 252 169 23 7,491 4,1 Oyster, eastern. 0yster, eastern 140,001 33 5 1660 23 18,660 3,1 Oyster, native 1,455,605 29,549 137,455 3,740 18,860 3, Miscellaneous moliusk. 18 11 33 5 160 23, 163,667 49, Miscellaneous moliusk. 18 11 33 5 160 33, 5 603,117,120 \$53,184 Immentsa: 2,935 2,42 2,935 2,42 2,935 2,43 508 508 508 508 183 982 143 16,314 2,935 2,44 2,935 2,42 2,935 508 10,466 2,935 508 10,660 10,466 2,935 2,42 2,935 163,44 2,734 443,953 368 2,935 508 508 10,465 2,935 108,44 2,743 16,314 2,7 | Clam, gaper | | | | | 36 837 | 13 217 | | |
| Octopus 4,025 252 169 23 26,346 1, Oyster, native 1,455,605 29,549 14,0018 36,567 49,925 14,0018 36,567 49,925 14,0018 36,567 49,925 14,4271,968 23,44 1,455,605 29,549 1,455,605 29,549 1,4271,968 23,45 1,4271,968 23,41 1,635,607 49,925 242 2,935 242 2,935 242 2,935 242 2,935 242 2,935 242 2,935 160 10,460 1,038 10,544 2,935 160 10,460 1,0481 1,044 1,0460 1,0481 1,042,070 7,745,776 3,041,076 3,04,707 7,475,776 3,2470 <td>Clam, Washington</td> <td></td> <td></td> <td></td> <td></td> <td>00,001</td> <td>10,211</td> <td></td> <td>8</td> | Clam, Washington | | | | | 00,001 | 10,211 | | 8 |
| Oyster, native. Oyster, native. Squid. 1,455,660 1,425,605 3,15 29,549 137,455 3,740 18,650 3,3740 Miscellaneous mollusk. 18 11 | Octopus | 4,025 | 252 | 169 | 23 | | | | 1,7 |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | Orantara anatara | | | | | | | 140.010 | 0.0.1 |
| Oyster, giant Pacific 14,455,605 29,549 137,455 3,740 1,635,605 49,234 Total pounds and value 62,638,956 \$1,672,329 355,749,330 \$28,527,217 99,541,312 \$14,783,498 603,117,120 \$53,184 ipments: ¹ Bonito. 2,935 242 133 508 \$16,85,607 49,952 \$143 \$16,344 2,935 \$242 Cabrilla. 508 \$1,957,037 \$508 \$10,65 \$29,935 \$163 \$08 \$16,35,607 49,952 \$143 \$16,344 \$2,935 \$242 \$2,935 \$163 \$08 \$508 \$10,460 \$1,987 \$08 \$10,460 \$1,987 \$099 \$100 \$10,465 \$2,935 \$10,400 \$1,983 \$10,460 \$1,983 \$10,460 \$1,983 \$10,460 \$1,983 \$10,460 \$1,983 \$10,460 \$1,983 \$10,460 \$1,983 \$10,465 \$2,935 \$21,665 \$6,283 \$10,460 \$12,833 \$14,221,968 \$14,221,968 \$13,346 \$14,221,96 | | | | | | | | | |
| Squid. Miscellancous mollusk. 14,000 18 137,455 11 3,740 14,271,968 33 234,5 160 Total pounds and value Bonito. 62,638,956 \$1,672,329 355,749,030 \$28,527,217 99,541,312 \$14,271,968 \$23,53,184 Bonito. 2,935 2,242 2,935 2,242 2,035 \$508 \$183 508 \$2,597,217 99,541,312 \$14,371,968 \$2,035 | Oyster, giant Pacific | 1.455.605 | | | | | | | 49.4 |
| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $ | Squid. | 14,000 | 315 | 137,455 | 3,740 | | | 14,271,968 | 234,2 |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | Miscellaneous mollusk | 18 | 11 | | | 33 | 5 | 169 | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | Total pounds and value | 62,638,956 | \$1,672,329 | 355,749,930 | \$28,527,217 | 99,541,312 | \$14,783,498 | 603,117,120 | \$53,184, |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | | | | | | | | | |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | Bonito | | | 2 0 3 5 | 949 | | | 2 935 | 2 |
| Eel 508 183 921 190 10,465 2, 10,460 10,465 2, 909 909 <td></td> <td></td> <td></td> <td></td> <td></td> <td>982</td> <td>143</td> <td></td> <td>2.3</td> | | | | | | 982 | 143 | | 2.3 |
| Halibut, California. 10,460 1,638 10,460 1,1 Halibut, Pacific | Eel | | | 508 | 183 | | | | 1 |
| Halibut, Pacific. | Grouper | | | 9,544 | 1,967 | | | | 2,1 |
| Mackerel, Pacific 230,781 39,740 900 909 909 907 77, 439,053 134, 52,470 77, 439,053 134, 52,470 77, 439,053 134, 52,470 77, 439,053 134, 56,75,135 72,653 20, 77,75,353 20, 77,75,353 </td <td>Halibut, California</td> <td></td> <td></td> <td></td> <td></td> <td>10,460</td> <td>1,638</td> <td>10,460</td> <td>1,6</td> | Halibut, California | | | | | 10,460 | 1,638 | 10,460 | 1,6 |
| Sablefishsumon | Halibut, Pacific | | | | | | | 40,529 | 8,1 |
| Salmon 357,397 106,114 674 101 439,053 134, 674 Seulpin | | | | | | 909 | 69 | | |
| Sculpin 674 101 674 Seabass, white | Sablefish | | | 230,781 | | | | | 77,9 |
| Seabass, white | Salmon | | | 357,397 | 109,114 | 674 | 101 | 439,053 | 134,0 |
| Shad. 21,665 6,928 21,665 6,928 Swordfish. 1,081 194 21,665 6,928 1,081 194 Tuna, abacore. 2,530 279 397,541 43,849 512,534 56,7475 7,475,7475 Tuna, bluefin 2338,254 330,863 26,6470,000 3,745,405 56,828,100 3,34,346 44,635 Wahoo. 112 26,760,000 3,34,346 44,635 6,780,900 3,34,346 44,635 132,865 3,03,037 556,242 40,560,143 5,734, Wahoo. 112 26,760 3,31,047 556,242 40,566,143 5,734, Miseellancous fish 114,275 26,760 35,211 13,365 30, Clam, Pismo. 2,340,784 \$331,142 79,058,985 \$11,857,502 11,607,281 \$1,538,435 107,596,403 \$15,924 | | | | | | 074 | 101 | 0/4 | |
| Sturgeon 21.665 6.928 21.665 6.928 Tuna, albacore | Seabass, white | | | | | 263 | 57 | | |
| Swordfish. 1.081 1.91 1.91 1.081 1.081 7,475 Tuna, abacore. 2,530 279 397.541 43,849 551.355 145.885 145.885 512.534 56, Tuna, bluefin 343.346 44,635 6780.900 331.446 44,635 512.534 56, Tuna, skipiack. 2,338,254 330.803 26,470.000 3,745,505 3,031.037 556,242 40,566,143 5,734, 132 Wahoo 112 267,06 3,031.037 556,242 40,566,143 5,734, 132 Misecilancous fish 114,275 26,706 35,211 131,365 30, Clam, Pismo 2,340,784 \$331,142 79,058,985 \$11,857,502 11,607,281 \$1,538,435 107,596,403 \$15,292 | Shad | | | | | | | | 29,2 |
| Tuna, albacore. | | | | | | | | | 6,9 |
| Tuna, bigeye. 2,530 279 397,541 43,849 | Tuna albacore | | | 39 181 549 | | 875.135 | 145.885 | | |
| Tuna, bilefin 343,346 44,635 745,346 343,346 343,346 346,3346 346,3346 347,346 346,3346 347,346 346,3346 347,3346 347,3346 347,346 347,346 347,3346 347,346 347,3346 347,3346 347,3346 347,3346 347,3346 347,3346 347,3346 347,3346 347,3346 347,3346 347,3346 347,3346 347,3346 347,3346 < | | | | | | 010,100 | 110,000 | | |
| Tuna, skipiack. Tuna, skipiack. 10,333,893 1,269,390 6,786,900 834,110 18,634,023 2,238,254 Tuna, sellowing. 2,338,254 330,863 26,470,000 3,745,505 3,31,037 556,212 40,526,143 5,734, 132 530,035 56,212 40,526,143 5,734, 132 530,035 56,212 40,526,143 5,734, 133,365 30, Miscellaneous fish. 114,275 26,706 35,211 131,365 30, Mollusk: Clam, Pismo. 2,340,784 \$331,142 79,058,985 \$11,857,502 11,607,281 \$1,538,435 107,596,403 \$15,924 | Tuna, bigeye | 2,530 | 279 | | | | | | 56,5 |
| Wahoo 132 40 133 132 30 Miscellancous fish. 114,275 26,706 131,365 30, Mollusk: 1,578,976 35,211 1,578,976 35,211 1,578,976 35,211 Total pounds and value 2,340,784 \$331,142 79,058,985 \$11,857,502 11,607,281 \$1,538,435 107,596,403 \$15,922 | Tuna, bluehn | | | | | 6 700 000 | 024 110 | 343,346 | |
| Wahoo, Miscellaneous fish | Tuna, skipjack | 9 228 954 | 220 862 | | 1,269,390 | | | | |
| Miscellaneous fish III.4,273 26,706 III.4,273 26,706 III.4,273 30, Mollusk: Clam, Pismo Image: Clam, Pismo <td>Wahoo</td> <td>2,000,201</td> <td>000,000</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0,101,1</td> | Wahoo | 2,000,201 | 000,000 | | | | | | 0,101,1 |
| Clam, Pismo. 1,578,976 35,211 1,578,976 35,2 Total pounds and value 2,340,784 \$331,142 79,058,985 \$11,857,502 11,607,281 \$1,538,435 107,596,403 \$15,922 | | | | | | | | | 30,7 |
| Clam, Pismo. 1,578,976 35,211 1,578,976 35,211 Total pounds and value 2,340,784 \$331,142 79,058,985 \$11,857,502 11,607,281 \$1,538,435 107,596,403 \$15,922 | Mollusk | | | | | | | | |
| | Clam, Pismo | | | 1,578,976 | 35,211 | | | 1,578,976 | 35,2 |
| | Total pounds and value | 2,340,784 | \$331,142 | 79,058,985 | \$11,857,502 | 11,607,281 | \$1,538,435 | 107,596,403 | \$15,929. |
| | Grand Astron | 01.070 710 | ea 000 454 | 494.000.017 | 010 001 510 | 111 140 500 | A10 001 000 | | |

¹ See Table 14 for origin of shipments.

TABLE 24

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish Into California During 1955

DEPARTMENT OF FISH AND GAME

TABLE 25

| | | Value | Pounds |
|----------------------|----------------------------|---------------------------|------------------|
| Cureka region totals | | \$2,905,700 | 24,169,54 |
| Eureka | Salmon | \$619,322 | 1,772,34 |
| | Dover sole | 177,002 60,517 | 3.590.31 |
| | Crab | 60,517 | 341,32 560,29 |
| | Petrale sole | 47,625 | 560,29 |
| | Rockfish | 37,504 | 1,205,92 |
| | English sole | 37,125 | 631,37 |
| | Sablefish | 34,176 | 371,88 |
| | Rex sole | 34,176 12,734 9,894 | 231,10 |
| | Pacific halibut | 8,669 | 51,29 123,84 |
| | Albacore | 7,220 | 46,94 |
| | Sanddab | 5,636 | 106,74 |
| | All other | 18,151 | 445,8 |
| | Totals | \$1,075,575 | 9,479,23 |
| Fort Bragg | Salmon | \$661,154 | 1,884,48 |
| Fort Diagg | Dover sole | 81,151 | 1,646,0 |
| | Sablefish | 50,742 | 552,14 |
| | Petrale sole | 33,231 | 390,94 |
| | Rockfish | 15,286 | 501,60 |
| | Lingeod | 13,175 | 188,2 |
| | English sole | 12,096 | 205,7 120,8 |
| | Rex sole | 6,660 | 120,8 |
| | Crab All other | 2,778 5,847 | 15,6 122,6 |
| | Totals | \$882,120 | 5,628,36 |
| Crescent City | Salmon | \$342,227 | 985,83 |
| | Crab | 150,140 | 846,81 |
| | Ocean shrimp | 48,254 | 505,80 |
| | Dover sole | 4,671 11,071 | 94,74 161,95 |
| | Totals | \$556,363 | 2,595,1 |
| | | | |
| Fields Landing | Dover sole Petrale sole | \$113,189 | 2,295,9 |
| | Rockfish | 54,256 | 638,3 1,225,1 |
| | Salmon | 37,810 25,356 | 73,1 |
| | English sole | 14,048 | 238,9 |
| | Crab | 13,719 | 77,3 |
| | Arrowtooth halibut | 11,279 | 572,5 |
| | Sablefish | 10,368 | 112,8 |
| | Lingcod | 9,102 | 130,0 |
| | Hake | 8,341 | 496,4 |
| | Rex sole All other | 5,824 6,529 | 105,7 124,0 |
| | Totals | \$309,821 | 6,090,3 |
| Trinidad. | Crab | \$46,842 | 264,1 |
| Timuau | Salmon | 9,906 | 29,2 |
| | All other | 7 | 1 |
| | Totals | \$56,755 | 293,5 |
| Point Arena | Salmon All other | \$22,860 72 | 64,5 9 |
| | Totals | \$22,932 | 65,4 |
| All other ports | All other | \$2,134 | 17,3 |
| | Totals | \$2,134 | 17,3 |

Landings of the Commercial Fishing Boats in the Eureka Region During 1955, Shown by Port of Landing With the Corresponding Values

 TABLE 25

 Landings of the Commercial Fishing Boats in the Eureka Region During 1955, Shown by Port of Landing With the Corresponding Values

63

TABLE 26

Landings of the Commercial Fishing Boats in the Sacramento Region During 1955, Shown by Port of Landing With the Corresponding Values

| | | Value | Pounds |
|--------------------------|---------------------------------|----------------------------|-------------------------------|
| Sacramento region totals | | \$702,482 | 3,599,466 |
| Pittsburg | Salmon Shad All other | \$298,686 22,584 421 | 1,153,673 379,709 7,012 |
| | Totals | \$321,691 | 1,540,394 |
| Sacramento | Salmon Hardhead All other | \$91,556 3,199 622 | 353,633 7,379 3,933 |
| | Totals | \$95,377 | 364,945 |
| Benicia | Salmon All other | \$92,356 1,713 | 356,726 26,068 |
| | Totals | \$94,069 | 382,794 |
| Port Costa | Salmon | \$70,231 | 271,268 |
| | Totals | \$70,231 | 271,268 |
| Martinez | Salmon Shad | \$47,871 4,950 | 184,900 71,939 |
| | Totals | \$52,821 | 256,839 |
| Clear Lake | Carp Hardhead | \$26,945 16,277 | 449,083 37,854 |
| | Totals | \$43,222 | 486,937 |
| Turlock | Carp All other | \$10,668 719 | 176,908 1,701 |
| | Totals | \$11,387 | 178,609 |
| All other ports | All other | \$13,684 | 117,680 |
| | Totals | \$13,684 | 117,680 |

 TABLE 26

 Landings of the Commercial Fishing Boats in the Sacramento Region During 1955, Shown by Port of Landing With the Corresponding Values

TABLE 27

64

Landings of the Commercial Fishing Boats and Shipments Into the San Francisco Region During 1955, Shown by Port of Landing With the Corresponding Values

| Yellowfin tuna | \$5,260,722 | 37,265,24 |
|-----------------|--|--|
| Albacore | | |
| Albacore | \$1,089,817 | 7,693,88 |
| | 952,665 | 5,874,53 |
| Crab | 408,539 | 2,678,94 |
| Salmon | 290,121 | 855,47 |
| Skipjack | 147,916 | 1,205,56 |
| Petrale sole | 97,067 | 1,074,44 |
| English sole | 81,455 | 1,528,23 |
| Sablefish | | 436,95 474,98 |
| Rockfish | 36,508 | 922,51 |
| Chad | 90.946 | |
| | | 27,85 222,70 |
| Smelt. | 14,823 | 346,00 |
| Dover sole | 13,915 | 398,71 |
| Sanddab | 12,831 | 287,69 |
| Bigeve tuna | 12,405 | 112.46 |
| Rex sole | 12,348 | 112,46 277,48 |
| | | 172,87 |
| Pacific herring | 10,203 | 250,68 403,04 |
| | | |
| Pacific halibut | | 40,52 206,65 |
| Sand sole | 6 494 | 200,03 |
| All other | 22,651 | 323,28 |
| Totals | \$3,396,347 | 25,890,93 |
| Salmon | \$583,915 | 1,703,86 |
| Crab | 53,124 | 348,35 |
| Petrale sole | | 269,23 |
| English sole | | 317,86 342,32 |
| Rockfish | | 342,32 |
| All other | 18,530 | 388,13 |
| Totals | \$712,760 | 3,482,31 |
| Salmon | \$375,390 | 1.095.39 |
| Crab | 78,398 | 514,08 |
| English sole | 25,838 | 484,76 |
| | 21,532 | 238,19 |
| Ocean shrimp | 21,730 | 308,72 |
| Rockfish | 11,307 | 296,88 |
| Smelt | 8,471 | 89,76 91,50 |
| Rex sole | | 133,61 |
| All other | 12,497 | 333,57 |
| Totals | \$567,496 | 3,586,49 |
| Albacore | \$152,736 | 1,074,09 |
| Crab | | 544,15 |
| | 77,931 | 227,40 |
| Totals | \$313,657 | 1,845,72 |
| Albacore | \$44.215 | 310,93 |
| | 28,838 | 189,10 |
| Salmon | 20,422 | 59,58 |
| All other | | 20,51 |
| | | 580,14 |
| Eastern oyster | \$36,188 | 140,91 |
| | 18,905 | 170,32 |
| All other | | 744,52 64,96 |
| An outer | 0,100 | 04,90 |
| | English sole. bluefin tuma. Sablefish. Rockfish. Shad. Bay shrimp. Simelt. Dover sole. Sanddab. Bigeyy tuna. Rex sole. Lingcod. Flounder. Pacific halibut. Anchovy. Sand sole. All other. Totals. Salmon. Crab. Salmon. All other. Totals. All other. Totals. Salmon. All other. Totals. All other. Totals. All other. Totals. All other. Totals. All other. Totals. Salmon. Crab. Salmon. All other. Totals. All other. Totals. All other. Totals. All other. Totals. All other. Totals. All other. Totals. All other. Totals. All other. Totals. All other. Totals. Totals. All other. Totals. T | English sole. 81,455 Filuefin tuna |

 TABLE 27

 Landings of the Commercial Fishing Boats and Shipments Into the San Francisco Region During 1955, Shown

 by Port of Landing With the Corresponding Values

TABLE 27—Continued

Landings of the Commercial Fishing Boats and Shipments Into the San Francisco Region During 1955, Shown by Port of Landing With the Corresponding Values

| | | Value | Pounds |
|-----------------|-----------------------------|-----------------------------|-----------------------------|
| Princeton | Crab Salmon All other | \$24,992 20,846 4,171 | 163,879 60,828 32,132 |
| | Totals | \$50,009 | 256,839 |
| Richmond | Bay shrimp All other | \$31,311 653 | 420,280 5,119 |
| | Totals | \$31,964 | 425,399 |
| Berkeley | Salmon Crab | \$5,180 3,516 | 15,089 23,058 |
| | Totals | \$8,696 | 38,147 |
| All other ports | All other | \$3,444 | 38,526 |
| | Totals | \$3,444 | 38,526 |

3-72272

TABLE 27

Landings of the Commercial Fishing Boats and Shipments Into the San Francisco Region During 1955, Shown by Port of Landing With the Corresponding Values

66

TABLE 28

Landings of the Commercial Fishing Boats and Shipments Into the Monterey Region During 1955, Shown by Port of Landing With the Corresponding Values

| | | Value | Pounds |
|------------------------|---|--|--|
| fonterey region totals | | \$1,535,523 | 34,742,021 |
| Monterey | Squid Rockfish Yellowfin tuna Skipjack Anchovy | 201,566 175,716 151,063 91,903 66,895 | 12,366,028 4,061,608 1,054,124 737,792 5,106,520 |
| | Salmon Albacore English sole Bluefin tuna Sardine | 39,409 35,991 28,452 22,640 12,317 | 110,420 245,669 401,867 183,619 515,370 |
| | Sablefish White croaker (kingfish) Lingcod Petrale sole Sanddab | $^{11,933}_{11,825}\\^{7,654}_{7,175}_{6,918}$ | 352,019 189,255 77,701 71,39 108,60 |
| | Smelt Jack mackerel Pacific herring All other | $^{6,894}_{6,136}$ $^{5,078}_{26,919}$ | 114,76 103,99 186,56 579,44 |
| | Totals | \$916,484 | 26,566,75 |
| Moss Landing | Albacore Salmon Squid Anchovy Sardine | \$275,795 106,961 28,476 22,912 10,062 | $1,882,560 \\ 299,333 \\ 1,747,000 \\ 1,749,000 \\ 421,000 $ |
| | Pacific herring Shark All other | 9,988 5,014 10,273 | 363,20 95,69 140,57 |
| | Totals | \$469,481 | 6,698,36 |
| Santa Cruz | Salmon English sole California pompano Sablefish Smelt | \$70,297 11,739 9,493 8,931 7,126 | 196,717 165,807 38,97 263,442 124,583 |
| | Rockfish White croaker (kingfish) Petrale sole All other | | 94,49 86,60 53,12 453,16 |
| | Totals | \$149,558 | 1,476,90 |

 TABLE 28

 Landings of the Commercial Fishing Boats and Shipments Into the Monterey Region During 1955, Shown by

 Port of Landing With the Corresponding Values

TABLE 29

67

Landings of the Commercial Fishing Boats and Shipments Into the Santa Barbara Region During 1955, Shown by Port of Landing With the Corresponding Values

| | | Value | Pounds |
|------------------------------------|----------------------|-------------|-----------|
| anta Barbara region totals | | \$2,003,471 | 64,979,74 |
| Post Huonomo | Sardine | \$570,967 | 33,586,29 |
| I of a frueneme | Jack mackerel | 138,334 | 8,982,72 |
| | Anchovy | 56,188 | 3.087.26 |
| | Pacific mackerel | 15,524 | 988.77 |
| | California halibut | 8,445 | 35.63 |
| | All other | 3,342 | 35,03 |
| | | | |
| | Totals | \$792,800 | 46,715,92 |
| Port San Luis (Avila, Grover City) | Yellowfin tuna | \$330,863 | 2,338,25 |
| ort Hueneme | Salmon | 87,164 | 249,96 |
| | Abalone | 12,479 | 93,33 |
| | Rockfish | 10,284 | 263.99 |
| | Petrale sole | 6,077 | 63.70 |
| | All other | 23,865 | 305,5 |
| | Totals | \$470,732 | 3,314,81 |
| Santa Barbara | Abalone | \$139,015 | 1,136.3 |
| | Sardine | 102,808 | 6.047.5 |
| | Spiny lobster | 88,926 | 191.5 |
| | California halibut | 19,433 | 81.9 |
| | White seabass | 18,396 | 84,1 |
| | Jack mackerel | 12.656 | 821.8 |
| | Shark | 7.213 | 106.4 |
| | Petrale sole | 5.561 | 58.2 |
| | All other | 13,312 | 399,1 |
| | Totals | \$407,320 | 8,927,4 |
| Morro Bay | Rockfish | \$108,913 | 3,073,3 |
| | Abalone | 43,090 | 322.2 |
| anta Barbara | Giant Pacific oyster | 29,549 | 1,455,6 |
| | Salmon | 17,753 | 50,9 |
| | Petrale sole | 17,534 | 183,7 |
| | Crab | 14,608 | 74.1 |
| | Albacore | 13,265 | 87.6 |
| | All other | 20,813 | 280,3 |
| | Totals | \$265,525 | 5,528,1 |
| San Simeon | Abalone | \$63,628 | 475,90 |
| | Totals | \$63,628 | 475,90 |
| All other ports | All other | \$3,466 | 17,43 |
| | Totals | \$3,466 | 17.4 |

 TABLE 29

 Landings of the Commercial Fishing Boats and Shipments Into the Santa Barbara Region During 1955, Shown by Port of Landing With the Corresponding Values

TABLE 30

Landings of the Commercial Fishing Boats and Shipments Into the Los Angeles Region During 1955, Shown by Port of Landing With the Corresponding Values

| | | Value | Pounds |
|---------------------------|--|--|--|
| Los Angeles region totals | | \$40,384,719 | 434,808,915 |
| Terminal Island | Yellowfin tuna Skipjack Albacore Sardine | \$15,739,458 10,091,102 7,598,661 2,174,209 | 104,555,473 75,776,776 45,625,372 96,203,945 |
| | Bluefin tuna | 1,681,331 | 11,772,79 |
| | Jack mackerel Pacific mackerel Anchovy Bigeye tuna Bonito All other | $\begin{array}{r} 468,367\\298,101\\48,807\\43,849\\5,671\\6,275\end{array}$ | 21,886,30 12,960,89 3,813,07 397,54 94,48 32,92 |
| | Totals | \$38,155,831 | 373,119,57 |
| San Pedro | Barracuda White seabass Spiny lobster Bluefin tuna Pacific mackerel | \$137,028 114,592 100,045 89,395 53,050 | 852,69 483,88 196,51 624,27(2,306,53 |
| | Black sea bass Anchovy Grouper Rockfish Abalone_ | 51,034 49,935 44,670 36,801 36,693 | $343,89 \\ 3,901,14 \\ 229,43 \\ 363,42 \\ 484,50$ |
| | Sardine Jack mackerel California halibut Yellowfin tuna Albacore | $36,660 \\ 34,836 \\ 32,270 \\ 29,990 \\ 16,345$ | 1,622,12 1,627,86 154,62 195,24 98,70 |
| | Sculpin. White croaker (kingfish). Cabrilla. Swordfish. Halfmoon. Shark. Yellowtail. All other. | $\begin{array}{c} 14,929\\ 13,831\\ 13,455\\ 10,968\\ 8,403\\ 7,639\\ 5,297\\ 19,646\end{array}$ | $\begin{array}{c} 64,90\\ 343,15\\ 90,42\\ 25,20\\ 34,38\\ 65,58\\ 59,45\\ 264,52\end{array}$ |
| | Totals | \$957,512 | 14,432,49 |
| Newport Beach | Pacific mackerel Abalone Albacore Spiny lobster Anchovy | \$129,197 81,677 41,625 41,195 38,769 | 5,617,27 1,108,68 251,35 80,91 3,028,81 |
| | Swordfish Sardine White seabass Jack mackerel All other | $18,912 \\ 15,000 \\ 9,109 \\ 8,773 \\ 16,564$ | $\begin{array}{r} 43.46\\ 663.73\\ 38.45\\ 409.93\\ 98.31 \end{array}$ |
| | Totals | \$400,821 | 11,340,95 |
| Long Beach | Anchovy | | $\begin{array}{c} 12,145,290\\ 4,057,430\\ 116,16\\ 94,61\\ 238,74\\ 240,940\\ 99,59\end{array}$ |
| | Totals | \$343,109 | 16,992,77 |
| Los Angeles | Salmon Sablefish Pismo clam Sturgeon All other | \$108,886 39,740 35,211 6,928 26,889 | 356,65 230,78 1,578,97 21,66 114,78 |

 TABLE 30

 Landings of the Commercial Fishing Boats and Shipments Into the Los Angeles Region During 1955, Shown by

 Port of Landing With the Corresponding Values

TABLE 30-Continued

Landings of the Commercial Fishing Boats and Shipments Into the Los Angeles Region During 1955, Shown by Port of Landing With the Corresponding Values

| | | Value | Pounds |
|-----------------|---|--|--|
| Wilmington | Anchovy Jack mackerel Pacific mackerel Sardine All other | \$123,922 27,982 20,760 11,692 914 | 9,681,431 1,307,58 902,623 517,363 21,290 |
| | Totals | \$185,270 | 12,430,293 |
| Santa Monica | Sardine . Anchovy . Spiny lobster . Jack mackerel . All other . | \$42,354 22,501 18,578 6,703 8,537 | 1,874,083 1,757,873 36,492 313,236 101,102 |
| | Totals | \$98,673 | 4,082,790 |
| Redondo Beach | Spiny lobster All other | \$6,167 2,801 | 12,113 30,561 |
| | Totals | \$8,968 | 42,674 |
| Dana Point | Spiny lobster All other | \$8,098 35 | 15,900 239 |
| | Totals | \$8,133 | 16,14 |
| All other ports | All other | \$8,748 | 48,36 |
| | Totals | \$8,748 | 48,36 |

 TABLE 30

 Landings of the Commercial Fishing Boats and Shipments Into the Los Angeles Region During 1955, Shown by

 Port of Landing With the Corresponding Values

70

TABLE 31

Landings of the Commercial Fishing Boats and Shipments Into the San Diego Region During 1955, Shown by Port of Landing With the Corresponding Values

| | | Value | Pounds |
|------------------------|---|---|--|
| an Diego region totals | | \$16,321,933 | 111,148,593 |
| San Diego | Yellowfin tuna Skipjack Albacore Bluefin tuna Spiny lobster | \$7,138,278 5,653,311 3,023,813 132,897 98,599 | 46,979,014 42,804,843 18,264,393 923,536 183,611 |
| | White seabass. Abalone. Barracuda California halibut. Swordfish. | $56,030 \\ 39,670 \\ 36,394 \\ 28,036 \\ 23,031$ | 226,244 501,824 264,633 139,695 53,461 |
| | Shark. Rockfsh. Pacifie maekerel. Jackknife clam. Yellowtail. Seulpin. All other. | $16,597 \\ 8,785 \\ 7,375 \\ 6,668 \\ 6,156 \\ 5,553 \\ 12,934$ | 160,429 112,358 167,716 18,585 82,303 27,907 133,591 |
| | Totals | \$16,294,127 | 111,044,143 |
| Encinitas | White seabass | \$5,105 4,273 | 20,626 11,809 |
| | Totals | \$9,378 | 32,435 |
| Oceanside | White seabass | \$5,119 1,815 | 20,683 10,531 |
| | Totals | \$6,934 | 31,214 |
| Mission Beach | Jackknife elam | \$6,376 | 17,770 |
| | Totals | \$6,376 | 17,770 |
| All other ports | All other | \$5,118 | 23,031 |
| | Totals | \$5,118 | 23,03 |

 TABLE 31

 Landings of the Commercial Fishing Boats and Shipments Into the San Diego Region During 1955, Shown by

 Port of Landing With the Corresponding Values

TABLE 32

Origin of Shipments of Fresh Fish Into California During 1956

| | Shipped to | | | | | |
|---|------------------|-------------------------------|----------------------------|---|------------------------|--|
| | Eureka region | San Francisco region | Santa Barbara region | Los Angeles region | San Diego region | Total pounds |
| Continental United States: Carp. Eel. Sabiefish. Shad. Sturgeon. Tuna, skipjack. Tuna, yellowfin. Miscellancous fish. | | 3,317 | | 2,950 110,280 3,069 70 52,473 131,049 | | 1,535 2,950 110,280 3,317 3,069 70 54,835 153,589 |
| Oregon, Washington, Canada and Alaska: Halibut, Pacific. Sablefish. Salmon. Shad. Sturgeon. Miscellaneous fish. | 6,438 | 293,440 64,738 33,259 | | 290 199,692 117,090 20,532 36,568 | | 46,206 493,132 188,266 33,259 20,532 36,568 |
| South of the international bound- ary: Seabass, white Crustacean: Shrimp, unclassified Mollusk: Clam, Pismo | | | 5,10) | 1,190,472 | 9,487 | 9,487 5,100 1,274,312 |
| South America: Tuna, albacore Tuna, bigeye Tuna, biuefin Tuna, skipjack Tuna, yellowfin | | | 2.500 | 389,649 10,709 162,875 11,994,244 4,083,810 | 3,290,627 7,326,047 | 389,649 13,209 162,875 15,284,871 11,409,857 |
| Japan: Sardine Swordfish. Tuna, albacore. Tuna, bigeye Tuna, skipjack. Tuna, yellowfin. | | 9,762 4,077,481 492,344 | 2,000 | $310 \\ 15,820,775 \\ 654,873 \\ 64,927 \\ 30,635,204$ | 32.870 | 6,800 10,072 19,933,126 654,873 557,271 43,139,821 |
| Total pounds | 6,438 | 14,367,167 | 3,284,384 | 65,681,911 | 10,659,031 | 93,998,931 |

Recapitulation

| | Pounds | | Pounds |
|--|---------------------------|---|--|
| Carp Eel Halibut, Pacific Sablefish Salmon | 2,950 46.206 | Tuna, albacore Tuna, bigeye Tuna, bluefin Tuna, skipjaek Tuna, yellowfin | 20,322,775 668,082 162,875 15,842,212 54,604,513 |
| Sardine | 9,487 36,576 23,601 | Miscellaneous fish Crustacean: Shrimp, unclassified Mollusk: Clam, Pismo. | 190,157 5,100 1,274,312 |
| | | Total pounds | 93,998,931 |

TABLE 32Origin of Shipments of Fresh Fish Into California During 1956

TABLE 33

Origin of the Commercial Fish Landings and Shipments Into California During 1956

| | | Fishing bo | at landings | | | Total pounds of |
|--|-------------------------|-----------------------------------|---|--|-------------------------------------|---|
| Species | California | North of the state boundary | South of the inter- national boundary | Total fishing boat landings | Shipments ¹ | fishing boat landings and shipments combined |
| Anchovy | 56,920,585 | | | 56,920,585 | | 56,920,585 |
| Barracuda, California | 50,153 22,491 | | 702,374 | 752,527 | | 752,527 127,614 |
| Bonito Cabezon | 12,397 | | 105,123 | 752,527 127,614 12,397 | | 127,014 |
| Cabrilla | | | 63,438 | 63,438 | | 63,438 |
| Carp. | 855,576 | | | 855,576 | 1,535 | 857,111 |
| Corvina, shortfin | | | 430 | 430 | | 430 |
| Corvina, shorthn Croaker, white (kingfish) | 889,850 | | | 889,850 | | 889,850 |
| Dolphinfish, common Eel | 149 430 | | | 149 430 | 2,950 | 149 3,380 |
| Flounder | 374,114 | 996 | | 375,110 | | 375,110 |
| Flyingfish | 50,724 | 330 | | 50,724 | | 50,724 |
| Grouper | | | 211,594 | 211.594 | | 211,594 |
| Hake | 1,317,103 | 59,114 | | 1,376,217 15,108 | | 1,376,217 |
| Halfmoon | 15,108 | | | 15,108 | | 15,108 |
| Halibut, arrowtooth | 1,011,411 | 59,186 | | 1,070,597 | | 1,070,597 |
| Halibut, California Halibut, Pacific | 382,006 39,007 | 11 | 73,793 | 455,799 39,018 | 46,206 | 455,799 85,224 |
| Hardhead | 76,750 | | | 76,750 | 40,200 | 76,750 |
| Hardhead Herring, Pacific | 1,735,776 | | | 1,735,776 | | 1,735,776 |
| Lingood | 909,006 | 22.255 | 50 | 931,311 | | 931,311 |
| Lingcod Mackerel, jack | 75,762,110 | 22,200 | 30 | 75,762,110 | | 75,762,110 |
| | 50,012,780 | | 229 | 50,013,009 | | 50,013,009 |
| Needlefish, California | 525 | | | 525 | | 525 |
| Opaleye | 3,433 | | | 3,433 | | 3,433 |
| Perch | 187,681 | | | 187,681 | | 187,681 |
| Pompano, California | 76,679 | | | 76,679 | | 76,679 |
| Ratfish Rock bass | 8,245 | | 3,432 | 8,245 3,432 | | 8,245 3,432 |
| Rockfish | 14,656,584 | 242,332 | 44,599 | 14,943,515 | | 14,943,515 |
| Sablefish | 2,809,315 | 59.092 | | 2,868,407 | 603,412 | 3.471.819 |
| Salmon | 2,809,315 11,401,372 | 13,115 | | 11.414.487 | 188,266 | 3,471,819 11,602,753 |
| Sanddab | 787.972 | 828 | | 788,800 | | 788.800 |
| Sardine Sculpin | 69,554,345 100,232 | | | 69,554,345 100,232 | 6,800 | 69,561,145 100,232 |
| | | | | | | 1.565 |
| Sculpin, staghorn Sea bass, black | 1,565 39,610 | | 291.708 | 1,565 331,318 | | 331,318 |
| Seabass, white | 413,956 | | 667,267 | 1.081.223 | 9,487 | 1,090,710 |
| Seatrout, greenling | 1,187 | | | 1,187 | | 1,187 467,701 |
| Shad | 431,125 | | | 431,125 | 36,576 | 407,701 |
| Shark | 1,045,634 | | 39,680 | 1,085,314 | | 1,085,314 |
| Sheep-head | 4,965 | | 1,610 995 | 6,575 995 | | 6,575 995 |
| Skate | 175,546 | | 205 | 175,751 | | 175,751 |
| Smelt | 466,333 | | | 466,333 | | 466,333 |
| Sole. Dover | 7.244.572 | 1.023.852 | | 8,268,424 | | 8,268,424 |
| Sole, Dover Sole, English | 7,244,572 3,769,360 | 55,592 | | 3.824.952 | | 3.824.952 |
| Sole, petrale | 2,536,234 1,134,867 | 293,824 12,506 | | 2,830,058 | | 2,830,058 |
| Sole, rex Sole, sand | 77,062 | 250 | | 1,147,373 77,312 | | 1,147,373 77,312 |
| | 22,856 | | | 22,856 | | 22,856 |
| Sole, unclassified Splittail | 22,856 | | | 22,856 | | 22,850 |
| Sturgeon | | | | | 23,601 | 23,601 |
| Swordfish | 273,294 | | 1,880 | 275,174 | 10,072 | 285,246 |
| Tomeod | 1,153 | | | 1,153 | | 1,153 |
| Tuna, albacore | 15,874,652 | 115,985 | 21,064,574 | 37,055,211 | 20,322,775 | 57,377,986 |
| | | | | 10 005 000 | 668,082 | 668,082 |
| Tuna, bigeye | 2 612 044 | | | | | |
| Tuna, blgeye Tuna, bluefin Tuna, skipjack Tuna, yellowfin | 2,612,046 875 102 | | 10,013,922 120,152,347 149,280,874 | 12,625,968 120,153,222 149,280,976 | 162,875 15,842,212 54,604,513 | 12,788,843 135,995,434 203,885,489 |

TABLE 33Origin of the Commercial Fish Landings and Shipments Into California During 1956

TABLE 33—Continued

Origin of the Commercial Fish Landings and Shipments Into California During 1956

| | | Fishing bo | at landings | | | Total pounds of |
|---|---|-----------------------------------|---|---|------------------------|--|
| Species | California | North of the state boundary | South of the inter- national boundary | Total fishing boat landings | Shipments ¹ | fishing boat landings and shipments combined |
| Turbot Wahoo Whitebait Whitefish.ocean Yellowtail. Miscellaneous fish | 83,294 148,820 990 18,598 2,000 | | 12,258 830 352,289 346 | 83,294 12,258 148,820 1,820 370,887 2,346 | 190,157 | 83,294 12,258 148,820 1,820 370,887 192,503 |
| Crustacean: J rab. Crab, rock. Lobster, spiny. Prawn. Shrimp, bay. Shrimp, unclassified. | 14,320,169 59,171 735,869 1,233 718,968 1,168,179 | | 125 | 14,320,459 59,171 735,994 1,233 718,968 1,168,519 | 5,100 | $\substack{14,320,459\\59,171\\735,994\\1,233\\718,968\\1,168,519\\5,100}$ |
| Mollusk: Abalone Clam, gaper Clam, jackknife Clam, Jismo. Clam, Washington | 4,284,063 688 26,683 10,629 | | | 4,284,063 688 26,683 10,629 | 1,274,312 | 4,284,063 688 $26,683$ $1,274,312$ $10,629$ |
| Octopus Oyster, eastern Oyster, giant Pacific Oyster, Kumamoto Oyster, native Squid Miscellaneous mollusk | $\begin{array}{r} 16,217\\ 142,181\\ 6,101,220\\ 23,965\\ 6,234\\ 19,483,984\\ 66\end{array}$ | | | $\begin{array}{r} 16.217\\ 142.181\\ 6,101.220\\ 23,965\\ 6,234\\ 19,483,984\\ 66\end{array}$ | | 16,217 142,181 6,101,220 23,965 6,234 19,483,984 66 |
| Total pounds | 373,504,251 | 1,959,568 | 303,085,972 | 678,549,791 | 93,998,931 | 772,548,722 |

¹ For origin of shipments refer to Table 32.

4-72272

TABLE 33Origin of the Commercial Fish Landings and Shipments Into California During 1956

| THE | MARINE | FISH | CATCH | \mathbf{OF} | CALIFORNIA |
|-----|--------|------|-------|---------------|------------|
| | | | | | |

| | | THE M | AKINE F | ISH CATU | H OF CA | LIFORNIA | | 10 |
|--|-----------------|--|--|--|---|--|--|--|
| | Total pounds | 56,920,585 752,527 127,614 12,397 63,438 | 855,576 430 889,850 149 430 | 375,110 50,724 211,594 1,376,217 15,108 | 1.070,597 1.55,799 39,018 76,750 1.735,776 | $\begin{array}{c} 931,311\\ 75,762,110\\ 50,013,009\\ 3,433\\ 3,433\end{array}$ | $187,681 \\ 76,679 \\ 8,245 \\ 3,432 \\ 3,432 \\ 11,943,515$ | $\begin{array}{c} 2,868,407\\ 11,414,487\\ 788,800\\ 69,554,345\\ 100,232\end{array}$ |
| | December | 3,575,000 33,430 14,852 1,371 2,5,125 | 69,022 430 87,411 | 33,396 73,444 114,867 3,500 | 84,409 35,024 6,794 66,325 | 98,166 5,125,283 7,392,942 529 | 8,857 6,963 1,155,118 | $237.702 \\ 51.635 \\ 51.694 \\ 3.922.732 \\ 587 \\ $ |
| | November | $4.763,206\\143,704\\40,682\\1,378\\1,378\\1,378$ | 62,220 27,009 | 44,121 37,182 143,144 60 | 120,297 27,191 11,073 347 | 76,519 14,451,421 8,285,215 | 16,969 12,600 1,317,273 | $\substack{442.070\\28,632\\55,954}8,956,089\\8,955,089\\218$ |
| | October | 2,542,085 121,745 4,834 856 768 | 75,597 27,303 | 61,596 4,780 138,404 20 | 123,393 16,437 50 14,227 463 | $\substack{80,244\\10,538,456\\9,870,799\\525\\18}$ | 10,214 11,885 11,885 | 275,125 64,898 50,655,141 472 |
| | September | 2,453,225 70,288 34,791 540 | 71,597 | 22,310 125 159,521 4,139 | $ \begin{array}{r} 141.934 \\ 27.851 \\ 889 \\ 4.188 \\ 4.188 \\ 49,200 \end{array} $ | 84,064 6,354,485 2,816,252 395 | $13,262 \\ 10,211 \\ 1,400 \\ 1,280,850 $ | $\begin{array}{c} 210,359\\ 1,265,378\\ 59,768\\ 274,442\\ 3,886 \end{array}$ |
| g 1956 | August | 5,779,630 43,561 669 1,380 | 19,671 92,748 149 | 117,304 | $191,709 \\ 48,210 \\ 4,499 \\ 17 \\ 75,080 \\ 75,08$ | $ \begin{array}{c} 98,794 \\ 2,690,521 \\ 5,771,031 \\ \end{array} $ | 29,230 12,869 1,174,488 | 2,068,279 2,068,279 402,335 21,913 |
| ornia During | July | 4,089,685 49,361 758 | 34,796 67,797 190 | $\begin{array}{c} 6.717\\ 20.245\\ 1.325\\ 133,637\end{array}$ | 118,111 44,849 2,338 2,338 165,078 | $\substack{150,047\\1,543,647\\6,098,549}$ | 16,520 5,883 1,270,558 | $\substack{211,096\\3,541,435\\69,426\\265,804\\285,517\end{matrix}$ |
| 34 s Into Califi | June | 2,929,954 11,588 11,588 1,691 2,535 | 30,471 79,338 90 | 13,347 $21,071$ $4,035$ $180,534$ 514 | 117,116 36,024 26,146 134,629 134,629 | $\begin{array}{c} 100,817\\ 2,384,923\\ 1,157,740\end{array}$ | 7,461 70 695 934,646 | $\substack{258,543\\58,177\\58,177\\261,451\\29,903}$ |
| TABLE 34 d Shipments In | May | 3,337,915 31,966 1,886 1,973 | 34,998 277,606 150 | 67,332 9,408 145,021 225 | 88,578 36,109 5,076 1,465 1,465 | $ \begin{array}{c} 100,288 \\ 5,501,062 \\ 1,705,129 \\ \end{array} $ | 2,354 1,401,851 | $2,450,114\\72,269\\241,313\\5,596$ |
| TABLE 34 Monthly Landings and Shipments Into California During 1956 | April | 9,1114,893 7,802 744 744 | 117,691 64,813 | 29,556 99,954 315 | 51,537 60,723 60,723 $ 4,720 93,796 $ | 56,814 3,175,002 368,578 339 | $\begin{array}{c} 48,070\\ 1,673\\ 2,000\\ 1,319,695\end{array}$ | $\begin{array}{c} 231,568\\ 15,027\\ 58,404\\ 28,404\\ 240,361\\ 4,147\end{array}$ |
| Monthly L | March | 9,288,452 63,941 1,004 638 13,367 | 132,976 75,103 | 46,234 47,989 46,373 3,667 | 11,713 55,248 20 12,940 122,760 | 45.799 4,466,037 631,734 826 | ${}^{31,286}_{3,579}$ ${}^{3,579}_{3,400}$ ${}^{3,400}_{1,176}$ ${}^{1,176}_{1,176}$ | 232,692 83,717 156,620 2,330 |
| | February | 5,585,200 117,274 6,942 918 9,599 | 1 1 1 | 25,027 10,766 25,101 2,668 | 17,731 43,315 13,459 723,874 | $ \begin{array}{c} 16,345\\9,995,538\\1,260,471\\622\end{array} $ | $ \begin{array}{c} 9,821 \\ 1,166 \\ 200 \\ 180 \\ 1,205,034 \end{array} $ | $\substack{146,738\\362\\65,033\\165,250\\1,985}$ |
| | January | 3,461,340 57,867 21,473 150 11,184 | 115,260 | 8,170 31,948 7,950 | 4,069 24,818 7,380 77,805 | 23,414 9,535,735 4,654,569 | 3,446 35 35 $1,175$ $1,381$ $1,082,443$ | $176,481 \\ 112 \\ 64,439 \\ 4,013,807 \\ 678$ |
| | Species | Fishing boat landings: Anchory: Barreeda, California. Bouto. Cabron. | (arp. Corvina, shortfin. Croaker, white (kingfish). Dolphinfish, common. Eel | Flounder Flyingfish Flourer Hake Haltmoon | Halibut, arrowtooth Halibut, California. Halibut, Pacific Hardhead . | Lingcod Mackerd, jack Mackerd, Pacific Needlefsh, California Opaleye | Perch. Pompano, California. Patrish. Rock bass. Rock bass. | Sablefish Salmon Salmon Sandab Sardho Seulpin |

 TABLE 34

 Monthly Landings and Shipments Into California During 1956

| | | | Monthly L | u andings and | ADLE 34-CONTINUED od Shipments Into Cali | s Into Calify | Monthly Landings and Shipments Into California During 1956 | g 1956 | | | | | |
|--|---|--|---|--|--|--|--|--|---|---|---|---|--|
| Species | January | February | March | April | May | June | July | August | September | October | November | December | Total pounds |
| Sculpin, staghorn. Sca lass, black. Scabass, white. Scatrout, greening. Shad | 27,177 28,022 | 8,482 22,431 78 | 11,847 19,842 45 | 1,072 16,301 74,333 | 23,471 82,252 350,206 | 42,387 107,492 6,586 | 30,447 50,940 95 | 899 140,167 | 280 41,308 148,441 | 295 29,906 256,358 352 | 690 81,098 155,804 403 | 33.224 53.173 144 | 1,565 331,318 331,318 1,081,223 1,187 1,187 431,125 |
| Shark Shtep-head Stera. Starte Smate | $118,363 \\ 168 \\ 168 \\ 80 \\ 14,802 \\ 4,814$ | 77,384 334 20,200 12,217 | $\begin{array}{c} 420,431\\ 298\\ 575\\ 28,361\\ 27,404\end{array}$ | 63,590 115 28,094 24,929 | 50,524 181 11,609 47,005 | 76,672 200 11,027 88,444 | 62,014 7,475 101,876 | 30,614 4,060 68,862 | 28,821 794 340 7,759 47,401 | $ \begin{array}{r} 37,942 \\ 1,397 \\ 9,804 \\ 9,804 \\ 26,437 \\ \end{array} $ | 61,091 1,677 12,445 14,849 | $ \begin{array}{r} 57,868 \\ 1,411 \\ 20,1115 \\ 2,005 \\ \end{array} $ | - |
| Sole, Dover Sole, English Sole, Pertale Sole, rex | $\begin{array}{c} 211,982\\ 236,066\\ 183,565\\ 134,766\\ 3,195\end{array}$ | 186,546 288,123 159,307 113,333 113,333 6,497 | $\begin{array}{c} 291.797\\ 338.909\\ 186.850\\ 102.380\\ 8.288\end{array}$ | $\begin{array}{c} 559.964 \\ 423,581 \\ 173,153 \\ 79,597 \\ 13,219 \end{array}$ | $\begin{array}{c} 671,410\\ 385,605\\ 182,521\\ 92,189\\ 8,416\end{array}$ | $\begin{array}{c} 892.208\\ 236.562\\ 274.575\\ 53.240\\ 1.841\end{array}$ | $\begin{array}{c} 818,087\\ 199,794\\ 258,508\\ 56,702\\ 2,493\end{array}$ | $^{1,308,794}_{\begin{array}{c}282,247\\298,381\\90,871\\2,303\end{array}}$ | 1,012,118 394,799 214,819 85,163 17,366 | $\begin{array}{c} 860.954\\ 340.914\\ 184.298\\ 91.099\\ 9,310\end{array}$ | 1,091.249 345,228 312,672 141,383 2,890 | 363.315 353.124 401.409 106.650 1.494 | 8.268,424 3.824,952 2.830,058 1.147,373 77,312 |
| Sole, unclassified Splittail Swordfish Tomodd Tum, albacore | 690 362,722 | 1,355 17 22,849 | 1,603 | 859 | 877 | 2,437 | 1,146 2,225 11,186,341 | $\begin{smallmatrix} 1,540\\110\\25,915\\10,115,668\end{smallmatrix}$ | $1,010 \\ 59,195 \\ 68 \\ 7,758,516$ | 4,716 160,369 4,681,705 | 5,642 26,924 1,662,157 | 981 546 1,054,736 | 22,856 127 275,174 1,153 1,153 37,055,211 |
| Tuna, bluefin Tuna, skipjack. Tuna, yellowfin. Turbot. Mahoo | $\frac{10,528,037}{14,763,384}$ | 10,604,426 10,610,871 8,613 | 9,935,768 16,075,682 7,790 | $ \begin{array}{c} 8,025,713\\ 21,729,816\\ 3,063 \end{array} $ | $333,699\\9,735,507\\19,131,216\\6,185\\12,258$ | 2,478,487 9,528,813 15,165,979 5,638 | 580,704 8,861,819 16,662,043 2,167 | $ \begin{array}{c} 5.220,348 \\ 10,202,854 \\ 9,433,773 \\ 1,932 \end{array} $ | 2,644,251 13,674,290 8,513,011 6,952 | $^{659,816}_{7,130,270}_{4,226,879}_{9,519}$ | 708,513 11,870,750 5,734,860 10,504 | $\substack{10,054,975\\7,233,462\\13,628}$ | $\begin{array}{c} 12.625,968\\ 120.153,222\\ 149,280,976\\ 83,294\\ 12,258\end{array}$ |
| Whitebait Whitefash, ocean Yellowtail Miscellaneous fish | 822 19,650 | 5,567 8,735 146 | 9,088 1,240 4,193 54 | 11,825 261 387 72 | 32,126 14,260 1,215 | $40,384\\18\\105,027\\758$ | 28,886 220 71,379 49 | 14,676 6 37,363 2 | 609 59,275 20 | 146 32,703 18 | 181 16,125 | $^{4,510}_{1,790}$ | 148,820 1,820 370,887 2,346 |
| Crustacean: Crab. rock. Lotsh. rock. Dotster, spiny. Prawn. | 2,097,003 3,978 119,253 3,610 3,610 | 2,303,943 3.861 120,948 6,420 | 2,031,683 1,567 47,329 15,770 15,770 | 1,645,860 508 37 8,439 | 1,185,890 1,232 21,044 166.024 | $\begin{array}{c} 317,905\\ 2,871\\ 33,337\\ 33,337\\ 254,673\end{array}$ | 6,808 6,808 184 103,474 315,566 | 5,301 74 217,434 331,769 | 7,432 176,575 100,487 | 6,590 205,593 74,632 | ${\begin{array}{c} 1,719,331\\ 10,519\\ 135,437\\ 135,437\\ 26,871\end{array}}$ | 3,018,844 8,504 107,434 31,362 31,362 | 14,320,45959,171735,994735,994718,968718,9681,168,519 |

TABLE 34Monthly Landings and Shipments Into California During 1956

DEPARTMENT OF FISH AND GAME

| 4,2 | 378 10,629 598 16,217 | 01 142,181 83 6,101,220 99 005 | | 49,370,914 678,549,791 | 1,535 | 72 603,412 188,266 | 00 6,800 9,487 36,576 | 23,601 10,072 | 20, | $\begin{array}{c c} 162,875\\ 91\\ 15,842,212\\ 00\\ 190,157\\ 190,157\\ \end{array}$ | ,250 5,100 | 00 1,274,312 | 76 93,998,931 | 53,891,590 772,548,722 | - |
|------------------------------------|-----------------------------|--|---|------------------------|---|---|-----------------------------------|-----------------------|--------------------------------|---|-------------------------------------|-------------------------|---------------|--|--|
| 350 | - | 15,701 | 2,29 | | | 16,472 | 6,800 | | 1,116,817 | $ \begin{array}{r} 419.991 \\ 2.934.046 \\ 6.100 \end{array} $ | 1,2 | 19,200 | 4,520,676 | 12 | |
| 200 | 1,809 | 13,354 1,696,553 7007 | 2,611 | 68,046,550 | 2 050 | 6 | | | 513,305 | 3,070,488 3,481,263 9,515 | | 32,640 | 7,211,715 | 75,258,265 | |
| 282 | 326 498 | 15,056 948,872 5 750 | | 96,780,435 | | 25.749 6.256 | 3,338 | | 120,722 | $1.763.459\\4.845.523\\22,450$ | 2,500 | 32,000 | 6,821,997 | 56,987,302 103,602,432 | |
| 280.571 20 3.087 | 241 762 | 11,100 307,915 1,800 | 1,22 | 52,294,649 | | 51.177 55.979 | 7,546 | 1,505 | 38,620 | $\begin{array}{c} 625,324\\ 3,905,092\\ 7,410\end{array}$ | | | 4,692,653 | 56,987,302 | |
| 388,430 | 464 | 10,190 39,915 | 1,645,800 | 58,906,833 | | 47,097 31,542 | 1,941 11,296 | | 696,703 254,279 | 1,053,824 4,171,111 11,005 | | | 6,278,798 | 65,185,631 | |
| 465,497 | 617 | 7,978 49,899 | 2,373,720 2,373,720 | 60,250,950 | | 32,364 47,283 171 | 17,078 | | 842,601 254,220 | 952,257 5,013,990 5,875 | | 735,432 | 7,901,271 | 68,152,221 | |
| 485,827 | 986 | $^{8,459}_{112,057}$ | 4,588,340 12 | 45,916,176 | 1,035 | 25,037 25,037 35 | 3,716 | | 1,531,472 145,419 | $\begin{array}{c} 466,182\\ 3,859,972\\ 2,200\end{array}$ | | | 6,038,754 | 51,954,930 | |
| 577,737 20 2.782 | 26 1,386 | 11,087 314,643 | $^{1,500}_{3,882,666}$ | 53,360,423 | 500 | 106,419 35 | 1,148 | 15,529 4,174 | 2,255,832 10,698 | $867,962 \\ 6,339,741 \\ 2,000$ | | | 9,604,440 | 62,964,863 | |
| 474,985 60 2,300 | 6,193 2,055 | 10.557 $375,959$ | 1,370 338,223 | 49,264,967 | | 42,324 8,406 | | 138 | 3,423,221 3,466 | 1,260,985 5,445,170 35,744 | | | 10,219,454 | 59,484,421 | · . |
| 195,486 160 1,936 | 2,716 2,542 | 13.714 325.768 | 78,020 | 47,122,401 | | 10,330 68,525 42,106 | | 3,507 | 2,176,758 | 102.872 1.660.558 4.948.177 73,808 | 1,350 | 455,040 | 9,608,290 | 56,730,691 | |
| 220 1.026 | $^{325}_{1,592}$ | 12,115 199,700 | 5,305 5,305 | 44,386,612 | | $11,281 \\ 15,000$ | | 2,406 | 3,006,250 | 1,298,721 3,948,285 11,050 | | | 8,292,993 | 52,679,605 | |
| 282,388 140 406 | $^{235}_{1,908}$ | 12,870 231,956 | 461 44,395 12 | 52,848,881 | | 87,078 2,152 | | 504 | 4,600,474 | 2,402,461 5,712,143 3,000 | | | 12,807,890 | 65,656,771 | ts. |
| Mollusk: Abalone Clam, gaper | Clam, Washington Octopus | Oyster, eastern Oyster, giant Pacific Ovster, Kumamoto | Öyster, native Squid Miscellaneous mollusk. | Total pounds | Shipments: ¹ Carp. Eel | Halibut, Pacific Sablefish Salmon | Sardine Scabass, white Shad | Sturgeon Swordfish | Tuna, albacore Tuna, bigeye | Tuna, stripiack Tuna, skipjack Tuna, yellowfin Miseellaneous fish | Crustacean: Shrimp, unelassified | Mollusk: Clam, Pismo | Total pounds | Grand total fishing boat land- ings and shipments | ¹ See Table 32 for origin of shipments. |

TABLE 34—Cont'd.

| | Total pounds | $103,233\\1,026,560\\983,399\\175\\39,007$ | ${}^{68,835}_{350,672}$ ${}^{350,672}_{72,221}$ ${}^{2,876,497}_{1,039,779}$ | 6,298,493 97,334 14,004 120,962 | $ \begin{array}{r} 6,081,783 \\ 1,295,503 \\ 969,823 \\ 456,276 \\ 14,115 \\ 14,115 \\ \end{array} $ | 10,120 500,063 7,806 88,177 11 | 7,988,684 895,596 | 10,629 1,774 4,381,050 23,965 | 2,429,491 35,816,766 |
|--|--------------|--|--|--|--|--|----------------------|---|----------------------|
| | December | 5,151 104,327 73,284 | 53,312 3,803 152,268 125,789 | 6,942 | 308,055 120,883 185,621 45,579 1,075 | 330 | 4,146 | 378 1,228,700 8,428 | |
| | November | 17,583 128,215 109,061 35 | 30,881 5,837 237,832 267,334 | 7,253 | 819,406 128,151 118,670 62,070 895 | 4,900 604 4,517 | 40 | $189 \\ 1,402,000 \\ 7,987$ | 3,353,695 |
| | October | 19,442 114,711 115,530 | $22,082 \\ 4,766 \\ 289,477 \\ 150,050 $ | 2,961 165 1,305 | 723,426 108,586 62,174 48,177 3,080 | 170,574 100,574 | | 326 795,000 5,750 | 2,642,127 |
| ring 1956 | September | 8,151 138,403 140,494 889 | 36,517 9,298 316,437 104,550 | 232,923 17,508 6,663 | 871,135 133,447 72,139 52,968 2,419 | 285,266 580 29 | 100,487 | $^{241}_{248,500}$ | 2,780,929 |
| Region Du | August | $ \begin{array}{c} 6,035\\ 161,526\\ 181,149\\ 140\\ 4,488 \end{array} $ | $\begin{array}{c} 200\\ 53,807\\ 15,754\\ 245,997\\ 71,816\end{array}$ | 1,466,779 13,381 27,215 | 1,128,308 108,927 71,588 62,351 265 | 155 43,619 23 10,841 | 309,744 | 156 | 3,984,264 |
| the Eureka | July | $ \begin{array}{c} 1,097 \\ 75,562 \\ 106,140 \\ 2.338 \end{array} $ | 60,646 7,796 343,028 71,622 | 2,421,607 6,402 56,458 | 759,404 76,911 89,833 39,939 | 23,041 | 177,310 | 362 23,150 | 4,342,646 |
| 35 I Fish Into | June | 115,835 115,835 102,935 26,146 | $\begin{array}{r} 67\\32,296\\172,644\\82,590\end{array}$ | 1,016,116 7,962 3,448 23,352 | $\begin{array}{c} 722,323\\ 93,420\\ 70,603\\ 30,064\end{array}$ | 23,299 11 | 317,905 199,180 | 42,450 | 3,083,796 |
| TABLE 35 Monthly Landings and Shipments of Commercial Fish Into the Eureka Region During 1956 | May | 14,615 100,327 74,195 | 34,829 368,470 77,008 | $1,161,068 \\ 7,784 \\ 3,746 \\ 4,206$ | 484,186 167,115 50,316 43,654 953 | 121 17,318 | 1,115,089 108,875 | 26 241,800 | 4,080,986 |
| ipments of | April | 19,547 43,445 49,872 | $^{17,057}_{11,806}$ | 11,689 6,650 1,405 | 250,004 141,591 67,911 35,341 4,684 | 90 508 6,297 | 1,558,196 | $^{6,193}_{255,450}$ | 2,793,438 |
| lings and St | March | 5,205 17,108 10,259 | $ \begin{array}{c} 6,314\\ 9,806\\ 257,961\\ 21,712 \end{array} $ | 11,959 160 115 | $\begin{array}{c} 4,687\\ 4,687\\ 67,588\\ 23,784\\ 529\end{array}$ | 43 43 | 1,901,183 | $^{2,716}_{128}$ 144,000 | 2,612,492 |
| onthly Land | February | 4,581 21,351 17,311 | 2,289 $3,113$ $210,525$ $17,305$ | 3,170 | 5,131 81,164 62,171 7,202 200 | 220 301 2,577 | 1,796,424 | 325 | 1,477,369 2,235,533 |
| Σ | January | 5,750 3,169 | 68,568 642 242 25,318 1,431 | 323 | 5,718 12,857 51,209 5,147 15 | 30 193 11 | 1,295,701 | 235 64 | 1 |
| | Species | Fishing boat landings from California Prounder- Halate, Arrowrooth, Halate, California, | Halbut, Fachie. Herring, Pacific. Lingred. Perch. Sablefish. | Salmon. Sanddab Shark. State Smolt | Sole, English Sole, English Sole, petrale Sole, rex | | Crustacean: Crab | Mollusk: Clam, Washington Octopus Oyster, Kunamoto | Total pounds |

 TABLE 35

 Monthly Landings and Shipments of Commercial Fish Into the Eureka Region During 1956

78

| 80 990 6,340 59,114 10,400 59,186 11 82 22,255 | 5,264 242,332 2,387 59,092 13,115 84 1,023,852 45,102 1,023,852 | 826 55,592 4,693 293,824 2,090 12,506 3,959 3,959 | 340 | 77,348 1,847,542 | 6,438 | 6,438 | 2,506,839 37,670,746 | |
|---|---|---|--------------------------------------|------------------|-----------------------------------|--------------|-----------------------------|---------------------------------------|
| 8,899 10,118 732 | 6,394 13,279 220,347 44 | 96 9,450 2,000 | | 271,415 77 | | | 3,625,110 2,50 | |
| 9,193 7,500 2,027 | 22,558 7,012 75,325 | 5,966 40,819 380 | | 170,780 | | | 2,812,907 | |
| 4,718 | 27,067 7,346 1,204 78,169 | 7.021 570 | | 128,209 | 1,502 | 1,502 | 2,910,640 | |
| 6,635 5,241 6,457 | 54,529 6,385 11,911 664 115,390 | 3,983 86,494 1,965 3,959 | | 303,624 | 4,936 | 4,936 | 4,292,824 | |
| 5,375 4,888 3,244 | 31,336 1,440 27,064 | 527 57,719 270 | 340 | 132,203 | | | 4,474,849 | |
| 14,754 9,500 4,883 | 17,596 4,441 121,197 | 3,598 70,190 1,788 | | 247,947 | | | 3,331,743 | |
| 356 3,200 11,539 1,830 | 14,544 5,228 80,215 | 2,234 3,295 428 | | 122,869 | | | 4,203,855 | |
| 20 | 5,512 4,733 57,717 | 1,702 1,011 200 | | 71,193 | | | 2,864,631 | |
| 540 | 6,590 3,776 93,047 | 670 287 15 250 | 290 | 105,565 | | | 2,718,057 | |
| 1,195 | 50,942 3,065 110,279 | 35,263 12,845 2,800 | | 216,389 | | | 2,451,922 | |
| | , | | | | | | 1,477,369 | ts. |
| Tahing boat laudings from waters promoth of the state boundary: Plonnder - the state boundary: Hake - Halbut, arrowtooth Halbut, Pacific | Rockfish Sablefish Samon Sandab Sole, Dover | Sole, English. Sole, Petrale. Sole, rex. Sole, sand Tuna, albacore. | Crustacean: Crab Shrimp, ocean | Total pounds | Shipments: ¹ Salmon | Total pounds | Grand totals, Eureka region | See Table 32 for origin of shipments. |

TABLE 35—Cont'd.

| | Total pounds | 855,097 76,750 1,139,585 431,125 110 | 2,502,794 |
|---|-------------------------------------|---|--------------------------------------|
| | December | 68.622 6.794 51,635 | 127,051 |
| | September October November December | 19,671 71,607 75,567 62,220 65,622 118,107 71,567 75,567 11,073 6,794 118,107 873,454 14,227 11,073 6,794 110 873,454 14,227 15,652 51,653 110 873,454 14,227 15,652 51,653 | 101,925 |
| | October | 75,597 14,227 | 89,824 |
| uring 1956 | September | 71,597 4,188 873,454 | 949,239 |
| o Region D | August | 19,671 17 148,803 110 | 168,601 |
| Sacrament | July | 34,717 | 35,166 |
| 36 oats in the | June | 34.968 30.471 34.717 1465 30.471 34.717 20.935 670 339.206 6.586 | 37,765 |
| TABLE 36 Il Fishing Boats | May | | 407,604 |
| Commercia | April | 122.976 117.691 34.998 30.471 12.940 15.011 20.035 570 74.333 350.206 6.586 | 211,755 |
| TABLE 36 Monthly Landings of the Commercial Fishing Boats in the Sacramento Region During 1956 | March | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 145,916 |
| onthly Land | February | 91 13 | 105,196 |
| Σ | January | 115,260 7,380 112 | 122,752 |
| | Species | Fishing boat landings from California Carp | Total pounds, Sacramento re- gion |

 TABLE 36

 Monthly Landings of the Commercial Fishing Boats in the Sacramento Region During 1956

| | | THE | MAR | INE F | ISI | I C | атсн | OF | CALI | FORNIA | | | | 81 | |
|---|-----------------|--|--|---|----------|----------------|---|------------------------------|----------------------------------|--|----------------------------------|---------------------------|--|------------------------------------|---------------|
| | Total pounds | 387,981 190,785 180,785 | $^{9,637}_{223,041}$ | 7,290 27,777 15,801 925,121 | 317,665 | 3,229 | 2,942,536 830,216 2,938,586 | 455.097 1.565 | $197 \\ 43,282 \\ 96,940 \\$ | 147,492 1,145,950 1,730,489 883,773 505,104 | 62,847 1,643 | 1,153 3.243.829 | 63,985 53,340 22 | 5,974,661 718,968 | |
| - | December | 000 | 479 | 725 1,771 66,325 | 13,820 | | 326,185 | 40,235 300 | $^{2,008}_{10,730}$ | $\substack{62\\8.383\\184,256\\92,529\\46,780\end{array}$ | 419 | | 11.111 4,510 | 2,921,848 31,362 | - i - |
| | November | | 22,092 | 883 1,883 347 | | 202 | 424,723 61,852 | 42,029 690 | 1,566 | 1,660 50,076 161,013 52,731 54,582 | 1,895 | 55.838 | 5,691 181 | 1,684,660 26.871 | |
| 56 | October | 15,280 | 336 41,623 | 363 2,160 363 | 32,856 | 1,690 | Ψ | 37,792 295 | $^{31}_{7,258}$ | 7,134 61,038 171,892 51,286 51,286 | 6,230 120 | | 9,334 | 74.632 | |
| During 19 | September | 122,950 | 474 9,544 | 1,440 | 30,025 | 1,440 | 8° • = = | 24,069 280 | $^{116}_{7,620}$ | 17,432 62,734 179,649 69,302 21,889 | 14,947 299 | | 6,372 | 176.575 | |
| isco Region | August | 161,100 | 1,381 | 5,319 141 | 18,793 | 66 | 103,267 35,913 351,834 | 31,392 | 3,166 3,380 | 25,939 61,501 87,062 97,924 18,080 | 2,038 | 973.445 | 1,909 | | 22,025 |
| San Franci | July | 39,225 | 2,362 | $^{1,500}_{7,083}$ | 71,809 | 100 | $ \begin{array}{c} 96.779\\ 96.779\\ 27.644\\ 1.052.802 \end{array} $ | 22,565 | 2,994 4,530 | $\begin{array}{c} 17.548\\ 29.874\\ 72.699\\ 89.767\\ 9.838\end{array}$ | 2,493 | | 1,483 3,525 | 103.474 | 137,916 |
| 37 ish Into the | June | 5,750 | 4,134 9,480 | 4,681 | 50,364 | | $\begin{array}{c} 45.767\\71.536\\736.139\end{array}$ | 22,561 | 217 3,970 | 22,251 46,571 86,243 91,532 12,729 | 1,841 | | 2,616 16,761 | 33.337 | 55,493 |
| TABLE 37 Monthly Landings and Shipments of Commercial Fish Into the San Francisco Region During 1956 | May | 22,326 100 | 157 50,181 | 2,790 2,844 329 | 32,092 | | 130,285 123,361 683,436 | 41,430 | 80 7,105 | $10,675\\103,832\\146,969\\70,698\\39,528$ | 7,463 | 436 | 4,633 | 47,217 | 57,149 |
| ients of Cor | April | 21,050 | 300 5,966 | 1,665 655 3 978 | 13,692 | 100 11 | 173,537 95,470 | 32,480 | 12,400 | 15,297 251,098 217,016 54,711 32,694 | 8,535 60 | 65 | 2,480 5,499 22 | 32,591 8,430 | and to |
| s and Shipm | March | 300 | 38,620 | 1,454 706 199 735 | 21,167 | 15 000 | 312,287 90,896 | 49,232 | 9,065 13,840 | 24,639 193,443 121,514 77,165 58,948 | 7,509 | 45 | 5,671 4,046 | 94,193 15,770 | |
| ıly Landing: | February | | 19,410 | $^{+20}_{-792,594}$ | 8,855 | 111 0 | 283,848 | 53,480 | 8,568 10,390 | $\begin{array}{c} 4.165\\71.136\\120.798\\42.372\\82,238\end{array}$ | 6,297 | 539 | 6,223 2,590 | 451,436 6.420 | |
| Month | January | | 310 4,815 | 900 4,396 8,540 | 12,617 | 1 219 | 228,904 89,645 | 57,832 | 3.690 7.785 | $690\\206,264\\181,378\\93,756\\98,410$ | 3,180 | | 6,462 811 | 742,716 3,610 | |
| | Species | Fishing boat landings from California waters: Anchovy. Concernent | Croaker, white (kingfish). Flounder | Hake. Halibut, arrowtooth Halibut, California. Herring Pacific | Lingcod. | Mackerel, jack | Rockish Sablefish Salmon | Sanddab Sculpin, staghorn | Seabass, white Shark Skate | Smelt. Sole. Dover. Sole. English. Sole. pertale. Sole. pertale. | Sole, sand Sole, unclassified | Tomcod. Tuna. albacore | Turbot. Whitebait Miscellaneous fish | Crustacean: Crab Shrimn, hav | Shrimp, ocean |

 TABLE 37

 Monthly Landings and Shipments of Commercial Fish Into the San Francisco Region During 1956

| DEPARTMENT | \mathbf{OF} | FISH | AND | GAME | |
|------------|---------------|------|-----|------|--|
| | | | | | |

| | Mont | TABLE 37—Continued Monthly Landings and Shipments of Commercial Fish Into the San Francisco Region During 1956 | s and Shipr | T ments of Co | TABLE 37—Continued ommercial Fish Into th | Continued ish Into the | San Franci | isco Region | During 19. | 26 | | | |
|--|-----------------------------------|---|--|---|--|------------------------------------|--|---------------------------------------|---|--|---------------------|----------------------------------|--|
| Species | January | February | March | April | May | June | July | August | September | October | November | December | Total pounds |
| Mollusk: Abalone. Otopus. Oyster, estern. Oyster, gant Paeffe. | 680 12,870 12,906 12,906 | 12,115 18,250 145 | 950 13.714 21.943 1.313 | 2,090 330 10,557 22,909 1,370 | 2,575 425 $11,087$ $17,693$ $1,500$ | 1,725 430 $8,459$ $16,557$ 720 | 3.050 100 7.978 19,749 294 | 1,925 70 10,190 13,715 69 | $\begin{array}{c} 1.750 \\ 534 \\ 11.100 \\ 20,165 \\ 25 \end{array}$ | 1,500 148 15,056 50,672 37 | $^{1,375}_{13,354}$ | 1.025 682 15,701 32,108 | $\begin{array}{c} 17.965\\ 5.249\\ 142.181\\ 325.145\\ 6.234\end{array}$ |
| Total pounds | 1,785,655 | 1,995,703 | 1,317,291 | 1,043,863 | 1,656,946 | 1,352,331 | 1,834,391 | 2,251,286 | 3,020,962 | 1,680,171 | 2,763,455 | 3,871,686 | 3,871,686 24,573,740 |
| Fishing boat landings from waters north of the state boundary Tuna, albacore. | | | | | | | | | | 768 | | | 768 |
| Total pounds | | | | | | | | | | 768 | | | 768 |
| Fishing boat landings from waters south of the international bound- ary Tuna, skipjack. Tuna, yellowfin | | | | 150,572 | 1,369 65,119 | | | | | | | | $^{1,369}_{215,691}$ |
| Total pounds | | | | 150,572 | 66,488 | | | | | | | | 217,060 |
| Shipments ¹ Carp. — — — — — — — — — — — — — — — — — — — | 33,301 | 1,000 | $ \begin{array}{c} 10,040 \\ 55,925 \\ 5,006 \end{array} $ | 7,324 | 500 402 36,724 | 1,035 3,110 20,087 | 32,364 25,788 171 | 12,608 | 23,559 17,725 | 16,179 | 73,553 22,420 | 6,800 | 1,535 45,916 293,440 64,738 6,800 |
| Shad Swordfsh Tuna a haore | 504 807.517 | | 5,256 $265,260$ | 805.243 | 1,148 $4,002$ 442.486 | 3,716 | 17,078 | 11,296 | 38.620 | 3,338 | 212.795 | 283.438 | 36.576 9.762 4.077.481 |
| Tuna, skipjack. Tuna, yellowfin Miscellaneous fish | 816,426 3,000 | 1,027,473 10,500 | 1 | 583,046 2,000 | ~ | 883,340 1,000 | $^{929,179}_{1,000}$ | 200,032 1,040 | 400,250 | 805,450 | 977,391 | 625,914 | $\begin{array}{c} 492,344 \\ 9,316,035 \\ 22,540 \end{array}$ |
| Total pounds. | 1,660,748 | 1,243,663 | 1,977,032 | 1,488,165 | 1,373,335 | 912,288 | 1,459,490 | 618,036 | 480,154 | 951,945 | 1,286,159 | 916,152 | 14,367,167 |
| Grand totals, San Francisco region | 3,446,403 | 3,239,366 | 3,294,323 | 2,682,600 | 3,096,769 | 2,264,619 | 3,293,881 | 2,869,322 | 3,501,116 | 2,632,884 | 4,049,614 | 4,787,838 | 39,158,735 |
| ¹ See Table 32 for origin of shipments. | nts. | | | | | | | | | | | | |

 TABLE 37

 Monthly Landings and Shipments of Commercial Fish Into the San Francisco Region During 1956

| | | Total pounds | 9,658,359 9,762 244,421 130 | 46,638 283,253 | 235 14,615 736,498 144,946 | 2,454,324 43,848 525 28,916 29,341 | $\begin{array}{c} 8,245\\ 5,616,156\\ 891,214\\ 752,969\\ 202,541 \end{array}$ | $^{828}_{1,667}_{572,411}_{54,620}$ | $168,246\\13,890\\589,722\\186,241\\105,357$ | $^{100}_{4,660,071}$ |
|----------|---|-------------------|---|-------------------|--|--|--|--|---|------------------------|
| | | December | 1,364 | 11,181 | 2,131 20,296 | 763 | 423,079 67,364 2,916 | 27,556 9,385 | $ \begin{array}{c} 1,863 \\ 1,070 \\ 38,767 \\ 8,425 \\ 6,100 \\ 6,100 \\ \end{array} $ | 624 3,886 59 |
| | | November December | 599,200 1,378 7,052 | 4,446 6,030 | 235 1,416 21,493 | 1,650 | 273,378 97,350 6,088 | 56 3,275 6,570 | $ \begin{array}{c} 9,002 \\ 1,110 \\ 42,032 \\ 20,078 \\ 14,145 \end{array} $ | 100 54,096 191 |
| | | October | 200,750 777 11,496 | 531 14,500 | 10,287 | 181,235 525 3,607 | 327,102 36,257 22,828 | 44 3,681 | 15,384 1,165 39,450 11,364 6,969 | 401,695 |
| | ing 1956 | September | 373,425 521 30,566 | 4,610 16,400 | 49,200 $4,724$ | 822,184 145 6,451 | $\begin{array}{c} 1,400\\ 394,093\\ 38,967\\ 26,047\\ 15,679\end{array}$ | 100 360 5,812 116 | $22,389 \\ 80 \\ 61,494 \\ 23,757 \\ 4,781 \\ 4,781 \\ 1,78$ | 3,284,945 3,284,945 |
| | Monthly Landings of the Commercial Fishing Boats in the Monterey Region During 1956 | August | 704,760 1,380 74,770 | 9,009 13,550 | 1,646 74,880 15,110 | $1,427,259\\8,345\\3,840\\11,582$ | 567,502 54,945 72,843 35,680 | 207 718 402 | 11,765 3,420 73,524 25,572 6,405 | 915,449 |
| | e Monterey | July | $^{4,850}_{29,071}$ | 2,620 | $ \begin{array}{r} 3,658\\ 165,078\\ 11,845 \end{array} $ | 11,824 35,503 3,448 4,392 | 701,188 109,208 30,116 36,712 | $ \begin{array}{c} 548 \\ 104 \\ 95 \\ 2,560 \end{array} $ | 25,043 1,745 41,486 6,522 6,625 | 354 |
| 38 | Boats in the | June | 51 4 | 2,597 | 2,289 134,562 7,667 | 1,472 | $\begin{array}{c} 70\\ 500,788\\ 94,363\\ 1113,446\\ 211,984\end{array}$ | 100 2,996 1,124 | $\substack{ 41,343\\1,105\\40,784\\10,609\\7,857 \end{cases}$ | 349 |
| TABLE 38 | al Fishing | May | 1,217,895 1,704 21,424 150 | 2,180 35,704 | 226,419 20,933 | 4,095 | 627,528 62,157 510,517 18,630 | 80 220 1,113 234 | 29,649 2,725 59,099 13,933 6,133 | 363 |
| | e Commerc | April | 3,935,667 539 12,835 | 4,015 | 366 86,234 13,018 | 4,605 | 2,000 510,534 70,583 12,549 | 268 70 29,128 8,446 | $\begin{array}{c} 4,555\\ 1,025\\ 52,778\\ 5,284\\ 5,284\end{array}$ | 655 |
| | dings of th | March | 2,515,212 513 7,480 | 1,841 29,265 | 344 25 $11,296$ | 1,520 | $^{3,400}_{437,841}_{110,060}$ | 408 360,883 13,590 | 1,290 445 $69,973$ $17,769$ $9,246$ | 1,307 |
| | Aonthly Lan | February | 1,600 273 5,606 | 1,036 3,750 | 256 1,838 | 180 | 200 384,168 65,432 4,670 | 9,500 6,773 | 5,713 40,220 16,804 9,781 | 255 284 |
| | | January | 50 2,463 | 2,572 2,200 | 1,728 | 270 | $ \begin{array}{c} 1,175\\ 468,955\\ 84,528\\ 84,528\\ 3,939 \end{array} $ | 108,690 5,420 | 250 30,115 8,952 22,031 | 255 |
| | | Species | Fishing boat landings from California waters: Anchory Caberon Croaker, white (kingfish) | Flounder | Halibut, arrowtooth Halibut, California Herring, Pacific Lingcod, | Mackerel, jack. Mackerel, Pacific Needlefish, California. Perch Pompano, California. | Ratfish Rockfish Sablefish Samon Samon | Sardine | Smelt. Sole. Dover. Sole. English. Sole, rerate. | Sole, stand |

TABLE 38Monthly Landings of the Commercial Fishing Boats in the Monterey Region During 1956

| 84 | | | DEP | ARTMEN | т | F FISH | AN | D G. |
|---|-------------------------------------|-----------|--------------------------------|--|---------------|---|---------------|--------------------------------|
| | Total | 7,303 | $^{31,205}_{1,233}$ | $^{688}_{5,983}_{18,594,241}$ | 46,168,260 | $ \begin{array}{r} 19,869 \\ 2,169 \\ 360,951 \end{array} $ | 382,989 | 46,551,249 |
| | December | | 12,193 | 20 727 2,237,630 | 2,882,158 | | | 2,882,158 |
| | September October November December | | 8,828 82 | $^{48}_{2,607,805}$ | 3,796,491 | | | 3,796,491 |
| | October | 146 | 32 | 314,960 | 1,635,610 | | | 1,635,610 |
| ing 1956 | September | 580 | 28 | $^{20}_{1,229,190}$ | 6,418,813 | | | 6,418,813 |
| Region Dur | August | 2,924 | 74 | 1,585,305 | 5,704,308 | | | 5,704,308 |
| e Monterey | July | 2,320 | 184 | 2,113,425 | 3,421,477 | | | 3,421,477 |
| Continued Boats in the | June | 324 | | 4,333,170 | 5,516,977 | 2,123 90,503 | 92,626 | 5,609,603 |
| TABLE 38—Continued cial Fishing Boats in th | May | 302 | | 20 3,882,551 | 6,747,731 | 19,869 46 46 $270,448$ | 290,363 | 7,038,094 |
| T. Commerci | April | 29 | $\frac{521}{37}$ | 60 463 258,215 | 5,105,732 | | | 5,105,732 |
| TABLE 38—Continued Monthly Landings of the Commercial Fishing Boats in the Monterey Region During 1956 | March | 278 | 4,157 243 | 1,299 | 3,620,831 | | | 3,620,831 |
| lonthly Lan | February | 400 | 4,600 | 220 518 | 564,118 | | | 564,118 |
| 2 | January | | 906 221 | $^{140}_{1,990}$ | 754,014 | | | 754,014 |
| | Species | Whitebait | Crustacean: Crab. Prawn. | Mollusk: Clam, gaper Octopus Squid Missellancous mollusk | Total pounds. | Fishing hoat landings from south of the international boundary: Tuna, shipisek Tuna, yellowfin | Total pounds. | Grand totals, Monterey region. |

ME

TABLE 38Monthly Landings of the Commercial Fishing Boats in the Monterey Region During 1956

| | | THE MILL | | onton | or eann | Onitin | | |
|---|-----------------|---|--|---|--|--|---|------------------------------|
| | Total pounds | 557,450 2,345 14,157 14,157 143,505 143,505 | $4,634\\95,315\\14,056,984\\11,836,493\\42,047$ | 2,576,483 47,501 264,248 8,785 | 15,446,144 721 41,260 1,022 169,747 | $^{399}_{4,152}$ $^{4,152}_{9,985}$ $^{9,985}_{2,949}$ $^{2,949}_{153,646}$ | $\begin{array}{c} 495,189\\ 68,130\\ 1,849\\ 13,199\\ 320,084\end{array}$ | 11,098 935 |
| | December | 55 55 16,774 | $ \begin{array}{c} 10,643 \\ 2,802,345 \\ 2,009,070 \\ 2,588 \end{array} $ | 185,620 4,252 470 | 772,705 557 144 920 | 90 705 8,392 | 110,141 6,101 27 300 | 1,108 6 |
| | November | 200 65 2,315 | $ \begin{array}{c} 11.786\\ 2.168,992\\ 4.713,868\\ 3,266 \end{array} $ | 316,119 2,255 | 927,860 304 4,176 403 1,229 | 71 | 111.743 8,586 74 25,284 | 105 |
| 56 | October | 800 79 5,587 | $\begin{array}{c} 12.727\\ 4.484.171\\ 4.653.705\\ 3.223\end{array}$ | 295,005 185 | $13,092,203 \\ 1,072 \\ 352 \\ 2,263 \\ 2,263 \\$ | 138 410 15,020 | $18,655\\6,185\\154\\10,350\\138,879$ | 85 18 |
| TABLE 39 Monthly Landings and Shipments of Commercial Fish Into the Sanla Barbara Region During 1956 | September | 108,510 19 160 11,033 | $ \begin{array}{c} 11,299\\ 223,240\\ 138,000\\ 3,283\end{array} $ | 169,093 800 17,375 | 212,100 5,572 1,963 | 120 | $\substack{ 42,600 \\ 4,955 \\ 106 \\ 2,189 \\ 125,627 \\ \end{array}$ | 20 |
| bara Regior | August | 138,940 1,863 13,957 | $^{+,557}_{-182,656}$ | $^{70}_{117,85}_{11,785}_{116,069}_{116,069}$ | 261,500 10,853 6,625 | $210 \\ 2,708 \\ 175 \\ 8,751 \\ $ | $ \begin{array}{c} 16,803 \\ 2,070 \\ 19 \\ 660 \\ 28,633 \end{array} $ | |
| Sanfa Barl | July | 87,280 358 70 | 2,503 $40,878$ $42,000$ $4,942$ | $ \begin{array}{c} 44 \\ 61,122 \\ 1,036 \\ 36,902 \\ 36,202 \\ 295 \end{array} $ | 155,476 9,196 20,490 | 2,512 | 14,424 30 563 1,361 | 684 |
| 39 ish Into the | June | 25,300 738 549 10,907 | 267,702 9,000 | $^{20}_{76,792}^{158,792}_{5,603}^{20}_{119,844}^{10}_{672}$ | $\begin{array}{c} 12,300\\417\\7,918\\25,336\end{array}$ | 34 361 1,012 12,517 | 30,676 802 384 | 2,797 |
| TABLE 39 mmercial Fish | May | 98,120 169 151 16,698 | 10,604 421,400 57,600 | $\substack{196,809\\7,329\\74,058\\1,245}$ | 87 18,101 | 138 452 10,188 | 44,279 2,446 112 | 1,431 802 |
| nents of Co | April | 39,680 205 3,361 17,510 | $^{+,284}_{12,829}$ 581,600 7,077 | 282,598 12,184 157 | 20 | 10,494 | 27,064 6,078 33 | 75 |
| s and Shipr | March | 19,460 125 3,645 3,645 28 14,240 | 6,922 853,220 4,728 | 249,062 6,132 782 | 727 45 34,649 | 645 175 24,301 | 24,041 10,387 285 | 2,076 54 |
| hly Landing | February | 27,000 645 1,746 | 350 2,134 519,500 2,757 | 194,141 5,063 2,967 | 694 78 43,970 | 116 1,874 10,678 | 25,115 11,312 92 | 2,089 |
| Mont | January | 12,160 2,493 37 7,114 | 3,716 1,511,280 1,321 | 320,311 877 1,586 | 12,000 388 1,489 | 88 1,147 3,874 3,874 | 29,648 9,178 | 648 |
| | Species | Fishing boat landings from California waters Anchory: Cabeor, white (kingfish) Flouder California | Herring, Pacific Lingcod Mackerel, jack Mackerel, Pacific | Pompano, California. Rockfish Sabbersh Salmon Sanddab | Sardine Sea bass, black Seatass, white Seatrout, greenling Shark | Sheep-head Skate Smelt. Sole, Dover Sole, English | Sole, petrale Sole, rex Sole, unclassified Swordfish, Tura, al bacore | Turbot Miscellaneous fish |

THE MARINE FISH CATCH OF CALIFORNIA

TABLE 39Monthly Landings and Shipments of Commercial Fish Into the Santa Barbara Region During 1956

| | Total | $325,619 \\ 10,028 \\ 198,430$ | 2,708,793 2,571 1,395,025 12,545 | 51,044,943 | $^{2,000}_{3,190,944}$ | 5,100 | 83,840 | 3,284,384 | 54,329,327 | |
|---|------------|--|---|----------------------|---|-------------------------------------|--------------------------|--------------|---------------------------------------|--|
| | December | 80,657 4,862 31,021 | 246,142 134 237,175 12,000 | 6,545,065 51 | 160,000 | 1,250 | 19,200 | 180,450 | 6,725,515 5 | |
| | November I | $25,803 \\ 1,164 \\ 28,903$ | 326,068 30 216,075 | 8,910,890 | 2,000 | | 32,640 | 34,640 | 8,945,530 | |
| 99 | October 1 | 858 26,486 | 212,537 103,200 | 1,338,295 23,084,347 | | 2,500 - | 32,000 | 189,500 | 1,718,995 23,273,847 | |
| TABLE 39—Continued Monthly Landings and Shipments of Commercial Fish Into the Santa Barbara Region During 1956 | September | 247 | 200,462 39,250 545 | 1,338,295 | 380,700 155,000 | | | 380,700 | | |
| ara Region | August | 162 | 265,110 26,200 | 1,361,789 | 248,000 | | | 248,000 | 1,609,789 | |
| Santa Barb | July | 337 | 286,420 | 800,775 | 339,300 | | | 339,300 | 1,140,075 | |
| Continued ish Into the | June | 99 | 256,077 323 53,050 | 1,009,011 | 272,000 | | | 272,000 | 1,281,011 | |
| TABLE 39—Continued commercial Fish Into th | May | 23,584 | 363,710 346 55,150 | 1,405,109 | 2,500 242,174 | | | 244,674 | 1,649,783 | |
| T/ nents of Co | April | 54,552 | 267,850 414 $97,600$ | 1,438,535 | 397,826 | | | 397,826 | 1,836,361 | |
| s and Shipn | March | 31,860 198 19,484 | 97,969 147 159,825 | 1,565,212 | 339,950 | 1,350 | | 341,300 | 1,906,512 | |
| hly Landing | February | 51,483 1,152 45,164 | 596 181,450 | 1,142,855 | 208,204 447,790 | | | 447,790 | 1,590,645 | |
| Mont | January | $57,680 \\ 988 \\ 47,372$ | 186,448 451 $219,050$ | 2,443,060 | 208,204 | | | 208,204 | 2,651,264 | ts. |
| | Species | Crustacean: Crab. rock. Crab. rock. Lobster, spiny. | Mollusk: Abalone Octopus Oyster, giant Pacific | Total pounds | Shipments ¹ Tuna, albacore Tuna, bigeye Tuna, yellowfin | Crustacean: Shrimp, unclassified | Mollusk: Clam, Pismo. | Total pounds | Grand totals, Santa Barbara region | ¹ See Table 32 for origin of shipments. |

TABLE 39Monthly Landings and Shipments of Commercial Fish Into the Santa Barbara Region During 1956

| THE | MARINE | FISH | CATCH | OF | CALIFORN |
|-----|--------|------|-------|----|----------|

CH OF CALIFORNIA

| TABLE 40 Monthly Landings and Shipments of Commercial Fish Into the Los Angeles Region During 1956 | January February March April May June July August September October November December Pounds | 3,4 | 11.972 22.014 63,817 47,867 235,765 33,396 36,190 13,172 9,571 14,866 18,760 86,200 613,620 | | R.021,455 9,475,446 3,612,817 2,583,348 5,075,567 2,115,749 1,400,445 1,400,445 1,400,445 1,400,445 1,400,445 5,570,550 5,870,556 1,210,738 2,332,528 5,007,077 1,651,177 1,250,935 602,107 1,374 6,019,994 5,531,220 5,580,556 1,210,738 2,3392,138 3,092,103 3,083,13 3,092,103 3,083,13 3,092,103 3,083,13 3,092,103 3,093,133 3,094,104 3,093,133 3,094,104 | 116 26 116 26 106 106 116 26 106 106 106 116 26 126 20 216 12490 211,233 130 1241,233 130 1341,233 130 1341,233 130 1341,233 130 1341,233 130 1341,233 130 1341,233 130 130 130 130 130 130 130 130 130 1 | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ |
|---|--|--|---|--|---|--|---|--|--|
| Мол | January | 3,449,180 | 11,972 | 6,378 | 8,024,455 4,654,127 32,446 | 4,001,807 678 | $^{357}_{2,088}$ | 271 | |
| | Species | Fishing boat landings from California waters: Anchovy Barracuda, California | Cabezon Croaker, white (kingfish) | Flyingfish. Halfmoon Harbut, California. Herring, Pacific | Mackerel, jack. Mackerel, Pacific. Opaleye. Pompano, California. | Sablefish Sallmon Sanddab Sardine Soulnine | Sea bass, black Seabass, white Shark Sheep-head State | Smelt Sole, petrale Sole, unclassified Svordfish Tuna alharore | Tuna, bluefin Tuna, skripjack Whitefish, occan Vellowteh, |

 TABLE 40

 Monthly Landings and Shipments of Commercial Fish Into the Los Angeles Region During 1956

| DEPARTMENT | OF | FISH | AND | GAME | |
|------------|----|------|-----|------|--|
| | | | | | |

 $\mathbf{88}$

| | December pounds | 2.382 43.989 49.550 347.184 | 75,968 1,192,471 55 877,198 44,500 877,198 | 15,277,050 209,902,323 | 111,258 | . 111,258 | | 25,125 63,438 63,438 | 73,444 211,379 | 9,433 | 29.990 283,347 | 18,016 444,310 580 26,978 320 820 995 | 976 | 5,337,143 62,636,547 | |
|---|-----------------|---|--|------------------------|---|--------------|-----------------------------------|--------------------------|-------------------|--------------------------------|--|--|-----------|--|--------------------------|
| | | | | | | | | | | | | | | | i |
| | November | 8,073 68,506 | 144,205 42 3,225 | 29,273,569 | | | 101 001 | 10,563 | 37,182 | 430 | $^{8,475}_{79,188}$ | 92,047 10,178 | | 2,097 275,039 4,691,986 | |
| 9 | October | $^{4,612}_{94,769}$ | 54,199 27 47,660 | 52,508,023 | 58,978 | 58,978 | 010 00 | 1,038 | 4,780 | 2,615 | 2,080 27,924 | 156,278 $4,412$ 500 | | 430 497,866 493,708 | 453,103 |
| During 195 | September | 7,185 | 54,355 17 7 | 12,212,832 | 52,280 | 52,280 | 000 | 11,390 | 125 | | 40,584 | 53,295 4,750 340 | 916 | 104,362 1,888,001 5,381,058 | 4,692,963 |
| TABLE 40—Continued Monthly Landings and Shipments of Commercial Fish Into the Los Angeles Region During 1956 | August | 5,139 | 97,690 17 60,495 | 14,410,346 | | | 110.01 | 116'04 | | 4,540 | 155 | 85,041 121 | | 2,011,176 3,212,879 6,510,213 | 5,983,226 |
| e Los Ange | July | 6,471 | 158,954 51 260,295 10 | 12,577,513 | | | 101 01 | 45,400 | 1,325 | | 29,140 | 7,685 | | 3,975,305 452,361 5,376,047 | 11,432,335 |
| Continued ish Into the | June | 2,811 | 187,134 69 255,170 12 | 6,939,151 | | | 040 0 | 2,535 | 4,035 | | 695 41,285 | 12,094 2,869 | | 36,266 2,478,487 8,114,323 | 12,090,482 |
| TABLE 40—Continued Commercial Fish Into 1 | May | 1,232 | 161,251 115 20 | 9,524,610 | | | | | | | 23,103 | 51 | | 313,706 5,689,927 | |
| T/ ments of Co | April | 508 | 122,414 90 80,008 | 8,682,379 | | | | | | | | 566 82 | | 4,407,237 | 12,942,573 |
| gs and Ship | March | 885 18,200 | 80,890 74 78,020 | 11,512,713 | | | 100.02 | 13,367 | 47,989 | | 1,176 1,335 10,217 | 12,841 1,170 | | 4,900,382 | |
| ihly Landing | February | $^{2,429}_{59,021}$ | 5,305 | 16,641,064 | | | 000 00 | 92,522 4,491 9,599 | 10,551 | | $ \begin{array}{c} 55 \\ 16,540 \\ 5,570 \end{array} $ | 4,555 | | 8,574 5,828,270 | |
| Mon | January | 2,262 57,129 | 55,411 42,405 | 20,343,073 | | | 200.20 | 13,765 | 31,948 | 1,848 | 1,381 1,560 26,181 | 1,892 | | 74,970 | 6,741,480 |
| | Species | Crustacean: Crab, rook Lobster, spiny | Mollusk: Abalone Octopus Squd Miscellaneous mollusk. | Total pounds | Fishing boat landings from waters north of the state boundary: Tuna, albacore | Total pounds | south of the international bound- | Bonito Cabrilla | Shorthn, corvina. | Halibut, California Lingeod | Rock bass Rockfish Sea bass, black | Scabass, white Shark Shep-head Shera | Swordfish | Tuna, albacore. Tuna, bluefin Tuna, skipjack | Tuna, yellowfin Wahoo |

TABLE 40Monthly Landings and Shipments of Commercial Fish Into the Los Angeles Region During 1956

| 12,907 1,045 270,287 164 | 8,737,036 10,341,930 171,994,704 | 2,950 | 298,510 800,509 16,210,221 (65,582 2,900,004 419,991 12,050,241 2,500,004 419,991 12,050,241 2,503,875 2,148,132 34,771,457 9,515 6,100 | 1,190,472 | 5,729,462 3,391,204 65,681,911 | 43,740,067 29,010,184 447,690,196 | |
|---|----------------------------------|---|--|-----------|--------------------------------|---------------------------------------|---------------------------------------|
| 8,185 | 1,746,777 8,7 | 9,570 | | | 4,133,962 5,7 | 58,447,740 43,7 | |
| 51,615 | 12,286,261 | 27,618 36,752 1,505 | 625,324 3,124,142 3,124,142 7,410 2,45 | | 3,822,751 | 28,374,124 | |
| 290 | 21,378,310 17,849,052 | 47,097 13,998 | 303,643 354,279 254,279 254,2544 2,782,544 | | 4,196,551 | 36,455,949 | |
| 60,647 | | 21,495 | 388,691 354,220 708,551 3,522,125 4,875 | 735,432 | 5,635,389 | 39,591,212 | |
| 103,698 | 22,889,269 | 4,950 | $\begin{array}{c} 1,531,472\\145,419\\145,419\\266,182\\2,704,632\\1,200\end{array}$ | | 4,854,466 | 34,682,886 | |
| 3.754 20 | 18,450,907 | 69,695 35 15,529 | $\begin{array}{c} 172\\1,813,346\\8,198\\539,023\\3,927,223\\3,927,223\end{array}$ | | 6,373,221 | 34,348,738 | |
| | 17,350,458 | 35,000 7,854 | $\begin{array}{c} 2,527,978\\ 2,527,978\\ 3,466\\ 971,317\\ 4,079,598\\ 33,744\end{array}$ | | 7,659,095 | 33,691,932 | |
| 3,700 | 13,211,638 14,886,051 17,350,458 | $290 \\ 37,100 \\ 3,507$ | $\begin{array}{c} 1,911,498\\ 162,875\\ 162,875\\ 484,199\\ 2,440,729\\ 71,808\end{array}$ | 455,040 | 5,579,646 | 31,978,410 | |
| 4,478 | | 10,281 15,000 2,406 | 2,841,820 1,235,590 2,034,540 2,034,540 | | 6,140,187 | 35,992,889 | |
| 19,468 | 12,867,015 | 53,777 2,152 28 | 3,792,957 1,527,825 2,789,188 | | 8,165,977 | 41,376,065 | its. |
| Whitefish; ocean Yellowtail. Miseellaneous fish | Total pounds. | | Swordfish. Tuna, bibeore. Tuna, bigeve. Tuna, bibeite. Tuna, skipjaek. Tuna, skipjaek. Miseellaneous fish. | | Total pounds. | Grand totals, Los Angeles re- gion | See Table 32 for origin of shipments. |

TABLE 40—Cont'd.

| | Total pounds | $\begin{array}{c} 42.507\\ 1.764\\ 8.015\\ 91.770\\ 91.770\end{array}$ | $ \begin{array}{c} 314\\ 180,536\\ 140,276\\ 332\\ 77,322 \end{array} $ | $ \begin{array}{c} 3,491\\ 18,174\\ 38,096\\ 3,190\\ 156,397\end{array} $ | $168,337 \\ 3,565 \\ 1,770 \\ 157 \\ 49,006$ | 1,855,965 50,150 209 70 507 | 15,925 367 5,154 | 190,255 |
|---|-------------------|--|--|---|--|--|--|----------------|
| | December | 346 77 196 9,820 | 13 15,060 8,506 | 1,234 | 19,500 | 126,324 | 1,260 | 26,863 |
| | November December | 191 562 13,773 | 52 51,717 3,012 | 5,850 21 212 292 $14,711$ | 31,389 1,440 165 7,580 | 304,654 | 354 | |
| 5 | October | 64 565 575 | 203 801 30,990 3,637 | 234 724 7,461 | 12,658 799 32,340 | 1,150,752 47 70 | 3,299 | 84,238 |
| Juring 195 | September | 368 2,137 1,320 | 95 27,813 5,141 | 868 82 1,177 | 4,783 46 120 6,168 | 174,365 23,653 | 1,443 | |
| TABLE 41 Monthly Landings and Shipments of Commercial Fish Into the San Diego Region During 1956 | August | $\begin{array}{c} 321\\ 56\\ 56\\ 149\\ 3,674\end{array}$ | 205 5,516 4,524 | 9,166 | 5,494 | 44,662 44,886 | 312 | |
| he San Dieg | July | 2,407 284 104 1,390 | 1,052 3,338 | 9.727 371 6,558 | 10,454 | 52,952 21,611 165 | 359 | |
| 41 Fish Into ti | June - | 8,262 37 83 83 14,187 | $12 \\ 1,326 \\ 287 \\ 3,969 \\ 3,960 \\ 3$ | 3,463 12,324 9,648 73 73 42,070 | 34,061 27 795 37 | 1,666 | 879 234 | |
| TABLE A | May | 30,778 186 109 13,710 | 686 | 1,018 250 40,507 | 18,964 90 325 | | 8,892 76 | |
| pments of (| April | 267 450 16,204 | | 16 3,313 5,457 | 13,907 74 485 | 261 | 387 | |
| ids and Shi | March | 48 161 9,887 | 3,627 8,230 | 2,125 | 8,341 | | 484 | 9,636 |
| ıthly Landir | February | 14 1,065 6,737 | 34 592 288 11.030 | 12 1,976 1,548 | 7,145 | 590 | 36 280 | 16,763 |
| Moi | January | 70 70 | 442 | 12,193 | 1,641 | | 728 | 14,752 |
| | Species | Fishing beat landings from California Baytor (alifornia. Bonto and california. Croaker white (kingfah). Polphinsh, common. Halbut California. | Lingcod Mackerel, jack Mackerel, Pacific Opalere Rockish | Salmon Sardine Seulpin Sea bas, black Seabas, wite | | Tuna, albacore. Tuna, bluefin. Tuna, scilogack. Tuna, scilowfin. Whitefish, ocean. | Yellowtail. Miseellaneous fish. Crustacean: Crah.rook | Lobster, spiny |

TABLE 41Monthly Landings and Shipments of Commercial Fish Into the San Diego Region During 1956

| 361,831 26,683 138 | 3,495,425 | 140,742 63,876 64,360 229 | $125 \\ 14,609 \\ 8,361 \\ 222,957 \\ 12,702 \\ 12,7$ | $\begin{array}{c} 790\\ 205\\ 904\\ 914,845,478\\ 875,564\end{array}$ | 57,512,262 56,639,483 5,698 3,50 82,002 182 | 7,573,371 130,491,219 | $ \begin{array}{c} 9,487 \\ 32,870 \\ 3,290,627 \\ 7,326,047 \end{array} $ | 10,659,031 | 7,852,005 144,645,675 | |
|---|--------------|---|---|---|--|--|--|--------------|---------------------------------|--|
| 27,222 | 245,764 | 18,133 14,775 | 23,286 2,551 | 546 427,181 | 4,717,607 2,368,407 708 | 7,573,371 | 32,870 | 32,870 | 7,852,005 | |
| 29,101 1,022 | 678,727 | 20,570 13,428 3,467 | $^{802}_{1,206}$ 29,296 2,628 | 150 563,820 645 | 7,178,536 2,341,910 2,341,910 | $\frac{100}{11,816,948} \frac{25}{10,159,347}$ | 161,454 | 161,454 | 10,999,528 | |
| 13,800 | 1,346,082 | 28,641 3,094 | 47 47 503 503 65,670 1,904 | 1,131,676 | 6,636,140 3,773,706 21,093 | | 376,279 1,170,311 | 1,546,590 | 14,709,620 | |
| 24,004 3,087 | 276,670 | 13,427 22,304 13,457 | 735 294 70,363 1,303 | 640 574,508 13,843 | 8,293,232 3,820,016 6,037 | 12,830,159 | 7,546 | 7,546 | 13,114,375 | |
| 23,705 4,339 | 124,186 | 139 | 4,898 | 4,875,153 | 3,450,547 | 12,749,377 | $1,941 \\ 268,799 \\ 940,535$ | 1,211,275 | 14,084,838 | |
| 17,073 4,352 | 133,989 | 495 20,062 | 260 525 373 | $ \begin{array}{c} 205 \\ 358 \\ 6,800,352 \\ 40,927 \end{array} $ | 3,485,772 5,229,708 10,108 | 15,594,480 | 243,706 223,386 | 467,092 | 16,195,561 | |
| 40,891 3,795 | 178,126 | 46 | | 171,622 | 2,984,994 | 4,569,177 | | | 4,747,303 | |
| 2,782 | 174,491 | | | 104 | 4,044,165 6,381,863 5,698 307 182 | 10,432,319 | 328,939 1,284,271 | 1,613,210 | 12,220,020 | |
| 82,631 2,300 138 | 151,663 | 7,535 | 1508 1,508 | | 3,618,476 8,636,671 | 12,265,379 | 289,668 384,700 | 674,368 | 13,091,410 | |
| 15,677 1,936 | 63,449 | 4,502 116 922 | 6,607 1,525 306 420 | | 5,035,386 6,242,254 350 493 | 11,292,881 | 724,275 986,037 | 1,710,312 | 13,066,642 | |
| 1,026 | 49,171 | 24,438 2,451 215 | $^{125}_{2,502}$ $^{2,879}_{2,879}$ $^{10,205}_{300}$ | 13,685 | 4,776,156 3,387,503 4,257 | 8,224,945 | 22,871 438,482 | 461,353 | 8,735,469 | |
| 40,529 | 73,107 | 22,862 7,708 2,656 | 3,496 475 13,523 765 | 287,481 | 4,621,784 8,021,904 | 12,982,836 | 874,636 1,898,325 | 2,772,961 | 15,828,904 | ts. |
| Mollusk: Abalone Clam, jackknife Octopus | Total pounds | Fishing boat landings from waters south of the international bound- ary: Barraeuda, California | Rock Bass Rockfish Sea bass, black Seatuss, white Shark | Sheep-head Skate Swordish Tum, albacore Tum, bluefin | Tum, skipjack. Tum, yelowin. Wihitefish, ocean. Yellowakal. | Crustacean: Lobster, spiny Total pounds | Shipments ¹ Seabass, white. Tuma, skipjack. Tuma, skipjack. | Total pounds | Grand totals, San Diego region. | ¹ See Table 32 for origin of shipments. |

TABLE 41Monthly Landings and Shipments of Commercial Fish Into the San Diego Region During 1956

TABLE 42

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish Into California During 1956

| | Eureka | region | Sacramer | nto region | San Franc | isco region | Montere | ey region |
|--|----------------------|------------------------------|-----------|------------|--------------------|---------------|----------------------|------------------|
| Species | Pounds | Value | Pounds | Value | Pounds | Value | Pounds | Value |
| Fishing boat landings: | | | | | | | | |
| Anchovy Barracuda, California | | | | | 387,981 | \$7,760 | 9,658,359 | \$124,592 |
| Barracuda, Cantornia | | | | | | | | |
| Cabezon Cabrilla | | | | | 190 | 2 | 9,762 | 387 |
| Carp Corvina, shortfin Croaker, white (kingfish) | | | 855,097 | \$35,914 | 479 | 34 | | |
| Croaker, white (kingfish) | | | | | 9,637 | 877 | 244,421 | 12,978 |
| Dolphinfish, common Eel | | | | | | | 430 | 13 |
| Del | | | | | | | 400 | 10 |
| Flounder | 104,229 | \$4,232 | | | 223,041 | 9,458 | 46,638 | 2,453 |
| Grouper Hake | 1.085.674 | 18,999 | | | 7,290 | 110 | 283,253 | 2,804 |
| Halfmoon | 1,060,074 | 10,000 | | | 1,290 | | 200,200 | 2,804 |
| Halibut, arrowtooth | 1,042,585 | 20,122 | | | 27,777 | 849 | 235 | 7 |
| Halibut, California Halibut, Pacific | 175 39,018 | 42 9,836 | | | 15,801 | 3,379 | 14,615 | 3,220 |
| Hardhead Herring, Pacific | 68,835 | 1,742 | 76,750 | 32,619 | 925,121 | 12,582 | 736,498 | 33,510 |
| | 0.00 | 00.048 | | | 017.007 | | | 10.000 |
| Lingcod Mackerel, jack Mackerel, Paeific Needlefish, California | 372,927 | 30,915 | | | 317,665 3,229 | 21,030 95 | 144,946 2,454,324 | 13,088 58,413 |
| Mackerel, Pacific | | | | | | | 43,848 | 2,228 |
| Needlefish, California | | | | | | | 525 | 26 |
| Opaleye | | | | | | | | |
| Perch Pompano, California | 72,221 | 10,610 | | | 44,497 | 6,570 | 28,916 | 2,715 |
| Pompano, California | - | | | | | | 29,341 | 11,118 |
| Ratfish Rock bass | | | | | | | 8,245 | 79 |
| Rockfish | 3,118,829 | 102,335 | | | 2,942,536 | 112,863 | 5,616,156 | 250,325 |
| Sablefish | 1,098,871 | 93,953 | | | 830,216 | 21,917 | 891,214 | 24,686 |
| Salmon | 6,311,608 | 2,230,873 | 1,139,585 | 361,933 | 2,938,586 | 983,927 | 752,969 | 259,925 |
| Sanddab Sardine | 98,162 | 5,389 | | | 455,097 | 22,665 | 202,541 828 | 12,153 |
| Seulpin | | | | | | | 020 | |
| Sculpin, staghorn | | | | | 1,565 | 78 | | |
| Sea bass, black | | | | | 1,505 | 18 | | |
| Seabass, white | | | | | 197 | 66 | 1,667 | 461 |
| Seatrout, greenling Shad | | | 431,125 | 27,279 | | | 165 | 4 |
| | | | 431,123 | 21,219 | | | | |
| Shark Sheep-head | 220 | 11 | | | 43,282 | 1,925 | 572,411 | 30,264 |
| Sierra | | | | | | | | |
| Skate | 14,004 | 2 | | | 96,940 | 1,338 | 54,620 | 551 |
| Smelt | 120,962 | 6,835 | | | 147,492 | 13,513 | 168.246 | 11,610 |
| Sole, Dover | 7,105,635 | 349,597 87,416 126,112 | | | 1,145,950 | 41,025 | 13,890 | 536 |
| Sole, Dover Sole, English Sole, Petrale | 1,351,095 | 87,416 | | | 1,730,489 | 102,098 | 589,722 | 40,101 |
| Sole, Petrale Sole, rex | 1,263,647 468,782 | 26.346 | | | 883,773 505,104 | 77,771 24,700 | 186,241 105,357 | 18,047 5,247 |
| Sole, sand | 14,365 | 1,202 | | | 62,847 | 5,492 | 100,001 | 7 |
| Sole, unclassified | 10,120 | 395 | | | 1,643 | 104 | 6,599 | 553 |
| Splittail Swordfish | | | 127 | 13 | | | | |
| Swordfish | | | | | | | | |
| Tomcod Tuna, albacore | 504,022 | 71,570 | | | 1,153 3,244,597 | 40 517,838 | 4,660,071 | 733,961 |
| Tuna, bluefin | | | | | | | 19,869 | 2,583 |
| Tuna, skipjack | | | | | 1,369 | 157 | 2,169 | 249 |
| Tuna, yellowfin | 7,806 | 421 | | | 215,691 63,985 | 29,118 | 360,983 | 47,975 |
| Turbot Wahoo | 7,806 | 421 | | | 63,985 | 2,661 | 405 | 18 |

TABLE 42The Value, by Region, of the Annual Landings and Shipments of Commercial Fish Into California During 1956

92

93

TABLE 42—Continued

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish Into California During 1956

| | Santa Barb | ara region | Los Ange | les region | San Diego region | | Total | |
|---|------------|------------|--------------------------|------------|------------------|-----------|---------------------|-----------|
| Species | Pounds | Value | Pounds | Value | Pounds | Value | Pounds | Value |
| ishing boat landings: | | | | | | | | |
| Anchovy | 557,450 | \$10,480 | 46,316,795 | \$578,960 | | | 56,920,585 | \$721.79 |
| Anchovy Barracuda, California | | | 569,278 | 103,210 | 183,249 | \$31,006 | 752,527 | 134,21 |
| Bonito | | | 61,974 | 2,950 | 65,640 | 4,070 | 127,614 | 7,02 |
| Cabezon | 2,345 | 117 | 100 | 4 | | | 12,397 | 5 |
| Cabrilla | | | 63,438 | 9,395 | | | 63,438 | 9,39 |
| Carp | | | | | | | 855.576 | 35.9 |
| Corvina, shortfin | | | 430 | 65 | | | 430 | |
| Croaker, white (kingfish) | 14,157 | 795 | 613,620 | 21,949 | 8,015 | 691 | 889,850 | 37,2 |
| Carp Corvina, shortfin Croaker, white (kingfish) Dolphinfish, common | | | | | 149 | 12 | 149 | |
| Eel | | | | | | | 430 | |
| Flounder Flyingfish Grouper Hake | 1.202 | 70 | | | | | 375,110 | 16.2 |
| Flyingfish | -, | | 50,724 | 5,052 | | | 50,724 | 5,0 |
| Grouper | | | 211,379 | 39,740 | 215 | 39 | 211,594 | 39,7 |
| Hake | | | | | | | 1,376,217 | 21,9 |
| Halfmoon | | | 15,108 | 3,774 | | | 15,108 | 3,7 |
| Halibut, arrowtooth | | | | | | | 1,070,597 | 20,9 |
| Halibut, California | 143,505 | 32,160 | 125,573 | 32,222 | 156,130 | 34,505 | 455,799 | 105,5 |
| Halibut, California Halibut, Pacific | 110,000 | 02,100 | 100,010 | | 100,100 | 01,000 | 39,018 | 9,8 |
| Hardhead | | | | | | | 76,750 | 32,6 |
| Herring, Pacific | 4,634 | 174 | 688 | 14 | | | 1,735,776 | 48,0 |
| Lingard | 05 215 | 8,511 | 144 | 15 | 314 | 28 | 931,311 | 73,5 |
| Mackerel jack | 14 056 984 | 212,260 | 59,067,037 | 1.258,129 | 180,536 | 2,690 | 75,762,110 | 1,531,5 |
| Lingcod Mackerel, jack Mackerel, Pacific Needlefish, California | 11 836 493 | 200,037 | 37,992,163 | 858,624 | 140,505 | 4,623 | 50,013,009 | 1,065,5 |
| Needlefish, California | 11,000,100 | 200,001 | 01,008,100 | 000,001 | 110,000 | 1,080 | 525 | 1,000,0 |
| Opaleye | | | 3,101 | 481 | 332 | 50 | 3,433 | 5 |
| Perch | 42.047 | 9,243 | 1 | | | | 187,681 | 29,1 |
| Pompano, California | 42,047 | 9,243 | 47,064 | 11,338 | | | 76,679 | 29,1 |
| Ratfish | 2/1 | 00 | 47,004 | 11,000 | | | 8,245 | 22,0 |
| Rock bass | | | 3,307 | 538 | 125 | 10 | 3,432 | 5 |
| Rockfish | 2,576,483 | 96,367 | 597,580 | 61,229 | 91,931 | 7,729 | 14,943,515 | 630,8 |
| Sablefish | 47,501 | 1.872 | 605 | 54 | | | 2.868,407 | 142,4 |
| Salmon | 264,248 | 95,694 | 4,000 | 1,689 | 3,491 | 1,418 | 11,414,487 | 3,935,4 |
| Sanddab | 8,785 | 459 | 24,215 | 3,592 | 0,101 | 1,110 | 788,800 | 44,2 |
| Sardine | 15,446,144 | 293,477 | 54,089,199 | 1,379,275 | 18,174 | 632 | 69,554,345 | 1,673,5 |
| Seulpin | | | 62,136 | 15,193 | 38,096 | 7,677 | 100,232 | 22,8 |
| Sculpin, staghorn | | | | | | | 1,565 | |
| Sea bass, black | 721 | 96 | 319,046 | 48,973 | 11,551 | 1,524 | 331,318 | 50.5 |
| Seabass, white | 41.260 | 11.599 | 658,745 | 157,309 | 379,354 | 86,986 | 1.081.223 | 256.4 |
| Seatrout, greenling | 1,022 | 56 | | | | | 1,187 | |
| Shad | | | | | | | 431,125 | 27,2 |
| Shark | 169,747 | 11,406 | 118,615 | 12,693 | 181,039 | 17,711 | 1,085,314 | 74.0 |
| Shark Sheep-head | 399 | 34 | 1,821 | 115 | 4,355 | 322 | 6,575 | 4 |
| Sierra. | | | 995 | 69 | | | 995 | |
| Skate | 4,152 | 342 | 4,060 | 272 | 1,975 | 132 | 175,751 | 2,6 |
| Smelt | 9,985 | 398 | 19,491 | 1,254 | 157 | 16 | 466,333 | 33,6 |
| Sole, Dover | 2,949 | 141 | | | | | 8,268,424 | 391.2 |
| Sole, English | 153,646 | 9,926 | | | | | 3,824,952 | 239,5 |
| Sole, petrale | 495,189 | 48,133 | 1,208 | 79 | | | 2,830,058 | 270,1 |
| Sole, rex. | 68,130 | 3,672 | | | | | 1,147,373 | 59,9 |
| Sole, sand | | | | | | | 77,312 | 6,7 |
| Sole, unclassified | 1,849 | 176 | 2,645 | 197 | | | 22,856 | 1.4 |
| Splittail Swordfish | | | | | | | 127 | |
| Swordfish | 13,199 | 5,046 | 212,065 | 85,208 | 49,910 | 20,733 | 275,174 | 110,9 |
| Tomcod Tuna, albacore | 320,084 | 47,469 | 11.624.994 | 2.051,472 | 16,701,443 | 2,911,061 | 1,153 37,055,211 | 6,333,3 |
| | 020,004 | 37,309 | | | | | | |
| Tuna, bluefin | | | 11,680,385 | 1,525,458 | 925,714 | 121,546 | 12,625,968 | 1,649,5 |
| Tuna, skipjack | | | 62,637,213 92,064,749 | 7,190,752 | 57,512,471 | 6,631,188 | 120,153,222 | |
| Tuna, yellowfin | 1 | | 192.064.749 | 12,447,154 | 56,639,553 | 7,657,668 | 149,280,976 | 120.181.9 |
| Turbot | 11,098 | 513 | | | 0.010001000 | ., | 83,294 | 3,6 |

TABLE 42The Value, by Region, of the Annual Landings and Shipments of Commercial Fish Into California During 1956

TABLE 42—Continued

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish Into California During 1956

| | Eureka | region | Sacrame | ato region | San Franc | isco region | Montere | ey region |
|--|------------|-------------|-----------|------------|----------------------|--------------------|------------|------------|
| Species | Pounds | Value | Pounds | Value | Pounds | Value | Pounds | Value |
| Fishing boat landings:—Contd. Whitebait Whitefish, ocean | 88,177 | \$6,984 | | | 53,340 | \$7,772 | 7,303 | \$880 |
| Yellowtail Miscellaneous fish | | 1 | 110 | \$22 | 22 | 6 | | |
| Crustacean: Crab Crab. rock | | 1,131,239 | | | 5,974,661 | 633,588 | 31,205 | 4,400 |
| Lobster, spiny Prawn | | | | | | | 1,233 | 493 |
| Shrimp, bay Shrimp, ocean | | 79,828 | | | 718,968 272,583 | 54,354 20,117 | | |
| Mollusk: Abalone | | | | | 17,965 | 2,842 | | |
| Clam, gaper Clam, jackknife | | | | | | | 688 | 68 |
| Clam, Washington Octopus | | 1,227 68 | | | 5,249 | 229 | 5,983 | 590 |
| Oyster, eastern | 4,381,050 | 72,725 | | | $142,181 \\ 325,145$ | $37,905 \\ 37,555$ | | |
| Oyster, Kumamoto Oyster, native Squid | | | | | 6,234 | 1,369 | 18,594,241 | 317,96 |
| Miscellaneous mollusk | | | | | | | 17 | 5 |
| Total pounds and value | 37,664,308 | \$4,491,425 | 2,502,794 | \$457,780 | 24,791,568 | \$2,817,779 | 46,551,249 | \$2,031,40 |
| hipments: ¹ Carp Eel Halibut, Pacific | | | | | 1,535 | \$129 | | |
| SablefishSalmon | | \$1,916 | | | 293,440 64,738 | 51,939 31,346 | | |
| Sardine Seabass, white | | | | | 6,800 | 204 | | |
| Shad Sturgeon Swordfish | | | | | 36,576 9,762 | 38,405 3,417 | | |
| Tuna, albacore Tuna, bigeye | | | | | 4,077,481 | 733,539 | | |
| Tuna, bluefin Tuna, skipjack | | | | | 492,344 | 50,761 | | |
| Tuna, yellowfin Miscellaneous fish | | | | | 9,316,035 22,540 | 1,328,467 3,167 | | |
| Crustacean: Shrimp, unclassified | | | | | | | | |
| Mollusk: Clam, Pismo | | | , | | | | | |
| Total pounds and value. | 6,438 | \$1,916 | | | 14,367,167 | \$2,253,312 | | |
| Grand totals | 37,670,746 | \$4,493,341 | 2,502,794 | \$457,780 | 39,158,735 | \$5,071,091 | 46,551,249 | \$2 031 40 |

¹ See Table 32 for origin of shipments.

TABLE 42The Value, by Region, of the Annual Landings and Shipments of Commercial Fish Into California During 1956

TABLE 42-Continued

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish Into California During 1956

| | Santa Barl | ara region | Los Ange | les region | San Die | go region | То | otal |
|---|-------------------|-------------------------|--|---|----------------------------------|-----------------------------|--|---|
| Species | Pounds | Value | Pounds | Value | Pounds | Value | Pounds | Value |
| Fishing boat landings:—Contd. Whitebait Whitefish, ocean. Yellowtail Miseellaneous fish | | | 963 272,960 719 | \$77 24,867 178 | 857 97,927 549 | \$64 7,139 110 | 148,820 1,820 370,887 2,346 | |
| Crustacean: Crab. Crab, rock Lobster, spiny Prawn Shrimp, bay Shrimp, ocean | 10,028 198,430 | 46,889 302 98,460 | 43,989 347,184 | 3,876 184,599 | 5,154 190,380 | 137 101,663 | ${}^{14,320,459}_{59,171}_{735,994}_{1,233}_{718,968}_{1,168,519}$ | 1,816,116 4,315 384,722 493 54,354 99,945 |
| Mollusk: Abalone | | 350,340 | 1,192,471 | 100,386 | 364,834 | 27,016 | 4,284,063 | 480,584 |
| Clam, gaper Clam, jackknife Clam, Washington Octopus | | 141 | 502 | | 26,683 138 | 9,689 | 688 26,683 10,629 16,217 | 68 9,689 1,227 1,144 |
| Oyster, eastern Oyster, giant Pacific Oyster, Kumamoto Oyster, native Squid. Miscellaneous mollusk | 1,395,025 | | | | | | $142,181 \\ 6,101,220 \\ 23,965 \\ 6,234 \\ 19,483,984 \\ 66$ | 37,905 138,320 398 1,369 337,224 9 |
| Total pounds and value | 51,044,943 | \$1,625,461 | 382,008,285 | \$28,243,828 | 133,986,644 | \$17,691,896 | 678,549,791 | \$57,359,570 |
| Shipments: ¹ Carp Eel Halibut, Pacific Sablefish Salmon | | | 2,950 290 309,972 117,090 | \$1,180 107 56,884 62,034 | | | 1,535 2,950 46,206 603,412 188,266 | \$129 1,180 12,045 108,823 95,296 |
| SardineSeabass, whiteShadShadSturgeonSwordfishSwordfishSwordfishSturgeonSwordfishSturgeonSwordfishSturgeonSwordfishSturgeonSwordfishSturgeonSwordfishSturgeonSwordfishS | | | | 14,734 109 | 9,487 | \$912 | 6,800 9,487 36,576 23,601 10,072 | 204 912 38,405 14,734 3,526 |
| Tuna, albacore Tuna, bigeye Tuna, bluefin Tuna, skipjack Tuna, yellowfin Miseellaneous fish | 2,500 | \$860 406 543,737 | $\substack{16,210,424\\665,582\\162,875\\12,059,241\\34,771,487\\167,617}$ | 3,002,163 85,128 20,392 1,278,280 4,958,414 43,631 | 32,870 3,290,627 7,326,047 | 5,424 393,514 991,214 | $\substack{20,322,775\\668,082\\162,875\\15,842,212\\54,604,513\\190,157}$ | 3,741,986 85,534 20,392 1,722,555 7,821,832 46,798 |
| Crustacean: Shrimp, unclassified | 5,100 | 2,856 | | | | | 5,100 | 2,856 |
| Mollusk: Clam, Pismo | 83,840 | 2,633 | 1,190,472 | 25,595 | | | 1,274,312 | 28,228 |
| Total pounds and value | 3,284,384 | \$550,492 | 65,681,911 | \$9,548,651 | 10,659,031 | \$1,391,064 | 93,998,931 | \$13,745,435 |
| Grand totals | 54,329,327 | \$2,175,953 | 447,690,196 | \$37,792,479 | 144,645,675 | \$19,082,960 | 772,548,722 | \$71,105,005 |

¹ See Table 32 for origin of shipments.

TABLE 42The Value, by Region, of the Annual Landings and Shipments of Commercial Fish Into California During 1956

| | | | Pounds |
|----------------------|--------------------------|---------------------|------------------------|
| Eureka region totals | | \$4,493,341 | 37,670,746 |
| Eureka | Salmon | \$849,824 | 2,400,142 |
| Luicha | Crab | 344,362 | 2,431,933 |
| | Dover sole | 134,196 | 2,431,933 2,727,555 |
| | Giant Pacific oyster | 72,725 | 4,381,050 |
| | Albacore | 49,479 | 348,447 |
| | English sole | 42,341 | 654,421 |
| | Petrale sole | 37,057 | 371,310 |
| | Rockfish | 32,208 | 932,577 |
| | Sablefish | 18,026 | 210.832 |
| | Rex sole | 10,410 | 185,225 |
| | Pacific halibut | 9,505 | 37,702 |
| | Perch | 8,052 | 54,810 |
| | Lingcod | 6,676 | 80,525 |
| | All other | 15,413 | 359,571 |
| | Totals | \$1,630,274 | 15,176,100 |
| | | | |
| Fort Bragg | Salmon | \$883,444 | 2,506,058 |
| | Dover sole Sablefish | $102,512 \\ 67,665$ | 2,083,574 791,406 |
| | Petrale sole | 32,373 | 324,378 |
| | Rockfish | 26,994 | 324,378 896,246 |
| | English sole | 22,740 | 351,465 |
| | Lingeod | 14,916 | 179,929 |
| | Crab | 11,160 | 78,815 |
| | Albacore | 9,626 | 67,791 |
| | Rex sole | 7,591 | 135,075 |
| | Arrowtooth halibut | 7,150 | 370,450 |
| | Hake | 6,737 | 384,982 |
| | All other | 8,401 | 142,882 |
| | Totals | \$1,201,309 | 8,313,051 |
| Crescent City | Crab | \$532,314 | 3,759,281 |
| | Salmon | 429,418 | 1,212,460 |
| | Ocean shrimp | 78,472 | 880,713 |
| | Albacore | $12,465 \\ 13,130$ | 87,784 194,530 |
| | | | |
| | Totals | \$1,065,799 | 6,134,768 |
| Field's Landing | Crab | \$143,890 | 1,016,173 |
| | Dover sole | 112,247 | 2,281,451 |
| | Petrale sole | 55,110 41,540 | 552,207 1,243,937 |
| | Rockfish English sole | 20,618 | 318,66 |
| | - 0 | | |
| | Arrowtooth halibut | 12,689 | 657,470 |
| | Hake Sablefish | 11,876 8,223 | 678,64 96,18 |
| | Rex sole | 7,998 | 142,31 |
| | Lingcod | 5,642 | 68,06 |
| | All other | 7,397 | 67,37 |
| | Totals | \$427,230 | 7,122,47 |
| Trinidad | Crab | \$97,164 | 686,18 |
| | All other | 4,587 | 13,35 |
| | Totals | \$101,751 | 699,54 |
| Point Arena | Salmon All other | \$30,977 2,376 | 87,49 16,93 |
| | Totals | \$33,353 | 104.42 |
| | | 100,000 | , |
| Shelter Cove | Salmon All other | \$29,115 173 | 82,27 1,96 |
| | Totals | \$29,288 | 84,24 |
| All other ports | All other | \$4,337 | 36,14 |
| | Totals | \$4,337 | 36,14 |

TABLE 43 Landings of the Commercial Fishing Boats and Shipments Into the Eureka Region During 1956, Shown by Port of Landing With the Corresponding Values

 TABLE 43

 Landings of the Commercial Fishing Boats and Shipments Into the Eureka Region During 1956, Shown by Port of Landing With the Corresponding Values

97

TABLE 44

Landings of the Commercial Fishing Boats in the Sacramento Region During 1956, Shown by Port of Landing With the Corresponding Values

| | | Value | Pounds |
|--------------------------|---|---|---|
| Sacramento region totals | | \$457,780 | 2,502,79 |
| Pittsburg | Salmon Shad All other | \$176,274 16,618 57 | 555,019 265,319 1,213 |
| | Totals | \$192,949 | 821,55 |
| Sacramento | Salmon Hardhead Shad Carp All othe r | \$57,581 17,956 5,434 5,399 2 | 181,30 42,25 90,26 128,54 1 |
| | Totals | \$86,372 | 442,37 |
| Martinez | Salmon All other | \$50,881 1,860 | 160,20 28,12 |
| | Totals | \$52,741 | 188,32 |
| Benicia | Salmon All other | \$42,061 3,371 | $132,43 \\ 47,53$ |
| | Totals | \$45,432 | 179,96 |
| Port Costa | Salmon | \$35,136 | 110,62 |
| | Totals | \$35,136 | 110,62 |
| Clear Lake | Carp Hardhead | \$22,943 10,774 | $546,26 \\ 25,35$ |
| | Totals | \$33,717 | 571,61 |
| Turlock | Hardhead Carp All other | \$3,889 3,883 22 | 9,15 92,44 11 |
| | Totals | \$7,794 | 101,70 |
| All other ports | Carp | \$3,639 | 86,64 |
| | Totals | \$3,639 | 86,64 |

 TABLE 44

 Landings of the Commercial Fishing Boats in the Sacramento Region During 1956, Shown by Port of Landing

 With the Corresponding Values

| | | Value | Pounds |
|----------------------------|--|---|--|
| an Francisco region totals | | \$5,071,091 | 39,158,735 |
| San Francisco | Yellowfin tuna Albacore Crab Salmon Rockfish | | 9,531,726 5,114,208 3,444,675 681,591 2,262,881 |
| | English sole Sablefish Petrale sole Skipjaek Shad | $\begin{array}{c} 75,743\\70,457\\56,195\\50,918\\38,405\end{array}$ | 1,283,786 994,873 638,584 493,713 36,576 |
| | Dover sole Bay shrimp Rex sole Sanddab Lingcod | 37,525 23,690 19,859 16,846 11,998 | 1,048,190 313,360 406,122 338,267 181,246 |
| | Pacific halibut Anchovy Smelt Flounder Sand sole All other | $\begin{array}{c} 11,938 \\ 7,760 \\ 6,736 \\ 5,576 \\ 5,323 \\ 26,395 \end{array}$ | 45,916 387,981 73,793 131,506 60,909 571,229 |
| | Totals | \$3,413,519 | 28,041,132 |
| Point Reyes (Drakes Bay) | Salmon Crab. Rockfish Giant Pacific oyster Petrale sole. English sole. Lingcod All other. | \$438,206 48,283 20,558 20,017 16,316 10,582 7,058 14,424 | $\begin{array}{r} 1,308,859\\ 454,639\\ 578,439\\ 173,300\\ 185,420\\ 179,358\\ 106,603\\ 362,192 \end{array}$ |
| | Totals | \$575,444 | 3,348,810 |
| Bodega Bay | Salmon. Crab. Ocean Shrimp. English sole. Smelt. Petrale sole. All other. | 256,313 139,779 18,309 15,767 5,492 5,241 24,294 | 765,570 1,316,191 248,088 267,245 62,735 59,554 440,468 |
| | Totals | \$465,195 | 3,159,851 |
| Sausalito | Albacore Salmon Crab All other | | 1,087,756 149,159 207,713 9,142 |
| | Totals | \$245,125 | 1,453,770 |
| Oakland | Albacore Crab Salmon All other | | 1,091,106 279,528 62,482 24,559 |
| | Totals | \$226,687 | 1,457,675 |
| Tomales Bay (Marshall) | Eastern oyster Giant Pacific oyster Pacific herring All other | \$37,905 17,538 8,394 5,255 | 142,181 151,845 617,200 46,549 |
| | Totals | \$69,092 | 957,775 |
| Princeton | Crab Salmon All other | \$28,573 11,936 4,797 | 269,048 35,652 33,920 |
| | Totals | \$45,306 | 338,620 |
| Richmond | Bay shrimp All other | \$28,074 889 | 371,35 6,77 |
| | Totals | \$28,963 | 378,12 |
| All other ports | All other | \$1,760 | 22,97 |
| | Totals | \$1,760 | 22,97 |

TABLE 45 Landings of the Commercial Fishing Boats and Shipments Into the San Francisco Region During 1956, Shown by Port of Landing With the Corresponding Values

TABLE 45

Landings of the Commercial Fishing Boats and Shipments Into the San Francisco Region During 1956, Shown by Port of Landing With the Corresponding Values

TABLE 46

Landings of the Commercial Fishing Boats in the Monterey Region During 1956, Shown by Port of Landing With the Corresponding Values

| | | Value | Pounds |
|------------------------|--------------------|-------------|------------|
| Monterey region totals | 1. | \$2,031,401 | 46,551,249 |
| Monterey | Squid | \$257,932 | 15,083,766 |
| - | Rockfish | 226,483 | 5,115,444 |
| | Albacore | 165,750 | 1,052,379 |
| | Anchovy | 109,629 | 8,498,400 |
| | Salmon | 98,232 | 284,567 |
| | Yellowfin tuna | 47,975 | 360,983 |
| | Jack mackerel | 45,886 | 1,927,978 |
| | English sole | 30,748 | 452,176 |
| | Sablefish | 15,076 | 544,265 |
| | Petrale sole | 10,071 | 103,933 |
| | Lingeod | 9,083 | 100,589 |
| | Sanddab | 6,761 | 112,675 |
| | All other | 33,859 | 767,127 |
| | Totals | \$1,057,485 | 34,404,282 |
| Santa Cruz | Salmon | \$77,950 | 225,810 |
| | Albacore | 28,712 | 182,300 |
| | Rockfish | 23,834 | 500.512 |
| | Pacific herring | 13,011 | 285,953 |
| | Sablefish | 9,610 | 346,949 |
| | English sole | 9,121 | 134.131 |
| | California pompano | 8,348 | 22,031 |
| | Petrale sole | 7,944 | 81,981 |
| | Smelt | 5,376 | 78,042 |
| | All other | 21,184 | 437,589 |
| | Totals | \$205,090 | 2,295,298 |
| Moss Landing | Albacore | \$539,499 | 3,425,392 |
| | Salmon | 83,743 | 242,592 |
| | Squid | 59,895 | 3,502,615 |
| | Shark | 28,089 | 541,033 |
| | Pacific herring | 18,499 | 406,580 |
| | Anchovy | 13,950 | 1,081,400 |
| | Jack mackerel | 11,516 | 483,860 |
| | All other | 13,635 | 168,197 |
| | Totals | \$768,826 | 9,851,669 |

 TABLE 46

 Landings of the Commercial Fishing Boats in the Monterey Region During 1956, Shown by Port of Landing With the Corresponding Values

TABLE 47

Landings of the Commercial Fishing Boats and Shipments Into the Santa Barbara Region During 1956, Shown by Port of Landing With the Corresponding Values

| | | Value | Pounds |
|------------------------------------|-------------------------------------|--------------------|-------------------------|
| Santa Barbara region totals | | \$2,175,953 | 54,329,323 |
| Port San Luis (Avila, Grover City) | Yellowfin tuna | \$543,737 | 3,190,944 |
| | Salmon | 74,210 | 204,913 |
| | Albacore | 21,951 | 148,010 |
| | Petrale sole Crab | $15,039 \\ 14,415$ | 154,72 100,10 |
| | Abalone | 9,507 | 68,942 |
| | Rockfish All other | 8,211 9,604 | 154,224 228,073 |
| | Totals | \$696,674 | 4,249,94 |
| Port Hueneme | Sardine Jack mackerel | \$274,358 | 14,439,88 |
| | Pacific mackerel | 203,051 190,156 | 13,447,060 11,251,81 |
| | Abalone | 15,470 | 176.04 |
| | All other | 6,351 | 242,53 |
| | Totals | \$689,386 | 39,557,343 |
| Santa Barbara | Abalone | \$116,382 | 945,577 |
| | Spiny lobster California halibut | 95,411 29,981 | 192,28 133,78 |
| | Sardine | 16,744 | 881,240 |
| | White seabass | 11,349 | 40,373 |
| | Shark Pacific mackerel | 10,595 | 161,150 |
| | Pacific mackerel | 9,881 9,779 | 584,67 100,60 |
| | Jack mackerel | 9,179 | 607,89 |
| | English sole | 6,737 | 104,28 |
| | Anchovy | 6,052 | 321,900 |
| | Rockfish Swordfish | 5,163 5,046 | 157,290 13,199 |
| | All other | 8,919 | 138,253 |
| | Totals | \$341,218 | 4,382,523 |
| Morro Bay | Abalone | \$95,688 | 696,680 |
| | Rockfish Crab | 82,947 32,474 | 2,264,308 225,513 |
| | Giant Pacific oyster | 28,040 | 1.395.025 |
| | Albacore | 25,194 | 169,885 |
| | Petrale sole Salmon | \$23,315 21,325 | 239,863 58,893 |
| | Perch | 8,861 | 40,157 |
| | Lingeod | 7,093 | 79,429 |
| | All other | 7,400 | 139,692 |
| | Totals | \$332,337 | 5,309,445 |
| San Simeon | Abalone | \$111,217 | 806,504 |
| | Totals | \$111,217 | 806,504 |
| All other ports | All other | \$5,121 | 23,572 |
| | Totals | \$5,121 | 23,572 |

 TABLE 47

 Landings of the Commercial Fishing Boats and Shipments Into the Santa Barbara Region During 1956, Shown by Port of Landing With the Corresponding Values

TABLE 48

101

Landings of the Commercial Fishing Boats and Shipments Into the Los Angeles Region During 1956, Shown by Port of Landing With the Corresponding Values

| | | Value | Pounds |
|---------------------------|--|---|--|
| Los Angeles region totals | | \$37,792,479 | 447,690,196 |
| Terminal Island | Yellowfin tuna Skipjack Albacore Bluefin tuna Sardine | | 126,445,944 74,696,374 27,548,831 11,367,498 48,103,535 |
| | Jack mackerel Pacific mackerel Anchovy Bigeye tuna Pismo clam | $994,964 \\ 534,754 \\ 150,067 \\ 85,128 \\ 15,812$ | 46,711,94 23,661,67 12,005,37 665,58 735,43 |
| | Yellowtail Grouper All other | $ \begin{array}{r} 13,198 \\ 6,248 \\ 3,682 \end{array} $ | 144,876 33,233 61,513 |
| | Totals | \$35,339,084 | 372,181,80 |
| San Pedro | White seabass California barracuda Spiny lobster Pacific mackerel Bluefin tuna | | $\begin{array}{c} 603,589\\ 565,351\\ 163,589\\ 2,856,863\\ 473,712\end{array}$ |
| | Anchovy Yellowfin tuna Sardine Black sea bass Jack mackerel | 55,656 52,767 51,358 45,937 42,857 | 4,452,489 390,299 2,014,02 299,260 2,012,05 |
| | Rockfish Grouper California halibut Swordfish. Albacore | $37,232 \\ 33,320 \\ 30,402 \\ 24,785 \\ 24,036$ | 370,33 177,23 118,47 61,68 136,17 |
| | White eroaker (kingfish) Seulpin Squid. Yellowtail. California pompano | 15,878 14,632 14,630 11,532 10,547 | 447,31 59,84 677,29 126,58 43,78 |
| | Shark Cabrilla All other | 10,071 9,395 18,119 | 93,56 63,43 160,58 |
| | Totals | \$963,199 | 16,367,53 |
| Newport Beach | Pacific mackerel Abalone Jack mackerel Swordfish Spiny lobster | \$166,973 98,838 75,646 60,070 48,432 | 7,388,16 1,173,86 3,551,44 149,50 91,08 |
| | Albacore Sardine White seabass Anchovy All other | $22,616 \\ 13,511 \\ 11,117 \\ 5,935 \\ 7,148$ | 128,13 529,83 46,55 474,810 41,111 |
| | Totals | \$510,286 | 13,574,51 |
| Long Beach | Anchovy | 244,778 76,559 43,875 27,944 17,927 12,566 6,504 | $\begin{array}{r} 19,582,260\\ 3,002,302\\ 2,059,840\\ 52,555\\ 152,870\\ 556,030\\ 56,540\end{array}$ |
| | Totals | \$430,153 | 25,462,40 |
| Wilmington | Jack mackerel Anchovy Pacific mackerel White croaker (kingfish) All other | | 4,691,58; 7,122,142 3,521,723 152,300 37,992 |
| | Totals | \$275,077 | 15,525,743 |

 TABLE 48

 Landings of the Commercial Fishing Boats and Shipments Into the Los Angeles Region During 1956, Shown by

 Port of Landing With the Corresponding Values

| | | Value | Pounds |
|-----------------|------------------------|------------------|---------------------|
| Los Angeles | Salmon | \$61,804 | 116,656 |
| | Sablefish | 56,884 14,734 | $309,972 \\ 23,601$ |
| | Sturgeon Pismo clam | 9,783 | 455,040 |
| | All other | 44,918 | 170,857 |
| | Totals | \$188,123 | 1,076,126 |
| Santa Monica | Anchovy | \$33,375 | 2,669,995 |
| | Sardine | 10,151 | 398,089 |
| | Spiny lobster | 9,880 | 18,581 |
| | All other | 13,636 | 303,979 |
| | Totals | \$67,042 | 3,390,644 |
| Redondo Beach | Spiny lobster | \$5,908 | 11,111 |
| | All other | 4,532 | 62,096 |
| | Totals | \$10,440 | 73,207 |
| All other ports | Spiny lobster | \$5,457 | 10,263 |
| | All other | 3,618 | 27,957 |
| | Totals | \$9,075 | 38,220 |

TABLE 48—Continued Landings of the Commercial Fishing Boats and Shipments Into the Los Angeles Region During 1956, Shown by Port of Landing With the Corresponding Values

TABLE 48

Landings of the Commercial Fishing Boats and Shipments Into the Los Angeles Region During 1956, Shown by Port of Landing With the Corresponding Values

> TABLE 49 Landings of the Commercial Fishing Boats and Shipments Into the San Diego Region During 1956, Shown by Port of Landing With the Corresponding Values

| | | Value | Pounds |
|-------------------------|---|--|---|
| San Diego region totals | | \$19,082,960 | 144,645,675 |
| San Diego | Yellowfin tuna Skipjack Albacore Bluefin tuna White seabass | \$8,648,882 7,024,702 2,916,242 121,546 84,110 | $\begin{array}{c} 63,965,600\\ 60,803,098\\ 16,732,918\\ 925,714\\ 372,320 \end{array}$ |
| | Spiny lobster California halibut California barracuda Abalone Swordfish | 56,454 32,753 30,986 25,942 20,733 | $\begin{array}{c} 105,719\\ 148,204\\ 183,132\\ 351,149\\ 49,910 \end{array}$ |
| | Shark Jackknife elam Seulpin Yellowtail Rockfish All other | $17,501 \\ 9,689 \\ 7,305 \\ 7,139 \\ 6,023 \\ 18,453$ | 178,829 26,683 36,251 97,927 71,314 446,270 |
| | Totals | \$19,028,460 | 144,495,038 |
| La Jolla | Spiny lobster | \$18,293 | 34,257 |
| | Totals | \$18,293 | 34,257 |
| Oceanside | Spiny lobster All other | \$8,039 5,678 | $15,054 \\ 38,318$ |
| | Totals | \$13,717 | 53,372 |
| Cardiff | Spiny lobster White seabass | \$11,622 50 | $\substack{21,764\\220}$ |
| | Totals | \$11,672 | 21,984 |
| All other ports | Spiny lobster All other | \$7,255 3, 5 63 | $13,586 \\ 27,438$ |
| | Totals | \$10,818 | 41,024 |

TABLE 49

Landings of the Commercial Fishing Boats and Shipments Into the San Diego Region During 1956, Shown by Port of Landing With the Corresponding Values

| TABLE 50 The Recorded Statewide Catch, in Numbers of Fish, Made by Anglers Fishing From Licensed Party Boats ¹ and the Number of Angler Days | h, in Numbers | of Fish, Mad | TABL by Anglers | TABLE 50 Iglers Fishing Fro | m Licensed P | arty Boats ¹ a | nd the Numb | er of Angler | Days | |
|---|---|--|--|--|---|--|--|---|---|---|
| Species | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 |
| Albacee Barrateda California. Habut, California. Rock bas ² Rockfish ³ . | 11,445 677,449 104,436 682,789 193,652 | $\begin{array}{c} 15,414\\ 384,056\\ 143,462\\ 630,223\\ 410,665\end{array}$ | $\begin{array}{c} 22,692\\ 366,423\\ 104,639\\ 796,959\\ 570,637\end{array}$ | 118,087 256,367 85,935 619,397 679,164 | $\begin{array}{c} 75,924\\ 269,545\\ 59,295\\ 781,609\\ 721,808\end{array}$ | 187,267 336,862 34,158 535,832 706,004 | $\begin{array}{c} 23,363\\ 23,363\\ 170,550\\ 34,292\\ 711,395\\ 696,480\end{array}$ | 20,008 282,552 59,674 876,667 1,149,367 | 78,688 154,962 35,802 497,343 1,737,707 | 65,814 87,603 21,661 2,036,708 |
| Salmon Salmon Yellowrail All other. | $\begin{array}{c} 5.018\\ 20.724\\ 6.948\\ 367.971 \end{array}$ | 11,209 $24,078$ $13,028$ $477,884$ | 23,057 65,545 17,710 372,132 | 56,337 54,718 6,971 313,437 | 71,970 44,367 23,721 302,405 | $86,472 \\ 41,043 \\ 59,263 \\ 318,974$ | $\begin{array}{c} 98,723\\ 28,182\\ 27,702\\ 489,471 \end{array}$ | $^{119,911}_{41,588}_{40,872}_{683,808}$ | $128,978 \\ 30,103 \\ 36,468 \\ 413,832$ | 114,505 19,755 29,198 417,389 |
| Total number of fish Number of angler days | 2,070,432 359,436 | 2,110,019 407,757 | 2,339,794 469,915 | 2,190,413 544,264 | 2,350,644 556,949 | 2,305,875 562,898 | 2,280,158 502,146 | 3,274,537 532,190 | 3,113,883 496,286 | 3,262,99 5 523,063 |
| Does not include barges. Rock bass includes two species, kelp bass (<i>Paralabraz clathratus</i>) and sand bass (<i>P. nobulifer</i>). | clathratus) and | sand bass (P. 1 | rebulifer). | | | | - | | | |

TABLE 50 The Recorded Statewide Catch, in Numbers of Fish, Made by Anglers Fishing From Licensed Party Boats and the Number of Angler Days

TABLE 51

The Recorded Catch of Live Bait in Southern California Made by the Vessels Supplying the Party Boat Fleet

(Pounds)

| Species | 1952 | 1953 | 1954 | 1955 | 1956 |
|---------------------------|------------|------------|------------|------------|------------|
| Anchovy | 13.620.879 | 12.783.016 | 13,372,042 | 12,250,890 | 12.663.614 |
| Croaker, white (kingfish) | 189,171 | 47,992 | 56,650 | 33,155 | 34,050 |
| Mackerel, jack | 33,126 | 1,414 | 405 | | |
| Queenfish | 233,545 | 94,411 | 67,258 | 57,571 | 6,600 |
| Sar line | 227,571 | 19,865 | 137,563 | 80,955 | 15,770 |
| Sardine, "firecrackers" | 25,649 | 11,345 | 2,880 | 37,259 | 270 |
| Smelt | 28,299 | 19,704 | 26,187 | 21,983 | 7,650 |
| Other species | 6,464 | | 8,786 | 3,767 | 225 |
| Total pounds | 14,364,704 | 12,977,747 | 13,671,771 | 12,485,580 | 12,728,179 |
| Number of boats reporting | 24 | 30 | 23 | 22 | 18 |

ο



 TABLE 51

 The Recorded Catch of Live Bait in Southern California Made by the Vessels Supplying the Party Boat Fleet