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STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF FISH AND GAME FISH BULLETIN 149

The California Marine Fish Catch For 1968 and Historical Review 1916-68



by RICHARD F. G. HEIMANN and JOHN G. CARLISLE, JR. 1970



FIGURE 1

(2)

FIGURE 1

TABLE OF CONTENTS

7	ALIFORNIA MARINE FISH CATCH FOR 1968	Door
	Foreword	Page 5
	Explanation of Tables	6
	Common and Scientific Names of Fishes, Crustaceans, and Mollusks in the 1968 Catch	9
	Annual Landings and Shipments (Figure 2)	10
	Annual Landings and Shipments, 1916 through 1968	11
	Landings and Shipments of Leading Species Ranked by Pounds	11
	Number of Licensed Commercial Fishermen	12
	Number of Registered Fishing Boats by Length	12
	Origin of Shipments	13
	Origin of Commercial Fish Landings	14
	Monthly Landings and Shipments—Statewide	16
	Monthly Landings and Shipments—by Area	18
	Value and Poundage, Annual Landings and Shipments by Areas	s 30
	Value of Landings and Shipments by Ports and Areas	33
	Partyboat Sport Catch, 1959–1968	42
	Inshore Bait Landings, 1968	43
	Live Bait Catch, 1964–68	43
	Appendix A—Species Composition of Salmon Landings	44
I	HSTORICAL REVIEW 1916-1968	47



FOREWORD

Catch bulletins provide records of the amounts and values of various living marine resources taken by California's commercial fisheries, and summarize the catches made by the partyboat sportfishing industry. They also detail the small quantities of freshwater fish taken commercially in inland areas. These data provide the basic background for managing California's marine fishery resources. The published figures are of national and international significance, and are used by fisheries scientists, legislators, educators, members of the fishing industry, and others interested in the State's fisheries.

This report for 1968 is the 28th in the series of catch bulletins. The first, published in 1929, contained the records of the 1926 and 1927 commercial fish catches.

California's fishery statistics are based on a system whereby fish dealers, processors, and partyboat operators send duplicate copies of their landing records to the Department. The statistical system and methods used to collect the records were fully described in Fish Bulletin 86, which reported the catch for 1950. In the intervening years, methods and equipment have been modified as conditions warranted, but the basic principles have remained unchanged.

Credit for this publication belongs to the personnel of the Marine Fisheries Statistics Unit who process the many documents necessary for its publication. Special acknowledgment is given to the wardens along the coast and the clerks in the field offices whose efforts insure the completeness of the records. We appreciate as well the cooperation of the many wholesale fish dealers and canners.

1. EXPLANATION OF TABLES

The tables in this bulletin summarize the statistics of the various fishery operations in California during 1968. Five types of activity are being reported this year: landings of commercial fishermen in California; imports of tuna from other states or foreign countries destined for processing in California; sport catches of the partyboat fleet; landings of inshore species used for bait; and catches of boats supplying live bait for sportfishing. In addition, Appendix A shows the species composition of the salmon catch for 1968.

The statistics presented in this publication do not encompass all of the fishing activities in the State since not all of these activities are reported. For example: sportfishing from private boats or from shore is not reported, nor is the importation of fish for use in a fresh state. Department biologists do sample some facets of the sportfishery, but since this is part of specific studies, most of the results are not reported here.

The Department annually publishes a circular which enumerates some of the fishery products produced from the catch. The 1968 figures are contained in circular No. 43, "Statistical Report of Fresh, Canned, Cured, and Manufactured Fishery Products for 1968" (Heimann and Carlisle, 1969).

1.1. SOURCE OF DATA

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

Partyboat catch data are obtained from logs completed by the boat operator. The log for each trip includes the number of each species taken, the number of anglers, the number of hours fished, and the specific area fished. The date, boat name, and boat registration number are also furnished. Copies of these records are sent to the Department monthly.

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

Clerical personnel at field offices at Eureka, Monterey, Terminal Island, and San Diego maintain contact with fish dealers and local Fish and Game Wardens to insure that the records are accurate and

transmitted promptly. All data received by the Department are carefully edited to insure correctness and coded to facilitate processing. The data are then punched into cards and summarized with electric tabulating machines.

1.2. STATISTICAL AREAS

The State is divided into seven areas for the purpose of reporting fisheries statistics $^{(Figure\ 1)}$. Each statistical area is named for a major port within its boundaries. Sacramento area landing statistics are incorporated with San Francisco totals in the tables.

1.3. SPECIES

The common and scientific names of the species reported in 1968 are listed in Table 1. Some varieties are reported only collectively when, for economic or other reasons a specific separation is not practical. A further combination of species is made in preparing the tables.

The "Miscellaneous (Animal Food)" category consists of a variety of low value species caught by trawling. Since it is impractical for the dealers to report the many species separately, Department biologists periodically sample this catch to determine its species composition. Based on this sampling, the percentage and weight compositions of the 1968 animal-food category are as follows:

\mathcal{C}^{-1}		
Species	Percent	Pounds
Sablefish	30.5	789,838
Arrowtooth flounder	16.0	414,341
Hake	13.3	344,421
Rex sole	12.6	326,294
Dover sole	11.5	297,808
Rockfish	8.5	220,119
English sole	4.5	116,534
Twenty-one other species	3.1	80,279
	100.0	2,589,634

Salmon catches reported in the tables are for all species combined. However, biologists from the Department's Marine Resources Branch sample the commercial and sport salmon fisheries to determine the species composition of the catches and to obtain estimates of the unreported catch from skiffs. The sampling methods and results for 1952 through 1965 were detailed by Jensen and Swartzell (1967); since 1966 results have been presented annually in the catch bulletin. Appendix A details the salmon catch for 1968.

1.4. CONDITION

Most fish and shellfish are landed in a round condition; however, some species, such as salmon and swordfish, are usually eviscerated or cleaned before being brought ashore. The condition of fish landed or shipped into the State cannot always be determined, so the tables summarize the weights as reported to the Department without regard to condition.

Since 1963, oyster landings have been reported as packed weight rather than weight in the shell. The packed weight is estimated to be 15.5 percent of the live weight for Pacific oysters; 10.9 percent for eastern oysters.

Landings reported in measurements other than weight are equated to pounds using conversion factors determined by periodic sampling. The factors used in 1968 were:

Abalone, red 50 pounds per dozen
Abalone, pink 25 pounds per dozen
Abalone, white 25 pounds per dozen
Abalone, green 35 pounds per dozen
Clam, Washington 7 pounds per dozen
Crab, market 2 pounds each
Live bait 12.5 pounds per scoop

1.5. VALUE

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

1.6. INSHORE BAIT

The inshore bait fishery takes several kinds of fish and invertebrates from bays, rivers, and intertidal regions for sale as bait. Records of this fishery have been published as a separate summary in the Catch Bulletin since 1963. Conversion factors used for inshore bait for 1968 were as follows:

Crab, sand .041 pound per dozen

4.5 pounds per gallon
Crab, shore .013 pound per dozen
Mudsucker .465 pound per dozen
Mussel 80 pounds per sack
Sculpin, staghorn .465 pound per dozen
Shrimp, ghost .082 pound per dozen

1.7. REFERENCES

Heimann, Richard F. G., and John G. Carlisle, Jr. 1969. Statistical report of fresh, canned, cured and manufactured fishery products for 1968. Calif. Dept. Fish and Game, Circular, (43): 1-15.

Jensen, Paul T., and Phillip G. Swartzell. 1967. California salmon landings 1952 through 1965, Calif. Dept. Fish and Game, Fish Bull., (135): 43-57.

TABLE 1
Common and Scientific Names of Fishes, Crustaceans, and Mollusks in the 1968 Catch

Common name	Scientific name	Common name	Scientific name
	FIS	SHES	
Anchovy Barracuda, California	Engraulis mordax	Shark	
Barracuda, California	. Sphyraena argentea	Basking	Cetorhinus maximus
		Bay	Carcharhinus lamiella
Kelp bass	. Paralabrax clathratus	Blue	Prionace glauca
Sand bass	Paralabraz clathratus Paralabraz nebulifer Paralabraz maculatofasciatus Chromis punctipinnis Sarda chiliensis	Blue_ Bonito_ Leopard	Isurus oxyrinchus Triakis semifasciata
Spotted sand bass	. Paralabrax maculatofasciatus	Leopard	Triakis semifasciata
Blacksmith	. Chromis punctipinnis		
Bonito, Pacific	Sarda chiliensis	Soupfin Spiny dogfish Thresher Small amounts of	Galeorhinus zyopterus
Cabezon	Scorpaenichthys marmoratus Cyprinus carpio	Spiny dogfish	Squalus acanthias
Carp	Cyprinus carpio	Thresher	Alopias vulpinus
Crooker		Small amounts of	-
White Queenfish Dolphinfish	Genyonemus lineatus	others	
Queenfish	Seriphus politus	Sheephead, California	Pimelometopon pulchrum
Dolphinfish	Coryphaena hippurus	Skate	
Eel	or phrasin soft as	Rat rav	Muliobatis californicus
California moray	Gumnothorax mordax	Big skate California skate	Raja binoculata
Wolf	Anarrichthys ocellatus	California skate	Raja inornata
Flounder		Longnose skate	Raja rhina
Arrowtooth Starry Small amounts of	Atheresthes stomias	Shovelnose guitarfish.	Rhinobatos productus
Starry	Platichthus stellatus	Small amounts of	Territoria production
Small amounts of	I tationingo otenarao	others	
other flatfishes		Smelt	
Flyingfish	Cunsalurus ann	Eulachon	Thaleichthus nacificus
Croonling belo	Cypselurus spp. Hexagrammos decagrammus	Jacksmelt.	Atherinopsis californiensis
Стоинов, кегр	Mandagammos aecagrammus	Nightemest	Smininghus starbai
Grouper Hake, Pacific	Mycteroperca spp.	Nightsmelt	Spirinchus starksi
Hake, Pacific	Merluccius productus	Suri	Hypomesus pretiosus
naiimoon	Medialuna californiensis	Surf_ Smelt, whitebait	Attosmerus elongatus
Halibut			Spirinchus starksi
California	Paralichthys californicus		Young of several others
Pacific	Paralichthys californicus Hippoglossus stenolepis	Sole	
Hardhead		Dover	Microstomus pacificus
Sacramento blackfish .	Orthodon microlepidotus	Dover English	Parophrys vetulus
Hardhead	Mylopharodon conocephalus Clupea pallasi	Petrale	Eopsetta 10rdanı
Herring, Pacific	Clupea pallasi	Rex	Gluntocenhalus zachirus
Hitch	Lavinia exilicauda		
Hitch Lingcod Mackerel	Ophiodon elongatus	Sand Sealyfin Small amounts of	Psettichthys melanostictus
Mackerel	- p	Scalyfin	Isopsetta isolepis
Jack.	Trachurus symmetricus	Small amounts of	
Pacific	Scomber japonicus	others	
Mudsucker, longiaw	Gillichthus mirabilis	Swordfish	Xinhias oladius
Onaleve	Girella migricans	Tuna	
Perch Pompano, Pacific Rockfish	Member of family Embiotocidae	Albacore	Thunnus alalunga
Pompano Pasifio	Peprilus simillimus All species of Sebastes and Sebas-	Bigeye	Thunnus obesus
Rockfish	All energies of Scharter and Schar-		Thunnas thunnus
MOCKHOIL	tolobus	Skinjack	Katsuwonus pelamis
Sablefish		Skipjack Yellowfin	Thunnus albacares
Salmon	Апориорота јето на		
King	Oncorhynchus tshawytscha	Curlin	Pleuronichthys decurrens Hypsopsetta guttulata Pleuronichthys verticalis
Silver	Oncornynenus isnuwytochu	Diamond	Unproported autiviate
Sanddab	Cithariahthus sandidus	Hornybood	Plannoniahthus perticalis
Sanddab	Cunarichtnys soraiaus	Small amount of	r teuronichings terricuits
Sardine	Sarainops caermeus	Small amounts of	
Sargo	Anisotremus daviasoni	others	4 4 12 1 1 1
Sculpin Sculpin, Pacific staghorn	Scorpaena guttata	White Col	Acanthocyotum solanaeri
sculpin, Pacific staghorn	Leptocottus armatus	Wahoo	Camoiatilus princeps
Sea bass, giant Seabass. white	Stereolepis gigas	renowtan, California	Seriola dorsalis
Seabass. white	Cynoscion nobilis		
	CRUST	ACEANS	
rab	I	Prawn	
Market	Cancer magister	Ridgeback	Eusicyonia ingentis
MarketRock_	Cancer productus	Ridgeback	Pandalus platyceros
	Cancer antennarius		
	Cancer anthonyi	Bay	Crago franciscorum
Sand	Emerita analoga		
Shore	Hemigrapsus oregonensis	Ghost	Callianassa californicus
CHOICE.	Pachygrapsus crassipes	Ocean	Pandalus iordani
Spider	Lararhanchus en	Red	Crago nigricauda Callianassa californicus Pandalus jordani Hippolysmata californica
Spider Lobster, spiny	Danulinus interruntus	Accu	rrepporgament curryornica
Journey	1 anamus interruptus		
	MOLLS	USKS	
	MOLLE		
		Mussel	16 12
Abalone			Mytitus edulis
Black	Haliotis cracherodii	Day	
Black	Haliotis cracherodii Haliotis fulgens	Rock	Mytilus californianus
Black Green Pink	Haliotis fulgens Haliotis corrugata	Rock Octopus	Mytilus californianus Octopus spp.
Black Green Pink	Haliotis fulgens Haliotis corrugata	Bay Rock Octopus Oyster	
Black Green Pink	Haliotis fulgens Haliotis corrugata	Ovster	
Black Green Pink Red White	Haliotis fulgens Haliotis corrugata	Ovster	
Black Green Pink Red White Clam	Haliotis fulgens Haliotis corrugata Haliotis rufescens Haliotis sorenseni Cochicula flymines	Ovster	
Black Green Pink Red White	Haliotis fulgens Haliotis corrugata Haliotis rufescens Haliotis sorenseni Cochicula flymines	Ovster	
Black Green Pink Red White	Haliotis fulgens Haliotis corrugata Haliotis rufescens Haliotis sorenseni Cochicula flymines	Rock. Octopus. Oyster Eastern Giant Pacific. Sea snail Squid.	
Black Green Pink Red White	Haliotis fulgens Haliotis corrugata Haliotis rufescens Haliotis sorenseni Cochicula flymines	Ovster	
Black Green Pink Red White	Haliotis fulgens Haliotis corrugata Haliotis rufescens Haliotis sorenseni Cochicula flymines	Ovster	

Common and Scientific Names of Fishes, Crustaceans, and Mollusks in the 1968 Catch

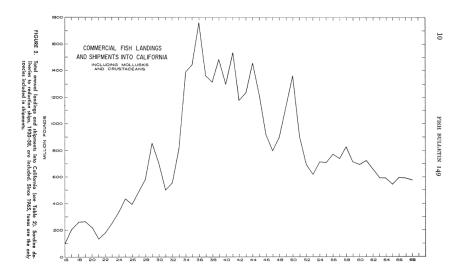


FIGURE 2. Total annual landings and shipments into California (see Table 2). Sardine deliveries to reduction ships, 1930-38, are included. Since 1965, tunas are the only species included in shipments

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

Year	Thousands of pounds	Year	Thousands of pounds
1916	95.003	1941	1,528,892
1917	209,877	1942	1,173,414
1918	261,134	1943	1,234,049
1010	266,270		1,459,456
1919		1944	
1920	222,004	1945	1,216,501
1921	135,348	1946	919,822
1922	182,343	1947	795,499
1923	253,875	1948	900,467
1924	340,446	1949	1,135,339
1925	437,502	1950	1,366,676
1926	394,964	1951	904,114
1927	487,166	1952	694,996
1928	583,527	1953	618,919
1929	856,854	1954	713,410
1930	702,189	1955	710,713
1930	702,189	1900	710,713
931	502,390	1956	772,551
932	556,139	1957	738,550
933	821,805	1958	832,919
934	1,390,798	1959	713,423
935	1,448,017	1960	694,663
.330	1,440,017	1900	034,003
936	1.764.900	1961	725,253
937	1,362,984	1962	663,107
938	1,310,596	1963	592,899
939	1,486,535	1964	591,131
940	1,297,518	1965*	544,480
370	1,297,318	1900	944,480
		1966	591,533
		1967	589,028
		1968	567,214
		1000	501,211

^{*} Beginning in 1965 only tuna shipments are recorded.

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

TABLE 3
Landings and Shipments of Leading Species Ranked by Pounds *

1	967				1968		
Species	Rank	Thou- sands of pounds	Thou- sands of dollars	Species	Rank	Thou- sands of pounds	Thou- sands of dollars
Yellowfin tuna Skipjack tuna Albacore tuna Anchovy Jack mackerel Pacific bonito Squid Bluefin tuna Market crab Rockfish Salmon Dover sole English sole Abalone Sablefish	3 4 5 6 7 8 9 10 11 12 13 14 15	167,252 114,959 71,748 69,609 38,181 21,219 19,602 13,736 11,716 9,799 7,402 7,215 5,822 4,422 3,798	\$25,387 11,767 17,193 701 1,447 891 438 1,667 2,033 680 3,945 466 510 860 315	Yellowfin tuna Albacore tuna Skipjack tuna Jack mackerel Anchovy Squid Market crab Pacific bonito Bluefin tuna Rockfish Dover sole Salmon English sole Abalone Sablefish	2 3 4 5 6 7 8 9 10 11 12 13 14 15	212,238 76,100 60,674 55,668 31,076 24,933 16,016 14,922 13,016 9,444 8,536 6,952 5,811 4,475 3,219	\$36,438 18,233 7,959 2,122 284 553 3,535 620 1,968 668 578 4,014 4,014 1,124 229
Petrale sole Miscellaneous (animal food). Rex sole Bigeye tuna Ocean shrimp All others	16 17 18 19 20	2,769 2,596 1,766 1,481 1,413 12,523	355 52 149 207 164 2,221	Pacific mackerel	16 17 18 19 20	3,133 2,947 2,590 2,275 1,931 11,258	168 389 52 250 163 1,935
Totals		589,028	\$71,448	Totals		567,214	\$81,787

^{*} Only the tunas are included in the shipments.

TABLE 3

TABLE 4 Number of Licensed Commercial Fishermen

	License year*			
Area of residence	1967-68	1968-69		
Eureka Sacramento San Francisco Monterey Santa Barbara Los Angeles San Diego Alaska, Washington and Oregon fishermen licensed in California Mexican nationals licensed in California	2,016 454 1,648 757 947 1,912 1,600 450 12	2,101 477 1,633 743 915 1,969 1,613 505 6 42		
Totals	9,823	10,004		

^{*} April 1 to March 31.

Number of Licensed Commercial Fishermen

TABLE 5

Number of Registered Fishing Boats by Length

License year*	Up to 24 feet	25 to 39 feet	40 to 64 feet	65 to 84 feet	85 to 99 feet	100 feet and over	Total
1967–68	1,550	1,773	1,081	118	25	99	4,646†
1968-69	1,677	1,829	1,080	137	25	106	4,854‡

Number of Registered Fishing Boats by Length

^{*} April 1 to March 31. † The owners of 485 boats were issued fishing party licenses in 1967–68. ‡ The owners of 492 boats were issued fishing party licenses in 1968–69.

TABLE 6
Origin of Shipments Received for Processing in California During 1968 *

	Pounds shippe	ed to each area	
Shipped from: Species	Los Angeles	San Diego	Total pounds
Oregon, Washington, Canada and Alaska: Tuna, albacore	16,246,863	38,054	16,284,917
Mexico and Central America: Tuna, bluefin. Tuna, skipjack. Tuna, yellowfin.	80,098 310,884 1,835,553		80,098 310,884 1,835,553
Japan: Tuna, albacore Tuna, yellowfin	22,598,656 44,978,436	800,755 1,157,931	23,399,411 46,136,367
China (Formosa): Tuna, albacore Tuna, yellowfin	329,800 1,043,465		329,800 1,043,465
Malaya: Tuna, albacore	9,224,608 90,425 6,686,909	484,854 339,493	9,709,462 90,425 7,026,402
Philippines: Tuna, yellowfin.	540,358		540,358
South Pacific Islands: Tuns, albacore. Tuns, bigye. Tuns, skipjack. Tuns, yellowfin.	4,648,320 61,965 1,128,302 676,832	775,412 691,416	5,423,732 61,965 1,128,302 1,368,248
Africa: Tuna, albacore Tuna, yellowfin	1,468,276 1,261,548	4,406,974	5,875,250 1,261,548
Total pounds	113,211,298	8,694,889	121,906,187

^{*} Beginning in 1965 only tuna shipments are recorded.

TABLE 6 Origin of Shipments Received for Processing in California During 1968

TABLE 7
Origin of Commercial Fish Landings and Volume of Shipments Into California During 1968

origin or commercial ris	in Landings	ana voiame	or ompine	nto unto car	norma buri	ng 1300
		Landings of	catches from			
Species	California waters	Waters north of State	Waters south of State	Total pounds	Tuna shipments*	Grand total
Fish: Anchovy Barracuda, California Blacksmith Bonito, Pacific Cabezon	31,076,116 114,534 137,634 14,903,357 20,106		25,966 18,572	31,076,116 140,500 137,634 14,921,929 20,106		31,076,116 140,560 137,634 14,921,929 20,106
Carp Croaker, white Flounder Flounder, arrowtooth Flyingfish	297,793 941,304 853,366 13,400 73,207	2,791	384	297,793 941,304 856,157 13,400 73,591		297,793 941,304 856,157 13,400 73,591
Grouper Hake, Pacific Halfmoon Halibut, California Halibut, Pacific	6,494 49,532 659,425 127		230,913 85 12,229	230,913 6,494 49,617 671,654 127		230,913 6,494 49,617 671,654 127
Hardhead Herring, Pacific Hitch Lingcod Mackerel, jack	243,581 357,869 1,495 1,070,047 55,650,082	24,007	17,600	243,581 357,869 1,495 1,094,054 55,667,682		243,581 357,869 1,495 1,094,054 55,667,682
Mackerel, Pacific Opaleye Perch Pompano, Pacific Rockfish	3,115,846 11,173 166,398 269,372 9,212,091	101,723	17,600 1,642 130,582	3,133,446 11,173 168,040 269,372 9,444,396		3,133,446 11,173 168,040 269,372 9,444,396
Sablefish	3,179,524 6,951,800 713,068 124,088 89,512	39,931 131 1,554	35,663	3,219,455 6,951,931 714,622 124,088 125,175		3,219,455 6,951,931 714,622 124,088 125,175
Sea bass, giant Seabass, white Shark Sheephead, California Skate	14,919 210,050 476,069 11,578 185,065	1,285	143,502 651,830 23,878 1,172	158,421 861,880 499,947 12,750 186,350		158,421 861,880 499,947 12,750 186,350
Smelt. Smelt, whitebait. Sole, Dover. Sole, English Sole, petrale.	443,062 238,061 8,040,493 5,738,574 2,891,797	495,028 72,864 54,808		443,062 238,061 8,535,521 5,811,438 2,946,605		443,062 238,061 8,535,521 5,811,438 2,946,605
Sole, rex. Sole, sand Sole, miscellaneous. Swordfish. Tuna, albacore.	1,899,750 211,376 29,531 169,051 11,617,055	30,833 2,779,875	83 30,347 680,229	1,930,583 211,376 29,614 199,398 15,077,159	61,022,572	1,930,583 211,376 29,614 199,398 76,099,731
Tuna, bigeye	3,737,291 410,713 98,492 69,368	1,125 136	109,558 9,197,859 58,823,928 152,928,017	109,558 12,936,275 59,234,641 153,026,509 69,504	152,390 80,098 1,439,186 59,211,941	261,948 13,016,373 60,673,827 212,238,450 69,504
Wahoo Whitefish, ocean Yellowtail, California Miscellaneous Miscellaneous (animal food)	2,116 22,460 1,669 2,421,825	167,809	6,310 531 140,717	6,310 2,647 163,177 1,669 2,589,634		6,310 2,647 163,177 1,669 2,589,634

TABLE 7
Origin of Commercial Fish Landings and Volume of Shipments Into California During 1968

TABLE 7—Continued
Origin of Commercial Fish Landings and Volume of Shipments Into California During 1968

		Landings of	catches from			
Species	California waters	Waters north of State	Waters south of State	Total pounds	Tuna shipments*	Grand total
Crustacean:						
Crab, market	16,015,581			16,015,581		16,015,581
Crab, rock	351,657			351,657		351,657
Crab, spider	187			187		187
Lobster, spiny	312,483			312,483		312,483
Prawn, ridgeback	426			426		426
Prawn, spot	7,239			7,239		7,239
Shrimp, bay	10,465			10,465		10,46
Shrimp, ocean	2,269,920	4,850		2,274,770		2,274,770
Mollusk:						
Abalone	4,474,842			4,474,842		4,474,84
Octopus	17,444	219		17,663		17,66
Oyster, eastern.	16,166			16,166		16,16
Oyster, giant Pacific	645,553			645,553		645,55
Squid	24,932,713			24,932,713		24,932,713
Miscellaneous mollusk	1,842			1,842		1,84
Total pounds	218,299,224	3,778,969	223,229,197	445,307,390	121,906,187	567,213,57

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

Origin of Commercial Fish Landings and Volume of Shipments Into California During 1968

TABLE 8 Monthly Landings and Shipments Into California During 1968 Total pounds October 2,143,912 6,420 16,200 4,139,392 321 5,195,169 240 13,213 318,084 347 121,720 8,249 95,216 327,500 340 6,459,040 31,076,116 7,639 140,500 137,634 830,893 14,921,929 3,287 20,106 225,205 44,803 3,605 111,248 432 217,210 11,010 9,400 292,820 570 ıda, California. 199,968 1,314 171,009 4,080 3,946,361 2,691 663,619 6,436 227,103 3,693,932 252 297,793 941,304 856,157 13,400 73,591 230,913 6,494 49,617 671,654 127 119,325 65,707 123,471 1,870 21,650 51,172 12,177 600 865 1,900 65,266 14,310 3,210 28,745 47,228 81,147 127,265 3,445 -65 121,811 -22,595 16,220 40,500 2,814,652 40,500 40,500 40,500 40,500 40,500 40,500 10,103,520 40,500 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 10,103,520 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40,500 40, \$0,942 \$3,464 1,300 17,690 7,659 56,351 19 85,056 119,128 515 11,666 44,370 104,218 492 49,736 1,247 53,669 38,040 45 2,405 23,883 170 682 2,211 53,602 175 9,556 59,552 925 7,865 42,368 4,140 4,536 102,032 108 200 66,240 205,628 3,346,108 99,506 715 511,733 42,590 1,125,750 178,895 2,350,624 99,385 5,21,228 3,149 41,590 61,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1,945 1 750 91,017 5,719 25,583 7,519 19,353 755 17,450 120,696 6,870,686 38,273 36,780 51,158 4,004,841 179,634 40,231 103,250 6,355 112,894 206,633 2,924,035 64,963 849 29,938 29,779 908,069 42,005 815,118 57,891 5,247,071 90,595 5,747,393 $\substack{125,851 \\ 2,710,212}$ Mackerel, Pacific... Opaleye.... Perch... Pompano, Pacific... Rockfish 94,112 1,302 25,215 24,660 884,175 252,964 42,922 6,506 11,393 68,516 157 28,011 17,447 904,814 327,082 1,975 3,586 38,519 918,152 57,286 608 3,309 22,304 696,543 863,388 362 4,383 3,086 523,689 457,644 18,900 17,313 768,419 291,802 47,702 12,995 4,408 15,719 70,338 43,235 1,292 14,131 908,069 1,55,590 1,049,660 95,827 437 16,262 24,749 53,336 48,551 429 13,592 131,590 316,450 42,490 743 7,917 241,199 1,138,865 82,721 56,485 7,232 204,636 1,875,546 63,168 1,677 21,278 429,803 67,837 6,024 1,414 158,421 861,880 499,947 12,750 186,350 6,122 85,681 13,700 1,513 12,427 15,224 64,799 15,071 1,267 12,560 1,919 21,708 92,820 1,783 21,595 9,493 48,272 73,186 1,914 13,325

TABLE 8
Monthly Landings and Shipments Into California During 1968

Grand total	27,881,569	23,166,371	53,084,383	53,321,536	69,372,441	48,536,841	61,337,569	53,041,383	43,782,666	49,128,903	38,054,551	46,505,364	567,213,577
Total pounds	5,498,865	6,835,326	10,433,542	8,341,997	12,049,190	4,734,566	11,639,826	18,328,769	14,255,792	15,201.053	5,028,200	9,559,061	121,906,187
Tuna, bluefin. Tuna, skipjack. Tuna, yellowfin.	2,789,699	793,915	3,776,714	4,437,185	609,710 9,403,942	293,580 3,498,688	80,098 147,988 7,263,376	387,908 5,405,984	4,025,674	9,609,448	4,224,714	3,982,602	80,098 1,439,186 59,211.941
SHIPMENTS:* Fish: Tuna, albacore Tuna, bigeye	2,709,166	5,985,638 55,773	6,615,003 41,825	3,904,812	1,980,746 54,792	942,298	4,148,364	12,534,877	10,230,118	5,591,605	803,486	5,576,459	61,022,572 152,390
Total pounds	22,382,704	16,331,045	42,650,841	44,979,539	57,323,251	43,802,275	49,697,743	34,712,614	29,526,874	33,927,850	33,026,351	36,946,303	445,307.390
Mollusk: Abalcne Octopus Oyster, eastern Oyster, giant Pacific Squid Miscellaneous mollusk	395,393 2,342 1,806 82,324 3,587,575	5,476 1,350 75,695 4,656,515 630	235,232 2,584 894 73,474 708,850 596	434,662 884 1,212 82,140 363,997 616	414,264 1,778 1,281 74,593 5,122,439	503,639 1,290 1,152 27,851 4,315,805	489,847 1,361 1,006 20,341 2,620,700	422,129 687 1,333 21,519 1,487,650	509,300 300 1,488 18,753 811,940	380,744 192 1,643 61,956 261,432	314,301 518 1,376 42,030 9,545	375,325 251 1,625 64,877 986,265	4,474,842 17,663 16,166 645,553 24,932,713 1,842
Prawn, spot	2,849 940	2,107 685	406 2,040	162 1,570	1,125 762,140	500 890,085	519,435	2,100 84,840	1,070 18,040	200	599 390	1,116 45	7,239 10,465 2,274,770
Crustacean: Crab, market Crab, rock Crab, spider Lobster, spiny Prawn, ridgeback	4,737,539 35,219 60,212	2,663,045 25,029 39,260	868,408 27,235 23,200	483,977 33,076 187	386,462 27,060	31,350 22,872	606 39,679	36,829	26,412	25,907 90,449	451,510 27,132 53,230	6,392,684 25,207 46,132 426	16,015,581 351,657 187 312,483 426
Wahoo. Whitefish, ocean. Yellowtail, California. Miscellaneous. Miscellaneous (animal food)	971 13,095 93,740	3,400 9,482 3 102,687	2,057 108,930	53 1,675 50 171,859	80 3,499 738 297,536	2,910 37 3,915 87 320,676	109 2,388 221 398,950	669 10,403 101 360,620	421 11,690 321,340	28 22,989 133 314,981	14 44,550 331 68,558	265 37,434 5 29,757	6,310 2,647 163,177 1,669 2,589,634
Tuna, bigeye	8,052	144,906 925,151 14,234	873,097 35,338,068 10,402	3,144,005 30,481,831 5,577	6,468,429 31,913,389 5,059	10,753,835 14,218,222 3,846	3,073,860 6,754,474 24,639,047 2,444	21,994 4,305,076 3,214,037 7,807,579 1,400	24,946 4,493,003 3,576,497 1,663,009 4 235	9,115 1,029,712 ,730,437 1,112,448 7,085	15,634 6,794,267 3,418,708 5,051	53,503 18,990 10,780,657 1,509,057 2,119	109,558 12,936,275 59,234,641 153,026,509 69,504
Sole, rex	172,544 26,491 2,480	185,929 30,507 4,792	110,352 15,885 4,205	129,351 4,275 1,413	131,352 395 1,334 502	140,935 5,260 1,261 10,703	207,336 1,551 3,622 41,517 328,012	219,554 13,175 4,067 88,603 2,149,267	190,679 21 680 1,546 39,445 5,356,954	189,828 24,260 53 15,752 6,787,506	132,634 33,992 2,075 2,876 422,849	120,089 33,905 2,766 32,571	1,930,583 211,376 29,614 199,398 15,077,159

^{*} For origin of shipments refer to Table 6, Beginning in 1965 only tuna shipments are recorded

TABLE 8—Cont'd.

		Monthly La	indings of	Commerci	TABLI al Fishing		the Eureka	a Area Dui	ing 1968				,
Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
LANDINGS FROM: California waters: Fish: Bonito, Pacific									48				48
Cabezon Flounder Flounder, arrowtooth Halibut, California	69,435 1,470	58,990 2,490	10,905 595	2,096 600	12,478 2,080	48,300 3,165	26 111,453	74,030	72,620	16,109	35,067	15,872	527,355 10,400 150
Halibut, Pacific Lingcod Mackerel, jack Perch Rockfish	18,643 7,797 221,399	26,325 6,854 283,038	26,245 10,818 209,667	41,542 5,863 228,876	57,158 210,360	82,151 166,919	108 155,242 3,780 397,743	19 152,870 16,662 387,062	109,525 245 6,581 277,937	45,431 1,158 199,143	31,614 949 139,165	12,068 825 81,087	127 758,814 245 61,287 2,802,396
Sablefish Salmon Sanddab Shark Skate	150,163 12,597 47	237,166 18,222 145	128,970 17,752	69,753 62,932 16,323 4,130	129,305 743,160 30,497 47 2,755	76,040 1,056,583 35,346 8,743	35,983 1,496,275 54,240 4,097	58,053 612,761 45,445 7,462	111,363 92,501 8,159 90 7,396	313,659 16,656 312 10,987	246,786 11,100 742 4,856	153,512 7,547 300	1,710,753 4,064,212 273,884 1,683 50,426
Smelt Smelt. whitebait. Sole, Dover. Sole, English. Sole, petrale.	891 156,284 309,258 211,227	130 22,249 321,338 374,942 203,631	71 20,352 116,875 184,529 97,281	624 29,058 350,667 258,428 120,917	19,010 56,388 1,091,867 206,638 128,397	23,381 63,525 1,067,703 298,102 119,535	65,094 34,493 894,635 420,697 165,973	38,963 5,161 1,159,563 369,735 207,678	22,492 828,586 497,382 162,947	7,154 1,112,596 194,212 182,299	362 449,144 116,267 138,328	147,238 55,749 182,761	177,281 232,117 7,696,496 3,285,939 1,920,974
Sole, rex	99,882 140 85,135	123,766 240 86.236	63,472 75,720	99,040 139,148	95,215 160 8 43 194,854	124,820 233 220 236,186	188,004 594 77 25,159 267 214,216	193,550 953 30 1,480,745 95 12 193,171	158,282 252 1,779,520 244,480	149,213 60 133,739 245 237,033	94,482 80 21,950 450 30,116	99,380 620 500 7,439	1,489,106 2,847 600 3,441,113 1,820 12 1,743,734
Crustacean: Crab, market Crab, rock Shrimp, ocean	4,656,661	2,582,753	849,687	472,903	379,848 185 743,335	28,734 225 871,770	606 115 464,005	150	40	55	200 25	6,204,462 20	15,175,854 815 2,079,110

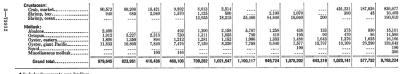
TABLE 9
Monthly Landings of Commercial Fishing Boats in the Eureka Area During 1968

Mollusk: Octopus Oyster, giant Pacific Miscellaneous mollusk		124 49,960 630	199 50,140 436	154 60,586 470	248 55,429	235 5,152	556 4,344	239 6,728	105 6,360	97 36,243	10,064	117 25,816	2,273 365,180 1,536	
Total pounds	6,055,542	4,399,229	1,863,714	1,964,110	4,159,465	4,317,068	4,737,782	5,011,177	4,386,911	2,656,401	1,331,791	6,995,463	47,878,653	
Waters north of State: Fish:						,			.,	-,,,,,,,	.,001,101	0,000,100	41,010,000	
Flounder Lingcod Rockfish Sablefish Salmon		===	122 392 6,490 12,867	210 1,063 9,788 5,920	7,393 26,685 7,730	952 869	314 6,507 22,405 3,737 131	30 6,563 18,165 4,737	2,115 1,137 10,639 32	1,994 297	4,688 4,611		2,791 24,007 101,723 39,931	
Sanddab Skate Sole, Dover Sole, English Sole, et ale			157 135,931 2,349 2,482	36,091 15,899 10,602	471 104,252 18,871 21,040	656 1,285 6,030 7,066 3,037	85,701 3,267 9,301	79,406 4,290 3,846	15,472 21,122 4,500	10,922	21,223		131 1,554 1,285 495,028 72,864 54,808	MARINE
Sole, rex Turbot Miscellaneous (animal food)	===		5,515 12,325	5,341 9,126	8,910 58,317	1,071 136	1,167 29,979	2,482 48,664	4,605	9,398	1,742		30,833 136 167,809	FISH C
Crustacean: Shrimp, ocean					4,850								4,850	DATC
Mollusk: Octopus					219								219	Ξ
Total pounds			178,630	94,194	258,738	21,102	162,509	168,299	59,622	22,611	32,264		997,969	FOR
Grand total	6,055,542	4,399,229	2,042,344	2,058,304	4,418,203	4,338,170	4,900,291	5,179,476	4,446,533	2,679,012	1,364,055	6,995,463	48,876,622	1968

TABLE 9—Cont'd.

			0		TABLE		Pan Franci	4	During 100	0 *				20
Species	January	February	March	April	May	June	July	August	During 196	October	November	December	Total pounds	
LANDINGS FROM: California waters: Fish:														
Anchovy. Bonito, Pacific. Cabezon. Carp. Croaker, white.	119,325	870 47,228 3,975	19,295 595	21,650 746	1,000 40 1,900 1,082	2,000 1,702	3,480 210	7,023 24 1,431	9,000 760 2,294	7,960 14,785 1,390	41,210	13,440 32,400 65	51,463 809 910 297,793 15,628	
Flounder Flounder, arrowtooth Hake, Pacific Halibut, California Hardhead	22,693	61,271 955 58,155 22,595	36,718 32,872 46,771	5,694 4,456 40,231	1,384 1,130 525 365 6,355	19,769 2,138 755	3,338 515 14,192 200	3,690 16,891 100	14,252	16,245 10,734 23,060	9,430	14,100 4,825 41,855	248,693 3,000 525 191,003 243,581	FISH
Herring, Pacific	9,744	16,220 12,282 2,282	8,157 5,115	9,492 9,395	17,852	29,817 30	25,102 596	34,168 1,601	175 12,342 631	1,025 13,588 531		60 220 6,338 854	53,235 1,495 188,337 30 22,608	BULLETIN
Rockfish	12,226	22,410	23,723 9,415 13,970 50	36,924 129,936 17,860	25,005 16,513 306,843 33,530 21	48,693 12,656 677,391 14,510 146	22,921 21,610 717,358 26,775	48,250 11,720 316,895 27,928 90	12,585 50,383 20,014	67,061 6,590 30,992 56	22,895	36,782 5,665 11,920	584,131 137,280 2,198,806 265,903 409	149
Shark	6,000 354 115	6,900 2,191	3,541 6,930 2,681 1,632 10,785	2,006 3,488 8,182 1,580 12,350	360 3,401 18,484 520 73,544	3,926 6,880 17,874 490 28,432	2,303 2,000 13,168 39,368	2,057 1,400 7,719 51,842	6,601	6,746 9,367 4,505	7,183 660	1,694 6,056	59,689 62,725 82,419 5,944 255,692	
Sole, English Sole, petrale Sole, rex Solz, sand Sole, mixellaneous	34,440 16,508	36,265 28,129	84,110 39,439 19,745 13,355	74,515 48,925 14,030 1,490	92,237 61,770 11,402 235	76,850 32,080 3,969 4,845 500	67,929 42,546 9,110 957 1,681	120,273 58,705 10,002 12,152 2,562	41,771 14,997 18,900	195,618 25,750 29,110 21,630	28,970 15,940 31,015	137,536 9,975 5,945 29,945	1,697,246 490,375 204,955 179,161 6,463	
Tuna, albacore	7,155	11,540	5,860	3,640	1,640	2,080	12,047 1,880	112,630 965 25	4,235	118,407 5,985 8	3,935	1,355	963,260 50,270 349	

TABLE 10 Monthly Landings of Commercial Fishing Boats in the San Francisco Area During 1968



Includes Sacramento area landing

21

TABLE 10—Cont'd.

					TABLE	11							
	М	onthly Lar	dings of (ommercia	Fishing E	Boats in th	e Montere	y Area Du	ring 1968				
Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
ANDINGS FROM: California waters: Fish:													
Anchovy— Bonito, Pacific. Cabezon. Croaker, white Flounder.	1,697,500 532 1,497 1 1,960 7,820	56,000 45 3,710 7,960 4,285	278,200 713 3,345 4,306	835,500 2,473 1,296	3,600 -45 8,750 298	54,200 5,312 1,965	18,800 60 10,904 3,903	2,056,220 494 94 31,866 5,634	2,359,750 5,542 80 39,193 8,033	527,829 2,482 287 40,509 6,382	412,000 583 3,729 15,064 8,859	202,200 2,521 17,821 6,983	8,501,799 9,678 12,736 195,157 59,764
Hake, Pacific Halibut, California Herrinz, Pacific Lingcod Mackerel, jack	10,343 13,481 437,000	9,946 7,574 6,875	6,651 3,932 19,950	650 768 103,250 3,186 13,165	400 938 112,894 3,268 26,805	2,779 17,450 4,498 17,095	4,440 21,430 66,240 11,277 19,928	14,223 4,800 6,659 356,595	773 1,036 11,899	648 3,563 9,450	4,529 8,494 41,850	6,312 4,350	5,490 79,340 304,634 71,318 960,612
Perch	733 741 132,911 129,298	1,249 156 192,097 145,991	1,387 136 247,497 101,712	4,650 879 339,714 55,917 122,668	20 9,799 394,572 87,651 80,421	1,588 246,098 115,880 125,016	264 5,314 294,998 117,565 112,969	2,094 18,040 210,337 80,620 97,502	1,967 21,217 51,966 47,310 34,029	368 13,609 122,444 109,257	310 79 108,132 198,122		13,727 71,748 2,394,655 1,329,969 572,605
Sanddab Sardine Sea bass, giant Seabass, white Shark	11,692 179 3,550	14,693 501 2,572	10,955 94 445	8,153 37 438	18,190 112 2,104	12,581 5,830	18,340 1,131 796 8,384	22,338 129 599 4,661	15,775 20 2,457 1,680	20,169 400 1,943	13,510 66 7,615 17,314	2,209	172,631 1,280 66 14,999 60,620
Skate Smelt Sole, Dover Sole, English Sole, petrale	7,651 7,355 450 30,840 12,182	4,962 4,793 295 29,223 22,420	5,400 3,283 535 42,228 26,817	4,545 775 705 36,549 16,906	6,945 4,094 7,945 68,770 44,920	4,293 2,006 12,245 34,840 23,430	8,357 6,656 15,570 44,310 37,097	4,683 3,841 13,870 52,790 26,935	5,975 2,981 3,810 23,090 5,725	5,385 8,562 725 36,705 19,995	5.437 320 26,464 8,260	5,057 4,971 145 14,035 3,675	68,690 49,317 56,615 439,844 248,362
Sole, rex. Sole, sand. Sole, miscellaneous. Tuna, albacore. Turbot. Miscellaneous.	22,167 5,175 1,747 15	19,850 805 2,423	15,335 1,670 1,203	7,265 2,725 8 50	13,570 467 705	7,605 415 85	5,410 1,187 1,586	7,125 70 656 22,339	7,860 2,780 207 874,452	6,995 2,570 509,891	9,795 2,727 1,244 13,043 70	1,300 3,115 2,666	124,277 22,052 11,893 1,421,311 85 943

TABLE 11
Monthly Landings of Commercial Fishing Boats in the Monterey Area During 1968

Grand total	2,550,075	540,640	776,469	1,716,215	6,004,230	4,845,611	3,451,719	4,532,864	4,341,357	1,703,263	908,375	492,325	31,863,143
Squid				153,707	5,106,889	4,150,400	2,614,600	1,487,650	811,750	253,095			14,578,091
Octopus	161	103	65				15					31	381
Mollusk:												37	
Prawn, spot	2,849	2,107	406	162							599	1,116	7,239
Crab, rock	28			****							81	85	194
Crab, market	218	5	204	74	58						79	383	1,021
Crustacean:								1	1			1	1

MARINE FISH CATCH FOR 1968

TABLE 11—Cont'd.

TABLE 12 Monthly Landings of Commercial Fishing Boats in the Santa Barbara Area During 1968														24
Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds	
LANDINGS FROM: California waters: Fish:														
Anchovy Barracuda, California Bonito, Pacific Cabezon Croaker, white	60,082	132,960 51,740 1,830 775	4,020 10,473 601	11,340 956 36	8,370 4 358 247 8	10,970 103 432	16,565 3,923 480 13,835	19,620 1,329 187 435	20,565 4,495 172	815,500 4,579 60 385	8,426 1,658 351	729,500 116,030 766	4,007,925 9,386 254,770 6,333 15,521	
Flounder	8.572	2,719 25,095 3,167 385,070	11,070 22,912 3,279 187,620	2,881 32 26,357 2,608 284,970	150 31,032 4,924 75,650	20 175 45,856 3,208 1,219,380	35 50,039 7,489 864,225	10,838 6,373 464,300	4,035 1,790 155,750	1,402 2,015 246,350	2,009 2,368	227 3,571 4,246	17,469 479 231,718 50,556 4,251,015	FISH
Perch Pompano, Pacific Rockfish Sablefish Salmon	108,521	3,317 300 355,787	1,627 283,114	3,072 197,402 905	15 177,075 8,441	192,872 60 16,556	912 329,607 23,891	1,979 1,430 228,361 460 22,492	950 271,195 385 43,857	609 440 191,144	158,405	1,184 124,517	18,990 2,185 2,618,000 905 116,142	BULLETIN
Sanddab Sardine Sculpin Sea bass, giant Seabass, white	140	90 19,980 18 819	170	228 1,377	86 3,683	17 74 4,638	256 4,561	9,117	4,829	2,588	176	4,802	424 19,980 187 978 43,657	TIN 149
Shark Sheephead, California. Skate Sole, Dover Sole, English	94 480	2,924 52 925 44,242	2,510 97 54,148	1,906 22 397 260 24,356	45,144 156 224 1,340 21,042	64,291 325 5,170 13,297	14,150 517 56 6,745 12,679	9,410 47 9,665 10,939	2,169 198 7,160 18,914	7,750 82 1,280 30,994	13 114 70	3,635 27 210 16,605	161,128 881 3,155 31,690 315,300	
Sole, petrale. Sole, rex. Sole, sand. Sole, miscellaneous. Swordfish.	16,055 4,668 350		27,201 6,285 860 2,774	31,645 3,675 60 1,086	23,647 2,255 400	15,110 3,470 416 188	28,659 3,645 203 8,115	23,697 6,395 112 16,016	11,403 4,935 48 11,687	8,154 4,510 10 919	10,675 170 58	10,198 13,464 225 60	231,900 81,412 7,316 7,886 37,582	
Tuna, albacore Tuna, akipiack Turbot Whitefish, ocean Yellowtail, California Miscellanzous	882	2,694	4,542	1,937	3,376	1,410	4,327	72,624 340 12	1,110,553 354	922,396 855	596	7,323 264	2,131,415 354 17,193 95 7 12	
Miscellaneous (animal food)	8,605	16,451	20,885	23,585	44,365	84,490	154,755	118,785	76,860	68,550	38,442	22,318	678,091	

TABLE 12 Monthly Landings of Commercial Fishing Boats in the Santa Barbara Area During 1968

Crustacean: Crab, market Crab, rock Crab, spider Losater, spiny Prawn, ridgeback	88 7,892 23,495	79 8,918 18,759	96 6,667 12,595	1,108 13,252 187	543 10,783	9,325	9,683	8,359	7,969	6,329 21,390	8,035 16,818	13 11,819 19,215 426	2,029 109,031 187 112,272 426
Mollusk: Abalone. Oetopus. Oyster, giant Pacific. Squid. Grand total	286,455 16,133 402,355 1,387,059	14,930 1,532,970 2,665,706	112,208 15,485 196,315 987,688	227,490 14,078 28,040 905,248	188,649 12,005 2,050 666,029	237,964 14,379 67,100 2,011,398	224,211 8,209 5,300 1,797,369	192,544 38 5,151 	257,607 4,816 2,022,797	9,916 2,486,169	96,003 12,857 2,657,939	194,060 12,771 426,265 1,723,741	2,155,133 38 140,730 2,660,395 20,552,278

MARINE FISH CATCH FOR 1968

TABLE 12—Cont'd.

	Monthly	y Landings	and Shipn	nents of C	TABLE ommercial		the Los A	Angeles Ar	ea During	1968				26
Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds	
LANDINGS FROM: California waters:														
Fish: Anchovy Barraeuda, California Blacksmith	292,220	163,140 6,578	151,195 12	242,215 15,455	108,750 6,635 95,216	158,035 37,627 3,605	178,365 5,791 9,400	61,049 5,101 16,200	21,020 172	3,843,880 6 13,213	7,781,160 6,857	5,513,900	18,514,929 84,234 137,634	
Bonito, Pacific	3,882,327 50,939	611,798 67,369	189,475 211,659	224,936 47,183	326,754 55,290	99,382 20,802	275,751 59,502 85	4,122,185 46,870	3,680,724 2,703	309,624 83,624	168,355	701,470 51,130	14,592,781	
Flyingfish Halfmoon Halibut, California Lingcod	4,206 121	65 24,308 37	750 21,784	865 1,740 20,471	28,745 871 9,083	30,523 8,462 15	11,155 141 13,611	1,300 2,792 10,634	492 3,209 1,398	7,519 3,464		6,165 415	73,080 19,337 129,958 595	FIS
Mackerel, jack Mackerel, Pacific Opaleye	3,200,141 179,122	2,405,107 75,505	607,548 94,060 1,302	4,948,936 68,239 157	5,644,938 326,609 1,975	5,634,181 54,390 608	2,461,955 96,019 615	2,103,140 64,963 849	2,542,318 159,861 1,150	7,096,306 494,507 3,780		6,701,393 634,201		н во
Perch	4,244 16,572 144,122	2,135 14,693 55,887	6,182 24,524 70,317	4,207 16,568 46,068	28,705 35,351	1,241 20,716 25,697	4,607 38,246 39,331	6,481 10,309 3,709	3,453 4,186 10,298	2,892 7,796 22,540	2,042 3,007	1,645 10,117 58,346	39,750 195,439 534,996	BULLETIN
Sablefish Salmon Sanddab Sardine	115	6,242	10 6,506	736	33 56,485	75 1.677	30 2,234	10 308	16 8,659	4.024	955		617 35 148 100,821	N 149
Sculpin Sea bass, giant	440 281	1,808 357	67 372	90 235	1,236 344	1,071 713	250 2,406	1,184 3,396	647 1,485	158 82	439 44	294 92	7,684 9,807	9
Seabass, white	4,394 5,087 431	1,512 1,194 398	1,099 3,240 1,068	3,304 5,558 425	9,315 18,885 1,013	10,741 4,800 234 69	15,214 11,424 68	23,588 7,195 222	16,947 9,203 135	2,684 3,912 42	3,196	917 2,940 183	90,220 76,634 4,326 69	
Smelt Sole, English Sole, petrale.	1,247	1,700	35	2,930	8,173	13,430	25,832 166	28,795	2,935	18,550	245	16,818	133,470 245 166	
Sole, miscellaneous. Swordfish. Tuna, albacore.					13 502	9,784	29,567 64,352	37,842	23,095	12,011	1,079		113,880	
Tuna, bluefin							64,566	138,067 1,357,249 230,808 55,938	630,492 1,324,648 133,048 41,005	1,674,527 920,420 35,974 130		8,464	2,782,137 3,666,883 399,830 97,089	
Whitefish, ocean	78	288			80 303 33	698 87	47 991 30	1,625 20	381	28 39 65	14	5	247 4,325 255	
Crustacean:														
Crab, rock Lobster, spiny	26,285 26,208	15,423 14,896	19,472 6,174	19,824	16,092	13,322	29,881	28,320	18,403	16,689 32,602		13,085 14,691		

TABLE 13
Monthly Landings and Shipments of Commercial Fish Into the Los Angeles Area During 1968

Mollusk:														
Abalone	16,455		83,841	148,013	162,538	169,339	184,589	162,924	162,924	160,847	176,259	135,811	1,563,540	
Octopus	108	21	4							5	2	11	151	
Squid	3,185,220	3,123,545	512,535	182,250	13,500	97,800	800			8,337	9,545	560,000	7,693,532	
Total pounds	11,053,358	6,594,508	2,013,231	6,000,414	6,958,088	6,419,124	3,627,084	8,533,592	8,805,052	14,780,307	16,462,461	14,432,093	105,679,312	
Waters north of State:														
Fish:									255.862	2,489,825	29,930		2,775,617	
Tuna, albacore Tuna, bluefin									200,002	1,125	20,000		1,125	
Total pounds									255,862	2,490,950	29,930		2,776,742	
Waters south of State:														
Barracuda, California											12,885		12,885	
Bonito, Pacific	1,555			475				1,990			130	12,983	17,133	
Grouper	41,972	23,425		170				17,690	10,150	18,110	38,040	58,075	207,632 85	MARINE
Halfmoon Halibut, California	85			61	143				180			329	722	ŝ
Mackerel, jack		17,600			110				100				17,600	- 6
Mackerel, Pacific		17,600											17,600	É
Perch	34,222	19,117		4774	162			385 2,700	500 6,775	350 7,805	13,370	130 22,495	1,527 121 551	
Rockfish Sea bass, giant	34,222 10,120	19,117 21,812	6,870 4,030	3,406 13,535	4,791 8,432	179		20,965	16,435	8,267	13,127	9,939	126,841	FIS
Dea Date, giant		21,012		15,555	0,102	110		20,300						H
Seabass, white	52,911	55,707	80,212	48,812	24,325	148	15,695	16,155	78,710	68,860	109,016	62,628	613,179	
Shark	980	115	300	1,433					5,000		925	720 90	9,473 620	- 2
Sheephead, California Sole, miscellaneous.			415	115				83				90	83	Fi .
Swordfish								3,068					3.068	CATCH
Tuna, albacore							40,263	55,334	10,623	39,814			146,034	
Tuna, bigeve								21,994		9,115			31,109	FOR
Tuna, bluefin		144,906	710.100	2,392,526	5,216,718	7,701,172	2,245,453 5,607,429	1,570,426 2,215,398	2,459,173 2,947,024	107,876 5,352,312	3,305,729	9,180,085	6,382,928	유
Tuna, skipjack		924,605	713,106 29,848,350	21,366,867	19,883,059	9,506,904	18,929,954	4,934,504	1,479,529	992,164	2,917,041	1.243.393	112,026,370	
1 day, 7 cao mini		021,000	20,010,000	21,000,001	10,000,000	0,000,001	10,020,001	1,001,001	1,1111,000	,	2,000,000	.,,		-5
Wahoo	412	3,400				2,790 37							6,190	1968
Whitefish, ocean Yellowtail, California	12,925	8,905	2.057	1.337	1.085	300	320	935	5,555	21,221	40,311	33,476	128,427	
	12,020	-,,,,,												
Total pounds	155,182	1,237,192	30,655,340	23,828,737	25,138,715	17,211,530	26,839,114	8,861,627	7,019,654	6,625,894	6,450,583	10,624,343	164,647,911	
SHIPMENTS:*														
Fish:												F 040 000	F . F . 0 F 00	
Tuna, albacore	2,709,166	5,779,440	6,615,003	3,600,881	1,746,872	808,502	4,071,121	9,896,747	7,514,880	5,591,605	803,486	5,348,820	54,516,523 152,390	
Tuna, bigeye Tuna, bluefin		55,773	41,825		54,792		80.098	****					80,098	
Tuna, skipiack					609,710	293,580	147,988	387,908					1,439,186	
Tuna, yellowfin	2,789,699	793,915	3,497,857	4,254,985	8,603,118	3,498,688	7,263,376	4,714,568	4,025,674	9,531,198	4,224,714	3,825,309	57,023,101	
Total pounds	5,498,865	6,629,128	10,154,685	7,855,866	11,014,492	4,600,770	11,562,583	14,999,223	11,570,554	15,122,803	5,028,200	9,174,129	113,211,298	
Grand total	16,707,405	14,460,828	42,823,256	37,685,017	43,111,295	28,231,424	42,028,781	32,394 442	27 651,122	39,019,954	27,971,174	34,230,565	386,315,263	27

or origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 13—Cont'd.

					TABLE	14								•
Monthly Landings and Shipments of Commercial Fish Into the San Diego Area During 1968														
Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds	
LANDINGS FROM: California waters: Fish:														
Barracuda, California Bonito, Pacific Cabezon.	771 1,865 23	334 36 26	20	3,590 689	1,610 388 8	5,936 11,763	5,219 13,031	1,319 13,370	155 2,363	234 1,399		806 276	20,914 45,271	
Croaker, white	2,343	1,068	490	770	136	510	605 127	340	180	120	675	1,178	8,415 127	
Halfmoon	1,162 7,855 80	3,656 115	3,107	471 1,489	6,994 519	9,556 317 55	4,395 210 11	4,867 2,232	2,510 2,151 14	3,105 8	26 80	85 1,081 118	30,195 27,256 427 80	FISH I
Mackerel, Pacific Opaleye	512	35	52	277	473	2,896	487 100		60	100	1	90 275	4,997 375	ΞĔ
Perch	137 39,603	29,000	86 34,380 78	709 41,213	2,753 43,818	2,068 15,395	1,574 18,515	736 9,485	337 4,727	110 8,796 2,000	17,247	1,398 15,734	10,036 277,913 78 2,007	BULLETIN
Sculpin_ Sea bass, giant Seabass, white Shark Sheephead, California	3,968	11,895 8,292 1,002 524	11,156 1,187 1,232 1,783	7,827 86 3,223 2,365 705	5,996 423 8,901 6,488 723	16,100 708 5,873 13,973 1,549	1,886 464 5,306 25,261 992	2,597 388 3,787 25,228	2,963 162 7,530 8,440 419	1,256 234 175 5,252 97	6,503 115 1,382	9,494 135 6,230 5,092 519	81,641 4,068 60,765 116,315 6,371	149
Smelt Sole, petrale Sole, miscellaneous Swordfish Tuna, albacore	132 383	30	228	319	20 446	27 731	411 2,959 74,609	105 5,274 101,432	36 4,663 37,008	13 2,822 646,849	1,140	235 40 16,784	575 20 2,026 17,589 877,819	
Tuna, bluefin Tuna, skipjack Tuna, skipjack Tuna, yellowfin Whitefish, ocean Yellowtail, California Miscellaneous		120 3	===	53 296	2,039	2,917	600	70,369 10,427 1,360 669 7,843	21 46 43 306 2,062	285 60	484	265 1,312	70,408 10,529 1.403 1,774 18,128 98	
Crustacean: Crab, rock Lobster, spiny	1,014 10,509	688 5,605	1,096 4,431							2,834 36,457	1,202 22,178	198 12,226	7,032 91,406	

TABLE 14 Monthly Landings and Shipments of Commercial Fish Into the San Diego Area During 1968

Associate	Grand total	201,843	276,017	6,038,190	10,488,644	14,463,402	8,088,691	8,059,292	8,743,742	4,242,655	2,597,186	4,132,867	2,485,518	69,818,047	
Associated Ass															
Associate	Fish: Tuna, albacore			278,857	303,931 182,200	800,824			691,416		78,250			6,506,049 2,188,840	
Associate	Total pounds	13,040	7,389	5,660,821	9,879,757	13,285,192	7,769,838	7,750,020	5,086,933	1,392,884	1,720,594	4,032,407	1,982,411	58,581,286	
Associate	Tuna, skipjack. Tuna, yellowfin. Wahoo. Whitefish, ocean	===	546	159,991 5,489,718	751,479 9,114,964	12,030,330	3,052,663 4,711,318 120	1,147,045 5,709,093	757,404 2,815,777	496,025 142,432 20	1,342,095 120,154	3,488,538 501,651	1,600,572 265,664	14,047,523 40,901,647 120 82	1900
Associate	Sheephead, California Swordfish. Tuna, albacore. Tuna, bigeye.			30		22		122 876 105,669	26,403 166,096	6,656 24,946	247,800	7,974	53,503	552 27,279 534,195 78,449	ALCH FOR
Associate	Roekfish Seulpin Sea bass, giant	5,012	2,178	533	1,423 1,140	495 208	4,090 245	230 19,092 23	12,481	170	1,359	161 279	5,584	9,031 35,663 16,661	o mora a
Absorpt	Fish: Barracuda, California Bonito, Pacific Flyingfish Grouper	7,764			1,003		===	115 384			240	187	134 15,277	1,439 384 23,281	MANAGE
Ahsbers. 90,085 30,185 58,667 61,777 94,178 75,290 65,463 88,837 81,822 41,694 44,694 740,978 Oropous. 6 1 3 2 12 Squit.	Fish: Tuna, albacore														
Abalone	Total pounds	188,803	62,430	98,512	122,756	143,512	185,057	232,029	327,263	164,533	794,084	100,460	118,175	2,537,614	
	Octopus	- 6	1	3								2		12	

[•] For origin of shipments refer to Table 6. Reginning in 1965 only tung shipments are recorded

TABLE 14—Cont'd.

TABLE 15

Value of Landings and Shipments of Commercial Fish Into California by Area, 1968

Species	Eureka	San Francisco*	Monterey	Santa Barbara	Los Angeles	San Diego	Total
LANDINGS:						-	
Fish: Anchovy		51,463	8,501,799	4,007,925	18,514,929		31,076,116
Barracuda, California		\$2,573	\$83,818	\$30,494 9,386	\$167,591 97,119	33,995	\$284,476 140,500
				\$1,858	\$23,013	\$6,049	\$30,920
Blacksmith					137,634 \$4,124		137,634 \$4,124
Bonito, Pacific	48 \$5	809 857	9,678 \$637	254,770 \$10,015	14,609,914 \$606,880	45,710 \$1,989	14,921,929 \$619,583
Cabezon		910	12,736	6,333		61	20,108
Carp		\$19 297,793	\$511	\$209		\$9	\$752 297,793
Croaker, white		\$25,102 15,628	195,157	15,521	706,583	8,415	\$25,102 941,304
Flounder		\$1,712 248,693	\$12,887 59,764	\$395 17,469	\$42,772 85	\$867	\$58,633 856,157
	\$26.788	\$16,725	\$4,763	\$1,381	\$12		\$49,669
Flounder, arrowtooth	\$520	3,000 \$150					13,400 \$670
Flyingfish					73,080 \$10,492	511 \$121	73,591 \$10,613
Grouper					207,632	23,281	230,913
Hake, Pacific		525	5,490	479	\$47,812	\$5,583	\$53,395 6,494
Halfmoon		\$10	\$152	\$9	19,422	30,195	\$171 49,617
Halibut, California		191,003	79.340	231,718	\$4,481 130,680	\$6,053 38,763	\$10,534 671,654
	\$40	\$45,192	\$20,029	\$68,973	\$38,903	\$12,685	\$185,822
Halibut, Pacific	127 \$33						127 \$33
Hardhead		243,581 \$23,369					243,581 \$23,369
Herring, Pacific		53,235	304,634				357,869
Hitch		\$10,800 1,495	\$28,777				\$39,577 1,495
Lingcod	782.821	\$54 188,337	71,318	50,556	595	427	\$54 1,094,054
Mackerel, jack	\$62,516	\$14,858 30	\$8,194 960,612	\$4,776 4,251,015	\$105 50,455,700	\$37 80	\$90,486 55,667,682
	\$12	\$3	\$40,711	\$159,414	\$1,922,327	\$8	\$2,122,475 3,133,446
Mackerel, Pacific					3,128,449 \$167,271	4,997 \$486	3,133,446 \$167,757
Opaleye					10,798 \$2,103	375 \$61	11,173 \$2,164
Perch	61,287	22,608	13,727	18,990	41,277	10,151	168,040
Pompano, Pacific	\$10,836	\$6,142	\$2,291 71,748	\$4,627 2,185	\$9,000 195,439	\$1,949	\$34,845 269,372
Rockfish	2,904,119	584,131	\$18,220 2,394,655	\$431 2,618,000	\$32,109 656,547	286,944	\$50,760 9,444,396
Sablefish	\$161,007 1,750,684	\$51,832 137,280	\$162,221 1,329,969	\$155,315 905	\$95,794 617	\$41,462	\$667,631 3,219,455
	\$150,381	\$5,528	\$73,260	\$57	\$49		\$229,275
Salmon	4,064,343 \$2,187,714	2,198,806 \$1,370,543	572,605 \$379,941	116,142 \$75,839	35 \$19		6,951,931 \$4,014,056
Sanddab	275,438 \$24,011	265,903 \$22,133	172,631 \$12,546	424 \$41	148 \$28	78 \$20	714,622 \$58,779
Sardine			1,280	19,980	100,821	2,007	124,088
Seulpin			\$317	\$3,996 187	\$10,529 7,684	\$451 117,304	\$15,293 125,175
Sea bass, giant				\$37 978	\$2,737 136,648	\$31,836 20,729	\$34,610 158,421
		409	\$23 14,999	\$163 43,657	\$24,821 703,399	\$3,713 99,416	\$28,720 861,880
Seabass, white		\$115	\$4,491	\$16,667	\$205,352	\$32,617	\$259,242
Shark	1.683 \$105	59,689 \$2,568	\$2,250	161,128 \$16,499	86,107 \$11,113	130,720 \$17,127	499,947 \$49,662
Sheephead, California _				881 \$59	4,946 \$443	6,923 \$731	12,750 \$1,233
Skate	51,711 \$469	62,725 \$785	68,690 \$1,139	3,155 \$232	69 87	\$131	\$1,233 186,350 \$2,632

TABLE 15 Value of Landings and Shipments of Commercial Fish Into California by Area, 1968

TABLE 15—Continued

Value of Landings and Shipments of Commercial Fish Into California by Area, 1968

	,					-,,	
Species	Eureka	San Francisco*	Monterey	Santa Barbara	Los Angeles	San Diego	Total
Smelt	177,281	82,419	49,317		133,470	575	443,062
Smelt, whitebait	\$11,507 232,117	\$8,855 5,944	\$5,118		\$5,881	\$65	\$31,426 238,061
Sole, Dover	\$19,692 8,191,524	\$926 255,692	56,615	31,690			\$20,618 8,535,521
Sole, English	\$557,315	\$15,020 1,697,246	\$3,278 439,844	\$1,901 315,300	245		\$577,514 5,811,438
Sole, petrale	\$298,040 1,975,782	\$141,607 490,375	\$36,504 248,362	\$24,656 231,900	\$24 166	20	\$500,831 2,946,605
Sole, rex	\$253,622	\$68,665 204,955	\$36,558 124,277	\$30,169 81,412	\$25	\$5	\$389,044 1,930,583
Sole, sand	\$129,492 2,847	\$17,551 179,161	\$9,248 22,052	\$6,659 7,316			\$162,950 211,376
Sole, miscellaneous	\$307 600	\$21,375 6,463	\$2,649 11,893	\$879 7,886	746	2,026	\$25,210 29,614
Swordfish	\$50	\$ 462	\$1,186	\$858 37,582	\$91 116,948	\$518 44,868	\$3,165
	2 441 112	002.000	1 401 211	\$24,743	\$79,223	\$29,963	199,398 \$133,929
Tuna, albacore	\$645,445	963,260 \$180,600	1,421,311 \$266,528	2,131,415 \$399,641	5,703,788 \$1,212,505	1,416,272 \$284,341	15,077,159 \$2,989,060
Tuna, bigeye					31,109 \$4,859	78,449 \$12,407	109,558 \$17,266
Tuna, bluefin					10,050,936 \$1,528,647	2,885,339 \$427,186	12,936,275 \$1,955,833
Tuna, skipjack				354 \$47	45,176,235 \$5,912,085	14,058,052 \$1,858,288	59.234,641 \$7,770,420
Tuna, yellowfin					112,123,459 \$17,444,740	40,903,050 \$6,368,029	153,026,509 \$23,812,769
Turbot	1,956 \$162	50,270 \$2,476	85 84	17,193 \$1,041			69,504
Wahoo					6,190 \$1,426	120	\$3.683 6,310
Whitefish, ocean				95	696	\$18 1.856	\$1.444 2,647
Yellowtail, California				\$6 7	\$58 132,752	\$148 30,418	\$212 163,177
Miscellaneous	12	349	943	\$1 12	\$15,090 255	\$3,000 98	\$18,091 1,669
Miscellaneous (animal	\$1	\$29	\$57	\$1	\$49	\$16	\$156
food)	1,911,543 \$38,231			678.091 \$13,562			2,589,634 \$51,793
rustacean:							
Crab, market	\$3,250,980	836,677 \$283,157	1,021 \$401	2,029 \$838			16,015,581 \$3,535,376
Crab, rock	815		194 \$9	109,031 \$6,999	234,585 \$29,777	7,032 \$429	351,657 \$37,214
Crab, spider				187 \$9			187 \$9
Lobster, spiny				112,272 \$96,125	108,805 \$104,435	91,406 \$92,605	312,483 \$293,165
Prawn, ridgeback				426 \$341			426
Prawn, spot			7,239 \$6,515				\$341 7,239
Shrimp, bay		10,465					\$6.515 10,465
Shrimp, ocean	2,083,960	\$2,491 190,810					\$2,491 2,274,770
	\$229,222	\$20,999					\$250,221
Nollusk: Abalone		15,191		2,155,133	1,563,540	740,978	4,474,842
Octopus	2,492	\$4,184 14,589	381	\$572,314 38	\$372,314 151	\$174,763 12	\$1,123,575 17,663
Oyster, eastern	\$91	\$614 16,166	\$49	\$2	\$49	\$3	\$808 16,166
Oyster, giant Pacific	365,180	\$47,928 139,643		140,730			\$47.928 645,553
Squid	\$84,904	\$32,467 190	14,578,091	\$32,720 2,660,395	7,693,532	505	\$150.091 24,932,713
Miscellaneous mollusk_	l	\$9 306	\$398,550	\$37,318	\$117,389	\$15	\$553,281 1,842
	\$259	\$1,702					\$1,961
Total pounds Total value	48,876,622 \$8,143,764	9,788,224 \$2,451,387	31,863,143 \$1,623,832	20,552,278 \$1,802,317	273,103,965 \$30,258,554		445,307,390 \$53,695,507

TABLE 15 Value of Landings and Shipments of Commercial Fish Into California by Area, 1968

TABLE 15—Continued Value of Landings and Shipments of Commercial Fish Into California by Area, 1968

Species	Eureka	San Francisco*	Monterey	Santa Barbara	Los Angeles	San Diego	Total
SHIPMENTS:†							
Tuna, albacore					54,516,523	6,506,049	61,022,572
					\$13,624,208	\$1,623,876	\$15,248,084
Tuna, bigeye					152,390 \$17,408		152,390 \$17,408
Tuna, bluefin					80,098		80,098
Tuna, piuenu					\$11,895		\$11,895
Tuna, skipjack					1,439,186		1,439,186
					\$188,312		\$188,312
Tuna, yellowfin					57,023,101	2,188,840	59,211,941
					\$12,154,321	\$470,746	\$12,625,067
Total pounds Total value					113,211,298 \$25,996,144	8,694,889 \$2,094,622	121,906,187 \$28,090,766
Total value					¢20,550,144	92,034,022	¢20,080,700
GRAND TOTAL POUNDS. GRAND TOTAL VALUE.		9,788,224 \$2,451,387	31,863,143 \$1,623,832	20,552,278 \$1,802,317	386,315,263 \$56,254,698	69,818,047 \$11,510,275	567,213,577 \$81,786,273
GRAND TOTAL VALUE.	40,110,104	92,101,001	@1,U20,002	\$1,002,011	e00,201,000	¢11,010,270	401,100,210

Value of Landings and Shipments of Commercial Fish Into California by Area, 1968

Includes Sacramento area landings.
 † For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 16 Value of Landings by Port, Eureka Area, 1968

Value of Landings by Port	, Euleka Alea, 1300	
	Value	Pounds
EUREKA Market crab	\$1,293,000 735,306 277,851	6,035,833 1,327,935 1,481,330 1,981,019
Dover sole	134,780 84,904	365,180
English sole. Petrale sole. Rex sole. Salvelish. Rockfish.	42,597 39,233 34,716 28,657 24,427	480,052 305,635 407,489 333,617 458,670
Ocean shrimp Lingcod Sanddab Perch Flounder All other species	14,431 9,936 6,799 5,456 5,276 6,668	131,200 124,413 77,997 30,462 104,407 103,633
Port totals	\$2,744,037	13,748,872
Crescent City Market crab Salmon Ocean shrimp Albacore English sole	\$1,364,901 538,914 214,791 175,417 93,410	6,371,474 1,070,743 1,952,760 935,215 1,052,699
Dover sole	68,969 67,442 22,316 20,224 17,944	1,013,724 525,394 405,133 237,381 224,693
Sablefish	14,985 11,062 5,250 5,216	174,453 218,923 60,226 106,373
Port totals	\$2,620,841	14,349,191
Fort Bragg Salmon	\$686,549 256,709 190,991 86,084 71,577	1,237,900 1,198,340 1,018,243 1,265,283 833,269
Rockfish . English sole . Petrale sole . Res sole . Lingcod . Miscellaneous (animal food) . All other species .	67,712 44,300 43,563 21,904 21,318 9,976 7,422	1,181,560 499,248 339,364 257,102 266,946 498,790 95,015
Port totals	\$1,508,105	8,691,060
Fields Landing Dover sole. Market crab. English sole. Petrale sole. Rex sole.	\$267,482 207,303 117,733 103,384 52,648	3,931,498 967,707 1,326,804 805,389 617,967
Rockfish Sablefish Miscellaneous (animal food) Salmon.	46,551 35,162 27,860 18,091 13,318	858,739 409,345 1,392,981 32,214 166,769
Whitebait smelt. Flounder Sanddab Smelt All other species.	11,405 10,326 10,132 6,326 4,763	134,434 204,356 116,227 95,942 27,059
Port totals	\$932,484	11,087,431

TABLE 16 Value of Landings by Port, Eureka Area, 1968

FISH BULLETIN 149

TABLE 16—Continued Value of Landings by Port, Eureka Area, 1968

	Value	Pounds
Frinidad Market crab	\$127,871 65,457 290	596,915 136,979 1,544
Port totals	\$193,618	735,438
Albion SalmonAll other species	\$86,631 1,199	154,990 5,603
Port totals	\$87,830	160,593
Point Arena Salmon	\$56,766 83	103.582 455
Port totals	\$56,849	104 037
EUREKA AREA TOTALS	\$8,143,764	48,876,622

TABLE 16 Value of Landings by Port, Eureka Area, 1968

TABLE 17
Value of Landings by Port, San Francisco Area, 1963 *

Tulue of Lundings by Fort, our	Transisso Area, 1000	
	Value	Pounds
Bodega Bay		
Salmon	\$597,989	971,563
Albacore	76,986	410,616
Market crab	62,509	184.701
English sole	36,394	436,208
Ocean shrimp	19,597	178,075
Ocean surmip	19,097	110,010
Rockfish	15,771	141,968
Petrale sole	14,436	103,099
Smelt	8,563	80,332
All other species	20,225	279,353
Port totals	\$852,470	2,785,915
an Francisco		
Salmon Market crab	\$167,243	265,340
Market crab	128,997	381,162
English sole	86,765	1,039,930
Petrale sole.	45,675	326,190
Rockfish	30,883	380,545
California halibut	93 008	101,047
California halibutSand sole	23,908 19,216	161,066
Sanddah		
Sanddab	16,079	193,174
Flounder	10,963	163,010
Rex sole	10,087	117,795
Lingcod	8,541	108,264
Dover sole	8,040	136,874
Albacore	5,389	28,741
Sablefish	4,828	119,884
All other species	8,169	159,682
Port totals	\$574,783	3,682,704
Point Reves		
Salmon	\$204,095	324,295
Market crab	35,287	104,265
Giant Pacific oyster	27,498	118,272
English sole	18,195	218,080
Petrale sole.	8,554	61.086
All other species	24,122	289,894
Port totals	\$317,751	1,115,892
ausalito		
Salmon	\$179,418	285,277
		200,211
Albacore	63,119	336,657
Market crab	16,228	47,952
Pacific herring	6,553	32,300
All other species	3,232	58,180
Port totals	\$268,550	760,366
rinceton	0151000	040.00
Salmon	\$154,036	243,861
Market crab	38,970	115,149
California halibut	18,511	78,235
All other species	6,853	57,592
Port totals	\$218,370	494,837
akland		
Salmon	\$61,476	98,514
Albacore	35,088	187,150
All other species	35,088 2,303	7,974
Port totals	\$98,867	293,638
omales Bay		
Eastern oyster	\$47.928	16,166
Giant Pacific oyster	4,861	20,906
All other species	9,693	51,226
Port totals	\$62,482	88,298

TABLE 17 Value of Landings by Port, San Francisco Area, 1963

FISH BULLETIN 149

TABLE 17—Continued

Value of Landings by Port, San Francisco Area, 1968 *

	Value	Pounds
Clear Lake Hardhead	\$22,646 22,485 8	236,041 266,748 220
Port totals	\$45,139	503,009
Berkeley SalmonAll other species	\$6,049 629	9,573 2,380
Port totals	\$6,678	11,953
All species	\$6,297	51,612
Totals	\$6,297	51,612
SAN FRANCISCO AREA TOTALS	\$2,451,387	9,788,224

^{*} Includes Sacramento area landings.

TABLE 17 Value of Landings by Port, San Francisco Area, 1963

TABLE 18 Value of Landings by Port, Monterey Area, 1968

	Value	Pounds
Monterey		
Squid	\$329,403	12,048,841
Rockfish	122,270	1,777,278
Salmon	114,136	172.030
Sablefish	66,088	1,199,766
	00,088	
Albacore	55,276	294,769
English sole	20,973	252,704
Petrale sole	20.146	136,866
White croaker	7.545	114,265
Spot prawn	6.515	7,239
Jack mackerel	5,198	122,645
Jack mackerei	3,198	122,040
Lingcod	4,995	43,473
California halibut	4,942	19,577
All other species	17,873	372,528
Port totals	\$775,360	16,561,981
Moss Landing		
Salmon	\$224,425	338,210
Albacore	210,929	1.124.822
	82.187	8,336,379
Anchovy		0,000,019
Squid	69,147	2,529,250
Rockfish	39,647	613,840
Jack mackerel	35.239	831,500
Pacific herring	28,442	301.094
Petrale sole	16.412	111.496
English sole	15,531	187,140
	10,001	
Sanddab	8,695	119,641
Sablefish.	7,172	130,203
Rex sole	5,892	79,175
All other species	25,439	298,295
Port totals	\$769,157	15,001,045
Santa Cruz		
Salmon	\$41,380	62,365
California 1 1 11 14	13.019	51,572
California halibut		51,572
Pacific pompano	12,756	50,231
All other species	12,160	135,949
Port totals	\$79,315	300,117
MONTEREY AREA TOTALS	\$1,623,832	31,863,143

TABLE 18 Value of Landings by Port, Monterey Area, 1968

TABLE 19 Value of Landings by Port, Santa Barbara Area, 1968

	Value	Pounds
lorro Bay		
Albacore	\$300,070	1,600,372
Abalone	178,690	663,828
Rockfish.	80,102	1,350,149
Giant Pacific oyster	32,720	140,730
Salmon	17.620	26,669
Saimon	17,020	20,009
Petrale sole	15,196	116,808
Jack mackerel	10,482	279,520
California halibut	8,744	29,376
Lingcod	4,523	47,881
All other species	25,950	47,881 407,797
Port totals	\$674,097	4,663,130
nta Barbara		
Abalone	\$292,211	1,109,032
Spiny lobster	79,111	92,400
Rockfish	68,981	1,179,559
California halibut	33,136	111,322
Swordfish	33,136 22,773	34,590
English sole	15,652	200,143
White seabass	10,733	28,114
White seabass Miscellaneous (animal food)	9,005	450,236
Petrale sole.	8,783	67,513
Chork	7.010	
SharkRock erab	7,910	76,890
Rock crabAll other species	6,588 9,317	102,623 97,000
Port totals	\$564,200	3,549,422
	\$304,200	0,013,122
ort Hueneme	\$148,932	3,971,495
Jack mackerel		
Squid	37,318	2,660,395
Anchovy_California halibut	30,494	4,007,925
California halibut	16,318	54,820
Abalone	13,129	50,947
Pacific bonito	8,578	218,233
Spiny lobster	8,377	9,784
All other species	4,822	39,237
Port totals	\$267,968	11,012,836
vila		
Albacore	\$99,370	529,971
Abalone	72,709	269,905
Salmon	56,335	86,619
Shark	6,070	60,380
Petrale sole	5,745	44,158
Rockfish	5,119	76,746
English sole	4,506	57,624
All other species.	10,847	76,019
Port totals	\$260,701	1,201,422
xnard		
Abalone	\$12,250	48,322
California halibut	5,319	17.870
Spiny lobster	4,939	5,769
All other species	2,025	18.404
Port totals	\$24,533	90,365
Il other ports		07.45-
All species.	\$10,818	35,103
Totals	\$10,818	35,103
ANTA BARBARA AREA TOTALS		20,552,278

TABLE 19 Value of Landings by Port, Santa Barbara Area, 1968

TABLE 20 Value of Landings and Shipments by Port, Los Angeles Area, 1968

	Value	Pounds
Ferminal Island		
Landings:		
Yellowfin tuna	\$17,366,115	111,618,109
Skipjack tuna	5,909,222	45,154,355
Jack mackerel	1,648,072	43,257,270
Bluefin tuna	1,428,399	9,391,801
Albacore	1,181,322	5,557,100
Pacific bonito	393,499	9,473,036
Anchory	153,571	16,966,150
AnchovyPacific mackerel	110,478	2,066,265
Squid.	96,758	6,341,397
Sardine	6,228	59,637
All other species.	9,637	124,199
Total landings	\$28,303,301	250,009,319
Shipments:*	\$20,000,001	200,000,010
	\$13,619,210	54,496,523
Albacore Yellowfin tuna	12,154,321	57,023,101
Skipjack tuna	188,312	1,439,186
Bigeye tuna	17,408	152,390
Bluefin tuna	11,895	80,098
Total shipments	\$25,991,146	113,191,298
Port totals	\$54,294,447	363,200,617
San Pedro Landings:		
	6353 930	1 470 901
	\$352,230 202,035	1,479,801 692,040
White seabass	174,936	4,211,378
Bluefin tuna	100,246	659,124
Rockfish	93,022	638,447
TOCKHOIL	00,022	000,111
Jack mackerel	91,788	2,409,174
Yellowfin tuna	78,620	505,316
Pacific mackerel	48,507	907,218
Grouper	47,812	207,632
White croaker	42,213	698,562
Swordfish	38,587	56,962
Spiny lobster	38,402	40,010
California halibut	32,283	108,444
Pacific pompano	32,027	194,941
Albacore	25,166	118,382
(I) - 1 1 1	04.040	407.000
Giant sea bass	24,643 22,574	135,673
California barracuda		95,267
SquidCalifornia yellowtail	20,631	1,352,135
Anchovy	15,010 11,550	132,056 1,276,045
•		
Rock crabFlyingfish	10,397	81,912
Flyingfish	10,171	70,845
Shark	9,804	75,965
Perch	5,983	27,481
Smelt	5,120 4,301	115,759 41,184
Sardine	13,254	93,148
All other species		
Port totals	\$1,551,312	16,424,901
Vilmington		
Landings:	*100.000	4 505 0
Jack mackerel	\$182,308	4,785,077
Pacific bonito	36,926	888,950
Pacine mackerel	8,217 7,880	153,681
		31,243
Ablante	2 000	100 000
Abalone	3,802	198,823

TABLE 20 Value of Landings and Shipments by Port, Los Angeles Area, 1968

TABLE 20—Continued
Value of Landings and Shipments by Port, Los Angeles Area, 1968

	Value	Pounds
Newport Beach		
Landings: Swordfish	\$38.372	56,644
Spiny lobster	15.823	16,485
Abalone	8,835	37,763
Albacore	5,513	25,932
All other species	8,225	119,719
Port totals	\$76,768	256,543
ong Beach		
Landings:	*** ***	
Spiny lobster	\$31,681 9.070	33,007 104,410
All other species	9,070	104,410
Port totals	\$40,751	137,417
Redondo Beach		
Landings:	\$18.875	148,699
Rock crabSpiny lobster	8,872	9.243
All other species	1.203	8,851
-		
Port totals	\$28,950	166,793
Santa Monica		
Landings:	****	6,610
Spiny lobster	\$6,345 5,028	28,025
All other species		
Port totals	\$11,373	34,635
All other ports		
Landings:	\$6,966	16,583
All species.	\$0,900	10,000
Total landings	\$6,966	16,583
Shipments:		
All species	\$4,998	20,000
Total shipments	\$4,998	20,000
Totals	\$11,964	36,583
OS ANGELES AREA TOTALS	\$56,254,698	386,315,263

 $[\]bullet$ Beginning in 1965 only tuna shipments are recorded.

TABLE 20

Value of Landings and Shipments by Port, Los Angeles Area, 1968

TABLE 21
Value of Landings and Shipments by Port, San Diego Area, 1968

	Value	Pounds
San Diego		
Landings:		1
Yellowfin tuna	\$6,368,029	40,903,050
Skipjack tuna	1,858,288	14,058,052
Bluefin tuna	427,142	2,885,039
Albacore	283,206	1,410,619
Abalone	174.273	738,957
Abaione	174,275	100,001
Spiny lobster	82,839	81,766
Rockfish	37,054	255,970
White seabass	32,184	98,097
Seulpin	31,693	116,775
Swordfish	29,749	44,547
CI I	15.485	110.004
Shark		118,234
Bigeye tuna	12,407	78,449
California halibut	12,025	36,746
Halfmoon	6,053	30,195
California barraeuda	5,873	33,005
Grouper	5,583	23,281
All other species	13,268	130,628
Total landings	\$9,395,151	61,043,410
Shipments:*		
Albacore	\$1,623,876	6,506,049
Albacore	470.746	2,188,840
Yellowfin tuna	470,740	2,188,840
Total shipments	\$2,094,622	8,694,889
Port totals	\$11,489,773	69,738,299
Oceanside		
Landings:		1
All species.	\$14,424	73,717
D. A. A. A.	\$14.424	
Port totals	\$14,424	73,717
Cardiff		
Landings:		1
Spiny lobster	\$5,122	5,056
All other species	11	42
Port totals	\$5,133	5,098
All other ports		
Landings:		1
	\$945	933
All species	\$945	933
Totals	\$945	933
SAN DIEGO AREA TOTALS	\$11,510,275	69,818,047

[•] Beginning in 1965 only tuna shipments are recorded.

TABLE 21

Value of Landings and Shipments by Port, San Diego Area, 1968

TABLE 22 Statewide Commercial Partyboat Catch by Species (Not including anchored barges) 1959–1968 *

										-	
Species	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	
Barracuda, California. Bass, kelp and sand. Bonito, Paeific. Cabezon. Halibut, California.	1,195,585 428,426 776,386 5,329 25,365	755,408 478,656 1,199,919 2,516 48,310	391,884 613,604 849,426 2,639 108,011	335,507 789,149 798,725 4,538 118,966	483,699 1,219,344 775,719 9,726 125,669	303,070 1,103,394 1,298,804 6,491 141,465	443,304 1,230,313 806,322 7,575 118,213	892,697 1,278,939 644,415 10,293 88,726	470,480 1,003,914 349,952 5,419 63,582	372,246 1,317,963 1,102,936 4,349 54,663	FISH
Lingcod Mackerel, jack Mackerel, Pacific Rockfish Salmon	11,820 88,952 1,177,979	28,232 8,537 79,370 1,015,673 37,941	23,466 28,891 113,988 898,641 42,965	25,399 9,029 116,738 956,438 87,612	27,513 9,342 146,560 962,659 72,457	25,263 6,577 101,219 966,801 92,021	33,260 25,619 151,896 1,347,430 51,677	44,676 19,027 205,090 1,688,718 70,151	43,559 16,236 108,366 1,894,057 84,946	42,449 13,588 78,933 2,102,859 127,584	BULLETIN
Seulpin. Seabass, white. Seabass, white. Sheephead, California. Tuns, albacore. Tuns, bluefin.	11,477 10,593 17,146 39 1,330	15,111 15,697 11,541 76,075 97	26,672 14,082 15,210 184,891 2,268	33,314 14,564 13,488 229,314 2,453	53,896 19,800 18,443 158,372 737	73,844 14,901 26,822 112,358 693	71,888 9,775 41,651 99,771 92	69,851 3,972 52,967 74,680 1,998	63,280 3,385 42,676 96,497 3,166	59,863 4,138 33,075 129,710 1,231	IN 149
Whitefish, ocean	5,608 457,350 28,039	5,850 254,969 56,132	6,647 42,367 87,981	6,157 21,826 92,776	6,231 45,705 142,630	6,949 39,104 114,400	13,810 18,367 163,595	15,587 80,163 166,470	18,184 31,392 145,073	22,155 58,049 205,410	
Total number of fish	4,328,575	4,090,034	3,453,633	3,655,993	4,278,502	4,434,176	4,634,558	5,408,420	4,444,164	5,731,201	
Number of angler days† Number of anglers	557,154	516,255 637,498	495,805 593,916	595,866	643,155	695,445	688,103	857,000	780,102	819,651	

^{*} See Fish Bulletin No. 121 for historical records 1936-1961. † Not available after 1961.

TABLE 22 Statewide Commercial Partyboat Catch by Species (Not including anchored barges) 1959-1968

TABLE 23 Inshore Bait Landings by Area Pounds and Value

Species	Sacramento	San Francisco and Monterey	Los Angeles	San Diego	Statewide
Clam	400.000				400.000
Freshwater	406,996 \$41,749				406,996 \$ 41,749
Jackknife			31,028	24,557	55,585
Durnle			\$18,700 4,521	\$13,822 19,487	\$32,522 24,008
Purple			\$2,286	\$8,626	\$10,912
Unclassified		429	78	266	773
		\$104	\$22	\$5 32	\$ 658
Crab					
Sand			7,738		7,738
Shore			\$22,835 5		\$22,835
Snore		\$1	\$ 68		. 6 \$69
		.			
Mudsucker, longjaw			282		282
			\$268		\$268
Mussel (bay and rock)		6	79,125	12,341	91,472
,,		\$1	\$9,484	\$1,284	\$10,769
Perch, shiner	188				188
oron, branci	\$303				\$303
Sculpin, staghorn	1,468	361			1,829
curpin, stagnorn	\$5,075	\$1,337			\$6,412
Shrimp					
Bay	46,542	659			47,201
	\$46,400	\$746			\$47,146
Ghost			3,717	4,031	7,748
D.J			\$15,839 5.113	\$15,540	\$31,379 5.113
Red			\$7.149		\$7,149
TOTAL	455,194	1,456	131,607	60,682	648,939
	\$93,527	\$2,189	\$76,651	\$39,804	\$212,171

TABLE 23 Inshore Bait Landings by Area Pounds and Value 1968

TABLE 24 Recorded Catch of Live Bait for Saltwater Sportfishing 1964-1968

,	Thousands of pounds*												
Species	1964	1965	1966	1967	1968								
Anchovy Herring, Pacific Mackerel, jack Sardine, adult Sardine, juvenile Miscellaneous†	10,382 18 283 1 26	12,296 66 2 82	13,382 25 54 T 84	10,774 1 T 22	14,353 158 57 80								
Total pounds	10,710	12,446	13,545	10,797	14,648								
Number of vessels‡	22	24	18	16	19								

TABLE 24

Recorded Catch of Live Bait for Saltwater Sportfishing 1964-1968

^{*} Weights are estimated from voluntary records. They should be regarded as minimal because some fishermen do not supply catch information.

T Less than 500 pounds.
† Consists primarily of queenfish and white croaker.
‡ The number of live bait fishing vessels for which landings were reported. These numbers differ slightly from those in previous catch bulletins, since the earlier landing records, as submitted, sometimes included the catch of more than one boat.

APPENDIX A

TABLE I

California Commercial Troll Salmon Landings by Port-Area, Month and Species, in Pounds ¹ and Numbers—1968

	Ay	oril	M	ay	Ju	ine	Ju	ily	Aug	gust	Septe	ember	Sea	son
	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers
rescent City King. Silver. Pink	1,142	140	81,809 20,872 61	9,599 4,522 15	51,601 180,019 78	8,366 31,082 16	99,988 440,142	8,742 68,372	33,369 159,649	2,578 24,189	539 1,474	46 189	268,448 802,156 139	29,471 128,354 31
ureka King Silver Pink	51,722 1,190	7,212 264	484,623 72,701 42	61,163 15,191 17	256,773 192,747 25	32,417 32,512 8	114,535 224,806	8,386 34,803	58,127 32,505	6,433 4,586	964 6,368	69 708	966,744 530,317 67	115,680 88,064 25
ort Bragg King Silver Pink	8,833 45	1,172 10	36,412 46,640	4,322 9,328	250,047 125,293	27,357 18,158	397,347 219,588	37,706 32,641	224,668 104,443	23,461 12,488	73,947 9,209	6,632 1,162	991,254 505,218	100,650 73,787
an Francisco King Silver Pink	128,717 1,219	12,870 279	282,504 24,339	31,925 4,636	530,608 145,617 1,166	47,886 25,805 389	472,408 244,508 442	47,268 29,940 74	269,147 47,748	24,272 6,561	42,529 7,854	3,732 924	1,725,913 471,285 1,608	167,953 68,145 463
Ionterey King Silver Pink	123,335 247	13,126 54	82,340 6,522	7,734 1,279	131,603 9,969	10,356 1,452	131,610 5,250	10,510 591	113,626 6,378	9,448 626	77,615 287	7,081 34	660,129 28,653	58,255 4,036
tatewide KingSilverPink	313,749 2,701	34,520 607	967,688 171,074 103	114,743 34,956 32	1,220,632 653,645 1,269	126,382 109,009 413	1,215,888 1,134,294 442	112,612 166,347 74	698,937 350,723	66,192 48,450	195,594 25,192	17,560 3,017	4,612,488 2,337,629 1,814	472,009 362,386 519

¹ Dressed head on.

APPENDIX A TABLE I

California Commercial Troll Salmon Landings by Port-Area, Month and Species, in Pounds and Numbers—1968

APPENDIX A

TABLE II

California Ocean Recreational Salmon Landings and Success ¹ by Fishery, Port, Month and Species, in Numbers of Fish—1968

Li .	alitornia	Ucean	Kecreat	ionai Sa	lmon La	ndings a	ind Succ	cess i by	Fishery	, Port, I	Month ar	id Speci	es, in N	umbers	of Fish-	_1968		
		February		March			April			May				June				
	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day
Crescent City PartyboatSkiff	0	0	::	0	0	::	0	0	::	0	0	::	2 7	6 37	0.80 0.26	27 161	421 1,733	1.24 0.72
Eureka Partyboat Skiff	0	0	::	0	0	::	0	0		34 0	33 0		75 174	79 97	0.33 0.14	203 1,212	1,068 8,364	0.61 0.83
Fort Bragg Partyboat Skiff	0	0	=	2 0	0		2 0	0		0 19	316 127	2.14 0.45	100 107	377 202	0.64 0.29	543 737	1,268 3,870	0.66 0.72
San Francisco Partyboat Skiff	6,402 241	0	1.48 0.95	7,698 1,224	0	1.24 0.76	2,966 471	527 5	0.49 0.56	3,715 975	2,556 180	1.29 1.45	8,428 594	1,614 447	1.59 0.52	16,108 2,464	1,349 1,056	1.81 1.19
Monterey Partyboat Skiff	155 725	0	0.17 0.77	298 2,917	0	1.66 1.30	1,478 2,316	123 47	0.78 0.67	1,084 1,834	980 713	0.66 0.51	733 1,798	48 144	1.03 0.53	690 2,251	38 131	0.93 0.70
Statewide Partyboat Skiff	6,557 966	0	1.27 0.81	7,998 4,141	0	1.25 1.07	4,446 2,787	650 52	0.55 0.65	4,833 2,828	3,885 1,020	1.07 0.63	9,338 2,680	2,124 927	1.38 0.41	17,571 6,825	4,144 15,154	1.39 0.82

APPENDIX A TABLE II

California Ocean Recreational Salmon Landings and Success by Fishery, Port, Month and Species, in Numbers of Fish—1968

APPENDIX A

TABLE II

California Ocean Recreational Salmon Landings and Success ¹ by Fishery, Port, Month and Species, in Numbers of Fish—1968

	antornia	ucean	кесгеац	onai sa	imon La	naings a	ina Succ	ess i by	FISHERY	, Port, I	nonth a	nd Speci	es, in N	umbers	of Fish-	-1968		
		February		March			April			May			June			July		
	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day
Crescent City PartyboatSkiff	0	0	::	0	0	::	0	0	::	0	0	-:	2 7	6 37	0.80 0.26	27 161	421 1,733	1.24 0.72
Eureka Partyboat Skiff	0	0	==	0	0	::	0	0		34 0	33 0		75 174	79 97	0.33 0.14	203 1,212	1,068 8,364	0.61 0.83
Fort Bragg Partyboat Skiff	0	0	=	2 0	0		2 0	0		0 19	316 127	2.14 0.45	100 107	377 202	0.64 0.29	543 737	1,268 3,870	0.66 0.72
San Francisco Partyboat Skiff	6,402 241	0	1.48 0.95	7,698 1,224	0	1.24 0.76	2,966 471	527 5	0.49 0.56	3,715 975	2,556 180	1.29 1.45	8,428 594	1,614 447	1.59 0.52	16,108 2,464	1,349 1,056	1.81 1.19
Monterey Partyboat Skiff	155 725	0	0.17 0.77	298 2,917	0	1.66 1.30	1,478 2,316	123 47	0.78 0.67	1,084 1,834	980 713	0.66 0.51	733 1,798	48 144	1.03 0.53	690 2,251	38 131	0.93 0.70
Statewide Partyboat Skiff	6,557 966	0	1.27 0.81	7,998 4,141	0	1.25 1.07	4,446 2,787	650 52	0.55 0.65	4,833 2,828	3,885 1,020	1.07 0.63	9,338 2,680	2,124 927	1.38 0.41	17,571 6,825	4,144 15,154	1.39 0.82

APPENDIX A TABLE II

California Ocean Recreational Salmon Landings and Success by Fishery, Port, Month and Species, in Numbers of Fish—1968

HISTORICAL REVIEW 1916-1968

From time to time it is desirable to present a historical review of the California commercial fish catch. The first review was published in 1937 in Fish Bulletin 49, and presented the catch for the years 1916 through 1935. A second review appeared in 1949, in Fish Bulletin 74, which gave figures for the years 1916 through 1947. This third historical review presents the catch record for the years 1916 through 1968, thereby giving the entire statistical history of the fisheries of California since the beginning of its recorded history.

The purposes of this type of review are to present the published record for all past years and to provide ready access to the statistics which show the complete fisheries picture and the long-period trends. In the past, such a record has proved of great value to fisheries biologists, administrators, wildlife conservation officers, educators, and people in the fishing industry.

Prior to 1960, the yearly published catch statistics were not considered final, and late landing data were added to our source data files as they were received. In addition, our files were corrected if occasional errors were found in the published record. As a result, the landing figure for a particular species in a year depended on the source of the data—the original catch bulletin, a slightly later tabulation of our source records, a later historical review, or finally, a figure obtained from our current tabulations. The practice of updating or correcting the published record was abolished with the publication of the 1960 catch figures; data published for 1960 and years since then will never be changed.

In the course of this review all the catch figures were reexamined. Our present records were compared to the original publication and subsequent historical reviews. All differences were carefully examined and checked against notations in the source files. Almost all of the differences were documented through this procedure, although a few could not be and had to be considered as human errors. The figures in this historical review are now in balance with our source data files, and represent a final determination of the actual landings. No further changes in the basic records or the figures published in this review will be allowed.

Our records of landings between 1916 and 1947 include some fish that were actually landed outside the State and later shipped to California dealers. The 1949 historical review (Fish Bulletin 74) attempted to separate landings and shipments for some species. The present review demonstrated, however, that this separation was very subjective for species other than tuna. As a consequence, only tuna shipments and the very small portion of other species that could be definitely identified as shipments have been separated from the total record for the 1916-1947 period (Table 1).

From 1948 through 1964, landings and shipments were separated in our files and publications; the record of shipments, however, was

acknowledged as being quite incomplete for species other than tuna. Starting in 1965, only shipment data involving the tunas have been collected and published.

Table 1 summarizes our information on statewide landings and shipments for the period 1916 through 1968. Tables 2 through 20 present the significant aspects of the historical record. The species shown are the more important ones in the landings; species nomenclature follows that used with the 1968 marine fish catch statistics presented as the first part of this Fish Bulletin.

Separate summaries are given for landings caught north or south of the state boundaries, or for shipments, when these aspects of a fishery are particularly noteworthy. However, origin information is not completely dependable prior to 1931 when a formal origin of catch was added to the statistical system. Other types of summaries are used where some special feature is of historical significance.

The final table shows landings of animal food from 1961 through 1968. Prior to 1961, landings of mixed fish to be ground for animal food were reported haphazardly as a species making up a good part of that particular load. With the rapid growth of this industry between 1953 and 1960 this situation became intolerable and produced major inaccuracies in the records. As a consequence, a new system where the dealer records the delivery as animal food and our biologists sample the catch to determine its species composition was inaugurated in 1961. Table 21 summarizes the landings reported as animal food; preliminary estimates of the catch composition were presented with the original publication of each year's data. Final detailed catch compositions of the animal food landings are compiled and published separately; Nitsos and Reed (1965) presented these data for 1961 and 1962.

Landings during the period covered by this review exhibited an almost steady rise from 1916 to 1936 when a peak of 1.76 billion pounds of fish was landed. Sardines dominated the landings during the 1930's and 1940's, but after the failure of this fishery in the early 1950's the tunas became dominant. Since 1958 the total landings have exhibited a slow but almost steady decline.

The origin of the landings has also changed during the past 20 years. In 1947 landings from California waters amounted to 69% of the total California landings, while landings from south of the State totaled 30%. In 1968 landings from California waters made up only 49% of the total. Tuna shipments have become very important to the overall operation of the California fishing industry amounting to 122 million pounds in 1968, compared to California landings of 445 million pounds.

The tables which follow represent the work of many individuals during the past 10 years. The original instigation for this historical review and the direction of its progress came from Edward C. Greenhood. The late Annine Phillips Stevens planned and supervised much of the actual work. The accurate interpretation of original records and updating and compiling the tables, a long and arduous task, was carried out by Ellen L. Gramm, Dorothy K. Bailey, Jeanne P. Cowger, and the entire staff of the Biostatistical section. The many persons

who served in the information unit during this time deserve special credit for their efforts.

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TABLES

TABLE 1 TOTAL YEARLY LANDINGS AND SHIPMENTS IN POUNDS

	TOTAL	TAME! TAMBING	, AND OHN MENT	7 111 1 001100	
			Total landings	_	
Year	California landings*	Shipments other than tuna†	and shipments other than tuna	Tuna shipments‡	Grand total
Teat		than tuna	- Coner chan cuna	ampinenta;	- Grand total
1916	95,002,695		95,002,695		95,002,695
1917	209,876,670		209,876,670		209,876,670
1918	261,134,265		261,134,265		261.134.265
1919	266,270,133	107	266,270,240		266,270,240
1920	222,003,425	951	222,004,376		222,004,376
1921	135,346,435	1,391	135,347,826		135,347,826
1922	182,343,333		182,343 333		182,343,333
1923	253,874,581	í	253,874,581		253,874,581
1924	340,445,919		340,445,919		340,445,919
1925	437,502,232		437,502,232		437,502,232
1926	394,964,393		394,964,393		394,964,393
1927	487,088,551		487,088,551	77,592	487,166,143
1928	578,887,037	857,306	579,744,343	3,782,408	583,526,751
1929	850,953,251		850,953,251	5,900,804	856,854,055
1930	695,147,535	32,105	695,179,640	7,009,155	702,188,795
1931	495,448,900		495,448,900	6,940,975	502,389,875
1932	552,617,747		552,617,747	3,521,316	556,139,063
1933	817,715,982		817,715,982	4.089,034	821,805,016
1934	1,384,827,500		1,384,827,500	5,970,654	1,390,798,154
1935	1,442,032,007		1,442,032,007	5,984,564	1,448,016,571
1936	1,760,370,876		1,760,370,876	4,529,014	1,764,899,890
1937	1,351,256,911		1,351,256,911	11,726,806	1,362,983,717
1938	1,300,257,401		1,300,257,401	10,338,267	1,310,595,668
1939	1,479,045,931	·	1,479,045,931	7,488,975	1,486,534,906
1940	1,293,981,291		1,293,981,291	3,536,372	1,297,517,663
1941	1,527,760,007		1,527,760,007	1,132,184	1,528,892,191
1942	1,172,943,617		1,172,943,617	470,506	1,173,414,123
1943	1,234,049,119		1,234,049,119	0.505-5-5	1,234,049,119
1944	1,456,919,970		1,456,919,970	2,535,547 108,758	1,459,455,517
1945	1,216,391,831		1,216,391,831	108,758	1,216,500,589
1946	919,822,188		919,822,188	326,160	919,822,188
1947	795,172,919	73,467	795,172,919	1,322,926	795,499,079
1948	899,070,526	1 202 055	899,143,993	1,424,487	900,466,919
1949	1,132,620,348 1,344,358,573	1,293,855 6,399,233	1,133,914,203 1,350,757,806	15,918,589	1,135,338,690 1,366,676,395
1950					
1951	865,749,226	4,638,919	870,388,145	33,726,242	904,114,387
1952	655,838,075	5,192,573	661,030,648	33,965,725	694,996,373
1953	547,802,957	8,040,854	555,843,811	63,075,605	618,919,416
1954	625,835,447	1,677,816	627,513,263	85,897,121	713,410,384
1955	603,117,051	2,735,682	605,852,733	104,860,721	710,713,454
1956	678,552,376	2,398,474	680,950,850	91,600,457	772,551,307
1957	628,003,175	3,858,296	631,861,471	106,688,913	738,550,384
1958	676,170,923	3,071,482	679,242,405	153,676,658	832,919,063 713,423,036
1959	529,242,200	1,321,722	530,563,922	182,859,114	713,423,036
1960	543,402,951	1,535,272	544,938,223	149,724,849	694,663,072
1961	599,263,509	2,164,041	601,427,550	123,825,921	725,253,471
1962	521,439,230	1,077,215	522,516,445	140,590,162	663,106,607
1963	509,718,393	744,927	510,463,320	82,435,547	592,898,867
1964	493,140,709	1,250,354	494,391,063	96,739,561	591,130,624
1965	453,268,232		453,268,232	91,211,669	544,479,901
1966	458,440,080		458,440,080	133,093,337	591,533,417

1967 1968	503,893,182 445,307,390		503,893,182 445,307,390	85,134,479 121,906,187	589,027,661 567,213,577

California landings include some shipments of species other than tuna for the period 1916 through 1947.
† Shipments other than tuna are incomplete prior to 1948, minimal from 1948 through 1964, and unavailable from 1968 through 1968.
† Tuna shipments do not balance to figures given in the tuna tables because shipments of bigeye and unclassified tuna are included here.

TABLE 1 TOTAL YEARLY LANDINGS AND SHIPMENTS IN POUNDS

TABLE 2
YEARLY LANDINGS AND SHIPMENTS IN POUNDS
Albacore tuna

	California	North of	South of	Total		Total
Year	waters	state	state	landings	Shipments	pounds
1916	22,899,309			22,899,309		22,899,30
1917	30,556,242			30,556,242		30,556,24
1918	7,263,895		1,527	7,265,422		7,265,42
1919	13,553,025		77,874	13,630,899		13,630,89
1920	18,876,647			18,876,647		18,876,6
1921	15,274,528		2,199	15,276,727		15,276,72
1922	13,231,823			13,231,823		13,231,8
923	12,488,199		26,634	12,514,833		12,514,8
1924	17,280,346		415,016	17,695,362		17,695,3
925	21,684,942		521,981	22,206,923		22,206,93
1926	2,469,861		60	2,469,921		2,469,93
1927	4,455,372		123,995	4,579,367	77,592	4,656,9
1928	283,321			283,321	3,782,408	4,065,7
929	269,056		45	269,101	5,841,229	6,110,3
1930	283,117			283,117	7,005,568	7,288,6
1931	37,322			37,322	6,939,079	6,976,40
932	619,694			619,694 487	2,467,521	3,087,2
933	487			119,829	2,793,965	2,794,4
934	119,829 2,386,249		61,279	2,447,528	4,167,467 3,231,265	4,287,2 5,678,7
	945,595			945,595	1,510,409	2,456,0
936	2,020,016			2,020,016	2,723,693	4,743,7
937	4,789,880	1,995,101	29,919	6,814,900	6,759,735	13,574,6
939	8,264,109	1,732,066	4,187	10,000,362	6,422,872	16,423,2
940	2,387,254	1,552,504	880	3,940,638	3,137,696	7,078,3
941	3,016,065	325,144		3,341,209	973,299	4,314,5
942	7,998,144	020,111	2,623,216	10,621,360	470,506	11,091,8
943	11,886,148		9,498,716	21,384,864		21,384,8
944	8,679,273		9,774,659	18,453,932	2,535,547	20,989,4
945	8,777,991	232,850	12,214,180	21,225,021	108.758	21,333,7
946	9,116,647	2,434	8,958,818	18,077,899		18,077.8
947	7,395,765	13,867	5,762,119	13,171,751	255,530	13,427,2
948	10,499,390	55,167	25,901,589	36,456,146	1,153,643	37,609,7
949	20,417,078	48,030	23,541,172	44,006,280	284,040	44,290,3
950	38,139,296	30,396	23,575,512	61,745,204	4,378,420	66,123,6
951	13,284,606	9,150	17,621,586	30,915,342	17,520,891	48,436,2
952	23,103,074	3,389	26,697,061	49,803,524	22,525,248	72,328,7
953	13,297,627	47,468	20,490,810	33,835,905	46,186,816	80,022,73
954	14,289,095		11,818,195	26,107,290	38,466,383	64,573,6
955	9,312,029		19,690,269	29,002,298	44,844,675	73,846,9
956	15,874,652	115,985	21,064,574	37,055,211	20,322,775	57,377,9
956 957	22,613,429		20,911,816	43,525,245	39,564,027	83,089,2
958	25,387,036	1,075,988	724,753	27,187,777	27,485,321	54,673,0
959	32,522,331	218,133		32,740,464	29,741,982	62,482,4
960	32,056,980	69,104	2,986,543	35,112,627	36,339,548	71,452,17
961	20,594,360	143,709	8,385,175	29,123,244	30,291,007	59,414,2
962	32,046,366		4,576,009	36,622,375	36,731,754	73,354,1
963	41,925,739		6,933,839	48,859,578	16,945,225	65,804,8
964 965	33,867,847 19,850,865	230,603	8,683,164 3,136, 5 16	42,551,011 23,217,984	32,169,953 44,807,150	74,720,9 68,025,13
			, ,		,,	
966	16,141,399	672,854	1,374,959	18,189,212	55,719,626	73,908,8
967	15,184,473	2,387,979	285,471	17,857,923	53,889,762	71,747,61
968	11,617,055	2,779,875	680,229	15,077,159	61,022,572	76,099,73

TABLE 2
YEARLY LANDINGS AND SHIPMENTS IN POUNDS Albacore tuna

TABLE 3
YEARLY LANDINGS AND SHIPMENTS IN POUNDS
Bluefin tuna

	California	North of	South of	Total		Total
Year	waters	state	state	landings	Shipments	pounds
	14,990,860			14,990,860		14,000,00
1919	10,530,272			10,530,272		14,990,86 10,530,27
1920	1,971,813			1,971,813		
1921	2,811,283			2,811,283		1,971,81
1922	3,218,090			3,218,090		2,811,28
1923	3,218,090			3,218,090		3,218,09
1924	3,241,110			3,241,110		3,241,11
1925	3,803,677			3,803,677		3,803,67
926	6,526,533		79	6,526,533		6,526,53
1927	4,898,386		79	4,898,465		4,898,46
1928	13,700,870			13,700,870		13,700,87
1929	7,476,370		50,487	7,526,857		7,526,85
1930	15,598,892		6,322,390	21,921,282		21,921,28
931	2,356,775		1,177,255	3,534,030		3,534,03
932	460,044		611,162	1,071,206	1,053,795	2,125,00
933	324,216		236,276	560,492	889,336	1,449,82
004	18,291,721		66,107	18,357,828		18,357.82
934	18,495,813		6,677,270	25,173,083	146,531	25,319,61
935	13,808,578		5,116,305	18,924,883	745.052	
936			1,871,851			19,669,93
937	10,822,071			12,693,922 17,728,031	524,062	13,217,98
938	16,512,262		1,215,769	17,728,031	4,328	17,732,35
939	9,318,934		2,516,737	11,835,671	44	11,835,71
940	18,849,968		1,120,300	19,970,268		19,970,26
941	8,848,147		670,865	9,519,012		9,519,01
942	10,331,506		2,513,058	12,844,564		12,844,56
943	7,663,887		2,514,881	10,178,768		10,178,76
944	16,083,584		4,259,966	20,343,550		20,343,55
945	14,100,476		6,493,833	20,594,309		20,594,30
946	15,518,212		6,513,590	22,031,802		22,031,80
947	14,755,661		6.082.012	20,837,673		20,837,67
948	1,693,760		4,835,047	6,528,807	168,180	6,696,98
	2,266,236	1	2.123,235	4,389,471		4 000 07
949			2,729,624	2,738,963	107,878	4,389,37
950	9,339		3,025,209	3,862,418		2,846,84
951	837,209			0,802,418	2,112	3,864,53
952	907,215		3,669,470	4,576,685	22.115	4,576,68
953	3,903,642		5,868,973	9,772,615	62,447	9,835,06
954	5,647,572		15,377,248	21,024,820	771,147	21,795,96
955	2,477,735		11,131,442	13,609,177	343,346	13,952,52
956	2,612,046		10,013,922	12,625,968	162,875	12,788,84
957	10,462,564		9,851,982	20,314,546	323,024	20,637,57
958	15,609,801		15,109,431	30,719,232	757,976	31,477,20
959	13,073,729		2,169,236	15,242,965	554,738	15,797,70
960	4,339,031		7,613,480	11,952,511	1,463,900	13,416,41
061	13,762,432		7,120,218	20,882,650	1,272,540	22,155,19
961	17,039,651		14,160,300	31,199,951	1,919,778	33,119,72
962	7,130,960		23,222,449	30,353,409	2,348,392	32,701,80
1	4.055.000		10 515 000	02 171 050		
964	4,655,330		18,515,928	23,171,258	3,660,681	26,831,93
965	2,274,674		13,653,486	15,928,160	806,346	16,734,50
966	2,202,585		32,617,821	34,820,406	3,118,804	37,939,21
	1,791,634	47,532	11.896,429	13,735,595	1	13,735,59
967	3,737,291	1,125	9,197,859	12,936,275	80,098	13,016,37

TABLE 3
YEARLY LANDINGS AND SHIPMENTS IN POUNDS Bluefin tuna

TABLE 4
YEARLY LANDINGS AND SHIPMENTS IN POUNDS
Skipjack tuna

Year	California waters	South of state	Total landings	Shipments	Total pounds
1 car	waters	state	landings	ompments	pounds
018	3.022.964		3,022,964		3,022,964
19	6,880,312	12,115	6,892,427 7,957,277		6,892,42
20	7,942,188	15,089	7.957.277		7,957,27
21	1,134,853	140	1,134,993		1,134,99
22	10,104,563	1,753,270	11,857,833		11,857,83
23	4,579,077	6,883,445	11,462,522		11,462,52
24	1,349,513	2,424,545	3,774,058		3,774,05
25	8,755,478	5,466,975	14,222,453	****	14,222,45
26	14,217,018	6,734,330	20,951,348		20,951,34
27	5,802,598	28,003,362	33,805,960		33,805,96
28	4,394,938	11,551,972	15,946,910		15,946,910
29	8,032,077	18,974,936	27,007,013	59,575	27,066,58
30	3,015,275	17,470,312	20,485,587		20,485,587
31	11,965,616	4,541,145	16,506,761		16,506,761
32	375,042	21,261,535	21,636,577		21,636,577
33	10	16,687,298	16,687,308	405,733	17,093,041
34	1.007.013	14,830,194	14,830,194	1,579,245	16,409,439
35	1,907,916	15,289,270	17,197,186	2,606,768	19,803,95
36	8,456,751	18,549,354	27,006,105	2,264,925	29,271,030
37	1,884,148	45,219,944	47,104,092	7,594,903	54,698,995
38	2,816	22,650,815	22,653,631	3,499,343	26,152,97
39	2,718,641	27,402,250	30,120,891	1,066,059	31,186,950
40	2,985,111	53,665,044	56,650,155 25,585,468	260,367	56,910,522
42	4,214,373 217,838	21,371,095 38,517,390	38,735,228	121,596	25,707,064 38,735,228
43	17,904	28,875,880	28,893,784		
44	43,676	29,993,560	30,037,236		28,893,78
45	93,078	33,254,818	33,347,896		30,037,236 33,347,896
46	1.747,060	39,340,934	41,087,994		41,087,99
47	893,046	51,567,122	52,460,168		52,460,168
48	319,194	58,451,409	58,770,603	1,103	58,771,700
49	26,677	78,495,241	78,521,918	52,739	78,574,65
50	12,421	124,766,998	124,779,419	3,261,659	128,041,078
51	590	115,886,258	115,886,848	2,750,824	118,637,672
52	534	84,528,763	84,529,297	4,362,370	88,891,66
53	1,307	122,304,876	122,306,183	8,347,736	130,653,91
54	14,399	153,741,791	153,756,190	15,707,756	169,463,94
55	1,246	101,889,720	101,890,966	18,634,023	120,524,98
56	875	120,152,347	120,153,222	15,842,212	135,995,43
57	353,455	90,194,258	90,547,713	20,888,590	111,436,30
58	2,488,907	120,278,637	122,767,544	25,390,712	148,158,256
59	1,365,207	97,100,450	98,465,657	47,728,534	146,194,19
00	24,199	46,279,495	46,303,694	28,494,941	74,798,63
61	578	65,402,282	65,402,860	21,344,772	86,747,633
62		92,721,036	92,721,036	6,338,433	99,059,46
63	2,224,116	94,395,828	96,619,944	9,664,889	106,284,833
64	3,988	66,054,966	66,058,954	6,495,326	72,554,28
065	40	84,241,655	84,241,695	5,677,518	89,919,213
66	173,781	50,915,480	51,089,261	14,136,271	65,225,533
67	116,902	110,839,399	110,956,301	4,002,499	114,958,800
68	410,713	58,823,928	59,234,641	1,439,186	60,673,82

TABLE 4
YEARLY LANDINGS AND SHIPMENTS IN POUNDS Skipjack tuna

TABLE 5
YEARLY LANDINGS AND SHIPMENTS IN POUNDS
Yellowfin tuna

Year	California waters	South of state	Total landings	Shipments	Total pounds
1919 1920 1921 1922 1923	348,081 1,477,905 1,200,600 1,205,023 428,896	487,119 96,851 6,200,256 10,408,029	348,081 1,965,024 1,297,451 7,405,279 10,836,925		348,081 1,965,024 1,297,451 7,405,279 10,836,925
1924	680,759 2,963,620 2,695,502 595,247 84,626	2,382,639 10,274,278 9,869,484 25,338,719 32,168,580	3,063,398 13,237,898 12,564,986 25,933,966 32,253,206		3,063,398 13,237,898 12,564,986 25,933,966 32,253,206
1929 1930 1931 1932 1933	199,444 35,553 154,024 165,323 6,867	37,245,480 56,618,628 36,425,456 36,758,087 51,068,763	37,444,924 56,654,181 36,579,480 36,923,410 51,075,630	3,587 1,896	37,444,924 56,657,768 36,581,376 36,923,410 51,075,630
1934 1935 1936 1937 1938	19,514 529,001 767,231 187,732 10,566	60,893,646 71,765,126 77,585,413 91,334,726 78,277,578	60,913,160 72,294,127 78,352,644 91,522,458 78,288,144	223,942 8,628 884,148 74,861	61,137,102 72,294,127 78,361,272 92,406,606 78,363,005
1939	457,405 237,527 1,799 1,315 2,058	109,960,396 113,522,373 76,662,732 41,465,299 49,259,270	110,417,801 113,759,900 76,664,531 41,466,614 49,261,328	138,309 37,289	110,417,801 113,898,209 76,701,820 41,466,614 49,261,328
1944 1945 1946 1947 1948	45,373 4,959 32,653 3,234 593	63,098,518 87,326,481 127,214,022 150,385,520 191,723,388	63,143,891 87,331,440 127,246,675 150,388,754 191,723,981	70,630	63,143,891 87,331,440 127,246,675 150,459,384 191,723,981
1949	9,884 1,461 63 	184,514,502 182,314,373 160,246,175 178,439,583 132,086,244	184,524,386 182,315,834 160,246,238 178,439,583 132,086,346	1,087,708 8,130,632 13,422,415 7,078,107 8,458,606	185,612,094 190,446,466 173,668,653 185,517,690 140,544,952
1954	120 70,853 417,710	119,401,795 122,291,864 149,280,874 136,884,984 123,001,684	119,401,795 122,291,864 149,280,994 136,955,837 123,419,394	29,701,898 40,526,143 54,604,513 45,085,798 94,655,755	149,103,693 162,818,007 203,885,507 182,041,635 218,075,149
1959	81,676 10,482 	$\begin{array}{c} 108,288,171 \\ 189,296,372 \\ 191,854,056 \\ 124,020,715 \\ 109,522,946 \end{array}$	108,369,847 189,306,854 191,854,056 124,020,755 109,583,166	102,622,211 83,341,244 70,456,206 94,128,155 52,743,056	210,992,058 272,648,098 262,310,262 218,148,910 162,326,222
1964	$ \begin{array}{c} 84 \\ 2,385 \\ 98,492 \end{array} $	149,020,029 156,553,451 132,592,138 140,356,053 152,928,017	149,020,113 156,553,451 132,594,523 140,356,053 153,026,509	53,835,616 39,881,904 57,250,249 26,895,482 59,211,941	202,855,729 196,435,355 189,844,772 167,251,535 212,238,450

TABLE 5
YEARLY LANDINGS AND SHIPMENTS IN POUNDS Yellowfin tuna

TABLE 6
YEARLY LANDINGS IN POUNDS AND TONS
Anchovy, Pacific Herring and Sardine

	Anchovy		Pacific he	rring	Sardine*	
Year	Pounds	Tons	Pounds	Tons	Pounds	Tons
916	531,209	266	2,928,591	1,464	15,648,839	7,82
917	531,209 528,753	264	7,435,997	3,718	104,103,331	52,05
918	868,161	434	7,938,280	3,969	157,652,811	78,82
919	1,609,548	805	4,289,899	2,145	153,877,179	76,93
920	569,774	285	274,364	137	118,520,914	59,26
921	1,946,881	973	542,124	271	59,332,305	29,66
922	652,516	326	341,621	171	93,399,900	46,70
923	307,074	154	383,950	192	158,159,356	79,08
924	346,951	174	435,620	218	242,685,958	121,34
925	93,071	46	865,774	433	315,294,986	157,64
926	60,157	30	453,607	227	286,741,250	143,37
927	368,201	184	1,168,321	584	342,275,289	171,13
928	357,470	179	1,139,682	570	420,269,665	210,13
929	382,445 319,561	191	957,563 717,634	479	651,771,904 502,062,747	325,88
930	319,501	160	717,034	359	502,002,747	251,03
931	307,494	154	685,759 765,724	343	364,351,801	182,17
932	299,217	150	765,724	383	422,609,716	211,30
933	317,292 257,505	159	601,445	301	626,397,481	313,19
934	257,505	129	801,601	401	1,119,931,099	559,96
935	178,970	90	928,880	464	1,095,758,548	547,87
936	195,122	98	840,530	420	1,463,543,700	731,77
937	226,229	113	631,330	316	1,071,490,525	535,74
938	735,144	368	504,884	252	1,023,389,489	511,69
939	2,147,901	1,074	302,242	151	1,160,793,581	580,39
940	6,317,797	3,159	453,193	227	905,973,403	452,98
941	4,105,382	2,053	789,753	395	1,262,480,393	631,24
942	1,694,290	847	190,815	95	969,747,099	484,87
943	1,570,803	785	630,358	315	972,269,915 1,147,207,882	486,13
944	3,891,029	1,946	422,290	211	1,147,207,882	573,60
945	1,616,880	808	460,465	230	845,062,774	422,58
946	1,921,627	961	481,776	241	510,759,173 255,513,948	255,3 127,7
947	18,940,521	9,470	1,654,850	827	255,513,948	127,73
948	10,835,930	5,418	8,000,492	4,000	362,037,087	181,0
949	3,322,273 4,878,687	1,661 2,439	379,311 1,425,351	190 713	633,379,791 714,522,761	316,69
950	4,878,087	2,439	1,420,351	713	714,522,761	357,2
951	6,954,852	3,477	4,923,655	2,462	328,900,731	164,4
952	55,782,870	27,891	9,495,386	4,748	14,330,420	7,1
953	85,835,478	42,918	7,801,928	3,901	9,468,892	4,7
954	42,410,364	21,205	911,906	456	136,504,017	68,2
955	44,691,582	22,346	1,946,521	973	145,607,749	72,8
956	56,920,585	28,460	1,735,776	868	69,554,345	34,7
957	40,547,526	20,274	1,188,080	594	45,862,106	22,9
958	11,602,724	5,801	2,399,730	1,200	207,445,837	103,72
959	7,173,739 5,058,603	3,587 2,529	1,727,013 1,800,672	864 900	74,366,856 57,532,719	37,1 28,7
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,,				01,002,119	20,1
961	7,711,573	3,856	1,401,248	701	43,169,064	21,5
962	2,764,003	1,382	1,305,569	653	15,362,952	7,68
963	4,570,380	2,285	630,087	315	7,131,221	3,56
964 965	4,975,089 5,733,024	2,488 2,866	349,270 516,319	175 258	13,137,483 1,924,219	6,5
966	62,280,236	31,140	241,973	121	878,359	43
967	69,609,377	34,805	271,902	136 179	148,766	
968	31,076,116	15,538	357,869	179	124,088	

^{*} Includes Reduction Ships.

TABLE 6
YEARLY LANDINGS IN POUNDS AND TONS Anchovy, Pacific Herring and Sardine

TABLE 7
YEARLY LANDINGS IN POUNDS AND TONS
Mackerel

				01101				
	Jack mack	erel	Pacific mac	keral	Unclassified m	ackerel	Total	
Year	Pounds	Tons	Pounds	Tons	Pounds	Tons	Pounds	Tons
1916					1,113,998	557	1,113,998	557
1917					3,345,563	1,673	3,345,563	1,673
1918					4,005,906	2,003	4,005,906	2,003
1919					2,654,596	1,327	2,654,596	1,327
1920					2,997,308	1,499	2,997,308	1,499
1921					2,914,613	1,457	2,914,613	1,457
1922					2,466,762	1 222	2,466,762	1,233
1923					3,553,954	1,233 1,777	3,553,954	1,777
1924					3,227,300	1,614	3,227,300	1,614
1925					3,506,103	1,753	3,506,103	1,753
				1	.,,	3,1.00		
1926	235,151	118	3,610,098	1,805			3,845,249 5,191,442	1,923
1927	462,539	231 269	4,728,903 35,251,298	2,364 17,626			35,789,744	2,596 17,895
1928	538,446						58,672,242	29,336
1929	698,290	349 184	57,973,952 16,531,364	28,987 8,266			16,900,192	8,450
1930	368,828	184	10,551,504	8,200			10,300,132	0,400
1931	563,108	282	14,254,081	7,127			14,817,189	7,409
1932	536,409	268	12,473,746	6,237			13,010,155	6,505
1933	1,010,850	505	69,613,680	34,807			70,624,530	35,312
1934	1,581,274	791	113,848,585	56,924			115,429,859	57,715
1935	9,983,924	4,992	146,427,202	73,214			156,411,126	78,206
1936	4,599,382	2,300	100,542,214	50,271			105,141,596	52,571
1937	6,541,026	3,270	60,936,701	30,468			67,477,727	33,739
1938	4,133,918	2,067	79,848,015	39,924			83,981,933	41,991
1939	3,760,155	1,880	80,909,374	40,455			84,669,529	42,335
1940	1,432,637	716	120,504,412	60,252			121,937,049	60,968
	-,,						00.005.005	10.110
1941	2,068,685	1,034	78,167,200	39,084			80,235,885	40,118
1942	5,348,501	2,674	52,553,663	26,277			57,902,164 87,913,773	28,951
1943	12,698,974	6,350	75,214,799	37,607			06,910,770	43,957
1944	12,777,077	6,388	83,656,900	41,828			96,433,977 62,749,752	48,217 31,37 5
1945	9,032,987	4,516	53,716,765	26,858			02,140,102	01,010
1946	15,093,321	7,547	53,875,327	26,938			68,968,648	34,484
1947	129,048,507	64,524	46,478,362	23,239			175,526,869	87,763
1948	72,898,335	36,449	39,385,801	19,693			112,284,136	56,142
1949	51,250,088	25,625	49,771,273	24,886			101,021,361	50,511
1950	133,255,752	66,628	32,649,969	16,325			165,905,721	82,953
1951	89,838,095	44,919	33,518,520	16,759			123,356,615	61,678
1952	146,521,673	73,261	20,604,761	10,302			167,126,434	83,563
1953	55,750,855	27,875	7,502,181	3,751			63,253,036	31,626
1954	17,333,581	8,667	25,392,604	12,696			42,726,185	21,363
1955	35,754,707	17,877	23,310,302	11,655			59,065,009	29,533
	, ,						105 555 110	00.000
1956	75,762,110 82,011,785	37,881	50,013,009	25,006			125,775,119	62,888
1957	82,011,785	41,006	62,043,775	31,022			144,055,560	72,028
1958	22,065,801	11,033	27,648,485	13,824			49,714,286	24,857 37,555
1959	37,507,227	18,754	37,602,134	18,801			75,109,361	
1960	74,945,453	37,473	36,808,690	18,404			111,754,143	55,877
1961	97,606,304	48,803	44,110,194	22,055			141,716,498	70,858
1962	89,978,933	44,990	48,578,820	24,289			138,557,753	69,279
1963	95,442,284	47,721	40,242,676	20,121			135,684,960	67,842
1964	89,692,911	44,846	26,827,881	13,414			116,520,792	58,260
1965	66,666,380	33,333	7,050,059	3,525			73,716,439	36,858
1000	10.000.100	20,431	4,629,504	2,315			45,491,913	22,746
1966	40,862,409	19,090	1,166,607	583			39,347,154	19,674
1967	38,180,547 55,667,682	27,834	3,133,446	1,567			58,801,128	29,400
1968	00,007,082	21,004	0,100,440	1,007			00,001,120	20,100
			.,		1			

TABLE 7 YEARLY LANDINGS IN POUNDS AND TONS Mackerel

TABLE 8
SEASONAL LANDINGS IN TONS
Sardines

Season*	Reduction	San Francisco	Monterey	Los Angeles	San Diego	Total
	ships	area	area	area	area	tons
1916-17 1917-18 1918-19 1919-20 1920-21		70 450 1,000 230	7,710 23,810 35,750 43,040 24,960	17,380 41,340 32,530 16,580 11,740	2,440 7,360 6,810 6,410 1,520	27,530 72,580 75,540 67,030 38,450
1921-22		80	16,290	19,220	910	36,500
1922-23		110	29,210	33,170	2,620	65,110
1923-24		190	45,920	35,040	2,780	83,930
1924-25		560	67,310	96,330	8,820	173,020
1925-26		560	69,010	61,990	5,710	137,270
1926-27	10,960	3,520	81,860	64,720	2,110	152,210
1927-28		16,690	98,020	67,900	4,650	187,260
1928-29		13,520	120,290	119,250	1,420	254,480
1929-30		21,960	160,050	140,540	2,620	325,170
1930-31		25,970	109,620	38,490	80	185,120
1931-32	31,040	21,607	69,078	42,656	264	164,645
1932-33	58,790	18,634	89,599	83,605	62	250,690
1933-34	67,820	36,336	152,480	125,047	1,746	383,429
1934-35	112,040	68,477	230,854	178,818	4,865	595,054
1935-36	150,830	76,147	184,470	138,400	10,651	560,498
1936-37	43,890	141,099	206,706	138,115	4,594	726,124
1937-38		133,718	104,936	109,947	383	416,564
1938-39		201,200	180,994	146,403	2,800	575,287
1939-40		212,453	227,874	96,827	112	537,266
1940-41		118,092	165,698	175,592	1,202	460,584
1941-42		186,589	250,287	148,912	1,585	587,373
1942-43		115.884	184,399	201,510	2,868	504,661
1943-44		126,512	213,616	135,311	2,690	478,129
1944-45		136,598	237,246	178,294	2,767	554,905
1945-46		84,103	145,519	173,110	951	403,683
1946-47		2,869	31,391	194,774	4,768	233,802
1947-48		94	17,630	101,154	2,463	121,341
1948-49		112	47,862	131,830	3,922	183,726
1949-50		17,442	131,769	186,433	3,281	338,925
1950-51		12,727	33,699	303,752	2,910	353,088
1951-52 1952-53 1953-54 1954-55 1955-56		82 	15,897 49 58 856 518	111,774 5,635 4,111 67,099 73,943	1,351 27 323 510	129,104 5,711 4,492 68,465 74,461
1956-57 1957-58 1958-59 1959-60 1960-61			63 17 24,701 16,109 2,340	33,564 22,255 79,264 21,146 26,436	16 	33,643 22,272 103,971 37,256 28,878
1961-62 1962-63 1963-64 1964-65 1965-66			2,231 1,211 1,015 308 151	23,295 2,961 1,895 5,717 535	2 	25,528 4,172 2,942 6,103 719
1966-67 1967-68	: ::::		23 10	311 61	10	344 71

^{*} Season June through the following May.

TABLE 8 SEASONAL LANDINGS IN TONS Sardines

TABLE 9
YEARLY LANDINGS IN POUNDS
Salmon

		Sailliuli		
Year	Coastal ports	Sacramento area ports	Coastal rivers	Total pounds
916	5.592.216	3,450,786	1,896,592	10,939,594
917	6,085,997	3,975,487	999,097	11,060,581
918	5,933,346	5,938,029	1,221,813	13,093,188
919	7,208,382	4,529,222	1,408,123	13,145,727
920	6,066,190	3,860,312	1,207,317	11,133,819
921	4,483,105	2,511,127	996,700	7,990,932
922	4,338,317	1,765,066	1,131,741	7,235,124
923	3,736,924	2,243,945	1,109,391	7,090,260
924	6,374,573	2,640,110	1,000,586	10,015,269
925	5,481,536	2,778,846	1,265,371	9,525,753
926	3,863,677	1,261,776	958,626	6,084,079
927	4,921,600	920,786	669,543 480,483	6,511,929
928	3,444,306 4,033,660	553,777 581,497	429,714	4.478,566 5,044,871
929	4,085,650	1,213,698	703,546	6,002,894
931	3,666,841	941,605	686,065	5,294,511
932	2,649,204	1,264,987	703,990	4,618,181
933	3,657,661	454.253	446,520	4,558,434
934	3,921,530	397,572	110,020	4,319,102
935	4,773,112	888,868		5,661,980
936	4,093,475	949,179		5,042,654
937	5,934,996	974,871		6,909,867
938	2,170,921	1,668,376		3,839,297
939	2,238,755	496,933		2,735,688
940	5,160,393	1,515,588		6,675,981
941	2,946,030	844,963		3,790,993
942	4,063,306	2,552,944		6,616,250
943	5,285,527	1,295,424		6,580,951 10,286,991
944	7,021,848 7,912,754	3,265,143 5,467,960		13,380,714
	.,,			,,
946	7,196,527	6,463,245		13,659,772
947	8,104,297	3,380,484		11,484,781
)48	5,860,915	1,939,801 899,090		7,800,716 6,430,111
49	5,531,021 5,867,346	1,202,890		7,070,236
		1,343,171		7,192,701
51	5,849,530 6,536,890	738.081		7,192,701
53	7,136,223	869,696		8,005,919
54	8,599,579	900,961		9,500,540
55	9,656,996	2,320,746		11,977,742
56	10,274,902	1,139,585		11,414,487
57	5,176,909	321,824		5,498,733
58	3,656,841			3,656,841
59	6,768,699	463		6,769,162
60	6,221,445			6,221,445
61	8,637,907			8,637,907
62	6,672,861			6,672,861
63	7,859,186			7,859.186
65	9,481,215 9,737,775			9,481,215 9,737,775
1				
66	9,446,995			9,446,995
67	7,401,729			7,401,729
68	6,951,931			6,951,931

TABLE 9 YEARLY LANDINGS IN POUNDS Salmon

TABLE 10
YEARLY LANDINGS IN POUNDS
California barracuda

Year	California waters	South of state	Total pounds
	0.000.000	460,369	0.007.000
016	2,226,993		2,687,362
017	2,965,368	94,955	3,060,323
018	3,885,691	951,593	4,837,284
19	4,038,852	1,786,105	5,824,957
20	4,585,388	3,615,947	8,201,335
21	4,588,900	3,036,262	7,625,162
22	4,721,448	1,528,770	6,250,218
23	5,135,824	2,064,751	7,200,575
24	4.733,779	2,394,744	7,128,523
25	5,976,453	2,059,996	8,036,449
26	2.945.169	2,077,295	5,022,464
27	4,355,583	1.844,156	6,199,739
28	4,385,214	2.067,242	6,452,456
29	3,925,899	1,302,711	5,228,610
30	3,513,608	1,250,158	4,763,766
31	3,336,065	841,473	4,177,538
32	2,505,101	421,674	2,926,775
			2,929,773
33	2,912,152	160,810	3,072,962
34	1,801,264	381,558	2,182,822
35	2,003,947	613,877	2,617,824
936	2,247,858	729,984	2,977,842
37	1,799,045	1,139,445	2,938,490
38	1,260,790	1,269,022	2,529,812
90		1,124,274	4,092,054
139	2,967,780 2,545,661	1,169,171	3,714,832
)40	2,545,661	1,109,171	0,/14,002
941	2,971,349	1,230,579	4,201,928
942	2,243,163	1,211,374	3,454,537
943	2,382,884	1,392,454	3,775,338
944	2,317,430	1,330,878	3,648,308
45	1,744,560	2,128,697	3,873,257
946	1 697 946	1,469,678	3,107,024
	1,637,346	969,878	2,665,745
947	1,695,867		
948	1,100,081	1,025,656	2,125,737
49	903,574	1,554,110	2,457,684
050	890,435	1,367,980	2,258,415
951	670,015	1,436,913	2,106,928
052	747,667	1,346,539	2,094,206
953	565,942	872,904	1,438,846
54	485,946	1,076,793	1,562,739
55	322,831	818,128	1,140,959
056	50,153	702,374	752,527
957	387,143	295,523	682,666
058	753,266	161,993	915,259
059	1,110,409	42,192	1.152,601
60	1,147,831	81,837	1,229,668
	479 269	231,017	709,379
061	478,362		
62	521,769	224,707	746,476
63	347,354	31,360	378,714
64	251,025	83,115	334,140
65	273,003	89,055	362,058
966	233,319	85,797	319,116
967	281,224	31,960	313,184

TABLE 10 YEARLY LANDINGS IN POUNDS California barracuda

TABLE 11 YEARLY LANDINGS IN POUNDS Pacific bonito

raciile poliite							
Year	California waters	South of state	Total pounds				
1916	465,691	14,715	480,406				
1917	889,376	14,710	889,376				
1918	2,265,047	176,667	2,441,714				
1919	2,908,745	600,353	3,509,098				
1920	672,393	201,255	873,648				
1320	0.2,000	201,200	0.0,010				
1921	241,859	82,878	324,737				
1922	894,292	63,650	957,942				
1923	478,771	636,476	1,115,247				
1924	843,095	202,187	1,045,282				
1925	782,868	96,298	879,166				
	2 0 4 2 0 0 2	480.000					
1926	2,942,906	178,698	3,121,604				
1927	1,121,476 1,336,719	596,532 770,370	1,718,008				
1928		770,370	2,107,089				
1929	593,886	2,324,658	2,918,544				
1930	3,866,496	1,297,764	5,164,260				
1931	3.014.135	65,538	3,079,673				
1932	1,676,487	1,185,799	2,862,286				
1933	1,967,244	284,955	2,252,199				
1934	3,003,048	199,646	3,202,694				
1935	2.263.740	5,632,744	7,896,484				
1500	2,200,110	0,002,111	1,000,101				
1936	2,216,679	4,999,237	7,215,916				
1937	5,707,212	2,100,858	7,808,070				
1938	4,684,570	3,155,423	7,839,993				
1939	6,697,249	3,221,626	9,918,875				
1940	3,553,121	1,738,019	5,291,140				
1941	7,850,496	3,057,106	10,907,602				
1942	860,833	789,856	1,650,689				
1943	801,535	1,480,764	2,282,299				
1944	326,175	492,696	818,871				
1945	339,664	2,374,517	2,714,181				
*0.40	582,948	E 049 700	5,625,648				
1946	384,327	5,042,700 13,312,856	13,697,183				
1947	214,992	8,920,134	9,135,126				
1949	99,244	1,730,297	1,829,541				
1950	33,456	662,158	695.614				
1000	00,100	002,100	000,011				
1951	54,047	722,756	776,803				
1952	7,504	2,135,013	2.142.517				
1953	19,069	3,083,578	3,102,647				
1954	218,701	2,100,359	2,319,060				
1955	40,354	96,636	136,990				
1956	22,491	105,123	127,614				
1957	110,174	108,975	219,149				
1958	4,804,784	742,022	5,546,806				
1959	3,003,058	8,558	3,011,616				
1960	1,219,682	30,862	1,250,544				
1001	8,439,400	73,572	8,512,972				
1961	2,071,998	62,904	2.134.902				
1962	4,013,505	9,017	4,022,522				
1964	2,606,411	5,858	2.612.269				
1965	5,632,399	5,941	5,638,340				
	0,000,000	0,011	0,000,010				
1966	18,308,175	840,319	19,148,494				
1967	17,841,537	3,377,894	21,219,431				
1968	14,903,357	18,572	14,921,929				

TABLE 11 YEARLY LANDINGS IN POUNDS Pacific bonito

TABLE 12 YEARLY LANDINGS IN POUNDS Giant sea bass

didit 500 buss							
Year	California waters	South of state	Total pounds				
012	100.414	04.000	150.440				
916	129,414	24,026	153,440				
917	152,570	5,810	158,380				
918	210,432	38,363	248,795				
919	126,997	58,273	185,270				
920	89,869	58,168	148,037				
921	87,196	40,235	127,431				
922	83,692	13,662	97,354				
923	75,740	151,255 142,727	226,995				
924	88,677	142.727	231,404				
025	102,904	86,168	189,072				
926	120.070	257,864	377,934				
927	182,726	284,869	467,595				
928	204,862	177,253	382,115				
929	164,093	240,293	404,386				
030	187,473	240,293	394,009				
931	254,017	248,047	502,064				
932	231,203	242,643	473,846				
933	119,582	333,441	453,023				
934	53,752	807,746	861,498				
935	17,223	614,536	631,759				
936	19.854	378,741	398,595				
937	20,412	695,172	715,584				
938	34,848	372,978	407,826				
939	32,964	427,979	460,943				
940	42,784	323,899	366,683				
941	27 901	371,736	409,537				
040	37,801	0/1,/00	970 700				
942	13,717	365,063	378,780				
943	19,271	681,584	700,855				
944	18,478	416,402	434,880				
945	10,481	319,687	330,168				
946	26,325	406,236	432,561				
947	18,922	225,382	244,304				
948	16,637	171,374	188,011				
949	17,221	97,180	114,401				
950	11,903	138,893	150,796				
951	8,590	268,894	277,484				
952	5,272	308,222	313,494				
	7,823	404,156	411,979				
953							
954	5,835 7,663	344,441 357,824	350,276 365,487				
956	39,610	291,708	331,318				
957	9,302	233,051	242,353				
958	9,962	206,065	216,027				
959	10,085	239,824	249,909				
960,	20,565	221,125	241,690				
961	12,509	327,854	340,363				
962	8,188	438,021	446,209				
963	13,960	289,619	303,579				
	14,018	208,697	222,715				
964 965	13,053	338,697	351,750				
966	7,486	333,481	340,967 230,604				
967 968	11,893 14,919	218,711 143,502	158,421				

TABLE 12 YEARLY LANDINGS IN POUNDS Giant sea bass

FISH BULLETIN 149

TABLE 13
YEARLY LANDINGS IN POUNDS
White seabass

Year	California waters	South of state	Total pounds
016	477,091	391 094	798,115
017	869,187	321,024 30,810	899,997
018	1,458,667	154,853	1,613,520
	2,380,713	74,654	
019	2,375,646	252,462	2,455,367 2,628,108
	, , , , , , , , , , , , , , , , , , , ,		
21	2,069,414 2,195,831	500,075	2,569,489
22	2,193,831	736,220	2,932,051
23	1,781,970	591,877	2,373,847
24	938,760 890,437	550,829 994,672	1,489,589 1,885,109
26	1,477,789	738,613	2,216,402 2,273,407
27	806,559	1,466,848	2,273,407
28	824,879	475,335	1,300,214
29	955,556	606,676	1,562,232
30	1,239,285	387,137	1,626,422
31	1,058,162	341,251	1,399,413
32	667,363	137,433	804,796
33	828,129 468,299	334,950	1,163,079
34	468,299	382,898	851,197
35	648,900	417,519	1,066,419
36	564,956	243.137	808.093
37	263.195	336,224	599,419
38	269,987	356.660	626,647
39	806,604	187,792	994,396
40	811,307	187,792 104,409	915,716
41	832,454	75,842	908,296
42	356,655	197,200	553,855
43	379,178	121,005	500,183
44	254,070	139,918	393,988
45	380,468	147,262	527,730
	,		
46	472,204	144,272	616,476
47	692,314	390,709	1,083,023
48	789,691	324,599	1,114,290
49	945,502	464,097	1,409,599
50	1,123,463	407,911	1,531,374
51	955,428	577,827	1,533,255
52	692,292	454,811	1,147,103
53	471,206	454,811 402,087	873,293
54	434,354	771,757	1,206,111
55	544,953	369,912	914,865
56	413,956	667,267	1,081,223
57	1,261,955	245,140	1,507,095
58	2,750,652	99,111	2,849,763
59	3,385,791	37,562	3,423,353
30	1,086,895	149,303	1,236,198
31	458,491	235,733	694,224
62	208.867	365,541	574,408
33	372,479	518,741	891,220
34	550,817	840,264	1,391,081
35	577,607	850,538	1,428,145
66	674,545	663,305	1,337,850
67	507,588	715,171	1,222,759
68	210,050	651,830	861,880

TABLE 13
YEARLY LANDINGS IN POUNDS White seabass

TABLE 14 YEARLY LANDINGS IN POUNDS California yellowtail

Year	California waters	South of state	Total pounds
			-
916	1,137,253	16,141	1,153,394
917	2,736,906	9,089	2,745,995
918	11,375,426	139,946	11,515,372
919	4,871,763	133,502	5,005,265
920	2,486,537	218,400	2,704,937
921	2,139,626	351,170	2,490,796
922	3,111,131	303,292	3,414,423
923	2,968,596	1,094,012	4,062,608
924	2,863,012	1,851,137	4,714,149
925	2,586,621	593,270	3,179,891
926	3,173,424	1,849,690	5,023,114
927	1,435,456	2,789,397	4,224,853
928	1,297,037	1,386,477	2,683,514
929	849,945	2,225,319	3,075,264
930	1,214,959	3,555,797	4,770,756
931	1,690,680	835,173	2,525,853
932	1,024,086	772,278	1,796,364
933	1,233,286	2,665,602	3,898,888
934	210,590	2,136,571	2,347,161
025	582,589	7,566,129	8,148,718
935		.,,	
936	253,723	9,838,747	10,092,470
937	223,983	5.147.492	5,371,475
938	246,238	6,566,080	6,812,318
939	262,524	2,603,764	2,866,288
940	329,036	5,627,768	5,956,804
941	95,924	9,734,766	9,830,690
942	55,017	2,671,252	2,726,269
943	33,359	4,901,520	4,934,879
944	28,464	2,928,707	2,957,171
945	23,415	3,510,637	3,534,052
946	31,285	4,530,298	4,561,583
947	103,706	9,849,148	9,952,854
948	246,553	10,138,141	10,384,694
949	15,907	7,301,833	7,317,740
950	5,727	3,524,174	3,529,901
951	14,454	4.655,282	4,669,736
952	51,116	9,395,863	9,446,979
953	14,379	5,198,004	5,212,383
954	11,846	1,644,932	1,656,778
955	5,570	158,752	164,322
956	18,598	352,289	370,887
957	150,898	358,053	508,951
958	105,486	64,144	169,630
959	207,187	24,097	231,284
960	156,518	92,115	248,633
061	80,689	300,080	380,769
961	37,066	151.355	188,421
962		44.283	
963	25,443		69,726
964 965	25,878 12,522	84,221 115,283	110,099 127,805
	35,880	209,327	245,207
966	35,880 13,179	127.490	150,668
967	13,179 22,460	137,489 140,717	163,177

TABLE 14 YEARLY LANDINGS IN POUNDS California yellowtail

TABLE 15 YEARLY LANDINGS IN POUNDS Flatfish other than sole

Year	California halibut	Pacific halibut	Arrowtooth flounder*	Starry flounder	Sanddab	Turbot
		=0.044		450.010	2 222 524	2.00
916	4,052,173	70,344		453,916	2,228,734	2,608
917	4,379,312	131,585		1,151,876	2,631,862	1,327
918	4,624,218	129,473		818,835	1,751,609	3,664
919	4,698,123	161,375		435,731	709,738	2,115
920	4,279,582	165,308		481,587	721,810	855
921	3,653,861	141,896		293,656	784,011	219
922	3,254,505	148,979		539,220	1,170,979	1,534
923	2,229,381	197,456		508,961	1,363,911	1,011
924	2,576,882	132,016		379,770	1,699,832	1,868
925	2,452,551	161,310		594,420	1,952,847	3,926
926	1,349,031	338,689		667,711	1,143,935	1,365
927	1,303,559	568,672		590,064	892,718	3,950
928	1.187.651	375,840		399,880	1,108,764	9,234
929	1,102,573	750,624		580,752	1,051,868	1,323
930	1,097,760	413,958		391,096	616,349	7,345
931	969,773	790,384		169,806	472,805	18,284
932	949,702	645,828		543,806	665,345	23,422
933	989,649	321,664		457,998	562,994	49,615
934	1,037,008	1.022,965		537,164	767,025	72,548
935	1,575,863	872,971		656,113	675,597	72,287
36	1,582,907	530,457		621,186	621,675	116,275
37	1,207,235	316,641		974,770	516,195	75,990
938	1,078,229	421,910		542,812	639,328	85,896
939	991,621	402,250		739,311	821,204	104,585
940	948,457	309,491		804,089	779,078	62,124
941	706,650	234,762		601,577	442,487	26,940
942	750,539	238,988		370,125	353,540	6,571
943	1,111,998	281,121		505,399	505,338	38,047
944	1,485,463	250,946		366,520	551,269	72,825
945	1,748,821	290,138		337,543	592,062	159,870
946	2,457,187	403,070		509,448	679,072	49,847
947	1.787.901	282,100		527,072	701,413	101,784
948	1,306,629	130,589		405,251	804,695	114,701
949	1,256,435	167,347		356,374	722,183	95,605
050	1,092,748	201,900	74,309	913,765	690,621	128,080
51	868,201	86,749	59,801	1,128,892	543,821	110,164
552	525,402	242,581	112,913	597,477	659,874	81,895
53	530,315	98,219	88,367	502,526	690,443	69,158
54	661,331	90,682	550,457	500,550	753,471	175,918
55	509,742	51,942	748,249	650,180	781,564	100,498
56	455,659	39,158	1,070,597	375,400	789,280	83,294
00	376,815	26,206	933,715	504,461	692,083	96,055
57	267,446	8,271	643,880	471,202	406,438	72,533
58			797 954	1,046,926	466,684	129,225
59	354,242 376,263	8,345	787,254	259.038	348,373	62,438
60	370,203	4,916	1,007,679	,	,	,
61	654,554	3,961	†60,659	315,337	562,964	71,367
62	863,086	3,546	53,326	338,192	679,911	80,383
63	1,120,369	4,508	17,345	521,310	555,783	96,819
64	1,276,105	3,040	9,735	420,986	589,526	93,280
965	1,243,718	5,019	11,595	378,389	479,041	78,531
66	1,011,412	671	3,503	380,628	720,101	83,327
67	838,058	498	6,041	870,707	687,168	72,853
68	671,654	127	13,400	856,157	714,622	69,504

TABLE 15 YEARLY LANDINGS IN POUNDS Flatfish other than sole

^{*} Arrowtooth flounder were tabulated with unclassified sole prior to 1950.
† The drop in landings after 1960 reflects a change in reporting animal food landings (see text).

TABLE 16
YEARLY LANDINGS IN POUNDS
Sole *

Year	Dover	English	Petrale	Rex	Sand	Unclassified	Total pound
916						6,407,186	6,407,186
917						8,728,429	8,728,429
						7,027,767	7,027,767
918						7,027,707	7,027,707
919						5,528,685	5,528,685
920						3,821,748	3,821,748
921						4,870,870	4,870,870
922						7,043,336	7,043,336
923						7,086,035	7,086,035
924						8,835,351	8,835,351
925						8,762,535	8,762,533
020						0,102,000	0,102,000
926						8,649,870	8,649,870
927						10,479,765	10,479,76
928						10,281,719	10,281,719
929						11,706,761	11,706,761
930						10,924,085	10,924,08
1931			1,375,535	831,240		7,206,107	9,412,882
932			1,227,223	555,558		7,206,107	9,412,882 8,890,840
933			953,424	559,743		6,797,928	
900		5,280,154					8,311,09
934			2,456,989	715,498		514,962	8,967,603
.935		6,035,966	1,988,325	631,432		508,540	9,164,263
936		6,286,867	1,126,527	515,648		395,966	8,325,00
1937		5,750,060	1,802,721	451,497		297,944	8,302,22
938		4,953,934	2,026,166	515,254		242,293	7,737,64
939		6,270,424	2,558,461	667,496		248,411	9,744,79
1940		5,056,535	1,575,489	593,359		162,622	7,388,00
340		0,000,000	1,070,409	000,000		102,022	1,000,000
1941		3,278,638	893,426	371,130		82,661	4,625,85
1942		2,020,562	611,580	387,545		136,070	3,155,75
943		3,092,170	918,925	495,672		275,612	4,782,37
1944		3,066,865	1.123,986	413,286		96,237	4,700,37
1945		5,857,240	1,232,801	442,179		250,482	7,782,70
		-,	1,202,001			200,102	1,102,10
1946		7,176,727	2,666,285	570,418		151,263	10,564,69
947		8,379,502	2,947,177	842,968		163,947	12,333,59
1948	7,234,438	8,171,645	5,089,684	893,248		265,924	21,654,93
1949	7,890,073	5,713,258	4,952,156	982,307		191,691	19,729,48
1950	9,548,379	8,080,693	4,366,598	1,068,456		812,382	23,876,50
		0,000,000		1,000,100		012,002	20,010,00
1951	8,621,238	5,631,659	2,726,304	1,013,890		179,369	18,172,46
1952	11,748,215	4,911,468	2,893,619	1,185,451		70,563	20,809,31
1953	8,904,367	4,099,106	3,350,163	1,020,877	34,542	36,958	17,446,01
954	9,930,438	3,748,245	4.171,901	1,183,538	75,544	72,056	19,181,72
1955	8,185,501	4,134,779	3,619,530	1,094,437	92,572	19,425	17,146,24
1056	0 960 404	9 000 007	0 990 150	1 147 500	77.057	22,852	10 170 01
1956	8,268,424	3,826,297	2,830,158	1,147,523	77,357		16,172,61
	7,932,137	4,819,872	3,456,819	1,234,494	56,061	28,252	17,527,63
1958	8,053,040	5,150,234	3,157,678	1,422,891	24,435	15,214	17,823,49
1959	7,327,420	4,617,491	2,632,451	1,443,005	95,765	21,197	16,137,32
1960	9,184,814	2,375,383	2,475,661	1,107,372	73,464	228,066	15,444,76
1961	7,826,617	3,645,918	3,390,739	1,208,829	77,130	34,484	16,183,7
1962	8,581,091	4,206,048	3,041,164	1,408,245	196,565	68,444	17,501,5
			2 217 040			49,415	10,001,0
1963	9,781,732	4,254,545	3,317,948	1,565,672	331,208	43,415	19,294,5
1964	9,265,238	4,592,752	2,697,670	1,410,647	336,197	47,265	18,349,7
1965	10,759,963	4,892,391	2,662,257	1,490,475	310,444	43,016	20,158,5
1966	10,311,633	4,844,868	2,927,190	1,635,399	235,691	25,957	19,980,7
967	7,215,037	5,821,909	2,768,537	1,766,038	305,897	31,712	17,909,1
1968	8,535,521	5,811,438	2,946,605	1,930,583	211,376	29,614	19,465,1

Prior to 1931, all soles were combined as one group; individual species were tabulated separately when they became sufficiently important.

TABLE 16 YEARLY LANDINGS IN POUNDS Sole

TABLE 17

YEARLY LANDINGS IN POUNDS Perch and perch-like fishes

Year	Opaleye	Halfmoon	Blacksmith	Sargo	Perch	Total pounds	
1010					001 100	001.100	
1916					221,186	221,186	
1917					252,503	252,503	
1918					203,420	203,420	
1919					192,481	192,481	
1920					186,381	186,381	
1921					253,199	253,199	
1922					243,776	243,776	
1923					359,682	359,682	
1924					305,726	305,726	
1925					272,351	272,351	
1926					208,910	208,910	
1927					262,893	262,893	
1928		30,104			236,974	267,078	
1929		16,308			311,194	327,502	
1930		36,765			267,972	304,737	
		24.000		000	000 000		
1931	17,913	24,692		260	223,092	265,957	
1932	15,279	21,547		-525	207,222	244,048	
1933	4,272	8,880		503	214,511	228,166	
1934	3,896	28,394		334	192,596	225,220	
1935	1,424	33,432		5,226	241,525	281,607	
1936	1.781	42,166		515	207,280	251,742	
1937	1,778	34,333	100	3.069	210,309	249,589	
1938	100	27,501		5	155,815	183,421	
1939	20	21,001		773	139,394	140,187	
1940	39	192		435	57,977	58,643	
1940	99	192		100	01,311	00,040	
1941				220	25,832	26,052	
1942	66				58,018	58,084	
1943	17				113,018	113,035	
1944	7			2,305	146,546	148,858	
1945				1,384	217,486	218,870	
1946				196	192,430	192,626	
1947	1.519			44	289,182	290,745	
1948	564	614		1.899	302,087	305,164	
	954	014		31	326,336	327,321	
1949 19 50	6.278	1.604		27	242,354	250,263	
1000	-,	-,		-			
1951	1,006	254		1,580	237,331	240,171	
1952	525		83,811		213,357	297,693	
1953	392		14,200		281,998	296,590	
1954	9,164	50,007		2,040	118,499	179,710	
1955	6,117	34,410		695	136,554	177,776	
1956	3,433	15,108			187,681	206,222	
1957	5,198	12,872			245,699	263,769	
1958	2,351	4,455	3	1,740	189,679	198,228	
1959	4.866	3,639		35	212,853	221,393	
1960	1,208	2,904		222	164,273	168,607	
		F.007			110.045	100 700	
1961	2,337	5,907	20	44	118,245	126,533	
1962	1,674	8,536	20	59	165,115	175,404	
1963	4,378	8,683	2,900	171	172,884	189,016	
1964	2,001	10,043	145,143	11	133,115	290,313	
1965	3,149	10,518	117,785	128	187,736	319,316	
1966	19,432	9,530	6,920	1,120	160,381	197,383	
1967	17,298	25,431	7,620	41	202,513	252,903	
1968	11,173	49,617	137,634	46	168,040	366,510	
	,,	,					

TABLE 17 YEARLY LANDINGS IN POUNDS Perch and perch-like fishes

YEARLY LANDINGS IN POUNDS
Fishes

Year	Cabezon	White croaker*	Pacific hake	Lingcod	Rockfish	Sablefish
16	569	779,287	189,219	617,236	4,918,952	83,623
17	434	835,259	254,331	930,519	7,774,026	909,846
18	167	1,014,820	193,018	915,836	8,242,754	498,937
19		609,175	133,181	1,063,136	5,398,109	334,950
19	•	461,459	141,981	687,954	5,633,077	781.032
20		401,409	141,981	087,934	0,033,077	781.032
21		391,085	90,218	425,543	4,761,658	1,022,642
22		581,863	74,516	568,481	4,312,014	268,554
23		411,564	78,969	467,347	5,096,622	538,292
24	.****	384,317	60,780	400,432	4,742,885	933,310
25	3,352	536,654	22,017	683,130	5,488,621	722,472
26		484,921	58,335	649,902	7,540,969	175,642
27	752	529,267	84,553	556,308	6,390,604	992,654
928	2,628	441,758	108,648	853,537	6,419,909	916,955
29	1,196	476,497	145,669	1,167,120	6.036,409	1,439,408
30	1,046	457,167	56,088	1,288,172	7,225,424	1,359,147
931	1.115	414.034	12,501	1,229,088	7,277,688	1,021,215
932	4.678	447,531	29,001	899,912	5,636,319	975,373
933	4,265	564,274	37,539	1,088,955	4,787,774	1,332,573
934	5,265	634,345	56,901	857,600	4,603,536	2.117.048
935	10,537	768,676	73,843	1,017,455	4,831,174	2,848,672
36	18,468	652,134	50,791	758,547	4,603,904	1,035,530
937	8.189	645,759	63,454	968,258	4,291,214	733,499
938	5.425	493,209	36,428	646,004	3,637,137	415,836
939	4,023	542,901	13,661	576,072	3,333,126	767,044
940	3,392	412,228	18,049	576,972 692,243	3,570,636	573,785
941	13,346	325,155	15,044	529,772	3,405,622	536,540
942	2,312	284,225	41,981	314,334	1,423,440	1,972,522
943	7,532	396,633	10,505	719,318	2,762,192	3,205,374
944	3,906	367,701	4,751	746,039	6,422,230	4,116,451
945	4,417	459,515	2,415	758,395	13,286,076	6,264,397
#40	4,417	409,010	2,415	(90,089	13,280,070	0,204,397
946	7,860	437,023	550	1,156,127	11,161,222	2,656,873
947	4,526	458,686	876	1,940,747	8,498,584	902,110
948	8,202	643,123	4,600	2,056,088	6,507,205	2,068,439
949	16,073	764,429	1,535	1,656,184	5,962,267	1,743,372
950	21,679	750,722	500	1,915,905	8,115,102	1,584,301
951	23,875	682,269	24,972	1,672,114	10,993,502	2,585,513
952	34,556	3,273,702	6,145	1,366,279	10,727,521 12,228,663	1,343,867
953	13,365	1,201,134	103,926	952,103	12,228,663	1,655,653
954	6,262	913,802	611,522	952,103 947,383	12,640,729	2,357,531
955	6,944	819,488	956,545	964,926	12,681,697	2,065,737
956	12.415	889,870	1,376,217	931,311	14,943,515	2,868,407
957	13,206	535,362	1,150,006	1,639,654	16.091.279	2,199,782
958	19,612	770,534	1.135,138	1.599.515	17.842,163	1,732,99
959	9,508	1.534,382	1.097.069	1,406,297	17,842,163 15,281,282	1,938,356
960	3,067	1,078,119	325,088	1,307,129	13,713,886	2,419,02
961	4.952	889,164	†3,275	1,439,943	10,830,762	1,616,528
62	2,474	687,633	78,530	1,112,204	9,834,393	2,015,23
963	2,811	551,059	139,699	1,133,008	11,749,460	1,809,349
964	5,281	838,584	111,529	836,377	8,117,912	2,463,45
965	7,438	1,135,566	119,255	812,690	9,392,424	2,863,55
966	12,599	790,997	69,002	800,303	10,063,592	3,215,939
967	14,284	496,378	14,430	938,655	9,798,951	3,798,49
968	20,106	941,304	6,494	1,094,054	9,444,396	3,219,45
700						

TABLE 18 YEARLY LANDINGS IN POUNDS Fishes

White croaker includes queenfish.
 † The drop in landings after 1960 reflects a change in reporting animal food landings (see text).

FISH BULLETIN 149

TABLE 18—Continued YEARLY LANDINGS IN POUNDS Fishes

Year	Seulpin	Shark	California sheephead	Smelt	Swordfish	Whitebait smelt
1916	8,014 17,425 28,237 25,432 35,674	36,247 287,872 403,093 612,683 811,349	3,549 5,906 22,978 17,972 14,567	991,509 984,270 796,984 756,980 744,187	18,442 18,252 12,513	161,797 123,079 135,857 5,915 678
1921	58,380	539,333	23,925	765,073	14,803	5,229
1922	42,121	282,018	18,205	830,140	23,256	84,007
1923	60,466	360,363	31,628	806,380	11,691	67,818
1924	109,070	392,634	24,267	721,912	31,833	122,483
1925	223,104	372,332	48,811	751,669	27,045	70,968
1926	108,068	506,723	138,927	883,123	45,543	85,557
1927	113,457	325,653	159,397	965,921	130,288	134,149
1928	97,083	623,816	372,677	926,116	426,001	135,186
1929	107,797	833,985	288,422	933,095	693,081	243,119
1930	88,610	647,297	243,689	1,054,665	562,729	174,917
931	91,688	596,134	198,347	1,074,810	340,769	141,495
932	85,503	850,888	89,591	899,216	661,470	133,540
933	64,160	471,030	58,609	729,702	850,699	95,751
934	65,939	526,280	143,552	732,191	263,958	105,982
935	69,549	555,256	188,022	875,480	669,283	164,345
1936	110,417	471,861	128,577	841,231	577,402	197,738
1937	137,312	914,205	81,466	682,070	625,307	86,177
1938	155,386	7,504,329	72,031	567,861	722,478	106,724
1939	128,628	9,227,750	71,361	474,936	594,360	166,883
1940	122,133	7,860,030	62,352	449,360	887,168	127,449
941	95,287	7,617,334	49,119	452,739	916,739	131,102
942	44,332	3,551,566	50,258	443,939	445,908	159,258
943	42,550	3,729,334	151,048	1,566,273	336,386	141,367
944	57,270	2,613,431	168,653	1 541,044	751,596	269,425
945	94,656	2,438,096	249,584	2,369,580	363,093	291,152
946	145,129	1,608,846	267,125	793,336	863,494	344.477
	127,048	2,637,926	193,489	713,310	1,009,957	326,616
	155,076	2,480,555	100,227	782,096	1,113,808	222,499
	148,367	1,550,992	63,524	715,616	198,361	241,764
	139,523	717,247	66,209	590,968	26,494	207,607
951	101,437	842,324	61,410	1,095,665	228,034	162,054
952	83,610	623,238	36,231	646,679	265,690	152,115
953	119,628	449,753	35,426	670,116	142,831	179,292
954	134,310	770,337	29,184	609,082	23,055	267,426
955	108,056	576,201	13,152	780,172	134,659	214,558
956	100,232	1,085,314	6,575	466,333	275,174	148,820
957	73,268	728,900	11,033	371,472	375,986	243,600
958	64,872	491,713	11,366	549,864	471,775	306,805
959	37,342	602,191	10,233	551,945	448,220	274,408
960	29,203	694,191	4,740	429,299	324,754	168,458
961 962 963 964	26,718 57,951 75,521 94,225 82,736	623,972 753,177 665,367 646,569 648,265	12,602 20,327 28,011 17,934 12,153	491,265 339,498 358,456 414,039 368,951	368,855 39,057 98,074 183,023 327,174	335,852 188,357 148,080 191,215 148,596
966	108,499	653,790	15,984	522,457	468,772	162,259
967	82,656	596,898	19,628	591,975	305,067	199,694
968	125,175	499,947	12,750	443,062	199,398	238,061

TABLE 18 YEARLY LANDINGS IN POUNDS Fishes

TABLE 19
YEARLY LANDINGS IN POUNDS
Crustaceans

Year	Market crab	Rock erab	Spiny lobster	Bay shrimp	Ocean shrimp	Spot prawn
						-
916	1,296,912		250,632	411,847		
917	2,580,840		355,259	605,004		
918	1,619,280		195,750	722,178		
919	1,304,904		256,894	747,023		
920	1,220,568		247,156	817,091		
921	800,952		334,271	907,467		1,006
922	860,328		376,310	990,349		1,000
923	1.075,800		384,381	1,113,358		
924	1,506,816		294,356	1,551,086		
925	3,234,312		432,059	1,460,234		
000	0.000.000		440.100			
926	3,296,280 2,960,712		442,198 508,123	1,431,511 1,697,365		
927	3,574,464	270	355,800			
928	1,792,776	210	396,764	2,280,871 3,054,748		
929	1,992,384	12	374,450	2,687,831		8,730
930	1,332,901	12	,	_,,		0,100
931	2,231,384	56	383,697	1,684,763		4,114
932	2,433,987	145	319,307	2,681,807		982
933	3,208,494	14,818	380,014	2,087,952		798
934	3,768,081	24,570	366,651	1,783,663		910
935	3,680,188	12,817	371,661	3,445,091		2,351
936	2,311,802	16,202	414,183	2,240,849		1.861
937	1,627,753	1,710	393,242	1,108,761		3,041
938	3,873,600	3,847	308,378	1,847,926		3,28
939	5,953,361	3,984	376,928	1,175,979		4.271
940	5,151,014	3,460	281,102	1,080,190		2,361
941	4.260,340	2.645	357,334	952,152		5,757
942	2,414,110	80	168,641	800,958		,, 0,
943	2,315,338	- 00	298,377	253,215		43
944	2,934,776	540	512,490	291,974		-
945	4,334,383	12,188	478,619	382,147		1,452
	0.004.000	11 000	600 070	100 115		
946	9,624,368	11,600 15,244	690,272 593,401	432,145 841,086		5,178 1,687
947	10,733,398 11,892,891	20,938	563,520	926,707		2,77
948	11,115,476	18,636	834,658	800.441		3,95
949	11,704,648	20,007	933,449	913,181		5,790
300	11,701,010	20,001	300,113	510,101		0,15
951	11,568,353	22,592	824,611	931,323		2,69
952	12,997,451	16,977	807,070	913,908	205,485	3,016
953	8,278,519	49,300	749,245	732,308	287,410	2,72
954	7,829,651	39,058	901,293	744,768	296,797	2,69
955	6,119,320	54,051	855,416	682,731	838,656	1,182
956	14,320,549	59,171	735,869	718,968	1,168,519	1.233
957	19,118,484	151,131	647,281	192,814	1,376,641	767
958	17,282,766	166,962	632,618	45,955	1,728,680	91
959	17,262,261	129,534	505,947	35,011	1,785,228	
960	14,876,148	120,903	351,032	1,580	2,026,787	147
001	11 711 207	151 760	412,453	2.050	2,002,709	
961	11,711,327 3,222,580	151,782 200,304	412,453 515,816	1,075	1,782,955	69
962	3,222,580 1.951.461	240,611	515,816 584,192	1,075	2,093,063	8,44
963				1,220		
964 965	1,815,363 4,803,906	263,885 328,686	446,655 480,325	10,765	1,100,147 1,422,364	5,77
000						
966	12,376,390	330,843	489,088	4,165	1,190,197	3,57
967	11,716,488	324,386	449,874	19,771	1,412,513	2,59
968	16,015,581	351,657	312,483	10.465	2,274,770	7.239

TABLE 19 YEARLY LANDINGS IN POUNDS Crustaceans

TABLE 20 YEARLY LANDINGS IN POUNDS Mollusks

Year	Abalone	Eastern oyster	Pacific oyster	Squid
916	762,001	1,969,519		275,620
		816,276		420,020
917	637,780			439,438
918	602,919	1,360,685		361,714
919	759,203	1,515,425		3,698,242
920	806,716	1,121,160		508,199
921	1,481,170	767,124		432,559
922	1,523,394	743,252		209,641
923	1,555,134	688,103		1,180,446
924	2,241,812	526,775		6,831,029
925	2,352,861	569,003		1,891,220
		610,499		
926	2,060,770	610,422		3,135,561
927	2,816,530	554,921		6,014,113
928	2,066,243	726,298		1,351,992
929	3,438,858	437,245		4,660,572
930	3,176,513	582,367		10,969,462
931	3,262,166	456,255		1,738,621
932	2,817,345	290,571		4,229,743
099	2,756,188	340,003	68,762	824,543
933				
934	3,223,492	518,600	50,240	1,530,450
935	3,870,921	346,682	299,375	815,944
936	3,302,195	318,912	310,683	945,439
937	2,863,175	364,649	680,081	501,662
938	2,121,468	280,742	1,207,421	1,599,319
939	1,804,440	130,684	1,659,355	1,162,056
940	1,724,084	113,360	1,292,505	1,800,632
011	1,002,330	102,040	1,717,781	1,431,136
941				
942	164,462	92,426	609,233	943,783
943	680,274	79,878	741,105	9,164,361
944	1,630,402	106,896	636,686	10,936,595
945	2,429,312	65,581	309,738	15,225,664
946	2,095,762	84,603	88,006	38,024,528
947	2,669,285	133,779	46,035	14,542,649
010	3,195,852	331,238	166,524	19,255,687
948				6,859,129
949	3,599,998	46,535	235,134	
950	3,954,791	117,079	143,612	5,996,335
951	4,084,190	178,716	133,700	12,382,869
952	4,784,033	163,485	190,638	3,670,923
953	4,720,350	129,733	161,520	8,917,114
954	4,099,525	124,928	460,620	8,155,105
955	4,185,875	140,918	1,635,067	14,271,968
056	4,284,063	142,181	6,101,220	19,483,984
956		110 024		19,440,191
957	5,421,914	119,834	11,067,646	12,449,121
958	4,224,018	32,087	9,599,062	7,457,418
959	4,561,827	8,733	13,759,192	19,653,013
960	4,266,408	2,072	10,686,856	2,561,520
961	4,553,766	105,726	10,047,550	10,285,791
962	4,183,181	95,100	11,043,732	9,368,149
963	4,333,879	*13,502	*1,255,515	11,560,854
	4,079,223	4,910	1,354,737	16,433,624
964 965	4,576,084	7,982	1,054,810	18,619,893
	4,963,556	12,925	787,502	19,025,879
966				
966	4,421,581	12,710 16,166	729,431 645,553	19,601,922 24,932,713

^{*} Beginning in 1963 oyster landings have been reported as the weight of the packed meats rather than as weight in the shell.

TABLE 20 YEARLY LANDINGS IN POUNDS Mollusks

TABLE 21 YEARLY LANDINGS IN POUNDS Animal food *

1961	3,777,133	1965	2,873,650
1962	1,879,811	1966	2,380,223
1963	1,033,961	1967	2,596,118
1964	1,738,441	1968	2,589,634

^{*} Unmarketable whole fish destined to be ground and frozen for use by fur breeders.

TABLE 21 YEARLY LANDINGS IN POUNDS Animal food