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**STATE OF CALIFORNIA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF FISH AND GAME BUREAU OF MARINE FISHERIES
FISH BULLETIN No. 58
The Commercial Fish Catch of California for the Year 1940**



BY
*THE STAFF OF THE
BUREAU OF MARINE FISHERIES*
1942

FOREWORD

Seventh in a series of bulletins dealing with the commercial fish landings in California, this issue publishes the monthly and yearly totals for 1940. Also included are the values of the catches for 1939 and 1940.

The publication is the work of the members of the staff of the Bureau of Marine Fisheries of the California Division of Fish and Game, with the responsibility for the final compilations resting with the statistical unit of the Bureau. The cooperation of the Division's Bureau of Patrol and Law Enforcement in the collection of the original material is gratefully acknowledged.

September, 1941

TABLE OF CONTENTS

	Page
Introduction -----	9
Value of the Commercial Fish Landings-----	10
Bait Records -----	20
Commercial Fishermen -----	24
Commercial Fishing Fleet-----	26
Tables of Commercial Fish Landings in California, 1940-----	27
Common and Scientific Names of Fishes, Crustaceans and Mollusks	45



FIG. 1

FIG. 1

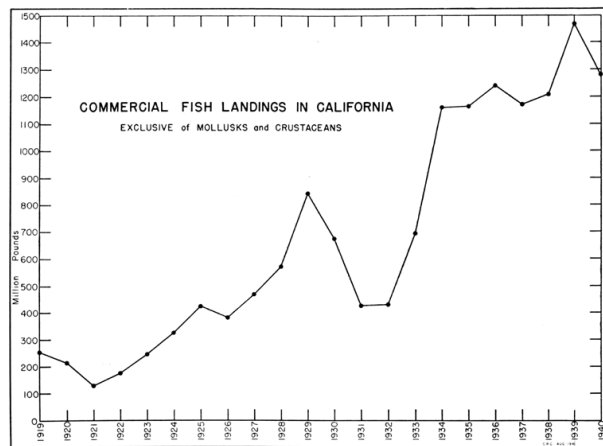


FIG. 2

FIG. 2

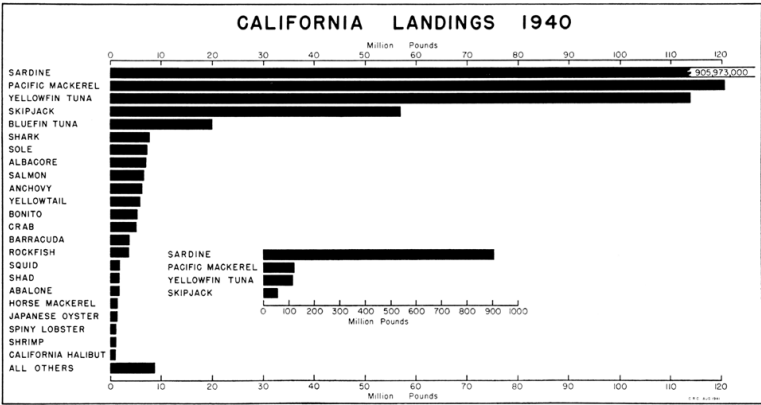


FIG. 3

FIG. 3

1. INTRODUCTION

The success of any program for the collection of fisheries statistics depends upon its flexibility as well as its uniformity. Uniformity is necessary to make records comparable from year to year, but at the same time sufficient flexibility must be maintained to meet changing conditions and new demands. Such is the basis for the fisheries statistics collected and compiled by the California Division of Fish and Game.

The series of "Catch Bulletins," of which this is the seventh, is intended primarily to make available the summaries of commercial fish landings in each region of the State. These are presented as in former years. In addition, supplementary tables are included to aid in understanding our fisheries. of such are the tables of numbers and nativity of commercial fishermen and the number of boats of each type engaged in the fishery. These have proven of much interest and they are again included in this bulletin.

An important factor influencing fishing effort is the price paid to fishermen, and we find instances of fishing vessels being shifted from one fishery to another because of price inducements. Probably the most outstanding example of this is the unforeseen rapid development of the shark fishery because of the high prices offered for the liver oils containing their high potency of vitamin A. From prices paid and pounds delivered, the value of catch of each species may be determined and a summary of such values is presented in this bulletin for the first time.

There has been a steady development of sport fishing in the ocean waters of southern California. Not only has this catch mounted to an impressive volume, but the amount of small fish required as bait for this army of anglers must be considered together with its effect on the several species used as bait. Our statistical records, therefore, have been expanded to include not only the sport catch itself but also the harvesting of the small sized fishes used by the anglers for bait. A preliminary summary of our bait catch records is presented in the following pages.—*W. L. Scofield.*

2. VALUE OF THE COMMERCIAL FISH LANDINGS

In 1940 the California Division of Fish and Game started making its own compilations of the value of its commercial fisheries. Prior to this time the State collected the raw data and the actual computation was done by the U. S. Bureau of Fisheries (now the U. S. Fish and Wildlife Service). The present bulletin contains annual value tables for 1939 and 1940 as well as the more detailed tables of landings made in 1940. For this report we have chosen to regard the value of a catch of fish as the amount paid the fisherman and to consider every increase beyond that point as processing and handling costs.

Fish, even more than most commodities, are subject to the laws of supply and demand. At a cannery the demand is relatively steady, hence there is a comparatively steady contract price. Fish landed during heavy runs are canned and held in warehouses till they can be sold. At fresh fish markets a different situation exists. Fresh fish is a highly perishable commodity which must be handled with the greatest possible speed in spite of occasional sudden and unpredictable changes in the catch. At times the prices may vary widely from day to day or even from hour to hour.

Some fish sell at a very low price. Sardines sold for bait are taken in small quantities and usually command about two cents per pound. Sardines sold to the canneries are taken by large boats close to the home port, and loads of a hundred tons are common. In 1940 the canneries paid \$11 per ton. Much of the profit in sardines comes from sardine oil. Competition with sardine oil from Japan used to help keep the price down, but now the Japanese supply is cut off, the demand for oil is rising and the late 1941 price of sardines is \$17.

Yellowfin tuna, like sardines, are taken in large quantities, but the boats must go thousands of miles and must often spend days catching bait before they can begin tuna fishing. Then after they catch their tuna they must carefully refrigerate them. In 1940 yellowfin tuna brought the fishermen \$120 per ton.

Spiny lobsters are taken a few, very few, at a time by men who must make, repair and tend a long string of lobster traps. The fishermen received an average price of over 15 cents per pound (over \$300 per ton) during 1940, but even at this high price the average lobster fisherman works very hard for very little.

2.1. Computation of Values

As mentioned, the values given in this bulletin represent amounts paid to the fishermen by the canneries and markets. Roughly 99 per cent of the fish in these tables is actually sold by fishermen to canneries or markets. The remainder is caught by members of marketing firms, and for this fish the values represent an estimate of the amount which the catches would have brought independent fishermen on an open market.

The values given are computed as follows. The California Division of Fish and Game issues receipt books to each buyer. Whenever the buyer purchases fish from a fisherman he fills out one of these receipts in triplicate and is required to list (among other items) the weight of each species caught and the price paid. The dealer, the fisherman and the Division each receive one copy.

The information is transferred to punch cards in the Division of Fish and Game statistical department. The figures on the cards are then totaled on electrical tabulating machinery in almost any way that may be desired. In most of the statistical summaries, tables are compiled by months for the eight statistical regions into which the State is divided. This was done in calculating values, but to reduce the number of tables in this publication seven regions are used and only the yearly totals are shown.

For the work under discussion, the monthly catch of each species is listed so as to show the amount landed at each price. From these figures the value is readily calculated. Sometimes at a cannery, part or all of a load of fish (nearly always tuna) is condemned by the State Board of Health. Condemned fish is accepted by the cannery and made into fertilizer but nothing is paid to the fishermen for it. Such fish is included in the catch figures as it was caught and landed, but in computing values it is recorded as being of no value inasmuch as the fishermen received nothing for it.

During 1939 and 1940 there was an appreciable proportion of the receipts on which no price was given. The general rule in such instances was to apply the average price paid for the species during that month. In a few cases almost the entire regional landings of some lesser species would be delivered in one or two loads, and if no price was recorded it was necessary to estimate the value by noting prices paid for similar quantities the preceding and following months, the same month of the preceding or following year, and in neighboring regions. The obvious solution for the future is to make certain that prices are not omitted on the receipts. This is being done.

Most of the fish landed by members of marketing firms can not be evaluated by the methods just described. The firms do not buy from fishermen, hence there is no price actually paid for the fish. Many of the species so handled are seldom taken by independent fishermen, hence we can not apply the prevailing market prices. So far our solution has been to ask officials of some of these companies to estimate for us what would be a fair price for each species, considering its abundance or scarcity during that month.

From Monterey northward, most of the trawler (drag net) caught fish is taken by marketing firms. Most bottom species are caught in quantity by drag nets and some species, such as sole, sand dabs and flounders, are seldom taken by any other method. The bulk of the shrimp catch is taken by marketing firms, but there is a fair number of independent shrimp fishermen. Oysters in California are raised, harvested and marketed by the same companies on privately owned beds.

These are the first value tables issued by the California Division of Fish and Game. As further use for such material develops, we will attempt to expand the tables in whatever manner seems most useful.—*Donald H. Fry, Jr.*

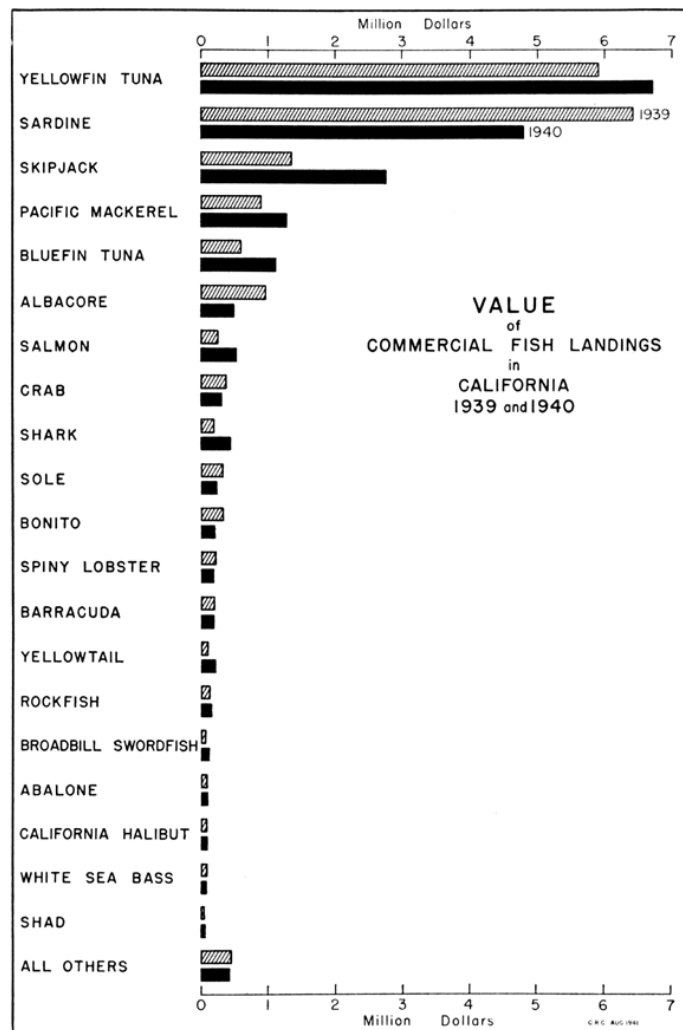


FIG. 4. Values of commercial fish landings in California, 1939 and 1940. In *poundage* the sardine catch is greater than that of all other species combined, but sardines are a very cheap fish and are exceeded in value by the comparatively expensive yellowfin tuna.

FIG. 4. Values of commercial fish landings in California, 1939 and 1940. In *poundage* the sardine catch is greater than that of all other species combined, but sardines are a very cheap fish and are exceeded in value by the comparatively expensive yellowfin tuna

TABLE 1
VALUE OF COMMERCIAL FISH LANDINGS IN THE EUREKA REGION DURING 1939 AND 1940
Fishing Boat Landings

Species	1939		1940	
	Pounds	Value	Pounds	Value
Cabezone.....			159	\$2
Cultus, Pacific.....	312,503	\$9,867	352,084	11,368
Flounder, Starry.....	242,197	6,248	197,290	5,013
Hake.....	3,870	39	4,980	49
Halibut, California.....	1,725	162	5,825	407
Halibut, Northern.....	377,771	28,684	247,412	18,446
Herring, Pacific.....	14,475	129	34,003	348
Mackerel, Pacific.....	18			
Perch.....	4,875	154	2,128	64
Rockfish.....	755,440	27,665	583,605	21,417
Sablefish.....	595,693	21,465	374,919	12,403
Salmon.....	1,675,116	138,590	3,369,492	264,719
Sand Dab.....	219,305	8,553	307,276	12,034
Sardine.....			765	22
Sea-trout, California.....	11	1		
Shark.....	38,472	1,015	649,977	81,135
Skate.....	58,650	584	23,749	252
Smelt.....	21,985	622	31,300	898
Sole.....	4,138,353	147,988	3,687,071	122,083
Tomcod.....	3,805	152	2,196	84
Tuna, Albacore.....	2,922	131	215	15
Turbot.....	420	17	700	24
Whitebait.....	140,041	10,330	108,054	7,493
Miscellaneous Fish.....	111,625	988	114,276	989
Crustacean:				
Crab.....	2,013,809	89,176	1,268,256	72,533
Mollusk:				
Clam, Soft-shell.....	534	53	314	32
Clam, Miscellaneous.....	17,738	694	21,275	772
Mussel.....	1,800	22		
Octopus.....	2,538	107	2,797	121
Oyster, Eastern.....	6,522	226		
Oyster, Native.....	1,905	134	9,360	655
Scallop.....	300	15		
Totals.....	10,764,418	\$493,801	11,399,478	\$633,378

TABLE 1
VALUE OF COMMERCIAL FISH LANDINGS IN THE EUREKA REGION DURING 1939 AND 1940

TABLE 2
VALUE OF COMMERCIAL FISH LANDINGS IN THE SACRAMENTO REGION DURING 1939 AND 1940
Fishing Boat Landings

Species	1939		1940	
	Pounds	Value	Pounds	Value
Carp.....	14,213	\$356	10,044	\$234
Catfish.....	217,014	27,455	151,630	21,702
Flounder, Starry.....	370	8	104	3
Hardhead.....	12,921	1,869	4,962	741
Pike.....	183	8	161	5
Salmon.....	496,933	57,024	1,515,588	120,094
Sardine.....	95,572,075	524,067	60,367,700	315,357
Shad.....	1,316,295	48,478	1,763,184	52,534
Split-tail.....	15,461	503	12,118	434
Sucker.....	53	2	106	2
Totals.....	97,645,518	\$659,770	63,825,597	\$511,106

TABLE 2
VALUE OF COMMERCIAL FISH LANDINGS IN THE SACRAMENTO REGION DURING 1939 AND 1940

TABLE 3
VALUE OF COMMERCIAL FISH LANDINGS IN THE SAN FRANCISCO REGION DURING 1939 AND 1940
Fishing Boat Landings

Species	1939		1940	
	Pounds	Value	Pounds	Value
Anchovy	214,907	\$2,769	13,775	\$277
Cabezone	208	2	1,488	17
Cultus, Pacific	193,966	5,970	271,088	9,399
Eel			7	
Flounder, Starry	478,092	12,847	582,027	15,235
Hake	9,641	94	13,058	179
Halibut, California	25,261	2,252	61,687	4,648
Halibut, Northern	21	2	817	95
Herring, Pacific	278,399	2,029	413,486	2,158
Kingfish	5,386	234	16,510	432
Mackerel, Pacific	65	4	928	36
Pereh	57,995	1,894	22,447	634
Ratfish	750	4		
Rock Bass			414	17
Rockfish	390,123	14,700	454,696	17,510
Sablefish	14,757	445	77,681	2,503
Salmon	438,141	36,886	1,177,086	91,404
Sand Dab	512,689	20,166	420,038	16,801
Sardine	396,270,664	2,183,573	170,991,694	888,384
Sea-bass, White	16,817	1,507	27,566	2,896
Shad	470	33	843	27
Shark	4,631,579	89,865	4,934,940	258,047
Skate	204,598	2,044	100,628	1,611
Smelt	172,313	6,307	116,461	4,227
Sole	4,207,821	124,825	3,423,981	97,711
Toneod	870	35	2,371	98
Tuna, Albacore	462,274	23,785	48,371	3,330
Tuna, Bluefin	4,715	231		
Turbot	99,463	3,817	54,817	2,164
Whitebait	25,444	1,670	17,478	1,237
Miscellaneous Fish	72,364	628	75,004	743
Crustacean:				
Crab	3,561,416	265,838	3,856,126	226,580
Shrimp	1,175,979	16,397	1,080,190	13,096
Mollusk:				
Clam, Soft-shell	75,187	3,414	62,921	2,858
Clam, Miscellaneous	7,799	434	5,215	262
Octopus	3,030	181	5,684	287
Oyster, Eastern	124,162	8,691	113,358	7,938
Oyster, Japanese	1,629,662	40,741	1,174,726	29,369
Oyster, Native	11,846	831	15,164	1,099
Snail			100	1
Totals	415,375,904	\$2,875,145	189,694,484	\$1,703,310

TABLE 3
VALUE OF COMMERCIAL FISH LANDINGS IN THE SAN FRANCISCO REGION DURING 1939 AND 1940

TABLE 4
VALUE OF COMMERCIAL FISH LANDINGS IN THE MONTEREY REGION DURING 1939 AND 1940
Fishing Boat Landings

Species	1939		1940	
	Pounds	Value	Pounds	Value
Anchovy.....	11,970	\$242	37,440	\$264
Cabezone.....	3,586	41	1,160	15
Cultus, Pacific.....	67,297	3,268	67,147	3,357
Flounder, Starry.....	16,295	535	24,476	618
Hake.....	150	2		
Halibut, California.....	28,587	2,000	20,655	1,971
Herring, Pacific.....	1,175	14	3,595	72
Kingfish.....	189,032	7,323	122,166	4,695
Mackerel, Horse.....	82,495	6,518	110,267	7,131
Mackerel, Pacific.....	828,433	22,510	452,036	18,033
Pereh.....	25,933	1,088	9,635	427
Pompano, California.....	201	99	420	108
Rockfish.....	1,328,520	53,039	1,658,696	65,291
Sablefish.....	33,918	626	86,723	1,206
Salmon.....	125,498	12,266	613,224	54,528
Sand Dab.....	84,025	3,631	42,842	1,985
Sardine.....	429,599,487	2,374,221	363,115,401	1,929,969
Sea-bass, Black.....	245	12	661	30
Sea-bass, White.....	103,789	9,397	133,321	8,733
Sea-trout, California.....	13			
Shad.....	3			
Shark.....	1,823,882	34,333	814,276	37,704
Skate.....	30,735	385	11,041	181
Smelt.....	99,231	4,319	100,931	4,094
Sole.....	1,174,532	37,772	130,795	4,625
Tuna, Albacore.....	4,528,522	234,920	834,726	58,752
Tuna, Bluefin.....			4,689	391
Tuna, Bonito.....	28	1	3,952	293
Turbot.....	4,702	177	6,541	219
Whitebait.....	4,398	433	1,917	160
Miscellaneous Fish.....	6,186	65	1,443	38
Crustacean:				
Crab.....	378,136	18,795	26,632	2,062
Shrimp.....	4,271	819	2,361	439
Mollusk:				
Abalone.....	789,450	36,730	813,400	40,643
Clam, Pismo.....	16,330	957	13,524	803
Clam, Miscellaneous.....	36	2		
Mussel.....			100	
Octopus.....	23,255	1,332	17,599	1,284
Squid.....	1,097,815	21,199	1,654,532	27,133
Totals.....	442,512,761	\$2,889,091	370,938,124	\$2,277,274

TABLE 4
VALUE OF COMMERCIAL FISH LANDINGS IN THE MONTEREY REGION DURING 1939 AND 1940

TABLE 5
VALUE OF COMMERCIAL FISH LANDINGS IN THE SANTA BARBARA REGION DURING 1939 AND 1940
Fishing Boat Landings

Species	1939		1940	
	Pounds	Value	Pounds	Value
Barracuda.....	180,499	\$14,357	127,125	\$6,927
Cabezone.....	229	8	532	29
Cultus, Pacific.....	931	40	786	38
Flounder, Starry.....	2,264	90	192	6
Flying Fish.....	81	4		
Halibut, California.....	330,333	25,362	398,921	30,108
Halibut, Northern.....	33	4	50	4
Herring, Pacific.....	1,456	39	200	4
Kingfish.....	539	19	288	9
Mackerel, Horse.....		45		1
Mackerel, Pacific.....	30,083	642	341,104	3,318
Perch.....	20,366	918	1,028	39
Pompano, California.....			1,582	285
Rock Bass.....	39,401	2,722	55,469	2,752
Rockfish.....	201,039	8,332	300,707	12,993
Sablefish.....	23		183	11
Sand Dab.....	7		55	2
Sardine.....	3,625	60	58,126	415
Sculpin.....	402	17	368	11
Sea-bass, Black.....	13,373	739	13,039	694
Sea-bass, White.....	221,874	17,870	204,291	17,929
Shark.....	2,490,123	52,575	911,221	35,967
Sheepshead.....	24,849	816	36,566	1,248
Skate.....	31,564	317	34,448	360
Smelt.....	24,057	892	20,853	762
Sole.....	216,694	5,907	129,636	3,447
Swordfish, Broadbill.....	75,080	8,898	311,978	41,000
Tuna, Albacore.....	1,561,755	86,314	1,108,308	76,364
Tuna, Bluefin.....	9,727	584	15,582	993
Tuna, Bonito.....	37,572	1,010	18,566	667
Tuna, Skipjack.....	10		299	15
Tuna, Yellowfin.....	75	4		
Turbot.....			3	
Whitefish, Ocean.....	13,516	720	36,782	1,724
Yellowtail.....			536	24
Miscellaneous Fish.....	10,201	436	14,362	594
Crustacean:				
Lobster, Spiny.....	122,238	22,923	94,091	17,524
Mollusk:				
Abalone.....	1,011,937	40,406	910,559	52,095
Clam, Pismo.....	176,364	8,947	153,954	7,696
Clam, Miscellaneous.....	20	1		
Octopus.....	167	7	48	1
Oyster, Eastern.....			2	
Oyster, Japanese.....	29,693	1,106	117,779	3,027
Totals.....	6,882,800	\$303,080	5,420,174	\$318,183

TABLE 5
VALUE OF COMMERCIAL FISH LANDINGS IN THE SANTA BARBARA REGION DURING 1939 AND 1940

TABLE 6
VALUE OF COMMERCIAL FISH LANDINGS IN THE LOS ANGELES REGION DURING 1939 AND 1940
Fishing Boat Landings

Species	1939		1940	
	Pounds	Value	Pounds	Value
Anchovy.....	1,921,024	\$19,205	6,251,827	\$56,962
Barracuda.....	2,418,211	110,977	2,949,489	141,099
Cabezone.....			53	1
Cabrilla.....	88,579	4,635	17,541	948
Catfish.....	22	4		
Cultus, Pacific.....	1,730	105	624	29
Flying Fish.....	20,125	883	37,709	1,482
Grouper.....	20,940	1,373	5,497	391
Hake.....			11	
Halibut, California.....	332,249	27,826	301,701	28,136
Kingfish.....	347,219	7,177	272,428	5,382
Mackerel, Horse.....	3,676,380	30,026	1,310,346	15,556
Mackerel, Pacific.....	73,654,557	768,422	116,061,349	1,219,019
Mackerel, Spanish.....	12,570	497	2,847	170
Mullet.....	97	8		
Perch.....	30,773	2,019	20,681	1,540
Pompano, California.....	3,203	814	8,574	1,525
Rock Bass.....	108,798	7,530	123,510	8,697
Rockfish.....	355,768	14,944	337,559	14,639
Sablefish.....	122,653	6,149	34,279	1,796
Salmon.....			24	3
Sand Dab.....	5,175	1,055	8,832	1,065
Sardine.....	238,516,091	1,328,384	309,332,556	1,652,990
Sculpin.....	88,808	7,384	87,599	7,099
Sea-bass, Black.....	212,456	11,758	276,582	15,757
Sea-bass, White.....	333,890	26,443	350,919	27,731
Shark.....	209,663	9,650	377,748	25,392
Sheepshead.....	29,836	1,050	17,122	637
Skate.....	11,307	271	7,773	163
Smelt.....	148,970	6,007	150,686	5,758
Sole.....	5,533	310	14,353	722
Swordfish, Broadbill.....	260,726	31,405	399,968	56,764
Tuna, Albacore.....	2,898,977	179,714	1,291,808	89,590
Tuna, Bluefin.....	10,369,609	527,097	17,137,035	962,159
Tuna, Bonito.....	8,760,121	283,568	4,133,781	153,013
Tuna, Skipjack.....	13,189,845	570,853	24,077,928	1,134,132
Tuna, Yellowfin.....	36,150,712	1,922,309	33,342,557	1,931,203
Turbot.....			63	2
Whitefish, Ocean.....	10,644	575	10,481	514
Yellowtail.....	1,011,252	33,373	3,271,641	108,783
Miscellaneous Fish.....	69,878	3,254	35,537	5,291
Crustacean:				
Crab, Rock.....	3,984	199	3,460	186
Lobster, Spiny.....	184,526	36,329	179,285	33,884
Mollusk:				
Abalone.....	3,053	123	125	6
Clam, Miscellaneous.....	20,598	1,570	14,007	972
Octopus.....	549	70	452	58
Snail.....			125	1
Squid.....	62,786	1,497	106,870	2,292
Totals.....	395,673,731	\$5,986,806	522,415,342	\$7,713,539

Shipments to Canneries from Other States and Foreign Countries

Species	1939		1940	
	Pounds	Value	Pounds	Value
Tuna, Albacore.....	6,422,872	\$396,609	2,908,432	\$211,064
Tuna, Bluefin.....	44	2		
Tuna, Skipjack.....	1,066,059	47,650	260,367	13,295
Tuna, Yellowfin.....			138,309	4,303
Totals.....	7,488,975	\$444,261	3,307,108	\$228,662

TABLE 6
VALUE OF COMMERCIAL FISH LANDINGS IN THE LOS ANGELES REGION DURING 1939 AND 1940

TABLE 7
VALUE OF COMMERCIAL FISH LANDINGS IN THE SAN DIEGO REGION DURING 1939 AND 1940
Fishing Boat Landings

Species	1939		1940	
	Pounds	Value	Pounds	Value
Anchovy			14,755	\$133
Barraeuda	1,493,344	\$61,082	620,669	24,963
Cabrilla	22,758	917	73,038	2,675
Cultus, Pacific	545	19	454	23
Flounder, Starry	63	6		
Flying Fish	114	7		
Grouper	20,490	788	73,326	2,901
Halibut, California	297,591	21,585	219,291	18,156
Herring, Pacific	6,737	68	1,909	32
Kingfish	725	22	836	21
Mackerel, Horse	1,280	32	11,979	133
Mackerel, Pacific	6,396,188	65,544	3,648,295	39,597
Mackerel, Spanish	3,471	201	85	3
Mullet	2,921	233	2,004	152
Pereh	245	7	2,448	72
Pompano, California		103		13
Rock Bass	117,954	5,770	66,409	3,834
Rockfish	302,236	12,680	234,356	10,847
Sand Dab			35	3
Sardine	831,639	4,423	2,167,161	9,025
Seulpin	39,418	1,901	33,866	1,810
Sea-bass, Black	234,751	11,917	75,155	3,980
Sea-bass, Short-fin	2,600	250	356	46
Sea-bass, White	318,026	22,667	197,211	13,022
Shark	34,191	536	171,022	2,989
Sheepshead	16,676	560	8,229	313
Skate			448	7
Smelt	7,780	274	28,894	1,058
Sole	1,859	123	1,916	158
Swordfish, Broadbill	258,554	24,103	175,256	20,295
Tuna, Albacore	545,612	34,113	601,888	42,902
Tuna, Bluefin	1,451,620	74,167	2,762,962	152,974
Tuna, Bonito	1,121,154	36,325	1,134,365	42,155
Tuna, Skipjack	16,931,036	729,491	32,571,928	1,608,712
Tuna, Yellowfin	74,267,014	3,990,049	80,417,343	4,776,198
Whitefish, Ocean	19,528	916	12,343	460
Yellowtail	1,855,036	62,298	2,684,927	94,413
Miscellaneous Fish	1,575	62	940	46
Crustacean:				
Lobster, Spiny	983,132	147,966	823,445	118,497
Mollusk:				
Squid	1,455	44	39,430	712
Totals	107,589,348	\$5,311,146	128,818,777	\$6,993,360

Shipments to Canneries from Other States and Foreign Countries

Species	1939		1940	
	Pounds	Value	Pounds	Value
Tuna, Albacore			229,264	\$20,628
Totals			229,264	\$20,628

TABLE 7
VALUE OF COMMERCIAL FISH LANDINGS IN THE SAN DIEGO REGION DURING 1939 AND 1940

TABLE 8
VALUE OF COMMERCIAL FISH LANDINGS IN CALIFORNIA DURING 1939 AND 1940

Species	1939		1940	
	Pounds	Value	Pounds	Value
Anchovy.....	2,147,901	\$22,216	6,317,797	\$57,636
Barracuda.....	4,092,054	186,416	3,697,283	172,989
Cabezone.....	4,023	51	3,392	64
Cabrilla.....	111,337	5,532	90,579	3,623
Carp.....	14,213	356	10,044	234
Catfish.....	217,036	27,459	151,630	21,702
Cultus, Pacific.....	576,972	19,259	692,183	24,214
Eel.....			7	
Flounder, Starry.....	739,311	19,734	804,089	20,875
Flying Fish.....	20,321	874	37,709	1,482
Grouper.....	41,430	2,161	78,823	3,292
Hake.....	13,661	135	18,049	228
Halibut, California.....	1,016,046	79,187	1,008,080	83,426
Halibut, Northern.....	377,825	28,690	245,279	18,545
Hardhead.....	12,921	1,869	4,962	741
Herring, Pacific.....	302,242	2,279	453,193	2,614
Kingfish.....	542,901	14,775	412,228	10,539
Mackerel, Horse.....	3,760,155	36,576	1,432,637	22,821
Mackerel, Pacific.....	80,960,374	857,122	120,503,712	1,280,063
Mackerel, Spanish.....	16,041	698	2,932	173
Mullet.....	3,018	241	2,004	152
Pereh.....	140,187	6,080	58,367	2,776
Pike.....	183	8	161	5
Pompano, California.....	3,494	913	10,679	1,931
Ratfish.....	750	4		
Rock Bass.....	266,153	16,022	245,502	15,300
Rockfish.....	3,333,126	131,360	3,569,529	141,797
Sablefish.....	767,044	28,685	573,785	17,919
Salmon.....	2,735,688	24,766	6,675,414	539,748
Sand Dab.....	821,204	33,406	779,078	31,890
Sardine.....	1,160,793,581	6,414,708	905,973,403	4,796,162
Seulpin.....	128,628	9,302	122,133	8,920
Sea-bass, Black.....	460,825	24,426	365,437	20,461
Sea-bass, Short-fin.....	2,600	250	356	46
Sea-bass, White.....	994,396	77,884	913,311	70,311
Sea-trout, California.....	24	1		
Shad.....	1,316,768	48,511	1,764,027	52,561
Shark.....	9,227,750	187,994	7,859,184	441,234
Sheepshead.....	71,361	2,426	61,917	2,198
Skate.....	336,854	3,601	238,287	2,574
Smelt.....	474,036	18,421	449,135	16,797
Sole.....	9,744,792	316,925	7,387,752	228,746
Split-tail.....	15,461	503	12,118	434
Sucker.....	53	2	106	2
Swordfish, Broadbill.....	594,360	64,406	886,902	118,059
Tomcod.....	4,675	187	4,567	182
Tuna, Albacore.....	16,423,234	955,586	7,023,012	502,645
Tuna, Bluefin.....	11,835,715	602,081	19,970,268	1,116,517
Tuna, Bonito.....	9,918,875	320,904	5,290,964	196,128
Tuna, Skipjack.....	31,195,959	1,347,994	56,910,522	2,756,154
Tuna, Yellowfin.....	110,417,801	5,912,362	113,898,209	6,711,704
Turbot.....	104,585	4,011	62,124	2,409
Whitebait.....	166,883	12,433	127,449	8,890
Whitefish, Ocean.....	43,688	2,214	59,606	2,728
Yellowtail.....	2,896,288	95,671	5,656,804	203,220
Miscellaneous Fish.....	271,829	5,427	241,562	7,701
Crustacean:				
Crab.....	5,953,361	373,809	5,151,014	301,175
Crab, Rock.....	3,984	199	3,460	186
Lobster, Spiny.....	1,289,896	207,218	1,096,821	169,905
Shrimp.....	1,180,250	17,216	1,082,551	13,535
Mollusk:				
Abalone.....	1,804,440	77,259	1,724,084	92,744
Clam, Pismo.....	192,694	6,904	167,478	8,499
Clam, Soft-shell.....	75,721	3,467	63,235	2,890
Clam, Miscellaneous.....	46,191	2,701	40,497	2,006
Mussel.....	1,800	22	100	
Octopus.....	29,539	1,697	26,580	1,751
Oyster, Eastern.....	130,084	8,917	113,360	7,938
Oyster, Japanese.....	1,659,355	41,847	1,292,505	32,396
Oyster, Native.....	13,751	965	24,524	1,754
Scallop.....	300	15		
Snail.....			225	2
Squid.....	1,162,056	22,740	1,800,632	30,157
Totals.....	1,483,933,455	\$18,963,100	1,296,048,348	\$20,399,440

This table includes actual landings at California ports by the commercial fishing fleet (Fishing Boat Landings) and shipments by truck, rail, and ocean liner to California canneries from other states and foreign countries.

TABLE 8
VALUE OF COMMERCIAL FISH LANDINGS IN CALIFORNIA DURING 1939 AND 1940

3. BAIT RECORDS

Along the coast of southern California from Ventura County south to San Diego a considerable fishery for live bait for the use of sport fishing boats has developed. Each year more and more people participate in ocean sport fishing and the live bait fishery has expanded correspondingly. This increase has emphasized the need for adequate records of the amount and kinds of bait used in this fishery. The method of collecting these records is summarized together with a brief description of the fishery.

The busiest season is from about the first of May to the end of September, though some of the boats operate throughout the year. Frequently, the boats are used for other kinds of fishing during the winter.

Several species are involved in the bait catch but anchovies and sardines are the most important, comprising 98 per cent of the total. The fish taken are from 2½ to 6 inches long. Smaller fish usually escape through the net and larger fish are not so satisfactory. Sardines of bait size are all immature fish whereas about half the anchovies taken are adults. Although not desirable for bait, immature kingfish, queenfish and smelt are often taken with the anchovies and sardines.

The fishermen begin their search for live bait at about daybreak and continue until midday if fish are not found. A school of fish is located by their "flipping" at the surface which they often do while feeding. If they are being pursued by predatory fish they will often break the surface in large numbers. If the fish do not show, the net is sometimes set "blind" in a likely location. The boats engaged in this type of fishing are about 35 feet long and have enough beam aft to support a tank of sea water weighing five tons or more. There must be enough additional space on the stern for four men to pull in the net and stack it. The nets used are lamparas or round haul nets and are from 75 to 150 fathoms long and 5 to 15 fathoms deep.¹ The mesh of the net diminishes from four inches near the ends to one-half inch in the center or "bag".

The net is set in a circle around the school and then pulled onto the boat as rapidly as possible. As the net is pulled in, the fish are concentrated in one portion of the net from which they are transferred to the bait tank with a long-handled scoop net which holds from 7 to 25 pounds of fish. The tank is supplied with a constant flow of fresh sea water sufficient to change the water in the tank about every 15 minutes. The number of scoops is always counted, as crowding will kill the whole catch.

In addition to the bait transferred directly from the net to the sport fishing boats or used from the tank of the bait boat, many of the boat operators hold fish in receivers. These are series of boxes made

¹ Scofield, W. L. Sardine fishing methods at Monterey, California. California Division of Fish and Game. Fish Bulletin, no. 19, 61 pp., 1929.

of slats and sunk in the water so that their lids are just above the surface. These boxes are generally about six feet square and six feet deep and are used to maintain a supply of bait over a period of more than a day. Under ideal conditions, sardines can be kept indefinitely but anchovies do not survive for more than a few days.



FIG. 5. Transferring live bait from the bait boat to the receiver. Photograph courtesy of Los Angeles Times.

FIG. 5. Transferring live bait from the bait boat to the receiver. Photograph courtesy of Los Angeles Times

Early in the summer of 1938 a program of estimating the relative abundance of bait was started by the Bureau of Marine Fisheries. This information was gathered by personal interviews about every two weeks with the captains of the bait boats. Four levels of abundance were recognized: (1) sufficient bait, usually enough to fill the demand, was taken with the first haul; (2) enough bait to fill the demand but difficult to obtain; (3) some bait but not enough to fill the demand;

and (4) no bait at all. Estimates were made of the ratio of sardines to the total. This method of gathering information did not prove very accurate but laid the groundwork for the system used the following year. As live bait is not brought ashore and is sold directly to other fishermen, it is not included in the regular records of commercial fish landings collected by the California Division of Fish and Game. In 1939 forms were supplied to the fishermen to obtain a more uniform and exact record. The completed daily forms are mailed to the Division each month. This information is recorded on punch cards, compiled and analyzed.

These records do not include the bait used by the commercial tuna boats.

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF FISH AND GAME

Daily Bait Record

Date Aug. 3, 1941 Town San Pedro
No. of hauls 5 Fish and Game No. 5621
Block areas fished 719 Boat name Jitters

Indicate below the number of scoops of each species taken. If you fished and even though no fish were caught fill in the blanks above.

SPECIES		NO. OF SCOOPS
SARDINES	100	5
ANCHOVIES	110	60
QUEENFISH (Herring)	440	
SMELT	180	1
KINGFISH (Tomcod)	435	

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STATE PRINTING OFFICE

N^o 56402



FIG. 6. Form used by bait fishermen in reporting catches of live bait.

FIG. 6. Form used by bait fishermen in reporting catches of live bait

As the fishermen record their catches in numbers of scoops of bait taken, it is necessary to convert the figures to pounds. The conversion factor was determined by weighing from 50 to 100 scoops of live fish under regular operating conditions on each of seven boats. The average was 17 pounds per scoop. The scoop is the unit of measure accepted by the bait business and is worth from 33 cents to a dollar.

TABLE 9
LIVE BAIT USED BY SPORT FISHERMEN

	<i>Tons</i>	
	<i>1939</i> <i>(26 Boats)</i>	<i>1940</i> <i>(30 Boats)</i>
Sardines -----	573.4	335.9
Anchovies -----	1503.2	2006.0
Smelt -----	3.0	5.7
Kingfish -----	9.4	6.5
Queenfish -----	37.6	35.0
Total -----	2126.6	2389.1

TABLE 9
LIVE BAIT USED BY SPORT FISHERMEN

In the table are shown the tons of live bait recorded in 1939 and 1940. It has not yet been possible to obtain complete records from all the boats. However, the figures in this table represent about 80 per cent of the live bait taken for sport fishing. As mentioned previously almost all the live bait taken is either sardines or anchovies. For the 1939 and 1940 seasons, the table indicates that the catch of anchovies far exceeded that of sardines, in spite of the fact that sardines are usually preferred when both species are available. Collection of records over a series of years will give a measure of the relative abundance of anchovies and sardines and of the changes in this ratio which take place from year to year.

The table also shows that the total catch for 1940 was greater than for 1939. This was the result of a greater demand for bait and a larger number of boats operating. It does not indicate a greater abundance of bait, for the average total catch per boat was 3 per cent more in 1939 than in 1940. It is interesting to note that the larger total catch in 1940 resulted from an increase in the tonnage of anchovies whereas the catch of sardines decreased. The general opinion among the bait men was that in 1940 unusually large numbers of anchovies were present which offset any scarcity of other species, especially sardines.—*J. Alfred Aplin.*

4. COMMERCIAL FISHERMEN

For the 1940–1941 license year there was a total of 9,047 commercial fishermen along the coast and the rivers of California. Because of their fishing operations on the high seas and near defense areas, there is a widespread interest in the nationalities of the fishermen. Fifty per cent of the fishermen in California are of foreign birth, but only 25 per cent of the State's total are actually aliens. Half of the 4,531 foreign born have acquired citizenship and one-fifth have taken out first naturalization papers. Eight per cent of the 9,047 are Japanese who are denied citizenship and 5 per cent other nationals who have made no offer of allegiance.

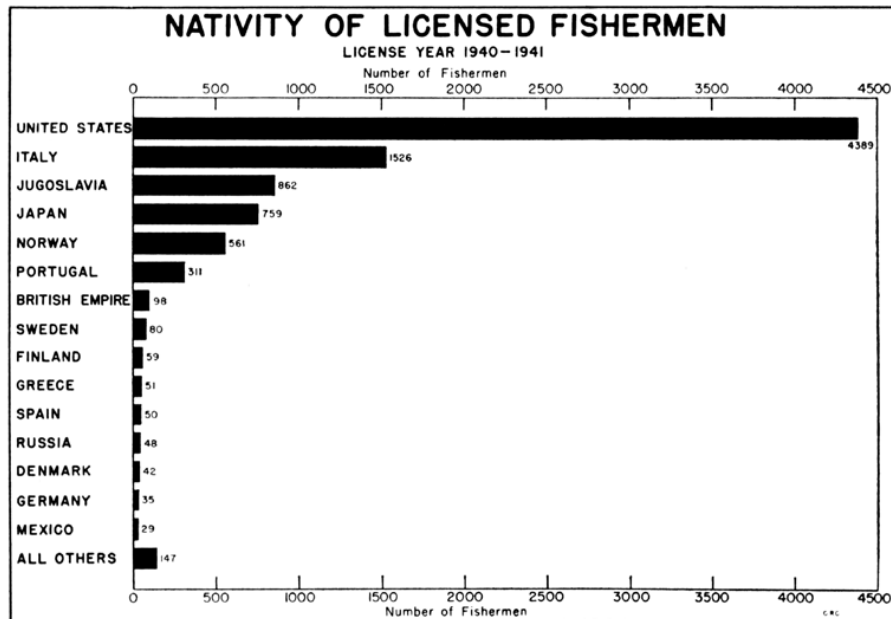


FIG. 7

FIG. 7

There are few trades whose membership is so carefully identified or whose activities are as closely followed in this State. In addition to the California Division of Fish and Game marine patrol, the market and marine sport fishermen are under the close surveillance of at least five federal agencies which patrol the seas and the waterfront. The men are licensed, the boats registered, and the fish reported on sales receipts. Additional checks are made on fishermen returning from foreign waters.

At the 1941 session of the State Legislature a new law was enacted, requiring an additional registration and identification of the fishermen and boat owners. Each commercial fisherman and boat owner is

required to register at an office of the Division of Fish and Game and to furnish two copies of a photograph of himself, at which time he is fingerprinted. He is issued an identification card which must be renewed every five years. This applies to all commercial fishermen, whether alien or citizen.—*Geraldine Conner*.

TABLE 10
1940-1941 LICENSED COMMERCIAL FISHERMEN

Citizens :	
United States born (excluding orientals)	4,060
United States born Chinese	38
United States born Japanese	289
Naturalized citizens	2,276
Noncitizens :	
First naturalization papers	989
Aliens	1,266
Nativity not recorded	129
Total licensed commercial fishermen, 1940-1941	9,047

TABLE 10
1940-1941 LICENSED COMMERCIAL FISHERMEN

TABLE 11
CALIFORNIA COMMERCIAL FISHERMEN, LICENSE YEAR 1940-1941

Region of residence	Nativity	Number of fishermen	Total by region
Eureka	United States	151	252
	Finland	32	
	All others	69	
Sacramento	United States	229	434
	Italy	151	
	Greece	28	
	All others	26	
San Francisco	United States	479	1,436
	Italy	436	
	Norway	298	
	Jugoslavia	83	
	Japan	35	
	All others	105	
Monterey	United States	557	1,195
	Italy	439	
	Japan	77	
	Spain	36	
	All others	86	
Santa Barbara	United States	308	393
	Italy	15	
	Portugal	12	
	All others	58	
Los Angeles	United States	1,815	3,534
	Jugoslavia	718	
	Japan	494	
	Italy	206	
	Norway	79	
	All others	222	
San Diego	United States	703	1,452
	Italy	264	
	Portugal	251	
	Japan	152	
	Mexico	21	
	All others	61	
Alaska, Washington, Oregon and other out of state fishermen licensed in California	Norway	148	351
	United States	146	
	Jugoslavia	38	
	All others	19	
Total licensed commercial fishermen, 1940-1941			9,047

TABLE 11
CALIFORNIA COMMERCIAL FISHERMEN, LICENSE YEAR 1940-1941

5. COMMERCIAL FISHING FLEET

During 1939 and early 1940 there was a noticeable increase in the number of large boats being built and registered to enter the California fishing fleet. Most of these were purse seine vessels and alarm was felt because of the possible effect of this added fishing effort on the sardine and mackerel fisheries. But the 1940–1941 boat census shows no increase in the number of these larger boats actually engaged in fishing as the United States Navy bought many of the new sturdy purse seiners and Mexico also came into the market for boats of this type, all to be used in coast defense work. The British Government also purchased a number of the fast taxi-type craft from the west coast.

The increase of 350 boats in the 1940–1941 registration over the previous year is most noticeable in the group between 25 feet and 39 feet long. This is due to the new development in the shark fishery, intensive mackerel fishing and the steady development of the marine sport fishery. Since the party boats sell their excess catches and the commercial boats occasionally take out sport fishermen and all exploit the same species, the two groups actually comprise one commercial fleet. During 1940, 602 party boat permits were issued.—*Geraldine Conner*.

TABLE 12
COMMERCIAL FISHING FLEET, 1940-1941 *

Region of home port	Number of boats, grouped by length					Total number of boats from each region
	Up to 24 feet	25 to 39 feet	40 to 64 feet	65 to 84 feet	85 feet and over	
Eureka.....	12	189	21			222
Sacramento.....	98	156	5	1		260
San Francisco.....	43	451	68	22	6	590
Monterey.....	99	196	45	68	4	412
Santa Barbara.....	66	106	32	1		205
Los Angeles.....	257	642	233	109	39	1,280
San Diego.....	46	113	77	26	50	312
Alaska, Washington and Oregon..	2	34	58	70	9	173
Total number of boats.....	623	1,887	539	297	108	3,454

* Market fishermen's license year is April 1 of one year to March 31 of the following year.

TABLE 12
COMMERCIAL FISHING FLEET, 1940-1941

6. TABLES OF COMMERCIAL FISH LANDINGS IN CALIFORNIA, 1940

The tables of commercial fish landings in California for the year 1940 differ from those previously published in that they do not include the record of shipments of fresh and frozen fish from other states and foreign countries to the fresh fish markets in California. This record has been omitted because it is a voluntary report; it is incomplete and therefore misleading. The law requires that the California Division of Fish and Game be given a complete record of all fresh and frozen fish, mollusks and crustaceans landed in the State by the commercial fishing boats and licensed fishermen, and it also requires a record of shipments of fresh or frozen fish from other states and countries for use in the California canneries. All voluntary records of fish shipped to the markets from outside the State are compiled, but like the bait records and the landings of the party fishing boats, this poundage is included in a separate category and not confused with the production records of our market fishermen.

In this connection it will be noted that the tables include fishing boat landings from California waters and from waters to the north and south of the State and shipments by truck, rail and cargo vessel to California canneries from outside the State. In the State-wide tables, including the table of values (Table 8), shipments and fishing boat landings are combined, whereas in the regional tables which follow, shipments and fishing boat landings are kept separate and the points of origin of the fish are shown. In the regional tables of value (Tables 1 2 3 4 5 6 7, inc.) fishing boat landings only are shown, but no separation is made for origin. Thus, the different types of tables present the same information in a variety of ways and any apparent discrepancies between tables are due to differences in their contents.

In the tables for 1939 and 1940, we acknowledge an error in the shark figures due to the fact that in this rapidly developing fishery, the demand for livers exceeded that for the meat and some fishermen made a practice of dumping the carcasses at sea. A new law gives the necessary control of the shark fishery for the future, and since a correcting factor for the total here presented would be conjecture we give the weights as reported to us. A similar condition existed in the shad fishery during 1940, where quantities of shad roe were reported rather than the round weight for the roe shad. The percentage of error introduced into the balance of the tables for cleaning loss is not of alarming proportions.

The boundaries of the regions of landing shown in the tables are as follows:

Eureka region: Del Norte, Humboldt and Mendocino counties.

Sacramento region: Sacramento and San Joaquin river systems with the delta areas, including Suisun Bay and Lake County.

San Francisco region: Sonoma, Marin, San Francisco and San Mateo counties, including San Francisco and San Pablo bays.

Monterey region: Santa Cruz and Monterey counties.

Santa Barbara region: San Luis Obispo, Santa Barbara and Ventura counties.

Los Angeles region: Los Angeles and Orange counties.

San Diego region: San Diego and Imperial counties.

The following conversion factors are used when shellfish are reported in numbers rather than in pounds: crabs, 2 pounds each; abalones, 50 pounds per dozen; gaper clams, 2 pounds each; Pismo clams, 24 pounds per limit of 15; Washington clams, 7 pounds per dozen; eastern oysters, 30 pounds per hundred; Japanese oysters, 50 pounds per hundred, or 8 pounds per gallon cleaned.—*Geraldine Conner*.

ORIGIN OF COMMERCIAL FISH LANDINGS IN CALIFORNIA DURING 1940

Species	California	North of State Boundary	South of International Boundary	Japan	Total pounds
Anechoy	6,317,797				6,317,797
Barnacuda	2,545,380		1,151,903		3,697,283
Cabezone	3,392				3,392
Cabrilla			90,579		90,579
Carp	10,044				10,044
Catfish	151,630				151,630
Cultus, Pacific	690,522	1,350	311		692,183
Eel	7				7
Flounder, Starry	803,829	260			804,089
Flying Fish	37,709				37,709
Grouper			78,823		78,823
Hake	18,049				18,049
Halibut, California	921,531		86,549		1,008,080
Halibut, Northern	247,659	620			248,279
Hardhead	4,962				4,962
Herring, Pacific	453,193				453,193
Kingfish	412,228				412,228
Mackerel, Horse	1,432,637				1,432,637
Mackerel, Pacific	120,503,712				120,503,712
Mackerel, Spanish			2,932		2,932
Mullet	2,004				2,004
Perch	58,012		355		58,367
Pike	191				191
Pompano, California	10,593		86		10,679
Rock Bass	239,510		5,992		245,502
Rockfish	3,480,614	1,450	87,465		3,569,529
Sablefish	573,785				573,785
Salmon	6,674,775		639		6,675,414
Sand Dab	777,208	1,870			779,078
Sardine	905,973,203		200		905,973,403
Sculpin	122,071		62		122,133
Sea-bass, Black	42,784		322,653		365,437
Sea-bass, Short-fin	596				596
Sea-bass, White	809,731		104,080		913,811
Shad	1,764,027				1,764,027
Shark	7,855,989		3,195		7,859,184
Sheepshead	55,749		6,168		61,917
Skate	238,287				238,287
Smelt	448,077		1,058		449,135
Sole	7,290,577	97,175			7,387,752
Spitt-tail	12,118				12,118
Sucker	106				106
Swordfish, Broadbill	829,971		56,931		886,902
Tomcod	4,567				4,567
Tuna, Albacore	2,331,932	3,255,858	880	1,434,342	7,023,012
Tuna, Bluefin	18,849,968		1,120,300		19,970,268
Tuna, Bonito	3,553,069		1,737,895		5,290,964
Tuna, Skipjack	2,985,111		53,665,044	260,367	56,910,522
Tuna, Yellowfin	237,527		113,660,682		113,898,209
Turbot	62,124				62,124
Whitebait	127,449				127,449
Whitefish, Ocean	47,565		12,041		59,606
Yellowtail	329,036		5,627,768		5,956,804
Miscellaneous Fish	237,759	3,060	743		241,562
Crustacean:					
Crab	5,148,926	2,088			5,151,014
Crab, Rock	3,460				3,460
Lobster, Spiny	281,102		815,719		1,096,821
Shrimp	1,082,551				1,082,551
Mollusk:					
Abalone	1,724,084				1,724,084
Clam, Cockle	14,476				14,476
Clam, Gaper	2,988				2,988
Clam, Pismo	167,478				167,478
Clam, Razor	50				50
Clam, Soft-shell	63,235				63,235
Clam, Washington	22,983				22,983
Mussel	100				100
Octopus	26,580				26,580
Oyster, Eastern	113,360				113,360
Oyster, Japanese	1,292,505				1,292,505
Oyster, Native	24,524				24,524
Snail	225				225
Squid	1,800,632				1,800,632
Total pounds	1,112,348,855	3,364,370	178,640,414	1,694,709	1,296,048,348

This table includes actual landings at California ports by the commercial fishing fleet (Fishing Boat Landings) and shipments by truck, rail, and ocean liner to California canneries from other states and foreign countries.

REGION OF LANDING OF COMMERCIAL FISH LANDINGS IN CALIFORNIA DURING 1940

Species	Eureka Region	Sacramento Region	San Francisco Region	Monterey Region	Santa Barbara Region	Los Angeles Region	San Diego Region	Total pounds
Anchovy			13,775	37,440		6,251,827	14,755	6,317,797
Barracuda					127,125	2,949,489	620,669	3,697,283
Cablefish	129		1,488	1,169	832	33		3,592
Caballa						17,541	73,038	90,579
Carr		10,444						10,444
Catfish		151,630						151,630
Cutts, Pacific	332,084		271,088	67,147	786	624	454	692,183
Eel			7					7
Flounder, Starry	197,290	104	582,027	24,476	192			804,089
Flving Fish					37,799			37,799
Grouper					3,497			3,497
Hake	4,980		13,638			11		18,649
Hallbut, California	5,825		61,687	20,655	398,921			1,068,089
Hallbut, Northern	247,412		817		301,791		219,291	248,279
Hardhead		4,962			50			4,962
Herring, Pacific	34,003		413,486	3,295	200			1,999
Kneffish			16,610	122,199	288	272,428		432,228
Mackerel, Horse				110,267	45	1,310,346		1,422,658
Mackerel, Pacific			528	482,030	341,194	118,091,349		120,563,712
Mackerel, Spanish					2,847			2,847
Mullet								85
Perch		2,128		9,635	1,028	20,681		2,904
Pike			22,447				2,448	24,895
Pompano, California		161		420				161
Rock Bass				1,582	8,574			10,156
Roofish			114	38,469	123,210	96,409		259,902
Salmon	583,605		454,606	1,658,696	390,707	537,539	234,356	3,569,529
Subfish	374,919		77,681	86,723	183	14,279		573,785
Sardine	3,230,992	1,515,588	1,177,096	611,224	14			6,955,114
Sand Dab	397,276		429,008	42,842	55	8,832		779,978
Sardine	750	60,367,700	170,991,694	363,115,401	58,130	309,332,566	2,167,161	955,975,403
Sculpin				368	87,899			122,133
Sea-bass, Black				13,659	276,582			290,241
Sea-bass, Short-fin				661				661
Shad		1,763,184		27,569	133,321	350,919		1,975,113
Shark			843					843
Shark	649,977		4,934,940	814,276	911,221	372,748	171,022	7,839,184
Sheepshead					36,569	17,122		53,691
Skate	23,749		160,628	11,041	34,648	7,773		238,839
Sole	31,200		118,461	100,811	20,562	150,698		481,732
Sole	3,087,071		3,423,981	130,795	129,636	14,333	1,916	7,887,732
Spin-tail		12,118						12,118

DIVISION OF FISH AND GAME

Sucker.....		106						106
Swedfish, Broadbill.....					311,978	399,668	175,256	886,002
Tomcod.....	2,196		2,371					5,567
Tuna, Albacore.....	215		48,371	834,726	1,108,308	4,200,240	831,152	7,023,012
Tuna, Bluefin.....				4,689	15,452	17,187,035	2,762,962	19,970,268
Tuna, Bonito.....				3,932	18,366	4,132,781	1,194,365	5,266,064
Tuna, Skipjack.....					299	24,335,293	32,671,628	56,910,522
Tuna, Yellowfin.....						35,480,895	30,417,343	113,395,309
Turbot.....	700		54,817	6,541		3	63	62,124
Whitefish.....	108,054		17,478	1,917				127,449
Whitefish, Ocean.....					33,782	10,481	12,343	56,606
Yellowtail.....					336	3,271,641	2,684,627	5,936,904
Miscellaneous Fish.....	114,376		75,094	1,443	14,392	35,357	940	241,262
Crustacean:								
Crab.....	1,268,356		3,856,126	26,632		3,460		5,151,014
Crab, Rock.....								3,460
Lobster, Spiny.....					94,061	179,283	825,445	1,096,821
Shrimp.....			1,080,190	2,361				1,082,551
Mollusk:								
Alabaster.....				813,400	910,559	125		1,724,084
Clam, Cockle.....			409			14,007		14,476
Clam, Geiger.....			2,988					2,988
Clam, Pismo.....				13,324	153,654			167,478
Clam, Razor.....	50							50
Clam, Soft-shell.....	314		62,821					63,235
Clam, Washington.....	21,225		1,758					22,983
Mussel.....				100				100
Octopus.....	2,797		5,654	17,399	48	452		26,880
Oyster, Eastern.....			112,338		2			112,390
Oyster, Japanese.....			1,174,726		117,779			1,292,505
Oyster, Native.....	9,360		15,194					24,354
Snail.....			100			125		225
Squid.....				1,654,332		106,570	20,430	1,800,532
Total pounds.....	11,399,478	63,825,597	180,691,484	370,938,124	5,420,174	825,722,430	129,048,041	1,296,048,318

This table includes actual landings at California ports by the commercial fishing fleet (Fishing Boat Landings) and shipments by truck, rail, and ocean liner to California canneries from other states and foreign countries.

COMMERCIAL FISH CATCH OF CALIFORNIA

MONTHLY COMMERCIAL FISH LANDINGS IN CALIFORNIA DURING 1940

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Anchovy.....	532,804	246,227	119,668	9,169	24,913	3,065	157,672	683,989	680,296	1,480,337	1,614,006	645,276	6,317,737
Barramunda.....	288,205	194,181	577,496	567,248	377,744	373,412	384,432	286,175	185,336	305,395	244,506	179,304	3,097,282
Cabonno.....	35	101	779	117	333	384	850	886	92	124	374	117	3,352
Calappa.....	9,781	22,479	9,491	14,533	25,015	345	8,633	15	126	186	623	275	91,379
Carp.....	964	1,392	4,321	2,221	244	107	2,203	2,665	12,553	14,793	18,815	17,791	10,044
Catfish.....	7,215	7,225	26,942	31,559	2,474	2,290	2,290	2,665	12,553	14,793	18,815	17,791	10,044
Citrus, Pacific.....	12,136	33,552	71,198	43,296	36,974	26,156	33,049	61,850	31,349	67,960	170,319	64,434	692,183
Ed.....	36,295	97,909	130,549	66,589	68,459	97,102	97,509	38,818	31,347	92,826	50,185	16,170	894,089
Flounder, Starry.....	5,328	3,745	607	3,131	7,917	3,374	9,710	9,729	3,159	75	.....	.....	37,709
Plying Fish.....	5,328	3,745	607	3,131	7,917	3,374	9,710	9,729	3,159	75	.....	.....	75,323
Grouper.....	230	.....	55	.....	5,583	3,221	2,170	2,200	2,118	1,827	575	.....	18,040
Hake.....	98,346	130,421	138,901	111,961	80,907	63,636	65,236	80,790	84,813	46,133	48,793	42,601	1,006,080
Halibut, Northern.....	24	33	30	94,775	45,628	53,447	42,189	4,075	7,941	340	.....	.....	248,270
Hardhead.....	247,635	165,714	153,226	1,404	3,975	33,696	29,466	20,544	34,347	31,523	1,014	17,523	452,193
Herring, Pacific.....	26,494	35,579	50,577	83,843	40,576	33,696	29,466	20,544	34,347	31,523	1,014	17,523	412,228
Kingsfish.....	30,108	14,105	25,272	6,879	20,451	32,704	89,727	311,924	255,911	398,420	183,439	33,690	1,433,637
Mackerel, Horse.....	15,624,379	9,725,800	3,965,864	43,193	118,344	156,570	2,410,085	4,754,587	8,554,224	33,164,253	27,578,497	14,098,964	120,562,712
Mackerel, Pacific.....	150	1,599	.....	61	262	37	509	280	315	441	897	85	2,094
Mackerel, Spanish.....	3,504	6,893	12,660	14,016	883	396	7,960	4,728	4,379	1,415	1,086	1,430	56,367
Mullet.....	12	.....	33	31	.....	.....	.....	.....	.....	.....	.....	.....	161
Pike.....	2,292	568	1,547	136	75	2	6	61	2,098	3,069	273	220	10,079
Rock Bass.....	12,587	11,446	24,999	16,318	28,963	29,323	45,892	33,295	10,900	9,044	12,535	10,642	245,562
Rockfish.....	246,139	340,653	532,777	410,693	332,107	292,279	324,516	175,731	144,300	247,435	235,801	223,664	3,569,559
Sablefish.....	18,838	9,396	15,525	37,990	36,742	58,640	150,279	50,389	43,396	70,366	43,359	14,198	573,755
Salmon.....	26,092	44,576	65,302	294,679	1,132,477	705,469	1,127,533	2,214,423	1,993,943	1,665	.....	.....	6,575,414
Sand Dab.....	33,699	35,827	46,464	66,838	114,114	66,115	83,360	73,904	48,901	71,620	55,133	32,333	779,078
Sardine.....	120,852,654	74,267,332	18,243,827	208,570	174,431	133,088	249,699	3,595,946	6,824,356	197,475,706	303,431,128	189,290,776	905,972,468
Sculpin.....	7,619	6,334	11,705	11,888	14,919	13,897	11,129	10,814	6,245	7,601	15,638	4,047	122,133
Sea-bass, Black.....	19,088	8,499	4,753	17,528	8,919	11,850	63,088	89,000	62,542	52,663	19,599	10,641	365,437
Sea-bass, Shortfin.....	38,624	17,637	22,552	15,949	20,672	15,949	72,329	135,806	362,616	114,387	46,546	17,478	66,388
Sea-bass, White.....	.....	450	77,180	703,023	983,402	.....	.....	.....	.....	.....	.....	.....	1,784,027
Shad.....	766,446	474,410	94,113	141,965	399,242	683,110	526,417	644,912	1,083,279	801,906	842,647	890,437	7,859,184
Shark.....	11,538	19,560	12,862	6,807	1,036	2,364	1,549	1,530	726	4,651	4,253	4,308	61,917
Sheepshead.....	43,129	32,452	26,165	18,399	16,636	8,264	9,011	14,833	15,290	16,138	11,226	25,214	238,287
Smelt.....	41,220	38,196	32,086	30,523	30,488	32,838	36,325	31,436	44,164	38,548	39,343	33,296	446,135
Sole.....	719,511	563,312	572,215	664,087	681,767	665,642	634,516	614,070	533,499	717,023	699,184	392,926	7,387,752

DIVISION OF FISH AND GAME

Split-tail.....	406	678	236	230	427	30	383	1,751	4,172	2,744	1,061	12,119
Sucker.....	14	12	75								5	106
Swordfish, Broadbill.....						27,660	149,843	328,799	232,020	106,750	11,882	888,902
Tomcod.....	488	481	386	197	45	18	350	260	540		401	4,507
Tuna, Albacore.....	56,567	40,879	179,546	12,000		85	714,127	1,008,791	4,110,422	130,551	56,870	7,023,012
Tuna, Bluefin.....	223,150	135,054	102,264	73,433	54,144	43,404	2,037,023	3,174,885	754,176	97,455	209	19,070,388
Tuna, Bonito.....	561,031	542,431	1,533,074	5,532,419	3,443,969	3,150,871	5,717,865	10,110,371	7,854,577	5,115,534	5,965,771	4,683,669
Tuna, Skipjack.....	8,689,736	5,256,240	7,512,253	7,250,209	12,934,449	10,734,970	16,139,842	10,363,735	7,901,465	9,709,219	8,702,313	8,447,699
Tuna, Yellowfin.....	1,607	3,150	4,474	12,139	12,492	2,270	4,462	6,731	6,088	4,064	1,740	1,545
Turbot.....	13,227	17,417	24,022	22,113	12,562	12,493	12,264	5,339	5,509	864	50	1,289
Whitefish.....	12,550	8,876	9,575	4,138	2,816	622	1,220	721	800	2,007	6,540	6,708
Whitefish, Ocean.....	106,124	99,212	91,570	172,550	145,850	330,107	476,427	2,710,735	879,774	192,944	333,499	418,042
Yellowtail.....	10,656	15,455	19,750	22,579	22,147	30,552	26,597	16,792	19,652	25,407	20,490	11,085
Miscellaneous Fish.....												241,592
Crustaceans:												
Crab.....	344,712	402,128	557,040	638,642	602,996	496,514	558,568	343,602	1,368		655,306	437,893
Crab, Rock.....	162	334	392	131		398	389	160			308	94
Lobster, Spiny.....	240,660	201,922	138,431								130,528	195,724
Shrimp.....	20,899	30,744	47,279	54,929	68,479	137,138	264,891	192,745	84,740		63,102	77,541
Mollusks:												
Abalone.....	21,150		161,600	85,200	384,575	187,550	228,025	136,825	155,450	113,650	178,154	71,965
Clam, Cockle.....	1,144	2,614	2,797	2,060	1,484	1,440	2,361	198	40	248	44	66
Clam, Geyer.....	239	440	292	360	300	320	220	260	240	180	200	20
Clam, Pismo.....	12,203	12,509	16,919	12,952	12,631	15,677	18,576	16,972	12,110	13,178	14,114	8,957
Clam, Razor.....						80						30
Clam, Soft-shell.....	4,124	4,011	4,280	4,047	4,000	3,870	5,159	3,759	6,790	7,883	5,464	4,851
Clam, Washington.....	2,909	2,976	2,960	2,949	358	128	88	104	3,112	3,354	2,732	2,353
Mussel.....		100										100
Octopus.....	558	662	1,202	1,478	3,499	5,907	4,741	1,245	1,468	2,515	1,402	26,580
Oyster, Eastern.....	10,528	11,636	11,862	9,183	6,140	5,308	5,096	5,375	5,967	10,944	12,251	14,967
Oyster, Japanese.....	125,093	137,004	119,430	83,621	61,467	44,578	55,595	73,917	113,835	172,754	154,421	159,580
Oyster, Native.....	2,530	1,650	2,470	1,610	2,358	5,792	4,078	2,060	1,510	1,476	167	24,524
Snail.....											125	100
Squid.....	2,396	50,771	26,530	66,835	1,210,155	79,620	179,520	40,065	31,508	19,500	38,197	63,585
Total pounds.....	180,349,020	93,026,432	361,116,496	18,097,544	29,050,489	23,801,934	38,768,577	47,204,418	44,848,144	254,878,920	352,033,313	211,068,291
												1,296,048,348

This table includes actual landings at California ports by the commercial fishing fleet (Fishing Boat Landings) and shipments by truck, rail, and ocean liner to California canneries from other states and foreign countries.

COMMERCIAL FISH CATCH OF CALIFORNIA

COMMERCIAL FISH LANDINGS IN THE EUREKA REGION DURING 1940

Fishing Boat Landings from California Waters

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Cabezone									92		67		159
Catfish, Pacific	6,189	18,547	35,591	25,705	10,555	11,411	33,484	47,705	27,878	25,700	85,916	22,073	350,734
Flounder, Starry	159	6,841	10,093	14,570	5,499	48,290	69,825	17,199	8,460	8,740	8,725		197,030
Hake	230				950	250	250	1,350	1,650	300			4,080
Hallibut, California				3,633	1,890								5,523
Hallibut, Northern				94,773	45,528	52,807	42,189	4,076	7,363	1	53		246,762
Herring, Pacific	23,610	10,289	365	104									34,063
Pork	230			1,533									2,178
Rockfish	12,057	43,596	68,598	93,153	34,845	34,823	52,596	30,994	23,611	33,878	80,064	22,569	582,155
Sablefish	6,087	3,282	6,435	23,068	36,535	44,349	114,596	63,275	31,773	33,869	6,444	3,185	373,919
Salmon				53,117	443,191	242,036	779,954	1,476,991	378,964				3,368,853
Spot Dab	225	6,155	24,961	46,168	19,120	19,880	45,350	44,371	19,963	42,003	29,113	8,960	368,496
Sardine						790			65				765
Shark	11,424	8,564	596	55	15	555	1,473	7,651	208,874	136,653	155,232	118,825	649,977
Skate	369	1,590	1,990	6,620	2,065	1,120	1,485	1,835	2,820	2,190	639	1,165	23,749
Snail	64	114	1,479	976	70	5,405	6,842	4,523	3,541	7,693	883	107	31,200
Sole	48,433	243,498	370,825	496,137	182,371	229,305	341,217	365,540	274,563	483,890	496,499	147,527	3,589,896
Tomcod							350	290			1,215	371	2,196
Tuna, Albacore								215					215
Turbot								700		635			700
Whitefish	11,903	16,758	22,644	15,367	10,755	6,756	9,439	5,289	5,481			27	106,654
Miscellaneous Fish	1,155	5,320	12,030	16,093	6,760	9,295	15,336	8,945	5,905	14,062	10,935	5,380	111,216
Crustacean:													
Crab	128,882	117,034	188,230	207,604	242,550	147,744	154,950	64,389	1,368			13,826	1,296,168
Mollusk:													
Clam, Razor						50							50
Clam, Soft-shell	87	69		62	222		36	12	24	12	12		314
Clam, Washington	2,841	2,609	2,685	2,197					3,016	3,290	2,625	2,237	21,225
Ostrea	77	93	380	66	12		68	12	158	404	1,183	344	2,797
Oyster, Native	2,329	1,680	2,349	1,530	1,000								9,260
Total pounds	257,564	486,042	749,444	1,106,231	1,044,874	854,476	1,719,321	2,124,785	1,000,921	810,622	789,389	347,297	11,290,966

Continued on next page.

DIVISION OF FISH AND GAME

COMMERCIAL FISH LANDINGS IN THE EUREKA REGION DURING 1940—Continued
 Fishing Boat Landings from Waters North of the State Boundary

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Cultus, Pacific.....			200				600		450		100		1,350
Flounder, Starry.....							290						290
Hallibut, Northern.....							620						620
Rockfish.....			550				790				200		1,450
Salmon.....							69	356	225				639
Sand Dab.....			1,180				139	409			130		1,850
Sole.....			17,475			29,140	39,715	4,000	4,375		2,470		97,175
Miscellaneous Fish.....			490			600	1,690	400					3,060
Crustacean:													
Crab.....			816			480	744	45					2,088
Total pounds.....			26,991			31,730	43,795	4,671	4,825		2,900		108,812
GRAND TOTAL.....													
Eureka Region.....	257,564	486,042	770,035	1,106,231	1,044,874	886,206	1,763,116	2,129,456	1,065,746	810,622	783,389	350,197	11,399,478

COMMERCIAL FISH LANDINGS IN THE SACRAMENTO REGION DURING 1940
 Fishing Boat Landings from California Waters

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Carp.....	364	1,362	4,321	2,221	244	107		15	120	386	621	275	10,044
Catfish.....	7,215	7,725	26,962	31,639	2,474	2,290	2,205	2,668	17,583	14,763	18,515	17,701	131,630
Flounder, Starry.....						104							104
Hardhead.....	24	53	21								716	4,144	4,962
Pike.....	12		33	31						30	35		161
Salmon.....	26,665	31,006	43,583	116,996	400,893	68,498		137,645	687,550		993	208	1,515,588
Sardine.....	3,897,509	3,308,000								20,470,100	23,556,509		60,287,790
Shad.....		450	77,150	702,182	983,402								1,763,184
Split-tail.....	406	678	296	290	427	30		388	1,751	4,172	2,744	1,961	12,118
Sucker.....	14	12	75									5	106
GRAND TOTAL.....													
Sacramento Region.....	3,932,130	3,349,286	154,281	833,325	1,387,544	70,925	2,205	140,711	706,989	20,489,451	23,579,738	9,158,994	63,825,597

COMMERCIAL FISH CATCH OF CALIFORNIA

35

COMMERCIAL FISH LANDINGS IN THE SAN FRANCISCO REGION DURING 1940

Fishing Boat Landings from California Waters

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Anchovy.....	55	53	1,000	1,400	10,575	800	.....	.....	.....	.....	.....	.....	13,775
Cabazon.....	.....	.....	698	30	125	255	.....	.....	.....	55	100	117	1,488
Calfua, Pacific.....	2,079	13,332	32,332	14,545	21,844	10,727	12,550	8,966	20,502	35,652	66,791	31,848	271,088
Eel.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flounder, Starry.....	35,097	90,910	119,423	17,428	57,052	67,942	27,040	21,373	22,512	87,018	41,200	14,832	582,027
Hake.....	.....	.....	65	.....	4,653	2,960	1,920	880	468	1,327	325	.....	13,058
Hallibut, California.....	1,516	7,596	11,446	5,346	3,103	2,746	3,740	10,555	2,842	1,043	6,766	.....	61,057
Hallibut, Northern.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	478	339	.....	817
Herring, Pacific.....	224,325	155,305	15,126	.....	1,800	.....	.....	.....	.....	.....	.....	.....	413,488
Kingfish.....	1,776	3,105	4,361	991	107	2,538	897	232	548	274	1,004	457	16,510
Mackerel, Pacific.....	.....	.....	330	.....	.....	.....	18	180	400	.....	.....	.....	628
Perch.....	1,447	4,227	7,147	4,102	200	.....	1,470	883	922	1,090	337	.....	22,447
Rock Bass.....	.....	.....	114	.....	.....	.....	.....	.....	.....	.....	.....	.....	114
Roofish.....	33,288	38,481	70,706	37,454	67,731	38,301	27,093	17,042	26,502	44,961	37,911	34,086	434,006
Salbafish.....	6,995	1,060	917	1,799	13,523	3,228	3,294	1,794	5,614	20,943	15,902	1,092	77,091
Salmon.....	13,570	12,970	146,670	126,074	273,418	509,564	2,820	.....	.....	.....	.....	.....	1,177,086
Sand Dab.....	50,189	43,177	27,399	14,320	91,818	42,362	31,442	22,573	55,373	23,671	21,564	22,650	420,038
Sardine.....	4,528,800	5,452,500	21,400	16,700	66,500	5,300	.....	3,715,000	6,450,650	63,985,291	63,384,339	23,347,270	170,991,094
Sea-bass, White.....	.....	.....	13	690	.....	.....	55	1,993	5,905	9,119	3,321	2,853	27,569
Shad.....	.....	.....	843	.....	.....	.....	.....	.....	.....	.....	.....	.....	843
Shark.....	525,400	354,748	32,938	40,385	37,099	98,176	287,728	525,694	1,332,763	586,478	588,086	310,775	4,934,940
Skate.....	35,756	34,572	14,065	4,725	13,155	4,805	5,741	9,245	3,560	10,771	8,878	21,087	160,528
Snelt.....	18,292	20,118	11,302	11,270	12,166	7,020	5,867	6,077	4,920	6,902	8,736	3,991	116,461
Sole.....	662,222	367,853	157,056	79,822	456,967	368,828	230,100	232,321	295,344	226,950	197,738	227,741	3,423,981
Tomcod.....	488	481	396	197	45	18	.....	540	.....	.....	186	30	2,371
Tuna, Albacore.....	1,477	2,980	4,325	8,195	10,423	2,379	4,330	6,711	6,258	6,084	1,737	1,848	48,371
Turbot.....	.....	.....	.....	.....	.....	.....	105	2,365	39,691	8,884	15	.....	54,517
Whitebait.....	1,324	659	1,355	3,612	1,887	4,284	2,525	50	28	229	50	1,205	17,478
Miscellaneous Fish.....	7,796	5,699	4,532	2,183	5,644	5,032	4,691	5,129	11,143	5,940	5,762	4,262	75,094
Crustacean:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Crab.....	211,822	319,384	363,264	447,034	356,676	347,238	402,200	296,914	.....	.....	693,494	421,400	3,556,126
Shrimp.....	20,831	30,744	47,379	84,477	68,250	137,138	264,591	192,778	84,740	63,039	78,503	39,540	1,080,190
Mollusk:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clam, Cockle.....	19	33	32	47	60	46	46	36	40	32	44	32	469
Clam, Taper.....	236	400	292	360	300	320	220	260	240	140	200	20	2,988
Clam, Soft-shell.....	4,037	3,942	4,280	3,088	4,000	3,870	5,123	8,744	6,796	7,871	8,432	4,851	62,421
Clam, Washington.....	228	367	275	152	156	128	88	104	96	64	104	16	1,725
Ostrea.....	173	222	559	460	959	936	245	359	132	386	957	414	5,664
Oyster, Eastern.....	10,628	11,626	11,982	5,193	6,140	5,368	5,009	5,975	10,842	12,031	14,867	113,358	113,358
Oyster, Japanese.....	120,442	129,471	108,786	77,216	46,303	40,054	55,505	65,139	99,238	153,225	137,095	142,261	1,174,725
Oyster, Native.....	60	.....	280	60	1,758	5,702	4,078	2,093	1,510	1,476	167	.....	15,194
Snail.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	100	100
GRAND TOTALS, San Francisco Region.....	6,508,650	7,091,700	1,108,444	892,928	1,492,540	1,308,574	1,664,309	5,745,319	8,422,795	65,296,700	65,310,578	24,881,895	189,694,484

36

DIVISION OF FISH AND GAME

Fishing Boat Landings from California Waters

COMMERCIAL FISH LANDINGS IN THE MONTEREY REGION DURING 1940

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Anchovy.....				2,325	7,550	600		100	1,290		25,375		37,440
Cabezon.....		8	51	87	308	35	270	422		16	35		1,160
Cutthroat, Pacific.....	3,798	1,099	2,972	3,036	4,426	3,696	6,294	5,101	2,519	6,340	17,223	10,003	67,147
Flounder, Starry.....	1,948	158	1,207	14,155	5,903	870	326	67	381	33	260	8	24,776
Hallibut, California.....	3,278	2,247	919	2,726	732	459	1,508	1,578	2,632	1,588	727	2,281	20,655
Herring, Pacific.....		120		1,500	2,175								3,260
Kingfish.....	5,853	10,999	8,315	21,968	17,067	13,020	6,561	4,365	877	5,556	14,962	5,865	122,166
Mackerel, Horse.....	1,230	303	334	5,940	6,461	20,311	23,832	11,838	22,856	5,257	5,275	6,338	110,267
Mackerel, Pacific.....	88,312	59,994	51,326	24,644	6,838	15,172	14,184	45,495	64,379	50,122	15,520	9,777	452,636
Perch.....	28	26	458	3,874	80		2,932	2,030	170		9	8	9,635
Pompano, California.....			4						400				400
Rockfish.....	131,455	107,513	209,377	211,312	178,163	154,143	164,333	106,117	65,997	105,432	117,209	76,543	1,658,699
Sablefish.....	727	1,028	1,804	1,401	3,327	5,248	10,326	3,217	4,945	15,101	22,596	9,257	86,753
Salmon.....	184	3,114	6,949	121,966	141,096	268,798	71,906	6,331	2,335	4,351	2,812	215	613,224
Sand Dab.....	60,101,645	35,877,953	69,053	150,330	96,953	114,835	154,998	183,496	35,465	112,005,389	82,947,947	71,644,388	363,116,401
Sardine.....	257	76	35	59	109		474	71,186	51,125	5,542	635	298	961
Sea-bass, Black.....	224	610											332
Sea-bass, White.....	202,100	86,521	1,731	44	175	6,542	23,368	83,444	118,010	58,101	79,733	154,177	814,276
Shark.....	2,079	941	1,078	2,662	307	227	401	1,011	1,273	362	39	501	11,041
Skate.....	2,618	1,670	1,445	1,127	1,437	11,408	13,785	9,458	16,681	19,034	12,288	9,579	100,931
Sole.....	1,991	2,273	15,899	55,204	17,086	18,529	13,735	1,466	337	1,094	223	43	130,795
Tuna, Albacore.....								205,457	588,355	40,914			834,726
Tuna, Bluefin.....								2,477	2,212				4,689
Tuna, Bonito.....	3,510				398					11		33	3,952
Turbot.....	120	170	265	3,555	1,979		112						6,841
Whitefish.....			23	134	220	1,483							1,917
Miscellaneous Fish.....	11		232	200	70	230	142	30	514	14			1,443
Crustacean:													
Crab.....	4,008	5,710	4,730	4,004	1,740	1,302	614	60			1,822	2,642	26,332
Shrimp.....	68			452	249			7		63	1,038	494	2,391
Mollusk:													
Abalone.....			78,150	42,575	200,925	83,100	143,750	93,800	123,200	6,975	28,425	12,500	813,400
Clam, Pismo.....	1,380	1,911	2,394	794						1,485	5,237	2,373	13,124
Mussel.....		100											100
Octopus.....	58	290	630	955	2,458	4,971	4,438	951	1,175	637	441	549	17,269
Squid.....	30	25,710	45,123	1,219,185	79,629	179,820	40,330	29,505	14,855	11,555	8,897		1,654,232
GRAND TOTALS.....	60,555,102	36,215,854	488,055	769,296	1,924,319	794,401	843,662	879,575	1,138,567	112,355,191	83,012,632	71,960,500	370,938,124
Monterey Region.....													

COMMERCIAL FISH CATCH OF CALIFORNIA

COMMERCIAL FISH LANDINGS IN THE SANTA BARBARA REGION DURING 1940
Fishing Boat Landings from California Waters

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Barracuda.....			11,310	21,399	22,175		1,565	332	21,091	13,020	31,664	4,659	127,125
Calzone.....			15			114	89	164			143	174	532
Calves, Pacific.....					15	82	41	78			246	163	786
Flounder, Starry.....			65				58		34	35			192
Hallibut, California.....	45,720	30,024	32,917	16,535	35,099	38,064	38,331	44,574	43,137	33,096	18,624	18,503	388,921
Hallibut, Northern.....			30			20							50
Herring, Pacific.....			200										200
Kingfish.....		40	100		51	42	25	30					288
Mackerel, Horse.....			45										45
Mackerel, Pacific.....	1,304	405	498		2,516	2,704	1,119	441	6,228	26,513	52,585	246,789	341,104
Perch.....	8	39	27	169	74	112	178	228	169	24			1,028
Pompano, California.....									1,282				1,282
Rock Bass.....	3,733	7,182	13,154	4,742	2,980	2,293	4,250	2,396	737	1,678	4,811	5,343	55,409
Rockfish.....	51,972	51,762	51,647	19,489	30,829	26,731	19,307	14,933	11,665	15,987	41,369	10,272	306,707
Sablefish.....					13		150	20					183
Sand Dab.....										8		47	55
Sardine.....			3,745	1,335	203	460	760	849			27,920	22,600	58,120
Sculpin.....				115	111	104		12		24			368
Sea-bass, Black.....	915	549	948	2,094	780	3,798	985	826	44	925	617	585	13,039
Sea-bass, White.....	31,529	14,026	7,105	6,633	883	23,894	25,562	50,843	19,944	11,944	5,788	6,210	204,291
Shark.....	21,674	17,662	22,236	42,304	245,239	422,348	95,859	7,867	10,770	11,682	5,432	8,188	911,221
Sheephead.....	8,420	9,621	8,588	3,868	62	1,385	711	1,116	46	199	1,755	325	36,566
Skate.....	6,476	4,508	7,564	2,815	71	1,540	1,088	2,190	2,312	2,990	1,444	2,729	34,648
Smelt.....	368	292	2,555	5,805	8,641	1,712	618	358	116	259	77	62	20,963
Sole.....	6,613	8,781	9,923	24,791	25,326	17,217	8,652	9,369	8,817	4,706	4,179	5,152	129,639
Swordfish, Broadbill.....					9	432	39,495	103,991	104,359	52,110	9,582		311,978
Tuna, Albacore.....						135	19,570	87,083	37,977	145			1,108,808
Tuna, Bluefin.....					1,585	8,152		3,110	7,735				15,582
Tuna, Bonito.....	206		16	133		77	7	344	3,015	1,964	9,920	3,364	18,966
Tuna, Skipjack.....							281			18			299
Turbot.....													3
Winged, Ocean.....	8,588	7,116	6,431	2,754	1,615	231	928	397		261	5,496	2,835	36,782
Yellowtail.....				232	7	86	15		11	183			330
Miscellaneous Fish.....	209	261	487	835	1,996	5,862	1,631	1,899	498	521	2,410	671	14,592
Crayfish.....													
Lobster, Spiny.....	5,822	4,506	4,387							42,711	19,227	17,435	94,091
Mollusk.....													
Abalone.....	21,150		83,450	42,625	183,650	104,450	84,275	43,025	32,200	106,900	186,720	59,405	910,559
Clam, Pismo.....	10,825	10,358	14,565	12,188	12,681	15,677	18,876	16,372	12,110	11,065	10,577	6,385	138,584
Octopus.....		48											48
Oyster, Eastern.....													2
Oyster, Japanese.....	5,281	7,533	10,644	6,405	5,164	4,824		8,778	14,617	19,509	17,335	17,719	117,779
GRAND TOTALS, Santa Barbara Region.....	213,811	155,236	294,992	217,366	578,012	674,436	347,234	514,706	1,196,342	395,996	421,617	439,826	5,420,174

22 DIVISION OF FISH AND GAME

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Anchovy	532,404	346,227	118,968	5,444	6,703	3,695	157,072	603,889	678,916	1,480,337	1,588,461	696,821	6,251,827
Burbot	1,123	1,671	182,950	512,102	338,209	321,484	255,950	198,588	34,088	13,724	3,733	11,460	1,884,355
Cake													33
Cod, Pacific		74	22		56	270	10			25	140	26	624
Frying Fish			697	3,131	7,917	3,254	9,710	9,739	3,156	7			37,796
Hake							11						11
Haddock, California	30,308	54,702	65,332	54,490	27,612	19,791	16,038	5,555	4,968	4,318	6,530	11,337	301,701
Kingfish	18,924	21,735	37,829	30,574	22,751	18,066	21,983	15,889	32,720	22,720	16,719	12,146	272,428
Macarel, Bone	28,879	13,712	24,003	30	13,960	11,688	55,539	299,771	223,353	365,273	188,661	47,332	1,310,246
Macarel, Pacific	15,010,458	9,647,075	3,899,870	3,906	90,850	105,029	550,818	4,661,317	8,824,340	33,070,080	27,317,447	13,483,519	116,061,349
Perch	1,791	2,571	4,308	4,338	679	143	2,382	1,494	1,594	301	740	890	20,631
Pompano, California			868	1,543	136	53	2	4	61	21	3,099	273	8,574
Rock Bass	3,775	1,665	7,308	10,183	20,215	21,903	29,824	10,641	4,669	2,166	3,058	2,386	122,212
Rockfish	22,145	32,016	75,543	18,830	17,576	21,903	12,633	7,186	14,134	18,797	31,792	62,792	337,459
Salmon	7	2,793	6,479	8,555	2,874	2,715	2,000	2,109	1,134	453	594	694	34,279
Sand Dab	101	1,378	1,433	385	491	111	240	222	226	1,085	1,644	1,216	5,832
Sardine	52,307,390	29,537,664	15,148,436	1,605	9,500	10,833	89,248	82,727	354,715	1,014,446	133,490,832	74,396,331	296,332,556
Sealup	2,927	4,399	7,473	7,796	11,374	13,396	11,129	10,542	3,631	3,542	5,837	1,545	87,899
Sea-bass, Black	325	1,002	919	4,510	4,563	3,067	8,413	2,567	841	250	734	175	29,069
Sea-bass, White	1,233	629	12,248	12,273	11,564	32,874	67,438	181,666	10,828	3,619	2,550	4,302	341,631
Shark	4,227	4,314	11,617	33,550	194,630	97,174	32,293	8,457	8,179	12,735	6,421	377,619	877,619
Sheepshead	1,592	369	3,791	2,576	565	579	773	308	202	2,508	1,275	911	16,472
Skate	408	529	1,438	1,547	584	904	296	662	273	283	328	219	1,773
Sole	18,175	13,532	15,986	5,916	5,733	5,128	6,295	9,114	15,062	29,574	15,834	17,416	150,682
Sole	214	822	1,314	3,545	2,082	2,433	1,025	1,225	544	383	473	293	14,333
Swordfish, Broadbill						28,001	76,111	140,631	95,276	52,914	2,990		397,933
Tuna, Albacore	96,292	48,953		437,175	4,980,307	4,177,469	17,410,029	4,345,446	627,231	53,728	15		219,888
Tuna, Bluefin	71,800	15,077	54,328	49,619	16,903	10,454	50,685	417,408	1,731,481	363,583	18,212	3,827	16,474,185
Tuna, Bonito								3,747	363,583				2,933,577
Tuna, Skipjack								12,077	322,659	269			338,476
Tuna, Yellowfin				215			8,445	51,538	51	11,552			71,601
Turbot	10		44	9				324	158	592	730	564	65
Whitetail, Ocean	1,673	370	2,679	1,142	1,052	198	292						9,776
Yellowtail	12		2,747	20,880	34,712	8,428	5,388	4,365	999	370	30	2,280	83,381
Mediterranean Fish	1,271	405	1,697	3,298	4,751	11,487	3,164	1,169	1,922	4,858	1,377	470	33,389
Crustaceans													
Crab, Rock	792	334	392	131		398	389	160		492	398	94	3,460
Libinia, Spiny	8,458	6,538	2,636							53,367	38,696	21,938	131,663
Mollusk									50				135
Amalut	1,123	2,679	2,705	2,013	1,424	1,394	2,315	162		216		14	14,067
Clam, Cockle	48	19								76	214	35	432
Octopus										123			125
Squid		46,417	810	21,700				2,673	2,003	4,645		28,820	106,570
Total pounds	68,134,379	36,810,487	22,699,636	1,286,083	5,740,639	4,933,756	3,345,499	10,548,099	12,704,158	36,954,073	162,682,782	88,756,768	457,690,831

COMMERCIAL FISH CATCH OF CALIFORNIA

39

Continued on next page.

COMMERCIAL FISH LANDINGS IN THE LOS ANGELES REGION DURING 1940—Continued

Fishing Boat Landings from Waters North of the State Boundary

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Tuna, Albacore.....									1,080,922				1,080,922
Total pounds.....									1,080,922				1,080,922

Fishing Boat Landings from Waters South of the International Boundary

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Barracuda.....	167,613	147,613	72,425			75			70,140	256,716	200,949	146,403	1,064,634
Cabrilla.....	9,781		7,415			345							17,541
Grouper.....	4,520		615							50			5,497
Mackerel, Spanish.....	150		1,739							441	457		2,847
Rock Bass.....	798					435					15		1,248
Sea-bass, Black.....	15,798		1,356			3,739	21,104	81,873	60,838	48,825	18,385	108	251,573
Sea-bass, White.....	147	419	1,085			100			587	1,682	4,698	670	9,388
Shark.....							17			112			129
Sheephead.....	650												650
Swordfish, Broadbill.....							1,209		626				1,835
Tuna, Bluefin.....			179,946	205,883	8,549		153,861	121,110		43,604			712,850
Tuna, Bonito.....	1,532		8,334				137,464	621,987	27,133	224,260	7,335	3,765	1,328,904
Tuna, Skipjack.....	151,067	169,933	1,464,376	4,331,461	2,967,587	1,763,213	2,681,243	4,198,881	1,802,003	1,381,098	1,073,633	951,047	23,739,432
Tuna, Yellowfin.....	917,019	899,744	1,202,346	3,111,689	6,962,252	3,859,138	7,649,251	2,643,379	21,450,011	1,446,773	1,075,963	1,247,273	33,371,659
Whitefish, Ocean.....	703												703
Yellowtail.....	11,358	13	13,433	43,383	7,070	116,033	309,937	2,300,344	400,494	45,438	27,459	11,997	3,188,990
Miscellaneous Fish.....								110		32	6		148
Crustacean:													
Lobster, Spiny.....	8,783	16,958	14,850								1,187	6,344	47,722
Total pounds.....	1,291,109	1,224,680	3,059,065	8,192,416	9,976,855	5,773,135	11,274,436	9,867,361	4,732,272	3,449,121	2,415,102	2,368,107	63,643,889

Continued on next page.

DIVISION OF FISH AND GAME

COMMERCIAL FISH LANDINGS IN THE LOS ANGELES REGION DURING 1940—Continued

Shipments to Canneries from North of the State Boundary

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Tuna, Albacore.....				12,000			46,852	828,324	714,923		27,170		1,629,269
Total pounds.....				12,000			46,852	828,324	714,923		27,170		1,629,269

Shipments to Canneries from South of the International Boundary

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Tuna, Yellowfin.....								138,309					138,309
Total pounds.....								138,309					138,309

Shipments to Canneries from Japan

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Tuna, Albacore.....							471,830	377,493	351,974			77,866	1,279,163
Tuna, Skipjack.....			57,890	102,587		100,190							260,667
Total pounds.....			57,890	102,587		100,190	471,830	377,493	351,974			77,866	1,539,830
GRAND TOTALS, Los Angeles Region.....	69,425,688	41,035,167	25,816,321	9,593,086	15,717,494	10,807,081	15,138,587	21,839,786	19,604,249	40,403,106	165,125,054	61,196,741	835,722,450

COMMERCIAL FISH CATCH OF CALIFORNIA

COMMERCIAL FISH LANDINGS IN THE SAN DIEGO REGION DURING 1940

Fishing Boat Landings from California Waters

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Anchovy	89,727	4,547	110,781	29,554	17,035	51,739	116,877	86,286	12,505	7,667	4,883	14,755	14,755
Barracuda	70		43										113
Calico, Pacific	14,514	35,452	18,097	13,565	6,860	529	290	4,372	19,378	2,139	10,015	1,531	132,742
Halibut, California													1,009
Herring, Pacific	111		52	10					160	282	122	99	836
Kingfish						703	10,639	615					11,957
Mackerel, Blue						30,063	1,543,946	637,201	58,877	11,620	189,843	298,029	3,048,293
Mackerel, Pacific	524,105	18,326	13,590	14,313	18,680	37	539	260	915				2,004
Mullet				61		141	108	90	1,754				2,093
Perch													17
Pompano, California	4,166	1,738	1,206	512	4,460	3,066	14,818	14,339	4,668	4,355	3,661	2,376	61,715
Rock Bass	9,405	21,209	39,978	28,267	4,049	9,282	16,975	2,767	2,358	4,683	3,679	4,212	146,931
Rockfish													35
Sand Dab													35
Sardine	19,410	1,205	1,193	409	1,463	499	1,470	983	290	289	423,199	1,654,269	2,196,861
Seelpin	4,602	2,444	4,232	3,915	3,434	397	376	762	204	2,635	9,501	2,500	33,894
Sea-bass, Black	504	98	237	411	948	274	82		20				4,075
Sea-bass, Short-fin													536
Sea-bass, White	4,154	1,458	2,024	522	1,249	12,998	32,384	21,139	8,156	2,500	571	13,354	102,519
Shark	1,591	2,591	4,564	3,576	13,677	55,473	52,476	6,476	4,705	40	1,419	1,351	167,556
Sheepshead	35	112	33	162	22	54			85	1,083	450	839	2,711
Skate	80												22
Squid	1,702	1,389	944	2,629	2,441	2,165	2,900	1,390	3,246	4,086	1,527	1,801	27,836
Sole	68					45	90	12	9		25		1,916
Swordfish, Broadbill							9,167	26,471	51,764	31,032	1,726		120,160
Tuna, Albacore				266,537	615,153	536,391	2,489	129,912	25				129,426
Tuna, Bluefin				22,413	36,943	32,621	131,243	792,964	83,131	153			2,335,512
Tuna, Bonito	210,201	101,976	38,199				138,783	48			669	1,265	724,674
Tuna, Skipjack							167,496		1,015,177	1,255,616	298,147		2,446,336
Tuna, Yellowfin									38,257	49,162	5,627		166,026
Whitefish, Ocean			25						42				107
Yellowtail	10,245	3,274	37,049	24,551	79,102	31,715	9,556	12,725	5,591	1,502	422	87	244,919
Miscellaneous Fish	79		12		36	45	103		70				545
Crustaceans													
Lobster, Spiny	1,360	1,581	520							34,173	11,235	6,477	55,448
Mollusk													
Squid	2,396	4,324									26,542	6,065	38,430
Total pounds	916,695	262,741	292,052	410,349	805,544	787,824	2,426,979	2,070,703	1,291,368	1,383,155	916,462	1,985,107	13,488,979

Continued on next page

42

DIVISION OF FISH AND GAME

COMMERCIAL FISH LANDINGS IN THE SAN DIEGO REGION DURING 1940—Continued
Fishing Boat Landings from Waters South of the International Boundary

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds	
Barramunda	29,792	950		4,283	235	114		969	19,532	11,868	3,576	15,650	86,969	
Calappa		22,479	2,076	14,833	25,915			8,063					73,038	
Catfish, Pacific					88								111	
Crabs					36								35	
Halibut, California	499	3,745	5,150	12,945	36,408	804	13,815						73,326	
Mackerel, Spanish			10,170	13,364	4,174	2,070	8,429	23,366	11,956	6,049			86,949	
Perch				335									85	
Pompano, California													353	
Rock Bass	95	871	234	881	978	144			86				86	
Rockfish									809	545			82	
Sardine	4,817	16,147	15,278	2,370	18,814	2,374	1,509		606	3,097	9,686	11,767	46,949	
Sculpin									200				200	
Sea-bass, Black	1,069	6,774	1,293	10,143	2,826	510	35,210	232	1,999	2,503	140	9,271	71,080	
Sea-bass, White	1,317	798	72	485	831	2,053	9,843	35,759	14,242	12,090	125	14,585	94,092	
Shark				411	1,348	407	142		298				3,096	
Sheepshead	461	400	208	201				196	313	861	852	2,083	5,518	
Sneek								146	244	798			2,083	
Swordfish, Broadbill								3,556	30,813	20,727			55,096	
Tuna, Albacore								880					880	
Tuna, Bluefin								3,560	1,448	38,897			403	
Tuna, Bonito	26,320	18,631	857	1,368		252	206	15,343	45,063	55,715	194		407,450	
Tuna, Skipjack	410,864	322,498	410,008	398,371	473,082	1,227,408	2,761,742	5,719,896	5,004,030	5,157,103	4,984,378	192,462	409,091	
Tuna, Yellowfin	7,769,238	4,376,696	6,619,943	4,138,305	6,942,697	6,876,821	8,478,826	7,450,332	6,418,146	8,296,632	7,671,025	3,199,736	3,982,622	
Whitefish, Ocean	1,682	1,490	240	212	149	193		603		1,184	3,189	2,394	11,236	
Yellowtail	76,529	96,525	18,641	83,404	24,009	174,245	147,531	403,101	472,709	144,959	305,527	403,578	2,429,708	
Miscellaneous Fish	195		400										995	
Crustaceans:														
Lobster, Spiny	216,237	172,216	106,308								275	129,499	132,462	767,997
Total pounds	8,538,880	5,090,406	7,192,246	4,884,993	6,708,533	8,472,487	11,472,681	13,891,737	11,032,856	13,691,911	12,856,433	11,095,031	114,856,216	

Continued on next page

COMMERCIAL FISH CATCH OF CALIFORNIA

COMMERCIAL FISH LANDINGS IN THE SAN DIEGO REGION DURING 1940—Continued

Fishing Boat Landings from Waters North of the State Boundary

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Tuna, Albacore.....								12,350	450,232				471,582
Total pounds.....								12,350	450,232				471,582

Shipments to Canneries from North of the State Boundary

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Tuna, Albacore.....										52,095	21,390		74,085
Total pounds.....										52,095	21,390		74,085

Shipments to Canneries from Japan

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Tuna, Albacore.....							105,104	50,075					155,179
Total pounds.....							105,104	50,075					155,179
GRAND TOTALS, San Diego Region.....	9,455,575	5,250,147	7,484,298	5,295,344	7,514,097	9,290,311	14,094,764	15,934,865	12,860,456	15,127,761	15,794,255	13,080,138	129,048,941

DIVISION OF FISH AND GAME

COMMON AND SCIENTIFIC NAMES OF FISHES, CRUSTACEANS AND MOLLUSKS
FISHES

<i>Common name</i>	<i>Scientific name</i>
Anchovy	Anchoviella compressa Anchoviella delicatissima Engraulis mordax
Barracuda	Sphyræna argentea
Cabezone	Scorpaenichthys marmoratus
Cabrilla	Epinephelus analogus
Carp	Various species of Mycteroperca
Catfish	Cyprinus carpio Ameiurus catus Ameiurus nebulosus
Cultus, Pacific	Ophiodon elongatus
Eel	Cebidichthys violaceus Xiphister mucosus Other stichæids and blenniids Gymnothorax mordax
Flounder, Starry	Platichthys stellatus
Flying Fish	Cypselurus californicus
Grouper	Various species of Mycteroperca
Hake	Merluccius productus
Halibut, California	Paralichthys californicus
Halibut, Northern	Hippoglossus stenolepis
Hardhead	Orthodon microlepidotus Mylopharodon conocephalus
Herring, Pacific	Clupea pallasii
Kingfish	Genyonemus lineatus
Small percentage of Queenfish	Seriophus politus
Mackerel, Horse	Trachurus symmetricus
Mackerel, Pacific	Pneumatophorus diego
Mackerel, Spanish	Scomberomorus sierra
Mullet	Mugil cephalus
Perch	
Halfmoon	Medialuna californiensis
Opal-eye	Girella nigricans
Salt-water	Various members of the Embiotocidae
Sargo	Anisotremus davidsoni
Pike	Ptychocheilus grandis
Pompano, California	Palometa simillima
Rock Bass	Paralabrax clathratus Paralabrax nebulifer
Rockfish	All species of Sebastodes and Sebastolobus found in California waters
Sablefish	Anoplopoma fimbria
Salmon	Oncorhynchus tshawytscha Oncorhynchus kisutch
Sand Dab	Citharichthys stigmatæus Citharichthys sordidus
Sardine	Sardinops caerulea
Sculpin	Scorpaena guttata
Sea-bass, Black	Stereolepis gigas
Sea-bass, Short-fin	Cynoscion parvipinnis
Sea-bass, White	Cynoscion nobilis
Shad	Alosa sapidissima
Shark	Alopias vulpes Galeorhinus zyopterus Mustelus californicus Notorynchus maculatus Prionace glauca Rhinotriacis henlei Squalus suckleyi Triakis semifasciata Small percentage of other species
Sheepshead	Pimelometopon pulcher
Skate	Raja binoculata Raja inornata Raja rhina And other species
Smelt	Atherinops affinis Atherinopsis californiensis Leuresthes tenuis Hypomesus pretiosus Small percentage of other Osmeridae
Sole	Eopsetta jordani Glyptocephalus zachirus Parophrys vetula Several other pleuronectids
Split-tail	Pogonichthys macrolepidotus
Sucker	Catostomus occidentalis
Swordfish, Broadbill	Xiphias gladius

Tomcod	<i>Microgadus proximus</i>
Tuna	
Albacore	<i>Germo alalunga</i>
Bluefin	<i>Thunnus thynnus</i>
Bonito	<i>Sarda lineolata</i>
Skipjack	<i>Katsuwonus pelamis</i>
Yellowfin	<i>Neothunnus macropterus</i>
Turbot	<i>Hypsopsetta guttulata</i>
	<i>Pleuronichthys decurrens</i>
	<i>Pleuronichthys verticalis</i>
	Possibly a small percentage of other pleuronectids
Whitebait	<i>Allosmerus attenuatus</i>
	<i>Spirinchus starksi</i>
	Young of several species of fishes
Whitefish, Ocean	<i>Caulolatilus princeps</i>
Yellowtail	<i>Seriola dorsalis</i>

CRUSTACEANS

Crab	<i>Cancer magister</i>
Crab, Rock	<i>Cancer antennarius</i>
	<i>Cancer anthonyi</i>
	<i>Cancer productus</i>
Lobster, Spiny	<i>Panulirus interruptus</i>
Shrimp	<i>Crago franciscorum</i> and <i>Crago nigricauda</i>

MOLLUSKS	
Abalone	Haliotis fulgens Haliotis rufescens
Clam, Cockle	Paphia staminea Species of Chione
Clam, Gaper	Schizothaerus nuttallii
Clam, Pismo	Tivela stultorum
Clam, Razor	Siliqua patula
Clam, Soft-shell	Mya arenaria
Clam, Washington	Saxidomus nuttalli
Mussel	Mytilus californianus Mytilus edulis
Octopus	Polypus hongkongensis Polypus bimaculatus
Oyster, Eastern	Ostrea virginica
Oyster, Japanese	Ostrea gigas
Oyster, Native	Ostrea lurida
Snail	Various species of gastropods
Squid	Loligo opalescens Small percentage of other species