# CALIFORNIA COMMERCIAL LOBSTER FISHERY

1973 - 1974 SEASON

#### Lobster Log Books

Early in 1973, the California Fish and Game Commission asked the Department to investigate California's sport and commercial lobster fisheries and by July 1975 recommend management which would improve them. In response, the Department organized a research team and directed its members to meet the Commission's request. The team first turned its attention to the commercial fishery, which, of the two, has the greatest impact on the resource.

For the purpose of the investigation the team recommended commercial fishermen keep a daily log. In San Francisco, on August 17, 1973, the California Fish and Game Commission amended Section 122 of the Administrative Code, Title 14 to require a daily log book. On November 8, 1973, the Commission conducted a public hearing at San Diego regarding its action the previous August. No correspondence was received from fishermen on the subject of log books and none spoke at the hearing.

Prior to October 3rd, the opening of the 1973-74 lobster season, the Department began distribution of log books. By the end of the season 300 books were handed or mailed to lobster boat skippers. Since each book covered 50 days of fishing, some skippers required more than one book to see them to the end of the season, March 20, 1974.

Log books were printed with self-carbon, duplicate pages; the original was mailed to the Department and duplicate pages remained with fishermen as fishing records. Logs went through a bookkeeping process, were read by a biologist, and the content was tabulated by accounting

machines. The important questions in the log book were when and where lobsters were caught, how many were caught, and how often traps were pulled (Figure 1). The hours and depth traps fished were less critical points, but the answers described change in fishing methods from October through March and offered some clues to lobster behavior.

# Fishing Effort

The best estimate of effort comes from number of traps fished or pulled; one trap pulled is a unit of effort.

It is a characteristic of the California fishery that most fishing takes place in October and the least in March. In the past, this was seen in the decline of number of boats landing lobsters. This past season, the decline in effort was better measured, and it was found to be more severe than presumed. Number of traps pulled dropped from 105,603 in October to 14,520 in March; a 6-month drop of 86% (Tables 1-6).

Information was reported in the logs by 10 min origin blocks (Figure 2). The logs showed considerable variation in effort by geographic area. Block 860 (Point Loma) had 27% of the total effort in October and 9% in March. The closest rival, Block 850 (a portion of San Clemente Island) had a third of the effort of Point Loma in October but twice as much in March.

The change in effort, particularly about the channel islands, indicated fishermen sometimes moved their entire string of traps. This was uncommon along the mainland, although a few fishermen made substantial moves to avoid poachers.

### Legal Catch

Catch was presented two ways by the log. Number of lobsters caught was recorded by date, block number, depth and hours the traps fished. Pounds of lobsters were recorded by date but not by other categories (fishermen learn the weight of their catch at time of sale). Often fishermen place lobsters in receivers for several days before sending a shipment to market.

During the 1973-74 season, the log book catch came to 122,271 kg (268,996 lb) or 161,317 lobsters. Generally 25 to 30% of the catch is made in October. This past season 38% of the catch was reached the first month.

Block 860 (Point Loma) was the heavy producer, with 33% of the October catch and 12% of the year's total.

#### Short Catch

Fishermen were asked to keep count of the short lobsters they caught and record this on their logs. Interviews with several fishermen indicated that counts of short lobsters are estimates. If we presume shorts were returned to the water, then undoubtedly many of the same lobsters were caught over and over again.

Short lobster production resembles the pattern of legal production.

Most were caught in October (46%), the fewest in March (3%).

During the 6-month season, 872,737 short lobster were reported caught, over five times the legal catch. In some areas 10 shorts were caught for every legal; sometimes the ratio jumped 20 to 1. San Clemente Island, Santa Catalina Island, Point Loma and the south coast produced the most shorts. Fewest were produced around Santa Barbara Island, San Nicolas

Island, the northern channel islands and the Santa Barbara coast.

### Southern Channel Island Fishery

There are four islands in the southern channel group: Santa Catalina, San Clemente, Santa Barbara, and San Nicolas. Unlike the northern islands, they are widely separated. San Nicolas Island, the farthest to sea, is 60 nautical miles from San Pedro, and 45 miles from Santa Catalina Island. The chief problems are distance to market, unprotected passage between islands, winter storms, and assorted closures by the military, Department of the Interior, and State of California. The advantages are, in respect to the mainland, less competition from other fishermen, less trouble from poachers, and, in certain areas, better catch rates.

Lobster fishing at Santa Catalina Island is restricted by Commission regulation to the weather side from the West End to Church Rock, about 21 miles of shore. The lee side is reserved for sportsmen. The island produced 23,586 shorts and 9,084 legal lobsters caught at a rate of 0.4474 legal lobsters per trap pulled.

The 43-mile coast of San Clemente Island is open to commercial lobster fishing except U.S. Navy harbors, at any time, and Pyramid Cove during gun-fire practice. The east shore abruptly drops into deep water, providing a narrow ledge of lobster habitat. The west or seaward shore gradually shelves out to sea and lobster habitat is more extensive. San Clemente Island is famous for high production of short lobsters. In 1973-74, log books reported 68,798 shorts and 24,115 legals, with a catch rate of 0.5113 legal lobsters per trap pulled.

Santa Barbara Island, a part of the Channel Islands National Monument, is 21 miles west of Santa Catalina. It is little more than a steep sided rock,  $4\frac{1}{2}$  miles around with  $1\frac{1}{2}$  miles of the east shore being closed to commercial fishing. Santa Barbara has a reputation for providing large lobsters but production is low because of limited habitat. In 1973-74, the island produced 7,759 legal lobsters and 4,161 shorts. The legal catch rate was 0.6388.

San Nicolas Island is known to produce larger lobsters than Santa Barbara Island. In some respects, the island has better lobster habitat than the other three southern channel islands. The island has 20 miles of shoreline of which 4 miles are closed. A portion of the northwest side, known as AlfaSection, is closed by the U.S. Navy. The rest of the island is open to fishing although fishermen cannot approach within 300 yards of shore. During the past season San Nicolas Island produced 2,834 legal lobsters and 461 shorts. The catch rate for legals was 0.8021.

The southern channel islands have 83 miles of shore available to commercial lobster fishing. Production this past season was slightly over 524 legal lobsters per linear mile.

# Northern Channel Island Fishery

The northern channel islands, Anacapa, Santa Cruz, Santa Rosa, and San Miguel form a 55-mile east-west chain. Anacapa Island, the nearest to the mainland is  $10\frac{1}{2}$  miles from Port Hueneme. Some of the problems of lobster fishing in the northern channel islands include rough weather, severe poaching because of nearness to the mainland, and, because of currents and weather, the need for heavy traps and ballasting. Fishermen report that fishing the northern islands requires greater skill and labor than in the south. The advantages include fair to good catch rates, moderate competition and, for Anacapa and Santa Cruz Islands, proximity to market.

Anacapa Island, a part of the Channel Islands National Monument, consists of three small islands with a shore of nine miles; 4½ miles of the north shore are closed to commercial fishing by the Department of the Interior. The island produced 11,985 shorts and 2,830 legal lobsters, with a catch rate of 1.0290 legal lobsters per trap pulled.

Santa Cruz Island, approximately 51 miles around, is the largest of the northern channel islands. It lies 4 miles west of Anacapa Island. Typical of these northern islands, the south shore is somewhat protected while the north is exposed to prevailing weather. This past season Santa Cruz Island produced 49,484 shorts and 18,122 legal lobsters. The legal catch rate was 0.8007.

Santa Rosa Island is five miles southwest of Santa Cruz Island with a shoreline of 37 miles. The island's best production was during the last three months of the season. Santa Rosa produced 1,472 shorts and 1,665 legal lobsters with a catch rate of 0.7283.

San Miguel Island, 19 miles around, lies less than three miles from Santa Rosa Island, yet its water conditions and biota are representative of both southern and northern California. No lobster fishing was reported from San Miguel in 1973-74.

The northern channel islands have 111 miles of shore available to commercial lobster fishing. Production was 203 legal lobsters per shore mile.

The northern channel islands are near the northern limit of California's lobster fishery. On the mainland the fishery extends another 30 miles north, with a few pockets as far as Avila. The southern limit is near Magdalena Bay, Mexico, about 600 miles to the south.

### La Jolla - Point Loma Fishery

This section of the mainland coast includes Del Mar south to the Tijuana River. Over 30% of California's production came from here in 1973-74, yet it has less than 16 miles of shore with lobster habitat. The area produced 555,749 shorts and 49,773 legals, at a catch rate of 0.5627 legal lobsters per trap pulled. This is the equivalent of 3,111 legal lobsters per shore mile.

The area has advantages for the lobster fisherman, the market is near and the weather is generally good. Although the section covers only a few miles of coast, habitat extends considerable distance offshore, particularly about Point Loma. One disadvantage of the La Jolla-Point Loma area is competition among fishermen as 28% of all California lobster fishing effort was applied to this area this past season.

If short production is a resonable indicator, there is little doubt that La Jolla-Point Loma is the best lobster nursery in California.

### Laguna - Encinitas Fishery

This section of the mainland coast includes Huntington Beach south to Solana Beach, about 65 miles with 34 miles of lobster habitat.

The area produced 128,403 shorts and 24,638 legals at a catch rate of 0.4254 legal lobsters per trap pulled. Production was 725 legal lobsters per linear mile of lobster habitat.

This area is close to market, has good weather but limited habitat. Competition is high and poaching severe.

### Palos Verdes - Huntington Beach Fishery

MATERIAL BULLETONIES AND DESCRIPTION OF THE ARCHITECTURE.

This section of the mainland coast includes Rocky Point south to
Huntington Beach, about 31 miles with 11 miles of lobster habitat. Palos

Verdes Peninsula is the significant lobster habitat.

The area produced 5,807 shorts and 5,775 legals at a catch rate of 0.2871 legal lobsters per trap pulled. Production was 525 legal lobsters per linear mile of lobster habitat.

Palos Verdes is close to market, has good weather and extensive rocky habitat; however, the White Point sewage outfall has resulted in a general deterioration in the marine environment. Fishermen are troubled by poachers and competition is high.

### Port Hueneme - Malibu Point Fishery

This section of the mainland coast includes north of Port Hueneme south to Malibu Point, encompassing 68 miles of coast with 16 miles of lobster habitat. Santa Monica Bay is closed to commercial fishing (the closure has 30 miles of shore; about eight miles are lobster habitat).

The area produced 8,111 shorts and 3,386 legals at a catch rate of 0.5279 legal lobsters per trap pulled. Production was 212 legal lobsters per linear mile.

### Point Arguello - Ventura Fishery

This section of the mainland coast includes Point Arguello south to north of Port Hueneme encompassing about 94 miles of which 71 miles have lobster habitat.

The area produced 14,720 shorts and 11,336 legals at a catch rate of 0.4304 legal lobsters per trap pulled. Production was 160 legal lobsters per linear mile.

DAILY LOBSTER LOG						3	
NAME OF SKIPPER	Permit No.				YEAR		
Boat Name		Boo	at F & G No		MONTH		
						DAY	
TRAP LOCATIONS (NEAREST LANDMARKS)	F&G BLOCK No.	DEPTH FEET	No. TRAPS PULLED	No. HOURS IN WATER	No. SHORT LOBSTER	NO. LEGAL LOBSTER	
			,				

FIGURE 1. Page from the daily lobster log.

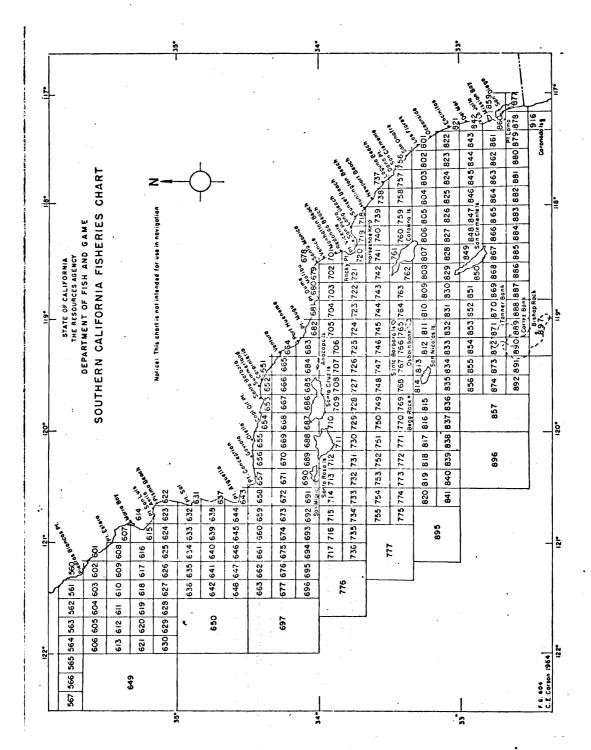


FIGURE 2. Southern California fisheries chart.

TABLE 1. Lobster Log Book Catch-Effort Data for October 1973.

Origin block	Number traps pulled	Number shorts	Number legals	Legal catch per trap pulled (numbers)
643	360	51	21	0.0583
653	1,239	720	606	0.4891
654	700	1,077	569	0.8129
655	678	591	271	0.3997
656	<b>42</b> 0	9 <b>2</b>	127	0.3023
657	675	149	101	0.1496
658	240	17	11	0.0458
665	235	104	112	0.4766
679	107	35	58	0.5421
680	1,098	4,586	287	0.2614
681	171	104	129	0.7544
68 <b>2</b> ·	144	18	35	0.2431
685	390	290	177	0.4538
686	650	1,150	370	0.5692
707 <sup>-</sup>	940	4,950	1,055	1.1223
707 708	2,613	6,905	2,161	0.8270
708 709				0.8776
	1,225	<b>2,</b> 640	1,075	
710	30 105	6	8	0.2667
712	195	296	132	0.6769
718	32	3	10	0.3125
719 700	346	79	105	0.3035
<b>72</b> 0	4,695	3,020	1,389	0.2958
737	6,190	8,599	2,554	0.4126
738	2,152	1,348	550	0.2556
740	260	0	21	0.0808
756	3,228	3,349	1,096	0.3395
757	4,245	7,486	2,130	0.5018
761	1,288	1,169	595	0.4620
762	3,923	3,203	1,648	0.4201
765	2,562	948	1,967	0.7678
801	2,646	5,087	867	0.3277
807	2,857	3,564	1,142	0.3997
813	216	346	329	1.5231
821	4,965	34,464	3,370	0.6788
822	1,232	5,410	517	0.4196
829	2,337	4,357	1,454	0.6222
842	7,829	80,828	6,183	0.7898
849	1,045	2,710	433	0.4144
850	9,119	15,595	5,492	0.6023
860	28,674	187,243	20,402	0.7115
867	1,452	2,868	710	0.4890
877	1,940	3,565	1,151	0.5933
878	<b>2</b> 60	1,604	93	0 <b>.3</b> 577
Total:	105,603	400,626	61,513	Average: 0.58 <b>2</b> 4

Total weight reported: 43,564 kg (95,840 lb)

TABLE 2. Lobster Log Book Catch-Effort Data for November 1973.

Origin block	Number traps pulled	Number shorts	Number legals	Legal catch per trap pulled
DIOCK	craps purred	3110110	105010	(numbers)
643	360	5 <b>1</b>	74	0.2055
65 <b>3</b>	1,023	302	45 <b>2</b>	0.4418
654	683	871	454	0.8696
655	<b>72</b> 0	845	435	0.6041
656	<b>588</b>	274	276	0.469 <b>3</b>
657	945	372	314	0.3322
658	480	71	86	0.1791
665	386	214	266	0.6891
679	<b>2</b> 98	71	132	0.4430
680	368	<b>7</b> 5	119	0.3234
681	798	559	566	0.7093
68 <b>2</b>				
	86	45 070	81	0.9419
685	580	970	340	0.586 <b>2</b>
686	420	1,160	460	1.095 <b>2</b>
687	100	80	40	0.4000
707	<b>62</b> 5	1,870	5 <b>2</b> 5	0,8400
708	<b>2,</b> 585	7,715	1,676	<b>0.6483</b>
709	1,610	2,890	814	0,5056
710	340	<b>32</b> 5	9 <b>3</b>	0 <b>. 273</b> 5
719	593	69	119	0.2007
<b>72</b> 0	2,079	448	5 <b>37</b>	0 <b>. 2</b> 58 <b>3</b>
737	2,793	4,032	1,231	0 <b>.</b> 44 <b>0</b> 7
738	1,876	1,408	721	0.3843
739	161	82	180	1.1180
740	40	0	22	0.5500
756	2,123	1,594	59 <b>7</b>	0.2812
757	3,725	4,834	1,577	0.4233
761	220	287	136	0.6182
762	3,421	2,586	1,850	0.5408 ·
765	3,257	981	1,966	0.6036
801	1,074	645	215	0.2002
80 <b>7</b>	2,126	1,840	846	0.3979
8 <b>2</b> 1				
	1,200	3,334	476	0.3967
822	461	273	89	0.1931
8 <b>2</b> 9	1,577	<b>2,1</b> 59	792	0.5022
84 <b>2</b>	5,274	53,688	2,318	0.4395
849	2,395	2,647	848	0.3541
850	2,394	2,259	857	0.3580
860	16,500	86,656	7,405	0.4488
867	3,086	4,447	1,330	• 0.4310
877 	835 	840	<b>2</b> 57	0.3078
Total:	<b>70,20</b> 5	193,869	31,572	Average: 0.4517

Total weight reported: 22,924 kg (50,433 lb)

TABLE 3. Lobster Log Book Catch-Effort Data for December 1973.

Origin block	Number traps pulled	Number shorts	Number legals	Legal catch per trap pulled (numbers)
643	240	42	28	0.1166
652	195	62	96	0.4923
653	879	361	374	0.4254
654	682	906	636	0.9325
655	484	424	223	0.4408
656	<b>33</b> 8	171	151	0.4467
657	751	327	<b>24</b> 0	0.3195
658	<b>24</b> 0	40	43	0.1791
665	274	310	238	0.8686
680	633	631	311	0.4913
681	1,332	1,221	668	0.5015
68 <b>2</b>	75 · .	60 2 020	48 845	0.6400
685.	780 320	2,020	845	1.0833
686	<b>32</b> 0	755	250	0.7813
687	515	856	622	1.2078
688	100	50	80	0.8000
707	600	3,100	830	1.3833
708	2,113	7,664	2,095	0.9914
709	1,606	3,430	1,440	0.8966
710	730	1,425	501	0.6863
711	<b>24</b> 6	<b>24</b> 3	<b>162</b>	0.6585
<b>72</b> 0	4,088	868	1,273	0.3114
737	1,947	2,041	8 <b>2</b> 9	0.4257
738	1,209	937	5 <b>2</b> 0	0.4301
<b>7</b> 39	132	49	73	0.5530
740	99	10	86	0.8687
756	1,674	1,483	5 <b>3</b> 9	0.3220
<b>757</b>	3,170	4,819	1,589	0.5013
761	<sup>*</sup> 830	<b>47</b> 5	258	0.3108
76 <b>2</b>	2,192	7,148	1,034	0.4717
765	3,091	809	1,770	0.5 <b>72</b> 6
801	58 <b>2</b>	2,277	96	0.1649
807	1,492	1,275	609	0.4082
821	954	1,795	410	0.4298
822	280	2,105	97	0.3464
8 <b>2</b> 9	3,027	4,731	1,736	0.5735
842	2,943	27,788	1,025	0.3483
849	2,640	2,921	587	0.2223
850	432	409	168	0.3889
860	9,766	42,996	3,643	0.3730
867	1,900	2,293	1,145	0.6026
8 <b>77</b>	974	4,226	498	0.5113
8 <b>7</b> 8	759	3,021	395	0.5204
Total:	57,314	138,574	28,261	Average: 0.4930

Total weight reported: 23,206 kg (51,053 1b)

TABLE 4. Lobster Log Book Catch-Effort Data for January 1974.

Origin	Number	Number	Number	Legal catch per trap pulled
block	traps pulled	shorts	<u>legals</u>	(numbers)
643	360	187	162	0.4500
65 <b>2</b>	330	133	194	0.5879
65 <b>3</b>	838	336	376	0.4486
65 <b>4</b>	658	6 <b>3</b> 8	366	0.556 <b>2</b>
655	604	293	223	0.369 <b>2</b>
656	<b>72</b> 0	294	302	0.4194
657	1,035	55 <b>2</b>	386	0.3729
658	360	302	171	0.4750
665	72	28	33	0.4583
680	196	171	173	0.8826
681	510	304	431	0.8450
685	385	380	<b>22</b> 9	0.5948
686	<b>2</b> 60	670	530	2.0385
687	355	55 <b>2</b>	357	1.0056
<b>7</b> 08	840	1,715	768	0.9142
709	995	1,385	9 <b>2</b> 5	0.9296
710	<b>23</b> 5	194	155	0.6596
711	110	50	55	0.5000
<b>72</b> 0	3,834	750	910	0.2373
737	1,050	1,472	46 <b>2</b>	0.4400
738	608	601	333	0.5476
739	2	0	2	1.0000
740	471	99	409	0.8684
756	1,006	633	210	0.2087
757	1,898	2,617	1,184	0.6238
761	240	176	130	0.5417
76 <b>2</b>	549	723	272	0.4954
765	1,709	677	1,202	0.7033
801	590	4,756	191	0.3237
807	600	675	348	0.5800°
813	270	22	29 <b>7</b>	1.1000
814	1,331	67	1,032	0.7753
821	702	1,942	458	0.65 <b>2</b> 4
822	673	8,879	282	0.4190
8 <b>2</b> 9	2,681	2,915	794	0.2962
842	2,062	11,498	661	0.3206
849	1,340	1,207	293	0.2187
850	586	885	266	0.4539
860	2,909	7,657	90 <b>2</b>	0.3101
877	660	7,850	556	· 0.84 <b>24</b>
878	667	1,933	580	0.8696
Total:	35,301	66,218	17,610	Average:
•			-	0.4988

Total weight reported: 14,517 kg (31,937 1b)

TABLE 5. Lobster Log Book Catch-Effort Data for February 1974.

				Legal catch
Origin	Number traps	Number	Number	per trap pulled
lock	pulled	shorts	1ega1s	(numbers)
643	480	441	<b>24</b> 9	0.5188
65 <b>2</b>	175	69	96	0,5486
653	588	<b>21</b> 5	<b>252</b> .	0.4285
654	610	331	316	0.5180
655	<b>5</b> 85	190	185	0.3162
656	602	220	168	0.2791
657	965	730	457	0.4736
658	<b>24</b> 0	167	73	0.3042
681	<b>27</b> 9	81	146	0.5232
685	430.	5 <b>32</b>	3 <b>2</b> 6	0.7581
		60		
686 687	100		140	1.4000
687	175	37	63	0.3600
688'	160	160	205	1.2813
689	140	60	100	0.7143
707	185	1,040	195	1.0541
708	793	1,010	507	0.6393
<b>7</b> 09	490	1,182	333	0.6796
710	165	60	60	0.3636
711	360	90	237	0.6583
712	105	50	100	0 <b>.</b> 95 <b>2</b> 4
<b>72</b> 0	1,946	183	267	0.1372
737	<b>3</b> 0	24	6	0.2000
740	404	<b>62</b>	178	0.4406
<b>7</b> 56	374	<b>2</b> 56	86	0.2299
757	979	1,327	381	0.3892
762	111	85	30	0.2703
765	1,317	666	740	0.5619
801	5 <b>1</b> 5	2,259	<b>12</b> 5	0.2427
813	392	8	<b>2</b> 85	0.7270
814	1,324	18	89 <b>1</b>	0.6730
821	518	1,252	<b>27</b> 8	0.5367
822	334	3,008	94	0.2814
8 <b>2</b> 9	3,911	5,046	<b>2,47</b> 8	0.6336
84 <b>2</b>	708	3, <b>2</b> 51	213	0.3008
849	250	231	213 54	0.2160
850				
860	2,311	3,350	1,463	0.6331
	1,938	4,834	696	0.3591
867 077	400	8 <b>2</b> 5	<b>2</b> 67	0.6675
877 070	895	7,775	696	0.7777
878	789	2,363	590	0.7478
Total:	27,073	43,548	14,026	Average:
	,070	,540	~., ~= ~	0.5180

Total weight reported: 11,064 kg (24,341 1b)

TABLE 6. Lobster Log Book Catch-Effort Data for March 1974.

Total:	14,520	29,902	8,335	Average: 0.5740
878 —————	673	5,873	743	1.1040
86 <b>7</b>	750	1,944	640	0.85 <b>33</b>
860 .	1,293	8,936	707	0.5467
850	2,643	4,089	1,738	0.6575
84 <b>2</b>	. 99	1,324	570 59	0.5959
8 <b>2</b> 9	88 <b>2</b>	910	5 <b>7</b> 0	0.646 <b>2</b>
8 <b>22</b>	8 <b>2</b>	54	17	0.2073
8 <b>21</b>	313	673	141	0.4504
807	135	110	40	0.2962
765	209	80	114	0.5454
76 <b>2</b>	319	270	146	0.4576
757	4 <b>7</b> 9	1,250	303	0.63 <b>2</b> 5
756	30	80	17	0.5666
740	130	11	38	0.2923
<b>72</b> 0	589	60	127	0.2156
719	210	14	29	0.1380
712	50	30	30	0.6000
711	230	112	98	0.4260
710	200	800	285	1.4250
709	30	20	5	0.1666
708	190	376	172	0, 905 <b>2</b>
707	400	1,025	225	0.56 <b>2</b> 5
689	135	82	131	0.9703
688	455	249	335	0.7362
687	150	120	175	1.1666
685	<b>23</b> 0	110	<b>12</b> 5	0.5434
681	318	150	202	0 <b>.</b> 635 <b>2</b>
658	360	<b>17</b> 5	<b>132</b>	0.3666
657	881	269	<b>2</b> 65	0.3007
656	510	81	107	0,2098
655	472	139	136	0.2881
654	363	157	. 177	0.4876
65 <b>3</b>	205	72	87	0 <b>. 4243</b>
65 <b>2</b>	145	50	65	0 <b>.</b> 448 <b>2</b>
6 <b>43</b>	360	207	154	0.4277
	and the second s	shorts	<u>legals</u>	(numbers)
Origin Olock	Number traps pulled	Number	Number	per trap pulled
<u> </u>	Masmbos	Masonhose	Marmhan	

Total weight reported: 6,996 kg (15,392 1b)

TABLE 7. Season Total Catch Per Effort by Area for 1973 - 1974.

Tabatan araa	Number traps pulled	Number	Number	Catch per effor
Lobster area	purred	shorts	<u>legals</u>	legals
Santa Catalina Is.	20,303	<b>23,</b> 586	9,084	0.4474
San Clemente Is.	47,158	68,798	24,115	0.5113
Santa Barbara Is.	<b>12,</b> 145	4,161	7,759	0.6388
San Nicolas Is.	3,533	461	2,834	0.8021
Anacapa Is.	<b>2,7</b> 50	11,985	2,830	1.0290
Santa Cruz Is.	22,630	49,484	18,122	0 .8007
Santa Rosa Is.	2,286	1,472	1,665	0.7283
La Jolla - Pt. Loma	88,447	555,749	49,773	0.5627
Laguna - Encinitas	57,907	128,403	24,638	0.4254
Palos Verdes -		·		
Huntington Beach	20,111	5,807	5 <b>,77</b> 5	0.2871
Port Hueneme -	·		-	
Malibu Pt.	6,413	8,111	3,386	0.5279
Pt. Arguello -	·	·	•	
Ventura	26,333	14,720	11,336	0.4304
Total	310,016	872,737	161,317	Average: