

Appendix III: Profile of Commercial Fisheries for the MLPA South Coast Study Region

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Appendix III (a): Summary of Santa Barbara County Fisheries, 1998-2007

Table III-1: Summary of Santa Barbara County finfish fisheries, 1998-2007

Market Category Groupings ¹ FINFISH	Primary Species Targeted	Primary Gear	Number of Fishermen ⁴ 2007 ³	Number of Vessels ⁴ 2007 ³	Average Annual Landings (pounds)	Average Annual Value (\$) ²
California halibut	California halibut	Trawl, hook-and-line, entangling nets	48	49	74,669	\$322,976
Sharks and skates	Shortfin mako, Thresher, Soupfin, Spiny dogfish, Leopard, Shovelnose guitarfish, Skates	Hook-and-line, trawl, entangling nets	30	32	58,335	\$83,322
White seabass	White seabass	Entangling nets, hook-and-line	14	16	55,479	\$122,901
Nearshore fishes	Nearshore rockfish, Cabezon	Hook-and-line, trap	22	28	35,099	\$243,871
California sheephead	California sheephead	Hook-and-line, traps	12	15	16,545	\$57,520
Swordfish	Swordfish	Harpoon, entangling nets	7	7	11,332	\$42,500
Salmon	Chinook salmon	Hook-and-line	2	2	10,980	\$28,595
Tuna	Albacore tuna	Hook-and-line	8	8	7,496	\$10,066
Angel shark	Pacific angel shark	Trawl nets	10	10	6,345	\$7,400
Sole	English, Petrale, Rex	Trawl nets	13	13	5,183	\$4,960
Shelf rockfish	Shelf rockfish	Trawl, hook-and-line, entangling nets	14	15	5,019	\$13,784
Unidentified rockfish	Unidentified rockfish	Trawl, hook-and-line,	3	3	4,488	\$15,413

		entangling nets				
Ocean whitefish	Ocean whitefish	Hook-and-line, entangling nets	7	7	2,944	\$8,383
Lingcod	Lingcod	Hook-and-line, trap, entangling net, trawl	12	13	2,181	\$5,270
California yellowtail	California yellowtail	Hook-and-line, round haul nets	3	3	1,664	\$2,360
Mackerel-anchovy	Jack mackerel, Pacific mackerel, and Northern Anchovy	Round haul nets	2	2	1,105	\$323
Pacific bonito	Pacific bonito	Round haul nets, hook-and-line	1	1	943	\$452
Dover sole/ Thornyhead/Sablefish	Dover sole, Longspine thornyhead, Shortspine thornyhead, Sablefish	Trawl nets, hook-and-line	6	5	660	\$1,174
Slope rockfish	Slope rockfish	Trawl nets	4	4	306	\$395
Croaker	White	Entangling nets, hook-and-line, round haul nets	3	3	242	\$327
Sanddabs	Pacific sanddabs, Speckled sanddabs, Longfin, sanddabs	Trawl, hook-and-line	2	2	159	\$186
Surf perch	Barred, Black	Hook-and-line, trawl	0	0	64	\$48
All other fish	All finfish with small landings		22	22	981	\$757

Source: Data compiled from the Commercial Fishery Information System data base (extract date: May 2, 2008).

¹ Market Category Groupings are listed in descending order by average annual landings within the county.

² Average values were calculated by applying an inflationary figure to each of the ten year (1998-2007)

³ Commercial license year from April 1 through March 31 the following calendar year.

⁴ Fishermen and vessels may fish more than one market category grouping.

Table III-2: Summary of Santa Barbara County invertebrate fisheries, 1998-2007

Market Category Groupings¹ INVERTEBRATES	Primary Species Targeted	Primary Gear	Number of Fishermen⁴ 2007³	Number of Vessels⁴2007³	Average Annual Landings (pounds)	Average Annual Value (\$)²
Sea Urchin	Red, purple, and white sea urchins	Hand harvest	110	60	4,299,401	\$3,451,281
Market Squid	Market squid	Round haul nets, and brail	3	3	807,180	\$126,695
Rock crab	Brown, red, and yellow rock crab	Traps	36	38	597,271	\$856,893
Ridgeback prawns	Ridgeback prawn	Traps	3	3	361,313	\$571,896
Sea cucumbers	Warty and giant red sea cucumbers	Hand harvest, and trawl	22	18	192,232	\$167,495
Spiny lobster	Spiny lobster	Traps	38	40	172,837	\$1,533,485
Kellet's whelk	Kellet's whelk	Hand harvest	15	16	32,959	\$21,678
Spider crab	Spider crab	Traps	24	26	19,339	\$23,243
Spot prawn	Spot prawn	Traps	7	7	19,101	\$175,225
All Other Invertebrates	All invertebrates with small amount of landings		21	21	5,039	\$2,729

Source: Data compiled from the Commercial Fishery Information System data base (extract date: May 2, 2008).

¹ Market Category Groupings are listed in descending order by average annual landings within the county.

² Average values were calculated by applying an inflationary figure to each of the ten year (1998-2007)

³ Commercial license year from April 1 through March 31 the following calendar year.

⁴ Fishermen and vessels may fish more than one market category grouping.

Appendix III (b): Summary of Ventura County Fisheries, 1998-2007

Table III-3: Summary of Ventura County finfish fisheries, 1998-2007

Market Category Groupings ¹ FINFISH	Primary Species Targeted	Primary Gear	Number of Fishermen ⁴ 2007 ³	Number of Vessels ⁴ 2007 ³	Average Annual Landings (pounds)	Average Annual value (\$) ²
Pacific sardine	Pacific sardine	Round haul nets	38	31	6,562,252	\$341,222
Mackerel-anchovy	Jack mackerel, Pacific mackerel, and Northern Anchovy	Round haul nets	36	32	5,532,368	\$402,221
California halibut	California halibut	Trawl, hook-and-line, entangling nets	37	38	147,759	\$614,043
Pacific bonito	Pacific bonito	Round haul nets, hook-and-line	9	8	134,385	\$37,455
Tuna	Albacore tuna	Hook-and-line	6	5	131,059	\$212,250
Dover sole/ Thornyhead /Sablefish	Dover sole, Longspine thornyhead, Shortspine thornyhead, Sablefish	Trawl nets, hook-and-line	7	12	97,234	\$223,470
White seabass	White seabass	Entangling nets, hook-and-line	26	27	79,816	\$196,729
Swordfish	Swordfish	Harpoon, entangling nets	8	7	55,381	\$217,215
Sharks and skates	Shortfin mako, Thresher, Soupfin, Spiny dogfish, Leopard, Shovelnose guitarfish, Skates	Hook-and-line, trawl, entangling nets	31	31	52,368	\$61,545
Slope rockfish	Slope rockfish	Trawl nets	9	13	45,695	\$53,222
Shelf rockfish	Shelf rockfish	Trawl, hook-and-line, entangling nets	12	12	35,552	\$49,638
Croakers	White	Entangling nets, hook-and-line, round haul nets	4	4	27,038	\$11,035
Nearshore fishes	Nearshore rockfish, Cabezon	Hook-and-line, trap	16	17	18,020	\$72,654

Angel shark	Pacific angel shark	Trawl nets	10	11	17,667	\$22,566
Sole	English, Petrale, Rex	Trawl nets	13	13	17,456	\$12,711
Unidentified rockfish	Unidentified rockfish	Trawl, hook-and-line, entangling nets	3	3	15,352	\$14,889
California yellowtail	California yellowtail	Hook-and-line, round haul nets	15	15	9,381	\$6,308
Ocean whitefish	Ocean whitefish	Hook-and-line, entangling nets	14	13	4,005	\$6,128
Salmon	Chinook salmon	Hook-and-line	3	3	2,666	\$4,795
Lingcod	Lingcod	Hook-and-line, trap, entangling net, trawl	7	7	1,803	\$2,998
Sandabs	Pacific sanddabs, Speckled sanddabs, Longfin, sanddabs	Trawl, hook-and-line	5	5	1,489	\$2,342
Surf perch	Barred, and black	Hook-and-line, trawl	5	5	1,487	\$342
All other fish	All finfish with small landings		31	33	212	\$1,621

Source: Data compiled from the Commercial Fishery Information System data base (extract date: May 2, 2008).

¹ Market Category Groupings are listed in descending order by average annual landings within the county.

² Average values were calculated by applying an inflationary figure to each of the ten year (1998-2007)

³ Commercial license year from April 1 through March 31 the following calendar year.

⁴ Fishermen and vessels may fish more than one market category grouping.

Table III-4: Summary of Ventura County invertebrate fisheries, 1998-2007

Market Category Groupings¹ INVERTEBRATES	Primary Species Targeted	Primary Gear	Number of Fishermen⁴ 2007³	Number of Vessels⁴2007³	Average Annual Landings (pounds)	Average Annual value (\$)²
Market Squid	Market squid	Round haul nets, and brail	81	63	66,144,244	\$12,824,706
Sea urchin	Red, purple, and white sea urchins	Hand harvest	49	23	2,217,951	\$1,958,725
Sea cucumber	Warty and giant red sea cucumbers	Hand harvest, and trawl	23	15	310,523	\$339,952
Rock crab	Brown, red, and yellow rock crab	Traps	33	31	173,491	\$251,542
Ridgeback prawn	Ridgeback prawns	Traps	6	5	139,297	\$250,689
Spiny lobster	Spiny lobster	Traps	20	20	85,299	\$764,048
Spot prawn	Spot prawn	Traps	7	6	82,712	\$852,241
Spider crab	Spider crab	Traps	20	21	16,984	\$23,645
Kellet's whelk	Kellet's whelk	Hand harvest	10	10	1,675	\$1,291
Other invert	All invertebrates with small amount of landings		19	22	5,448	\$3,353

Source: Data compiled from the Commercial Fishery Information System data base (extract date: May 2, 2008).

¹ Market Category Groupings are listed in descending order by average annual landings within the county.

² Average values were calculated by applying an inflationary figure to each of the ten year (1998-2007)

³ Commercial license year from April 1 through March 31 the following calendar year.

⁴ Fishermen and vessels may fish more than one market category grouping.

Appendix III (c): Summary of Los Angeles County fisheries, 1998-2007

Table III-5: Summary of Los Angeles County finfish fisheries, 1998-2007

Market Category Groupings¹ FINFISH	Primary Species Targeted	Primary Gear	Number of Fishermen⁴ 2007³	Number of Vessels⁴2007³	Average Annual Landings (pounds)	Average Annual value (\$)²
Pacific sardine	Pacific sardine	Round haul nets	43	36	73,087,472	\$3,875,649
Mackerel-anchovy	Jack mackerel, Pacific mackerel, and Northern Anchovy	Round haul nets	49	44	22,272,583	\$1,684,010
Tuna	Albacore, bluefin, yellowfin, bigeye, and skipjack tuna	Hook-and-line, and round haul nets	21	20	7,018,606	\$4,660,835
Swordfish	Swordfish	Harpoon, entangling nets	26	25	1,421,308	\$4,238,893
Pacific bonito	Pacific bonito	Round haul nets, hook-and-line	13	13	822,058	\$250,639
Sharks and skates	Shortfin mako, Thresher, Soupfin, Spiny dogfish, Leopard, Shovelnose guitarfish, Skates	Hook-and-line, trawl, entangling nets	49	51	180,294	\$204,156
White seabass	White seabass	Entangling nets, hook-and-line	18	21	131,454	\$280,857
California halibut	California halibut	Trawl, hook-and-line, entangling nets	67	61	119,248	\$521,628
Dover sole Thornyhead Sablefish	Dover sole, Longspine thornyhead, Shortspine thornyhead, Sablefish	Trawl nets, hook-and-line	13	23	108,635	\$333,116
California yellowtail	California yellowtail	Hook-and-line, round haul nets	24	23	51,113	\$63,370
croaker	White	Entangling nets, hook-and-line, round haul nets	10	9	42,291	\$32,709
sheephead	California sheephead	Traps, and hook-	10	12	23,883	\$101,247

		and-line				
Shelf rockfish	Shelf rockfish	Hook-and-line, entangling nets	8	10	23,606	\$47,923
Nearshore fishes	Nearshore rockfish, Cabezon	Hook-and-line, trap	19	22	22,421	\$62,128
Sole	English, Petrale, Rex	Trawl nets	15	15	16,799	\$16,933
Slope rockfish	Slope rockfish	Hook-and-line	6	16	13,487	\$25,147
Unidentified rockfish	Miscellaneous rockfish	Hook-and-line	3	4	10,189	\$16,213
Smelt	Silversides, jack, and top smelt	Round haul nets	8	7	6,837	\$5,558
Sanddabs	Pacific sanddabs, Speckled sanddabs, Longfin, sanddabs	Hook-and-line	6	7	6,188	\$23,504
Other fish	Miscellaneous fish	Miscellaneous gear	59	58	3,903	\$2,304
Lingcod	Lingcod	Hook-and-line, trap, and entangling net	10	10	1,348	\$2,859
Surf Perch	Barred, and black	Hook-and-line, trawl	4	5	945	\$2,075
Ocean whitefish	Ocean whitefish	Hook-and-line, entangling nets	4	4	852	\$1,356
Angel shark	Pacific angel shark	Miscellaneous gears	7	6	763	\$545
Salmon	Chinook salmon	Hook-and-line	0	0	487	\$1,243
Other flatfish	Other flatfishes	Miscellaneous gear	1	1	110	\$80
White shark	White shark	Miscellaneous nets	0	0	100	\$613

Source: Data compiled from the Commercial Fishery Information System data base (extract date: May 2, 2008).

¹ Market Category Groupings are listed in descending order by average annual landings within the county.

² Average values were calculated by applying an inflationary figure to each of the ten year (1998-2007)

³ Commercial license year from April 1 through March 31 the following calendar year.

⁴ Fishermen and vessels may fish more than one market category grouping.

Table III-6: Summary of Los Angeles County invertebrate fisheries, 1998-2007

Market Category Groupings¹ INVERTEBRATES	Primary Species Targeted	Primary Gear	Number of Fishermen⁴ 2007³	Number of Vessels⁴2007³	Average Annual Landings (pounds)	Average Annual value (\$)²
Market squid	Market squid	Round haul nets, and brail	77	61	53,017,529	\$10,344,472
Sea urchin	Red, purple, and white sea urchins	Hand harvest	25	19	2,189,611	\$2,253,215
Sea cucumber	Warty and giant red sea cucumbers	Hand harvest, and trawl	18	12	137,818	\$171,016
Spiny lobster	Spiny lobster	Traps	41	42	113,511	\$984,101
Rock crab	Brown, red, and yellow rock crab	Traps	26	28	80,907	\$131,887
Spot prawn	Spot prawn	Traps	7	7	38,158	\$408,163
Spider crab	Spider crab	Traps	23	25	30,975	\$38,071
Kellet's whelk	Kellet's whelk	Hand harvest	25	27	27,173	\$19,212
Ridgeback prawn	Ridgeback prawns	Traps	2	2	23,234	\$36,302
Other inverts	All invertebrates with small amount of landings		24	24	2,315	\$2,636

Source: Data compiled from the Commercial Fishery Information System data base (extract date: May 2, 2008).

¹ Market Category Groupings are listed in descending order by average annual landings within the county.

² Average values were calculated by applying an inflationary figure to each of the ten year (1998-2007)

³ Commercial license year from April 1 through March 31 the following calendar year.

⁴ Fishermen and vessels may fish more than one market category grouping.

Appendix III (d): Summary of Orange County fisheries, 1998-2007

Table III-7: Summary of Orange County finfish fisheries, 1998-2007

Market Category Groupings ¹ FINFISH	Primary Species Targeted	Primary Gear	Number of Fishermen ⁴ 2007 ³	Number of Vessels ⁴ 2007 ³	Average Annual Landings (pounds)	Average Annual value (\$) ²
Dover Sole/Thornyhead/Sablefish	Dover sole, Longspine thornyhead, Shortspine thornyhead, Sablefish	Hook-and-line, and traps	11	21	112,307	\$290,235
Swordfish	Swordfish	Harpoon, entangling nets	8	8	32,536	\$204,902
Mackerel anchovy	Jack mackerel, Pacific mackerel, and Northern Anchovy	Round haul nets	3	3	32,514	\$25,595
Croaker	White	Hook-and-line, and round haul nets	2	2	29,774	\$42,812
California sheephead	California sheephead	Traps, and hook-and-line	4	4	13,292	\$56,894
Slope rockfish	Slope rockfish	Hook-and-line	11	20	8,827	\$18,936
Pacific sardine	Pacific sardine	Round haul nets	2	2	7,851	\$2,818
Sharks and skates	Shortfin mako, Thresher, Soupfin, Spiny dogfish, Leopard, Shovelnose guitarfish, Skates	Hook-and-line, and round haul nets	10	10	4,953	\$5,259
Nearshore fishes	Nearshore rockfish, Cabezon	Hook-and-line, trap	2	2	4,029	\$11,066
Shelf rockfish	Shelf rockfish	Hook-and-line, and traps	2	2	3,380	\$7,402
Tuna	Albacore tuna	Hook-and-line	0	0	2,778	\$6,938
California halibut	California halibut	Hook-and-line	7	7	2,181	\$12,883
Unidentified rockfish	Miscellaneous rockfish	Hook-and-line	0	0	1,480	\$3,431
California yellowtail	California yellowtail	Hook-and-line, round haul nets	0	0	1,046	\$2,231

Other fish	Miscellaneous fish	Miscellaneous gear	5	7	733	\$500
Sanddabs	Pacific sanddabs, Speckled sanddabs, Longfin, sanddabs	Hook-and-line	2	2	472	\$1,093
White seabass	White seabass	Hook-and-line	0	0	402	\$1,149
Ocean whitefish	Ocean whitefish	Hook-and-line	1	1	281	\$566
Smelt	Silversides, jack, and top smelt	Round haul nets	0	0	109	\$535
Sole	English, Petrale, Rex	Miscellaneous gear	8	9	102	\$229
Lingcod	Lingcod	Hook-and-line	1	1	54	\$221
Pacific bonito	Pacific bonito	Round haul nets, hook-and-line	0	0	43	\$37
Other flatfish	Other flatfishes	Miscellaneous gear	0	0	19	\$39
Surf perch	Barred, shiner, white, walleye	Hook-and-line, round haul nets	0	0	10	\$11
Angel shark	Pacific angel shark	Miscellaneous gears	1	1	2	\$2
White shark	White shark	N/A	0	0	0	\$0
Salmon	Chinook salmon	N/A	0	0	0	\$0

Source: Data compiled from the Commercial Fishery Information System data base (extract date: May 2, 2008).

¹ Market Category Groupings are listed in descending order by average annual landings within the county.

² Average values were calculated by applying an inflationary figure to each of the ten year (1998-2007)

³ Commercial license year from April 1 through March 31 the following calendar year.

⁴ Fishermen and vessels may fish more than one market category grouping.

Table III-8: Summary of Orange County invertebrate fisheries, 1998-2007

Market Category Groupings¹ INVERTEBRATES	Primary Species Targeted	Primary Gear	Number of Fishermen⁴ 2007³	Number of Vessels⁴2007³	Average Annual Landings (pounds)	Average Annual value (\$)²
Spiny lobster	Spiny lobster	Traps	34	30	105,233	\$928,583
Sea urchin	Red, purple, and white sea urchins	Hand harvest	7	6	79,275	\$77,855
Spot prawns	Spot prawn	Traps	5	5	33,645	\$351,540
Rock crabs	Brown, red, and yellow rock crab	Traps	11	13	30,154	\$39,506
Market squid	Market squid	Round haul nets, and brail	0	0	22,841	\$6,218
Kellet's whelk	Kellet's whelk	Hand harvest, and traps	6	7	7,745	\$4,562
Spider crab	Spider crab	Traps	9	9	4,241	\$4,667
Sea cucumbers	Warty and giant red sea cucumbers	Hand harvest	0	0	752	\$687
Ridgeback prawns	Ridgeback prawns	Traps	0	0	23	\$239
Other inverts	All invertebrates with small amount of landings	Miscellaneous gear	7	7	613	\$2,101

Source: Data compiled from the Commercial Fishery Information System data base (extract date: May 2, 2008).

¹ Market Category Groupings are listed in descending order by average annual landings within the county.

² Average values were calculated by applying an inflationary figure to each of the ten year (1998-2007)

³ Commercial license year from April 1 through March 31 the following calendar year.

⁴ Fishermen and vessels may fish more than one market category grouping.

Appendix III (e): Summary of San Diego County fisheries, 1998-2007

Table III-9: Summary of San Diego County finfish fisheries, 1998-2007

Market Category Groupings¹ FINFISH	Primary Species Targeted	Primary Gear	Number of Fishermen⁴ 2007³	Number of Vessels⁴2007³	Average Annual Landings (pounds)	Average Annual value (\$)²
Tuna	Albacore, bluefin, yellowfin, bigeye, and skipjack tuna	Hook-and-line, and round haul nets	25	24	785,125	\$724,567
Swordfish	Swordfish	Harpoon, entangling nets	42	38	391,923	\$1,571,142
Pacific Sardine	Pacific sardine	Round haul nets	1	1	214,852	\$26,166
Sharks and Skate	Shortfin mako, Thresher, Soupfin, Spiny dogfish, Leopard, Shovelnose guitarfish, Skates	Hook-and-line, trawl, round haul nets	51	45	198,006	\$298,233
Dover sole Thornyhead Sablefish	Dover sole, Longspine thornyhead, Shortspine thornyhead, Sablefish	Hook-and-line, and traps	9	22	131,686	\$393,791
California sheephead	California sheephead	Traps, and hook-and-line	13	12	36,671	\$162,206
Mackerel-anchovy	Jack mackerel, Pacific mackerel, and Northern Anchovy	Round haul nets	5	6	32,283	\$7,591
California halibut	California halibut	Hook-and-line	22	22	31,113	\$120,307
White seabass	White seabass	Hook-and-line	10	10	21,909	\$57,569
Slope rockfish	Slope rockfish	Hook-and-line	10	20	17,719	\$26,880
California yellowtail	California yellowtail	Hook-and-line, round haul nets	27	25	16,274	\$24,162
Shelf rockfish	Slope rockfish	Hook-and-line	20	19	9,401	\$17,279
Unidentified rockfish	Miscellaneous rockfish	Hook-and-line	8	7	6,426	\$9,716
Nearshore fishes	Nearshore rockfish, Cabezon	Hook-and-line, trap	15	15	4,299	\$15,393
Pacific bonito	Pacific bonito	Round haul nets, hook-and-line	5	5	2,421	\$2,005

Ocean whitefish	Ocean whitefish	Hook-and-line	7	7	1,289	\$1,372
Other fish	Miscellaneous fish	Miscellaneous gear	47	44	1,148	\$939
Lingcod	Lingcod	Hook-and-line	12	13	773	\$2,177
Croaker	White, queenfish	Hook-and-line, and round haul nets	0	0	477	\$484
Sanddabs	Pacific sanddabs, Speckled sanddabs, Longfin, sanddabs	Hook-and-line	2	2	359	\$771
Surf perch	Barred, shiner, white, walleye	Hook-and-line, round haul nets	1	1	241	\$261
Sole	English, Petrale, Rex	Miscellaneous gear	1	1	127	\$158
Angel shark	Pacific angel shark	Miscellaneous gears	2	2	112	\$141
Smelt	Silversides, jack, and top smelt	Round haul nets	1	1	21	\$18
Other flatfish	Other flatfishes	Miscellaneous gear	1	1	4	\$8
White shark	White shark	N/A	0	0	0	\$0
Salmon	Chinook salmon	N/A	0	0	0	\$0

Source: Data compiled from the Commercial Fishery Information System data base (extract date: May 2, 2008).

¹ Market Category Groupings are listed in descending order by average annual landings within the county.

² Average values were calculated by applying an inflationary figure to each of the ten year (1998-2007)

³ Commercial license year from April 1 through March 31 the following calendar year.

⁴ Fishermen and vessels may fish more than one market category grouping.

Table III-10: Summary of San Diego County invertebrate fisheries, 1998-2007

Market Category Groupings¹ INVERTEBRATES	Primary Species Targeted	Primary Gear	Number of Fishermen⁴ 2007³	Number of Vessels⁴ 2007³	Average Annual Landings (pounds)	Average Annual value (\$)²
Sea urchin	Red, purple, and white sea urchins	Hand harvest	19	14	745,921	\$681,276
Spiny lobster	Spiny lobster	Traps	55	57	237,866	\$1,993,702
rock crab	Brown, red, and yellow rock crab	Traps	15	15	140,069	\$181,832
Spot prawn	Spot prawn	Traps	6	6	47,112	\$443,302
Market squid	Market squid	Round haul nets	2	2	14,937	\$3,439
Kellet's whelk	Kellet's whelk	Hand harvest, and traps	10	11	12,720	\$10,597
Sea cucumber	Warty and giant red sea cucumbers	Hand harvest	5	5	9,625	\$9,091
Spider crab	Spider crab	Traps	12	13	9,164	\$8,478
Ridgeback prawns	Ridgeback prawns	Traps	0	0	18	\$97
Other inverts	All invertebrates with small amount of landings	Miscellaneous gear	13	14	1,703	\$2,433

Source: Data compiled from the Commercial Fishery Information System data base (extract date: May 2, 2008).

¹ Market Category Groupings are listed in descending order by average annual landings within the county.

² Average values were calculated by applying an inflationary figure to each of the ten year (1998-2007)

³ Commercial license year from April 1 through March 31 the following calendar year.

⁴ Fishermen and vessels may fish more than one market category grouping.

Appendix III (f): Summary of the Santa Barbara County landings (pounds), 1998-2007

Table III-11: Summary of Santa Barbara County finfish landings (pounds), 1998-2007

FINFISH Market Category Grouping	YEAR										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10-Year Average
California halibut	66,782	99,067	66,742	102,546	105,170	69,386	59,425	49,419	61,455	66,698	74,669
Sharks and skates	101,340	64,906	58,445	56,465	69,785	62,202	50,403	37,888	25,871	56,041	58,335
White seabass	32,465	50,169	41,116	36,364	57,067	84,768	65,642	59,371	79,817	48,008	55,479
Nearshore fishes	58,815	58,192	68,090	51,836	34,383	18,269	14,263	11,936	17,918	17,285	35,099
California sheephead	51,116	13,609	19,695	22,341	23,590	18,031	4,419	7,757	3,068	1,819	16,545
Swordfish	18,200	12,673	1,724	6,253	5,074	6,219	4,694	7,659	4,024	46,795	11,332
Salmon	27,260	2,155	980	1,446	61,547	900	11,279	3,868	274	89	10,980
Tuna	13,972	11,887	5,662	13,873	6,133	3,026	11,966	4,925	96	3,416	7,496
Angel shark	14,543	7,815	8,139	5,922	4,781	6,045	5,436	3,413	4,348	3,005	6,345
Sole	2,211	3,162	13,005	7,868	13,770	2,595	7,986	154	387	692	5,183
Shelf rockfish	14,976	8,208	3,592	1,251	2,286	642	5,571	3,918	5,140	4,607	5,019
Unidentified rockfish	18,965	13,140	4,312	2,766	2,687	2,074	579	209	47	105	4,488
Ocean whitefish	8,388	5,073	2,251	4,096	2,317	2,364	1,160	2,283	1,083	421	2,944
Lingcod	4,916	2,779	769	1,636	2,228	3,440	2,389	1,536	1,279	840	2,181
California yellowtail	3,873	3,882	1,275	177	815	1,078	2,325	1,354	1,424	434	1,664
Mackerel-anchovy	4,138	21	6,696	11	21	8	7	3	15	127	1,105
Pacific bonito	473	216	327	48	395	1,235	2,954	302	3,433	51	943
Dover sole/ Thornyhead/Sablefish	56	887	54	148	82	105	1,241		513	3,515	660
Slope rockfish	1	151	98		71	1,108	1,522	40		64	306
Croaker	699	506	382	393	177	79	60	83		39	242
Sanddabs	193	12	418	359	235	89	158	25		97	159
Surf perch	86	17	16		153	330	2	5	30		64
All other fish	1,464	1,209	1,024	1,459	1,126	940	706	709	573	604	981

Source: Data was compiled from the CDFG Commercial Fishery Information System database (extract date: May 2, 2008)

Note: 2007 data is preliminary

Table III-12: Summary of Santa Barbara County invertebrate landings (pounds), 1998-2007

INVERTE- BRATES	YEAR										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10-Year Average
Sea Urchin	3,259,767	4,547,920	2,360,326	2,184,572	3,249,303	4,333,122	5,872,821	5,877,381	5,486,331	5,822,469	4,299,401
Market Squid	43,542	43,392	2,483,758	1,572,467	1,092,773	1,163,832	884,706	784,960	84	2,284	807,180
Rock crab	612,899	445,750	477,153	512,128	637,329	679,142	556,216	641,490	710,203	700,395	597,271
Ridgeback prawns	374,926	1,215,581	1,132,439	180,708	272,262	301,196	43,232	17,288	24,031	51,466	361,313
Sea cucumbers	111,793	157,104	67,474	277,218	337,206	265,411	238,620	197,458	140,699	129,334	192,232
Spiny lobster	145,851	124,356	132,804	174,177	211,553	214,129	221,542	190,861	179,269	133,830	172,837
Kellet's whelk	13,669	26,538	24,843	21,967	13,626	23,606	23,295	8,186	107,032	66,832	32,959
Spider crab	38,801	20,339	9,866	11,285	17,493	20,117	20,593	9,949	27,135	17,813	19,339
Spot prawn	34,228	44,082	30,133	15,973	25,847	5,630	3,617	5,130	11,072	15,294	19,101
All Other Invertebrates	3,405	8,853	7,491	681	4,086	6,129	2,724	12,258	2,724	2,043	5,039

Source: Data was compiled from the CDFG Commercial Fishery Information System database (extract date: May 2, 2008)

Note: 2007 data is preliminary

Appendix III (g): Summary of the Ventura County landings (pounds), 1998-2007

Table III-13: Summary of Ventura County finfish landings (pounds), 1998-2007

FINFISH Market Category Grouping	YEAR										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10-Year Average
Pacific sardine	1,956,655	5,473,012	6,825,757	8,877,920	11,185,078	5,221,399	10,436,747	4,308,024	4,266,404	7,071,519	6,562,252
Mackerel- anchovy	3,349,309	5,240,639	8,344,143	8,778,302	1,600,159	1,466,545	6,226,916	6,852,354	9,539,976	3,925,339	5,532,368
California halibut	144,880	210,941	148,588	227,405	210,654	148,428	140,634	75,749	81,233	89,081	147,759
Pacific bonito	335,518	117,204	80,252	9	34,650	0	136,141	16,103	581,795	42,174	134,385
Tuna	144,087	34,972	41,762	41,391	388,972	390,782	45,303	32,318	143,114	47,888	131,059
Dover sole Thornyhead /Sablefish	84,611	48,670	127,076	168,632	72,846	84,586	90,902	105,091	105,909	84,016	97,234
White seabass	5,657	26,079	28,430	35,872	95,224	86,668	109,291	78,904	104,833	227,204	79,816
Swordfish	164,746	53,437	81,195	47,095	59,001	47,238	36,835	1,034	22,228	41,005	55,381
Sharks and skates	63,781	59,066	73,341	53,040	44,426	52,157	49,791	33,736	41,415	52,927	52,368
Slope rockfish	180,590	21,082	19,589	32,347	34,553	54,810	33,697	31,837	36,772	11,675	45,695
California sheephead	86,424	36,691	38,952	54,091	32,108	31,235	31,276	15,935	18,703	10,109	35,552
Shelf Rockfish	180,050	29,322	11,099	7,156	4,443	1,427	10,187	7,801	11,030	7,863	27,038
Croakers	4,709	3,181	25,541	35,252	14,269	22,651	5,154	10,415	33,613	25,417	18,020
Nearshore fishes	28,525	35,206	37,670	28,451	18,943	5,299	11,727	3,407	3,135	4,307	17,667
Angel shark	32,686	38,492	25,003	16,837	17,492	12,275	8,432	8,290	9,778	5,272	17,456
Sole	12,598	9,011	12,470	31,790	9,775	6,623	6,991	4,656	21,305	38,298	15,352
Unidentified rockfish	57,070	18,179	9,233	3,766	1,671	260	1,099	816	1,332	382	9,381
California yellowtail	6,901	7,478	5,361	1,699	9,976	2,051	907	1,668	866	3,138	4,005
Ocean whitefish	5,525	4,267	4,730	3,874	1,680	1,085	824	729	1,306	2,641	2,666
Salmon	11,834	573	220	299	3,971		746	176		215	1,803

Lingcod	5,720	1,692	448	1,674	831	1,010	2,034	391	438	655	1,489
Sandabs	2,738	1,363	1,207	1,677	776	467	5,470	12	104	1,057	1,487
Surf perch	14	788	270	34	19	12	241	144	487	108	212
All other fish	2,356	2,982	3,384	3,378	1,950	2,706	2,444	1,571	2,432	2,066	2,527

Source: Data was compiled from the CDFG Commercial Fishery Information System database (extract date: May 2, 2008)

Note: 2007 data is preliminary

Table III-14: Summary of Ventura County invertebrate landings (pounds), 1998-2007

INVERTE- BRATES	YEAR										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10-Year Average
Market Category Grouping											
Market Squid	5,799,950	140,901,486	145,002,569	84,619,803	39,527,026	42,744,307	49,682,338	47,577,595	25,426,752	80,160,618	66,144,244
Sea urchin	2,390,414	3,116,984	2,365,666	1,353,495	1,628,148	2,137,200	2,258,663	2,274,265	2,349,840	2,304,835	2,217,951
Sea cucumber	441,472	270,853	478,172	260,438	438,181	346,373	208,302	277,754	179,497	204,183	310,523
Rock crab	159,802	66,423	121,958	159,039	159,065	203,946	254,560	203,617	177,338	229,162	173,491
Ridgeback prawn	52,638	170,598	294,025	129,210	163,678	186,927	15,652	30,897	134,485	214,862	139,297
Spiny lobster	70,866	57,288	71,301	79,774	82,909	89,284	104,450	101,454	108,117	87,546	85,299
Spot prawn	210,062	159,940	90,745	89,802	54,017	24,291	32,663	43,931	61,534	60,135	82,712
Spider crab	14,013	10,424	14,821	15,921	16,735	26,253	29,009	16,666	11,195	14,799	16,984
Kellet's whelk	348	3,238	2,410	1,632	1,159	1,019	2,216	1,854	1,144	1,731	1,675
Other invert	2,724	6,810	8,853	4,767	5,448	7,491	2,724	7,491	1,362	6,810	5,448

Source: Data was compiled from the CDFG Commercial Fishery Information System database (extract date: May 2, 2008)

Note: 2007 data is preliminary

Appendix III (h): Summary of the Los Angeles County landings (pounds), 1998-2007

Table III-15: Summary of Los Angeles County finfish landings (pounds), 1998-2007

FINFISH Market Category Grouping	YEAR										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10-Year Average
Pacific sardine	69,152,351	85,947,696	86,263,897	89,866,542	86,655,046	53,822,780	52,224,069	53,236,434	59,002,589	94,703,314	73,087,472
Mackeral-anchovy	41,270,125	24,038,077	53,263,123	30,745,967	12,277,192	9,724,737	9,209,361	11,651,142	16,758,434	13,787,672	22,272,583
Tuna	31,433,930	19,291,159	6,131,935	2,682,242	2,402,161	2,386,091	2,208,475	2,526,112	299,874	824,084	7,018,606
Swordfish	477,104	1,815,169	3,033,697	2,740,986	2,122,967	2,327,068	1,344,829	69,562	174,236	107,462	1,421,308
Pacific bonito	2,147,710	72,852	13,041	902	8,084	2,663	639,209	5,784	4,885,635	444,697	822,058
Sharks and skates	204,148	267,864	206,928	207,053	229,813	207,383	78,899	105,443	113,587	181,820	180,294
White seabass	89,961	140,552	99,909	87,684	182,239	206,482	100,116	96,382	155,762	155,457	131,454
California halibut	143,013	218,701	190,829	125,131	144,938	92,216	112,318	62,837	55,932	46,563	119,248
Dover sole											
Thornyhead											
Sablefish	52,326	106,643	78,673	51,828	78,453	129,315	176,762	175,577	100,921	135,856	108,635
California yellowtail	197,741	41,783	77,031	61,279	54,049	18,752	25,092	4,991	23,319	7,093	51,113
croaker	27,689	79,104	88,240	51,560	57,056	48,000	19,624	24,652	15,011	11,974	42,291
sheephead	62,971	28,113	28,991	28,689	22,556	18,421	15,786	11,357	15,133	6,811	23,883
Shelf rockfish	104,968	39,457	11,520	10,449	7,438	1,268	13,176	18,010	12,137	17,637	23,606
Nearshore fishes	79,475	36,679	23,131	22,969	14,896	11,048	10,073	12,340	5,744	7,853	22,421
Sole	38,419	22,969	14,018	15,730	8,926	12,818	17,134	20,357	8,438	9,181	16,799
Slope rockfish	16,728	4,013	8,261	21,421	21,230	25,234	21,780	6,589	5,185	4,432	13,487
Unidentified rockfish	80,761	13,054	2,919	2,776	991	162	237	596	34	355	10,189
Smelt	766	1,289	7,299	19,284	12,981	9,214	11,324	3,399	182	2,633	6,837

Sanddabs	3,628	8,056	10,957	13,295	12,938	3,165	1,978	884	3,341	3,640	6,188
Other fish	4,318	5,423	4,930	3,723	4,420	3,298	4,080	3,451	2,754	2,635	3,903
Lingcod	2,570	776	1,047	1,280	358	613	1,735	1,788	1,210	2,098	1,348
Surf Perch	636	459	2,817	526	2,143	912	362	354	1,095	145	945
Ocean whitefish	3,808	348	414	1,826	537	207	315	232	359	477	852
Angel shark	1,783	581	788	1,117	749	277	437	66	1,590	237	763
Salmon	469	87	267	703	366	275	2,705	0	0	0	487
Other flatfish	13	103	56	123	95	3	0	707	2	0	110
White shark	60	0	0	0	50	61	422	350	56	0	100

Source: Data was compiled from the CDFG Commercial Fishery Information System database (extract date: May 2, 2008) Note: 2007 data is preliminary

Table III-16: Summary of Los Angeles County invertebrate landings (pounds), 1998-2007

INVERTEBRATES	YEAR										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10-Year Average
Market squid	501,600	61,045,584	98,662,148	86,355,527	62,082,214	16,985,383	23,156,830	70,207,733	81,702,131	29,476,139	53,017,529
Sea urchin	1,067,681	2,747,457	4,916,417	4,519,167	2,689,246	1,432,081	1,742,620	1,093,645	934,451	753,345	2,189,611
Sea cucumber	203,195	133,782	89,511	169,413	155,449	137,488	103,146	88,085	149,532	148,576	137,818
Spiny lobster	134,728	80,835	105,555	108,572	95,734	120,384	137,611	123,334	116,901	111,457	113,511
Rock crab	80,558	38,015	54,294	76,393	75,328	72,596	76,872	71,700	75,666	187,645	80,907
Spot prawn	58,030	48,042	30,561	26,730	13,471	14,721	42,149	49,820	48,001	50,054	38,158
Spider crab	35,827	21,013	20,398	25,306	34,034	56,565	35,806	28,236	26,706	25,861	30,975
Kellet's whelk	10,415	7,928	8,908	10,513	27,659	43,361	33,221	58,657	21,505	49,565	27,173
Ridgeback prawn	6,344	3,151	135,996	52,830	3,705	8,690	282	10,004	1,844	9,496	23,234
Other inverts	681	4,767	3,405	2,043	2,043	6,129	681	681	1,362	1,362	2,315

Source: Data was compiled from the CDFG Commercial Fishery Information System database (extract date: May 2, 2008) Note: 2007 data is preliminary

Appendix III (i): Summary of the Orange County landings (pounds), 1998-2007

Table III-17: Summary of Orange County finfish landings (pounds), 1998-2007

FINFISH Market Category Grouping	YEAR										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10-Year Average
Dover Sole/Thornyhead/Sablefish	91,986	131,163	107,095	96,652	84,783	174,843	186,713	67,894	54,461	127,480	112,307
Swordfish	13,526	47,146	37,967	29,977	49,545	42,480	25,817	27,432	29,561	21,907	32,536
Mackerel anchovy	101,964	16,745	33,859	32,051	17,729	18,369	14,072	43,295	34,046	13,007	32,514
Croaker	16,643	34,238	33,736	35,308	67,438	45,721	14,221	13,786	16,867	19,786	29,774
California sheephead	18,800	18,321	26,798	7,325	15,326	11,889	8,502	6,078	10,884	8,994	13,292
Slope rockfish	3,617	846	2,312	2,749	23,893	13,881	13,264	4,908	12,415	10,382	8,827
Pacific sardine	6,962	2,287	345	795	3,440	1,349	754	240	41,381	20,953	7,851
Sharks and skates	5,858	2,643	2,524	2,166	1,937	6,820	5,457	7,321	6,388	8,413	4,953
Nearshore fishes	20,328	9,688	2,072	1,993	3,503	465	1,001	75	974	188	4,029
Shelf rockfish	10,389	6,542	3,376	4,444	1,128	787	5,426	831	79	802	3,380
Tuna	2,076	838	732	7,615	11,979	2,780	495	640	621	0	2,778
California halibut	934	336	606	110	3,720	2,831	3,459	3,109	3,227	3,475	2,181
Unidentified rockfish	8,261	2,550	1,477	310	1,569	17	36	561	20	0	1,480
California yellowtail	6,537	732	1,245	1,092	0	0	58	103	695	0	1,046
Other fish	816	833	714	510	816	833	1,224	612	408	561	733
Sanddabs	113	806	232	638	1,095	590	338	173	575	162	472
White seabass	401	1,323	510	208	472	1,109	0	0	0	0	402
Ocean whitefish	107	1,023	320	676	22	217	127	312	0	7	281
Smelt	3	36	0	0	0	201	854	0	0	0	109
Sole	37	0	7	42	239	229	13	1	190	257	102
Lingcod	45	262	91	0	134	0	0	0	7	5	54
Pacific bonito	133	0	11	0	0	0	0	0	285	0	43
Other flatfish	30	26	45	0	82	2	0	0	0	0	19
Surf perch	0	0	1	0	0	93	2	0	0	0	10
Angel shark	0	0	0	0	0	0	0	0	0	23	2
White shark	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0

Source: Data was compiled from the CDFG Commercial Fishery Information System database (extract date: May 2, 2008) Note: 2007 data is preliminary

Table III-18: Summary of Orange County invertebrate landings (pounds), 1998-2007

INVERTEBRATES Market Category Grouping	YEAR										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10-Year Average
Spiny lobster	107,872	84,671	125,233	98,070	98,010	81,222	90,919	100,085	149,241	117,006	105,233
Sea urchin	16,589	19,271	115,053	137,228	124,403	98,658	118,108	70,598	19,644	73,195	79,275
Spot prawns	43,995	44,978	21,431	40,697	28,967	26,134	28,506	36,511	35,034	30,194	33,645
Rock crabs	25,542	11,632	31,927	56,206	22,025	35,195	29,881	29,270	40,609	19,254	30,154
Market squid	150	386	200	0	650	121,888	933	0	104,199	0	22,841
Kellet's whelk	3,321	2,218	4,375	5,398	9,646	10,569	11,726	11,327	11,259	7,609	7,745
Spider crab	2,777	2,918	4,163	5,588	4,946	5,728	4,544	6,516	3,145	2,081	4,241
Sea cucumbers	0	5,494	347	0	761	623	288	5	0	0	752
Ridgeback prawns	2	0	0	230	0	0	0	0	0	0	23
Other inverts	681	0	1,362	1,362	0	2,043	681	0	0	0	613

Source: Data was compiled from the CDFG Commercial Fishery Information System database (extract date: May 2, 2008)

Note: 2007 data is preliminary

Appendix III (j): Summary of the San Diego County landings (pounds), 1998-2007

Table III-19: Summary of San Diego County finfish landings (pounds), 1998-2007

FINFISH Market Category Grouping	YEAR										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10-Year Average
Tuna	2,698,361	2,388,053	449,172	554,031	599,675	895,975	215,516	21,144	19,225	10,100	785,125
Swordfish	491,511	614,661	500,289	361,966	330,399	276,272	236,723	253,898	455,161	398,347	391,923
Pacific Sardine	450,702	1,209,193	42,258	450	199,448	61,930	97,990	47,420	39,032	94	214,852
Sharks and Skate	243,097	199,720	211,587	232,417	216,277	228,843	123,682	190,895	165,596	167,947	198,006
Dover sole Thronthead Sablefish	137,266	47,786	30,023	120,166	256,420	189,554	62,417	141,686	196,345	135,194	131,686
Califonia sheephead	38,890	29,631	57,657	35,463	26,536	28,305	26,539	47,279	36,626	39,784	36,671
Mackerel- anchovy	111,130	35,958	13,536	9,824	12,750	37,388	450	42,156	58,774	864	32,283
California halibut	33,122	41,046	55,572	50,183	18,356	19,046	24,054	30,748	20,612	18,390	31,113
White seabass	4,101	7,327	16,421	6,336	17,158	46,438	18,601	52,565	33,112	17,027	21,909
Slope rockfish	7,408	2,399	2,802	1,552	30,676	44,085	41,716	14,476	23,069	9,006	17,719
California yellowtail	29,500	12,639	25,122	17,163	10,625	8,618	18,444	13,259	13,834	13,537	16,274
Shelf rockfish	15,096	21,281	6,778	4,883	8,811	1,562	9,232	8,262	9,637	8,466	9,401
Unidentified rockfish	39,211	19,547	1,862	822	317	272	466	321	375	1,071	6,426
Nearshore fishes	4,583	3,997	6,595	13,523	5,339	817	2,533	1,509	2,202	1,893	4,299
Pacific bonito	8,089	555	1,879	185	739	1,403	1,842	831	7,151	1,531	2,421
Ocean whitefish	5,996	475	1,265	961	807	237	1,278	973	423	472	1,289
Other fish	1,003	884	1,071	850	1,258	1,309	1,207	1,020	1,530	1,343	1,148
Lingcod	368	684	42	96	701	1,581	1,520	681	847	1,212	773

Croaker	394	1,262	114	1,710	718	574	0	0	0	0	477
Sanddabs	715	905	1,428	68	0	160	0	0	49	263	359
Surf perch	0	262	568	1,175	140	30	0	229	0	1	241
Sole	2	326	365	213	249	16	0	0	97	5	127
Angel shark	515	67	346	0	22	45	0	13	27	83	112
Smelt	0	0	0	0	0	0	0	0	137	68	21
Other flatfish	0	25	0	1	0	0	0	0	12	3	4
White shark	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0

Source: Data was compiled from the CDFG Commercial Fishery Information System database (extract date: May 2, 2008)

Note: 2007 data is preliminary

Table III-20: Summary of San Diego County invertebrate landings (pounds), 1998-2007

INVERTEBRATES	YEAR										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10-Year Average
Sea urchin	448,412	582,278	644,464	788,973	1,018,903	891,704	881,415	743,482	822,143	637,440	745,921
Spiny lobster	195,168	138,868	270,810	234,240	212,368	229,475	303,707	246,355	335,733	211,935	237,866
rock crab	81,914	62,880	272,074	228,893	166,602	187,964	131,929	104,319	89,693	74,425	140,069
Spot prawn	28,722	36,640	36,684	47,463	31,888	33,337	57,340	71,108	73,708	54,229	47,112
Market squid	4,974	9,000	76,794	24,174	0	0	31,402	0	2,997	29	14,937
Kellet's whelk	534	2,234	1,857	1,413	779	217	232	25,659	49,486	44,793	12,720
Sea cucumber	13,198	29,117	6,408	1,365	12,892	6,706	9,257	10,505	0	6,799	9,625
Spider crab	7,369	13,354	6,487	4,349	4,275	6,841	7,117	6,761	16,747	18,343	9,164
Ridgeback prawns	0	184	0	0	0	0	0	0	0	0	18
Other inverts	2,043	1,362	0	2,043	681	2,043	2,724	3,405	1,362	1,362	1,703

Source: Data was compiled from the CDFG Commercial Fishery Information System database (extract date: May 2, 2008)

Note: 2007 data is preliminary

Appendix III (k): Profile of major commercial fisheries in the south coast study region

Fishery: California Halibut – Trawl

Species Targeted: California halibut (*Paralichthys californicus*)

Primary depth range: 10 to 300 feet (2 to 50 fathoms)

Primary habitat type(s): Soft Bottom

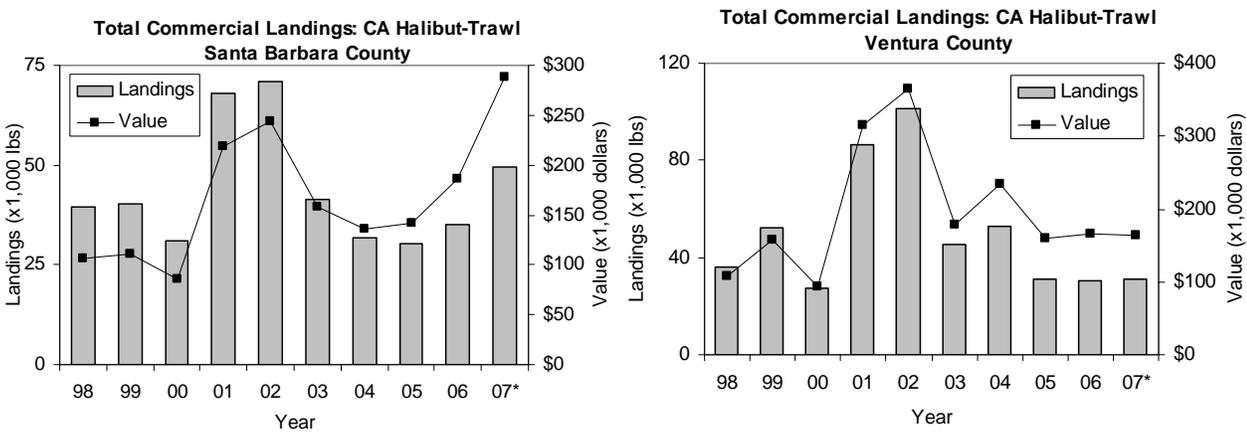
Primary gear: Trawl

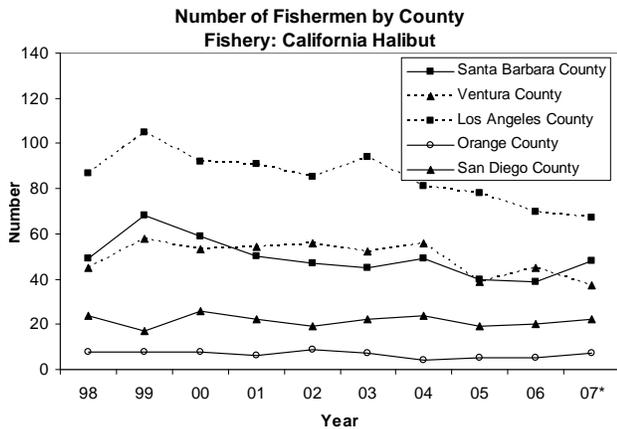
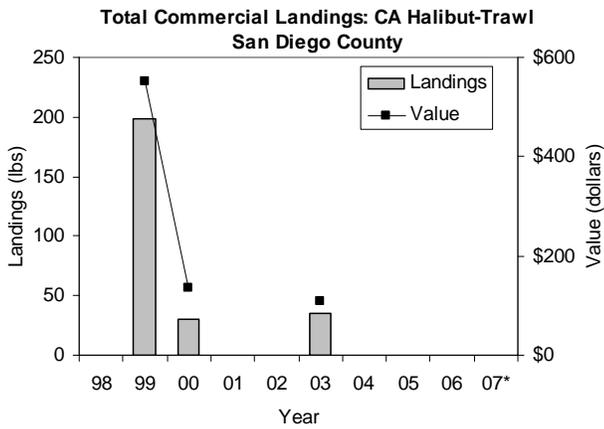
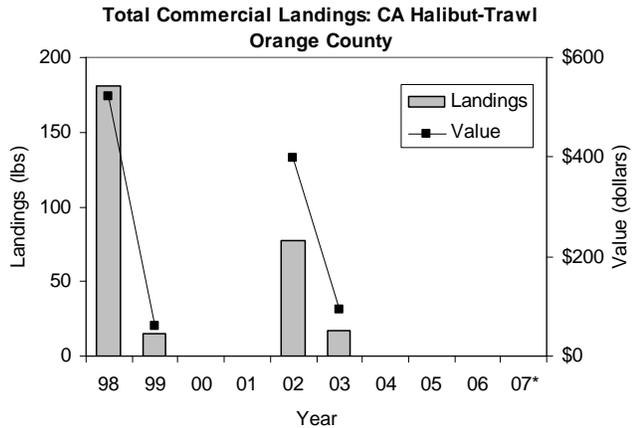
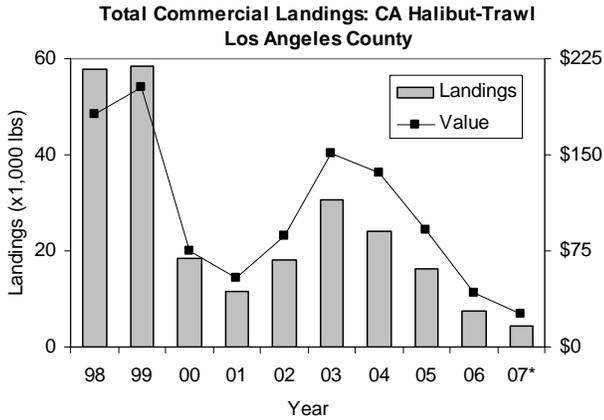
Primary area of fishery: State waters (x) Federal waters (x)

Synopsis of commercial regulations applicable to the south coast study region:

Trawling for California halibut is permitted in federal waters (3 to 200 nautical miles (nm) offshore) using trawl nets with a minimum mesh size of 4.5 in. Trawling is prohibited within state waters (0 to 3 nm offshore), except in the designated "California halibut trawl grounds," which encompass the area between Point Arguello (Santa Barbara County) and Point Mugu (Ventura County) in waters beyond 1 nm from shore. Bottom trawls used in this area must have a minimum mesh size of 7.5 in., and trawling is closed from March 15 to June 15 to protect spawning adults.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 23 July 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at least one landing for that fishery, port area and year. *2007 data are preliminary.





Fishery: California Halibut – Set Net

Species Targeted: California halibut (*Paralichthys californicus*)

Primary depth range: 10 to 300 feet (2 to 50 fathoms)

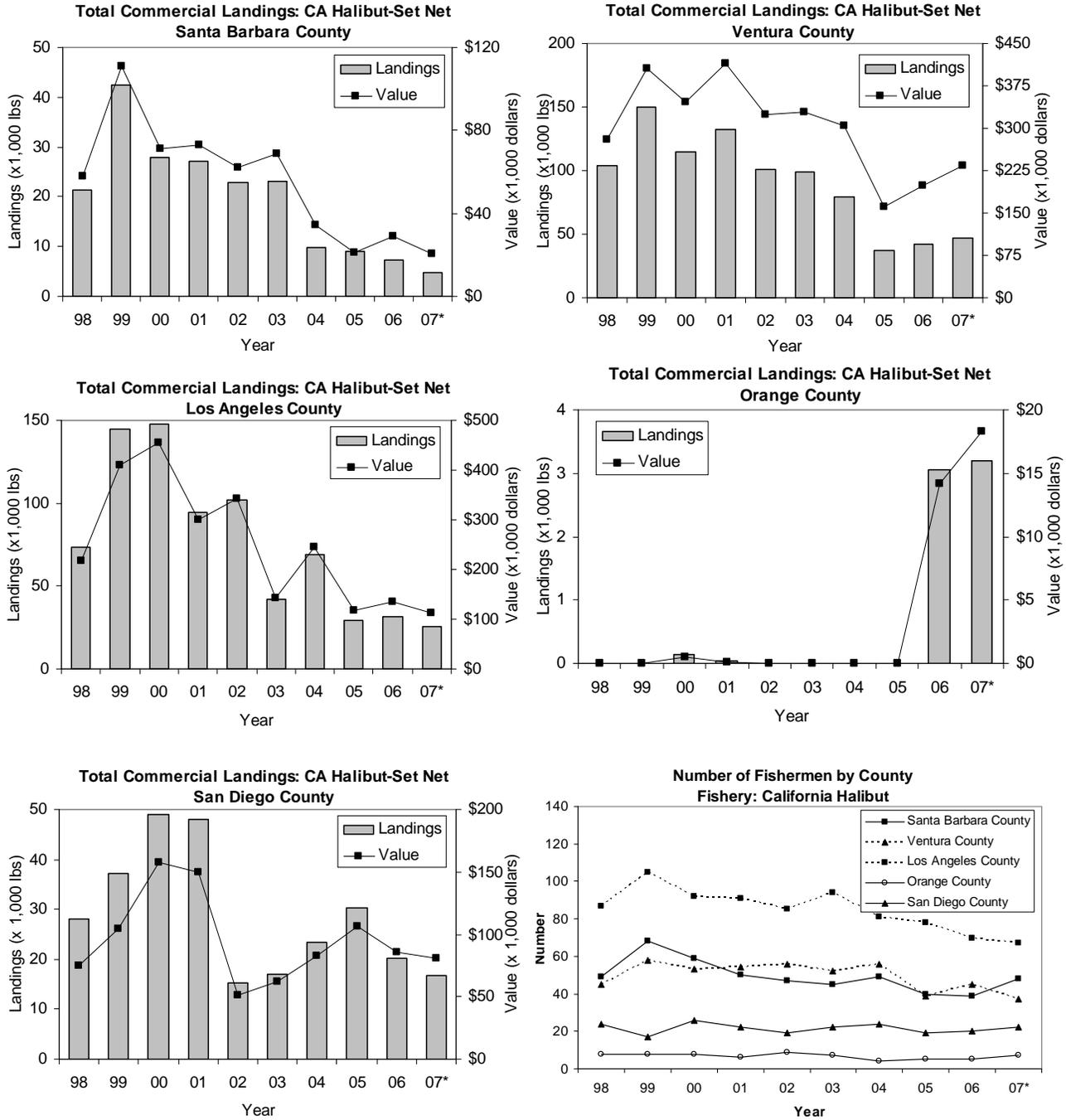
Primary habitat type(s): Soft bottom

Primary Gear: Gill and trammel net

Primary area of fishery: State waters () Federal waters (x)

Synopsis of commercial regulations applicable to the south coast study region: Gill and trammel nets are prohibited in state waters from Point Reyes to the California.-Oregon border, in state waters from Point Arguello to the California-Mexico border, in waters not less than 60 fathoms between Point Reyes to Point Argeullo, and in waters less than 70 fathoms (fm) or within 1 nm, whichever is less, around the Channel Islands. Currently, the mesh size must be at least 8.5 in. to harvest California halibut.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fishery Information System database (extraction date: 23 July 2008). Values are adjusted to account for inflation. The number of fishermen reflects the number of fishermen who have made at least one landing for that fishery, port area and year. *2007 data are preliminary:



Fishery: California Halibut – Hook-and-Line

Species Targeted: California halibut (*Paralichthys californicus*)

Primary depth range: 10 to 300 feet (2 to 50 fathoms)

Primary habitat type(s): Soft bottom

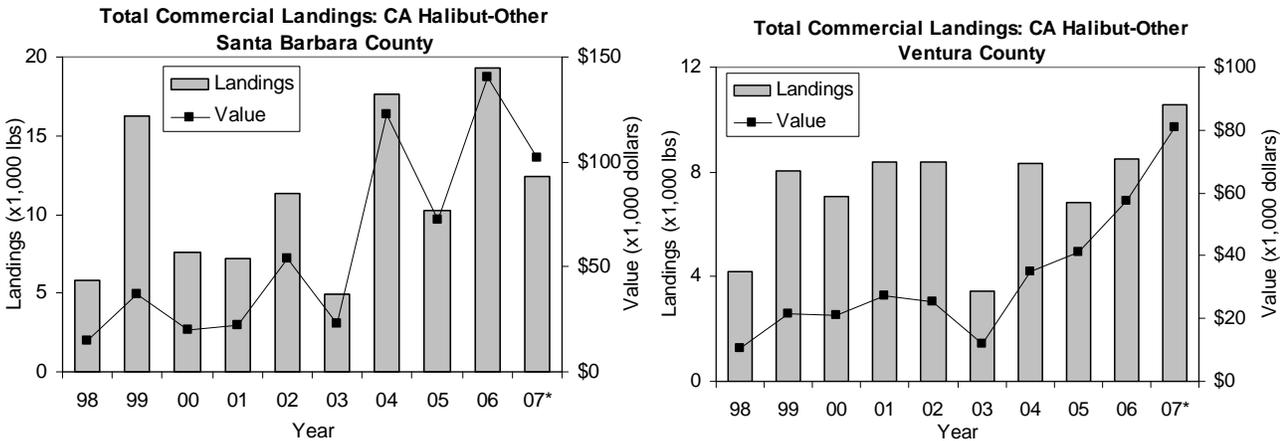
Primary Gear: Hook-and-line

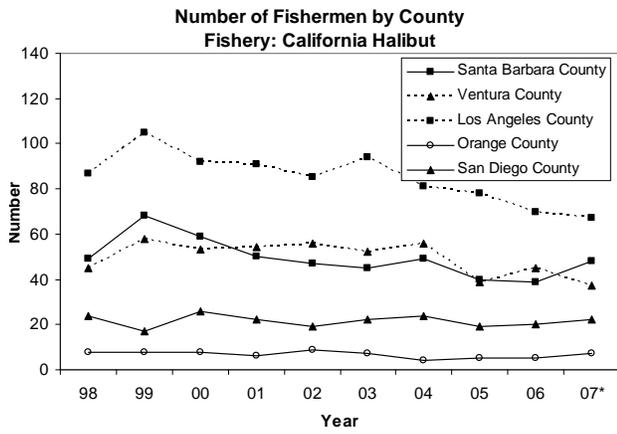
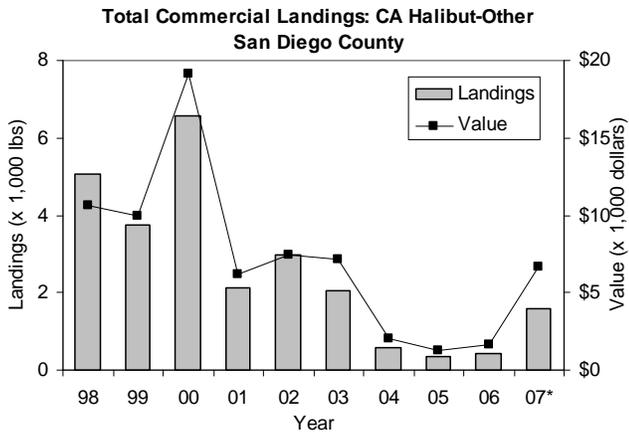
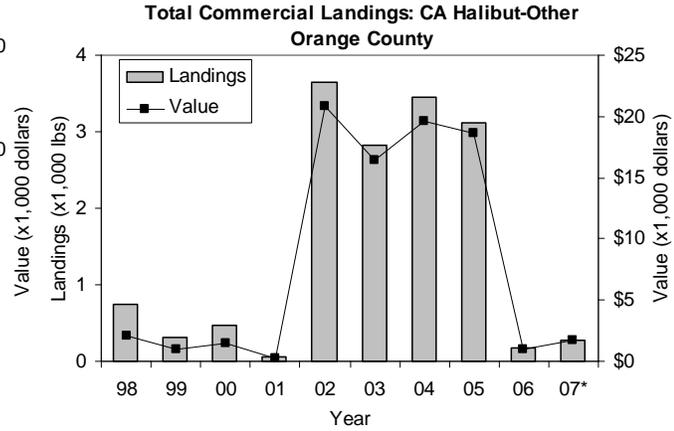
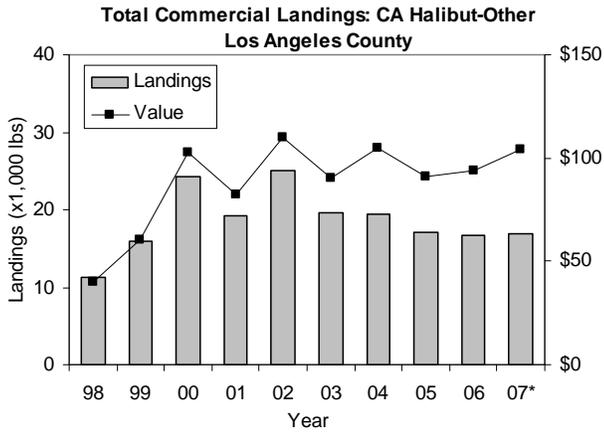
Primary area of fishery: State waters (x) Federal waters ()

Synopsis of commercial regulations applicable to the south coast study region:

Historically, commercial catches of California halibut by hook-and-line gear have been insignificant when compared to the total pounds landed annually by trawl and set net fisheries. However, over the last decade, hook-and-line catches of halibut have ranged from 11% to 23% of annual commercial landings, with the majority of those landings made in the San Francisco area. Commercial fishing laws prohibit the take of California halibut, unless the fish is 22 inches or greater in total length.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fishery Information System database (extraction date: 23 July 2008). Values are adjusted to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary:





Fishery: California sheephead

Species Targeted: California sheephead (*Semicossyphus pulcher*)

Primary depth range: 10 to 280 feet (2 to 47 fathoms)

Primary habitat type(s): Reef/kelp areas

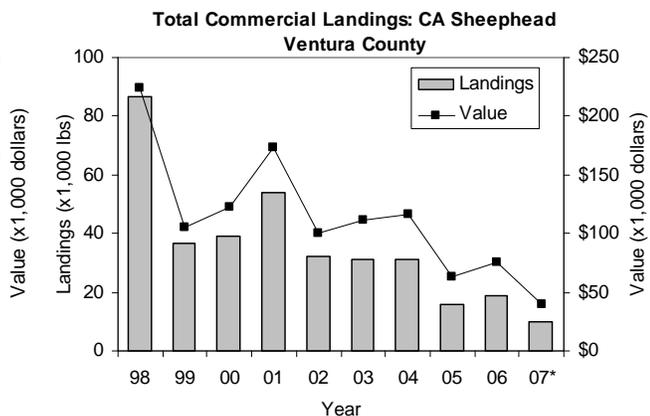
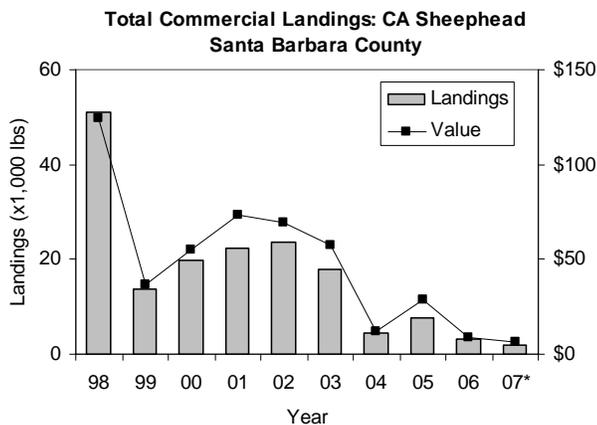
Primary gear: Trap

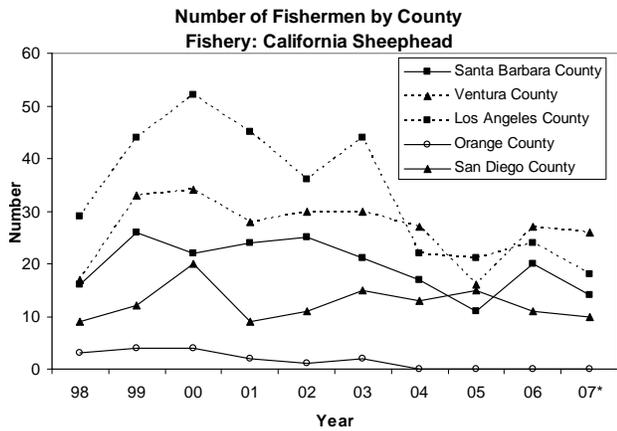
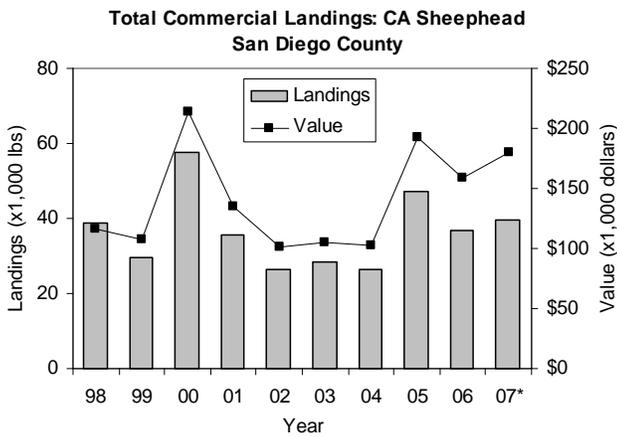
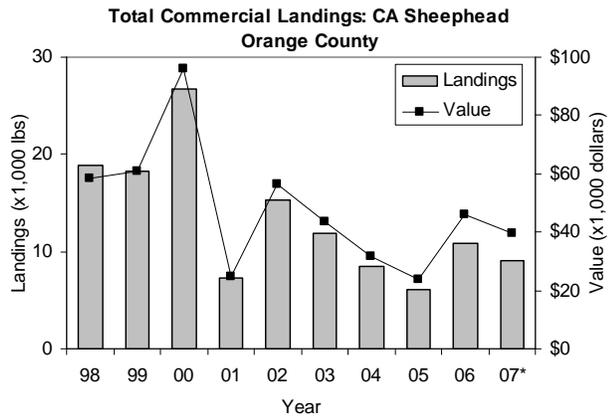
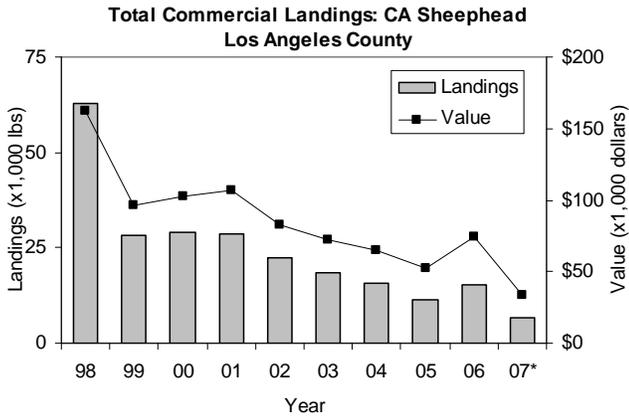
Primary area of fishery: State waters (x) Federal waters (x)

Synopsis of commercial regulations applicable to the south coast study region:

Commercial fishermen must possess a nearshore fishery permit to take California sheephead. Beginning in 2004, two month cumulative trip limits set by the state went into effect for the commercial California sheephead fishery in an effort to sustain it throughout the year. The California sheephead fishery has a two month cumulative trip limit set at 2,000 pounds for the January/February period, closed March/April, and thereafter 2,400 pounds for each of the remaining two-month periods per nearshore fishery permit holder.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 23 July 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary.





Fishery: California Spiny Lobster

Species Targeted: California Spiny Lobster (*Panulirus interruptus*)

Primary depth range: 12 to 300 feet (2 to 50 fathoms)

Primary habitat type(s): Rocky reefs

Primary gear: Trap

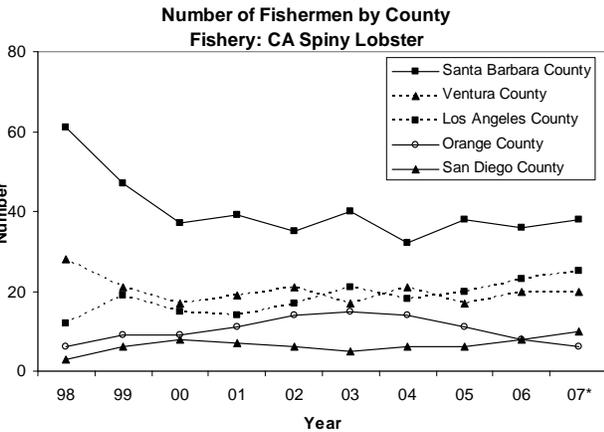
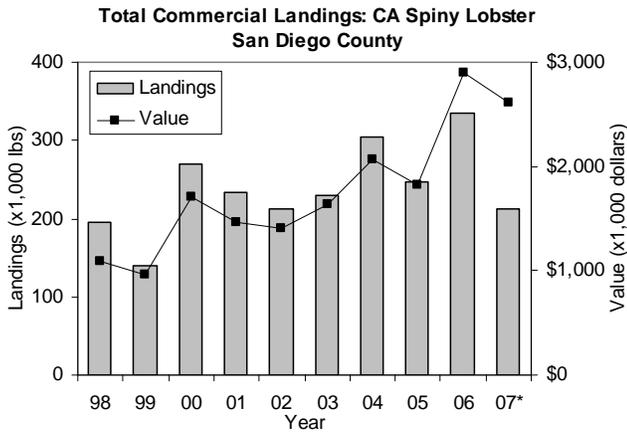
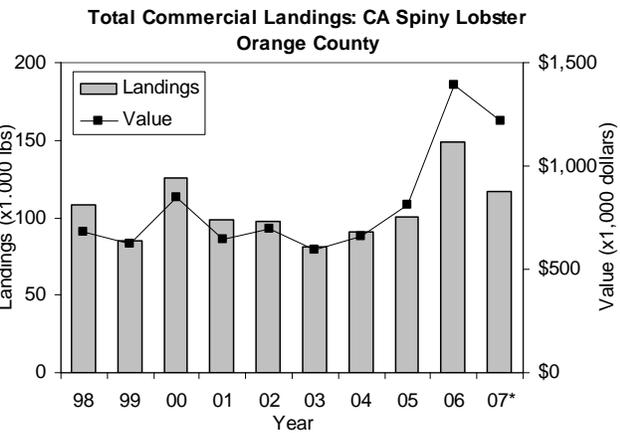
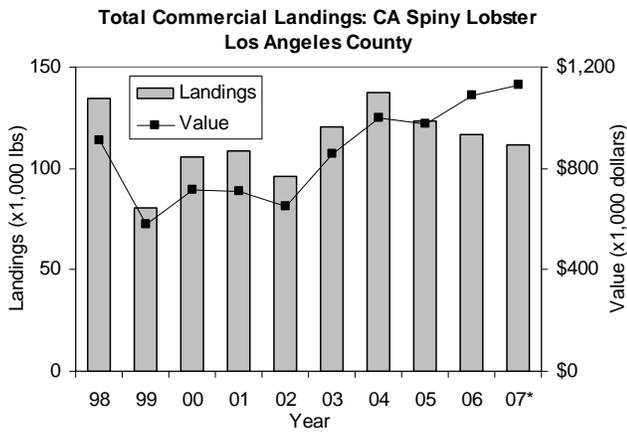
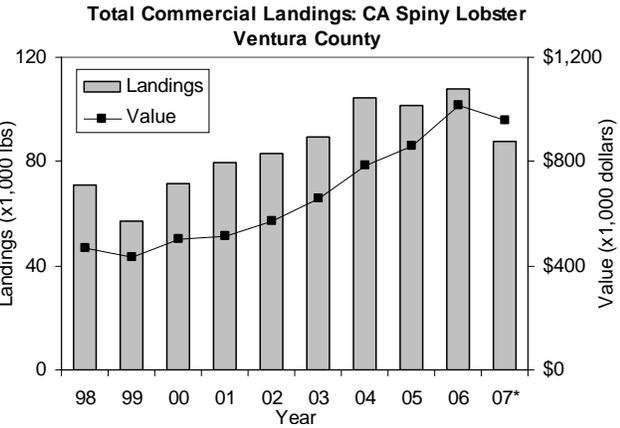
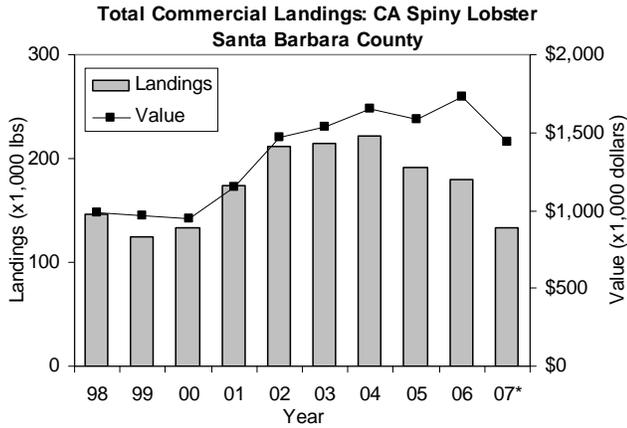
Primary area of fishery: State waters (x) Federal waters ()

Synopsis of commercial regulations applicable to the south coast study region:

A restricted access program for spiny lobster was initiated in 1996. The program currently provides for two types of permits: a restricted access lobster operator permit and an unrestricted lobster crewmember permit. A lobster operator permit, which is non-transferable, is required for the commercial take of spiny lobster. A lobster crewmember permit is required to assist an operator. Any licensed fisherman may buy a lobster crewmember permit; however, an operator permit is only issued to fishermen who held a permit in the previous season.

The commercial lobster fishery runs from early October through mid-March. A size limit of 3.25 in. carapace length (CL), measured from the rear edge of the eye socket to the rear edge of the body shell, measured along the midline. Lobster traps must have at least one escape port (measuring 2.38 in. x 11.5 in.). Escape ports effectively minimize the retention of undersized lobsters, and have been required since the 1976-1977 season. Lobster traps must have a destruct device that is approved by the Department of Fish and Game (DFG) to ensure that lost or abandoned traps do not continue to capture marine life indefinitely.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 02 May 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary.



Fishery: Coastal Pelagic Finfish Species (CPFS)

Species Targeted:

Pacific sardine (*Sardinops sagax*),
Northern anchovy (*Engraulis mordax*),
Pacific mackerel (*Scomber japonicus*),
Jack mackerel (*Trachurus symmetricus*)
Pacific bonito (*Sarda chiliensis*)

Primary depth range: 30 to 300 feet (5 to 50 fathoms)

Primary habitat type(s): Pelagic, open ocean

Primary gear: Purse seine / drum seine

Primary area of fishery: State waters (x) Federal waters (x)

Synopsis of commercial regulations applicable to the south coast study region:

This fishery is federally managed with guidance from the Pacific Fishery Management Council (PFMC) Coastal Pelagic Species (CPS) Fishery Management Plan (FMP). The plan dictates methods for stock assessment, quota limits, restricted access and harvest allocation.

Pacific Sardine: The season is open from January 1 through December 31. Harvest guidelines for 2007 were set at 151,654 metric tons. Harvest follows an allocation scheme where 35% of the total allowable harvest is allocated coast wide on January 1, 40% of the harvest guideline, plus any portion not harvested from the initial allocation is reallocated coastwide on July 1, and on September 15 the remaining 25%, plus any portion not harvested from earlier allocations, is reallocated.

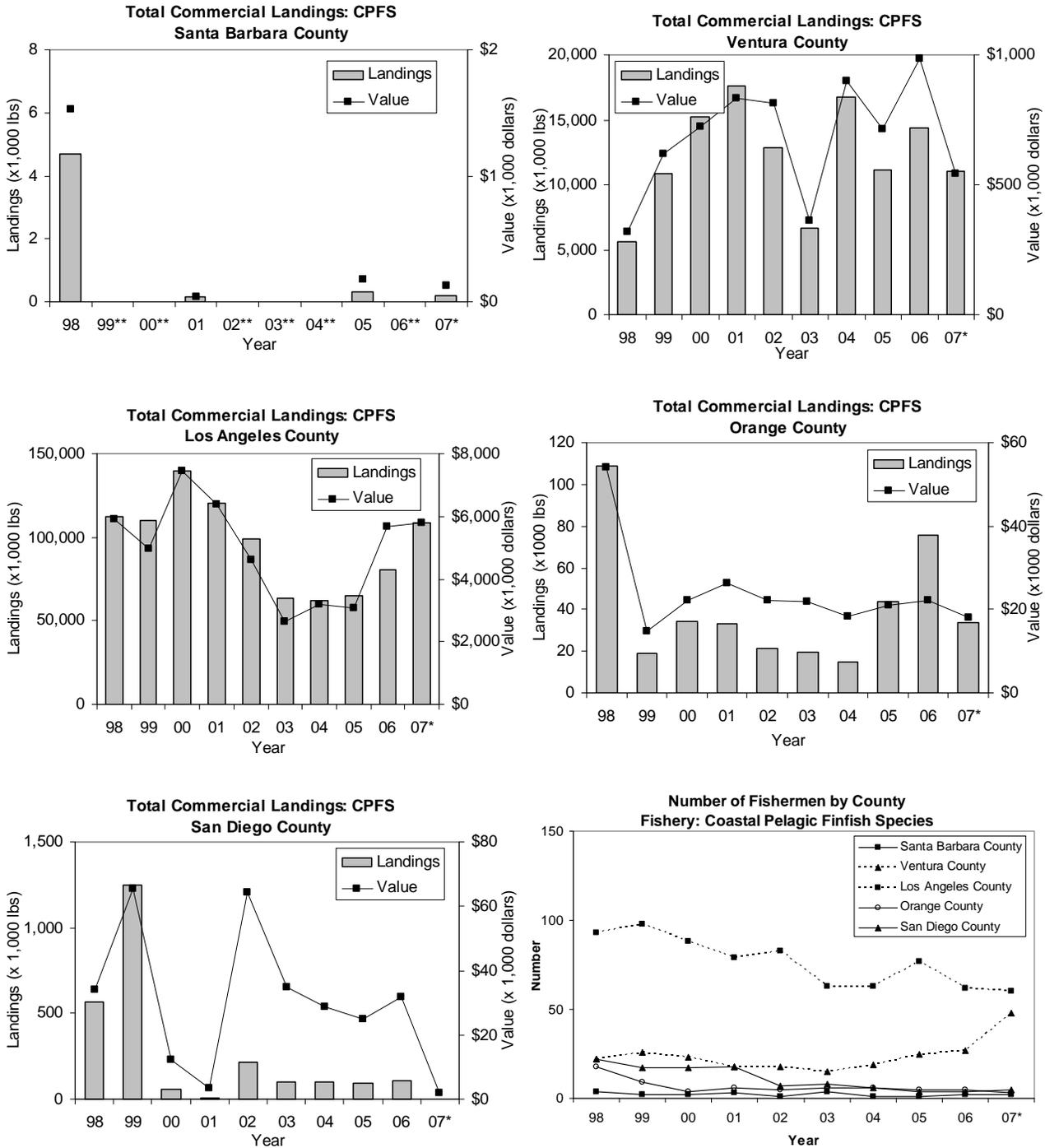
Pacific Mackerel: The season is open from July 1 through June 30. The harvest guideline for 2006-2007 fishing season was 19,845 metric tons.

Northern Anchovy: This species is considered a monitored species meaning that it has been determined not to need management by harvest guidelines or quotas according to provisions of the CPS FMP.

Jack Mackerel: This species is considered a monitored species under the CPS FMP. No harvest guidelines or quotas are in place for this fishery.

Pacific Bonito: This species is considered a monitored species meaning that it has been determined not to need management by harvest guidelines or quotas.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 02 May 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary:



Fishery: Crab

Species Targeted:

- Brown rock crab (*Cancer antennarius*)
- Red rock crab (*Cancer. productus*)
- Yellow rock crab (*Cancer. anthonyi*)

Primary depth range: 90 to 240 feet (15 to 40 fathoms)

Primary habitat type(s): Sandy bottom, near rocky substrate

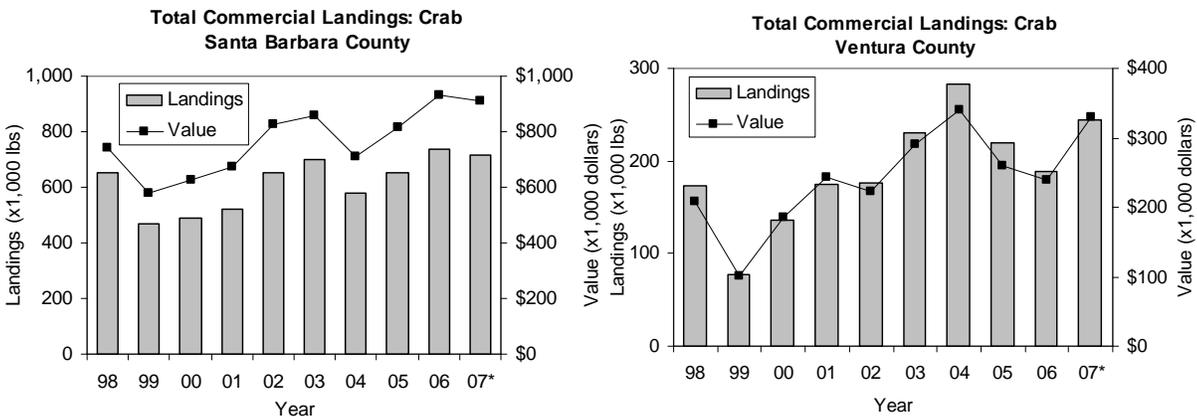
Primary gear: Trap

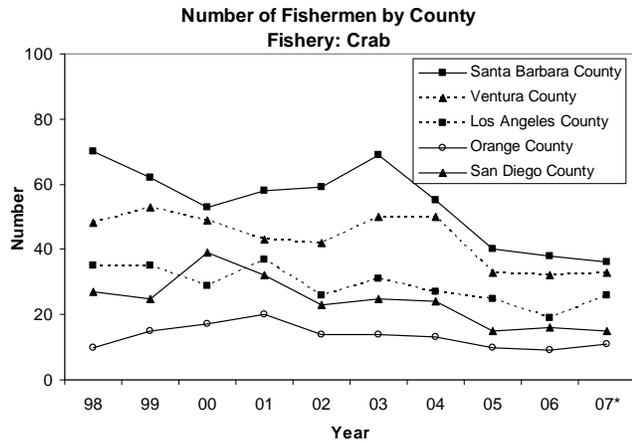
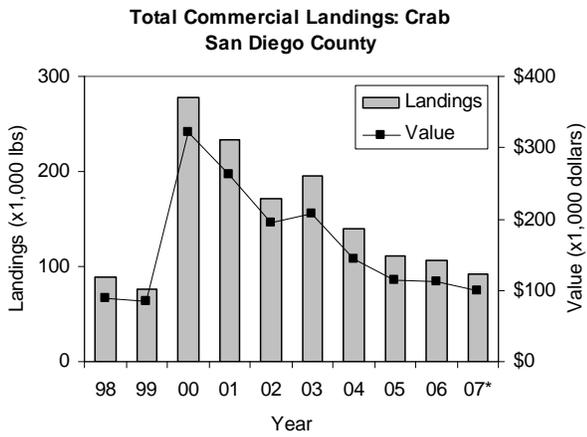
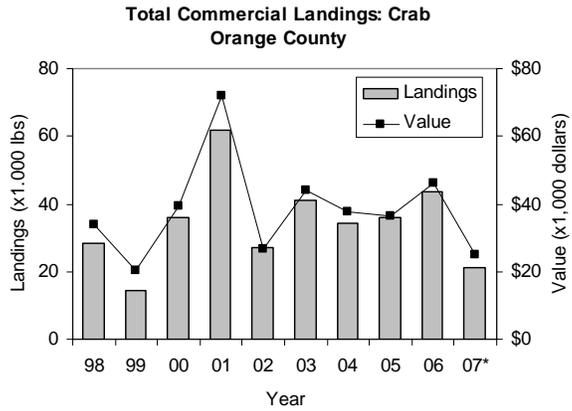
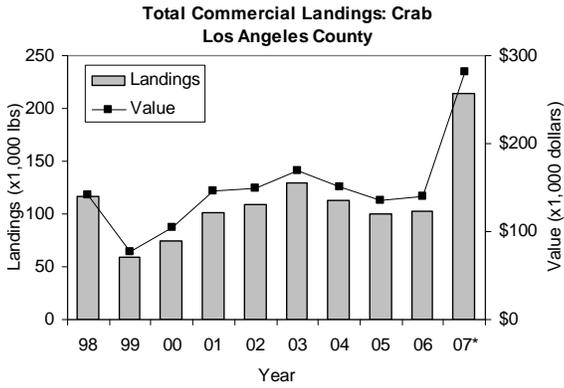
Primary area of fishery: State waters (x) Federal waters ()

Synopsis of commercial regulations applicable to the south coast study region:

A permit system was initiated in the 2005-2006 season. Beginning with the 2006-2007 season, permits will only be issued to those holding a rock crab permit in the previous season. Only rock crab with a carapace width of at least 4.5 inches may be retained.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 02 May 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. The data includes incidental landings of sheep crab (*Loxorhynchus grandis*). *2007 data are preliminary.





Fishery: Flatfish, Other (does not include California halibut)

Species targeted:

Pacific sanddab (*Citharichthys sordidus*)
Longfin sanddab (*Citharichthys xanthostigma*)
Arrowtooth flounder (*Atheresthes stomias*),
Starry flounder (*Platichthys stellatus*),
Bigmouth sole (*Hippoglossina stomata*)
Butter sole (*Pleuronectes isolepis*),
C-O sole (*Pleuronichthys coenosus*)
English sole (*Pleuronectes vetulus*),
Fantail sole (*Xystreurus liolepis*)
Petrale sole (*Eopsetta jordani*),
Rex sole (*Errex zachirus*),
Rock sole (*Pleuronectes bilineata*),
Sand sole (*Psettichthys melanostictus*),
Slender sole (*Eopsetta exilis*),
Curlfin turbot (*Pleuronichthys decurrens*),
Diamond turbot (*Hypsopsetts guttulata*)
Hornyhead turbot (*Pleuronichthys verticalis*),
Spotted turbot (*Pleuronichthys ritteri*)

Primary depth range: 180 to 4,000 feet (30 to 700 fathoms)

Primary habitat type(s): Low-relief, mixed and hard bottoms

Primary gear: Bottom trawl

Primary area of fishery: State waters (x) Federal waters (x)

Synopsis of commercial regulations applicable to the south coast study region:

Trawling for fish is prohibited within the Rockfish Conservation Area (RCA). A federal permit is required to fish outside the RCA. There are three types of federal permits: trawl limited entry, fixed gear limited entry, non-trawl open access. Within the MLPA South Coast Study Region (Point Conception to the United States – Mexico border), the RCA for commercial fishing is 30 to 150 fathoms for fixed gears limited entry and open access gears and from 100 to 150 fathoms for limited entry trawlers.

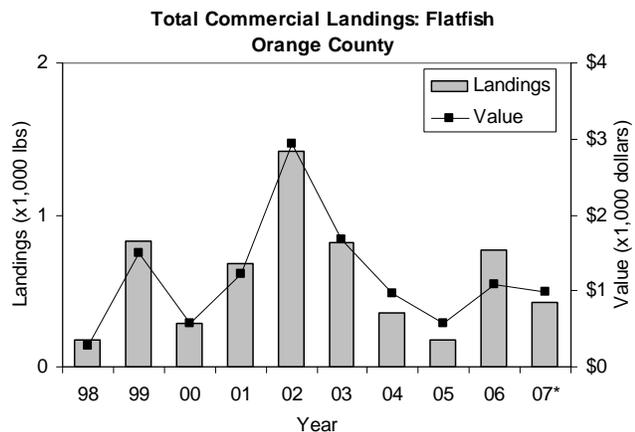
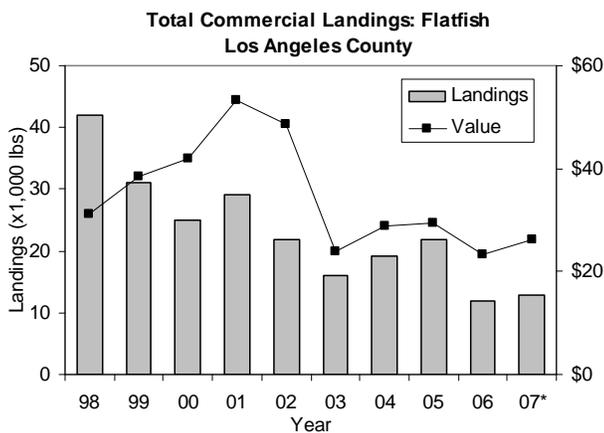
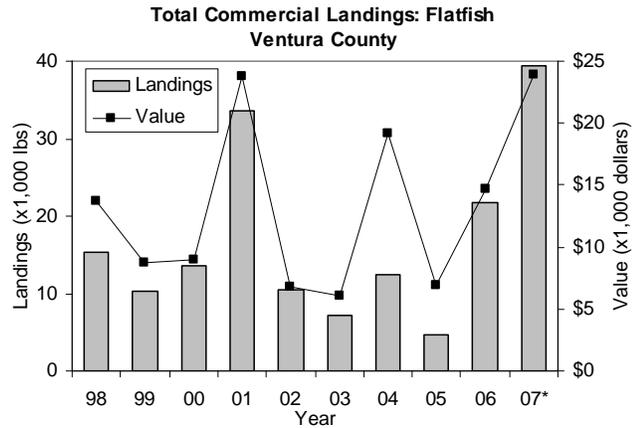
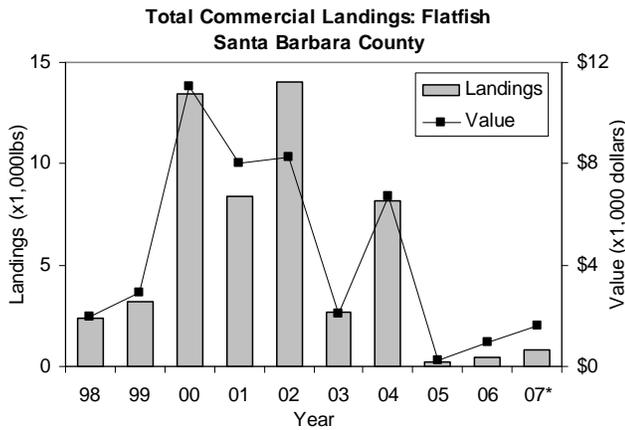
For the 2007 season:

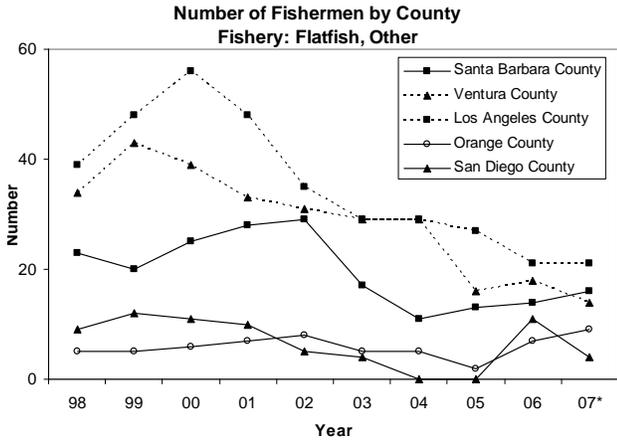
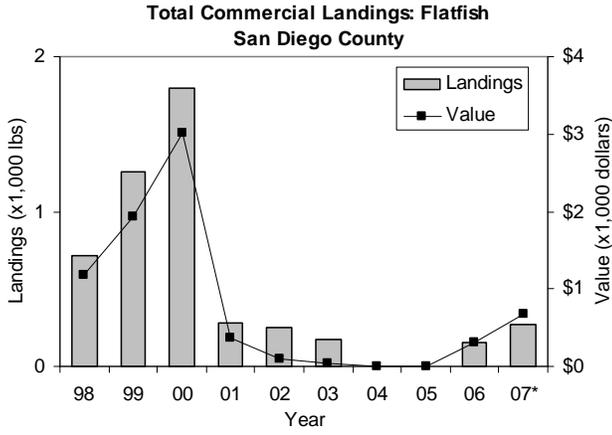
- The limited entry trawl fishery is open all year with two-month trip limits in effect. The RCA for this fishery in the study region is from 100 to 150 fathoms.
- The limited entry fixed gear fishery operates on cumulative trip limits and is open all year. The trip limits for the 2007 season are 5,000 lbs per month. The RCA for this

fishery in the study region is from 30 to 150 fathoms. With appropriate gear, fishermen may fish within the RCA.

The open access gear fishery operates on cumulative trip limits and is open all year. The trip limit for the 2007 season is 3,000 lbs per month, with no more than 300 lbs in species other than Pacific sanddabs (*Citharichthys sordidus*). The RCA for this fishery in the south coast study region is from 30 to 150 fathoms. With appropriate gear, fishermen may fish within the RCA.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 02 May 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at least one landing for that fishery, port area and year. *2007 data are preliminary.





Fishery: Kellet’s Whelk

Species targeted: Kellet’s whelk (*Kelletia kelletii*)

Primary depth range: 3 to 225 feet (0 to 38 fathoms)

Primary habitat type(s): Rock and sand bottoms in kelp beds

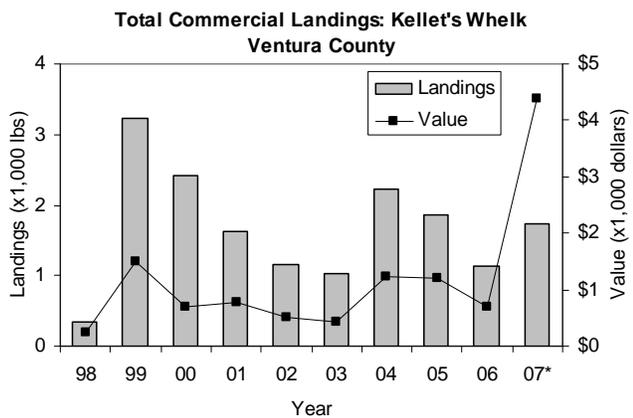
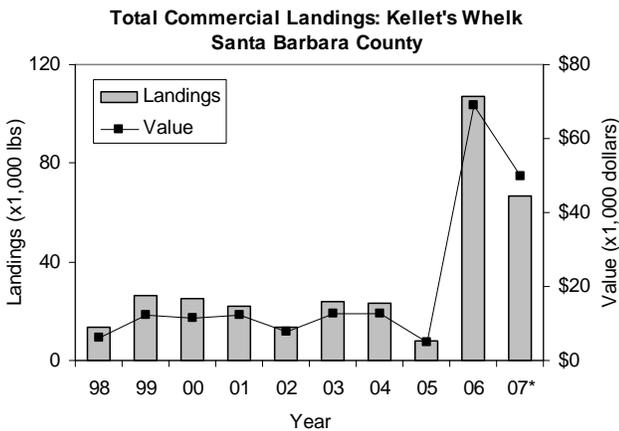
Primary gear: Trap incidental to commercial lobster or rock crab fishing

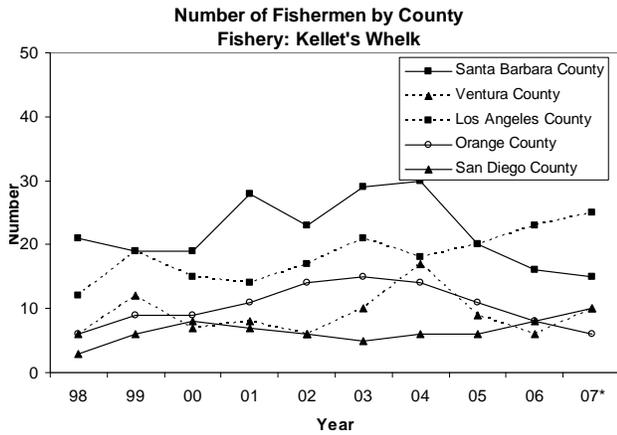
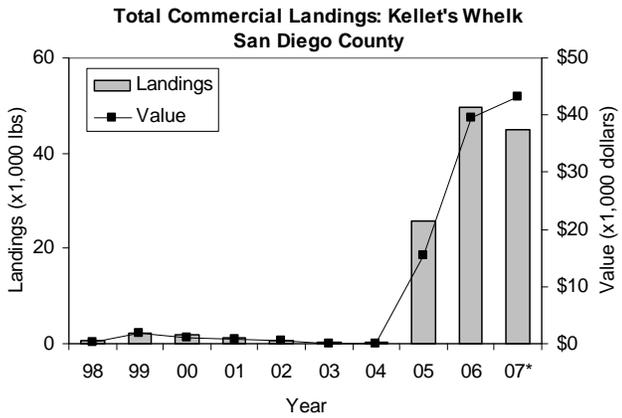
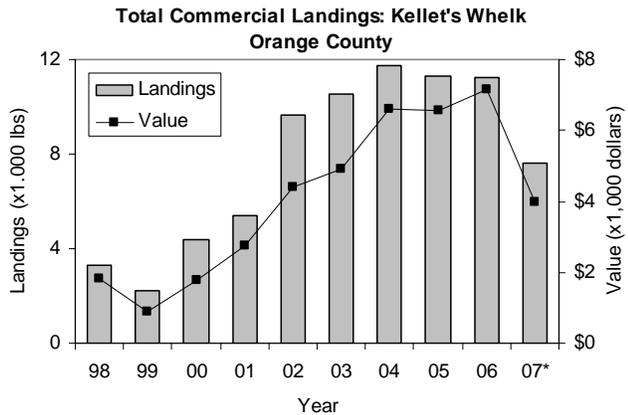
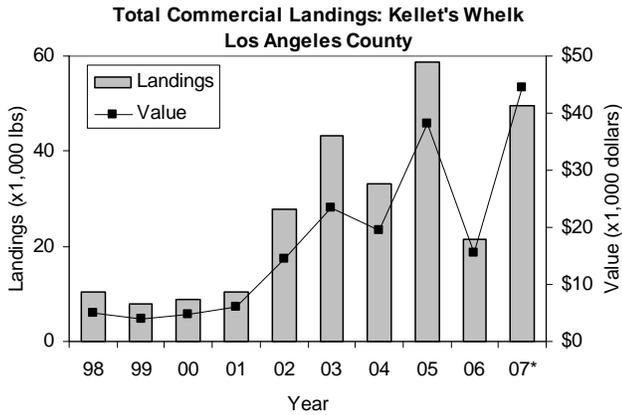
Primary area of fishery: State waters (x) Federal waters ()

Synopsis of commercial regulations applicable to the south coast study region:

Commercial landings are predominantly allowed under incidental take regulations for rock crab and lobster trap fishing. Thus take by this form of fishing is restricted to those persons holding either a commercial rock crab or lobster permit. There is also a very small directed commercial dive fishery.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 02 May 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary.





Fishery: Market Squid

Species Targeted: Market squid (*Loligo opalescens*)

Primary depth range: 50 to 150 feet (8 to 25 fathoms)

Primary habitat type(s): Pelagic waters, inshore sandy bottoms (spawning)

Primary gear: Purse seine, Drum seine (Round haul nets)

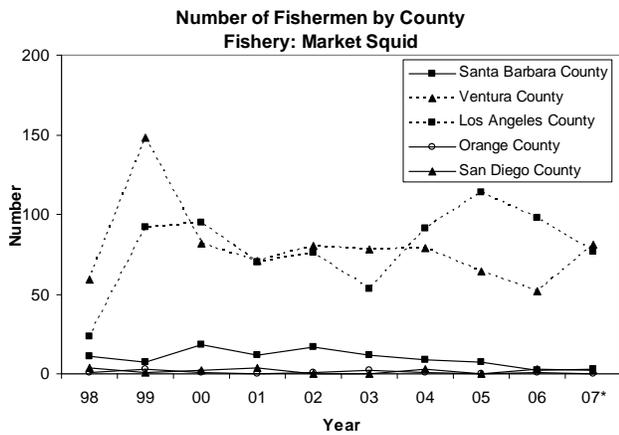
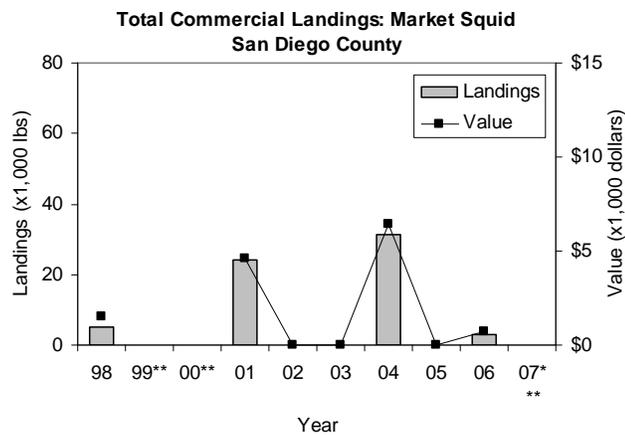
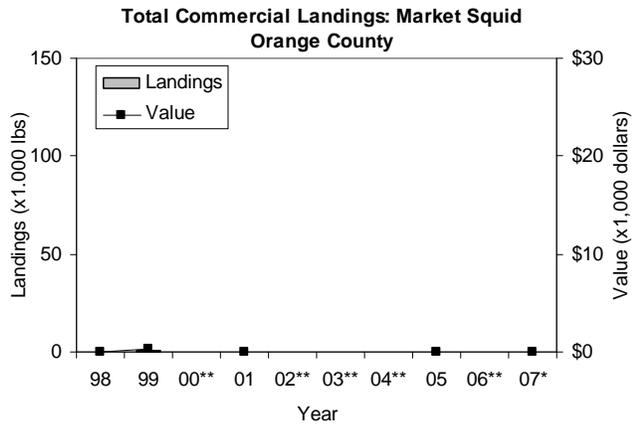
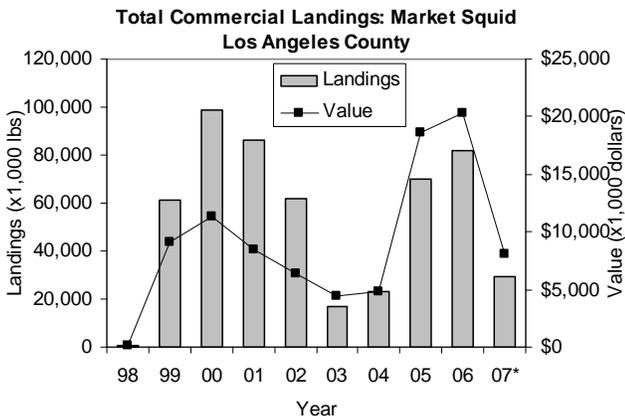
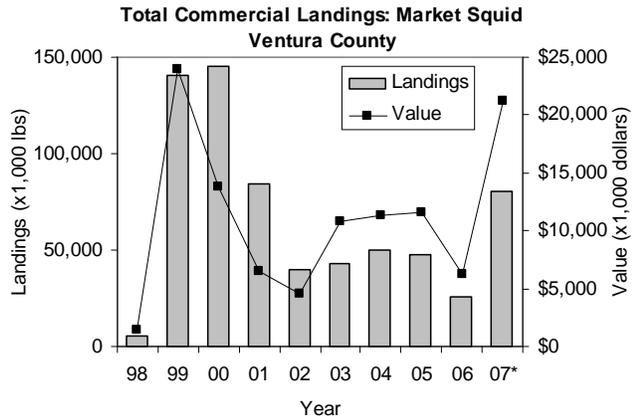
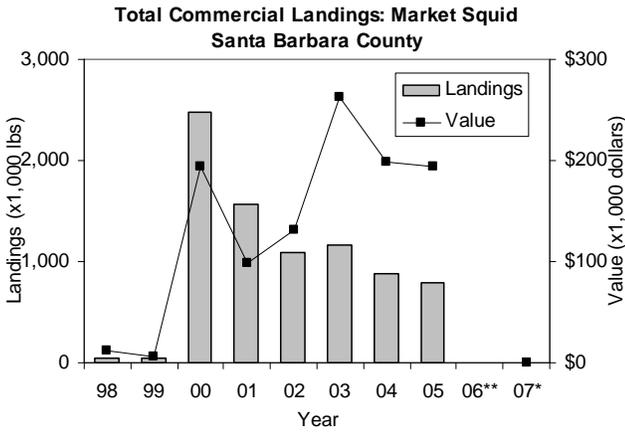
Primary area of fishery: State waters (x) Federal waters ()

Synopsis of commercial regulations applicable to the south coast study region:

In 2004, the California Fish and Game Commission adopted a comprehensive Market Squid Fishery Management Plan (MSFMP). The season for market squid is April 1 through March 31, which reflects the term of the permit. This fishery is managed with fishery control rules. These rules include:

- Restricted access program limiting participation in the fishery.
- State-wide catch limit of 118,000 tons per season.
- Weekend closures from noon Friday to noon Sunday.
- Fishery monitoring through the use of port sampling and mandatory logbooks.
- Gear restrictions including a 30,000 wattage limit with required light shields, and various spatial closures to round haul gear for general habitat protection (Santa Monica Bay, leeward side of Catalina Island), marine protected areas with act as forage reserves and harvest replenishment areas (e.g., Channel Islands MPAs).
- Monitoring of populations using the egg escapement method.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 02 May 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen represents the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary. **Data cannot be disclosed due to confidentiality considerations.



Fishery: Nearshore Finfish

Species Targeted:

Deeper nearshore

Black rockfish (*Sebastes melanops*),
Blue rockfish (*Sebastes mystinus*),
Brown rockfish (*Sebastes auriculatus*),
Calico rockfish (*Sebastes dalli*),
Copper rockfish (*Sebastes caurinus*),
Olive rockfish (*Sebastes serranoides*),
Quillback rockfish (*Sebastes maliger*),
Treefish (*Sebastes serriceps*)

Shallow nearshore

Black-and-yellow rockfish (*Sebastes chrysomelas*),
China rockfish (*Sebastes nebulosus*),
Gopher rockfish (*Sebastes carnatus*),
Grass rockfish (*Sebastes rastrelliger*),
Kelp rockfish (*Sebastes atrovirens*),
California scorpionfish (*Scorpaena guttata*),
Cabezon (*Scorpaenichthys marmoratus*),
Kelp greenling (*Hexagrammos decagrammus*),
Rock greenling (*Hexagrammos lagocephalus*),
Monkeyface prickleback (*Cebidichthys violaceus*)

Primary depth range: 0 to 400 feet (0 - 67 fathoms)

Primary habitat type(s): Nearshore rocky reefs, kelp beds

Primary gear: Hook-and-line, trap

Primary area of fishery: State waters (x) Federal waters ()

Synopsis of commercial regulations applicable to the south coast study region:

A comprehensive Nearshore Fishery Management Plan (NFMP) was adopted by the California Fish and Game Commission (Commission) in May 2002. The NFMP established four management areas for the nearshore fishery; the MLPA South Coast Study Region (Point Conception to the U.S./Mexico border) is entirely contained within the Nearshore FMP South Coast management area. Nearshore Fishery Permits for the take of the shallow nearshore species listed above were established in 1999, and a restricted access program was implemented in 2003. Under the restricted access program, nearshore fishery permits may only be used within the management area for which they were issued. Nearshore fishery permits are both non-transferable and transferable, and allow the use of hook-and-line gear only. There is a gear endorsement for trap gear. A non-transferable permit for the deeper nearshore species listed above was established in 2003. There are no gear restrictions for the deeper nearshore species. Additionally, a non-transferable bycatch

permit, established in 2003, is issued to qualified fishermen using trawl and gill net gears. This allows them to take small amounts of shallow nearshore species and is valid only for the south-central and south management areas.

Cumulative two-month trip limits for all nearshore species, except monkeyface prickleback, are in effect, with a March/April closure for that portion of the state south of 40°10' North Latitude. The season may be closed early if the harvest guidelines are met or exceeded. There are year-long closures for limited entry trawl permit holders using large footrope or midwater trawls.

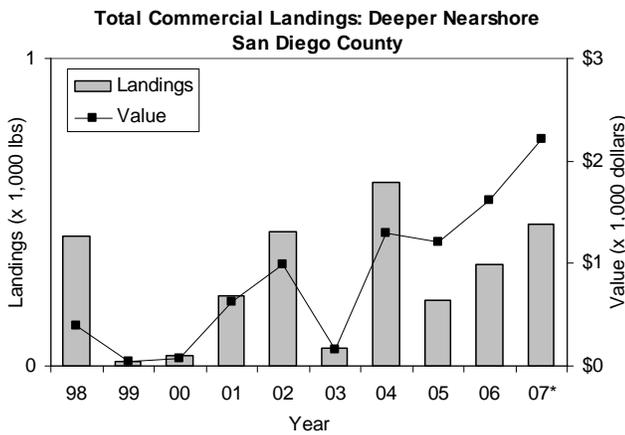
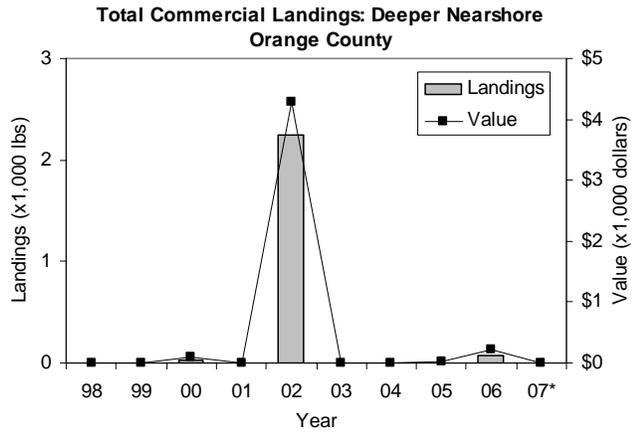
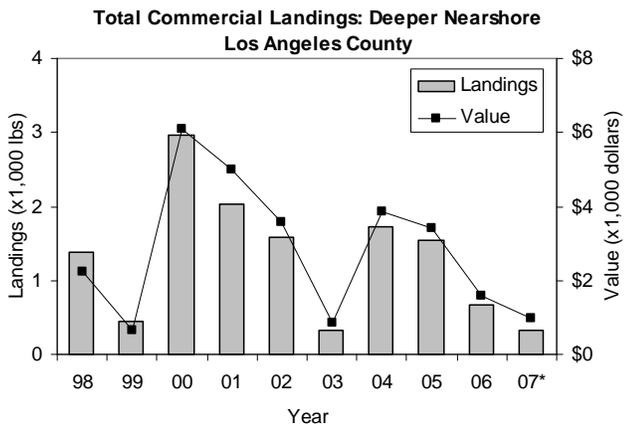
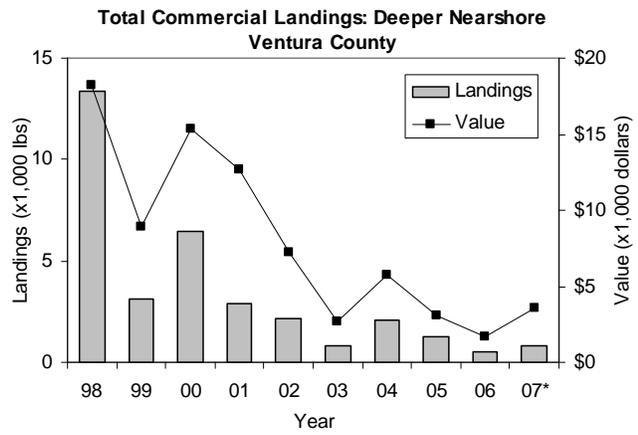
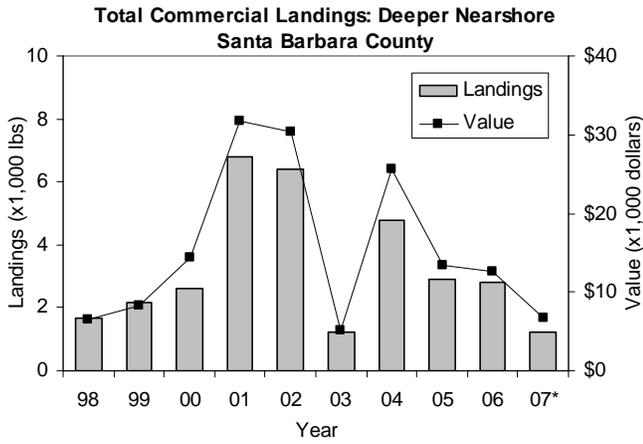
The statewide harvest guideline and trip limits for minor nearshore rockfish (shallow and deeper) are set by the Pacific Fishery Management Council. The Commission sets the total allowable catch (TAC) and trip limits for cabezon, greenlings, and California sheephead. The statewide annual total allowable catch for cabezon is 152,100 lbs with 59,300 lbs allocated for commercial harvest. For sheephead the TAC is 205,500 and the commercial allocation is 75,200 pounds, greenlings the TAC is 37,600 and the commercial allocation in 3,400 pounds.

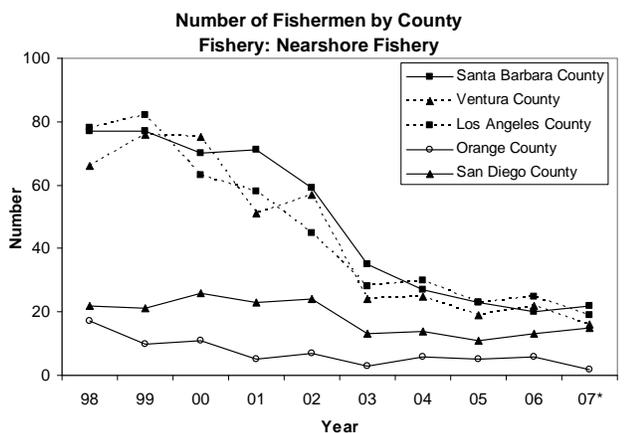
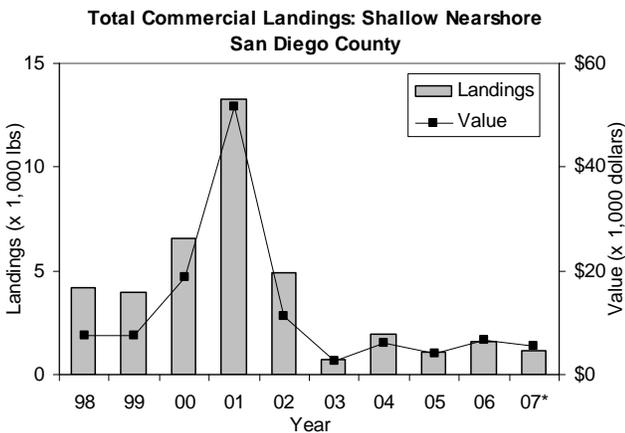
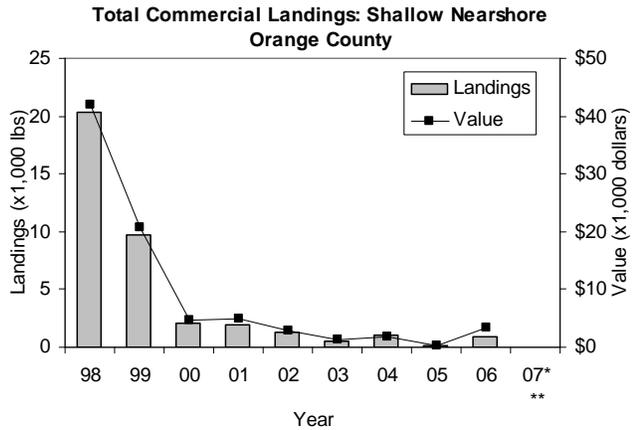
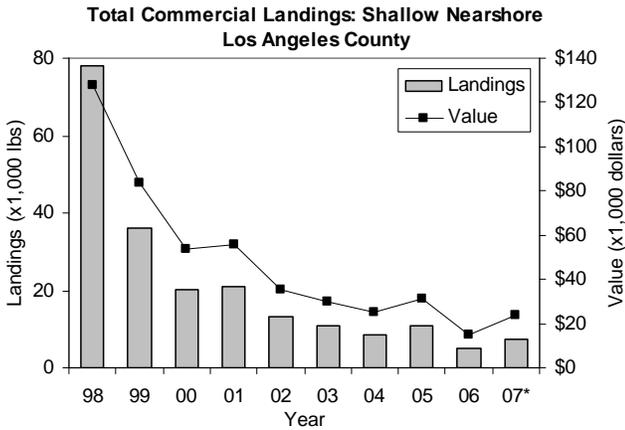
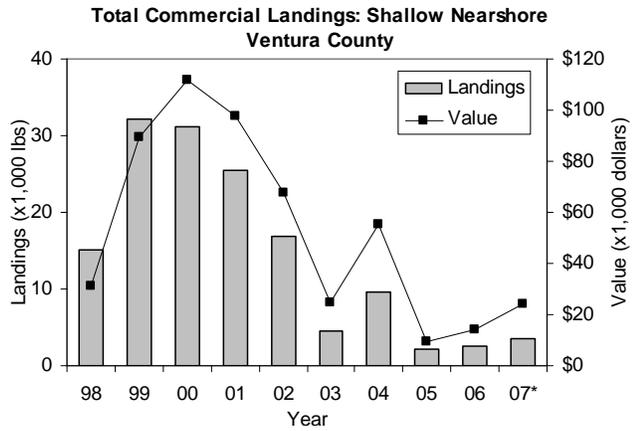
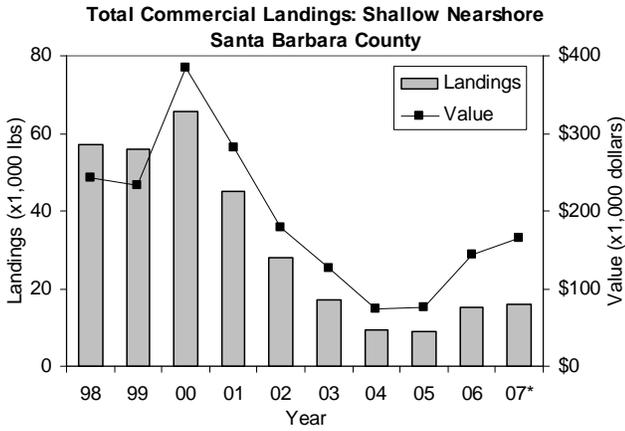
Minimum size limits:

- 10 inches:
 - Black-and-yellow rockfish (*Sebastes chrysomelas*)
 - Gopher rockfish (*Sebastes carnatus*)
 - Kelp rockfish (*Sebastes atrovirens*)
 - California scorpionfish (*Scorpaena guttata*)
- 12 inches:
 - Kelp greenling (*Hexagrammos decagrammus*)
 - Rock greenling (*Hexagrammos lagocephalus*)
 - China rockfish (*Sebastes nebulosus*)
 - Grass rockfish (*Sebastes rastrelliger*)
- 15 inches:
 - Cabezon (*Scorpaenichthys marmoratus*)

The deeper nearshore species do not have size limits.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 23 July 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary. **Data cannot be disclosed due to confidentiality considerations.





Fishery: Ridgeback Prawn

Species Targeted: Ridgeback prawn (*Sicyonia ingentis*)

Primary depth range: 130 to 525 feet (22 to 88 fathoms)

Primary habitat type(s): Soft bottom habitat composed of green mud, shell and sand.

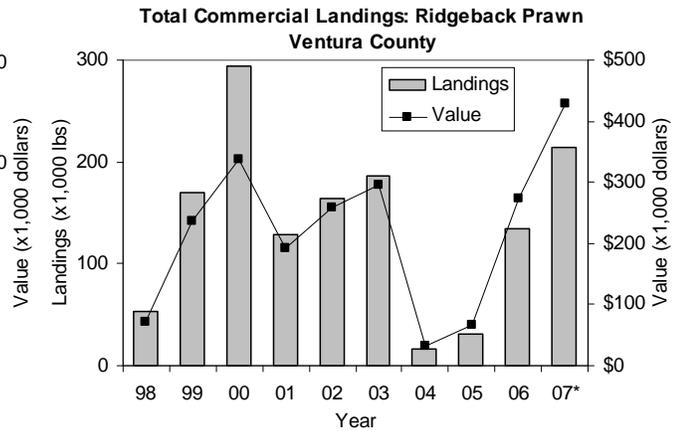
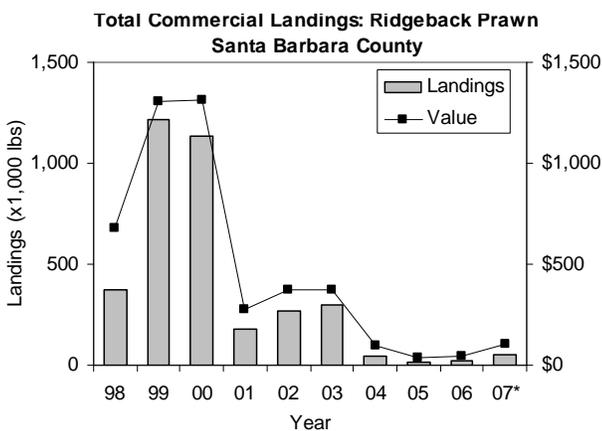
Primary gear: Trawl

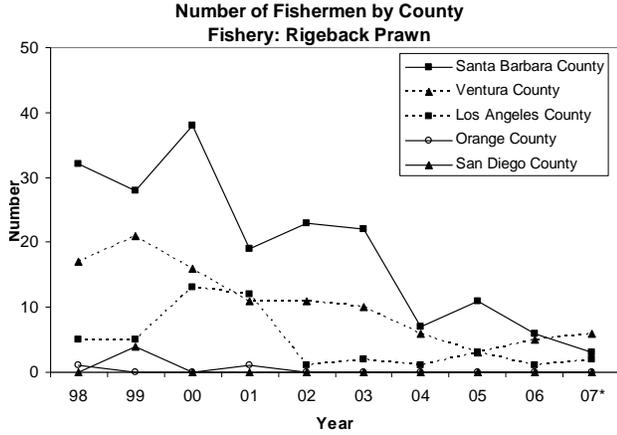
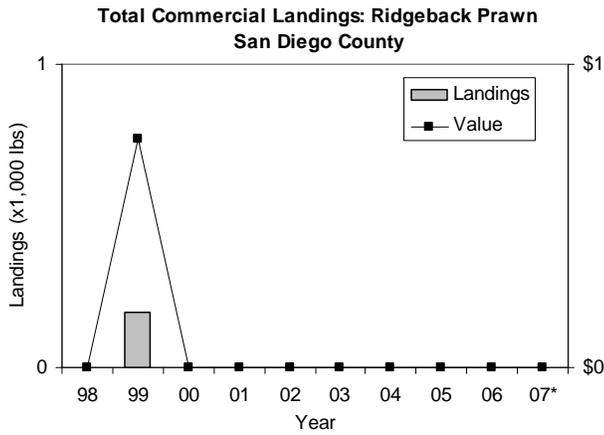
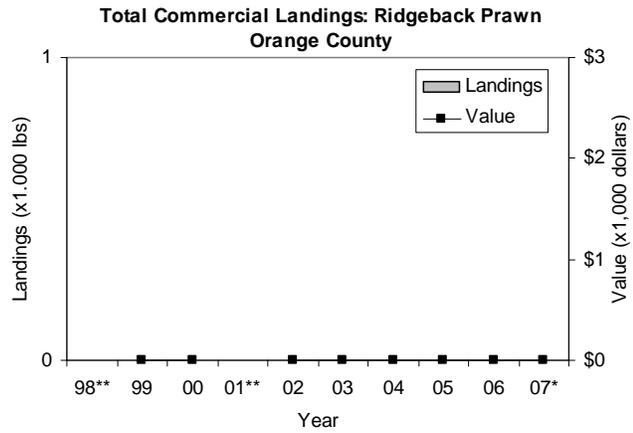
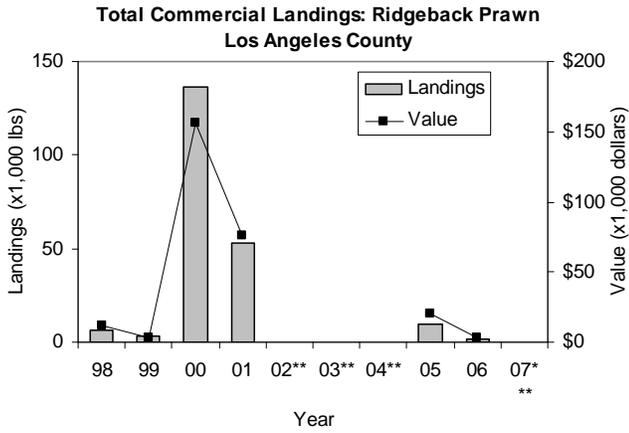
Primary area of fishery: State waters () Federal waters (x)

Synopsis of commercial regulations applicable to the south coast study region:

Trawling for ridgeback prawn is prohibited in state waters and in waters not less than 150 feet (25 fathoms). For trawl nets with single-walled bag or cod-end, mesh of any webbing shall not be less than 1 ½ inches in length; trawl nets with double-walled bag or cod-end may be used with a mesh of not less than 3 inches in length. Bottom trawlers targeting ridgeback prawn are required to use a rigid grate fish excluder device to minimize bycatch. A seasonal closure from June 1 through September 30 exists to protect the ridgeback during their peak spawning months.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 02 May 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary. **Data cannot be disclosed due to confidentiality considerations.





Fishery: Sea Cucumber – Non-Trawl (Dive)

Species Targeted: Warty sea cucumber (*Parastichopus parvimensis*)

Primary depth range: 20 to 80 ft (3 to 13 fathoms)

Primary habitat type(s): Rocky reefs, sand and gravel sediment

Primary gear: Dive

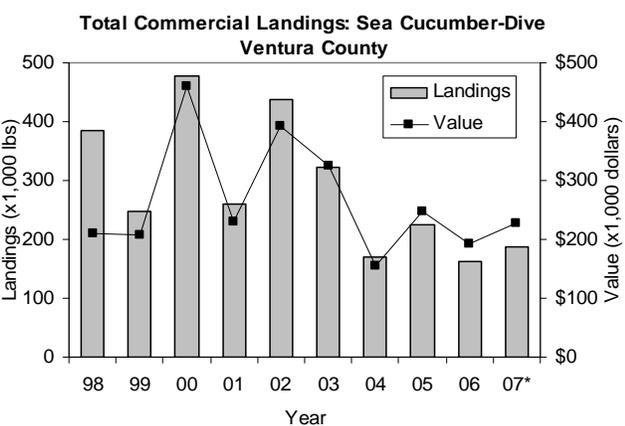
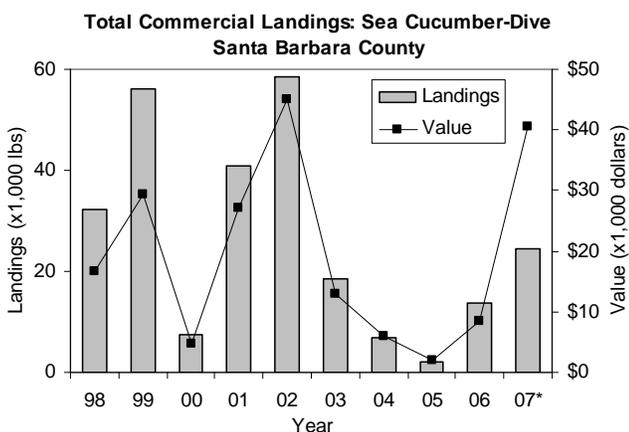
Primary area of fishery: State waters (x) Federal waters ()

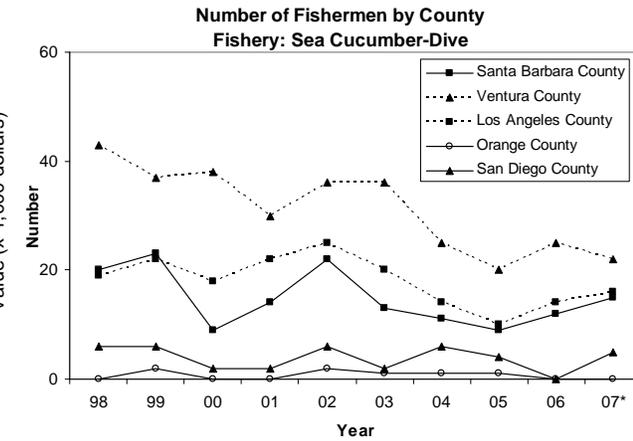
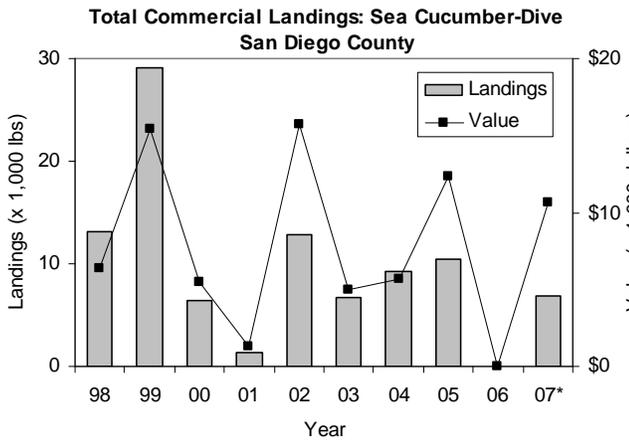
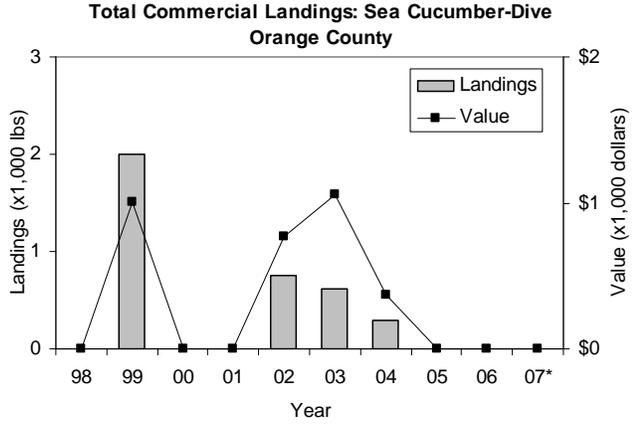
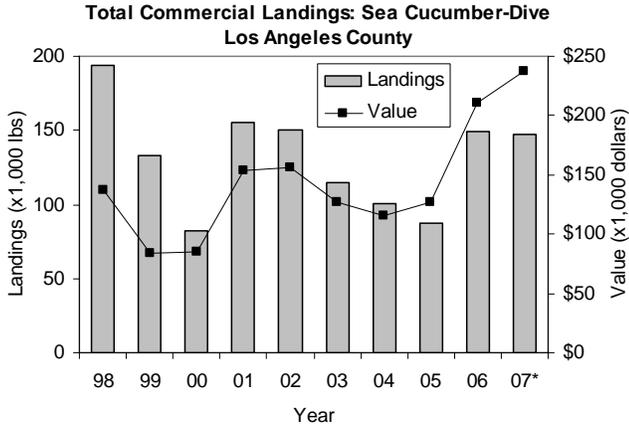
Synopsis of commercial regulations applicable to the south coast study region:

In 1992 the Legislature established a sea cucumber harvest permit, required for trawlers and divers targeting sea cucumbers. Qualifying criteria for the permit included having a 50 pound documented landing of sea cucumbers during at least one calendar year between January 01, 1988 and June 30, 1991. In 1994 the Legislature specified that sea cucumber permits were non-transferable, and established a \$250 annual permit fee.

In 1997 the Legislature repealed existing sea cucumber regulations and created separate dive and trawl sea cucumber permits. A ceiling on the number of dive permittees was set, based on the number of dive permits issued during the 1997-98 license year. In 2006 there were 92 sea cucumber diver permits. A dive permit transfer procedure was also introduced by the 1997 legislation

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 23 July 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary. **Data cannot be disclosed due to confidentiality considerations.





Fishery: Sea Cucumber - Trawl

Species Targeted: California sea cucumber (*Parastichopus californicus*)

Primary depth range: 120 to 360 feet (20 to 60 fathoms)

Primary habitat type(s): sand, mud bottom

Primary gear: Trawl

Primary area of fishery: State waters () Federal waters (x)

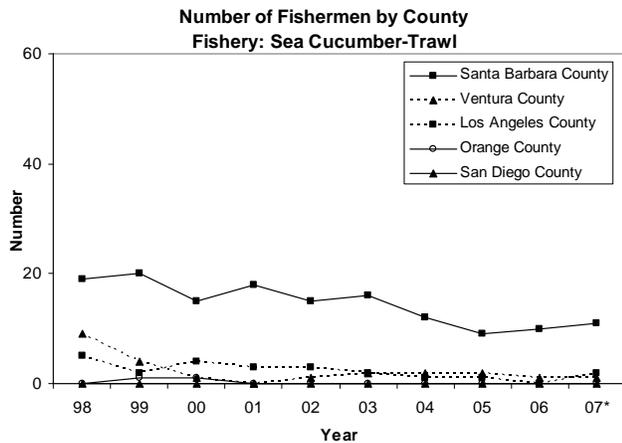
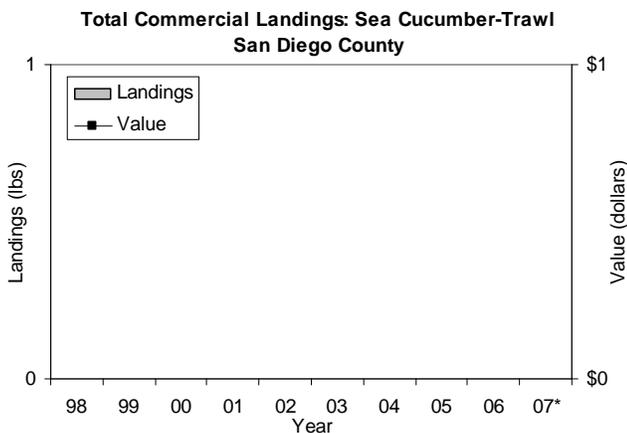
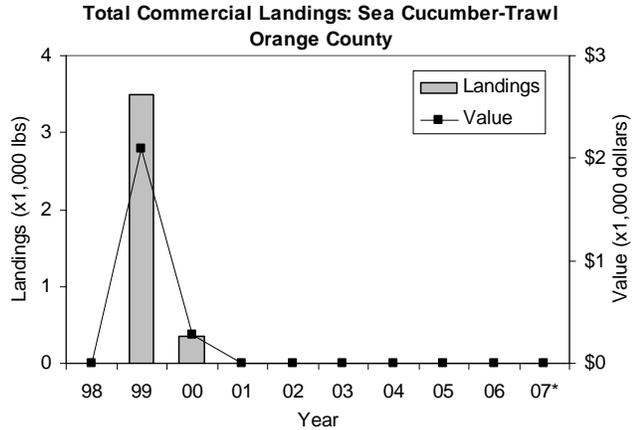
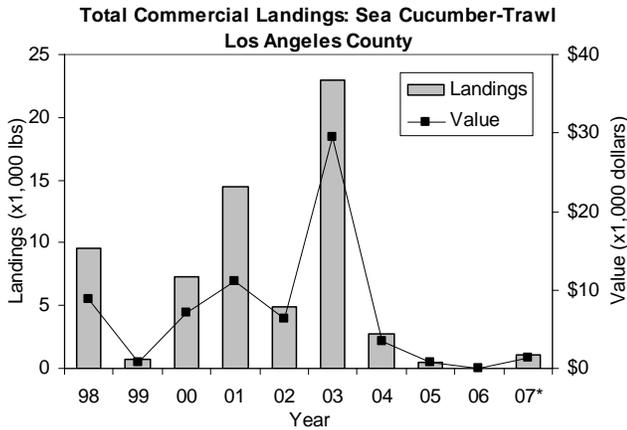
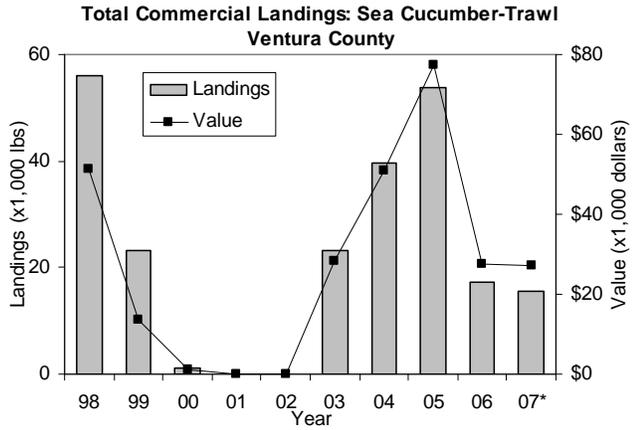
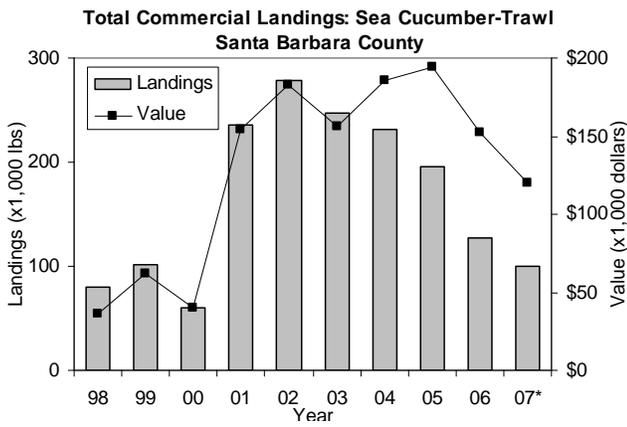
Synopsis of commercial regulations applicable to the south coast study region:

In 1992 the Legislature established a sea cucumber harvest permit, required for trawlers and divers targeting sea cucumbers. Qualifying criteria for the permit included having a 50 pound documented landing of sea cucumbers during a calendar year between Jan 01, 1988 and June 30, 1991.

In 1994 the Legislature specified that sea cucumber permits were non-transferable, and established a \$250 annual permit fee. The minimum landing requirement was waived for some trawl sea cucumber fishermen.

In 1997 the Legislature repealed existing sea cucumber regulations and created separate dive and trawl sea cucumber permits. A ceiling on the number of trawl permittees was set, based on the number of trawl permits issued during the 1997-98 license year. A trawl permit transfer procedure was also introduced by the 1997 legislation.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 23 July 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary. **Data cannot be disclosed due to confidentiality considerations.



Fishery: Sea Urchin

Species Targeted: Red sea urchin (*Strongylocentrotus franciscanus*)

Primary depth range: 10 to 90 feet (2 to 15 fathoms)

Primary habitat type(s): Rocky reefs, kelp and hard bottoms

Primary gear: Dive

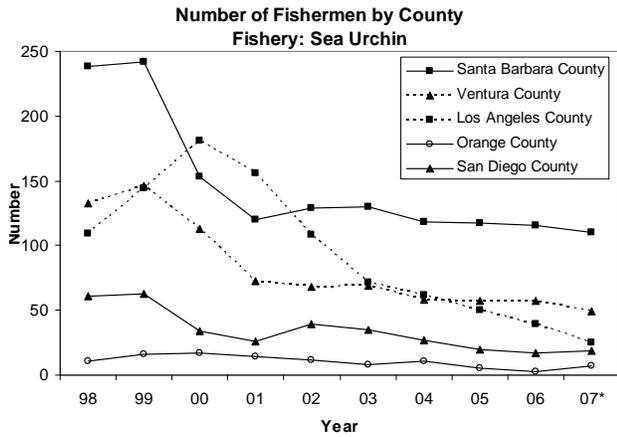
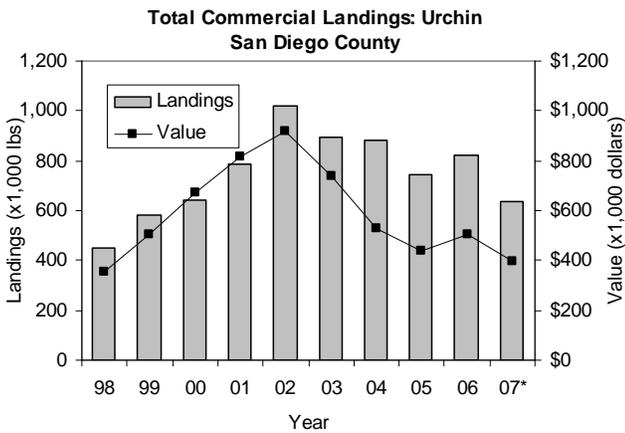
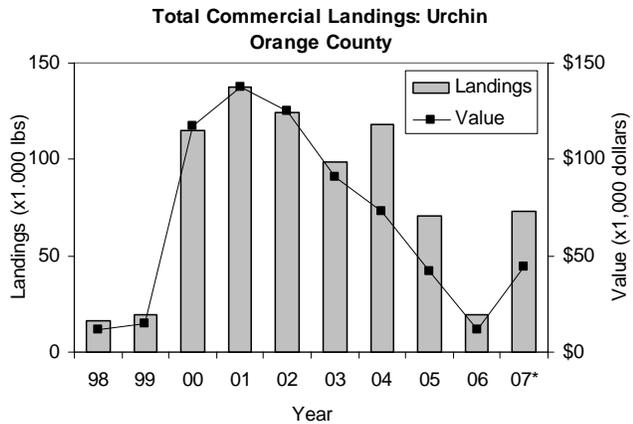
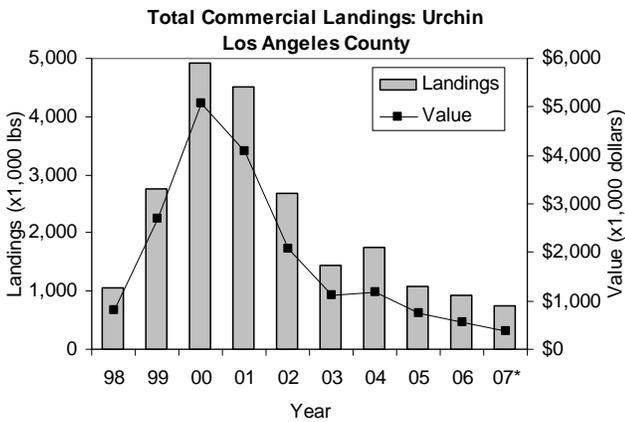
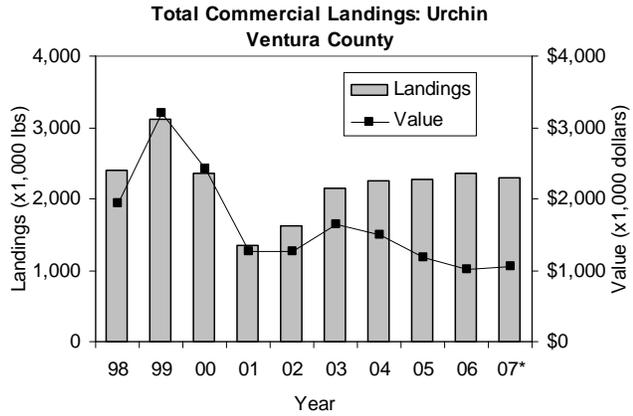
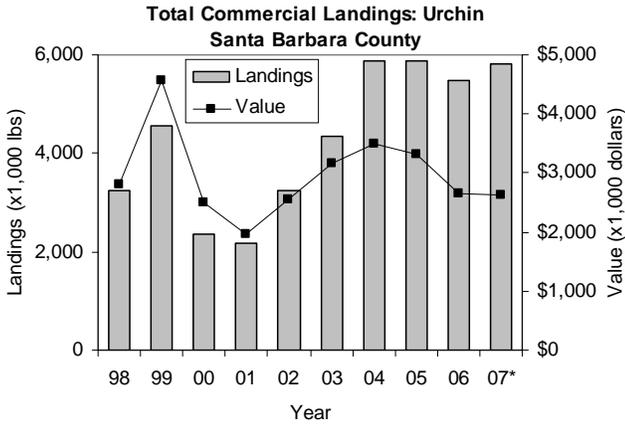
Primary area of fishery: State waters (x) Federal waters ()

Synopsis of commercial regulations applicable to the south coast study region:

This is a restricted access dive fishery requiring a non-transferable urchin diving permit. Divers usually collect sea urchins by hand using hookah (a compressor system with a long hose to deliver air to the diver). Scuba (air tank on back) is also used, but usually for scouting areas. New fishermen enter the fishery by lottery based on the number of permits from the previous season that are not renewed. There are no landing requirements to renew the permit. The season is open seven days per week from November through May, and four days a week from June through October (new regulations effective July 1, 2008). Sea urchins harvested in southern California (south of the Monterey-San Luis Obispo County line) may not have a test diameter between 1.5 and 3.25 inches except that not more than 30 may be landed incidentally within this size range. Sea urchins less than 1.5 inches in diameter are not targeted, but may be landed incidentally. Effective July 2008, a logbook is required to be filled out by every diver after each dive day. Prior to this date, only the operator of the vessel where sea urchin harvesting was taking place was required to fill out a daily log. As of August 1, 2008, 291 sea urchin permittees had renewed their permits. Nineteen new applicants were drawn for sea urchin permits on August 20, 2008.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 02 May 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. However, the value reported is based on the price recorded on the landing receipt at the time of landing which may have been significantly lower than the final price paid to the permittee due to uncertainties in roe recovery and quality, and market price. The number of fishermen reflects permittees who have made at the least one landing for that fishery, port area and year. In 2007, there were 199 active sea urchin divers in southern California and 32 active in northern California.

*2007 data are preliminary.



Fishery: Sharks, Skates and Rays

This represents multiple fisheries which either target shark or harvest them incidentally.

Species:

Brown smoothhound (*Mustelus henlei*),
Gray smoothhound (*Mustelus californicus*),
Basking shark (*Cetorhinus maximus*),
Blue shark (*Prionace glauca*),
Horn shark (*Heterodontus francisci*),
Leopard shark (*Triakis semifasciata*),
Pacific angel shark (*Squatina californica*),
Salmon shark (*Lamna ditropis*),
Sevengill (*Notorynchus cepedianus*),
Soupfin shark (*Galeorhinus zyopterus*),
Sixgill (*Hexanchus griseus*),
Shortfin mako shark (bonito shark) (*Isurus oxyrinchus*),
Swell shark (*Cephaloscyllium ventriosum*),
Thresher shark (*Alopias vulpinus*),
White shark (*Carcharodon carcharias*),
Spiny dogfish (*Squalus acanthias*),
Pacific electric ray (*Torpedo californica*),
Round stingray (*Urolophus halleri*),
Bat ray (*Myliobatis californica*),
Big skate (*Raja binoculata*),
California skate (*Raja inornata*),
Shovelnose guitarfish (*Rhinobatos productus*),
Spotted ratfish (*Hydrolagus colliei*)

Primary depth range: 0 to 2,400 feet (0 to 400 fathoms)

Primary habitat type(s): Open ocean, pelagic, nearshore, soft and hard bottoms, rocky reefs and kelp forests

Primary gear: Hook-and-line, trawl, gill nets

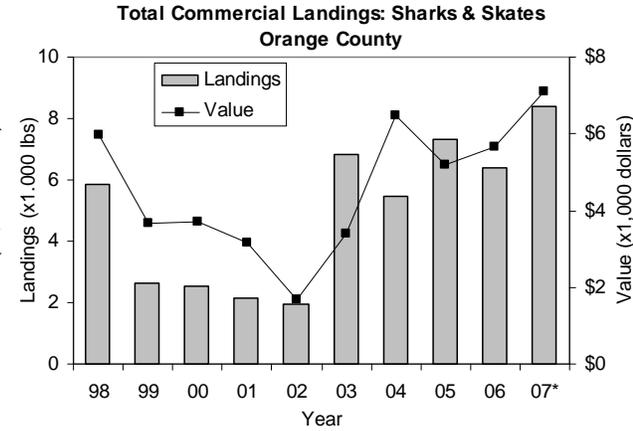
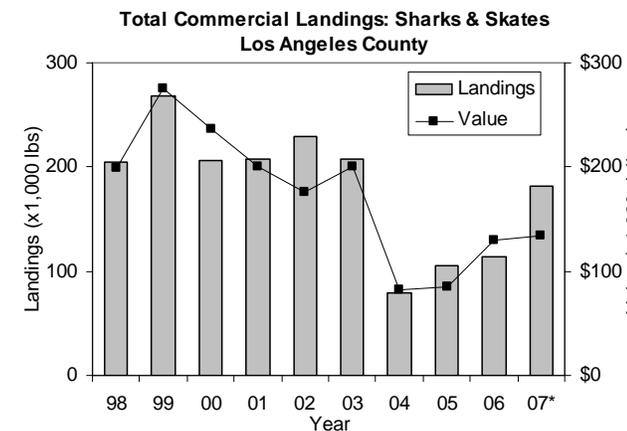
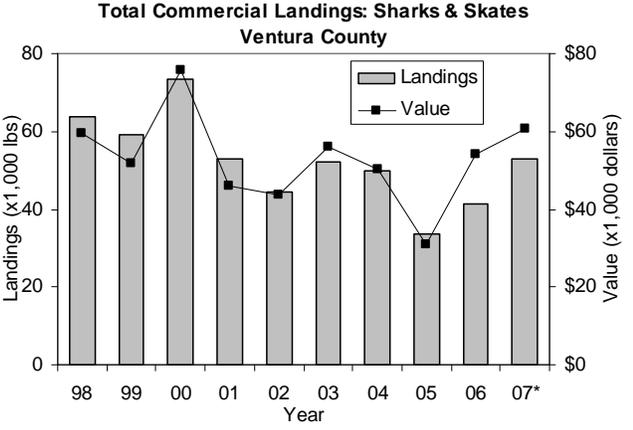
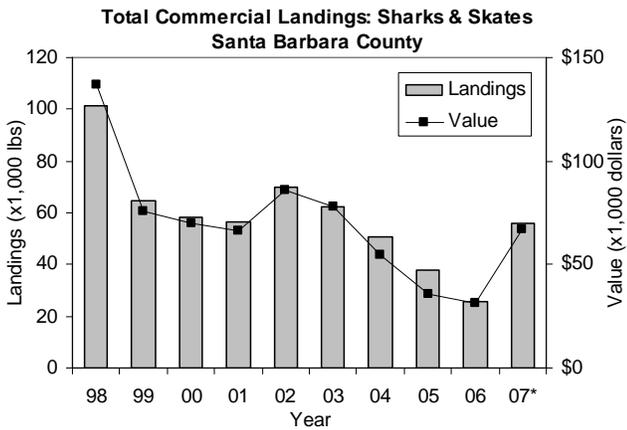
Primary area of fishery: State waters (x) Federal waters (x)

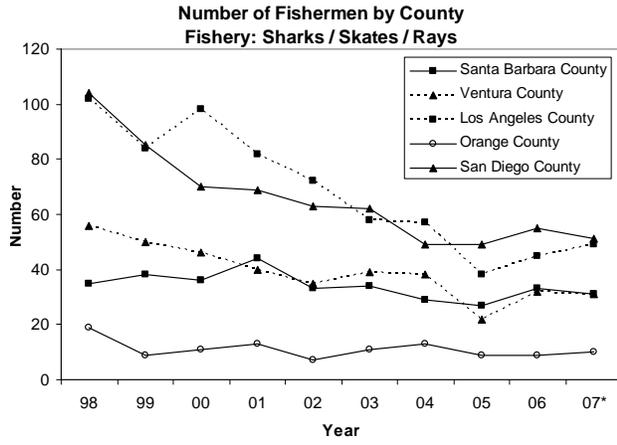
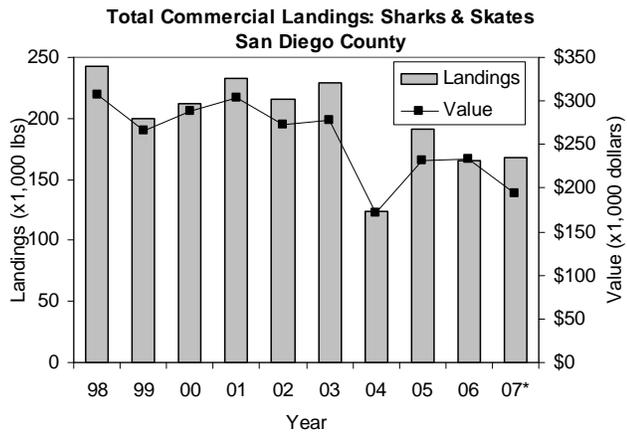
Synopsis of commercial regulations applicable to the south coast study region:

A highly migratory species (HMS) permit is required to take thresher and mako sharks. No quotas are currently in place for harvesting sharks covered in the HMS Fishery Management Plan. However, harvest guidelines for common thresher sharks are set at 340 metric tons and at 150 metric tons for shortfin mako sharks. White sharks may not be taken for commercial purposes. Leopard sharks have a minimum legal size of 36 inches. Pacific angel sharks have a minimum legal size of 42 inches for females and 40 inches for males.

Sharks may be taken with drift gill nets with a mesh size of 8 inches. Spears, harpoons, and bow and arrows may not be used to take soupfin shark.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 02 May 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary.





Fishery: Shelf Rockfish

Species Targeted:

Shelf rockfishes:

- Bocaccio (*Sebastes paucispinis*),
- Canary (*Sebastes pinniger*),
- Chilipepper (*Sebastes goodei*),
- Shortbelly (*Sebastes jordani*),
- Widow (*Sebastes entomelas*),
- Yelloweye (*Sebastes ruberrimus*)

Other shelf rockfish species landed:

- Bronzespotted (*Sebastes gilli*)
- Cowcod (*Sebastes levis*),
- Chameleon (*Sebastes phillipsi*)
- Flag (*Sebastes rubrivinctus*),
- Greenblotched (*Sebastes rosenblatti*),
- Greenspotted (*Sebastes chlorostictus*),
- Greenstriped (*Sebastes elongatus*),
- Halfbanded (*Sebastes semicinctus*),
- Honeycomb (*Sebastes umbrosus*)
- Pink (*Sebastes eos*),
- Pinkrose (*Sebastes simulator*),
- Redstripe (*Sebastes proriger*),
- Rosethorn (*Sebastes helvomaculatus*),
- Rosy (*Sebastes rosaceus*),
- Speckled (*Sebastes ovalis*),
- Squarespot (*Sebastes hopkinsi*),
- Starry (*Sebastes constellatus*),
- Stripetail (*Sebastes saxicola*),
- Swordspine (*Sebastes ensifer*),
- Tiger (*Sebastes nigrocinctus*),
- Vermilion (*Sebastes miniatus*),
- Yellowtail (*Sebastes flavidus*)

Primary depth range: 180 to 1,200 feet (30 to 200 fathoms)

Primary habitat type(s): Deep rocky reefs, cobble, sand and edges of canyons

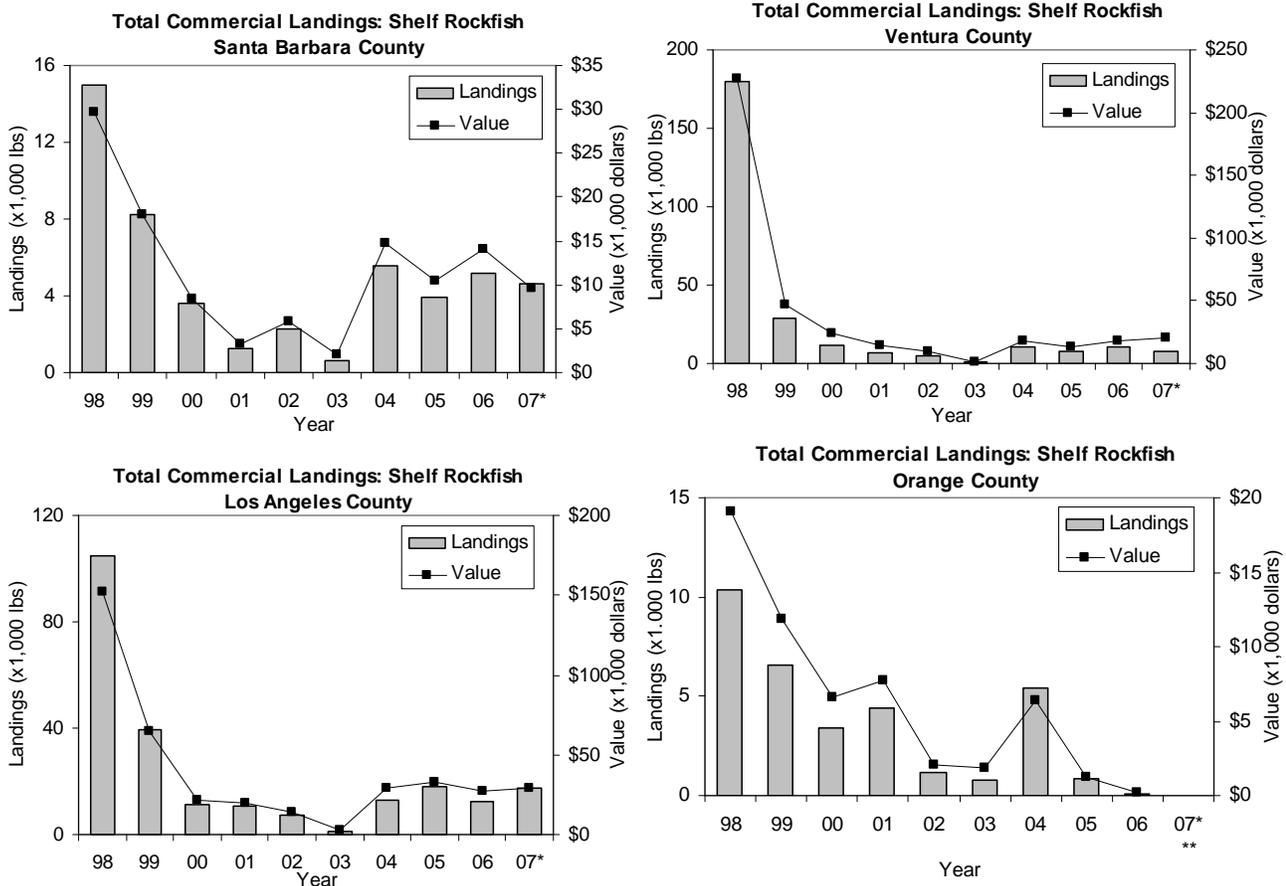
Primary gear: Bottom trawl, midwater trawl, longline, hook-and-line, gill net

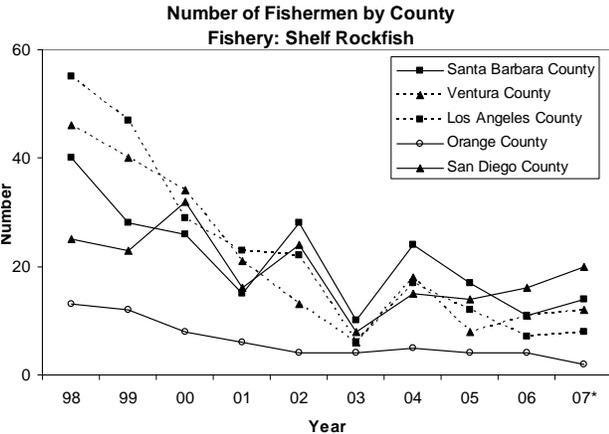
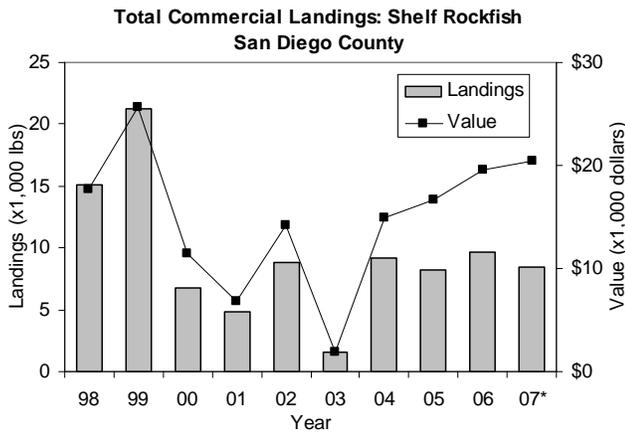
Primary area of fishery: State waters (x) Federal waters (x)

Synopsis of commercial regulations applicable to the south coast study region:

Within the Rockfish Conservation Area (RCA), the taking of rockfishes is prohibited. A federal permit is required to fish outside the RCA. There are three types of federal permits: trawl limited entry, fixed gear limited entry, non-trawl open access. Within the MLPA South Coast Study Region (Point Conception to U.S./Mexico border), the RCA for commercial fishing is from 30 to 150 fathoms for fixed gears limited entry and non-trawl open access and from 100 to 150 fathoms for limited entry trawlers. Rockfishes landed must be sorted by species or species group prior to weighing. Cumulative trip limits per permit are in effect, generally on a two-month basis. The season may be closed early if harvest guidelines are met or exceeded. A total closure of cowcod is in effect for 2007 for all gears. Species such as bocaccio, canary, widow, yelloweye and cowcod have been declared overfished. See section 3.2.2 for a complete further information about overfished species.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 02 May 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary. **Data cannot be disclosed due to confidentiality considerations.





Fishery: Slope Rockfish

Species Targeted:

Slope rockfishes:

Splitnose (*Sebastes diploproa*),

Darkblotched (*Sebastes crameri*)

Grenadiers (Pacific rattail- *Coryphaenoides acrolepis*)

Other rockfish species landed:

Aurora (*Sebastes aurora*),

Bank (*Sebastes rufus*),

Blackgill (*Sebastes melanostomus*),

Pacific ocean perch (*Sebastes alutus*),

Redbanded (*Sebastes babcocki*)

Primary depth range: 1,200 to 4,200 feet (200 to 700 fathoms)

Primary habitat type(s): Soft bottom on continental slope, submarine canyons

Primary gear: Trawl, hook-and-line

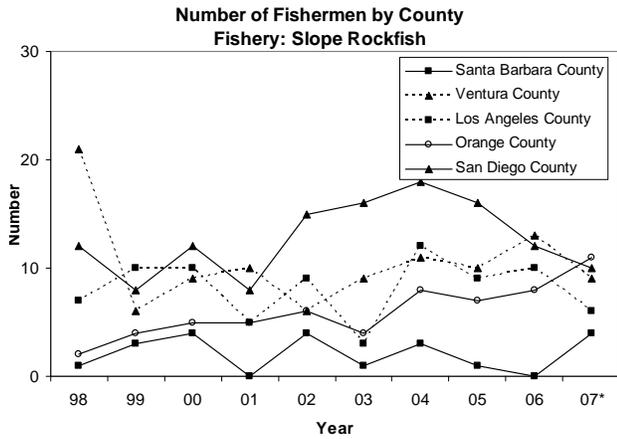
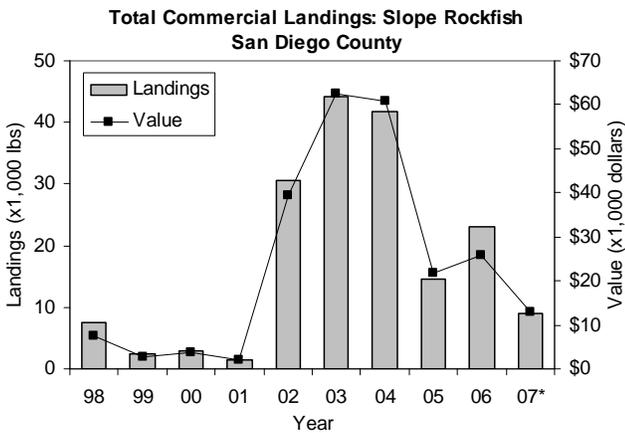
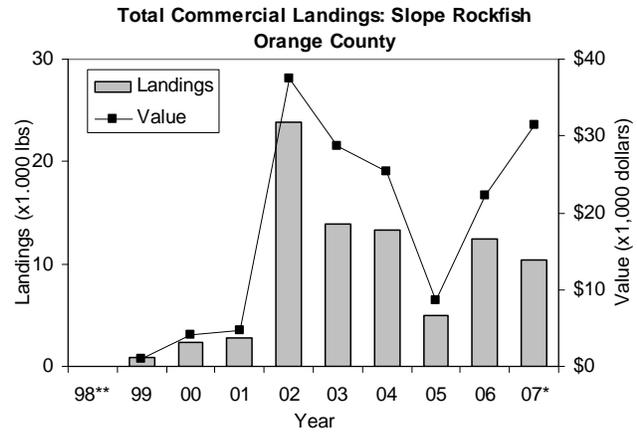
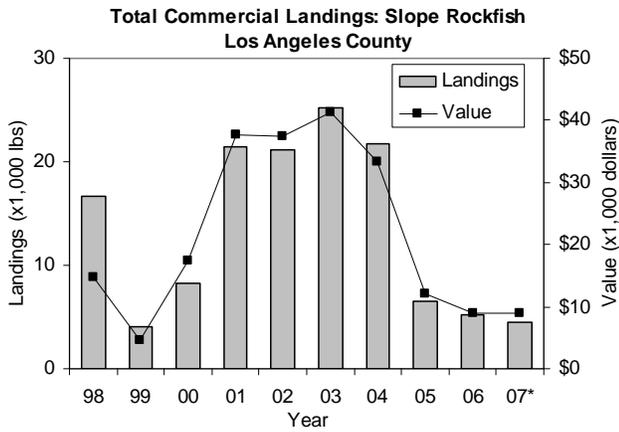
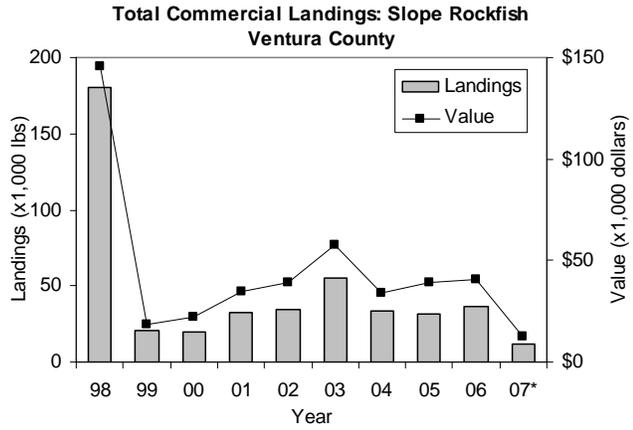
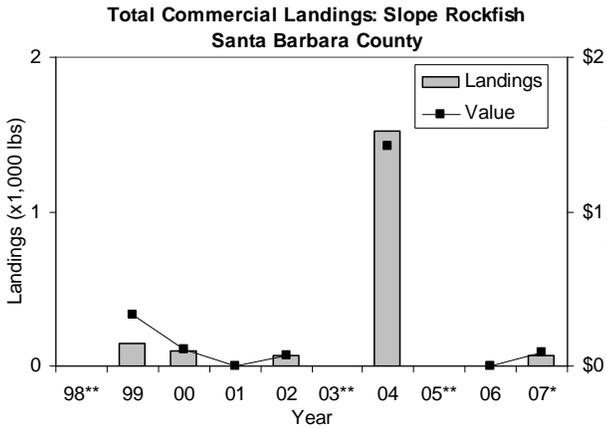
Primary area of fishery: State waters () Federal waters (x)

Synopsis of commercial regulations applicable to the south coast study region:

Within the Rockfish Conservation Area (RCA), the taking of rockfishes is prohibited. A federal permit is required to fish outside the RCA. There are three types of federal permits: trawl limited entry, fixed gear limited entry, non-trawl open access. Within the MLPA South Coast Study Region (Point Conception to the U.S./Mexico border), the RCA for commercial fishing is 30 to 150 fathoms for limited entry and non-trawl open access, and from 100 to 150 fathoms for limited entry trawlers. Rockfishes landed must be sorted by species or species group prior to weighing. Cumulative trip limits per permit are in effect, generally on a two-month basis. The season may be closed early if harvest guidelines are met or

exceeded. Species such as darkblotched and Pacific Ocean perch have been declared overfished. See section 3.2.2 for a complete further information about overfished species.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 02 May 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary. **Data cannot be disclosed due to confidentiality considerations.



Fishery: Spot Prawn

Species Targeted: Spot prawn (*Pandalus platyceros*)

Primary depth range: 600 to 750 feet (100 to 125 fathoms)

Primary habitat type(s): Canyons; hard, soft and mixed bottoms

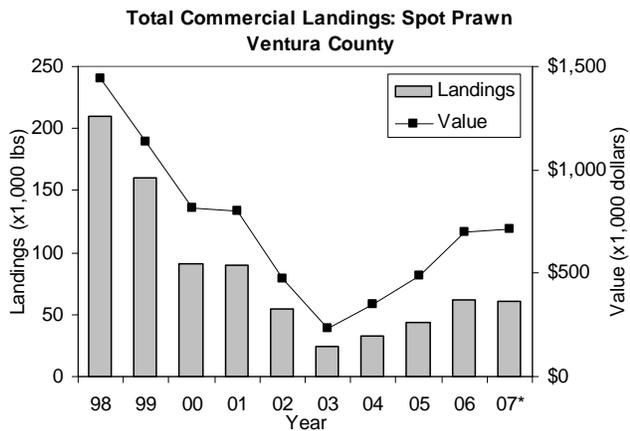
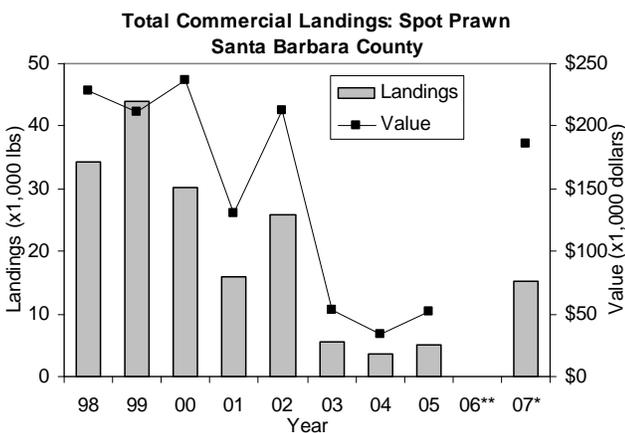
Primary gear: Trap

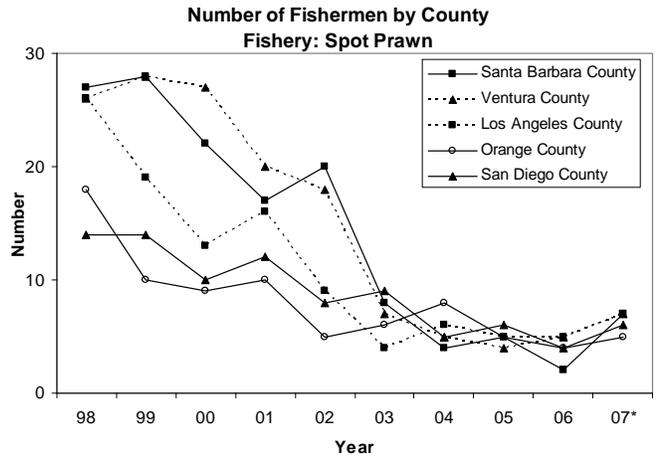
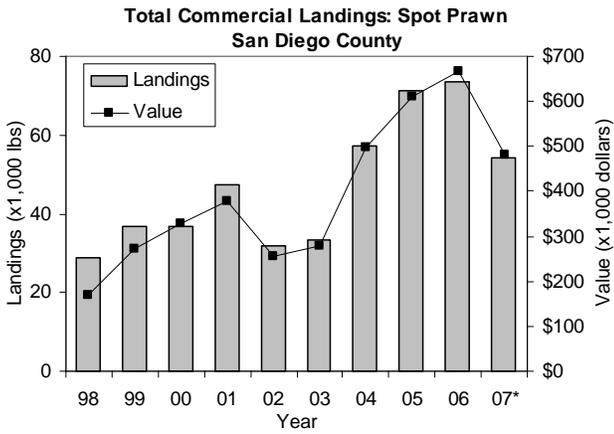
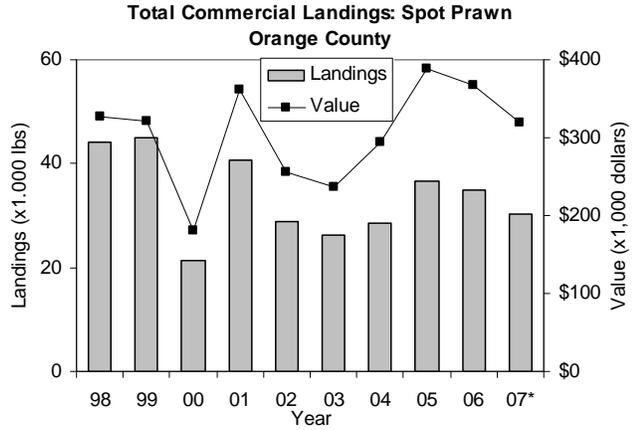
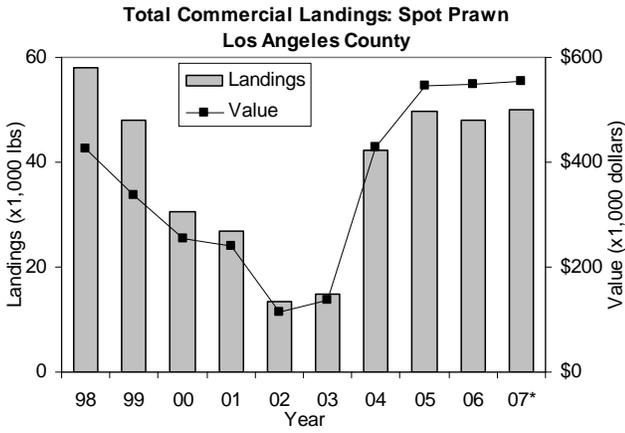
Primary area of fishery: State waters (x) Federal waters (x)

Synopsis of commercial regulations applicable to the south coast study region:

This is a restricted access fishery with a 3-tier structure with no restrictions on geographical region of fishing. Tier 1 permits are fully transferable. A permittee may use no more than 500 traps (only 300 in state waters north of Point Arguello), and has no restrictions on landings. Tier 2 permits are not transferable. A permittee may use no more than 150 traps, and may land no more than 5,000 lbs of spot prawns in a calendar year. Tier 3 (trawl-to-trap conversion) permits are not transferable. A permittee may use no more than 500 traps (only 300 in state waters north of Point Arguello), and has no restrictions on landings. North of Point Arguello the season for spot prawn is open from 1 August through 30 April. South of Point Arguello the season is open from 1 February through 31 October. All species caught incidentally in spot prawn traps must be returned to the water immediately. Trawling for ridgeback prawn is prohibited in state waters and in waters not less than 150 feet (25 fathoms).

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 02 May 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary. **Data cannot be disclosed due to confidentiality considerations.





Fishery: White Seabass

Species Targeted: White seabass (*Atractoscion nobilis*)

Primary depth range: 0 to 400 feet (0 to 67 fathoms)

Primary habitat type(s): Kelp beds and rocky bottom

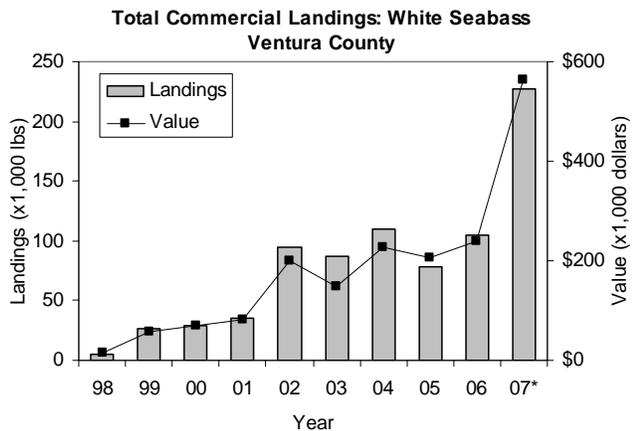
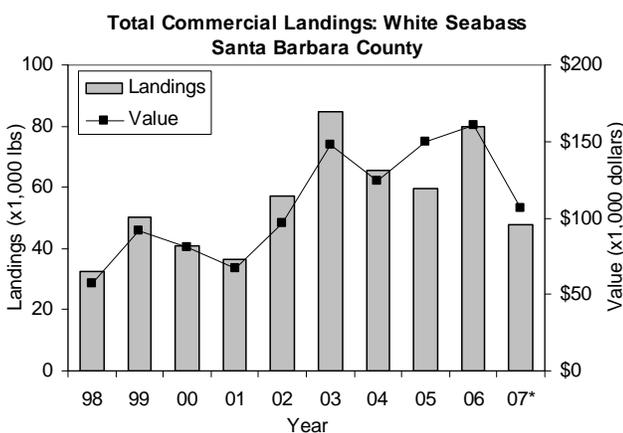
Primary gear: Set gill net

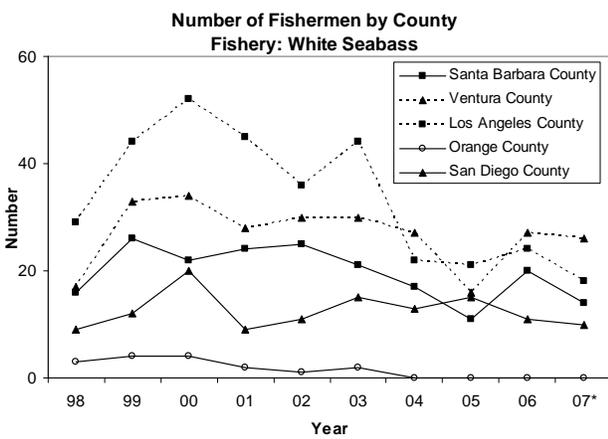
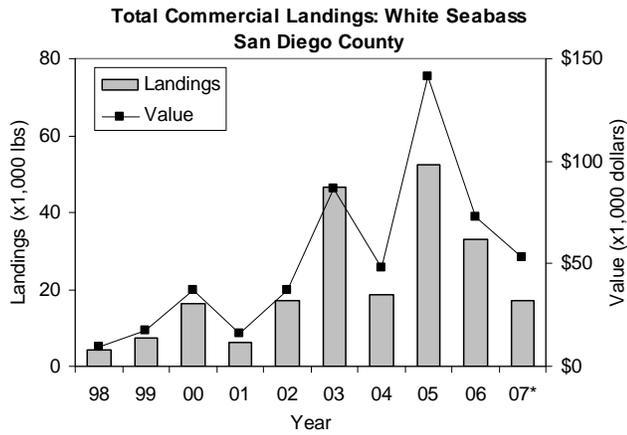
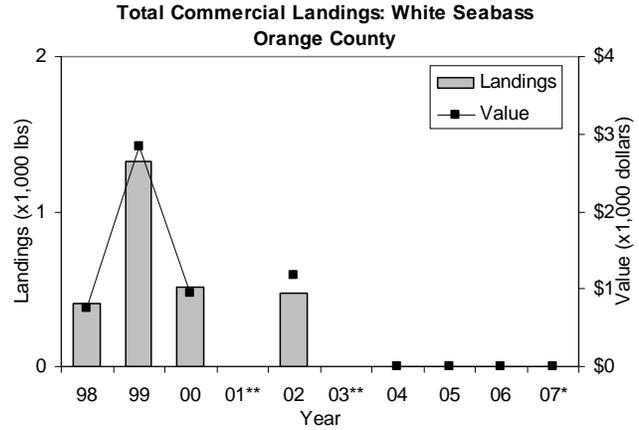
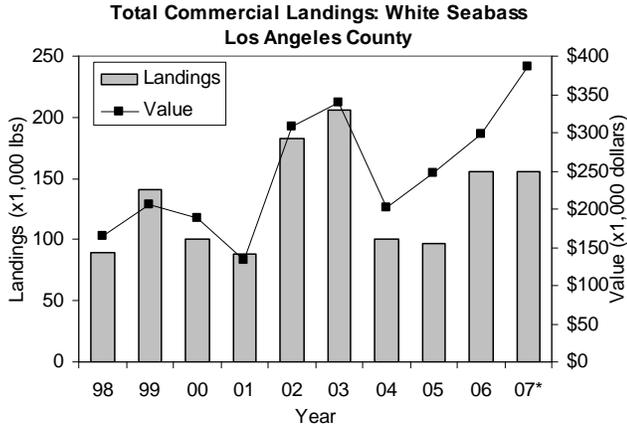
Primary area of fishery: State waters (x) Federal waters ()

Synopsis of commercial regulations applicable to the south coast study region:

The white seabass season is open from June 16 through March 14 between Point Conception and the U.S – Mexico border. The minimum size is 28 inches total length. Gill nets with meshes of a minimum length of six inches may be used to take white seabass; however, from June 16 to March 14 not more than 20 percent by number of white seabass (greater than 28 inches), up to 10 fish per load, can be taken in gill or trammel nets with meshes 3.5 to 6 inches. White seabass, in addition to all other species, cannot be taken by gill and trammel nets in ocean waters under the following conditions: (1) less than 70 fathoms deep or within one mile, whichever is less, of the Channel Islands, (2) 0-3 miles from the mainland shore between Point Arguello and the Mexican border, (3) less than 35 fathoms between Point Fermin and the south jetty at Newport Harbor. It is unlawful to take white seabass using purse seine or round haul nets. It is unlawful to possess white seabass on a boat carrying our using any purse seine or round haul net unless taken off Mexico.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 02 May 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary. **Data cannot be disclosed due to confidentiality considerations.





Fishery: Yellowtail

Species Targeted: Yellowtail (*Seriola lalandi****)

*** Also known as *Seriola dorsalis*.

Primary depth range: 0 to 228 feet (0 to 38 fathoms)

Primary habitat type(s): Pelagic

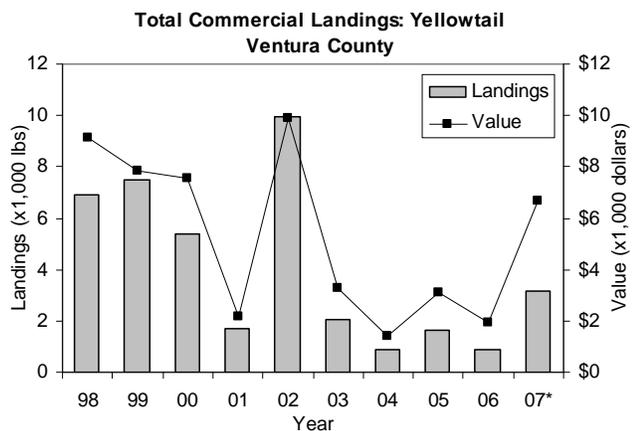
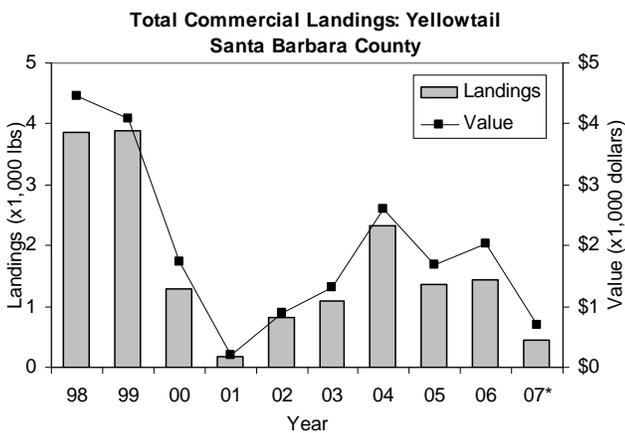
Primary gear: Set gill-net, Hook-and-line

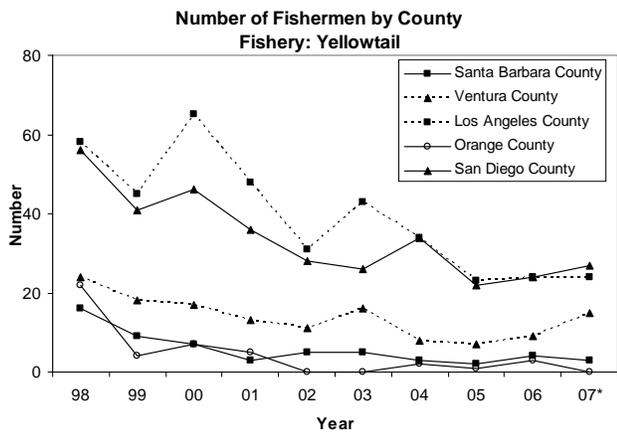
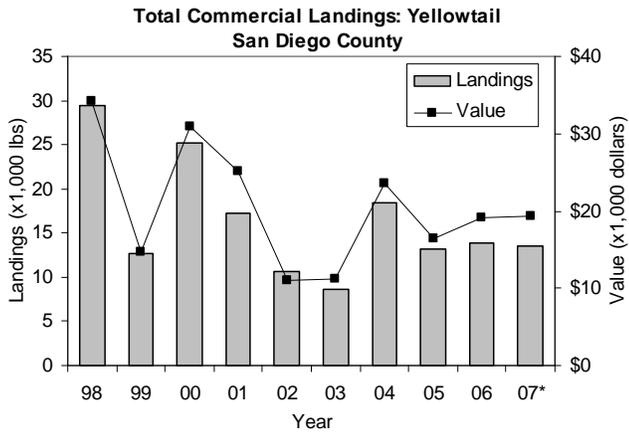
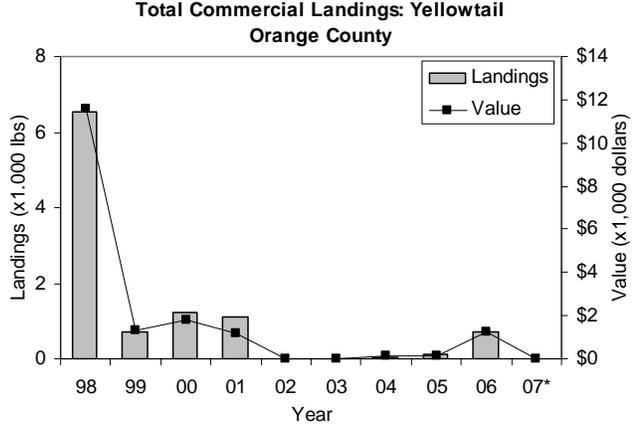
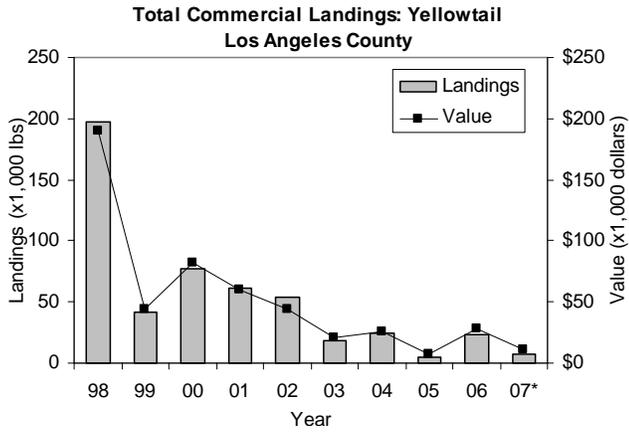
Primary area of fishery: State waters (x) Federal waters ()

Synopsis of commercial regulations applicable to the south coast study region:

Minimum size limit is 28 inches. Between May 1 and August 31 it is unlawful for (a) any one person to have more than 500 pounds of yellowtail in their possession on any boat, barge or vessel; (b) two or more persons to have in their possession on any boat, barge or vessel, a combined weight of 500 pounds of yellowtail per person; or (c) five or more persons to have more than a combined weight of 2,500 pounds of yellowtail in their possession on any boat, barge or vessel.

Landings and ex-vessel values by county: Data were compiled from the Commercial Fisheries Information System database (extraction date: 02 May 2008). Reported ex-vessel values are adjusted to 2007 dollars to account for inflation. The number of fishermen reflects the number of fishermen who have made at the least one landing for that fishery, port area and year. *2007 data are preliminary. **Data cannot be disclosed due to confidentiality concerns.





Appendix III (I): Market categories included in market category groupings

California Halibut

Market categories: California Halibut, Halibut

California Sheephead

Market categories: California Sheephead

California Spiny Lobster

Market categories: California Spiny Lobster

Coastal Pelagics Finfish Species

Market categories: Bullet Mackerel, Deep Body Anchovy, Jack Mackerel, Juvenile Sardine, Northern Anchovy, Pacific Mackerel, Pacific Sardine, Slough Anchovy, Unspecified Mackerel

Crab

Market categories: Brown Rock Crab, Red Rock Crab, Rock Unspecified Crab, Yellow Rock Crab, Sheep Crab

Croaker

Market categories: Black Croaker, Spotfin Croaker, Unspecified Croaker, White Croaker, Yellowfin Croaker

Dover sole, Thornyheads & Sablefish (non-trawl & trawl)

Market categories: Dover Sole, Longspine Thornyhead, Sablefish, Shortspine Thornyhead, Thornyheads

Flatfish, Other

Market categories: Arrowtooth Flounder, Starry Flounder, Unspecified Flounder, Butter Sole, English Sole, Petrale Sole, Rex Sole, Rock Sole, Sand Sole, Slender Sole, Unspecified Sole, Bigmouth Sole, Faintail Sole, C-O Sole, Hornyhead Turbot, Spotted Turbot, Turbot, Curlfin Turbot, Diamond Turbot, Longfin Sanddab, Pacific Sanddab, Sanddab, Speckled Sanddab

Kellet's Whelk

Market categories: Kellet's Whelk

Lingcod

Market category: Lingcod

Market Squid

Market category: Market Squid

Nearshore Finfish

Market categories: Black-and-Yellow Rockfish, Black/Blue Group Rockfish, Black Rockfish, Blue Rockfish, Brown Rockfish, Cabezon, Calico Rockfish, California Scorpionfish, China Rockfish, Copper Rockfish, Grass Rockfish, Gopher Rockfish, Group Bolina Rockfish, Group Deep Nearshore Rockfish, Group Gopher Rockfish, Group Nearshore Rockfish, Kelp Rockfish, Kelp Greenling, Monkeyface Eel, Olive Rockfish, Quillback Rockfish, Rock Greenling, Treefish Rockfish

Ridgeback Prawn

Market categories: Ridgeback Prawn

Sea Cucumber

Market categories: Giant Red Sea Cucumber, Warty Sea Cucumber, Unspecified Cucumber

Sea Urchin

Market category: Red Urchin

Sharks, Skates & Rays

Market categories: Bat Ray, Pacific Electric Ray, Stingray, Unspecified Ray, Basking Shark, Bigeye Thresher Shark, Blacktip Shark, Blue Shark, Brown Smoothhound Shark, Cow Shark, Dusky Shark, Gray Smoothhound Shark, Horn Shark, Leopard Shark, Pacific Angel Shark, Pelagic Thresher Shark, Salmon Shark, Sevengill Shark, Shortfin Mako Shark, Sixgill Shark, Smooth Hammerhead Shark, Soupfin Shark, Spiny Dogfish Shark, Swell Shark, Thresher Shark, White Shark, Unspecified Shark Big Skate, California Skate, Round Stingray, Shovelnose Guitarfish, Spotted Ratfish, Thornback Skate, Unspecified Skate

Shelf Rockfish

Market categories: Bronzespotted Rockfish, Bocaccio Rockfish, Bocaccio/Chili Group Rockfish, Canary/Vermillion Group Rockfish, Canary Rockfish, Chilipepper Rockfish, Chameleon Rockfish, Cowcod Rockfish, Flag Rockfish, Greenblotched Rockfish, Greenspotted Rockfish, Greenstriped Rockfish, Group Red Rockfish, Group Shelf Rockfish, Halfbanded Rockfish, Honeycomb Rockfish, Mexican Rockfish, Pink Rockfish, Pinkrose Rockfish, Redstripe Rockfish, Rosethorn Rockfish, Rosy Rockfish, Shortbelly Rockfish, Speckled Rockfish, Squarespot Rockfish, Starry Rockfish, Stripetail Rockfish, Swordspine Rockfish, Tiger Rockfish, Widow Rockfish Yelloweye Rockfish, Yellowtail Rockfish, Vermilion Rockfish

Slope Rockfish

Market categories: Aurora Rockfish, Bank Rockfish, Blackgill Rockfish, Darkblotched Rockfish, Grenadier, Pacific Ocean Perch Rockfish, Redbanded Rockfish, Shortraker Rockfish, Splitnose Rockfish

Smelt

Market categories: Jacksmelt, Night Smelt, Surf Smelt, True Smelt, Topsmelt, Whitebait Smelt

Spot Prawn

Market category: Spot Prawn