

U.S. Department of the Interior
U.S.G.S. – Western Ecological Research Center
Piedras Blancas Office Santa Cruz Field Station
P.O. Box 70 San Simeon, CA 93452
Phone (805) 927-3893 Fax (805) 927-3308
Email: brian_hatfield@usgs.gov

31 May 2007

Spring 2007 Mainland California Sea Otter Survey Results

The spring 2007 sea otter count began on 2 May and was completed on 17 May. Overall viewing conditions for this survey, 2.7, were more favorable than those during the spring 2006 survey (2.4, where 0=poor, 1=fair, 2=good, 3=very good, and 4=excellent). *Macrocystis* surface canopies were noted to be relatively low or thin in many areas. The survey boundaries were Point San Pedro in the north to Rincon Point in the south.

The total sea otter count, 3026, is 12.4% higher than the spring 2006 count and 7.1% higher than the previous high count of 2825 in spring 2004. The number of independent sea otters observed, 2637, is 11.3% above the number counted last spring (Table 1). The count of the north half of the range (defined here as north of Cape San Martin) is up approximately 18%, while the south half was up about 8% from the count last spring. The central part of the range (Seaside to Cayucos) was also up 8%. The coastal segment with the largest increase in sea otters this spring was from Capitola to Seaside, with an increase of 135 independent otters. This area was counted under excellent conditions this year compared to good conditions last spring. Two other areas had increases in the number of independents of at least 50 animals: Point Lobos to Point Sur (69) and Pismo Beach to Point Sal (56). The two areas with the largest decreases in independent sea otters were Pigeon Point to Capitola (-47) and San Simeon Point to Cayucos (-37). One hundred and six independent sea otters (and zero confirmed pups) were spotted east of Point Conception this spring, which is similar to the number counted during the last 2 spring counts (92 in 2005 and 93 in 2006, Figure 1). What is different this spring is that 39 of these were spotted east of Gaviota, with 29 in the Naples Reef area, approximately 7 km west of Coal Oil Point (and 50 km east of Point Conception). None were spotted east of Gaviota during the spring 2005 count and only one in spring 2006. The southern-most sighting was of a single animal near Santa Barbara Point; the northern-most being an individual approximately 3 km north of Pillar Point. Note: we get occasional reliable reports of sea otters – almost always single animals – beyond the boundaries of our survey. We believe the number of these animals is insignificant, but will expand our survey search boundaries when more than one or two animals are seen in an area for extended periods.

The pup count this spring, 389, is 59 more than the previous record of 330 pups counted in spring 2004. Increases in the central part of the range accounted for most of this increase. Compared with the pup count from last spring there were 30 more in the coastal segment from Dolan Rock to Cape San Martin and 28 more from San Simeon Point to Cayucos. There were 14 fewer pups observed north of Capitola this spring (Figure 2).

The count this spring, because it is higher than the 2004 spring count, has a positive effect on the 3-year running average for independent, pups, and total sea otters. The 3-year running average for total sea otters is up 2.4% to 2818 animals (Figure 3). This is the metric the U.S. Fish and Wildlife Service's Southern Sea Otter Recovery Plan recommends using to reduce the influence of anomalously high or low counts from any particular year.

This survey is a cooperative effort between USGS-BRD-Western Ecological Research Center, CDFG–Marine Wildlife Veterinary Care and Research Center, Monterey Bay Aquarium, and many experienced and dedicated volunteers, including docents of the Point Lobos State Reserve and members of the Pacific Cetacean Group. Assistance was also received from staff of the U.S. Fish and Wildlife Service, the California Coastal Commission, and U.S. Minerals Management Service. A special note of appreciation is extended to Sue Benech, Jud Vandevere, and Phil and Carole Adams.

Table 1. Summary of Spring Surveys, 1995-2007.

<u>YEAR</u>	<u>INDEP</u>	<u>% CHANGE</u>	<u>PUPS</u>	<u>% CHANGE</u>	<u>PUP/INDEP RATIO</u>	<u>TOTAL</u>	<u>% CHANGE</u>
1995	2095	0.9	282	-0.4	13.5 : 100	2377	0.8
1996	1963	-6.3	315	11.7	16.0 : 100	2278	-4.2
1997	1919	-2.2	310	-1.6	16.2 : 100	2229	-2.2
1998	1955	1.9	159	-48.7	8.1 : 100	2114	-5.2
1999	1858	-5.0	232	45.9	12.5 : 100	2090	-1.1
2000	2053	10.5	264	13.8	12.9 : 100	2317	10.9
2001	1863	-9.3	298	12.9	16.0 : 100	2161	-6.7
2002	1846	-0.9	293	-1.7	15.9 : 100	2139	-1.0
2003	2270	23.0	235	-19.8	10.4 : 100	2505	17.1
2004	2495	9.9	330	40.4	13.2 : 100	2825	12.8
2005	2417	-3.1	318	-3.6	13.2 : 100	2735	-3.2
2006	2369	-2.0	323	1.6	13.6 : 100	2692	-1.6
2007	2637	11.3	389	20.4	14.8 : 100	3026	12.4

Figure 1. Independent Sea Otters: Distribution and Abundance in California by Coastal Segment, Spring 2005 - 2007

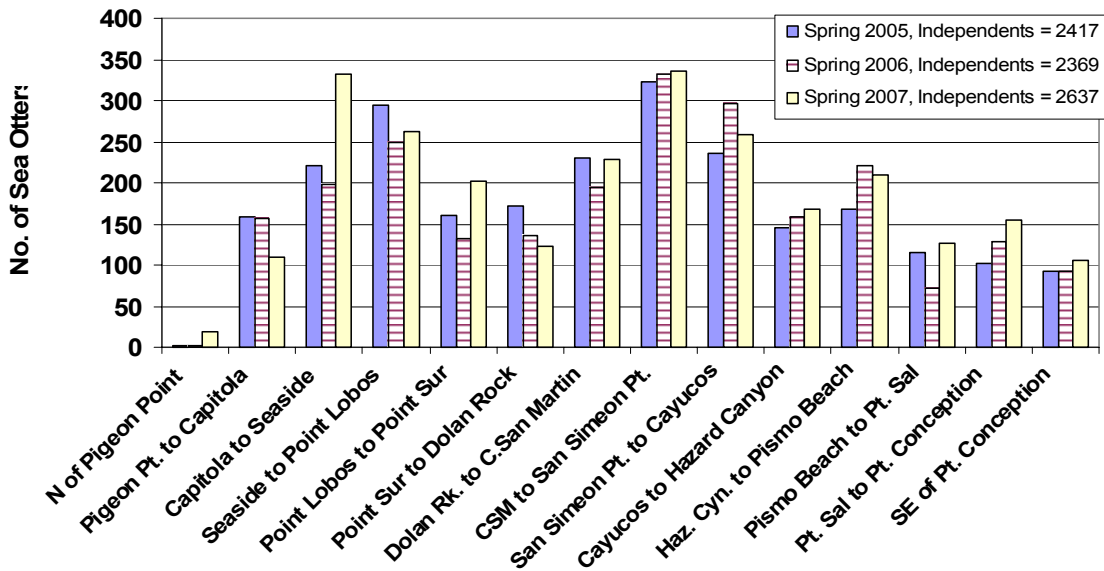
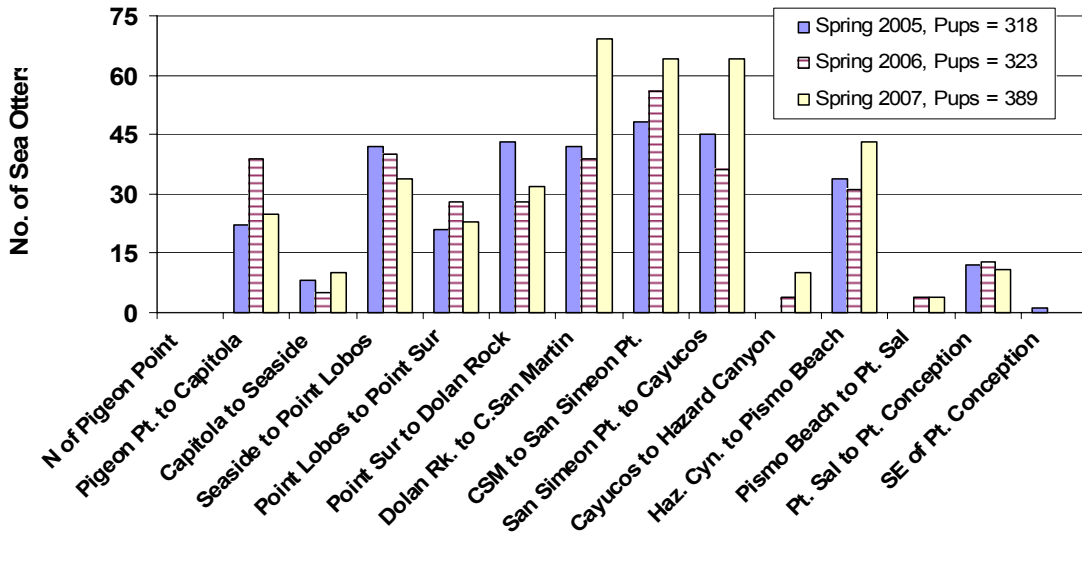


Figure 2. Sea Otter Pups: Distribution and Abundance in California by Coastal Segment, Spring 2005 - 2007



Sea Otter Counts: 3-Year Running Averages

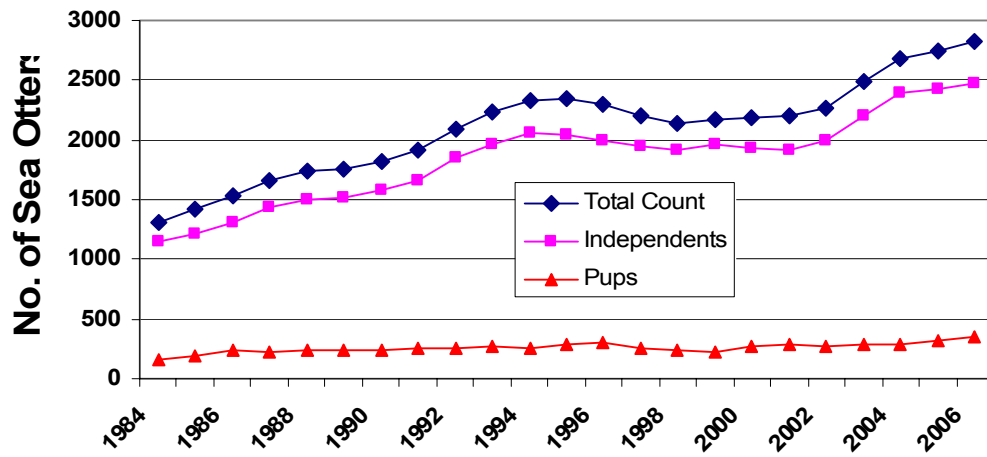


Figure 3. Number of southern sea otters counted during spring surveys, plotted as 3-year running averages. (Example: values for 2006 are the averages of the 2005, 2006, and 2007 counts.)