

TABLE 4.6: Summary of Estimated Spatial and Temporal Occurrence for Selected Marine Mammals In Ocean Waters off North/Central California

Species or Species and Stock	Occurrence in National Marine Sanctuaries (NMS) ^{3,4}			Spatial Occurrence Over Bathymetric Zones in the Study Area ^{3,4,5,6}					Temporal Occurrence in Study Area ^{3,4,5,6,7}		
	Cordell Bank NMS	Gulf of Farallones NMS	Monterey Bay NMS	Nearshore (Coast to 50m isobath)	Inner Continental Shelf (coast to 100m isobath)	Outer Continental Shelf (100m–200m isobaths)	Continental Slope (200m–2,000m isobaths)	Deep Ocean, beyond the Slope (>2000m isobath)	Upwelling Season (3/15-8/14)	Oceanic Season (8/15-11/14)	Davidson Current Season (11/15-3/14)
Southern sea otter *	NS	NS				NS	NS	NS			
California sea lion *											
Steller sea lion *											
Northern fur seal *											
Pacific harbor seal *							NS	NS			
Northern elephant seal *											
Bottlenose dolphin, CA coastal stock **	NS						NS	NS			
Harbor porpoise (central CA) **							NS	NS			
Dall's porpoise											
Risso's dolphin				NS							
Pacific white-sided dolphin				NS							
Short-beaked common dolphin	NS										
Northern right-whale dolphin				NS	NS						
Killer whale											
Baird's beaked whale				NS	NS	NS					
Cuvier's beaked whale				NS	NS	NS					
Other beaked whales: <i>Mesoplodont spp.</i>				NS	NS				NS		NS
Sperm whale				NS	NS						
Blue whale											
Humpback whale											
Fin whale											
Minke whale											
Gray whale								NS			

Key:

NS or no tone: Not sighted or 1-2 total sightings in available data sets; see below.

 Present; sightings were mostly Rare or Uncommon at sea

 Present; sightings were mostly Common or Frequent at sea (e.g., sightings occurred almost daily to every few weeks)

* Indicates breeding occurs in the study area.

** Indicates breeding likely occurs in study area.

Notes:

(e.g., sightings occurred once a month to once a year)

1. The intent of this table is to provide a summary of where and when marine mammals occur in the study area off north/central California, from Pt. Arena to Pt. Sal. This table was developed in spring-summer 2007, and is based on a combination of expert opinions (see below) and the following sources: the CDAS central CA data set (1980-2003), the NOAA/SWFSC mammal surveys (1991-2001), NMFS stock assessment reports (e.g., Caretta et al., 2006), information from the Monterey Bay Whale watch site (<http://www.gowhales.com/sighting.htm>), and

current sanctuary management plans.

2. This table was developed in 2006 by Tracy Gill (NCCOA NOAA) and Carol Keiper (Oikonos) and reviewed and revised by David Ainley, John Calambokidis, Jan Roletto, Sarah Allen and Lisa Etherington.

3. Species may occur in the study area in areas and time periods not indicated; the absence of sightings may be due to insufficient survey effort than real absence from the area or season.

4. This table does not attempt to address relative abundance; it does contain a qualitative estimate of frequency of sightings in the study area. Frequency of sightings can vary annually and interannually. For example, a species can generally be considered rare in a certain location or time period, but occasionally occur in that place or time with common or frequent sightings.

5. The study area includes the ocean waters off north/central California, from Pt. Arena to Pt. Sal, CA, and offshore to the extent of data (~35-39°N x 120-130°W).

6. When different opinions were offered by researchers as to whether a species was not sighted or sighted (no tone or light) we chose to show the species as Present, rare/uncommon.

If the difference was deciding between the lower and higher categories of sightings based on two sources, we chose the dark tone.

7. Species may have been sighted in the study area in all three seasons, but may not be considered year-round, as some species move out of the study area for part of the year for feeding

or breeding.