

## Twenty-five Years of Rehabilitation of Odontocetes Stranded in Central and Northern California, 1977 to 2002

Kathryn A. Zagzebski<sup>1,2</sup>, Frances M.D. Gulland<sup>1</sup>, Martin Haulena<sup>1,3</sup>, Michelle E. Lander<sup>1,4</sup>,  
Denise J. Greig<sup>1</sup>, Laurie Gage<sup>5</sup>, M. Bradley Hanson<sup>6</sup>, Pamela K. Yochem<sup>7</sup>, Brent S. Stewart<sup>7</sup>

<sup>1</sup> *The Marine Mammal Center, 1065 Fort Cronkhite, Sausalito, CA, 94965, USA*

<sup>2</sup> *Current address: National Marine Life Center, P.O. Box 269, Buzzards Bay, MA, 02532, USA*

<sup>3</sup> *Current address: Vancouver Aquarium, P.O. Box 3232, Vancouver, BC, Canada, V6B 3X8*

<sup>4</sup> *Current address: National Marine Mammal Laboratory, 7600 Sand Point Way N.E., Seattle, WA, 98115, USA*

<sup>5</sup> *Wildvet Consultant Services, 1131 Second Ave., Napa, CA, 94558, USA*

<sup>6</sup> *Northwest Fisheries Science Center, 2725 Montlake Blvd. E., Seattle, WA, 98112, USA*

<sup>7</sup> *Hubbs-SeaWorld Research Institute, 2595 Ingraham St., San Diego, CA, 92109, USA*

### Abstract

Rehabilitation of stranded cetaceans is receiving increasing attention and involves considerable financial and personnel resources, although the survival rate appears to be low. To evaluate rehabilitation success, we examined 25 years (1977-2002) of data on live-stranded odontocetes ( $n=70$ ) from northern California that were rescued for rehabilitation. Thirty-five animals (50%) died within the first 24 hours of being rescued, 13 animals (19%) died within the first week, seven animals (10%) died within a month, and five animals (7%) survived longer than one month, but subsequently died. Three animals (4%) were deemed non-releasable and placed into captivity, whereas five animals (7%) were released back into the wild. Two animals (3%) were relocated and released; these animals were never seen again. Clinical signs were non-specific and it was difficult to differentiate medical problems that resulted from stranding from those that may have caused the stranding. Causes of death included pneumonia ( $n=16$ ), septicemia ( $n=6$ ), encephalitis ( $n=3$ ), maternal separation ( $n=7$ ), and blunt trauma ( $n=6$ ). No morbilliviral inclusion bodies or typically associated lesions were detected. Cause of death was unknown for 23 cases. Myocardial degeneration and contraction band necrosis ( $n=9$ ) and nephrosis ( $n=4$ ) probably resulted from the stress of stranding. Ulcerative glossitis and esophagitis were observed in most animals that were tube-fed in rehabilitation. Four animals that had been in rehabilitation for more than one week had rhabdomyolysis and one had scoliosis. These data indicate success of rehabilitating and releasing stranded odontocetes in California is minimal, and stress of stranding and rehabilitation in addition to pre-existing disease can result in morbidity and mortality. Of the animals released, two common dolphins (*Delphinus delphis*) and one harbor porpoise (*Phocoena phocoena*) were tagged with satellite transmitters. Transmissions were received for up to five mo. after release. Increased use of telemetry is essential for post-release monitoring and evaluating rehabilitation success.

**Key words:** harbor porpoise, *Phocoena phocoena*, common dolphin, *Delphinus delphis*, odontocete, cetacean, strandings, disease, wildlife rehabilitation, radio-telemetry, satellite telemetry, California