## Marine mammal strandings and the role of the veterinarian

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## 1 INTRODUCTION

## 1.1 General

Marine mammal strandings, particularly those involving large numbers of whales or dolphins, attract a vast amount of public and media attention. These events are often the scene of impressive mobilisations of heavy equipment, volunteers and a variety of experts who attempt to contribute to the rescue effort. Knowledgeable veterinary expertise is a significant component of any rescue and the veterinarian at a stranding is likely to find themselves in a high-profile, challenging, operational and advisory role. Their role can be as varied as the strandings themselves and include aspects of clinical examination or necropsy and assessment, drug selection and administration, euthanasia and tag attachment. It can also be controversial. The media increasingly seek early advice on the likelihood of human causes of the stranding such as potential links to seismic or military acoustic activities that may have occurred in the vicinity. Similarly, advice to euthanase an animal may meet with polarised views. More commonly, however, veterinarians will be asked to advise or assist with health assessments and interventions for single stranded cetaceans or pinnipeds. In all eventualities, the way to maximise the positive contribution of the veterinarian is to ensure that they understand their role and the role of others, and give advice that matches their experience, knowledge and capacity in circumstances that may be novel and at times overwhelming.

Very few comprehensive texts have been produced on the wider topic of strandings; Marine Mammals Ashore: A Field Guide for Strandings (2nd edn) by Geraci and Lounsbury (2005) and the University of Sydney's Post Graduate Foundation in Veterinary Science Marine Wildlife, Proceedings 335 (2000) are probably the most useful. Within the confines of this chapter it is not possible to provide a detailed clinicians' guide to diagnosis, treatment, sample collection and follow-up for all stranding scenarios. Rather, we more modestly aim to provide veterinarians, particularly those less familiar with marine mammal anatomy and physiology, with a reasonably brief and accessible summary and guide that, augmented with guides like that of Geraci and Lounsbury (2005) and the information in Chapters 17, 18 and 19 of this volume, will help them understand how and why they might best contribute to positive outcomes from marine mammal strandings. Good guides to identification and basic background biology of commonly stranded animals can be found in Baker (1999), Bryden et al. (1998) and Carwardine (1995).

We will discuss in general terms the issues of strandings of all marine mammals. Although single stranded cetaceans and pinnipeds ashore are much more common, the prognosis for single stranded cetaceans is generally poor and mass strandings often require greater veterinary involvement. For this reason, the focus of this summary will be most relevant to cetacean mass strandings.