

NMFS Decision Process for Responding to Live Marine Mammals that are Stranded or Otherwise in Distress

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NOAA's National Marine Fisheries Service (NMFS) and the Marine Mammal Stranding Network have developed protocols and procedures for responding to live marine mammals that are stranded or otherwise in distress to ensure the health, welfare and safety of both the animals and the human responders. These protocols balance the need for standardized procedures while allowing flexibility to address specific needs of different situations for diverse species and habitats, as well as unforeseen circumstances. Protocols and procedures for cetaceans (whales, dolphins and porpoises) can be different than the ones for pinnipeds (seals and seal lions) since their biology is significantly different. Human and animal safety is the top priority for NMFS and the Network. NMFS and the Network evaluate several factors before intervening. Each event is different and requires consideration of the following factors by NMFS in consultation with the Network and outside experts:

What are the species and group composition involved in the event?

- Responses to small cetaceans or pinnipeds (*e.g.*, bottlenose dolphins or harbor seals, which are < 8 feet) are not the same as for large whales (*e.g.*, right whales, which are > 40 feet).
- Different species have specific group compositions and social behaviors (*e.g.*, bottlenose dolphins can occur singly or in groups of < 20 individuals, whereas Atlantic white-sided dolphins can occur in groups of > 100). The presence of mother-calf pairs is a consideration since young and naïve animals can be particularly vulnerable to disturbance.
- Pelagic (deep water) species like pilot whales, common dolphins, and Atlantic white-sided dolphins are out of habitat and at risk of stranding in shallow waters. In contrast, coastal species such as bottlenose dolphins are adept at navigating shallow river and estuarine systems, which are part of their normal habitat.
- Animals from species that are listed as endangered or threatened (*e.g.*, Hawaiian monk seals, right whales) may require extraordinary rescue efforts in order to support recovery of the population.

Is the situation caused by human activities or a natural event?

- Animals in distress as a result of human activities are prime candidates for response and intervention. This includes animals entangled in fishing gear or marine debris, injured from a vessel collision, or trapped in a habitat area by human activities (*e.g.*, physical barriers, oil spills, construction noise, etc.).
- Animals that are out of habitat or displaced by severe weather or oceanographic events (*e.g.*, hurricanes, tsunamis, El Niño, underwater earthquakes, etc.) can be candidates for intervention if they cannot leave the area on their own accord and/or their health is declining. For example, NMFS and the Network routinely rescue dolphins washed inland by hurricanes or ice seals that have ventured off course to temperate or tropical areas, especially when the animals are in habitats that can compromise their health. Animals are initially monitored prior to conducting an intervention to allow every opportunity for them to leave on their own.
- Animals that may be naturally expanding their range and exploring new habitats should be left alone. Intervention may be warranted, however, if animals become a “nuisance” and are having a negative effect on the environment, private property or public safety.

Are resources available to ensure the safety and welfare of both the animals and the responders?

- Intervention can be risky and dangerous for both the animals and human responders. The Network includes highly trained personnel with different expertise. NMFS helps coordinate rescue activities to ensure the appropriate people are deployed to a particular event with an adequate number of personnel and sufficient equipment or facility resources for the rescue operation and veterinary care. NMFS and the Network coordinate with local officials and interested parties during events.
- Rescue operations are only approved if all safeguards can be maintained for the animals, rescue team members, and the public. If safety cannot be maintained, then rescue operations must stand down until appropriate safeguards can be put into place.

References:

- Geraci, J.R. and V.J. Lounsbury. 2005. *Marine Mammals Ashore: A Field Guide for Strandings* (Second Edition). National Aquarium in Baltimore, Baltimore, MD. 371 pp. [*Sponsored by NOAA/NMFS*]
http://www.aqua.org/research_marinemammalsashore.html
- Gulland, F.M.D., F.B. Nutter, K. Dixon, J. Calambokidis, G. Shorr, J. Barlow, T. Rowles, S. Wilkin, T. Spradlin, L. Gage, J. Mulsow, C. Reichmuth, M. Moore, J. Smith, P. Folkens, S. Hanser, S. Jang, and C.S. Baker. 2008. Behavioral responses to herding efforts of a cow-calf pair of humpbacks whales (*Megaptera novaeangliae*) in the Sacramento River Delta, California. *Aquatic Mammals*, 34(2):182-192.
<http://www.nefsc.noaa.gov/njdolphins/BIBLIOGRAPHY/Gulland%20et%20al.%202008.pdf>
- NMFS and USFWS. 1997. DRAFT Release of Stranded Marine Mammals to the Wild: Background, Preparation, and Release Criteria. Draft NOAA Tech. Memo. NMFS-OPR-XX. 76 pp.
<http://www.nmfs.noaa.gov/pr/pdfs/health/release.pdf>
- NMFS. 2007. Interim Best Practices for Marine Mammal Stranding Response, Rehabilitation, and Release. In: Draft Programmatic Environmental Impact Statement for the Marine Mammal Health and Stranding Response Program March 2007, Volume II: Appendices A-D.
<http://www.nmfs.noaa.gov/pr/health/eis.htm>
- Reynolds, J.E. and D.K. Odell (Eds.). 1991. *Marine Mammal Strandings in the United States: Proceedings of the Second Marine Mammal Stranding Workshop*, Miami, Florida, December 3-5, 1987. NOAA Technical Report NMFS 98. 157 pp.
http://www.nmfs.noaa.gov/pr/pdfs/health/marine_mammal_strandings.pdf
- Southall, B.L., R. Braun, F.M.D. Gulland, A.D. Heard, R.W. Baird, S.M. Wilkin and T.K. Rowles. 2006. Hawaiian melon-headed whale (*Peponocephala electra*) mass stranding event of July 3-4, 2004. NOAA Technical Memorandum NMFS-OPR-31. 73 pp.
http://www.nmfs.noaa.gov/pr/pdfs/health/stranding_melonheadedwhales_final_report.pdf
- St. Aubin, D.J., J.R. Geraci and V.J. Lounsbury. 1996. Rescue, Rehabilitation, and Release of Marine Mammals: An Analysis of Current Views and Practices. NOAA Tech. Memo. NMFS-OPR-8. 65 pp.
<http://www.nmfs.noaa.gov/pr/pdfs/health/rescue.pdf>
- Touhey, K.M., C. Merigo, M.J. Moore, and K. Patchett. 2003. Mass stranding prevention: the effectiveness of herding and acoustic deterrence. Spoken presentation at the 15th Biennial Conference on the Biology of Marine Mammals, Greensboro, NC.
<http://www.nefsc.noaa.gov/njdolphins/BIBLIOGRAPHY/touhey.pdf>
- Additional information available on the Internet:*
- NOAA/NMFS' Marine Mammal Health and Stranding Response Program
<http://www.nmfs.noaa.gov/pr/health/>
- Marine Mammal Stranding Network Participants
<http://www.nmfs.noaa.gov/pr/health/networks.htm>
- John H. Prescott Marine Mammal Rescue Assistance Grant Program
<http://www.nmfs.noaa.gov/pr/health/prescott/>
- Documentary "Saving Springer: Orphan Orca"
http://sos.noaa.gov/datasets/extras/saving_springer.html