March 2016

2015 Whale Entanglements off the West Coast of the United States

NOAA FISHERIES
WEST COAST REGION

Overview

In 2015, 61 whales were reported as entangled off the coasts of Washington, Oregon, and California. This is the highest annual total since NOAA Fisheries started keeping records in 1982. We confirmed 48 of the 61 reports were of an actual entangled whale via follow-up sightings and entanglement response information. The recent increases in entanglement reports likely reflect a variety of factors, including changes in whale abundance and distribution, shifting patterns in fishing and other human activities, and increased public reporting.

Humpback whales were the predominant species reported as entangled, confirmed in 31 separate cases in 2015. This year we also had the first confirmed case of an entangled blue whale on the West Coast. Entanglements occurred throughout the year, but the majority of cases were reported in September—with 11 documented cases. Of the 61 reported whale entanglements, 57 were reported off California, three were reported off Washington, and one off Oregon. However, where entangled animals are observed and reported does not necessarily reflect where and when the entanglement originated. Animals can remain entangled in gear for long periods of time and still remain capable of traveling great distances with it attached. Higher reporting rates in California may reflect a higher level of human activity (e.g., recreation) in coastal waters, so there may be a greater likelihood that an entangled whale will be seen and reported.

Gray whale and calf. Photo: NOAA

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2015 Entanglement Report by Month and Species

Month	Humpback	Gray	Other	Total
January	2	0	0	2
February	2	2	1 Fin Whale	5
March	1	4	1 Unidentified	6
April	0	0	1 Killer Whale	1
May	4	1	3 Unidentified	8
June	5	0	0	5
July	5	1	0	6
August	2	1	2 Unidentified	5
September	6	2	1 Blue; 2 Unidentified	11
October	6	0	1 Fin Whale	7
November	2	0	3 Unidentified	5
December	0	1	0	1

From 2000-2012, the average number of whale entanglement reports per year was approximately 10. In 2014, we received 32 reports, which was the highest total to date—until 2015.

Increased Reporting

The higher number of whale entanglement reports made in 2015 may be attributable to changes in the number and distribution of whales in recent years, and/or changes in the distribution of fishing and other human activities, which are, in part, influenced by environmental conditions. NOAA Fisheries is working to better understand and predict how all these factors may be impacting whales off the West Coast.

Broader public awareness may also be contributing to the recent increase in entanglement reports. Increasing awareness about whale entanglements and available reporting mechanisms has been a focus of NOAA Fisheries' outreach. We have also been working with trained and permitted responders along the West Coast to increase their capacity to respond to entanglement reports, and train new responders in reporting and response techniques—additional outreach that may be contributing to the 2015 numbers.

Sources of Entanglements

In 2015, of the 61 reports, 22 were identified as fishing gear and 39 were not able to be identified to a specific source. This includes gear identifiable to that used in state-managed fisheries occurring off the coasts of Washington, Oregon, and California:

Dungeness crab commercial fishery	11 reports
Set gillnet and tribal gillnet fisheries	5 reports
Dungeness crab recreational fishery	1 report
Spiny lobster fishery	1 report

Outcomes of Entanglements

In 2015, the disentanglement network actively responded to entanglement reports across the West Coast. Their involvement greatly increased the ability to accurately document the nature of the entanglement, as well as initiate interventions to remove gear. The outcomes of the entanglements are as follows:

Disentangled	2 cases
Partial Disentanglement	2 cases
Self-Release	4 cases
Death	1 case
Unknown	52 cases

Of the 61 reports, the fate of 52 whales reported as entangled is unknown. An "unknown" outcome is not the same as a finding of death, injury, or no injury to the animal. It simply means we were not able to re-sight the animal to confirm its condition.

Efforts to Conserve Whales & Reduce Entanglements

Whale Conservation Efforts

Over the last several decades, marine mammal populations have been increasing off the West Coast as a result of federal and state protections. In the case of some large whales, like the humpback and gray whale, population recovery has led to re-evaluating the protected status of these species under the Endangered Species Act. The Eastern Pacific population of gray whales was removed from the Endangered Species List in 1994, and some populations of humpback whales off the West Coast are being considered for changes in their listing status.

Humpback whale. Photo: Robert Pitman, NOAA

Protecting Whales from Entanglements

NOAA Fisheries is engaged in a number of activities to minimize whale entanglements. We are:

1. Actively raising awareness about the importance of the quality of information needed in an entanglement report;
2. Working to expand the capability of permitted organizations to respond to entanglement reports;
3. Collaborating with the California Department of Fish and Wildlife, commercial and recreational crab fishermen, and non-governmental organizations, to evaluate ways to minimize entanglements in the California fishery, including development of a "Best Practices Guide" for fishermen that can be used coast-wide;
4. Working with states of California, Oregon, and Washington, as well as stakeholders to establish priorities for future evaluation of entanglement risk in particular fisheries and fishing gear;
5. Providing scientific expertise on all known or suspected sources of entanglements, exploring when, where, and how entanglements are occurring, and evaluating the available information on entanglements to determine the impacts on humpback whale populations; and
6. Working to better understand how environmental conditions influence the vulnerability of whales to entanglements.

Management Considerations

Each year, the distribution of whales off the West Coast could shift based on a variety of biological and environmental conditions. Whales typically undertake regular migrations between feeding and breeding areas. Environmental conditions will also vary and will influence the distribution of prey species for these animals (krill and small fishes). This may bring the whales into areas that may or may not be used by fisheries, and could lead to greater or fewer chances of entanglements. The annual abundance and distribution of whales informs management efforts, and NOAA Fisheries considers all of this information, along with data collected on entangled animals, in its effort to protect whales from entanglements.

How do I learn more about whale entanglements?

Disentanglement Network: www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/disentanglement_network.html

Whale & Fisheries Interactions: www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/fisheries_interactions.html.

Fixed Gear Guide: www.westcoast.fisheries.noaa.gov/publications/protected_species/marine_mammals/fixed_gear_guide_final_12.14.11.pdf

Best Practices Guide: http://www.westcoast.fisheries.noaa.gov/publications/protected_species/marine_mammals/cetaceans/best_practices_guide_minimizing_whale_entanglement_potfishing.pdf

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How to Report an Entangled Whale

The public plays an important role in saving distressed whales, like those that become entangled. Prompt reporting and monitoring of the animal are the best ways to help.

You can report large whales in distress to either:

The 24/7 reporting hotline: 1-877-SOS-WHALe (767-9425)

or

The United States Coast Guard on VHF CH-16

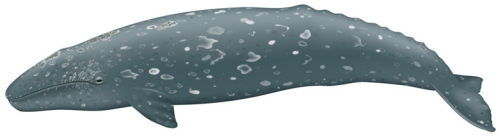
Entangled whales are unpredictable and potentially dangerous. Please keep a safe distance and do not approach the animal. You can continue to monitor the animal's condition and document the encounter while waiting for a response team to arrive.

What to include in your Report

Download reporting form

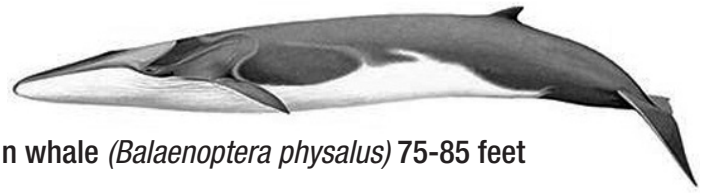
1. **Location of the animal;**
2. **A detailed description of the color and gauge of rope;**
3. **Location of gear on the whale;**
4. **Color and size of buoys;**
5. **Direction of the whale's movement, including whether it is solitary or with a group;**
6. **Behavior of the whale, including whether it is surfacing or diving, and the length of dive times;**
7. **Species of whale; and**
8. **Size and condition of the whale.**

Documentation in the form of photos and videos of the entangled whale can provide valuable information to the responders and resource managers. The information from each whale entanglement contributes to our larger knowledge-base and can be a valuable tool in helping to prevent future entanglements.



Gray Whale *(Eschrichtius robustus)* 39-46 feet

Humpback whale *(Megaptera Novaeangliae)* 40-60 feet



Fin whale *(Balaenoptera physalus)* 75-85 feet

Blue whale *(Balaenoptera musculus)* 88-108 feet

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