

LARGE WHALE ENTANGLEMENTS



NOAA FISHERIES SERVICE



While disentanglement efforts may free and animal from a life-threatening entanglement, it is not the long-term answer to the problem. Rather, we need to reduce the rate in which entanglements occur.”



NOAA Fisheries’ Alaska Protected Resources Division works to safely free endangered large whales from life-threatening entanglements, and, at the same time, help gather valuable information that will reduce the frequency and impact of entanglement in the future.

Background:

Marine mammal entanglement, or by-catch, is a global problem that every year results in the death of hundred of thousands of whales, dolphins, porpoises and seals world-wide. Entangled marine mammals may drown or starve due to being restricted by gear, suffer physical trauma and systemic infections, and/ or be hit by vessels due to an inability to avoid them. For Alaska’s smaller marine mammals, like the seals and porpoises, death is typically immediate, and due to drowning. However, large whales, like the humpback whale, can typically pull gear, or parts of it, off the ocean floor, and are generally not in immediate risk of drowning.

Methodology:

Cutting free a 45-foot, 40-ton, typically free-swimming animal, is not an easy task, and can be quite dangerous for humans and the animal alike. To do so safely, rescuers use a boat-based technique called “kegging”. Historically, ‘kegging’ involved attaching barrels or kegs to whales by harpooning them. The extra drag and buoyancy of the kegs would tire the whale out and keep it at the surface. For disentanglement, rescuers throw grapples or use hooks on the end of poles to attach to the gear entangling the animal. Instead of barrels, rescuers use large buoys. Once approachable, rescuers safely assess the animal and entanglement, and attempt to free the animal of all entangling gear.

Technology:

In addition to specially designed tools that help responders get hold of and cut free large entangled whales, NOAA Fisheries uses transmitters and receivers to automatically and remotely track an entangled animal over time. The science, called telemetry, is an important tool for whale rescue. The Alaska Response Network uses telemetry to track and re-locate entangled whales that cannot be disentangled during the initial response due to limited resources, and/or condition restraints. Telemetry increases the safety of disentanglement operations, and may assist in its overall success.

Network and Authorization:

NOAA Fisheries' Alaska Region Protected Resources Division coordinates disentanglement efforts under the agency's National Marine Mammal Health and Stranding Response Program permit (#932-1905). Entanglement response efforts are dependent on upon the commitment of many state and federal agencies (e.g. NOAA Fisheries Office of Law Enforcement, the U.S. Coast Guard, the Alaska Department of Fish and Game), private non-governmental organizations, fishermen, and other individuals working together. Whale rescue is complex and dangerous for the whale rescuers as well as the animal. Network response to entangled whales may only be attempted by authorized persons who are experienced, trained, knowledgeable, and have proper support and equipment, working under NOAA Fisheries' permit.

Accomplishments:

- The Alaska Network has grown since its inception in 1998, and now comprises over 180 participants who have received different levels of training in order to support disentanglement efforts statewide.
- The Network has received over 130 large whale entanglement reports.
- Mounted more than 80 on-water responses (some reports could not be responded to due to time-of-day, weather, and/or remoteness).
- Totally or partially freed (removing significant amounts of gear thereby improving the animal's chances of survival) over 40 large whales.
- Recovered gear that has been identified as local fishing gear, marine debris, and mooring gear.
- Fishermen are trying to reduce the rate and impact of large whale entanglement in their gear, and assist in disentanglement efforts when appropriate.

How can you help:

- Call - the NOAA Fisheries' Hotline at **(877) 925-7773** to alert authorized responders
- Monitor - if a response is possible, authorities may ask that you watch the animal from a safe distance (greater than 100 yards and not directly behind).
- Document - if possible take photos and video of animal and entanglement from a safe distance.
- Stay in the boat - never get in the water to help a whale.
- Wait for trained, authorized personnel - do not attempt to free a whale on your own. Disentangling a large whale is dangerous. Removing trailing lines and buoys may diminish the chances of freeing the animal of all gear, potentially leaving lethal wraps behind.



Telemetry buoy, housing a GPS transmitter, tracks an entangled whale. The buoy is attached to the gear entangling the animal.



Trained stranding network members assess an entangled whale before attempting to cut it free.



Stranding network members with the assistance of the US Coast Guard free an entangled humpback whale.