

Summary of 2007/2008 Large Whale Entanglement and Ship strike Reports

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The Hawaiian Islands Disentanglement Network (HIDN) is a community-based Network, coordinated by Ed Lyman and David Mattila of the Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS). The Network works under NOAA's Pacific Islands Regional Office (PIRO) Marine Mammal Response Network, coordinated by David Schofield, and receives authorization from NOAA Fisheries' Marine Mammal Health and Stranding Response Program (MMHSRP; permit # 932-1489-08), coordinated by Dr. Teri Rowles. The Network was formed in an attempt to free endangered humpbacks and other marine animals from life threatening entanglements and, at the same time, help gather valuable information that will mitigate entanglement and other threats, like ship strikes, in the future.

The Network has grown since its inception in 2002 and now comprises over 100 participants who have received various levels of training in order to support large whale response efforts statewide. To date, the Network (Sanctuary) has received 190 reports of marine mammals in distress and has mounted 59 (on-the-water or in-the-air) responses. In a majority of these reports (104) the observer indicated that the animal was entangled. However, further investigation and assessment indicated that only half (49%) actually involved an entanglement. Many of these misreports (60% to date) involved observers misinterpreting white-flipped humpbacks as having gear along their sides. One in five humpbacks in the North Pacific have white flippers, which when viewed from a nearby vessel or shore, appear blue-green in the water and are typically misinterpreted as netting. Most of these misreports (87.5%) are shore-based. Observers have also misinterpreted the white flippers as surfboards and kayaks entangled on the animal's flank. Other examples of misreports include: animals in the proximity of gear, but not entangled; reflections off the wet backs of animals interpreted as buoys; calves being interpreted as gear, surface behaviors, like breaching, being interpreted as animals trying to throw an entanglement, and snorkelers or divers in the water ("there's a whale entangled and it is trailing a red and white flag").

The 51 reports confirmed as actually involving entanglements, represented as many as 39 humpbacks for which the Network was able to mount 28 on-the-water responses. Some reports come in too late in the day, represented animals too far offshore, or were in conditions that were not conducive (e.g. rough sea state) for a rescue effort. In those cases when an on-water response could be mounted, a majority of the responses (53.3%) have been successful. Over the past several years, 9 animals have been freed of all or significant amount of entangling gear, 4 have been tagged on separate occasions, contributing to their disentanglement, and 5 animals have been assessed as not having a life threatening entanglement. Conversely, 3 efforts have been unsuccessful and 11 animals were never relocated. The biggest contributor to an unsuccessful response is not relocating the animal. If there is no standby vessel, then an entangled whale ends up being a rather large needle in an even larger haystack.

Since 2003, the Network has removed approximately 2400 feet of line (does not include netting and twine) from the 9 different humpback whales. Animals have been confirmed entangled in local fishing gear (traps and net), mooring gear, marine debris, and actively fished gear set as far away as Alaska. To date, 6 humpbacks reported entangled in Hawaii have been confirmed to have gear from Alaska. Five of these represent commercial pot gear. The greatest known straight-line distance a whale may have carried gear is 2350 nm (between the Pribilof Islands in the Bering Sea and the island of Maui where the whale was first reported).



2008 entanglement reports (green = confirmed, red = not confirmed)

The 2007/2008- humpback whale season (November 1, 2006 – May 15, 2007) was characterized by fewer entanglement reports (about half compared to last year). Much of the difference was due to the lack of any repeat sightings (reports) and the fact that there were fewer misreports compared to the past several seasons. The Network received 44 reports of distressed animals, 15 of these involving entanglements - two (2) of the reports involved entangled monk seals, while the remaining 13 involved humpbacks. Of the 13 entangled humpback reports, two could not be confirmed and 6 of the reports (50%) were confirmed as not actually involving an entanglement – they were misreported.

The remaining 5 reports were confirmed as separate cases of humpbacks entangled in gear. The first confirmed report of an entangled humpback was received on December 9, 2007 from the tour boat, Wiki Wahine, off Lahaina, Maui. The subadult animal appeared healthy and was carrying an undetermined amount of monofilament line wrapped at least two times around tailstock and trailing at least 25 feet behind. The animal appeared recently entangled, with the line barely cutting in. Therefore, no response was mounted at the time.



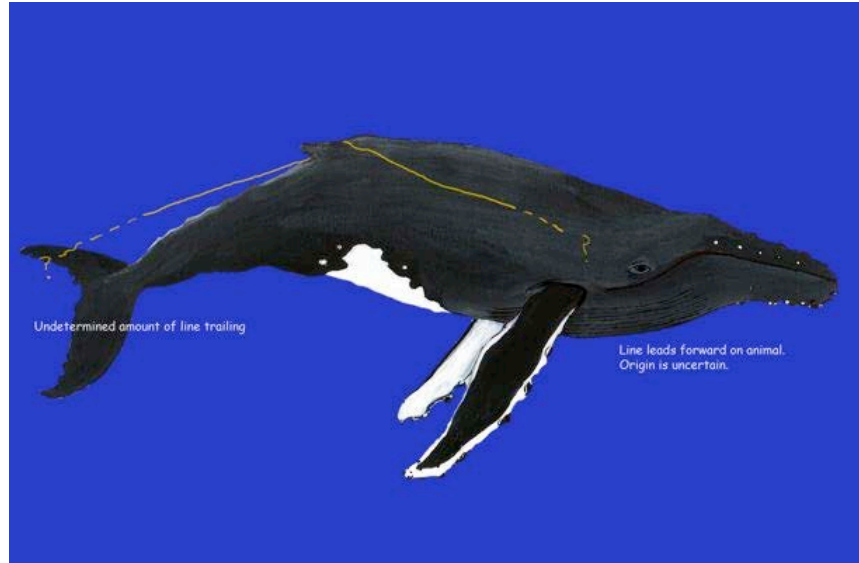
December 9, 2007, subadult humpback entangled in monofilament line.

The second confirmed entanglement report involved a humpback calf with monofilament line hanging from its baleen about a quarter of the way back on the right side. The animal was documented by Ken Held aboard the tour vessel, Lanikila, on January 2 off Lahaina, Maui, but was not detected until the photographer took a closer look at his images several days later. Between the assessment of the entanglement being minor and the understandable delay in reporting, no response was mounted on this animal.



January 2, 2008, calf entangled in monofilament line through mouth

The third confirmed entanglement of the season involved a subadult humpback also reported off Lahaina, Maui. The entanglement was observed on January 26 by the crew of the tour boat, Kapaluakai, as yellow polypropylene line draped over the animal's back and trailing behind. The report came in just before sunset and thus no response was mounted.



January 26, 2008, subadult humpback reported with line over back.

The fourth confirmed entanglement of the season was reported by the crew of the Prince Kuhio, a whale watch boat out of Maalaea Harbor, Maui, on February 10, off Maalaea and involved an adult female humpback that was the nuclear animal in a competitive group. The animal was entangled in heavy gauge line through the mouth and along both sides of body to a bundle of gear just above the animal's flukes. There was one wrap of line around the peduncle that held the bundle of gear close to the animal with a deflated red polyball attached.



February 10, 2008, adult humpback entangled in heavy gauge line.

Though the report came in late in the day, a response was mounted. The team made up of Sanctuary staff from the Kihei office, with the little time remaining, attempted to attach a telemetry buoy to the trailing gear. The hope was that they would be able to track the distressed animal and attempt a disentanglement effort the next possible opportunity. However, the dynamics of the competitive group, the proximity of the gear to the animal, and the limited amount of time were all factors in the team's inability to get the telemetry buoy attached to the gear. The animal was successfully biopsy sampled.

The fifth and last confirmed entanglement of the season was reported on April 25 by the sport-fishing vessels, Kuuhuapula and Seafire, and involved a humpback calf 6.7 nm SW of Maili Pt., Oahu. The animal was entangled in over 400 feet of line either through the mouth or around the flippers. A trio of buoys were attached to one of the trailing ends of line. The vessel, Seafire was able to standby and monitor the animal for over 4 hours while the US. Coast Guard, Sector Honolulu, deployed the cutter, Ahi, to transport a Network response team made up of David Schofield, NOAA Fisheries' Marine Mammal Network Response Coordinator for the region, and Dave Nichols, Hawaii's Department of Land and Natural Resources' Marine Conservation Specialist, to attach a telemetry package to the trailing gear. The next day a full disentanglement effort was mounted, including Schofield and Nichols, as well as, David Mattila, Ed Lyman, and Paul Wong from the Hawaiian Islands Humpback Whale National Marine Sanctuary, and Joe Chojnacki from the Papahānaumokuākea Marine National Monument, all aboard the Sanctuary's response vessel, Hihimanu. The team tracked the transmitter 40 nm west of Oahu, and on arriving on site discovered that the calf had thrown all the gear during the night - what appeared to be all the line that had been attached to the animal was left trailing behind a now drifting tracking buoy.



April 25, 2008, humpback calf trailing over 400 feet of line.



US Coast Guard prepares to deploy RHI from cutter, Ahi, with David Schofield and David Nichols aboard in order to attach telemetry buoy to gear trailing entangled humpback calf.

Including the responses outlined above, the Network carried out 10 (6 on-the-water and 4 shore-based) response efforts for entangled animals. The United States Coast Guard was involved in two of the on-water responses. On February 19 the Coast Guard, station Maalaea, received a report of a humpback breaching on and subsequently getting entangled in the rigging of a sailboat. After a thorough search neither the sailboat or the animal was found. The report was later determined to be false. The US Coast Guard's, Sector Honolulu, deployment of the cutter, Ahi, and diversion of a H64 helicopter, were integral to the success of the April 25 response to the entangled calf west of Oahu. During the very same event, Network responders, Nichols and Schofield, were able to get some hands-on experience working with an entangled whale. Eleven Network members have now obtained some hands-on experience working on entangled whales here in Hawaii.



April 11, 2008 report of ship-struck calf.

In contrast to confirmed entanglement reports, the number of confirmed ship strike reports received by the Network was greater compared to past seasons. This season there were 12 humpbacks, involving 11 cases, reported as ship-strikes. Nine animals (in separate cases) were reported hit by vessels, and 3 animals (in 2 cases) were observed with wounds indicating a ship strike had recently occurred. Three of the animals were observed with minor injuries or the description of the event was such to indicate a minor strike. The island of Maui had the most reports at 7 animals (6 cases – 1 case was a mother/calf, both with wounds), followed by the Big Island with 3, and Oahu at 2. Kauai had no reports of ship strikes this past whale season. The breakdown by age class was 6 adults, 1 juvenile and 5 calves. In other words, half of the reports (50%) represented young animals. Past reports around the Hawaiian Islands indicate 83% of confirmed ship-strike reports involve younger animals (calves and juveniles). Six responses were mounted to document and assess reports of ship struck whales. Half of these were successful.



2007-2008 humpback season confirmed ship strike reports

Once again, the Network received considerable assistance from the on-water boating community. For example, all five confirmed entanglement reports originated from the tour and sport fishing communities. Some of these operators stood by for hours until help could arrive. Many whale research organizations, including Center for Whale Studies, the Hawaii Marine Mammal Consortium, the Hawaii Whale Research Foundation, the

Dolphin Institute, and Whale Trust, also played an important role in helping relocate entangled animals, and by documenting and assessing ship-struck animals. In many ways they and the tour boat operations made the difference in what really is a community-based response network.



April 16, 2008 report of humpback calf struck by vessel.

The Hawaiian Islands Disentanglement Network understands that the answer to large whale entanglements does not lie with trying to find and cut every whale free, but from gathering and sharing valuable information that can help mitigate the issue of marine debris and entanglement threat in the future. To this end, the Network has designed and implemented a web site, much like the Atlantic Large Whale Disentanglement Network web site, to act as an electronic newsletter for the Hawaiian Islands Disentanglement Network members and their partners. Over 230 Network members are signed up on to the website. In addition, sanctuary staff gave or contributed to three talks and two posters at the 17th Marine Mammal Biennial Convention in South Africa this past year. The Network continued to address the entanglement issue at meetings, seminars, and workshops. For instance, David Mattila attended and spoke at the Serious Injury Workshop last September and will attend Western Pacific Grey Whale Workshop to be held in Japan in May. David will also attend the International Whaling Commission meetings in Chile this year. Both David Mattila and Ed Lyman continue to perform numerous trainings throughout the year. Disentanglement trainings have recently been carried out or are scheduled for Alaska, California, Washington, and Mexico. Ed Lyman will be on detail with NOAA Fisheries' Office of Protected Resources – Alaska Region this summer to not only assist with disentanglements efforts there, but to continue investigating gear that has been removed from animals. David Mattila will be in New England again this summer where he will work with the Provincetown Center for Coastal Studies and assist in any entanglements reported in that region.