

Summary of the 2006 Disentanglement Season

Edward Lyman, Network Coordinator

The end of the 2006 whale season also marks the end of the 5th season for the Hawaiian Disentanglement Network. The community-based Network is coordinated by David Mattila and Ed Lyman of the Hawaiian Islands Humpback Whale National Marine Sanctuary, incorporated into the greater Pacific Islands Marine Mammal Response Network by David Schofield of NOAA's Pacific Islands Regional Office, and receives authorization through NOAA Fisheries' Marine Mammal Health and Stranding Response Program (permit # 932-1489-08). The network was formed in an attempt to free endangered humpbacks and other marine animals from life threatening entanglements and, at the same time, gather valuable information that will help mitigate the issue of marine debris and entanglement in the future. The Network has continued to grow since it's inception in 2002 and now comprises over 60 participants in various roles throughout the main Hawaiian Islands.

Since its start in 2002, the fledgling Network has received 74 reports of animals in distress, 51 of them representing reports of entangled animals. The Network has mounted over 36 responses to these reports and confirmed 38 of them. The number of confirmed entanglement reports represent as many as 23 humpback whales. Of these 23 humpbacks:

- 2 were assessed and determined to not be candidates for disentanglement
- 9 were responded to (sometimes on multiple occasions) and not found,
- 6 of the reports were not possible to respond to (due to time of day and/or unworkable conditions),
- 1 was unsuccessful,
- 4 were freed from life threatening entanglements, 2 this past season.

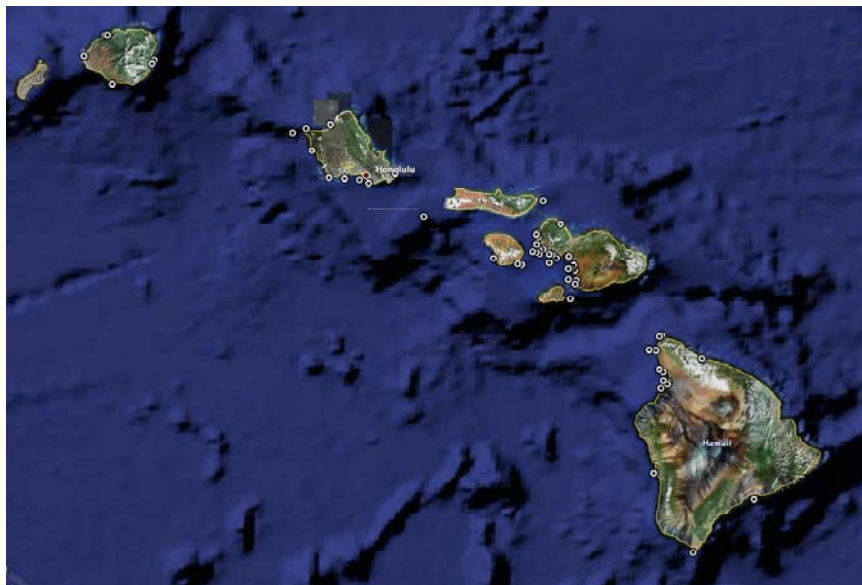


Figure 1: Locations of all distressed animals reported to Network between 2002 and 2006.

The number of reports and associated responses represents an extraordinary effort by the Network, and many organizations and individuals should be credited.

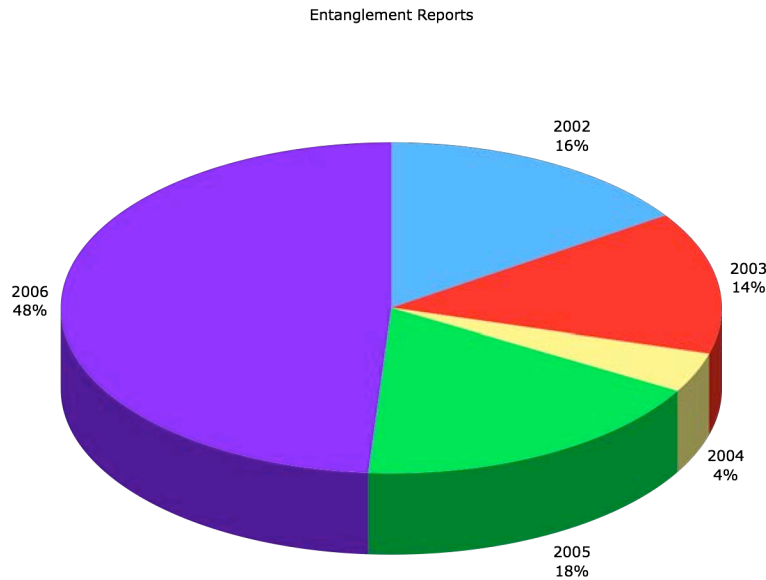


Figure 2: Entanglements reported to the Network by year.

The 2006 whale season was the busiest yet for the Network with 38 reports of distressed animals, 25 of them involving entanglement. This represents nearly as many reports as all the other years combined. However, the greater number of reports is probably a result of the Network's increased efforts over time and not an influx of entangled animals to Hawaii's waters. The increase effort has resulted in greater public awareness and overall participation. For instance, the Networked carried out 19 responses to these reports, the majority (15) of them involving responses to entangled animals. This is more than twice as many responses from any other year.

During the 2006 season (November 1 – April 30) there were as many as 7 confirmed entangled humpbacks reported to the Network around the Hawaiian Islands. It is possible that two of these reports represent re-sightings and that only 5 humpbacks were reported entangled around the main Hawaiian Islands. Responses (in some cases multiple responses) to the seven confirmed reports resulted in one animal being assessed as not having a life-threatening entanglement and thus not a candidate for disentanglement, 4 of the animals not being relocated during rescue responses, and the remaining 2 being successfully disentangled.

Unlike previous years in which reports were either spread out throughout the main Hawaiian Islands or somewhat clustered in the lee of Maui, many of this year's initial (confirmed) reports of entangled animals were centered off Hawaii's (Big Island) Kohala Coast. Of the 7 reports, one was off Kauai', one off Oahu' and the remaining 5 off the

Big island. Even with the unusual volume of reports off the Big Island, there was a high and extremely successful response rate. There are several reasons for this high response and success. First, well-trained and experienced first responders on the Big Island rose to the challenge, carrying out many of the responses. In this regard, special thanks are due to Chris Gabriele, Suzanne Yin, and Susan Rickards of the Hawaii Marine Mammal Consortium (HMMC), Justin Viezbicke, Hawaii Marine Conservation Coordinator, and David Nichols, Marine Conservation Specialist for the Hawaiian Department of Land and Natural Resources. HMMC responded on 6 occasions to reports of entangled whales and actually made initial reports on 3 of the animals. Justin Viezbicke was able with assistance from HMMC to attach telemetry buoys to two of the entangled animals. In addition, David Mattila and Ed Lyman, the Network's primary disentangers, flew to the Big Island on 3 different occasions to work with Viezbicke and HMMC to re-locate and attempt disentanglement of the animals. Unfortunately, on all 3 occasions the animals were not re-located.

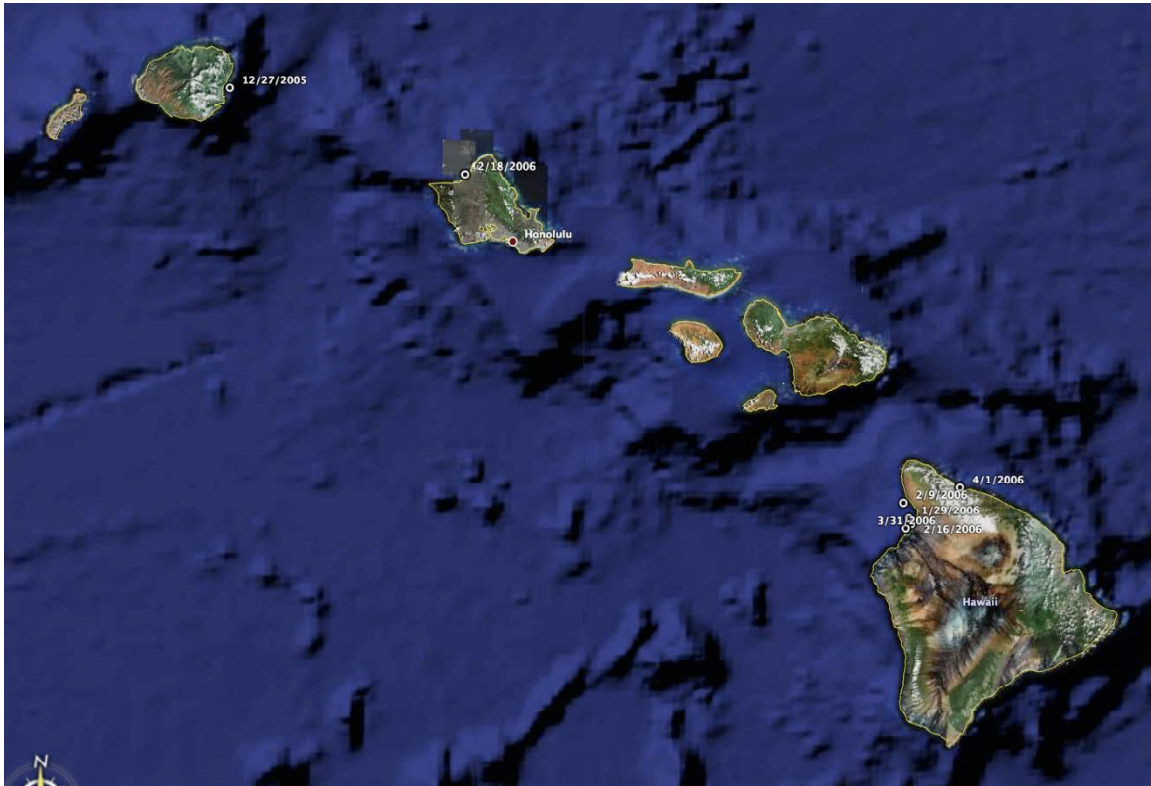


Figure 3: Initial reported locations of humpbacks confirmed entangled in 2006

Luckily, 2 of the entangled whales were eventually re-located in the leeward waters of Maui, where the primary disentanglement team mounted responses, which resulted in the disentanglements of both animals. In both efforts gear was retrieved and is presently being analyzed to determine their identity and source. Gear from the first disentanglement on February 12, 2006 has been identified as crab pot gear set by a fisherman from Kodiak, Alaska. We are still awaiting word on the gear from the second disentanglement.

Both disentanglements were somewhat unique in that neither animal was entirely keged to a stop, and thus they had to be cut free on the fly (while the rescue inflatable was being towed behind). The second disentanglement was even more interesting in that it involved a female humpback that was the nuclear animal in a competitive group.

Also unique this season was the fact that telemetry was used for the first time in Hawaii to monitor and assist in re-locating entangled whales. Telemetry buoys with VHF transmitters on board were attached to two of the entangled humpbacks. In the first deployment, the transmitter indeed assisted in tracking the animal. In the second deployment the transmitter was not heard again within hours of attachment. It is possible considering that the tagged animal may have just become entangled (and thus more prone to longer range movements) or considering the lateness of the season (reported on 3/31/06) and higher probability for the animal to head for higher latitudes, that the animal may have easily gotten out of range of VHF receivers. It is also possible that the buoy became fouled, or was lost independently or along with some of the entangling gear. It was reported that the entanglement involved considerable weight, which could have contributed to the loss of the telemetry buoy.

Once again, the US Coast Guard participated in several responses. In the past the Coast Guard has supported disentanglement efforts both on the water and in the air. This season most of their assistance came in the way of aerial support. On several occasions the Coast Guard provided helicopters to help locate entangled animals. In fact, aerial support was another unique aspect of the season. In addition to the USCG, NOAA-chartered helicopters looking for marine debris, and Blue Hawaiian Helicopters, a commercial tour operation, provided aerial support.

This season also saw another giant leap in the Network's preparedness. First, over 40 Network members were trained or received refreshers during 5 training events on 4 islands. Second, the Network received funds from NOAA's Pacific Islands Regional Office for additional disentanglement equipment, documentation gear, and telemetry. These funds will allow the Network to provide core components to caches of equipment on Kauai, Oahu, Maui, and the Big Island.

The Network can be proud of its accomplishments this season. While, we are making every effort to expand and improve our abilities to respond and successfully disentangle whales from life-threatening entanglements, we realize that this is not the solution to the problem. By documenting entanglements we hope to provide valuable information that will help mitigate the issue through prevention.

Challenges for 2007 season

- Acquire additional funds through grants and other outside sources to continue support for the Network. Funds are needed for additional telemetry transmitters, documentation gear (especially pole cams), and event costs
- Pursue preventive measures to mitigate entanglement threat, since disentanglement is not the long-term answer.

- Initiate a website that will serve several important functions. First as an “Electronic Newsletter” to keep the diverse Network members informed, up-to-date and involved. Second, to act as an invaluable resource during actual events, by providing all Network members with real-time information about “ongoing cases.” This will give Network members the most current information about what to look for, what information is needed for assessment and planning, and what the current recommended actions are. Finally, it can provide a forum for an exchange of ideas about new equipment and techniques, as well as other approaches to the solving the problem.