

Hawaiian Islands Humpback Whale National Marine Sanctuary 2008-2009 Season Summary Large Whale Entanglement and Whale-vessel Contact Reports

**Compiled by:
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The Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS) receives, and when appropriate, responds to, reports of humpback whales, and other marine animals in distress. The Sanctuary works closely with NOAA Fisheries' Pacific Islands Regional Office (PIRO) and their Marine Mammal Response Network, Hawaii's Department of Land and Natural Resources, NOAA's Office of Protected Resources and their Marine Mammal Health and Stranding Program, the United States Coast Guard, and NOAA's Office of Law Enforcement. The Sanctuary works under NOAA Fisheries' Marine Mammal Response Program and Hawaii's Department of Land and Natural Resources, but leads and coordinates response efforts involving entangled humpback whales around the main Hawaiian Islands through a community-based network. The Hawaiian Islands Disentanglement Network (HIDN) is a collaborative effort between, the state and federal agencies already mentioned, local whale researchers, the tour industry, fishermen, and many private citizens. The primary objectives of the Network are to provide safe and authorized response to entangled large whales (hopefully freeing some from life threatening entanglements in the process) and to gather valuable information from these response efforts that may mitigate entanglement threat and other threats, like ship strikes, in the future. NOAA Fisheries' Marine Mammal Health and Stranding Response Program (MMHSRP; permit # 932-1489-08) authorize all marine mammal response efforts in the US.



The Hawaiian Islands Disentanglement Network, now in its 8th season, comprises over 120 members who have received various levels of training in order to support large whale response efforts statewide. More than 163 hours of training have been provided since 2002. To support the Network's response efforts, caches of specially designed equipment have been established on the islands of Hawaii, Maui, Oahu, and Kauai.

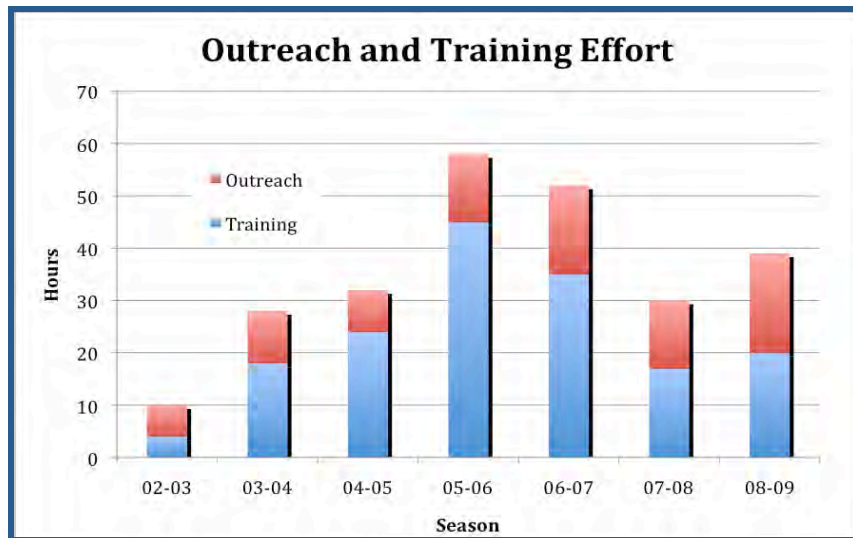


Figure 1: Entanglement threat outreach and training effort

To date, the Sanctuary has received over 255 reports of marine mammals in distress and the Network has mounted more than 100 (on-the-water or in-the-air) responses¹. In a majority of these reports (130) the observer indicated that the animal was entangled. Sixty-four (64) of the entanglement reports were confirmed as truly involving entangled humpback whales and represent as many as 41 different animals. Since 2003, the Network has freed 11 humpback whales of gear, and responded and assessed 3 animals as not having life threatening entanglements. Unfortunately, the Network has responded on numerous occasions only to not locate the entangled animal. The biggest contributor to an unsuccessful response is not being able to re-locate the animal. If there is no standby vessel, then an entangled whale ends up being a rather large needle in an even larger haystack.

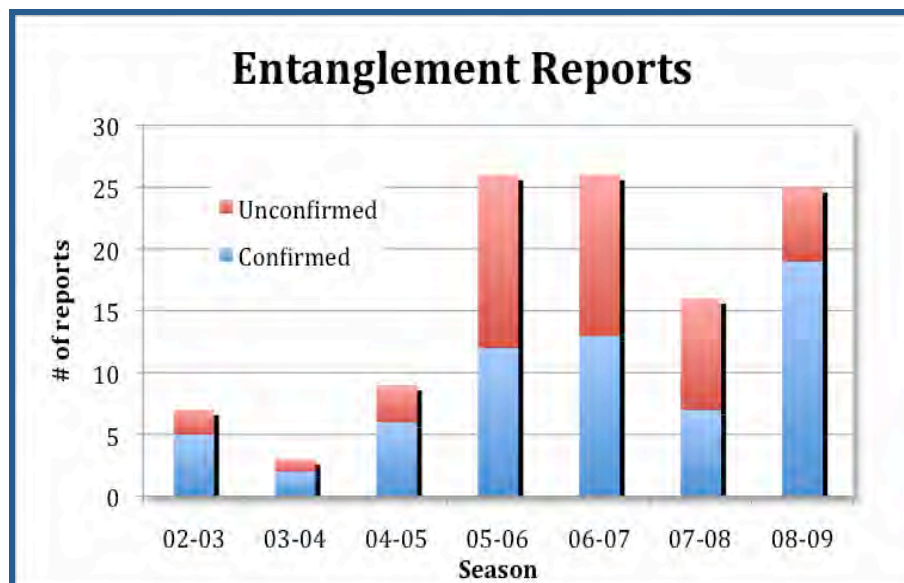


Figure 2: Humpback whale entanglement reports by season

The Network does not or cannot respond to every report of an entangled whale. Past responses and thorough vetting of initial entanglement reports has shown that approximately 50% of reports here in Hawaii were misreported or could not be confirmed. Examples of misreports include: white-flipped humpback whales interpreted as carrying gear; animals in the proximity of gear, but not entangled; reflections off the wet backs of animals interpreted as buoys; calves being interpreted as gear; and surface behaviors, like breaching, being interpreted as animals trying to throw an entanglement. In addition, many reports come in too late in the day, represent animals too far offshore, or in conditions that are not conducive (e.g. rough sea state) for mounting rescue efforts. In those cases when an on-water response should and could be mounted, the Network has a 44% success rate freeing entangled humpbacks of all or significant amounts of gear.

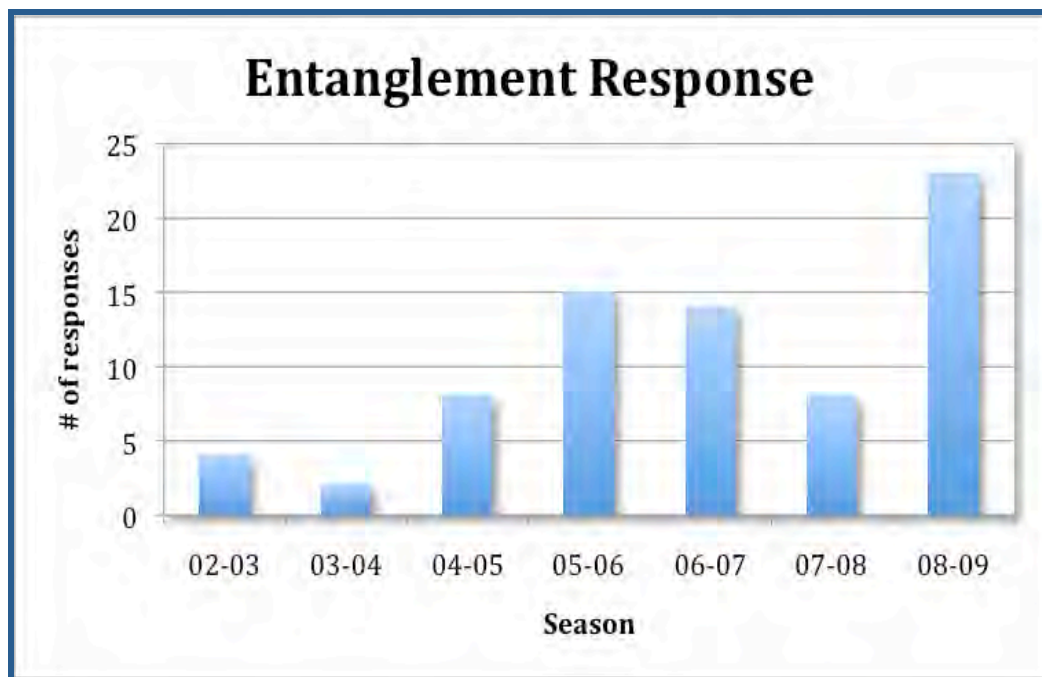


Figure 3: On-water/ air entanglement responses by season

Since 2003, the Network has removed nearly 3,000 feet of entangling gear² from humpback whales in Hawaii. 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, 8 humpbacks reported entangled in Hawaii have been confirmed to have gear from Alaska. Six of these represent commercial pot gear. The greatest known straight-line distance (accounting for obstacles) a whale may have carried gear is over 2,400 nm (between Wrangell, Alaska and the island of Maui).

Summary of 2008-2009 season disentanglement reports and efforts:

- As many as 8 humpback whales reported and confirmed entangled in gear.
- Six of the 8 entangled animals were initially sighted within the Sanctuary.
- Most of the reports and initial sightings were in the lee of Maui (3 off Maui, 1 off Kauai, 1 off Oahu, 1 off Lanai, and 2 off the island of Hawaii).
- Six reports involved adults and 2 were subadults.
- The Sanctuary mounted 12 on-water responses to five of these reports.
- The United States Coast Guard mounted at least 5 responses towards entangled whales. On two occasions Coast Guard transported crew and gear, and provided standby support towards rescue efforts. Aerial support was provided on at least two events.
- Research organizations, Hawaii Marine Mammal Consortium, Center for Whale Studies, Whale Trust, Hawaii Whale Research Foundation, Hawaii Institute for Marine Biology, and Jupiter Foundation, assisted on numerous occasions.
- Tour industry platforms from Pacific Whale Foundation, Blue Hawaiian Helicopters, Hawaiian Rafting Adventures, Maui-Molokai Sea Cruises, Maui Dive Shop, Captain Andy's, and Sunshine Helicopters assisted a record number of times and were instrumental in providing multiple sightings that allowed for multiple response efforts.
- Support was also provided by Hawaii's Division of Aquatic Resources (Kona office), Kahoolawe Island Reserve Commission (KIRC), and Molokai Air.



Figure 4: Initial reports of entangled humpback whales

During the 2008/2009 humpback whale season (November 1, 2008 – May 10, 2009), the Sanctuary received 64 reports of distressed animals; 25 of these involved entanglements. Nineteen (19) reports were confirmed as entangled humpbacks, representing as many as 8 different animals. While the total number of reports of entangled whales and number of different animals was on par with many past season, the number of confirmed entanglement

reports was much higher. Much of the difference was due to fewer misreports and a greater number of repeat sightings (re-sights) compared to past seasons. In the past, approximately 50% of the reports were unconfirmed either due to lack of information or misreporting. However, only 6 reports were unconfirmed this season, representing only 25% of the reports. The increase in confirmed reports and re-sightings may be a result of an increase in outreach (see figure 1) and community involvement. Nearly 20 hours of dedicated outreach on entanglement threat and response was performed, in addition to continued use of a disentanglement website and email alerts.

The Network mounted 23 on-water and in-air responses to entangled whales this past season. This represented twice as many responses compared to the average number of responses (avg = 11.25, n=45) over the past several seasons. The greater number of responses was also likely due to the increase in reporting and higher quality of reports. One animal first sighted off the Big Island on March 20 was re-sighted on 8 different occasions (see figure 5). Thus, the greater number of response efforts in part represent the greater number of multiple efforts put into some of these animals. In fact, all three humpback whales that were actually worked on involved multiple efforts. Two of the 3 animals were freed of significant amounts of gear, 3 animals were not re-located, 1 animal could not be responded to (reported several days later), 1 was partially freed by a fisherman, and 1 animal was not freed of gear even though rescue efforts were attempted on 3 different occasions.

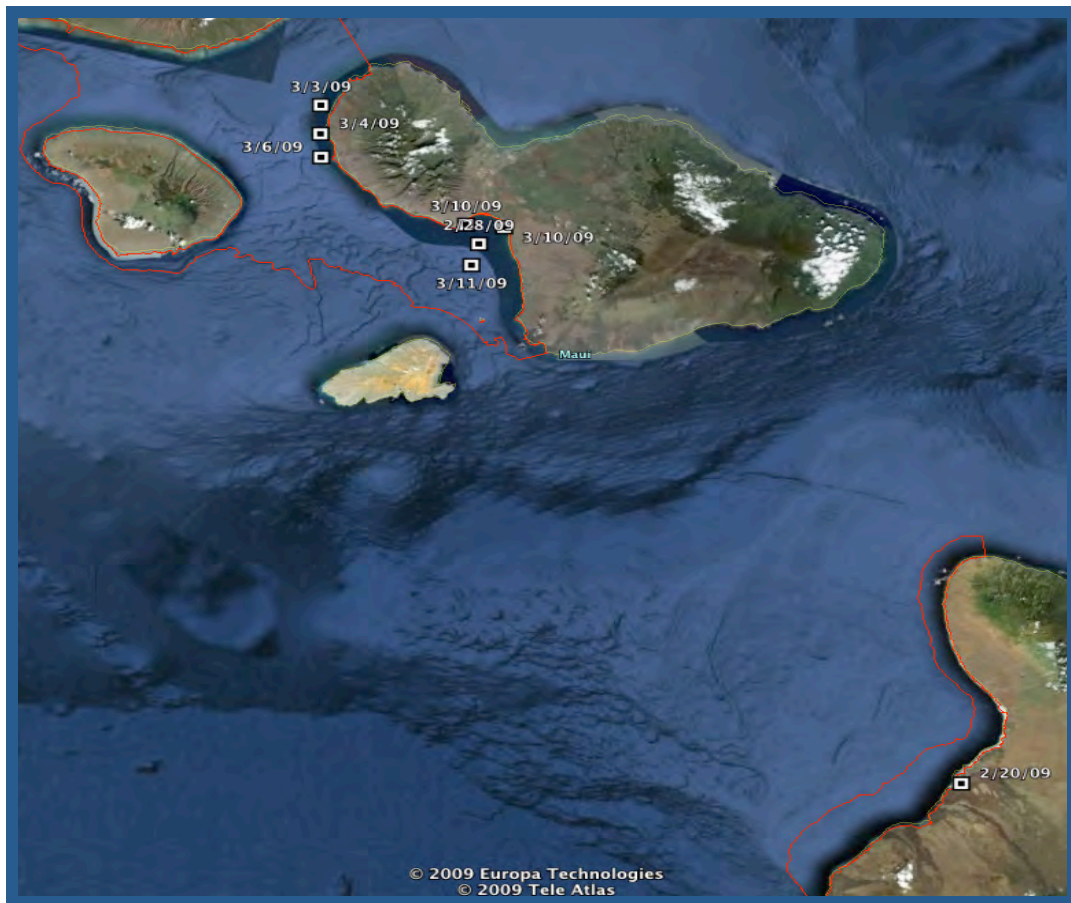


Figure 5: Re-sight location of an entangled humpback

Once again, the Network received considerable assistance from the on-water boating community. For instance, many of the initial reports and re-sights were called in by tour boats. Many whale research organizations, including Center for Whale Studies, the Hawaii Marine Mammal Consortium, the Hawaii Whale Research Foundation, Hawaii Institute for Marine Biology, and Whale Trust, also played an important role in relocating, assessing and standing by entangled animals. The US Coast Guard once again provided both surface and aerial assets that were instrumental in many marine mammal response and rescue efforts. They also assisted the Sanctuary directly with vessel operations. Blue Hawaiian Helicopters and Sunshine Helicopters provided valuable aerial support. These groups and organizations made the difference between not responding to these distressed marine mammals and providing a professional, safe, and many times, successful response to reports to entangled and ship-struck animals. Mahalo.

Cases:

12/13/08: Entangled adult humpback whale off Coral Gardens, Maui



An adult humpback whale was reported entangled off Coral Gardens, Maui, by kayaker after returning from a trip. The animal was entangled in heavy gauge polypropylene line (floatline) from forward and right side of body (mouth or flipper?). Line drapes across back to left side where it forms a bundle of gear alongside tailstock. Smaller gauge (1/2") sinking line also originates forward on right side and runs along right side of animal as well as to bundle on left side. These lines, along with possibly a third type of line, trail aft approximately 40 feet. While the report was several hours old, it indicated that the animal had been observed in the area for over an hour and might still be on site. Thus, the Hawaiian Islands Humpback Whale National Marine Sanctuary and NOAA Fisheries mounted the first of several response efforts for this animal. The first effort on **December 13, 2008**, resulted in the animal being assessed, documented and as a result of the assessment, tagged by attaching a telemetry buoy to the trailing gear.

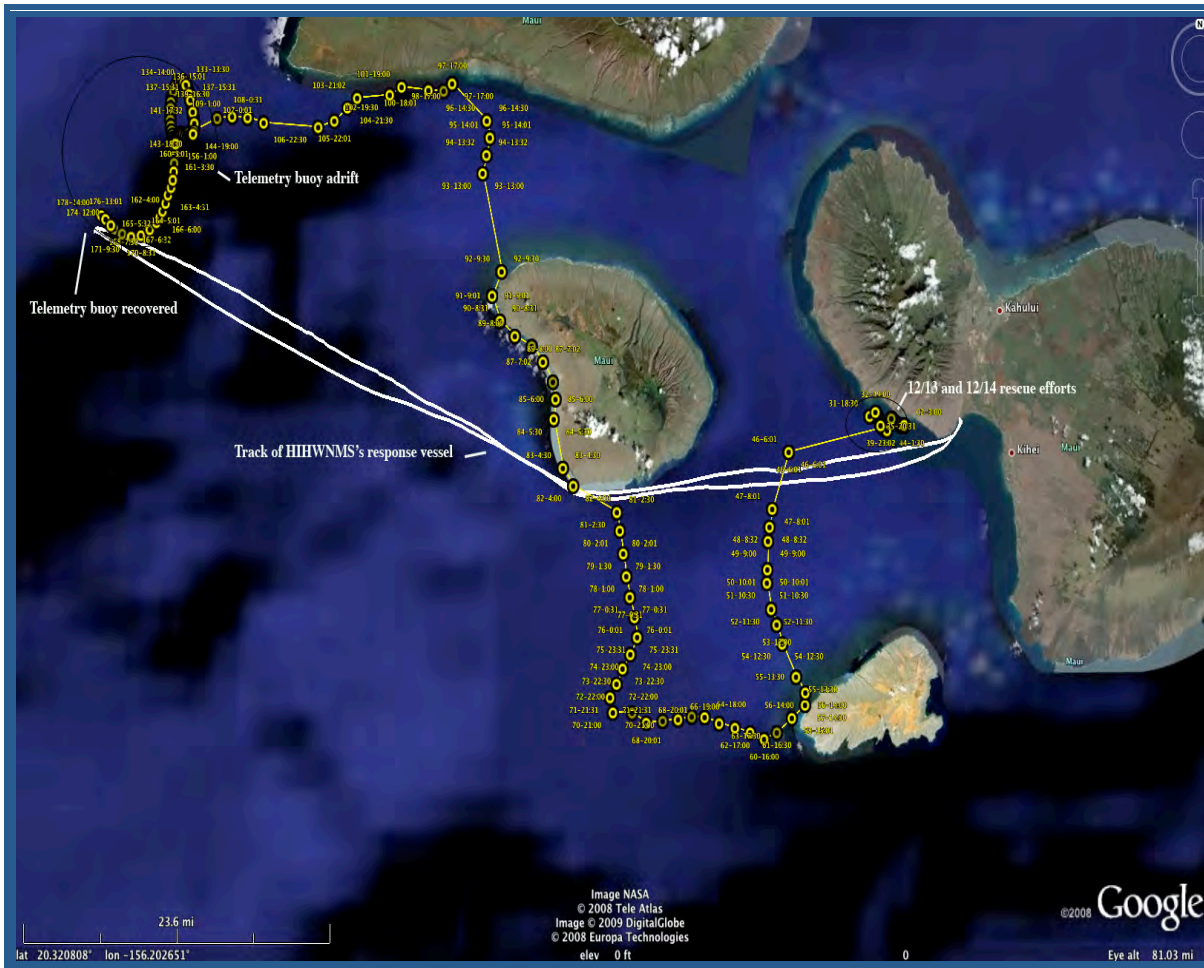
December 14, 2008:

The same team re-located the animal the next day and began “kegging” the animal down. During the operation, 115 feet of line, or approximately 1/3 of the gear on the animal, was removed. With fading light at the end of the day, the telemetry buoy was re-attached.

However, over the next several days the animal remained on the move and offshore, providing no opportunities for another response. On December 16 the United States Coast Guard provided aerial assistance to confirm that the transmitter package was still attached to the whale. Kahoolawe Island Reserve Commission (KIRC) also provided valuable assistance and protocols were established to work within the reserve’s waters

December 18, 2008:

After travelling at least (straight-line distances between fixes) 93 nm over 71 hours, the telemetry package became detached. The Sanctuary response team recovered the telemetry package, but unfortunately no entangling gear was attached.



12/24/08: Subadult humpback whale entangled off Kauai



An “odd-looking” subadult humpback whale was observed and photographed on December 24, 2008 by passengers aboard two different tour vessels. Investigation of images days later indicated that the animal was entangled. The animal was wrapped in heavy gauge line around fluke blades, though entanglement may also involve other parts of body. The entangling lines had caused significant trauma to the flukes. Animal was emaciated and in poor condition. A heavy load of cyamids amphipods covered at least the tailstock region of the body. No response was mounted due to nature (belatedness) of report. Images were obtained from passengers of tour vessels for assessment.

1/12/09: Entangled humpback whale reported between Molokini and Maui

A humpback whale trailing more than 100 feet of yellow poly line was observed by a local dive vessel. The Hawaiian Islands Humpback Whale National Marine Sanctuary mounted a response effort, but was unable to re-locate the animal. Maui Dive Shop, Kahoolawe Island Reserve Commission and Blue Hawaiian Helicopters provided assistance.

1/13/09: Subadult humpback whale entangled in crab pot gear off Huula, Oahu

A subadult humpback whale (25 - 30 feet) was reported entangled in local crab gear (confirmed) by a local rod/reel fisherman late in the day (dusk). Line was seen wrapped around animal's tailstock and running straight down as if weighted. Unknown if other parts of the body were involved. The good-intentioned fisherman (not reported gear owner) perceived the animal to be in immediate danger and removed a portion of buoyline along with all floats. Unfortunately, a significant, and potentially lethal, amount of line and pot(s) were believed to remain on the animal. No lines or buoys remained at the surface, making this animal/entanglement extremely difficult to re-sight and free. No response was mounted due to time of day.

1/19/09: Adult humpback whale entangled off Ship Wreck Beach, Lanai

An adult humpback whale with approximately 45 feet of light green-colored net trailing behind was seen by Sunshine Helicopters. Gear appeared to be attached to animal's tailstock. No floats were visible. The Hawaiian Islands Humpback Whale National Marine Sanctuary mounted a response. Considering time of day (15:15) the plan was to mount a rapid response, hopefully re-locate, assess, and tag the animal for later disentanglement efforts. Unfortunately, the animal was not re-located. Sunshine Helicopters and Molokai Air provided aerial support.

2/1/09: Subadult humpback whale entangled off Lahaina, Maui



An adult humpback whale was seen entangled by local tour operator from Hawaiian Rafting Adventures' (HRA). Animal appeared to have light-colored, small gauge line around right flipper and tailstock before trailing several hundred feet behind. An oval-shaped, orange 2-foot diameter buoy was along the right side of the animal. The Hawaiian Islands Humpback Whale National Marine Sanctuary, NOAA Fisheries, and US Coast Guard mounted a response effort. The HRA vessel attempted to stand by the animal until the response team could arrive; however, unfortunately, the animal was lost in heavier seas while the team was enroute and not re-located. The team aboard the Sanctuary response vessel searched for several hours and assessed over 20 different humpback whales, but was unable to re-locate the entangled animal. In addition, the United States Coast Guard assisted by providing a Coast Guard Auxiliary aerial asset. The aerial asset also searched the area, and while many whales were observed (>30), none were observed entangled in gear.

The animal was re-sighted a week later on **February 7** off McGregor Pt, Maui by Sanctuary volunteers. Hawaiian Islands Humpback Whale National Marine Sanctuary, NOAA Fisheries, and US Coast Guard mounted a response effort. The HIHWNMS launched a rapid response team aboard response vessel, Hihimanu, and was able to re-locate the animal. The

USCG provided support by transporting the rest of the response team (HIHWNMS and NOAA Fisheries) and gear to the primary response vessel, and stood by while rescue operations proceeded. After several hours of effort, over 350 feet of line, representing nearly the entire entanglement, was removed from the animal.

2/20/09: Adult humpback whale reported entangled in Mauna Lani Bay, Hawaii



An adult humpback whale was reported entangled off of Mauna Lani Bay, Big Island. The animal was entangled in heavy gauge (~1" diameter) yellow poly line that originated from forward on body. The attachment point/ origin, while uncertain, likely involved the pectoral flipper(s) and/or mouth on left side. Two lines from left side crossed loosely over back forward of dorsal fin to a bundle of gear that was along animal's right side. Two lines ran forward from bundle were observed under, but not wrapping, right flipper origin. Lines trailed from bundle along animal's right side and terminated as frayed end approximately 50 feet behind the fluke. The animal was slightly emaciated and had some line chafe on the leading edge of right fluke blade, but otherwise showed no obvious signs of being compromised (health/parasites).

Hawaii Marine Mammal Consortium (HMMC) mounted a response effort and re-located the animal. Animal was assessed and documented, but the team was unable to attach the telemetry buoy due to deteriorating sea conditions. The Jupiter Foundation stood by to transport additional gear and personnel in case they were needed.

The animal was subsequently re-sighted 8 times over a 3-week period. Responses were mounted on 4 different occasions:

February 28, 2009:

The animal was re-sighted by Pacific Whale Foundation vessel, Ocean Intrigue, 1.5 nm

southeast of Maalaea Harbor. The Hawaiian Islands Humpback Whale National Marine Sanctuary mounted a response effort, but was unable to re-locate animal in deteriorating sea conditions.

March 3, 2009:

The animal was re-sighted 1 nm offshore of Mahana, Maui. The Center for Whale Studies (CWS) responded, but due to heavy seas (25 kts and greater) was unable to locate animal. The response effort initiated by HIHWNMS was aborted.

March 6, 2009:

The animal was re-located by Center for Whale Studies (CWS) off Mala Wharf, Maui. Two other whale research organizations, Whale Trust and Hawaii Whale Research Foundation (HWRF), assisted CWS in keeping track of animal while response team from HIHWNMS and PIRO were enroute. The US Coast Guard was on standby to assist. With CWS, Whale Trust and HWRF standing by, the response team successfully grappled the gear entangling the animal while the animal was stationary and singing. However, on adding the first kegger buoy the attachment was lost. Unfortunately, the animal became evasive and increasingly difficult to track, no further attachments were possible. Rescue operations were finally terminated late in the day.

March 11, 2009:

The animal was re-sighted several miles off Pali Pt, Maui by Pacific Whale Foundation vessel, Ocean Spirit, which stood by the animal for 45 minutes until the Sanctuary's response vessel, Hihimanu, arrived on scene. The US Coast Guard transported additional Sanctuary personnel and provided safety support for ensuing rescue efforts. As in past efforts, the animal was difficult to track and approach. The response team was able to establish a control line for kegger and access to the animal, but the attachment to the animal was lost after a short period of time. No gear was removed and all further attempts at getting a hold of the animal were unsuccessful. Rescue operations were finally terminated late in the day.

3/11/09: Adult humpback whale reported entangled off Honokahua Harbor, Hawaii

An adult humpback was seen entangled by several tour vessels departing Honokahua Harbor, Big Island. Animal described as having gray "poly" line wrapped around tailstock and trailing gear at least 45 feet behind animal. However, the terminus of the line was not observed and may have been much longer.

Hawaiian Islands Humpback Whale National Marine Sanctuary's Justin Viezbicke and Hawaii Division of Aquatic Resources responded, but unfortunately, the animal was not re-located.

1. These reports do not include monk seals or sea turtles, other on-shore responses to any marine animal, or responses carried out by NOAA Fisheries' Marine Mammal Response Network independent of Hawaiian Islands Humpback Whale National Marine Sanctuary.
2. Includes line of 3/8" or greater. Does not include netting or twine