



Hawai'i Marine Mammal Consortium  
Non-profit marine mammal research, education and conservation

## WINTER FIELD REPORT – June 2007

Aloha friends and supporters! We have had yet another productive field season in terms of all three of our consortium's main goals: conservation, research and education, and we'd like to take this opportunity to tell you about it. This newsletter also gives us a chance to thank the many people who helped make it all possible, as well as communicate three new unique ways of contributing to our non-profit efforts. As always, if you have any questions, feel free to contact us at [info@hmmc.org](mailto:info@hmmc.org).

Entangled whale figure and photos are used courtesy of the Hawaiian Islands Disentanglement Network and were obtained under NMFS permit #932-1489-08, issued to NOAA's Marine Mammal Health and Stranding Response Program. All other cetacean photos were taken under NMFS permits # 774-1714 and # 782-1719.

### CONSERVATION:

Whale Disentanglement: HMMC has continued to work cooperatively with the Hawaiian Islands Disentanglement Network (HIDN). On 6 February 2007, at 10:47 am, a humpback whale (*Megaptera novaeangliae*) was reported in distress by Ocean Sports tour boat, *Alala*. HMMC staff and volunteers, accompanied by the Hawaiian Islands



Humpback Whale National Marine Sanctuary's West Hawai'i Marine Conservation Coordinator, Justin Viezbicke, were able to locate the whale about 0.5nm off Kiholo Bay a few hours later. Kudos and sincere thanks to Ocean Sports for standing by the animal for over three hours! Both topside and underwater (via 'polecam' - a small underwater camera mounted on a pole) images of the animal were obtained and the entanglement was determined to be life threatening. The whale had line through its mouth trailing aft on both sides. There was also line around its body, pinning its left pectoral fin to its side and cutting into the whale's back several inches. A bundle of gear was trailing approximately 30 to 40 feet behind the whale. The animal was extremely emaciated with a heavy carpet of whale lice. We were able to tag the whale with a tethered telemetry buoy (with radio and satellite transmitters) by throwing a grapple hook into the entangling gear. This was the first time that satellite telemetry has been used to track an entangled whale in Hawaiian waters. The next day, HIDN staff flew in from Maui to attempt to disentangle the whale. HMMC assisted in relocating the animal using radio telemetry receivers and acted as a support vessel for the disentanglement effort by Sanctuary and DLNR Aquatic Resources staff. At 11:00 am, the whale was relocated just south of Upolu Point, using both satellite fixes and real-time VHF telemetry. The disentanglement team was able to cut the line wrapped around the body and remove all of the trailing



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gear. Over 300 feet of line was removed including the trailing bundle, which included two metal rods 1" in diameter and approximately 2 feet long. HMMC was asked to obtain a biopsy sample from this whale for health assessment purposes, given its emaciated condition. Its fate will likely remain unknown because it never showed its flukes or dorsal fin for individual identification.

Shore Station Cleanup: Increasingly, over the past few years, our shore-based research site off Akoni Pule Highway has been used as an illegal dumpsite. This season was especially bad, with numerous heaps of trash and three abandoned vehicles adding to the mess. This year, HMMC did something about it. An approximate tally of what Yin (with some help from Chris) hauled away includes: 16 wooden pallets, 2 truck loads of green waste (to the green waste compost), 3 truck loads of scrap metal and a refrigerator (to Kealakehe scrap metal recycling), 3 truck loads of trash (to the regional landfill at Puako), 3 car batteries (recycled at Napa Auto Parts store), and 1 truck load of firewood (delivered to local residents). All disposal was free of charge. In addition, persistent calls to the State of Hawai'i Department of Health eventually led to the removal of all three abandoned vehicles. Hopefully, when they see that the site has been cleaned up, the illegal dumpers will think twice next time. We applaud the efforts of Recycle Hawai'i to educate Big Island residents about proper disposal.

## RESEARCH:



In 2007, our humpback whale research was in transition away from the intensive SPLASH sampling we did in 2004, 2005 and 2006, and toward focused observations of the behavior and biology of specific types of whale groups, including singers, mother-calf pairs, stationary pairs of adults with long dive times (over 20 minutes) and humpbacks associated with melon-headed whales (*Peponocephala electra*). HMMC was on the water 15 days, collecting 5 biopsy and 28 skin samples of approximately 114 humpback whale pods. We also collected several high quality recordings of the 2007 humpback whale song.

Additionally we had numerous odontocete encounters, including four sightings of spinner dolphins (*Stenella longirostris*), two sightings of bottlenose dolphins (*Tursiops truncatus*) and two sightings of melon-headed whales. Valuable identification photographs and 5 biopsy samples were obtained from these encounters. Similar to last year, the melon-headed whale sighting was especially interesting as it was a loose group of several hundred animals in close association with at least 20 humpback whales. We obtained more high quality underwater acoustic recordings and submitted an abstract entitled, "First description of melon-headed whale (*Peponocephala electra*) vocalizations from the Pacific Ocean" to the Society for Marine Mammalogy's 17<sup>th</sup> Biennial Conference on the Biology for Marine Mammal, to be held in Capetown, South Africa in November and December 2007.



We have also continued our shore-based observations, spending 17 days on the hill. We saw approximately 209 pods consisting of at least 316 humpback whales, as well as 2 shore-based sightings of spinner dolphins.

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Data from this year will be added to the long-term data we have collected on temporal trends in abundance and distribution of humpbacks off the Kohala Coast, which we hope to summarize into a scientific publication in the next year or two.

### EDUCATION:

For two weeks in March 2007, HMMC worked in collaboration with whale researcher Jan Straley from the University of Alaska Southeast (UAS), Sitka Campus, to involve Alaska high school and university students in our studies on whale migration patterns and behavior. The work was funded by a grant from the Cooperative State Research Education and Extension Service (CREES) program under the U.S. Department of Agriculture. Two of the six Alaska students who were



chosen to participate were students at Sheldon Jackson University, and the remaining four were native Alaskan students at Mount Edgecumbe High School. We accompanied the group on a



We accompanied the group on a whale-watching cruise aboard the University of Hawai'i at Hilo's research vessel to record humpback whale song and learn about field techniques for observing and taking identification photographs of whales. In West Hawai'i, we taught them our shore-based whale

observation techniques and provided hands-on laboratory sessions for them to learn about acoustic analysis of whale songs and match whale identification photographs to the southeastern Alaska whale catalog. These hands-on sessions were interspersed with lectures on humpback whale biology and research methods, and field trips to local cultural sites to learn about Hawaiian culture. We appreciated the students' attentiveness and enthusiasm and learned a great deal from our experiences together.



Also in March, we demonstrated shore-based whale observation techniques to three avid and attentive students from Japan and their teacher, Satoru Yamamoto, affiliated with the Center for Marine Mammal Science in Japan. We also gave them a presentation about whales and their use of underwater sound.

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For the fourth consecutive year, HMMC collaborated with Cornell University in teaching a bioacoustics course to university students. We deployed three hydrophones with radio transmitters in front of the shore station and demonstrated techniques for acoustic localization with simultaneous theodolite tracking and behavioral recording.

## SUPPORTING HMMC:

We are pleased to announce three new ways to support HMMC.

**Giveline** is a new way to support HMMC when you shop online. It is an online store created for the community-minded shopper where every transaction generates a charitable contribution to your favorite non-profit. Giveline has over a million bestselling products. We invite you to check out the store at <http://www.giveline.com/>.

HMMC affiliated with **One Percent for the Planet** (<http://www.onepercentfortheplanet.org/>), which is an alliance of companies that recognize the true cost of doing business and donate 1% of their sales to environmental organizations worldwide. The environmental alliance is designed to help members become sustainable businesses and the environmental group database aids membership to make choices with their corporate grants to environmental organizations.

**Please Recycle!** Here's how you can contribute to the environment by both recycling and supporting the research, education and conservation efforts of the Hawai'i Marine Mammal Consortium. Take your HI-5 containers to any of **The Arc of Hilo operated Redemption Centers** (at community transfer stations) and tell them you want to donate to HMMC. Your donation will be processed and 5 cents per container will be donated to the HMMC. The Arc of Hilo will issue a check to HMMC each month. If you drop off your containers when they are closed, simply attach a note that states you want to donate your containers to HMMC.

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