



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

WINTER FIELD REPORT – July 2008

Aloha friends and supporters! Here is our annual newsletter to share our work and thank the many people who helped make it all possible. As always, feel free to contact us at info@hmmc.org.

CONSERVATION:

Whale Stranding Response: Although in 2008 we were not called upon to assist with any whale entanglements, we were a point of contact for response to whale-related emergencies in West Hawai'i. These included: 1) on-scene investigation within an hour of a reported collision between a charter vessel and a humpback whale calf, 2) on-scene observations of a mother-calf-escort pod that was lingering in the channel entering the deep-draft harbor at Kawaihae, and 3) timely shore-based observations of a reportedly "sick" mother and her calf, that were apparently sleeping at the sea surface near the south basin of Kawaihae Harbor.



Shore Station Cleanup Update: This year we continued our major effort to clean up illegally dumped items at the shore station on Akoni Pule highway. We are pleased to report that the site remained relatively clean between years, and that this year we were able to finish the job with some great volunteer help from the Hoffhines family and Kim New. For the first time in several years, the place was completely clean! We hope that would-be dumpers will show more aloha when they see that the area has been cleaned up. And we want to say again that proper disposal of the trash was free of charge at the publicly funded transfer stations at the Puako, Kealakehe and Waimea transfer stations and the Waikoloa landfill. Recycle Hawai'i tells all: <http://www.recyclehawaii.org>



We also removed a few globs of derelict fishing net from the ocean (left).

RESEARCH:

HMMC conducted 16 winter humpback whale surveys in West Hawai'i, resulting in 144 fluke identification photographs and 5 biopsy samples to determine the sex composition of stationary pairs of whales with long dive times. We obtained photographic identifications from encounters with spinner dolphins and melon-headed whales. Visiting researchers Simon Allen (from Western Australia) and Bree Witteveen (from Kodiak, Alaska) helped out in February.

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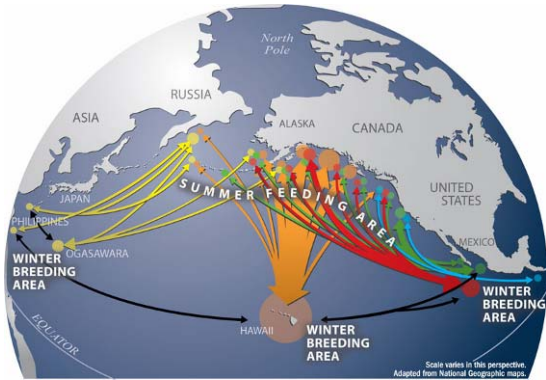


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This winter, HMMC sighted a whale that Chris recognized from many years of sightings in Glacier Bay. Read the full story on the Glacier Bay National Park web site.

<http://www.nps.gov/glba/naturescience/whales.htm>



Fun Facts From SPLASH: The first results of the international study of humpback whales in the North Pacific are becoming available. HMMC was the main Big Island contributor to SPLASH. A news brief about the project was published in the prestigious science journal *Nature* in May. Read the final report at:

<http://www.cascadiaresearch.org/SPLASH/SPLASH.htm>

The SPLASH map (left) uses SPLASH data and was produced by the Office of National Marine Sanctuaries, based on a National Geographic projection from National Geographic is available at:

http://sanctuaries.noaa.gov/news/features/0108_splash.html

HMMC photographed the flukes of 455 different whales in West Hawai'i that are part of the SPLASH database. Whales sighted by HMMC that were sighted by other researchers during SPLASH in 2004-2006 revealed several interesting migrations.

- Surprisingly, a few West Hawai'i whales were sighted in Mexico and the Philippines in other years.

- Most West Hawai'i whales used feeding areas in southeastern Alaska and northern British Columbia, but also used a variety of other feeding grounds.

# Whales	Region
<i>Wintering Areas</i>	
121	Hawaiian Islands
2	Mexico - Revillagigedos
1	Mexico -Baja California
1	Phillipines
<i>Feeding Areas</i>	
50	Southeastern Alaska
28	Northern British Columbia
19	Northern Gulf of Alaska
9	Bering Sea
5	N. Washington / S. British Columbia
3	Western Gulf of Alaska

# Whales	Island
14	Big Island
2	Kauai
86	Maui
10	Molokai
9	Oahu
2	PB

- The 121 West Hawai'i whales that were re-sighted within Hawai'i were most likely to be sighted off Maui or the Big Island, but some were sighted in all studied areas in the Hawaiian Islands.

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Shore Based Observations:

In 20 days on the shore station for our annual shore-based scan sampling observations, we saw 214 pods containing 363 whales, as well as 4 groups of spinner dolphins.

PIPIN Update:

NOAA Fisheries sponsors a collaborative effort, known as PIPIN, to create a spinner dolphin photo-identification catalog within the Hawaiian Archipelago and the Pacific Islands Region. In December 2007, HMMC invited PIPIN to join the consortium and operate under HMMC's non-profit umbrella. In March 2008, HMMC was one of five spinner dolphin research groups who received funding to process its spinner dolphin identification photographs from 2003-2007 for submittal to the PIPIN database. We plan to submit our spinner dolphin photographs to PIPIN in beginning in October 2008 (www.pipin.org).



Black-tipped Reef Shark Project:

In 2007, while on a field trip with Alaska students (see story below), HMMC discovered that black-tipped reef sharks could be observed from shore in Pelekane Bay, at Pu'ukohola Heiau National Historic Site. Since then, HMMC researchers have looked for sharks for one hour, one morning per week, using binoculars to find and count the number of sharks, and a digital camera to take photographs. Preliminary results show that the highest numbers of sharks (13 different sharks is our highest daily count so far) are present in winter months compared to the rest of the year. In summer and fall, we often saw no sharks, or a single shark. HMMC is working in partnership with the National Park Service <http://www.nps.gov/puhe> and looking at other sources for funding to continue monitoring, determine shark movements and characterize their habitat in the bay.

Publications and Accomplishments:

HMMC has successfully applied for, and obtained, its own NOAA Fisheries Scientific Research permit, and plans to be operating under the authority of that permit in 2009 and beyond.

The HMMC paper on determining shore station height based on theodolite fixes of vessels at known GPS locations will be published in the next few months in Marine Mammal Science.

HMMC is still working on a manuscript on melon-headed whale vocalizations in West Hawai'i.

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EDUCATION:



For the second year in a row, we spent two weeks working with whale researcher Jan Straley from the University of Alaska Southeast, Sitka Campus, (UAS) to involve native Alaskan students from Mount Edgecumbe High School in our studies on whale migration patterns and behavior. The work was funded by a grant from the USDA's Cooperative State Research Education and Extension Service (CREES) program. We took fluke identification

photographs and recorded singing whales on a whale-watching cruise in Hilo Bay aboard the University of Hawai'i at Hilo's research vessel, hosted by Dr. Jason Turner. In West Hawai'i, we taught them shore-based whale observation techniques and provided hands-on laboratory sessions on research methods. Lehua Wong-Wilson told us about historic Hawaiians relationships with sharks. Chadd Paishon of Na Ka Lai Wa'a worked with us to provide Hawaiian cultural education. The students got to work on the Hawaiian voyaging canoe Makali'i, and go up on the slopes of Mauna Kea to plant trees as part of a reforestation project with cattle rancher Rich Kaniho.



In March, Chris visited Waimea Middle School to do a hands-on fluke matching exercise with Mrs. Edmons's 5th grade class, to illustrate how researchers learn things about whale migration, behavior and life history using whale fluke photographs.



For the fifth consecutive year, HMMC collaborated with Cornell University in teaching a bioacoustics course to university students. Students learned about visual and acoustic methods of whale observations.

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SUPPORTING HMMC:

We appreciate your support via direct donations and via the following organizations:

Giveline <http://www.giveline.com>

One Percent for the Planet <http://www.onepercentfortheplanet.org>

Bring your recyclables to Arc of Hilo Recycling Centers and tell them you want to donate to HMMC.

MAHALO TO OUR VOLUNTEERS!

Left to right, from top: Bill Rickards, Bree Witteveen, Holly Sargeant-Green, Sam Rosen, Noa Rickards, Kim New, Simon Allen, Marilyn Wright, Kyle Hoffhines, Mike Hoffhines.

ACKNOWLEDGEMENTS:

Essential assistance from the volunteers shown (right), and funds provided by a grant from the U.S. Department of Agriculture, made the 2008 field season possible. Thanks again to the Computer Recycling Center (www.crc.org), in Santa Rosa, California, for donating two Apple computers we began using this year. For the continued excellent performance of our trusty skiff, Malolo, we thank Joe Mobley of University of Hawai'i, Honda Motor Corporation of America and Kona Coast Marine. We greatly appreciate the use of scientific research permits held by the National Marine Mammal Laboratory and the Southwest Fisheries Science Center (SWFSC). Also, thanks to Kerri Danil and Susan Chivers (SWFSC) for equipment loans. And, finally, thanks go to Jan Straley of UAS, Sitka Campus, Jason Turner of University of Hawai'i at Hilo, and Chuck Greene of Cornell University, for educational collaborations.



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