

NOAA FISHERIES SERVICE

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Monk Seals

Two monk seal responses on the island of Niihau

On November 10, 2010, the Robinson family notified NOAA Fisheries of a dead Hawaiian monk seal on the island of Niihau. NOAA Fisheries personnel were escorted onto the island to investigate this report. A carcass in the advanced stages of decomposition with a number of wounds was discovered. The carcass was retrieved and taken to Kauai for digital radiographs, necropsy and biological specimen collection. Due to the advanced stage of decomposition, the wounds revealed very little to no information about how the animal died, what caused the wounds and whether the wounds were present before or after the animal's death. Radiographs revealed no foreign objects and were inconclusive on the cause of death. The internal examination confirmed that the animal was a female.

On December 2, 2010, the Robinson family reported a live seal with severe injuries to its neck region. The seal had first been observed the previous day on the northern shore of Niihau. NOAA Fisheries personnel, escorted by the Robinson family and residents, searched the area for several hours, but were unable to locate the seal. The Robinson family did capture video and still footage from the day before, but the severity of the injury could not be accurately assessed without further examination or documentation.

NOAA Fisheries wishes to thank the Robinson family and Niihau residents for their support and partnership.



The Robinson family of Niihau documented this live animal with serious injuries to its neck. Experts in pinniped veterinary medicine speculated that the injury was perhaps blubber from the seal's neck, rather than a portion of its esophagus.

NOAA



Hawaiian Monk Seals

Seal Count October 16, 2010

	April 28 2007	October 20 2007	April 19 2008	October 18 2008	April 20 2009	October 17 2009	April 17 2010	October 16 2010
Kauai	13	6	13	14	16	14	5	12
Oahu	6	5	14	9	7	9	8	12
Molokai	19	7	8	15	11	9	12	4
Maui/Lanai	1	3	0	5	0	4	4	1
Kahoolawe	2	1	2	0	1	2	2	3
Island of Hawaii	0	1	1	5	0	1	1	1
Total	41	23	38	48	35	39	32	33

Results of the eighth semi annual monk seal count. *Note: Laau Point, Molokai was not surveyed although there are usually a number of seals counted there on a regular basis. The community of Niihau also participated counting 47 seals.

Dehooking on Oahu

On September 27, 2010, Hawaiian Monk Seal Response Team Oahu volunteers observed RT10, the three month old pup born at Turtle Bay, Oahu (offspring of R5AY), with a hook and approximately two feet of trailing line embedded in her back. The hook was successfully removed from the pup by NOAA personnel.

R5AY has a history of pups and weanlings with fishery interactions. On two separate occasions, NOAA personnel removed a circle hook from R5AY's first pup (RI37). These incidences occurred only five months from each other and within her first year of life. Her second pup (R032), also born on the North Shore of Oahu, was only four weeks old when it became entangled in fishing line and was subsequently freed by NOAA personnel. The same pup died in a gill net off of Makai Pier on Oahu only a few months later.

On June 15, 2008, R5AY's third pup (RW18) was found to have a hook in his mouth. The pre-weaned pup was temporarily separated from his mother and the circle hook was removed. RW18 continued to thrive postweaning, but was unfortunately found dead on October 15, 2008. This animal was

found less than a mile away from where R032 was discovered. Although the cause of death could not be definitively determined, some aspects of this case were consistent with drowning due to entanglement.

R5AY has been documented with five pups since she was first sighted as an adult on Kauai in 2002. Three of her pups are still alive today. The pattern of these pups being entangled or hooked in recreational fishing gear demonstrates the major impact these types of interactions have on the population of monk seals in the main Hawaiian Islands (MHI). NOAA Fisheries has been successful in identifying and dehooking seals with embedded hooks around the MHI; however, it is important to stress that responses to these types of strandings do not remedy the problem itself. Outreach and education is one of the major tools we can use to reduce the impact of human fishing gear on these animals.



HMSRTO volunteers provided this photo documentation of RT10 with a hook and approximately two feet of trailing line embedded in her back.

R015

R015 is a well-known adult female Hawaiian monk seal with a habit of pupping on beaches frequented by humans. She can be identified by her numerous cookie cutter shark scars and a wish-bone shaped scar on her right flank. She has pupped seven times on Island of Hawaii between 2002 and 2008. R015's eighth pup was unexpectedly born in Hana, Maui, in October 2009. R015 weaned her pup after seven weeks and molted in early 2010. She remained on Maui through the beginning of May 2010. By mid-May, 2010, R015 was confirmed to be back on the Island of Hawaii. She was



not documented again on the Island of Hawaii until late September 2010.

If R015 were pregnant, NOAA Pacific Islands Fisheries Science Center (PIFSC) estimated a due date of her ninth pup around October 25, 2010. For several months, the Hilo Marine Mammal Response Network dispatched volunteers to search for her, but to no avail. A United States Coast Guard aerial survey, conducted in order to cover remote coastlines and valleys between Hilo and Hawi, was also unsuccessful at locating a mom and pup pair. In addition, volunteers in Hana, Maui were advised to keep a lookout for this individual.

After a single sighting at the end of November, 2010, on the Island of Hawaii, she showed up on Maui, after a few weeks, pup-free and molted. According to PIFSC, there was not enough time between her expected due date and the time she showed up on Maui for her to have molted, given birth, nursed and weaned a pup. After intense efforts to locate her, it turned out R015 skipped having a pup this year. Skipping a year like this is not uncommon for Hawaiian monk seals.

Given the endangered status of the Hawaiian monk seal, every mother is extremely important; as is the survival of her young. NOAA Fisheries and its partners make every attempt to monitor the movements of expecting mothers; as well as to provide immediate protection when they give birth.

More Hawaiian monk seals are being sighted on Maui

Maui County, also known as “Maui Nui”, includes the islands of Maui, Molokai, Lanai and Kahoolawe. How many seals there are in Maui County and specifically how many seals are on each island, is an ever-changing, almost certainly growing, number. Hawaiian monk seals can and will move between islands within the Hawaiian Island chain. Why some individuals choose to travel often and far while others never leave their natal island is unclear. What is more certain, is that as more effort is put into finding seals, more seals will be found. At least, that has been the case for Maui over the last four years.

The NOAA Fisheries Monk Seal Sighting Hotline was established in Maui at the beginning of 2007. At that time, Maui was acknowledged by NOAA Fisheries as a short-term home for two to four individual Hawaiian monk seals. Since the hotline’s establishment, over 1,000 hours of outreach have been conducted and over 1,000 calls have been received.

A record total of 13 different seals have been identified and documented on Maui in the past year.

Of those 13 seals identified in 2010, half of the individual seals are adult females that seem to utilize the island of Maui for foraging and resting, while opting for the island of Molokai to give birth and nurse their pups. Of those six females, three are closely related. Two of the seals are sisters and their mother (who is at least 20 years old) has given birth to a total of 12 pups over the years. The other half of the 13 identified seals on Maui includes a yearling male that was born in late 2009 on the east side of Maui. His mother, R015, and two adult males were born on Maui in 1998 and the other one was born on Kahoolawe in 2001.

Where do all these seals go and what are they doing? The answers are slowly trickling in as the awareness of monk seals and the number of sightings



R015 has given birth to most of the seals that are seen regularly on the Island of Hawaii. Of the nine seals documented on the Island of Hawaii in 2010, three are the progeny of R015.

being reported by the general public is increasing. For example, RH44, a 10-year-old female, was born on the island of Kauai, now pups on Molokai, molts on Maui and spends a majority of her time either on Maui or the Island of Hawaii. R017, another adult female whose birth place and date are unknown, pups on Molokai, molts on Oahu, spends a majority of her time on the west side of Maui and has been documented multiple times on the island of Lanai. An ongoing cell phone tag study being led by PIFSC with the support from the U.S. Navy is providing an even greater level of information on monk seal movement between the islands. Stay tuned for further details.



Cetaceans

Stranded pilot whale provides for a community outreach opportunity

A stranding in Halawa Valley, Molokai, was reported on October 6, 2010, by the Molokai Marine Mammal Response Network (MMMRN) via the Puu O Hoku Ranch. NOAA Fisheries personnel reached out to a local cultural practitioner to inform him of the stranding and to seek his input and participation. Hawaii Pacific University (HPU) and NOAA Fisheries were interested in performing a necropsy to understand the cause of death and to collect samples to inform ongoing research into ocean and population health. The practitioner was supportive of the efforts to gain knowledge through this whale and a private blessing was performed prior to the investigating team's arrival.

Before the necropsy was performed, NOAA Fisheries and HPU sat with keiki from the community to discuss the stranding event and answer any questions posed. State Division of Conservation and Resources Enforcement (DOCARE) representatives were also on the scene to assist with community relations. For public safety reasons, it was decided that the carcass should be removed from the water's edge and placed at an inland location for necropsy and burial. After the community decided where this should occur, Puu O Hoku Ranch staff donated heavy equipment and operations to move the carcass to its final resting site. A necropsy was performed, samples were collected for analysis and the animal was buried. At the instruction of the cultural practitioner, ti leaves he had placed with the carcass were buried with the whale. Ti or ki leaves were used by the high priests or kahuna in ancient Hawaiian religious ceremonial rituals.

Stranding of an insular false killer whale

On November 27, 2010, HPU, NOAA Fisheries, Molokai DOCARE and the County of Maui Public Works responded to a 14 foot false killer whale, or *Pseudorca*, that stranded live on Kawela Beach, Molokai. The whale died in shallow waters among volunteers providing support.

After consulting with Hawaiian cultural leaders on Molokai, marine mammal scientists and veterinary professionals performed a necropsy in order to determine the cause of death. The whale was an adult female that was in poor nutritional condition. Multiple findings on the initial examination indicate the animal may have been suffering from a systemic disease. This has yet to be confirmed.

In the weeks after the stranding event, HPU scientists, students, NOAA veterinarians and pathologists carried out detailed analyses to determine the cause of the animal's death. Ultimately, this work will improve our collective understanding about this species and the potential health and environmental challenges facing the local population.

This particular whale was a known individual first identified in 2004 off Island of Hawaii by scientists from the Cascadia Research Collective. Using its dorsal fin markings, it was later observed in 2008 off the coasts of Island of Hawaii and Oahu.

Though *Pseudorca* are known to eat large fish at the surface, this whale had a large squid and squid beaks in its stomach. This is the first evidence that *Pseudorca* in Hawaii also feed on squid.

There are two known populations of false killer whales in Hawaiian waters, one whose members spend all of their time in local waters (referred to as the "insular



David Schofield (NOAA Fisheries) provides outreach to keiki in the community about the stranding.

population"), and one that roams over wider areas of the central tropical Pacific. This whale was a member of the small insular population of false killer whales. Hawaiian insular false killer whales were recently proposed for listing as endangered under the Endangered Species Act. There are probably fewer than 200 individuals remaining in the wild. Understanding the cause of death of the stranded animal could provide valuable information for the conservation and recovery of the population.

Pseudorca are among several species of cetaceans known as "blackfish". Blackfish, such as melon-headed whales, pilot whales and pygmy killer whales, are commonly called whales but are classified scientifically in the Delphinidae family.

This individual was the first stranded false killer whale that HPU had responded to since they joined the Marine Mammal Response Program in 2006.

According to NOAA records, this is also the first reported stranding of this species reported in more than a decade, with only eight strandings occurring in Hawaii in the last 40 years. For more information about *Pseudorca*s in Hawaii, visit <http://www.cascadiaresearch.org/hawaii/>



The 14 foot adult female false killer whale died in shallow waters among volunteers providing support.

Third stranding on Kahoolawe in six months

On October 13, 2010, HPU and NOAA Fisheries responded to a report of an animal in the advanced stages of decomposition near Hakioawa iki (NE Kahoolawe). This report was of concern as the animal was of similar size and very close to the location of two pilot whales that stranded in June. The response team was escorted by Kahoolawe Island Reserve Commission (KIRC) staff, Protect Kahoolawe Ohana (PKO) cultural working group members and Kehaulani Watson (NOAA Fisheries Hawaiian Cultural Liaison).

HPU has submitted samples for species identification, although results are unlikely to provide much information due to the condition of the carcass. If the species is confirmed to be a pilot whale, this stranding would represent a total of four pilot whale strandings in 2010. In the past decade, there have only been a total of seven pilot whale strandings reported in the Pacific Islands Region. NOAA Fisheries, KIRC and PKO are continuing to build relations in an effort to facilitate the exchange of cultural and scientific knowledge in hopes of better understanding the implications of these alarming trends on ocean health.

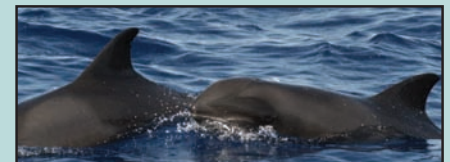


This unidentified cetacean represents the third stranding on Kahoolawe this year.



Dr. Trisha Kehaulani Watson works as contractor for NOAA Fisheries as a Native Hawaiian Liaison for Hawaiian monk seal recovery and Cultural Practitioner Network Coordinator for the region's Marine Mammal Response Network. Kehau is the President of Honua Consulting and has served as senior staff to the Vice Chancellor of Research and Graduate Education, University of Hawaii Manoa and the University of Hawaii, Office for the Vice President of Research, where she worked on special projects including environmental compliance and community outreach. She is considered an expert on environmental planning, conservation and historical preservation. Kehau is the Native Hawaiian representative for the Hawaiian Island Humpback Whale National Marine Sanctuary Advisory Council and is a member of numerous Native Hawaiian organizations.

What Can You Do to Help?



To report a stranded or injured dolphin or whale, please call the NOAA Marine Mammal Emergency Hotline at 1-888-256-9840.

Stranded dolphins and whales are generally sick or injured and require medical attention. **Do not approach, handle or push the animal back into the sea.** Coming to shore may be a way for the sick or injured animal to prevent drowning and also avoid predators. By calling the NOAA Hotline immediately, you will receive guidance on the best way to help the stranded animal.

Images from the Field

Marine Life Discovery Day outreach event

In an effort to promote greater public awareness and knowledge of ocean life and marine conservation efforts in Hawaii, the NOAA Office of Law Enforcement (OLE) Pacific Islands Division and the U.S. Coast Guard (USCG) hosted a public outreach day at the USCG Station on Maui.

Marine Life Discovery Day was held on November 20, 2010. Numerous NOAA offices (including NOAA OLE, NOAA Fisheries Pacific Island Region and the Hawaiian Islands Humpback Whale National Marine Sanctuary), the State of Hawaii Department of Land and Natural Resources and the USCG participated in the event. The event included numerous activities for children, including the

opportunity to use microscopes to look at various sea creatures, activities to simulate interaction with disentanglement gear and the opportunity to examine actual bottomfish. The public enjoyed having the opportunity to board the NOAA OLE 33 foot patrol boat, as well as two USCG patrol boats. The USCG also conducted an air show with a helicopter practicing rescue techniques. The new NOAA vessel will be used for patrols, law enforcement investigations and to support marine mammal response events.



The USCG conducted an air show with an HH65 helicopter practicing rescue techniques.



The public enjoyed having the opportunity to board the NOAA OLE 33 foot patrol boat.



From left to right: Wayne Williamson, Barbara Billands, Clay Gates, Robert Billand and David Schofield

Marine mammal response members are proactive to prevent an entanglement

On December 10, 2010, Hawaiian Monk Seal Response Team Oahu (HMSRTO) volunteers notified NOAA Fisheries of a large amount of marine debris sprawled across the reef at Nimitz Jetty, Barbers Point on the island of Oahu. The Barbers Point (Kalaeloa) area is currently a regular haul-out spot for approximately five Hawaiian monk seals, but as many as ten different individuals have been known to frequent that stretch of beach in recent years. Given the number of seals that utilize this area, there

was a concern that the marine debris could entangle a seal. HMSRTO volunteers and Officer Mantec (Barbers Point Base Police) worked tirelessly throughout the morning to drag hundreds of feet of line weighing about 1,500 pounds out of the water and off of the reef. NOAA marine mammal personnel later arrived to help cut the line into smaller pieces so that it could be loaded onto a truck. The line was taken to Pier 38 for disposal and down-cycling through the "Hawaii Nets to Energy Program."



HMSRTO and NOAA Fisheries work to load the marine debris into the truck.



Two of the "regulars" RS00 (left) and R012 (right) at White Plains, Barbers Point, HI.

Hawaiian monk seals have one of the highest documented entanglement rates of any pinniped species. In addition to causing problems in the main Hawaiian islands, marine debris, including derelict fishing gear, is a chronic form of pollution affecting the Northwestern Hawaiian Islands, where the majority of the seals reside.

All photos and accounts of response events in this newsletter occur under NOAA NMFS permit 932-1905