Overview of the PIR Marine Mammal Response Network

Marine Mammal Commission
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Marine Mammal Response and Program Scope:

• Authority: Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA)

• Stranding Definition: On beach or in water and unable to return to normal environment or life function

• National Program: MARINE MAMMAL HEALTH AND STRANDING RESPONSE PRGM

• Regional Coordinator: David Schofield + Island Coordinators
  • PIFSC decision makers for live monk seal interventions

• Species: 21 different species of odontocetes and mysticetes
  • Frequency/year - HI cetaceans 20-25, monk seals year 20-25, large whale entanglements 4-12, Territories <1/year
  • Stranding causes: hookings, entanglement, entrapment, disease, natural
MARINE MAMMAL AND SEA TURTLE RESPONSE PARTNERS IN HAWAII
STATE-WIDE SIGHTINGS/EMERGENCIES
ALL ISLANDS
MONK SEAL, TURTLES, DOLPHINS, WHALES

888-256-9840
Humpback Whale Strandings in Early 2016-17 Season, UME?

- November 11, 2016
  - Kailua Bay, Oahu
  - Floating
- November 28, 2016
  - Leeward coast near Ka‘ena, Oahu
  - Beached
- December 16, 2016
  - Pu‘u‘ohoku, Molokai
  - Drifted offshore
- December 26, 2016
  - Kekaha/PMRF, Kauai
  - Floating

- December 30, 2016
  - Offshore Ahihi Kinau NAR, Maui
  - Floating then Beached

- January 8, 2017
  - 300 yds. offshore Hookipa Beach Park, Maui
  - Floating
Figure 1. Location of 2016/17 Stranded Humpback Whales
Hawaiian Islands Large Whale Entanglement Response Network: Objectives

- Provide experienced, well-equipped, authorized, and thereby safer, coordinated, broader response

- Increase awareness

- Release some large whales from life-threatening entanglements

- Document/gather information in order to assess impact, determine gear, effectiveness of management, improve response capability and ultimately reduce risk
Hawaiian Islands Large Whale Entanglement Response Network

- Started in 2002 by David Mattila/ Hawaiian Islands Humpback Whale National Marine Sanctuary
- Partner with other agencies and work with community
- Ed Lyman/ Sanctuary coordinate effort working with and under PIRO (David Schofield) and MMHSRP
Hawaii Network:
Unique Challenges in response

Primary wintering ground for majority of humpback whales in North Pacific:

• Breeding (hormone differences)
• Calving (MC interactions)

Challenges:
• Remote/ insular environment
• Extremes on conditions
• Diversity of gear types
• Remoteness

NOAA HIHWNMS/ MMHSRP #932-1905
Accomplishments - Reporting

> 402 reports

192 (47.8%) confirmed

141 animals (minimum)

Species:
- 135 Humpback whales
- 2 Sperm whales
- 1 Sei whale
- 3 unknowns

Sources:
- 43.3% tour industry
- 17.0% state and federal
- 13.9% public
- 10.6% researchers
- 8.5% fishers
- 2.4% Observer Program
- 4.4% other

* Do not have the effort base of East or West Coast, but in-water community and aloha spirit has been extremely valuable
**Accomplishments: Preparedness**

- 660 hrs of trainings (~ 40 hrs/ season)
- 20 Responders trained at higher levels
  - (1 - L5, 1 - L4, 14 - L3)
- > 300 Network responders trained in various support roles
- 11 response teams, covering much of the main Hawaiian Islands
- 10 Rapid response telemetry kits
- 4 full caches of equipment
  - Full cache of equipment (incl. inflatable, tools, and telemetry)
  - Rapid response kit (telemetry and means to attach it)
Accomplishment - Response and outcomes 2002 - to date...

Gear removed from 32 whales

28 animals (27 humpback whales and 1 sei whale) freed of significant amount of gear

Representing a ~43% success rate toward those cases warranted and able
2018-19 Season

9 confirmed reports
7 adults and 2 subadults
7 Maui, 1 Oahu, 1 Kauai
5 disentanglement efforts (2 not re-located, 3 on 2 animals, both partially freed)
One gear from BC Canada; other from US Aleutians

Image courtesy of Hannah Pittore
Age Class
Hawai‘i 2002 - 2019 season

- Age class known in 85.8% (n=120) of cases
- Juveniles and calves represented the majority (53.4%, n=55) of known aged animals

Accomplishments - Information gained
Gear Types
Hawaiʻi (2002 - present)

51.5% of gear identified to gear type
68.6% fixed gear (of IDed gear)
41.5% (n=31) pot (trap) gear
  - 12 local
  - 23 from Alaska/BC

HIHWNMS data, 2019
(#) represent sample size
Gear from Alaska and British Columbia

- Includes crab, shrimp and fish traps
- Average minimum distance carried is 3,984 km (2,151 nm; N=16)
- Maximum known straightline distance carried is ~ 4,537 km (2,450nm; Wrangell, AK)
Other Distressed Whale Reports (2018-19 Season)

> 75 reports/ 40 confirmed

Include out-of habitat, injured/ sick, separated calves, ship-struck, dead.....
Summary/ conclusions

• Large whale disentanglement by itself is not the answer, but combined with data collection and adaptive management is the needed strategy towards addressing overall risk.

• Information gained is dependent on effort and questions we ask - the scope of our effort.

• Our response, and associated risk is dependent on our preparedness - greater preparedness = greater productivity and lower risk.
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