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Overview of the PIR Marine Mammal Response Network

Marine Mammal Commission
21 May, 2019

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Marine Sanctuary*

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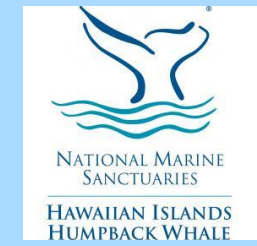
Marine Mammal Response and Program Scope:

- **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





MAUI OCEAN CENTER



MARINE MAMMAL AND SEA TURTLE RESPONSE PARTNERS IN HAWAII



STATE-WIDE SIGHTINGS/EMERGENCIES

ALL ISLANDS

MONK SEAL, TURTLES,
DOLPHINS, WHALES

888-256-9840



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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



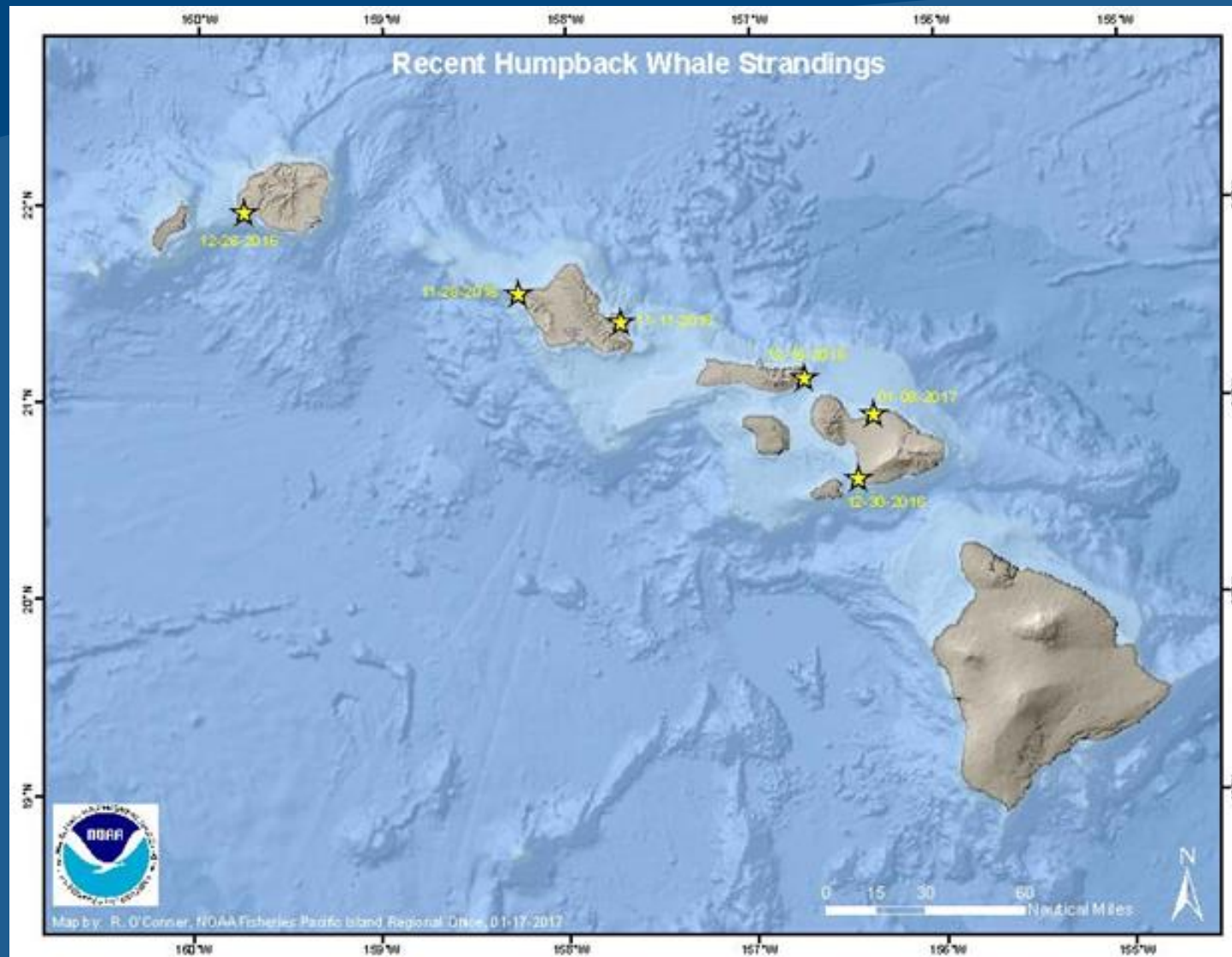
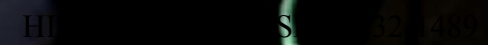


Figure 1. Location of 2016/17 Stranded Humpback Whales

NATIONAL MARINE
SANCTUARIES

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 SanctuarySanctuary
- 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



Accomplishments - Reporting

> 402 reports

192 (47.8%) confirmed

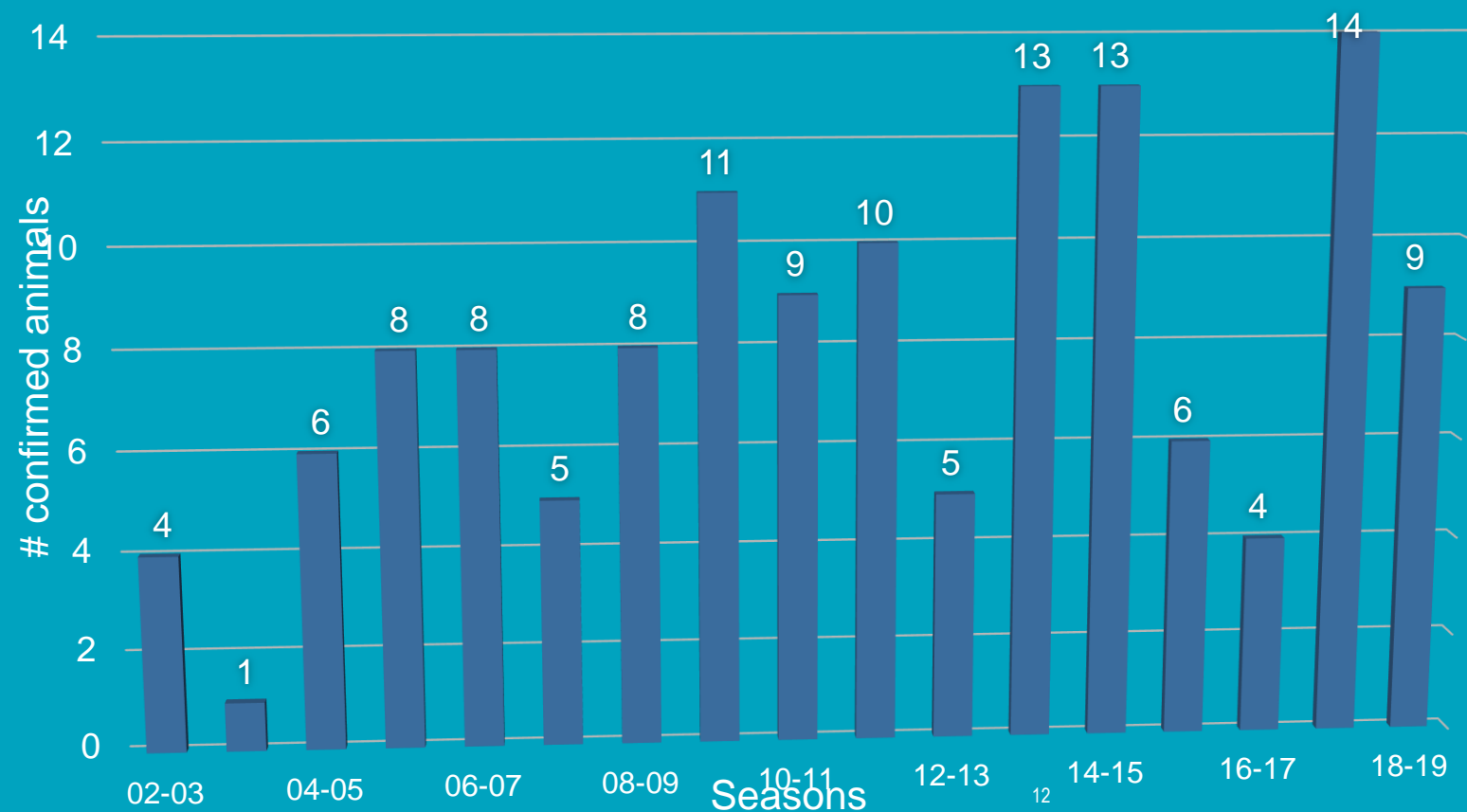
141 animals (minimum)

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

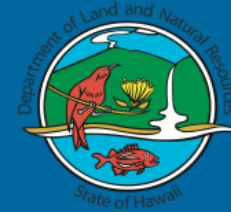
28 animals (27 humpback
whales and 1 sei whale)
freed of significant
amount of gear

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)

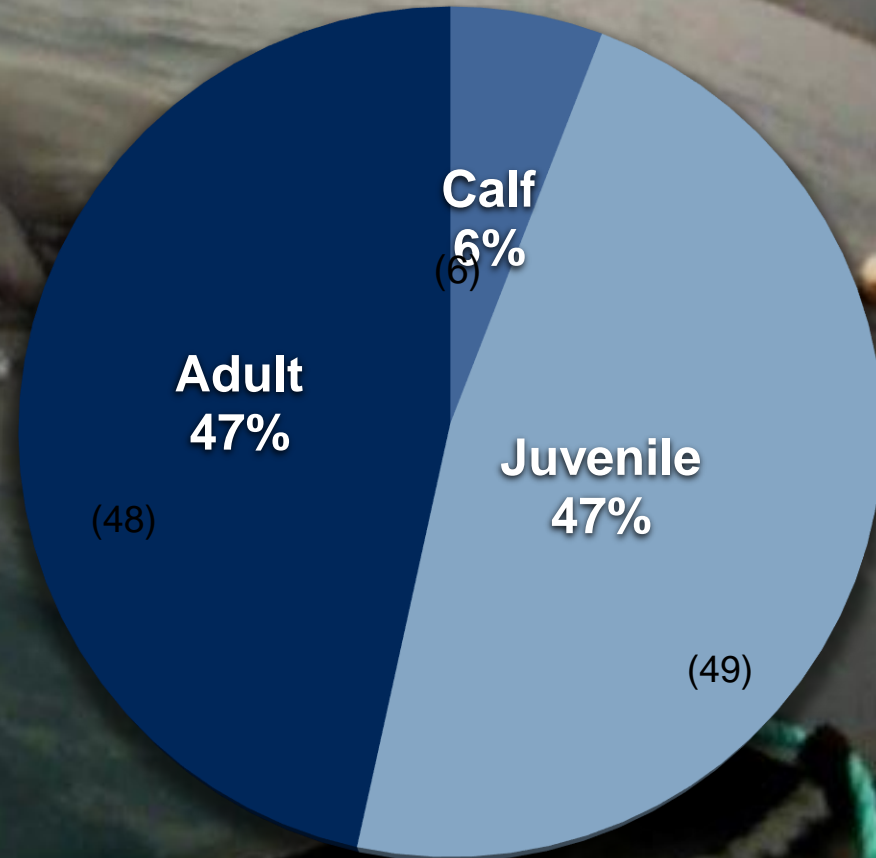
One gear from BC Canada;
other from US Aleutians

Accomplishments - Information gained

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

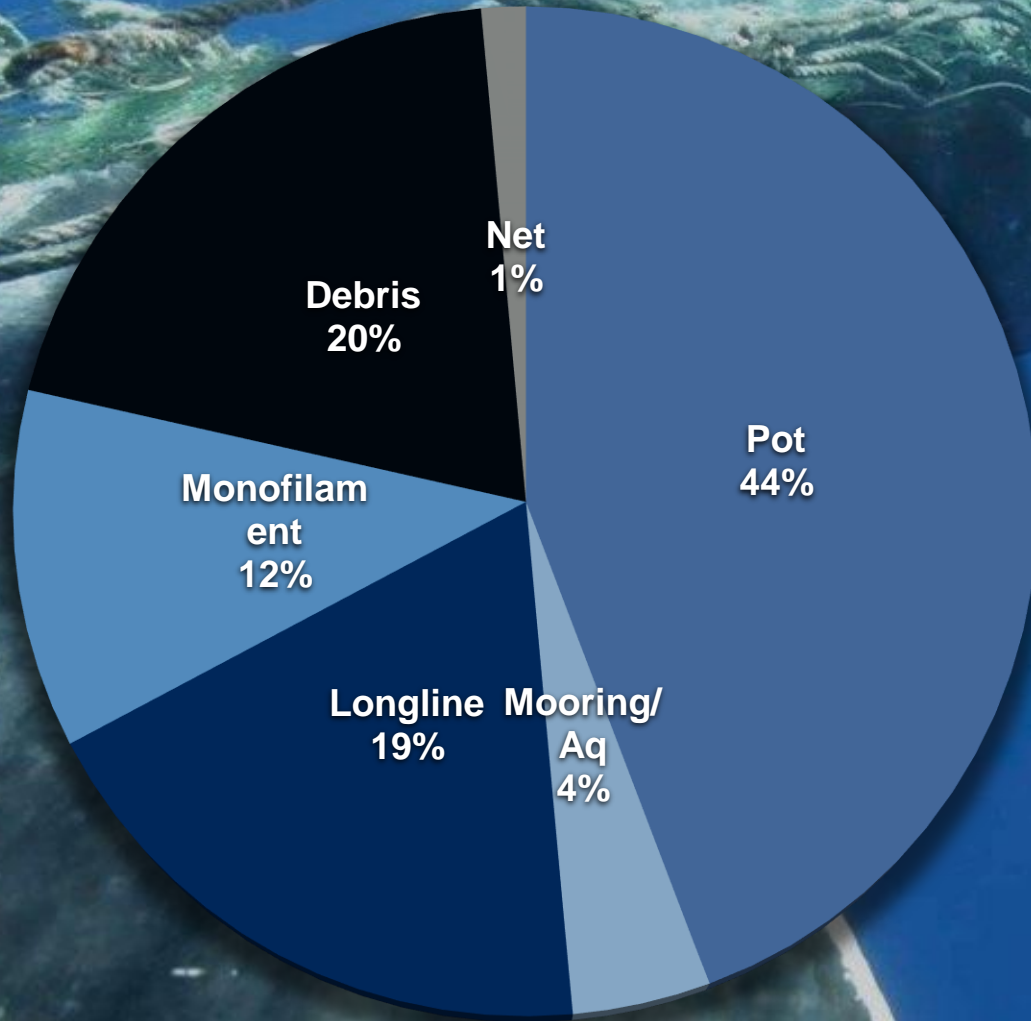


(#) represent sample

Accomplishments - Information gained

Gear Types

Hawai'i (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

Pribilof Isl, AK

Wrangell, AK

Unimak Pass, AK

Hecate St, BC



- 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)

Gear from Alaska and British Columbia



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



Acknowledgements



NOAA Office of Protected Resources
NOAA Fisheries Pacific Region Office
NOAA Fisheries Pacific Islands Fisheries
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NOAA Office of Law Enforcement
NOAA Corps
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U.S. Coast Guard/ CG Aux. (D14)
Kaho'olawe Island Reserve Commission
Fishers (Commercial, sport, recreational)
Whale researchers (NGOs)