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Marine Mammals

False killer whale

Pseudorca crassidens

SPECIES STATUS:

Federally Listed as Endangered – Main Hawaiian Insular Stock
State Listed as Endangered
IUCN Red List – Data Deficient

SPECIES INFORMATION: False killer whales are found at the broadest range of depths of all cetaceans in Hawai'i. In Hawai'i, they feed primarily on mahi mahi and yellowfin tuna, and food sharing is known to occur. To increase success of finding prey, they travel in a broad band up to several kilometers wide. They have low reproduction rates with calving intervals of approximately seven years. Gestation ranges from 14 to 16 months and lactation for one and half to two years. Life span is about 60 years. They are gregarious and form strong social bonds, and are usually found in subgroups of 10 to 20 that belong to larger groups of 40 or more individuals. They also occur with other cetaceans, most notably the bottlenose dolphin. False killer whales in Hawai'i are reproductively and genetically isolated from other populations in the Pacific.

DISTRIBUTION: Three stocks occur in the Hawaiian Islands, with partially overlapping ranges: the Main Hawaiian Insular stock (federally listed as endangered) is found within 140 kilometers of the Main Hawaiian Islands (MHI), the Hawai'i Pelagic stock in waters greater than 40 kilometers from the MHI, and the Northwestern Hawaiian Insular stock within 93 kilometers of the Northwestern Hawaiian Islands (NWHI) and Kaua'i. The species also occurs in tropical and temperate waters worldwide.

ABUNDANCE: Abundance estimates are as follows: for the Main Hawaiian Insular stock, 150 whales with a declining population trend, for the Hawai'i Pelagic stock, 1,500 whales with an unknown trend, and for the Northwestern Hawaiian Insular stock, 500 whales with an unknown trend.

LOCATION AND CONDITION OF KEY HABITAT: Shallow inshore and deep oceanic waters around Hawai'i.

THREATS:

- Fisheries interactions. Injury and mortality can be caused by hooking and entanglement of whales in fishing gear. False killer whales are known to steal yellowfin tuna and mahi mahi off trolling lines, which may have resulted in intentional shooting of the whales by fishers. To reduce mortality and injury in Hawaiian longline fisheries, a Take Reduction Plan became effective in 2012. The plan describes gear requirements, time-area closures, and improved responses to hooked and entangled false killer whales.
- Marine pollution and debris. Ingestion of marine debris can cause intestinal injury or blockage. Accumulations of tiny, plastic particles containing PCBs and DDEs can cause toxic effects from ingestion.

- Underwater noise. Sonar transmissions from military vessels, underwater detonations during military exercises, and vessel noise may interfere with behavior, and result in physical harm or loss of hearing sensitivity.
- Climate change. Rising ocean temperatures and ocean acidification from climate change could result in lower ocean productivity and decreased food availability.

CONSERVATION ACTIONS: Actions specific to false killer whales should include the following:

- Reduce marine debris and pollutants in the marine environment.
- Continue to reduce vessel strikes and entanglement.
- Continue to collaborate with the National Oceanic and Atmospheric Administration (NOAA) on enforcement of the Marine Mammal Protection Act as it relates to preventing marine mammal harassment and disturbance.
- Incorporate false killer whales and other marine mammals in Hawaiian Islands Humpback Whale National Marine Sanctuary management.
- Collaborate with local conservation organizations working on cetacean conservation and education.

MONITORING:

- Monitor abundance and distribution of false killer whales in Hawaiian waters.
- Continue monitoring entanglement and fisheries bycatch.

RESEARCH PRIORITIES:

- Evaluate habitat use, feeding behaviors, and other biological information.
- Evaluate impacts of plastics and marine debris on marine mammals.
- Evaluate impacts of whale-watching and other tourist activities on false killer whales.

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