



Marine Mammals

False killer whale

Pseudorca crassidens

SPECIES STATUS:

IUCN Red List - Lower Risk/ Conservation Dependent
National Marine Fisheries Service Strategic Stock

SPECIES INFORMATION: False killer whales (*Pseudorca crassidens*) can be found at the broadest range of depths of all the cetaceans in Hawai‘i. In Hawai‘i, false killer whales feed primarily on mahi mahi and yellowfin tuna. They discard the internal organs, gills, and tail. To increase success of finding prey, these whales travel in a broad band that can be up to several kilometers (miles) wide. Food sharing has been documented, and they feed during the day and at night. False killer whales have a breeding season that lasts several months. Gestation periods range from 14 to 16 months and lactation occurs for one and a half to two years. False killer whales have low reproduction rates with calving intervals of approximately seven years. These whales are gregarious and form strong social bonds. They are usually found in groups of ten to twenty that belong to much larger groups of up to 40 individuals in Hawai‘i and 100 individuals elsewhere. They also are found with other cetaceans, most notably the bottlenose dolphin. False killer whales in Hawai‘i may be reproductively isolated from other populations in the Pacific; however, there are no island resident populations.

DISTRIBUTION: They are found throughout the Hawaiian Islands in both shallow and deep water. In the Main Hawaiian Islands, a recent study found them off the island of Hawai‘i, O‘ahu, and the island group of Maui, Moloka‘i, Lāna‘i, and Kaho‘olawe.

ABUNDANCE: Barlow (2003) estimates population abundance at 268 in the entire Hawaiian Exclusive Economic Zone. False killer whales are rarely seen in Hawaiian waters. There is no clear abundance trend.

LOCATION AND CONDITION OF KEY HABITAT: False killer whales inhabit both shallow and deep oceanic waters in Hawai‘i.

THREATS:

- Fisheries bycatch is a major threat to false killer whales in Hawai‘i. Specifically, false killer whales have been recorded interacting with Hawaii’s longline fisheries and bottomfish fisheries off the NWHI. These types of interactions can result in injury such as dorsal fin disfigurement or death. Dorsal fin disfigurement may affect reproduction and survival. False killer whales also have been documented stealing yellowfin tuna and mahi mahi off trolling lines from large commercial fisheries. Intentional death may result from this interaction as fishermen want to decrease their competition for fish;

- Marine debris, in the form of small plastic particles, accumulates in the Hawaiian Archipelago. These plastic particles contain harmful chemicals such as PCBs and DDEs. False killer whales not only ingest these particles, but the plastic can also cause intestinal injury or blockage. Derelict fishing gear is another marine debris problem in the Hawaiian Islands as it can entangle false killer whales;
- Man-made noise caused by the many commercial, military, and private vessels that enter Hawaiian waters has been documented to disrupt cetacean's foraging and nursing behavior and possibly feeding and breeding behaviors as well;
- Disturbance from whale-watching tours and marine pollutants are two other threats that may affect the false killer whales.

CONSERVATION ACTIONS: In addition to common statewide and marine conservation actions, specific actions include:

- Establish a systematic fisheries monitoring system for interactions with false killer whales;
- Continue working to decrease marine debris;
- Continue to collaborate with NOAA on enforcement of the Marine Mammal Protection Act as it relates to preventing marine mammal harassment and disturbance;
- Continue collaboration with NOAA, agency partners, and stakeholders in the process of considering species for inclusion in the HIHWNMS;
- Work with partners to decrease pollutants and chemicals in the marine environment;
- Work with and assist local conservation organizations working on cetacean conservation, education, and marine debris clean-up.

MONITORING:

- Survey nearshore habitat for detailed population size and distribution;
- Monitor the number of false killer whales entangled or otherwise impacted by marine debris and taken as fisheries bycatch.

RESEARCH PRIORITIES:

- Continue researching habitat use, feeding behaviors, and other biological information;
- Collaborate with NOAA to understand interactions with nearshore fisheries;
- Research impacts and toxicity of small plastic pellet debris on marine mammals;
- Initiate studies to determine threats and minimize their impacts;
- Study potential impacts of whale-watching and other tourism related activities on false killer whales.

References:

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