

## Main Hawaiian Island Insular False Killer Whale

**COMMON NAME:** Insular False Killer Whale

**HAWAIIAN NAME:** False Killer Whale

**SCIENTIFIC NAME:** *Pseudorca crassidens*

**LEGAL STATUS:** Endangered (Federal and State) Main Hawaiian Islands Insular False Killer Whale Distinct Population Segment. Protected under the MMPA. Endangered (IUCN Red List).

**APPEARANCE:** False killer whales are large members of the dolphin family. Females reach lengths of 15 feet, while males are almost 20 feet. In adulthood, false killer whales can weigh approximately 1,500 pounds. Their dorsal fin is tall and their flippers (pectoral fins) have a distinctive hump or bulge in the middle of the front edge. Their body shape is more slender than other large delphinids.



**BEHAVIOR:** They form strong social bonds, usually found in groups of 10-20; they are known to "strand" in large groups. They are also found with other cetaceans, most notably bottlenose dolphins.

**NATIVE RANGE:** False killer whales are found worldwide mainly in tropical and warm-temperate waters. Adapted to an island-associated foraging strategy and overall ecology, insular false killer whales are generally found in deeper waters just offshore. These areas offer a wide range of depths for insular false killer whales to travel, forage, and move freely around and between the islands.

**DIET:** MHI insular false killer whales feed on a variety of large pelagic fish as well as squid (cephalopods).

**ECOLOGICAL THREATS:** Reasons for the decline of the MHI insular false killer whale DPS include:

- Marine debris entanglement or ingestion
- Contaminants and toxins introduced through prey consumption can put individual health or reproduction at risk
- Interactions with long-line fisheries or consuming previously hooked fish
- Incidental take in commercial and recreational non-longline fisheries
- Biomagnification of some pollutants can adversely affect health in these top marine predators, causing immune suppression, decreased reproduction, or other impairments
- Water pollution and changes in water temperatures may also increase pathogens, naturally occurring toxins, or parasites in surrounding waters
- Inherently slow reproductive rates and an aging population
- Low genetic diversity
- Waters with in-water noise below levels that impact false killer whales' ability to detect, interpret, and utilize acoustic cues that support important life history functions
- Exposure to infectious or harmful agents (such as bacteria, viruses, toxins, or parasites) either through their prey or directly through ingestion of contaminated waters

**MCBH CONSERVATION MEASURES:** There have been no official or anecdotal sightings of the insular false killer whale within MCBH's 500 yd Naval Defensive Sea Area, otherwise known as the security buffer zone. The waters surrounding the Mōkapu peninsula outside of the security buffer zone contain habitat normally associated with foraging by the MHI insular false killer whales. Although there are no geographical areas owned or controlled by the Department of Defense at MCBH that

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overlap with the areas under consideration for MHI insular false whale critical habitat, MCBH does conduct programs and activities that would indirectly benefit the MHI insular false killer whales.

Conservation measures at MCBH that benefit the insular false killer whale include:

- **Monitor for presence of MHI insular false killer whales to help direct management activities.**
- **Monitor recreational water activities.** Ensure recreational fishermen attend to their gear, do not discard fishing line or hooks into the water, take immediate action to free the MHI insular false killer whales minimizing injury, and avoid further interactions should an incident occur.
- **Hazardous waste, toxins and contaminants control.** MCBH has a number of programs in place, i.e., Storm Water Management and Monitoring Program, HAZMAT/HAZMIN programs, recycling, maintain oil water separators, and conducts water quality monitoring to prevent and contain environmental contaminants or hazardous material from entering coastal waters.
- **Removal of marine debris.** MCBH conducts efforts to remove marine debris that washes up on Base beaches.
- **Feral animal control.** MCBH has an active feral and nuisance animal control program, which includes capturing and removing rats and cats that can potentially spread toxoplasmosis into the marine environment.
- **Interagency cooperation.** MCBH collaborates with NOAA Fisheries regarding data sharing on marine mammals including insular false killer whale sightings (none to date). If a sick, injured, stranded, entangled, or dead marine mammal appears in MCBH waters or on beaches it is reported, protected, and if necessary transferred to appropriate authorities at NOAA Fisheries for rehabilitation and/or necropsy
- **Education and outreach.** MCBH works with the Marine Corps Community Services (MCCS) marina to disperse educational material to prevent disposing of plastics, nets, or potential contaminants into the ocean and to prevent boat strikes of the MHI insular false killer whales.

For more information: MCBH Integrated Natural Resources Management Plan. 2016. Section 5, 7.4, and Appendix

### PHOTOS

1. False killer whale. Marie Hill, 2013