Marine Mammals

Other Toothed Whales



Feresa attenuata (DD)

Grampus griseus (LC)

Indopacetus pacificus (DD)

Kogia breviceps (DD)

Kogia sima (DD)

Lagenodelphis hosei (LC)

Mesoplodon densirostris (DD)

Orcinus orca (DD)

Peponocephala electra (LC)

Physeter macrocephalus (FE, SE, VU)

Stenella coeruleoalba (LC)

Steno bredanensis (LC)

Ziphius cavirostris (LC)

SPECIES STATUS:

Sperm whale (*Physeter macrocephalus*) is Federally and State Listed as Endangered (FE, SE) IUCN Red List - Various (see abbreviations below)

IUCN Data Deficient (DD)

IUCN Least Concern (LC)

IUCN Vulnerable (VU)

SPECIES INFORMATION: The other toothed whales of Hawai'i besides the spotted, bottlenose, and spinner dolphins and false killer and short-finned pilot whales, which are considered in separate fact sheets, are: pygmy killer whales (*Feresa attenuata*), Risso's dolphins (*Grampus griseus*), Longman's beaked whales (*Indopacetus pacificus*), pygmy sperm whales (*Kogia breviceps*), dwarf sperm whales (*Kogia sima*), Fraser's dolphins (*Lagenodelphis hosei*), Blainville's beaked whales (*Mesoplodon densirostris*), killer whales (*Orcinus orca*), melon-headed whales (*Peponocephala electra*), sperm whales (*Physeter macrocephalus*), striped dolphins (*Stenella coeruleoalba*), nai'a or rough-toothed dolphins (*Steno bredanensis*), and Cuvier's beaked whales (*Ziphius cavirostris*). Feeding habits vary for these toothed whales. The sperm whale feeds on a variety of prey types including large squid, sharks, demersal rays, and bony fish, while the pygmy and dwarf sperm whales feed on smaller cephalopods and crustaceans. The beaked whales and the majority of the ocean dolphins feed on squid and small fishes. Some also feed on crustaceans. They also differ in their foraging behaviors. The sperm whales, nai'a, Fraser's, and Risso's dolphins and Cuvier's beaked and melon-headed whales all feed in deep waters. The striped dolphin has a more diverse diet and feeds throughout the water column. Killer whales

have the most diverse diet of all the toothed whales, feeding on schooling fish, squid, sharks, and large baleen whales; they also feed cooperatively. There is little information about reproduction for pygmy killer whales; Longman's, Blainville's, and Cuvier's beaked whales; Risso's and Fraser's dolphins; and nai'a. Gestation lasts for one year for the pygmy and dwarf sperm whales, striped dolphin, and melon-headed whale. Most species care for a single calf at a time. The killer and sperm whales are sexually mature after 11 years of age. The sperm whale breeds in the tropics and gives birth in the spring. Killer whale calves are nursed for a year. Striped dolphins care for their young in groups of about 30, and calving intervals are four years. Some of these whales, such as the pygmy and dwarf sperm whales, are solitary, while others such as the killer whale, Fraser's dolphin, and melon-headed whale form large social groups. The killer whale, sperm whale, and Longman's beaked whale form strong social bonds.

DISTRIBUTION: Pygmy killer whales have been sighted off Ni'ihau, O'ahu, Maui, and the island of Hawai'i. Risso's dolphins are rare and have been sighted off the coast of Kona. Longman's beaked whales and Fraser's dolphins have not been recorded in nearshore Hawaiian waters, but they occur in offshore waters and may be occasional visitors. Pygmy and dwarf sperm whales, Blainville's and Cuvier's beaked whales, and nai'a are found throughout the Main Hawaiian Islands (MHI). Killer whales are only occasional visitors to Hawai'i but have been sighted off Kaua'i, the Wai'anae coast of O'ahu, southwest Lāna'i, and off Kona, Hawai'i. Melonheaded whales are common throughout the MHI, with groups sighted off of the Wai'anae coast, southwest Lāna'i, and Kona. The sperm whale is found throughout all the MHI and the Northwestern Hawaiian Islands (NWHI). The striped dolphin has been seen off Ni'ihau and west of O'ahu.

ABUNDANCE: Abundance estimates in the Hawaiian Islands Exclusive Economic Zone are as follows: pygmy killer whale 3,433, Risso's dolphin 5,207, Longman's beaked whale 4,571, Fraser's dolphin 10,226, Blainville's beaked whale 2,338, killer whale 101, melon-headed whale 447, sperm whales 3,354, striped dolphin 20,650, nai'a 6,288, and Cuvier's beaked whale 1,941. There are no current abundance estimates for pygmy and dwarf sperm whales. There are no available data on population trends in Hawaiian waters.

LOCATION AND CONDITION OF KEY HABITAT: Most of these species except striped dolphins, dwarf sperm whales, and killer whales live only in deep (e.g., >100 meters depth), oceanic waters but can occur within state waters, especially in areas with steep drop-offs like off much of Hawai'i and Southwest Maui County.

THREATS:

- Boat strikes and entanglement. Ships colliding with whales (most notably, sperm whales), and entanglement in fishing gear (both operational and derelict gear) such as drift gillnets, longlines, and purse seines are major threats, causing injury and mortality.
- <u>Underwater noise</u>. 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. Cuvier's and Blainville's beaked whales and killer whales are especially sensitive to noise.
- <u>Marine pollution and debris</u>. Ingestion of marine debris can cause intestinal injury or blockage. Accumulations of tiny, plastic particles containing PCBs and DDEs can cause

toxic effects when ingested.

CONSERVATION ACTIONS: Actions specific to toothed whales should include the following:

- Continue to reduce vessel strikes and entanglement.
- Reduce marine debris and pollutants in the marine environment.
- Incorporate toothed whales and other marine mammals in Hawaiian Islands Humpback Whale National Marine Sanctuary management.
- Collaborate with local conservation organizations on cetacean conservation, education, and marine debris clean-up.

MONITORING:

- Monitor abundance and distribution of toothed whales in Hawaiian waters.
- Monitor mortality and injury from entanglement and boat strikes.

RESEARCH PRIORITIES:

- Continue research on stock structure, habitat, and ecology.
- Evaluate impacts and toxicity of small plastic pellet debris on toothed whales.
- Examine impacts of vessel noise and sonar transmissions on toothed whales.

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