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Injuries from fisheries

Pseudorca are the most frequently bycaught species of whale or dolphin in the Hawai'i longline fishery (an estimated 10-15 killed or seriously injured each year). The insular population has a high rate of dorsal fin injuries from line interactions as shown in the photos on the left, with one individual having lost its entire dorsal fin.

For more information on *Pseudorca* in Hawai'i see:

www.cascadiaresearch.org/hawaii/falsekillerwhale.htm

www.fpir.noaa.gov/PRD/prd_false_killer_whale.html

National Marine Fisheries Service proposed listing the Hawaiian insular false killer whales as Endangered under the U.S. Endangered Species Act on November 17, 2010. This came after a year-long review by a NMFS team which found that the whales constitute a distinct population and that the population is in danger of extinction throughout its range. Under the Endangered Species Act, NMFS now has one year to make a final decision about whether or not to list the insular *Pseudorca* as an Endangered species. To make comments (by February 15, 2011) go to www.regulations.gov and search for "false killer whale".

What can you do to help the *Pseudorca*?

- Eat sustainably caught fish
- Don't use pesticides or other household toxic chemicals
- If you fish, use circle hooks



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Skull illustrations from skullsunlimited.com
All other illustrations by Uko Gorter

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Pseudorca



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Hawai'i's False Killer Whales



Hawai'i's *Pseudorca* are in decline

Pseudorca, or false killer whales, are a rare, normally open-ocean dolphin. In Hawaiian waters there are two populations of *Pseudorca*: island associated (insular) and those that live offshore (pelagic). Due to ongoing research over the last 11 years, more is known about *Pseudorca* in Hawai'i than anywhere else. The insular population is truly kama'āina - they are long-term residents genetically different from *Pseudorca* elsewhere and the only known insular *Pseudorca* population in the world. This population has declined from about 500 individuals in the late 1980s to about 150 individuals today.

What has caused the decline?

- Accumulating high levels of persistent organic pollutants in their bodies
- Reduction in available food
- Fishing gear entanglement and eating hooked fish
- Humans deliberately shooting the whales to prevent them from eating their catch.



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Cool Fact!

Pseudorca cooperatively hunt and share their prey, often passing it back and forth many times before starting to consume it. They have even been known to share their catch with human swimmers and people in boats. Since *Pseudorca* feed on large fish and commonly bring them to the surface, more is known about their diet than any other marine mammal in Hawai'i.



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A group of *Pseudorca* sharing a tuna

AT RISK - *Pseudorca* life history explains their vulnerability

- *Pseudorca* grow slowly and live for a long time - around 60 years. They are slow to reproduce (1 offspring every 6-7 years), and like humans, female *Pseudorca* go through menopause, having a long post-reproductive period.
- *Pseudorca* feed on large game fish like yellowfin tuna, mahimahi, ono and swordfish which are high on the marine food web.
- Because they are long-lived and feed high on the food web, *Pseudorca* accumulate high levels of pollutants such as PCBs, DDTs, and flame retardants that have built up in the food they eat.
- Such high levels of pollutants in the body may impact the immune system and/or reproduction in *Pseudorca*.

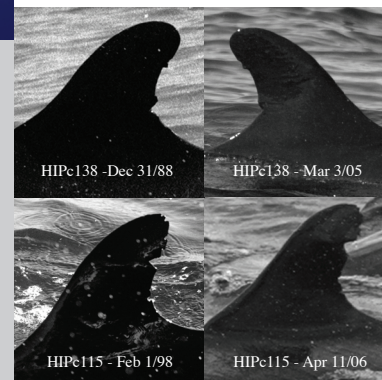
How scientists learn about *Pseudorca* in Hawai'i

Tracking ➡

Along with continued photo-ID work, satellite tags are being used on *Pseudorca* around Hawai'i to better understand movements and habitat use. This map shows 10 days of movements of a *Pseudorca* tagged off O'ahu in October 2010.



Dorsal fin matching ⬇



Distinctive dorsal fins allow individuals to be followed over the years.

Did you know?

False killer whales were given the name *Pseudorca* because of similarities to killer whales in the skull and teeth.

