



## **Marine Fishes**

### **Sharks and Rays**

**Great white shark**

**Niuhi**

*Carcharodon carcharias*

**Whale shark**

**Lele wa'a**

*Rhincodon typus*

**Manta ray**

**Hāhālua**

*Manta alfredi* or *Manta birostris*

#### **SPECIES STATUS:**

IUCN Red List – sharks are Vulnerable, Manta ray is Data Deficient  
None Endemic

**SPECIES INFORMATION:** Great whites (niuhi) are predators on large fishes, marine mammals, and some sea turtles and larger invertebrates. Whale sharks filter feed on planktonic schooling fishes, squids, and crustacean larvae and adults. Manta rays are planktonic filter feeders in coastal waters. These species have slow growth rates and low fecundity that limit their recovery from threats. The sharks travel widely and may only be occasional visitors to Hawai'i. Recent tagging of great white sharks off California found that many took unexpectedly large migrations into the Central Pacific Ocean, including one individual that made it all the way to Hawai'i for a few months. Manta taxonomy is confused so it cannot be determined whether our species is *alfredi* or *birostris* at this time.

**DISTRIBUTION:** All species are likely to occur throughout the Hawaiian Islands but great whites (niuhi) have been noted in the main islands through Laysan Island, and whale sharks have been recorded throughout the main islands.

**ABUNDANCE:** There are no systematic survey efforts for these species.

**LOCATION AND CONDITION OF KEY HABITAT:** All species can be found in shallow water depths. A tagged great white shark spent most of its time in very deep water however. All are wide ranging. Manta rays can be predictably found off parts of the west coast of the island of Hawai'i.

**THREATS:**

- These species are threatened by fisheries bycatch and directed catch in other parts of the world for food, medicinal and other commercial uses;
- Tourism to see manta rays occurs on the Kona Coast of the island of Hawai'i. Tourism for great white and whale sharks occurs elsewhere but their presence here is too unpredictable to make tourism feasible.

**CONSERVATION ACTIONS:** The goals of conservation actions are to not only protect current populations, but to also establish further populations to reduce the risk of extinction. These sharks are listed in Appendix II of the Convention on International Trade in Endangered Species (CITES). In addition to common statewide and island conservation actions, specific actions include:

- Maintain healthy populations with appropriate fishing regulations, enforcement, and education.

**MONITORING:**

- Continue to survey for populations and distribution in known and likely habitats.

**RESEARCH PRIORITIES:**

- Improve understanding of factors affecting the species population size and distribution.

**References:**

Crow GL, Crites J. 2002. Sharks and rays of Hawaii. Honolulu, HI: Mutual Publishing. 203 pp.

International Union for the Conservation of Nature and Natural Resources. [Internet] Threatened Red List. Available from: <http://www.redlist.org/search/search-expert.php> (Accessed May 2005).

Mundy B. In press. A checklist of the fishes of the Hawaiian Archipelago. Bishop Museum Bulletin of Zoology, B. P. Bishop Museum Press. 1340 ms. pages.