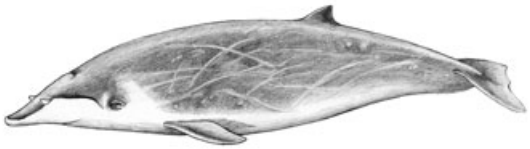
Alaska Department of Fish & Game

# Stejneger's Beaked Whale



**Stejneger's beaked**, or saber toothed whale (*Mesoplodon stejnegeri*) is a medium-sized beaked whale of the family Ziphiidae. It can be found in the North Pacific along the Aleutian Islands and the adjacent waters of the Bering Sea and Gulf of Alaska, south to the coast of California. Scarring from cookie cutter sharks suggests that the whales may also inhabit tropical and temperate waters. A discrete population is thought to inhabit the Sea of Japan. The Stejneger's beaked whale is commonly found along the 2,500 ft (750 m) to 5,000 ft (1,500 m) slopes in deep waters.

**General description:** At birth the Stejneger's beaked whale measures about 6 ft 11 in (2.1 m) to 7 ft 7in (2.2 m). The average size of adult whales is 16 ft (5 m) and they weigh about 1.3 tons.

The Stejneger's beaked whale has a narrow body with a relatively undeveloped melon that slopes into a medium length beak. The mouth line forms a smooth upward curve with a prominent arch toward the rear of the jaw. The lower jaw protrudes beyond the upper jaw, hence its name, the saber toothed whale. One pair of throat grooves is present. The single blow hole appears as a slight depression from the side view. Two triangular, laterally compressed teeth are visible outside the mouth forward of the apex of this arch in adult males. The dorsal fin is small and falcate (hooked) located far beyond mid-back. The flippers are small and fit into depressions in the body called flipper pockets that allow for a more hydrodynamic profile.

The color of the Stejneger's beaked whale is grayish brown on the back and lighter on the belly with a mottled pattern of light gray to white on the underside of females. The upper surface of the head and eyes is a dark brownish gray forming a cranial cap. This dark pigmentation is also present in the flipper pockets. White oval scars are present on the posterior half of the body and near the genitals. Males have long linear scars on much of the body. These scars are thought to be caused during breeding time by the teeth of other males as they battle for females.

**Food habits:** Toothed whales use echolocation to locate their prey. High frequency sound waves are produced in the nasal complex and are focused through the melon (forehead) into the whale's surroundings. As these waves hit an object they bounce back as echoes giving the whale information about prey and the environment. Beaked whales capture their prey by "suction feeding" using the throat grooves for rapid expansion of the oral cavity to suck prey into their mouths. They feed primarily on squid from the taxonomic families Gonatidae and Cranchiidae, which are deep water squid (650 ft (200 m) or more) that do not spend time near the surface indicating that Stejneger's beaked whales forage in deep water.

**Life history:** Little is known about the life history of Stejneger's beaked whales. Most of what is known about them comes from stranded specimens. Calving is thought to occur from April to May.

**Seasonal movements:** Not much is known about movements, but strandings off the coast of Japan in the spring and winter suggest that the whales may be migratory.

**Behavior:** Stejneger's beaked whales have been reported to travel in pods of 1–15 at speeds of up to 6.0 knots. They travel close together and surface from dives in unison. They are reportedly shy of boats and generally try to avoid them.

**Population size:** There are no estimates of abundance for Stejnegjer's beaked whales but they are not currently listed as 'threatened' or 'endangered' under the Endangered Species Act, nor are they listed as 'depleted' under the Marine Mammal Protection Act.

**Predators, hunting, and other mortality:** Sharks and killer whales are possible predators of Stejneger's beaked whales and they are occasionally drowned in gillnets. Stejneger's and Cuvier's beaked whales were hunted in the past by Japan. Cookie cutter sharks (Isistus brasiliensis) are thought to cause the crescent shaped scars on the tail and body and large numbers of nematodes have been reported in the kidneys, however it is unknown if these parasites cause mortalities in otherwise healthy animals.

Text: Juan Leon Guerrero