



Baird's Beaked Whale

Baird's beaked, or bottlenose whale (*Berardius bairdii*), is a large odontocete (toothed whale) and the largest whale in the family Ziphiidae. It inhabits the North Pacific and Bering Sea along the Aleutian Islands as well as the adjacent waters of the Gulf of Alaska, Sea of Okhotsk, and the Sea of Japan.

General description: At birth, Baird's beaked whales measure about 14 feet (4.2 m) long. Adult females average 37 feet (11.3 m) and weigh 12.5 tons (11,339 kg); the largest recorded female was 42 feet (12.6 meters) long. Adult males are slightly smaller than females with an average length of 34 feet (10.4 m) and weigh 10 tons (9,071.8 kg).

The Baird's beaked whale has a prominent forehead or melon that slopes into a long beak. The mouth is long and curved upwards and there are two long v-shaped grooves accompanied by two accessory grooves on the throat. The lower jaw extends beyond the upper jaw and has two protruding triangular teeth that are present in both mature males and females.

The body is cylindrical with a small triangular dorsal fin positioned about two thirds the distance to the flukes. The dorsal fin is slightly falcate (hooked) near the rear margin and slightly rounded at the tip. The flippers are small and rounded and fit into depressions in the body called flipper pockets that allow for a more hydrodynamic profile when the flippers are not being used for turning.

The color of Baird's beaked whales ranges from grey to brown to black with white blotches under the throat, between the flippers, and near the navel. Various scars and scratches occur on mature males but are absent on females and immature males. These scars are thought to be caused by the teeth of other males during breeding battles.

Food habits: Toothed whales use echolocation to locate their prey. High frequency sound waves are produced in the nasal complex and focused through the melon into the water, as these sound waves hit an object they bounce back as echoes giving the whale information about its prey and the environment. Baird's beaked whales capture their prey by "suction feeding" in which the accessory grooves and throat grooves allow the rapid expansion of the oral cavity to suck prey into their mouth. They are thought to forage at depths greater than 3,000 feet (~1,000 m) and are known to prey on squid, skates, rat-tails, rockfish, and octopus.

Life history: Breeding is thought to occur between October and November. A single calf is born after a gestation period of 17 months with many of the births occurring in the months of March and April. Females reach sexual maturity between 10–15 years of age and ovulate once every two years throughout their lifespan of 58 years. Though they probably only reproduce once every 3 years. Males mature between the ages of 6–12 years and have a lifespan of about 84 years.

Seasonal movements: Little is known about movements of Baird's beaked whales. They are found along 1,000–3,000 meter contours, along the continental shelf as well as near submarine canyons and sea-mounts.

Behavior: Baird's beaked whales are reported to be shy and difficult to approach with boats. They travel in pods of two to 20 in a tight formation and may respire at the surface in synchrony. A single deep dive (>1,000 m) is usually followed by a series of intermediate dives (<1,000 m). Little is known about the purpose of this dive sequence, although it is thought that the shallow dives are needed to recover from oxygen debt created by the deep dive. It is possible, however that they are also foraging at the intermediate depths as many of their prey are found there. Due to the shyness and open ocean habitats of these whales, most of what is known about the species has been learned from dead animals found on the beach.

Population size: There are no estimates of abundance for Baird'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: Killer whales are the only known predators of Baird's beaked whales. A substantial commercial harvest occurred in the past by several countries but there is a quota of 54 per year currently taken by Japan. Some are drowned each year in fishing nets, however little is known about other causes of mortality such as parasites or disease. Baird's beaked whales 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.

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