
**Common Name: HUMPBACK WHALE**

**Scientific Name:** *Megaptera novaeangliae* Borowski

**Other Commonly Used Names:** humpback

**Previously Used Names:** *Balaena novaeangliae*

**Family:** Balaenopteridae

**Rarity Ranks:** G4/SNRN

**State Legal Status:** Endangered

**Federal Legal Status:** Endangered

**Description:** Humpbacks are medium-size whales averaging 14 meters (46 feet) in length and weighing up to 43 metric tons (47 U.S. tons). Humpbacks are generally grayish-black on their back, contrasting with white flippers, sides and belly. The most distinctive feature of humpbacks is their long white flippers that can be up to ⅓ of their total body length. The white pigmentation gives their flippers the appearance of long, bluish-green wings when seen through the water. Humpbacks' heads and jaws are covered in large bumps, called tubercles. They have a small dorsal fin and long throat grooves that enable their throat to distend during feeding. The underside of a humpback's fluke features a distinctive black and white pattern that can be used to distinguish whales from one another.

**Similar Species:** Humpback and North Atlantic right whales are the two whale species most commonly sighted off the Georgia coast. Right whales can be distinguished by their black flippers and lack of a dorsal fin. Humpbacks are in the rorqual family which includes the blue, fin, minke, sei, and Bryde's whales. Humpbacks' stocky appearance and long white flippers make them easy to distinguish from other rorqual species.

**Range and Habitat:** Humpback whales inhabit the Atlantic, Pacific, and Indian oceans. Most subpopulations are migratory, alternating between tropical/subtropical waters in winter for breeding and temperate/subpolar waters for feeding in summer. Members of the North Atlantic subpopulation spend their summers at distinct foraging grounds in the Gulf of Maine, Gulf of St. Lawrence, and off Newfoundland, Labrador, and western Greenland. Photo-identification data indicate that whales have high fidelity for their foraging grounds, meaning that they do not travel among the different foraging grounds. Foraging grounds in the North Atlantic are located along the coastal shelf and tend to have high levels of productivity. Each winter, North Atlantic humpbacks migrate south to the West Indies in order to breed and have their calves. Well documented wintering grounds include Silver Bank, Navidad Bank, and Samana Bank off of the Dominican Republic. The reason why humpback whales return to these specific sites each winter is unknown. Sightings and strandings of humpbacks occur during the winter months off the southeast and mid-Atlantic U.S. coasts, indicating that some whales do not make the trip to the West Indies in winter. These whales are often small in size indicating that they are likely juvenile non-breeding whales.

**Diet:** Humpbacks feed primarily on krill and small schooling fish, such as herring, sand lace, and sardines. Their diet and foraging techniques vary widely compared to most baleen whales. In general, humpbacks are "lunge feeders," meaning that they swim toward an aggregation of prey with their mouth closed, then open their mouth and lunge toward the prey, thereby quickly engulfing a large mouthful of food and seawater. Once the mouth is closed, massive amounts of seawater are forced out of the mouth through their baleen, leaving the prey behind. Humpbacks may use exhalations of bubbles to concentrate prey. They may also cooperate with one another to improve foraging efficiency by, for example, timing foraging lunges with vocalizations.

**Life History:** Humpback whales may be found alone or in groups. Large aggregations of whales are routinely seen on the feeding grounds during summer. Membership in groups is usually short-lived, although some whales may stay together for periods of time when foraging

cooperatively. During winter, female humpbacks engage in elaborate courtship behavior. Single males will often make elaborate series of calls referred to as "songs." Songs can last for over an hour and presumably play a role in attracting females. Single females and females with calves are often accompanied by male "escorts" while on the breeding grounds. Other males may arrive in order to challenge these males for access to their females, resulting in temporary competitive groups of 10 or more whales. Competitive groups sometimes exhibit raucous behavior with multiple males bumping, breeching onto, and slapping one another. Female humpbacks have their first calf at approximately 5 - 7 years of age. Gestation lasts about 1 year. Calves are 4 - 5 meters (13 - 15 feet) long and about 700 kg (1,500 pounds) at birth. Females may nurse their calves for up to a year, but most are weaned much sooner. A mature female usually calves every 2 - 3 years. Young whales and whales in poor condition may be preyed upon by killer whales and large sharks. Healthy adult humpbacks probably have no natural predators.

**Threats:** The commercial whaling industry reduced humpback populations throughout much of the species' range. Commercial harvest of humpbacks was banned in the North Atlantic in 1955 and most other locations in 1966. Today entanglement in commercial fishing gear is the primary threat to humpback whales. Humpback whales frequently become entangled in fixed fishing gear during the summer months off New England and Atlantic Canada. Other threats include collisions with ships and habitat degradation.

**Georgia Conservation Status:** The North Atlantic humpback population numbers at least 11,000 and is increasing steadily at approximately 3% per year. The species is listed as Endangered under the Endangered Species Act of 1973 and the Georgia Endangered Wildlife Act of 1973. The National Marine Fisheries Service (NMFS) is considering reviewing the humpback's status under the Endangered Species Act, which could ultimately lead to down-listing the species to Threatened.

**Conservation and Management Recommendations:** Current conservation efforts focus on reducing mortality from entanglement in commercial fishing gear. NMFS created the Atlantic Large Whale Take Reduction Team (ALWTRT) in 1996 to reduce the sources of fishing entanglements. It is unclear whether the ALWTRT has succeeded in this goal. The Atlantic Large Whale Disentanglement Network (ALWDN) is a network of 18 first response teams from Florida to Canada that document entangled whales and disentangle whales when possible.

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