



Humpback Whale

North Carolina Wildlife Profiles



Humpback Whale

Megaptera novaeangliae

The humpback whale is the best known and most studied baleen whale, easily recognizable by its long pectoral fins, and aerial behaviors. Humpback whales have bumps known as *tubercles* on their heads, which may have a sensory function, and as many as 400 baleen plates on each side of the mouth. Adults can reach 17 meters long but usually are 14–15 meters; adult females are slightly longer than males.

Description

The body is black on the dorsal surface and white, black or mottled on the ventral surface. The flippers are 1/3 the length of the body and are white on North Atlantic humpbacks, usually black on North Pacific humpbacks. The dorsal fin shape varies, but is usually small and falcate-shaped. As with all rorqual whales, humpbacks have ventral pleats from the tip of the lower jaw to the umbilical region. Individual humpbacks are identified by the underside of their tail, each of which has a unique color pattern.

History and Status

Georg Borowski, a naturalist from Germany, described this species in New England in 1751. The genus name, *Megaptera*, comes from the Greek for “big wing” (*mega*= big and *pteron*= wing) and the species name, *novaeangliae*, from Latin for New England. *Megaptera* is one of two genera in the family Balaenopteridae, the rorqual whales. The genus *Megaptera* is “monotypic,” which means that there are no other species in this genus.

Approximately 200,000 humpback whales were slaughtered in the Southern Hemisphere in the 20th century. Of these, more than 48,000 were taken illegally by the Soviet Union. Commercial whaling for humpbacks ended worldwide in 1966, although hunting continued by the Soviet Union for some years after. Some researchers estimate that as much as 95 percent of the worldwide population of humpback whales were taken by whalers. The humpback is now listed as endangered.

Today, population levels currently appear to be increasing at a growth rate of 6.5 percent to 10 percent in the most studied populations. Two exceptions to this recovery are humpbacks in Oceania and in the Arabian Sea. There are an estimated 10,400 humpback whales in the North Atlantic and 6,000-8,000 in the North Pacific. The effects of varying contaminant residue levels in humpback tissues from chemical pollution among many whale populations are unknown. Entanglement in fishing gear, ship strikes, and noise pollution are the more critical threats.

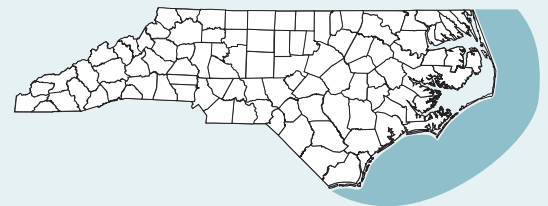
Humpback whales are the most commonly sighted large whales off the North Carolina coast.



Range and Distribution

Humpback whales are found in all of the world's oceans. They spend spring through fall in colder feeding grounds and migrate to the tropics to calve during winter months, where they do not feed. Females with calves tend to prefer shallower waters, perhaps to avoid shark predation.

Range Map



Humpback Whale

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Habitat and Habits

Humpback whales migrate from feeding grounds in colder, high latitude waters from the spring through the fall to low-latitude, tropical waters where they give birth and nurse in winter months. Humpback whales are found in coastal or shelf waters in the summer months, when they generally feed and do not reproduce. In winter months, they cluster around islands or offshore reefs in the tropics.

Both males and females reach sexual maturity at an average of five years. Mating and calving occur in the winter. Inter-birth intervals are usually two years. Calves are approximately 10–12 months old and four meters long when they become independent of their mother.

Humpback whales feed on a variety of small schooling fish (for example, herring, capelin, mackerel) and euphausiids (small shrimp-like crustaceans). Humpbacks are possibly the only whales that blow curtains of bubbles in the water to trap or herd schooling fish, then lunge through the bubble curtain and gulp up the fish. The ventral pleats expand as the humpbacks feed.

Male humpbacks sing long complex songs in the winter months, probably to attract female whales.

People Interactions

People interact with humpback whales in many ways. For many years, humpback whales and other whales were commercially hunted. Although commercial whaling officially ended in 1966, humpbacks and other whales are still hunted for scientific research and a few aboriginal hunts still take humpbacks for subsistence. Some sources of mortality for humpback whales today are entanglement in fishing gear and boat strikes. The humpback whale is the most studied of any of the baleen whales, partially because humpbacks prefer near shore waters and concentrate in groups. The humpbacks' songs and individually identifiable flukes make these whales the subject of many researchers.

Wild Facts

Classification

Class: Mammalia

Order: Cetacea

Family: Balaenopteridae

Average Length

13 m. (42') for adult males; 13.9 m. (45') for adult females.

Food

Small schooling fish (herring, menhaden, capelin, mackerel) and Euphausiids (small shrimp-like crustaceans). Humpbacks migrate greater distances than any known mammal; as much as 5,000 miles in one direction; and as many as 90% of humpbacks return to the same feeding grounds every year.

Breeding Season

Southern Hemisphere: June–October

Gestation 11 mos.–12 mos.

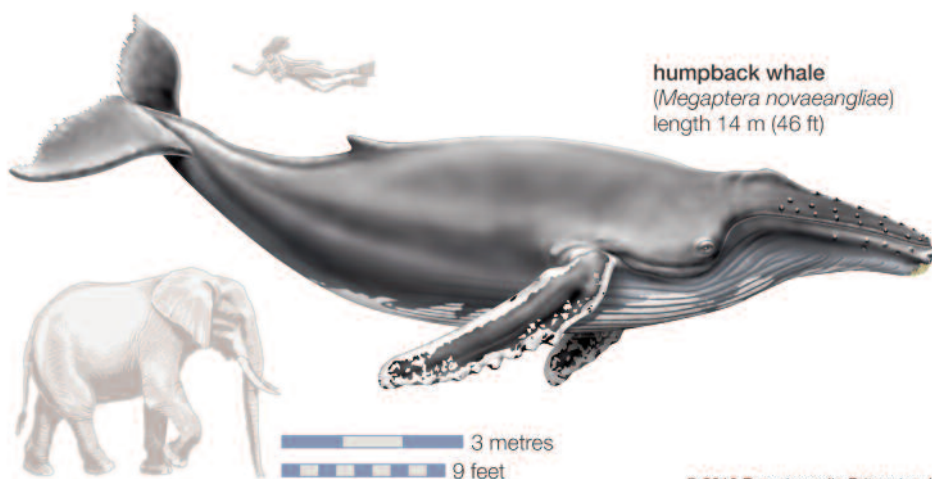
Females give birth at approximately 5 yrs.

Young

Calves nurse for 10 mos.–12 mos. Become independent at approximately 10–12 mos. old or when they reach approximately 4 m. in length. Once separated, there is little contact between mother and calf.

Life Expectancy

More than 48 yrs. Humpback age can be estimated by counting the number of growth layers in the laminar “plug” in the ear after the whale dies. Potential predators include killer whales, false killer whales and sharks. Natural markings on tail flukes are critical to identifying individuals, allowing scientists to learn about biology and behavior. Rake marks from killer whale teeth are found on many humpback whales.



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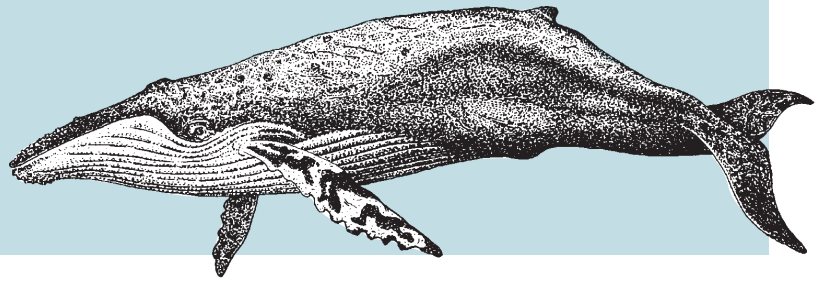
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NCWRC Interaction

Humans have studied humpback whales for many years, beginning with studies using results from commercially whaled humpbacks. Whalers gathered data on anatomy and physiology, reproduction, feeding, distribution and migration patterns.

In North Carolina, approximately two humpback whales strand dead each year. Many mortalities are caused by ship strikes or entanglement.

Humpback whales are the most commonly sighted whales off the North Carolina coast. In December through March, humpback whale blows can be seen from North Carolina beaches. The whales sometimes feed on schools of menhaden and are often seen in close proximity to groups of bottlenose dolphins.



Q&A—Resources for Teachers

1. Why does the male humpback whale sing?

The male humpback probably sings to attract female whales.

2. Are population levels of the humpback still decreasing?

Population levels currently appear to be increasing at a growth rate of 6.5 percent to 10 percent in the most studied humpback whale populations.

3. How far do humpback whales migrate?

Humpbacks migrate greater distances than any known mammal; as far as 5,000 miles in one direction.

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Credits

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