



NATIONAL AQUARIUM IN BALTIMORE.

Conservation Education Department
Pier 3, 501 East Pratt Street
Baltimore, MD 21202

Fast Facts

- ❑ The scientific name of the humpback whale means "big wing of New England."
- ❑ Humpbacks eat by gulping large amounts of seawater and filtering out small fish.
- ❑ Humpback whales blow bubbles to create a "bubble net" to corral their prey.

Key Terms

Baleen - Instead of teeth, some kinds of whales filter food out of the water using flexible, fringed plates in their mouth called baleen.

Cetaceans - The name for the group of toothed and baleen whales.

Fluke - The whale's tail is used to move the animal forward.

Ask the Aquarium

Fact Sheets from the
Conservation Education Department

Humpback Whales

The humpback whale is hard to confuse with other cetaceans because of its stocky build and long white flippers. Although its scientific name *Megaptera novaengliae* means "big wing of New England", early whalers noticed the humped look of its back as the animals dove and the name "humpback" stuck. The humpback whale, like other whales, evolved from a land-dwelling hoofed animal.

The humpback is a medium-sized whale growing to about 15.2 meters (50 feet), yet its 4.6 meter (15 feet) pectoral (side) fins, or "wings," are longer than a blue whale's at only 3.6 meters (12 feet). These long, flexible fins give the whales great maneuverability as the tail, or fluke, propel the animal forward. Distinctive coloration and patterns on the fluke help scientists to identify individual animals.

Humpback whales are found in all oceans. There are three separate populations in the North Atlantic, North Pacific, and southern hemisphere. Humpback whales generally migrate from the colder polar areas to the warmer areas bound by the Tropics of Cancer and Capricorn to winter and reproduce. While in the northern or southern polar regions, they spend most of their time feeding and training their young to find food.

Feeding Strategies

Unlike toothed whales, such as killer whales and dolphins, humpbacks do not have teeth. Instead, they use many plates of baleen to filter small marine animals from the



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water. A large part of their diet consists of krill and small schooling fish. Humpbacks are "gulpers", taking in large mouthfuls of food and water and then forcing the water through the hundreds of baleen plates that hang from their top jaw. Grooves that run along their throat expand to help hold the water, while the hairy inner side of the baleen keeps small animals from escaping as water is pushed out. The tongue then cleans off the baleen. Although they have been seen feeding alone, humpback whales may also feed in pairs or groups, and sometimes work together to create a "bubble net." In this technique, the whales swim to a point under the water, and one whale swims around in a spiral, blowing a column of large bubbles. As the bubbles rise, the imaginary "net" concentrates the food into the center. The whales then surface inside the circle and rise up with mouths open to engulf both food and water. Humpbacks eat about one ton of food each day, amounting to over one million calories.

Whale Migration

As winter approaches, humpbacks leave their feeding grounds and migrate to warmer tropical or temperate areas to breed and give birth. For the North Pacific whales this means heading to the warm waters around Hawaii. To attract mates, some males will swallow water to make themselves look bigger and might actually blast others with bubbles. The gestation period is roughly one year, and they bear young about once every two to three years. The females give birth to calves measuring 4.3 meters (14 feet), and weighing 680 kilograms (1500 pounds). A calf nurses from its mother for a little less than a year, drinking up to 450 liters (120 gallons) of milk each day. They stay in the breeding grounds from November to April.

Whale Songs

It is also in the warm water that male humpbacks sing. Their songs are complex, repeated patterns of sounds that occur in complete sequences, and may last from six to thirty minutes. Humpbacks use the same songs, composed of moans, belches, yelps, and high frequency chirps for about a year. All of the whales from a certain area "sing" the same song, which is constantly evolving and changing.

Endangered Species

Because they stay near coastal areas or islands, humpbacks are often seen performing all sorts of acrobatic stunts, including breaching, spy-hopping, flipper flopping, and lob-tailing. Scientists are not sure of the need for such displays, but one reason could be to create noise. A whale may leap and spin in the air and land with a crash that can be heard for miles.

In the early days of whaling, the

relatively small humpback was found to yield large quantities of oil from its blubber, which could be used for products that ranged from lubricants to cosmetics and margarine. Baleen from whales was used as a flexible strong material in a number of pre-plastic products, and meat could be processed into pet food. As a result of this commercial use, the humpback population has dwindled from 150,000 animals to less than 10,000 in all the oceans. Humpbacks were placed on the endangered species list in 1970; since then they have become more popular with people who are "shooting" them with cameras instead of harpoons. The humpbacks are also protected by an international ban on whaling that was passed in 1986. Even though there has been an increase in humpback numbers, it remains to be seen whether the populations will be able to make a full recovery.

PLAY! The New Dolphin Show

The Aquarium's new dolphin show will bring you into the dolphins' world – a world of learning, interaction, and play. You'll learn how dolphins learn the skills they need to survive as they chase, leap, splash, and tumble with one another and with our trainers. We hope the program will give you a new understanding of how dolphins learn and develop.

Most of all, we want you to experience what it's like to work with these magnificent animals!

Check out our interactive Web site at www.aqua.org/play to:

- Meet the Dolphins
- Watch video of our dolphins in action.
- Become a dolphin trainer online.