

## Natural Heritage & Endangered Species Program

www.mass.gov/nhesp

Massachusetts Division of Fisheries & Wildlife

## Blue Whale Balaenoptera musculus

State Status: **Endangered** Federal Status: **Endangered** 

**DESCRIPTION:** The Blue Whale has a long mottled gray body, with a broad rostrum and large ridge that extends from the blowhole to the rostrum's tip. Blue Whales are reported to weigh up to 165 tons and measure up to 110 feet depending on their location (larger whales reside in the Atlantic). However, after the long period of commercial whaling, whales of this size may no longer exist. Blue Whales appear light blue when seen through the water and those at higher latitudes can sometimes look yellow-green to brown due to cold-water diatoms. Both sides of the head are dark and the baleen is black. The dorsal fin is located threequarters of the way down the body and is relatively small, usually less than 25 cm in height. About 15% of the time, the tail is lifted out of the water when they make deep terminal dives. Like other baleen whales, female Blue Whales are somewhat larger than males.

RANGE: Populations occur in all oceans, but their distribution varies seasonally. Blue Whale populations in the North Atlantic, North Pacific, and Southern Hemisphere do not mix. Although the winter distribution of Blue Whales in the North Atlantic is not well known, their range extends from the subtropics to the Greenland Sea. They are most frequently sighted off the coast of eastern Canada throughout the summer and fall and there are rare sightings off Cape Cod. Cape Cod is considered to be at the southern edge of the Blue Whale's feeding range. Evidence also suggests there may be a Blue Whale population in the Gulf of Mexico and Caribbean, such that the species may exist in two distinct populations within the North Atlantic.

In the North Pacific, there are larger populations of Blue Whales, divided between the Eastern and Western North Pacific. The Western stock often feeds in the Gulf of Alaska throughout the summer months, while during the winter they migrate to lower latitudes in the central



Photo courtesy of NOAA

Pacific and near Hawaii. In December through March, Blue Whales and their calves can be observed in the Gulf of California offering evidence that the area is a crucial feeding and nursing zone for the species.

**DISTRIBUTION IN NEW ENGLAND:** Blue Whale sightings are characteristically very rare in New England; however, they can be seen off the coast of Cape Cod and in the Gulf of Maine. They may feed off the coast of Cape Cod throughout the summer and fall.

**LIFE HISTORY AND ECOLOGY:** Female Blue Whales become sexually mature at approximately 10 years old. Calves can weigh up to 3,000 kg at birth and measure 8 m in length. After 6 to 8 months, a calf is about 16 m in length and consumes 350 to 400 liters of milk a day.

The diet of the Blue Whale consists mainly of krill. While the whales may also eat fish and copepods, they are not a significant part of the diet.

A Species of Greatest Conservation Need in the Massachusetts State Wildlife Action Plan

## **Massachusetts Division of Fisheries & Wildlife**

1 Rabbit Hill Rd., Westborough, MA; tel: 508-389-6300; fax: 508-389-7890; www.mass.gov/dfw

Please allow the Natural Heritage & Endangered Species Program to continue to conserve the biodiversity of Massachusetts with a contribution for 'endangered wildlife conservation' on your state income tax form, as these donations comprise a significant portion of our operating budget.

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Since the prohibition of whaling, threats to Blue Whales include collisions with ships, predation by Killer Whales, ice entrapment along the southwestern coast of Newfoundland during winter and spring, pollution, habitat degradation, and long-term changes in climate.

POPULATION STATUS: The Blue Whale is listed as endangered under both the federal and state endangered species acts. Although Blue Whales received complete international legal protection from commercial whaling in 1966 under the International Convention for the Regulation of Whaling, the population is still recovering slowly. On 17 April 2012, the National Oceanic and Atmospheric Administration announced intentions to update the 1998 recovery plan and requested comments and information from the public. By 2015, this update had not been completed. Ship strikes are the most frequently documented cause of mortality.

**STRANDED WHALES:** For all live or dead marine mammal strandings, please call one of the following Hot Lines:

For Cape Cod: 508-743-9548

IFAW Marine Mammal Rescue and Research

For areas near Boston: 617-973-5247

New England Aquarium

For all other areas: 978-281-9300

National Marine Fisheries Service, Gloucester

Be prepared to provide the following information:

- Name and contact number
- Location of animal with detailed description and nearby landmarks, if possible
- Number, size, and type of animal
- Any other helpful information such as behavior or tidal cycle

Keep a safe distance away from the animal. For mass strandings of two or more animals and large whales, the International Fund for Animal Welfare will establish an incident command system where respondents will have logo gear and/or vests.

For all dead marine mammals, please describe:

 If the carcass is marked with grease pen or tagged, note the tag's color, number, and position on the animal

Though every carcass cannot be removed due to budget limitations, it is required by law that data and samples be collected from every dead marine mammal that comes to shore.

## REFERENCES

Blue Whale (*Balaenoptera musculus*). Office of Protected Resources, NOAA Fisheries. URL:
<a href="http://www.fisheries.noaa.gov/pr/species/mammals/whales/blue-whale.html">http://www.fisheries.noaa.gov/pr/species/mammals/whales/blue-whale.html</a>

National Marine Fisheries Service. 1998. Recovery plan for the blue whale (*Balaenoptera musculus*). Prepared by Reeves R.R., P.J. Clapham, R.L. Brownell, Jr., and G.K. Silber for the National Marine Fisheries Service, Silver Spring, MD. 42 pp.

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