



## Natural Heritage & Endangered Species Program

[www.mass.gov/nhesp](http://www.mass.gov/nhesp)

*Massachusetts Division of Fisheries & Wildlife*

## Fin Whale *Balaenoptera physalus*

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

**DESCRIPTION:** Fin Whales can weigh between 40 and 80 tons and measure 22 to 26 meters long, second in size only to the Blue Whale. Females tend to be slightly larger than males by 5-10%. Fin Whales have a sleek, streamlined body with a V-shaped head and are dark grey to brown on top, with white underneath. They have a tall, hooked, dorsal fin located two-thirds of the way down their body. Fin Whales are commonly called Razorbacks for the ridges on the middle of the back behind the dorsal fin. The unique asymmetrical coloration on the head easily separates this species from all of the other baleen whales. On the right side, the lower jaw is white, and the baleen plates in the front half of the mouth are also white, but abruptly change to dark in the back half of the mouth. By contrast, the lower left jaw is gray and all of the baleen plates on the left side are dark. This coloration may aid in herding fish during feeding, although its primary purpose is unknown.

**RANGE:** Fin Whales prefer deep, offshore waters of all the major oceans, primarily in temperate and polar latitudes. There are two named subspecies of Fin Whales, including *B. physalus physalus*, in the North Atlantic, and *B. physalus quoyi*, in the Southern Ocean. Fin Whales are migratory with a complex migration pattern, moving seasonally into and out of high-latitude feeding areas. Fin Whales have also been divided into four stocks in US waters for management purposes: Hawaii; California/Oregon/Washington; Alaska (Northeast Pacific); and Western North Atlantic. Densities of individuals in these areas change seasonally; however, they occur year-round in each of these areas.

### **DISTRIBUTION IN NEW ENGLAND WATERS:**

The species can be found in Massachusetts throughout the year, where they can be observed about 20 km off any part of the coastline. They are common east of Cape Cod in the Great South Channel and in deeper waters



*Photo courtesy of NOAA*

east of Boston and Cape Ann. Although there are seasonal fluctuations, the Fin Whale is most common in New England from April to November. Massachusetts waters are a major feeding ground for Fin Whales on the east coast of the U.S. Photo-identification studies have suggested Fin Whales may remain in Massachusetts waters for up to several months, although shorter residencies of a few days to several weeks are more common.

**LIFE HISTORY AND ECOLOGY:** Due to their complex migratory patterns, deep ocean habitat, and ability to travel at high speeds, Fin Whales are notoriously difficult to study. This whale feeds primarily on fish such as sand lance and herring, which they capture by engulfing and filtering mouthfuls of water. Other components of their diet include krill and squid. They apparently fast throughout the winter.

Fin Whales are found in social groups of 2 to 7 individuals. Though little is known about the social and mating systems of Fin Whales, similar to other baleen whales, long-term bonds between individuals appear to

*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](http://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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be rare. Fin Whales can live between 80 and 90 years. Males reach sexual maturity at 6-10 years of age, while females are sexually mature between 7 and 12. The gestation period for females is 11-12 months and they often give birth to a single calf in midwinter in tropical or subtropical waters. Newborns are approximately 6 m long and can weigh up to 2 tons.

Fin Whales produce unique sounds at 20 hz that may carry up to 800 km underwater. These sounds are well below the threshold of human hearing and their purpose remains unknown. The sounds may be used for communication or long-range acoustic imaging to identify oceanographic features.

**POPULATION STATUS:** The Fin Whale is classified as Endangered under both the state and federal endangered species acts. Fin Whale numbers were significantly reduced by commercial whaling, which was mostly prohibited in 1977. Currently, the most common cause of mortality is caused by collisions with vessels. Other threats include entanglement in fishing gear, reduced prey abundance due to overfishing, and interference with their low-frequency sounds.

**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.

## REFERENCE

Fin Whale (*Balaenoptera physalus*). Office of Protected Resources , NOAA Fisheries. URL: <http://www.nmfs.noaa.gov/pr/species/mammals/cetaceans/finwhale.htm>

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