

Sperm Whale

Physeter macrocephalus

Bermuda Protected Species



GOVERNMENT OF BERMUDA

Department of Environment & Natural Resources



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Current Status

Native

BPSA: VU (A1d)

CITES: Appendix 1

Bda Red List: VU

CMS: Appendix I and II

Fisheries Order: Yes

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Ecology

Identification

The sperm whale is the largest of the toothed whales (Odontoceti). Males reach 50 to 60 feet (15 to 18 m) and weigh 48 tons (43 m tonnes), while females grow to 15-38 feet (4.6 to 11.6 m), and are much smaller. This species is very distinctive looking, with a massive blunt square head which can be one third the length of its body. This whale has a long, narrow lower jaw which contains 36-40 teeth, while the top jaw contains sockets into which the lower teeth fit. Sperm whale teeth were historically used to create scrimshaw art by sailors and whalers during the 18th, 19th and 20th centuries.

Toothed whales have a single nostril, unlike baleen whales which have two. In the sperm whale, the nostril is on the left side at the front of the head. When the whale blows, a 15 foot (4.5m) spout is projected forward and to the left.

The body colour of the sperm whale is dark grey or brown and the skin on the back half of the whale towards the tail is wrinkled. Sperm whales have a short rounded dorsal fin and flippers. The dorsal fin is a low hump followed by a series of bumps along the back. The fluke is roundly triangular with a deep central notch, rounded tips and smooth, straight edges. The sperm whale raises its fluke out of the water when it makes a deep dive (see lower photo on left).

Habitat

Sperm whales are found in the open ocean, particularly waters over 1000 m deep which are ice free. They are occasionally seen around Bermuda by offshore boaters and yachts passing between Bermuda, the Caribbean and North America.

Range

The sperm whale has a wide global distribution. They migrate seasonally in search of food.

Diet

Sperm whales primarily eat squid, but will eat fish. They hunt in darkness at depths over 1000 feet, so they produce loud sonar clicks to find food and communicate with each other. The huge head of the sperm whale contains a large quantity of waxy liquid called spermaceti which is thought to help with this kind of echo location behavior.

Reproduction and Life Cycle

The sperm whale has the slowest reproductive rate of all whale species, with females producing a single calf about every four years. The gestation period is about 15 months, after which the female nurses her calf for around two years.

Why protect this species?

In the 18th and 19th century spermaceti was used to produce candles and other products and was considered extremely valuable. The oil produced from boiling the fat (blubber) of sperm whales was burned for heat and light and was used to make lubricants for machinery and soap. Sperm whales were widely hunted to obtain these valuable products, leading to a world-wide decline in their population.

Due to their historic decline from whaling activities and other more modern threats like ship strikes, entanglement in fishing gear, pollution and man-made noise in the ocean, sperm whales are considered globally Vulnerable.

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What is being done to conserve it?

Sperm whales are protected under Appendix I of the Convention on International Trade in Endangered Species (CITES) which restricts their international trade.

Protected Species Act Listing: Level 1, 2012

IUCN Red List: Vulnerable (A1d) ver. 3.1

All species of whales, dolphins and porpoises are protected in Bermudian waters under the Fisheries Act (1972).

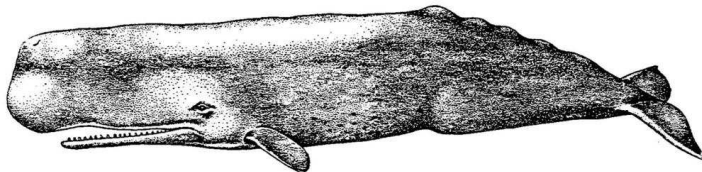
Habitat protection: More than 170,000 square miles of ocean surrounding Bermuda were declared a Marine Mammal Sanctuary in 2012 which provides additional protection for this species while they travel along their migratory routes in the Atlantic Ocean. Sperm whales would also benefit from protection being afforded to the Sargasso Sea.

Reporting: Several sperm whales have stranded in Bermuda over the years, and this data is recorded at the Bermuda Natural History Museum. Recent observations of sperm whales offshore have been reported during research cruises for other purposes.

Protective legislation

Fisheries Act (1972)

Protected Species Act (2003)



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What you can do?

Learn: Understand how destruction of habitat leads to loss of endangered and threatened species and Bermuda's plant and animal diversity. Tell others what you have learned.

Pilot boats responsibly when whale watching in order to minimize disturbing them. Drive slowly and with caution; where possible post a dedicated lookout in addition to the skipper. Do not approach any whale closer than 100 meters (ca. 300 feet). The Department of Environment and Natural Resources has published a full set of guidelines (see link below) for whale watching vessels to ensure that whales are not harassed while migrating past Bermuda.

Report: Members of the public are encouraged to report a sperm whale sighting or stranding to the Department of Environment and Natural Resources and the Bermuda Aquarium Museum and Zoo (293-2727). Photos are appreciated.

Information sources

Taylor, B.L, Baird, R., Barlow, J., Dawson, S.M., Ford, J., Mead, J.G., Notarbartolo di Sciara, G., Wade, P. & Pitman, R. L. 2008. *Physeter macrocephalus*. The IUCN Red List of Threatened Species 2008.

Katona, S.K., Rough, V. and Richardson, D. T. 1993. A Field Guide to Whales, Porpoises and Seals from Cape Cod to Newfoundland. 4th ed. Smithsonian Institution Press.

To learn more about guidelines for whale watching please visit:

<http://www.environment.bm/whale-watching-guidelines>



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For Further Information

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www.environment.bm

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