

# SPECIES FACT SHEET -

# North Atlantic Right Whale (Eubalaena glacialis)



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#### Measurements

Length

Newborn: 4.4-4.8 m

Full grown: 13.5-17.0 m

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Weight

Newborn: c. 1.400 kg

Full grown: 50,000-56,000 kg

(up to 90,000 kg)

# Identification

#### At Sea

Large head, narrow rostrum with highly arched lower jaws, dark body and no dorsal fin. Both the head and jaws have several large white, grey, or yellowish callosities, which are infested with parasites. V-shaped blow.

#### On Land

205-270 (average 250) very long (2-2.8 m), narrow (up to 18 cm) dark-brown, grey or black baleen plates on each side of the upper jaw, with very fine fringing hairs.

# **Description**

#### Head

The massive head forms 25% of the total body length in adults, and up to 35% in juveniles. Grey or black thickened skin patches form callosities around the head and jaws. The largest of these on top of the rostrum is termed the bonnet. Their arrangement is unique to each right whale. The upper edges of the lips are often scalloped. Callosities appear light yellow or cream coloured due to large infestations of whale lice *Cyamus*. It has a narrow, strongly arched rostrum and strongly bowed lower jaw. Numerous hairs also occur on the upper jaw and the chin. The eyes are located just above corners of the mouth. The blowholes are situated at the highest point of the rear part of the head, pointing slightly to the sides. The blow is diagnostic, being V-shaped as a result of the widely-separated blowholes, and may reach 7 m in height.

# **Body, Fin & Markings**

The species has a very stout body. Unlike all other great whales except the bowhead, it lacks a dorsal fin altogether, the dorsal surface is smooth and ridge-less. The body colour is generally black, occasionally with a white belly and chin patches. The flippers are broad and paddle shaped, up to 1.7m long. On diving, the very broad, deeply notched and smoothly tapering tail flukes, black in colour, are raised above the water.

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# Distribution

#### **Global Distribution**

The historical range of North Atlantic right whales apparently extended as far south as Florida in the west and northwestern Africa in the east and as far north as Labrador, southern Greenland, Iceland, and Norway. The present range, primarily from Florida and Georgia to Atlantic Canada with very occasional occurrence beyond those limits, is much reduced from its historical extent.

# **European Waters**

In the eastern North Atlantic, the species once ranged from NW Africa, Azores and the Mediterranean, north to the Bay of Biscay, western Ireland, the Hebrides, Shetland, Faroe Islands, Iceland, and Svalbard. Since the 1920s, however, sightings have been sporadic, with only isolated records from the Canaries, Madeira, Spain, Portugal, France, Britain, Ireland and Iceland. There is also a photographic record thought to be of this species from the southern North Sea off Schouwen, Zealand in The Netherlands (July 2005).

#### **UK & Ireland**

In British and Irish waters, seven records have occurred over the last half century: two off SW Ireland (June 1964 & Aug 1970), one near Rockall Bank, 600 km west of Scotland, sighted twice (Sept 1974), one (of two individuals) in the northern Irish Sea (May 1979), one west of the Outer Hebrides (Aug 1980), one NW of Rockall (May 2000), and one north of Shetland (July 2000).

# **Abundance**

The North Atlantic right whale is one of the rarest of all the great whales. Once abundant in the North Atlantic, its population is now estimated to be around 400 individuals, less than 5% of historical carrying capacity which is considered to have been between 9,100 and 21,300 individuals before human exploitation. With fewer than 100 breeding females left and only 12 births recorded in the three breeding seasons since 2017, the species is on the brink of extinction.

# **Habitat**

The North Atlantic right whale normally occurs in coastal temperate regions with high copepod abundance between 20° and 70°N, in sea temperatures of 0°-21.8°C (averaging 12.3°C).

## Diet

Right whales feed entirely on zooplankton, especially large calanoid copepods (notably *Calanus finmarchicus*), although consumption of euphausiids, pteropods and larval barnacles has been observed, particularly when they are associated with copepods.

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# **Behaviour**

The species performs highly energetic behaviours at or above the surface of the water - including breaching, lobtailing, and flippering. The functions of these behaviours are not known. They all produce very loud sounds, which may have a communicative and/or aggressive function. They are seen either singly or in pairs, except for courtship activity when pairs of apparently unrelated individuals sometimes associate for several weeks at a time. In feeding areas, large aggregations of whales are sometimes seen, but these appear to be acting independently. Right whales are "skimmers", feeding by swimming forward with the mouth agape. Typical feeding dives last for 10–20 min.

# **Life History**

The average age at sexual maturity for females is probably 9–10 years, although the youngest female with a calf was 5 years old. The age at sexual maturity not known for males. Mating is thought to involve sperm competition where several males surround a female and inseminate her. Females give birth to a single calf every 3–5 years, following a gestation period of c. 12 months. Weaning of the calf occurs when it is c. 1 year old. Gentle contact behaviour between conspecifics (petting, stroking, nuzzling) has been recorded in this cetacean species and is common among mothers and their calves. Calves are born in winter, early December-late March, although births have been recorded outside this period. Mortality rates are estimated at 26–31% in year 1, 10% in year 2, 5% in year 3, and 1–4% for the next 7 years. Adult mortality rates are apparently very low; only three adults are known to have died of natural causes in this population since 1970. There are very few data on longevity, although at least one female had a sighting history extending over 60 years, suggesting it was at least 70 years of age and possibly much older.

## **Conservation Threats**

Right whales, so called for being the "right" whale to kill, were hunted by the Basques over 1,000 years ago, which led to development of all whaling. Centuries of hunting reduced numbers to a fraction of their former size, particularly in the eastern North Atlantic. All right whale populations around the world were given complete protection from commercial whaling in the 1930s. Nowadays, over 50% of all mortality of the species is due to collisions with large ships and entanglement in fishing gear, particularly in lobster pot lines. Over 75-80% of all right whales in North Atlantic display scars from entanglement in fishing gear some time in their lives. Cumulative impacts of all human activities are not well understood, but may be affecting health and reproduction. Other potential human pressures include underwater noise disturbance, poisoning from algal blooms, and chemical contaminants. In addition, impacts to right whales from global climate change are anticipated. The species is legally protected in European, British and Irish waters.

**IUCN status:** Critically Endangered.

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