

Balaenoptera acutorostrata (Common Minke Whale)

Family: Balaenopteridae (Baleen Whales)

Order: Cetacea (Whales and Dolphins)

Class: Mammalia (Mammals)



Fig. 1. Common minke whale, *Balaenoptera acutorostrata*.

[<http://marinebio.org/species.asp?id=230>, downloaded 3 March 2017]

TRAITS. *Balaenoptera acutorostrata* is the smallest, as well as the most abundant, of the baleen whales, with an average length of 8.5-8.8m for females and 7.8-8.2m for males (Perrin and Brownell, 2009). A maximum length of 10.5m and a maximum weight of 10 tonnes is known for this species. The back is coloured dark grey or black, with a falcate (sickle-shaped) dorsal fin; the belly is white (Horwood, 1990), and a white band is sometimes present on the dorsal side of the flippers (Fig. 1). It has a streamlined body and narrow, pointed head with flat rostrum (snout). There is a long ridge along the head with a pair of blowholes. Around 300 yellowish baleen plates are present in the mouth, occasionally asymmetrical, and 50-70 ventral grooves run from throat to flippers. The tail extends into two long tips (Fahay, 1999).

DISTRIBUTION. Found in all oceans, virtually in all latitudes ranging from 65°S to 80°N (Fig. 2) (IUCN, 2008). Occurrence is seasonal as it migrates between tropical to polar waters (Horwood, 1990), and is accidental in waters of Trinidad and Tobago.

HABITAT AND ACTIVITY. Found in coastal waters, as well as in offshore waters (IUCN, 2008), but rarely ventures more than 170km away from land. Commonly enters lagoons, bays, fjords, and estuaries. Lives close to water surface in all but polar waters. Moves further into polar ice domains than other baleen whales. Often migrates to cooler waters at higher latitudes during the summer and then migrates back to cooler waters at lower latitudes in the winter (Fahay, 1999). It feeds on a variety of prey in different regions, based on their obtainability. Primarily takes krill in the Northern Hemisphere. Takes small, shoaling fish species such as herring, capelin, and sand eel in North Atlantic, and saury and pollack in North Pacific. In Antarctic, it mainly takes myctophid fish (Perrin and Brownell, 2009).

FOOD AND FEEDING. This species is carnivorous, feeding seasonally on fish, molluscs, and crustaceans (Fahay, 1999). It feeds according to local prey abundance; its opportunistic feeding habits and flexible feeding pattern make it a conspicuous high trophic level predator in the north-eastern Atlantic (Windsland et al., 2008). The filter feeding technique using baleen plates frayed into bristles, is used to forage and feed on small vertebrates (Fahay, 1999). It feeds at the water surface, either alone or in small groups of two or three. Group hunting rarely seen as species prefers to hunt alone, unlike other baleen whales. Preys primarily on krill and small fish such as herring and sardines. Hunting strategy involves circling and herding prey into dense groups before lunging for the kill (Fig. 3) (Murphy, 1995).

POPULATION ECOLOGY. This species is very abundant, more so than other baleen whales. Solitary; singletons usually spotted. Travels alone. Only few sightings of pairs recorded, mainly calf and mother. Small groups of 3 individuals sometimes seen. Large aggregations, no greater than 400, occur on occasion in high latitudes where krill is plentiful (Perrin and Brownell, 2009). When reported in groups (around 5-15), it is unclear of whether it is uncoordinated and members are just attracted to the common location, or if it is coordinated and due to social behaviour (Murphy 1995). Group size appears to vary based on season, prey abundance, and latitude. Segregation seems to occur by sex, age class, size, sexual status or breeding condition, but only little evidence of this exists (Horwood, 1990). Maximum age is estimated to be 32 years (Olsen and Sunde, 2002).

REPRODUCTION. Only one offspring is born at a time; on average, females produce young every other year. Gestation lasts 10-11 months, and birth weight is approximately 450kg. Young are weaned at 5 months old. Breeding occurs throughout the period of December to May in the Atlantic, whereas it is yearlong in the Pacific. Peak months for giving birth are June and December. For females, growth stops at 18 years and for males, it stops at 20 years (Fahay, 1999). Approximate age for sexual maturity is at 7.8 years and for physical maturity is at 13 years (Olsen and Sunde, 2002). Mating behaviour has not yet been observed directly (Perrin and Brownell, 2009).

BEHAVIOUR. Young calves stay with mothers until about 5 months old. Not much is known about juvenile behaviour; mature whales are hard to tell apart from immature whales. This species is quite acrobatic, capable of entirely leaping out of the water (Fig. 4). It is a fast swimmer, and a mobile predator (Fahay, 1999), thought to be curious as it approaches ships and wharfs, travelling with the vessels for up to hours. Its small, inconspicuous blow and brief surfacing behaviour make it difficult to spot (Perrin and Brownell, 2009). Its communication and perception channels involve both chemical and tactile means (Fahay, 1999). Preyed on by killer

whales, it can endure straight-headed, prolonged pursuits at 15-30 km per hour. Anti-predator strategies to evade being captured include outdistancing the predator given sufficient space, or taking cover from ships when possible. May also beach itself. If caught, it makes no attempt to physically defend itself (Ford et al., 2005). Fig. 5 shows a killer whale attacking a common minke whale.

APPLIED ECOLOGY. *Balaenoptera acutorostrata* is listed as Least Concern (IUCN, 2008) as it is no longer commonly hunted and its numbers have been increasing since the 1900s (Fahay, 1999). Current population of over 300,000 is stable. Whaling and poaching of species has significantly decreased, but harvesting of parts is still ongoing to a small extent in North Atlantic and North Pacific areas. No major threat to species exists, but it may occasionally be caught in fishing gear throughout its wide range. Possible reduction of Arctic ice warrants monitoring as its implications for common minke whales are uncertain (IUCN, 2008).

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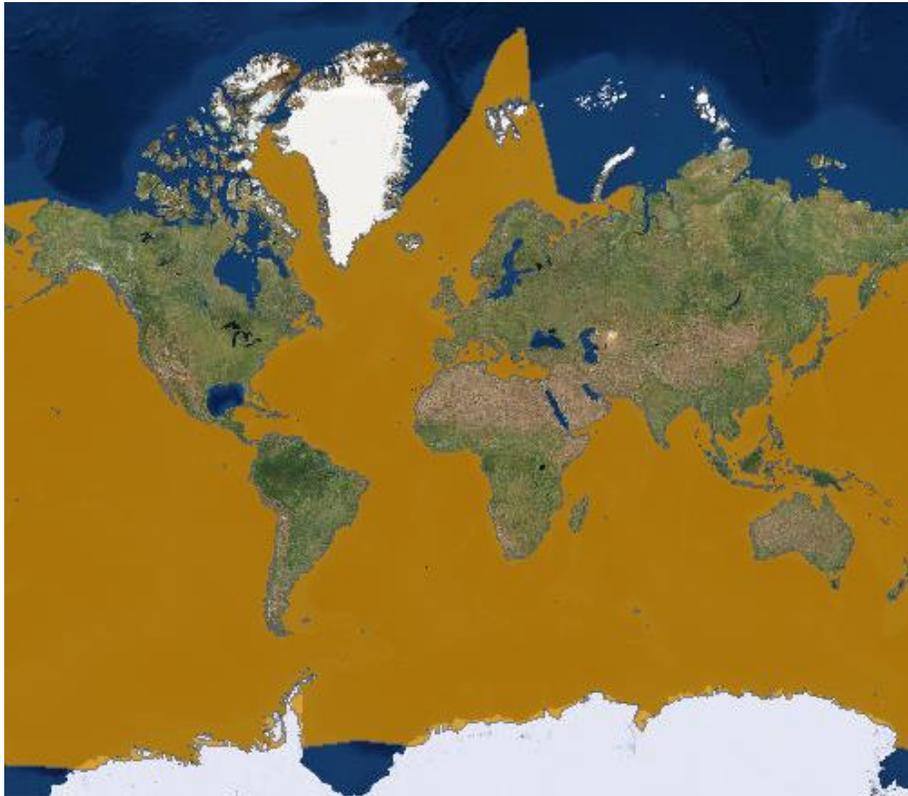


Fig. 2. Common minke whale geographic distribution.

[<http://maps.iucnredlist.org/map.html?id=2474> downloaded 3 March 2017]



Fig. 3. Common minke whale lunge feeding on herring.

[<http://whalesanddolphinsbc.com/what-species-of-whales-and-dolphins-are-in-bc-2/minke-whale-%E2%80%93-balaenoptera-acutorostrata-of-bc/> downloaded 6 March 2017]



Fig. 4. Common minke whale leaping.

[http://www.crru.org.uk/minke_whale.asp downloaded 6 March 2017]



Fig. 5. Killer whale attacking common minke whale.

[<http://video.nationalgeographic.com/video/orcas-attack-minke-whale-lex> downloaded 6 March 2017]