

Blue Whale



Porcupine Sea Bight (Photos: Ivan O'Kelly)

Blue whales are the largest mammal on planet Earth capable of reaching lengths of up to 33m.

Classification

Class: *Mammalia*

Order: *Cetacea*

Suborder: *Mysticeti*

Family: *Balaenopteridae*

Genus: *Balaenoptera*

Species: *musculus*

Common names: *Blue Whale, Sulphur Bottom*

Irish Name: *An míol mór gorm*

Key identification features

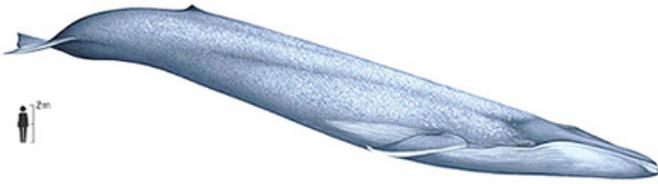
Body length: 31-33m

Weight: Up to 150,000kg

Blow: Rises in a single, thick column reaching up to 6-12m high

Head: Broad, flattened, U-shaped rostrum. A single raised ridge runs from the tip of the rostrum to the prominent splash guard around the blowhole.

blue colour varies among individuals and may darken with age. Some individuals, particularly in the North Pacific, may obtain yellow undersides as a result of marine diatom (algae) growth on skin.



<http://marinebio.org/species.asp?id=41>

Field identification: at sea (behaviour)

The blue whales' massive blow can reach up to 12m occurring every 10-20 seconds for 2-6 minutes, after which it may dive anywhere from 5-20 minutes. The enormous splash guard may be seen protruding high out of the water while the rostrum (flat area in front of the splash guard) is flat and rarely breaks the surface. The small dorsal fin is not always visible upon surfacing as some individuals are so long that they are below the surface by the time the dorsal fin passes. The region behind the head is extraordinarily wide and the spine appears like a massive muscular column down a broad rotund back. Their sleek bodies may result in the under-estimation of their huge size. Tail flukes are wide and triangular, with a slight caudal notch in the centre.

They swim at a speed of about 3-4 knots but have been recorded accelerating to speeds of up to 10-16knots. Adults rarely if ever breach but calves have been observed breaching. Although they do not always fluke (lift tail flukes) on diving, they will occasionally do so on the last (terminal) dive of a sequence. Any large baleen whale observed fluking in Irish waters could be a blue whale but is more likely to be a humpback. Blue whales emit low frequency moans (1-3Hz) that can travel for great distances underwater. They also produce ultra-sonic bursts of sound (21-31kHz) when feeding; this may help them detect large concentrations of krill, their primary food.

Field identification: on land (strandings)

Flippers are relatively short (less than 10% of body length) and tapered at the ends. They have 55-95 throat grooves which extend about 60% of the way down the body. The baleen is all black, though may be greyer in old animals. 270-400 black baleen plates hang on each side of the upper jaw.

Blue whales have a rudimentary moustache containing four bristles and an adolescent beard of ~40 hairs. They have 63-64 free vertebrae. Blue whales have the largest penis of any animal, measuring up to 3m long.

Species similar in appearance

A smaller form of the blue whale exists. The pygmy blue whale (*B. m. breviceauda*) is generally under 22m in length, with a shorter tail region, shorter baleen plates and a different skull anatomy. Despite its name, it's still a huge animal.

Blue whales be confused with any of the other large baleen whales but there are noticeable differences between the blows, surfacing sequences and appearance of the flukes (see relevant species profiles for details). The major risk of confusion is between fin and blue whales, especially in areas where both species are known to occur.

Important differences between the two species are as follows:

- **Shape of the rostrum:**

Fin: V-Shaped

Blue: U-Shaped

- **Surfacing sequence:**

Fin: Blow followed shortly by the dorsal fin

Blue: Blow followed by a long roll of the back and a tiny dorsal fin at the end

- **Roll and flukes:**

Fin: Rolls high out of water - does not show flukes

Blue: Rolls lower in the water and occasionally flukes before a deep dive

Status and distribution

The population is still recovering from the slaughter of 30,000 whales during the height of the Antarctic whaling industry. They are found in oceans worldwide but feed only in the colder waters of the Antarctic, North Pacific and North Atlantic. They are generally found in deep waters along the edge of continental shelves. The northern and southern hemisphere populations are distinct with little migration between populations. They are separated temporarily while in tropical waters. The North Atlantic population moves south in winter towards their breeding areas near the equator. Numbers in the North Atlantic may be as low as 400 individuals.

The range of the pygmy blue whale is narrower and they do not migrate as far into the polar region. A year-round population exists off the Californian coast. There may be fewer than 1,000 pygmy blue whales alive and were hunted by the Russians up until 1972.

Where and when best seen in Ireland

Once relatively common in Irish waters, 98 animals were landed between 1908-1914 and 27 between 1920-1922 at the Blacksod Whaling Station in Co. Mayo. Although much rarer now, there have been a number of sightings off the Irish west coast in recent years. Research using US Navy underwater recording equipment has detected blue whale mating calls off the west and north-west coasts indicates that an estimated 30-50 may pass through Irish waters each year.



A single animal was sighted by researchers in UCC in the Rockall Trough in 2001. More recently two animals were photographed by an IWDG members feeding among fin whales along the shelf slopes, off the Southwest coast in September 2008 (image above). Another blue whale pair (image by Irish Air Corp) below was observed by IWDG members and crew of the RV Celtic Mist on 6th Sept 2012 off the Porcupine Seabight in the Southwest in September 2012.

Food and feeding

Feed on swarming planktonic crustacea or krill (almost exclusively on a few species such as *T. longicornis* and *M. norvegica*). Blue whale may swallow 4 tons of such food per day.

Reproduction and life cycle

Max. life expectancy: 80+

Average life expectancy: at least 30+

Mating Occurs: Summer.

Season of birth: Winter.

Gestation: 11-12 months.

Average length/weight of calf at birth: 7m / 2,500 4,000kg

Social structure and communication

They are usually found either singly or in close-knit groups of 3-4 animals, but may form larger groups when feeding and breeding.

Blue whales produce simple, low frequency songs which have the potential to travel great distances in the water.

Conservation issues

The discovery of blue whales passing the west coast each winter may mark a slow recovery in the blue whale in Irish waters. Numbers in the North Atlantic may still be as low as 400 individuals.

The only significant threat in Irish waters is noise pollution from offshore exploration and drilling along the West Coast. As with most creatures which use low-frequency sound for communication, they are sensitive to acoustic disturbance. Studies have revealed that blue whales are less likely to vocalise in the presence of active SONAR.

ID image

BlueWhale.jpg

[< Previous](#)

[Share](#) [Tweet](#) [Share](#)

[Next >](#)