



THE
**WHALES OF
ICELAND**





MEET THE

WHALES OF ICELAND

The first whales evolved over 50 million years ago, sharing a terrestrial ancestor group with hippos. The first whales were (surprisingly) land animals, with a long skull and carnivorous teeth!

Over time they evolved into the marine animals we know today, but they still share many similarities with land mammals, including humans. They feed their babies with their own milk and breathe air.

Most whales travel half-way across the world to their ancient feeding grounds. Many species of whale come to Iceland's waters to feed. For example, the humpback whale travels an average of 8300 km from destinations such as the Gulf of Mexico all the way to Iceland.



Most whales travel half-way across the world to their ancient feeding grounds.

DID YOU KNOW?
The oldest blue whale was recorded at 110 years old.

BLUE WHALE

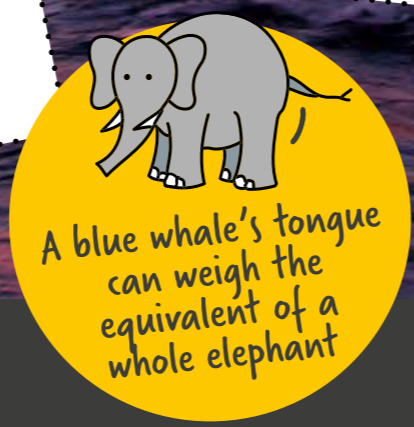
Scientific name: *Balaenoptera musculus*
Average lifespan in the wild: 80-90 years
IUCN Status: Endangered

Size: Blue whales can grow to 30 metres in length, making them the largest known animals to ever live. A full-sized blue whale would dwarf most dinosaurs. Adult blue whales can weigh up to 120 tonnes which is equivalent to around 17 fully grown elephants.

Speed: Up to 39 km/hour.

How did they get their name? They get their name from their grey to blue colour of their skin.

Fun facts: Their hearts weight as much as an average car and they don't have any teeth, instead they have 270-395 plates of baleen. Baleen is a filter-feeder system. The system filters food, such as krill, through the water. If conditions are right, like in cold water, then the diatoms (planktonic photosynthesizes) will build up and adhere to the bellies giving their stomachs a yellowish tinge.



A blue whale's tongue can weigh the equivalent of a whole elephant

SPERM WHALE

Scientific name: *Physeter microcephalus*
Average lifespan in the wild: 60-70 years
IUCN Status: Endangered

Size: Up to 20 metres in length, which is longer than the average bus! They can weigh up to 50 tonnes. They are the largest of the toothed whales and they have the largest brain of any living animal, weighing an average of 7.8 kilograms which is 6 times heavier than an average human's brain.

Speed: Up to 30 km/hour.

How did they get their name? Their name derives from the spermaceti organ in its head. In the early 18th and 19th century New England whalers sought out the whales for the valuable spermaceti oil in their head, to make various oils and fluids, which was used as lamp fuel and in the production of soap. This hunting is what lead to their endangered status.

Fun fact: They can dive up to 3,280 feet and can hold their breath for 90 minutes.



HARBOUR PORPOISE

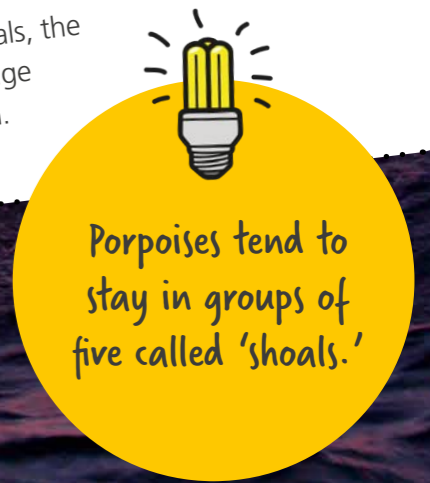
Scientific name: *Phocoena phocoena*
IUCN Status: Least concern
Average lifespan in the wild: 8-13 years (although some individuals have been found to live to 20)

Size: Up to 2 metres in length. They can weigh up to 70 kilograms, making them the smallest of all marine mammals.

Speed: Up to a speed of 23 km/hour

How did they get their name? The word porpoise is derived from the Latin for pig – 'porcus' and 'piscus' which means fish, they are known as the 'puffin pig' as a result of the sneeze like puffing sound they make when they breathe. As their name suggests, this particular species of porpoise stays close to coastal areas or river estuaries.

Fun fact: As the smallest examples of marine mammals, the baby harbour porpoises range from 67 to 85 cm in length.



Porpoises tend to stay in groups of five called 'shoals.'

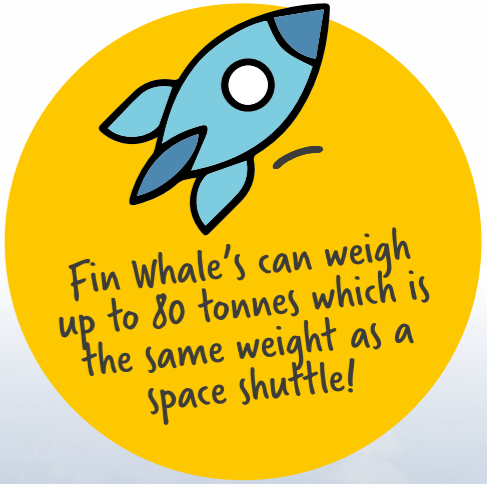


MEET THE

WHALES OF ICELAND

Some of the most common species to spot around Iceland are; minke whales, blue whales, sperm whales, harbour porpoise, humpback whales, orcas, white-beaked dolphin and fin whales.

Some of those, such as the humpback whale and the minke whale, are seen frequently by whale watching tours in Iceland. Unfortunately, some of these species are being put under threat by the whalers who hunt them for their meat. Controversially, whalers have permits to hunt two species around Iceland, the minke whale and the fin whale.



DID YOU KNOW?
Adults Humpback whales range from 12-16 metres which is similar to the length of a double decker bus



ORCA

Scientific name: Orcinus orca

Average lifespan in the wild: 30-50 years (although their estimated maximum lifespan is 60-70 for males and 80-100 for females)

IUCN Status: Data deficient / unknown.
Size: They can grow up to 8 metres in length which is around the length of two Range Rovers together. They can also weigh up to eight tonnes which is the same as three fully grown rhinos. Orcas are the largest of the dolphin family.

Speed: Up to a speed of 50 km/hour, which makes them one of the fastest of all whales.

How do they get their name? In Latin orca means the shape of a barrel or cask which is likely to be referring to the shape of its body. Orcas are often referred to as killer whales, after sailors witnessed their large-scale pack attacks on other dolphins and whales.

Fun fact: Orcas are social animals which stay together in pods for life and develop their own unique dialects in which to communicate and coordinate hunts.



FIN WHALE

Scientific name: Balaenoptera physalus

Average lifespan in the wild: 85-90 years

IUCN Status: Vulnerable (although their population trend is predicted to be increasing)

Size: Up to 26 metres which is a few metres longer than then length of a cricket pitch. Fin whales are the second largest creatures on the planet after blue whales. They can weigh up to 80 tonnes which is the same weight as a space shuttle!

Speed: Up to a speed of 30 km/hour (one of the fastest whales just behind orcas and Sei whales)

How do they get their name? Balaenoptera means 'winged whale' while Physalus means 'bellows'. Their name comes from the fin on their back, which gave them the nickname razorback.

Fun fact: When fin whale sounds were first recorded scientists thought that they were geological sounds (like tectonic plates grinding). They are elusive and so their mating rituals have not yet been observed in the wild.

MINKE WHALES

Scientific name: Balaenoptera acutorostrata

Average lifespan in the wild: 40-60 years

IUCN Status: Least Concern

Size: Minke whales are the smallest of the baleen whales, reaching a length of around 6.5-7.5 metres. Their weight is 10 tonnes, which is around the weight of 13 cows!

Speed: Up to 40 km/hour.

How did they get their name? They received their common name from a Norwegian trainee whale spotter named Meincke, who supposedly mistook a minke whale for a blue whale.

Fun facts: Minke Whales have earned the nickname 'Stinky Minkes' because of the bad smell of their spouting. Minke Whales' vocalisations can be as loud as a plane taking off (up to 152 decibels).



HUMPBACK WHALE

Scientific name: Megaptera novaeangliae

IUCN Status: Endangered

Average lifespan in the wild: 45-100 years
Size: Adults range from 12-16 metres which is similar to the length of a double decker bus. An adult humpback whales typically weigh up to 30 tonnes which is equivalent to eight fully grown hippopotami.

Speed: Up to a speed of 27 km/hour

How did they get their name? Its name comes from the shape of its dorsal fin and the way it looks when it's diving. The scientific name Megaptera means 'large-winged' and refers to its long wing like flippers.

Fun fact: Humpback whales sing to attract mates; this song can last up to 20 minutes and all males sing the same song with slight variations depending on the year and the male. When they sing, they float, suspended in water, with their head down and are relatively motionless.





THE

BIG THREE THREATS

OCEAN POLLUTION

✓ Plastic is ingested by whales as they think it is food. The plastic then gets stuck in their stomachs. 56% of whales, dolphins and fish have been recorded to have eaten plastic. A 2015 study estimated that more than 15 trillion pieces of plastic are in the ocean. Alarming, 50% of plastic pollution in the ocean comes from fishing gear alone.

✓ Oil spills, chemical runoffs and pesticides in the ocean either kill off the fish that the whales eat or directly poison the whales themselves. The pollutants do not just stay in the sea but they are also ingested by the whales and absorbed into their blubber, resulting in the passing on of the pollutants through food chains.

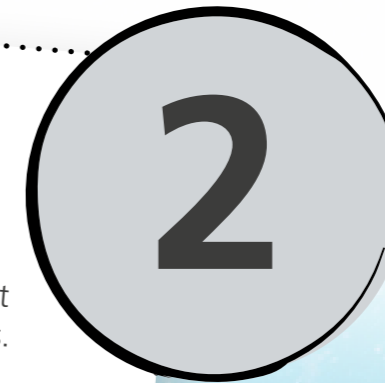


HUMAN INTRUSIONS AND DISTURBANCES

✓ Ship transportation routes potentially interfere with the ancient migration routes, which endangers the lives of many whales as they are under threat from getting hit or scared away from their breeding and feeding grounds.

✓ Humans also over fish in the areas whales eat, which results in less food for whales. The air guns that are used for marine and oil exploration can be heard by Humpback Whales up to 3km away, these loud bangs are enough to deter and scare away the whales, which could potentially affect their migration to certain areas, such as Iceland.

✓ Whaling also still poses as a threat towards whales. Between 2003 to 2007 whaling took a total of 220 minke whales. It estimated that 1,700 whales have been legally whaled in Icelandic waters since the global ban in 1986.

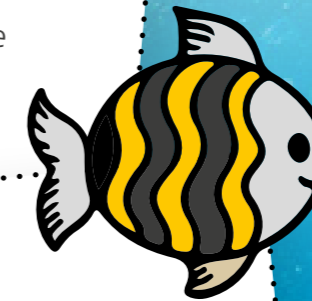


CLIMATE CHANGE AND SEVERE WEATHER

✓ Changes in fish migration changes the migration pattern of whales. Higher sea temperatures result in fish being born at different times of year. Therefore, when whales get to feeding grounds, they are sometimes too late and fish have left, or too early and fish have not bred yet.

✓ Krill are dependent on sea ice, which is decreasing. This means there is a large decline in krill populations which are a crucial source of food for whales.

✓ Higher temperatures will likely result in higher numbers of whales in the Icelandic waters which will increase competition for food and territory. Over the past century as a result of fossil fuel gasses like carbon dioxide trapping radiation, the global sea temperature has risen by 0.6 °C, this warming has occurred from the surface to depths of 2300 feet, which is where most sea life thrives.



STATUS

The International Union for Conservation of Nature (IUCN) provides the world's most comprehensive inventory of the global conservation status of biological species..

All species fit into 9 categories:

- **Not evaluated (NE)**
- **Data Deficient (DD)**
- **Least Concern (LC)**
Unlikely to become extinct in the near future.
- **Near threatened (NT)**
Close to being at high risk of extinction in the near future.
- **Vulnerable (VU)**
Considered to be at high risk of unnatural (human-caused) extinction without further human intervention.
- **Endangered (EN)**
Very high risk of extinction in the wild.
- **Critically endangered (CR)**
In a particularly and extremely critical state.
- **Extinct in the wild (EW)**
Survives only in captivity, cultivation and/or outside native range, as presumed after exhaustive surveys.
- **Extinct (EX)**
Beyond reasonable doubt that the species is no longer surviving.

OTHER THREATS INCLUDE

Entanglement in fishing gear

Habitat degradation

Increasing competition for resources between species

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THE IMPORTANCE OF

ICELAND FOR WHALES



Husavik Whale Watching



Male orca



White Beaked orca



Fishing Boat

The cold waters of Iceland provide rich feeding grounds for marine life. The mix of cold seas and warm ocean currents provides ideal environments for whales to feed.

The currents consist of the cold Arctic Sea to the north and the warmer Atlantic Sea to the south. The currents, combined with the long summer daylight and shallow waters, make Iceland an extremely favorable feeding ground for many species of whales.

The shallow depth of the Icelandic waters provides the perfect habitat for herring, squid and other small fish that whales can eat.

This results in Iceland providing plentiful food supplies for the whales which migrate to the area.



From home



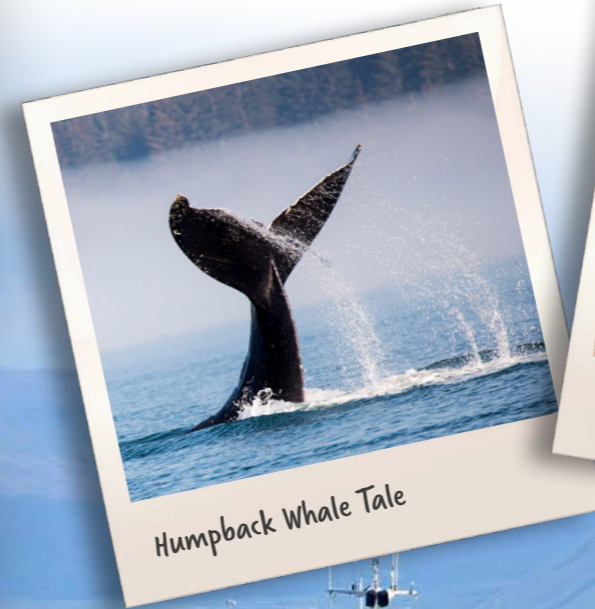
- ✓ Reduce your plastic consumption
- ✓ Recycle more plastic, cardboard and bottles, to prevent them from becoming rubbish
- ✓ Don't dump toxic chemicals down the drain as they will end up in the sea. Read the labels on products and try to avoid buying products containing harmful chemicals.

- ✓ Use alternatives to pesticides, herbicides and fungicides on your garden and try to use more organic products such as manure and biological methods of pest control
- ✓ Pick up litter in public places and on the beaches
- ✓ Avoid wasting water as it is a precious resource
- ✓ Reduce carbon dioxide emissions by using public transport and cycling when you can.



WHAT CAN BE

DONE



Humpback Whale Tale

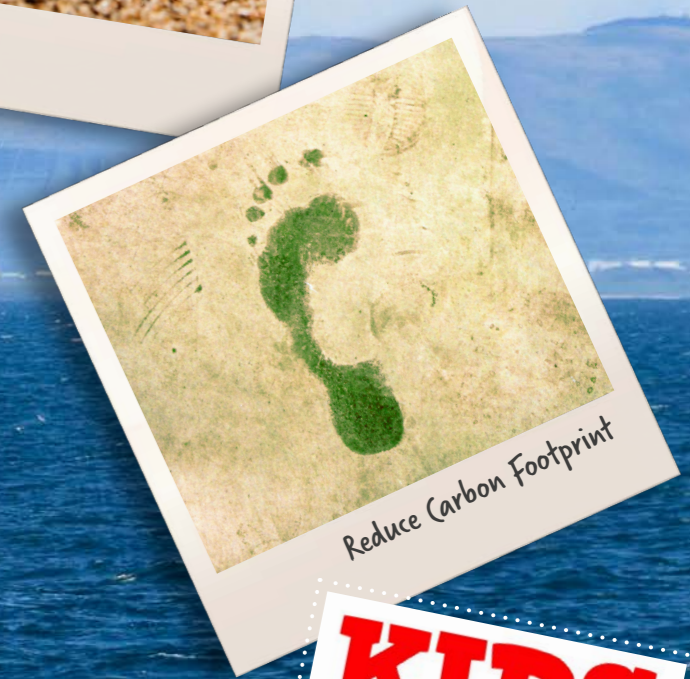


From Iceland

- ✓ Don't order whale meat in restaurants
- ✓ Avoid buying products made from whales' meat.
- ✓ Visit Whales of Iceland to learn more...



Minke Whale



Reduce Carbon Footprint

KIDS
against
PLASTIC

WHALES OF ICELAND

EXHIBIT

The Whales of Iceland exhibit consists of 23 hand painted man-made life size models of the various whale species found in Icelandic waters throughout its natural history.

What is Whales of Iceland?

You'll find a 25m (82 ft) long blue whale, a full-size sperm whale, the critically endangered North Atlantic right whale and many more! Personal characteristic can be found on each model that resembles a real whale in the ocean.

With interactive information stands and videos, surrounded by soothing whale sounds, underwater ambient lighting and black and yellow beach-like floor, Whales of Iceland is a dreamy adventure visitors' can learn about the whales and their habitat.

Why should a school group visit?

Whales of Iceland is visited by school groups all year round. Recently they have added a new room that features the five main direct threats to whales in the ocean: entanglement in fishing gear, plastic pollution, whaling, ship strikes and noise pollution. Every visitor will leave this room understand about and caring more for the whales and the ocean.

Whales of Iceland teamed up with the International Fund for Animal Welfare who secured the projection rights of a beautiful 60-minute-long documentary about noise pollution that they screen in their new room on a huge screen daily.

