

MISTER BIGS

Whales really are the **MISTER BIGS** of the animal kingdom. One species, the blue whale, is the largest animal ever to live on Earth.

BALEEN WHALES have huge plates inside their mouths which they use to filter plankton, krill and small fish from vast quantities of sea water. They feed near the surface of the ocean.

The humpback, southern right and the blue are baleen whales.

TOOTHED WHALES are hunters!

They snack on penguins, squid, fish, seals and other whales.

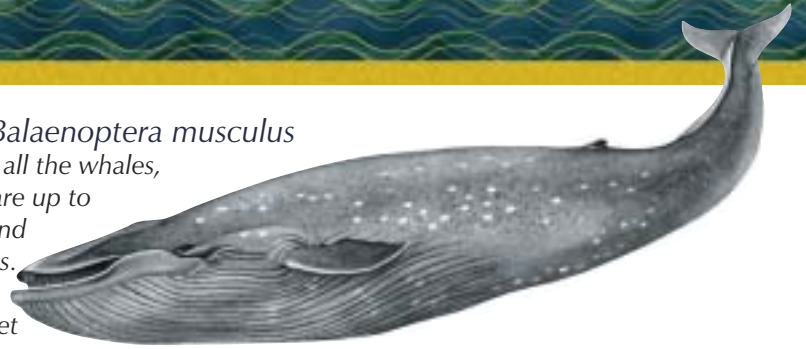
They often dive a kilometre deep in search of their food. The sperm whale is a toothed whale.

Blue whales *Balaenoptera musculus* are the largest of all the whales, and fully grown are up to 30 metres long and weigh 150 tonnes.

They were the number one target for whalers and were hunted to the edge of extinction. These gentle giants live almost entirely on krill.

Sperm whales *Physeter macrocephalus* are the largest of the toothed whales weighing about 40 tonnes and growing up to 19 metres long.

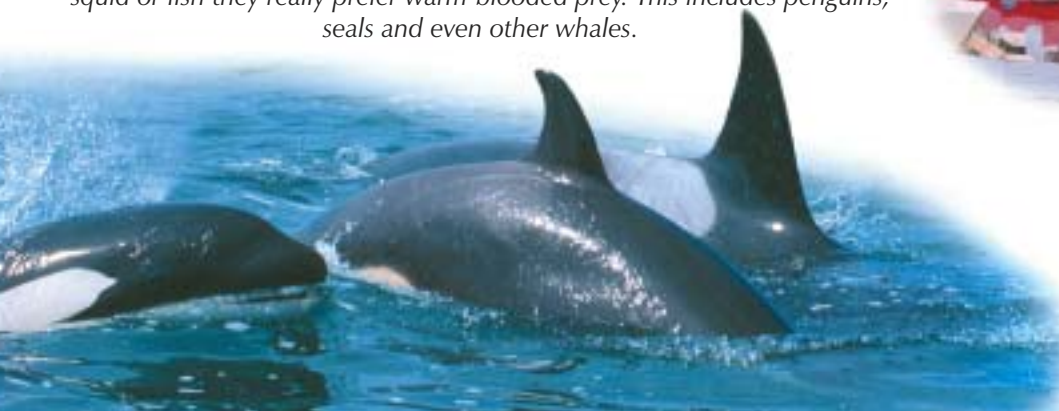
They are champion divers. The longest recorded dive is 90 minutes and dives may reach depths of 3 kilometres or more. One particularly hungry sperm whale was found with over 18,000 squid beaks in its stomach!



Southern right whales *Eubalaena australis* have massive heads covered with distinctive, crusty, white growths called callosities, which are home to barnacles, worms and lice. Whalers named the southern right whale after their belief that it was the 'right' whale to catch because it floated when harpooned and was easy to approach.



Killer whales *Orcinus orca* (which are actually large dolphins) have distinctive, shiny, black and white heads and are one of about 6 species of toothed whales. The toothed whales mostly have quite long jaws, armed with a row of very sharp cutting teeth that are well adapted for seizing or cutting up large and active prey. Although the killer whale will sometimes eat squid or fish they really prefer warm-blooded prey. This includes penguins, seals and even other whales.



WHALING

Whaling has been carried out in the Southern Ocean since the late 1800s. In the early days, the whales were hunted from small boats using hand-held harpoons. With the introduction of cannon-fired harpoons and ships fitted with on-board processing plants in the 1920s, huge numbers of whales were killed for their oil and meat. In just one year 46,000 whales were killed. When whalers hunted one species to near extinction, they simply moved on to the next. Only small numbers of blue, humpback, right, sei and fin whales remain in the Southern Ocean today. It is estimated that no more than about 5% of the original number of blue whales exist today.



SIZING UP THE SUSPECTS

Humpback Whales

Humpback whales *Megaptera novaeangliae* are huge! Fully grown they weigh up to 40 tonnes and can be 16 metres long. The humpback whale is a member of the family of baleen whales, named after the sieve-like plates inside their mouths that they use for trapping huge numbers of krill. Other baleen whales include the blue, fin, minke, right and sei whales.

SONG The humpback whale can 'sing', producing a sequence of moans and whistles lasting as long as 10 minutes. Scientists believe that singing may be an adaptation that enables the whales to identify each other over long distances.

BREATHING Whales breathe through a blowhole on top of the head. This allows a whale to breathe while swimming at the surface of the water. The blowhole closes when the whale dives.

FOOD Humpback whales swim through schools of krill and small fish with their mouths open, catching and filtering krill and small fish up to about 20 centimetres long.

FAT LAYER Under the skin there is a layer of blubber up to 15 centimetres thick. This doubles as both a food store and an insulating layer from the cold. Whalers once hunted humpbacks as a rich source of fatty oil.



TAIL They have a flat tail called a 'fluke'. A massive muscle moves the fluke up and down as a powerful propeller.

Mr Bigs MENU
Krill casserole
Fish fingers
Squid rings
Penguin pie
Seal sausages
Whale fluke soup



FOREFLIPPERS Very long flippers control steering and balance and provide power for swimming.

SHAPE Despite their huge size humpback whales move beautifully in the water. Their streamlined shape increases ease of movement.



WHO'S EATING WHO?