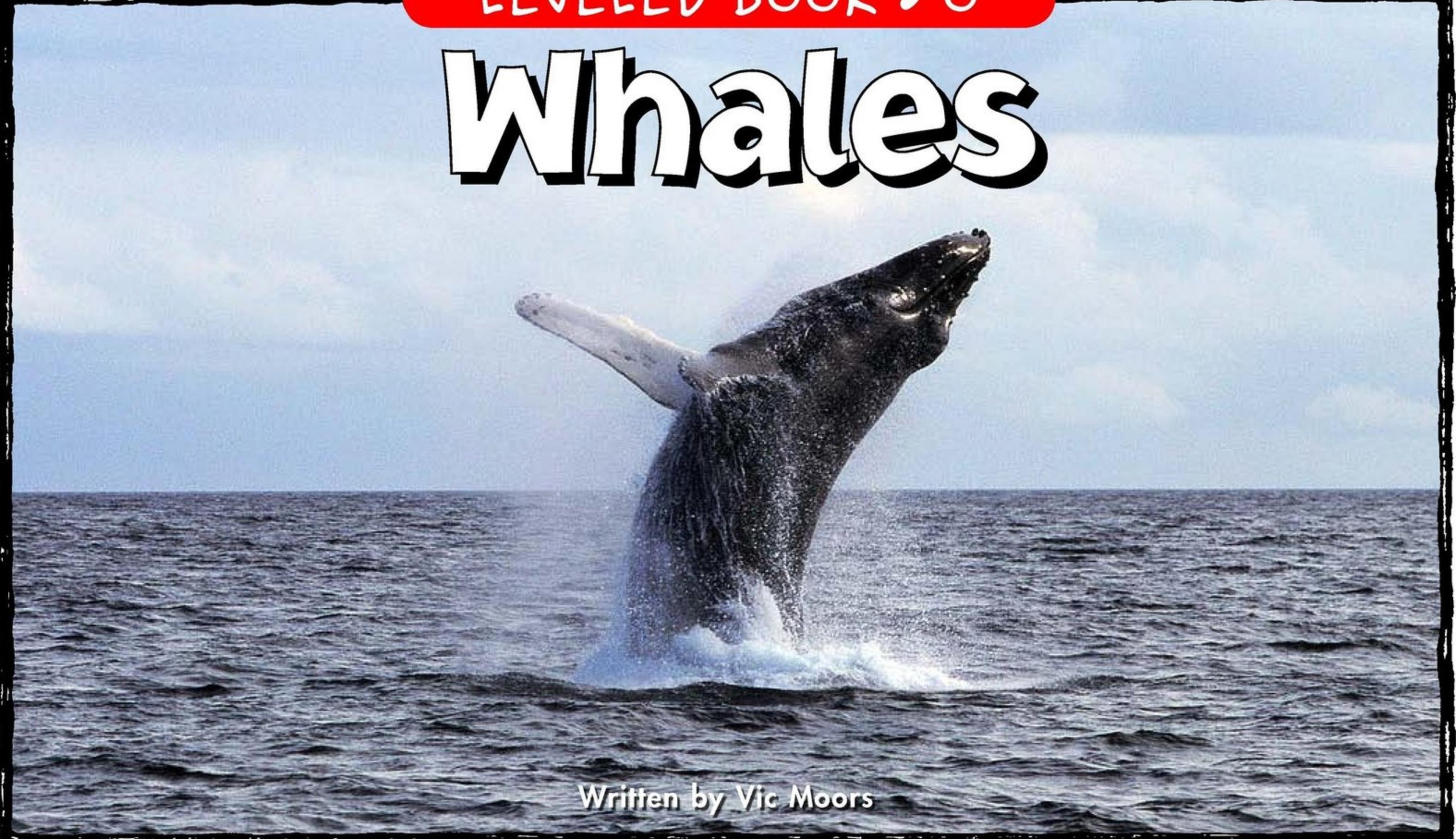


LEVELED Book • O

# Whales



Written by Vic Moors

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## **Introduction**

Whales are very large. In fact, they are the largest animals on Earth. And they are probably the largest animal that ever lived on Earth. They are bigger than any known dinosaur. Even elephants are small when compared to whales. A large blue whale can be over 33 meters (100 ft) long. It can weigh nearly as much as 20 school buses. Its heart is as big as a small car. A large elephant, in comparison, is 4.3 meters (13 ft) tall and weighs less than one school bus.



Some whales are fairly small. These smaller whales are 1.2 to 1.8 meters (4 to 6 ft) long. Dolphins are an example of a smaller whale.



Closeup of a humpback whale

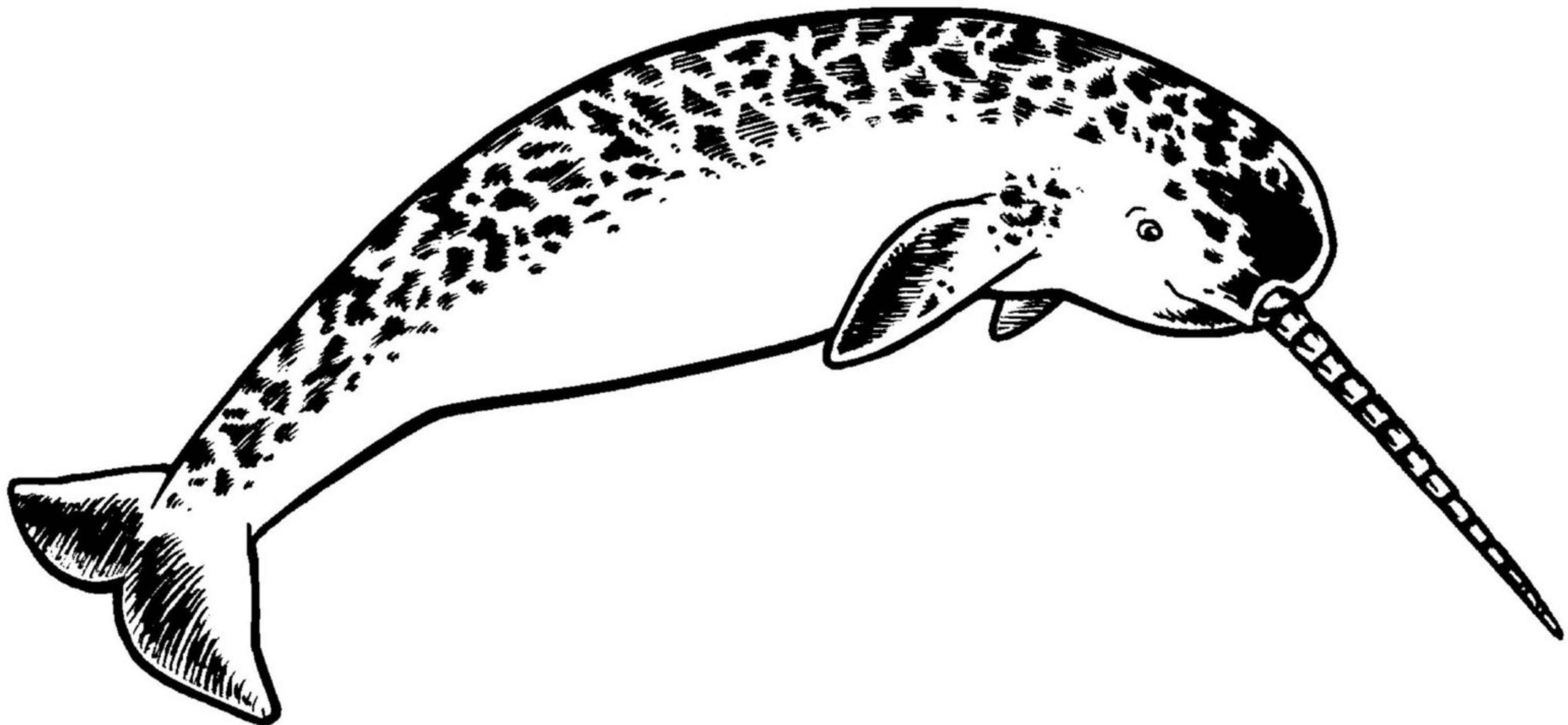
## **Types of Whales**

There are about 75 kinds of whales. Most whales fall into one of two groups. One group has teeth. They are called toothed whales. The other group does not have teeth. They are called baleen whales.

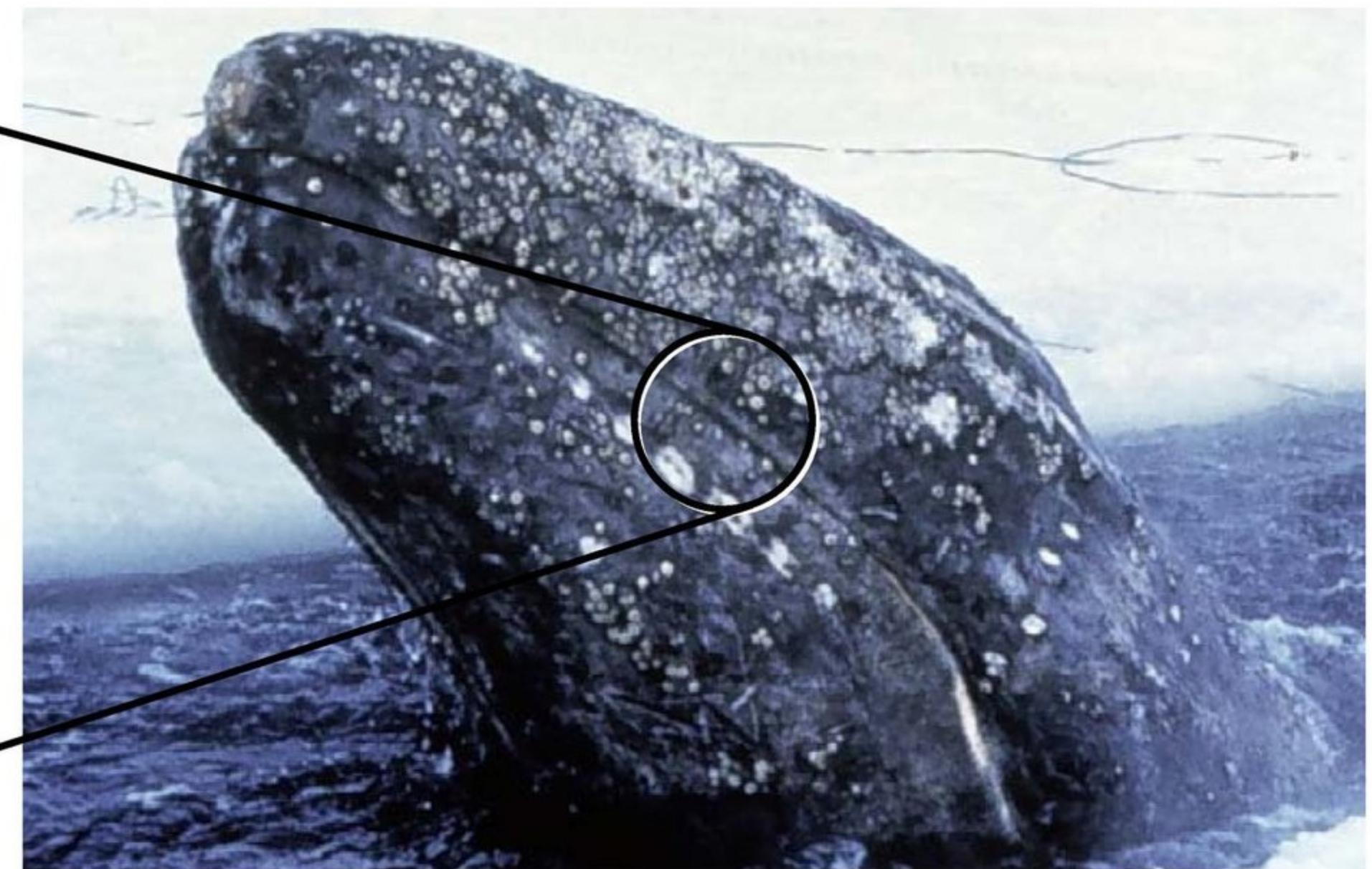
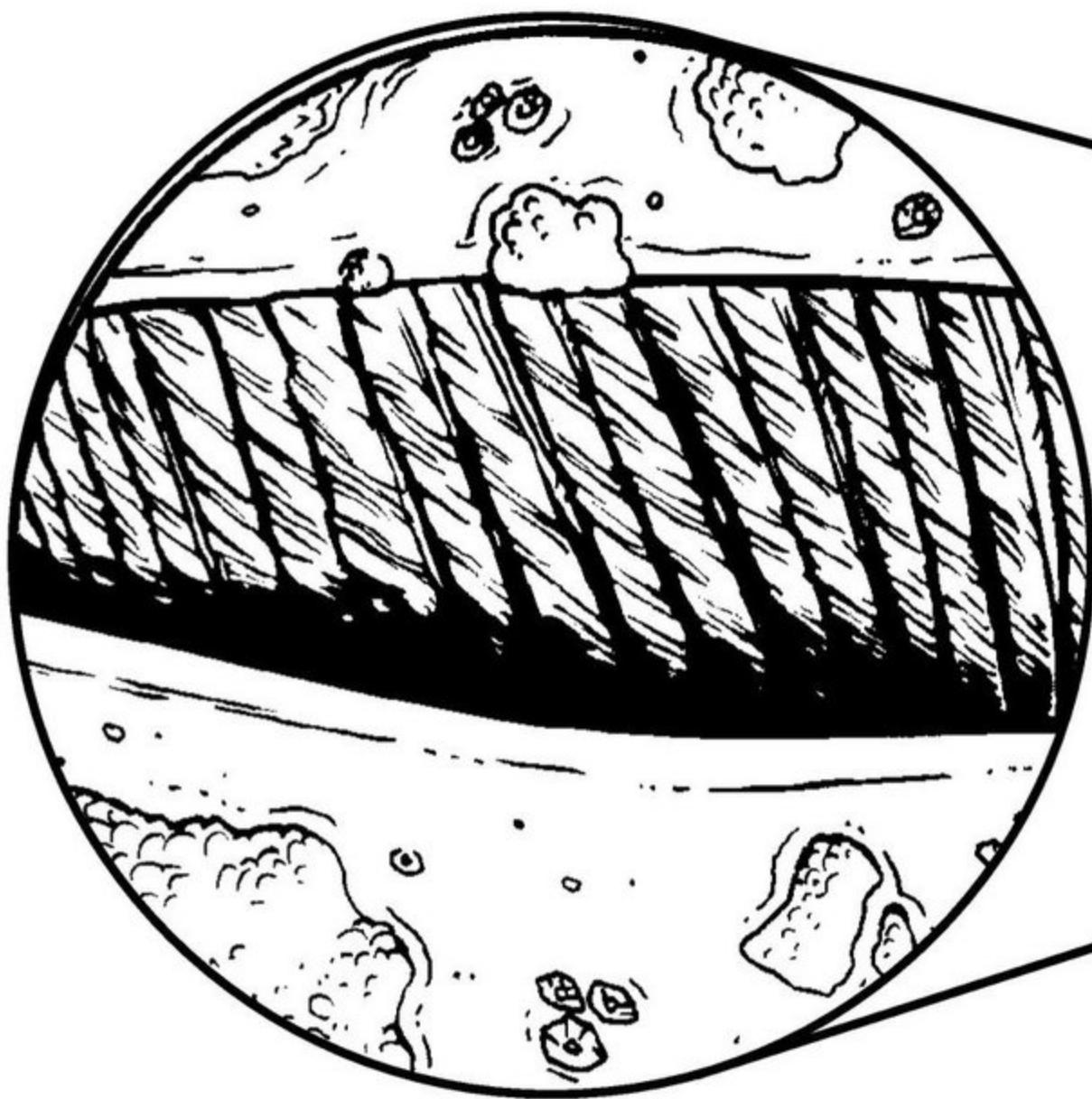


Orca, or killer whale

Toothed whales, which include dolphins and porpoises, have jaws lined with sharp teeth. They eat fish, squid, and other sea life. Larger toothed whales even eat seals. The killer whale, or orca, is a well-known toothed whale. Orcas are called killer whales because they are very good at hunting other animals.



One of the strangest whales is the **narwhal**. It is a toothed whale. The male narwhal has a large tusk growing straight out of the front of its head. The tusk can be up to eight feet long.



Gray whale in the ice

Baleen whales have a special material, called **baleen**, that hangs from their upper jaw. Baleen looks a little like a giant feather or comb. It filters small fish and very small sea life from the ocean. It seems strange that such large creatures eat such tiny food.



Humpback whales feeding on krill

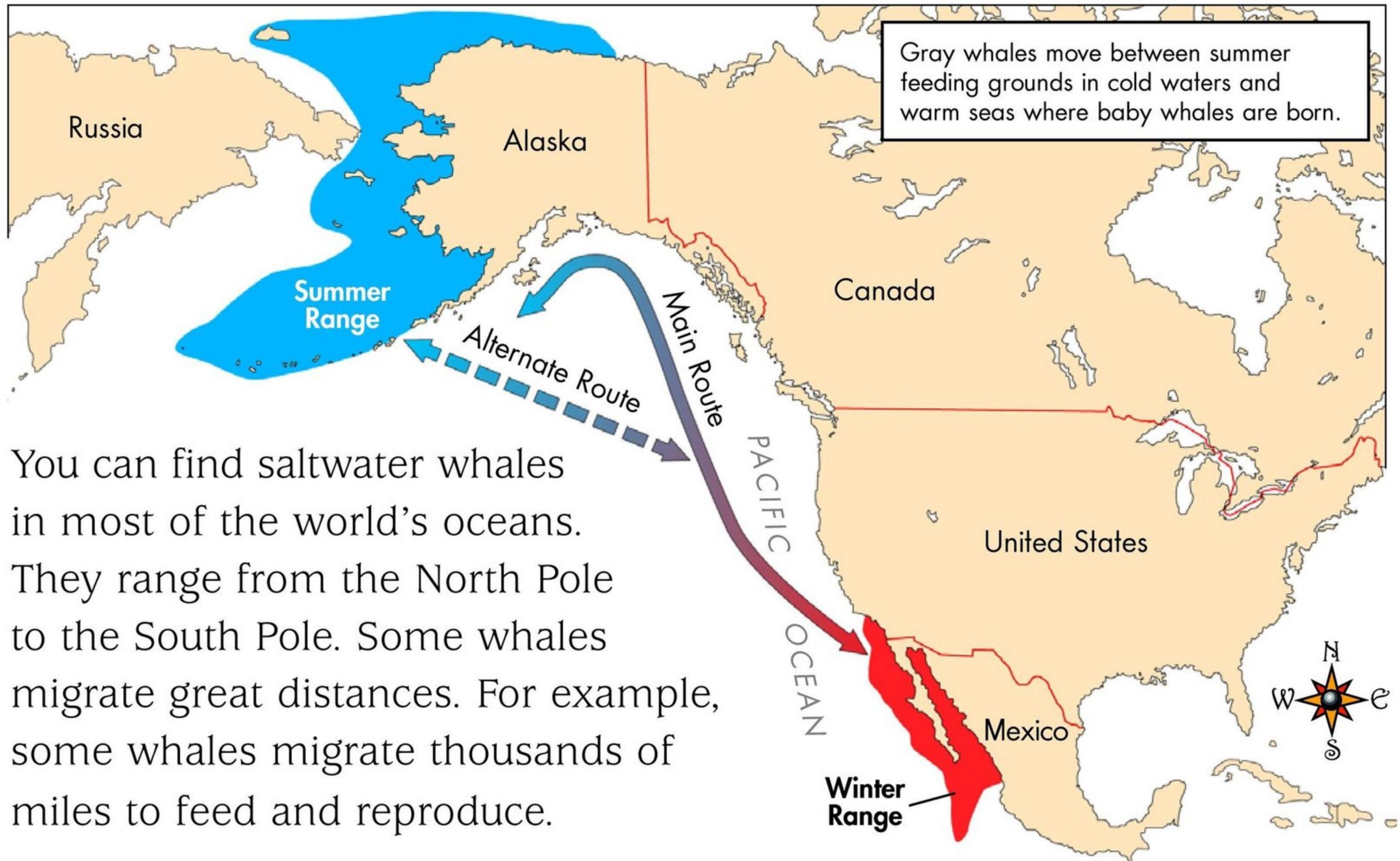
Baleen whales feed in different ways. Some feed by moving slowly through water. They swim with their mouths open. As they do, they trap small animals from the water that passes through the baleen filter. The trapped food is then swallowed. Other baleen whales swallow huge gulps of water. A single gulp could fill a couple of swimming pools. A whale then forces the water out of its mouth through the baleen filters. The whale swallows the food filtered out of the water.



A humpback whale breaching

## Where Whales Live

Most whales live in salt water. But a few live in freshwater rivers. Since water makes things **buoyant**, it helps support the weight of large whales.





Pink Amazon River dolphin

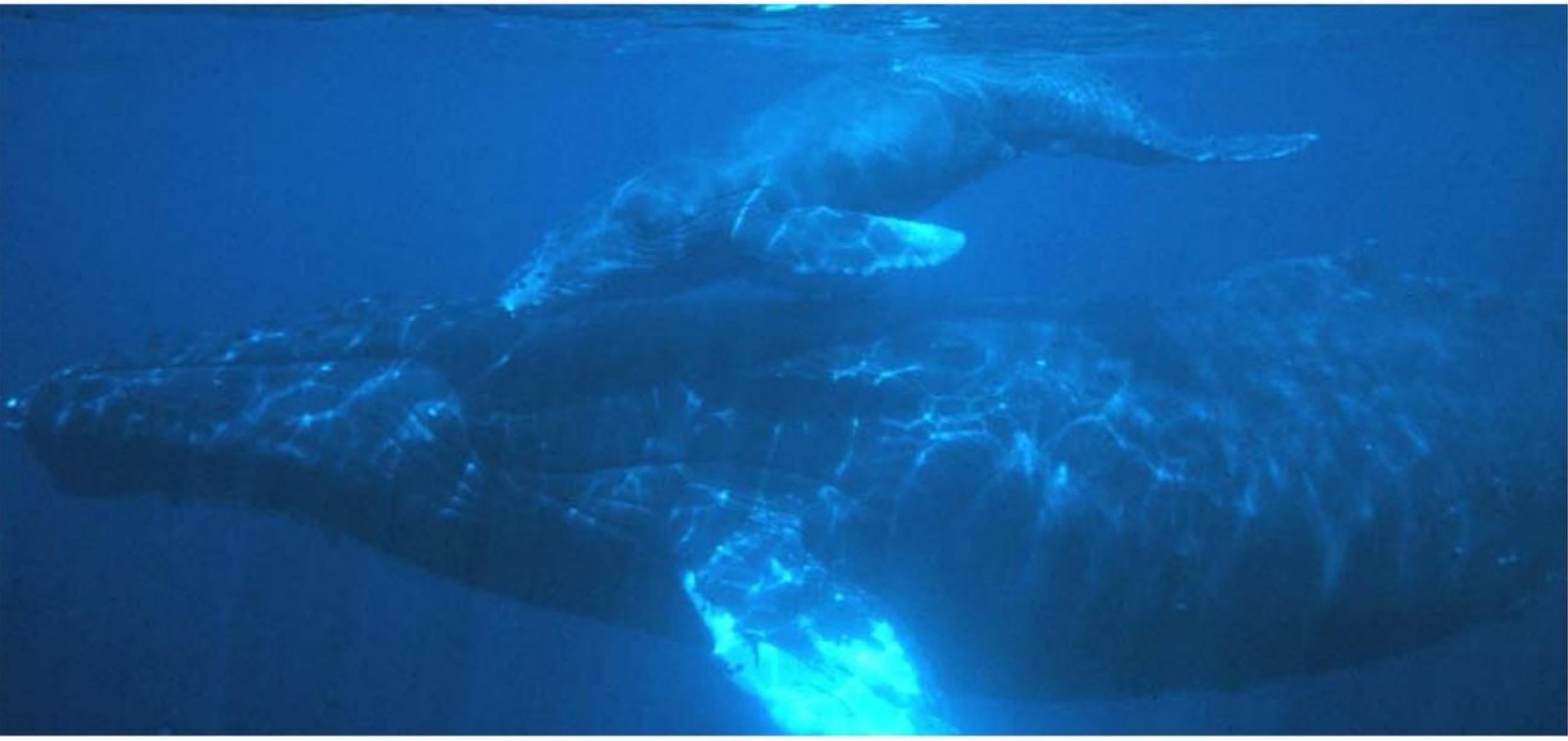
Freshwater whales can be found in certain rivers. Pink dolphins live in the Amazon River. They have been found more than 1,600 kilometers (1,000 miles) up the river.



Blowhole of a gray whale with barnacles

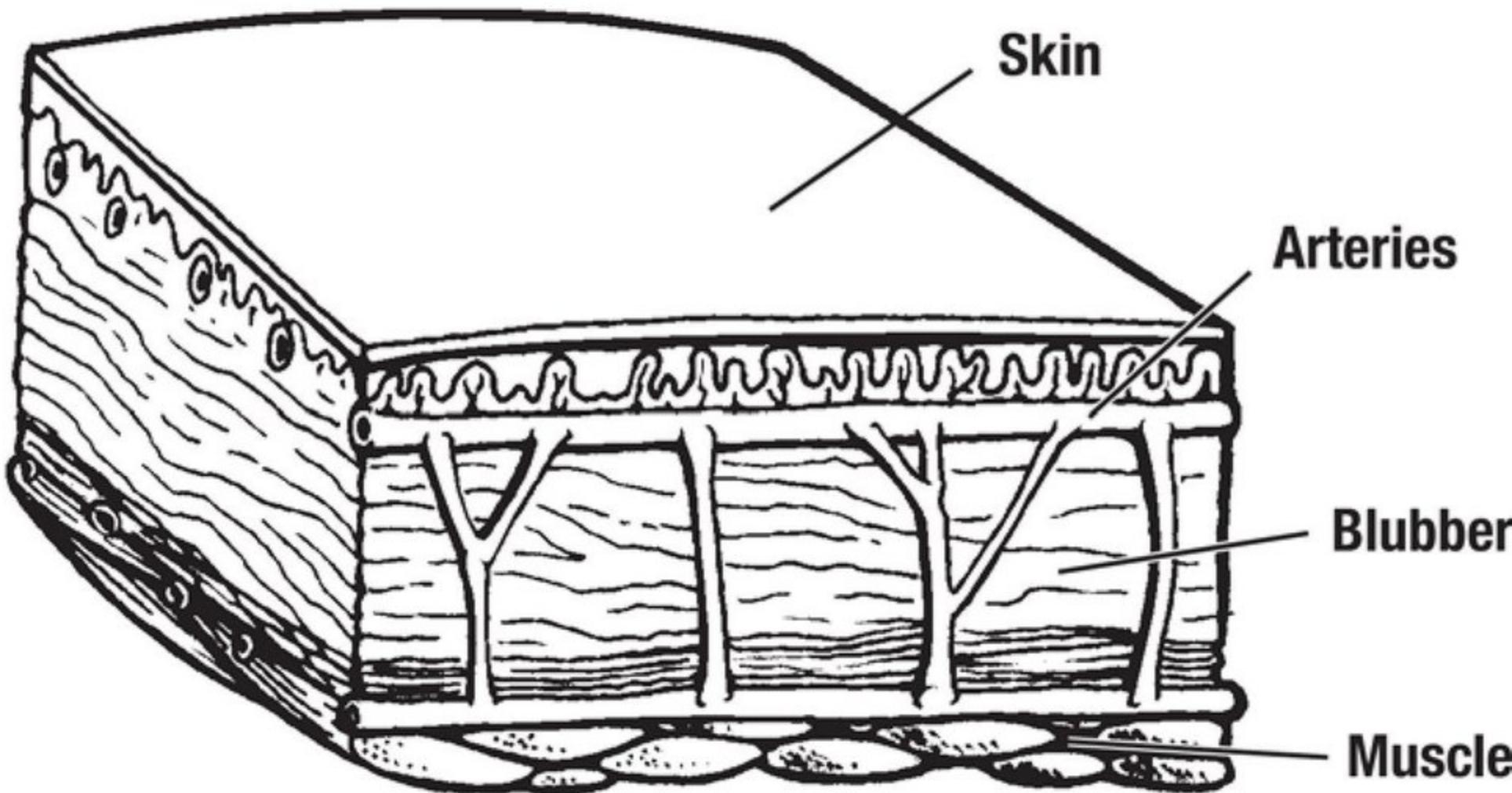
## Characteristics of Whales

Whales are mammals. They have lungs and must surface for air. Whales do not breathe through their mouths. Instead, they breathe through a **blowhole** on the top of their head. Whales have a constant body temperature. A whale's body temperature is 99 degrees Fahrenheit. It is almost the same as a human's.



Humpback whale with calf

Female whales give birth to live young. They feed their young with milk from special glands. This milk is rich in fat. A large female whale can produce more than 600 liters (150 gallons) of milk a day.

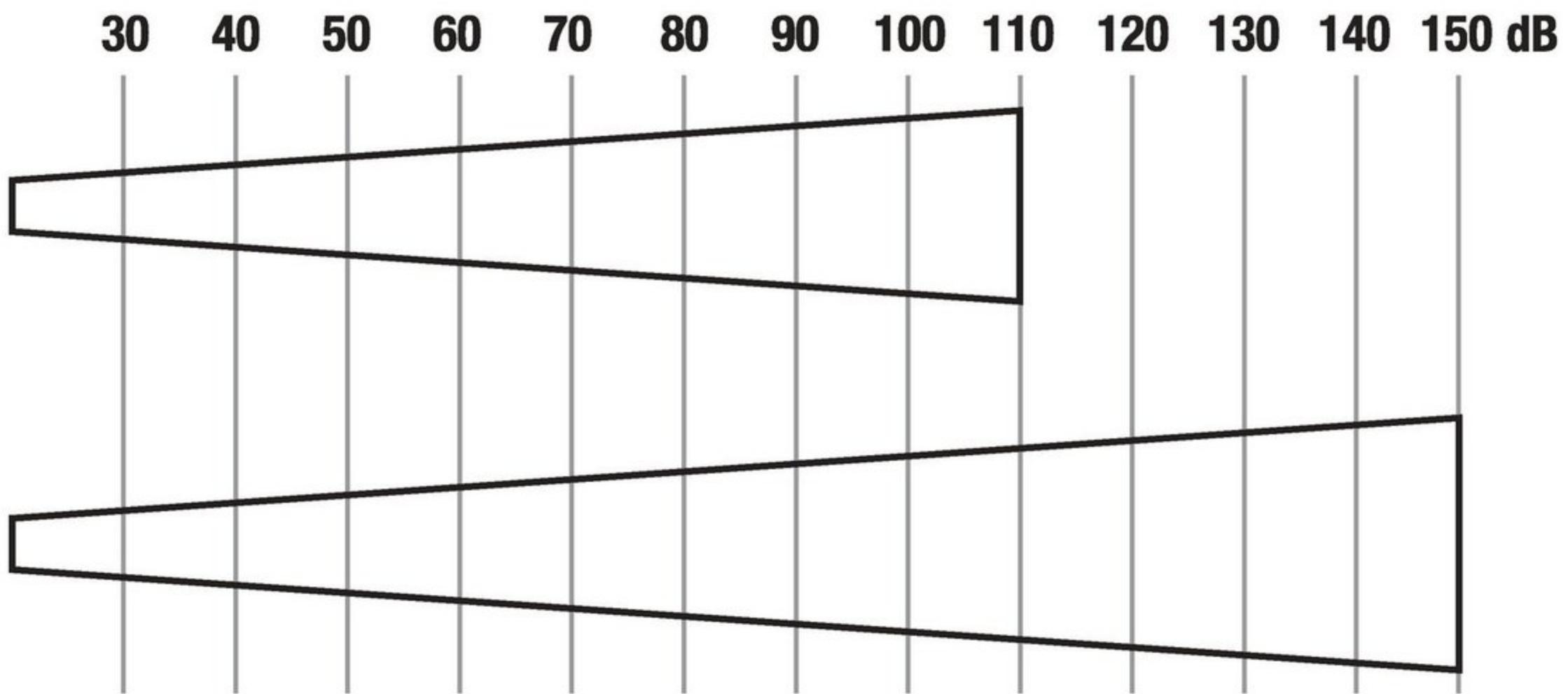
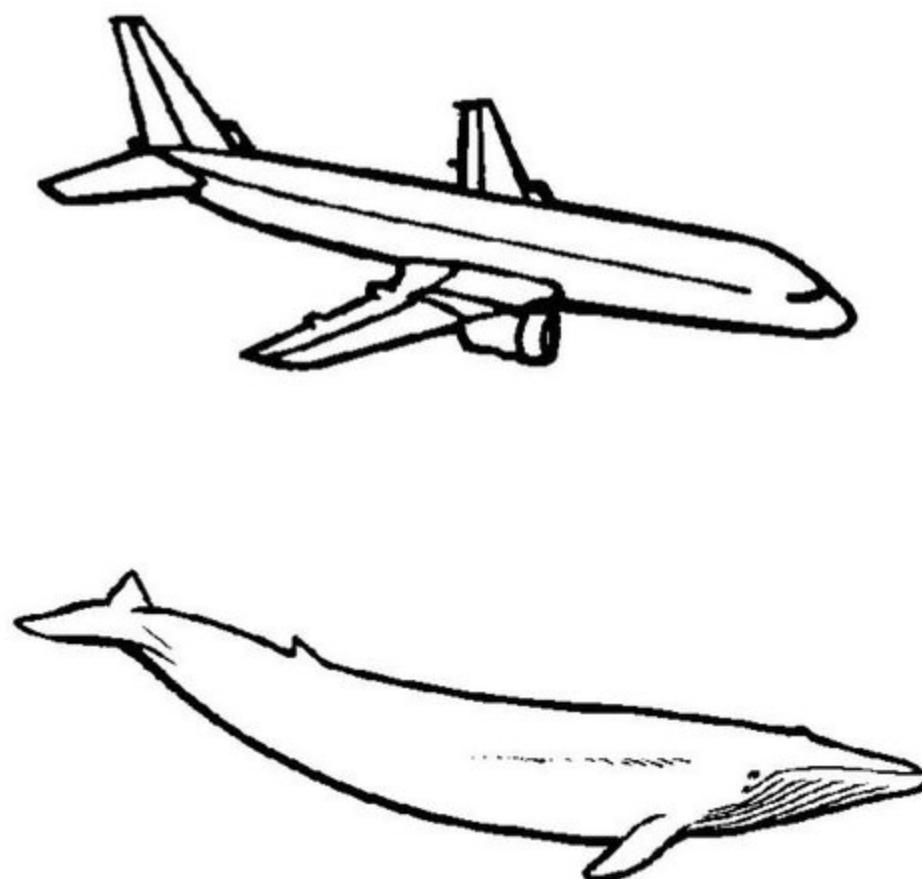


Whales have a thick layer of fat called **blubber**. The blubber lies just beneath the skin. It can be up to 50 centimeters (20 in) thick. The layer of blubber keeps whales warm when they are in very cold water. Whales store food as fat or blubber. They use the blubber for energy when food is scarce. And since blubber is lighter than other parts of the whale's body, it keeps the whale from sinking.



A humpback whale's tail

Whales have two large flippers that are paddle-shaped. They also have a large fan-shaped tail. These parts help whales move through the water. They use their flippers to steer. They use their tail to push themselves through the water.



The larger whales can make very loud sounds. A blue whale makes the loudest sound of any animal. Sound is measured in units called **decibels**. The sound of a blue whale can reach 150 decibels. In comparison, a jet engine is 110 decibels. So whales are very noisy creatures. A blue whale can be heard through the ocean for over 1,600 kilometers (1,000 miles).



Two bottle-nosed dolphins leaping out of the ocean

Some whales, such as dolphins, make a clicking sound. The sound bounces off objects and returns to the dolphin. Dolphins use the echoes of sound to locate objects in the water. Sperm whales also use this method when hunting for fish and squid in deep, dark water.



Humpback whale

## **Whale Behavior**

Whales spend much of their time diving below the water. Whales store lots of oxygen in their blood and muscles. When a whale dives, its heart slows down. This means it uses up less oxygen. Some whales can stay under water for a little less than an hour. Other whales can stay under for over an hour. Deep-diving sperm whales can stay under for up to 80 minutes.



A pod of orcas swimming with dorsal fins exposed

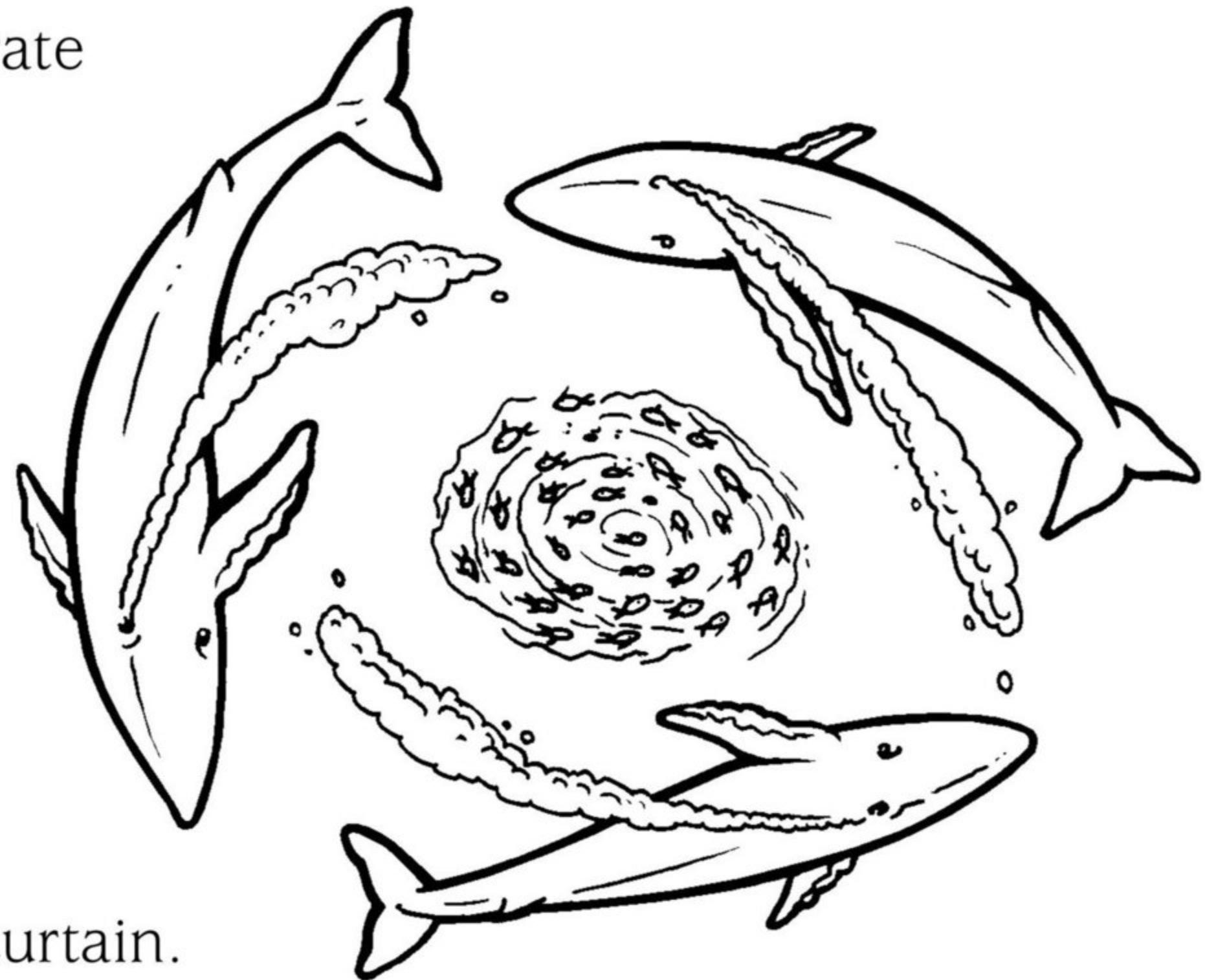
Whales usually swim in groups called **pods**. A pod consists of male and female whales of many different ages. The young whales swim with their mothers. Some pods are smaller and consist only of family members. Others are large and can have over 100 members.



Killer whale popping through the ice

Many whales migrate to warm tropical waters in the winter. They go there to have their babies. In the summer they migrate to polar regions. They go to polar waters because of the rich source of food found there.

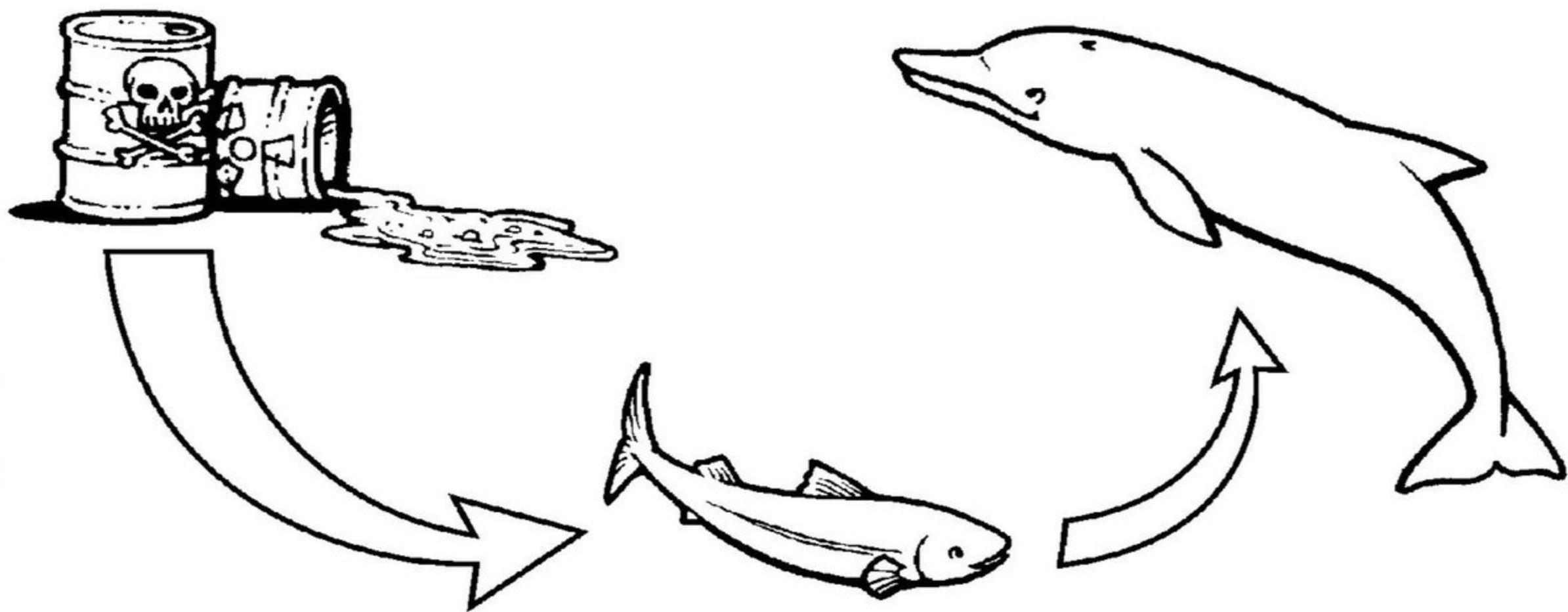
Whales often seem to cooperate with each other. One type of cooperation is bubble feeding. When whales bubble feed, they form a circle. They release bubbles from their blowholes. The bubbles make a curtain that traps small fish. Each whale takes a turn eating fish inside the curtain.





## Threatened Whales

For years, whales were hunted for their meat and blubber. The blubber was used for lamp oil. It was also used to make paint, soap, and cosmetics. As ways of hunting improved, more and more whales were killed. Many types of whales were hunted to near **extinction**.



Pollution of the oceans is also threatening whales. Whales eat fish that have toxic chemicals in their bodies. As whales eat more and more of these fish, they become poisoned. Scientists also think that noise pollution is interfering with long-distance whale communication.



Humpback whale showing large front flippers

Efforts have been made to protect whales. As a result, some types of whales are increasing in number. But whales reproduce slowly. So it will take hundreds of years to get whale populations back to safe levels.

## **Glossary**

<b>baleen</b> (n.)	special material in the mouth of certain whales that filters food from ocean water (p. 8)
<b>blubber</b> (n.)	a layer of fat found beneath the skin of whales (p. 15)
<b>buoyant</b> (adj.)	able to float (p. 10)
<b>blowhole</b> (n.)	opening on the top of a whale's head used for breathing (p. 13)
<b>decibel</b> (n.)	a unit of sound (p. 17)
<b>extinction</b> (n.)	the process by which an entire group of animals or plants dies out (p. 23)
<b>narwhal</b> (n.)	a type of toothed whale that has a long, straight tusk growing out of its head (p. 7)
<b>pod</b> (n.)	a group of whales (p. 20)

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