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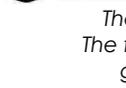
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water affairs
Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

- Go whale watching – Cape Town Routes Unlimited can give details of where to see whales on the Cape Coast (see address below).

Further reading

Whales, dolphins and porpoises. 1988. R. Harrison and M. Bryden. Timmins: Cape Town.

Secrets of the seas: Illustrated guide to marine life off southern Africa. 1992. A. Payne and R. Crawford (eds). Vlaeberg Publishers: Cape Town.

Whale watching in South Africa – the Southern Right Whale. 1997. PB. Best. Mammal Research Institute: Uni. of Pretoria.

Whale watch. 1996. V. Cockroft & P. Joyce. Struik: Cape Town.

Useful addresses

Iziko Museums of Cape Town. PO Box 61, Cape Town, 8000. Tel (021) 481 3800; Website www.iziko.org.za

Sea World Education Centre. PO Box 10712, Marine Parade, 4056. Tel (031) 328 8222; Website www.seaworld.org.za

Bayworld - Port Elizabeth Museum Complex. PO Box 13147, Humewood, 6013. Tel (041) 584 0650; Fax (041) 584 0661; Website www.bayworld.co.za

The Dolphin Action and Protection Group. Save the Whales National Campaign. PO Box 22227, Fish Hoek, 7974. Tel (021) 782 5845; E-mail info@dapg.org.za; Website www.dapg.org.za

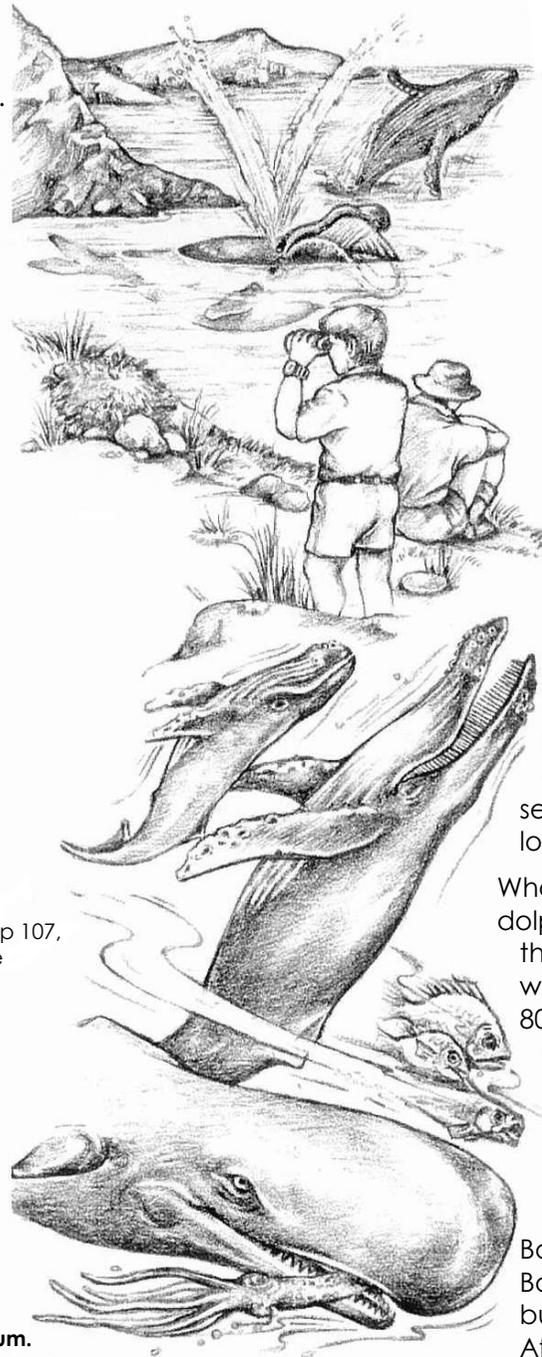
Cape Town Routes Unlimited. Waterfront Gateway Office, Shop 107, Clarke Tower Building, Southarm Road, V&A Waterfront, Cape Town, 8001. Tel (021) 405 4500; Website www.tourismcapetown.co.za



The Enviro Facts Project is sponsored by Pick 'n Pay through WWF-SA. The fact sheets have been developed with the support of several NGOs, government departments, academic institutions, and individuals. A full set of 60 Enviro Fact sheets is available from Share-Net.

Please write to: Share-Net, Enviro Facts Project, PO Box 394, Howick, 3290. Tel (033) 330 3931 ext 124/144; Fax (033) 330 4576; e-mail sharenet@wessa.co.za

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Enviro Facts 46

February 2010

Whales

The study of fossils indicates that the ancestors of today's whales gradually returned from land to live in the sea. Modern-day whales are large, aquatic mammals. They have little hair, breathe air using lungs (unlike fish which use gills to take oxygen from the water), and give birth to live young which are nursed with milk from their mother. The young are cared for until they are old enough to look after themselves.

Whales have nostrils, called blowholes, which open on the top of the head so that the whale can breathe air out and rapidly suck fresh air in without stopping swimming. The whale's body is streamlined so it can swim more easily. The tail has developed into a powerful horizontal fin called a fluke, and the forelimbs have become flippers which the whale uses to steer and change its position in the water. Some whale species seem to be able to communicate over long distances using low frequency sounds.

Whales fall into the order, Cetacea, which also includes dolphins and porpoises. The word 'cetacean' is derived from the Latin word *cetus* = a large sea animal and the Greek word *ketos* = sea monster. There are currently around 80 recognised species of cetaceans. There are two groups of cetaceans - the Baleen whales and the Toothed whales. Baleen whales are called this because of the 'teeth' which are actually comb-like plates which hang from the top jaw and are used to strain or filter out their food or zooplankton (and occasionally fish) from the sea water. The sub-order of whales known as Baleen whales include the Blue, Sei, Fin, Bryde's, Humpback, Bowhead, Minke, Grey, Right, and Pygmy Right Whales. All but the Bowhead and Grey Whales can be found in South African waters. The other sub-order, the Toothed whales, include the Sperm, Beaked, Killer (or orca), Beluga, Narwhale, and Pilot whales, as well as all dolphins and porpoises. These whales eat fish and squid.

Hunting. Whales have been hunted by people for at least 4 000 years. The Khoikhoi people utilised stranded animals. They gained their basic protein but also utilised the whale bones as building materials when wood was in short supply. With the arrival of European settlers, whaling developed rapidly. In more recent times, the advent of commercial whaling in the open seas (in the 1500s and 1600s), and the development of the explosive cannon (1868) and steam ships has resulted in a plundering of the world's whale stocks. Whales used to be hunted for a variety of products, including oil, whalebone and meat. The only product with special value today is the meat, most of which is eaten in Japan.

The Right Whale got its name from the early whalers as it was the 'Right Whale' to hunt - it was slow swimming, hugged the shoreline, provided a lot of oil and floated when dead. By the middle of the 19th century, the Right Whale was almost hunted to extinction in the southern African waters with fewer than 100 surviving. Hunting of Southern Right Whales almost destroyed the species before it was awarded full conservation protection in 1940. Since then, this whale has increased in number to over 2 000. The Right Whales return from near extinction in South African waters has to be one of the world's most important whale conservation success stories.

Conservation action. All whale hunting is controlled by the International Whaling Commission (IWC). The IWC is, however, a voluntary international organisation and is not backed up by treaty – this means that there are substantial practical limitations on its authority. In 1982 the IWC introduced a pause in commercial whaling for an unspecified period, to start in 1986. Despite this moratorium, Japan, Norway and Iceland have used a loophole in the convention to continue to kill small numbers of whales for 'scientific research' – although it is believed that these catches do not pose a threat to the survival of the whale populations concerned. Since 1994, however, Norway, has been whaling commercially and Iceland began hunting commercially in 2006.

There is an international ban on the commercial killing of all whales. Unfortunately, the IWC has no ability to enforce any of its decisions through penalty imposition. Debate within the IWC around lifting the ban on whaling applies only to whales such as the Minke Whales, whose numbers are plentiful. The numbers of most other whale species are far too low to consider allowing commercial whaling.

There is greater concern for the conservation of several smaller cetacean species including the river dolphins of the Far East, and the Vaquita in Mexico, which are reduced to as few as 200 animals in some species, and are gravely threatened by habitat destruction and entanglement in fishing gear.

Whale species found in southern African waters.

Thirty-seven species of cetaceans are found in South African waters, including:

- **Blue whale.** This is the largest living animal on Earth and weighs up to 130 000kg. It can grow up to 25m in length. A favourite target of the 20th century whaling fleets, the Blue Whale was nearly exterminated before it was given world-wide protection in 1967. It is estimated that whaling has reduced the total world population to less than 10 000, from a pre-whaling figure of 300 000.

- **Humpback Whale.** Named for the distinctive hump behind the dorsal fin, this is an agile and acrobatic whale, often leaping out of the water (breaching) and slapping its tail and flippers on the water. The most amazing characteristic of the humpback is its song - a fascinating pattern of grunts, squeals, squeaks, moans and hums in repeated sequences that may go on for 20 minutes or more. This species has been protected world-wide since 1963, and is now showing signs of recovery.

- **Southern Right Whale.** Commonly found close inshore around Cape Town and the Port Elizabeth coast, its range is between 30° and 50° South. These whales come close inshore to mate and to have their calves during the winter and spring months, but have been sighted during the summer months as well. Gestation is approximately one year, and calves are suckled for nine to twelve months. Females breed about once every three years, or less frequently. Scientists identify individual whales by the distinctive white callosities (wart-like outgrowths of the skin that are covered with parasites) on the head. This whale has twin blowholes on the top of its head which expel air under great pressure. This condenses and forms a distinctive 4m high V-shape.

- **Sperm Whale.** This is one of the best known of the world's whales as it featured in Herman Melville's book *Moby Dick*. It is easily recognised by its huge head and row of large white teeth in the lower jaw. Sperm Whales probably dive deeper than any other whale - 900m or more – and find their food in the lower areas of the oceans. The head of the Sperm Whale contains a huge amount of very fine, clear oil (called spermaceti).

What you can do

- *Become informed about the complex issues surrounding whale conservation, particularly the issue of sustainable use.*
- *Beached whales can be reported to one of the contacts listed overleaf.*