

Whales in the Derwent

The River Derwent once supported large numbers of whales. When the British arrived in 1803 the Reverend Robert Knopwood observed how his small boat was forced to keep close to shore to avoid being capsized by the passing whales. At times, it was considered dangerous to cross the estuary in small boats due to the large number of whales.

Many of the whales in the Derwent were southern right whales, so named because they were the "right" whales to catch - they could be hunted from the shore, approached easily by boat and tended to float after they were killed. Whaling was one of the first industries established in the Derwent just two years after the arrival of the British, peaking between 1835 and 1839.

The estuary was once a calving ground for the southern right whale, which fed in the cold waters of the Great Southern Ocean during summer and moved to warmer, more sheltered waters in the north to breed during autumn. In these areas, whales were often found less than 200 metres from shore and in water as shallow as 5m

Southern right whales

The southern right whale is mostly black, sometimes with white patches on its chin and belly. Each individual can be identified and tracked via the distinctive pattern of "callosities" on its head - these lumps of barnacles, whale lice and parasitic worms form unique patterns on each whale. These whales are 4-18 metres long and have broad, rounded backs with no dorsal fin. They have a distinctive V-shaped blow when they spray from their blowholes.

Southern right whales follow an annual migration route, travelling about 5000km in each direction between Antarctica and the southern coasts of Australia, South America and Africa. In the summer, many stay in the sub Antarctic waters between 40 and 55 degrees south, feeding on the dense copepods (planktonic crustaceans) and krill blooms found in the Southern Ocean. Baleen inside the whale's mouth is used to sieve food. The whales then travel north, to warmer temperate waters to give birth, rear their young and breed during winter months. During this time they do little or no feeding, surviving on their fat reserves.



Callosites on the head of a whale in Frederick Henry Bay in July 2005. Picture: James Kerr, Mercury

Why were whales killed?

From the earliest days of European settlement, whales were killed to make oil for lighting and the lubrication of machinery. Initially whalers processed only the blubber, tongue and parts of the head. Other body parts such as tissues, organs and bones also contain oil but weren't utilised until pressurized cooking methods were developed in the late 19th century.

Oil from the southern right whale was called "black oil". It burned with a low light and a distinctive smell which made it suitable only for street lighting. The baleen was prized because of its strength and flexibility and was used for the construction of weaving implements, bases for beds, carriage parts and corsets.



Whaling pots at Salamanca Place. Picture: James Kerr, Mercury

Whaling in the Derwent

Hobart's first whaling station, known as Trywork Point, was established in 1805 at Droughty Point on the eastern shore. Large iron cauldrons called trypots were used to boil the blubber. Two or more trypots were placed together in a brick or stone furnace known as a tryworks. To extract the purest oil the pots were constantly stirred to prevent sediment settling and burning. The trypots were heated mostly with scraps of blubber that remained after the oil had been melted out. This created a foul-smelling, oily black smoke



Tasmanian whaleboat. Picture: Tasmanian Maritime Museum

Tasmanian whaling boats carried crews of up to six men and their equipment, hunting southern right whales as they entered bays and estuaries. The boats were longer and heavier than American whaling boats but the Tasmanian timber made for a smoother and quieter passage so that the whalers were able to approach the whales unnoticed.

The years 1836-41 marked the peak of the Tasmanian whaling industry. In 1836 there were nine whaling stations in bays around Hobart. By 1841, 53 stations dotted the shorelines of

Tasmania, but the sea's bounty was nearly exhausted - most of the southern right whales had disappeared. In the 1850s efforts turned to sperm whales and these were hunted offshore out of Hobart

Whaling centres in the estuary had been fished out by the 1840s. The Trywork Point station had ceased to exist by 1818 and it was rare to see whales returning. If they did the consequences were still the same.

How many whales were caught? Whaling continued intermittently until the

1890s, by which time the southern right whale had been hunted to the edge of extinction more than 25.000 had been killed in Australia and New Zealand alone. It was recorded that 7745 southern right whales were taken by Tasmanian whalers and this is a minimum as many would not have been retrieved and these plus others were never recorded.



"Flensing" a whale on Norfolk Island in 1911. The same process was used in Hobart a century earlier. Picture: National Library of Australia

Southern right whales today

There have been signs of a steady recovery in whale numbers over the last 30 years - reflected in the number of sightings reported around Tasmania. In 1980, there was one report of a whale sighting, whereas in 1995 (a peak year) there were 52 reports of southern right whales around the state. Note these are sightings not individuals, so there may be many duplicates.

At present, the Department of Primary Industries, Parks, Water and Environment's (DPIPWE) whale hotline normally receives at least one reported sighting per year from the Derwent between North Bruny Island and Sandy Bay. Some southern right



Southern right whale mother and calf in the Derwent in August 2010. Picture: Tasmanian Department of Primary Industries, Parks, Water and Environment.

whale cows are arriving with calves in areas such as Great Oyster Bay, with an August 2010 sighting of a whale and newborn calf. If this calf was born in the Derwent, it could be the first since 1820. There were other sightings of whales near Coles Bay and Eaglehawk Neck prior to the cow and calf being spotted in the Derwent. Twenty years of constant whale watching in the Bight has never seen such a birthing.

The return of southern right whales to the Derwent and other parts of Australia is a sign that they are slowly recovering from their earlier exploitation to near extinction.

Conserving and monitoring

The Department of Primary Industries, Parks, Water and the Environment (DPIPWE) records the occurrence of cetaceans such as southern right whales within the Tasmanian Cetacean Marine Occurrence Database (Whalebase), which has become an invaluable tool for the conservation of cetaceans in Tasmania. Records are sourced from staff surveys, agency reports (including the Tasmanian Parks and Wildlife Service) and information received via an all-hours Whale Hotline for the reporting of strandings and other marine mammal incidents.

Part of the program includes photographing individuals to allow for easier identification of species which has resulted in an impressive catalogue of unique individual cetaceans from features such callosity profiles found on southern right whales. DPIPWE, through the Princess Melikoff Trust Marine Mammal Conservation Program, is also involved in whale and dolphin stranding events and in the collection of data to help in the understanding of why such events occur.

What you can do

- Report all whale sightings to 0427 942 537
- When boating on the Derwent keep a careful look out for whales to avoid collisions, particularly during winter and early spring.
- Don't approach them head on or take your boat within 100 metres. Southern right whales are inquisitive and may well approach your boat to investigate.
- Whales may become entangled and drown in nets, craypot lines or other fishing gear. Particular care should be taken fishing in areas frequented by whales.
- Detailed whale watching guidelines are available from www.environment.gov.au/coasts/ publications/whale-watchingguidelines-2005.html

Find out more

- Tasmanian Department of Primary Industries, Parks, Water and Environment. www.dpipwe.tas.gov.au
- Tasmanian Maritime Museum. www.maritimetas.org/web-content/ resources/whaling.html
- Tasmanian Parks and Wildlife Service. www.parks.tas.gov. au/index.aspx?base=1803





