

Meet Jubi – Singapore's Sperm Whale

By Anne Pinto-Rodrigues

The recent unveiling of a sperm whale skeleton at the Lee Kong Chian Natural History Museum (LKCNHM) has sparked a lot of interest in the subject of whales. The skeleton comes from a dead female sperm whale that fortuitously washed up near Jurong Island in July 2015. It is an almost complete whale skeleton, even the last tailbone, the size of a 10-cent coin, was recovered and put on display by the meticulous team at the LKCNHM. She has been affectionately nicknamed Jubi by the museum staff, short for 'Jubilee whale', as she was found in the 50th year of Singapore's nationhood.

Sperm whales (*Physeter macrocephalus*) get their name from the waxy substance found in their large head cavity, which early whalers mistook to be the whale's sperm. This notion led to the misnomer 'sperm whale' and the wax was called 'spermaceti'. These leviathans were hunted in alarming numbers till the late 19th century and the oils extracted from them were used to light up the western world. Liquefied blubber was used

as lamp oil while candles were made out of spermaceti. Thankfully, the commercial production of kerosene in the mid-1800s led to a decline in demand for whale oils and whaling was reduced. In 1986, the International Whaling Commission placed a moratorium on all commercial whaling, thus giving whale populations a chance to recover from centuries of indiscriminate slaughter.

Sperm whales, which have the largest brain in the animal kingdom, are classified under the sub-order *Cetacea* (*cetus* is Latin for 'large sea creature'). This sub-order includes aquatic mammals such as dolphins, porpoises and of course, whales. To support their life underwater, the body of a cetacean is shaped just like a fish, but in reality whales are mammals like us. This means they are warm-blooded, need to breathe air through their lungs, gestate and give birth to live young, among a multitude of other similarities. These remarkable creatures are also known for their intelligence and communication skills, such as the 'clicking' of sperm whales or the 'whistling' of dolphins.

The diet of sperm whales consists primarily of squid while fish, octopus and crabs form the rest of their intake. It is said a female sperm whale can eat up to



Only the tail fluke is visible as a sperm whale dives into the ocean off Kaikoura, New Zealand. Photo by the author



The skeleton of Singapore's sperm whale, on display at the Lee Kong Chian Natural History Museum. Photo courtesy of the Lee Kong Chian Natural History Museum

800 squid a day. Marcus Chua, Curator of Mammals at the LKCNHM, informed us that nearly 1,800 squid beaks from several different species were found in Jubi's stomach. He said that work was underway to find out the squid species to which the beaks belong. This might help shed some light on Jubi's journey to Singapore. Sadly, several pieces of plastic trash were also found in her gut, an indication of the ever-increasing reach of plastic litter in the world's oceans.

DNA testing of Jubi's skin indicates that she may have belonged to a North Pacific population (the area around Japan). She was probably travelling southward towards Southeast Asia, when she was hit by a ship, as evidenced by the large, gaping wound and the damaged vertebra on her back.

The International Union for the Conservation of Nature and Natural Resources (IUCN) Red List of Threatened Species classifies sperm whales as 'vulnerable' to extinction. Thanks to an increasing interest in whale-watching-related tourism, whales today are worth a lot more alive than dead.

Sperm whales are not resident in Singapore waters. While the circumstances of Jubi's death are unfortunate, finding this carcass has given researchers at the LKCNHM a chance to study this species first-hand. The sperm whale skeleton displayed at the LKCNHM museum will help educate the public about the conservation of this magnificent species and also create greater awareness of the damage plastic does to marine ecosystems.

Anne Pinto-Rodrigues is a strong supporter of marine conservation and first became interested in cetaceans following a whale-watching trip to Kaikoura, New Zealand, nearly a decade ago.
