

Remains of whale found off Tanjong Pagar being preserved

Ang Qing
Correspondent

Work to preserve the remains of a whale that surfaced in the waters off Tanjong Pagar on Sept 6 is under way as scientists labour to solve its many mysteries.

Marine mammal scientists told *The Straits Times* that the baleen whale is likely to have hailed from elsewhere in the South China Sea or the waters off Peninsular Malaysia, as Singapore's shallow waters are insufficient to support buffets of prey that most of these large whales feed on.

The dead animal was identified as a rorqual whale – a family of baleen whales characterised by their pleated throats that expand when they eat.

These filter-feeding whales also include the blue whale, the world's largest.

Whales play a key role in ecosystems as they help transport nutrients across oceans and can mitigate the impact of climate change by storing large amounts of carbon.

NUS' Lee Kong Chian Natural History Museum curator of mammals Marcus Chua, who is leading the operation to study and preserve the whale, said the team be-

gan cutting flesh off the carcass on Sept 15 to obtain its skeleton.

"The next step will be the degreasing and preservation of the bones," he said. "Degreasing is important because whale bones are oily."

Explaining why it took days to salvage the carcass from the water, Dr Chua said it was a complex operation, which entailed careful planning and securing permits.

It will take some time to determine the exact species the specimen belongs to, as the roughly 6.3m-long carcass was at an advanced stage of decomposition, he added.

Dr Lindsay Porter, who chairs the International Whaling Commission's Scientific Committee, said that given the carcass' state of decay, it could have broken up at sea, so the whale's missing rear half does not necessarily indicate how it died.

She theorised that the whale likely washed up in Singapore from other parts of the South China Sea, where there is a resident population of the Bryde's whale, and another seven species of rorqual whales that have been detected.

The chances of spotting these leviathans in coastal exclusive economic zones are slim, noted Dr Porter, a senior researcher at the non-profit group South-east Asia



The carcass of the whale being retrieved near Marina Bay Cruise Centre on Sept 12. The animal likely came from elsewhere in the South China Sea or waters off Peninsular Malaysia. PHOTO: LEE KONG CHIAN NATURAL HISTORY MUSEUM, NUS

Marine Mammal Research, since these typically cover less than 1 per cent of the waters large whales swim through.

A spokeswoman for marine mammal research and conservation group MareCet said a whale population is also present in the waters off Kedah on the north-western coast of Peninsular Malaysia.

The tropical rorqual whales most commonly found near Peninsular Malaysia are Bryde's whales and

Eden's whales, she added.

While it is unclear whether baleen whales frequent Singapore's waters, she said that highly urbanised coastlines with intense shipping traffic, underwater noise, pollution and limited prey are generally unsuitable as whale habitats.

Even though many whale species are known to travel through Singapore's waters, populations of large whales are not known to dwell there, said Mr Sirius Ng, a doctoral student at the National University

of Singapore studying marine mammals.

One reason for the absence of baleen whales is the lack of their prey in Singapore's waters.

Most baleen whales feed on large aggregations of prey like krill and anchovies that take place when coastal upwellings bring nutrient-rich water to the surface, said Mr Ng.

This natural phenomenon is not observed in Singapore but does happen in Indonesia and Malaysia, where several species of rorqual whales have been detected.

Said Mr Ng: "Therefore, the carcass could be a vagrant individual that travelled close to Singapore before its demise, or it could have succumbed elsewhere in the region and drifted to Singapore."

The whales more regularly spotted frolicking in Singapore's waters are several species of small-toothed whales like the Indo-Pacific humpback dolphin.

This is because Singapore's shallow coastal waters provide a habitat and sufficient food for these smaller whale species but are inadequate for larger whales, such as sperm whales and most baleen whales, that need deeper waters or nutrient-rich currents, said Dr Chua.

Of the nine species of rorqual whales in the world, four are glob-

ally threatened with extinction.

Most baleen whales have been targeted by commercial whale fishing over several centuries for their meat and other products, said Mr Ng.

With the international adoption of anti-whaling laws in 1986, the intensity of harvesting has declined, but these whales continue to face other human-induced threats like vessel collisions, which killed the last whale to have washed up in Singapore in 2015.

The dead sperm whale was found floating off Jurong Island with a gash in its back.

The mammal, named Jubilee for Singapore's golden jubilee that year, is now displayed at the Lee Kong Chian Natural History Museum.

Narrow and busy waterways like the Strait of Malacca and the Strait of Singapore pose an especially high risk of such ship strikes, said the MareCet spokeswoman.

Other threats to whales include pollution, loss of habitat and entrapment in fishing gear, said Mr Ng.

He added: "These threats stem from the encroachment of human activities into the coastal environment, which is commonly observed in South-east Asia."

aqing@sph.com.sg