

Saving Singapore's gentle giants

Spanning records from 1820 to 2024, a new study has revealed the clearest history yet of Singapore's marine mammals. **Ang Qing** highlights seven species that have surfaced in the Republic's waters and how scientists say they should be protected.

1 Indo-Pacific bottlenose dolphin

(*Tursiops aduncus*)

The third-most commonly seen mammal is most typically found in cleaner waters of the Singapore Strait near the Southern Islands. Among the most common species, it has the highest average group size, at more than seven dolphins. Its numbers have dropped significantly over the past two or three decades.

3 Indo-Pacific humpback dolphin

(*Sousa chinensis*)

The most common marine mammal spotted here. The species is seen primarily near the Southern Islands. Local records indicate that the carnivore travels in an average group size of less than three in Singapore's waters. Its numbers have declined over the past two or three decades.

4 Sperm whale

(*Physeter macrocephalus*)

There are only two records here of the deep-diving species, which is rarely found in shallow waters. Its nutrient-rich waste feeds phytoplankton, which absorb planet-warming carbon dioxide. The species can grow up to 18m.

5 Dugong

(*Dugong dugon*)

The sea cow, so named for its diet of seagrass, is the second-most commonly recorded marine mammal here. The species is found typically as carcasses. It routinely returns to historical refuges in Sungei Johor Estuary, leaving trails in seagrass meadows as it feeds. It is often found alone.

2 Irrawaddy dolphin

(*Orcaella brevirostris*)

The dolphin has been found only once here, in 2014, when its skeletal remains were found partially buried in the sand along a beach at East Coast Park. The dolphin eats predominantly fish, spitting water while feeding to help capture them. It tends to swim in small groups of up to six.

7 False killer whale

(*Pseudorca crassidens*)

The dolphin has been spotted twice in Singapore's waters. It is highly sociable and can form pods of up to 500, incorporating other dolphin species. The carnivore has been known to eat other dolphins, although it usually eats squid and fish.

6 Indo-Pacific finless porpoise

(*Neophocaena phocaenoides*)

The porpoise first surfaced in 1996, when a carcass was found in Pasir Ris Park. The carnivore does not leap out of water like dolphins do, making it difficult to spot in the wild. It frequents shallow water along mangrove-lined shores.

Hot spots

Western Islands
(Pulau Hantu, Pulau Semakau and reefs in the vicinity)

Sungei Johor area
(Changi, Pulau Ubin, Pasir Ris)

Southern Islands
Kusu Island, Sisters' Islands and St John's Island Complex

Threats



Habitat degradation and loss due to coastal development



Noise pollution



Vessel strikes due to busy territorial waters



Highly variable water quality and harmful algae blooms, which likely result in unstable food supply



Entanglement in fishing gear

Recommendations

- Protection of marine mammal hot spots as nature reserves or marine parks
- Speed limit of 10 knots at hot spots
- Understanding foraging and reproduction activity (mating, birthing, caring for young) at hot spots and their seasonality
- Local marine mammal observer networks