

There are two types of whale – baleen and toothed whales. Baleen whales have 2 'comblike' keratin plates in their mouths that they use to filter their prey through, whereas toothed whales (including dolphins and porpoises) have teeth. These differences have an affect on plastic ingestion.

Baleen whales take in large amounts of water each time they open their mouths to feed (up to 75,000 litres in blue whales!), resulting in the high potential of plastic consumed. When ingested, microplastics found in the water or in the plankton that they are feeding on can lead to long term health issues. Larger plastics, which can block their digestive tracts and lead to starvation, are also a danger, especially as larger pieces of plastic are unable to filter out of the keratin plates once sucked in.

Globally there are many recordings of whale deaths, including in Cairns in 2009 a Brydes whale was found dying of starvation on the shore with 6m³ of plastic found inside it. Toothed whales are more at risk of ingesting large amounts of plastic, mainly due to mistaking the pieces for their food, although microplastics are also a threat.

In Schleswig-Holstein, Germany in 2016, 13 stranded sperm whales all had the presence of plastic, ranging from 13m long fishing nets and a 70cm long plastic component from a car.

