#### **TUBERCLES**

Tubercles are golf ball-sized bumps on a humpback whale's upper and lower jaws they are the only whales that have them! Scientists think they are used to sense temperature and vibrations in the water.

#### DORSAL FIN

The humpback whale's dorsal fin is located about 2/3 of the way down its back. It is pointed and just 30cm tall, which is very small compared to the size of the whale's body.

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## **PEDUNCLE MUSCLE**

The peduncle muscle is the strongest muscle in the entire animal kingdom! This powerful muscle is used to move the tail up and down for swimming. A humpback whale arches its peduncle when getting ready to dive down. This looks like a hump on the back of the whale, which is how the humpback whale got its name.

### **FLUKES**

Flukes are the whale's tail. They are approximately 4.5 metres across: that's 1/3 of their whole body length! Each humpback whale has different flukes, just like people have different fingerprints.

#### BALEEN

Humpback whales do not have teeth, instead they have up to 400 pairs of baleen plates hanging down from both sides of their long upper jaws. Each baleen plate is up to 60-90cm long. Humpback whales use baleen to feed by gulping in large amounts of water, and their baleen filters out small prey, such as krill and small fish. Baleen is made out of a strong and flexible material called keratin - this is the same material our fingernails are made of!

### **BLUBBER**

Humpback whales have a thick layer of fat, called blubber, which can be up to 30cm thick! Blubber helps whales stay warm in cold water - and it even helps them float too.

#### **PECTORAL FINS**

Humpback whales have the longest pectoral fins of all whales: they are 4.5 metres long: a 1/3 of their whole body length! Humpback whales use their paddle-shaped pectoral fins for steering, turning very quickly and stopping in the water while swimming.

WHALE song

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# Humpback whale Megaptera novaeangliae



A humpback's pectoral fins can grow up to 4.5 metres long - a wingspan that measures almost half the length of a bowling lane!

As baleen whales, humpbacks feed on tiny crustaceans (mostly krill), plankton and small fish. Humpback whales can consume up to **1,800 kilograms of food** in a single day, which would weigh more than a car!

Humpbacks migrate thousands of kilometres from their summer feeding grounds in cold, polar waters (like Alaska and Antarctica) to winter breeding grounds in warm, tropical waters near the equator (like Hawaii and Tonga).

Among the 78 species of baleen and toothed whales, only a small handful are known to produce **whale songs**, including humpbacks.











Whales and Kapiti have significant historic connections. Particularly compelling is the navigation story connecting whales and Māori in the region in pre-European times. It is believed that in exploring the region in their waka, Māori followed the navigation path of whales to guide them safely through complex and dangerous currents around Cook Strait and Kapiti Island. This helped begin the settling of Kapiti Island which was of strategic and political importance in the 19th century, particularly as a stronghold of Te Rauparaha and Ngati Toa.

Te Rauparaha started trading with Pakeha by welcoming visiting ships to Kapiti and encouraging whalers and traders to live among Ngāti Toa. Cook Strait became the centre of a lucrative maritime trading empire, controlled by Ngāti Toa from their island fortress of Kapiti. Humpback and southern right whales were slaughtered by intensive whaling activities based around Cook Strait and on Te Kahe Te Rau O Te Rangi, Kapiti Island during past centuries. According to the Department of Conservation's website, an original population of approximately 10,000 humpbacks at the beginning of the last century was reduced to less than 5%, or an estimated 250-500 whales, of the original population. Humpbacks were given total protection from commercial whaling by the International Whaling Commission (IWC) in 1966 and are classed as Vulnerable by the International Union for Conservation of Nature (IUCN). The humpback whale (Megaptera novaeangliae) is a migratory species of Baleen whale found throughout the oceans of the North Atlantic, North Pacific and Southern Hemisphere. Northern migrating Humpbacks in New Zealand waters pass along the east coast of the South Island and then divide into two groups, with one continuing up the east side of the North Island and the other passing through Cook Strait and up the west side of the North Island past the Kapiti region. In 2010, over 40 Humpbacks were sighted migrating through this region.

Image credit: [Bowring, Walter Armiger] 1874-1931 :[Jillett's whaling station on Kapiti Island, 1844] - [1907?] source: Alexander Turnbull Library



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![](_page_9_Picture_0.jpeg)

![](_page_10_Figure_0.jpeg)

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**1IGRATION** OCEAN RAPARAUMU PECTORAL PLEAT RAUMATI UOTERANGI SCIENCE SEVEN SONG TAIL **FUBERCLE** *WAIKANAE* WATER WHALE

![](_page_12_Picture_2.jpeg)

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![](_page_13_Figure_0.jpeg)

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