

## 1 THEY LEAP HIGH OUT OF THE SEA

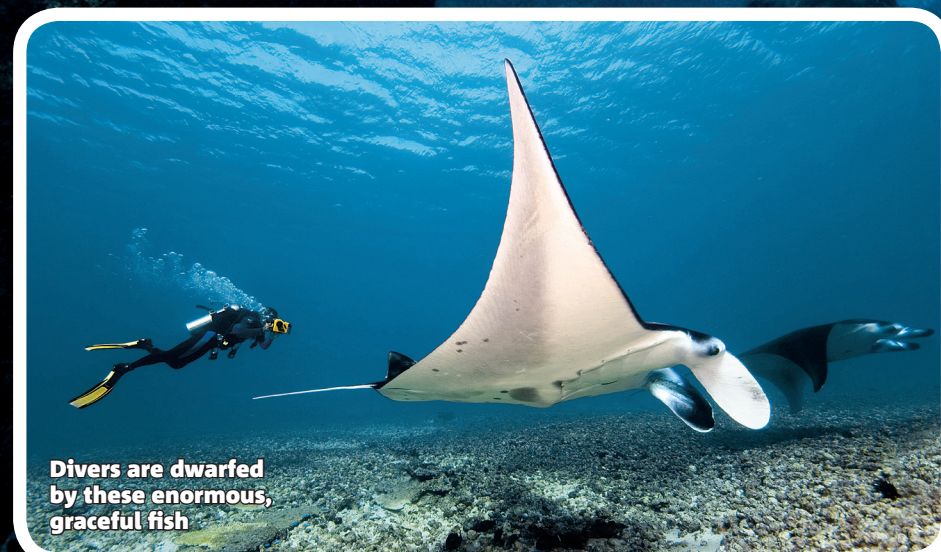
Most fish stay underwater. But not manta rays. They sometimes launch themselves out of the sea, a behaviour known as **breaching**. When they come down they create a colossal splash. "We think that they're using the noise to signal to one another," explains marine biologist Andrea Marshall, a manta ray expert from the Marine Megafauna Foundation.

## 2 THEY CAN BE GIGANTIC

They're named after the Spanish word 'manta', meaning 'blanket' – and no wonder! One species, the **giant manta**, has **winglike fins** that can stretch up to **9m across**, flapping like birds as they move through the water. They're so big that they'd stretch comfortably across four king-sized beds placed side by side! Weighing up to two tonnes (twice the weight of a small family car!), they're one of the largest fish in the sea.

## 3 MANTAS LIVE WORLDWIDE

Mantas live throughout the world in **tropical** and **subtropical** waters. Some stay near shore. Others migrate hundreds of kilometres and dive deep into the sea.



Divers are dwarfed by these enormous, graceful fish

# 7 COOL THINGS ABOUT MANTA RAYS

CHECK OUT THIS WEIRD FANTASTIC FISH...



Mantas are top at team-work!

## 7 THEY WORK TOGETHER TO MAKE TORNADOES!

Manta rays have a cool way to trap the plankton they eat. A long line of them will **swim in a fast, tight circle** to create an underwater 'tornado'. The spiralling water sucks in and holds plankton captive. The rays then devour the banquet that is trapped inside their swirling snare.

## 6 GIANT MOUTHS VACUUM UP FOOD

A manta's **mouth** can be 2.5m wide – that's longer than a professional basketball player is tall! When it feeds, the manta unfurls the long fins (called **cephalic fins**) on each side of its mouth. The fins, which can each be nearly a metre long, **funnel plankton** into the manta's extra-large mouth, which it opens to vacuum up food. Manta rays can trap plankton as small as a grain of sand, and a large ray will eat almost 30kg of plankton a day. Because **whale sharks** and mantas sometimes compete for the same food, hundreds of manta rays and whale sharks jostle and bump for mouthfuls of plankton, like giant kids fighting over a bag of sweets!

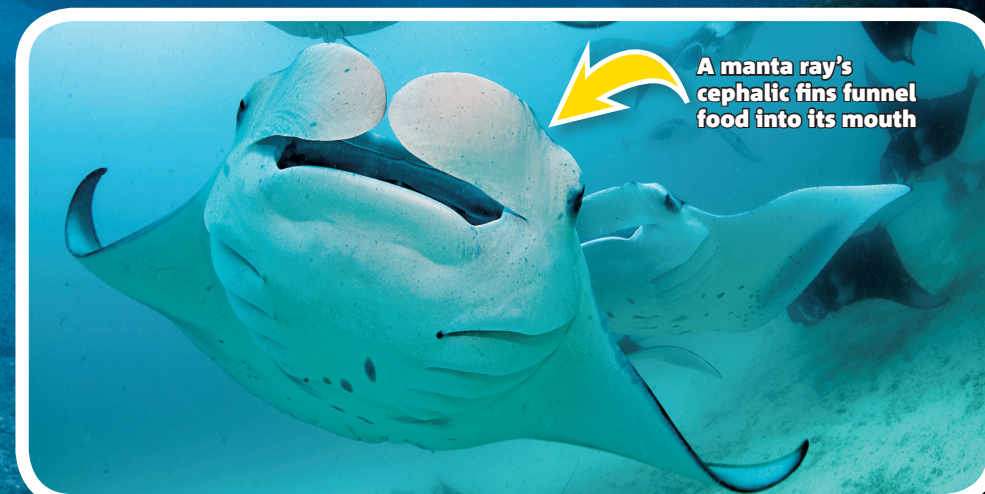


## 4 MANTAS PLAY WITH BUBBLES!

Ever wondered whether fish like to 'play'? Well, manta rays certainly seem to enjoy interacting with humans! They'll circle scuba divers, inspecting them closely with their massive eyes and **playing in the bubbles** created by the divers' gear. Marine biologist Andrea uses these bubbles to **bond** with the mantas. "They shake with pleasure when they feel the tickle of the bubbles," she says. "So if one passes over, I blow bubbles on its belly to encourage it to stop." This helps her get close enough to collect measurements or DNA samples. Some mantas will hang around for 30 to 45 minutes interacting with the biologists.

## 5 THEY'RE BRAINIACS

Fish aren't really known for their brainpower. But manta rays have the **biggest brain** (compared to body size) of any fish in the world. And this makes sense, because social animals often have huge brains. "Mantas are clearly social," says Andrea. "We often see them in groups of several hundred working together to feed on tiny ocean plants and animals called plankton."



A manta ray's cephalic fins funnel food into its mouth