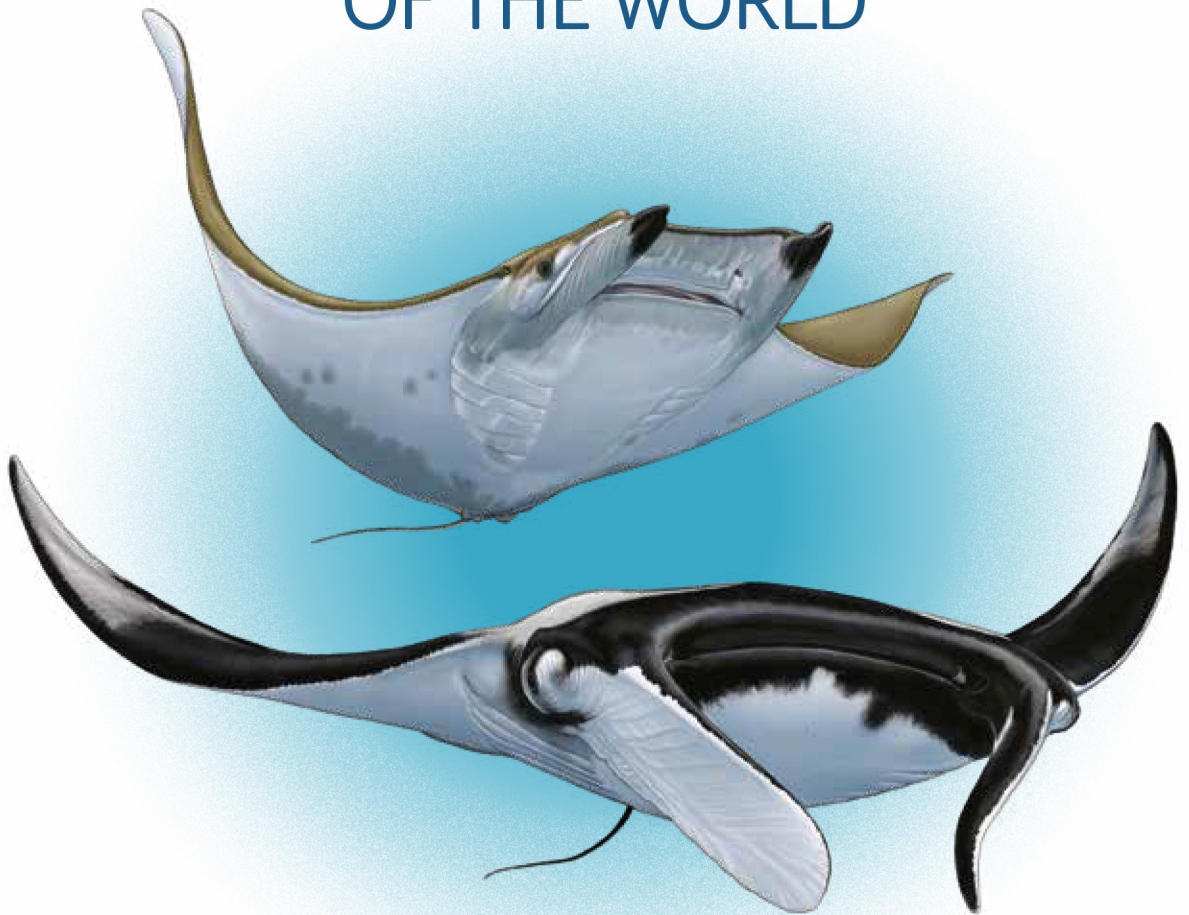


GUIDE TO THE
**MANTA &
DEVIL RAYS**
OF THE WORLD

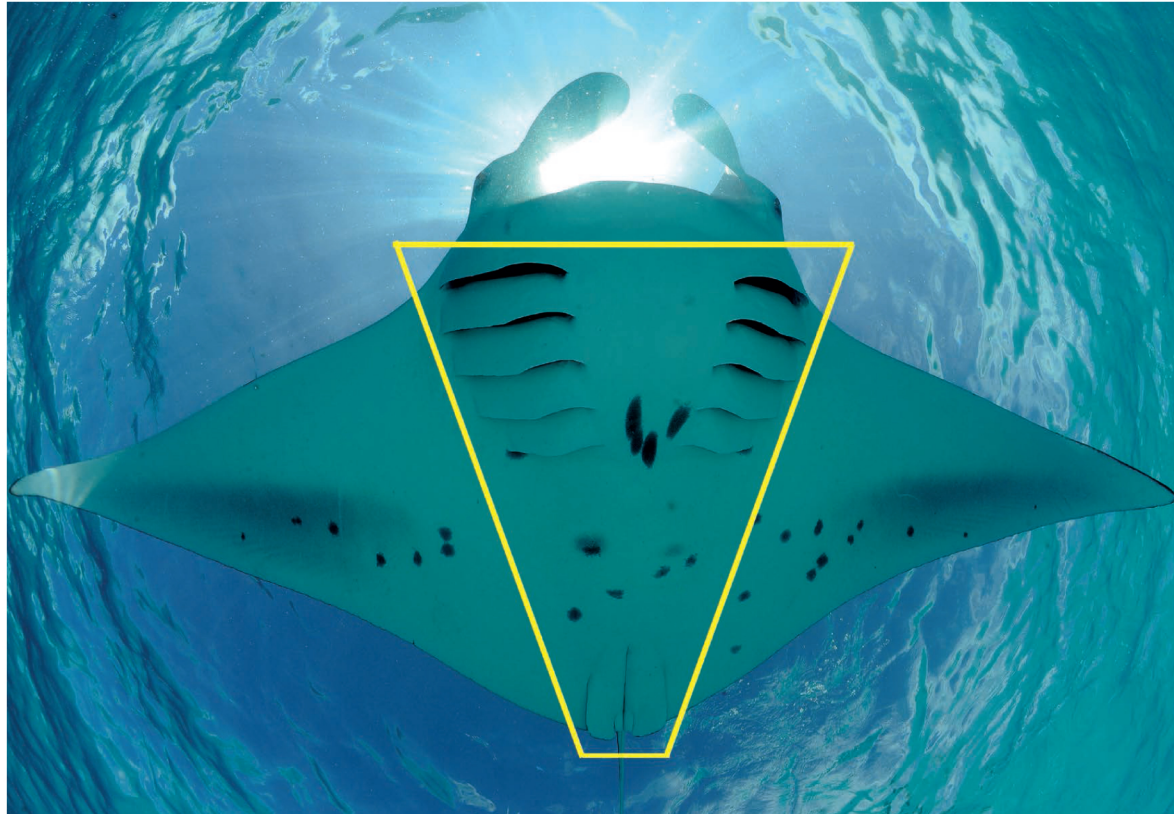


Guy Stevens, Daniel Fernando, Marc Dando
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GUIDE TO THE MANTA & DEVIL RAYS OF THE WORLD

Stevens, Fernando, Dando
Notarbartolo di Sciara

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IDtheManta – Global Database

IDtheManta is a global manta ray photo-ID database platform in which automated visual biometric photo-ID technology is linked to a global relational database accessible to both manta scientists and the general public. It is a massive data source for scientists, enabling research organisations to monitor and learn about the manta ray populations around the world. *IDtheManta* also helps to raise awareness and drive the conservation of manta rays and their habitats globally by providing in-depth feedback to every individual who uploads a sighting to the database.

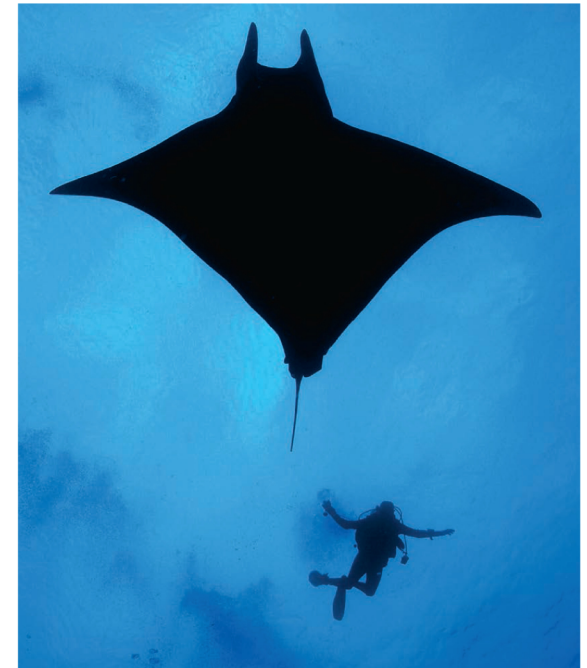
It is possible to identify every individual because each manta has its own unique pattern of black spots on its predominantly white belly. These patterns do not change throughout the lives of the mantas, enabling researchers to track each individual as it is sighted over the decades (mantas live for more than 40 years). Every manta sighting – whether of a new manta or a re-sighting of an individual that is already known – is an important piece of a huge jigsaw puzzle.

Anyone can contribute directly to the science and conservation of manta rays by submitting their images directly through the Manta Trust's website www.mantatrust.org. Ideally, we are looking for images that best show the spots on the underside (ventral surface) of the manta rays. Other images that show the top (dorsal surface) of the manta rays, or the tail area, can also be used to identify the specific species you encountered and/or the sex of the individual.

Swimming with mobulids

There are few experiences more exciting than diving or snorkelling with manta and devil rays. Every year tourists spend an estimated US\$140 million globally to see manta rays in the wild. Tourism is potentially one part of the solution to the issue of global manta fisheries, providing many countries with a strong economic incentive to protect these animals and fishing communities with an alternative livelihood. By swimming with mobulids you could be helping to save them! However, as you watch these fascinating animals it is important to keep in mind that these rays are sensitive to disturbance. Unmanaged human interactions with manta and devil rays will lead to negative impacts on the local populations as the number of these interactions increase.

Many dive operators regionally have developed guidelines for encounters with mobulids, especially manta rays. These guidelines help to ensure disturbance to the animals is minimised. They aim to create a sustainable approach to mobulid ray tourism, ensuring these special sites remain healthy for many more years to come. To make sure that the most effective regulations are implemented globally, the Manta Trust has taken a systematic approach to addressing this need by developing a Best Practice Code of Conduct based on long-term scientific studies and information pooled from previous guidelines.



Manta rays are marine cash cows, generating US\$73 million annually through direct revenue generated from dive and tourism activities globally. Tourism has opened up many new opportunities to exploit and profit from our oceans; tourism can and should be used to protect them too. At Hanifaru Bay (below) SCUBA diving is now prohibited to protect this important manta aggregation site.



Code of conduct

Over a decade of research from sites all across the globe has provided our team with great insights on manta and devil ray tourism interactions. Based on these studies, a tourism Code of Conduct for interacting with manta rays is summarised below and is available for download from the Manta Trust's *SwimWithMantas* website www.swimwithmantas.org, along with educational videos in multiple languages. The Code of Conduct and associated documents on this website refer not only to in-water behaviour by divers and snorkellers, but also include recommendations for vessels approaching and departing manta aggregations, and key points to include in the briefing by crew and operators prior to the manta encounter experience. More broadly, shark and ray tourism operators can also find on the Manta Trust's main website www.mantatrust.org a detailed guide: *'Responsible Shark and Ray Tourism - A Guide to Best Practice'*, created by the Manta Trust in partnership with WWF and Project AWARE.

Although every site is different, on a broad level there are several steps you can take to minimise the negative impacts on these graceful giants (including the larger devil ray species). Most notably, interactions at manta cleaning stations will differ from those at feeding aggregations, so the Code of Conduct recommends different practices for each. Cleaning stations are often located at prominent reef outcrops, on reef crests, or around coral heads which are home to small specialised cleaner fishes. Manta rays visit these cleaning stations to have parasites cleaned from their bodies. Manta feeding aggregations often occur at predictable locations where ocean currents and the reef geography concentrate the rich planktonic creatures the mantas feed on.

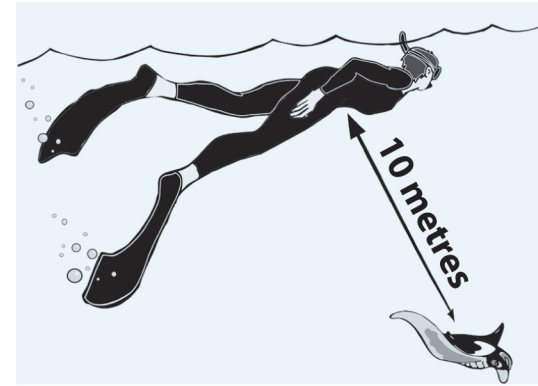
The simple diagrams on the following pages are designed to clearly lay out the key guidelines for interacting with manta rays, both at cleaning stations and during feeding events, either while snorkelling or while SCUBA diving.

Millions of people around the world each year collectively spend billions in search of their own close encounters with marine animals, like these free-divers at a manta ray feeding site in the Maldives (right). Just a few decades ago rays were generally perceived as dangerous sea monsters.



HOW TO SWIM WITH MOBULID RAYS

By following this Tourism Code of Conduct, you will avoid disturbing the mantas you encounter. At the same time you will increase your chance of having a life-changing experience with these gentle giants.



STEP 1

Enter the water quietly and calmly, no closer than 10 metres/33 feet from the manta ray.

STEP 2

Keep your fins below the water's surface when swimming. Splashing and noise can scare mantas away, so you want to approach as quietly as possible.

STEP 3

Do **NOT** approach closer than 3 metres/10 feet. Instead, remain still and let the manta come to you.

STEP 4

You should approach the manta from their side, giving them a clear path ahead.



STEP 5

As the manta swims past you, do **NOT** chase after it! You will never catch up with a manta anyway, and will likely scare it away in the process.

STEP 6

Do **NOT** touch a manta ray. You will ruin the encounter, and may receive a fine depending on local laws.

STEP 7

For scuba divers only.

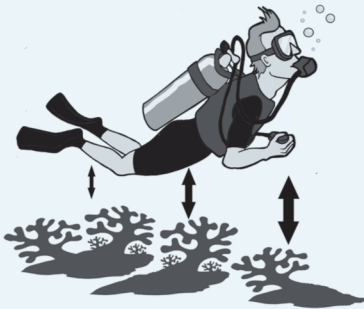
If you are diving with mantas, you will most likely be encountering them on a cleaning station. These are important sites for manta rays.

During the encounter, **remain at the side of the cleaning station. Do NOT swim onto the main cleaning area.**

STEP 8

For scuba divers only.

Keep low and hover close to the seabed, but **be careful not to damage the reef** beneath you. Depending on the dive site, you may need to stay in an area designated for divers.



STEP 9

For scuba divers only.

When a manta swims towards you, **do NOT block their path as they swim overhead.** Stay low, and stay where you are.

STEP 10

Be sure to **follow any extra rules, laws and regulations** that may be specific to the manta site you're visiting.

To watch a film version of this guide, and learn more about sustainable manta tourism, visit:

www.SwimWithMantas.org

