

# MANTA RAY

—FACTS & FIGURES—

[WWW.MANTARAYADVOCATES.COM](http://WWW.MANTARAYADVOCATES.COM)



# MANTA RAYS ARE GENTLE GIANTS

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## FACT:

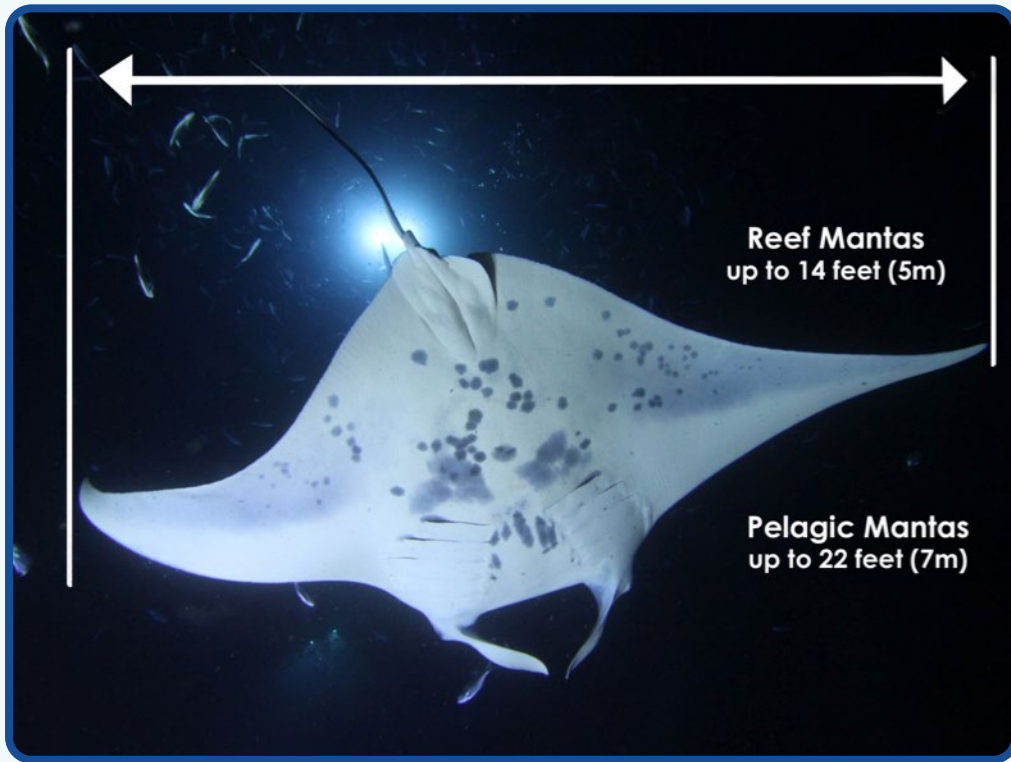
*Manta rays are harmless creatures.  
They have*

- » No teeth
- » No barb
- » No stinger

Different species of rays inhabit the ocean, like spotted eagle rays, bat rays, mobula rays and sting rays. The latter rays became infamous in 2006 when Steve Irwin, the Australian “Crocodile Hunter” lost his life to one. All of the above mentioned rays have means of defense on their body, but not the manta rays. Their protection from predators is early detection with extremely good eyesight, counter-shading and high speed swimming abilities.



# SPECIES AND SIZES OF MANTA RAYS



Every foot of a manta ray weighs approx. 70- 100 lbs.

## FACT:

There are two species of mantas

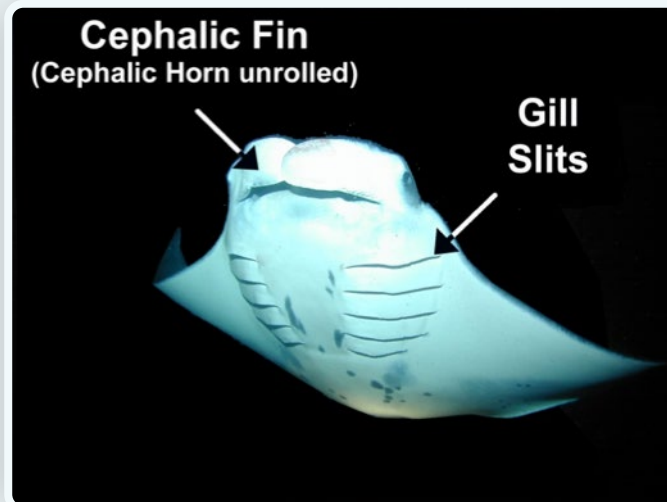
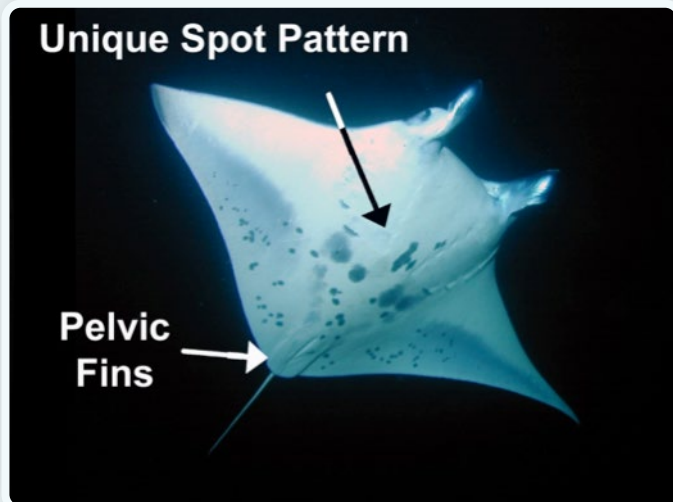
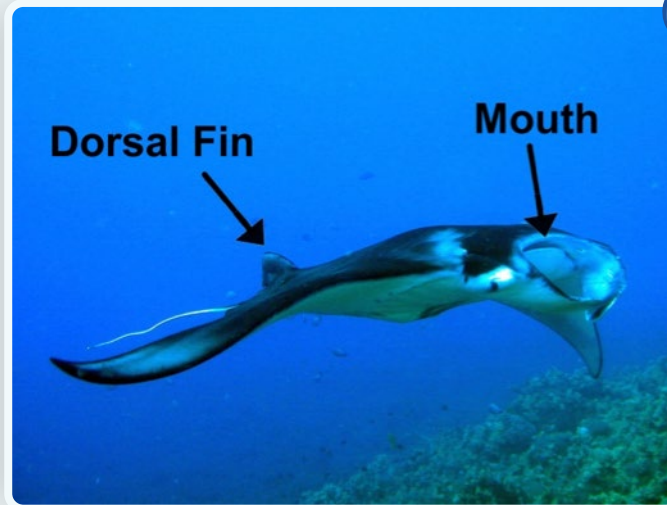
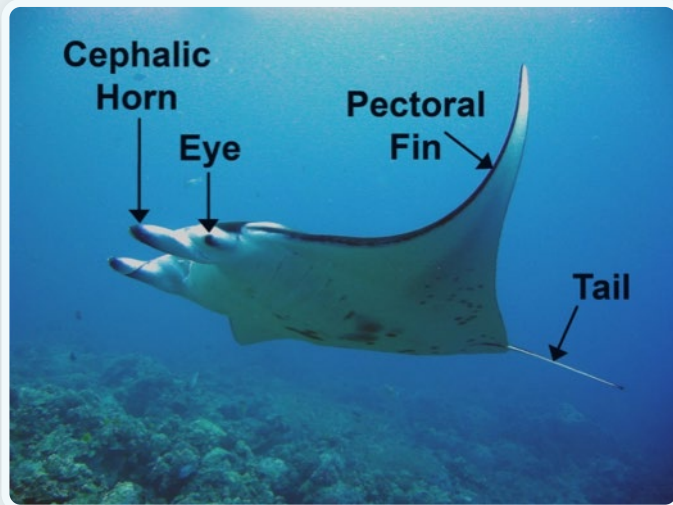
- 1 Reef mantas (*Mobula alfredi*)
- 2 Pelagic mantas (*Mobula birostris*)

Both species live in tropical, sub-tropical and temperate ocean waters.

SIZE CHART	REEF MANTA	PELAGIC MANTA
Pup	2-3 Feet	4-5 Feet
Juvenile	4-6 Feet	4-6 Feet
Mature Male	8 - 9 Feet	Unknown
Mature Female	12 - 14 Feet	22 Feet

# ANATOMY OF MANTA RAYS

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## FACT:

- » Manta rays are cartilaginous fish (no bones)
- » They are “cousins” to sharks and skates

# WHAT DO MANTA RAYS EAT?

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## FACT:

- » Plankton is small and microscopic organisms of various kinds and species which concentrate near lights at night.
- » Manta rays feed on plankton. They filter-feed with their large mouth and a complex system of brachial filters.

Manta rays swim slowly and gracefully while they are feeding. Their large mouths open and funnel the plankton into their oral cavity. They consume 12% of their body weight in plankton per week.

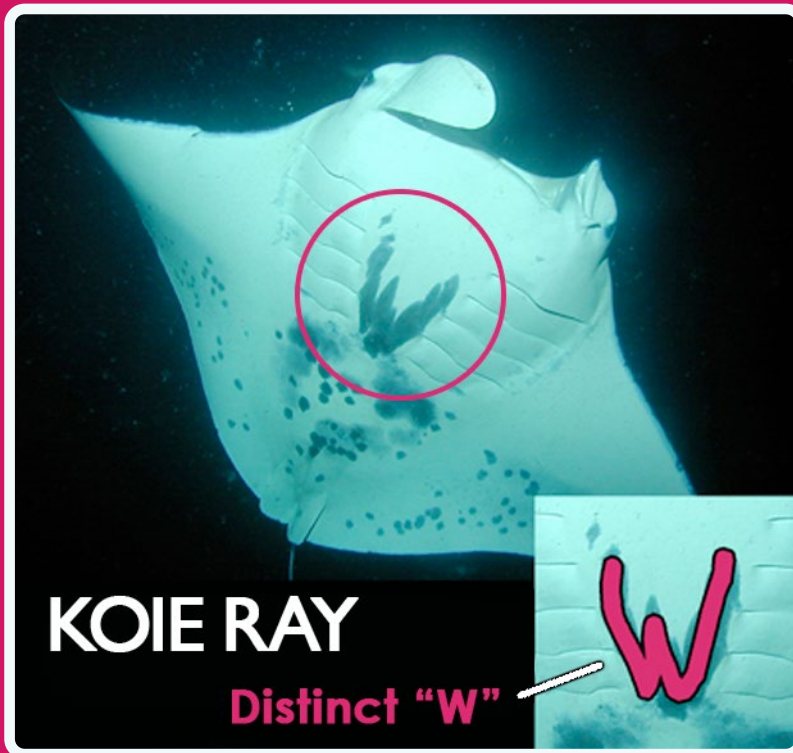


# IDENTIFICATION OF INDIVIDUAL MANTA RAYS

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## FACT:

- » Each manta ray has a unique spot pattern on its underside. This allows us to identify and monitor them.



Over 300 different manta rays have been identified along the Kona Coast.

The manta rays were given names like: Big Bertha, Wing Ray, Lee Ray, Shirley Ray, Lefty, Ray Charles Ray or Darth Ray-der.

Over the last 20 years, we have been compiling a database of individuals and sightings. To those who wish to know more about the manta rays of Kona, we invite you to browse our collection of pictures, video clips, descriptions and stories online.



<https://mantarayadvocates.com/manta-ray-library/>

# EXPERIENCING MANTA RAYS IN THEIR NATURAL HABITAT

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## FACT:

- » Swimming with manta rays in Kona (Big Island of Hawaii) is a once-in-a-lifetime experience, and rated one of the top ten aquatic adventures in the world.

Along the West Coast of Hawaii tour operators have been consistently placing underwater lights (after sunset) in shallow waters to attract plankton. Over a span of 30 years three different manta viewing areas were established. Since manta rays feed on plankton, they've been conditioned to associate lights with the presence of food.

When people go swimming with manta rays, divers will gather on the bottom of the ocean and snorkelers stay on the surface. If manta rays are in the area, they will be attracted to the lights and feed on the plankton in the water column in-between.



# PASSIVE INTERACTION WITH MANTA RAYS

## GUIDELINES:

- » NO TOUCHING
- » KEEP WATER COLUMN FREE

When you enter the ocean, you're visiting the manta rays' realm. We advocate passive interaction with the mantas, so we and our guest won't cause them harm.

To get the most out of swimming with manta rays, follow these guidelines:

### 1 DO NOT TOUCH THE MANTA RAYS!

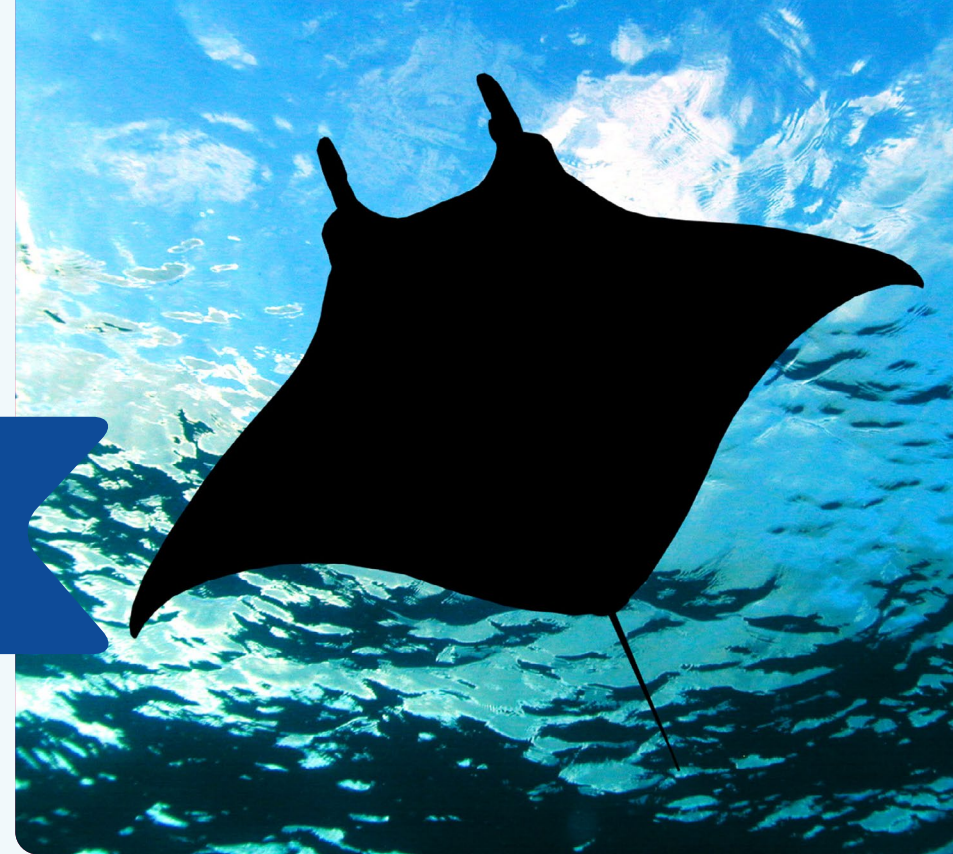
Manta rays have a protective slime coating on their body. Touching removes this mucus layer and compromises the creature's immune system.

### 3 DIVERS: STAY ON THE BOTTOM!

Make constant contact with the bottom in sandy areas. Do not float into or swim through the water column which is designated for the manta rays.

### 2 SNORKELERS: STAY ON THE SURFACE!

Do not free dive into the water column which is designated for the manta rays.



# MANTA RAYS ARE A VULNERABLE SPECIES

## FACT:

Eco-Tourism generates multiple times more revenue than fisheries. However, manta ray fishing is still a thriving business. If the demand for manta gills (mainly from branches of traditional Chinese medicine) continues to exceed the rate of reproduction of mantas, then it is very likely that mantas will be extinct within the next 30 to 50 years.\*

Source: "Racing Extinction" – Documentary 2015

ECO-TOURISM



Value of a living Manta Ray  
= **\$1,000,000** / year  
(conservative estimate)

FISHERY



**DRIED GILL RAKER**

Value of a dead Manta Ray  
= **\$200** / creature  
(high estimate)

# SHARE YOUR MANTA KNOWLEDGE!

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Now that you know so much more about the beautiful manta rays, we cheer you on to share your knowledge.

## CHILDREN:

Take this knowledge to school and inspire your classmates!

## SCUBA DIVERS:

Tell your fellow divers about the magnificent gentle giants!

## ALL OCEAN ENTHUSIASTS:

Show off your manta facts to family, friends and co-workers!



# IN NEED OF MORE MANTA RAY LOVE?



SUBMERGE YOURSELF  
IN RELAXATION

[MantaRayMeditations.com](http://MantaRayMeditations.com)



BOOK YOUR MANTA RAY  
MOONLIGHT SWIM

[MantaRayExperience.com](http://MantaRayExperience.com)



JOIN OUR FREE  
FACEBOOK COMMUNITY

[MantaAdvocatesHawaii.com](http://MantaAdvocatesHawaii.com)



JAMES L. WING



MARTINA S. WING

Manta rays are beautiful and majestic animals that have a life-changing effect on people who meet them. We've only just begun to uncover their many mysteries.

But manta rays are becoming threatened and could even face extinction if nothing improves. Ocean pollution, badly regulated tourism activities and prejudices about the gentle giants of the sea do nothing to help that.

We're James and Martina Wing, and we're the driving forces behind Manta Ray Advocates. We want to reach as many people as possible to raise awareness and spread knowledge about manta rays.

If you come and visit the Big Island of Hawaii, we'd love to take you on a moonlight swim with the mantas so you can experience them in person - which really is a life-changing adventure.

- » 50+ years of combined manta ray field experience
- » Professional Underwater Photographers
- » Founders of Hawaii Ocean Watch
  - a 501(c)(3) non-profit organization



***“People protect what they love.”***

JACQUES YVES COUSTEAU

