



*Your Guide*  
AS A  
MANTA RAY  
ADVOCATE

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



# MANTA RAYS ARE GENTLE GIANTS

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## FACT:

*Mantas have*

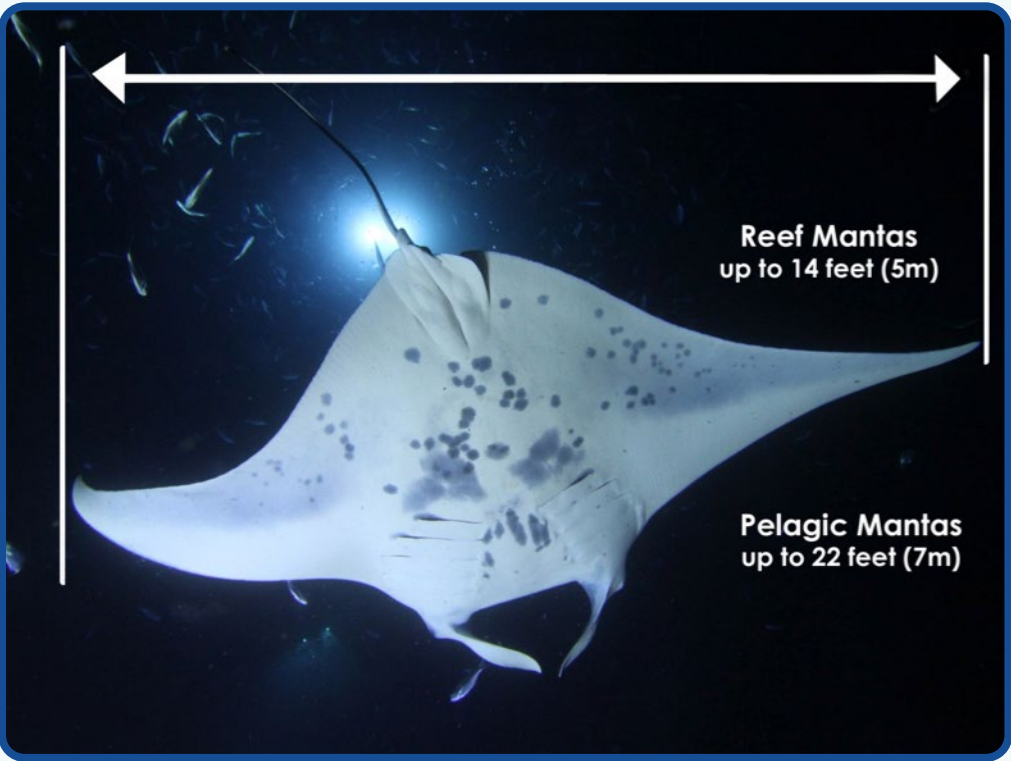
- » No teeth
- » No barb
- » No stinger

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

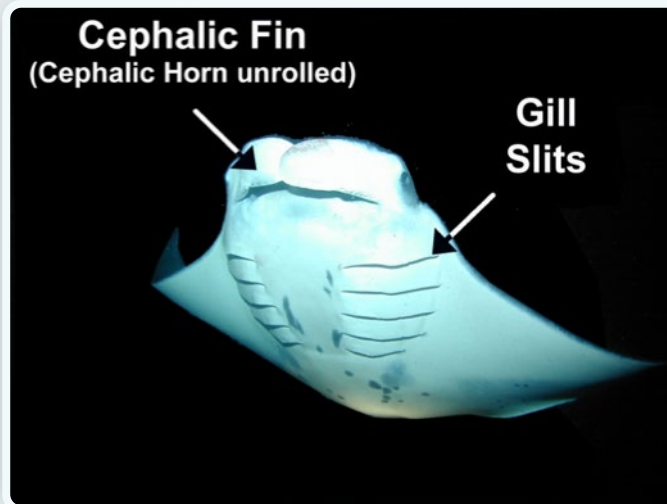
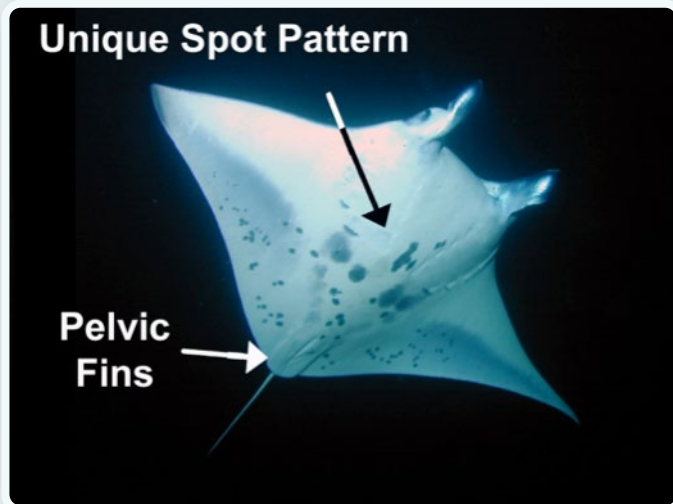
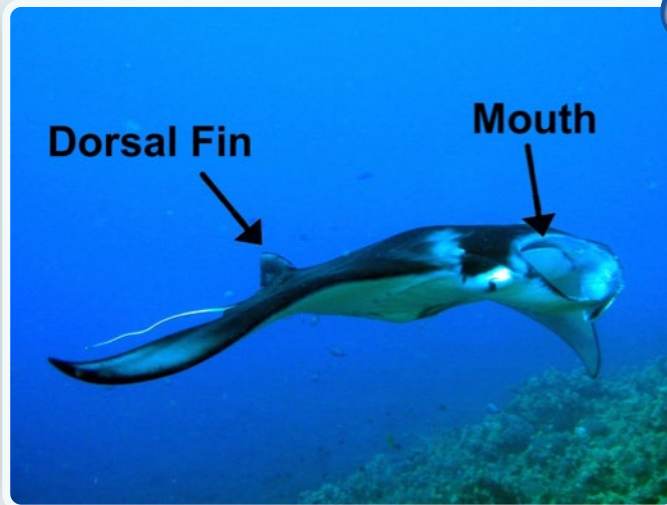
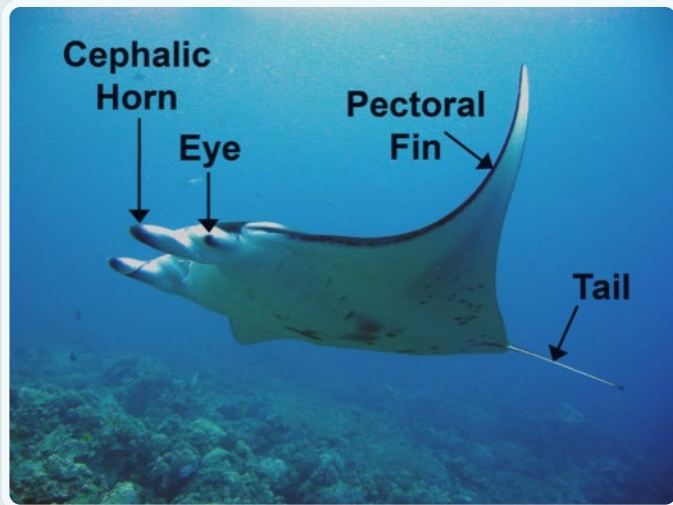
- 1 Reef mantas (*Mobula alfredi*)
- 2 Pelagic mantas (*Mobula birostris*)

Both species exist in all temperate 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



# DIET OF MANTA RAYS

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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.

The manta rays swim slowly and gracefully while they are feeding. Their large mouths open and funnel the plankton into their oral cavity. It is estimated that they consume 12% of their body weight in plankton per week.

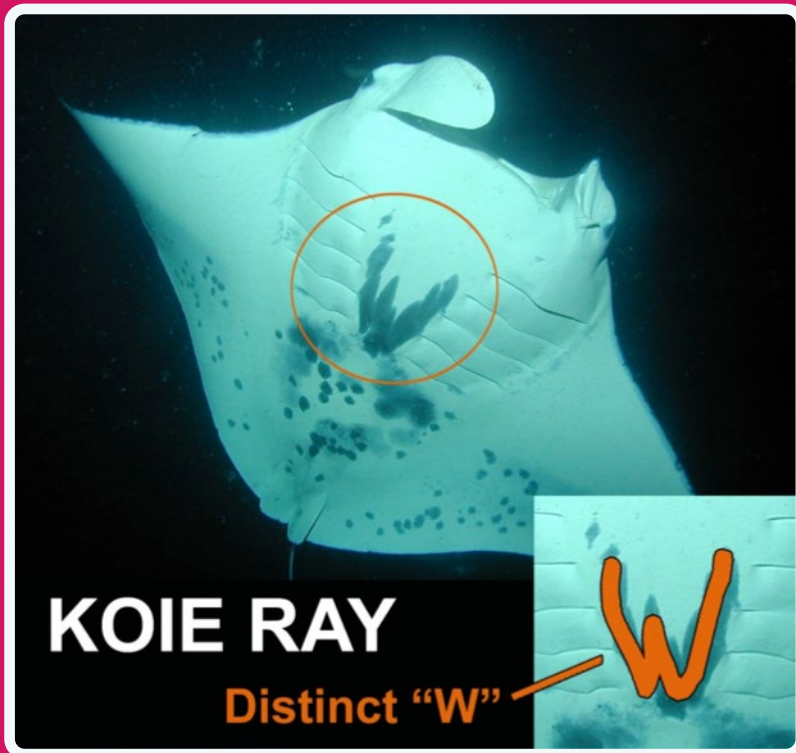


# IDENTIFICATION OF INDIVIDUAL MANTA RAYS

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## FACT:

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



Close to 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.



# EXPERIENCING MANTA RAYS IN THEIR NATURAL HABITAT

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## FACT:

- » The manta ray activity in Kona Hawaii is considered a Once-in-a-Lifetime experience and rated as one of the TOP TEN aquatic adventures in the world.

The manta rays found in near shore waters off the West Coast of Hawaii have learned to associate light with the presence of their natural, planktonic food source. This is due to conditioning by humans over a period of decades.

When divers gather on the bottom during the dive and the snorkelers are on the surface, the lights cause the planktonic marine life, if present, to concentrate. If the manta rays are in the area, they will be attracted to those lights.



# PASSIVE INTERACTION WITH MANTA RAYS

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## GUIDELINES:

- » NO TOUCHING
- » KEEP WATER COLUMN FREE

By entering the ocean you are visiting the manta rays' realm. We do not want to harm so we advocate passive interaction with the mantas.

To accomplish optimal viewing of the manta rays, we adhere to the following guidelines:

### 1 DO NOT TOUCH THE MANTA RAYS!

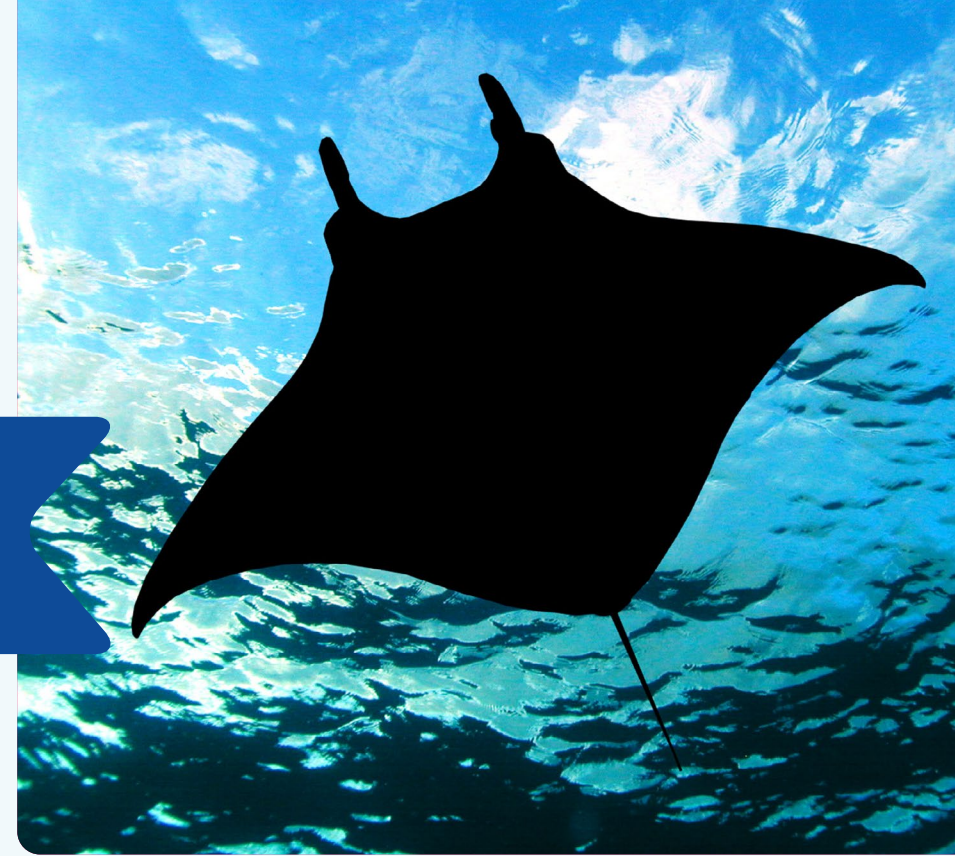
Manta rays have a protective slime coating on their body. Touching removes this mucus layer and compromises the creature's immune system.

### 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.

If the demand for manta gills (for Chinese traditional 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



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



# SHARE YOUR MANTA KNOWLEDGE!

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!



## ADDITIONAL RESOURCES:

Do you want to learn and share more?

- 1 Visit [www.MantaRayAdvocates.com](http://www.MantaRayAdvocates.com)
- 2 Join our Manta Ray Advocates Community (Free [Facebook Group](#))
- 3 View this [3-minute video](#) with incredible manta ray footage



JAMES L. WING



MARTINA S. WING



- » Professional Underwater Photographers
- » Manta Ray Advocates and Researchers
- » 50+ years manta ray field experience
  - James since 1991
  - Martina since 1998
- » Founders of Hawaii Ocean Watch
  - a 501(c)(3) non-profit organization





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

JACQUES YVES COUSTEAU

