

1 **Cownose & Manta Rays**

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2 **Morphology – Cownose Ray**

- Live young
- Free swimming & active
- Young look similar to adults
- 11 to 18 in. wide at birth.
- Grows to 45 in.
- 50 pounds

3 **Food Sources – Cownose Ray**

- Feeds on benthic crustaceans and mollusks
- Dig depressions in bottom sediment by flapping pectoral fins, sucking sediment through the mouth, spitting it out gill slits
- flat tooth plates, present on both jaws, are used to grind their hard shelled prey

4 **Location- Cownose Ray**

- most common type of ray found in the Chesapeake Bay
- only species in this genus known in Eastern Pacific: Gulf of California to Peru and the Galápagos Islands.
- Found over soft bottoms, near rocky or coral reefs and reef dropoffs.
- Occasionally found near the surface and can jump out of the water.
- Often in schools, sometimes associated with *Aetobatus narinari* : the Spotted Eagle ray.

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6 **Body Features- Cownose Ray**

- Brown colored back with white belly
- Eyes are on the side of its head
- Has one stinger on its tail, but usually doesn't sting people

7 **Interesting Facts- Cownose Ray**

- Cownose rays are being blamed for depleting the oyster population in the Chesapeake Bay
- Have been seen in schools of hundreds in Florida in depths as low as 4 feet

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9 **Morphology – Manta Ray**

- They have side or pectoral fins that have evolved into wide triangular wings which they use to propel themselves through the water. With wing spans reaching over 20 feet across. Their broad blanket-like bodies earned them the name manta which means cloak in Spanish.
- Many of what were in the past considered different species of manta rays are in fact simply different colors of mantas

10 **Life History – Manta Ray**

- Manta rays started out as bottom feeders long ago, but over time evolved into surface feeders taking advantage of the abundant microscopic animals that inhabit the open water.
- Manta rays use their size and fast maneuverable swimming ability for defense that has rendered tail stingers unnecessary.

11 **Food Sources –Manta Ray**

- Manta rays feed on microscopic organisms such as copepods, mysids (minuscule shrimp-like animals) along with larvae of fish, lobster, and octopus that float and swim in the open water.
- As the water passes through the body and out the gills, food and oxygen are trapped in five sets of meshwork plates, called branchial filters.

12 **Location- Manta Ray**

- Mantas are found world-wide in tropical to warm temperate seas.

13 **Depth of living– Manta Ray**

- Found throughout tropical seas of the world.
- Typically around coral reefs

14 **Interesting Facts- Manta Ray**

- Can weigh up to 6000 lbs and be 30 ft.wide
- About four feet at birth.

15 **Body Features- Manta Ray**

- Manta rays still possess spiracles, however they are small and non-functional. Instead, mantas remove oxygen from water that enters their mouth and passes over their gills
- The mouth of the manta ray has migrated to the front edge of its body and has expanded in size considerably.
- Manta rays have cephalic fins or “horns” which contribute the common name Devil rays.

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- http://en.wikipedia.org/wiki/Cownose_ray
- <http://marinebio.org/species.asp?id=99>
- http://en.wikipedia.org/wiki/manta_ray