

# **American Cownose Ray**

*Rhinoptera bonasus*

**Description:** Cownose rays have a diamond-shaped body. The back of their body ranges in color from brown to olive green, with a pale underside. This coloration is a type of camouflage known as countershading - from above, their dark backs blend in with the dark depths of the ocean, and from below, the light underbelly blends in with the sunlit ocean surface. The tail of the cownose ray is typically about twice as long as their body length.

**Range:** Atlantic Ocean along western Africa, Eastern U.S., Gulf of Mexico, and the Caribbean

**Habitat:** Often occurs coastally in tropical marine and brackish waters

**Diet:** Bottom-dwelling shellfish, lobster, crab, and fish

**Weight:** Up to 50 lbs

**Length:** 3 to 7 ft wide and 2 to 4 ft excluding the tail; males are slightly larger than the females.

**Lifespan:** Up to 20 years

**Status:** Vulnerable

**Predators:** Cobia and sharks, most specifically sandbar, bull, and hammerhead sharks

**Threats:** Overfishing

**Relatives:** Bat rays, eagle rays, and manta rays

**Breeding:** The breeding season for cownose rays varies by location but generally occurs between June and October. Gestation lasts for about 11-12 months, after which time, typically one pup is delivered. They are ovoviviparous, meaning that the eggs will hatch inside the mother, and she will give birth to fully-developed juvenile rays.

## **Quick Facts:**

- Cownose rays get their name from the notch in their head that gives their face the shape of a cow's nose.
- They use electroreceptors and their great sense of smell to find food. They use their wings to disturb the substrate to expose food.
- Their long, flat teeth plates are used for crushing shells. They are able to filter through what they find, spit out the shells, and swallow the food.
- Cownose rays are often observed traveling in large schools (in the thousands) for long distances.
- They are known to be very docile
- Cownose rays have been observed jumping out of the water and landing with a loud smacking sound, likely to deter predators.
- Oftentimes, cownose rays are mistaken for sharks when their pointed pectoral fins break the surface of the water.

**Conservation:** Cownose rays were relisted by the IUCN in June 2019 as Vulnerable. This decline is due to a slow reproductive rate with few offspring and the result of overfishing and bycatch. Sustainable seafood choices are the best way that we can help to reverse this reclassification.

**GSC Residents:**

The cownose rays at the GSC are located in the Hands-on Harbor touch pool. They are target trained for feeding and this has resulted in allowing them to become amazing painters! Target training is not only important for tracking amounts of food, but it can also be a great enrichment tool.

**Favorite Foods:** Everything! Squid, clam, capelin, anchovy, silversides, salmon, bonito

**Favorite Enrichment:** Hula hoops, painting, yellow chain bar, holee balls, divers

**Trained Behaviors:** They do paint a bit. They have a special tool that is placed in the water that holds a paintbrush on one end and a holee ball with food on the other. As they eat the food, it moves the paintbrush.

**From the Keeper:** The ray with the big scars on his back is 'Wrongway' and is named that because he swims in the opposite direction of all the other rays. His scars are from a shark bite, which is also why he is blind in one eye. The smallest ray is named Triton.

Name: Triton  
Date of Birth: October 29, 2020  
Sex: Male  
Origin: Sea Life Charlotte-Concord Aquarium

Name: Nibbles  
Date of Birth: ~June 1, 2014  
Sex: Female  
Origin: Wild born

Name: Neptune  
Date of Birth: December 3, 2019  
Sex: Male  
Origin: Sea Life Charlotte-Concord Aquarium

Name: No official name  
Date of Birth: ~June 1, 2014  
Sex: Male  
Origin: Wild born

Name: Poseidon  
Date of Birth: December 3, 2019  
Sex: Male  
Origin: Sea Life Charlotte-Concord Aquarium

Name: Shark Bait  
Date of Birth: ~January 1, 2010  
Sex: Male  
Origin: Wild born

Name: Picasso  
Date of Birth: ~June 1, 2014  
Sex: Female  
Origin: Wild born

Name: Nicole  
Date of Birth: ~January 1, 2010  
Sex: Male  
Origin: Wild born

Name: Cora  
Date of Birth: ~June 1, 2014  
Sex: Female  
Origin: Wild born

Name: No official name  
Date of Birth: ~January 1, 2010  
Sex: Male  
Origin: Wild born

Name: No official name  
Date of Birth: ~June 1, 2014  
Sex: Female  
Origin: Wild born



**Sources:**

<https://www.floridamuseum.ufl.edu/discover-fish/species-profiles/rhinoptera-bonassus/#:~:text=The%20gestation%20period%20is%20believed,shell%20capsule%20in%20early%20August.>

<https://www.georgiaaquarium.org/animal/cownose-ray/>