

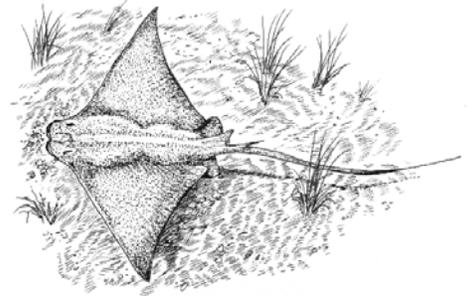
## Cownose Rays – the Bay’s Flattened Sharks

### What are they?

Cownose rays are the most common kinds of ray found in the Chesapeake Bay. They belong to a family of animal that do not have true bones. Instead, these animals have skeletons made from cartilage, a tough, flexible tissue. Humans also have cartilage, but it mainly connects bones and makes up softer body parts like ear lobes and the tips of noses.

### What do they look like?

Cownose rays are named that because their heads look something like a cow’s muzzle. This creature has broad wings and a long tail. When these rays are born, they are between 11 and 18 inches wide. They grow to be between 3 and 4 feet wide, from the tip of one wing to the tip of another. Adults may weigh as much as 50 pounds or more. These rays are generally brown on top, with a white underside.



### Where can you find them?

Cownose rays are often found skimming over eelgrass bays in the shallower parts of the bay. However, they also move into deeper open waters of the Bay. These rays are migratory animals; they move from place to place at different times of the year. They arrive at the mouth of the Bay around May and stay until late September or October. Then they migrate south, going as far as the coast of Brazil in South America.

### How do they behave?

People who see cownose rays on the Bay’s surface often think they are seeing a shark. That is because rays often swim with the tips of their wings above the water. These wing tips look very much like a shark’s top fin.

These rays sometimes jump completely out of the water and land with a large “plop.” Scientists think they might do this to warn other animals that they are in their territory.

Many people are afraid of rays because they have poisonous stingers. However, unlike other kinds of rays, cownose rays rarely rest on the bottom. Because of this, swimmers or waders cannot step on them by mistake. In addition, their stingers are located close to their bodies on their tails. So the chances of being poisoned by a cownose ray stinger are very small.

Like its cousins, sharks and skates, cownose rays give birth to live babies called pups. This is very unusual for creatures that live in water. Many water animals lay eggs that hatch into young animals.

Cownose rays travel in feeding groups that can be as small as five and as large as 200 rays.

### What do they eat?

Cownose rays love to eat soft shell clams, other kinds of clams, and oysters. In fact, one scientist observed a school of rays that ate 60,000 oysters in a single night. Traveling in schools across the Bay bottom, these rays flap their wings quickly to stir up the sediment there. This uncovers hidden clams and oysters. The rays then grab their prey and crush their shells, using two strong dental plates. Cownose rays also eat bony fish, crabs and gastropods like snails.

### What eats them?

Cownose predators include a large fish called a cobia and sandbar and bull sharks.

### Creature Feature

Cownose rays have a unique place in Chesapeake Bay history. In 1608, explorer and adventurer John Smith was spear fishing near the Rappahannock River. Instead of a fish, he speared a cownose ray. The ray’s stinger hit him near the wrist. His arm and shoulder swelled up dramatically. His crew was convinced he was going to die. They even dug him a grave. However, John Smith recovered – and ate the same ray for dinner that night.