

Here I am in my wet suit on assignment for National Geographic *magazine.*

FACE TO FACE: INTRODUCTION

At Crystal River National Wildlife Refuge in Florida, an adult manatee comes to the surface to breathe. Manatees breathe in through their nostrils and then close them tightly as they dive back under the water.

There is something magical about meeting an animal in the wild. As an underwater wildlife photographer, it's my job to get close to animals in the sea. In fact, I have to get close to them because it's hard to get a clear picture through water. So I spend a lot of my time just waiting for those fleeting moments when an underwater creature comes near enough that I can capture a good picture of it. These are special moments, when the animal chooses to be with you.



CAN MOLARS MARCH?

- Manatees have only one kind of tooth – the molar. A molar is a large back tooth for grinding food.
- Manatees take in a lot of sand and other grit along with all the plants they eat. This causes their teeth to wear down.
- When the teeth wear down too much, they fall out.
- New molars grow at the back of the mouth. These new molars move forward to replace the old ones. That's why they're called "marching molars".

I spent several weeks photographing manatees in Florida, at places like Crystal River National Wildlife Refuge. The best time to find them was either early in the morning or late in the afternoon as they gathered near **freshwater** springs. Wearing a mask and snorkel, I would slowly move to a place where they could see me. Then I would wait.

Many of the animals ignored me. But every once in a while, a manatee came right up to me! Sometimes we would even swim side by side.

After a few weeks, my wife, Marcia, and daughters Caroline (age 4) and Katherine (age 11) came to visit, and we went to look for manatees together. We got up early the first morning, loaded our equipment into a small boat, and slowly headed down the Crystal River. It was January. The air was cold, and thick fog clung to the warmer river water like a heavy winter blanket. Pulling on our wet suits, snorkels and masks, we slipped quietly into the waist-deep water.

With our heads underwater, we watched and waited. Pretty soon, we saw dozens of manatees gliding over the sandy river-bottom. A few manatees even came over and nudged our legs. They didn't seem interested in us. But as my daughter headed back to the boat, her mum shouted, "Katherine, there's a little manatee swimming right behind you!"

My daughter Katherine swims with a playful young manatee in the Crystal River. The manatee seemed to enjoy the interaction, and it even swam right up under her arm.

Katherine turned around. She was face to face with a young manatee. It was curious and wanted to play. They swam together gently, moving away from the shore. When Katherine stopped swimming, the calf turned around and came back to her. They swam together for about ten minutes. But for Katherine, those ten minutes will last a lifetime!

MEET



Some plants and animals make their home on the backs of manatees. Mats of ***algae*** *often cover their rough skin. Fish eat the algae and the small animals that live in it.*

THE MANATEE

Manatees use their flippers to steer through the water and to grip things, just like humans use their arms. Manatees even have tiny fingernails!

When early explorers sailed to the Americas, many of them reported seeing **mermaids** along the coast. Today, we know that they were probably looking at manatees. With its flippers that look like arms and the way it lifts its head above the water, a manatee does look a bit like a person with a fish's tail – from far away, at least. But once you've been face to face with a manatee, it's hard to believe that anyone could mistake one for a mermaid.



Spanish moss hangs from trees along the St. John's River, Florida, where manatees have gathered in the warm waters.

So what are manatees? They are mammals. Even though they live their lives in the water, they are actually related to elephants. Like elephants, they have thick skin, sometimes more than 2.5 centimetres thick. Manatees don't have trunks, but they do have large flexible **snouts** that they use to grab and hold objects in the water. This is useful when feeding.

Breathing

Like all other mammals, the manatee breathes air. It has two nostrils on the top of its snout. When the manatee needs to take a breath, it pokes its snout out of the water and sucks in air through its nostrils. When a manatee is resting, it only comes

to the surface to breathe every ten minutes or so. A manatee often floats just below the surface, taking a short breath with only its snout above the water.

Manatee bodies

Manatees grow 2.4 to 4 metres long, and they can weigh up to 600 kilograms. Despite their large size, manatees are graceful swimmers. Their bodies are smooth and streamlined – ideal for underwater life. Manatees use their strong tails to push themselves through the water. But they usually move slowly. Manatees prefer water that is 1 to 4 metres deep. In shallow water, they often use the tips of their flippers to walk along the bottom.

Manatees are often referred to as "sea cows". A group of them is called a herd. Males are called bulls, females are cows, and babies are called ***calves****.*

