

# OCEAN BLUE CREW

## NewSletter

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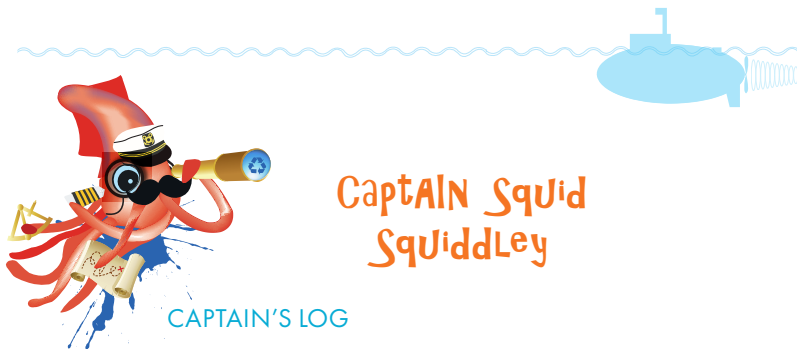


## Introduction

Ahoy matey! It's the Ocean Blue Crew from the Clearwater Marine Aquarium here to give you some nautical knowledge about our incredible ocean! November was Manatee Awareness Month and to celebrate we are going to learn about Florida's state animal! We are also going to learn about how CMA is helping these gentle giants around the world.

The order Sirenia contains all manatees and their cousins the dugong and the extinct Steller's sea cow. The Steller's sea cow was found around eastern Russia and grew to be over 30 feet and sometimes around 22,000 pounds, which is about the same as two large elephants.

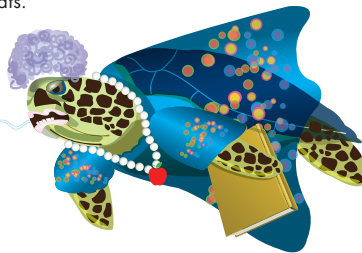
There are three different species of manatees. One species is found in South America, the other in North America, and the third in Africa. All of the species have round paddle-like tails, a split prehensile lip, and short molar teeth in the back of their mouths. Their cousin, the dugong, from Australia look a little bit different. They have a forked tail like a dolphin, a longer non-split front lip, and tusk-like front teeth. Manatees are also bigger than dugongs in both length and weight.



## CaptAIN Squid Squiddley

### CAPTAIN'S LOG

Arr Me Mateys! Me and me crew have sailed the ocean blue and wanted to share some of the research projects that we saw around the world! Recently the Clearwater Marine Aquarium and the Sea to Shore Alliance, an organization dedicated to research and conservation of marine animals around the world, have teamed up to create the Clearwater Marine Aquarium Research Department. This allows us to connect ongoing research and conservation efforts with sea turtles, North Atlantic right whales, bottlenose dolphins, and manatees to better understand these animals. CMA's manatee research is conducted in Florida and Georgia; and even Cuba and Belize. The research allows us to work with local governments to protect the future of these animals. Now let's go to Teacher Turtle who will tell us about manatee habitats.



## Teacher Turtle

The hot springs in central Florida; such as, the Three Sister Spring of Crystal River, are very important to manatees as they need these warm waters to survive in the winter months. The average temperature of the springs is about 73° F year round, which is important because manatees cannot stay in waters below 68° F for a long time. Even though some manatees may weigh over 2,000 pounds and look very large, manatees are mostly muscle. Manatees do not have blubber, a thick insulating fat layer common to cold-water animals. This means that manatees are not able to stay warm in cold water, ultimately causing them to get sick if they are in cold water for long periods of time.

When manatees are in cold water they become cold stressed, which is very similar to hypothermia in people. Manatees who are sick with cold stress become very slow moving, which makes them eat less and lose a lot of weight. Cold stress manatees can also get white patches or sores on their skin. Once this happens, a manatee may need to be rescued and brought to a rehab location. There it can be kept in warm water and fed nutritious food to help them gain weight before being released into warm water areas, like the protected hot springs.



## Observation Otter

Our experiment today will give you a chance to be a manatee field specialist.

In the field, manatees are unfortunately identified by scar patterns on their bodies created from being struck by boat propellers. While field specialists are looking for manatees, there are two ways that they can identify which specific manatees they see. The first is using a camera to take high quality pictures to compare with other photographs previously taken, and the other is drawing the scars they observe onto a manatee diagram.

Today you are going to be testing your hand at drawing manatee scar patterns.

### You Will Need:

- A Large Potato
- A Large Bowl of Water (Large Enough to Float the Potato)
- A Sharp Knife
- A Piece of Paper
- A Pen or Pencil
- Adult Help and/or Supervision

### Directions:

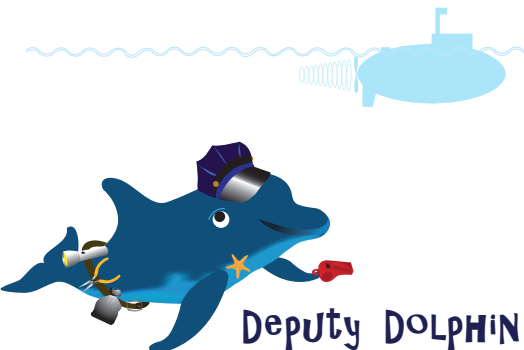
1. Under adult supervision, go online and look at photos of manatees. Observe the differences between the manatees in the photos.
2. Select a manatee that you would like to draw. Take a look at any unique patterns on its body.
3. With the help of your adult, use a sharp knife to draw the pattern into the top of the potato. Another option is to draw on the potato. The potato will act as the manatee.
4. Place your manatee potato in the bowl of water.
5. Test friend's manatee ID skills and see if they are able to match your potato manatee to the photo you selected.



Chef Shark here! Today, I am going to share with you a great meal inspired by our herbivorous manatee friends!

#### You Will Need:

- Spinach Pasta
  - Pesto Sauce
  - Spinach or Swiss Chard
1. Cook your pasta following the package's instructions.
  2. While your pasta is cooking, cook up your favorite leafy green such as spinach or Swiss chard.
  3. Mix your drained pasta with your preferred amount of pesto sauce. Add your cooked greens. Serve.



Deputy DOLPHIN

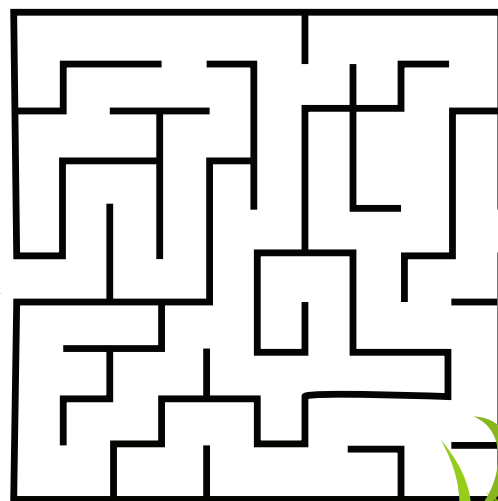
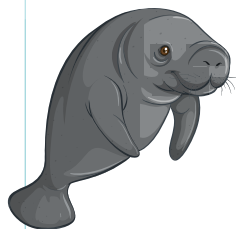
Dolphin Deputy here to tell you some simple ways that you can help manatees. In 2017, manatees were removed from the Endangered Species list. To keep their population growing we need to continue to have safe boating practices such as recognizing and going slow in manatee zones, letting other boaters know when a manatee is in the area, being on the lookout in cooler weather for cold stressed animals and calling rescue organizations like Clearwater Marine Aquarium. It is also important to not feed manatees in the wild or give them water from a garden hose. Not only is this activity illegal, but the manatees can also become accustomed to being around humans and may get injured.

Not everyone spends a lot of time near the water, but there are still ways that you can help! One way is to make sure that all of your trash is thrown away properly so it does not end up in our waters. Also, learn as much as you can and share this awesome knowledge with others.



#### Playtime PELICAN

Help the hungry manatee across the maze to get to the sea grass!



Creative CRAB

#### You Will Need:

- 2 Large Paper Plates
- A Single-hole Punch
- Glue
- Elastic String
- Scissors
- Markers or Crayons
- Grey Paint
- Paint Brush
- A Circular Object to Trace
- Construction Paper (optional)

#### HELLO CRAFTY CRITTERS!

We're going to show you how to make these super cute manatee masks!

1. Paint the 2 paper plates grey and let dry.
2. Draw and cut out a snout shape on one plate.
3. Glue the snout onto bottom of the other plate and let dry.
4. Trace eyeholes using a circular object (we used a bottle cap). Cut out the eyeholes using scissors.
5. At the middle on both sides of the plate, use the hole punch to punch 1 hole on each side.
6. Draw nostrils and whisker dots. Add any other details you'd like. We gave our manatee some sea grass to eat! Tie the elastic string in the holes on the sides of the mask.

