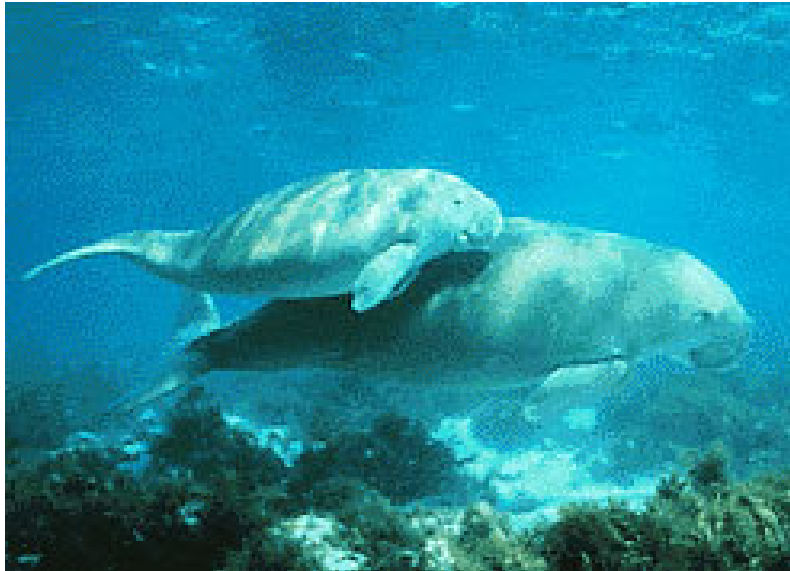


Conservation Status: Threatened

The Dugong



St. Aiden's Home School, South Africa

Cover Picture: This work is in the public domain in the United States because it is a work of the United States Federal Government under the terms of Title 17, Chapter 1, Section 105 of the US Code.

Manatees and dugongs are large, gentle animals that spend their whole lives in the water. They are mammals and need to breathe air like you and me.

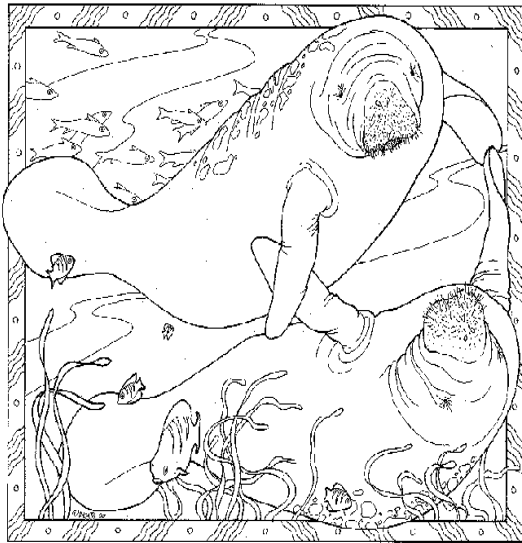
Manatees and dugongs can grow to be as long a 13 feet and can weigh up to 3,500 pounds. That's about the same size as a mini-bus. Manatees and dugongs have greyish tough and wrinkled skin. They have single bristle-like hairs scattered all over their seal-like bodies and thick whiskers on their snouts. While manatees have a paddle-shaped tail, the dugongs have a tail that is pointed on the ends, very much like a whale's. Both species use their tails to move their bodies through the water.

They have two limbs in the front of their body which they use for actions like steering and scooping up food. Manatees and dugongs have very small eyes yet they can see fairly well. They have no external ears by they can hear very well. Manatees and dugongs rest by floating near the surface of the water or by lying on the bottom. They can hold their breath for about 20 minutes which is much longer than we can. However, they usually com to breathe every three to five minutes. Manatees and dugongs can live as long as 60 years.

Manatees and dugongs live in warm, shallow, coastal waters, estuaries (where rivers meet the sea), and in slow moving rivers in tropical parts of the world.

Manatees and dugongs have existed for more than 60 million years which means that they were around at the same time as the dinosaurs! Manatees and dugongs are members of the biological family named Sirenians: the dugong, the West Indian

manatee, the West African manatee, and the Amazonian manatee. There once was a fifth type of Sirenian called the Stellar's sea cow, but it was overhunted and became extinct about 230 years ago. When an animal becomes extinct it means that there are no longer any more of those animals anywhere in the world. The sea cow is gone forever, and swims only in our memories.



The dugong lives in the shallow water of tropical seas off the coasts of East Africa, Australia, India, the Philippines, and other islands in the South Pacific. Dugongs look different from manatees. Dugongs have pointed tails (many manatees have a small notch in the tail) and one pair of tusk-like teeth. Dugongs are seldom found in fresh water.

Dugongs rest in the deep water during the day and move towards the shoreline at night to feed. The dugong uses its flippers for balance and moving along the ocean floor as it grazes. Dugongs are not thought to migrate as far as the manatees do. Like manatees, dugongs are usually found in small groups or alone. But groups of thousands of dugongs have been seen occasionally.

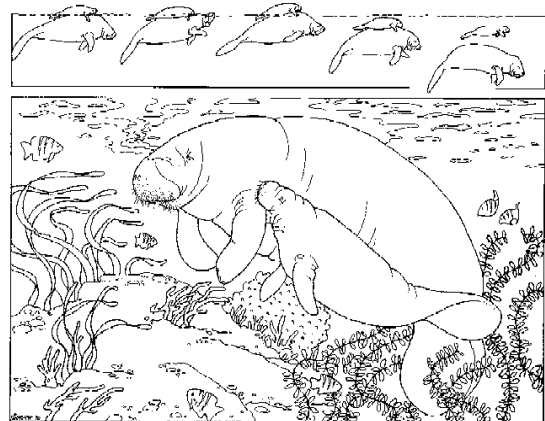
The West African manatee lives in coastal areas, rivers, and creeks of western Africa. It looks very similar to the West Indian manatee. Like the other species of manatees and dugongs, the West African manatee is extremely agile underwater. It enjoys doing somersaults, barrel rolls, head and tail stands, and upside-down gliding. Manatees and dugongs usually swim about three to nine feet below the

surface of the water. They swim about two to six miles per hour which is about the same speed as a professional swimmer. However, to avoid danger a manatee or dugong can swim up to 16 miles per hour, as fast as most sail boats can move on a very windy day!

Manatees and dugongs are herbivores, meaning they eat only plants such as the water hyacinth. Seagrass beds are important feeding grounds for them. Although manatees and dugongs mainly eat larger aquatic plants, they also eat algae and crustacea such as barnacles which grow on these plants. They spend much of their day feeding and can eat up to 100 pounds of vegetation in one day! Manatees and dugongs spend more time feeding before winter because they need more energy to maintain their body temperature in colder water.

A manatee and dugong mouth is different from ours. Its lower lip and jaw has horny pads that help it grasp plants. Its upper lip is split down the middle and each side can move independently. Its teeth are broad and flat, well suited for grinding up plants. As the teeth are worn away by the grit, sand, and sediment which can adhere to plants the animals eat, they are replaced by other teeth which grow in from behind. Manatees and dugongs have no front teeth.

Usually manatees and dugongs give birth to only one calf every three to five years. The gestation period, or time it takes the calf to develop inside the mother, is about thirteen months.



A newborn calf is pinkish, about four feet long, and weighs 60-100 pounds, about as big as a full grown goat. Once born, a calf immediately swims to the surface for its first breath of air. Sometimes a calf clings or rests on its mother's back as she feeds or sleeps and comes up to the surface for air when she does. The calf drinks milk from its mother's teats which are under her flipper.

Though the calf is able to graze on plants soon after birth, it nurses and stays with its mother for up to two years. The father does not participate in the care of the calf, and the mother and father do not stay together as a pair.

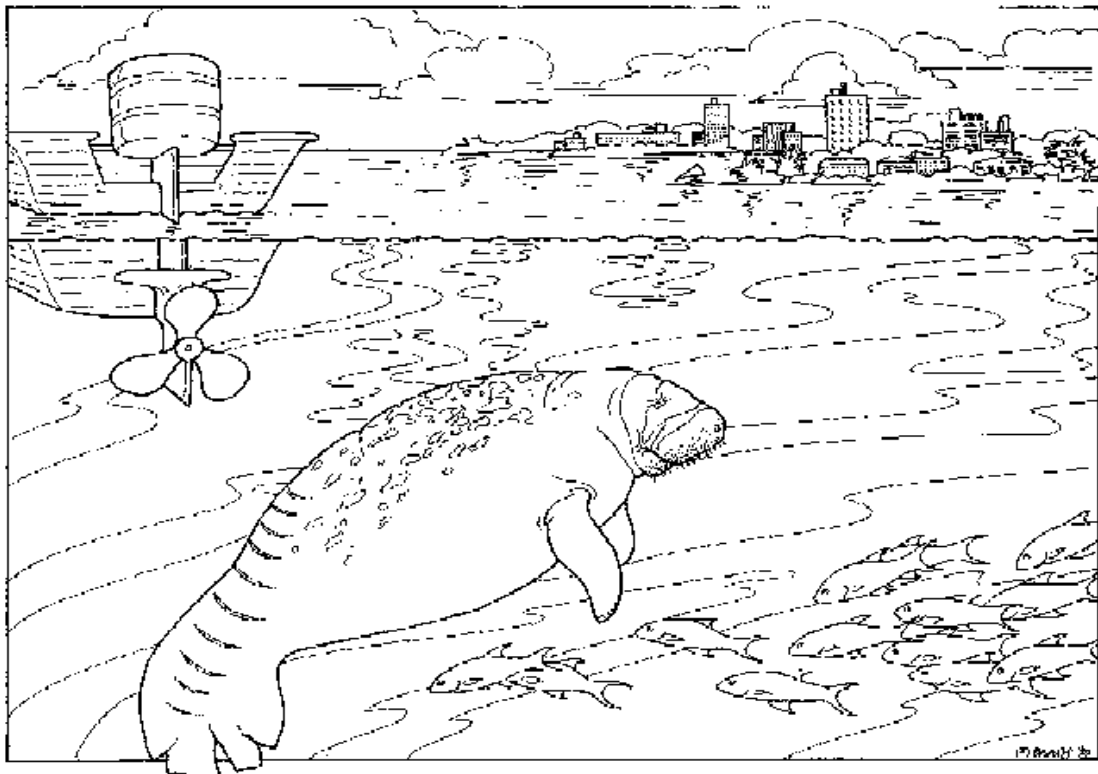
Manatees and dugongs are not possessive about territory like other animals (such as dogs). They are not aggressive in any way and do not fight with each other. They are extremely gentle animals. Because they have no natural enemies, manatees and dugongs do not need to travel in large herds which offer protection to the members of the group. Individual manatees and dugongs form loose groups without regard to gender (male or female) or age. Their groups do not have a leader or a defined structure.

Manatees and dugongs engage in social activities such as chasing, bumping, and sometimes body surfing together. They grab each other's flippers, put their mouths together, and nibble and kiss gently to greet each other. Manatees and dugongs are normally silent but can make high-pitched squeals to communicate fear, anger, playfulness, and maintain contact when feeding and travelling.

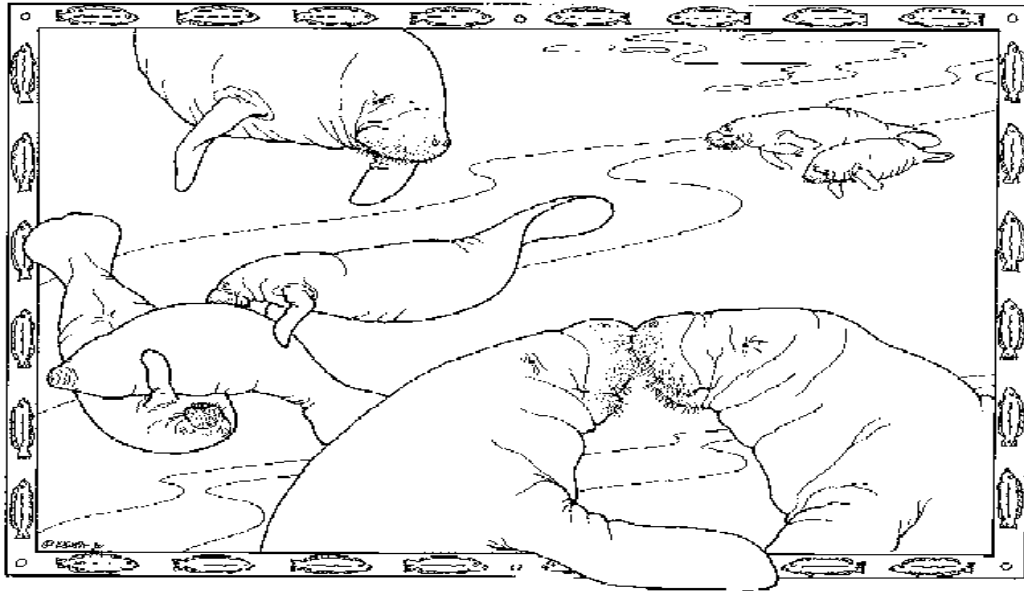
Every year more and more people live near the warm coasts and rivers that are also the homes to manatees and dugongs. Manatees and dugongs

have fewer places to live and feed. This loss of living space, or habitat, is a major threat to the future survival of these gentle animals.

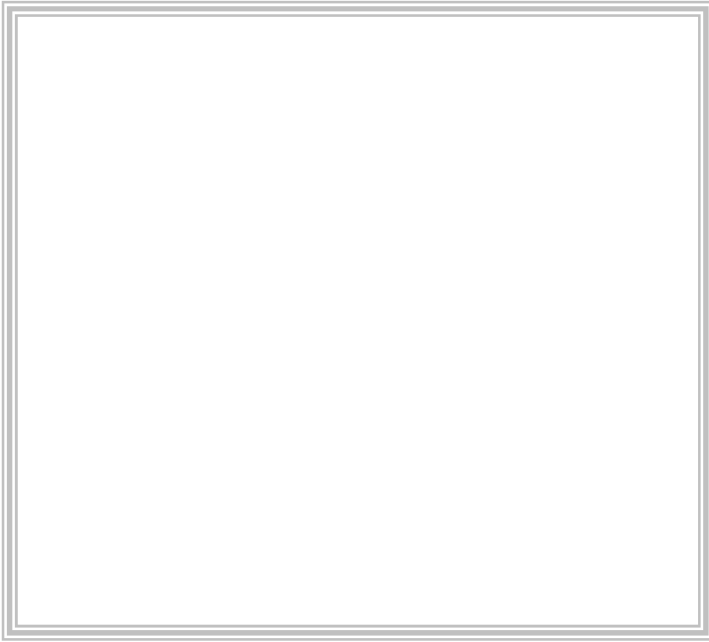
Other threats are caused by the changes people bring to the shallow waters where manatees and dugongs live. For example, in the United States, some people drive boats carelessly and too fast. Manatees are not quick enough to get out of the way and they are killed or injured badly by a boat's hull and sharp propellers. Some people chase or tease the animals. Some people discard fishing gear and other trash into the water. Manatees and dugongs accidentally eat this or become entangled in it and die. Floodgates and canal locks sometimes kill the animals by trapping them under water and causing them to drown. Pollution kills the seagrass and other plants which manatees and dugongs eat.



Manatees and dugongs can be saved in spite of all of the dangers they face. But we all must take action right away. Conservationists are people who work to protect animals, plants, and other natural resources. Conservation groups are working to enforce laws forbidding the hunting of manatees and dugongs.



They are also working together with the government to establish refuges and marine sanctuaries (protected areas) where manatees and dugongs can live undisturbed by hunters, boats, and pollution. Scientists are researching manatee and dugong behaviour so that we can better understand these animals. We must all understand these animals. We must all understand the dangerous situation facing the manatees and dugongs and what must be done to protect them. You and I can help by learning and by teaching others about these special and vanishing animals.



Handwriting practice lines consisting of ten horizontal dashed lines.

Main body of handwriting practice lines consisting of twenty horizontal dashed lines.

Handwriting practice lines consisting of 18 horizontal dashed lines on a white background.

A large, empty rounded rectangular box with a double-line border, intended for drawing or free writing.

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