NO PREP

Gentle Giants

Manatees and Dugongs

Includes: Student reading, case study, differentiated questions, teacher key

Name: Period: Date:

Gentle Giants: Manatees and Dugongs

Meet the Sea Cows

In warm, shallow waters around the world live the sirenians, a group of gentle, slow-moving marine mammals that includes manatees and dugongs. These animals are often nicknamed "sea cows" because of their grazing lifestyle—they spend most of their day munching on underwater grasses. Unlike whales and seals, sirenians never leave the water, and they play an important role in keeping seagrass beds healthy and thriving. Sadly, despite their peaceful nature, these giants are among the most endangered marine mammals.

Manatees: River to Ocean Travelers

Manatees are found in both freshwater and saltwater, with the West Indian manatee being the most well-known. They can grow over 10 feet long and weigh more than 1,000 pounds, yet they survive entirely on plants. Unlike fast-swimming dolphins, manatees are slow and deliberate, using paddle-shaped tails to glide

Name: Period: Date:

Gentle Giants: Manatees and Dugongs

Meet the Sea Cows

In warm, shallow waters around the world live the sirenians, a group of gentle, slow-moving marine mammals that includes manatees and dugongs. These animals are often nicknamed "sea cows" because of their grazing lifestyle—they spend most of their day munching on underwater grasses. Unlike whales and seals, sirenians never leave the water, and they play an important role in keeping seagrass beds healthy and thriving. Sadly, despite their peaceful nature, these giants are among the most endangered marine mammals.

Manatees: River to Ocean Travelers

Manatees are found in both freshwater and saltwater, with the West Indian manatee being the most well-known. They can grow over 10 feet long and weigh more than 1,000 pounds, yet they survive entirely on plants. Unlike fast-swimming dolphins, manatees are slow and deliberate, using paddle-shaped tails to glide through rivers and coastal areas. They rise frequently for air and have a gentle, curious nature. Unfortunately, their slow speed makes them vulnerable to boat strikes, one of their biggest threats. Conservation programs now create "manatee zones" where boats must slow down to protect them.

Dugongs: The Ocean Grazers

While manatees often live in rivers and coastal bays, dugongs are strictly marine and are found mostly in the Indian and Pacific Oceans. They have a more dolphin-like tail compared to the round tail of manatees, and their snouts are shaped for grazing on seagrass meadows. Dugongs are shy and less studied than manatees, but like their relatives, they are herbivores that spend most of their day feeding. Unfortunately,

dugongs are heavily threatened by habitat destruction, entanglement in fishing gear, and hunting in some regions.

Key Information

Feature	Manatee	Dugong
Habitat	Freshwater & coastal areas	Strictly marine, coastal seagrass beds
Tail Shape	Rounded, paddle-like	Fluked, dolphin-like
Diet	Aquatic plants, seagrasses	Seagrass meadows only
Snout	Short, rounded	Downturned for grazing
Threats	Boat collisions, habitat loss	Habitat loss, fishing gear, hunting

Case Study: The Florida Manatee Crisis

In recent years, Florida's manatees have faced a devastating challenge: starvation. Pollution and algal blooms have killed large areas of seagrass, the manatees' main food source. In 2021 alone, more than 1,000 manatees died in Florida, many from malnutrition. Wildlife officials responded by launching emergency feeding programs, offering lettuce to starving manatees in the wild. While this helped in the short term, conservationists stress that the real solution is restoring seagrass habitats. The Florida crisis highlights how environmental damage can ripple through ecosystems, threatening even the most iconic species.

1. Why are manatees especially at risk of being hit by boats?

2. What long-term solution is needed to save Florida's manatees from starvation?

_____

_____

Multiple Choice

1. What is one major difference between dugongs and manatees?

    a) Dugongs eat fish as well as plants

    b) Dugongs live only in the ocean

    c) Manatees migrate to the Arctic

    d) Manatees live only in saltwater

2. Because manatees swim slowly, what does the reading name as one of their biggest threats?

    a) Cold temperatures

    b) Predation by sharks

    c) Competition with dolphins

    d) Boat collisions

3. What is the main food source for both manatees and dugongs?

    a) Small fish

    b) Jellyfish

    c) Seagrass

    d) Squid

Matching

Write the letter of the correct definition on the line next to each term.

Term	Definition
1. ___ Manatee tail	A) Plant-eating herbivores
2. ___ Dugong habitat	B) Boat collisions
3. ___ Shared trait	C) Downturned snout for grazing
4. ___ Dugong snout	D) Rounded, paddle-shaped
5. ___ Threat made worse by slow swimming speed	E) Lives strictly in marine environments

Fill-in-the-Blank

1. Manatees are often called _____ because of their grazing habits.

2. Dugongs are found mostly in the _____ and Pacific Oceans.

3. Pollution has reduced _____ beds, a vital food source for manatees.

Short Answer

Answer each question in 2-4 complete sentences.

1. Compare the tails of manatees and dugongs.

_____

_____

_____

2. Why are dugongs more vulnerable than manatees in some regions?

3. How do sirenians help maintain healthy seagrass ecosystems?