

Manatees



1. What is the common name, kingdom, phylum, class, order, family, genus, species, and subspecies of the manatee.
2. What do manatees eat and how much per day?
3. Where do manatees live and what is their habitat and range?
4. Give a detailed description of a manatee.
5. How do manatees breathe and how often do they need to come up for air?
6. Write an essay on the reproduction, gestation, and the relationship the female manatee has with her young.
7. How do manatees communicate?
8. What is their behavior like?
9. What value does the manatee have to man?
10. Know the rules when boating or jet skiing around manatees.
11. Know all water signs when boating or jet skiing.
12. What are the do's and don'ts when near a manatee?
13. What are the manatee's enemies and problems?
14. What are other Sirenian species?
15. Visit an area where you can observe manatees in their habitat.

Manatees Answers

1. Name: Florida manatee or sea cow
Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Sirenia
Family: Trichechidea
Genus: Trichechus
Species: Manatus
Subspecies: Latirostris
2. Manatees are herbivores, feeding on a large variety of submerged emergent and floating plants. Some favorite foods of the manatees in Florida include:

Freshwater

Manatee grass--*Syringodium filiforme*
Turtle grass--*Thalassia testudina*
Widgeon grass--*Ruppia maritima*
Shoal grass--*Halodule beaudettei*

Saltwater

Florida elodea--*Hydrilla verticillata*
Southern naiad--*Najas guadalupensis*
Eurasian watermilfoil--*Myriophyllum specatum*
Tapegrass, eelgrass--*Vallisneria spiralis*
Coontail--*Ceratophyllum demersum*
Water hyacinth--*Eichornia crassipes*
Water lettuce--*Pistia stratiotes*

Manatees eat 10-15% of their body weight a day. So it averages about 60-100 pounds per day.

3. The United States manatee population is concentrated primarily in Florida. Manatees are susceptible to cold related disease and in the winter congregate near natural springs which have a constant 72 degrees F. temperature, or warm effluents of power plants, or other industrial outflows. Water temperatures below 68 degrees F. usually cause manatees to move into these warmer refuge areas. Individual manatees often return to the same wintering areas year after year. Between late March and November, manatees migrate freely around Florida's rivers and coastal waters. A few may range as far as the Carolinas and as far west as Louisiana during the summer months, but these sightings are rare. They like shallow, slow-moving rivers, estuaries, saltwater bay, canals, and coastal areas, particularly where sea grass beds flourish. They can live in salt or freshwater.

Manatees Answers Continue

4. Large, seal-like body that tapers to a beaver-like tail. Two forelimbs with three or four nails on each. Thick skin with stiff whiskers on the upper lip. They are gray or gray-brown. Typically about 9-10 feet long, weighing 1,000 pounds. They can grow as large as 13 feet, weighing more than 3,000 pounds. Their vision in depth perception may be limited. They can, however, differentiate colors. They can hear well despite the absence of external lobes. Directional hearing is limited.
5. Nostrils on upper surface of the snout close tightly like valves when submerges. Surfacing to breathe every few minutes when active, every 10 to 15 minutes when resting.
6. Normally one calf every two to five years, twins are rare. They form mating herds of one female and several males. The manatee carries the calve about 13 months. When born, the baby is around four feet long and weighs around 66 pounds. Sometimes a manatee will adopt another's calf and care for it along with her own. The calf will need its mother's care for two years. When the calf needs to rest, it usually lays on its mother's back. The two touch almost constantly. When it is several weeks old, it will begin to nibble on grass. But it will depend on mother's milk for many months to come. The mother manatee plays with her young and communicates with squeaks and grunts. She always knows where her calf is.
7. They emit sounds which are within human auditory range. They make squeaks and squeals when frightened, playing, or communicating, particularly between cow and calf.
8. Completely harmless and not aggressive, they are often shy and reclusive.
9. They help keep the water ways clear of excess vegetation. While coastal and estuarine vegetation is declining, quite another problem is occurring in our fresh water bodies. In recent years, Florida has experience and influx of exotic species, including freshwater vegetation. Because exotic species originate elsewhere and are not native to Florida, they have no natural enemies, and consequently, can grow unchecked. Our freshwater bodies have become clogged with such vegetation. Manatees eat these exotic plants and in certain areas may help keep water bodies clear but there aren't manatees to control these unwanted plants in all the areas where they are found.
10. *Abide by the posted speed zone signs while in areas known to have manatees present or when observations indicate manatees might be present.
*Observations may include a swirl at the surface caused by the manatee when diving; seeing the animal's back, snout, tail, or flipper break the surface of the water' or hearing it when it surfaces to breathe.

*Where polarized sunglasses to reduce glare from the water. This will help you see manatees easier.

Manatees Answers (Continued)

10. *Try to stay in deep channels. Manatees can be found in shallow, slow-moving rivers, estuaries, lagoons, and coastal areas. Avoid boating over sea grass beds and shallow areas.
- * Remain, at least, 50 feet away from a manatee when operating a power boat.
 - * Don't operate a boat over large congregations of manatees.
 - * If you water ski, please choose areas that manatees do not use or cannot enter such as landlocked lakes.
 - * Please do not discard monofilament line, hooks, or any other litter into the water. Manatees may ingest or become entangled in this debris and become injured or even die. Discarding monofilament fishing lines in the waters of Florida is unlawful!

11.

SLOW SPEED IDLE SPEED NO ENTRY RESUME NORMAL



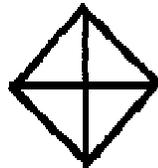
Nov. 15-Mar. 31

This sign is posted on the fringe of seasonal protected areas. You will see it as you approach the areas.



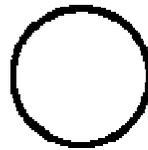
Nov. 15-Mar. 31

This sign appears in the center of seasonal protected areas.



MANATEE REFUGE

This sign appears in the Crystal River Sanctuary and Blue Springs Sanctuary. It means no swimming, boating, or diving.



SAFE OPERATION

This sign appears on the fringe of protected areas. You will see it as you leave the areas.

12. The manatee is an endangered species and is protected by state and federal law. The law states: It is unlawful for any person, at any time, intentionally or negligently to annoy, or molest, harass, or disturb any manatee. Anyone convicted of violating Florida's state law faces a possible maximum fine of \$1,000 and/or imprisonment for up to one year.

BEING NEAR MANATEES

Look at but don't touch manatees. Also, don't feel manatees or give them water. If manatees become accustomed to being around people, they can alter their behavior in the wild, perhaps causing them to lose their natural fear of boats and humans, and this may make them more susceptible to harm. Passive observation is the best way to interact with manatees and all wildlife.

Do not pursue or chase a manatee while you are swimming, snorkeling, diving, or boating.

Never poke, prod, or stab a manatee with your hands, feet, or any object.

Manatees Answers Continued

If a manatee avoids you, you should avoid it. Don't isolate or single out an individual manatee from its group, and don't separate a cow and her calf.

Avoid excess noise and splashing if a manatee appears in your swimming area.

Use snorkel gear when attempting to watch manatees. Stay at the surface of the water and passively observe the manatee. The sound of bubbles from scuba gear may cause manatees to leave the area.

Don't enter areas designated as "NO ENTRY MANATEE REFUGE". These areas have been identified by the FL Department of Environmental Protection and the US Fish and Wildlife Services as crucial for manatee survival.

14. Other living members of the Order Sirenia are found in aquatic habitats similar to that of the West Indian manatee. Because of their herbivorous nature, all are found in relatively shallow waters where sunlight can penetrate and stimulate growth.

The Amazonian manatee lives exclusively in inland, freshwater areas, while the dugong prefers coastal and marine ecosystems. Although little is known about the West African manatee, it also inhabits tropical and subtropical waters. The only Sirenian species to inhabit cold waters was Steller's sea cow, hunted to extinction within 27 years of its discovery in 1741 in the Bering Strait.

