

Marvelous Manatee

“FYI”

(For Your Information)



Table of Contents

- What's A Manatee??? (Part I)
- What's A Manatee??? (Part II)
- Manatee Rules & Regulations (Part I)
- Manatee Rules & Regulations (Part II)
- Introducing... *The Crystal River Manatee*

What's A Manatee??? Part I

- **DESCRIPTION:** Large, seal-like body that tapers to a powerful flat tail. Two agile forelimbs with three to four toenails on each, which act like arms to help the manatee maneuver in shallow water, grasp and move food toward their mouths, and act like flippers during swimming. Thick and wrinkled skin with a rough texture - a bit jiggly under the neck and arms. Their skin reacts to touch, as their bodies are very muscular - contracting and changing shape slightly when scratched or tickled. Powerful upper lips which articulate to help maneuver food or dig through sediment.
- **SIZE :** Average 9 to 10 feet long, weighing around 1,000 lbs. Can grow as large as 13 feet and weigh more than 3,000 lbs. Calves are born weighing about 40 lbs, gaining about 700 lbs. during their first year.
- **BEHAVIOR :** Gentle and generally slow-moving. Most of the time is spent eating vegetation (100-150 lbs. per day), resting and traveling. On average manatees can travel about 40 to 50 miles a day, sometimes farther. Chessie, the famed manatee rescued from the cold waters of the Chesapeake Bay and returned to Florida, was tagged with a locating device which showed he traveled as far as Rhode Island during hot summer months.
- **SIGHT :** Some people believe Manatees are near sighted, or may have limited depth perception. It is believed that they can differentiate between colors. It is unclear how manatees navigate in pitch black or murky waters - when their eyesight would be of no use. They do have sparse body hair over their bodies, and thick whiskers on their faces. It is not clear if this aids in navigation. One expert is convinced, however, that they know exactly where swimmers are, even in blackout conditions.



What's A Manatee??? Part II

- **HEARING** : Manatees can hear very well despite the absence of external ear lobes. They are not believed to have the capabilities of echolocation.
- **COMMUNICATIONS** : Emit sounds that are within human auditory range. They make sounds such as squeaks and squeals when frightened, playing, or communicating; particularly between cow and calf. No air is released from the manatee when these sounds are made, and it is not clear where the sounds are being produced or if they serve any other purpose.
- **BREATHING** : Manatees are mammals and breath air through their noses at the surface - with nostrils which close tightly when submerged. They breath every few minutes when active or swimming, and every 10 to 15 minutes when resting. They are capable of exchanging 98% of their lungs capacity in one breath. Their lungs are very large, and are also used for buoyancy control. The rushing sound of a deep exhale and breath sound much like a snorkeler. This sound, and the associated "footprint" left by the manatees tail and body at the surface are clues which reveal the presence of manatees in the area.
- **HABITAT AND FOOD** : Manatees are found in coastal waterways, estuaries, salt water bays, rivers and canals, particularly where seagrass beds are located. Manatees are completely herbivorous and can eat 10-15% of their bodyweight daily. In captivity they are fed lettuce and other greens, and given elephant vitamins.
- **REPRODUCTION** : Females mature around 5 to 9 years of age, and males not until 6 to 9 years of age. It is believed that one calf is born every 2 to 5 years. Twins are rare in the wild. Gestation period is around 13 months. Newborns weigh approximately 40 pounds at birth and stay with them other for several years. Call the Wildlife Alert Hotline 1-888-404-FWCC (3922) or *FWC/#FWC, or use VHF Channel 16 on your marine radio if you see an injured, dead, tagged, or orphaned manatee, or if you see a manatee being harassed.



Manatee Facts & Information (Part I)

- Manatees (family Trichechidae, genus *Trichechus*) are large, fully aquatic marine mammals sometimes known as sea cows. The name manati comes from the Taino, a pre-Columbian people of the Caribbean, meaning 'breast'. They contain three of the four living species in the order Sirenia, the other being the dugong, which is native to the Eastern Hemisphere. The Sirenia is thought to have evolved from four-legged land mammals over 60 million years ago, with the closest living relatives being the Proboscidea (elephants) and Hyracoidea (hyraxes).
- Manatees are mainly herbivores, spending most of their time grazing in shallow waters and at depths of 1-2 meters (3-7 ft). Much of the knowledge about manatees is based upon research done in Florida and cannot necessarily be attributed to all types of manatees. Generally, manatees have a mean mass of 400-550 kg (900-1200 lb), and mean length of 2.8-3.0 m (9-10 ft), with maximums of 3.6 meters and 1,775 kg seen (the females tend to be larger and heavier). When born, baby manatees have an average mass of 30 kg.
- On average, most manatees swim at about 5 km/h to 8 km/h (1.4 m/s to 2.2 m/s; 3 to 5 miles per hour). However, they have been known to swim up to 30 km/h (8 m/s; 20 miles per hour) in short bursts. Manatees inhabit the shallow, marshy coastal areas and rivers of the Caribbean Sea and the Gulf of Mexico (*T. manatus*, West Indian Manatee), the Amazon Basin (*T. inunguis*, Amazonian Manatee), and West Africa (*T. senegalensis*, West African Manatee). A fourth species, the Dwarf Manatee (*T. bernhardi*) was recently proposed for a population found in the Brazilian Amazon, although some have questioned its validity, instead believing it is an immature Amazonian Manatee. Florida is usually the northernmost range of the West Indian Manatee as their low metabolic rate makes cold weather endurance difficult. They may on occasion stray up the mid-Atlantic coast in summer. Half a manatee's day is spent sleeping in the water, surfacing for air regularly at intervals no greater than 20 minutes.



Manatee Facts & Information (Part II)

- Florida Manatees have been known to live up to 60 years, and they can move freely between different salinity extremes; however, Amazonian Manatees (*T. inunguis*) never venture out into salt water. They have a large flexible prehensile upper lip that acts in many ways like a shortened trunk, somewhat similar to an elephant's. They use the lip to gather food and eat, as well as using it for social interactions and communications. Their small, widely spaced eyes have eyelids that close in a circular manner. Manatees are also believed to have the ability to see in color.
- They emit a wide range of sounds used in communication, especially between cows and their calves, yet also between adults to maintain contact and during sexual and play behaviors. They may use taste and smell, in addition to sight, sound, and touch, to communicate. Manatees are capable of understanding discrimination tasks, and show signs of complex associated learning and advanced long term memory. They demonstrate complex discrimination and task-learning similar to dolphins and pinnipeds in acoustic and visual studies. Manatees typically breed only once every other year, since gestation lasts about 12 months, and it takes a further 12 to 18 months to wean the calf. Only a single calf is born at a time and aside from mothers with their young or males following a receptive female, manatees are generally solitary creatures.



Manatee Rules & Regulations (Part I)

- *The following rules and regulations have been put in place to help protect the manatee and their natural environment. Failure to heed these regulations will result in you being **fined** or **arrested** by local, state, and/or federal authorities. It is entirely possible to have a fantastic manatee encounter within these regulations:*
- **DO NOT** enter designated/posted sanctuaries for any reason!
- **DO NOT** pursue/chase (swimming after) or corner a manatee while swimming or diving. This includes following manatees for any reason.
- **DO NOT** disturb a resting manatee. Sleeping manatees sometimes rest in a "face-plant" on the river bottom, rising for air every few minutes. It is unlawful to interfere with these normal activities.
- **DO NOT** attempt to feed the manatees or give them water. Doing so may make the manatee associate food and water with humans, endangering the manatee.
- **DO NOT** attempt to ride, poke, prod, or grab the manatee at any time with any object including your hand or foot.
- **DO NOT** attempt to single out or surround a manatee.
- **DO NOT** attempt to separate a calf from it's mother, or any manatee from a group of manatees.

Manatee Rules & Regulations (Part II)

- Manatees are protected under federal law by the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973, which make it illegal to harass, hunt, capture or kill any marine mammal. Manatees are also protected by the Florida Manatee Sanctuary Act of 1978. Anyone convicted of violating this state law faces a possible maximum fine of \$500.00 and/or imprisonment for up to 60 days. Conviction on the federal level is punishable by a fine of up to \$50,000 and/or one year in prison. Feeding manatees, giving them water, or otherwise altering their natural behavior can be considered harassment. It is a second degree misdemeanor to intentionally discard any monofilament fishing line or monofilament netting into or onto the waters of the state of Florida. Following are some unwritten rules that will make your manatee encounter more enjoyable for everyone involved :
- **Do** enter the water quietly and move around without splashing or making noise. Sometimes sudden noises and movements will frighten a manatee who will most likely swim away. SCUBA gear is not recommended for manatee encounters, as the noise of rushing air normally frightens them away.
- **Do** wait for the manatee to show an interest in you before approaching it. Manatees are normally curious, and if you stay still, floating on the surface - they will normally approach you to initiate the contact.
- **Do** keep you feet off the bottom of the river if it is shallow enough to touch. Keeping your feet off the bottom will keep down the sediment, which will interfere with viewing and photographing the manatee.
- **Do** remember that the manatee is in charge of the encounter. If a manatee is sleeping or is not interested in making contact, leave it alone, as your only encounter would probably be seeing it's tail disappear ahead of you as it swims away into a sanctuary.
- **Call the Wildlife Alert Hotline 1-888-404-FWCC (3922) or *FWC/#FWC, or use VHF Channel 16 on your marine radio if you see an injured, dead, tagged, or orphaned manatee, or if you see a manatee being harassed.**

Introducing... **The Crystal River** **Manatee**

Swimming With The Manatee – Crystal River, Florida

- Crystal River offers several springs and areas to find and encounter the manatees - including a main spring which offers a nice SCUBA dive to the bottom of the 50 foot spring. Crystal River is a fifteen minute drive from Homosassa Springs. Crystal River features several Manatee Sanctuary areas which give the manatees a place to retreat from the boats and people when they want to rest or feed. You cannot enter these sanctuary areas under any circumstance. The newest sanctuary is at Three Sisters Springs. It was established in November 1997. Access to the three springs to swimmers is still provided and I recommend you snorkel back to the springs and enjoy the "lagoon-like" atmosphere.
- A wetsuit is recommended. Follow all rules and laws associated with swimming with and boating around the manatees. This area is closely monitored by Fish and Wildlife Officials who will fine you or arrest you for harassing or harming the animals in any way. The best way to find and access this area is with an experienced guide - who will train and supervise you as to proper conduct when swimming around manatees, can provide you with snorkeling equipment, and can help make your experience an enjoyable and memorable one.
- For more information on the Crystal River Wildlife Refuge, please visit their website on-line at:
http://www.gorp.com/gorp/resource/us_nwr/fl_cryst.htm



Presented By.....

