
What is the financial impact of protecting an endangered species like the manatee?

It is difficult to estimate the economic impacts of proposed speed zones. It is even more difficult to put a monetary value on preserving an endangered species.

Speed zones have a one-time cost associated with developing and promulgating the rule and with posting signs. Recurring costs include sign maintenance and enforcement. Some individual businesses may be affected by the zones.

The manatee is a major tourist attraction in many parts of the state. For example, manatees provide substantial economic benefit to Citrus County. In Lee County, there are several tour operators that highlight manatee observation as a major component of their businesses. Given that wildlife viewing and eco-tourism are some of the fastest-growing components of the Florida tourism industry, it makes good economic sense to assure a healthy and plentiful manatee population in Florida.

To many people, the protection and preservation of an endangered species is not about the economic cost or benefit involved; it is about being good stewards of our environment. To assess the value of Florida's manatees, is to place a value on a species considered by many as an irreplaceable national treasure--the only North American representative of the Order Sirenia, with a genetic makeup and behavior all its own.

The possibility of losing this evolutionary piece of an intricately balanced, diverse natural system that took millions of years to create, is incomprehensible to many. There are no substitutes for the manatee in Florida or for the type of habitat required for manatee survival.

For more information, please write to or call:

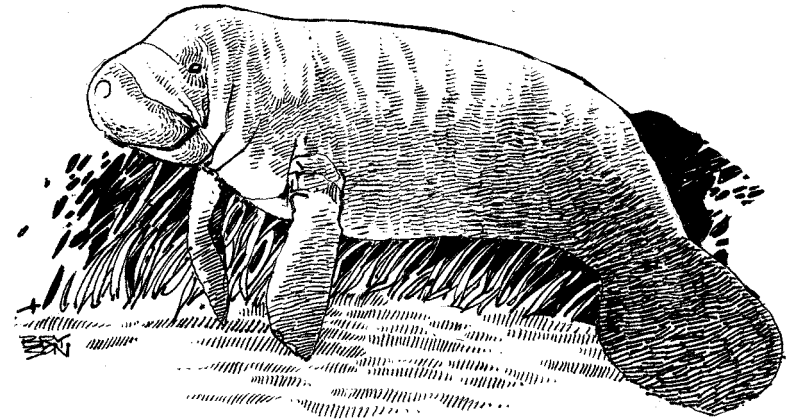
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620 South Meridian Street OES-BPS
Tallahassee, Florida 32399-1600
(850) 922-4330*



<http://www.floridaconservation/psm/>

09/02

Commonly Asked Questions About:



Manatees, Manatee Protection Rules, The Manatee Program and Funding Sources



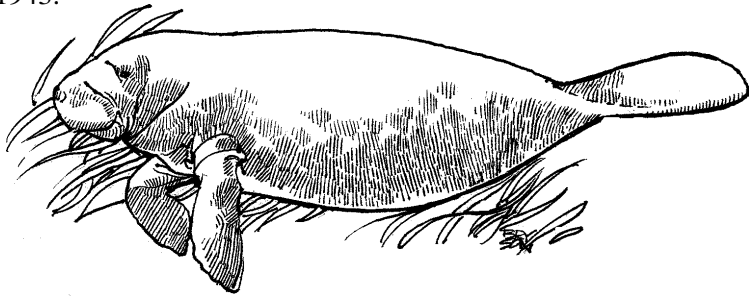
Florida Fish and Wildlife Conservation Commission

Who was here first--man or manatee?

Forty-five-million-year-old fossils of animals in the manatee family have been found in Florida. Prehistoric Indians in Florida used ceremonial pipes in the form of manatees, and manatee bones have been found at sites where ancient Indians lived in southeastern Florida. Pre-Columbian Indians occasionally hunted manatees for meat, but manatees were probably not a regular part of their diet.

Comments by writers in the early part of the nineteenth century suggest that manatees were “found in large numbers” and were “remarkably abundant.” Several writers in the late 1800s describe the netting and shooting of manatees by Indians. Pioneers who arrived during the nineteenth century shot manatees for meat, oil, and hides.

In 1893, laws were passed to protect manatees in Florida by making the hunting of manatees illegal. However, manatee poaching was common in parts of Florida during the Depression and World War II due to the shortage of other meat. The first report of manatee deaths due to collisions with boats was in 1943.



Does the West Indian Manatee exist anywhere else besides Florida?

There are two subspecies of the West Indian manatee: the Florida manatee (*Trichechus manatus latirostris*) and the Antillean manatee (*Trichechus manatus manatus*). The Florida manatee is confined mainly to Florida. Summer ranges extend up the Atlantic east coast (with one sighting as far north as Rhode Island) and along the Gulf Coast as far west as Louisiana and Texas. The Antillean manatee inhabits the Caribbean and South and Central American areas. The West Indian manatee is the only North American representative of the Order Sirenia, with a genetic makeup and behavior all its own.

What is a Voluntary Contribution?

Ch. 328.72(11) F.S. Voluntary Contribution - A registrant who provides a voluntary contribution of \$5 or more to the manatee program shall be given a decal by the tax collector to display, which signifies support for the Save the Manatee Trust Fund and shall be used for the purposes specified in s. 370.12(4). (See page 11 for specifications.)

A Voluntary Contribution Campaign is run during the vessel registration period each year through the county tax collection offices. Decals may be purchased at any time of the year and do not require that you own a vessel in order to get a decal.

Surplus decals from previous years are available through the Fish and Wildlife Conservation Commission's Bureau of Protected Species Management. The decals were first distributed in 1992 and eleven different decals are available to interested collectors. Ask for the Manatee Decal Collection and order one from each year. Each decal is available for a \$5 voluntary contribution. Manatee decals come in a variety of shapes and all are waterproof, which makes them great for displaying on vehicles or boats.

Decal donations in fiscal year 2000-2001 accounted for about \$90,000 to the Save the Manatee Trust Fund.

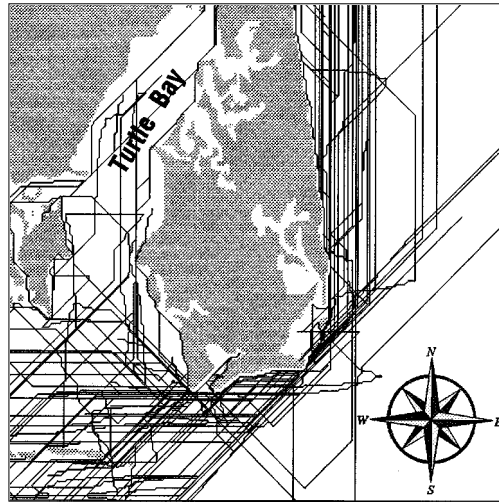


What happens to the funds collected from the manatee license plates?

Section 320.08058(1)(b), F.S., provides that the monies collected must be deposited into the Save the Manatee Trust Fund, created within the Fish and Wildlife Conservation Commission. The funds deposited in the Save the Manatee Trust Fund may be used only for environmental education; manatee research; facilities, as provided in s. 370.12(5)(b) F.S.; and manatee protection and recovery.

What information is used to reach the technical decisions and to determine the manatees' abundance in state waters?

All available information is used. As examples, systematic aerial surveys are used to determine relative manatee abundance and distribution in Florida; satellite telemetry is used to find out habitat preference and trend routes; and Geographic Information Systems (GIS) is used to analyze and display geographically referenced data. Other information comes from boat traffic data, bathymetric data and mortality data.



This map shows telemetry travel patterns of manatees.

How much of the vessel registration money goes to support manatees?

Ch. 328.76(1)(a) F.S. - Marine Resources Conservation Trust Fund - In each fiscal year, an amount equal to \$1.50 for each vessel registered in this state shall be transferred to the Save the Manatee Trust Fund and shall be used only for the purposes specified in s. 370.12(4)

What is s. 370.12(4)?

This section designates funds for a census of the manatee population in the state; the evaluation and development of manatee protection measures; funding of activities of public and private organizations and those of the commission intended to provide manatee and marine mammal protection and recovery efforts; posting of regulatory signs; production, publication and distribution of educational materials; research, rescue and recovery programs; assistance with recovery of the endangered or threatened marine mammals; prevention of the endangerment of other species of marine mammals; and other similar programs intended to protect and enhance the recovery of the manatee and other species of marine mammals.

How many manatees are estimated to exist today in state waters?

The statewide survey conducted in January 2001, produced a record count of 3,276 manatees. Researchers have planned two surveys each winter since 1988, but the necessary weather conditions have occurred only sixteen times. Unusually cold, clear and calm weather across the state is necessary for concentrating manatees at warm-water sites and for providing good flying conditions.

Is the manatee population increasing or decreasing?

Thus far, there is no conclusive scientific study that shows whether the state population is declining, increasing, or stabilizing. The most recent population models suggest that the state population may be stabilizing. These same models suggest that changes in human-caused mortality can have profound effects on the population. The good news is that in a few areas, such as Crystal River in Citrus County and Blue Spring in Volusia County, the data show an increase in the manatee population. These areas have had strong protective measures, such as speed zones, and *no entry zones* in place since the early 1980s.

What can I do to help support the manatee program?

- ◆ Purchase a **Save the Manatee** license plate.
- ◆ Make a \$5 donation at your local tax collector's office and receive a manatee decal.
- ◆ Follow safe boating practices when boating.
- ◆ Refrain from touching or feeding manatees.

We all must do our part to help this species survive.

What is the Florida Manatee Sanctuary Act?

The Florida Manatee Sanctuary Act is **Ch. 370.12(2), F.S.** Protection of Manatees or Sea Cows - Paragraph (b) states: The State of Florida is hereby declared to be a refuge and sanctuary for the manatee, the “Florida state marine mammal.” The Act authorizes the Commission to adopt rules regulating the speed and operation of motorboats to protect manatees from harmful collisions and from harassment. These rules appear in Chapter 68C-22, F.A.C.

In addition to authorizing the regulation of motorboats, paragraph (d) states ... “it is unlawful for any person at any time, by any means, or in any manner intentionally or negligently to annoy, molest, harass, or disturb or attempt to molest, harass, or disturb any manatee; injure or harm or attempt to injure or harm any manatee; capture or collect or attempt to capture or collect any manatee; pursue, hunt, wound, or kill or attempt to pursue, hunt, wound, or kill any manatee; or possess, literally or constructively, any manatee or any part of any manatee.”

What do I do if I see a manatee that is dead, injured, or one that is being harassed?

Please call the Fish and Wildlife Marine Enforcement Unit and report any of these sightings or violations:

1-888-404-FWCC or *FWC (mobile)

Why is the Marine Mammal Protection Act Important?

The act designates the manatee as a marine mammal. The act prohibits the taking of any marine mammal, regulates scientific research and other activities that may effect marine mammals, and establishes the Marine Mammal Commission. The act also sets up the Marine Mammal Health and Stranding Response Program. The fine for violation of the act can be as much as \$20,000 and/or one year in jail. *(Additional information on the act is available on the Internet from the Cornell Law School site - <http://www4.law.cornell.edu/uscode/16/ch31.html>)*

What kind of Manatee Research is Performed by the FWC Florida Marine Research Institute?

Pathology - The carcass salvage program collects carcasses from around the state and delivers them to the Marine Mammal Pathobiology Laboratory in St. Petersburg, Florida. Every carcass is examined in order to determine the cause of death. This program is used to gauge the relative success of all of the recovery efforts and for identifying new solutions to manatee mortality.

Recovery/Rescues - The carcass salvage program coordinates manatee rescue and recovery responses around the state. Staff investigate and confirm reports of sick, injured or orphaned manatees; develop rescue plans; mobilize rescue equipment and personnel; arrange for transportation; coordinate with critical care facilities and work with the media and public involved with the rescue event.

Geographic Information Systems (GIS) - Marine mammal GIS provides manatee data coverages including carcass recovery sites, aerial survey locations and locations of animals tracked by satellite. GIS provides scientists, managers, educators and consultants updated coverages, graphics and information needed for education, research or management decisions.

Photo Identification - Manatees are photographed in the wild to document manatee biological, geospatial, behavioral and environmental data. FMRI coordinates and maintains a portion of a catalog for west-central and south-west Florida. All manatees handled for rescue, rehabilitation or radio tagging are photographed.

Telemetry - How manatees use coastal habitats is essential to understanding the resources the population requires to expand and flourish. Satellite and radio transmitters on manatees allows researchers to obtain information about manatee behavior, migratory routes and preferred habitats.

Population Assessment - Weather permitting, annual winter surveys provide information about manatee spatial distribution, relative abundance and habitat use. Data from aerial surveys, mortality, life-history and ecology studies are being combined to create a population model that estimates trends in regional population sizes.

Research information: <http://www.floridamarine.org/>

Opportunities to help Support the Manatee Recovery Program:

Purchase a Manatee Specialty Tag - If you are a resident of Florida, one way to show your support is to choose the manatee license plate as your specialty tag on your vehicle. The extra money helps fund the state's manatee recovery program.

Manatee Decal Donations -Another way to support manatees is to donate to the program when you register your vessel. Waterproof decals are issued to boaters who donate \$5.00 or more to the manatee program. New decals are designed and made available each year. Start a collection today.

Save the Manatee Trust Fund -If you are not a resident of Florida, are committed to other specialty plates, or do not own a vessel, you can still support the manatee program by contributing to the "Save the Manatee Trust Fund." Whatever contribution you make goes to the research, management, protection and educational programs for the benefit of the manatee. *The States' manatee program is dependent on the Save the Manatee Trust Fund for the majority of its funding.*

Manatee Education Programs -Besides your contributions, we need support and assistance to educate others about manatees. Please review the material you receive and apply it as needed. All of the material may be copied. If you have a library nearby or know a teacher, please offer the material to them when you are finished with your program.

Contribute Today

Please donate to the "Save the Manatee Trust Fund" today. Make your check payable to the:

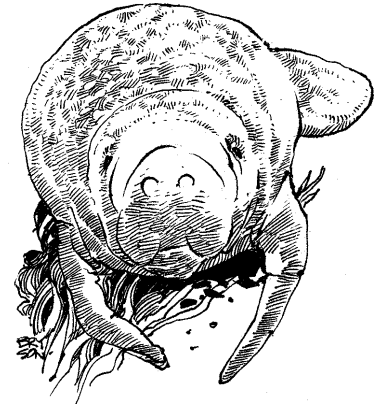
"Florida Fish and Wildlife Conservation Commission"



and mail it to the address on the back of this booklet (make sure that you note that the check is for the Save the Manatee Trust Fund). Please let us know if you would like to receive additional information.

What are Manatees?

In Florida, you have the opportunity to see a truly unique species of marine mammal that inhabits our waterways. Manatees are large, gray, torpedo-shaped mammals with leathery looking skin similar to an elephant's. The manatee has a set of flippers, a paddle-shaped tail and a whiskered face. The average adult manatee is about 10 feet long. Often referred to as "sea cows" because of their grazing habits, West



Indian manatees are found throughout peninsular Florida. The manatee is a federally-listed, endangered species and is protected by federal and state laws.

Florida provides manatees the warm, subtropical climate and estuarine habitat needed for their survival. These mammals generally cannot endure temperatures below 66° for extended periods of time, and the natural springs and warm-water discharges from power plants provide refuges necessary during the colder months of the year.

Where do Manatees Live?

Manatees live in many places. During most of the year, the animals may be found in fresh or saltwater, preferring calmer rivers, estuaries, bays and canals. In the winter, the mammals seek warmer waters and often aggregate in the discharge areas near power plants and natural warm water springs. Boaters should avoid manatee habitat areas and slow down when traveling in known manatee travel corridors.

Manatees, because of their large size, are easy to use as barometers for habitat protection. In order for manatees to survive, their habitat must survive as well. By protecting the seagrass areas and maintaining the water quality necessary for their survival, a healthy marine life population will flourish. Manatees, sea turtles, game fish and other animals dependent on seagrasses will be recipients of your concerned support of their environment.

What is the responsibility of the FWC concerning manatee protection rules in Florida?

The Florida Fish and Wildlife Conservation Commission's Office of Environmental Service (Bureau of Protected Species Management) is charged with adopting rules that regulate the operation and speed of motorboat traffic for manatee protection purposes. The rules protect manatees from harmful collisions with motorboats and from harassment, where manatee sightings are frequent and it can be generally assumed, based on available scientific information, that they inhabit these areas on a regular or continuous basis (Section 370.12(2), F.S.). Limited lanes or corridors providing for reasonable motorboat speeds are identified and designated within these areas (Section 370.12(2)(j), F.S.). In addition, the Commission may adopt rules to protect manatee habitat (such as seagrass beds), and may designate limited areas as safe havens for manatees to rest, feed, reproduce, give birth, or nurse their young while undisturbed by human activity.



What do the Speed Zones Mean?

“Idle speed zone” means an area where vessels may not be operated at greater than Idle Speed (the minimum speed that will maintain the steerage-way of a motorboat--no wake). 68C-22.002 (3) Florida Administrative Code (FAC)

“Slow speed zone” means an area where vessels may not be operated at greater than Slow Speed (the speed at which a vessel proceeds when it is fully off plane and completely settled into the water--minimum wake.) 68C-22.002 (8) FAC.

“Caution zone” means an area where manatees frequently inhabit on a somewhat regular basis and motorboat operators are advised to use caution so as not to strike a manatee. 68C-22.002 (9) FAC.

“Motorboats prohibited zone” means an area where the entry of vessels being propelled or powered by machinery is prohibited. 68C-22.002 (6) FAC.

“No entry zone” means a limited area of critical importance as a safe haven for manatees to rest, feed, reproduce, give birth, nurse or otherwise habituate undisturbed by human activity. No vessel of any kind, whether power-driven or non-motorized, ..., including every description of watercraft, barge, and airboat, shall be permitted within the designated area. No other vessel or flotation device, including but not limited to a seaplane, sailboard, surfboard, raft, or any other water toy or other like object intended for or capable of use as a means of transportation on the water, shall be permitted within the designated area, nor shall other human activities including but not limited to diving, snorkeling, swimming, fishing ..., and the introduction by persons of food or other objects, that involves disturbance of these waters or the manatees so inhabiting them, be permitted within such a designated area, 68C-22.002 (17) FAC.

“Maximum 25 MPH Speed Zone” means a controlled area within which a vessel's speed made good over the bottom, measured in statute miles, shall not exceed 25 miles per hour. Although it is the intention of the Commission to allow those vessels capable of attaining a planing configuration at 25 MPH to do so, this speed limit shall not be construed as permitting the reckless or careless operation of a vessel, in violation of Section 327.33, F.S., or authorizing any vessel to travel at an unsafe speed, in violation of 33 U.S.C. s. 2006, as adopted pursuant to Section 327.33, F.S., by reason of:

- (a) Having an elevated bow which restricts visibility, or
- (b) Producing an excessive wake which endangers other vessels or natural resources of the state. 68C-22.002 (11) F.A.C.

“Maximum 30 MPH Speed Zone” 68C-22.003 (12) FAC. Similar text, restrictions and guidelines as the Maximum 25 MPH Speed Zone, except the speed is 30 MPH.

“Maximum 35 MPH Speed Zone” 68C-22.003 (13) FAC. Similar text, restrictions and guidelines as the Maximum 25 MPH Speed Zone, except the speed is 35 MPH.

What kind of manatee-related programs are administered by the FWC Bureau of Protected Species Management?

Manatee Protection Plans (MPP) - A MPP is a summary of manatee data, strategies, and management actions aimed at protecting manatees in a specific area or county. They are important for the long-range planning necessary to insure the survival of the manatee in a rapidly growing state.

Rule Administration - This section establishes comprehensive manatee protection vessel speed zones and administers activities related to these zones, including sign-posting, permit reviews and variance reviews. Protection zones have been set up for all thirteen of the priority counties.

Permit Review - Coastal development and activities such as dredge and fill projects, marina and boat ramp construction and marine events, can have significant negative effects on manatees and their habitat. This section reviews development projects to reduce or eliminate adverse effects by recommending special permit conditions or permit denials.

Habitat Protection - A viable population of manatees will not persist without suitable habitat. This section addresses manatee habitat protection needs around the state by assisting with permit reviews, habitat studies or assessments and education efforts. Staff also monitor the Power Plant Management Plans.

Geographic Information Systems - Timely data and information are critical to ongoing manatee protection efforts. The GIS group integrates and maintains the bureau's geo-spatial data and map resources used for this purpose. Data updates obtained from researchers insure that the best information is used for management decisions.

Education - Educating the public is an integral component of the Florida Manatee Recovery Plan. This section participates in the development of public service announcements, television messages, brochures, teacher's guides, posters, pamphlets and information and marketing displays for public education purposes. A portion of the Save the Manatee Trust Fund is used for manatee education grants to County and local governments and is administered by the FWC Advisory Council for Environmental Education.

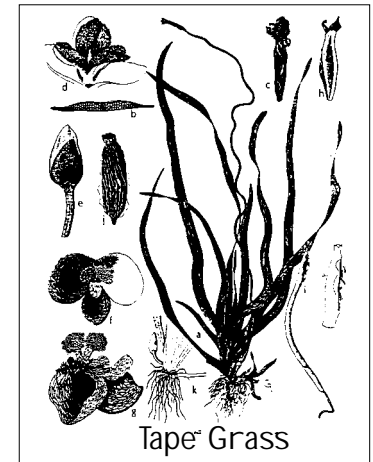
What is the Purpose of the Endangered Species Act?

ESA 1973, Sec. 2 (b) - The purposes of this act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered and threatened species and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section... .

The act further increased the federal protection of manatees and made it a violation to harass, harm, pursue, hunt, shoot, wound, kill, capture, or collect endangered species. It also authorized the cooperative agreements between states and the federal government with funding management, research and law enforcement. (*Visit the U.S. Fish and Wildlife Service Internet pages for the complete Act - <http://endangered.fws.gov/esa.html>*)

Why shouldn't people feed or give water to manatees?

The practice of feeding and attracting manatees to an area is discouraged for a variety of reasons and is illegal under state and federal law. First, manatees fed food items meant for human consumption may suffer health problems as a result. Manatees may grow accustomed to receiving food from people, thereby losing their natural fear, and may begin approaching vessels and docks looking for handouts. Manatees lured to unsafe areas, such as marinas, increase their chances of being struck by vessels in these dangerous areas. When necessary, manatees can travel long distances to find natural food sources and do not need people to supplement their diets. People should also refrain from providing freshwater from hoses hanging off of their docks. The water is a playful diversion to the manatee's natural environment and is not needed for their survival. Manatees get water from the food they eat or from other natural sources.



Manatees should eat natural aquatic plants, such as tape grass, instead of food provided by humans.

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What can you do to help endangered species?

- Support conservation organizations that help protect endangered species.
- Help save species by saving local habitat.
- Never buy endangered species or products made from endangered species.
- Spread the word to others about endangered species and their plight.
- Become politically aware and active.

Without conservation organizations, citizen involvement and strong legal protections, we would not be able to protect Florida's wildlife. While we have accomplished many things, there is still much to be done. We encourage you to get involved, show your support and know that you can make a difference by volunteering your time or contributing to Florida's wildlife trust funds.

Florida Fish and Wildlife Conservation Commission Contact Information

- **Bureau of Protected Species Management** (850) 922-4330 - Statewide protected species management for manatees, sea turtles and Northern right whales.
- **Florida Marine Research Institute** (727) 896-8626 - Provides the biological and scientific information needed for management of Florida's marine resources.
- **Office of Environmental Services** (850) 488-6661 - Administers statewide wildlife habitat protection and protected species management.
- **Office of Informational Services** (850) 488-4676 - Produces "Florida Wildlife" Magazine. Coordinates Project Wild, Watchable Wildlife, Florida Birding Trail and other education, media, publication, grant and marketing/economic development programs.
- **Division of Freshwater Fisheries** (850) 488-0331 - Fisheries Management, Resources and Services.
- **Division of Marine Services** (850) 487-0554 - Fisheries Management, Outreach and Services. "Fishing Lines" magazine and newsletter.
- **Division of Wildlife** (850) 488-3831 - Information about all of Florida's endangered or protected species. Conservation, Management, Quota hunts and Resources.