

PUBLICATION

Marine Canary In The Coal Mine: The Latest Threats To Manatee Survival And Efforts To Save Them

July 13, 2021

This article was adapted from the Florida Bar Journal

"Marine Canary in the Coal Mine: The Latest Threats to Manatee Survival and Efforts to Save Them"

Sometimes referred to as "sea cows" because of their roly-poly appearance, vegetarian diet, slow motion, and gentle ways, manatees have become, like their far more aggressive carnivorous cousins the alligator, a symbol for the state of Florida. One of the most successful motor vehicle specialty plates offered by the state features the manatee. They are undoubtedly beloved marine mammals deeply important to the people of Florida. Yet, like so many other gentle creatures, the manatee's primary survival threat comes from human activities. This man-made threat, which takes many forms, has resulted in a major change in manatee survival and sustainability.

Crisis in Florida Waters

In the first three months of 2021, an unusual catastrophic manatee mortality event shocked Floridians, including usually stoic government officials and scientists. While manatee deaths every year are not unusual, as a result of a number of factors, there was an unprecedented discovery of hundreds of manatees found dead and dying in Florida waters. As scientists scrambled for answers, the federal government stepped in to assist – a sign that these mass manatee mortalities could be linked to a larger environmental issue. Perhaps even more alarming, the National Oceanic and Atmospheric Administration Fisheries officials report that unusual mortality events could indicate deeper issues with implications for human health. This extraordinary and tragic incident of the death of hundreds of manatees – like the canary in the coal mine – could be a harbinger of a larger ecological disaster underway in the Sunshine State.

Laws to safeguard manatees date back to the British occupation of East Florida in the 18th century, making them some of the oldest wildlife protection laws in North America. Then, the Florida manatee was among the first animals to gain protection under the precursor to the Endangered Species Preservation Act of 1966 (ESA). The U.S. Fish and Wildlife Service (FWS) listed the West Indian manatee as endangered as well in 1970. A decade later, critical habitat protection was designated for the Florida manatee under the ESA. This designation delineated specific waterways in Florida that were known to be important concentration areas for manatees at that time. In 2008, some conservation groups petitioned to expand that 30-year-old designation due to changing human populations and manatee habitats. Unfortunately, FWS issued a notice of 12-month petition finding in 2010 that indicated revisions to critical habitat for the Florida manatee are warranted, but that the agency lacked the funds to act on the findings. Therefore, the critical habitat remains the same in 2021.

West Indian manatees are protected under The Marine Mammal Protection Act (MMPA) because the species is categorized as "threatened" under the ESA. This classification indicates the stock of the species is "depleted," making manatees eligible for additional protection measures under the MMPA.¹ The MMPA makes it illegal to "harass, hunt, capture or kill any marine mammal." The manatee is also protected by the Florida Manatee Sanctuary Act of 1978, which states: "It is unlawful for any person, at any time, intentionally or negligently, to annoy, molest, harass, or disturb any manatee." Further protections include state-mandated [Manatee Protection Plans](#) (MPP) implemented in 13 "key" counties identified by the Florida Fish and Wildlife Conservation Commission (FWC). These FWC-approved plans regulate reviews of permit applications for new

or expanding boat facilities. Even more restrictive are FWC-designated manatee sanctuaries and manatee refuges. The sanctuaries are areas where "all waterborne activities are prohibited," while the refuges "are areas where certain waterborne activities are restricted or prohibited."²

The legal landscape in place to protect this iconic creature has been inconsistent and has faced much criticism. Regulators have moved West Indian manatees up and down the ranks of the ESA's levels of protection in the past decade. At the same time, Florida has experienced several water-quality disasters, including most infamously red tide and toxic algae blooms. Although there has yet to be a specific cause linked to the surge in manatee deaths thus far in 2021, there is no question that manatees, as marine mammals, are impacted significantly from the degraded Florida waters plaguing their habitats. Florida is facing an ecological emergency due to the 2021 mass manatee mortalities. Scientists and Florida wildlife officials both express concern over seagrass shortages, due to nutrient pollution. Therefore, whether listed as "endangered" or "threatened" under the ESA, manatees will continue to face starvation until action is taken at the state and local levels to reduce nutrient loading in Florida's waterways.

Conclusion

To preserve these sacred sea cows, more needs to be done to address the underlying threats to their populations, starting with more focused study and action to prevent the large-scale die-off due to starvation and other man-made environmental conditions. Attention must be given immediately to agricultural, residential, and industrial wastewater and stormwater runoff. Stronger environmental and land use regulations are also needed. The habitat for marine mammals, like the manatee, can coexist and thrive along with human activities when managed properly. Otherwise, these conditions threaten not only manatees, but all marine and even human life if left unchecked. In short, for the sake of all life, we must *save the manatees*. For more information, see [Marine Canary in the Coal Mine: The Latest Threats to Manatee Survival and Efforts to Save Them](#).

¹ Lloyd Lowry, et al., *Endangered, Threatened, and Depleted Marine Mammals in U.S. Waters: A Review of Species Classification Systems and Listed Species 1* (Marine Mammal Commission 2007), available [here](#).

² Lloyd Lowry, et al., *Endangered, Threatened, and Depleted Marine Mammals in U.S. Waters: A Review of Species Classification Systems and Listed Species 1* (Marine Mammal Commission 2007), available [here](#).