

Starving manatees will face another rough winter next season

March 21 2022, by David Fleshler



Credit: Pixabay/CC0 Public Domain

When manatees on Florida's east coast gather next winter, they're likely to face another season of starvation.

Despite efforts to reduce pollution in the Indian River Lagoon, where record numbers of [manatees](#) died in the past two years, the sea cows are unlikely to find enough seagrass to get through next winter without help. Proposals to improve [water quality](#) and protect seagrass died in the Republican-dominated state Legislature, although lawmakers did budget more money for manatee habitat restoration and rescues.

Such rescues appear likely to be needed next winter, as [wildlife officials](#) say they expect to mount another emergency feeding operation, in which they supplement the manatees' natural diet with handouts of lettuce.

"We're not going to solve the seagrass issue in the Indian River Lagoon over the summer," said Tom Reinert, south regional director for the Florida Fish and Wildlife Conservation Commission. "So we'll have to see, but it feels likely we may have to do this again."

More than 55 tons of romaine and butter leaf lettuce were distributed to manatees near the Florida Power & Light plant in Brevard County, where manatees congregate during the cold months of winter. Unable to tolerate [water temperatures](#) below 68 degrees, manatees have learned to come to power plant discharge zones for warmth.

But when manatees concentrate in such numbers, they quickly strip the surrounding area of food, a problem worsened by the loss of vast fields of seagrass in the Indian River Lagoon, a 156-mile-long body of [water](#) enclosed by barrier islands that runs from northern Palm Beach County to Volusia County. When fertilizer chemicals such as nitrogen or phosphorus reach the lagoon, they stimulate the growth of algae that blocks sunlight, killing seagrass.

At least 420 manatees have died so far this year from all causes, although malnutrition is thought to be the biggest cause. While this number is lower than the 456 that died during the same period last year,

it's still far higher than the death rate in a normal year.

Mark Perry, executive director of the Florida Oceanographic Society, a [conservation group](#) that focuses on the state's east coast, said water quality may be improving in parts of the lagoon.

For about a year, the lagoon has been spared discharges from Lake Okeechobee, a major source of algae-laden water. In communities around the lagoon, [septic tanks](#) are being replaced by [sewer systems](#), reducing another source of pollution. And wetlands have been constructed that extract nutrients from water washing off farms and lawns.

But even if the lagoon's water quality improves and it gets through the summer without another horrific episode of toxic algae, Perry said seagrass takes time to grow.

"Even if we could correct the water quality problems, get the water right for seagrass to grow," he said. "It's going to be a long time, a couple of years. It's going to be slow, so we'll still see some elevated mortality."

Since 2009 the seagrass acreage in the lagoon has decreased by 58%. And the remaining seagrass beds have fallen sharply in productivity, with seagrass cover thinning by 89%, according to the St. Johns River Water Management District.

Water quality showed improvement this year, however, said Ashley Evitt, spokeswoman for the water management district. But while many projects are in the works to reduce incoming pollution and cleanse the lagoon, it will take years for seagrass to recover, she said.

"The district anticipates the need for several years of good water quality to see a substantial response in seagrass restoration; and unfortunately, it

isn't possible to predict water quality for next year or beyond," she said in an email. "... It would be a fair assumption that until the amount of seagrass in the [Indian River Lagoon] increases, manatees may continue to struggle next winter."

Three [environmental groups](#) have filed formal notice of intent to sue the Environmental Protection Agency for allowing Florida to impose what they considered to be weak water-quality standards with lax enforcement that allowed pollution to build up in the lagoon.

Jaclyn Lopez, Florida director for the Center for Biological Diversity, said Florida does little to enforce standards intended to reduce the amount of fertilizers and other pollutants washing off farms, ranches and lawns.

"We have a bunch of laws and regulations through the Clean Water Act and through Florida's version of that that are intended to address land use in a way that there isn't really bad runoff that just pushes all these nutrients into the water," she said. "Those laws are not being followed and they're not being enforced. So we have a compliance issue and we also have an enforcement issue."

The Florida Department of Environmental Protection did not respond to a request for comment.

State Sen. Linda Stewart, D-Orlando, introduced a bill intended to improve water quality by implementing recommendations of the state's Blue-Green Algae Task Force. These included standards for septic tanks, including inspections every five years and pump-outs of failing systems, as well as other measures to reduce pollution washing off land.

But the bill never made it through the process, with Stewart blaming a difficult legislative session in which the process was slowed by COVID

and dominated by social issues that were Republican priorities.

"That would have been a big help if we could have gotten it passed," Stewart said. "So many things that were important to people of Florida did not get through the process. We had some crazy [social issues](#) that seemed to have a higher priority."

The budget approved by the state Legislature, which is still awaiting the signature of Gov. Ron DeSantis, includes more than \$30 million for manatees, paying for expansion of rehabilitation centers, restoration of habitat and additional rescues workers.

Although a repeat of this year's unprecedented feeding operation, which distributed more than 55 tons of lettuce to hungry manatees, appears likely, it's not certain. Reinert, of the state wildlife commission, said experts need to analyze the current operation to see whether it was effective before deciding to set up a similar operation next winter.

Pat Rose, executive director of Save the Manatee Club, said the feeding operation needs to be improved, with lettuce offered nearer to where the majority of manatees congregate by the warm-water discharges of the power plant. He said officials need to monitor manatees' conditions over the summer and should consider beginning the feeding program earlier, in areas where they congregate before temperatures hit bottom.

He said there's a chance there may be more seagrass available to them next year, even if the improvement is modest.

"None of this is going to change dramatically in a year," he said. "But we're seeing some signs of seagrass availability. There are indications that water quality in some of the river systems is getting a little better. That may or may not stay that way."

Anyone who sees a sick, orphaned or dead [manatee](#) is asked to call the state's wildlife alert hotline at 888-404-3922.

©2022 South Florida Sun Sentinel.

Distributed by Tribune Content Agency, LLC.

Citation: Starving manatees will face another rough winter next season (2022, March 21)
retrieved 17 June 2024 from <https://phys.org/news/2022-03-starving-manatees-rough-winter-season.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.