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Florida's manatees are dying at an alarming rate this year and contaminated canals are partially to blame

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SOUTH FLORIDA SUN SENTINEL |

MAR 11, 2021 AT 7:00 AM

An alarming number of manatees have died in Florida already this year, on pace to be one of the deadliest years for the mammals in the past decade.

Scientists say the unusually high death count is due to a combination of cold weather and a decline in available sea grass for the vegetarians to feed on due to development, contaminated waterways and other human activity.

"It's this combination we have of cold weather, we have a reduction of where manatees can go, and in the places where manatees can go, as a consequence of human development and other activities, we have poor water quality which has resulted in these grass die-offs," said Jaclyn Lopez, Florida director of the Center for Biological Diversity.

State officials say 432 manatees have died already in Florida in 2021. That's nearly three times the five-year average of 146 deaths in the period between Jan. 1 through March 5, according to data from the Florida Fish and Wildlife Conservation Commission.

For comparison, 637 manatees died in all of 2020 and 607 in 2019.

Locally, there have been 51 manatee deaths in Broward County, one of the highest totals of any county in the state. In Palm Beach County, 32 manatees have died, 15 in Miami-Dade County and nine in Monroe County.

Patrick Rose, an aquatic biologist and executive director of the Save the Manatee Club, said sewage spills that plagued canals and rivers across Fort Lauderdale have led to a decline in sea grasses that manatees normally graze on.

"In Broward County we had a series of spills in terms of breaches in their sewer systems that did that whole system a number," Rose said in reference to <u>at least seven sewage</u> spills in a two-month span in January 2020.

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Thirteen of the Broward County deaths were in the warm waters of the Florida Power & Light Cooling Lakes east and west of Fort Lauderdale-Hollywood International Airport.

Miami-Dade County has also seen a decline in sea-grass beds and biologists say the situation there is thought to be worsening.

"We're hearing Biscayne Bay is going through a worsening phase so we're really going to have to look at more serious action to take place on a more comprehensive scale."

Brevard County was the scent of the state's largest number of deaths this year with 179 through March 5.

It's been a bad year for manatees in 2021, continuing a trend from 2020. Experts attribute the high number of deaths in 2021 to two main causes.

Most of the deaths Brevard County manatee deaths have occurred along the Indian River, a common warm water gathering place.

But although manatees gather in warm water locales, they swim away from them to eat sea grass, their main source of food. Unfortunately, they're not finding much sea grass, so they return to the warm water still hungry and at risk for malnutrition.

"A manatee will choose starvation over freezing to death," Lopez said.

Cold stress deaths are high with 41 so far this year. In 2020, there were 52 cold stress deaths for the entire year.

Cold weather, combined with a loss of sea grass, partly due to development and partly due to chemicals such as nitrogen and phosphorus, which are sometimes associated with fertilizers, have been a deadly combination.

Rose said normally more manatees would stay in the Banana River or Mosquito Lagoon, in the northern end of the Indian River Lagoon, but the loss of sea grass will force them into other areas.

He said in the southern end of the Indian River Lagoon has suffered from a series of algal blooms and phytoplankton blooms and the infusion of fresh water and nutrients from Lake Okeechobee has stressed that system and wiped out much of its sea grass.

Rose cautioned there are probably more manatee deaths than the state has documented and the causes might not be accurately attributed. Rose credited the state wildlife commission for rescuing sick and injured manatees, but said pandemic-related personnel shortages and restrictions have meant that nearly 70% of the dead manatees have not had necropsies to determine their causes.

"You're always better off when you have a real scientific understanding of what's actually happening," he said.

Of the 136 deaths that were investigated, 17 were caused by watercraft and 41 by cold stress.