Red tide numbers high south of Manatee County

By **Leslie Lake** - October 25, 2022

Despite growing red tide numbers to the south, Manatee County waters remained clear Oct. 23. - Kristin Swain | Sun

ANNA MARIA ISLAND – While the waters off Manatee County show only background concentrations of Karenia brevis, the bacteria that causes red tide, some areas to the south are experiencing high levels of the toxic algae.

Two local water quality experts agree that while predicting whether the bloom will reach local waters is difficult, nutrients in local waters would likely exacerbate the red tide if it does arrive.

"The reality is in just a few days, red tide (in the south) went from low levels to high enough to kill fish," said Dr. David Tomasko, executive director of the Sarasota Bay Estuary Program. Respiratory irritation suspected to be related to red tide was reported in Sarasota County on Oct. 19-20 at Nokomis, Venice North Jetty and Venice beaches.

"I never predict," Tomasko said. "Hopefully, this doesn't get bigger. The wind is out of the west pushing water toward shore – that's not going to help us. Water temperature has dropped about 10 degrees Fahrenheit, so that might slow it down."

Hurricane Ian in late September was an unusual event, he said, creating an environment conducive to red tide growth.

"We've never seen a storm as big and widespread. It's hard to tell what's going to happen," he said. "We loaded a huge amount of nitrogen into the eastern Gulf. We can make it worse by adding nutrients."

He said that high levels of bacteria are in the southern part of Sarasota Bay due in part to wastewater discharges following the storm.

"If you have nutrients in the water and red tide comes toward it, you get a bigger red tide," he said.

Tomasko said that red tide originates offshore and sometimes will stay offshore.

"The lesson learned from Ian is that we have to get our water quality together and if we do, we'll be experiencing a lesser red tide," Tomasko said.

Dr. Robert Weisberg, USF professor of physical oceanography and co-director of the Coastal Ocean Modeling and Prediction System, said depending on currents and winds, red tide may or may not impact Manatee County.

"Right now, the cells observed are showing up in the southern part of Sarasota Bay through Venice," he said. "The circulation is taking it southward."

Weisberg said the origin of this red tide is offshore about 100 miles on the continental shelf and the next few months will determine how much the bloom will take off.

"The bad news right now is we have a lot of runoff from land," Weisberg said. "Once there is a red tide, it makes use of nutrients. If red tide is large enough, it kills fish and the decaying fish feed red tide."

Weisberg said that with Ian driving offshore red tide inshore in southwest Florida, northern counties could be spared.

"The next period of months will determine how much offshore it is and how the bloom takes off," Weisberg said.

The USF College of Marine Science and Mote Marine Laboratory have each deployed gliders equipped with sensors to better understand conditions offshore, according to the Florida Fish and Wildlife Conservation Commission Center for Red Tide Research. The information collected will help direct future forecasting efforts.

Leslie Lake

Sun correspondent Leslie Lake covers the environment and Cortez. Email