Algae makes foul return to Southwest Florida coast

By Kate Spinner (Contact)

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Red and green, microscopic and massive, algae of all sorts have returned to Southwest Florida.

Globs of a toxic algae are fouling miles of northern Sanibel Island's shore and traces of red tide are growing in the Gulf of Mexico offshore of Boca Grande Pass to Big Carlos Pass and in the mouth of San Carlos Bay.

Up the Caloosahatchee River, east of Olga and in Lake Okeechobee, patches of blue-green algae have slicked the shoreline pea-green.

And on beaches from Sanibel to Naples red drift algae has been washing ashore for months. The rotting seaweed landed on most area beaches, but Fort Myers Beach got the worst of it, following rain from Tropical Storm Alberto.

The onset of the rainy season is sending decayed red drift algae offshore, but the weather also is washing more algae-causing nutrients into area waterways while the red drift blooms dissipate other forms of algae are filling the void.

"We're finding a lot of different kinds of algae," said Rick Bartleson, a scientist with the Sanibel Captiva Conservation Foundation marine lab. "They have everything they need; all the nutrients and light."

Red tide

Red tide is prevalent primarily in Lee County, but Collier County officials are closely monitoring it.

Rhonda Watkins, principal environmental specialist for Collier County Pollution Control, said data sent Tuesday from the National Oceanic and Atmospheric Administration indicate the red tide bloom detected in Lee County waters last week might move south to Collier.

"We put our beach monitors on alert and, of course, we'll be taking samples weekly," Watkins said.

Mike Bauer, natural resources manager for Naples, said he's keeping tabs on red tide reports and watching for dead fish.

Karenia Brevis, the microscopic critter that causes Florida red tide, was detected last week in low concentrations off Lee County beaches and in San Carlos Bay.

When the wind is blowing toward shore, low levels of Karenia Brevis can cause eye, nose and throat irritation in humans, said Earnest Truby, research scientist at Fish and Wildlife Research Institute. Larger concentrations kill fish and marine mammals such as dolphins and manatees.

Truby said this year's bloom was first discovered in a sample taken June 15. He said FWRI scientists cruised their research vessel along the Southwest Florida coast to take more samples last week.

The concentrations of Karenia Brevis in last week's samples were about half of what they were in the June 15 sample.

"I guess that could be encouraging," he said. "There weren't any fish kills or anything like that."

Truby said he could not guess whether conditions were ripe for the algae to flourish or die off.

Red drift algae

The days of red drift algae washing up on area beaches are drawing to a close. The algae are rotting away and summer rain is pushing the seaweed back out to sea where it will sink to the sand.

What remains of the algae on Fort Myers Beach will be raked away today and very little is washing up on other Lee and Collier beaches.

Chris Koepfer, natural resources supervisor for Lee County, took a dive last week to survey offshore conditions and noticed that the red drift bloom had completely died off.

A month ago the algae blanketed the sea floor off Lee County and covered artificial reefs. Stormy weather ripped the seaweed from its foothold and sent large amounts of it floating to shore.

In its place last week grew other species of algae, including caulerpa and sargassum, which typically grow offshore.

But the decaying remains of the drift algae still littered the sea floor last week.

"It was a huge bloom and then it crashed. What's going to happen afterward, I don't know. The nutrients aren't gone," Koepfer said. "If that's going to fuel another different kind of bloom, that's a possibility, but it's hard to say."

Lyngbya

Lyngbya majuscula, a noxious algae that attaches itself to sea grasses and looks like clouds of brown goo, is plaguing five miles of Sanibel Island's northern shore from Red Fish Pass to Tarpon Bay.

The algae, actually a blue-green algae despite its brown hue, produces toxins that can cause rashes on people with sensitive skin. Lyngbya majuscula also is poisonous to sea turtles and manatees that might accidentally eat it while grazing on sea grass.

The lyngbya bloom appears to be localized to Sanibel, but Bartleson said he would not be surprised to see it crop up elsewhere in Southwest Florida.

Mike Shirely, research director at Rookery Bay Research Reserve in Collier County, said his staff has not seen any odd algae blooms at the reserve.

Bartleson suspects an ever-increasing supply of nutrients and iron from land-based pollution is triggering the explosive growth of all sorts of algae in the region, including lyngbya.

Blue-green algae

Head up the Caloosahatchee river from San Carlos Bay and another toxic blue-green algae, called mycrocystis, awaits. In the fresh waters past the Franklin Lock, patches of blue-green algae are sliming the shoreline with a neon-green film.

Lisa Douglass, spokeswoman for the Florida Department of Environmental Protection, said the algae are toxic, but not widespread.

"There's a small patch near LaBelle. We've not gotten any reports of or witnessed anything other than that small patch," Douglass said. She said the DEP and the South Florida Water Management District will keep weekly tabs on the bloom to track its growth and its toxicity, Douglass said.

John Cassani, a scientist with Lee County Hyacinth Control, said workers with his department took photographs of blue-green algae patches growing in the river from Olga to east of Alva. The algae also are growing in Lake Okeechobee.

Contact with mycrocystis causes skin rashes and accidentally drinking the algae can cause severe stomach problems. People and pets should avoid areas where blue-green algae is blooming.

Both Cassani and Douglass speculate the runoff from the river's watershed caused the algae bloom, rather than the usual culprit: Lake Okeechobee.

"The river flows have been fairly reasonable for this time of year," Cassani said. "What we're looking at now is more watershed contribution to the bloom rather than the lake itself."

Due to abnormally dry weather, nutrient-rich water from the lake has been flowing into the river at a much more modest rate than it was last year when algae blooms spread all the way to the Cape Coral bridge.

Also, the first few rains of the summer usually carry larger amounts of pollutants into waterways. Algae feast off the influx of nutrients, so an early summer bloom is fairly common.

Watkins said Collier County usually encounters blue-green algae blooms in canals and freshwater rivers during the transition between the dry season and the wet season, but so far the blooms have not begun.