

New algae HAZARD

Harmful levels of algae bloom never seen before on LI

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Researchers studying the waters of Northport Harbor say they've found a type of harmful algae in the water never seen before at these levels in New York.

The algae, *Dinophysis acuminata*, produces a toxin that could cause stomach sickness in humans who ingest infected shellfish.

"The levels we saw in Northport Harbor in 2010 are higher than we've seen anywhere else" in New York, said Chris Gobler, associate professor in the school of marine and atmospheric sciences at Stony Brook University and an expert on harmful algal blooms.

He and doctoral student Theresa Hattenrath-Leman found the first hints of the algae concentrations in 2008 as they studied Northport Harbor — which has been off-limits for shellfish harvesting for years — for a different type of algae that causes paralytic shellfish poisoning. That is a potentially fatal disease that affects the nervous system of people who have eaten infected shellfish.

Since 2008, the *Dinophysis*

algae population has steadily grown and has begun to produce the additional toxin that causes diarrhetic shellfish poisoning, Gobler said.

Unlike paralytic shellfish poisoning, diarrhetic shellfish poisoning is typically milder and causes diarrhea, nausea and vomiting in people who have eaten shellfish taken from waters where there is an algal bloom.

Gobler said he reported his findings to the New York State Department of Environmental Conservation earlier this month.

William Hastback, the department's acting shellfisheries section head, said the discovery "is another cause for concern."

Hastback said his agency would look for the algae during its regular monitoring of the area for *Alexandrium fundyense*, the algae that causes paralytic shellfish poisoning. That outbreak, known as "red tide" for the distinctive color that the algal blooms lend to the water, usually occurs in spring and has been responsible for numerous fishing closures in Northport Bay, Huntington Bay and surrounding waters since it was discovered in the area in 2006.

While the new algae has been discovered in Northport Harbor, Gobler said it's possible that the algae could be swept into active fishing areas

by the tide.

Gobler said there was no indication yet that the *Dinophysis* algae has bloomed this year. He said its bloom season often reaches into June or July, past when the original red tide blooms.

While there's no hard data on what causes the *Dinophysis* algae population to grow, Gobler said it is often found in waters that have high nitrogen loads, such as Northport Harbor.

Adrienne Esposito, executive director of Citizens' Campaign for the Environment, said she was dismayed at the news.

"This is new to Long Island. This is really cutting-edge science. And it's not good news," Esposito said. "It's another clear symptom that these bays are in a critical stage of degradation."

But Northport Village Trustee Thomas Kehoe said he felt that Gobler's findings were not cause for alarm.

"We've had algal blooms for 100 years in the United States," Kehoe said. "He didn't find some little gremlin that's going to kill anybody."

The algae is in the waters of Northport Harbor, which has been off-limits for shellfish harvesting for years.

DINOPHYSIS ACUMINATA

■ The phytoplankton species of algae has been discovered in large numbers in Northport Harbor. It produces a toxin that causes diarrhetic shellfish poisoning, which causes a stomach illness in people who have eaten shellfish harvested from waters where there is a *Dinophysis* bloom.

■ Chris Gobler, an associate professor of marine and atmospheric sciences at Stony Brook University who made the discovery, said he believes the algae is in such high numbers in Northport Harbor because of the harbor's high nitrogen load.

■ Diarrhetic shellfish poisoning causes diarrhea, nausea and vomiting, but is not fatal.

