



NEW ENGLAND SHELLFISH BEDS REOPEN AFTER TOXIC RED TIDE ALGAE RECEDES

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Shellfish beds in seven New England coastal communities were reopened after the worst red tide toxic algae bloom in decades.

Recent tests indicate the red tide algae bloom that poisoned clams, oysters, and mussels from Maine to Cape Cod has receded, and certain shellfish species are now safe to harvest.

Although the announcement is good news for fishermen across the Northeastern Atlantic coast, many New England shellfish beds remain closed.

Massachusetts Governor Mitt Romney said the red tide has cost the shellfish industry about \$3 million per week.

What causes red tide?

This red tide occurred when *Alexandrium fundyense*, an alga that lives naturally on the ocean floor as cysts, bloomed in large amounts and floats to the ocean's surface.

The algae produce a toxin called saxitoxin. Scientists are unsure if the toxin protects the algae from plankton predators or if it has no purpose at all.

This particular bloom was caused when spring weather, including several "Nor'easter storms," pushed the microscopic single-celled organisms toward the shoreline, where they found more food to eat and lots of sunshine to stimulate their growth.

This combination "is like sprinkling fertilizer on a lawn," Peter Borrelli, executive director of the Provincetown Center for Coastal Studies, told The Boston Globe.

Some scientists think that the severity of this year's bloom, the worst since 1972, could be the result of the effects of more people living closer to the shore. More people mean more sewage, which contain nitrates. Nitrates act as fertilizer to marine systems like the red tide algae.

"Red tide is a natural phenomenon. It happens periodically," Bob Prescott, director of the Massachusetts Audubon Society's Wellfleet Bay Wildlife Sanctuary, told the Boston Globe.

"But is it exacerbated by the number of people who live along the coast? Is that in some way fueling this whole outbreak? You just don't know until it's over."

Red tide's impact

Shellfish, such as clams, mussels and oysters, ingest the toxic algae through filtering systems in which they suck in about 2 ½ gallons of seawater per hour. The algae pools in their stomachs, where it is eventually discharged over long periods of time.

The toxins do not harm the shellfish but can cause serious illness or even death in humans.

Because of tight government rules that regulate the safety of seafood, no one has reported becoming ill from this outbreak.

Other fish, like lobster, crab, shrimp and most fin fish were not affected by the red tide. Even scallops, which do filter the algae, remained safe to eat if only the cleaned adductor muscle – usually the only part eaten – was consumed.

A blow to tourism

Nevertheless, local fish restaurants have seen the impact of the outbreak.

“It has cut into sales. People are concerned,” Bud Noyes, owner of JT’s Seafood Restaurant in Cape Cod, told the Hartford Courant. “I can relate it to mad cow disease when people stopped eating steak.

Noyes, like a lot of other buyers, had to look to new sources of seafood, in his case Canada. Many others are heading farther south to the Chesapeake Bay for their shellfish.

“They want all we can get right now,” Bill Boulter, a longtime Maryland clammer, told Newsday. “The market’s been open for weeks, ever since the red tide hit, I guess.”

And local chambers of commerce want to convince would-be-travelers that their beaches are safe for swimming.

Unlike the red tides that have closed beaches in Florida with murky smelly water that can release airborne toxins and cause respiratory problems in people, the New England red tide algae are invisible, odorless and harmless to swimmers.

Friday's announcement indicates that the worst may be over for the local economy.

The reopened waters represent a small percentage of those closed, but they are also among the most productive--the reopened beds around Massachusetts's Monomoy Island, for example, account for nearly 50 percent of the value of the state's soft-shell clam harvest.

State officials have said that they expect more areas to reopen in the next week.

--Compiled by Annie Schleicher for NewsHour Extra

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