## Red tide may be worst in 60 years

Fear spreads with evidence

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Ryan Pinto/Special to news-press.com

A red tide littering Lee County waters with rotting fish carcasses dredges up 60-year-old memories for Capt. Harvey Hamilton.

In 1946 and 1947, the worst red tide on record fouled beaches and bays with millions of dead fish from Tarpon Springs to Marathon, and Hamilton, who lived on Cayo Costa, said this one is almost as severe.

"It's progressively getting worse," said Hamilton, who operates Native Charters and runs boats to the bridgeless islands for Bokeelia Marina. "It's terribly bad right now, the worst since 1946.

"There are dead redfish, trout, snook, grunts, pinfish, thousands and thousands of mullet, and pompano, too. You very rarely see dead pompano during red tide because they just run away from it. And grouper are washing in from offshore."

Red tide is a natural phenomenon caused by a population explosion, or bloom, of the single-celled alga Karenia brevis, or K. brevis, which produces a powerful neurotoxin.

Under normal conditions — when concentrations of K. brevis are less than 1,000 cells per liter of water — the organism causes no problems.

But during a bloom, the toxin renders shellfish poisonous, can kill fish, marine mammals, sea turtles and marine birds and can cause respiratory irritation in humans.

Red tide moves with currents, winds and tides, so no one can predict where it will go or how long it will last.

Fish started dying off Bonita Beach at the end of June, and until last week, the bloom hadn't gone farther north than southern Pine Island Sound.

"It's been slowly creeping in over the past couple of weeks," said Jeff Combs, a ranger at the J.N. "Ding" Darling National Wildlife Refuge on Sanibel. "It's pretty bad right now, a lot of dead fish. Last week, there were quite a few in the refuge, but most of those have washed out."

One red-tide victim was also a victim of mistaken identity, Combs said.

"There's a big goliath grouper just across the (Sanibel Causeway) drawbridge, and it was so big people called in saying it was a dead manatee," he said.

Water samples taken last week indicated that the highest concentrations of K. brevis, more than 1 million cells per liter, were in San Carlos Bay, but Hamilton said Monday that the bloom had moved as far north as the broken islands off Bokeelia.

Dead fish were particularly thick in Redfish and Captiva passes, he said.

Hamilton also reported extreme respiratory irritation.

"I'm making these trips every day for the marina, and I get sick to my stomach from coughing so bad," he said. "And there's no beer on the boat to choke it down."

Respiratory irritation isn't the only problem humans can have with red tide.

K. brevis toxin becomes concentrated in filter-feeding shellfish such as oysters and clams, so eating shellfish during a red tide can cause neurotoxic shellfish poisoning.

Symptoms include nausea, vomiting, diarrhea, difficulty in speaking and walking, dizziness and tingling of the extremities and lips.

Although all recreational shellfish beds are closed, eight people, all tourists, have come down with neurotoxic shellfish poisoning, said Robert South of the Lee County Health Department.

"The thing to remember is these were visitors, four from France and four from out of state: They didn't realize they were collecting shellfish where no shellfishing was allowed," South said. "They collected shellfish, took them back to where they were staying and cooked them up. Within five hours, they all became ill, and four had to be admitted to intensive care."

During red tide, shellfish in fish markets and restaurants are safe to eat.

"These shellfish were self-harvested when you're not supposed to," South said. "The people didn't know any better and paid a high price for their mistake."

So far, Fort Myers Beach has been mostly spared the stink of this red tide.

"We had a little bit, a very few dead fish, about mid-island," said D.J. Petruccelli, president of the Fort Myers Beach Chamber of Commerce. "We called Town Hall, and they picked them up."

Lovers Key State Park manager Mike Hensley had a similar report.

"As of this morning, we're OK," he said. "We had some people call asking about it, but we had a busy weekend for being the slow season. So Saturday and Sunday, we had no observations. But who knows?"