A Red Tide That's Not THE Red Tide

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Jay Barrett/KMXT

In some parts of the world, a “Red Tide” is a signal that a poisonous algae bloom is occurring and beachcombers should not eat clams and mussels and other bivalves. Here on Kodiak, that poisonous algae is pretty much always present and locals know not to eat bivalves to avoid exposure to paralytic shellfish poisoning.

So, when an actual red tide caused by an algae bloom appeared in local bays during the last few weeks, it brought up the question whether it was the Red Tide. Julie Matweyou of the Alaska Sea Grant Marine Advisory Program says no.

“I’ve been receiving quite a few calls about the red tide, the orange discoloration we’ve seen in the water. Actually received some calls before it hit our coastal areas. And then of course I noticed it myself out walking the beaches. What we’re seeing out there is noctiluca. It’s noctiluca scintillans, and it’s a non-toxic marine dinoflagellate. It does cause coloration but it does not cause a toxic bloom like what we see with paralytic shellfish poisoning.”

She said noctiluca is common the world over, and is always present in Kodiak waters, but the warm, calm weather of late put its reproduction into overdrive.

“The particular organism does not swim well. So it’s using its buoyancy to stay up in the water column. So what we’re seeing when we see these large blooms is the conditions are rip – the water was calm and still and it was probably dividing very rapidly, asexually, out in the water to produce a large bloom like this.”

As for the difference between a red tide and the Red Tide, Matweyou says the labels don’t really fit in Alaska.

“You can have a very visibly red bloom condition like we saw with noctiluca, and it’s a non-toxic bloom, and we wouldn’t necessarily have toxins in the water related to this tide. Or you could have no visible tide, no visible red discoloration of the water and have very toxic conditions. The organism that causes paralytic shellfish poisoning is Alexandrium. It’s also a marine dinoflagellate, but it very seldom if ever in Alaska reaches concentrations you can see in the water. You can get high concentrations, but you’re not going to visibly see them like we see with noctiluca.”

So just to be clear, the red bloom in the water is no cause for concern, but shellfish should still be avoided when there is no red bloom because PSP is always present and there are no testing regimes in place to declare when a beach is safe or not.