

Toxin in crab among impacts of warm sea that alarm scientists

By Peter Fimrite and Kurtis Alexander, San Francisco Chronicle

The poisoning of Dungeness crab off the California coast by a mysterious algae bloom may be bad news for the seafood industry, but to marine biologists and climate scientists, it is a frightening omen of future distress to a vibrant ecosystem.

Experts say the toxin in the algae, which likely flourished in this year's record-high ocean temperatures, is one symptom of a wholesale shift in the physical and biological makeup of the Pacific Ocean – a transformation so abrupt and merciless that it is endangering species and forcing migrations before our eyes.

“We are talking about a whole ecosystem change – including a lot of changes besides just the blooms,” said Raphael Kudela, a professor of ocean sciences at UC Santa Cruz. “It’s really restructuring the way California looks.”

The poisonous algae, multiplying since April, is now estimated to be 40 miles wide, in some places reaching down as far as two football fields, marine biologists say. It is the biggest and most toxic bloom researchers have ever seen.

The primary culprit, the experts say, is consistently high ocean temperatures caused by climate aberrations that are being reinforced by a strengthening El Niño weather pattern in the tropics.

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