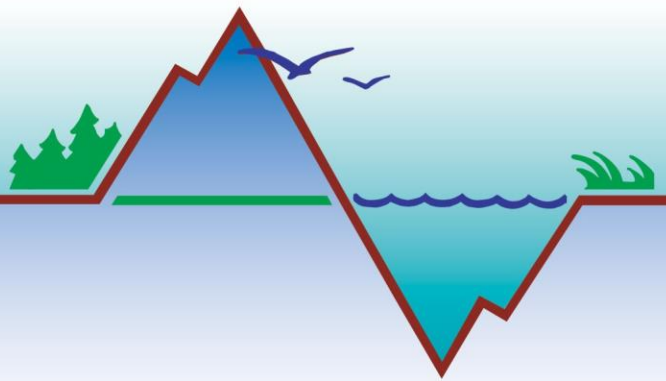


Kachemak Bay Research Reserve Phytoplankton Update

May 10th – May 16th 2019

Harmful Algal Bloom Program

Rosie Robinson 907-235-1598 rmrobinson3@alaska.edu



Hi all!

Our first wild shellfish toxin testing results of the summer are in! The shellfish that we send to DEC's Environmental Health Laboratory in Anchorage is wild and not from a commercial operation. Commercially harvested shellfish are regulated through DEC and are considered safe for consumption. The toxin test was done for saxitoxins which can are they type of toxin that can lead to paralytic shellfish poisoning. Anything below the regulatory limit of 80ug/100g is considered safe for human consumption. The blue mussels we tested came in well underneath the regulatory limit. KBNERR is not a regulatory agency and the harvest of wild shellfish is considered 'dig at your own risk' in the state of Alaska. Feel free to contact us with any questions!

<u>Date</u>	<u>Shellfish Type</u>	<u>Location</u>	<u>Toxin Tested For</u>	<u>Toxin Testing Result</u>
5/2/2019	Blue Mussels	Kasistna Bay	Saxitoxins – PSP	<10.1ug/100g
5/5/2019	Blue Mussels	Port Graham Harbor	Saxitoxins – PSP	<10.1ug/100g

Below is our phytoplankton update. We are still seeing large scale blooms of *Chaetoceros spp.* around Kachemak Bay!

Thanks to all of our monitors for sending in samples and readings this week!

Rosie Robinson, Grace Allan, & Jasmine Maurer

Kachemak Bay Research Reserve Phytoplankton Update

Qualitative Analysis Phytoplankton Data

INNER BAY

DATE	Bay	Water Temp	Salinity	Dominant species	Dinophysis	Pseudo-nitzschia	Alexandrium
5/7/2019	Peterson Bay	8	31	<i>Chaetoceros spp. and Thalassiosira spp.</i>	None	Present	None
5/14/2019	Halibut Cove	8	32	<i>Chaetoceros spp. bloom</i>	None	None	None
5/14/2019	Homer Harbor	9.4	28.8	<i>Chaetoceros spp.</i>	None	Present	None

5/14/2019	Peterson Bay	8	30	<i>Chaetoceros spp.</i>	None	Present	None
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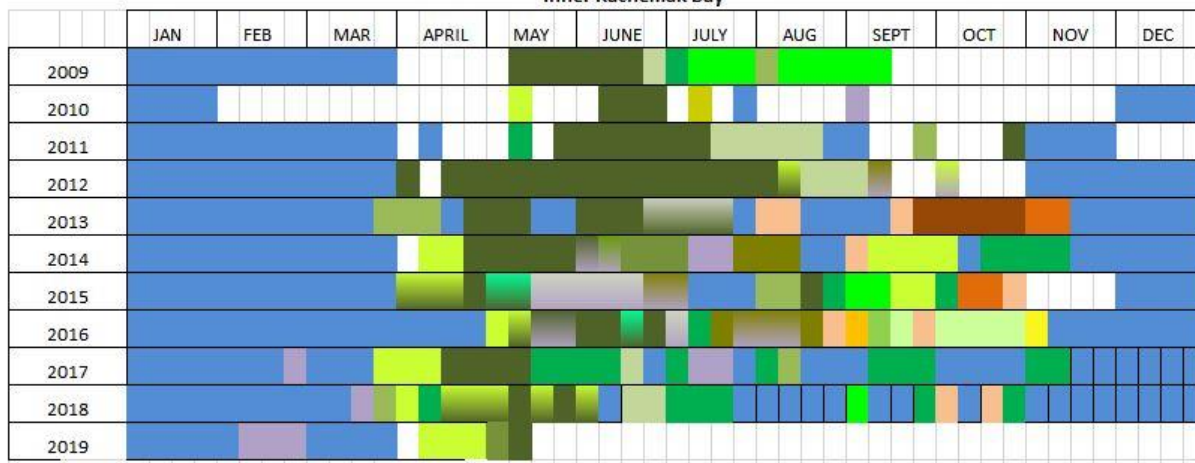
*Samples received after last weekly update

OUTER BAY

DATE	Bay	Water Temp	Salinity	Dominant species	Dinophysis	Pseudo-nitzschia	Alexandrium
5/7/2019	Bootleggers Cove	7	30	<i>Chaetoceros spp. bloom</i>	None	Present	None
5/9/2019	Seldovia Harbor	8.4	29	<i>Licmophora spp.</i>	None	Present	None
5/13/2019	Port Graham Bay	6.6	31	Sparse sample	Present	Present	None
5/13/2019	Port Graham Bay Entrance	6.6	33	Sparse sample	None	Present	None
5/14/2019	Tutka Bay	7.6	28	<i>Chaetoceros spp. bloom</i>	None	Present	None
5/15/2019	Eldred Passage	7.9	30.3	<i>Chaetoceros spp. bloom</i>	None	Present	None
5/15/2019	Sadie Cove	8.8	21.4	<i>Chaetoceros spp.</i>	None	Present	None
5/15/2019	Kasistna Bay	7.3	31.2	<i>Chaetoceros spp. bloom</i>	None	Present	None
5/16/2019	Seldovia Harbor	8.1	33	Mixed Diatoms	None	Present	None
5/16/2019	Port Graham Bay Entrance	7.6	26	Mixed Diatoms	None	Present	None
5/16/2019	Port Graham Bay	7.6	30	Mixed Diatoms	Present	Present	None

*Samples received after last weekly update

Phytoplankton phenology
Inner Kachemak Bay



Outer Kachemak Bay 2014 - 2019

Sadie, Tutka, Jakolof, Eldred Pass, Kasitsna, Seldovia, Pt. Graham



Dinoflagellates

- dinoflagellate mix
- *Ceratium furca*
- *Karenia mikimotoi*
- *Alexandrium*
- *Ceratium longipes*
- Diatom/Dinoflagellate Mix
- low levels of phytoplankton
- no data

Diatoms

- *Chaetoceros*
- *Cerataulina*
- *Coscinodiscus*
- *Lauderia*
- *Leptocylindrus*
- *Pseudo-nitzschia*
- *Rhizosolenia*
- *Skeletonema*
- *Stephanopyxis*
- *Thalassionema*
- *Thalassiosira*
- Diverse diatoms
- *Chaetoceros/Thalassiosira* equally dominant
- *Chaetoceros/Lauderia* equally dominant
- *Chaetoceros/Leptocylindrus* equally dominant
- *Leptocylindrus/Pseudo-nitzschia/Rhizosolenia* equally dominant
- *Chaetoceros/Pseudo-nitzschia* equally dominant
- *Rhizosolenia/Pseudo-nitzschia* equally dominant
- *Cerataulina/Pseudo-nitzschia* equally dominant
- *Thalassiosira/Pseudo-nitzschia* equally dominant
- *Leptocylindrus/Pseudo-nitzschia* equally dominant
- *Ditylum*
- *Corethron*



Kachemak Bay National Estuarine Research Reserve
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