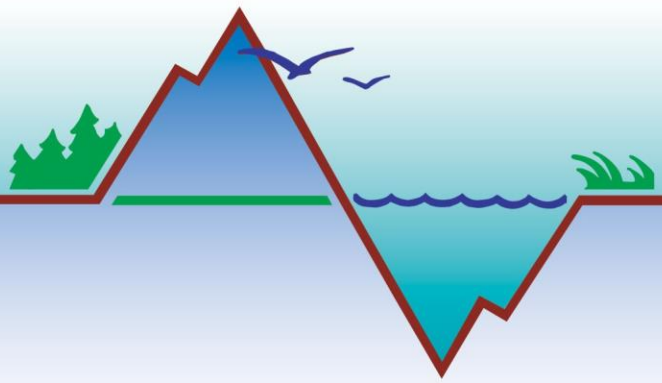


Kachemak Bay Research Reserve Phytoplankton Update

June 21ST – June 26th 2019

Harmful Algal Bloom Program

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



Hello everyone,

<u>Date</u>	<u>Shellfish Type</u>	<u>Location</u>	<u>Toxin Tested For</u>	<u>Toxin Testing Result</u>
6/12/2019	Blue Mussels	Kasitsna Bay Laboratory	Saxitoxins-PSP	Below regulatory limit.
6/17/2019	Razor Clams	Clam Gulch	Saxitoxins-PSP	Below regulatory limit.
6/17/2019	Razor Clams	Polly Creek	Saxitoxins-PSP	Below regulatory limit.
6/18/2019	Razor Clams	Chinitna Bay	Saxitoxins-PSP	Below regulatory limit.
6/19/2019	Blue Mussels	Homer Harbor	Saxitoxins-PSP	Below regulatory limit.

Above are the results from our wild shellfish testing program. The blue mussels and razor clams sampled from locations in Lower Cook Inlet and Kachemak Bay were under the regulatory limit for saxitoxins. However, we want to notify you that wild shellfish tested from locations in Southeast Alaska, Kodiak and the Aleutians have had high levels of toxins, well above the limits considered safe for consumption. Please review the Press Release, also attached to the weekly email, from the Department of Health and Social Services that was developed in partnership with multiple organizations involved in the Alaska Harmful Algal Bloom Network and KBNERR.

KBNERR is not a regulatory agency and harvesting wild shellfish in Alaska is considered 'dig at your own risk'. All commercially harvested shellfish are regulated by DEC and considered safe for consumption.

It was another quiet week for phytoplankton in Kachemak Bay and it will be interesting to see what comes up next as July begins. Keep reading for detailed analysis of this week's samples. Phytoplankton samples from Prince William Sound, representing April to June 10th, were received and analyzed this week. For the detailed analysis on these spring samples please contact us.

Thanks to all of our monitors for the phytoplankton samples!
Rosie Masui & 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
6/21/2019	Bear Cove	13	25	Sparse Sample	None	Present	None
6/23/2019	Halibut Cove	11	30	Sparse Sample	None	None	None
6/24/2019	Homer Harbor	14.2	27.8	Sparse Sample	None	None	None
6/26/2019	Halibut Cove	15	27	Sparse Sample	None	None	None

*Samples received after last weekly update

OUTER BAY

DATE	Bay	Water Temp	Salinity	Dominant species	Dinophysis	Pseudo-nitzschia	Alexandrium
6/19/2019*	Jakolof	9.3	31	<i>Chaetoceros</i> sp.	Present	Present	None
6/20/2019	Seldovia Harbor	11.9	30	Sparse Sample	None	Present	None
6/25/2019	Port Graham		30	Sparse Sample	Present	Present	None

*Samples received after last weekly update

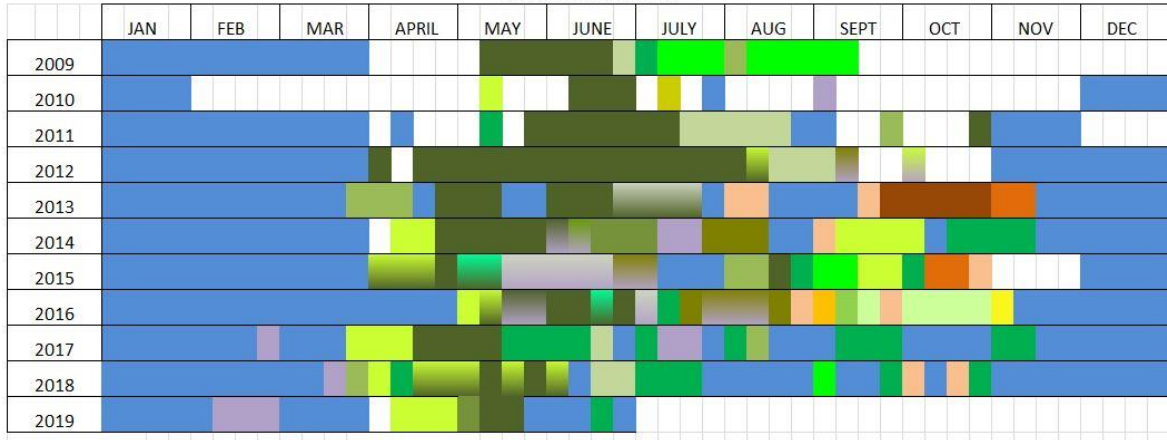
RESURRECTION BAY & Prince William Sound

DATE	Bay	Water Temp	Salinity	Dominant species	Dinophysis	Pseudo-nitzschia	Alexandrium
6/10/2019*	Prince William	12	14	<i>Leptocylindrus</i>	None	Present	None
6/22/2019	SMIC Dock	8.9	30.8	<i>Chaetoceros</i> sp.	Present	Present	None

*Samples received after last weekly update

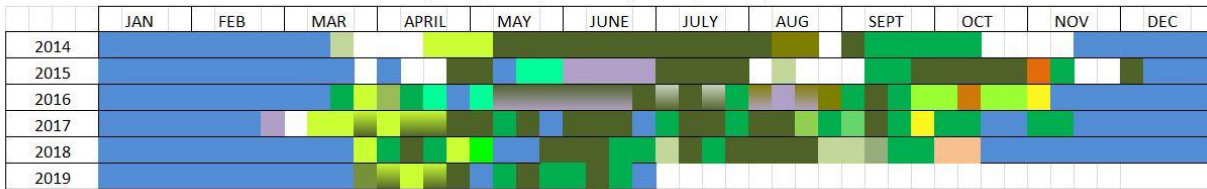
Phytoplankton phenology

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*



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