Kachemak Bay Research Reserve Phytoplankton Update
May 22– June 4th, 2020

Harmful Algal Bloom Program
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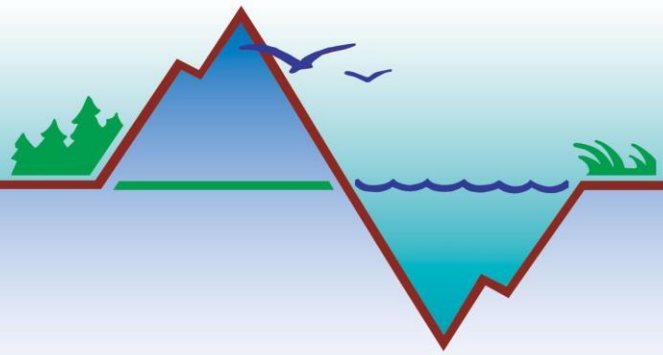

Hello Everyone,

We have results back from our first round of wild shellfish toxin testing this summer. Toxin levels were below the regulatory limit considered safe for consumption for both samples we submitted for testing.

Date	Shellfish Type	Location	Toxin Tested For	Toxin Testing Result
6/1/2020	Blue mussels	Homer Harbor	Saxitoxins-PSP	Below regulatory limit.
6/1/2020	Blue mussels	Kasitsna Bay	Saxitoxins-PSP	Below regulatory limit.

Commercially harvested shellfish are regulated by DEC and considered safe for consumption.

Phytoplankton samples throughout Kachemak Bay over the past two weeks have been dominated by *Chaetoceros* sp. In Outer Kachemak Bay several of the sub-bays are experiencing *Chaetoceros* sp. blooms this week. *Chaetoceros* sp. do not produce toxins, however, they do have long spines on each cell and form straight or curly chains. The spines on *Chaetoceros* cells can get caught in fish gills and cause irritation. This can be fatal if fish aren't able to swim away from areas with high densities of *Chaetoceros* sp., such as when fish are held in net pens. For this reason, phytoplankton monitoring is one tool used by hatcheries to optimize smolt health and inform the timing of release for stocked runs.

Currently the KBNERR webpage server is not functioning properly, as a result our website updates and resources are offline. Please reach out to Rosie or Jasmine to receive any support materials or past updates as needed. We apologize for any inconvenience this may cause. Our IT staff are working on it and we hope to have the website up and running again soon.

Thanks to all our monitors and partners 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
5/24/2020	Peterson Bay		30	Mixed Diatoms	None	None	None
5/25/2020	China Poot		36	Mixed Diatoms	None	Present	None
5/28/2020	Homer Harbor	8.7	29.7	Sparse	None	Present	Present
5/31/2020	Peterson Bay	8.3	30	Mixed Diatoms	None	None	None
6/2/2020	Halibut Cove	7.0	28	Sparse	None	None	None
6/3/2020	China Poot	8.7	29.4	*Chaetoceros* sp.	None	Present	None
6/3/2020	Homer Harbor	11.1	28.2	*Chaetoceros & Fragilariopsis*	Present	None	None
6/3/2020	Peterson Bay	9.8	29.0	*Chaetoceros* sp.	None	Present	None
6/3/2020	Aurora Lagoon		25.9	*Chaetoceros* sp.	Present	Present	None
6/3/2020	Bear Cove	9.9	28.1	*Chaetoceros* sp.	Present	Present	None

*Samples received after last weekly update

OUTER BAY

DATE	Bay	Water Temp	Salinity	Dominant species	Dinophysis	Pseudo-nitzschia	Alexandrium
5/24/2020	Tutka Lagoon	7.5	25.9	Sparse	None	Present	None
6/2/2020	Jakolof	8.0		*Chaetoceros debilis* bloom	None	Present	None
6/3/2020	Kasitsna	8.3	30.7	*Chaetoceros debilis* bloom	None	Present	Present
6/3/2020	Jakolof	9.0	30.7	*Chaetoceros* sp. bloom	None	Present	Present
6/3/2020	Sadie Cove	8.2	29.4	*Chaetoceros* sp. bloom	None	Present	None
6/3/2020	Tutka Bay	7.5	29.3	*Chaetoceros debilis* bloom	None	Present	Present

*Samples received after last weekly update

Prince William Sound

DATE	Bay	Water Temp	Salinity	Dominant species	Dinophysis	Pseudo-nitzschia	Alexandrium
4/23/2020*	MBH Dock	6.3	31.3	No cells	None	None	None
4/30/2020	MBH Dock	6.8	27.6	Sparse	None	None	None
5/9/2020*	MBH Dock	7.1	27.4	Sparse	None	None	None

*Samples received after last weekly update

Kachemak Bay National Estuarine Research Reserve
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