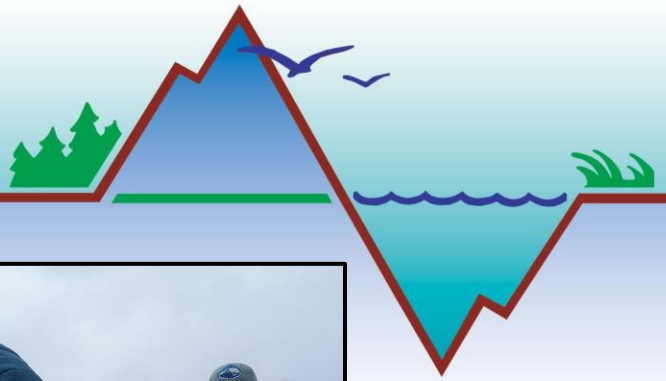


## Kachemak Bay Research Reserve Phytoplankton Update

April 1<sup>st</sup> – April 25<sup>th</sup> 2019

Harmful Algal Bloom Program

Rosie Robinson 907-235-1598 [rmrobinson3@alaska.edu](mailto:rmrobinson3@alaska.edu)



Happy Spring Everyone!

We hope you all have had a great winter! We are excited that Spring is here, and field season is fast approaching. We have already received some samples from our amazing community monitors. Our updates will be coming out weekly starting now through the rest of the summer. We will also be sending in shellfish for toxin testing twice every month and will be sharing the results in these updates. A reminder to all that we are sending in **wild** shellfish for harmful algal bloom related toxin testing. Commercial shellfish is regulated through the Department of Environmental Conservation and is considered safe for consumption.

During the month of April, in Kachemak Bay, *Chaetoceros* and *Thalassiosira* have been the dominate species in our samples. The only two harmful algal bloom species that we've seen so far this season are *Pseudo-nitzschia* and *Dinophysis*. We saw *Chaetoceros* blooming first this year in Sadie Cove in the end of March – the spring bloom has happened!

We look forward to a great season; let us know if you have any questions!

Rosie Robinson, Grace Allan, & Jasmine Maurer



Kachemak Bay National Estuarine Research Reserve  
Alaska Center for Conservation Science

UNIVERSITY of ALASKA ANCHORAGE

Kachemak Bay Research Reserve Phytoplankton Update  
Qualitative Analysis Phytoplankton Data

**INNER BAY**

DATE	Bay	Water Temp	Salinity	Dominant species	Dinophysis	Pseudo-nitzschia	Alexandrium
4/9/2019	Homer Harbor	6.7	29.5	<i>Thalassiosira</i>	None	Present	None
4/15/2019	Bear Cove	7	33	Sparse sample	None	Present	None
4/16/2019	Homer Harbor	8.2	28.9	<i>Thalassiosira</i> <i>abundant</i>	None	Present	None

\*Samples received after last weekly update

**OUTER BAY**

DATE	Bay	Water Temp	Salinity	Dominant species	Dinophysis	Pseudo-nitzschia	Alexandrium
4/3/2019	Kasistna Bay	6.0	30.5	Sparse sample	None	Present	None
4/3/2019	Tutka Bay	-	29	Sparse sample	None	Present	None
4/3/2019	Jakolof Bay	6.2	29.9	Sparse sample	None	Present	None
4/3/2019	Sadie Cove	6.2	30	<i>Chaetoceros</i> <i>bloom</i>	None	Present	None
4/3/2019	Jakolof Bay	-	-	<i>Thalassiosira</i> <i>abundant</i>	None	Present	None
4/4/2019	Seldovia Harbor	7.1	30	Sparse sample	None	Present	None
4/9/2018	Little Jakolof	6.5	34	<i>Thalassiosira</i> <i>abundant</i>	None	Present	None
4/20/2019	Bootleggers Cove	6.5	31	<i>Chaetoceros</i> <i>and</i> <i>Thalassiosira</i> <i>abundant</i>	None	Present	None
4/20/2019	Little Jakolof	6.5	31	<i>Thalassiosira</i> <i>bloom</i>	None	Present	None

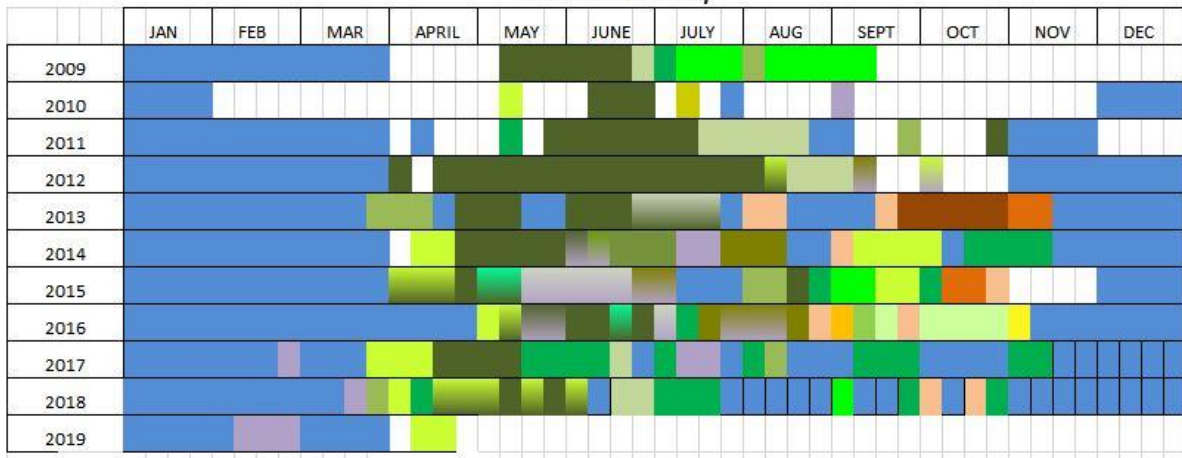
4/23/2019	Jakolof Bay	5.3	-	<i>Chaetoceros and Thalassiosira</i>	Present	Present	None
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\*Samples received after last weekly update

## RESSURECTION BAY

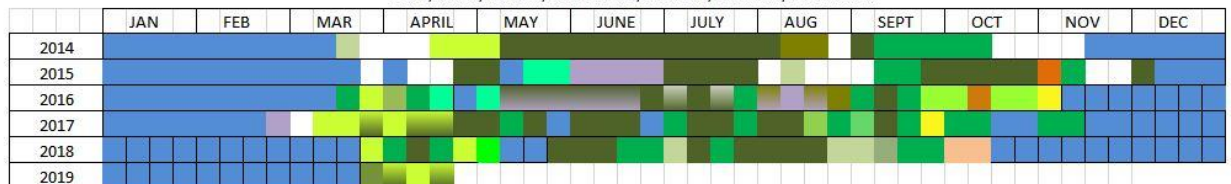
DATE	Bay	Water Temp	Salinity	Dominant species	Dinophysis	Pseudo-nitzschia	Alexandrium
4/12/2019	SMIC Dock	5.8	27.8	<i>Thalassiosira</i>	None	None	None
4/19/2019	SMIC Dock	6.1	30.0	<i>Thalassiosira</i>	None	None	None

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*