**Kachemak Bay Research Reserve Phytoplankton Update**
**November 8th – November 21st 2019**
Harmful Algal Bloom Program
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Happy Thanksgiving Everyone,

Our samples from the Homer Harbor were sparse over the last two weeks. Most of the species observed are represented by a single individual on the slide. Sparse samples during this period of the year are common; see the phenology charts below, the blue represent weeks of sparse phytoplankton.

This is the last Phytoplankton Update of 2019. Weekly samples of the Homer Harbor will continue through the winter and we will report out on any relevant observations when our email updates begin again in April of 2020.
Please reach out at any time with questions.

We are grateful to all our monitors and partners for all your contributions this year! Your work allowed us to track HABs in Kachemak Bay and beyond.
Rosie Masui & Jasmine Maurer

Kachemak Bay Research Reserve Phytoplankton Update
Qualitative Analysis Phytoplankton Data

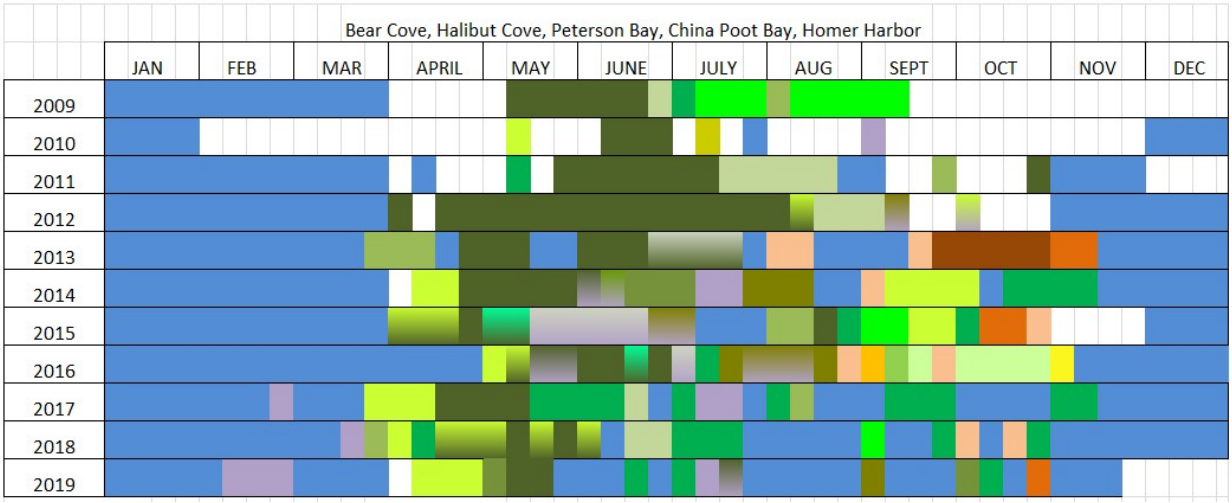
## INNER BAY

| DATE | Bay | Water Temp | Salinity | Dominant species | Dinophysis | Pseudo-nitzschia | Alexandrium |
|---|---|---|---|---|---|---|---|
| 11/14/2019 | Homer Harbor | 7 | 27 | Sparse Sample | Present | None | None |
| 11/21/2019 | Homer Harbor | 7.2 | 27.7 | Sparse Sample | Present | None | None |

*Samples received after last weekly update

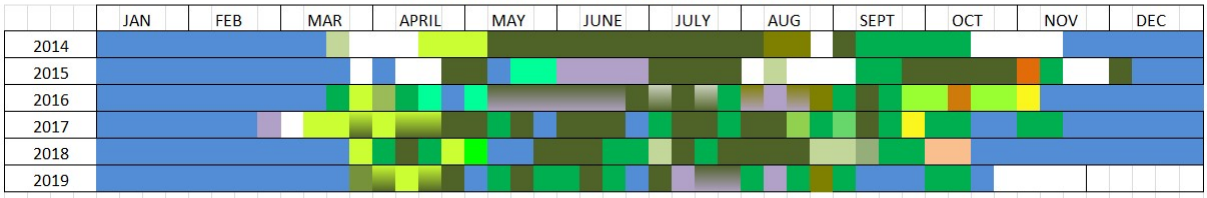
Phytoplankton phenology

**Inner Kachemak Bay 2009 - 2019**




**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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