

# KACHEMAK BAY RESEARCH RESERVE

## Harmful Algal Bloom Monitoring in Kachemak Bay

### 2010 Progress Report

The main goal of the Harmful Algal Bloom monitoring program is to look for species of phytoplankton that are known to carry toxins that can sometimes be harmful to humans.

Monitoring phytoplankton also provides us with valuable baseline information on the bloom cycles in Kachemak Bay. These blooms of photosynthesizing cells are the very base of all marine food chains. 8 volunteers gathered plankton samples this last season. Thank you for your work!

#### Top ten phytoplankton species

The most abundant phytoplankton species taken from your data sheets in 2009 & 2010 are below, beginning with most common.

*Chaetoceros*

*Coscinodiscus*

*Stephanopyxis*

*Nitzschia*

*Leptocylindrus*

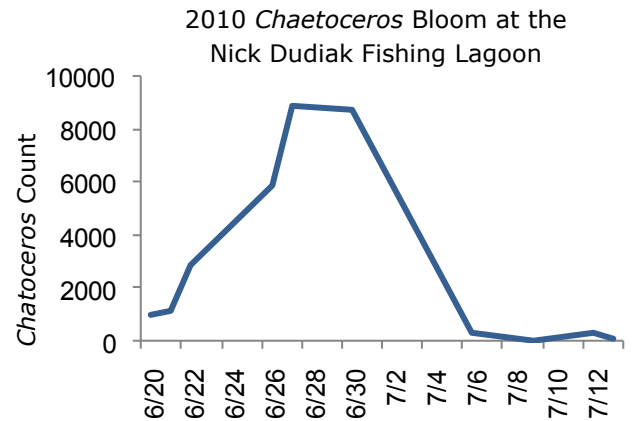
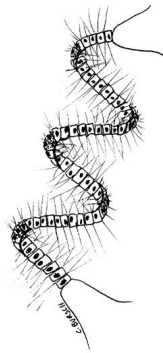
*Pleurosigma*

*Thalassionema*

*Protoperidinium*

*Pseudo-nitzschia* (can be harmful)

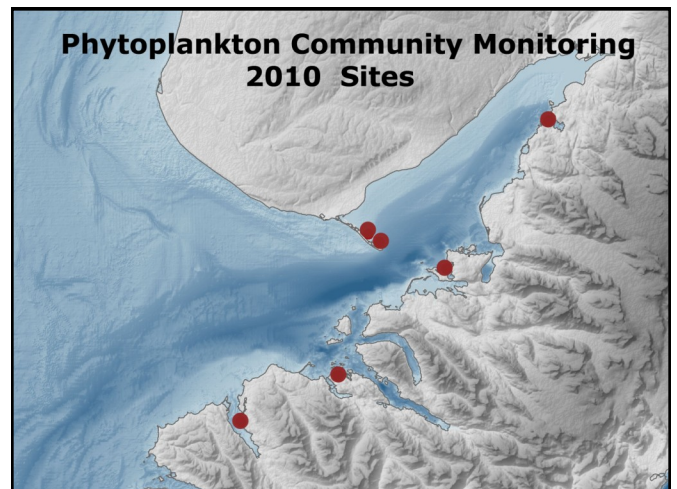
*Rhizosolenia*



#### Chaetoceros bloom at fishing lagoon

You may have heard about the trouble *Chaetoceros* have caused in the past by clogging the gills of the small salmon smolt brought to the fishing lagoon by hatcheries. This year the water was sampled for these cells almost daily for 3 weeks (see above graph). Only when the bloom was over did the truck come with the smolt this year! Well done, monitors!

#### Phytoplankton Community Monitoring 2010 Sites



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