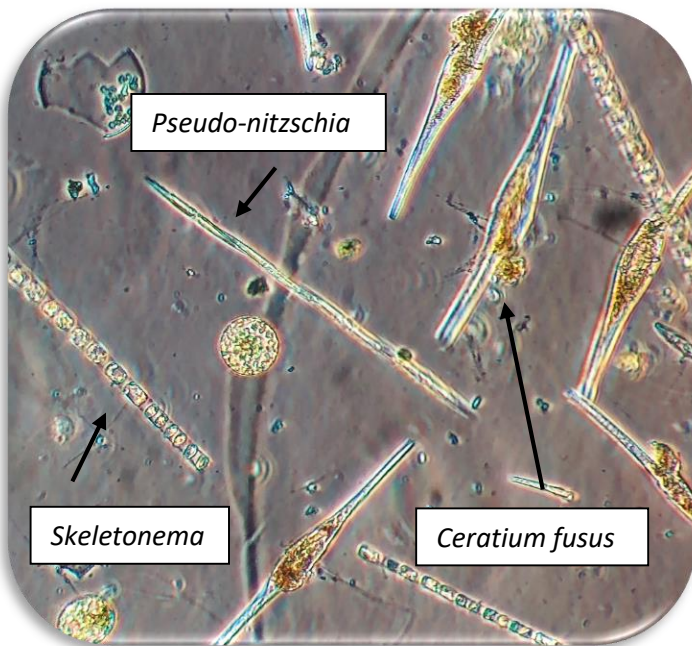


Oh my gosh!!! I had so much fun paddling with you-all. Thank you, Matthew, for organizing such a fun experience. And thank you-all for coming out today! I went back to the office and peeked at the samples under the microscope. Budd Inlet was significantly different in plankton composition – all those spiky *Ceratium*! The 3 Boston Harbor Samples (Harbor, Open Water, and Cove) were similar in many ways, but there were a few differences. I snapped photos of the species that seemed to be more pronounced at each of the sites.

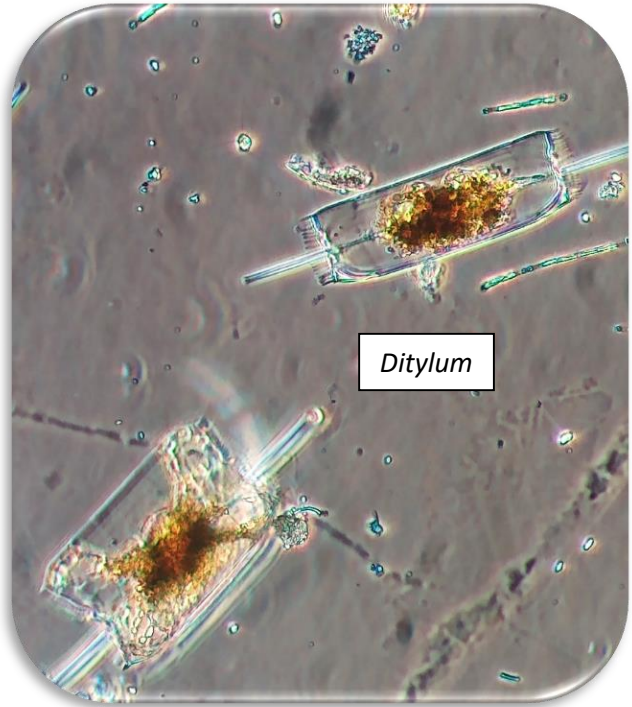
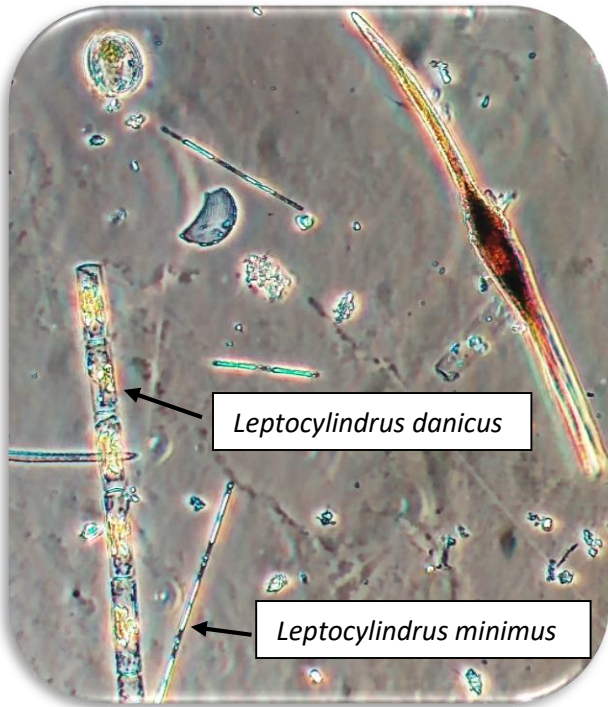


Also, I forgot to mention, if you're interested in "What's Blooming in Budd?" or some of the lakes around town, be sure to check out www.pacshell.org/whats-blooming-in-budd.asp and click on What's Blooming This Week!"

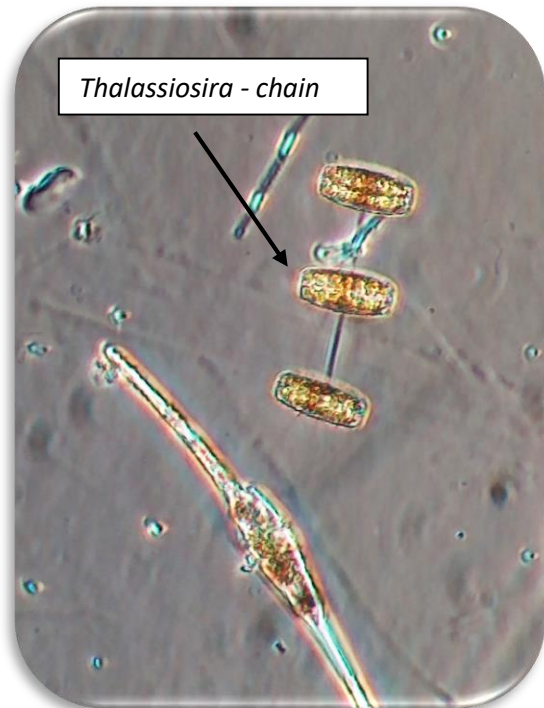
Budd Inlet had tons of *Ceratium fusus*. Also a lot of *Skeletonema* and *Pseudo-nitzschia* (the species responsible for Amnesic Shellfish Poisoning on the outer coast). It also had some *Dinophysis* (the species responsible for the Diarrhetic Shellfish Poisoning closure currently underway).



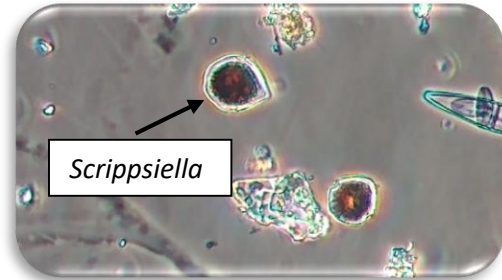
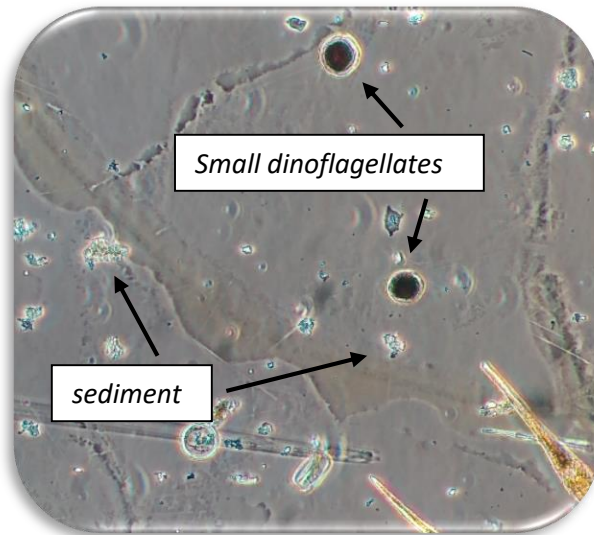
Boston Harbor plankton was less dense than Budd. There seems to be a lot more *Leptocylindrus* and *Ditylum* than the other sites. I also seem to recall more zooplankton at this site, but I didn't find many in this particular sample.



Open Water – Many of the same species, but seemed to have more *Thalassiosira* – both solitary cells and chains.



Zangle Cove - This plankton sample was unique in that it had much more sediment in it. It also had many small dinoflagellates – mostly *Scrippsiella* and *Heterocapsa*. These are stained with Lugol's iodine solution, so are very orange.



YSI/Secchi disc data:

Temperature (°C)				
	Budd Inlet	Boston Harbor	Open Water	Cove
Surface	17.8	18.4	16.1	18.3
1.5m	16.7	16.0	15.9	15.6
3m	15.9	15.6	15.5	15.5
Salinity (ppt)				
	Budd Inlet	Boston Harbor	Open Water	Cove
Surface	24.75	28.89	29	28.83
1.5m	28.43	29.1	29.02	29.05
3m	28.96	29.06	29.06	29.5
Dissolved Oxygen (mg/l)				
	Budd Inlet	Boston Harbor	Open Water	Cove
Surface	3.06	14.37	8.42	10.14
1.5m	3.07	8.52	8.27	7.86
3m	3.35	7.91	7.8	7.82
pH				
	Budd Inlet	Boston Harbor	Open Water	Cove
Surface	7.43	8.67	8.26	8.4
1.5m	7.51	8.42	8.25	8.23
3m	7.57	8.3	8.22	8.23
Water Clarity				
	Budd Inlet	Boston Harbor	Open Water	Cove
	4.0	4.2	4.2	2.3

Temps were coolest at the Open Water site and surprisingly warmer at Boston Harbor.

Budd is fresher than the other sites due to the Deschutes River. Open water is the saltiest.

Budd is low in oxygen throughout entire water column. BH is high at surface. Oxygen levels are great at other sites.

Oxygen and pH are closely related. When plankton photosynthesize they use carbon dioxide (raise pH) and create oxygen (raise DO). When they decompose, bacteria use oxygen (lower DO) & release CO2 (lower pH).

Water Clarity was lower at Zangles Cove due to sediment.