

KELT Plankton Sample – December 7, 2022

Fort Popham pier – 10:30am

Salinity 15.8

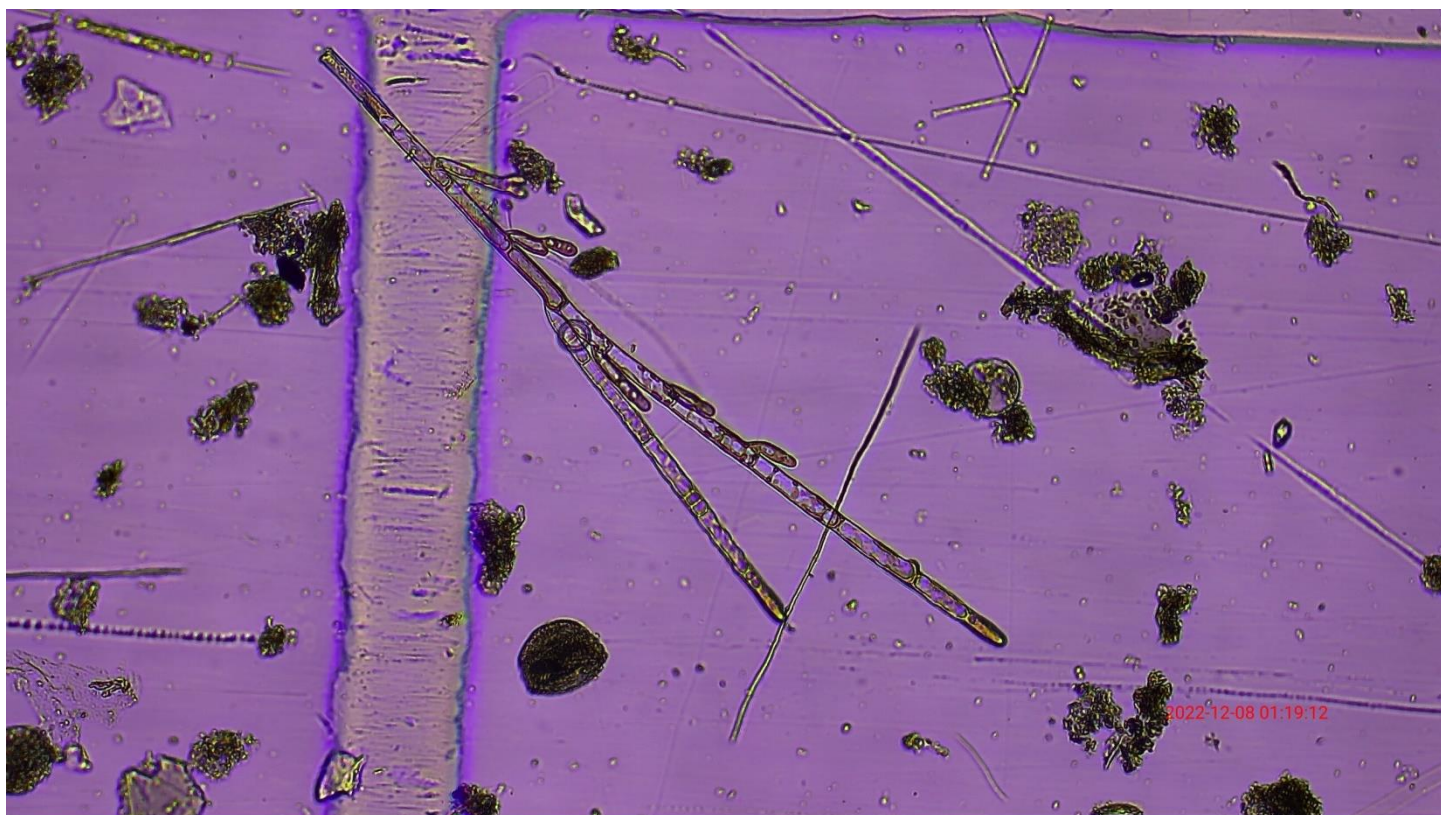
Temp 7.5

Wind South (Note: Sample follows rain event)

Samplers: Ted Wolfe and Kat Mead-von Huene

A sample was taken to see what species were present in December. Approx. 15L of sea water were filtered. 1 ml was put on the slide from plankton that had settled to the bottom of the collection tube, in order to see the maximum number of species, rather than take a count.

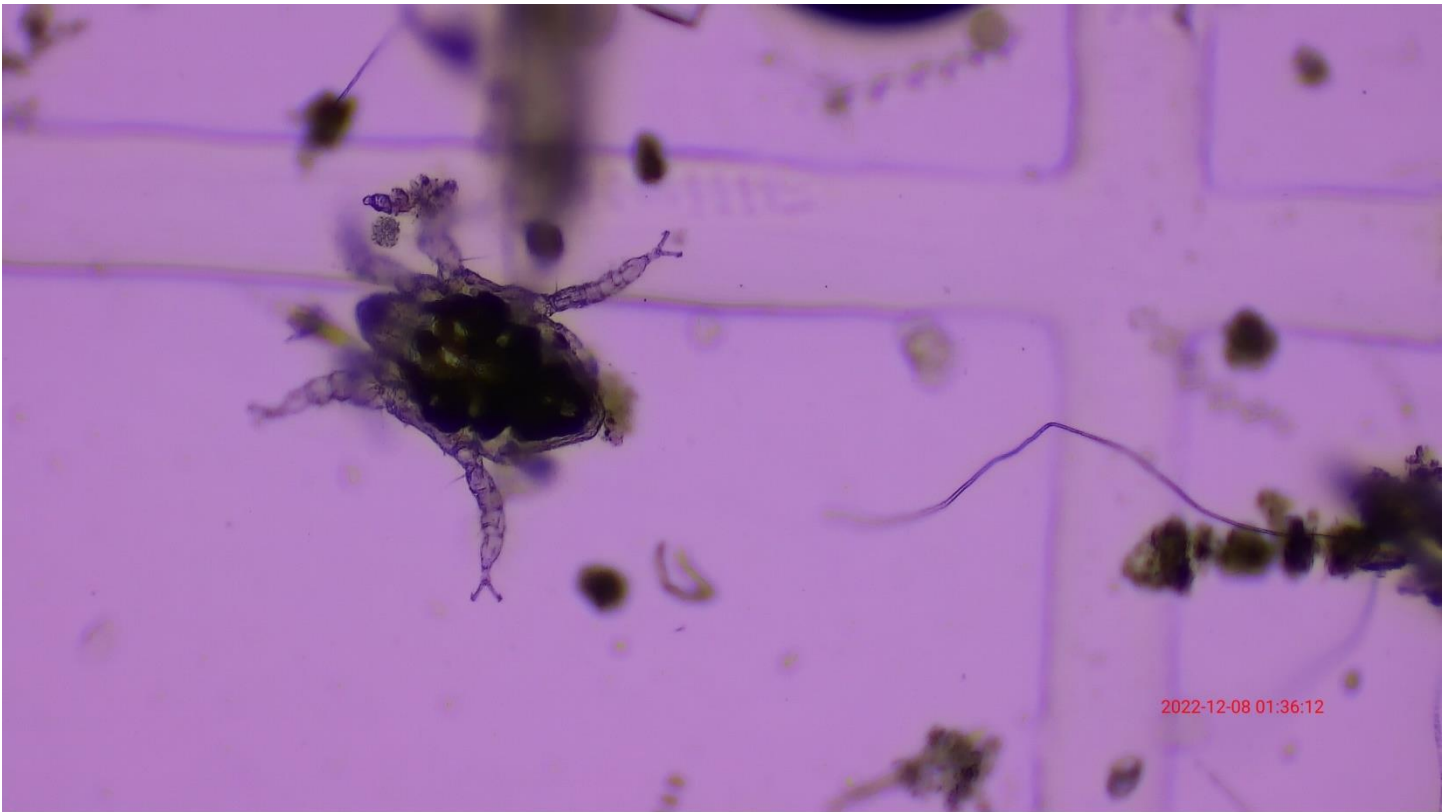
The following photos were taken with the ipad camera mounted to the microscope.



Ted Wolfe found this possible plant, showing new branches budding along the stem.

ID unknown.

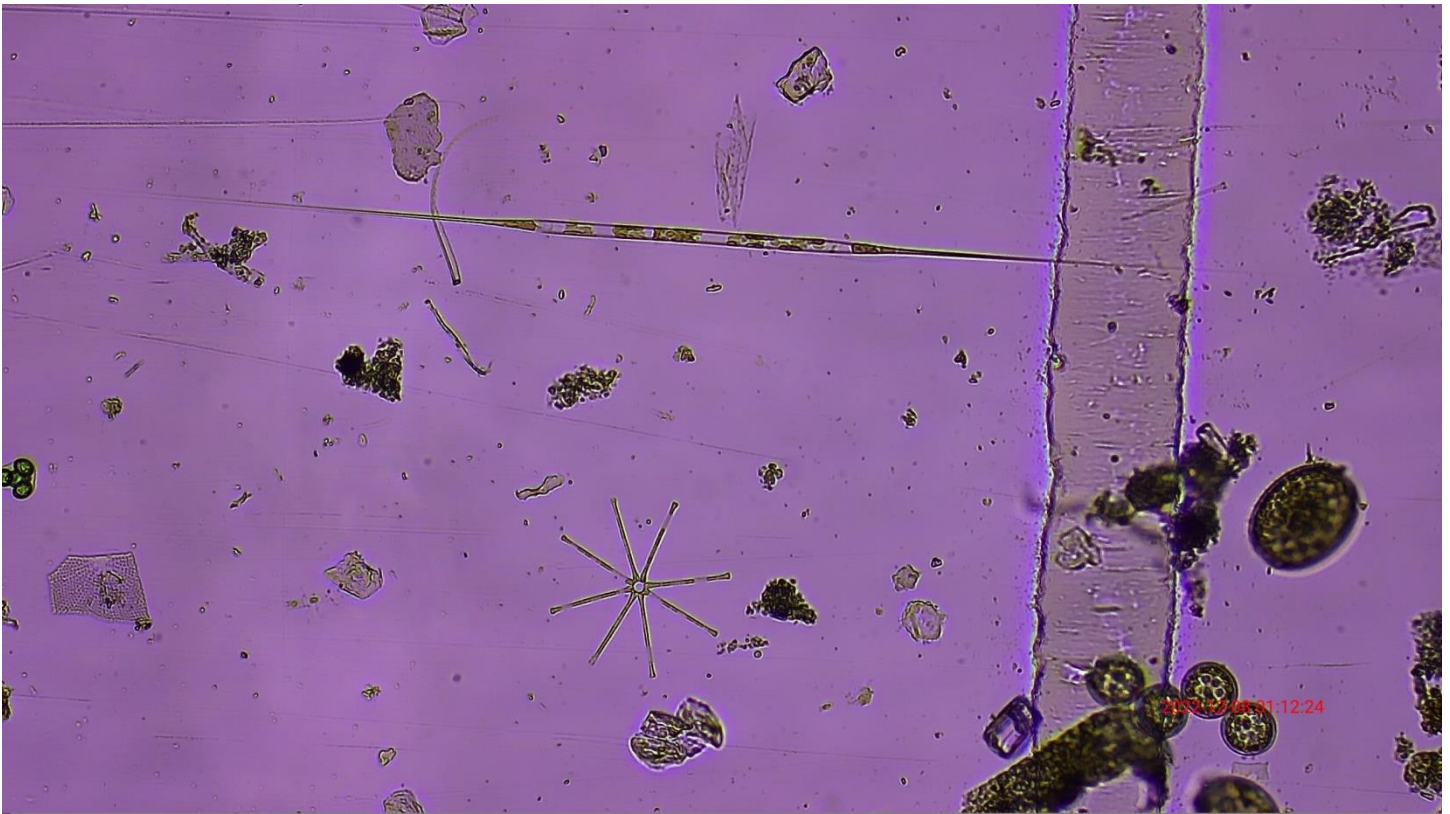
Does anyone have any ideas?



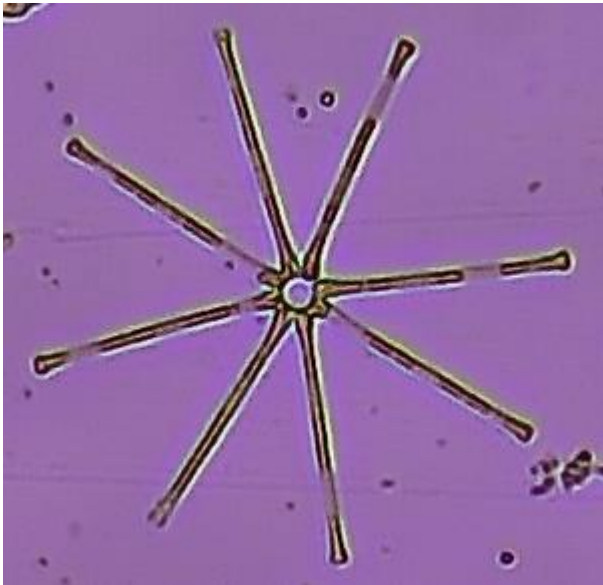
Ruth Indrick spotted this odd critter that moved like a crab in some ways and was very fidgety. It was climbing up and down on the debris in the sample instead of swimming/floating. ID unknown. Maybe a water mite?



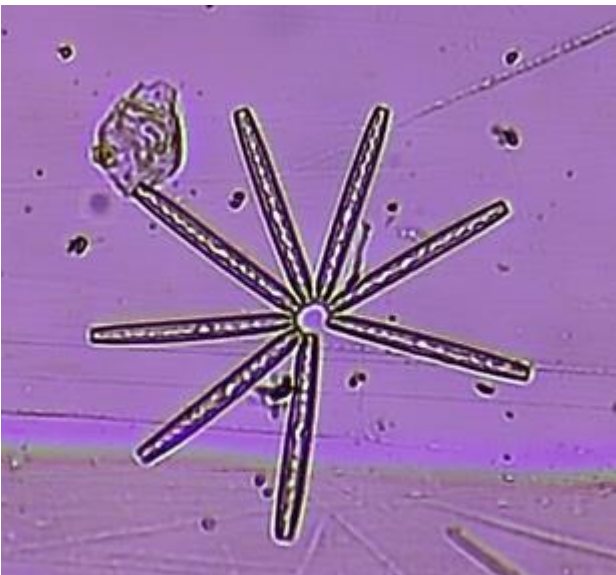
A few large *Pseudo-nitzschia* were present but not many. They were all pretty plump.



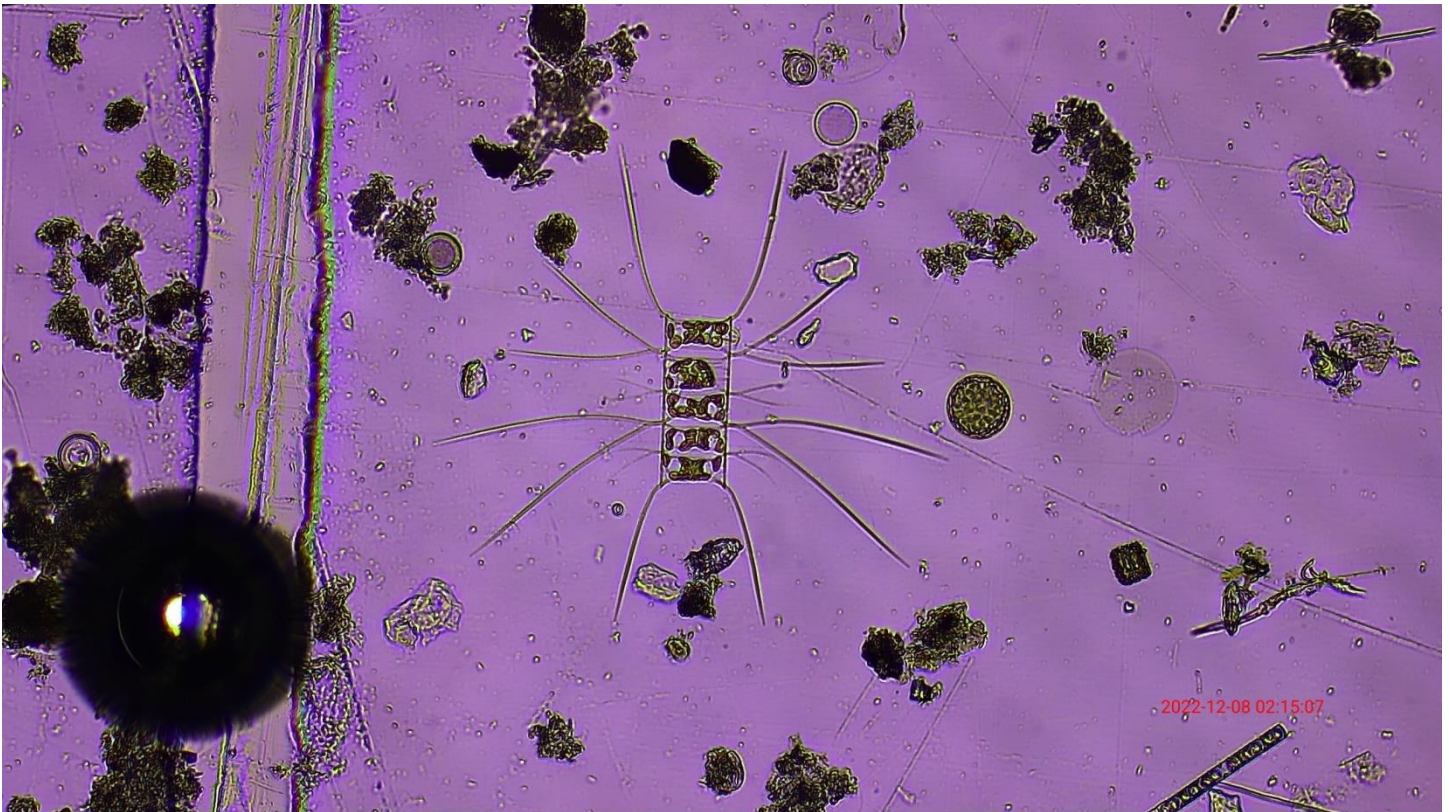
A Rhizosolenia floats above an Asterionella (formosa?). There were many of both of these species, as well as Thalassionema, looking like the Asterionella except it lacked the bulges on the ends of the arms. Asterionella is a freshwater diatom.



Asterionella (formosa?)



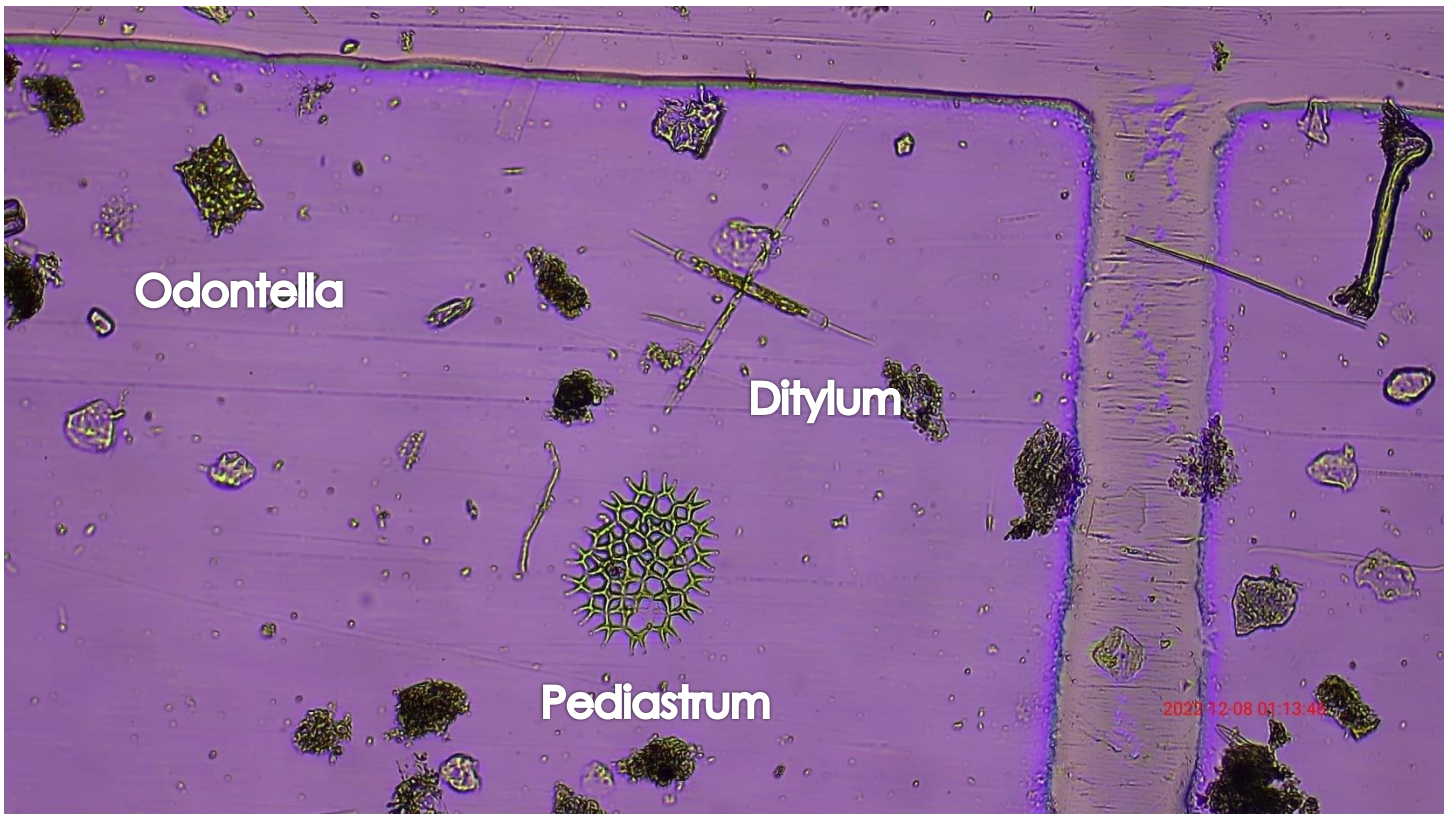
Thalassionema



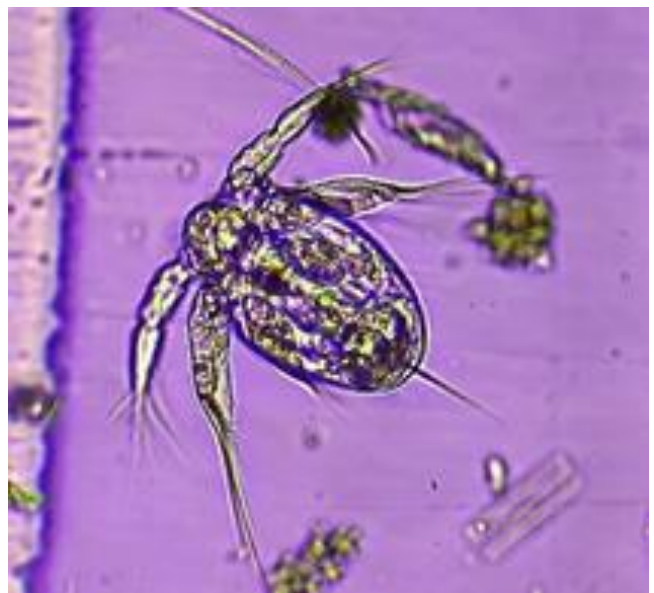
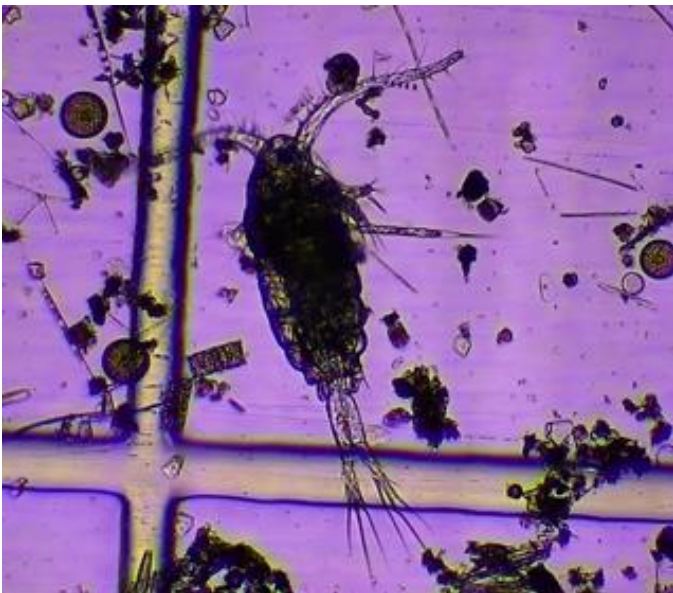
Several Chaetoceros chains were floating around, looking well-fed.



At the left, next to the cell divider, is the rotifer Keratella cochlearis, which was seen earlier this summer as well. It can be found in fresh and brackish water. On the right is Ceratium furca, which were plentiful this summer but not in this December sample.



In the upper left corner is an *Odontella* sp. In the center, the spiky algae is a *Pediastrum*, most often found in fresh water. Ruth saw this earlier in the year, also following a rain event (apparently they can appear in estuaries and wetlands). *Ditylum* floats above the *Pediastrum*.



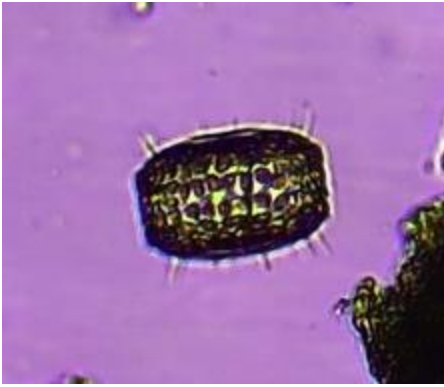
A couple of copepods were present in the sample; also a few nauplii.



Only one *Ceratium longipes* showed up.



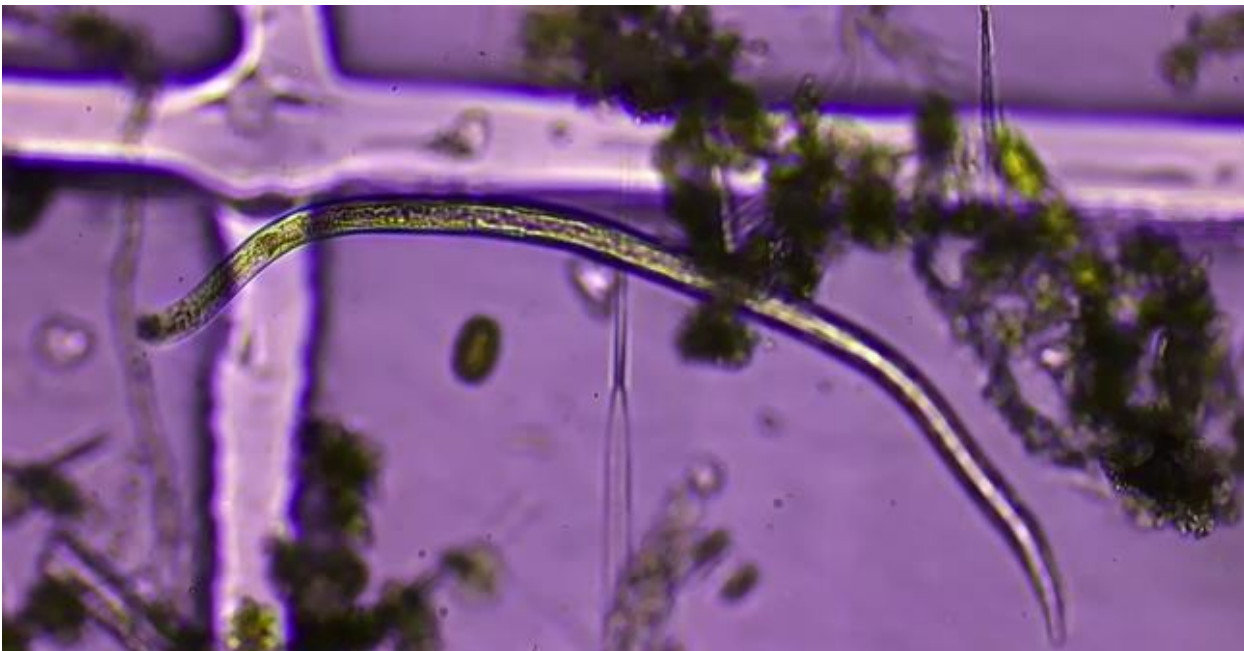
Does anyone have any ideas about this segment of something? It was a very bright pink.



There were quite a few of these...maybe a single Thalassiosira?



This may be a "water flea", a Cladoceran.



And there were a few squirming nematodes in the sample as well.

List of plankton species seen December 7, 2022:

Coscinodiscus

Pseudo-nitzschia (large)

Odontella

Thalassionema

Thalassiosira

1 Dinophysis norvegica

1 Ceratium longipes

1 Ceratium furca

Ditylum

Rhizosolenia

Prorocentrum micans

Skeletonema

Fragillaria

Gyrosigma

Pleurosigma

Chaetoceros

Tintinnid

Copepods

copepod nauplii

Pediastrum (fresh water sp)

Keratella (fresh water rotifer sp)

Possible water mite