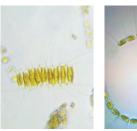
Phytoplankton

IDENTIFICATION GUIDE

Prepared by Andrew Bigham and Deanna Frankowski (2007) (Rev. 2020)

* Potentially hazardous algal bloom (HAB) and Phytoplankton Monitoring Network target.

DIATOMS





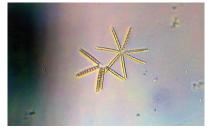
Chaetoceros sp.*
Square shaped cells with spines at each corner; often seen in chains



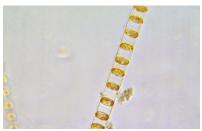
Odontella sp.
Rectangular shaped cell with
projections off each corner; may
form chains



Pleurosigma sp.
Elongated cell, tapered at ends;
normally orange or clear; often
seen moving



Thalassionema sp.Single, rod-like cells that may form chains



Skeletonema sp.Small cells evenly spaced in chains



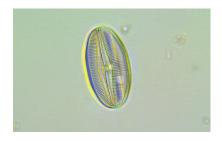
Rhizosolenia sp.
Elongated cell with projections at each end; may have multiple chloroplasts



Guinardia sp. Chain of cells that can be arched; each cell has multiple chloroplasts



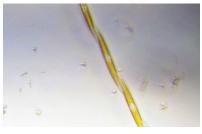
Ditylum sp.Cell has multiple chloroplasts and a long spine at each end



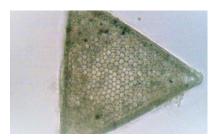
Navicula sp.
Related to Pleurosigma but
much smaller; often seen moving



Prorocentrum*
"bean shaped" or rounded, flattened cell with dent on the top,
with or without an apical spine.



Pseudo-nitzschia sp.* Cells look like grains of rice; cells form a rigid chain that looks like inclining stairs



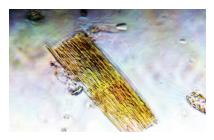
Triceratium rigid triangular shaped diatom with well defined pores.



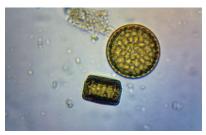
Asterionellopsis Single cells, or cells may form star-shaped colonies by uniting at base



Eucampia sp. Arched elliptical chains of cells connected by two projections



Bacillaria sp. Rectangular cells in inclining chains; moves in and out like an accordion



Coscinodiscus sp. Spherical cell; may have a dark band around the edge and a dark center



Striatella sp Rectangular shape and starburst patterned chloroplasts. Found as single cells or small groups.



Nitzschia sp. Long, oval cell with two projections; very small cells that move in straight line

DINOFLAGELLATES



Ceratium furca (phenotype)* "Forked Horns" Three horns: one elongated anterior and two unequal posterior horns.



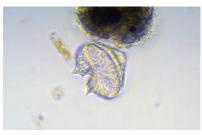
Dinophysis spp.* "The evil princess" wide rounded bottom, a handle-like wing on one side and flared "crown"



Ceratium longipes Cell with three long pipes radiating from a central disc



Akashiwo sanguinea* Flat, tooth-like shape, often orangish in color



Protoperidinium sp. Turnip-shaped cell that moves like a spinning top



