

Nature Note: Findings from the Field: Middle School Journal

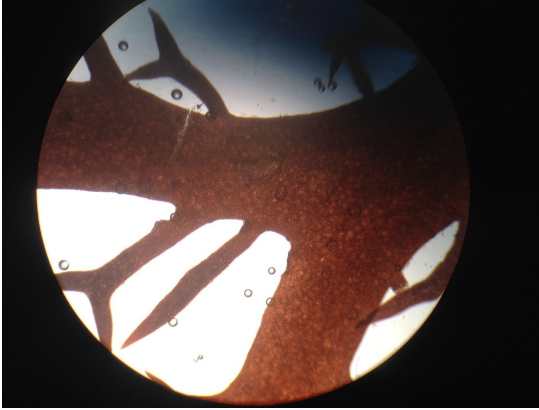
Kelp Help: Disastrous *Dasysiponia*

Jai M.
Bath Middle School
Mrs. Wright
January 31th, 2020

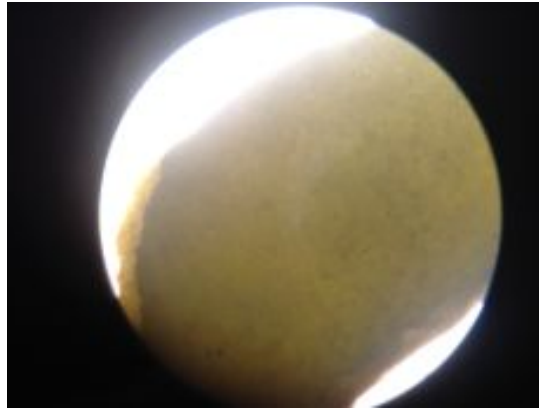
Over the past 30 years, scientists have noticed that a type of macroalgae known as *Dasysiponia japonica* has been taking over kelp forests, an important aquatic ecosystem which sustains life for many creatures. *Dasysiponia japonica* is red in color and often described as “fiber-like”. It originates from the Pacific, and is extremely invasive, as it is noted to dominate kelp forests at an alarming rate.

In ‘*Ocean Invasives*’, an article by Larry Harris, Kristen Mello, Amber Litterer, Christopher Wells, and Colin Ware, it is stated, “While the changing seascape has dramatically altered and increased the diversity and number of small creatures at the base of the marine food web, we still don’t know how these changes in the ecosystem will propagate through the entire chain.” This means that scientists are still unaware of just how the changes made by *Dasysiponia japonica* will affect other species that live in or near kelp forests. Other types of macroalgae, more commonly known as seaweed, are very important to sustaining a healthy ecosystem. *Dasysiponia* is known to interfere in ecosystems and push other macroalgae out.

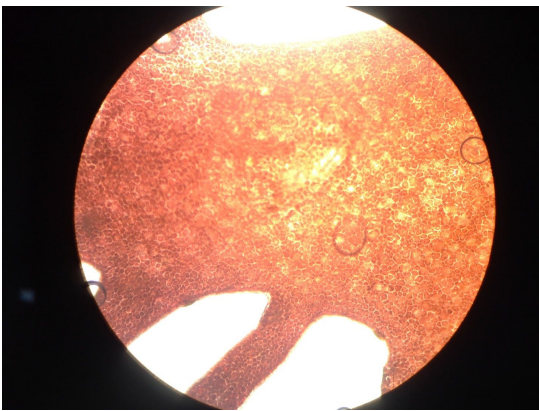
Although we found many types of macroalgae at Little Machias Bay in Cutler, Maine, we were unable to locate any traces of *Dasysiponia japonica*, meaning that it supports many healthy ecosystems.



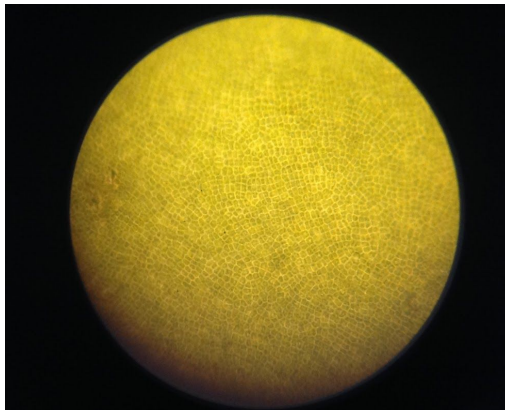
This photo is shown in 40x.



This photo is shown in 40x.



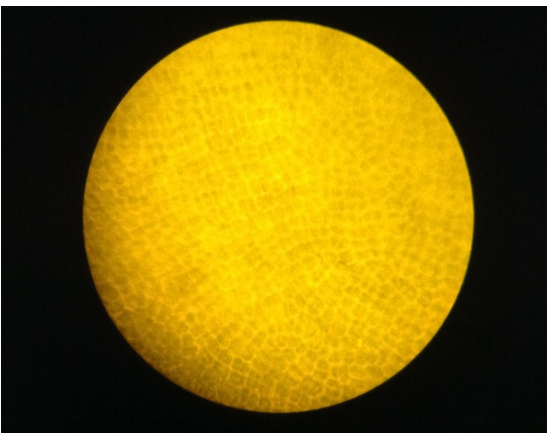
This photo is shown in 100x.



This photo is shown in 100x.



This photo is shown in 400x.



This photo is shown in 400x.

These are photos of different types of macroalgae (seaweed) found at Little Machias Bay, Cutler, Maine, lat. 44.6441, long. -67.2531, on December 17th, 2019. The sample was donated to our class at Bath Middle School by the Department of Marine Resources. They are not *Dasysiphonia* because *Dasysiphonia*'s cells are structured very differently than these macroalgae.

References cited

References:

“The Seaweed Site: Information on Marine Algae.” *Dasysiphonia Japonica Yendo*, www.seaweed.ie/descriptions/Dasysiphonia_japonica.php.

“Ocean Invasives.” *UNH Today*, 5 June 2018, www.unh.edu/unhtoday/2017/05/ocean-invasives