

Pond Life

By Jolearra Tshiteya

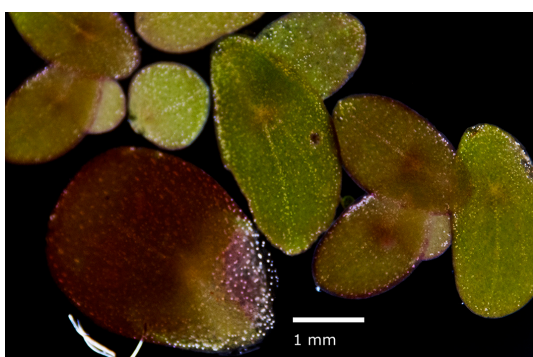
I focused on planaria and algae for this project. These two organisms are commonly found in fresh and salt water around the world.

Planaria are non-parasitic flatworms. They can be found in water as well in terrestrial settings such as under logs. Planaria have the amazing ability to regenerate parts of their bodies. One planaria split vertically can turn into two separate flatworms.

They move due to the combination of cilia and mucous that their bodies excrete. Their diet consists of both live and dead small animals. Planaria have a simple nervous system consisting of their brain (located between their "eyes"), transverse nerves and a lateral nerve chord.

Algae is frequently found in most aquatic settings. These organisms can be unicellular or grow over 60 meters in length. Algae are autotrophic beings, meaning they use photosynthesis to make their own food. Like other plants, they have square cells. However, they are different from land plants in that they do not have leaves and other "organs" found in vascular plants.

Left: A sample of algae backlit to show structures with a call out.
Right: The same sample of algae, polarized to emphasize structures not easily seen with white light.



Equipment: Nikon D300s body, Nikon bellows, 35 mm & 46 mm thimble lenses, light table, two polarizing filters.

Technique: Specimen were collected from sample pond water and placed into a small glass petri dish. The dish was then placed on top of the light table. For polarized shots, a polarizing filter was placed between the light table and the petri dish as well as a filter between the camera lens and the petri dish.

About the Photographer: Jolearra Tshiteya is a 4th year student at Rochester Institute of Technology. She will graduate in 2013 with a degree in Biomedical Photographic Communications. Jolearra enjoys photomicroscopy and fungi. She recently completed an internship at the Smithsonian National Museum of Natural History in Washington, D.C. | jmtbpc@gmail.com | jolearraphotography.com

Sources: <http://en.wikipedia.org/wiki/Algae>
<http://en.wikipedia.org/wiki/Planarian>