

# Pre-historic creatures and carnivorous plants in Damariscotta Lake



## WATERSHED HAPPENINGS

JULIA DAVIS

With the help of around 150 volunteers, the Damariscotta Lake Watershed Association (DLWA) is conducting an extensive survey of the shoreline and other shallow areas to locate invasive aquatic plants, namely hydrilla. Volunteers, staff, and interns are busy snorkeling, kayaking, canoeing, and boating around the lake in search of harmful lake invaders. To catch a glimpse of plant and animal communities under the surface, surveyors use scopes (buckets or trunks with a plexi-glass bottom) or a facemask if snorkeling.

Snorkeling has become a favorite method amongst DLWA staffers for many reasons: good visibility, better maneuverability, and it's just plain fun on a hot day.

Snorkeling has literally opened our eyes to the wonders of the underwater world. While our initial goal is to observe the presence or absence of invasive species, we can't help but notice the fascinating things inhabiting the lake. Here are some of the odd and intriguing things we've observed this summer:

### Bryozoan colonies

Bryozoan colonies look like giant, patterned, gelatinous balls. They are most often attached to underwater logs or branches and are sometimes visible from the surface. Bryozoans are tiny, colonial animals with a fossil record that dates back 500 million years.

Each colony can grow bigger than a basketball and consists of several million individual animals, termed zooids.

The zooids use tentacles to filter zooplankton (i.e. microscopic animals) from the water column. Before panicking, it's important to note that bryozoan colonies are good news for the lake. Bryozoans have a low tolerance for pollution, so they are often associated with good water quality. Keep your eyes out for these bizarre creatures on fallen logs and debris along the lakeshore.

### Carnivorous plants

Bladderworts are a common, native plant found in Damariscotta Lake. Unlike most aquatic plants that use roots to absorb nutrients from the soil, bladderworts lack roots. Instead, they capture small prey like zooplankton and insects using bladder-like traps on their leaves.

According to the Maine Volunteer Lake Monitoring Program (MVLMP), there are nine species of carnivorous Bladderwort plants in Maine. Bladderworts are a contributing member of the lake community serving as habitat for

invertebrate species and a place for fish to forage.

### Metaphyton blooms

Seen something resembling "green cotton candy" or a bright green cloud in the water? If so, this is a metaphyton bloom. According to a University of Maine field guide, metaphyton blooms consist of several algae species that form after heavy stormwater runoff in the spring or during long, hot spells in summer months. This type of algal bloom does not necessarily indicate excess nutrients in the lake, nor does it affect water clarity.

### Water Mites

Every day dozens of creatures are seen that resemble tiny, bright-red ticks floating in the water. Upon further investigation, these creatures are identified as water mites. Water mites eat zooplankton, detritus (dead plants and animals) and/or parasitize other aquatic organisms. Water mites do not pose a threat to humans and are an indicator of a healthy, diverse ecosystem.

### Freshwater mussels

Ever wondered about difference

is between a clam and mussel? This was a recent topic of conversation at the DLWA office after several weeks of observing bivalves on much of the lake bottom.

As it turns out, mussels and clams have very different life histories. When clams hatch they look like mini-adults; however, mussels hatch into "glochidia."

The glochidia attach themselves to a fish's fin or gills and soon become encrusted. Inside the fish, the mussels transform into their adult form, eventually falling off the fish and settling on the lake bottom. Damariscotta Lake is home to the Eastern Elliptio, a common freshwater mussel that parasitizes a variety of fish species. Mussels are another welcome addition to the lake ecosystem, improving water quality by filtering out algae and detritus.

### Other notables

Also observed are many fish species this summer, mostly bass and pickerel, some juveniles and some old lunkers. Loons, herons, and osprey have been spotted during the survey.

One startled snapping turtle swam underneath the trunk scope, which gave us an opportunity to follow its movements underwater. Several fairy shrimp, most often found in vernal pools, have been

collected in the lake.

Lastly, dozens and dozens of beer cans have been seen. We have been jokingly classifying them as native (domestic beers) or non-native (imported beers). On a more somber note, the beer cans serve as a reminder that choices made above the surface have a drastic impact on underwater communities.

So while the goal is to survey the lake for invasive plants, a serious threat to the lake ecosystem, constantly encountered are positive signs along the way. A vibrant and diverse plant and animal

community is seen just below the surface. Surveying the shoreline gives a new perspective and appreciation for the lake we enjoy. The public is invited to dive in and explore the lake with the DLWA.

Contact Julia Davis at 549-3836 or Julia@dlwa.org for more information on how to get involved with the Invasive Plant Patrol program.

This column was written by Amanda Moeser, who is working for DLWA this summer with the invasive plant program.



Bryozoan colonies are some of the fascinating lifeforms to be found under the water in Damariscotta Lake.