

## Algal Blooms – 2017

The summer was only starting, but already we had received quite a few enquiries from cottagers about patches or blobs of algae either on the floor of the lake or free-floating and drifting with the wind. Sometimes, a large mat of algae ended up on the shoreline.

We could attribute this lake-wide bloom to the unusually wet spring and early summer weather we experienced. Alternatively, this algal bloom could be one of the predicted consequences of having zebra mussels in White Lake. This is very likely the case.

The WLPP has had a close look at many of these algal masses and have found through microscopic examination that they were all green filamentous algae. These algae are all naturally occurring and are harmless in the sense that they do not produce dangerous toxins. At worst, they are a nuisance especially when they concentrate on your shoreline and begin to rot. Some cultures harvest this stuff and eat it as a green vegetable added to soup and other dishes. The WLPP does not recommend this!

Time will tell if this is an isolated occurrence or if these algal blooms return each year. Very little can be done about these blooms. However, there are some actions we can take to ensure that these blooms are minimized. This can be done primarily by reducing our impact on the lake. In particular, maintaining a healthy shoreline (no lawns!), respecting setbacks for building projects, maintaining septic systems and reducing boat wakes and other disturbances to the shoreline and near-shoreline sediments. All of these actions will reduce the amount of nutrients entering the lake at the very locations where zebra mussels are active.

If you want to know more, have a look at the photos below which correspond to the three most common filamentous algae we have seen in White Lake. You could also have a look at the algae identification guide we have posted on our website: ([http://wlpp.ca/wlppwebsite\\_018.htm](http://wlpp.ca/wlppwebsite_018.htm)) and especially the guide prepared by the Kawartha Lakes Association which is also available for download at this address: [http://wlpp.ca/linked/kawartha\\_algae\\_book\\_web.pdf](http://wlpp.ca/linked/kawartha_algae_book_web.pdf).





Mougeotia



Sirogonium



Sirogonium is a genus of filamentous charophyte green algae of the order Zygnematales. It is found in freshwater areas on all continents but Antarctica. Spirogyra measures approximately 32–115  $\mu\text{m}$  in width.

It should be noted that on June 29, 2017 a private citizen did alert the Leeds, Grenville and Lanark Health Unit of a possible blue-green algal bloom located in the Three Mile Bay area. Two samples were taken by officials and sent for analysis. Luckily, this sample did not contain any toxins nor did it contain any blue-green algae. The sample was found to contain diatoms, golden-brown algae and green algae. All of these species are common in White Lake.