WHITE LAKE CHECKUP: August 31, 2025

The morning of August 31th was beautiful on White Lake. The lake was calm when we set out for our 8th water sampling run of the year (three more to go!). We collected plankton samples at five of our 9 sampling sites as well as measured water clarity (Secchi Depth) and temperature at all sites. Plankton samples were analyzed later using an optical microscope.

Water Temperature: The water temperature in the deeper parts of the lake was 20.2°C. The temperature last year at this time was about the same at 20.7°C. The water temperature in the shallower parts of the lake was 17.6°C indicating a cooling trend.....Fall is coming!

Water Clarity: Water clarity as expressed as the Secchi Depth ranged from 4.6 to 5.4 metres in different parts of the lake and averaged 5.0 metres. Last year at this time, water clarity was an average of 5.3 metres or about the same.

Water Depth: The depth of the lake as measured at the gauge at the dam was 124 cm as compared to the target depth of 128 cm. This is 4 centimetres lower than called for in the water depth plan for the lake. The hot dry weather we experienced this summer is partly responsible for the low water levels. At this time last year, the lake was 13 cm higher than normal.

Cormorants: We observed 5 cormorants on our 50 km run on White Lake. It is common for us to find all of the cormorants concentrated at one or two places. Today, they were dispersed over 4 locations in the northern part of the lake. Last year on this date there were only 4 cormorants observed. It is important to emphasize that our count represents the lower limit of the population on the lake. However, it is clear that there are relatively few of this native species making White Lake their home.

Zebra Mussels: One of us (David Overholt) spends 6 hours over an optical microscope analyzing plankton samples obtained during each of our sampling sessions. Among the many species of alga and plankton he counts, zebra mussel larvae (veligers) are especially important. The results from these observations allows us to know the timing and number of spawning events which have occurred over the summer.

For example, from samples collected on July 1st of this year, we calculated that there were on that day about 275 billion zebra mussel larvae in the lake. Most of these perish when they develop shells and need to attach to a rock or sunken log. Zebra mussel larvae cannot survive on the surface of the sediments which makes up most of the lake bottom. It is no surprise then that the population of zebra mussels in White Lake is healthy and here to stay.

To learn more about White Lake please visit the White Lake Science and website: https://wlpp.ca/. One the home page, you will find all of the other White Lake Checkups published this year along with our most recent reports and Environment Bulletins.

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