

Follow-up Blue-Green Algae Water Test produces lower results

Ten lakes in Kosciusko and Whitley Counties were randomly selected for water testing the first week of September for blue-green algae and the algal toxin Microcystin. Lake Wawasee was one of two lakes that tested in the high range for algal toxins (see chart below). With Wawasee's clean water reputation, the results of this test got a lot of attention.

Microcystin is a toxin that is created by some blue-green algae (also called cyanobacteria.) Blue-green algae are found in all of our Indiana lakes, and some have the ability to create a dangerous toxin. Direct contact with algal toxins can cause skin irritation. Drinking untreated water, intentionally or accidentally, may result in gastrointestinal illness and more severe liver and neurological damage.

A series of additional water tests from four locations in Wawasee Lake and one location in Syracuse lake were completed the first week of October. The results: all tested in the LOW range for Microcystin and cyanobacteria (with the exception of the DNR public launch ramp on Wawasee, which was in the Moderate range for cyanobacteria).

The best thing we can do for our lakes is to prevent these algae toxins from getting any worse. Toxins and weeds are a symptom of water pollution. Please help to keep our lakes clean! We can all help – every little bit counts:

- . do not rake leaves or lawn clippings into the lake
- . keep fertilizers well back from the edge and use phosphorous-free fertilizers
- . install a stone seawall or natural shoreline
- . do not stir up the bottom of the lake with your boat propeller. ***Cautious boating in shallow areas may be our best defense.***

What Should I Look for to Avoid Toxic Algae?

The toxic strains of blue-green algae usually have heavy surface growths of pea green colored clumps, scum or streaks, with a disagreeable odor and taste. It can have a thickness similar to motor oil and often looks like thick paint in the water. Algae blooms usually accumulate near the shoreline where pets and children have easy access and the water is shallow and more stagnant. It is important to keep a watchful eye on children and pets so that they do not enter the water. Water with any of the characteristics listed below is symptomatic of a blue-green algae bloom and may contain toxins:

- A neon green, pea green, blue-green or reddish-brown color.
- A bad odor.
- Foam, scum or a thick paint-like appearance on the water surface.
- Green or blue-green streaks on the surface, or accumulations along shorelines

What are the Risks and Symptoms?

Pets and farm animals have died from drinking water containing toxic blue-green algae (or licking their wet hair/fur/ paws after they have been in the water). Blue-green algae toxins have been known to persist in water for several weeks after the bloom has disappeared.

While there are no U.S. standards regulating algal cell counts, the World Health Organization designates risk categories for recreational contact with water.

Relative Probability of Acute Health Effects	Cyanobacteria (cell/mL)	Microcystin (ug/L)
Low	< 20, 000	< 10
Moderate	20,000-100,000	10-20
High	100,000-10 million	20-2,000

Results of samples collected in nearshore areas in Wawasee and Syracuse Lakes

Sept. 2009

Wawasee – High

Oct. 2009

Wawasee Lake – Low*

Syracuse Lake – Low

* Exception of DNR launch ramp

For more information on blue-green algae, visit [Indiana's Blue-Green Algae Web site](http://algae.in.gov)<<http://algae.in.gov>>. The Web site is a collaborative effort of the Indiana Department of Natural Resources, the Indiana Department of Environmental Management, the Indiana State Department of Health, and the Indiana Board of Animal Health, in cooperation with the Center for Earth and Environmental Science at Indiana University-Purdue University Indianapolis. Dr. Howell from the State Health Department says it is always a good idea to take a bath or shower with warm, soapy water after coming in contact with untreated water in ponds and lakes, especially before preparing or consuming food. He also recommends people never drink, cook, or shower with untreated water from lakes, ponds, or streams. Pets and livestock should also not be allowed to swim in or drink untreated water from these sources.