State Reports High Levels of Blue-Green Algae in Area Lakes

Ten lakes in Kosciusko and Whitley Counties were randomly selected for testing the first week of September for blue-green algae and the algal toxin Microcystin. 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. Lake Wawasee was one of two lakes that tested in the high range for algal toxins (see chart below). A series of additional water tests will be done in October.

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.

For more information on blue-green algae, visit Indiana's Blue-Green Algae Web site <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.

Lyn Crighton, Executive Director of the Tippecanoe Watershed Foundation explains if we discover algal toxins in our lakes, there is not much we can do about it. Our best defense is to prevent the algal blooms. Algae and weeds are symptoms of water pollution – they are the result of excess fertilizers and runoff. The simple truth is that it is much more cost-effective to protect the many benefits provided by healthy watersheds than it is to restore them once they become impaired. And we all have a hand in the protection of our land and water resources.

**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
shorline 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.

<table>
<thead>
<tr>
<th>Relative Probability of Acute Health Effects</th>
<th>Cyanobacteria (cell/mL)</th>
<th>Microcystin (ug/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>&lt; 20,000</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>Moderate</td>
<td>20,000-100,000</td>
<td>10-20</td>
</tr>
<tr>
<td>High</td>
<td>100,000-10 million</td>
<td>20-2,000</td>
</tr>
</tbody>
</table>

Results of 10 lake samples collected in nearshore areas with current or recent algae blooms. Lake ratings based upon worst result in either category.

**Kosciusko County:**
- Wawasee – High
- James Lake (Little Tippy) - Moderate
- Lake Tippecanoe – Moderate
- Sawmill – Moderate
- Irish – Moderate
- Sechrist – Low
- Webster – Low

**Whitley County**
- Old – High
- Loon – Moderate
- Crooked - Moderate

**If You or Your Pets are Recreating in the Lake, Take Common Sense Precautions**
• **During Recreation in the water:**
  - Avoid coming in contact with visible algae while swimming, jet skiing or tubing.
  - Avoid swallowing large amounts of contaminated water.
  - Recreate in groups.
  - Don't let your pet drink or swim in contaminated water.
  - If your pet does swim in the river, be sure to properly bathe your pet afterwards.
  - Always supervise children playing in or around water, as they are more likely to swallow water.

• **After recreating in the water:**
  - Bathe or shower with warm, soapy water after being in water that may be contaminated.
  - Don't drink, cook or shower with contaminated water.