

# Blue-Green Algae

## What's the Scoop?

Blue-green algae, one of the regular summer visitors to lakes and ponds across the country, typically makes its appearance in Black Lake in late summer to early fall. When the first sighting occurs we post this information to advise visitors and residents and remind them of basic, common sense rules to avoid potential problems.

In the interest of public health and safety, the NYDEC and Dept. of Health also issue health advisories for areas that may be affected. For more information, please go to <http://www.dec.ny.gov/chemical/83310.html>

### **Is Black Lake safe for recreational water sports - fishing, swimming, jet skiing, etc?**

YES! Absolutely. This is a big lake and there are lots of areas that are not affected by these algae. The areas of concern are only those where the algae is visibly present. Just follow the safety guidelines below and enjoy a great vacation on the lake.

### **What is this stuff?**

Blue-green algae is technically not a plant, but bacteria known as cyanobacteria. Cyanobacteria are common and natural aquatic organisms present in many surface waters across the country and around the world. In waters where nutrients are readily available and certain environmental conditions exist, they can multiply rapidly creating visible floating colonies. This visible growth is typically referred to as a 'bloom' or 'scum'. The thickest blooms usually occur in calm waters, near shorelines or in protected bays. In the northeast, blooms most often occur in late summer or early fall when water temperatures are typically warmest. Usually these algal blooms are just an annoyance, but sometimes they can produce toxins that can have a negative effect on people and animals.

### **What does it look like?**

Cyanobacteria have been commonly referred to as 'blue-green algae'. However, cyanobacterial blooms are not always blue-green. In fact, they can be blue, bright green, brown, or red. Bloom appearance can be best described as "pea soup" or "spilled paint" on the water's surface.

### **Where is it?**

The highest concentrations are usually found in floating blooms and shoreline scums. These dense accumulations pose the greatest potential health risks. Watch for dense accumulations of algae and avoid these areas.

Weather influences where blue-green algae will accumulate in a given location. During extended periods of calm and sunny days, blooms can accumulate at the surface in any location. Wind and waves may cause them to form along shorelines or in protected areas. Shifts in wind direction can move a bloom from one location to another. Periods of cool rainy weather can often lead to the disappearance of a bloom.

### **Why should we be concerned?**

Depending on the type, amount and route of exposures different types of health effects can be caused by cyanobacterial toxins.

- People may get rashes or other skin irritations from coming into contact with blooms. These skin irritations are not usually associated with toxins, but other non-toxic compounds produced by blooms (lipopolysaccharides).
- Inhaling water droplets that have toxins in them may cause allergic-like reactions, runny noses, or sore throats.
- Swallowing water that has high levels of cyanobacterial toxins in it can cause internal issues.

Symptoms can include nausea, vomiting, diarrhea, skin or throat irritation, allergic reactions or breathing difficulties. Blue-green algae can also produce toxins that affect the liver and nervous systems when water is consumed in sufficient quantities.

As far as we know there are no documented cases of human illness directly related to blue-green algae in Black Lake. However, caution around the algae is urged, especially for pet owners. If animals ingest the toxin by drinking lake water or cleaning concentrated amounts of algae off themselves by licking, it can have devastating consequences, including paralysis and death.

### **What should we do?**

Pretty basic. Common sense tells us don't touch, play in, drink or eat the yucky stuff. Seriously though, the following guidelines have been recommended by the NYDEC for your health and safety. Because it is hard to tell a harmful algae bloom from other algae blooms, we recommend avoiding contact with any floating rafts, scums, and discolored water. These common-sense guidelines should really be followed any time you see floating algae bloom on any lake. Follow this advice and have a safe and enjoyable visit to Black Lake.

- People and pets should stay out of any water that looks like spilled paint or pea soup or bubbling scum.
- Don't drink the water in or near the bloom - boiling water does not protect people or pets from blue-green algal toxins.
- Anglers should not eat fish caught from water that looks scummy, bubbly, like spilled paint or pea soup.
- If people or pets are exposed to a bloom, rinse thoroughly with clean water.

STAY OUT OF THE WATER if algal blooms are observed. The blooms may contain toxins that can cause a range of negative health effects. Droplets can be inhaled when swimming, water skiing or jet skiing, so these activities should also be avoided in waters where blooms are present. Direct contact with harmful algal blooms or breathing airborne droplets containing high levels of blue-green algal toxins during swimming or showering can cause irritation of the skin, eyes, nose and throat and inflammation in the respiratory tract.

*Recreational contact, such as wading, swimming, water skiing or jet skiing in water not visibly affected by a blue-green algae bloom is not expected to cause health effects.* In general, people should avoid swallowing water while participating in activities such as wading, swimming, water skiing or jet skiing, and shower with clean water and wash thoroughly afterward.

Children are at higher risk than adults for illness from because of their smaller size and bodyweight. They are also the most likely people to be playing in thick blooms near the shoreline. If a blue-green algal bloom is observed, stay out of the water near the bloom. If children should be exposed to the algae, wash them thoroughly with clean water and soap afterward.

### **What about pets?**

Algal blooms may contain toxins that can cause a range of negative health effects, especially for pets and livestock that could swallow large amounts of scum by drinking contaminated water or cleaning themselves. Keep your pets out of the water when algal blooms or scum are visible. If they should be exposed to algae, wash them thoroughly with clean water and soap.

For more information on Blue-green algae, please visit the NYDEC web site at:  
<http://www.dec.ny.gov/chemical/83310.html>