

Blue Green Algae: A Preventable Emergency?

[2011 Nature & Outdoor Tourism Industry Conference](#)
[November 2nd, 2011](#)



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What Is Blue Green Algae?

- Primitive Organism
- Cyanobacteria
- Microcystins



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What Causes Blue Green Algae Blooms?

- Warm water temperatures
- Shallow, still water conditions
- Available nutrients (phosphorus)



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What Are The Negative Effects?

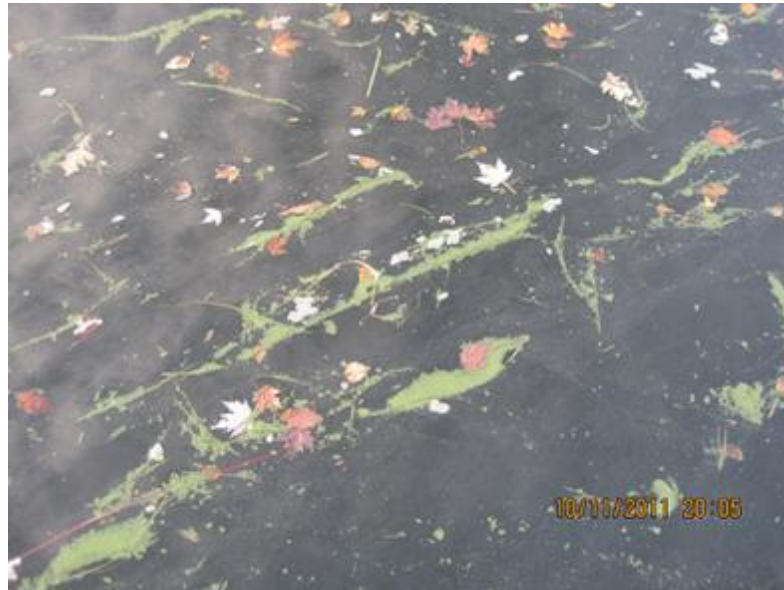
- May produce skin irritants, neurotoxins or hepatotoxins
- Contaminates drinking water supplies
- Affects recreational use of waterbodies (i.e. swimming)
- Ingestion can cause headaches, nausea, fever, diarrhea, abdominal pain, vomiting and more serious affects if larger quantities are consumed
- Contact with the affected waters can cause itchy irritated eyes and skin
- Liver, kidneys and other organs of fish may become toxic and extreme caution should be exercised handling and/or eating fish from contaminated waters
- Cannot be treated by boiling or use of algacides or chemicals and toxins can be increased by using these processes
- Esthetically, the green pea soup appearance and strong odour is very unappealing especially for tourists

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2011 Sudbury District Occurrences

- Lake Nipissing
- Lake Wolsely (Manitoulin)
- Long Lake
- McFarlane Lake
- Middle Lake
- Nepewassi Lake
- Ramsey Lake
- Vermillion River
- Bethel Lake
- Dry Pine Bay (French River)
- McCharles Lake



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Why Are We Seeing Increased Reports?

- Increased nutrient loadings (phosphorus) to our waterways
- Removal of natural shoreline vegetation
- Increased residential shoreline development
- Global warming
- Lower water levels

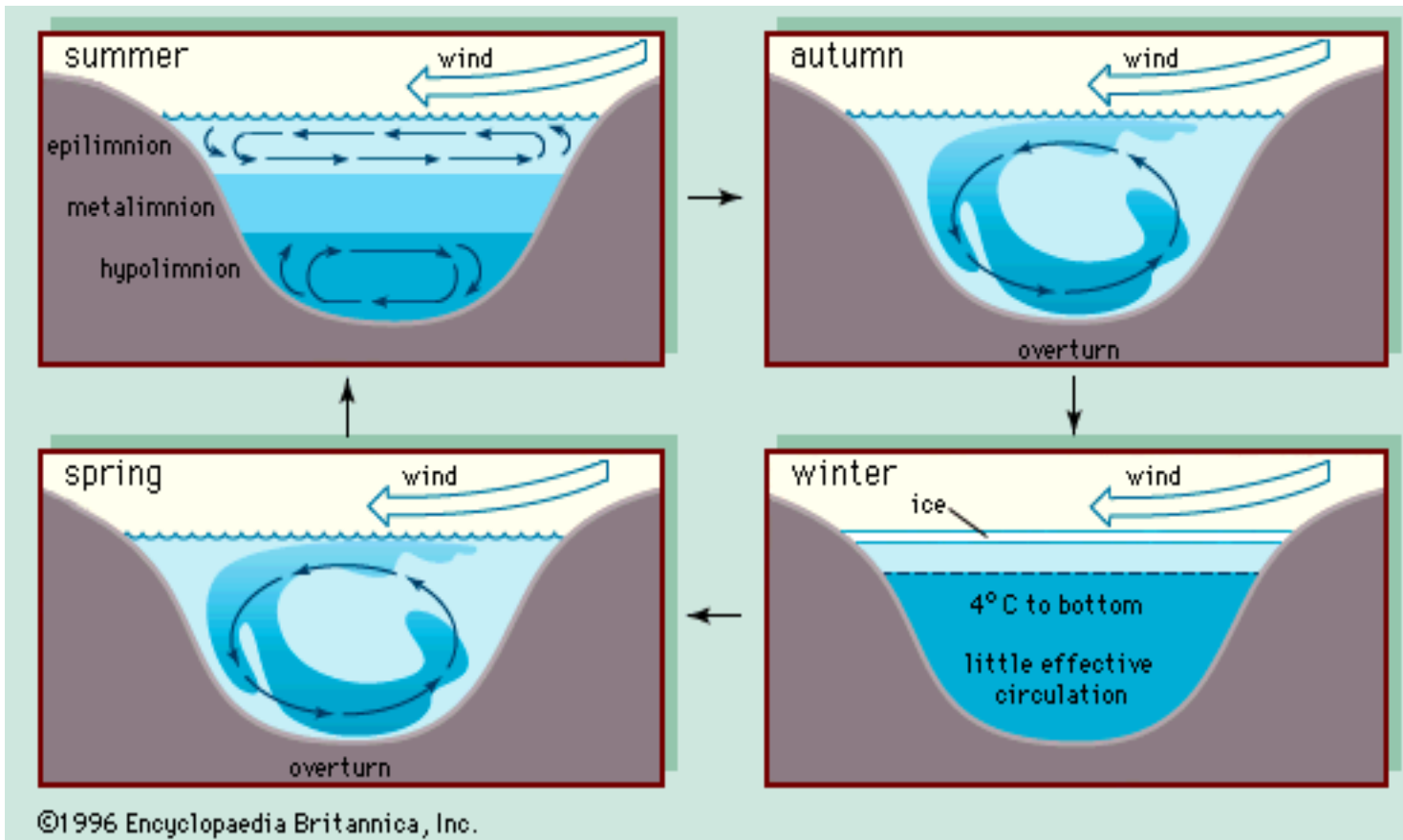


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Natural Lake Cycles

- Dimictic Lakes



What Actions Do I Need To Take In The Event Of An Algal Bloom?

- Report any suspected algal blooms to the MOE Spills Action Centre 1-(800)-565-4923 and/or your local health unit
- Do not drink, bathe or shower in untreated water. Do not allow children, pets and livestock to drink or swim in the water
- Do not use herbicides, copper sulphate or other algaecides
- Do not boil the water
- Do not cook with the water
- Do not eat the liver, kidneys and other organs of fish caught in the waterbody
- Do not treat the water with a disinfectant like chlorine (bleach)
- Do not rely on jug filtration systems
- Use alternative water sources

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What Actions Can I Take To Prevent Algal Blooms?

- Form a Lake Stewardship Group
- Maintain a continuous naturally vegetated shoreline buffer around your lake
- Do not use fertilizers or pesticides
- Control erosion and sediment transport
- Properly maintain septic systems and replace with upgraded systems when required
- Join the Lake Partner Program

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