BLUE-GREEN ALGAE (CYANOBACTERIA)

Cyanobacteria is the scientific name for blue-green algae. It is most commonly found in shallow, warm, and slow-moving or still water such as freshwater ponds and wetlands. While some species are blue-green, it can vary in colour from olive and dark green to purple and even yellowish. Cyanobacteria is of concern because it can produce toxins under certain conditions.

Blue-Green Algae Blooms

When large masses of cyanobacteria form, it is known as a bloom. Cyanobacteria blooms are described as giving the water the appearance of thick pea soup.

Three cases of cyanobacteria blooms have been documented in PEI in recent years.

- October 2004 MacLure's Dam, Murray River
- July/August 2005 MacLure's Dam, Murray River
- July/August 2005 Clark's Pond, Cavendish (PEI National Park)

Cyanobacteria blooms are common in other parts of Canada. The cause of the blooms in PEI is not known.





Figure 1

Figure 3

Figure 2

Figure 1 and 2: Blue-green algae bloom in MacLure's Pond, Murray River. July 2005. The close-up to the right shows the grainy appearance of the bloom.

Figure 3:

Blue-green algae bloom at MacLure's Dam, August 2005. Note the scum forming at the edge of pond.

Potential Animal and Human Health Impacts

Blue-green algae blooms may form a scum on the surface of freshwater ponds and lakes and can cause skin rashes and irritation of the eyes of swimmers. Humans that inadvertently drink the water while swimming can experience nausea, vomiting, sore throat, diarrhea, or cramps. Livestock, pets, terrestrial wildlife and aquatic life can also be harmed.

Because blue-green algae blooms can produce toxins, it is wise to treat them with caution. When a heavy growth of blue-green algae is identified, the Province's Chief Health Officer will issue a public advisory. In that case, signs are posted advising the public to avoid swimming or eating fish from the water and to keep animals from drinking the water.

The only way to confirm whether a particular bloom is toxic is through laboratory analysis.

Monitoring for Blue-green Algae

The PEI Department of Environment, Energy and Forestry and Parks Canada are working cooperatively to monitor Island ponds for the presence of blue-green algae blooms. Any public advisories will be posted on this website.

If you see what you suspect is a blue-green algae bloom, call the Department of Environment, Energy and Forestry at (902) 368-5044.

