

Blue-green algae invades reservoir; People, pets urged to stay away from green water in Irishtown Nature Park due to possible health risk

Cochrane, Alan [The Times - Transcript](#) [Moncton, N.B] 13 Aug 2008: A.1

There's an ugly green monster lurking in the stagnant water of the Irishtown Nature Park, and experts say it will continue to grow unless something is done about it.

The Irishtown reservoir has taken on a bright green glaze of pond scum -- also known as green-blue algae or cyanobacteria -- primitive microscopic plants that live in fresh water and feed on phosphorus, nitrogen and other nutrients.

The algae is a naturally occurring phenomenon that is apparently an extreme case in Irishtown this year, to the point where the city has urged people to keep themselves and their pets away from the a lake that looks as if the Incredible Hulk took a long bath and left behind a major case of ring around the tub.

The green bacteria floats like a film on the surface, moving slowly with the flow of water through the spillway into a nearby creek. And among the rocks and stagnant corners around the spillway are chunks of bright blue goo the size of a coffee cup or larger. These are called "blooms" but they don't smell like any roses you've encountered before.

Kneel down by the water with a stick and jab it into the blue sludge and you'll see that it is brown on the inside and emits a distinct, stomach- churning aroma.

Alyre Chiasson, a freshwater biologist at l'Universit de Moncton, says the blue-green algae is a naturally occurring phenomenon. Although it is common and natural, it could pose a serious health hazard to humans, animals, fish and anything else that comes in contact with it.

The City of Moncton yesterday issued a warning yesterday, advising people that the lake would be closed for recreational use. The park and its popular walking trails will remain open.

"Until further notice people should not boat, swim or fish in the lake. Also, pets should not swim in the lake or drink the water," the city said in a brief statement issued yesterday. Signs will be posted around the area and will remain until water and algae samples can be tested.

Bruce Tait, director of municipal facilities, said the city is working with provincial officials to find out what kind of tests should be done on the algae, and then find a lab that is capable of doing those tests.

"At least the good news is that it is a natural occurrence and not some type of point source solution," Tait said.

The reservoir feeds from swamps and streams north of the city. It flows through small creeks near Elmwood Drive and into the city near l'Universit de Moncton, eventually leading to the Petitcodiac River.

An inspection by the Times & Transcript yesterday indicated the algae was concentrated in the area by the old spillway, near the main entrance to the Irishtown Nature Park. The algae dissipates after the water flows over the spillway and through the creeks. There was no visual evidence of green colour in other bodies of water in the area yesterday morning.

Chiasson said blue-green algae can be dangerous and cause serious health problems if ingested by humans or animals. Although blue-green algae is common, the Irishtown Nature Park seems to be the only local water source affected to such an extreme in Metro Moncton this summer.

The Irishtown Nature Park is located on the Irishtown Road, on the northern edge of city limits between the Royal Oaks golf club and the Caledonia Industrial Park. The large reservoir has been around for many years and was used as a primary water source for the city before the Turtle Creek facility was built.

Tait said it is no longer connected to the municipal water system. "The pipes are gone. There is no way to connect it to the system. It is just a recreational body of water that is used sometimes by people with canoes or kayaks, or people who play fetch with their pets."

Susan Linkletter, a project co-ordinator with the Petitcodiac River Water Shed Alliance, was at the site yesterday taking water samples for testing.

She said the algae in the reservoir represents an extreme case, likely caused by the perfect combination of factors to promote widespread growth. Algae feeds on nitrates and phosphorous in the water and benefits from bright sunlight, like the long stint last month before the rains began. Also, the reservoir is sheltered from wind by the trees and there is not a lot of water flow. Also, the temperature around the lake has been steady at about 24 C recently. Linkletter said all these factors came together to provide a perfect breeding ground for the algae.

Tait said the city would continue testing the water and the algae itself, but the reason for its extreme appearance this year remains a bit of a mystery.

According to a fact sheet from the Ontario Department of the Environment, the nutrients that green-blue algae thrive on often enter the water from other sources, including "Runoff of

household fertilizers, agricultural runoff, industrial effluent, effluent from waste management systems and faulty septic systems."

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