Group seeks assistance for loons

As birds return, Nova Scotia scientists need help monitoring their health

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Along the shores of lakes all over Nova Scotia, residents are awaiting the retreat of ice and the return of loons. Chances are that when the loons return, they will be the same ones from last year. Research results from the Mersey Tobeatic Research Institute show that many loons return to the same lake summer after summer to feed on freshwater fish and raise their young. ERIC LEBEL • PICASA

Believe it or not, the ice will melt and new life will begin again.

As lakes reopen in southwestern Nova Scotia, an environmental research group is looking for volunteers to keep an eye out for loons, an important indicator of the health of the environment.

The most recent evidence from several scientific studies is that mercury levels are affecting how many chicks are being hatched and their behaviour when they are born.

"The very day the ice is gone the loons return," said Amanda Lavers, executive director of the Mersey Tobeatic Research Institute in Kempt, Queens County.

That's usually by mid-April, though this year it's pretty much anyone's guess when it might happen.

Lavers said loons, an icon of Canadian wildlife, are an important indicator of environmental health because "they are at the top of the food chain."

"So when we monitor them it helps give us an idea of what is happening with air pollution," which brings mercury pollution to the lakes.

She said southwestern Nova Scotia has a lot of bogs and wetlands with brown, tannic water to which the mercury binds. Loons eat the fish swimming in the water and that's how they get contaminated

expressed in the loon," said Lavers, which is exactly what has happened.

Neil Burgess, a wildlife toxicologist with Environment Canada, co-authored a study with a Wisconsin scientist that showed high mercury levels impaired the productivity of loons studied in 24 lakes in the Kejimkujik National Park and in Mary Lake in Caledonia.

and loon productivity was zero when mercury levels in the fish they ate were very high, the 2008 study said.

The report said mercury levels in lakes in southwestern Nova Scotia and New Brunswick were 59 to 159 per cent greater than in Wisconsin.

Burgess also co-authored a study in 2004 that said Kejimkujik loons had "significant

ers than loons tested in Halifax and southern New Brunswick.

The report said breeding loons at Keji had the highest mean concentration of mercury in their blood of any species in North America.

It also said 92 per cent of adult loons sampled had blood mercury concentrations in the "extra-high risk category."

The report also referred to

feathers and breeding behaviours.

Lavers said an Acadia University study has also found loon chicks with high mercury levels in their blood were behaving differently.

For example, they didn't ride on their parents' backs as much, which left them vulnerable to predators from the air and the water.

Environment Canada has put colour-coded bands on the legs of 58 loons since 1995 and is working with the Mersey Tobeatic Research Institute to monitor where the loons are and whether they are surviving.

Lavers said monitoring has shown many of the loons return to the same lake summer after summer. All but two of 14 loons identified through their leg bands last year were seen on the same lake where they were banded. In one case, the loon had been banded 18 years ago.

Knowing the loons return to a particular lake gives scientists an indication of pollution in that place, Lavers said.

Parks Canada says its volunteer-based LoonWatch program has found the loon population in Keji is "fair but declining," with only two chicks observed last summer.

Lavers said researchers want more volunteers to get involved in the program so that they can study what is happening with the loons and their natural environment.

Anyone interested in getting involved can contact the institute