

What is the fencing for along Highway 60?



Anyone driving along the Park's Highway 60 corridor will notice the black drift-fencing that has been temporarily installed in various places by both Park staff and construction contractors working on the highway. It is intended to keep Snapping and Painted Turtles off of the roadway in an attempt to reduce their mortality. These turtles prefer soft ditches and banks of roads for nesting.



Painted Turtle: Note the brilliant colours!



Snapping Turtle: Be careful to avoid its jaws as it will feel threatened and may snap!



Scan for more information about Ontario Turtles at Risk in Algonquin Park



Help Protect Us!
If you see a turtle on the road, slow down.
If possible, you may want to try to assist the turtle
by moving it in the direction it was heading.

Be careful with Snapping Turtles — you should not try to pick one up! Avoid its jaws as it will feel threatened and may snap! And, always remember, watch out for other traffic!

Trail impacts due to spring flooding

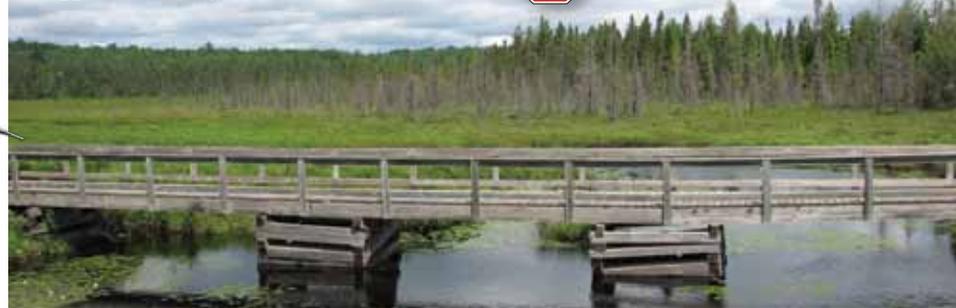


Algonquin Park witnessed unprecedented flooding this spring and the result has impacted several of the interpretive trails.

On the **Spruce Bog Trail**, the large bridge crossing the Sunday Creek near the highway has shifted and is no longer sitting safely on the piers. Park staff are in the process of looking for options at this site, including replacing the bridge with a new 80 foot single span bridge. Unfortunately, until this happens, the bridge is closed. However, the

trail remains open as a one-way trail up to the bridge and visitors can double back to the parking lot the way they came in.

Whiskey Rapids Trail lost most of the boardwalks along the river and park staff are working on a plan to rebuild this section. In the short term, this trail remains closed.



Being "bugged"?

This can be a challenging time to be outdoors with both blackflies and mosquitoes being present. Here are some tips to help you cope:

- **Wear light-coloured clothing** (white, tan, khaki, etc.)—blackflies are attracted to dark colours.
- **Cover up.** Wear long-sleeved shirts with cuffs and collars that can be buttoned tight, as well as long pants with elastic cuffs (or tuck your pants into your socks).
- **Use insect repellent** when outdoors—something with DEET works best. The concentration of DEET should be no greater than 30% for adults and no greater than 10% for children.
- If you cannot, or prefer not to, use insect repellent, try some type of netting (**a bug hat or bug jacket**), available at most outdoor stores. When camping, you can try a bug tarp shelter to avoid biting insects.



Blackfly biting (L) and mosquito feeding (R)
Photo (blackfly): Steve Marshall

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The Visitor Centre offers free WiFi internet access... and while there, don't forget to check out The Friends of Algonquin Park bookstore, or enjoy a light snack or meal at the Sunday Creek Café.

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The West is Best, But not for Long

By Dr. Doug Tozer, Aquatic Surveys Biologist, Bird Studies Canada



A pair of Common Loons feeding their young.

When it comes to Algonquin's loons, how could it be any better? If you watch and listen closely, there are hard-working parents, calls with specific meanings, touching family moments, edge-of-your-seat underwater chases for fish, even violence and divorce. And most of this happens on the open water in plain view on just about every lake.

Given that most of us find Algonquin loon-watching the best anywhere, it may come as a surprise that there is a better place for loons to live. We know this because of Bird Studies Canada's Canadian Lakes Loon Survey (CLLS) and the Algonquin Park Loon Survey (APLS). These programs originally grew out of concern that pollutants were negatively affecting the

health of lakes. It turns out that the number of chicks that Common Loon pairs produce each year (reproductive success) is a useful measure of the negative effects of airborne mercury and acid precipitation. CLLS participants have monitored Common Loon reproductive success each year throughout Ontario since 1981 and then nationally since 1992. Visitors and staff have undertaken the APLS since 1981, all in an attempt to indirectly track the effects of the pollutants.

Mercury is a potent toxin. Adult Common Loons with higher mercury are slower and spend less time doing activities that require a lot of energy like collecting food for chicks and defending breeding territories. Thus, mercury impairs Common Loon reproductive success.



The same is true for acid precipitation. Acids, and the toxic metals they mobilize, interfere with fish gill function. This, in turn, reduces fish growth, reproduction, and survivorship, and results in lower fish abundance in more acidic lakes. As a result, Common Loons produce fewer chicks on acidic lakes.



Common Loons produce fewer chicks in lakes impacted by pollution.

But it gets worse. Most mercury makes its way up the food chain to loons in the form of methylmercury. Acid in precipitation promotes the creation of methylmercury, in part because it increases the activity of bacteria that convert mercury to methylmercury. Higher water temperatures also promote the creation of methylmercury by increasing the activity of the bacteria and by favouring other methylation

pathways. As a result, methylmercury is more abundant and loons are at greater risk of mercury toxicity on acidic lakes and lakes with higher water temperatures. Emissions of mercury and the harmful components of acid precipitation increased throughout most of the 20th century and are now declining, yet deposition of these pollutants remains well above historical inputs and the amount deemed safe for aquatic wildlife.

But surely mercury and acid rain are not an issue in the wilds of Algonquin Park? Well, again, the answer may come as a surprise. Mercury and the harmful components of acid precipitation are released to the atmosphere during the combustion of fossil fuels. Algonquin receives airborne mercury from all over the globe, primarily because mercury persists in the atmosphere for up to a year or more. Mercury deposition is slightly higher in western Canada than in Algonquin and the rest of eastern Canada. By contrast, the harmful components of acid precipitation are mostly produced in the middle of the continent and are carried eastward and northeastward by prevailing winds, dropping them mostly into lakes in Algonquin and lakes in the rest of eastern Canada. This means lakes in Algonquin and eastern Canada are typically

more acidic than lakes in western Canada.

So as you can see, for loons, the west is best. Lakes in western Canada receive less acid precipitation than eastern lakes. As a result, loons that breed on western lakes probably have access to more fish to feed to their hungry chicks, and accumulate less mercury in their bodies than eastern loons, relieving them of the associated problems that come with mercury toxicity.

This is confirmed by the CLLS and APLS. A glance at the graph shows that reproductive success in western Canada has been consistently higher than in Algonquin Park. The data also show that reproductive success of Algonquin's loons increased during the 1980s, probably as a result of reductions in acid emissions, and has been relatively stable since (with some ups and downs).

The really surprising result, though, is that reproductive success in western Canada, although consistently higher than Algonquin, is declining over time. The reason for this is unclear. Even though methylmercury concentrations in lake water are lower in the west than in the east, concentrations could be increasing faster over time in the west. A possible explanation for this

is that due to climate change western Canada is heating up faster than eastern Canada. This may be increasing methylmercury production more in the west over time by increasing microbial activity or by favouring other methylation pathways.



Algonquin's lakes provide great opportunities to watch loons.

We all love watching Algonquin's loons. There is virtually nowhere else as rewarding for this. But the next time you are out enjoying loons, look up, and remember that even though Algonquin appears to be wilderness, there are outside influences that have serious consequences. And of course, remember that for loons the west is best, but maybe not for long.

Algonquin Park 2013 Loon Survey

The haunting calls of the Common Loon symbolize Algonquin's wild country for many people. Nearly every small lake has a breeding pair and there are multiple pairs on the larger lakes. Unfortunately, there are environmental threats to loons throughout their range that could potentially affect numbers here in the Park. These include reduced reproductive success caused by acid precipitation, and loons dying during migration due to avian botulism.

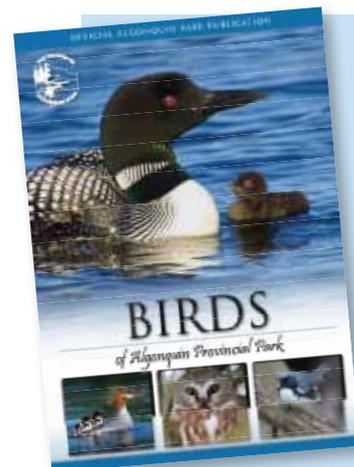
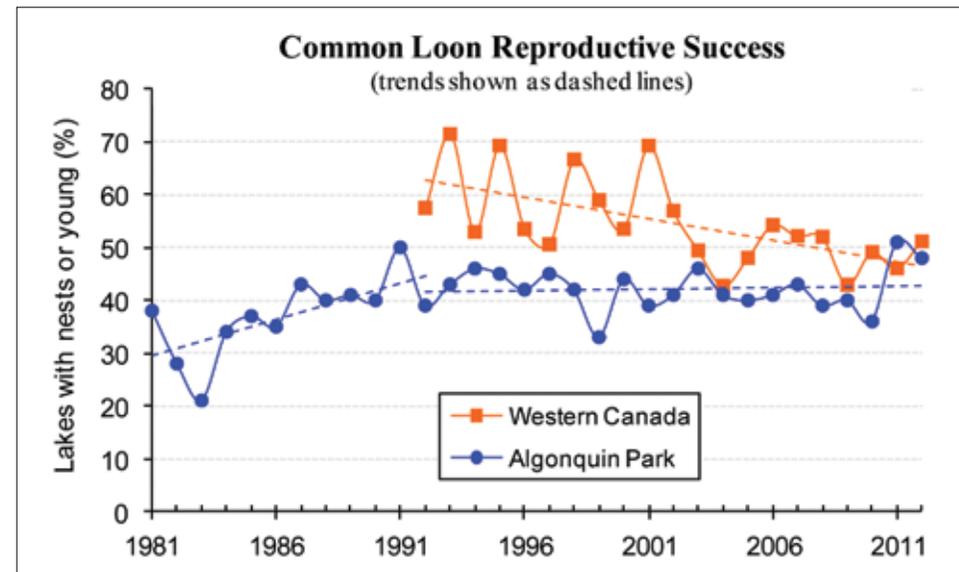


Help the Algonquin Loon Survey by reporting lakes with loon nests or young.

In 1981, we began a project to help determine just how well loons were doing in Algonquin. Visitors and staff report the lakes where they see adult loons, their nests and young. On average, nests or young were observed on 40% of lakes where loons were reported during the 32 years from 1981 to 2012. Only a long-term monitoring program can distinguish real trends from normal yearly fluctuations and we need observations from as many lakes as possible.

Loon Reproduction in Algonquin Park Since 1981

Year	# of lakes surveyed	% with nest/young
1981	121	38
1982	184	28
1983	237	21
1984	298	34
1985	210	37
1986	216	35
1987	261	43
1988	260	40
1989	240	41
1990	248	40
1991	201	50
1992	203	39
1993	232	43
1994	183	46
1995	223	45
1996	219	42
1997	173	45
1998	175	42
1999	190	33
2000	216	44
2001	168	39
2002	143	41
2003	120	46
2004	144	41
2005	156	40
2006	147	41
2007	138	43
2008	169	39
2009	146	40
2010	138	36
2011	134	51
2012	128	48



The revised Birds of Algonquin Provincial Park is coming!

The long-awaited revised edition of the Birds of Algonquin Provincial Park hits shelves this fall. Despite its seemingly endless expanses of thick forest, Algonquin is a can't-miss destination for bird enthusiasts as it is a stronghold for species that have travelled north from Tropical America to raise their young during the summer months. It is also one of the best places in south-central Ontario to see Boreal Forest specialties Spruce Grouse, Gray Jay, Black-backed Woodpecker and Boreal Chickadee.

Fifty years worth of careful data-keeping on the 279 bird species that have been recorded in Algonquin has uncovered some significant ecological trends in Algonquin's bird populations, resulting in a special 5-page section in this new edition.

ONLY \$4.95

The book will be available at the Algonquin Visitor Centre Bookstore, the East Gate and West Gate and online at www.algonquinpark.on.ca



Please give us a hand by reporting your loon sightings this year. Report forms are available at park offices and the Visitor Centre.