

apparently unable to make up the nutritional consequences of a bad winter very quickly. In fact, a bad winter can still have a lowering influence on the survival of calves born as much as three summers later. It is almost like a person who has lost his or her life savings because of one unlucky event and then has to spend years digging out of a financial hole.

Seen in this light, the chance events of the coming winter are of much more than trivial importance. No matter how reassuringly normal the fall now appears, the inhabitants of Algonquin Park will soon be obliged to play a potentially deadly game of roulette.

They have stepped up to the table (made it this far), determined the stakes (their lives and future offspring), placed their bets (chosen their lifestyles), and the wheel (winter) is about to spin. ... Good luck!

Where will the wheel stop this year?

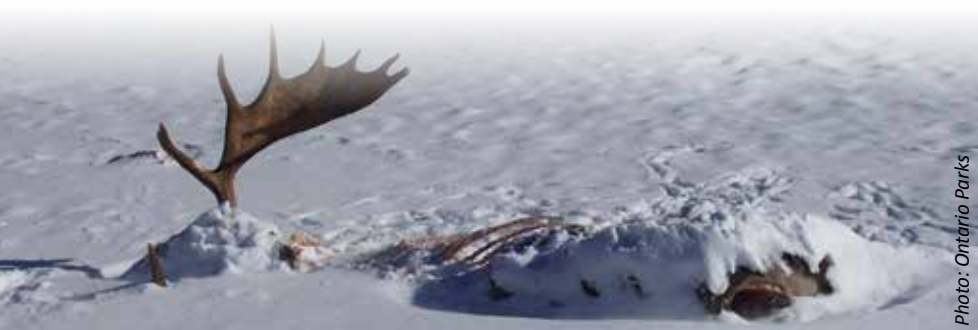
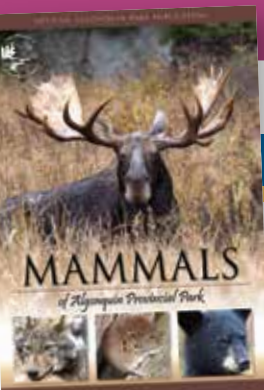


Photo: Ontario Parks

Winter is Algonquin's hardest season, and the conditions really matter. The demise of this Moose is a winfall for a whole suite of scavengers, from eagles and ravens to weasels and wolves.



## Official Park Publications

ONLY \$6.95

### Mammals of Algonquin Provincial Park

Fifty-five species are on Algonquin's mammal list. This book looks at their life histories, physical characteristics, and behaviours. Spectacular colour photographs of the Park's mammals to help make it easier to identify them, and illustrations that are a useful reference to distinguish tracks and scats are included in this new and heavily revised edition. 52 pages. Dan Strickland & Sandy Dobbyn, 2024.



### Birds of Algonquin Provincial Park

ONLY \$6.95

Visitors to Algonquin are often unaware that it offers a unique opportunity for seeing and hearing many of the birds of Ontario. Through 155 colour photographs and short accounts this book will introduce you to the main habitats of the Park, some of the most striking birds, and recent changes including the dramatic decline of 19 species.

## Algonquin Provincial Park's 13th Annual



# WINTER IN THE WILD

February 14th, 2026  
(Family Day Weekend)

All activities are free with the purchase of a valid Park Permit.

- Snowshoeing
- Special Presentations
- Winter Camping Demos
- Winter Bird Walk
- Ice Skating
- Night Walk
- BBQ at Mew Lake Campground  
Burgers \$5 each, Hotdogs \$3 each
- Roasting Marshmallows and more...

For more details check: [algonquinpark.on.ca](http://algonquinpark.on.ca) or [ontarioparks.com](http://ontarioparks.com)

Brought to you by:



### Algonquin Visitor Centre

April 18 to October 26, 2025  
Open Daily 9 am - 5 pm

October 27 - December 23, 2025:  
Weekends 9 - 5 pm, full services  
Weekdays 9 - 4 pm, limited services

December 24 - 26, 2025: Closed

December 27 - January 4, 2026: Christmas Break  
Daily 9 am to 5 pm, full services

January 5 - April 24, 2026

Weekends 9 am - 5 pm, full services  
Weekdays 9 am - 4 pm, limited services

Museum • Bookstore  
& Nature Shop



### Algonquin Logging Museum

June 14 - October 19, 2025  
Open Daily 9 am - 5 pm

The 1.3-km trail with outdoor exhibits is available year-round.

[OntarioParks.ca](http://OntarioParks.ca)  
[algonquinpark.on.ca](http://algonquinpark.on.ca)

# The Algonquin Raven

A Natural and Cultural History Digest

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## Winter Roulette

(originally published September 6, 1990, vol. 31, No. 12.)

by Dan Strickland

September is here again, and fall is unfolding as it should. The days are clear and silent, and the nights are nippy. Birds are leaving for the south, and already we have patches of red and orange foliage foretelling the peak of colours at the end of the month. October will then see the turning of Tamaracks and Aspens, the building of winter food piles by our beaver colonies, and the closing down of the Park's staffed facilities after Thanksgiving weekend. All these things are normal and regular events, year after year, and we know that many of our fall visitors share our appreciation for their comfortable predictability.

The age-old progression of the seasons is such a familiar fact of life that you may be surprised when we point out that the

one after this — winter — is not going to be predictable at all. Now it is true, just as day follows night, that the winter of 1990-91, will bring cold and snow to Algonquin. In that sense, the coming winter will be just as normal as the current season.

Nevertheless, the winter will also bring events of wild randomness, and these events will have an enormous, quite unpredictable bearing on the lives and fortunes of Algonquin Park inhabitants. It is almost as if they were dragged into a casino and forced to bet everything they had on a single game of chance. Grant you, this may seem to be an exaggeration, but if you join us in following the events of a typical winter, you will see what we mean.

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By the end of October the days will be noticeably shorter, and we will be having hard frosts just about every night. The cold will intensify, and the first snowstorm may occur in November. Then again, it may not, and therein lies a question of deadly importance.

Algonquin’s vast army of mice, voles, and shrews is a vital link in the Park’s food chain. They consume insects, seeds, and snails and in turn are food for larger animals, such as weasels, foxes, martens, and owls. Shrews and most mice remain active all winter, but their own internal heat-generating capacities are just not good enough to keep their tiny bodies warm in truly cold weather. When the temperature dips to 20 below for any extended period, they are doomed to freeze solid, even if they huddle together in well-insulated underground nests. The only thing that can save them is a good, thick layer of insulating snow, but who is to say a life-saving blizzard will arrive in time? It may well be that the first storm of the year passes north or south of the Park. Even worse, we could get a big dump, the snow could all melt, thoroughly soaking the leaf litter and the underground tunnels and nests of the Park’s small mammals, and then it could get really cold.

On such seemingly unimportant details about the timing and sequence of cold and snow hang the lives of literally millions of Algonquin mice and shrews. If the numbers don’t turn up right in a given year, the Park’s small mammal populations can be decimated, and with their collapse can come that of the predators that depend on them. Then, too, even if the mice and shrews are saved by the timely arrival of deep snow, this doesn’t necessarily ensure the salvation of their predators. If the snow is too thick, the predators may not be able to get at them. As long as the snow cover is light and fluffy, the mice and shrews will be

content to tunnel along on the soil surface. That, after all, is where their food is and where the snow insulation is best. Although foxes and owls can hear mice scurrying along down there and can plunge their legs unerringly down to the sound source through amazingly deep snow, there are still limits, nonetheless, especially for smaller predators. With more snowfalls the outlook for predators might seem increasingly dim, but other chance events can turn this around.

As the snow thickens and especially if a warm spell causes the upper layers to compact and lose their fluffiness, life will become less comfortable for small mammals down at the bottom of the snow. Carbon dioxide, released by the slow but continuing bacterial decay in the soil, will no longer be able to escape upward and will start to build up in the tunnel networks at the bottom of the snow. The mice and shrews will be forced to build and maintain ventilation shafts up to the surface, but when they do, of course, they again come within range of those owls and foxes. The important question once more, for both the hunters and the hunted is the precise timing of events. If deep snow comes early and cold temperatures delay compaction, the mice and shrews may be able to stay out of reach for so long that predators will either starve or wander out of the Park. It could all depend on a chance warm spell in the first week of January. If there is one, owls and foxes might live; if not, they might die.

Small mammals and their predators are far from the only creatures, of course, whose fortunes are greatly affected by snow depths. Regular Park visitors are quite familiar with the fact that deer start to have serious difficulties in moving about when the snow is 50 centimetres (20 inches) or more in depth. Indeed, severe winters, especially when there were two or three of



**The fortunes of predators and prey, both big and small are dependant on a complex and changing set of variables each winter. What is good for one species may spell disaster for another.** *Left: Deep, fluffy snow forces small mammals to the surface where they are in reach of the Barred Owl. Centre: Wolves take advantage of a snow crust that supports their weight, but moose and deer break through, making escape difficult. Right: A Ruffed Grouse will shelter under the snow, but a very cold night might trap under a crust of snow.*

them in a row, all but destroyed the Park’s deer population on a couple of occasions. What may not be appreciated is how chancey these events were. The difference between a bad winter and an easy winter for deer can be as little as two or three snowstorms — snowstorms that might just as easily have missed the Park or not materialized at all.

Then, too, what is shaping up as a killer winter can be transformed into a paradise for deer almost overnight. It sometimes happens that a freak warm spell followed by a good hard freeze will quickly transform metre-deep snow, in which deer were floundering, into a snow “pavement,” hard enough and strong enough to allow deer to move about with ease. Not only that, but the new surface may in effect elevate the deer up off the ground into range of a whole new supply of nutritious browse that was out of reach beforehand.

As in any game of chance, however, what is the lucky number for one player can be a disaster for another. The same hard-crust conditions that sometimes spell salvation for deer can spell just the opposite for grouse. Grouse escape the bitter cold of winter nights by plunging down into soft snow and hollowing out a snug, well-insulated chamber. Needless to say, grouse can’t do this and may freeze to death if there is a very cold night and a rock-hard crust, or they may break their necks if they try.

Or, strictly by chance, there could be the worst of both worlds. The crust could be strong enough to prevent grouse from flying into the snow but also too weak to consistently support large animals. Under such conditions, deer and moose



may irregularly break through the crust, lacerating their legs and expending great amounts of energy as they struggle to get back on top. Even worse, this may make them much more vulnerable to wolves. Many a healthy deer that otherwise would have gotten away has fallen victim to wolves just because, a few days earlier, weather conditions happened to make a crust strong enough to support wolves but not a running deer.

There is no doubt that the unpredictable interplay of snow and rain, cold spells and warm spells, can have enormous life-and-death consequences for many individual Algonquin Park inhabitants, but it goes much further than that. Depending on how deep the snow is, for example, and how easy or difficult it is for a cow moose to move around and get food, she will finish up the winter in a correspondingly better or worse nutritional state. This has an immediate bearing on the vigour of her calf that will be born a month or two later, and this in turn has a big influence on the calf’s prospects for survival. Not only that, but cow moose are... [Continued on Next Page...](#)