

## Q: Was this spring unusually early?

A: Most of Ontario experienced a warmer than average winter and spring. Did we notice it here in Algonquin? Here are a few observations from this year:

Lake Opeongo, Algonquin's largest lake, became ice-free on April 7, and this was the earliest date ever in 47 years, beating the previous earliest date of April 12, 1981.

Wood Frogs and Spring Peepers were calling on April 2, a record early date for both.

By early April, Spring Beauty and Trout-lily were in bloom, both likely earlier than ever noted before

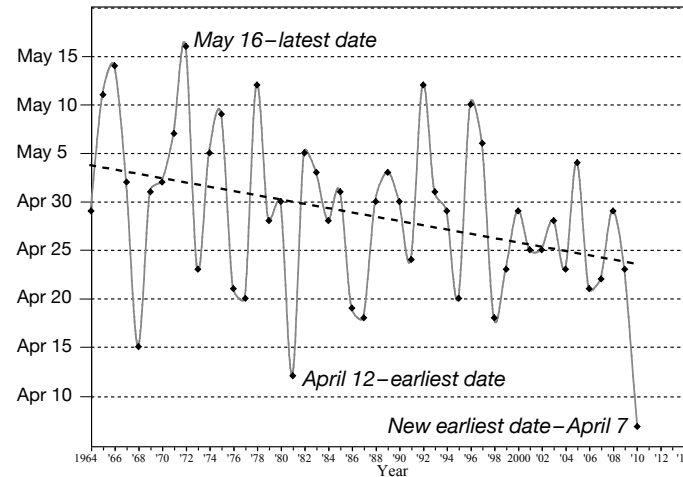
(although we have not recorded dates in the past).

Most bird migrants are arriving early, and three all-time early records were set by early April: Canada Goose (interior race), Common Loon, and Osprey.

Interestingly, many lakes opened up before Common Loons returned. There had been loon reports from only two lakes as of April 7. Loons typically arrive in Algonquin when the first small areas of open water appear.

A female Canada Goose incubating eggs along Costello Creek on April 4 was the earliest ever found here.

Lake Opeongo Ice-out Dates Since 1964 Showing Trend



Compiled by  
Ontario Ministry of  
Natural Resources:  
Algonquin Fisheries  
Assessment Unit

## Going to be on the water?

In a canoe, you must carry\*:

- a Canadian-approved Personal Flotation Device (PFD) or lifejacket of appropriate size for each person on board
- a buoyant heaving line not less than 15 metres in length
- a manual propelling device (e.g., paddle) or an anchor with not less

than 15 metres of cable, rope, or chain

- a bailer (at least 750 mL) or a manual water pump and hose
- a sound-signalling device (e.g., whistle) or appliance
- navigation lights that meet standards (e.g., watertight flashlight)

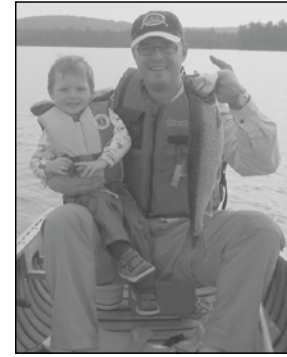
\* refer to the *Safe Boating Guide* for complete details

## Going fishing?

Here are a few rules, regulations\* and reminders while fishing in Algonquin:

- Trout fishing season opens April 24, 2010.
- No live baitfish are permitted.
- No fishing within 100 metres of a water control dam.
- No fishing within 300 metres downstream of Lake Opeongo's Annie Bay dam.
- Daily catch and possession limit for Lake Trout is 2 per person (1 per person with a Conservation Licence).
- Daily catch and possession limit for Brook Trout is 5 per person (no more than two of which can be Lake Trout); [2 per person with not more than one Lake Trout with a Conservation Licence].
- Be aware some lakes have slot limits [check the *Algonquin: Information Guide* (tabloid) for a list].
- Worms are not native to Algonquin and remaining worms should be taken home or thrown in the trash – not on the ground!

\* refer to the *Ontario Recreational Fishing Regulations Summary* for complete details



## Going to have a campfire?

Algonquin has experienced a very early, warm and dry spring. These conditions have created a potentially high forest fire risk. We ask all of our visitors to be fire smart and:

- Keep fires small and use existing fire pits.
- Ensure that leaves, needles and twigs are cleared at least one metre around the campfire.
- Never leave a fire unattended.
- Thoroughly extinguish all fires.



## Going for a hike?



Be aware that we are just opening our hiking, biking and backpacking trails for the season – you may come across downed trees, mud or flooded sections. With hundreds of kilometres of trails in Algonquin, it takes our dedicated staff several weeks to clean the trails after the long winter.

If you are going on a day-hike, know the length of the trail and give yourself enough time to get back to your vehicle before dark.

The *Raven* is available online [[www.algonquinpark.on.ca](http://www.algonquinpark.on.ca)] and a limited number of complete sets of the previous year's *Raven* are available at the Visitor Centre or the main gates.

A Natural and Cultural History Digest  
Algonquin Provincial Park



# The Raven



Vol. 51, No. 1

April 22, 2010

## Spring Issue

### Why the new look?

You have probably noticed that *The Raven*, the official newsletter for Algonquin Provincial Park, looks different this year. Why the new look?

2010 represents a new era for *The Raven*. For the first 50 years, *The Raven* had only two authors...Russ Rutter from 1960 to 1973 and Dan Strickland from 1974 to 2009. When Dan announced recently that he was going to end his run as the author, the Park thought that we should also retire *The Raven*...but we heard from you and you wanted us to keep the newsletter.

After much deliberation, we decided *The Raven* would continue, but with some changes. The new principal author will be Michael Runtz, a well-known Ontario naturalist, photographer and writer – with a strong connection

The Park thanks The Friends of Algonquin Park for its generous contribution to the production, printing and distribution of *The Raven* for the past 12 years. **THANKS!** Friends, for your support.

to Algonquin Park. But we will also introduce guest writers and continue to reprint some of the old *Raven* articles.

*The Raven* will now have six issues a year (two in the spring, two in the summer, one in the fall, and one in the winter). *The Raven* was weekly in the summer but that format goes back 50 years when the newsletter was the only Park publication and represented the Park Information Guide, *This Week in Algonquin*, as well as the natural history essay. This new schedule will allow us to update our visitors with timely seasonal information and safety messages.

We hope you enjoy the new version of *The Raven* and welcome your comments. We know it is not the same but we hope that, after 50 years, you will allow us some flexibility to change!



Wildflowers can be devious!

Learn more... see page 2.

## The Devious Side of Algonquin's Spring Flowers

by Michael Runtz

In summer, wildflowers paint Algonquin roadsides white and pink, and splash orange and yellow across the old airfield next to Mew Lake Campground. In that season it would be easy to think that the Hardwood Lookout, Track & Tower, and other trails that meander through maple-rich woods would never be worthy of a wildflower outing for, in summer, the colour green solely dominates the forest floor. However, if one were to walk any of those trails in early spring, a very different impression would certainly arise.

By late April the first drops of colour dot south-facing slopes and by mid-May a veritable flood sweeps the hillsides. Blue Violets, yellow Trout-lilies, white Dutchman's-breeches, pink Spring Beauties, and burgundy Red Trilliums are but a few of the stunning wildflowers that adorn Algonquin forests in spring. But why do so many woodland flowers grace the forest floor early in the year while few, if any, delight the eye in that habitat in summer?

The answer is simple — sunlight! The soil of a hardwood forest is a rich source of nutrients necessary for the food manufacturing process but wildflowers need sunlight to power their solar-driven engines so that they can grow, develop blooms, and ultimately produce seeds. In summer, due to the overhead canopy of leaves, sunlight is at a premium at ground level so it is primarily shade-tolerant plants that thrive on the forest floor. Prior to winter, however, hardwood trees drop their leaves and these are not replaced until well into the next May. Thus, each spring for a relatively brief period, sunlight shines unim-



**Dutchman's-breeches**

peded upon the forest floor, warming the soil and enticing the sun-lovers to make an appearance. And they do so with stunning predictability. Because of their brief but regular appearance, the early bloomers are known as spring ephemerals.

Those who visit Algonquin in early spring are well aware of the fickle nature of the weather. Because the Park is elevated atop an ancient dome of rock, temperatures fluctuate dramatically in both spring and autumn. And not just cold temperatures can prevail — snow has been recorded into early June. As every gardener is aware, late frosts and snowfalls play havoc with the success of a garden. The same certainly applies to wildflowers. Not only do wildflowers face damage to their tissues when the mercury drops precariously low, they can also be penalized for blooming early in



**Red Trillium – this species is the most common of Algonquin's four trilliums.**

another way. Most rely on insects for their pollination and if it is too cold for the pollinators to fly, pollination fails to occur and seeds are not produced. So how then do hardwood forest wildflowers cope under such high-risk conditions?

One solution is to scale down their size. Most spring wildflowers, unlike their towering cousins of summer roadsides, are small and hug the ground. The warmest part of the habitat happens to be next to the ground so they gain protection by being near it. Also, many wildflowers close their blooms at night, protecting the petals and sensitive sexual organs from the cold. They also have another trick up their petals, so to speak. Wildflowers try to get the job of pollination done as quickly and efficiently as possible.

Expediency is achieved primarily by attracting and directing the pollinators to the central part of the blooms where the reward for the insects (usually nectar) and, by no coincidence, the plant's sexual parts lie. Many of the early bloomers have colourful patterns called nectar guides that serve to visually direct their visitors to the rewards. Violets, whose petals can be white, yellow, or blue depending on



**Painted Trillium with its dramatic guiding pattern.**

the species, have nectar guides in the form of forked lines that converge at the opening that leads to the sexual parts. Even more dramatic is the guiding pattern borne by a Painted Trillium. These common trilliums are easily distinguished from White Trilliums (which are extremely rare wildflowers in Algonquin) by a rose-coloured bull's-eye at the base of their otherwise white petals. In addition to the visible guiding patterns, many flowers also have ultraviolet nectar guides that are invisible to our eye. Whether they employ converging lines, bull's-eyes, or ultraviolet patterns, by guiding their insect visitors to the sexual parts, wildflowers speed up the pollination process and get on with the important job of seed production.

But what if cold temperatures prevail, and the bees, flies, beetles, and butterflies that act as pollen couriers for the wildflowers fail to make an appearance? And what if the temperatures dip well below zero, damaging even the most resistant of blooms? Is all seed production lost for the season? Do the wildflowers fail to pass on their genes to a new generation?

Here again wildflowers demonstrate their ingenuity. Many of the early bloomers have a backup plan in case

their showy blossoms fail to perform their important function. To see this remarkable "Plan B" all one has to do is gently dig into the leaf litter and loose soil at the base of a violet, Spring Beauty, or Fringed Polygala. Attached to the plant just beneath ground level you will find tiny balls only a few millimetres in diameter. These are a seldom-seen floral secret. If you cut open one of these tiny balls and examine its inner workings with a microscope or very strong hand lens, you will discover that the round structure is actually an unopened flower that contains a full set of sexual parts. These ball flowers never open and pollen from their stamens (the male organs) fertilize the eggs held inside the pistils (the female organs). In other words, these closed flowers, technically known as cleistogamous flowers, self-pollinate. And they do so while protected from the idiosyncrasies of the environment above the ground. The seeds that these flowers produce are nothing less than insurance policies that allow the plants to pass on their genes even when the above ground blooms fail to achieve that goal.



**Delicate, pink-striped blossoms of Spring-beauty, densely carpeting areas of the forest floor, are a pretty sight in spring.**



**Blue Violets in their spring splendour.**

In Nature, adaptations that resolve one problem often inadvertently create another. Blooming early allows spring ephemerals to exploit the power of the sun in an otherwise shade-dominated habitat. But this means that their seeds are ready for dispersal by mid- to late summer. For summer roadside flowers, the wind is a commonly used means of transport. But in a hardwood forest, wind is not an option because the trees' leaves that block the sun are equally effective in stopping the wind. And a second problem is created by the dead leaves that carpet the forest floor. Seeds must penetrate this mat, flattened hard by winter snows, in order to reach the rich soil beneath. The spring ephemerals have solved both problems with one brilliant solution. They hire the services of ants to carry their seeds underground for them.

But that is another story!