

## Step Outside: Your Guide to Nature's Events

### Nature Guides

## Your Local Insect Symphony

Early September 2011


Featured Species: Cicada

For me, nothing says “end of summer, beginning of school” more than the buzzing drone of the [cicada](#) (which means buzzer in Latin), a large (2–5 cm., up to 15 cm in the tropics) insect that spends most of its life ([usually 2–5 years; up to 17 in some species](#)) underground (up to 2.5 m deep!), busily [sucking on plant roots](#).

Eventually, the [nymph emerges](#), crawls up onto a trunk or branch, and [moults](#) ([video!](#)). As an adult, its prime function is reproduction, with the males only doing the buzzing to attract females by vibrating its [timbals](#), complex membranes on either side of its abdomen. These timbals are also used to hear with. Fortunately, the males disable this hearing function before calling – otherwise, they’d probably go deaf! All this activity in turn exposes cicadas to predators, including the [Cicada Killer Wasp](#), which paralyzes the cicada in order to feed its developing young. After mating, cicada females lay [eggs in twigs](#). After hatching, [newborn nymphs](#) drop to the ground, dig in, and the cycle begins again. Cicada calls, plus those of the crickets and other insects mentioned below, can be found [here](#).

Other insects commonly heard this time of year include crickets, katydids and grasshoppers. Species most commonly heard in late summer include the [Fall Field Cricket](#), [Carolina Ground Cricket](#), [Bush Katydid](#), and [Marsh Grasshopper](#). The males stridulate, which means that, unlike cicadas, they rub body parts together (crickets use their wings) to create their call. Successful (well-fed) male crickets literally wear themselves out calling, dying sooner (but presumably more satisfied) than less successful males, which call less and later in life. Here are [resources](#) for crickets in the classroom.

Other Happenings:

- Another sure sign of the return to school are [Red Maple samaras](#) that helicopter to the ground, providing entertainment on the walks to school.
- [Blue Jay](#) calls are common sounds. Some Blue Jays move south, while others will stay.
- With the change of season, many birds are on the move to Central and South America. To get an idea of the volume of bird migration, stand outside on a calm, clear night and you’ll hear the [contact calls](#) of thousands of migrating songbirds – particularly [thrushes](#) and [warblers](#).
- Migrating [Common Nighthawks](#) are most visible during the last three hours of daylight. They migrate in groups, sometimes quite high, and all moving in a southwesterly direction.
- [Red-winged Blackbirds](#) are massing prior to migration. Check your local marsh!
- [American Pipits](#) show up in recently ploughed fields.
- Some butterflies are migratory, too. In the early morning and evening, migrating [Monarch Butterflies](#) can be found [clustering](#) in trees and shrubs along shorelines, on their way to their wintering areas in Mexico.  You can view their fall migration over time on the [Journey North](#) website, where there are tons of information, activities and lessons about Monarchs – sign up to become part of this incredible journey. You can see the [isolated mountaintops](#) where

#### Top R4R Picks

Resources for extending the learning

[Monarch Butterfly: Royal Mail. Activities for Grades 5–8](#)

Elementary, Middle

[Five Minute Fieldtrips](#)

Elementary, Middle

[Saving the Monarch](#)

Elementary

[Moth, the Fire Dancer](#)

Elementary

[Fall Monarch Migration](#)

Elementary, Middle

they will over winter and the [incredible profusion](#) of resting butterflies. We'll keep tabs on this bit of Canadian biodiversity while the snow flies, and then get ready for the journey back north in the Spring. As a preview, watch this Monarch caterpillar [hatch from its egg](#).

- [Clouded](#) and [Orange Sulphur](#) viewing is good in September.
- [Fall Webworm nests](#) are noticeable on shrubs and broad-leaved trees. They will over winter as pupae.
- [False Dragonhead](#), [Fringed-topped Bottle Gentian](#), [Brook Lobelia](#), and [White Snakeroot](#) bloom.
- [Beavers](#) get busy cutting trees for their [winter food supply](#). Look for loose piles of branches [near their lodge](#).
- [Eastern Chipmunks](#), [Eastern Grey Squirrels](#), and [Red Squirrels](#) are also busy storing food for the winter.
- [Pegasus](#), the flying horse, is a well-known fall constellation in the southeast sky. The Great Square, which makes up the body of Pegasus, is the most obvious part. One of these stars is also shared with Andromeda and can be used in locating the [Andromeda galaxy](#) - the most distant object viewable with the human eye. [Andromeda](#) is our closest galactic neighbour and is also a spiral galaxy. If you are able to make it out, you are seeing the past! The light that you see actually left the galaxy two million years ago! [Stellarium](#) is a great, free program for introducing and teaching the night sky in the classroom.
- [Goldenrod](#) are now in full bloom and will continue to the first frost in early October. It is worth a trip to look at these every few days. They can be found in some schoolyard naturalization sites, most old fields or the manicured edges of parks. Goldenrod attract many insects which make observing them so interesting. These include [monarchs](#), [bees](#) and [spiders](#). The children's picture book [On One Flower](#) is a great resource to use before or after a goldenrod field trip.