

Gardening in the Balance Lisa Stefaniak Peterborough and Area Master Gardeners

Last spring, an unusual sight shocked me as I sat sipping my tea and looking out the living room window. There were new, green leaves falling from my beautifully healthy sugar maple! They were fluttering down on a sunny day in June, and as they accumulated in the grass I began to panic. What could possibly be wrong with my tree? What sinister disease or horrible infestation would make it shed its bright green leaves?

When I inspected the damage I realized that the fallen leaves – a small fraction of the tree's total – were missing their petioles (the stem that connects each leaf to a branch). This was indeed unusual: when a tree naturally sheds its leaves, the petiole falls with the leaf. When I looked up, I saw the petioles still attached to the branches, and upon closer inspection I found that each petiole had one perfectly round hole. A bit of research revealed the culprit: the maple petiole borer (*Caulocampus acericaulis*), a little European sawfly that, in the larval stage, eats the centre of the petiole, cuts the leaf off, and 10 days later drops to the ground, only to emerge the following spring as an adult sawfly.

Wow! The little drama unfolding in my sugar maple ended as quickly as it began. But there was no need for panic: no real damage was done to the tree, and, as it turns out, there was little I could do to prevent or control this natural process. In fact, it was kind of cool to find yet another new insect visitor in my garden. This little sawfly was no real pest; it was a living thing worthy of attention, no different from most of the other insect visitors that inhabit or move through my garden each spring.

I have been gardening for 25 years now, for 3 years in Peterborough, and I have never used a pesticide of any kind. I have never needed to. This is not to say I have never had problems with insects. Earwigs can be pretty gross in a large mass, or in your shoes after you've taken them off and left them outside overnight. I've seen the tender new growth of roses smothered in aphids, and, in some years, the slugs dine voraciously on my precious hostas. What do I do about it? Nothing! Well, nothing drastic anyway. I make sure my containers are elevated so earwigs don't live underneath them in the day and eat my plants at night. I don't grow as many roses, and this seems to allow the ladybugs to keep the aphid population in check. I choose to fall in love with the right kinds of hostas -- the slug resistant varieties. More than anything else, I simply grow a lot of different plants, and this plant diversity tends to eliminate any real problems with insect infestations. Do the insects in my garden kill plants? No. Do they damage plants? Of course! To them, that's what plants are for.

As a gardener, you come to have an intimate relationship with your soil and your plants. Most of this awareness comes from crawling around on your hands and knees, and every year I see insects I have never seen before. Just last week, I saw a beautiful beetle with an intricate metallic pattern on its carapace that made it look like an ancient bronze coin. The insect world as a whole is so fantastic and complex that I find it difficult to pass judgment on any of its creatures.

I am a gardener for two reasons: I want to surround myself with beauty, and I want to surround myself with nature. But this is also a contradiction, for we often forget that plants themselves do not exist to be looked at and admired; they exist, at the most fundamental level, to live, to be lived in, and to be eaten. Their primary significance – and their primary mystery – is not that they look pretty, but that they exist. They are the basis of all life on earth. The herbivorous insects that feed on plants support, directly or indirectly, all of the animals that inhabit this unique bioregion. If you love to see birds in your garden, you need to help provide the insects they need to feed their young, and if you love butterflies and moths you need to provide the food and habitat that sustain caterpillars. The best way to do this, I have found, is to increase plant diversity and grow a wide assortment of native plants. Be careful with exotics, and plant only species that have the least potential to become invasive. Reduce the amount of your lawn if possible. Cultivating great swathes of non-native grasses, and then defending that monoculture with fertilizers and chemical interventions, doesn't support your local biotic community.

I suppose what I am saying is this: in the face of the pesticide ban and all of its controversies, one solution is simply to cultivate a different aesthetic. The "perfect" garden is as lifeless as a plastic flower. If there are no insects, the garden is sterile. A garden in balance with nature will support all kinds of life, but if we attempt to cultivate an image of perfection we inevitably fall prey to a corporate ideology that tells us that we are just a spray away from paradise. Nothing could be further from the truth. A garden that supports life is an imperfect garden, a garden that embraces the inevitable and desirable signs of life, including disease, decay, change, and transformation. We need to create a home for insects in our gardens in order to support the biotic communities we want to nurture, for their own right as living things, for our own pleasure, and for the future ecological viability of this bioregion. A little beetle that in the right light has a carapace like an antique coin will thank you.

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