



Green Lacewing – *Chrysoperla* sp.

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([www.insectsofalberta.com](http://www.insectsofalberta.com))



Ladybug – *Coccinellidae* sp.

## **Don't Kill – Employ!**

### **Predators in Your Garden**

### **Lacewings & Ladybugs**

August is here! Our roses are blooming and our vegetable gardens are showing signs of producing great harvests. In come the dreaded aphid colonies. Before you pull out your favorite pesticide, consider this: pesticides, even reduce-risk formulas, may wipe out that colony of aphids and kill the native and natural insect predators that would have feasted upon them. Up to 99% of the insects in your garden are actually beneficial predators that feast on garden pests. So don't kill them, employ them!

Ladybugs and lacewings can decimate a colony of aphids within days and may already be present in your Michigan garden. Unfortunately, their numbers may have decreased in your area due to pesticide use and other environmental issues. The good news is that you can easily attract them or purchase and introduce them yourself. Area garden suppliers often sell live ladybugs and there are a host of online retailers who sell live insects and egg or larvae kits. Simply search "purchase ladybugs" or "purchase lacewings" and you will have no problem finding an online source. Your insects will come with instructions – be sure to follow them to increase the chance that your buggy-buddies remain in your garden.

If you are experiencing issues with aphids consider implementing natural pest control by keeping these native predators around your home. Adult lacewings feed on the nectar, honeydew (an exudate of aphids) and pollens (which means they are pollinating!) of certain flower and vegetable plants; it is the larvae of these insects that will feed on and control aphids. One female lacewing may lay up to 300 eggs from which 300 larvae will be produced. These larvae are voracious carnivores consuming well in excess of 1000 aphids each by injecting them with venom and then sucking out their fluids.

With ladybugs, you get double duty. Adult ladybugs will eat aphids whole; one ladybug may eat as many as 5000 aphids during its lifespan if the food supply is bountiful. Ladybug larvae also kill aphids by impaling them with mandibles and sucking out their juices. Either way you win.

By providing suitable habitats for breeding you may see "parents and kids" of both species in your garden. Creating habitats for these insects is incredibly simple and well worth the time. If you treat them well they will reproduce and serve you for seasons to come. Creating a habitat may be as simple as including plants to attract beneficial insects in your garden and providing areas of shelter.

Ladybugs simply need an area on the ground with sticks, woodchips or mulch that you regularly mist with water. If you want to ensure that they remain and breed in your garden you can purchase ladybug pheromone, available where live ladybugs are sold. I have had great success creating long-lived habitats by putting some leaves and mulch under my rosebushes, dropping a few drops of pheromone there and misting the mulch in the evening. For years following I have watched hundreds of larvae hatch and grow to adulthood. My biggest problem at times was attracting aphids to feed them!

Lacewings need areas of grass, weeds and plants that produce the nectar and pollens they prefer. Including these plants in your garden will encourage them to feed and breed. Habitat kits are available for purchase online but I have found them unnecessary although they are fun projects for kids.

## Plants to Attract Your Carnivorous Friends

	<b>Lacewings</b>	<b>Ladybugs</b>
<b>Plants</b>	Angelica, fern leaf yarrow, cosmos (white), queen anne’s lace, tansy, dandelion, golden marguerite plants such as rose that attract aphids	Pot marigold, cosmos, yarrow, tansy, spike speedwell, queen anne’s lace, dandelion, sweet alyssum, plants such as roses that attract aphids
<b>Crops</b>	potatoes, tomatoes, strawberries, sweet corn, apples, asparagus, peppers	Potatoes, cabbage, peppers
<b>Herbs</b>	dill, coriander, fennel caraway	dill, fennel, coriander, garlic chives, golden chamomile, feverfew

Keep in mind that this is just a jumping off list! For additional resources check online with local Extension offices - you will find a wealth of information. And remember – NO PESTICIDES! Don’t kill your beneficial bugs. Happy breeding!



Ladybug Larvae



Lacewing Larvae