



## Beneficial Insects: Lacewings

In the vegetable garden, a tiny ecosystem exists. Microorganisms in the soil, bacteria and fungi, spiders, and insects all live and interact in, on, and around our crops. When the ecosystem is thriving, we hardly notice these miniature organisms. However, when populations become imbalanced, we quickly see results. For instance, a plant disease can surface or spread rapidly when weather conditions change. This fall, aphid populations have resurged in many Pittsburgh area gardens.

Often, when pest populations increase, it's not long before predatory insects follow. Allowing natural predators to control pest populations can save gardeners' time, energy, and money, and also increase the number of beneficial insects in the garden in the future. Waiting for beneficials to arrive can sometimes feel like folly – who wants to sit around and wait while their garden swarms with aphids? But those tense days pay off when you notice “the good guys” moving in!



*Green lacewing. Photo credit: [University of Missouri Extension](#).*

### *Life Stages and the Lacewing's Appetite!*

Lacewings are a beautiful insect that's a serious benefit to the garden. Adults range from  $\frac{1}{2}$ " -  $\frac{3}{4}$ " and feed primarily on nectar rather than bugs. But in their larval form, lacewings are called “aphid lions,” due to their ravenous appetite for aphids! These  $\frac{1}{2}$ " long, voracious predators can eat up to 100 aphids in one day! Aphid lions also eat various other garden pests like leafhoppers, thrips, mealybugs, and mites. The aphid lion grows through three “instars” or stages before forming a cocoon to morph into an adult. Adult lacewings lay distinctive tiny pale green eggs placed at the end of a long filament that extends from the leaf.



*Aphid lion (lacewing larva) attacking an aphid! Photo credit: [OK State University](#).*

#### *Attracting these Beauts*

Brown and green lacewings can be found in the Western PA area. Green lacewings are available for sale to control pest insects. But, attracting natives is much more cost effective route to take, unless you are releasing the purchased lacewings into a closed space, like a greenhouse.

Diversity in the garden and allowing herbs and flowers to bloom there helps to attract adults, which feed on nectar. Also, pests in the garden attract adults. For the benefit of their hungry little offspring, they lay their eggs close to the pest populations.



*Lacewing egg, attached to the end of a filament. Photo credit :[North Carolina State University Extension](#).*