# **Good Bugs, Bad Bugs**

# Do Not Be So Quick to Pull the Pesticide Trigger

We hear it all the time. Kill the bugs. Exterminate the bugs. Step on or stomp on the bugs. Did you know that 99% of insects are beneficial? A lot of insects are necessary for our ecosystems and plant communities. In fact, without insects, people could not exist. Insects pollinate flowers which gives us seeds and fruits and are essential to plant reproduction. However, yes, there are <u>bad insects</u>. Scale insects, mites, adelgids, lace bugs, and others suck the sap out of plants. Caterpillars and beetles eat leaves and can defoliate some plants. Emerald Ash Borers (pictured on the right), kill ash trees. Pine bark beetles kill pine trees. So, what do we do?

### Solutions:

- ⇒ Scan the QR code to the right to view invasive insects threatening Ohio's forests from the Ohio Department of Natural Resources or visit <a href="https://ohiodnr.gov/static/documents/forestry/PLT/Invasive-Insects-Ohio.pdf">https://ohiodnr.gov/static/documents/forestry/PLT/Invasive-Insects-Ohio.pdf</a>
- ⇒ If you have wooded property and are dealing with (invasive) insects call an ISA Certified Arborist® to help you handle the issue.



- ⇒ Always buy local firewood and do NOT transport any left over.
- ⇒ Report invasive species information to the appropriate authorities.
- ⇒ Educate yourself and others by volunteering to clear local parks and forests of invasive species.

# Convergent Lady Beetle (Hippodamia convergens) © Scott Peden Convergent Lady Beetle (Joleomegilla maculata) © Jon Rapp Convergens Convergens Parenthesis Lady Beetle (Hippodamia parenthesis) Cycloneda munda) © Tom Murray © Peter Cristofono

## Good Guys, who are they?

Cute <u>little ladybug beetles</u> are actually fierce predators which attack scales, aphids, and many other insects. Most appropriately, immature ladybug beetles look like fierce little dragons, minus the fire breathing.

Everybody is talking about the Monarch butterfly. Monarchs, as well as many other butterflies, start as caterpillars. While many of these caterpillars feed on various plants, they seldom feed in quantities to cause harm to their hosts. After all, harming your host would not be polite! Native insects have a *give and take* relationship (symbiotic or mutualistic) with native plants. Preserving the caterpillar stages of the butterfly life cycle gives us the mature butterflies and the perpetuation of the species.





And let's not forget bees. Everyone knows the <a href="https://www.noewbee">honeybee</a> pictured on the right. Much has been written about threats to honeybee colonies. Interestingly, honeybees are non-native insects to North America, hailing from Europe. There are many native North American bees. Bumblebees and mason bees are common, among many others.

So, the next time you see a bug, do not be too quick to kill it. It may be very necessary for you, your garden, and the health of the environment that includes your trees.

The Ohio Chapter International Society of the Arboriculture (ISA) is committed to advancing responsible tree care practices through research, technology, and education while promoting the benefits of trees. We remind those who own and manage trees, that trees need to have Invasive plants removed near them to improve tree health and vitality.

There are over 1,000 qualified tree experts in Ohio that have been designated by the ISA as certified arborists. To find an ISA Certified Arborist® in your area, visit www.Trees4Ohio.org.

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