

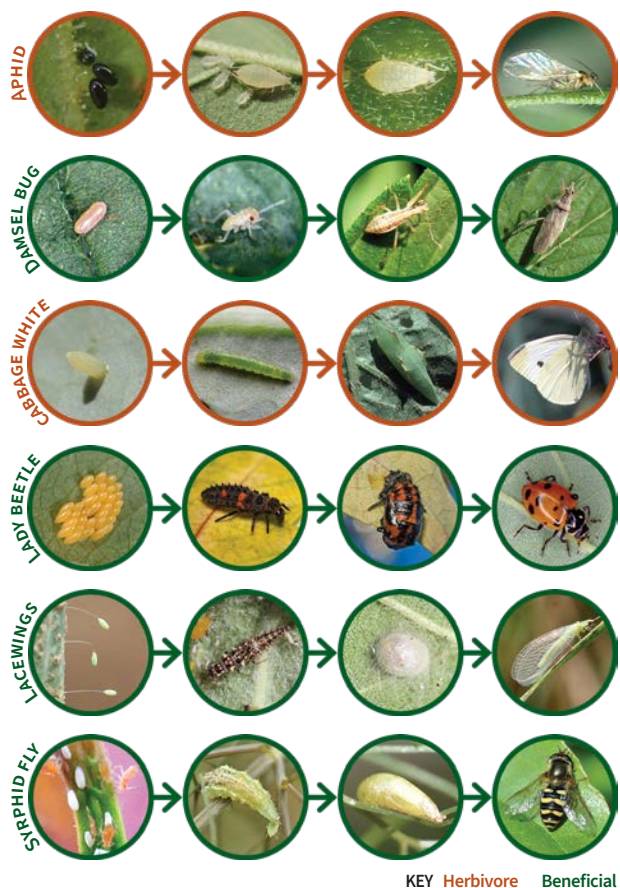
## Pest Management Decision Tree

The best way to help pollinators and other beneficial insects is to create habitat in your yard or community—**and ensuring that habitat remains pesticide-free is key to keeping it healthy.**

What steps should you take to keep your yard healthy and pest free? This simple tool walks through how to plan and monitor your yard to avoid insecticide use and protect the wildlife that thrives there.

### Identifying Insects at Different Life Stages

Insects can look very different throughout their various life stages. Here are some examples of common garden insects at different stages of development.



## Pest Prevention

It's important to keep plants healthy, as stressed plants have a much harder time defending themselves against pests. Simple actions can prevent pests:

- ☞ Select plants that will thrive in your yard conditions.
- ☞ Allow space between plants for airflow and sun.
- ☞ Ensure plants have correct water and nutrients.

Add a variety of native plants with overlapping bloom to support “natural enemies,” wildlife like lady beetles, predatory bugs, solitary wasps, spiders, and lacewings that keep pest populations in check. Natural enemies are very sensitive to pesticides, so refraining from using chemicals will keep these beneficial species healthy and hard at work in your yard!

See something concerning? Identify what is going on so you can make informed decisions.

Take a photo of the pest and damage to the affected plant. Submit it to university extension, a master gardener hotline, look at [Bugguide.net](http://Bugguide.net), [iNaturalist](http://iNaturalist) and the [Seek app](#), or even just Google a description of what you are seeing.

### Non-Chemical Pest Solutions

If you have a pest you feel the need to manage, search for non-chemical options; which are often simple, e.g.:

- ☞ Hand-picking caterpillars;
- ☞ Spraying water to knock aphids off plants; or
- ☞ Removing infested plant material.

Reading about a pest often provides specific ideas of how to get rid of it and prevent it from returning.

Once you have addressed the existing pest, follow with preventative practices to reduce pest problems in the future.

Visit the Xerces Society's [Rethinking Pesticide Use in Yards & Gardens](#) page ([xerces.org/pesticides/pesticides-your-garden](http://xerces.org/pesticides/pesticides-your-garden)) for resources.

Make a tax-deductible donation to the Xerces Society today! Visit [xerces.org/donate](http://xerces.org/donate) to learn more.

# Managing Pests While Protecting Pollinators



### Acknowledgments

Funding provided by the Carroll Petrie Foundation, Horne Family Foundation, and One Hive Foundation. AUTHORS: Aaron Anderson, Aimee Code. REVIEWERS: Jacqueline Buenrostro, Laura Rost, and Emily May. EDITORS: Matthew Shepherd and Sara Morris. DESIGNER: Sara Morris.

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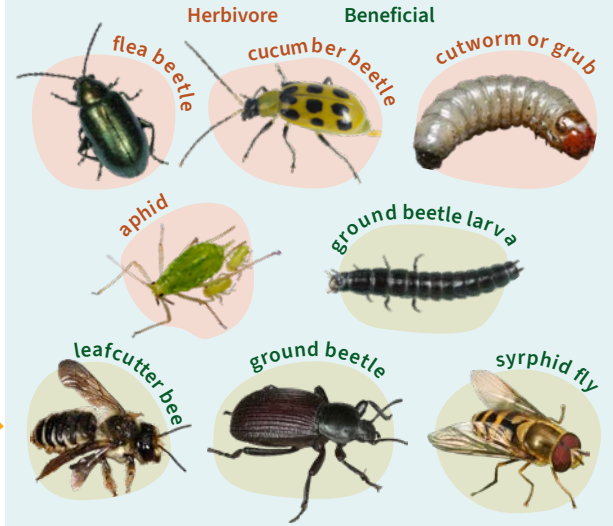
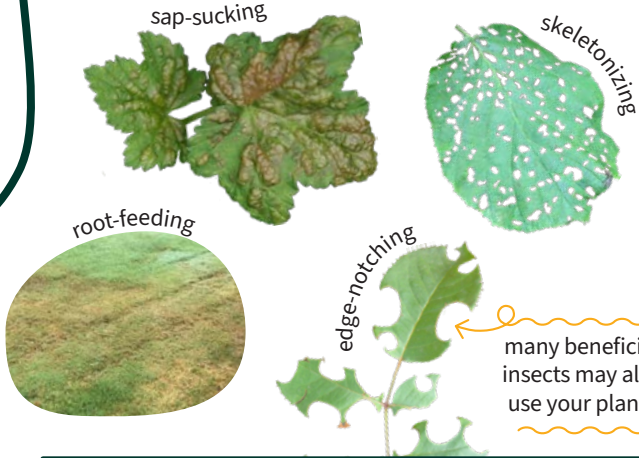
Have you considered going pesticide-free? Weeds and pests can often be managed without insecticides, herbicides, and other pesticides.

When plants are stressed, they can't effectively use their natural defenses against pests. Preventative practices, such as selecting plants that will thrive in your yard conditions, allowing space for airflow and sun, and ensuring plants have the correct amounts of water and nutrients, can help you avoid pest problems.

**START HERE: Observe**  
Keep an eye on your yard to see if the plants are healthy or there are signs of insect activity.

**What is it?**

Identify and learn more about the insect and how it lives. Most insects are not pests, and low levels of pest species are usually not an issue—in fact, they can help support wildlife in your yard!



**Add native plant diversity**

This will support the insects and other animals that feed on pests and help keep their populations in check.

**Prevent future problems**

Keep using preventative practices to avoid future problems.

**Leave it be!**  
Healthy plants can handle plenty of feeding damage. It's great that your garden is providing resource for a wide variety of insects!

Once you have learned more, ask yourself if you are happy with the health of the plant and willing to tolerate this insect in your garden?

**If you do use an insecticide, pick least toxic options like horticultural soaps or oils, and use the smallest amount possible. Target only the part of the plant where the pest is, instead of spraying your whole yard, and never spray flowering plants.**

**Try other methods**  
Take notes on what does and does not work in your landscape. Reach out to [pesticides@xerces.org](mailto:pesticides@xerces.org) if you need help finding resources.

**Did these work?**

**Deter or remove pests**  
Seek out [Non-Chemical Pest Solutions\\*](#) to stop pests from multiplying. There are online resources to manage pests sustainably.



Visit [xerces.org/pesticides](http://xerces.org/pesticides) for resources and recommendations.

PHOTO CREDITS—Jim Baker, North Carolina State University / Bugwood.org: trap crops; Joseph Berger, Bugwood.org: lady beetle life stages, "What is it?" insect examples; Whitney Cranshaw, Colorado State University / Bugwood.org: aphid life stages, cabbage white life stages, damsel bug life stages, hand removal, lacewings life stages, sap-sucking; Gerald Holmes, Strawberry Center, Cal Poly San Luis Obispo / Bugwood.org: edge-notching, selective pruning; Sara Morris: syrphid fly life stages; Oregon Department of Agriculture, flickr: root-feeding; Xerces Society, Aaron Anderson: hose jetting; Xerces Society, Emily May: screening / netting, soapy water; Xerces Society / Cameron Newell: cover; Milan Zubrik, Forest Research Institute, Slovakia / Bugwood.org: skeletonizing. Photographs remain under the copyright of the photographer.