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Lady Beetle

Hippodamia convergens

by J. Loomis and H. Stone



Ladybug, ladybird, and lady beetle are a few of the common names for this insect. Lady beetles are very common. In fact, there are more than 400 species in North America alone. The species most commonly seen in Oregon is the convergent lady beetle.



Photo: Ron Singer, U.S. Fish and Wildlife Service

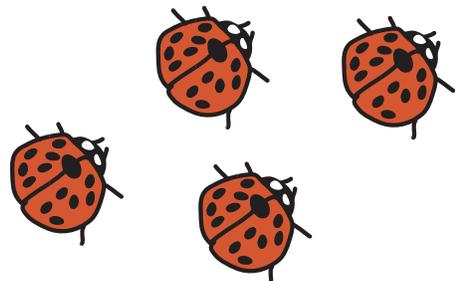
Lady beetles are a friend of gardeners and plants because they eat harmful insects such as aphids.

Lady beetles are one of the best insects to have in backyards, schoolyards, and farms. They are a friend of gardeners and plants because they eat harmful insects. Aphids are the main food for lady beetles. Aphids are small insects that many gardeners consider pests because they harm garden plants by sucking out their juices or sap. In its lifetime, a lady beetle can eat more than 5,000 of these little insects. That's amazing, since an aphid can be as big as a lady beetle!

Lady beetles also eat larvae and eggs of mites, moths, and beetles, as well as plant materials such as pollen and nectar. Nectar is a sweet, sticky liquid made of sugar. As aphids feed on plant sap, they make a nectar called honeydew. Honeydew is eaten by ants as well as by lady beetles.

Lady beetles do not drink water like people do. They get all the water they need from their food. After all, an aphid is a nice, juicy feast!

Jason Loomis and Hanna Stone, students in fisheries and wildlife, Oregon State University.

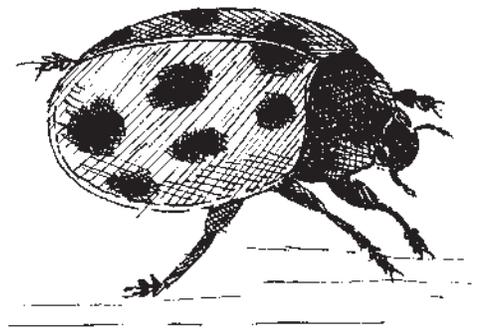


Species description

Lady beetles are about $\frac{1}{4}$ to $\frac{3}{8}$ inch (6 to 8 mm) long. They are oval (shaped like an egg), with six legs and two antennae.

The body usually is red or orange with black spots, and the head is black with white markings. Some species have yellow or even black bodies, and some have no spots.

A lady beetle's shell is actually two wing cases known as elytra. Under the elytra is a pair of delicate wings.



Lady beetles go through a complete life cycle known as metamorphosis from egg to adult. This process usually takes about 3 to 4 weeks. Although most lady beetles live only a few months, some can live for more than a year.

Females lay up to 50 yellow eggs at a

time on a leaf or branch. One female can lay up to 1,000 eggs during her life.



The eggs hatch into dark-colored larvae about $\frac{1}{25}$ to $\frac{3}{8}$ inch (1 to 8 mm) long. The larvae feed on aphids and other insects. This stage lasts about 20 to 30 days, during which the larvae grow and molt (shed their skin) several times.

Next, the larvae enter a pupal stage (similar to a moth cocoon or butterfly chrysalis). This "resting" stage usually lasts 3 to 12 days, and the pupa doesn't eat during this time.

Finally, an adult emerges from the pupa and searches for food and a mate.



Photo: T.W. Davies, California Academy of Sciences

A lady beetle's "shell" is actually two wing cases.



Where they live and why

Lady beetles live throughout North America. Their habitats include gardens, farms, meadows, schoolyards, and woods—anywhere there is food. During the warm summer months, they usually live on flowers, branches, bushes, and farm crops such as vegetables because they can easily find prey in these places.

Lady beetles seek shelter under leaves, branches, and other plant parts. Shelter protects them from bad weather and predators.

When temperatures start to drop in the fall, lady beetles seek shelter for the winter. Otherwise, they would die from the cold. People often find lady beetles



in their houses in the fall. During the fall, lady beetles gather in large groups, sometimes numbering in the hundreds or thousands.

Creating habitat



The right kinds of plants are crucial for attracting lady beetles. Flowers that produce lots of pollen and nectar, such as angelica, yarrow, marigolds, roses, dahlias, daisies, aster, and dill, are good.

The use of insect poison (pesticides) should be restricted because beneficial insects can be killed along with pests. A healthy garden should have lots of beneficial insects that help keep damaging insects under control.

A pile of yard debris can attract lady beetles. The pile should include branches, leaves, large and small pieces of bark, long grass, and any other debris that

accumulates in your yard. Yard debris creates shelter for lady beetles and provides a place for them to gather in the winter.

Lady beetles can be purchased, but when they are released they usually fly away. Purchasing lady beetles is not recommended because it removes them from their native areas and can deplete natural populations. Also, most lady beetles available for purchase are exotic species that compete with native species for food and shelter.

Lady beetle house plans

To provide winter shelter for lady beetles, you can build or purchase a lady beetle house. Plans are available online at <http://butterflywebsite.com/Articles/MQuinn/MQuinn1.htm>



Photo: Scott Bauer, Agricultural Research Service

Lady beetles' habitats include gardens, farms, meadows, schoolyards, and woods—anywhere there is food.

Fun facts

-  Lady beetle wings flap at a rate of 85 beats per second.
-  The convergent lady beetle got its name from the converging white lines on its body.
-  Lady beetles emit a smelly yellow substance when they are handled by predators or people. This smelly substance is actually their blood, and it keeps predators from eating them.
-  Lady beetles often try to spend the winter in houses.

Learn more!

Cornell University. <http://www.nysaes.cornell.edu/ent/biocontrol/predators/hippodamia.html> and <http://www.nysaes.cornell.edu/ent/biocontrol/predators/ladybintro.html>

Lady beetle house plans. <http://butterflywebsite.com/Articles/MQuinn/MQuinn1.htm>

National Wildlife Federation. <http://www.enature.com/fieldguide/showSpeciesGS.asp?searchText=lady+beetles&curPageNum=2&recnum=IS0023>

The Ohio State University. <http://ohioline.osu.edu/hyg-fact/2000/2002.html>

University of Kentucky. <http://www.uky.edu/Agriculture/Entomology/entfacts/fldcrops/ef105.htm>



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