

# All About Ladybugs

## What are ladybugs?

Ladybugs are insects in the Coccinellidae family of the beetle order, Coleoptera. They are characterized by their oval-shaped body and distinctive coloring.

## Is there a difference between lady beetles and ladybugs?

Although these insects are commonly called “ladybugs,” they are members of the beetle order, Coleoptera. The Coleoptera are unique from other orders in that they undergo complete metamorphosis (that is, have larva and pupa stages in their life cycle), and their forewings have modified into a hardened cover (elytra) that protects the insect. “True” bugs belong to the order Hemiptera, and include boxelder bugs, plant bugs, and squash bugs.



### Immature True Bug

Though taxonomically incorrect, lady beetles are still commonly referred to as ladybugs. Other frequently used common names are ladybirds or ladybird beetles.

## How did ladybugs get their name?

The most common legend as to how ladybugs got their name is that during the middle ages in Europe, swarms of aphids were destroying crops. The farmers prayed to the Virgin Mary for help – and help came in the form of ladybugs that devoured the plant-destroying pests and saved the crops! The grateful farmers named these insects “Our Lady’s beetles,” a name which had endured to present day.

## What do ladybugs eat?

Both adult and larval ladybugs are known primarily as predators of aphids but they also prey on many other soft-bodied insects and insect eggs. Many of these are agricultural pest such as scale insects, mealybugs, spider mites and eggs of the Colorado Potato Beetle and European Corn Borer. A few ladybugs feed on plant and pollen mildews and many ladybugs supplement their meat diet with pollen.

## What eats ladybugs?

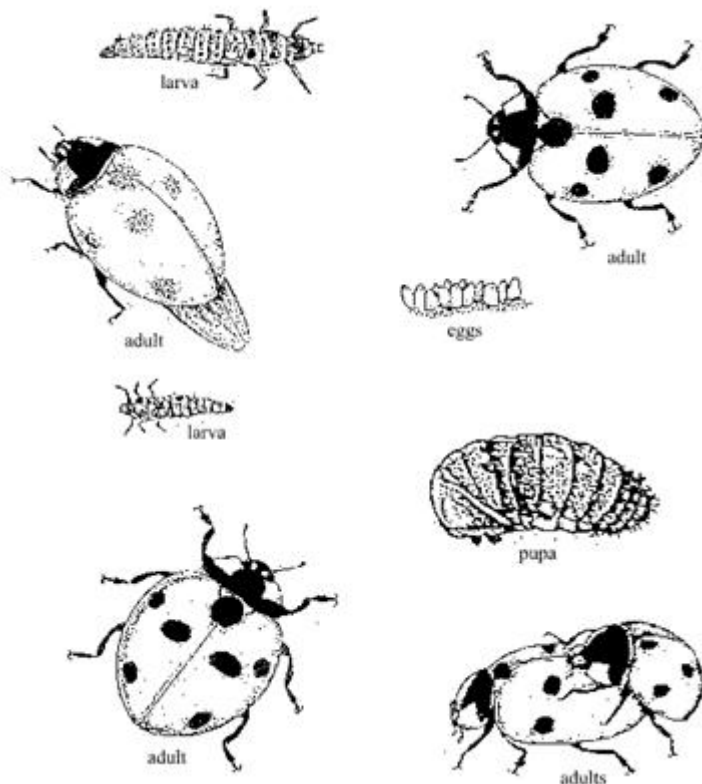
Ladybugs are not commonly eaten by birds or other vertebrates, who avoid them because they exude a distasteful fluid and commonly play dead to avoid being preyed upon. However, several insects, such as assassin bugs and stink bugs, as well as spiders and toads may commonly kill lady beetles.

## How many different species are there in the US? In the world?

There have been over 500 species of ladybugs identified in the United States, and over 4500 in the entire world.

## How long do they live?

After a female lays her eggs, they will hatch in between three and ten days, depending on ambient temperature. The larva will live and grow for about a month before it enters the pupal stage, which lasts about 15 days. After the pupal stage, the adult ladybug will live up to one year.



## What do the different stages of the life cycle look like?

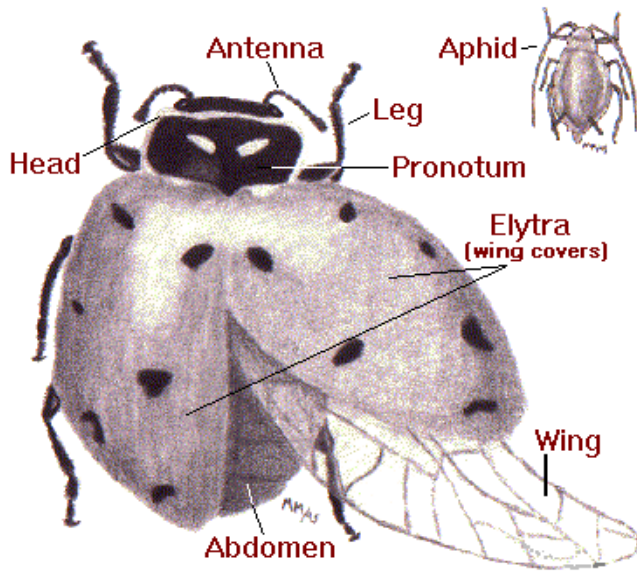
### Life Cycle Stages

**Eggs** are tiny, spindle-shaped, and arranged in clusters.

**Larvae** are usually elongated, “alligator” shaped, slightly pointed at the rear, and their body is covered in tiny bristles.

**Pupae** are slightly round and dark colored. You can find them attached to a surface by their hind ends.

**Adults** are sphere-shaped, smooth, and have easily recognizable colors and markings.



What about ladybug anatomy?

### Ladybug Anatomy

### Ladybug in Flight

Photo by Alex Wild, Champaign, Illinois, 2008



### Why are they so brightly colored?

Ladybugs bright colors serve as a warning – they indicate any potential predators of the distasteful repellents the beetle will release if attacked. Ladybug spots are part of the bright warning pattern discussed in the previous question.

### What's with them in my house during winter?

During the winter months, ladybugs seek out a warm place to hibernate. Many seek out cracks around buildings, including people's homes. They mass together to stay warm throughout the winter. Don't worry, they will not harm you or any part of your home, and they will be gone by spring.

### How did non-native species get here?

Non-native ladybug species may have been introduced to the United States by scientists as an attempt to control crop-damaging aphids, or they could have hitched a ride with any vegetation that was brought over from Europe, Africa, or Asia.