

IN SEARCH OF LADYBUGS

The Lost Ladybug Project

NATIVE LADYBUGS ARE DISAPPEARING. JOIN THE
LOST LADYBUG PROJECT AND HELP FIND THEM!

WHY DOES BIODIVERSITY MATTER?

Even though there are more than 5,000 species of ladybugs worldwide—about 500 native to North America—the disappearance of even a single species can be a great loss. This is because diverse ecosystems are composed of plants and animals and other organisms, each with a unique combination of traits. Each has a position in the food web, a special habitat, and a particular life cycle. Each organism has its own role to play.

KIDS CAN FIND RARE INSECTS, JUST BY LOOKING

WE NEED YOU TO BE OUR EYES AND HANDS.

Two young citizen scientists found an extremely rare nine-spotted ladybug near their home in Virginia in 2006. They were the first people to see a nine-spotted ladybug in the eastern United States in four years. Their finding proved that the nine-spotted ladybug is not extinct.

It's possible there's a rare ladybug in your yard—or in nearby farm fields or woods. This is the ultimate summer science project: You can learn, have fun, and help save important species, all at the same time.

WHY WE NEED THEM ALL

Every ladybug you find, rare or common, native or exotic, is important. Even if you collect 20 of the same species we would like to see them all because that tells us how common that ladybug species is in your area and how rare other species are.

TIPS FOR LOOKING FOR LADYBUGS

- Ladybugs hibernate in late fall and winter. They come out in spring when the weather warms up. The best time to look is between May and October.
- Most ladybugs are predators and can be found wherever there are aphids and small softbodied insects for them to eat. They can be found in gardens, meadows, bushes, and trees. Farmers' fields make excellent collecting sites, especially alfalfa, clover, wheat, and corn. (Get permission and be sure the field has not been sprayed with chemicals recently.)
- Ants like aphids, too: they eat sweet honeydew that is made by aphids and in return they protect the aphids from predators. Look for ladybugs where you find ants.
- Misshapen or wrinkly leaves may have infestations of aphids underneath. Look for hungry ladybugs there.
- Handle ladybugs gently. Let them crawl on your hand. Don't squeeze them. If you put one in a bottle, also put in twigs and grass and a few drops of water. Don't leave the bottle in direct sunlight. Too much heat will kill your ladybug friend.
- To learn more about ladybugs, how to collect them, and how to photograph them, visit the Cornell Entomology Department's Lost Ladybug Project web site: www.lostladybug.org.



TOOLS YOU MIGHT WANT TO USE

Sweep net: Buy one or make one with a coat hanger, stick, and cloth or a pillow case. (See instructions at www.lostladybug.org.) Sweep the leaves of plants and grasses as you walk along. Check for ladybugs in your net or carefully empty the net, inside out, into a container or onto a sheet.

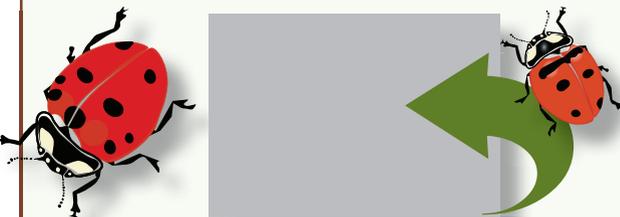
Beating sheet: Place a light-colored cloth under a bush that looks good for ladybugs and then gently tap the bush with a stick to knock the ladybugs onto the sheet.

Hand lens: Use a magnifying glass to see a ladybug close up.

Digital camera: If you have your camera ready and your ladybug stays still long enough, you can photograph it wherever you find it. If not, use a cooler or freezer to chill out your ladybug!

Cooler or freezer: Your ladybug will be too active to get a good image unless you slow it down a little. You can do this in a freezer safely for 5 minutes (over 6 may kill them) and this will quiet them for 2 to 4 minutes. Coolers are not as cold as freezers, so it will take 30 or more minutes to get 1 to 6 minutes of quiet time. Ladybugs will survive for days in a refrigerator.

PLACE YOUR LADYBUG HERE TO TAKE THE BEST PHOTO!



Place your chilled-out ladybug on a gray background (see above) and take the largest shot you can while maintaining focus. Use your camera's close-up mode. Shield the ladybug from bright light and use the flash only if there is very little light.

- 1 **COLLECT**
Go out and collect ladybugs!
- 2 **TAKE NOTES**
Note the date, time, location, and habitat (for example, wetlands, meadow, garden).
- 3 **TAKE THEIR PICTURE**
If you find any ladybugs, take pictures of them all! Please do not kill the insects.
- 4 **SEND THE INFO**
To send the information with the digital images go to www.lostladybug.org. If you do not have a digital camera, send color prints to Lost Ladybug Project, Cornell University, Department of Entomology, 4117 Cornstock Hall, Ithaca, NY 14853.
- 5 **RETURN THEM**
Please release the ladybugs safely where you found them.

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For more information, activities and a field guide, visit lostladybug.org.