Japanese beetles make Colorado home

Researchers ask Citizen Scientists to report where beetles are living this year

By Frank T. Krell
YourHub Contributor

Here they are again.
The Japanese beetle season has begun.
In yards and parks in Denver and the southern metro area, in Boulder, Fort Collins and Pueblo, we can find them in the thousands — pretty beetles about 3/8-inch (8-11 mm) long with brownish/copper-colored wing cases and green metallic fronts. Below the wing case is a row of white dots on each side.

If you've found a small insect with these characteristics, you've found a Japanese beetle — and likely a whole bunch of them, as they rarely come alone.

What do they do and where do they come from?
They are feasting on roses, Virginia creeper and almost any ornamental or fruit plant you can think of.

Japanese beetles (scientifically, Popillia japonica) are native to Japan. In summer 1911, people accidentally brought them over to the eastern United States with a delivery of Japanese iris to New Jersey. And from there they went. Seven years later, Japanese beetles had infested about 40 square miles, and by the 1940s they called 30,000 square miles of the eastern United States their home.

This did not happen unnoticed. Within five years of their arrival, scientists recorded the new beetle, recognized its damaging effects and started searching for efficient control methods. Insecticides, wasps, traps — everything has been tried. However, the beetles are still flourishing in the East and are far from being under control.

In the past, scientists have predicted multiple times that the Japanese beetle could not survive in Colorado. It is too dry, too cold in winter, and the dry-adapted native plants with their hard leaves are not palatable to the beetles. Japanese beetles need lush grass as a breeding ground: Their babies, called larvae or white grubs, feed on grass roots in well-watered soil. Lawns! Lawns do not exist in Colorado naturally, but we establish lawns almost everywhere we live, because we like it green. Together with all the pretty exotic trees and bushes we plant in our yards and parks, we've created an inviting place for Japanese beetles to thrive.

In the early 1990s they arrived in our state. The first Colorado specimen recorded was collected in September 1991 in Denver. It is preserved in the collections of the Gillette Museum at Colorado State University. Now sitting on a pin in an insect drawer, it is a document of the beginning of an invasion that has not reached its full effect.

The beetle did not travel overland on its own. The Great Plains are too dry to support travelling Japanese beetles. People brought it to Denver, again accidentally, with the ornamental plant trade.

“From 1995 we have found Japanese beetles in our traps every year,” says Laura Pottorff of the Colorado Department of Agriculture. In the last few years, they have spread across southern metro Denver in the hundreds of thousands.

Where are they found?
To find out their current distribution, the Denver Museum of Nature & Science ran a Citizen Science project last year, asking Coloradans...
The current known spread of Japanese beetles across greater metro Denver and Boulder. The distribution map of the Japanese beetle across the metro area is regularly updated at dmns.org/beetles.

Provided by Frank T. Krell

BEETLES

As an amazing result, 215 Citizen Scientists brought in 2,235 specimens, from Boulder to Pueblo, and we now can map which parts of Colorado are affected, and which are still safe but should be on the watch. The beetles could arrive in any area at any time.

Adams County so far has been largely spared. A few decades-old records from nurseries, some of them now defunct, and a handful of beetles found at Anschutz Medical Campus in Aurora and at Fairfax Park in Commerce City do not indicate a large problem at this point, but it can change at the blink of an eye, or at the beat of a beetle’s wing.

What can we do?

Can we do anything to discourage the beetles eating up our yards? Metro-wide xeriscaping and removal of lawns would be an effective option but it’s unlikely to happen. Insecticides kill beetles and will eliminate them from an area — for a short time — but they kill all other insects, too, including lady bugs, bees and other pollinators.

Trials with parasitic wasps started this year in several Colorado communities, but it’s much too early to say if this method is effective.

Japanese beetle traps are only effective if everybody in the neighborhood has them. Otherwise all the beetles from the neighborhood are likely to congregate in the one yard that doesn’t have traps.

An effective response by homeowners is to manually collect as many beetles as you can and drown them in a bucket of water with soap or dish soap. Those specific beetles will not be able to reproduce.

But to be realistic, as long as we have watered lawns, we likely will have to live with Japanese beetles.

The distribution map of the Japanese beetle in the Denver metro area is regularly updated at: http://dmns.org/beetles.

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