



GARDEN NOTES

THEY'RE HOPPIN' OUR WAY - GRASSHOPPERS

By Dennis Hinkamp

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It looks like it is going to be a good year for insects, which means it is a bad year for Homo sapiens and their gardens.

Some of the most destructive insects are grasshoppers and their relatives, says Jerry Goodspeed, Utah State University Extension horticulturist. This detrimental gang includes many types of grasshoppers, crickets and katydid. The Mormon cricket is already invading parts of Tooele County. Your neighborhood may be next.

Grasshoppers overwinter in the soil in egg pods, Goodspeed explains. These pods are normally deposited into the soil to protect them from the cold winter temperatures. They emerge in the spring, based on the temperature and other factors, though they usually make their first appearance from the middle to the end of May.

"Nymphs or young grasshoppers pass through four to five growing stages (instars) before developing into an adult," Goodspeed says. "Each of these instars resembles the adult but is smaller and has no wings. By the end of the summer the adults have wings and have the appetite and personality of a large human teenager."

The females lay their eggs in undisturbed, sparsely vegetated areas in late August, he says. Each lays about 25 egg pods with each pod containing up to 100 eggs.

"Normally, while they are young, they stay to eat in the vacant lots and fields where they hatched, but once plants and food becomes scarce, they move to greener pastures or landscapes. This is when they become a concern to homeowners," Goodspeed says. "The best control is achieved when they are small and most vulnerable. Control them in vacant lots or fields when they are tiny and defenseless."

However, he says insecticides that homeowners can use include carbaryl (Sevin), malathion, diazinon, chlorpyrifos (Dursban) or acephate (Orthene). Most of these are not labeled for food crops, so be sure to read and follow the directions on the labels carefully.

"Other methods to reduce and eliminate grasshoppers involve cleaning up vacant lots and fields," Goodspeed says. "These areas can also be rototilled in the fall after the eggs have been

laid. This brings the egg pods to the surface, making them more susceptible to the killing winter temperatures.”

Biological control can also be used, he explains. “*Nosema locustae*” are spores of a microsporidian protozoa that naturally infects grasshoppers. It is sold in some nurseries and garden centers. The grasshopper consumes the product, the spores germinate in the grasshopper and they become sick and die. When applied properly, up to 70 percent of the grasshoppers are infected.

Whether using biological controls or insecticides, all products work best when applied while the grasshoppers are young, he emphasizes. Treat their early feeding areas usually vacant lots or fields.

“Older grasshoppers are less affected. By the time a grasshopper gets big enough to carry away small picnic items, there is probably little you can do other than swat them,” Goodspeed says.

For more information, contact your local [USU County Extension office](#).

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