

## Home and Garden Guide to Mormon Crickets and Grasshoppers



### What will they eat?

Mormon cricket and grasshopper eggs generally hatch in undisturbed sites such as pastures, empty lots and roadsides. As the plants in these areas dry out or are eaten, they move to more lush growth found in yards and gardens. They will eat anything they can get their mandibles (chewing parts) into. They generally eat vegetation such as grasses, flowers and vegetables, but have been known to eat tree bark and even the wood on house siding.

### I've heard of grasshoppers but what's a Mormon cricket?

The Mormon cricket is not a true cricket. The insect resembles more a lifestyle of a grasshopper. Mormon crickets hatch during the spring, and depending on elevation usually around the first few weeks of April. However, in the southern part of the state, they typically hatch the first part of March. Young Mormon crickets are called nymphs.

These nymphs develop during the spring months. They undergo seven stages of development called in-stars. It takes 60 to 90 days for the Mormon cricket to pass through these seven stages and obtain the adult stage. The female Mormon cricket lays its eggs during the summer months. The incubation of the eggs occurs during the fall and winter months. The eggs start hatching when soil temperatures reach 40 degrees Fahrenheit. The Mormon cricket cannot fly, but is still an extremely mobile insect. When the crickets are young, they do not migrate long distances. After about the fourth in-star and during the adult stage the Mormon crickets become ravenous and start banding together. Once the crickets have banded together, they begin migrating. During their migrations they destroy any vegetation in their path.

### How do I keep them out of my yard?

Mormon cricket and grasshopper eggs generally hatch in undisturbed sites such as pastures, empty lots and roadsides. As the plants in these areas dry out or are eaten, they migrate out of vacant fields and low hills into the green lawns and gardens. Currently, homes are being built on lands that have for centuries produced grasshoppers and Mormon crickets. Therefore, we are seeing more and more crickets and grasshoppers hatch in lawns and gardens from eggs laid the previous year. This results in thousands of dollars in damage to newly planted landscapes. It is very important that communities work together to control grasshopper outbreaks. If one person is spraying, and neighbors are not, then the grasshoppers will just continue migrating from adjacent property.

If there is an outbreak of grasshoppers on your landscape during the summer, start spraying early. Once you see that grasshoppers have invaded, even the little ones, start spraying with diazinon for use on turf and ornamentals, malathion for use on turf, ornamentals and vegetables, or liquid carbaryl (Sevin) for use on turf, vegetables, and ornamentals. See precautionary statement on page two (Note: Dursban is effective but no longer available for home owners. If you still have containers of it around the home it is safe to use them according to label directions.) Baits that use insecticide such as Sevin have not been an effective barrier against grasshoppers in Utah. Grasshoppers fly and jump great distances and more than likely will miss the barrier of bait completely. This bait, however, is very effective for Mormon crickets.

### Can these insecticides be a danger to dogs, cats and other pets?

If you follow the label directions your pets should not be at risk. It should be noted that birds and fish are more sensitive to most insecticides than are other animals. If you have an outdoor fish pond, bird feeder or raise free-roaming chickens, turkeys or other domesticated birds, you should use extra caution when using any type of chemical and you should always read and follow the label directions for the product you choose to use for control.

### What kind of protective clothing, eyewear, etc., do I need?

The minimum requirements are shoes, socks, long pants and a long sleeve shirt with a collar. You might also consider a hat, gloves and eyewear. Through this is the minimum you would be wise to also use coveralls and rubber boots that you can take off and leave outside when you are finished. Change your clothes after applying any pesticide and wash them separate from other clothing. Also, be sure to properly wash your hands and face before eating or drinking to prevent accidental contact with your skin. Otherwise you may inadvertently bring pesticides into your home where they could come in contact with small children and/or pets.



## Is there anything I can do this year to reduce the chance of them coming back next year?

Vacant lots and fields need to be tilled in late fall to expose the eggs. Eggs are destroyed when they are exposed to the cold environment. Lawns need to be raked to also expose the eggs. Flower gardens may have a population of eggs, so the soil should be turned over to expose the eggs.

### Precautionary Statement

All pesticides have both benefits and risks. Benefits can be maximized and risks minimized by reading and following the labeling. Pay close attention to the directions for use and the precautionary statements. The information on pesticide labels contains both instructions and limitations. Pesticide labels are legal documents and it is a violation of both federal and state laws to use a pesticide inconsistent with its labeling. The pesticide applicator is legally responsible for proper use. Always read and follow the label.

### Utah State Extension Contacts Near You

Lyle Holmgren, USU County Agent, Box Elder County

TEL: (435) 257-5447  
FAX: (435) 257-4523  
400 North 1000 West  
Tremonton, UT 84337

Matt Palmer, USU Extension Agent, Tooele County

TEL: (435) 843-2352  
FAX: (435) 843-2355  
151 North Main  
Tooele, UT 84074-2141

Jeff Banks, USU Extension Agent, Juab County

TEL: 435-623-3454  
FAX: 435-623-2973  
160 North Main  
Nephi, Utah 84648

Michael Pace, USU Extension Agent, Millard County

TEL: 435-743-5412  
FAX: 435-864-4221  
Delta Office - 83 South Manzanita Ave:  
Delta, Ut 84624

Mark Nelson, USU Extension Agent, Beaver County

TEL: 435-438-6451  
FAX: 435-438-6481  
Courthouse, PO Box 466  
Beaver, UT 84713

David Drake, USU Extension Agent, Sevier County

TEL: 435-893-0475  
FAX: 435-893-0493  
250 N Main  
Richfield, UT 84701

Chad Reid, USU Extension Agent, Iron County

TEL: 435-586-8132  
FAX: 435-586-3314  
PO Box 69  
585 N Main #5  
Cedar City, UT 84720

Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran's status. USU's policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decisions. Utah State University employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran's status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person otherwise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities. This publication is issued in furtherance of Cooperative Extension work. Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Jack M. Payne, Vice President and Director, Cooperative Extension Service, Utah State University.