

Eastern Lubber Grasshoppers

Romalea microptera

Romalea guttata

The Eastern Lubber Grasshopper can wreak much havoc to our gardens and landscaping! Learn how to recognize it so you can act swiftly to minimize its damage.

The Eastern Lubber Grasshopper is one of 70 species of grasshoppers found in Florida. It is the largest grasshopper in North America. Because of its large size, it is frequently used for dissection in biology classrooms. The common name of this grasshopper, LUBBER, comes from the old English word “lobre” which means lazy or clumsy. The Lubber Grasshopper has small wings that do not support flight and is not very adept at hopping; it mostly travels by walking or crawling feebly. Thus, it fits its name! However, Lubbers are adept at climbing and like to feast on young foliage at the tips of branches.

Adult Lubber Grasshoppers range from a little over 2 inches to 3.5 inches in length. Females are larger than males and have a tapered abdomen that ends in a point versus a



Eastern Lubber Grasshopper

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male’s rounded upturned abdomen. Adult lubbers are very colorful, but the colors and patterns vary greatly. Most are largely shades of yellow with black spots and black tipped antenna. They have a pink or rose-tinted center to their forewings and tiny rose hindwings which are rarely seen.



Dark Form of the Eastern Lubber Grasshopper

Photo by Emmett Tullios from Jackson, Alabama, United States - Eastern Lubber grasshopper, CC BY 2.0, <https://commons.wikimedia.org/w/index.php?curid=64158456>

Nymphs, young Lubber Grasshoppers, are almost completely black with a yellow, orange, or red stripe down their back. Nymphs go through five stages of development, called instars, before they become adults. Each instar lasts about two weeks and ends with the nymph molting its exoskeleton. Nymphs, especially young nymphs, are gregarious, meaning they live in loosely organized communities and forage together. At



Nymph

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through Alabama, Mississippi, and Louisiana, to central Texas. Their habitat varies from swamps to

There's also a dark form of Lubber Grasshopper in which the yellow is the minor color and, in northern Florida, there's also a predominantly black form. In spite of how different these lubbers look, they are all one and the same species and mate successfully with each other.



Northern Florida Black Form

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night they tend to gather and climb vegetation to rest together near the tops of the vegetation. Lubbers are easiest to control while they are nymphs. In south Florida the nymphs begin to hatch and emerge in February.

The Lubber Grasshoppers' range extends from North Carolina south through South Carolina, Georgia, and Florida and west

open woodlands to weedy fields and ditches. Nymphs are more often found in wetter areas such as swamps and marshes with semiaquatic vegetation such as cattails and arrowhead while adults prefer a mixed hardwood pine habitat and open fields with intermediate moisture levels. For laying their eggs, Lubbers prefer dry habitat, often in a high sunny area.

Females mate about a month after becoming adults and lay their eggs at intervals during the summer. The female digs a hole 1"- 2" deep with the tip of her abdomen. She lays three to five parallel rows of eggs, held together by secretions, and closed with a rigid frothy plug of secretions. This group of eggs is called a pod. Depending on conditions such as soil, temperature, available food, it can contain 25 to 80 eggs. A female lubber often lays 3 or more pods during the summer. Egg pods tend to be clustered in the same area because females prefer to lay their eggs in an area where pods already exist.

Although individual Lubbers, in spite of their size, do not cause a lot of damage, the large number of lubbers in a small area, foraging together can exfoliate or seriously damage crops. Lubbers have a diverse diet consisting of more than 100 species from 38 plant families. They have favorite vegetables - peas, lettuce, kale, beans, and cabbage - and favorite fruit trees - citrus, figs, and peaches. They are not partial to tomato, pepper, celery, eggplant, okra, fennel, or sweet corn plants. They love sunflowers and regularly defoliate amaryllis, butterfly weed, canna, cranium, lantana, narcissus, oleander, and Mexican petunia.

Lubber Grasshoppers are difficult to control. They have few natural predators. Their bright coloration warns vertebrates such as birds, lizards, and small mammals that they are toxic. When alarmed, Lubbers spread their wings, hiss, secrete a foul-smelling froth, and expel a fine spray of toxic chemicals for more than five inches. Because of their varied diet, this toxic spray varies from grasshopper to grasshopper, making it difficult for predators to develop resistance. Lubbers can also vomit a brown tobacco colored liquid that will stain your clothes and skin. Only the Loggerhead Shrike

has been known to eat them. They impale the Lubbers on thorns or barbed wire and leave them there for a few days until the toxins degrade and the shrike can safely eat them.

Parasitic flies and nematodes can infest Lubber Grasshoppers and kill them when the parasite emerges.

There are few strategies for gardeners to control Lubber Grasshoppers. Some suggest spraying a strong-smelling substance such as garlic spray or hot pepper spray on your plants. Others suggest using strong scents like rosemary, peppermint oil, or clove oil to mask the scent of the plants you are trying to save. Other ideas include choosing fewer desirable plants for the edges of your garden or sprinkling Nolo Bait (an organic biological insecticide camouflaged in wheat bran) a distance from your garden to attract the nymphs to it and away from your garden. The insecticide in Nola Bait will kill Lubbers, just not immediately. All sources recommend attempting to control the Lubber in its nymph stage.

There are other insecticides that are modestly effective if sprayed directly on the nymph. These include products with carbaryl, bifenthrin, cyhalothrin, or permethrin in their ingredients. The most common suggestion I saw was to catch the nymphs and drown them in a bucket of soapy water. However, one site suggested cutting them in half with gardening shears and the American Orchid Society recommended “squashing” them because most chemicals that can kill Lubbers are not approved for use on orchids!

Submitted by Mary Jo Davis