
Profile

Southeastern Lubber Grasshopper

Romlea microptera

The Southeastern Lubber Grasshopper is a member of the short-horned grasshopper family *Acrididae* and is the most distinctive grasshopper in the southeastern United States, known both for its size and its unique coloration.

Adult Lubbers exist nearly throughout the year in Florida although numbers dwindle during fall and winter. They have one generation per year, with eggs beginning to hatch in South Florida during February.

Mating behavior is ritualized. The male mounts the female, similar to most grasshoppers. Once aboard, the pair rock back and forth, while the male flips his wing covers, each time briefly exposing the red hind wings and producing a clicking sound. After mating, the male will often continue to ride the female to insure that no other male can mate with her.

Females begin laying eggs during the summer months. After mating, females use the tip of the abdomen to dig a small hole into a suitable patch of soil. Usually at a depth of about two inches, she will deposit up to 50 eggs contained within a light foamy froth. Each female will lay from one to three egg masses. The eggs immediately enter diapause, or delayed development, in response to fall/winter conditions.

Immature Lubbers are black with one or more yellow, orange or red stripes, which differs dramatically in appearance from the bright yellow, red, and orange adults.

Lubbers, like all grasshoppers, grow through successive stages after molting. There are a total of five of these stages (instars) before the final molting into the adult stage. The length of these instars vary slightly but average about 15 days each. The highest number of adults can be observed during the months of July and August.



The young grasshoppers crawl up out of the soil upon hatching in February and often congregate near suitable food sources.

The nymphs stay in congregations with their nest siblings during their early weeks. They sleep in these groups clustered on the tops of low-growing vegetation.

Populations cycle up and down, possibly due to the action of parasites. The tachinid fly *Anisia serotina* attains high levels of parasitism, often, resulting in the “headless” lubber carcasses sometimes seen on the boardwalk.

Lubbers’ preferred foods are members of the lily family such as the Swamp Lily and members of Smilax family, which contain allelochemicals that make Lubbers distasteful.

The plants’ purpose for producing allelochemicals is to ward off herbivorous insects. That defensive mechanism does not work on lubbers.

Southeastern Lubber Grasshoppers possess a variety of abilities to defend themselves. The adult’s bright yellow,



orange, and red coloration with black spots is aposematic (warning), alerting potential predators that the lubber contains toxic substances.

There are records attributing the death of individual birds to the consumption of adult Lubbers. Also small mammals such as opossums have been known to vomit violently after ingesting a lubber and remain ill for hours.

However, shrikes catch and impale them, waiting a few days before eating to give time for the toxins to lose their potency. Even then, the shrikes only eat the head and abdomen, rejecting the thorax where the poison glands are located.

If the red, yellow, and black coloration fails to keep a predator at bay, the lubber may secrete a foamy spray from the thoracic region (the portion of the body where the legs and wings are attached.) This spray consists of a number of compounds, some of which are irritants.

Lubbers, like most all grasshoppers, can also regurgitate recently consumed plant material. This regurgitant is mostly liquid, has a dark brown color, and is commonly referred to as “tobacco spit.” The spit is partially digested food material along with some semi-toxic compounds from the insect’s crop region. The spit helps prevent predation and is effective against birds, spiders, and small mammals. In humans, it stains skin and clothes but causes no damage topically.

The wings offer little help with mobility for they are rarely more than half the length of the abdomen, making the Lubber incapable of flight. It can jump only short distances. Mostly it is quite clumsy and slow in movement, travelling by walking.