



Jerusalem Crickets

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Coming home from lunch one day, I was greeted by my next door neighbor. She was obviously distraught and said excitedly, "Help! I am scared to death of spiders and there is the biggest ugliest spider in my bedroom!" I went into my kitchen and emerged with a large empty mayonnaise jar in one hand and a flyswatter in the other. I fully intended to capture the spider, but took the flyswatter at the ready in case a quick dispatch was in order. My neighbor followed me into her house, quaking and wide eyed. She pointed towards the bedroom and in a quavery voice said, "It is in there, on the floor on the far side of the bed!" and refused to enter the bedroom where the offending creature was said to be. Tentatively, I went into the bedroom ready to capture whatever large spider was causing the distress. Halfway expecting to see a large wolf spider that might possibly dash for cover once it sensed my presence, to my surprise and pleasure I discovered that it was not a spider but a Jerusalem cricket! I set the jar down, put the flyswatter in my back pocket and carefully and gently picked up the Jerusalem cricket, which immediately "played dead" when placed in the palm of my hand. My neighbor was relieved that the Jerusalem cricket was not a spider, and she was just as relieved when I took it away.

Jerusalem crickets are some of the most unusual insects found in North America, strictly western in distribution, a few may be encountered just east of the Rocky Mountains. Members of the order Orthoptera, they are related to grasshoppers and crickets. Jerusalem crickets feed on underground tubers, prey on other insects, eat dead animal matter and are not considered to be agricultural pests. They are slow moving, mostly solitary and nocturnal in habit. Active at night, they stay in underground burrows during the day. Generally, they are encountered by finding them crawling in paths or roads at night or in the early morning, or by upturning a rock, stone, or log during the day. They may get into a house by accident, looking for a new place to dig a burrow. My neighbor had recently had an evening get together that lasted long into the night. The nights were pleasant and no mosquitos were out, so the front door had been left open as people moved in and out of the house. It is likely that the hapless Jerusalem cricket made its way into my neighbor's house, simply looking for food and a good place to bed down. Wandering slowly and innocently through the house, it may have by coincidence found its way into the bedroom.

Jerusalem crickets are not rare. There are estimated to be more than twenty species of Jerusalem crickets, but because of their solitary nature and the fact that they are active at night, most people do not regularly encounter them. Their unusual appearance is likely to startle someone who has never seen one before. They have a large almost humanoid head and thorax and

a fleshy bulbous black or charcoal gray and creamy white striped abdomen. They have stout, legs which sport some dull spines that assist them to dig and burrow into the ground and also have been observed to be used when making noise. Jerusalem crickets do not make a chirping sound like other crickets do. However, when disturbed they may rub their hind legs along the side of their abdomen producing a hissing noise or described as the sound of "rubbing together pieces of sandpaper" (Insects of Western North America, 1953, E.O. Essig, The McMillan company, New York, New York). Each Jerusalem cricket species has a unique mating call which is produced by drumming the ground with their abdomen. Distinguishing between the different species is done by detecting differences in their mating calls. The unusual appearance of a large, almost human-like head with tiny eyes has caused them to be an object of fear and superstition. In some areas they are known as "niña de la tierra" or "child of the earth".

Jerusalem Crickets are one of the largest crickets in North America. A fully grown adult Jerusalem Cricket may be 1 ½ to 2 inches in length. Beneath the head are very strong jaws that the Jerusalem Cricket utilizes for chewing. Even though they are related to grasshoppers, crickets and katydids, the Jerusalem cricket is not a fast runner, nor is it a jumping insect. It never develops wings, so it cannot fly. It differs from grasshoppers, crickets and others by being a solitary insect with a lower rate of reproduction. This means that you won't see hordes of them like you might see with crickets or grasshoppers. Rather docile in its habits, if captured by hand, the Jerusalem cricket is likely to "play dead", until it feels safe to crawl away. If it is handled carelessly it will readily bite, giving a painful pinch.

Jerusalem crickets are not garden pests nor do they attack humans. They are simply doing what they do best... helping the environment by eating dead animal matter, preying on other insects and eating some tuberous plant matter. If you encounter one this summer ... either at night crawling around on the ground, or during the day, under a rock or piece of wood, don't panic. Just let it go about its business. And know that you have encountered a seldom noticed child of the Earth, or Jerusalem cricket.

Assistance may be obtained from your local Arizona County Cooperative Extension System Office regarding identification of insect specimens found in your home, garden or yard. Further information can be found in various reference books such as insect field guides like *A Field Guide to Insects: America north of Mexico*, 1990, by Donald J. Borror and Richard E. White. Houghton Mifflin Company, New York, New York, (Peterson Field Guide Series), as well as *Bagging Big Bugs: How to Identify, Collect and Display the Largest and Most Colorful Insects of the Rocky Mountain Region*, 1995, by Whitney Cranshaw and Boris Kondratieff, Department of Entomology, Colorado State University. Fulcrum Publishing, Golden, Colorado. These publications can be found in local bookstores or purchased on line. An online reference can be found at Colorado Insects of Interest: Jerusalem Crickets, <wiki.bugwood.org>.