



Brown Recluse Spider

Araneae: Sicariidae, *Loxosceles reclusa* Gertsch & Mulaik

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Description Brown recluse spiders belong to a group of spiders commonly known as violin spiders or fiddlebacks. Their name refers to a characteristic fiddle-shaped pattern on their head region directly behind their eyes (never on the abdomen). Brown recluse spiders range in color from tan to dark brown, but often they are a golden brown. The coloration is generally uniform (head and abdomen are about the same color) with no stripes or bands on the legs. The fiddle marking is usually dark brown or black, with the neck of the fiddle pointing towards the abdomen. Hairs on the body are fine, not coarse, and the fiddle pattern is often shiny. The body measures 8–10 mm long (about 0.4 inch).



Brown recluse spider, *Loxosceles reclusa*.
(Lisa Ames, University of Georgia,
Bugwood.org)



Closeup of fiddle marking on brown recluse
spider, *Loxosceles reclusa*. (Lisa Ames,
University of Georgia, Bugwood.org)

Brown recluse spiders have six eyes arranged in three groups of two eyes each. There is a space between each pair of eyes. This eye arrangement is an excellent way to identify a brown recluse spider as most spiders have eight eyes arranged in two rows, but it does require a microscope for proper magnification. Should you have a spider you suspect is a brown recluse, submit the spider in alcohol to your extension agent for identification.

Important Note: Wolf, nursery web, and funnel weaver spiders are often mistaken for brown recluse spiders because people misinterpret the stripes on the head region and the abdomen of these spiders as a

“violin” pattern. Wolf, nursery web, and funnel weaver are typically large, robust, and hairy with stripes or bands on their legs. These characteristics will help distinguish them from brown recluse spiders, which never have stripes or bands on their legs, or spots or multiple stripes on the abdomen.

Damage Despite alarming stories in the media, brown recluse spiders seldom bite and the severity of a bite can vary from person to person (Vetter 2013). Symptoms may range from no harm at all to a very severe reaction. Often the initial bite is painless but followed by a systemic reaction 24–36 hours later with restlessness, fever, chills, nausea, weakness, and joint pain. Tissue death may occur at the bite wound and the skin may slough off. In some severe cases, a wound may develop that lasts several months. More severe symptoms are seen in the very young, the very old, or in the immunocompromised. However, many people live in areas where there are native populations of brown recluse spiders, often in very high densities, and they are rarely bitten or have very mild reactions after being bitten.

In all cases of a suspected bite from a brown recluse spider, apply ice to the bite, elevate the wound, and notify a physician immediately. Whenever possible, kill and take the spider to the physician for positive identification. An expert may be able to tell if it is a spider of medical concern or not even if it’s smashed. **It is very difficult even for medical doctors to diagnose a brown recluse spider bite based on the appearance of just a wound.** Many of the medical cases reported to be the result of a brown recluse spider bite are actually some other type of wound or infection and **not** the result of a spider bite. Stories about brown recluse bites being life threatening are often heard in the media, but in reality brown recluse spiders rarely bite and their bites often heal without extensive skin damage or scarring.

Habitat Brown recluse spiders are found primarily in the Midwest and south-central states. Its natural range reaches to the very tip of southwestern Virginia, but isolated populations have been confirmed in several locations across Virginia. These small, isolated introductions are likely the result of household goods or firewood transported from the brown recluse’s natural range into areas where it was not previously known to occur. The spider commonly lives in basements and garages of houses and often hides behind boards and boxes. It does not make webs out in the open. Populations of brown recluse spiders can be very high in infested buildings.

Control Some simple precautions can prevent spider bites, especially in areas known to have populations of potentially harmful spiders. Limit the entry of spiders into the house by installing screens and weather stripping around doors and windows with tight fits. Seal all cracks and crevices in the foundation, attic, around pipes, etc. as well. Clear clutter and junk from in and around the home to eliminate hiding places for spiders and their invertebrate prey. Don’t stack firewood beside the house for the same reasons. Clean closets, attics, basements, and other storage areas regularly to discourage spiders from taking up residence in them. Vacuum regularly behind and underneath furniture and large appliances. Consider removing bed skirts, furniture slipcovers that reach the floor, or long draperies that may conceal spiders.

Wear long sleeves and gloves when moving firewood or other items that may harbor spiders, such as cardboard boxes, stored papers, or anything left undisturbed for a length of time. Long sleeves and gloves are also a good idea when doing yard work. Shake out clothing, towels, or bedding before use. Also shake out your shoes or gloves before putting them on. Spiders cannot bite through fabric, but they may bite if trapped or pressed directly against the skin.

Sticky traps are effective in monitoring spider populations and may help reduce their numbers inside buildings. Individual spiders can be killed with a fly swatter or with an aerosol insecticide spray. Insecticides with residual activity can be applied for spider control, but sealing any entry points into the home and removing potential hiding places is a more effective strategy for controlling spiders.

Life Cycle Females deposit their eggs in off-white silken sacs about 8 mm (0.33 inch) in diameter in secluded, dark places. Spiderlings emerge in 24–36 days and leave the egg sac. Development is slow, influenced by weather conditions and food availability. They reach maturity in 10 to 12 months and can survive long periods of time without food or water.

References

Vetter, R. S. 2013. Myth of the Brown Recluse: Fact, Fear and Loathing [Online]. Available at: <http://spiders.ucr.edu/myth.html> (verified 26 Jan 2015).