



## Brown Recluse Spider

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### Description

Brown recluse spiders, *Loxosceles reclusa*, belong to a group of spiders commonly known as violin spiders or fiddlebacks (Araneae: Sicariidae). Their name refers to a characteristic fiddle-shaped pattern on their head region directly behind their eyes. Brown recluses range in color from tan to dark brown, but are often a golden brown. The coloration is generally uniform with no stripes or bands on the legs (Fig. 1). The fiddle marking is usually dark brown or black, with the neck of the fiddle pointing towards the abdomen (Fig. 2). 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).



Figure 1. Brown recluse spider (Lisa Ames, University of Georgia, Bugwood.org).

Brown recluse spiders have six eyes arranged in three groups of two eyes each with a gap between each pair of eyes (Fig. 2). 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.



Figure 2. Brown recluse spider eye arrangement (Lisa Ames, University of Georgia, Bugwood.org).

### 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 as a “violin” pattern on these spiders. Wolf, nursery web, and funnel weaver are typically large, robust, and hairy with striping or banding on their legs. These characteristics will help distinguish them from brown recluse spiders, which never have stripes or bands on their legs, or markings 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 undated). Symptoms may range from no harm at all to a very severe reaction. Often the bite is initially 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

young, the 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 only 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 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.

## Distribution

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 around the home to eliminate hiding places for spiders and their invertebrate prey. Don't stack firewood beside the house. Clean closets, attics, basements, and other storage areas regularly

to discourage spiders from living there. Vacuum regularly behind and underneath furniture and large appliances. Consider removing bed skirts, furniture slipcovers, and long drapes that may conceal spiders. Wear long sleeves and gloves when moving firewood, cardboard boxes, stored papers, or anything left undisturbed for a length of time. Wear long sleeves and gloves when doing yard work. Shake out clothing, shoes, towels, bedding before use. 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. Use a fly swatter or an aerosol insecticide to kill individual spiders. 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 (0.3 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. (undated) Myth of the Brown Recluse: Fact, Fear and Loathing [Online]. Available at: <https://spiders.ucr.edu/myth-brown-recluse-fact-fear-and-loathing> (verified 23 Jan 2021).

## Revised

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