People are often afraid of spiders because of their ill-deserved reputation for envenomizing victims. In fact, most spiders do not have mouthparts strong enough to penetrate skin. Spiders are considered beneficial arthropods because they often prey on insects that we consider nuisances. Homeowners should leave spiders alone if the spiders are in their natural habitat such as the yard or garden. However, the brown recluse, *Loxosceles reclusa*, is an exception.

**Description**

The brown recluse spider belongs to a group of spiders commonly known as the “fiddleback” spiders because of the violin-shaped marking they have on their cephalothorax (fused head and thorax) (Figure 1). The shape and intensity of the fiddle design may vary. A more constant characteristic for identification is the number and pattern of the eyes. Most spiders have four pairs of eyes. The brown recluse has only three pairs of eyes, arranged in a semicircle on the front of the cephalothorax (Figure 1).

These spiders are pale tan to brown in color. Female bodies range in size from 10 to 15 mm (about ¼ to ½ inch) and have a leg span of over 25 mm (1 inch). Males are generally half the size of females.

**Distribution, Habitat, and Habits**

The brown recluse spider has been collected throughout Alabama but is more commonly found in the northern half of the state. It is commonly found indoors in storage areas such as closets, basements, and cellars. The spiders take shelter in boxes, stored clothing, shoes, under furniture, folded bedding, and in any other areas of clutter where it is dry and warm.

Brown recluse spiders are adaptable. They are active in temperatures ranging between 45°F and 110°F, can survive long periods without food or water, and may live for up to 2 years. They generally are not aggressive. Humans are usually bitten when they inadvertently roll onto a spider during their sleep or put their foot in a seldom worn shoe inhabited by a brown recluse.

**The Web**

The web of a brown recluse spider is irregularly constructed with loose strands of silk. In contrast, the orb-weaving garden spider has a symmetrical web. The strands of the recluse’s webs are white to off-white in color.

**Life Cycle**

The average egg sac is about ½-inch in diameter, and each sac contains an average of 40 eggs. The brown recluse female can produce up to 300 eggs in her lifetime. Egg sacs are produced during summer, and the female spider will guard the egg sac until the spiderlings emerge. Spiderlings emerge after an incubation period of 24 to 36 days and take between 10 to 12 months to develop into adults.

**The Bite**

Bites occur year-round in heated homes where the temperature remains constant. When a brown recluse bite, it injects cytotoxins that cause tissue death or necrosis of the bitten area (Figure 2). Many brown recluse spider bites go unnoticed initially or result in mild stinging. Some people may feel a burning sensation within 30 minutes after
the bite. Then, within 8 hours, a necrotic spot may develop which can enlarge to the size of a silver dollar. If these symptoms do not appear within 48 to 96 hours, necrosis is not likely. If these symptoms do appear, the area can become ulcerated and sunken. Lesions may take months to heal (Figure 3).

![Figure 3. A more typical brown recluse spider bite. Photo taken several weeks after the bite. Lesions are healing.](image)

Treatment

First aid for someone who has been bitten by a brown recluse spider includes use of an ice pack to prevent or to reduce the swelling in the area where the bite occurred. Cooling the area helps to lessen tissue damage. Also, sanitizing the area with hydrogen peroxide or alcohol helps to prevent infection. Promptly seek medical attention. If the spider can be found, it should be collected and taken with the patient to the doctor to confirm the identity of the spider involved.

Medical treatment may include the use of non-steroidal anti-inflammatory drugs (NSAIDs) for inflammation and pain relief, antibiotics to prevent bacterial infection, and treatments to prevent tetanus. Sulfone drugs may be prescribed. They have decreased the need to surgically excise severe wounds in several studies. Other treatments may include early surgical excision of the wound and the use of corticosteroids and steroids.

Control

An Integrated Pest Management (IPM) approach is the best means of control. IPM incorporates all available control methods into a pest management program. Control methods include sanitation, exclusion, and chemical techniques. IPM includes doing a thorough inspection of the premises to locate and destroy all brown recluse spiders inside buildings.

Control of the brown recluse spider is critical. Due to the possible medical problems caused by bites, a professional pest control service should be enlisted for severe infestations in the house. Until the brown recluse is completely controlled in a home, occupants should carefully check and shake out their bedding before going to sleep. Bites are often inflicted when someone rolls onto one during their sleep. Bed skirts should also be removed to reduce the chances of spiders crawling onto the bed.

Sanitation

Remove any spiders found by vacuuming. Dispose of the bag outside. Remove webs so that you can monitor potential spider activity in future inspections. Sticky boards placed along walls can also be used for monitoring purposes. Professional pest control services can use flushing agents as a monitoring tool in an effort to locate breeding areas.

The person conducting the inspection should wear gloves. To prevent spiders from crawling up pant legs, constrict the pants with rubber bands around the ankles. The person may even consider wearing a bee veil when inspecting severely infested homes to prevent spiders from dropping on him or her.

Exclusion

Seal cracks and crevices in the structure where spiders can enter the home. Common areas for cracks and crevices are window sills, door thresholds, and around pipes. Outdoors, eliminate potential breeding habitats such as wood piles, leaf litter, and rocks where spiders may live near your house.

Chemicals

Use of pesticides labeled for spider control is warranted for serious brown recluse infestations. Spot treating corners or cracks and crevices in a house with a pyrethroid pesticide, and treating crawl spaces with a dust formulation are some techniques available. Enlisting the services of a professional pest control operator is an option to be seriously considered for brown recluse infestations.