

IN THIS ISSUE:

The facts on Arizona's

RECLUSE SPIDERS



There are eleven native recluse spider species in the United States, also commonly referred to as "fiddleback" or "violin" spiders. All of these, collectively termed "recluse spiders" by scientists, belong to the genus *Loxosceles* (pronounced Lawx-AW-sell-ees). Arizona has five native recluse spider species (*in below table); three of the Arizona species are *endemic* (meaning native or confined to a certain region). The two most likely to be encountered in our state – if at all – are the Arizona recluse (*L. arizonica*) and the desert recluse (*L. deserta*).



11 Species of Recluse Spider Native to U.S.	
<i>L. apachea</i> *	Red
<i>L. arizonica</i> *	Olive – endemic to Arizona
<i>L. blanda</i>	Light Blue
<i>L. deserta</i> *	Orange
<i>L. devia</i>	Magenta
<i>L. kaiba</i> *	Light grey – endemic to Arizona
<i>L. martha</i>	Not shown
<i>L. palma</i>	(small ranges native to California)
<i>L. reclusa</i>	Brownish (the true brown recluse)
<i>L. russelli</i>	Blue
<i>L. sabina</i> *	Light Green – endemic to Arizona

The true brown recluse (*L. reclusa*) has a large range, but is native only to a specific area east of the Rocky Mountains – mainly portions of the central Midwest and South.

Fortunately, we do not have established colonies of the brown recluse (*Loxosceles reclusa*) here in Arizona. Additionally, two *non-native* species of recluse spider are found in the United States (*L. rufescens*, the Mediterranean recluse, and *L. laeta*, the Chilean recluse). Their sightings are not on shown on the above map, but neither is established in Arizona.

What Does a Recluse Spider Look Like?

The most famous feature which all recluse spiders share is the violin shape on the cephalorax (the anterior segment of two body segments). However, our desert recluse, *L. deserta* (also known as *L. unicolor*), is relatively uniform in color and its violin mark is nearly indistinct. Spider color ranges from tan to dusky reddish-brown. Their body length is about 1/3" (7-12 mm), with long, thin legs. Including leg span, full grown spiders are about 1" (25 mm) in diameter. Unlike *most* other types of spiders, recluse spiders have six, rather than eight, pairs of eyes – a key feature which aids in identification.

The general public often misinterprets dark markings for a violin shape, or mistakes a striped wolf spider for a recluse spider.

Unfortunately, media attention and misinformation fuel public fear of spider bites – recluse spiders in particular. Only scientists and trained professionals should positively identify a suspected recluse spider by: 1) the number of eyes; 2) the unique positioning of the eyes.

How Can I Recognize a Recluse Spider Bite?

Spiders get a bad rap. The general public seems to consider any mysterious red dot a candidate for a spider bite. Recluse bites initially produce a reddened area which may form a bulls-eye lesion and blister, and eventually may give rise to a *necrotic wound* (an open, weeping wound characterized by dead tissues and slow healing). If not tended to, this can lead to disfiguring scarring; however, recluse bites are rarely fatal. Severity of recluse bites and reactions varies, and medical intervention is highly recommended to aid healing.

Infections, diseases, and other afflictions that may manifest at the skin's surface are sometimes misdiagnosed as recluse bites by medical professionals. Some of these include:

- ✓ *Staphylococcus aureus* infection
- ✓ Diabetic ulcer
- ✓ Poison oak
- ✓ Shingles
- ✓ Herpes simplex
- ✓ Vascular disorders

Misdiagnosis of the above conditions delays care and adds to the pool of misinformation surrounding recluse spiders.

If you suspect a spider bite, visit a physician. The bottom line to remember on any spider bite is: **unless you witness**

a spider actually biting you, or find characteristic puncture marks in the skin, the mysterious red dot is quite possibly something other than a spider bite.

Where Are Recluse Spiders Found?

The five Arizona recluse species are less *synanthropic* (like to live with humans) than their eastern cousin the brown recluse; they are not as reliant on urban, man-made structures for their survival, and are found as often living well away from humans as near them.

AZ recluse spiders have an affinity for dry, dark places. They may be brought into homes on stored items, firewood, or other woody debris collected from the desert. When people are bitten by a recluse spider species in Arizona, it is most often due to clothing left on the floor which the spider finds refuge in or from grasping items in storage without wearing gloves.

Recluse spiders spin a coarse, sticky, irregular web that is fairly flat and often overlooked by humans. During the daytime, they are usually found sitting on their web, and at night they often forage well away from their web in search of prey.

Recluse spider habitat in Arizona

Urban Areas	Non-urban areas
Cinder block wall crevices Wall voids and attics Storage areas Wood piles or debris Clothing or other linens left on the floor	Scraps of dead wood Dead cactus Wood rat nests

Infestations of recluse spiders are less likely in Arizona, and when they occur, the population levels are typically not as high as brown recluse infestations.

How Can I Prevent Recluse Spider Encounters?

- ✓ Use insect monitor traps for pest detection – this will also give you the spider “in-trap” and allow for proper ID (send it to us).
- ✓ Reduce woody debris, such as pallets and woody materials stacked near buildings.
- ✓ Stack firewood as far from inhabited structures as possible; store it off the ground and wear gloves to handle it, and place immediately on the fire once indoors (avoid stacking by the fire).
- ✓ Keep clothing picked up off floors; keep it hung up or folded in drawers; likewise, shake out clothing that gets left on the floor.
- ✓ Wear working gloves when visiting storage units and sheds; if you must place your fingers where you cannot see them, thick gloves can protect your fingers.
- ✓ Store items that are worn (clothes, gloves, skates, etc.) in tightly sealed plastic bins or at least twist-tied garbage bags.

The Bite

The physical reaction to a brown recluse spider bite depends on the spider species, sex, amount of venom injected, and an individual's sensitivity to it. Some people are unaffected by a bite, whereas others experience immediate or delayed effects as the venom kills the tissues (necrosis) at the site of the bite. Many bites cause just a little red mark that heals without event. The vast majority of brown recluse bites heal without severe scarring.

Typical bite (thanks Steven)



♀ Arizona recluse



Arizona Children's Environmental Health Program

Please RSVP for the next Arizona Children's Environmental Health Coalition meeting: **December 7th, 2006, 9 am- noon.** Coalition members and interested others are encouraged to invite colleagues (school facilities and administrative staff, environmental health advocates, reporters, etc.). The meeting will include:

- ❖ Management strategies for ROOF RATS
- ❖ What the new law SB1350 means to YOU.
- ❖ District updates, networking opportunities, and more!
- ❖ Orkin Pest ID booklets will be distributed at the meeting.

Information used from:

BugGuide: <http://bugguide.net/node/view/15740>
 Gertsch, W. J. and F. Ennik. 1983. The spider genus *Loxosceles* in North America, Central America, and the West Indies (Araneae, Loxoscelidae). *Bull. Amer. Mus. Nat. Hist.* 175(3): 264-360
 Olkowski, William, Sheila Daar, Helgo Olkowski. *Common Sense Pest Control.* The Taunton Press, 1991. 715 pp.
 University of Arizona, Urban IPM website: <http://ag.arizona.edu/urbanipm/index.html>
 University of California Riverside, Department of Entomology website: <http://spiders.ucr.edu/>

For information on Arizona's IPM in Schools program contact Dawn Gouge or Jennifer Snyder 520-568-2273, dhgouge@ag.arizona.edu



Few bugs are bad! More than 95% of all insect species are beneficial to humans