
BROWN RECLUSE AND OTHER RECLUSE SPIDERS

Integrated Pest Management Around the Home and Landscape

If asked to name all the spiders with which they are familiar, most Californians would have a short list: tarantula, black widow, and brown recluse. Tarantulas are well known because of their large, intimidating size and their use in many movies as eight-legged villains. Black widows are very common throughout the state, causing potentially serious injury with their bite. The adult females are easily identifiable by their shiny black body color and red hourglass on the belly. The brown recluse, however, is an enigma: there are no populations of the brown recluse, *Loxosceles reclusa*, in the state and fewer than 20 verified specimens have been collected over several decades in California. Yet in California people frequently relate stories in which they or someone they know was supposedly bitten or they have had a physician diagnose them with a brown recluse spider bite. However, there are several other species of recluse spiders that can occur in southern areas of California and that can cause similar medical concerns. This publication was written to provide science-based information about the status of the brown recluse and other related spiders in California.

COMMON AND SCIENTIFIC NAMES

Over the years, the group of spiders to which the brown recluse belongs has been known by various colloquial names: “violin” spiders, “fiddleback” spiders, “recluse” spiders, and “brown” spiders. The American Arachnological Society chose “recluse spiders” as the official common name for this group. The scientific name for the recluse spider group is *Loxosceles* (lox-SOS-a-leez)

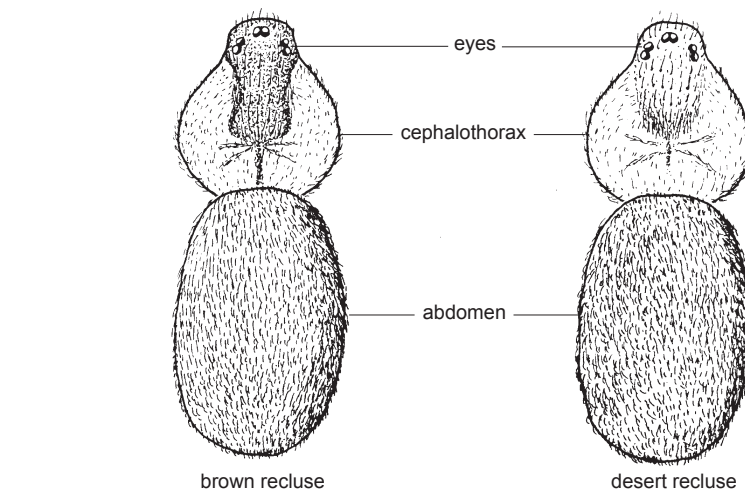


Figure 1. The head region (cephalothorax) and abdomen of a brown recluse, *Loxosceles reclusa* (left), and a desert recluse, *Loxosceles deserta* (right). Note the characteristic spacing of the six eyes arranged in three dyads. The violin marking is well defined on the brown recluse, but is very faint on the desert recluse.

and rhymes somewhat with “isosceles” as in the triangle. Whereas “isosceles” means equal legs, “loxosceles” means slanted legs, referring to the way the spiders hold their legs at rest. All known members of the group have a scientific name, and the more familiar members of this group also have common names (e.g., brown recluse, desert recluse, Arizona recluse).

IDENTIFICATION

The most definitive physical feature of recluse spiders is their eyes: most spiders have eight eyes that typically are arranged in two rows of four, but recluse spiders have six equal-sized eyes arranged in three pairs, called dyads. There is a dyad at the front of the cephalothorax (the first main body part to which the legs attach) and another dyad on each side further back

with a space separating the dyads from one another.

Many publications refer to the violin marking on the dorsal (top) surface of the cephalothorax (head region) as the most important diagnostic feature. Although this marking is fairly consistent in mature brown recluses and Texan recluses (*Loxosceles devia*), it can vary in intensity and sometimes fades in non-preserved, and it is very faint to nonexistent in several recluse species found in the southwestern United States (e.g., the desert recluse, *Loxosceles deserta*). Therefore, checking the eye pattern is the best way to eliminate almost all suspect nonrecluse spiders from consideration whereas the presence or absence of the violin marking may lead to misidentifications. Non-arachnologists (including physicians) have

a strong tendency to see “violins” on all body surfaces of harmless spiders and incorrectly assume that they have properly identified a brown recluse spider. In addition, the abdomens of all North American recluses are covered with fine hairs and are uniformly colored, although the coloration can vary from light tan to dark brown, depending in part on what they have eaten recently. There is never a coloration pattern on the abdomen of North American specimens. Finally, the uniformly colored legs are similarly covered with fine hairs whereas many nonrecluse spiders have stout spines and/or stripes, rings, or spots on their legs.

Some other spiders share each of these physical characteristics. However,

to be identified as a recluse spider, it must have all five of these characteristics.

- six eyes in dyads (pairs)
- uniformly colored abdomen with fine hairs
- no spines on the legs
- uniformly colored legs
- body not more than 3/8” in length

On this basis, more than 99% of the spiders found by Californians can be identified as something other than a recluse spider. If, however, you do find a recluse spider in California, it will most likely be the native desert recluse, *Loxosceles deserta*. To further identify *Loxosceles* spiders to species level requires a high-magnification microscope and the skills of a spider

expert (arachnologist).

AMERICAN RECLUSE SPIDERS

Eleven species of recluse spiders are native to the United States and two non-natives have become established in certain highly restricted areas of the country. The brown recluse spider is the proper common name for only one species, *Loxosceles reclusa*. It is the most widespread of the North American recluse spiders and lives in the south central Midwest from Nebraska to Ohio and south from Texas to Georgia (Fig. 2). Although the brown recluse **does not** live in California, we do have four species of native recluse spiders. The most common Californian recluse spider is the desert recluse, *Loxosceles deserta*. It is found mostly in

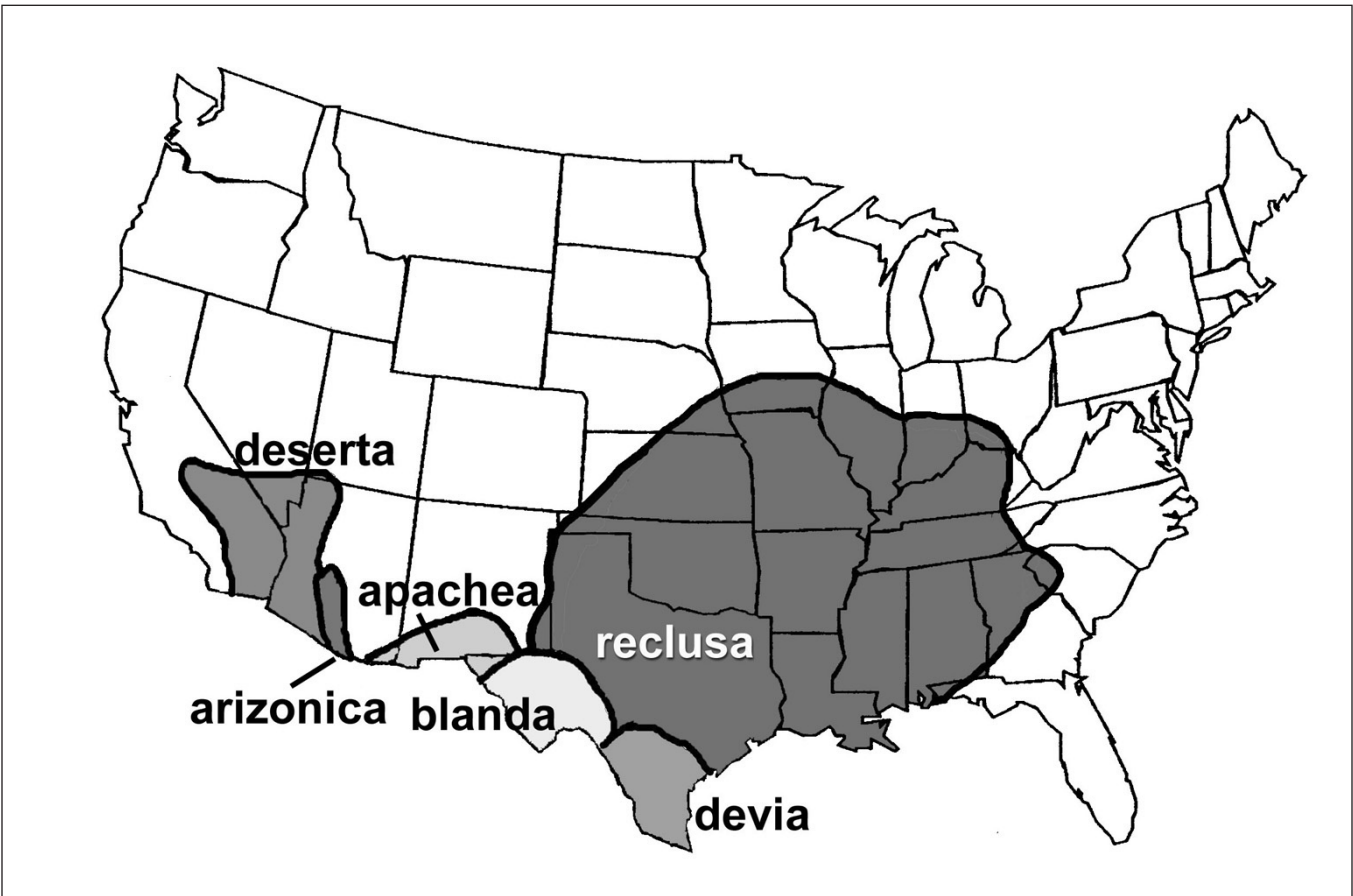


Figure 2. This map shows the established areas of six species of recluse spiders in the United States. The brown recluse spider, *Loxosceles reclusa*, is the most widespread, living in the southcentral Midwest from Nebraska to Ohio and south from Texas to Georgia.

the Sonoran and Mojave deserts, in the foothills of the lower San Joaquin Valley, and in adjacent areas of Mexico; most of these areas are sparsely populated by humans. In older literature, this spider was referred to as *Loxosceles unicolor*. There are additional species (*Loxosceles russelli*, *Loxosceles palma*, *Loxosceles martha*), but they are so uncommon that they are of scientific interest only.

In addition to these native species, the Chilean recluse spider, *Loxosceles laeta* (pronounced "LEE-ta"), has become established in portions of Los Angeles (Alhambra, Sierra Madre, Monterey Park, San Gabriel). This spider, however, seems to be confined to a very limited area in Los Angeles County even though it has lived there for possibly

over 70 years (one specimen collected from Los Angeles in 1936 is housed in Chicago's Field Museum spider collection). Also, occasional interceptions of the Mediterranean recluse, *Loxosceles rufescens*, are found in commercial goods shipped from out-of-state, but no populations of this spider are currently known in California.

Life History Characteristics

Recluse spiders, as their name implies, are reclusive. These nocturnal spiders emerge from their retreats at night and actively hunt down prey or may wait for prey to land in the small area several inches from their retreat. Although they do not build webs to capture prey, they do use silk to build a retreat in which they hide during the day. As dawn approaches, they may

seek shelter in dark places such as in clothing or shoes. Also, mature males roam in search of females. It is these two behaviors that can bring them into contact with people.

In nature, recluses are found in cracks and crevices in and under rocks. Recluses have very much benefited from human-altered environments where they are readily found under trash cans, plywood, tarps, or rubber tires, in boxes, etc. They are synanthropic (found in association with humans) and therefore are considered "house" spiders. In fact, in South America the recluse species have common names that translate as "the spider behind the picture" or "the spider in the corner."

Recluse spiders are relatively long

Spiders Commonly Confused with Recluses

Because of the misinformation surrounding the brown recluse's presence in California, many spiders that are virtually harmless are submitted by the public for identification. Most of them are not from the recluse family and some are not even spiders. A nationwide study was undertaken from 2000 to 2005, offering to identify any spider that was considered to be a brown recluse spider. Nearly 600 specimens were submitted from California, many from people who were adamant that they had a brown recluse. Only one of these specimens was a brown recluse, from a house where the family had moved from Missouri. No additional recluses were found in the house. The occasional finding of a translocated spider is not overly surprising, however, it still does not happen often. There were 17 desert recluses in this study, all submitted from the desert regions of southeastern California where the spiders are known to occur. Yet nonrecluse spiders were submitted in great numbers including many false black widow, woodlouse, and yellow sac spiders. Presented below are descriptions of spiders that share some of the same physical features as the brown recluse and have been misidentified as recluse spiders. For additional information on these spiders, consult a spider identification book such as Kaston's *How to Know the Spiders*, listed

in the References section or the table of common spider families found in California, located in the *Pest Note: Spiders*. The recluse spiders are in the Sicariidae (formerly Loxoscelidae) family.

Six-Eyed Spiders

Spitting spiders (*Scytodes* spp.) are closely related to recluse spiders and have six eyes arranged in a similar pattern. However, they also have many black spots or lines on their bodies that would exclude them as recluses. Unlike the recluse, the woodlouse spider, *Dysdera crocata*, has six eyes arranged in two groups of three (triads) and no bodily markings.

Spiders with Violin-Shaped or Other Dark Markings

Many common tan or gray spiders have dark markings on the head region, which convinces people that they have caught a bona fide recluse spider. These spiders include cellar spiders (*Pholcus phalangioides*, *Psilochorus* spp., *Phycocyclis* spp.), pirate spiders (*Mimetus* spp.), and sheet web spiders (Linyphiidae). The marbled cellar spider, *Holcnemus pluchei*, also confuses people even though the dark marks are on the ventral (underside) not the dorsal (top) surface of the body. Another frequent submission is *Zoropsis spinimana*, which is found only in the San Francisco Bay area and is a harmless Mediterranean

immigrant established in Sunnyvale around 1995. It is large, frequently found in homes, and Bay Area residents see the dark marking on the top surface of the abdomen as a violin which is the wrong body part to be sporting the violin marking in order to be identified as a recluse.

Ubiquitous Brown Spiders

Virtually every spider that is tan or brown has been turned in as a potential brown recluse. There are hundreds of species of these spiders in California. They include ground spiders (Gnaphosidae), sac spiders (*Cheiracanthium* spp., *Trachelas* spp.), wolf spiders (Lycosidae), grass spiders (Agelenidae), orb weavers (Araneidae), and male crevice spiders (Filistatidae). More specifically, males of both the western black widow (*Latrodectus hesperus*) and the false black widow (*Steatoda grossa*) are frequently brought in for recluse verification. One of the most common submissions as brown recluses are spiders in the genus *Titiotus*, which are found just north of Los Angeles, through central California to Redding and are commonly found in redwood forests. *Titiotus* spiders have a hair pattern that gives the impression of a violin and its coloration is similar to that of a brown recluse. All of these brown spiders have eight eyes and can quickly be eliminated from consideration.

lived. Among the various species, they mature after about 1 year and average a 2- to 4-year life span with some living more than 7 years under laboratory conditions. They are also well known for surviving long periods (6–12 months) without food before perishing.

Abundance of Recluses

One consistent life history characteristic of recluse spiders is that in the right environment their populations are usually dense. If you find recluses, you do not find one, you find many. The brown recluse spider, *Loxosceles reclusa*, is a common house spider in the midwestern United States. Examples for the brown recluse include 9 under a piece of plywood in Oklahoma, 52 in an indoor laboratory, 6 under a waterbed frame in Arkansas, 40 collected in a Missouri barn in 1 hour, 44 in sticky traps in a Tennessee home in 1 day, and eight Oklahoma 13-year-olds unknowingly hand-collected about 60 amongst bricks in about 7 minutes (without getting bitten).

In a mind-boggling study, in 6 months, a family in Kansas collected 2,055 brown recluse spiders in their 19th-century built home. They have lived there nearly a decade, continue to find brown recluse spiders regularly and only once in 10 years has anyone shown evidence of a bite; it was to a finger which turned red for a few days and then healed without incident. In fact, on many evenings, this family collected more brown recluse spiders per hour in their home than the entire California human population has ever been able to find in the state.

Similarly, for the desert recluse in California, 12 of these spiders were collected under a doghouse in Yucca Valley and six were removed from a cottage bedroom in the Mojave Desert. In a study in Chile, 645 of 2189 homes that were searched contained the South American recluse spider, *Loxosceles laeta*. The five most infested homes averaged 163 spiders and in none of these houses had spider bites been reported.

Non-abundance of Brown Recluses in California

Unlike many other spiders that disperse by either migrating or being carried by air currents when small (“ballooning”), recluse spiders can expand only outside their native range as a result of human intervention. The few brown recluses that have been collected in California typically are found in facilities that receive goods from out of state or are unintentionally transported by people who have moved from the Midwest. In these instances, searching the immediate area yielded no additional brown recluses so they were considered to be individual stowaways. Undoubtedly, more brown recluses have been inadvertently brought into the state via commerce and the relocation of household belongings; however, amazingly few specimens have ever been collected. Never have any of these translocated spiders been able to establish a foothold and start a population in California. Considering that brown recluse spider bites are not common in the south-central Midwest where brown recluses frequently cohabit with people, it is clear that California does not have anywhere near sufficient populations of these spiders to be responsible for the number of cases or illnesses that are attributed to them. The problem of misdiagnosis is widespread in North America, including such unlikely places as Alaska and Canada where doctors have attributed skin lesions to recluse bites when no brown recluse spiders have ever been found north of the 48 contiguous U.S. states.

Potential Toxicity of Bites

All *Loxosceles* spiders tested so far have the venom component that is capable of causing necrotic skin lesions, so it is best to assume that all recluse spiders may be capable of causing skin damage. In general, the desert recluse spider’s venom is similar to that of the brown recluse and should be considered of equal potency. In comparison to the brown recluse spider, the Chilean recluse supposedly has venom more potent and the Mediterranean recluse’s venom has been said to be less potent. However, these compari-

sons are more anecdotal than quantitative assessments.

About 10% of brown recluse bites cause moderate or greater tissue damage and scarring, but the vast majority heal very nicely without medical intervention. There is still not one *proven* death from brown recluse bite (a person was bitten by a spider caught in the act and properly identified).

RICE Therapy

Rest, Ice, Compression, Elevation

The recommended treatment for most brown recluse bites (the ones that do not become traumatic) is simple first aid: RICE therapy.

- ◆ Rest
- ◆ Ice
- ◆ Compression
- ◆ Elevation

While there are several highly probable deaths reported in children, these are extremely rare occurrences, about one every decade or so.

MEDICAL MISDIAGNOSES

One reason for the great awareness of the recluse spiders throughout North America is that necrotic (rotting flesh) wounds are commonly misdiagnosed as “brown recluse bites.” Although recluses can cause these types of wounds, the biological data involving the distribution of the spider indicate that most of these diagnoses are incorrect. A world-renowned toxicology physician who worked at University of Southern California Medical Center estimates that most general spider bites in California referred to him were actually the work of other arthropods and that 60% of “brown recluse spider bite” diagnoses came from areas where no *Loxosceles* spiders were known to exist. This is a serious problem in that several medical conditions misdiagnosed as recluse bites can lead to debilitating and potentially fatal consequences. For example, group A *Streptococcus* infection, sometimes misdiagnosed as a brown recluse bite, has a fatality rate that can vary from 20 to 80% depend-

ing on how quickly it is correctly diagnosed. In serious cases death can occur in a few days.

Additionally, many people diagnosed as having brown recluse bites in California are treated with antibiotics. The recommended treatment for most actual brown recluse bites (the ones that do not become traumatic) is simple first aid: **RICE** therapy (**R**est, **I**ce, **C**ompression, **E**levation). Antibiotics work against bacteria and have no effect on spider venom. However, regardless of the causative agent, it is wise to seek medical attention if you feel that it is warranted.

Bacterial Infections

Another medical condition that is frequently misdiagnosed as a spider bite or brown recluse bite is methicillin-resistant *Staphylococcus aureus* (MRSA) bacterial infection. Infections of this pathogen, which began to emerge in the 1990s are no worse than other *Staph* infections. However, because they are not affected by common antibiotics, they continue out of control until properly medicated. MRSA is a contagious infection, frequently found in places where people are housed in close quarters for lengthy periods of time. Such conditions include prisons, nursing homes, long-term health care facilities, sports camps, military barracks, etc. and typically involve several people being afflicted simultaneously. Very often “spider bites” are the first thing that people blame as the cause of these wounds, however, more careful investigation typically leads to the bacterial infection MRSA. The problem clears up quickly when the episode is recognized as a bacterial infection caused by poor hygiene and the afflicted persons are given antibiotics (e.g., bactrim, clindamycin), which are currently still effective against MRSA, and put on a schedule of more frequent washing/bathing, and changes of clothes or bed linens.

Multiple Bites

Spiders typically bite only once as a last ditch defensive effort before they are crushed between flesh and some object. Therefore, spiders are not the

causes of skin lesions if 1) there are multiple lesions on one person at the same time, especially if the lesions are on widely separated parts of the body, 2) if there are multiple episodes of lesions on the same person over a period of several weeks or months and 3) if there are multiple people in the same house or facility showing skin lesions at the same time. Multiple lesions immediately point toward the more likely situation of a contagious bacterial infection like MRSA or possibly an infestation of an arthropod (fleas, mites, kissing bug, etc.), that is seeking out mammals for blood meals.

Necrotic Wound Causes

If you do get a necrotic wound in California, you and your medical professional should consider many other common causes to be much more probable than a bite from a brown recluse spider. If an arthropod is involved at all, one should first consider all those creatures that seek out mammals for blood meals and may cause necrotic-type wounds. These include mites, fleas, bed bugs, soft ticks, hard ticks, conenose bugs, and kissing bugs (see *Pest Notes on Fleas, Bed Bugs, Conenose Bugs, and Lyme Disease in California* listed in Suggested Reading). In addition there is a long list of medical conditions and diseases that exhibit necrotic-type wounds. A few of these are *Staphylococcus* and *Streptococcus* bacterial infections; lymphomatoid papulosis (a non-Hodgkin’s disease lymphoma); diabetic ulcer; pyoderma gangrenosum; infected herpes simplex; herpes zoster (“shingles”); and Lyme disease. Any and all of these situations are more likely than the bite of a brown recluse spider in California.

CONTROL

If you do not live in the shaded areas on the map, you do not need to be concerned with recluse spiders in California. If you do live within the range of these spiders, you still need to verify that you have recluses on your property before attempting control. Not all micro-habitats within the shaded areas will be suitable for recluse survival. For example, even though *Loxosceles laeta* occurs in densely populated sec-

tions of Los Angeles, this species is usually found only in dark commercial and municipal storage basements, not in homes.

This leaves the desert recluse as the only Californian recluse of concern and a minor one at that. After verifying that you do have desert recluses in your home or workplace, there are steps you can take to reduce encounters with them that are similar for reducing encounters with spiders in general. The most important precaution is to remove and reduce trash and rubbish from your property, such as woodpiles, boxes, plywood, tires, and trash cans—especially if they are stored right next to the house. With attached garages, block off house access by sealing cracks around doors and access holes for electrical conduits or plumbing. In the Midwest, some brown recluse bites occur when a sleeping person rolls over during the night, and the trapped spider bites in self defense. In the bedroom, move the bed away from the wall, remove any skirts or ruffles and remove all items stored under it. This minimizes chances that any spider can crawl onto the bed. Do not leave clothes and shoes on the floor, or shake them before dressing if they are left out. Apparel and equipment that is only occasionally worn (gardening clothes and gloves, boots, baseball mitts, roller skates, etc.) should be stored in tightly closed plastic bags, especially if stored in the garage or other dark storage areas.

Typically, pesticide control of spiders is difficult unless you actually see the spider and are able to spray it. There are various insecticides available in retail outlets labeled for spider control. It is just as easy and much less toxic for your living area to crush the spider with a rolled up newspaper or your shoe. Sticky traps placed along floor boards out of the reach of pets and young children offer a non-insecticidal way to trap spiders as well as provide an idea of population levels in the structure. You can also remove a spider from your home by placing a jar over it and slipping a piece of paper under the jar that then seals off the opening

of the jar when it is lifted up. If you plan to send the spider to an expert for identification, try to keep it in an undamaged condition because a crushed specimen may be difficult to identify. If you can, soak the spider in rubbing alcohol for a few days to preserve it first. You can freeze the spider first to facilitate safe transfer into alcohol. If you send the spider in for identification, do not mail alcohol as this is a violation of postal regulations unless done exactly to the specifications for mailing flammable fluids.

REFERENCES

- 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.* 175:264–360.
- Hite, J. L., W. J. Gladney, J. L. Lancaster, Jr., and W. H. Whitcomb. 1966. *Biology of the Brown Recluse Spider*. Arkansas Experiment Station Bulletin #711.
- Kaston, B. J. 1978. *How to Know the Spiders*, 3rd ed. Dubuque, Iowa: Wm. C. Brown Co.
- Russell, F. E. 1986. A confusion of spiders. *Emergency Medicine* 18(11): 8-9, 13.
- Swanson, D. L., and R. S. Vetter. 2005. Bites of brown recluse spiders and suspected necrotic arachnidism. *New Eng. J. Med.* 352:700-707.
- Vetter, R. S. 2005. Arachnids submitted as suspected brown recluse spiders (Araneae: Sicariidae): *Loxosceles* species are virtually restricted to their known distributions but are perceived to exist throughout the United States. *J. Med. Entomol.* 42: 512-521.
- Vetter, R. S., and S. P. Bush. 2002. Reports of presumptive brown recluse spider bites reinforce improbable diagnosis in regions of North America where the spider is not endemic. *Clinical Infectious Diseases* 35:442-445.
- Vetter, R. S., P. E. Cushing, R. L. Crawford, and L. A. Royce. 2003. Diagnoses of brown recluse spider bites (loxoscelism) greatly outnumber actual verifications of the spider in four western American states. *Toxicon* 42:413-418.
- Waldron, W. G., M. B. Madon, and T. Sudarth. 1975. Observations on the occurrence and ecology of *Loxosceles laeta* (Araneae: Scytodidae) in Los Angeles County, California. *California Vector Views* 22:29–36.
- SUGGESTED READING**
- Pest Notes: Bed Bugs*. Sept. 2002. L. Greenberg and J. H. Klotz. Oakland: Univ. Calif. Div. Agric. Nat. Res. Publ. 7454. Also available online, <http://www.ipm.ucdavis.edu/PDF/PESTNOTES/pnbedbugs.pdf>.
- Pest Notes: Conenose Bugs*. Nov. 2002. L. Greenberg and J. H. Klotz. Oakland. Univ. Calif. Div. Agric. Nat. Res. Publ. 7455. Also available online, <http://www.ipm.ucdavis.edu/PDF/PESTNOTES/pnconenosebugs.pdf>.
- Pest Notes: Fleas*. Nov. 2000. M. Rust, et al. Oakland: Univ. Calif. Div. Agric. Nat. Res. Publ. 7419. Also available online, <http://www.ipm.ucdavis.edu/PDF/PESTNOTES/pnfleas.pdf>.
- Pest Notes: Lyme Disease in California*, In press. R. S. Lane. Oakland: Univ. Calif. Div. Agric. Nat. Res. Publ. 7485. Also available online, <http://www.ipm.ucdavis.edu/PDF/PESTNOTES/pnlymedisease.pdf>.
- Pest Notes: Spiders*. Nov. 2007. R. S. Vetter. Oakland: Univ. Calif. Div. Agric. Nat. Res. Publ. 7442. Also available online, <http://www.ipm.ucdavis.edu/PDF/PESTNOTES/pnspiders.pdf>.
- Pest Notes: Zoropsis spinimana, a Mediterranean Spider*. Dec. 2007. R. S. Vetter and D. Ubick. Oakland: Univ. Calif. Div. Agric. Nat. Res. Publ. 74143. Also available online, <http://www.ipm.ucdavis.edu/PDF/PESTNOTES/pnzoropsis.pdf>. ♦

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To simplify information, trade names of products have been used. No endorsement of named products is intended, nor is criticism implied of similar products that are not mentioned.

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WARNING ON THE USE OF CHEMICALS

Pesticides are poisonous. Always read and carefully follow all precautions and safety recommendations given on the container label. Store all chemicals in the original labeled containers in a locked cabinet or shed, away from food or feeds, and out of the reach of children, unauthorized persons, pets, and livestock.

Pesticides applied in your home and landscape can move and contaminate creeks, rivers, and oceans. Confine chemicals to the property being treated. Avoid drift onto neighboring properties, especially gardens containing fruits or vegetables ready to be picked.

Do not place containers containing pesticide in the trash or pour pesticides down sink or toilet. Either use the pesticide according to the label or take unwanted pesticides to a Household Hazardous Waste Collection site. Contact your county agricultural commissioner for additional information on safe container disposal and for the location of the Household Hazardous Waste Collection site nearest you. Dispose of empty containers by following label directions. Never reuse or burn the containers or dispose of them in such a manner that they may contaminate water supplies or natural waterways.

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