



J&L Garden Center

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Spiders - Good or Bad?

Just say the word "spider" and many people will scream, or jump with fear. Fifty percent of women and 16% of men suffer from arachnophobia, an irrational fear of spiders.

Spiders are a natural controller of many pests and insects. They are very beneficial predators and they serve a significant role in keeping populations of many pests in check. Without spiders, our world would be over-run by other insects. Most spiders are non-aggressive, and very few spiders have fangs capable of penetrating human skin. Most spiders in your yard are beneficial - they are the good guys. They trap and kill many insects that would otherwise cause problems on your flowers, shrubs and trees. Spiders may actually kill more insects than you can ever kill with chemical controls.



Brown Recluse Spider

As long as they stay outside, it is to your benefit to leave them alone. Once a spider decides to invade your home, it becomes a nuisance pest, and not necessarily a beneficial insect (arachnid). However, if you are allergic to dust mites, or have a bedbug or cockroach problem, spiders can be extremely beneficial in controlling these creatures - inside your home.



Spiders are arachnids, not insects. Spiders have four sets of legs instead of three sets like insects have. Spiders only have two body sections while insects have three body sections. Spiders do not have wings but many spiders can still fly by releasing a string of silk thread and letting the wind blow them around. Approximately 3,000 species of spiders can be found in North America alone. Only a few of these spider species are harmful to humans such as the brown recluse, black widow, a few species of tarantulas, and the hobo spiders.

Spider Anatomy



All spiders are poisonous and all are predators. However, most spiders are either too small, or their poison is too weak to harm humans. Even the Daddy-Long-Leg spider has very poisonous venom; their fangs are just not strong enough to penetrate human skin.



Spiders feed on a wide variety of insects and soft bodied invertebrate animals. Spiders attack and subdue their prey by biting with their fangs to inject a poison. Once their victim is paralyzed, the spiders feed on their prey. As predators, spiders are beneficial. They control insects very effectively, eliminating many possible outbreaks of insect infestations. They also help to prevent many diseases by eliminating the insects that spread the diseases.



All spiders are beneficial in the yard as long as they stay outside. It is when they come inside that the trouble begins. Most



people are afraid of spiders although some people keep spiders as pets. A few people even let their spiders run freely through the house to control other insect pests.

Widow Spiders.

Five species of widow spiders live in North America. The most common species is the Western Black Widow Spider. The adult female is jet-black with a red hour glass shaped mark on the underside of its abdomen. Males and immature females are usually brown and striped with yellow and white markings. The bite of the adult female is more toxic than the bite of the male or immature females. Black widow spiders are shy and only reluctantly bite, usually when molested or startled. Widow spiders are more aggressive when they are mating or when they are protecting an egg sac.



The bite of a widow spider may cause little immediate pain and may go unnoticed. Slight local swelling and redness at the bite site are early signs. More noticeable signs that may also appear are; intense muscular pain, rigidity of the abdomen and legs, difficulty in breathing, and nausea.

There is little first aid advised other than cleaning the bite, and calming the victim. A black widow spider bite does not usually cause any permanent physical problems and is rarely life threatening. However, a physician should be consulted as soon as possible. In treated cases symptoms generally start to fade in two or three days. Untreated cases may take a little longer to go away. Widow bites are more dangerous if the victim is a small child, an elderly person, or someone who is allergic to this spider's venom.

Brown Spiders.

This common name refers only to spiders in the genus *Loxosceles*. Several species of *Loxosceles* occur in the United States, but only the brown recluse spider, *Loxosceles reclusa*, and another brown spider *L. laeta* (Chilean Recluse) are known to be dangerous.



The brown recluse spider is common in the southern states, but it is introduced into other areas of the country as passengers in motor vehicles, or transported in boxes, or in other objects as people move throughout the country.



Photo Credit: Mountain-Bluebird-Products-HoboSpiderBite.gif

These spiders are also known as fiddlebacked, or violin spiders, because they have a dark violin pattern on the front portion of their body. They have only three pairs of eyes instead of four like most spiders. Brown recluse spiders like to hide in dark, reclusive areas of the home and garden during the day. They hide behind furniture, in baseboards, in cracks in the ceiling, in undisturbed piles of clothing, or even in bedding.

The bite of the brown recluse spider may go unnoticed, with no immediate after effects, but it usually is followed by a severe localized reaction. Its most common sign is scabbing, sloughing off of affected tissue, and very slow healing. The bite of this spider is much more severe than the bite of any other spider, even the hobo spider. Children react more severely than adults. A physician should be consulted immediately if you suspect this type of spider bite because a few deaths have resulted from the bite of this spider.

The Brown Recluse Spider has not been positively identified to be in Utah: at least at the time that this handout was written. No one has captured a brown recluse spider, in Utah, and taken it to the Utah State Extension Service for identification, although several reports have been made that people have been bitten by this spider.

The Brown Recluse Spider may be in this area, but it is possible that these reported bites are actually the bite of the Hobo Spider. The Hobo Spider bite is not quite as serious as the bite of the Brown Recluse Spider.

Tarantulas.

These can be very large, hairy spiders, up to 6 inches in diameter. However, most tarantulas are considerably smaller in size, including the species native to this area. Tarantulas are normally non-aggressive, and they rarely bite. Even if they do bite, their bite is not usually considered to be dangerous and causes little lasting pain or serious health problems.



One of the hazards associated with this spider is fear. This physiological fear is a real problem and can cause illness. Some people can also develop an allergic reaction to the body hairs of some species of tarantulas. Many species of tarantulas, not native to this area, are sold as pets. When agitated, or uneasy, tarantulas rake their abdomens with their hind legs and throw very fine abdominal hairs in the direction of the danger. These hollow, barbed hairs can penetrate the skin and introduce a toxic material that can cause an allergic reaction and possibly cause



anaphylactic shock. If you start to itch, develop a rash, or show other allergic symptoms, you may be allergic to your pet tarantula spider. Anyone handling a pet tarantula should recognize these potential problems.

Funnel-Web Spiders.

Most funnel web spiders are safe and beneficial to the yard. These spiders build funnel shaped webs in the yard. They also will build these webs in the dark, moist areas in the home, usually in the basement. The common house spider, *Tegenaria domestica*, belongs to this group. This spider is shy and will usually avoid interaction with humans. If startled it will usually run away. Its bite is basically harmless to humans.



Hobo Spiders.

The aggressive house spider (hobo spider), *Tegenaria agrestis*, also belongs to this group of spiders. The hobo spider likes dark, moist areas of the house. It is usually found in the basement or along the baseboards. It is not fond of heights and is rarely found on the ceilings or in high locations. However, a lady in Salt Lake City was bit by a hobo spider while standing on a ladder and picking peaches in her yard.



Photo Credit: Mountain-Bluebird-Products-FemaleHobo.jpg

Unlike the common house spider, the aggressive house spider is aggressive. Hobo spiders, when provoked, often attack the aggressor. Bites often occur when a spider is squeezed against the body, such as when you pick up a piece of wood and hold it against your body, or when a spider is inside a piece of clothing when you put it on.

The initial bite is not painful. It has been described as producing a very slight prickly sensation. However, a small, insensitive, hard area appears within thirty minutes, or less. It becomes surrounded with an expanding reddened area of skin. Within 15 to 30 hours the area blisters. About 24 hours later the blisters usually break, and the wound oozes serum. A cratered ulcer crusts over to form a scab. Tissues beneath the scab may die and slough away. In some cases the loss of tissue may become so severe that surgical repair is needed. The fully developed lesion may vary from 1/2 inch to 1 inch in diameter; sometimes even larger. Lesions may take several months to heal and frequently leave a permanent scar.



Other symptoms may also occur such as headache, weakness, tiredness, loss of memory, vision impairment, and nausea. Hobo spider bites are not always extremely bad, and are not deadly, but the bite victim should see a doctor as soon as possible.

Bite Prevention and Control

Preventing bites by spiders in high risk situations calls for simple, common sense measures. When working in enclosed infected areas wear protective clothing, including long sleeve shirts tucked into



gloves, long pants tucked into boots, and overalls or a jacket with a hood. Rubber bands over pant legs and shirt sleeves will minimize the possibility of a spider running up an arm or down a leg.



Wear gloves when working outdoors in potential spider habitats such as rock gardens, storage areas, and when moving wood. Keep bare hands out of places that you cannot see, and do not use bare hands to turn over possible hiding places. Many spider bites occur when the victim uses bare fingers to turn over wood or other objects that conceal the hidden spider.

Indoors, shake clothing out that has been stored or laid down in spider inhabited dwellings. Exercise caution when moving boxes or other objects that have been stored in basements, cellars, or greenhouses within the range of spiders.



A significant number of spider bites occur in bed, when the sleeping person inadvertently rolls over and places a limb on the spider. In many instances this could be prevented by eliminating the spiders' means of getting in or

onto the bed. Spiders usually get onto beds by climbing bedspreads, or other linen which touches the floor, or is very close to the floor. Hobo spiders are not proficient at scaling slick surfaces, such as bedposts. Keep the sides of bedspreads at least eight inches above the floor, and keep beds at least eight inches from walls with porous surfaces, if you have a spider problem in your home.



Spiders often enter a house when searching for mates, or to find warmth when the weather turns cold in the fall. Keeping spiders out of the house is always a major challenge. A few simple procedures may prevent most spiders from entering the home. Make sure screens are in good shape and make a tight fit; screen the dryer vent. Caulk windows and doorways, including the door seal beneath the door. You would be amazed at how small an area a spider can squeeze through.



Once inside, spiders can be controlled by routine cleaning, making certain to thoroughly vacuum in corners, closets, behind furniture, and underneath beds. Controlling spiders inside the house is difficult because spiders are not attracted to bait. Spiders only eat live insects, that they kill themselves: you can't poison a bug and use it for bait. Spiders also have special pads on the bottom of their legs which allow them to walk across many insecticides without absorbing the chemical. Some indoor spider sprays have a physical characteristic that acts like static electricity and is actually attracted to the spider's body. **Bonide Spider Spray** and **Bayer Home Pest Control** are two indoor insect sprays that have some degree of control for spiders inside the house.



One of the best controls for Spiders in-

side the house is to use spider traps. Spider traps have a hormone attractant along with a sticky substance to hold the spider until it dies: spiders can't resist the scent. Place a spider trap along the base of walls, in stairways, or in other parts of the house where spiders are noticed. If you don't catch any spiders within a week, move the trap to a different location. You may catch spiders in one part of the house but not in another area, even in the same room. The trap should last two or three months depending how hot and dry your house is. When the trap is full simply replace it with another one. Look at your trap and see how many different kinds of spiders you see on it. You may catch several different species on your spider traps including crab spiders, red jumping spiders, black jumping spiders, daddy long legs, yellow spiders, and lots of the common house spiders.



Many people have caught hobo spiders on their spider traps. I have never caught a black widow spider or a hobo spider (that I know of) in the spider traps inside my house but I have caught hundreds of the other pesky spiders.



Chemical Controls

Remember, most spiders are good for the yard. Do not just indiscriminately spray for spiders. You may kill many of the good spiders that are helping to control the bad spiders. Be sure to read and follow all label directions on the sprays that you apply. Make sure the chemical you choose is labeled for indoor use if you plan to spray inside your home. You may want to use one chemical for outdoor use, and a different chemical (or a different formulation of the same chemical) for indoor use.



Spray the outside of your home regularly as the temperatures start to cool in the fall, and as spiders start to look for a winter hiding area. You may need to spray window wells, around the doors, and near garage entrances, weekly as the weather cools. Once a major frost has either forced the spiders into their winter hibernation, or has killed the unprotected spiders, you may not need to spray outdoors again until next year. Eight, Bifenthrin, and Malathion are the chemicals of preference for outdoor use.



If spiders have found their way into your home, and if the other types of spider preventions and controls have not been sufficient to control the spiders inside your home, you may have to resort to chemical sprays. Many chemicals are labeled for indoor use. **Bonide Spider Spray**, **Orange Guard Insect Spray**, and **Bayer Home Pest Control** are some of the common 'Ready to Use' insecticides that are effective on spiders.

The 'ready to use' chemicals are the best to use inside because they do



not have the unpleasant odor associated with most chemicals. You can also buy concentrated insecticides, and mix them yourself, just make sure they are labeled for indoor use.



Aerosol insect foggers are also very effective in spider control, if you 'fog' the entire house. If you only fog one area, the spiders may just move to another area of the house. Foggers are great for cellars, crawl spaces, and other areas that are hard to reach. Foggers kill all exposed insects and spiders. Foggers will not kill any spiders hiding in closed closets, drawers, clothing, or in other areas that the chemical cannot reach.

Identification

Besides the Black Widow Spider, the only other dangerous spider in our area is the hobo spider. Without a 30 power hand lens, it is almost impossible to tell the difference between a common house spider, a grass spider, a giant house spider, some species of wolf spiders, and the aggressive house spider (Hobo Spider). The body markings are different but they are hard to always distinguish. The stripes on the legs are different but again, they are often hard to distinguish.



One of the best ways to identify hobo spiders from house spiders and wolf spiders, is to look at their eye patterns. Unfortunately the only way to see their eyes is to be very close, and to have a 30 power hand lens.



All funnel-web spiders have four sets of eyes. Each species of these spiders have a different eye pattern. If you look closely at their eye pattern you can definitely see the difference.

Spider Eye Patterns



Hobo Spider

Common House & Grass Spider

Wolf Spider

Spider Body Markings

The body markings are slightly different for each spider, but they are hard to distinguish without a powerful hand lens. For this reason, identifications of suspected hobo spiders should be confirmed by an entomologist or other persons trained in the identification of spiders.



Photo Credit: Mountain-Bluebird-Products-HoboSpiderBite.gif

You can take samples to the USU Extension Office you have questions about the spiders in your yard..



Photo Credit: Mountain-Bluebird-Products-MaleHobo.jpg

Black Widow Spiders



* Many Spider Sprays do not list Black Widow spiders on their label because Black Widow Spiders are web sitters and don't leave their webs. Spider Traps do not work for Black Widow Spiders.

Chemical Controls:

- * The Black Widow will be in the middle of the web in the evening, making evening sprays more effective.
- * Spider sprays will kill Black Widows only if sprayed directly on the spider. Spraying large areas, as a preventative, is not effective.
- * Spider dusts will kill the black widow if applied on the spider webs. Dusts are long lasting and are quite effective.



Organic Controls:

- * Carefully remove materials in areas where they might hide.
- * Eliminate as much clutter as possible in storage areas, around windows, in corners of rooms, and under furniture.
- * Seal and caulk openings, install screens and door sweeps, to prevent spiders from moving indoors.
- * Destroy webs and egg sacks by brushing, hosing, or vacuuming frequently.
- * If you vacuum black widow spiders and egg sacks, immediately seal the bag in a plastic bag before discarding.
- * Reduce outdoor lights that attract prey for spiders.
- * Keep piles of firewood, stones, boards, and heavy vegetation away from the home.
- * Use a garden hose, with high pressure, to wash down outside areas, such as rock piles, under decks, patios, and overhangs.
- * Remember to Always wear gloves if Hobo Spiders, or Black Widow Spiders, are present.



More resources:

- <http://extension.usu.edu/files/factsheets/hobospid.pdf>
- https://www.osha.gov/OshDoc/data_Hurricane_Facts/black_widow_spider.pdf
- <http://bugguide.net/node/view/13443>
- <http://extension.usu.edu/files/publications/factsheet/hobo-spiders-key07-08.pdf>
- <http://www.spiderexpert.com/faq.htm>
- <http://extension.usu.edu/files/publications/factsheet/hobo-spiders-key07-08.pdf>
- <https://utahpests.usu.edu/uppd/htm/hobo-spiders>
- <http://extension.usu.edu/files/publications/factsheet/spidersn-2012pr.pdf>
- <http://extension.usu.edu/files/publications/factsheet/hobo-spiders08.pdf>
- <http://bugguide.net/node/view/84423>