



Common Spiders In and Around Homes



Spiders are as familiar and well known to most people as they are disliked. The unpopular reputation of spiders is undeserved. Myths about spiders and the negative consequences of biting by a very, very small number of species overshadow the ecological benefits spiders provide. All spiders are beneficial predators that feed on insects, spiders, and other arthropods, and thus help reduce pest populations in and around homes, landscapes, gardens, and crops.

Characteristics

Spiders are related to insects but are distinctly different. Spiders and insects are both arthropods; that is, animals with an exoskeleton (their skeletons are on the outside of their bodies) and jointed legs. Differences between spiders and insects are described in the accompanying chart. Spiders are closely related to mites, ticks, and scorpions and are collectively known as *arachnids*.

Comparison between spiders and insects

	Spiders	Insects
Body regions	Two (cephalothorax, abdomen)	Three (head, thorax, abdomen)
Legs	Eight	Six
Eyes	Simple, usually eight (rarely six)	Compound, two
Wings	None	Four (sometimes two or none)
Antennae	None	Two
Mouthparts	Chelicerae (fangs)	Mandibles (jaws)

All spiders produce silk throughout their lifetime. Silk is produced as a liquid in specialized structures called spinnerets located at the tip of the abdomen. Silk hardens as it is drawn from the spinnerets and has contact with the air. Spider silk is used to build webs and other types of snares that capture prey, and to make egg cases, draglines, shelters, and retreats. Silk produced by spiderlings (young spiders) enables them to be transported by air currents and wind in a process called *ballooning*.

Spiders are predators feeding mainly on living insects, mites, and other small arthropods. Spiders are considered beneficial because of the large number of insects they prey on, including a number of pest species. All spiders have venom that is injected through the hollow fangs (chelicerae) into the living prey to immobilize the prey and begin the digestion process. Spiders feed by liquefying the prey with digestive fluids that are injected or regurgitated into the prey and then sucking in the digested food.

SpiderBites

Spiders very rarely bite people and far less than is generally assumed. Most spiders are harmless to people and are incapable of biting, even when coaxed. Most people and even medical doctors overstate “potential spider bite” diagnosis based on ambiguous symptoms such as redness, swelling, cramps, severe pain, or even necrotic lesions that can be caused by other factors including other diseases or medical conditions and bacterial skin infections.

For more information on spider bites and dangerous spiders, see Potentially Dangerous Spiders, A3689-University of Wisconsin Extension; PM 1721, Iowa State University Extension and Outreach; WW-06962, University of Minnesota Extension.

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(NOTE: Sizes given under spider descriptions represent the length of the body not including the legs).

HUNTING SPIDERS are outdoor spiders that may wander indoors as accidental invaders. Listed below are the most common hunting spiders that may be found indoors.

Wolf spiders (Figure 1) are moderate to large-sized spiders (¼- to 1-inch long) with dark brown and slightly hairy bodies. Wolf spiders are found on the ground or under stones in a wide variety of habitats, such as woodlands, grassy meadows, beaches, landscapes, gardens, and fields. Some even live underground. They commonly hunt during the day or at night when it is warm. Wolf spiders are alarming because of their large size and rapid movements. They are not aggressive and, according to *The Golden Guide to Spiders*, they make good pets.

Sac spiders (Figure 2) are normally found on foliage or on the ground. They are small to medium-sized spiders (⅓- to ⅝-inch long) and are usually yellowish or light-colored. Sac spiders hunt at night, feeding chiefly on small insects, and hide during the day in a silken tube or sac, from which they take their name. They do not construct webs. Outdoors, they usually roll up leaves into a tube, or may construct a retreat under stones. Sac spiders can be common indoors. They are found in retreats in a variety of places, including high upon walls near ceilings.

Fishing spiders (Figure 3) are typically seen near ponds, swamps, or slow-moving streams, but some may be found at considerable distances from water. Fishing spiders are the largest spiders in the Upper Midwest (1-inch long). With legs

Spider Behavior

Spiders can be divided into two groups depending on how they capture their prey.

- *Hunting spiders do not construct webs to capture food. Instead, they rely on quickness and relatively good eyesight to chase and capture prey. Active hunters (sometimes known as wandering spiders) actively search for and chase their prey. Passive hunters lie in wait and seize prey as it approaches. Hunting spiders live outdoors, but may wander into homes accidentally, particularly in the fall, but they do not survive well and usually do not reproduce indoors.*
- *Web-building spiders construct webs in calm, undisturbed places to capture their food. They live in or near their web and wait for food to come to them. They generally have poor eyesight and rely on sensing vibrations in their web to detect prey.*





Figure 1. Wolf spider



Figure 2. Sac spider



Figure 3. Fishing spider

spread out, some fishing spiders cover as much as 4 inches. They are generally dark-colored, usually brownish or grayish, with white markings. Fishing spiders can “skate” across water and can dive underneath to capture prey. In addition to insects, fishing spiders also can catch tadpoles, small fish, and other small vertebrate animals.

Sowbug spider, also known as the woodlouse hunter or the dysderid spider, is an introduced species that is now common and widely distributed in the United States (Figure 4). This medium-sized spider has distinctive coloration: the cephalothorax is purplish-brown, the abdomen is grayish-white, and the legs are orange. Unlike the majority of spiders, the dysderid spider has only 6 eyes. The chelicerae (fangs) are quite large and project forward. Dysderid spiders wander at night in search of food and are ground-dwellers commonly found under rocks and debris. As the name implies, their preferred prey are sowbugs and pillbugs, though a variety of prey may be taken.



Figure 4. Sowbug spider

Jumping spiders (Figure 5) are compact, medium-sized spiders that get their name from their ability to leap on their prey, often jumping many times their own body length. They are active during the day and are often found on windows, ceilings, walls, and other areas exposed to sunlight. Jumping spiders are compact, small to medium-sized (about ¼- to ½-inch long) and dark-colored with white markings. Some can be brightly colored, including some with iridescent mouthparts. These spiders move quickly in a jerky, irregular gait and can run sideways and backward. The two middle eyes of jumping spiders are particularly large and jumping spiders have the best vision of spiders, seeing objects up to eight inches away.



Figure 5. Jumping spider

Parson spider (Figure 6), one of the gnaphosid spiders, is a medium-sized spider (½-inch long) with a brownish body and gray abdomen with a white band running down over half the length of its abdomen. Parson spiders actively hunt at night and chase their prey. During the day, they are usually found outdoors under stones or loose bark in silken retreats. Indoors, they hide under objects or in cracks or crevices.



Figure 6. Parson spider

Crab spiders (Figure 7) are small to medium-sized spiders (⅓- to ⅔-inch long) ranging in color from yellow or red to brown or gray. The first four legs are longer than the back four and are held out to the sides giving a crab-like appearance. They can walk forward, sideways, or backward. Crab spiders are passive hunters — they wait motionless and ambush insects that pass by closely. Outdoors, crab spiders are often found on flowers but are also seen on stems or leaves. They are rarely found indoors.



Figure 7. Crab spider





Figure 8. Cobweb spider



Figure 9. American house spider



Figure 10. Cellar spider

WEB-BUILDING SPIDERS survive and reproduce well indoors and outdoors, depending on species.

Cobweb spiders are members of a large group also called the comb-footed spiders and are very common both outdoors and indoors. They are small to medium-sized spiders (about $\frac{1}{8}$ - to $\frac{3}{8}$ -inch long) and have a rounded, globular abdomen, small cephalothorax, and brownish or grayish color (Figure 8). They are sedentary and construct the familiar, irregular, tangled webs for which the group is named. Webs are built in undisturbed, out-of-the-way places such as wood and stone piles and in quiet areas of buildings, such as basements. A common type of comb-footed spider found indoors is the American house spider, also called the common house spider (Figure 9). It is grayish to brownish with chevron-like markings on its abdomen and a body length of over $\frac{1}{4}$ inch. It builds a loose tangle of webs (“cob webs”) in secluded and undisturbed areas of the house such as basements and crawl spaces.

Cellar spiders, including the long-bodied cellar spiders, are common in dark secluded places such as crawlspaces, basements, and cellars (as the name implies). Like the cobweb spiders, the cellar spiders build a loose, irregular web in corners near the ceiling or floor. Cellar spiders are $\frac{1}{3}$ to $\frac{1}{4}$ inch long, pale gray to light tan in color and have long delicate legs (resembling the daddy-longlegs). (Figure 10)

Orb weaver spiders are common spiders outdoors in gardens, fields, and landscapes. They are rarely found indoors. The orb weaver spiders make the familiar “typical” spider web of concentric circles and radiating lines. They range in size from small to large ($\frac{1}{8}$ - to 1-inch long) and are found in a variety of colors, some being brightly colored. Orb spiders have large, swollen-looking abdomens, including some that are oddly shaped. Despite their large size and bright coloration, orb weaver spiders are not dangerous.

Common orb weaver spiders include the black and yellow argiope (are-JI-o-pee) spider, the barn spider, and the marbled orb weaver spider. The **black and yellow argiope** (Figure 11), also known as the garden spider, is familiar to many. It is large (up to 1-inch long) and brightly colored black and yellow. The **Barn spider** (Figure 12) is large ($\frac{1}{2}$ -inch long) and yellow and brown in color. The barn spider is the model for Charlotte in E.B. White’s famous book, *Charlotte’s Web*. The **marbled orb weaver spider** (Figure 13) is a striking spider that attracts attention because of its typical bright orange color, though specimens vary from orange to beige to pale yellow and white.

Funnel weaver spiders produce a flat, horizontal web with a small funnel-like retreat off to one side. Webs are commonly built on the ground, around steps, window wells, foundations, and low shrubs. Funnel weaver spiders are generally brownish or grayish with stripes near the head and a pattern on the abdomen. They have long spinnerets and are moderate-sized ($\frac{3}{4}$ -inch long).

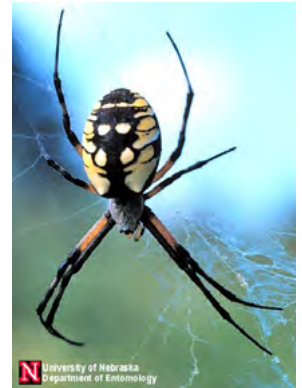


Figure 11. Black and yellow argiope



Figure 12. Barn spider

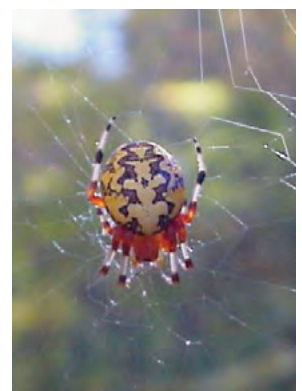


Figure 13. Marbled orb weaver spider





Figure 14. Barn funnel weaver



Figure 15. Grass spider



A common member of the funnel-web spiders is the barn funnel weaver (Figure 14). Barn funnel weavers have a pair of dark stripes behind the head and may build webs in corners and closets indoors. Other common funnel weavers are called grass spiders. Grass spiders (Figure 15), like the name suggests, build their horizontal webs in the short grass of lawns. They have three light colored and two dark colored stripes behind the head.

Management of Spiders In and Around Homes

Control of spiders is best achieved with an integrated pest management (IPM) approach that includes multiple tactics for prevention, exclusion, and population reduction. Since the type of spider will determine the necessary control actions, start by identifying the spider involved.

Spiders are not harmful. Tolerance for spiders and simple capture and removal are recommended whenever possible. However, dangerous spiders such as the black widow and brown recluse, both very rare in the upper Midwest, require immediate attention and control.

Eradication of all spiders from a home is difficult and unnecessary. Properties located in areas favorable to spiders, such as by rivers, lakes, or fields, are more likely to have large numbers of spiders. Spiders also will be more numerous in areas with a large supply of insects that serve as a food source for spiders.

Each situation is unique, but the following guidelines describe the integrated techniques that can be used to control spiders.

Indoors

Regular housecleaning is very important in the control of spiders indoors. Large, persistent spider populations indoors indicate the presence of a significant insect population that serves as their food.

- Capture and discard or remove individual spiders that have wandered inside.
- Remove papers, boxes, bags, and other clutter to minimize favorable sites for spiders.
- Remove webbing with a broom or vacuum, and destroy any egg sacs and spiders that are found. Look especially around windows, in corners, and in relatively quiet places.
- Sticky traps such as small glue boards or cockroach traps can be used to monitor for presence and abundance of spiders. In limited circumstances sticky traps also may provide some level of control. Place traps along walls, under furniture and appliances, and in other undisturbed locations.
- Eliminate insects that serve as a food supply, especially when large numbers exist. Check particularly in and under webs to see what insects have been captured.
- Osage orange fruits, also called hedgeballs or hedge apples, are sold in stores and alleged to repel spiders. They are not effective and their use is not recommended.
- You can supplement your sanitation efforts with an insecticide treatment. Lightly apply insecticide to cracks, gaps, and other places where spiders may hide. General treatments on surfaces and fogs are not effective. Most insecticides labeled for ants and cockroaches are also labeled for spiders. These products are commonly found in ready-to-use aerosol and liquid formulations. **CAUTION:** Read all label directions carefully before buying insecticides and again before using them.



Outdoors



Use the following techniques if accidental invasion by wandering spiders from outdoors is a frequent problem or to reduce an unacceptable number of spiders around your home and prevent spiders from getting inside. Otherwise, spider control in the lawn, landscape, and garden is not recommended because spiders are beneficial and an important component of the ecosystem.

- Remove piles of bricks, firewood, and other debris that may serve as suitable homes for spiders or move them further from your home.
- Keep grassy or weedy areas near buildings cut short.
- Trim back shrubs and other plants that directly contact your home.
- Periodically remove webs with a broom, vacuum, or a hard spray of water.
- Remove and destroy any egg sacs or spiders that are found.
- Check to be sure screens fit tightly. Replace any screens that fit poorly or are damaged.
- Reduce outside lighting to minimize attraction of insect prey that can encourage spiders. Yellow lights are less attractive to insects than mercury or sodium vapor lights. When possible, place security lights on a pole shining toward a door rather than on the building above the door. This will reduce attracting insects that spiders feed on to the building.
- Caulk or seal cracks or gaps around the foundation, doors, and ground level windows.
- As a last resort, lightly apply a broad-spectrum insecticide labeled for the exterior of buildings on the outside of your home to reduce invasion by wandering spiders. Spray under siding, in cracks and crevices, and other places where spiders may hide. General treatments on the siding or other surfaces are not effective. Read and follow all pesticide label directions.

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