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Dr. Gale E. Ridge and Katherine Dugas
Department of Entomology
The Connecticut Agricultural Experiment Station
123 Huntington Street, P. O. Box 1106
New Haven, CT 06504

Phone: (203) 974-8600

Fax: (203) 974-8502

Email: katherine.dugas@ct.gov

Website: <https://portal.ct.gov/caes>

SPIDERS FOUND IN THE HOUSE

Human fear towards spiders, known as ‘arachnophobia,’ is very common. This is largely driven by culture and misinformation. Despite their reputation, very few spiders are truly dangerous. In Connecticut, a small number of spider species are frequently encountered inside buildings, homes, and other man-made structures. This article will give some basic information on the spiders most likely to be encountered indoors and how to manage them.



Joseph Berger, Bugwood.org

Fig. 1: Cellar spider

There are approximately 550 species of spiders in Connecticut and most go unnoticed because they are reclusive. They hunt mostly insects and use stealth, entrapment with webs, and speed (chasing). Unlike insects, spiders possess eight (8) legs not six (6). It is not uncommon for spiders to trigger human fear and anxiety, because their movements as hunters are unpredictable. Encounters are unsettling for both people and the spiders -

who will flee if they have the opportunity. Myths, legends, and social phobia have contributed to a public dislike of spiders although they remain a principal predator within buildings and the outdoors of significant insect pests that can bring harm to public health and property.

Spiders use venom as part of a “tool chest” of hunting strategies. Venom stuns prey and helps with eating. If a spider is forced to envenomize a person, it is commonly referred to as a “bite.” The use of the word “bite” in this fact sheet is to describe the act of envenomization and not a physical act of biting.

Many people and medical professionals when seeing a painful often weeping unexplained skin wound default to “spider bite” as a diagnosis. There are a number of other causes including mosquito bites. Thus, unless the spider is captured at the time of envenomization a spider bite diagnosis must remain inconclusive. If an offending spider is caught, it is important to have it identified by an expert. This information will be useful for a doctor if treatment is needed. Additionally, if a spider is caught in the act of envenomization there will be seen two tiny puncture wounds separated by 1 millimeter or less. These quickly disappear as tissue

swells in reaction to the bite. Do not depend on suspected double puncture wounds for spider bite diagnosis since biting insects can “double tap” the skin in an attempt to penetrate. A spider must be caught to have an absolute diagnosis.

Cellar Spiders (Pholcidae)

Commonly called ‘daddy long-legs,’ cellar spiders are regularly found living in man-made structures. They frequent undisturbed dark corners in rooms, basements, and cellars.

These spiders have tiny oval pale cream to grayish bodies and very long thin legs (Fig. 1). They build three dimensional ‘cobwebs’ which they use to entangle prey such as flies, mosquitoes, even other spiders. Cellar spiders are excellent at controlling pests inside buildings and tolerating their presence in problem areas such as basements, cellars, and bathrooms is beneficial. They are a natural biocontrol alternative to pesticides.

There is an urban legend that these spiders are highly venomous. This is not true. The mouthparts of cellar spiders are too small to puncture human skin. The venom of these spiders is weak and not considered medically significant. Bites from these spiders are extremely rare.



Fig. 2: Yellow sac spider

Yellow Sac Spiders (*Cheiracanthium* spp.)

Yellow sac spiders are small greenish-yellow spiders, ¼ to ¾ inch long (Fig. 2). They live

outdoors under stones and indoors in cracks and crevices or in other secluded places.

Sac spiders do not build webs, instead they are active running nocturnal hunters. They hide during the day in retreats built from silk inside cracks and crevices or anywhere along the connection between ceilings and walls etc. During the summer months, these retreats are also used by the females as shelters to protect their eggs and serve as nurseries for newly hatched spiderlings.

Although not medically significant, these spiders have been known to bite people. Biting occurs during chance encounters with people and often are prompted by the spider thinking it is in peril. Unlike other species of house dwelling spiders, they are more likely to bite. If a bite does occur, it can be locally painful. It is advisable to see a doctor. Usually, the injury resolves in a few days, while severe reactions are rare.

Wolf Spiders (Lycosidae)

Wolf spiders are large long-legged active running hunters. Their bodies are usually up to one inch long. They can appear much bigger when the legs are splayed. They are hairy spiders with mottled gray and black markings. The hairs provide camouflage, physical protection, and sensory information such as hearing.

Female wolf spiders are good mothers. They carry their egg sacs until the spiderlings hatch. Then the spiderlings climb on to their mother’s backs and are carried until they are old enough and strong enough to fend for themselves.

Wolf spiders get their name from their active nocturnal hunting behavior and their size. They are found in grasslands, forest floors, and moist or sandy landscapes. They can also be found in building basements adjacent to these habitats. During the fall as temperatures drop, wolf spiders find their way into buildings where it is warmer. If disturbed, they will flee. If cornered, they may raise their front legs as a bluff in a defensive threat display. Although their large size and posture may be intimidating, these spiders rarely bite people and prefer to run away. Their venom is not considered medically significant.

Giant Fishing Spiders (*Dolomedes* spp.)

Giant fishing spiders are the largest northern forest spiders of North America. These spiders are very large, 1 - 1½ inches long (Fig. 3). Like wolf spiders, they appear larger than they actually



Fig. 3: Giant fishing spider, *Dolomedes* sp.
This individual is missing two legs.

are when the legs are splayed (3-4 inches toe to toe). Their body and legs are also hairy and mottled grayish black for camouflage, protection, and sensory information.

Despite their size, these spiders are reclusive and quick to flee if threatened. They live in forests and aquatic environments. Their preferred prey are aquatic insects, but they can catch small fish and tadpoles. Boathouses and other structures built close to bodies of water often have these fishing spiders. Like wolf spiders, females carry their egg sacs until the spiderlings hatch. Once they emerge, the females build ‘nursery webs’ to protect them. The females will then guard their young until they are strong enough to disperse. These spiders are not known to bite people, and their venom is considered not medically significant.

Woodlouse Hunters (*Dysdera crocata*)

Woodlouse hunters were introduced to North America from the Mediterranean. This primitive looking spider is named for its preferred prey, isopods also known as the woodlouse, sowbug, and pillbug. These isopods are land crustaceans that breathe using gills. They frequent damp wet areas and are rarely found in houses because the environment is too dry for them. The woodlouse hunter are medium-sized spiders about, ½ to ¾ inch long, with a pale grayish abdomen and

brownish-red cephalothorax* and legs (Fig. 4). These spiders have proportionately large chelicerae (mouthparts) designed to penetrate an isopod’s tough exoskeleton.



Fig. 4: Woodlouse hunter spider

These spiders also frequent moist leaf litter and rotting wood, where their prey is frequently found. Although isopods are infrequently found in man-made structures due to dry conditions, these large spiders are active wanderers and can occasionally be found inside homes. Despite their large chelicerae, bites are exceedingly rare and are not considered medically significant.

**Spiders have no necks. The head and thorax are fused hence the name cephalothorax (etymology: cephalo (head) plus thorax).*



Fig. 5: Jumping spiders have a prominent pair of forward-facing eyes.

Jumping Spiders (Family Salticidae)

Since the advent of modern macrophotography, jumping spiders have become popular subjects. Close up photographs of these spider’s faces reveal disproportionately large eyes giving them a doe-eyed cute appearance. This spider family has the greatest visual acuity over most spider families, because they are active daytime hunters.



Fig. 6: A male *Hentzia palmarum* jumping spider on top of a computer monitor.

They have been known to watch TV or computer monitors and respond to moving images. These spiders carefully stalk their prey and pounce with powerful and blindingly fast jumps or hops, hence the name.

To further their winsome reputation, jumping spiders have also been popularized in modern media thanks to their intricate courtship behaviors, which are usually described as ‘dancing.’ Male spiders engage in intricate visual signaling movements around the larger females in courtship to avoid being eaten. If the females are receptive and like what they see they will allow “safe” mating.

Jumping spiders are very small (Fig. 5, Fig. 6). In Connecticut they are not usually larger than a ½ inch in length. They are primarily found outdoors in many different habitats but can also be found actively wandering inside homes. Most are primarily brown or black in color with small patches of iridescent markings. Males are typically more brightly colored than the females. Most jumping spiders’ mouthparts are too small to penetrate human skin, and they are quick to flee if they sense danger. Their hyperawareness and rapid jumps may occasionally startle people; it also makes them very difficult to catch. They are not known to bite people.

Prevention and Control:

Active control of spiders does not require the use of pesticides. In most cases the simplest solution is to capture a wayward spider and release it outside. To prevent injury to the spider, place a clear drinking glass over the spider to prevent it from running away. Slowly slide a stiff piece of

paper or card underneath the spider to give it time to step onto the paper or card. Now confined, the spider can be safely carried outdoors and released. Web-building spiders can be caught in larger mouthed mason or other screw-topped jars for safe transportation. The larger jar mouths allow the web area the spiders are on to be easily picked up with the spiders. Non-lethal ‘critter-catchers’ are commercially available; these use a soft bristle trap attached to a long handle to safely pick-up spiders at a distance.

A vacuum cleaner can be used to regularly remove unwanted cellar spider webs from high corners. Allow the spiders to escape their webs before vacuuming; tap the “turned off” vacuum cleaner nozzle against the webs. The spiders will immediately exit. This keeps areas looking clean and tidy while still benefiting from the spider’s free pest-control services.

Preventing free-roaming spiders from entering homes is simple. Spiders often accidentally enter homes while chasing prey. Like most arthropods (small jointed-foot animals), spiders do not like dry environments. Running a dehumidifier and/or addressing known leaks and water issues will discourage spiders and their prey in these areas. General exclusion methods such as caulking exterior cracks and crevices, sealing windows, and screening vents will also exclude spiders and their prey from entering homes. This also has the added benefit of making homes more energy efficient and excludes larger pests such as rats and mice.