



Common spiders in our neighbourhood

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Understanding spiders makes it easier to recognise their important role in the environment. Considering their natural services also helps to realise they cause little harm and this reduces the need for fear.

There are many hundreds of species in Australia and such an emphasis has been put on spiders being poisonous, we often forget that very few spiders are actually harmful. They do not spread disease, nor do they plunder our food supplies. The truth is, spiders are very beneficial and feed on a lot of pest insects we would otherwise have to contend with. It is estimated that the weight of insects eaten annually by spiders outweighs the total weight of the entire human population.

As we know, spiders are not insects but are in the class Arachnida. They have only two body parts, the cephalothorax and the abdomen, and eight legs instead of six. All spiders spin silk, but not all build webs for the purpose of catching prey. Spiders such as the common wolf spider run down their prey as would a wolf, whilst a trapdoor spider will lay in wait in its burrow until some prey happens past.

In Western Australia, the only spider proven to be lethal is the red-back spider. There has been an effective antivenene for this spider since 1956 and there have been no deaths from a red-back spider bite in Australia since 1955. We also have many species of the large trapdoor spiders and, although venomous, none of these are considered life threatening. We do not have the deadly funnel-web spider in this state.

Here is some information on our most notorious local spiders.

Red-back spiders

Red-back spiders (*Lactrodectus hasselti*) are common and found throughout Australia. They are seen mostly in disturbed areas and seem to like living near humans. They nest in dry, sheltered areas where they build messy tangled webs with sticky tracer leads going to the ground that "crackle" if you run a stick through them. The female is easily identified with her long delicate front legs and a red or orange stripe on her pea-shaped abdomen. She also has a red or orange hourglass shape on her underside. Only the female is considered dangerous but is generally a timid spider, biting only in defence or when disturbed. The male is very small, and his fangs are unable to penetrate human skin. Very often the male will



The female red-back usually hangs upside down in her web.

be taken by the female as a meal during mating. Our red-back is the same spider as the black widow of north America.

Although red-back spider bites are usually immediately painful, the venom (which contains neurotoxins) works very slowly. Bites can result in headache, nausea, vomiting, abdominal pain, fever, hypertension and, in severe cases, paralysis.

Untreated, the symptoms worsen over a 24-hour period and may take weeks or months to heal. Red-back spider bites are the commonest poisonous bites requiring treatment in Australia, particularly over the summer months.

Trapdoor spiders

Trapdoor spiders (*Mygalomorphae*) are also common throughout Australia. These are the old-world or primitive spiders (mygalomorphs) having downward-pointing parallel fangs instead of the more typical pincer-like fangs. This is why they rear up in an apparently aggressive manner when threatened. Trapdoors are not aggressive spiders and spend the majority of their normally retiring lives in their burrows.

Males will wander temporarily during mating season, and this is usually when these spiders are encountered. Males do not live long after reaching maturity, usually dying soon after (or during) mating.

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Trapdoor spiders are similar in appearance to fellow mygalomorphs, the funnel-web spiders. Unlike funnel-web spiders, though, they are not considered life endangering, although the mouse spider, a type of trapdoor, is capable of a very nasty bite. Not all trapdoor species have a trapdoor lid covering their holes, although they all live in burrows. The females have long life spans ranging from 5–20 years, taking several years to reach maturity. Insects are their main prey, but prey will also include other spiders and other small animals.



A trapdoor spider out of its burrow.

Black house spiders

Black house spiders (*Badumna insignis*) are also called window spiders because of the tendency to build their webs around window frames. These untidy, zigzag threaded webs usually have one or two funnel-shaped entrances leading into a tubular retreat, and some people mistakenly think they may be funnel-web spiders. These robust, hairy spiders range from 9 mm (male) to 18 mm (female) in length, are grey to black in colour, and are found Australia wide.

Black house spiders are timid and bites to humans are rare but may be painful and can cause general symptoms such as nausea, sweating and vomiting. In a few cases necrotic skin lesions have been reported after multiple bites.



Female black house spider in her messy web.

These spiders catch a lot of flying insects around the home and garden, but are generally not tolerated well because of their messy webs around windows, eaves and even the mirrors of the family car! Enemies of these spiders include parasitic wasps, birds and the white-tailed spider.

White-tailed spiders

White-tailed spiders (*Lampona cylindrata*) are common and widespread across Australia. They are not web builders but vagrant hunters and are often seen inside houses, especially on summer evenings, wandering in search of prey. They are medium sized spiders, with cylindrical abdomens, grey to black bodies with stout legs and a white patch at the tip of the abdomen. They feed mainly on other spiders, plucking at their webs to imitate the struggling of an ensnared insect and then seizing the unsuspecting spider when it comes out of its retreat.

White-tailed spider bites typically cause initial burning pain followed by swelling and itchiness at the site. Occasionally, weals or cases of blistering ulceration have

been reported and some medical studies suggest that this may be due to a secondary infection of the wound. Sensational media reporting of severe cases of skin ulceration (a condition termed 'necrotic arachnidism') has given this spider a fearful reputation it probably doesn't deserve. Recent studies have monitored the medical outcomes of hundreds of verified white-tailed spider bites and found not a single case of ulceration. It is certainly safe to say that necrotic arachnidism is not a common outcome of a white-tailed spider bite. If they are common in the house, it is a good idea to check bedding before going to bed. Also, check your shoes before putting them on and do not leave clothing on the floor, as these spiders are often found sheltering in such situations.



Female white tailed spider ready to lay eggs.

Daddy long-legs

Daddy long-legs (*Pholcus phalangioides*) are cosmopolitan spiders and are probably the best known spiders world wide. They are almost always associated with human dwellings, famous for their small, dainty bodies with long legs up to 50 mm in length. These spiders are often found in the house or shed with their thin, tangled webs behind doors or attached to ceilings and upper walls in the corners of rooms. The non-sticky web of the daddy long-legs is really just a retreat for the spider and not designed to catch prey. The moment an insect ventures within striking range of the spider it will race out, bite and tangle up its prey until the struggle quickly ceases.



Daddy long legs are harmless and do not bite humans.

These spiders are harmless but, quite incorrectly, renowned for being deadly poisonous. Although their venom is quite toxic, their tiny fangs are incapable of penetrating human skin and the venom glands hold so little poison that it renders this distinction as merely mythical.

Huntsman spiders

Huntsman spiders (family *Sparassidae*) are the large 'hairy scary' spiders that absolutely terrify people when they scuttle out from behind a curtain or the sun visor in the car. In reality, Australian huntsman spiders are a fascinating group with 13 genera and 94 described species. Many huntsman spiders live socially in large family groups with the mothers showing extraordinary maternal instinct. These large, hairy grey-brown spiders have flattened bodies and are found throughout Australia, preferring to live outside under the bark of

trees or under rocks and logs on the ground. They are typically long-legged (females can reach sizes up to 15 cm across the legs) with forward facing legs, and are known for their scuttling sideways gait.

These sure-footed and agile spiders are nocturnal and sometimes seen indoors at night, hunting for insects. They have keen eyesight and are good hunters, running down and pouncing on their prey. None of these spiders spin webs of any kind.

Although some huntsman spiders can give a painful bite, they are not considered dangerous to humans.



Huntsman at rest, with forward pointing legs.

Wolf spiders

Wolf spiders (*Lycosa* species). There are hundreds of species of wolf spiders distributed very widely across Australia through their ability to disperse aerially as spiderlings. They are also known as lawn or garden wolf spiders by some, as this is where we often encounter them. Most wolf spiders are wanderers but some build burrows, either with or without a trapdoor entrance. Species range in size from 1 – 8 cm across the legs and are distinguished from other ground dwelling spiders by their large eyes used for hunting at night. Like huntsman spiders, wolf spiders are highly maternal and we can sometimes see the mother-to-be roaming with her silken egg sac attached to her underside, or marvel at her piggy-backing dozens of her young.



Wolf spider in a typical pose.

Most wolf spiders are typically drab brown-grey with variegated black or fawn patterns on them.

They are not dangerous to humans, although one species can give a painful bite, which has been known to cause blistering skin lesions and infection. For this reason you should consider wearing gloves when gardening.

Garden spider

Garden spider (*Eriophora transmarina*). These spiders are common across Australia, and can reach 20 –24 mm in length. They are famed for their large orb (wheel)-shaped webs we see in the home garden. Garden spider abdomens have a variety of patterns of colour and shape but two features common to these spiders are the red colouring in the leg joints and their ability to change colour to suit their surroundings. They build their webs at dusk and usually remove all but a single strand in the morning, when they retreat to surrounding shrubbery where their camouflaged bodies are rarely seen. Garden spiders are acutely aware of insect behaviour and when conditions are not favourable for flying insects, no attempt will be made to build a web. When conditions favour flying insects and a meal can be had, they waste no time, weaving a web in about 45 minutes.



Garden orb weaver in her web at night.

These spiders are considered harmless to humans and bites are extremely rare.

Many of us will remember shrieking in horror after blundering through their webs strung across the path on a summer's night. Disturbed in this manner though, these spiders will usually drop straight to the ground or scurry away and hide.