

Funnel-web Spiders

Atrax robustus

What do they look like?

Funnel-webs are large spiders, approximately 1.5 to 4.5 cm in body length, with glossy dark brown to black carapace. The abdomen is usually dark plum to black and not patterned. Males often have a ventral spur or swelling midway along the second leg, which is pointed in the species *Atrax robustus*. Spinnerets are usually obvious, finger-like and at the end of the abdomen. The eyes of the Funnel-web are closely grouped.



Where do they live?

The Sydney Funnel-web spider occurs in New South Wales, from Newcastle to Nowra and west to Lithgow. They especially favour the forested upland areas surrounding the lower, more open country of the central Cumberland Basin. This includes the Hornsby Plateau to the north, the foothills of the Blue Mountains to the west and the Woronora Plateau to the south. Funnel-web occurrence is low in much of central-western Sydney, and also the sandy coastal parts of the eastern suburbs and the Botany Bay area. They do better in areas of sandy clay, shale or basaltic soils that can retain moisture more effectively.

Funnel-webs burrow in moist, cool sheltered habitats – under rocks, in and under rotting logs, crevices and borer holes in rough-barked trees. In gardens, they prefer rockeries and dense shrubberies.

What do they eat?

Food consists of insects and other invertebrates. Most activity is nocturnal. The most characteristic sign of a Funnel-web's burrow are the irregular silk trip-lines that radiate out from the burrow entrance of most species. These trip-lines alert the spider to possible prey, mates or danger.

Breeding and Lifecycle

Female funnel-web spiders spend most of their life in their burrows, but do occasionally hunt on the surface at night. Adult males, however, leave their burrows and wander in search of females, particularly during summer and autumn. The males spend their entire short adulthood seeking as many receptive females as possible. Male funnel-webs approach the females' hidden burrows, possibly by following the scent of their chemical attractants. During mating, the male must restrain the female



from striking him with her fangs by using the spurs on his second legs, while he transfers sperm via his palps into her genital opening.

The female then spins a pillow-shaped silk egg sac, into which she lays over 100 eggs. She cleans and turns the egg sac several times during incubation and will defend it vigorously if disturbed. The spiderlings hatch about three weeks later, and stay with the mother for a few months. After two moults, they leave her burrow, dispersing by foot to eventually make their own burrows. Juvenile males will stay in their burrows until their final adult moult, after which they will become wanderers.

Funnel-webs mature in about two to four years, with the females living to ten or more years, and the males dying about six to nine months after maturity.

Toxicity

Bites are most prevalent during summer and autumn when males leave the burrows in search of females. Accidental encounters with wandering males usually occur in gardens, houses, garages and sheds – particularly ground-level dwellings on concrete slabs. Bites are dangerous and can cause serious illness or death. The venom appears to particularly affect primates (ie humans), whereas other mammals, such as dogs and cats, are relatively resistant.

The male Sydney Funnel-web Spider is more dangerous than the female. This is because the toxic venom component that attacks the human and primate nervous system so severely is only present in male spiders. Initial symptoms after a bite include local pain, mouth numbness, vomiting, abdominal pain, sweating and salivation.

If bitten, immediate action should be taken to apply a pressure immobilisation bandage and immobilise the bitten limb on a splint. The victim's movements should be restricted and capture the spider if possible for positive identification. Do not wash venom off the skin, as retained venom will assist identification. Seek medical attention urgently.

