econotes

Christmas spiders – our bush decorations By Brad Durrant

Every year in the months leading up to Christmas, small, yellow floating dots appear through the Australian bush and people's gardens. On closer inspection these dots are not floating, but sit in carefully constructed spider webs. Christmas spiders (also known as jewel or spiny spiders) mature at this time of the year and their bright yellow, white and black bodies decorate the bush throughout summer.

Every Christmas I get asked the same question: "Where do Christmas spiders go for the rest of the year?" Thankfully, this is very easy to answer. They don't go anywhere. Only juveniles are about from autumn to spring and they are just much harder to see during the earlier stages of their life cycle.

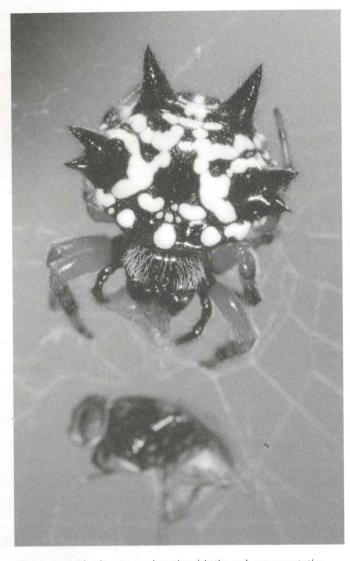
Christmas spiders (*Austracantha minax*) begin life within an egg sac, laid by females during autumn each year. Each egg sac may comprise of dozens of spiderlings. The silken egg sac can be a variety of shapes and is usually attached to a twig close to the web. Towards the end of autumn, the spiderlings emerge. Dispersal is possibly like many other orb-weaving spiders which use special silk that the spiderlings spin and use as a 'balloon' to float wherever the wind takes them. If the spiders land in a suitable position, they build a web to feed and grow. At this stage, they and their webs are very small, and as juveniles their colours are less distinct than those of the adult females that we usually see.

From the middle of spring the spiders are being noticed as they undergo their final moulting stages towards fully grown adults. Finally, Christmas spiders look more like Christmas decorations, with their bright colours and six large spines around their abdomen. They are particularly noticeable where, unlike most orb-web building spiders, they form large clusters, with their webs connected to or overlapping each other, in a similar way to golden orb-weavers.

Other orb-web builders, such as the garden orb-weavers, are nocturnal, building a fresh web every night and ingesting the previous day's web. Christmas spiders can usually be found sitting in the middle of their web all day and they keep the same web. Unlike many other spiders that have retreats or shady spots somewhere around the edge of their web, Christmas spiders rest in the hub of the web. Their hard abdomen protects the spiders from drying out in the sun as opposed to the soft bodies of most other orb-weaving spiders.

While most other spider webs are made to be quite inconspicuous, the silk lines that hold the Christmas spiders' web in place are dotted with balls of silk, making them far more noticeable. This is likely to prevent larger animals from walking or flying through their low webs which may require a lot of repair work for the Christmas spider.

Once the Christmas spiders have matured in early summer the males begin to look for a mate. Female Christmas spiders are



Christmas spider (Austracantha minax) is the only representative of the genus Austracantha and it only occurs in Australia. Here the spider is widespread and can be found in all mainland states and Tasmania. Austracantha is very closely related to the genus Gasteracantha which occurs mainly in the tropics, with many stunningly coloured and bizarre, spiny forms. Christmas spiders have six spines and are usually a combination of yellow and white surrounded by black. Photo – Brad Durrant

around three times larger than the males, so the courtship ritual needs to be done carefully or the male could be mistaken for prey. The male approaches the web of the female and plucks the silk of her web with his front legs to convey his intentions. If she is receptive, this courtship behaviour will suppress her predatory instinct and the male can approach her for mating.

Finally in autumn, all the eggs are laid and the female Christmas spiders die shortly after, leaving behind the next generation of bush decorations and a swathe of beautiful webs that the weather will eventually break apart and dispose of. Then it is only a short six months until I'm asked "Where have the Christmas spiders been?"