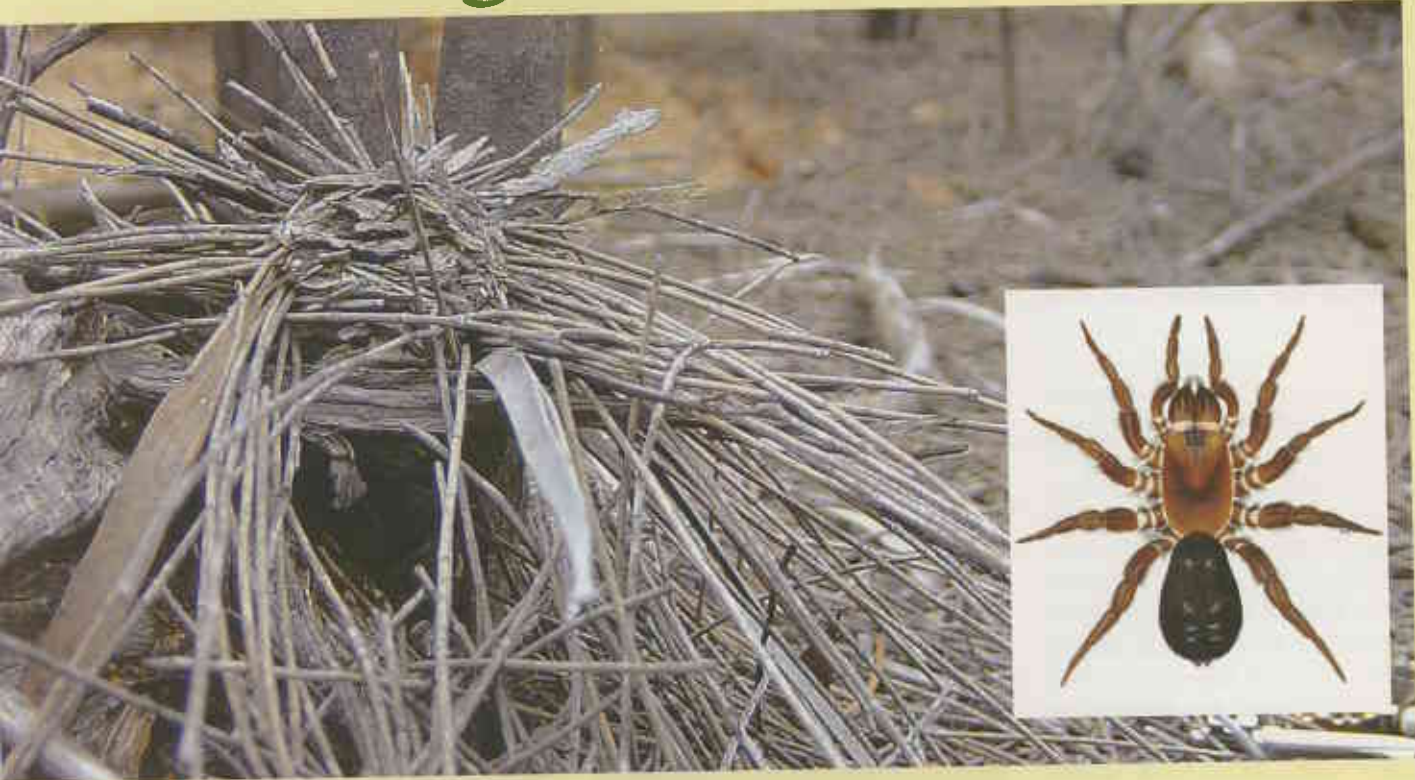


endangered

by Christine Freegard



Tree stem trapdoor spider

The tree stem trapdoor spider (*Aganippe castellum*) is a small native spider that grows to about 12 millimetres long. It is currently ranked as endangered, and populations are threatened by fire, vegetation clearing and trampling by stock. The future impact of salinity on the species is unknown, but is likely to be detrimental, as it will impact on the vegetation on which the spider depends for its survival.

This relatively small spider builds distinctive and easily recognised burrows, dug against the stems of shrubs or trees such as broom bush (*Melaleuca uncinata*), other myrtaceous shrubs, sheoaks (such as *Allocasuarina acutivalvis*) and sometimes eucalypts. The burrow extends above the ground with a silk-lined tube capped with a trapdoor that opens away from the trunk. A fan of twigs attached to the rim of the burrow hangs down to the ground. The twig lines direct prey, such as ants

travelling up and down the trunk, past the mouth of the burrow. Thus, dinner is served.

Females spend their entire lives in the one burrow, while males will leave their burrows, usually after autumn thunderstorms, to search for mates. The spiders are generally found in sandy loam soil, in areas subject to occasional sheet flooding. Having the burrow entrance raised above the surface of the ground helps to avoid flooding.

Tree stem trapdoor spiders are distributed throughout parts of the central, eastern and northern Wheatbelt. They live in clumped, but sparsely distributed, populations that probably reflect local soil types. The spider is known from only seven sites. One of these has been cleared for agriculture and, as a result, the spiders are thought to be locally extinct at this site.

Populations of the spider were recently discovered as a result of property assessments for the Land for Wildlife and WWF

Photo: Tree stem trapdoor spider burrow near Welbungin. Mick Davis/WWF Australia

Illustration: Female tree stem trapdoor spider. Brad Durrant

Australia's Woodland Watch Project. Private landowners Derek and Christine Putt of Welbungin are in the process of negotiating a Nature Conservation Covenant to voluntarily protect, in perpetuity, the spider's habitat on their property.

This is an excellent step in protecting the spider and its habitat, and anyone who believes that they know of other populations is encouraged to contact the Department of Conservation and Land Management on (08) 9334 0579.

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