IN BRIEF

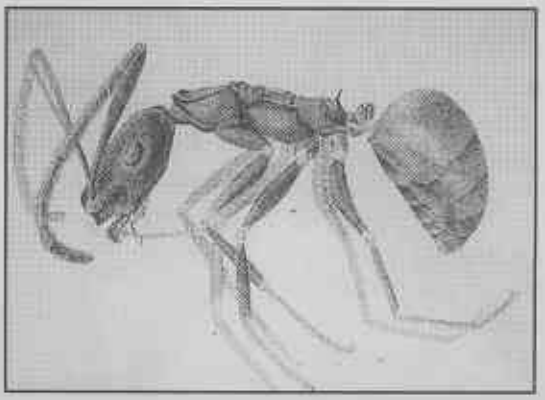
SPINELESS WONDERS

by Sylvia Leighton

IN early Nov, the Friends of Fitzgerald River National Park organised a weekend at Bremer Bay to study three important invertebrate groups, butterflies, ants and spiders. It was a revelation!

Mathew Williams from CALM spoke on butterflies (120 species in WA). They can be distinguished from moths as they rest with their wings upright, have clubbed antennae and usually fly during the day. Although traditionally butterflies are one of the better-known groups of insects, there were no records from The Fitz, so it was exciting to find 12 different species, including the Blue Iris Skipper (*Mesodina cyanophracta*). This caterpillar pulls leaves together to form a wigwam shelter at the base of a Western Iris (*Patersonia*) plant.

The 'ant man', Jonathan Majer of Curtin Uni, gave a fascinating insight into the biology, range and diversity of ants in WA (500-600 species). They can be vital to bushland ecology, as they contribute to pollination of flowers, dispersal of seeds and distribution of nutrients in the soil, as well as helping to recycle animal and plant remains. 24 different species of ant were found by various methods - shaken out of trees; collected from the ground; trapped in pit traps and picked up by torch light during the night. Examining the specimens under the stereoscope revealed how distinctly different the body features were on each species. We also did a simple test showing how quickly ants can move acacia seed, even though it may weigh 50 times more than the individual ant.



An ant only known to occur on deep white sands in the Wellstead area called Melophorous majeri.
Illustration by Nicollett Layover.

Barbara York Main of UWA spoke on spiders. She pointed out that ants are just one family, Hymenoptera, whereas there are many families of spider - some 70 in Australia. Spiders are a very ancient group of animals, whose body shape has not changed much from that of their fossil ancestors. They are all predators, sucking the juices from their insect victims, and using a variety of methods to catch their prey. The more primitive form of spiders with vertically-aligned fangs (eg trapdoor spiders) need to be standing on a solid substrate like the ground or a tree trunk to be able to raise their fangs to strike. More modern spiders with pincer-like fangs can bite their prey while dangling in a web. We collected 24 species from 12 different families.

The biggest threat to spider survival in Australia is fire. Possibly because most spiders evolved in wet conditions, they have very few adaptations to cope with fire. It takes spiders a long time to recolonise an area that has been burnt and many of the ancient species are decreasing in population size and are confined to pockets of microclimate tucked away in the landscape (eg breakaways in the Wheatbelt).

Invertebrates are very poorly known, yet they are such an important part of the ecosystem. *Land for Wildlife* members might like to establish a collection from bushland on their own properties - there are no licensing regulations for this fauna. A big problem is finding the experts to name them. Barbara York Main studied spiders on the family farm at Yorkrakine, and now she's a world expert. Lets encourage our young people to take an interest in invertebrates and maybe one day many more of our indigenous species will have been taxonomically named.

Sylvia Leighton is LFW Officer at Albany. Contact her on 9842 4500 to obtain details of books on collecting and identifying invertebrates.