The Overlooked Importance of Invertebrates: The Little Guys Doing Big Jobs!

Written by Blake Pimm an Environmental Science and Management student and Landcare volunteer from the Central West of NSW

(Antictenia punctunculus) encountered during nocturnal invertebrate observations. Photo: Blake Pimm

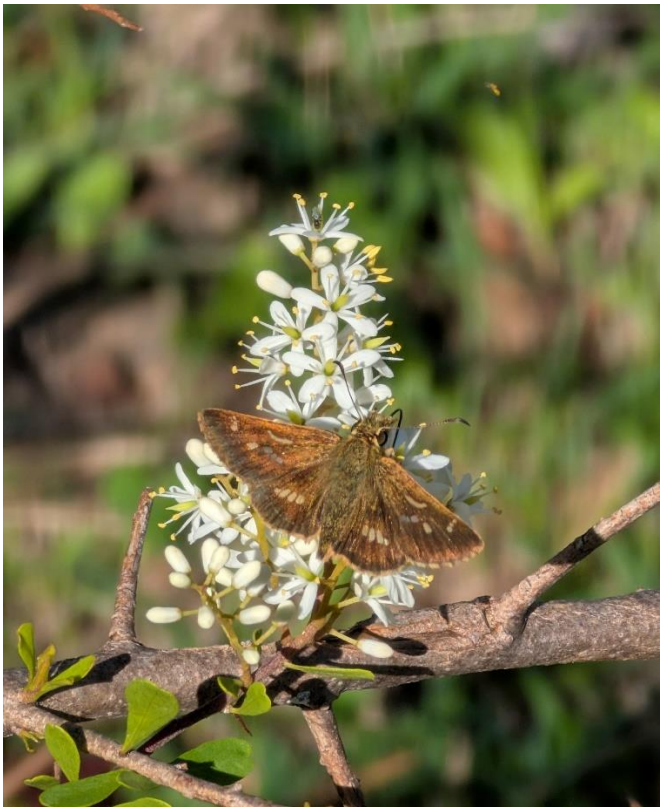
When we think about wildlife, our attention is often drawn to charismatic megafauna: polar bears, Bengal tigers, pandas and African elephants. These impressive and appealing animals grace the covers of wildlife magazines and become the stars of nature documentaries—and rightly so. But beneath our feet, scurrying through leaf litter and even flying around our porch lights, is an enormous diversity of animals that receives considerably less attention: **invertebrates.**

Invertebrates, simply put, are animals without a backbone and come in an extraordinary variety of forms, and make up a vast majority of the world's known animal species. Invertebrates include insects, arachnids, molluscs, worms and crustaceans, to name just a few. Despite often going unnoticed, they play pivotal roles behind the scenes in our everyday lives.

They may be small or out of sight, but the ecological roles they play within our ecosystems are not only enormous, but critical.

Moths are just one part of the enormous diversity of invertebrates found around us. Photo: Blake Pimm

Invertebrates provide an essential food source for countless birds, reptiles, amphibians and other animals. Their importance also extends directly to us. Through pollination, decomposition, nutrient cycling, soil processes and natural pest control, invertebrates contribute to many of the ecological processes that help produce the food we eat.



A Barred Skipper (Dispar compacta) feeding on native flowers in the Central West of NSW. Invertebrates play important roles in pollination and maintaining healthy ecosystems. Photo: Blake Pimm

In the Central West of NSW, I perform monthly nocturnal invertebrate observations for my local Landcare group, with observations recorded and figures published in a report to help document the invertebrates present within our small patch of reserve. As the months go by, I regularly interact with both members of our group and the public, trying to help in spreading information on the importance of invertebrates not only in our local area, but in general.

Observing moths during nocturnal invertebrate surveys in the Central West of NSW. Photo: Blake Pimm

This past week I had the pleasure of participating in a Science Week exhibition in the Oberon area, displaying my methods of invertebrate observations, and one concerning phrase reappeared a lot throughout the day when talking to visitors and members of the public, "You just don't see many insects anymore." Hearing the same comment repeatedly was concerning. While personal observations alone cannot tell us how invertebrate populations are changing, the fact that so many people independently expressed the same concern raises an important question: are we paying enough attention to the smaller animals around us?

Sharing invertebrate observation methods and citizen science at a National Science Week event in Oberon, NSW. Photo: Blake Pimm

With the Central West of NSW consisting of a large proportion of agricultural land, there are numerous pressures that could potentially affect local invertebrate populations. These include habitat loss and fragmentation from development and land clearing, pesticide use that can affect both pest and beneficial species, and the effects of a changing climate. The loss of invertebrate diversity does not affect these animals alone; the impacts can flow through food webs and influence the wider ecosystems that depend upon them.

If we want to help keep these species present, there are a number of things the everyday household can do. Planting locally native flowers and shrubs, retaining habitat such as leaf litter and fallen timber where appropriate, avoiding unnecessary pesticide use, and providing a variety of habitat types around the garden can all help. Even small actions, such as providing shallow water sources or appropriately designed habitat for solitary native bees, can make our gardens more welcoming to invertebrates while also helping our gardens thrive.

So, the next time you see a moth fluttering around your porch light, a spider hiding amongst the leaf litter, or a native bee visiting flowers in your garden, take a moment to stop and appreciate what you are looking at. These animals may not receive the same attention as our larger and more charismatic wildlife, but their importance should never be measured by their size. Invertebrates are all around us, quietly keeping our ecosystems functioning — **the little guys doing some very big jobs.**

About the author: *Blake Pimm is an Environmental Science and Management student and Landcare volunteer from the Central West of NSW, with a particular interest in entomology, invertebrate ecology and citizen science.*