urban antics by John Hunter

Sandgropers

Insects... the hot summer day was full of them, the air was a crazy conglomerate, a soup of airborne invaders going... everywhere, anywhere and nowhere.

Resting with head on hands, I stared down through the crystal clear water at my feet on the top step in the swimming pool. Scuttling across the water surface were hundreds of little insects, then I realised there were still smaller beasts ducking and weaving among the others... thousands perhaps. Question is, how many millions couldn't I see? Was I about to be the host of these silent invaders? I retreated to my diggings in the backyard.

The creamy quartz sand grains fell away from the spade as I prepared a trench then, to my horror, it happened again. This time the grand-daddy of all local insects, a huge, brown, shiny sandgroper dropped onto my bare foot.

Now, I know they don't have fangs (like a pit-bull or a centipede), but it was a quick tango out of there for another little rest and to ponder, up close and personal, this ungainly arthropod. On the human scale of beauty, only their mothers would love them but, in some countries around the world, this fat little number would definitely rank highly as a gourmet's delight.

Relatives of grasshoppers and crickets, local sandgropers *Cylindraustralia kochii* or *C. tindalei* (the two found in the Perth area) are slow-moving subterranean insects that live in our sandplains and tunnel or crawl through loose quartz sands for virtually their entire life.

There is, however, a strange personal feeling of pride and protection in Western Australia whenever one is 'unearthed',



probably because the term 'sandgroper' has a long history as a colloquial name for people born and raised in the State. So all you 'out-of-staters' (and I know there are a lot of you, because I can't buy a cheap house anymore or drive to work in a respectable time) please treat sandgropers with respect.

The grub-like, very elongated and cylindrical body has small, thick mid and hind legs recessed in the middle section of its length, which enables it to move forward or back-pedal with ease along its tunnels. The forelegs are highly modified for burrowing and don't look like legs at all. They are also short, but are flattened, have pronounced finger-like spines and are situated on either side of the head

The insects burrow by parting the soil ahead of them with breaststroke-like motions of their very powerful forelegs, compressing the soil and creating an open gallery as they progress. A tell-tale sign of their presence, particularly after rain, is the raised ridges of soil on windswept surfaces as they actively burrow just below the surface, possibly in search of the base of a succulent plant stem or looking for mates.

While farmers are a bit down on sandgropers for nicking the best selections in some cereal crops, city folk can take heart, as recent studies have shown that, besides introduced and native plant material, sandgropers eat sand-dwelling insects and the occasional feast of termites. Now that's squaring up the ledger.

DID YOU KNOW?

- Sandgropers were once thought to be degenerate mole crickets.
 While their digging apparatus and head are similar, mole crickets are long legged and a 'typical cricket' shape.
- Like grasshopper relatives, sandgropers do not change shape in metamorphoses. They develop from a single egg deep in a burrow and have no larval stage.
- Dr Terry Houston at the WA Museum would like frozen intact samples from the great southern and south coast regions of WA to further his studies on this amazing insect. You can contact him by email (terry.houston@museum.wa.gov.au).

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