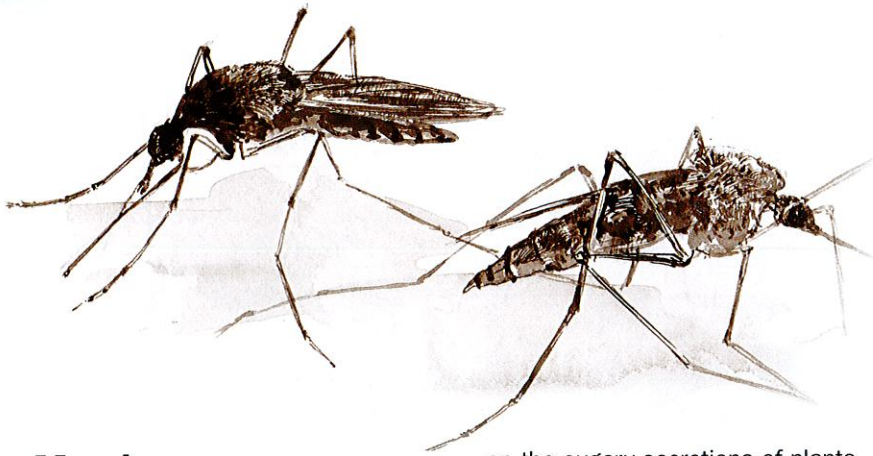


urban antics

by John Hunter



Mozzies

They sound like two-stroke motorcycles on steroids with the accelerator flat-out. It's annoying, disturbing and begs a brutal voluntary reaction, usually in the form of a self-harming 'whack' to the ear or forehead. Ouch! Such is the recurring night-time practice of most people in their desperate bid to dispatch a mosquito.

I am sure modern mozzies have learned to open Fido's doggie door and slip into what was once my safe inner sanctum. Here they regularly search me out and hover in front of my face causing my eyes to cross and my breath to falter, ruining a crucial part of TV's NCIS. Is nothing sacred anymore?

Mosquitoes are members of a family of nematoceric flies: the Culicidae (from the Latin *culex*, meaning 'midge' or 'gnat'). The word mosquito comes from the Spanish words *mosca* and *ito* meaning 'little fly'.

There are more than 3,500 species of mosquito known from various parts of the world and, as with all species of insect fauna, there are probably hundreds more waiting to be found and described. In Western Australia there are some 30 species known among some 80 across the continent.

Most of us are told that all mosquitoes bite and suck the blood of humans and other animals and, while this is partly true, many are not blood eaters, particularly the males which live

on the sugary secretions of plants. While female mosquitoes also eat plant juices, it is often necessary for the female of most species to seek out a blood meal to gather protein to prepare for producing her eggs. It is this act of blood eating that has some authorities arguing that mosquitoes are the most dangerous animals on Earth.

Mosquitoes can carry more than 100 viruses that infect people, with many more that infect animals. They also carry a wide variety of parasites including malaria plasmodia. There is a distinct possibility that, if you have a compromised immune system (from an underlying illness) and get bitten by an infected insect, you could easily die or be seriously crippled. What is also astounding is that mozzies and their deadly infections, when faced with new methods of eradication or drug attack, have been known to simply change habits, or mutate and resist.

In WA there has been a recent upsurge of mosquito-borne encephalitis, and we harbor the *Anopheles* and *Aedes* mosquito associated with Ross River virus, dengue fever, Murray Valley encephalitis and malaria. While malaria is not currently a problem in Australia, it only takes one malaria-carrying host species to present itself to a voracious adult female mosquito for the virus to spread.

Mosquito larvae (wrigglers) in a jar of water were once (and may be still) used as scientific classroom entertainment. In reality each female mosquito that escapes its watery birthplace is a flying syringe—a beast with a life history of infections and mayhem.

While mosquitoes are a nuisance and a health risk, they are a part of the rich web of life in which we live, and the biodiversity of our bush and wetland areas must always be a priority in conservation management. If you're seeking to reduce the risk of mosquito bite, avoid wholesale spraying, which also kills natural mozzie predators such as mayflies, dragonflies and fish. Instead rid your backyard of old tyres and pots where water stagnates and, most of all, gear up in the right clothes.

A fly swat or an aerosol repellent could also save your skin.

DID YOU KNOW?

- In a single 10-minute feed a female mozzie ingests about two-and-a-half times her pre-meal weight (in human terms, the equivalent of downing a bathtub-sized milkshake). She needs to drink every three days.
- A mosquito's proboscis is a sheath of separate blades, two sharp-pointed mandibles and a feeding tube powered by two tiny pumps. A liberal dose of saliva, used as an anti-coagulant, is the carrier of infectious disease.
- The oldest known mosquito with an anatomy similar to the modern species was found in 79-million-year-old Canadian amber from the Cretaceous period.

- 46 Bill Wills and the nature of memory
Memories of life on the Nullarbor Plain reveal a once-thriving suite of mammals that has now all but disappeared.
- 52 Controlling cats: the work continues
Controlling cats to protect our native animals is proving no easy task, so research into baiting programs continues.
- 59 An extraordinary story of a rock-wallaby colony
A rock-wallaby population clings to life in an unlikely setting.

Regulars

- 3 Contributors and Editor's letter
- 15 Bookmarks
The Canoe and Kayak Guide to Western Australia
Biodiversity monitoring in Australia
Guide to the Great Western Woodlands
- 44 Feature park
Serpentine National Park
- 31 Endangered
Quindanning spider orchid
- 62 Urban Antics
Mozzies

Publishing credits

Executive editor Madeleine Clews.
Editors Samille Mitchell, Joanna Moore.
Scientific/technical advice Kevin Thiele, Lachie McCaw, Keith Morris, Michael Rule.
Design and production Gooitzen van der Meer, Lynne Whittle, Peter Nicholas, Natalie Curtis.
Illustration Gooitzen van der Meer.
Cartography Promaco Geodraft.
Marketing Cathy Birch.
 Phone (08) 9334 0296 or fax (08) 9334 0432.
Subscription enquiries
 Phone (08) 9219 8000.
Prepress and printing GEON, Western Australia.

© Government of Western Australia
 March 2013

All material copyright. No part of the contents of the publication may be reproduced without the consent of the publishers.

ISSN 0815-4465

Please do not send unsolicited material, but feel free to contact the editors.

Published by the Department of Environment and Conservation (DEC), 17 Dick Perry Avenue, Kensington, Western Australia.

Visit DEC online at www.dec.wa.gov.au to search the LANDSCOPE catalogue.



Department of Environment and Conservation

