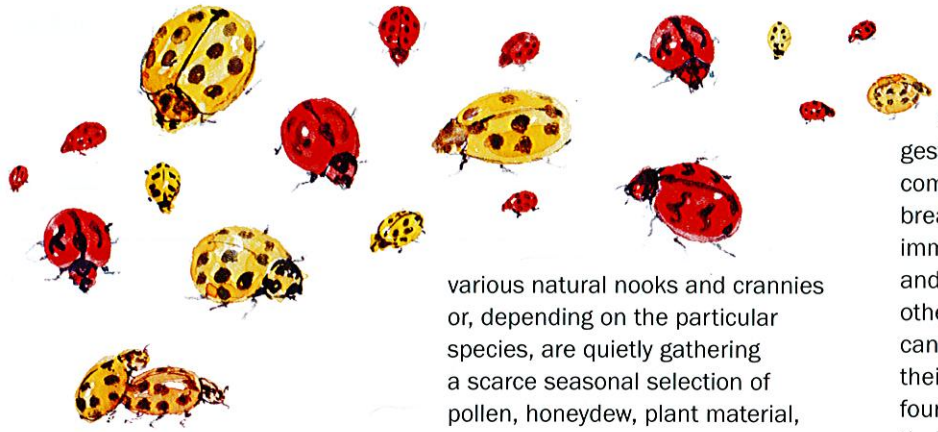
urban antics by John Hunter



Ladybirds

Perhaps the greatest enigma of the insect world is the ladybird. One minute a shiny exquisite dollop of lollypop in a hemispherical clown suit, the next a ruthless predator and outrageous cannibal.

This tiny beetle from the family Coccinellidae is the perfect public relations logo for most other insects which, in human terms, are less than attractive. With its appealing colours, shape and size, and having the movements of an over-enthusiastic robotic vacuum cleaner, it is no wonder there have been so many children's stories, songs and movies made about this little beast. Its demeanor and external morphology have inspired many ancient religions, cultures, artists, and a famous German automobile maker's dream.

Being part of the order Coleoptera (beetles) which accounts for about 40 per cent of all insects, the Coccinellids are themselves the third largest beetle family (that we know of) on Earth. Often misnamed as 'ladybugs', the animals have very efficient biting mandabills, whereas true bugs have feeding-tube mouth parts.

During winter and spring, as with most other insects, local ladybirds are probably in their lowest numbers. It is a time when the availability of food, fecundity, and well-being is generally lacking. At this moment, ladybirds are either aestivating in trees and various natural nooks and crannies or, depending on the particular species, are quietly gathering a scarce seasonal selection of pollen, honeydew, plant material, nectar or fungi, and the odd unlucky little grub.

Ladybird beetles are mostly observed in our local suburban gardens during the warmer months, particularly in autumn, as they dart about on vegetation, especially roses and citrus, where there is usually a seasonal population explosion of their favourite prey.

Starting in spring and culminating in autumn, well-watered gardens of luscious new-growth vegetation attract squillions of tiny sap-sucking aphids and scale insects, mites, butterflies, moths, lacewings and a horde of other insects. This is where the pantomime gives way to the brutal euphoria of a Flavian colosseum with plunder, pillage, feeding and breeding in concert.

Predatory Coccinellids lay their eggs on plants near their adult prey and their broods, the numbers of prey determining the number of eggs laid. The beetles are holometabolous insects, undergoing a complete metamorphosis with four discrete life stages: egg, lava, pupa and adult.

After about a week-long gestation, ladybird larvae, complete with efficient mandibles, break from their eggs and immediately seek out the nymphs and eggs of aphids and any other insect larvae, as well as cannibalising eggs and grubs of their own kind. They pass through four instars, each time shedding their skin and growing larger. The fourth instar is able to hold their prey in its jaws like the adult beetle, and sometimes lifts it from the substrate while it chews, eats and, in some species, sucks the bodies dry. After the pupa stage of seven to 10 days, an adult beetle emerges, wings extending from under the pale shiny dome of its wing covers.

Within several hours, the cuticle hardens and the species develops its characteristic colour pattern. It is not long before the voracious little beetle, with a twitch of its tiny clubbed antennae and the blur of six little legs, is busy hunting the soft juicy flesh of a victim, just like the rest of its cousins—up one branch and down the next.

There is no rest for the wicked, so the saying goes. Within a few days a ladybird will mate, the copulation lasting around an hour, but sometimes extending to hours or days—wow! Longevity then depends on length of aestivation, climate and brood numbers. They may live from two months to two years. And so the cycle continues—eat or be eaten.

DID YOU KNOW?

- Some 6,000 species of ladybird are found throughout the world with about 500 in Australia.
- Ranging from one to 10 millimetres across, ladybirds were first described by Carl Linnaeus in 1758.
- Many species are introduced around the world as biological control species in crops and orchards.

Volume 29 Number 1 SPRING 2013

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Regulars

Publishing credits

Executive editor Zoran Jovanovic.

Editors Samille Mitchell, Joanna Adele.

Scientific/technical advice Juliet Wege, Lachie McCaw, Keith Morris, Shaun Wilson.

Design and production Lynne Whittle, Gooitzen van der Meer, Peter Nicholas, Tiffany Taylor.

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 Advance Press, Western Australia.

Maps should be used as a guide only and not for navigational purposes.

ISSN 0815-4465

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

Published by the Department of Parks and Wildlife (DPaW), 17 Dick Perry Avenue, Kensington, Western Australia.

Visit DPaW online at www.dpaw.wa.gov.au.

Department of **Parks and Wildlife**