

# URBAN ANTICS!

## Beetles—yeah, yeah, yeah!

"Lookout!!! Lookout!!! Watch where you put your feet . . . you nearly got'im."

The agitated exclamation came from my jogging mate as we went about our early morning ritual.

"Watch out for the beetles," he repeated, "don't squash 'em."

I couldn't believe my ears. Here was this bloke who normally wouldn't have given a crippled crab the loan of a crutch and yet he had suddenly turned into the Messiah of . . . lawn beetles!

Beetles number about 300 000 species from some 150 families, and represent nearly 40 per cent of all the insects on Earth. They come in all shapes, sizes and colours, and inhabit every environment on the planet from steaming hot springs to freezing cold tundra. All environments, that is, except for the oceans.

A beetle's typical three-part insect body is encased in a tough exoskeleton. The sections comprise a head with compound eyes and antennae, a thorax with elytra, wings and legs, and an abdomen bearing the digestive, reproductive and respiratory systems.

The creatures make up the insect order Coleoptera, a Greek word meaning sheath wings. It refers to the elytra—front wings that have evolved

into hard covers that form a sheath over much of the upper body.

Adult beetles hold their elytra upward and outward to free the hind wings for flight. When folded, the elytra virtually turn the beasts into the armoured tanks of the insect world.

Many kinds of beetles are found in the Perth metropolitan area.

Ladybirds (Coccinellidae) are generally efficient predators and voracious feeders on aphids, mites and scale insects, and some species also eat leaves. The common orange and black spotted *Leis conformis*, like all ladybirds, secretes a poisonous liquid if disturbed by a predator.

The largest family of beetles is the weevils (*Curculionidae*). The mouthparts of these insects are at the tip of a long snout, which is used to bore into fruits, seeds and other plant parts. Look or brush among the leaves of young eucalypts during warm weather and a medium sized, grey-green, red-legged weevil will drop to the ground and 'play dead'. Also found on eucalypts are small Chrysomelid leaf beetles. Similar to ladybirds, they vary in colour using combinations of greens, reds, fawns and gold, and their tiny feet appear to have boots.

To see some unusual beetles, simply bury some meat for a couple of days then dig it up. Scurrying through the soil will be rove beetles (Staphylinidae), carrion feeders that are very fond of maggots and look like orange-headed earwigs.

Jewel beetles (Buprestidae), commonly found on our local rich and diverse flowering plants, are so breathtakingly beautiful with their iridescent and violent hues of multi-colour, that they have been classified as specially protected creatures.

### JOHN HUNTER

#### DID YOU KNOW

- The smallest beetle in the world is the feather-winged beetle, which is 0.5 mm long. The largest, the goliath beetle of Africa, is 13 cm long and weighs 42 g.
- Beetles' antennae are covered with hairs and special organs that can detect odours, and in some cases they have a simple type of hearing.
- Female fireflies (actually a group of beetles) produce a cool light in their abdomens, by chemical means. This helps the male fireflies to find them at night.

# LANDSCOPE

VOLUME TEN NO.3 AUTUMN ISSUE 1995



Flower arrangements featuring eucalyptus foliage are becoming popular with florists. Find out why on page 35.



Unseen for more than 100 years and believed to have been extinct, Gilbert's potoroo turned up quite unexpectedly. See page 28.



Salinity is a problem in the State's south-west, but farmers, communities and government agencies are working to find solutions. See page 39.



A giant dragonfly lives in the south-west of Western Australia. You can find out more about this ancient relict of the jarrah forest in 'Western Petalura' on page 52.



The thick-billed grasswren is one of several animals that may be reintroduced to Shark Bay as part of an ambitious project. See 'Return to Eden' on page 22.

## FEATURES

<b>FABULOUS FANFLOWERS</b> SUZANNE CURRY .....	10
<b>THE AGE OF JARRAH</b> MANDY CLEWS & TAMMIE REID .....	17
<b>RETURN TO EDEN</b> CAROLYN THOMSON & RON SHEPHERD .....	22
<b>LOST &amp; FOUND: GILBERT'S POTOROO</b> TONY START, ANDREW BURBIDGE, ELIZABETH SINCLAIR & ADRIAN WAYNE .....	28
<b>TURNING A NEW LEAF</b> LIZ BARBOUR & ALISON FUSS .....	35
<b>HEALTHY FARMLAND, HEALTHY BUSHLAND</b> KATE HOOPER & RICHARD GEORGE .....	39
<b>YALGORUP NATIONAL PARK: A PLACE OF LAKES</b> DAVID GOUGH & CHRIS PORTLOCK .....	45
<b>WESTERN PETALURA</b> ANDREW WILLIAMS & MATTHEW WILLIAMS .....	52

## REGULARS

<b>IN PERSPECTIVE</b> .....	4
<b>BUSH TELEGRAPH</b> .....	6
<b>ENDANGERED WESTERN BRISTLEBIRD</b> .....	34
<b>URBAN ANTICS</b> .....	54

## COVER

The stunning royal robe (*Scaevola striata*) is one of a host of fabulous fanflowers found in Western Australia. Suzanne Curry discusses this and other species in the family Goodeniaceae on page 10.

The illustration is by Philippa Nikulinsky.



**Managing Editor:** Ron Kawalilik  
**Editor:** David Gough  
**Contributing Editors:** Mandy Clews, Verna Costello, Kate Hooper, Carolyn Thomson  
**Scientific and technical advice:** Andrew Burbidge, Ian Abbott, Paul Jones  
**Design and production:** Maria Duthie, Sue Marais  
**Finished art:** Karen Addison  
**Illustration:** Ray Andress, Ian Dickinson, Gooitzen van der Meer  
**Cartography:** Promaco Geodraft  
**Marketing:** Estelle de San Miguel ☎ (09) 334 0296 Fax: 334 0498  
**Subscription enquiries:** ☎ (09) 334 0481 Fax: 334 0498  
 Colour Separation by Prepress Services  
 Printed in Western Australia by Lamb Print  
 © ISSN 0815-4465. All material copyright. No part of the contents of the publication may be reproduced without the consent of the publishers.



Published by Dr S Shea, Executive Director  
 Department of Conservation and Land Management,  
 50 Hayman Road, Como, Western Australia 6152.