

## A NIGHT OUT WITH THE WOYLIES

Until last year, woylies could no longer be found in the jarrah forest near Mundaring. But recently, two groups of primary school students spent a night proving these formerly endangered animals are alive, well and breeding. Operation Western Shield, which aims to eradicate foxes and feral cats and reintroduce native species, is already showing how it can turn the tables.

Winning 'a night out with the woylies' was the culmination of classroom work carried out by several schools using CALM's *Western Shield Action Pack*. This pack is designed for upper primary teachers and students, and is linked to school curriculum subjects. Its object is to raise awareness and understanding of our threatened animal species and to promote conservation initiatives. And what better way for students to become aware and understand than to take part in research methods used in Operation Western Shield in the natural environment?

After completing the Action Pack work, schools registered for a draw. Some schools won sets of CALM's Bush Books, while the lucky winners of the 'camp under canvas' were the students of Chidlow (Year 5/6) and St Lawrence (Year 7) Primary Schools.

In the early evening, the students visited an animal-viewing hide, deep in the jarrah forest where woylies were released last year. Supervised by CALM officers, students set traps close to the hide. Later, at The Hills Forest Activity Centre, they saw several threatened species, including a bilby, burrowing bettongs and western barred bandicoots that are being cared for by Kanyana Wildlife Rehabilitation Centre.

The evening wound up with a starlit walk in the forest, and later, as they settled in their tents, the students were serenaded by cicadas, quacking frogs and a boobook owl.

Early next morning, an inspection of the traps revealed mardos (small carnivorous marsupials), a quenda (southern brown bandicoot) and, of course, several woylies (one of which was a female with a joey in her pouch). These were all checked and released again into their natural habitat. Back at the Centre, students were challenged by an endangered species treasure hunt before returning to school.

Teachers and their students all agreed that the camps were a great success, exceeding their expectations. Teacher Wendy Harvey said:

"The Action Pack really caught my students' interest and also resulted in an enormous amount of effort and improvement in their language skills and other areas of the curriculum. The camp has been a memorable experience for every student, and one they will remember for many years to come."

The enthusiasm of students and teachers for the Action Pack and the camps, as well as the high standard of the entries, has been overwhelming. Buoyed by this reception, CALM is encouraging many more schools to participate in the program in 1997.

In 1996, all primary schools in the State were sent *Western Shield Action Packs* that can be used again in 1997. 'A night out with the woylies' will be drawn again in late 1997. If you have any queries about the program, or wish to have a copy of the action pack, please contact Elizabeth Moore, CALM



Education Projects Coordinator, on tel: (08) 9295 2244 or (08) 9334 0387, fax: (08) 9295 3247 or 9334 0498, or email Lizm@calm.wa.gov.au.

The *Western Shield Action Pack* is also available through CALM's *NatureBase* web page on <http://www.calm.wa.gov.au>.

Top: *St Lawrence students look for a place to set an Elliott trap.*

Above: *CALM forest ranger Dennis McDonald holds out freshly mixed bait for a wary Julien Coci to sniff. Two of Julien's fellow St Lawrence students, Daniel Taborsky and Anthony Armenti, look on.*  
Photos - Liz Moore

# LANDSCOPE

VOLUME TWELVE NUMBER 4, WINTER 1997



Noisy scrub-birds are rare in museum collections. This one, from a Dutch Museum, was probably collected by John Gilbert. See page 36.



Mount Bakewell looms over the old town of York, but it is more than just a prominent landmark. Find out why on page 42.



This year, The Hills Forest celebrates its fifth birthday. Find out what's been happening there in our story on page 10.



The Kimberley region of Western Australia has some weird and wonderful landforms. Read all about them on page 16.



The northern quoll is just one of WA's marsupials that have been part of a recent conservation status review. See page 22.

## FEATURES

**THE HILLS FOREST: THE FIRST FIVE YEARS**  
KATE BAXTER & STEV SLAVIN.....10

**GEOLOGY AND LANDFORMS OF THE KIMBERLEY**  
IAN TYLER.....16

**MARSUPIAL CONSERVATION**  
ANDREW BURBIDGE & KEITH MORRIS.....22

**INSECTS IN THE GARDEN**  
JANET FARR.....28

**JOHN GILBERT'S AUSTRALIAN COLLECTIONS**  
CLEMENCY FISHER.....36

**SUMMIT OF THE WHEATBELT**  
SUSAN PATRICK.....42

**EXTINCTIONS IN WESTERN AUSTRALIA**  
IAN ABBOTT.....49

## REGULARS

**BUSH TELEGRAPH**.....4

**ENDANGERED**  
CARRICK'S MINTBUSH.....48

**URBAN ANTICS** ANT-LION.....54


## COVER

Get down on the ground, scramble through the leaf litter and compost in your garden, and discover the fascinating world of insects. 'Insects in the Garden', on page 28, shows how these seemingly insignificant creatures help keep the ecosystem running smoothly and how they are a vital part of nature's life-cycle.

Illustration by Philippa Nikulinsky



**Managing Editor:** Ron Kawalilak  
**Editor:** David Gough  
**Story Editors:** Ray Bailey, Verna Costello, Mitzi Vance, Mandy Clews, Carolyn Thomson  
**Scientific/technical advice:** Andrew Burbidge, Ian Abbott, Paul Jones, Tony Start, Neil Burrows and staff of CALM's Science & Information Division  
**Design and production:** Maria Duthie, Sue Marais  
**Finished art:** Sue Marais, Maria Duthie, Tiffany Aberin  
**Illustrations:** Gooitzen van der Meer, Ian Dickinson  
**Cartography:** Promaco Geodraft  
**Marketing:** Estelle de San Miguel ☎ (08) 9334 0296 Fax: (08) 9334 0498  
**Subscription enquiries:** ☎ (08) 9334 0481 or (08) 9334 0437  
 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.  
 Visit LANDSCOPE Online on our award-winning Internet site  
 NatureBase at <http://www.calm.wa.gov.au/>

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