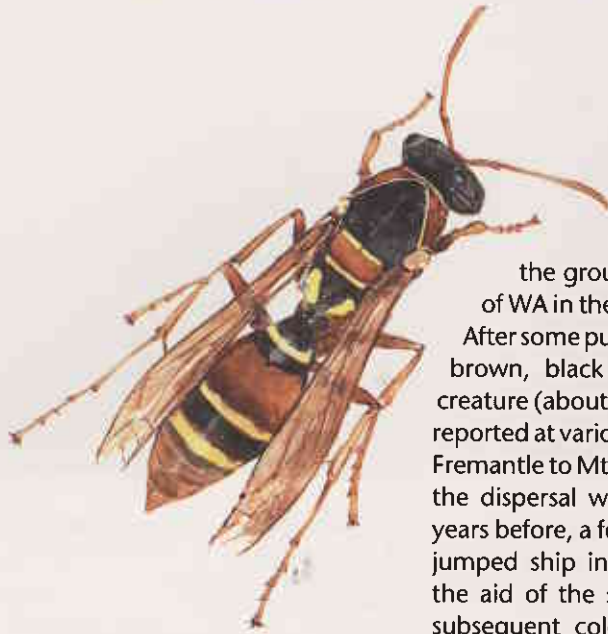


# URBAN ANTICS!



## THE PAPER-NEST WASP

Drowsy, summer afternoons in the garden can be intoxicating affairs in more ways than one. But, whether you are in your own backyard or in Kings Park, if you don't watch your step while admiring the scenery, you can end up right in 'it'...excruciating pain that is.

At this time of the year, life is thriving and the atmosphere is a swarming soup of manouevering insects, each with a motive to eat, or be eaten.

Although the aroma is at times exquisite, don't carelessly close your eyes and sink your face amongst the foliage of your favourite shrub or ...thwhack!!...*Polistes humilis*, the common paper-nest wasp, will zap your nose like you've been hit with a well aimed 3-iron.

There are two species of paper-nest wasp or paperwasp that frequent our gardens, both alien creatures, which were accidentally introduced to the State. They are typical of the order Hymenoptera which includes ants and bees, have a highly developed social organisation and will not hesitate in angrily pursuing any poor schmuck (hapless victim) that bumps into their nest.

The common paperwasp, a native of the eastern States was first discovered in the grounds of the University of WA in the summer of 1949-50.

After some publicity on the find, the brown, black and yellow banded creature (about 15mm in length) was reported at various nest sites from East Fremantle to Mt Lawley. The theory of the dispersal was that two or three years before, a fertile queen wasp had jumped ship in Fremantle and with the aid of the summer sea breezes, subsequent colonies quickly spread north-east.

A repeat situation probably occurred in 1977 when a similar insect, the yellow paperwasp (with yellow and black bands) was found at Fremantle.

Although the nests of both paperwasps are similar in colour and construction, it is more likely that the common paperwasp nest is the easier to locate. It resembles an up-turned toadstool of hexagonal cells, suspended by a short stalk to the branch of a tree or bush or sometimes a domestic structure. The yellow paperwasp prefers hidden sites such as fence capping, downpipes or under tiles.

After hibernating over winter, a fertile queen scrapes wood fibres from weathered power poles or fences with her powerful mandibles and with a mixture of saliva and chewed wood, constructs the stalk and the first few cells of her grey-brown, papery nest. An egg is laid in each cell and the young larva, which hatches a few days later, is fed on masticated nectar and caterpillar.

The stout white legless larvae mature and spin silken cocoons within their cells. After pupation, mature adults emerge. The first progeny are all infertile female workers which take over nest construction, food gathering and feeding the developing brood while the queen continues egg-laying.

Some nests may reach 15cm across and be home to several hundred wasps. Later in the season, males, recognised by their yellower faces, are produced and mate with those females destined to be future queens.

Late in the Autumn, the new queens fly off to hibernate and the workers and males die off around their declining colony. Nests may be located and reactivated next year.

The paper-nest wasp, apart from its aggressive nature and its capability of being able to repeatedly sting, is a useful insect in that it helps to control garden caterpillars. Watch them away from their nest, as they hover, legs dangling, seemingly to dance on the afternoon rays of a summer sun and then swirl effortlessly around sweet smelling foliage.

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BY JOHN HUNTER

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### DID YOU KNOW

- *The Hymenoptera receive their name from the two pairs of glassy membranous wings, the fore and hind wing of each side, being coupled together in flight by a row of small hooks.*
- *Paperwasps have a narrow waist, are more slender and slightly longer than a bee. They also have orange-brown antennae.*
- *BEWARE of European wasps. They look like the yellow paperwasp only more solid. They fly fast with legs held close to the body and have black antennae. Because of our moderate climate, they could continuously reproduce in hidden colonies of hundreds of thousands. Please report any such sightings to the nearest Agriculture WA or CALM office.*



Visitors can walk in the treetops along a series of walkways, platforms and stairways at the new Forest Heritage Centre in Dwellingup. (See page 10.)



A major survey of the Carnarvon Basin has recently been completed by staff from CALM, the WA Museum and the University of WA. What did they find? (See page 15.)

# LANDSCOPE

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It was a very good year in the Wildflower State. Find out just how good in our story on page 38.



Australia has its own families of songbirds that are very different from their European namesakes. See 'True Blue Birds' on page 45.



Quokkas were once widespread on WA's mainland, but the most visible populations are now found on just two islands. 'Where Have All the Quokkas Gone?' (See page 49.)

## FEATURES

- THE FOREST HERITAGE CENTRE**  
TAMMIE REID & MANDY CLEWS ..... 10
- PATTERNS IN NATURE**  
ALLAN BURBIDGE & NORM MCKENZIE ..... 15
- LIVING WITH LOGGING**  
IAN ABBOTT & PER CHRISTENSEN ..... 21
- SERPENTINE NATIONAL PARK**  
DAVID GOUGH, PAUL BROWN,  
DAVID LAMONT & WAYNE TAYLOR ..... 28
- ROCK WALLABIES OF YARDIE CREEK**  
JACK KINNEAR ..... 36
- THE WILDFLOWER STATE**  
NEVILLE MARCHANT ..... 38
- TRUE BLUE BIRDS**  
LES CHRISTIDIS & ALLAN BURBIDGE ..... 45
- WHERE HAVE ALL THE QUOKKAS GONE?**  
ELIZABETH SINCLAIR & KEITH MORRIS ..... 49

## REGULARS

- IN PERSPECTIVE** ..... 4
- BUSH TELEGRAPH** ..... 6
- ENDANGERED McCUTCHEON'S GREVILLEA** ..... 44
- URBAN ANTICS** ..... 54

## COVER

Western black-footed rock-wallabies are on the increase in Yardie Creek, thanks to a CALM fox-baiting program. Their numbers are being monitored by local tour operators Neil and Rhonda McGregor. See our story on page 36.

Illustration by Philippa Nikulinsky



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