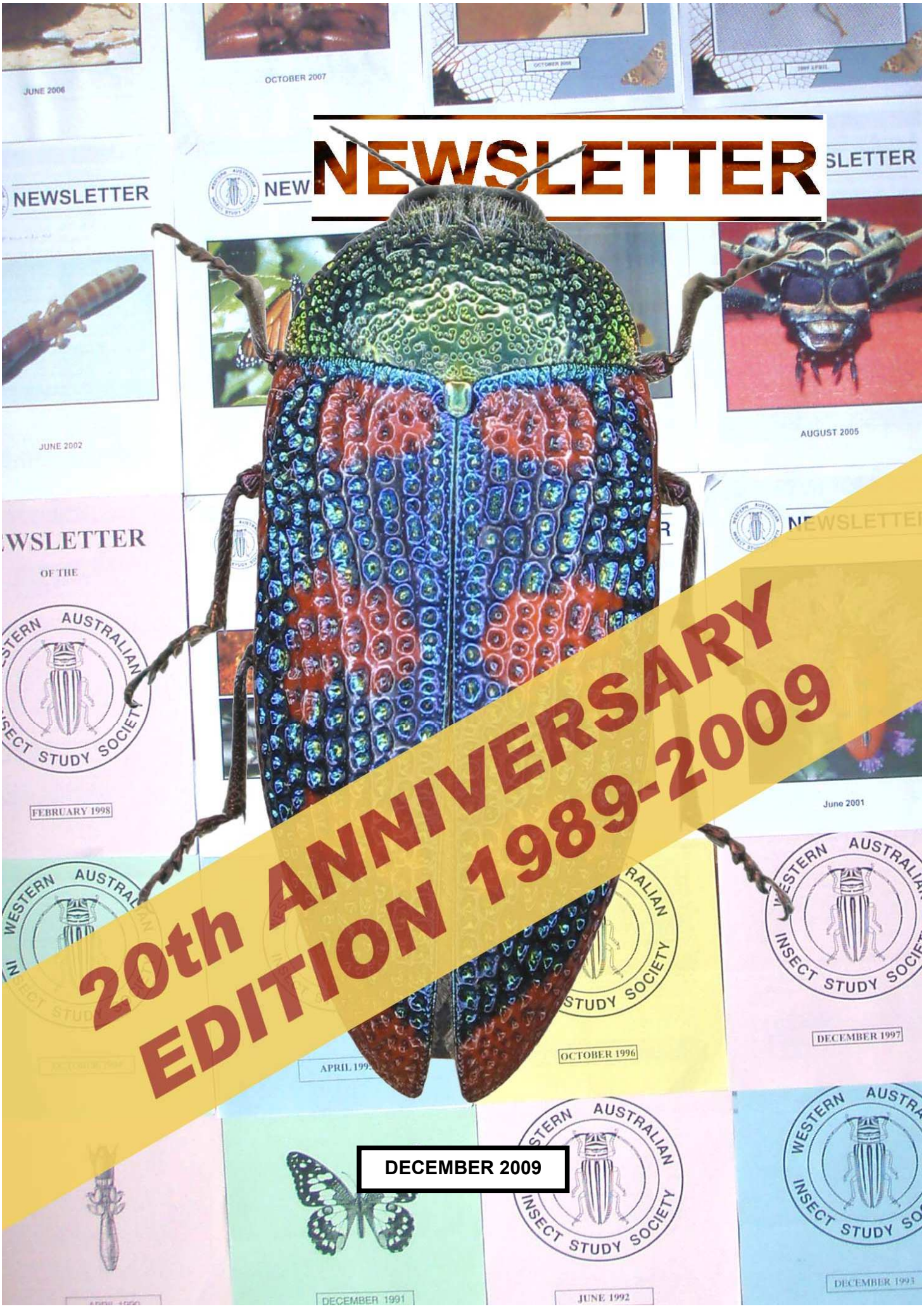
NEWSLETTER
20th ANNIVERSARY EDITION 1989-2009
DECEMBER 2009

**WESTERN AUSTRALIAN INSECT STUDY SOCIETY INC.**

# COMMITTEE OF MANAGEMENT 2009-2010

**President:** Otto Mueller (9312 1123)

**Secretary:** Terry Houston (w/hrs 9212 3742, Terry.Houston@museum.wa.gov.au)

**Treasurer:** Peter Langlands (a/hrs 9279 1808)

**Councillors:** David Knowles (9247 3727)

Eric McCrum (9295 3344)

Peter Ray (9298 8145)

Jan Taylor (9384 1475)

Julia Taylor

**Membership:** All enquiries regarding membership and any subscriptions should be forwarded to the Secretary (w/hrs 9212 3742, Terry.Houston@museum.wa.gov.au).

**Newsletter:** All contributions and enquiries should be directed to the Editor, Jan Taylor (telephone 9384 1475; e-mail jmtay5@bigpond.net.au).

**Web-site:** http://www.insectsocietywa.org.au

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**Contributions to the Newsletter by members are welcome:**
**tell us about your entomological activities, observations, or concerns**

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The Society gratefully acknowledges the support
of the Western Australian Museum

*Cover illustration*:
Roe's Jewel Beetle *Stigmodera roei* on a background of Newsletter covers taken from each of the 20 years since WAISS was founded. The beetle is to appear on the Society's celebratory mugs.

# Coming Events

**NEXT MEETING**
Wednesday 9 December 2009
commencing 7.30 pm
Kings Park Administration Centre

**Celebratory Members' Night:**
Bring your photos, slides, digitals, (power-points preferable if you have the technology), specimens or just tell the meeting about your interesting entomological experiences.

**Insect Hat Competition**
Members are invited to come wearing inventive, adventurous, playful, even silly hats, all with an insect motif. Competition will be fierce, with first and second prizes being $50 and $30 book tokens respectively. Prizes are also to be awarded to runners-up. Bring your cameras.

Refreshments will be provided following the meeting.

**Mugs.**
To mark the 20th Anniversary, celebratory mugs will be available for purchase at the meeting. They are good quality and have a motif of a colourful moth, a bee and a jewel beetle. They are priced at $15 each.

**Excursion:** No Excursion is planned.

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# Report on the October Meeting

Recorded by Margaret Owen.

**Main features:**

(1) "South American Insects"
by Palenque Blair

Palenque Blair showed us photographs taken by herself and Damien Annison. She talked about their trip to Ecuador and Peru. The equator runs through Ecuador and the Andes extend down the length of the country. Palenque told us that there was a lot less wild country than they expected because of the large population and now, even land on a steep slope is used for agriculture.

A few of the audience ventured tentative identifications and I liked the comment from the floor about a black caterpillar with spines. The comment was "The spines are not there for ornamentation." I think we decided that it was not the one that has a spider-like venom in the spines that can kill.

We saw gorgeous butterflies, moths, damselflies and a spectacular black midge with overlapping wings. Some of the species were found in the cloud forest.

Palenque also showed some photographs from the Galapagos and it was interesting that there is not a big variety of species there. We saw painted locusts, a booby and a lava lizard perched on top of a marine iguana.

(2) "Dragonflies and other insects in Mexico"
by Jan Taylor

Jan Taylor attended the conference of the Worldwide Dragonfly Association in June 2009 in the city of Xalapa in Mexico. The WDA conferences are held every two years The city is at 1700 metres where the natural vegetation is cloud forest made up of mainly temperate trees with an understory of tropical vegetation.

The neo-tropics are the most species rich part of the world for dragonflies and include the largest known species.

Mexico is two-thirds the size of WA and has a population of 100 million. The landscape is largely cleared of natural vegetation.

Those who didn't know, learnt from Jan, that damselflies are a subsection of dragonflies. We saw some photographs of beautiful creatures. The Forest Giant Damselfly has an abdomen 13 cm long and they breed in collections of water in trees, bromeliads and other plants. It is thought that the long abdomen of this species and others is so that

the damselflies can reach into the water in the leaf-bases or tree-hole to deposit eggs.

A forest giant damselfly, *Mecistogaster modesta*.
One of the largest odonates in the World.
Photo: Jan Taylor Xalapa, Mexico

Jan did a bit of touring and went to Lake Calamaco, El Tajin pyramid site and to the El Salto de Eyipantla waterfall.

ooOoo

**Insects in Focus**

"Tearsuckers" by David Knowles

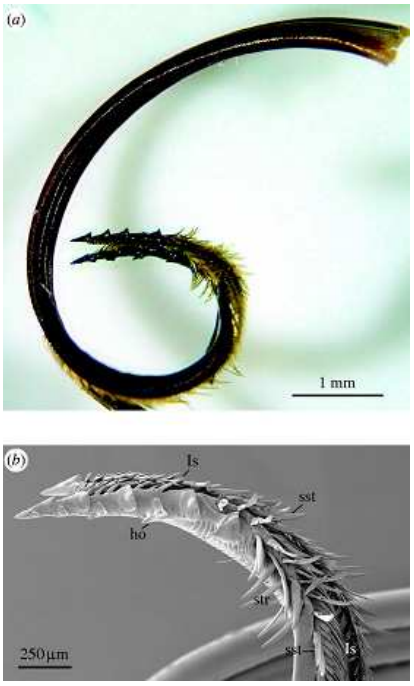
David said his sub-title was 'Why do you make me cry!' Technically the title would be 'Lachrymophagy (or Lachryphagy) in Moths.'

Noctuid tearsucking moth feeding from a horse's eye.
Photo: David Knowles.

Bees, flies, butterflies and moths are attracted to point sources of moisture. The moisture may be in the form of soil exudates, plant exudates and animal secretions, including wounds, faeces and urine for example.
Techniques of accessing moisture from these sources include puddling and siphoning. When there is a very low concentration of minerals in the liquid, the insect may be siphoning in through the proboscis, withdrawing the needed minerals and squirting the processed water out of the anus in a continuing stream. Insects may be able to extract minerals, carbohydrates, fats and proteins.

David showed photographs of a Papua New Guinea blue butterfly, *Milionia*, drinking the urine of mammals and a sessiid moth drinking fresh macaque urine. A map butterfly was shown sucking the sweat from Fleur's hat. The Vampire Moth, *Calyptra thaclictri* has a proboscis that can penetrate skin.

Some insects feed on tears and butterflies have even targeted crocodile tears. In Madagascar, a noctuid moth was seen feeding on the eye of a bird. The precedent for such behaviours possibly came from fruit piercing moths.




Tongue modifications for noctuid moth *Hemiceratoides hieroglyphica*.

During general discussion various topics were raised. Mention was made of a herbivorous spider in Costa Rica which feeds on the food parcels grown on the leaves of an acacia for the acacia ants. It has to be quick to avoid being attacked by the aggressive ants.

An article has appeared in the Australian Geographic is on insect deception and the New Scientist has an article on katydids mimicking the response of female cicadas to the male cicada's call. As the male cicada gets within range, the katydid seizes the cicada and eats it. The cicada over time changes his call and this has led to an evolutionary arms race.

# News, Notes & Announcements

**New Members**

Welcome to the following new members (location and interests are noted in parenthesis):

Challenger TAFE LRC, Murdoch Campus

Jane & Sharon Genovese (Wattle Grove; photography)

Robyn & Phil Everist (Mundaring; insects in vegetable gardens).

**Total Membership**

WAISS membership now stands at 111.

**Vale**

**Peter McMillan**

Sadly, we note the death of long-standing WAISS member Robert Peter McMillan. Peter died on 28 October at the age of 88 following a long period of ill-health. Peter was made a life-member of the Society in 2004 in recognition of his generosity over many years. A full obituary will be included in the February newsletter.

**Mary Deighton**

In October, the Society was also informed that long-standing member and former committee member Mary Deighton had passed away after a long period of ill-health.

**New Publications**

"*A Guide to the Ants of South-western Australia*" by Brian E. Heterick, Records of the Western Australian Museum Supplement No. 76, 2009, ISBN 978-1-920843-43-4, 205 pages, hard cover A4.

This is the first comprehensive coverage of the ant fauna of south-western Australia and will be a boon to anyone undertaking ant studies and identifications. The bulk of the book consists of illustrated keys to the 61 genera and nearly 500 species (both named and unnamed) known from the region. Though quite technical, the book is made user-friendly by the inclusion of a comprehensive glossary of terms and there are introductory sections covering various aspects of ants. One section deals with tramp ants and pest ants. Most illustrations are simple line drawings although there are also some scanning electron micrographs and a few colour illustrations (mainly habitat photographs).

The WA Museum Shop advises that the RRP for Brian Heterick's book is $49.95 but WAISS members can expect a 10% discount.

# Bug-Eye

(Observations of insects in the field.
Members' contributions welcomed)

**Plight of a caterpillar**

Mark Onslow found this caterpillar at Dwellingup. He wondered if the red attachments were mites. Anybody know what they are?

Caterpillar with red mites or parasites attached?
Photos: Mark Onslow.

**Photographs sent in by Members for the 20th Year Edition of the Newsletter**

There was a good response with many excellent images sent in. Unfortunately space did not permit all to be printed and it was hard choosing which ones to include. Many had artistic merit but sadly they had to be cropped for the Newsletter – Jan Taylor.

Greenblotched Moth, *Cosmodes elegans*.
Photo: Norm Pinsky

Owl midge or moth fly, Psychodidae.
Photo: Norm Pinsky

Geotrupid beetle, *Blackburnium reichei* from Wandoo forest. Photo: Terry Houston.

Giant Jewel beetle with even larger robber-fly.
Photo: Jiri Lochman

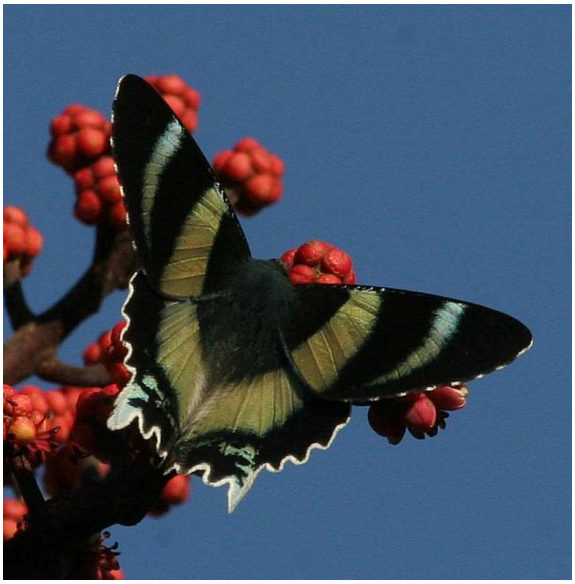
Robberflies are skilled and intrepid hunters, although the majority are much smaller than this truly gigantic and handsome species *Phellus piliferus.* In this photograph it has pinned down one of the largest Western Australian beetles – Jewel Beetle *Temognatha heros.* The shell of the abandoned beetle measured six and half centimetres, so with careful calculations I came to a conservative estimate that this fly measured close to seven and a half centimetres. Jiri Lochman.

David Knowles writes on Heather Adamson's peacock spider: The 'true' Peacock Jumping Spiders belong in the genus *Maratus*. This is mainly defined by male characters - 2 in particular; enlarged, adorned, and white-tipped third pair of legs for semaphore signalling (social and sexual); abdominal colouration is continued on flaps (of various extent and adornment) concealed beneath abdomen – these are erected to form a greater area during courtship displays. The species in question once went under the name 'pavonis' - the type comes from Victoria and has a longer body. Our species is mainly coastal extending through the peppermint belt to the edge of the Karri and inland, as I found out recently at my project at Gwambygine Pool outside York, via the *E. rudis* riparian belt. I think there may be at least 2 western species in this complex. Most Australian members of this genus are undescribed (I have seen and photographed 26 species, mostly from WA).

Peacock spider, *Maratus* sp. Photo Heather Adamson

Southern Old Lady Moth, *Dasypodia selenophora*.
Photo: Robert Powell.

Parasite fly, Conopidae. In the subtropical rain forest at Home Rule south of Cooktown. Photo Geoff Byrne.



Zodiac moth, a day flying species of Alcides; Fam Uraniidae. Photo: Geoff Byrne

We usually saw this species flying high in the forest, but when this tree was in flower there were at least 20 moths and many honeyeaters feeding on the flowers about 6 metres above the ground. These photographs were taken with an image-stabilised telephoto lens. Lake Eacham 24th Aug 09. Geoff Byrne.

Map Butterfly *Cyrestis a. achaetes* sipping Fleur's perspiration. Manisnam Island West Papua.. Photo: David Knowles

Ringtail damselfly, *Austrolestes* sp. Photo: Margaret Owen.

Jewel Beetle threesome, *Ethonion* sp. on *Gastrolobium* flower. Photo: Geoff Hutchinson.

Female flower wasp, Thynnidae. Photo: Peter Irwin.

Communally roosting male thynnid wasps
Photo: Margaret Owen.

Honeybee on finger. Photo: Dan & Suzanne Dowsett

Ladybird larva. Photo: Peter Irwin

Shield bug eggs. Photo: Peter Irwin

Rove beetle, *Actinus macleayi*. Photo: Jiri Lochman.

Where there is a corpse, there's bound to be maggots, and where are maggots, expect rove beetles. This rove beetle *Actinus macleayi* is hunting fly larvae on a dead feral pig. Jiri Lochman

Small Tortoiseshell Butterfly, *Aglais urticae* in Scotland. Tom Burbidge

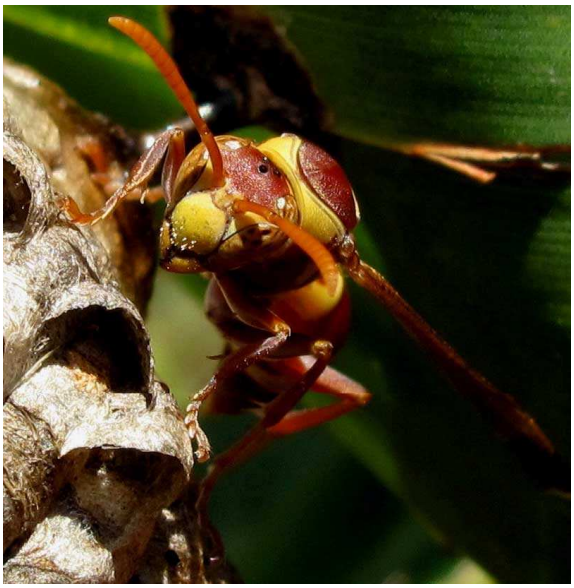
Sandwasp, *Bembix* at Bremer Bay.
Photo: Yvonne Nietrzeba

Scarlet Percher dragonfly, *Diplacodes haematodes*.
Photo Penny Hussey

Weevil on *Hibbertia* flower. Photo: Bill & Ruby Johnson family

## BUGHUNTER'S CORNER

### Why are Paper Wasps called Paper Wasps?



Paper wasp on its nest. Photo: Georgia Werner, supplied by Jenni Werner

Paper wasps build nests that look a little like the comb of a honeybees' nest. But instead of using wax to build the nest, like honeybees, they build it out of a sort of paper made by scraping the surface fibres off woody plants and mixing it with water or saliva to make it pliable. They then carefully use it to build up the larval cells in the nest. Paper is made in a similar way. This wasp is looking very threatening – warning intruders not to approach the nest, otherwise it will attack and inflict a painful sting.