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CIRCULAR OF THE ENTOMOLOGICAL SOCIETY OF NEW SOUTH WALES Inc

Next Meeting of the Entomological Society of NSW Inc

Where: Meeting Room 2, Ermington Community Centre, River Road, Ermington

When: 7.30 pm on Wednesday, 2 May 2007

Speaker: Dr Grant Herron, Senior Research Scientist

The Changing Face of Secondary Pests in Australian Cotton

Grant will present a review of the status of insect pests in cotton, from the introduction of transgenic cotton to reduce sprays against *Helicoverpa* through the emergence of cotton aphids and mirids as pests and the implications associated with insecticide resistance in these secondary pests

General Information

Tarsus will be sent by email in the week before each bi-monthly meeting. Please make sure that we have your latest email address or else speak to one of the members to arrange to receive your copy by some other means.

With dwindling numbers of entomologists in Sydney these days we really appreciate the support of those members who put in so much effort to keep the Society running.

We would all gain more from our Society if a few more members were willing to contribute just a little. Short articles for the Circular, interesting specimens brought to the meetings for "Show and Tell", offers to give presentations would all be well received.

I came across some old photographs of insects in New Guinea which stimulated me to write the following article. Maybe you too can find some buried stories of interest.

Graeme Smith
Circular Editor

POSITION STILL VACANT

PRESIDENT OF OUR ENTOMOLOGICAL SOCIETY

The Entomological Society of NSW still requires a member of the Society with an interest in setting the direction of the Society over the next year. Is this something you think you'd like to try?

You would preside at meetings of the Council and of the Society, provide general guidance in the formulation and development of policy, and act for the Society in such other ways as may further the objects.

The position is supported by an experienced Council who look forward to somebody stepping into this leading role.

If you would be interested just contact any of the Council members.

* Photo behind Tarsus title: Cicada emerging – Kanangra Boyd NP January 2007 *L. Smith*

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NOTICE: Statements made in the Circular do not necessarily represent the views of the Entomological Society of New South Wales Inc. TARSUS is for educational purposes only. TARSUS is prepared by for ESNSW by Graeme Smith Ph: 02 9981 3749 Email: le_gbsmith@optusnet.com.au

Some Insects from the Muller Plateau, PNG

Way back in 1978 and 1984 I joined expeditions to the remote PNG Highlands to explore the caves whose entrances were obvious on aerial photographs. Two large caves were explored and over 80 km of tunnels mapped. A small group of entomologists collected invertebrates from within the caves, finding a complex ecology sustained by the detritus washed into the caves. Among the insects numerous Collembola, Ephemeroptera, Dermaptera, Hemiptera, and several families of Coleoptera were collected. Many species were eyeless and obviously somewhat adapted for life in this low energy environment.

The state of knowledge on the taxonomy of the PNG fauna at that time meant however that most specimens were simply lodged with the Australian Museum, awaiting further work.



Entrance to Atea Kananda Cave

While our focus was on investigating the subterranean fauna, it was impossible not to notice some of the larger forest dwelling insects. The rainforest around the caves was at an altitude of over 2000 metres so the temperature was quite cool. Moss developed in the morning mist and hung from the branches.

The insects in the following photographs were found around the campsite.



Underground river



Graeme Smith

Reference

James *et al* (1980). Caves and Karst of the Muller Range. Report of the 1978 Speleological Expedition to the Atea Kananda, Southern Highlands, Papua New Guinea. Eds James, JM & Dyson, HJ. Speleological Research Council Ltd, Broadway NSW

Insect of the Month

RICHMOND BIRDWING BUTTERFLY - *Barbara May*

One of the largest and most spectacular insects in Australia is the Richmond (River) birdwing butterfly, *Ornithoptera richmondia*, occurring in northeast NSW and southeast Qld. It is the southernmost of three species of gorgeous birdwing butterflies, extending as far south as the Clarence River, once said to emerge in millions and now endangered.

The birdwing butterflies belong to the family Papilionidae. They are brightly coloured with a wingspan of more than 17cm, the males being iridescent green, black and gold, while the much larger females exhibit black, white and yellow.

The plight of the Richmond birdwing stems from land clearing and loss of larval food plants. This butterfly inhabited the "Big Scrub" a 75,000-hectare area of rainforest of which only 100

hectares remains. The caterpillars feed on a rainforest vine called *Pararistolochia praevenosa*, which has become relatively rare, with the disappearance of the forest. Meanwhile a similar exotic vine called Dutchman's pipe, fairly common in gardens, attracts the egg-laying female butterflies. Larvae feeding on these introduced vines are unable to complete their development, due to toxins in the leaves, and die before adulthood.

Drought conditions recently have also caused further extinctions in isolated outlying populations. The result is the Richmond birdwing is extinct from 2/3 of its former range.

Since the mid-1980's it has been a flagship species for raising public awareness of the drastic consequences of habitat loss for the many plants and animals of our coastal subtropical rainforest. Even school children have been involved in planting as many as possible of the Richmond birdwing vines, while aiming at removal of Dutchman's pipe from the area. Nurseries have been asked to cease selling the offending plant and propagate the real Richmond birdwing vine.

In 1996, NSW introduced threatened species legislation to include insects for the first time, and the Richmond birdwing was the first invertebrate so protected.

In 2002, Tim New and Don Sands developed the Butterfly Action Plan on behalf of Environment Australia, to clarify some of the requirements for insect conservation, which often differ from expectations for vertebrates.

In 2005 a new phase of the Richmond Birdwing Conservation Project was launched in Brisbane, as a Recovery Network with the specific aims of

- (a) Planning and re-establishing corridors to return the birdwing to its former range
- (b) Propagating, planting out and caring for Richmond birdwing vines
- (c) Strengthening outlying populations and re-establishing corridors at the northern and southern parts of the birdwing's range
- (d) Continuing information sessions, workshops and newsletters to raise public awareness of the problems the birdwing and other sub-tropical fauna and flora are facing.

Enquiries about the Richmond Birdwing Recovery Network can be made to Sue Scott 07 3200 7432, fax. 07 3805 3589, e-mail Susanne.Scott@bigpond.com

Sources:

CSIRO The Insects of Australia Vol II

SMH 1st Jan 1996

Qld. Ent. Soc. News Bull Vol 33, no.1, Mar. 2005

Qld. Ent. Soc. News Bull Vol 33, no.6, Sept. 2005



Male Richmond birdwing butterfly

Future Bi-monthly Meetings

The Council will continue the operation of the Society while we try to fill the position of President. However, the Society will meet only **BI-MONTHLY until further notice**. General meetings with a speaker will be held only on the “odd numbered” months (May, July, September, November) while the Council will meet more frequently. Speakers tentatively scheduled for the coming general meetings are shown below.

This timing allows us to alternate meetings with the Society For Insect Studies (SFIS) which meets at the Australian Museum at 7.30 on the second Tuesday of the “even numbered” months.

The next meetings of the general meeting Entomological Society of NSW will be held at 7.30 pm on May 2 at the usual venue.

Seminar series 2007

Date	Speaker	Title
2 May	Grant Herron (NSW DPI)	The changing face of secondary insect pests of Australian cotton
4 July	Sarah Mansfield (University of Sydney)	Predator and parasitoid behaviour and foraging
5 September	Graeme Smith (Reckitt Benckiser)	Testing consumer pest control products
7 November	Cameron Webb (Westmead Hospital)	Mosquitoes - Title TBD

Venue:

Meeting Room 2
Ermington Community Centre
10 River Road Ermington

Meetings start at 7:30 p.m.

Talks run for around 45 minutes, with 10 minutes for questions. Afterwards a supper is provided. Guests are most welcome.

Getting there:

By Car: From Victoria Rd turn into Spurway St (head towards Parramatta River). Turn right into Jackson St then left into River Rd. If heading north on Silverwater Rd, turn right into Victoria Rd then proceed as above. If heading south on Silverwater Rd take the Parramatta off ramp, cross Victoria Rd and proceed into River Rd. If you miss the off ramp, turn left into South St, then left into River Rd.

By Bus: Routes 525, 523 and L20 depart from Argyle St near Westfield shopping centre near Parramatta station. Routes 523 and L20 depart from West Ryde station. Get off at the Ermington shops. River Rd passes between the supermarket and the hotel.

SOCIETY POSTAL ADDRESS

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MEMBERSHIP FEES 2007

ORDINARY MEMBERS	\$50
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