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CIRCULAR OF THE ENTOMOLOGICAL SOCIETY OF NEW SOUTH WALES Inc

Next Meeting of the Entomological Society of NSW Inc

Where: Field Study Centre in Bicentennial Park.

NOTE THE CHANGE FROM OUR NORMAL VENUE

When: 7.30 pm on Wednesday, 6th February 2008

Speaker: Cameron E Webb
Department of Medical Entomology
ICPMR & University of Sydney
Westmead Hospital, Westmead NSW 2145

The Mosquito Fauna of NSW: Past, Present and a Future with Climate Change

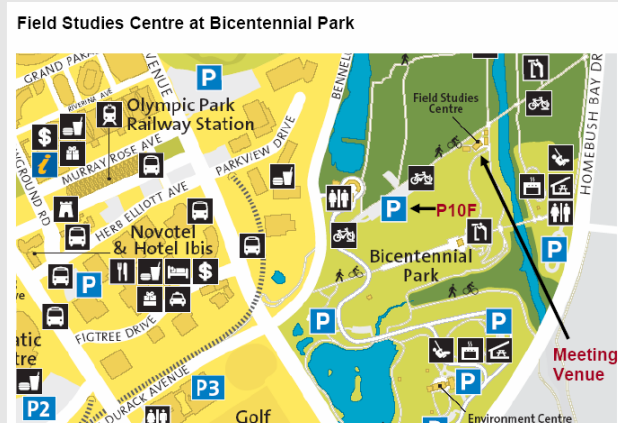
Dr. Cameron Webb is a Hospital Scientist and Clinical Lecturer with the University of Sydney and has undertaken extensive research into the mosquito populations of NSW including investigations of nuisance-biting and disease-carrying species and how local authorities can best manage the associated mosquito risk when designing urban development and wetland rehabilitation projects.

Cameron will provide an overview of the NSW mosquito fauna including the range of species, their biology, ecology and respective pest and public health risks. From the saltmarsh mosquito, *Aedes vigilax*, that is perfectly adapted to the highly ephemeral saline conditions of coastal saltmarsh to the banded freshwater mosquito, *Culex annulirostris*, that can occur at high numbers in irrigated farmlands and in constructed wetlands to the domestic mosquito, *Aedes notoscriptus*, that has made a home for itself amongst water holding containers in suburban backyards.

As climate change predictions raise concerns of increased mosquito populations and the introduction of exotic species and mosquito-borne diseases, an examination of the past and present mosquito fauna reveals what our future may (or may not) hold.

Crucial to an understanding of the local mosquito fauna are effective sampling methodologies and at Sydney Olympic Park, a cross section of the state's mosquito fauna is represented and a demonstration of the current monitoring program and examples of local species will be on display.

Note: Cameron hopes to make the meeting more interesting by including some outdoor activities and the identification of mosquitoes caught. A supper will be provided after the presentation.



The Field Studies Centre is located inside Bicentennial Park (off Australia Avenue), Sydney Olympic Park, about 150m walk from the Car Park P10F. Free parking has been arranged for this meeting by Swapan Paul.

Further transport information available at <http://www.sydnevolympicpark.com.au/Visiting/transport>

If you are having difficulty finding the venue please call the Security Rangers on 9714 7700

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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

November meeting - Zoo visit

Thanks to a generous offer from Warrick Angus and Simone McMonigal we were able to hold a very successful and informative evening in the “Backyard to Bush” section at Taronga Park Zoo in November. A total of about 30 members and family from both the Ent Soc. of NSW and the Society for Insect Studies arrived at the Zoo at about 7pm. The weather had been threatening all day but the rain stopped for the evening and we were able to enjoy a BBQ on the verandah of the Education Centre before touring the insect-related exhibits. It was a good opportunity for members of the two Sydney-based entomological societies to get to know each other better.

After the meal, Warrick and Simone warmed up the group with a “game” where everybody had to think about what insect they would like to come back as if they had a second chance at life and maybe give a reason why. We then moved on to some of the exhibits where Warrick explained the difficulties they had experienced setting up various living insect displays such as the ant nest. Of course, there were many other non-insect displays including snakes and farm animals that also received a lot of attention. Warrick was able to explain how the animals are cared for and told some entertaining stories about how he has had to introduce certain television celebrities to bird-eating spiders and other somewhat intimidating creatures. Reactions ranged from the extremely cavalier (foolish) to extreme (and probably justified) reluctance.

Following the tour, Simone and Warrick treated us all to a bowl of ice-cream topped with native bee honey along with tea and coffee. Warrick then showed some previews of photos and videos of Dawson’s Burrowing bee that he and Simone had just helped film in Western Australia for a wildlife documentary currently in production.



Louise and Graeme at the BBQ



Warrick explaining the challenges of the ant display cabinet while Kathy Collins SFIS and Robin Parson (ESNSW) along with others look on



A tour through the underground section included Giant Burrowing cockroaches



A centipede in its display cabinet

The Society would like to thank Taronga Park Zoo for allowing us to run this function; Warrick and Simone for their efforts to make everything work and for their contagious enthusiasm for what they do (not to mention the ice-cream and honey); Graham Owen and other SFIS members for their active participation and to Louise and Graeme Smith for organizing and cooking the food.



Barbara and Dinah trying to decide whether vertebrates are cuter than invertebrates



The ice-cream topped with native bee honey proved popular

General

Apenesia sp. (Hymenoptera: Bethyridae)

Martin Horwood

This insect was delivered to me by a pest controller before Christmas. He had collected them from an office where staff had complained about being stung by them. The pest controller thought they were ants, and possibly even fire ants given the severity of their sting!

While the insects superficially resemble ants, a microscope revealed some major un-antlike features. What stuck out to me was the lack of any structure on the petiole. My colleague Debbie Kent identified them as *Apenesia* sp., a Bethyrid wasp. *Insects of Australia* notes that this group of insects parasitises beetle and moth larvae. Female *Apenesia* are wingless and ant-like in appearance, whereas males are macropterous. The pest controller later told me that there was an infestation of carpet beetle in the office, which explains where the wasps came from.



Most entomologists are familiar with cases of “unidentified biting insects”. Usually there is no substance to the claims of insect involvement. However this case was an exception and I have added *Apenesia* to the (very small) list of insects that are a genuine cause of this malady.

Christmas Party

The last meeting of The Entomological Society of NSW for 2007 took the form of an open invitation to pre-Christmas dinner at the Boatshed Café at La Perouse, which was found to be so pleasant at Christmas 2006, on the beach, opposite the museum dedicated to the Comte de la Perouse. This is one of the favourite haunts of our long-serving treasurer Ted Taylor and his wife Mary-Lyn who enlivened the evening with toy insects and decorations of insect models. Ted's quiz on entomological topics made us rack our brains. Spouses and partners entered the debate with enthusiasm. I would encourage members who would like to revise their insect knowledge in the pleasant company of their peers to attend the next dinner.

We were delighted to share the evening with some members not often seen in Sydney these days - Barry Wallbank (Department of Agriculture Wagga Wagga) who has retired to Kiama, Graeme Thwaite (Department of Agriculture Orange), retired in Orange, and his daughter Janine, Alison and Michael Nichols, retired to Bathurst, and Phil Haddlington of Forestry fame.

Thanks to all who attended for their pleasant company.

Barbara May



Left to right: Front Row: Garry Levot, Noel and Barbara May, Graham Thwaite, Alison Nicholls with her husband Michael behind her and Mary Lynn Taylor looking over her shoulder;
Middle row: Gith Strid-Nwulaekwed, Howard Greening;
Back row: Ted Taylor, Phil Haddlington, Robert & Dinah Hales, Fred Swindley, Barry Wallbank



Barbara May & Graham Thwaite preparing their runners for "the Great Insect Race"



Aggies: Barry Wallbank, Howard Greening, Graham Thwaite, & Garry Levot

A REQUEST FROM OVERSEAS

From: didiergoffin@hotmail.com
To: tanya.james@agric.nsw.gov.au

Subject: Diptera Exchange
 26/11/2007

Dear Ms James,

I'm a member of the Royal Entomological Society of Belgium (amateur). I wonder if one of your amateur members would be interested by few exchange of flies. My collection come from Europe. Could you ask the question to your members?

Thank you in advance.

Best wishes

Didier Goffin

Sapsuckers

(This is supposed to be read by a certain retired horticulturalist with a sibillant accent)

*They suck the sap from sorghum
 And they suck the sap from seeds.
 They suck the sap most succulent
 To gain their daily needs.
 They're certainly unceasing
 In their search for sucking feeds,
 But, strangely, they will seldom seek
 To suck the sap from weeds.*

*In summer they suck lucerne
 And certain sorts of wheat,
 So you see they're not selective
 In the sort of sap they eat.
 Existence for these sucking bugs
 In summer is so sweet,
 They seethe with such excitement
 When they sense the summer's heat.*

*Sapsuckers closely studied
 On small microscopic slides
 Seem like certain politicians,
 So insatiable inside.
 Some subtle differences exist,
 Sapsuckers have their pride.
 They seldom seek to suck more sap
 When their sap source has dried.*

*As ceaseless scientific search
 Seeks certain ways to kill
 These stubborn little suckers
 Alas, they're sapsucking still.
 Insecticides and poisons
 Sometimes make sapsuckers ill
 But some survive to suck more sap
 With sure and certain skill.*

*Some say other insects
 May serve to save the day
 And slowly eat the suckers up
 Or scare the pests away.
 But suck controls are dangerous,
 So here's a safer way,
 Seek solace in the saviour,
 Sisters, brothers, let us spray!*

Insect of the Month

Archimantis- Field observations of a Sydney Mantid (Mantodea -Mantidae) Robin Parsons

Archimantis and *Tenodera* include the largest species of Mantids found around Sydney, imposing insects up to 110 mm & 100 mm long respectively.

Tenodera have fully winged adult males & females and their grass blade colouring blends well with the long, dense grassy vegetation which is also the principal habitat of their nymphs and favoured orthopteran prey. Unfortunately since the 1990's Sydney has been tidied up with fewer vacant 'wild' spaces and smaller residential gardens which seems to have reduced *Tenodera*'s presence in the Sydney suburban landscape.

Tenodera may also be found around lights at night in late summer and early autumn as both sexes can access and are attracted to settle around, electric lights. I have never observed *Archimantis* adults around lights and the females being short winged less likely to be able to access raised lighting.

Archimantis adults have fully winged males and short winged females generally brown, grey green but may be a deep rust/chocolate brown or pale grey ; the colour of old dead wood. The slim adult males are not much shorter than the robust females.

I have not found *Archimantis* adults in dense grass (e.g. *Kykuyu* or *Paspalum* as liked by *Tenodera*) but in larger branching herbaceous weeds, bushes and climbers (e.g. Paddy's Lucerne, Cypress, bottle brushes and wattles) even when these plants may be relatively isolated such as on urban nature strips or separated by garden paths, steps etc.

Having observed an adult female strolling (in daylight) between cypress trees along a concrete patio it seems they are able to travel between isolated plants. It seems that this ability and preference to use sparse and varied vegetation has helped them maintain a presence in the current urban environment.



The nymphs, with their light or black brown stalk like appearance, seem to prefer a mixture of open or tussocky grasses, with dead stalks and tall weedy herbs (e.g. flea bane, *Canna*) to about half a metre tall.

Like other Mantids, *Archimantis* is an opportunistic predator which in captivity I have given a variety of insect prey. However in 'the wild' I have only once observed one feeding which was an adult female which appeared to be holding the remains of an ant or fly which seemed to indicate a choice of relatively small prey.

Most other Sydney Mantids (*Orthodera*, *Tenodera*, *Mantis*, and *Pseudomantis*) commence their lives by hatching in spring and, after breeding, the next generation go through winter in the egg stage within the ootheca. *Archimantis* however is different in that the next generation overwinters as early instar nymphs. Thus searches under torchlight on cold July/August nights may reveal the straw-like nymphs resting on dead grass or weed stalks with virtually no other insect life to be seen.

The nymphs having spent their middle instars through winter (apparently living on nothing but cold air) in mid spring (October) move from the grasses and weed stalks into woody weeds, shrubby vegetation and small trees.

Archimantis reach adult stage around late spring to mid summer (November /December) with eggs laid in mid to late summer (January /February). The ootheca is covered in a globular spongy mass (nearly the size of a golf ball) on tree branches, walls or plant stems.



The nymphs hatch out in late summer around January/February, distinguished from other mantid first instar nymphs by their pale, checked, brown colour (*Tenodera* being off white, *Pseudomantis* dark brown with white tarsi). More significantly that at that time of year there are (apart from some *Orthodera* nymphs, which have the pronotum expanded to the width of the head and the body with distinct margin of yellow green) no other species of early instar mantid nymphs about. They reach a length of about 20 to 30 mm long by the onset of winter.

Archimantis is a large predatory insect (but not dangerous to people) that, like its relative *Tenodera*, needs a weedy spot to complete its lifecycle. Perhaps if enough of us put aside a weedy space *Archimantis* may keep a place in Sydney's suburbs.

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** unless otherwise advertised (as is the case this month). General meetings with a speaker will generally be held only on the “odd numbered” months (March, 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.

Future Events

Date	Speaker	Title
6 February, 2008 7.30 pm	Dr Cameron Webb (Westmead Hospital)	The Mosquito Fauna of NSW: Past, Present and a Future with Climate Change
5 March, 2008 7.30 pm		Annual General Meeting
2008 TBD	Robert McDougall	Alpine Ants
2008 TBD	Graeme Smith (Reckitt Benckiser)	Testing consumer pest control products

Venue:

Meeting Room 2
Ermington Community Centre
10 River Road Ermington

NOTE: The February meeting will **not** be held at the usual venue (see front page for details)

Meetings start at 7:30 p.m.

Talks run for around 45 minutes, with 10 minutes for questions. 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

C/- ENTOMOLOGY DEPARTMENT
THE AUSTRALIAN MUSEUM
6 COLLEGE STREET
SYDNEY NSW 2000

MEMBERSHIP FEES 2007

ORDINARY MEMBERS	\$50
COMPANY ASSOCIATES	\$60
STUDENT MEMBERS	\$25
CORPORATE MEMBERS	\$50

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