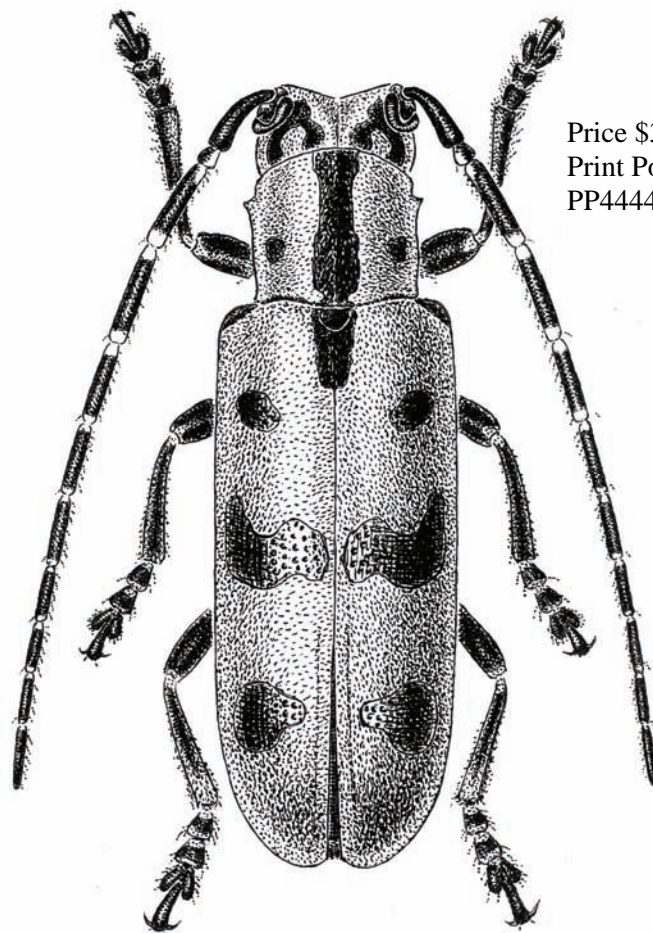




ENTOMOLOGICAL SOCIETY OF QUEENSLAND INC

# NEWS BULLETIN



Price \$3.50  
Print Post Approved  
PP444461/0003

Volume 38, Issue 7, October 2010

## THE ENTOMOLOGICAL SOCIETY OF QUEENSLAND

**Internet:** [www.esq.org.au](http://www.esq.org.au)    **Email:** [esq@uqconnect.net](mailto:esq@uqconnect.net)  
**Address:** PO Box 537, Indooroopilly Qld 4068

### President

Matthew Purcell  
Ph: (07) 3214 2847  
Fax: (07) 3214 2815  
Email: [matthew.purcell@csiro.au](mailto:matthew.purcell@csiro.au)

### Senior Vice President

Dr Lyn Cook  
Ph: (07) 3365 2070  
Fax: (07) 3365 1655  
Email: [l.cook@uq.edu.au](mailto:l.cook@uq.edu.au)

### Junior Vice President

Dr Christine Lambkin  
Ph: (07) 3840 7699  
Fax: (07) 3846 1226  
Email: [christine.lambkin@qm.qld.gov.au](mailto:christine.lambkin@qm.qld.gov.au)

### Secretary

Dr Judy King  
Ph: (07) 3202 7507  
Email: [cjking2@bigpond.net.au](mailto:cjking2@bigpond.net.au)

### Treasurer

Desley Tree  
Ph: (07) 3896 9684  
Fax: (07) 3896 9446  
Email: [desley.tree@deedi.qld.gov.au](mailto:desley.tree@deedi.qld.gov.au)

### News Bulletin Editor

Justin Bartlett  
Ph: (07) 3896 9419  
Fax: (07) 3896 9446  
Email: [justin.bartlett@deedi.qld.gov.au](mailto:justin.bartlett@deedi.qld.gov.au)

### Permit Information Officer

Dr Christine Lambkin  
Ph: (07) 3840 7699  
Fax: (07) 3846 1226  
Email: [christine.lambkin@qm.qld.gov.au](mailto:christine.lambkin@qm.qld.gov.au)

### Councillors

Richard Bull  
Ph: (07) 3378 0340  
Fax: (07) 3378 0340  
Email: [brichard42@optusnet.com.au](mailto:brichard42@optusnet.com.au)

Geoff Thompson  
Ph: (07) 3840 7690  
Fax: (07) 3846 1226  
Email: [geoff.thompson@qm.qld.gov.au](mailto:geoff.thompson@qm.qld.gov.au)

Dr Federica Turco  
Ph: (07) 3840 7690  
Fax: (07) 3846 1226  
Email: [Federica.turco@qm.qld.gov.au](mailto:Federica.turco@qm.qld.gov.au)

### Honorary Life Members

R.A.I. Drew  
D.L. Hancock  
M.J. Harslett  
D.S. Kettle  
D.P.A. Sands  
R.P. Kleinschmidt

### Sustaining Associate of News Bulletin

Tropical Fruit Fly Research Group,  
Griffith University

### THE AUSTRALIAN ENTOMOLOGIST

#### Editor

Dr Albert Orr  
PO Box 537  
Indooroopilly Qld 4068

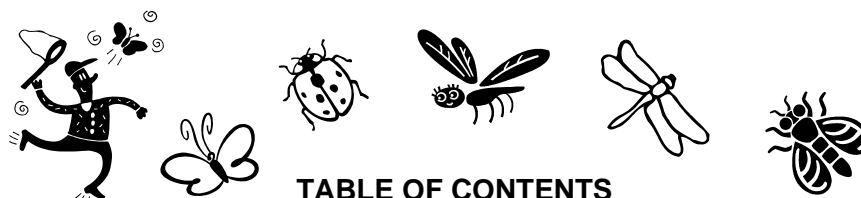
#### Business Manager

Dr Geoff Monteith  
Ph: (07) 3371 2621  
Fax: (07) 3846 1226  
Email: [geoff.monteith@bigpond.com](mailto:geoff.monteith@bigpond.com)

---

**Front cover illustration:** Habitus of *Zygrita diva* Thomson (Coleoptera: Cerambycidae), the lucern crownborer—artist William Manley, scanned from original illustration ©Queensland Department of Employment, Economic Development and Innovation

ISSN 1037-2989



<b>Minutes of General Meeting</b>	<b>114</b>
<b>Main Business</b>	
- The Evolution of a Butterfly Farmer — <i>Ross Kendall</i>	<b>114</b>
<b>Notice of Next Meeting</b>	<b>119</b>
<b>People &amp; Projects</b>	
- Bribie Island BugCatch Report	<b>120</b>
- Insects in Public Art—Some West Australian Sculptures	<b>124</b>
<b>Nomination for Membership form</b>	<b>128</b>

The **ENTOMOLOGICAL SOCIETY OF QUEENSLAND INC.**, since its inception in 1923, has striven to promote the development of pure and applied entomological research in Australia, particularly in Queensland. The Society promotes liaison among entomologists through regular meetings and the distribution of a *News Bulletin* to members. Meetings are announced in the *News Bulletin*, and are normally held on the second Monday of each month (March to June, August to December), or on Tuesday if Monday is a public holiday. Visitors and members are welcome. Membership information can be obtained from the Honorary Secretary, or other office bearers of the Society. Membership is open to anyone interested in Entomology.

Contributions to the *News Bulletin* such as items of news, trip reports, announcements, etc are welcome and should be sent to the News Bulletin Editor.

The Society publishes **THE AUSTRALIAN ENTOMOLOGIST**. This is a refereed, illustrated journal devoted to Entomology in the Australian region, including New Zealand, Papua New Guinea and the islands of the South Western Pacific. The journal is published in four parts annually.

**EMBLEM:** The Society's emblem, chosen in 1973 on the 50<sup>th</sup> anniversary of the Society, is the king stag beetle, *Phalacrognathus muelleri* (Macleay), family Lucanidae (Coleoptera). Its magnificent purple and green colouration makes it one of the most attractive beetle species in Australia. It is restricted to the rainforests of northern Queensland.

The issue of this document does **NOT** constitute a formal publication for the purposes of the "International Code of Zoological Nomenclature 4<sup>th</sup> edition, 1999". Authors alone are responsible for the views expressed.

## Minutes of General Meeting

Held in the Large Conference Room, CSIRO Entomology, Long Pocket Labs, 120 Meiers Road, Indooroopilly, on Monday October 11, 2010.

**Chair:** Matt Purcell

**Attendance,** Murdoch De Baar, Bradley Brown, Alejandro Costamagna, Gio Fichera, Tim Heard, David Holdom, Ross Kendall, Judy King, Chris Lambkin, Gunter Maywald, Brad McNeil, Geoff Monteith, John Moss, Matt Purcell, Geoff Thompson, Desley Tree, Federica Turco.

**Visitors:** Cassie Jansen.

**Apologies:** Justin Bartlett, Richard Bull, Lyn Cook, Trevor Lambkin, Bill Palmer, Richard Zietek.

**Minutes:** The minutes of the last General Meeting were circulated in News Bulletin Vol. 38, Issue 6, September 2010.

*Moved the minutes be accepted as a true record:* Geoff Monteith.

*Seconded:* Desley Tree.

### **Nominations for Membership:**

There were no nominations for membership.

### **General Business:**

1. Reminder that the December meeting is Notes and Exhibits and a BBQ. Presentations (10-15 minutes) are welcome – please contact Matt or Judy with your presentation title.
2. Chris Lambkin informed members that Bauple National Park has been added to the Collecting Permit list. New permits will be sent out shortly.

## Main Business

### **The Evolution of a Butterfly Farmer.**

Ross Kendall, Butterfly Encounters Pty Ltd.

The man on the left of the photo on the right (Fig. 1), taken in 1941, is my father who managed a citrus orchard on the Gregory River near Goodwood, which is between Maryborough and Bundaberg. I am sure that he knew of Orchard Swallowtail caterpillars eating young leaves and fruit piercing moths sucking fruit but I was unaware of this at the time as I am the child sitting on my mother's knee.

For seven years (1946–1953) of my childhood we lived on a farm at Booyal on the Burnett River upstream from Wallaville. This started a lifelong interest in farming and the environment. My interest in insects led to me being called “The Bugger” by others in the family.

Fast forward 50 years: Primary School; High School; Bank officer (and part time student); University (aborted after one year); cadet Patrol Officer in PNG; Teacher Training at ASOPA, Mosman, NSW; 10 years teaching at Hutjena High School on Buka Island, Northern Bougainville (mostly teaching Agriculture and Rural Science); 23 years teaching at St Laurence's College, South Brisbane. Over this period “bugs” were an occasional background interest. I remember Birdwing butterflies (*Ornithoptera urvilleanus*) were frequent fliers in our garden on Buka. Insect names like *Amblypelta*, *Brontispa longissima*, sweet potato weevil and Rhinoceros beetle came up as pests in agricultural teaching.

In 1998, for some reason, I grew an African Milkweed (*Gomphocarpus fruticosus*) in my garden and, as they do, female Wanderers were soon laying eggs on the leaves. As



1

I watched the larvae (Fig. 2) develop and pupate two ideas began to form: the first was to explore how I could encourage children to develop an interest in biology and the second was to perhaps sell some pupae.

The first idea resulted in the development of the Live Learning Kit. I heard of a group called Monarch Watch which operates from the University of Kansas in the USA (<http://www.monarchwatch.org>) and studied

their website. This led to information about a project conducted under the wing of Dr Karen Oberhauser at the University of Minnesota in the USA called *Monarchs in the Classroom* ([www.monarchlab.umn.edu](http://www.monarchlab.umn.edu)), which inspires children in a large number of schools in the USA. Karen gave me permission to include parts of their publications in *Butterflies in Your Classroom*.

The Live Learning Kit was trialled at a school (Fig. 3). The kids took to it with great enthusiasm and their teacher made some helpful suggestions that were incorporated in the book. Suggested graded lesson activities in the book are designed to meet relevant educational “outcomes.” The Kit is made up of an enclosure, a book, potted host plants and some eggs or caterpillars. Kits are usually supplied to schools in the Brisbane area as shipping of potted plants over longer distances poses severe logistical problems. Through the Internet, I receive enquiries from all over Australia. I even had an enquiry from a lady in Florida!



2





There are now others who provide some sort of experiential learning about insects in other states and I frequently refer enquiries to them.

It is desirable to have a business name to operate a business. After an initial year as “Butterfly Experiences” registered as a sole trader in Queensland, I decided that the best option was to register as a private company because company registration is recognised Australia wide. “Butterfly Experiences” was a registered name in another state so in May 2000 “Butterfly Encounters Pty Ltd” came into existence and with its own website - [www.butterflyencounters.com.au](http://www.butterflyencounters.com.au).

The Butterfly Encounters logo (right), representing the four stages of a butterfly life cycle, was registered as a trademark in 2002.

I am registered as a farmer with the Australian Taxation Office and this brings an interesting annual request. I need to complete an annual primary producer’s return for the Australian Bureau of Statistics which runs

to about 30 pages and requests information such as how many hectares are under cultivation, how many tons of fertiliser have been used and how many mega-litres of water were used for irrigation and watering livestock.

But let’s return to that idea of 1998; to sell some pupae.... I learned that Tony Hiller supplied butterflies to the South Bank Butterfly House and asked if he would like to purchase some. He did so and thus began the butterfly-farming project. So it was back to my old farming days and the four principles of livestock farming, which I summarise as “Breed them,” “Feed them,” “Keep them alive” and “Sell them.”

Having purchased a copy of *Butterflies of Australia*, I read it in great detail and started obtaining host plants for other species of butterflies. Of course, regular supplies of pupae meant a regular supply of food plants was needed to feed caterpillars.

The number of potted plants proliferated and a regular supply of fresh larvae meant that parasitic flies took a liking to my garden. I entered a steep learning curve about parasites, predators and diseases. This soon led to construction of insect screened, temporary enclosures to keep the flies out and the caterpillars inside. With great enthusiasm in the first few years, I raised about 45 species of butterflies.



Then I built “The Cathedral” (Fig. 4) which allows the butterflies to fly freely, mate and lay eggs on the appropriate host plants. Breeding stock of common species are relatively easy to obtain either by netting the occasional female or collecting eggs laid in the garden and raising them through. Sometimes I obtain eggs from other butterfly breeders.

We try to collect eggs every day as they, and young larvae, are a tempting meal for the ubiquitous ants and spiders. The eggs are hatched in small containers and larvae then raised on potted plants in small enclosures in my temperature controlled “nursery.” I prefer to use growing plants rather than cuttings as this results in healthier caterpillars and butterflies. Pupae are sent off packed in cotton wool while others are kept and allowed to emerge as adults.

I began to receive enquiries about butterflies for release at weddings and was soon despatching them by courier or express post for delivery the next day somewhere in Australia. Then came funerals, birthdays, wedding anniversaries and film shoots. Live butterflies are sent to a location only if they are endemic to that area. The exception is Western Australia where some non-endemic species are allowed.

There have been some unusual requests. One girl phoned me about butterflies for her wedding in Sydney. She was well informed, telling me she knew they could be sent to her frozen and she just needed to bring them back to life by warming them up! Another girl phoned one August from New Zealand wanting 1000 Monarchs for a film shoot the following weekend. Still another wanted 250 butterflies to release at



4



her wedding reception in Sydney – one for each guest and to be released in the Wentworth Hotel ballroom at 10 p.m.

Then came requests for papered specimens. To send them overseas, an export permit from Canberra is required. To obtain an export permit, the butterflies must be sourced from a recognised captive breeder. So I have been registered in Canberra as a recognised captive breeder of quite a number of species. To raise Birdwings and Ulysses, I also have a Queensland Wildlife Farmer's Licence.

I now have a more "modern" website but have kept the section on "Species Information" which allows anyone (children in particular) to find information and images of 22 species of butterflies. There have been suggestions that I supply a DVD on life cycles with the Live Learning Kit, but I have decided not to do this, as I believe it is important that children observe reality and learn that life does not happen in a five-minute video. As a compromise, for those

looking at the "Live Learning Kit" page on the website there is a "movie" of a the life cycle of the Common Crow (*Euploea core*).

Children's television producers have sent teams to film at various times and I can usually persuade them to present realistic scripts.

There have been some unusual moments. Some of you have seen this image of a bilateral gynandromorph Orchard Swallowtail (*Papilio aegeus*) (Fig. 5) that was bred in the "Cathedral." An aberrant (brown) Large Grass Yellow (*Eurema hecabe*) was also bred in the "Cathedral." I often breed the light form (form hinda) of the Yellow Migrant (*Catopsilia gorgophone*) in winter but this year was the first time that I have noticed a pair of them mating. In *Butterflies of Australia* (2000), Michael Braby wrote "The factors responsible for producing this form, and its significance, would make an interesting study." My facilities are available if someone wishes to take up the challenge.



The breeding of butterflies and the supply of pupae, butterflies and Live Learning Kits has become a routine activity for me. However it is quite time consuming and this constrains my growing wider interest in invertebrates and biodiversity. Fortunately, as there have been a number of new entrants in the butterfly breeding and release field in the last 10 years, increased demand is being met by others.

I have been able to discover new information at times and through the Butterfly and Other Invertebrate Club have published this information in our magazine *Metamorphosis Australia* (right). The Clubs ability to tap into the expertise and energy of many of our members and to reach a relatively wide audience means that, on a voluntary basis, we can make a useful contribution to education and to positive action. At this stage of my evolution, I am happy to play a part in coordinating those activities!



The Chair advised members that the next General Meeting will be on Monday November 8 at 12 noon at CSIRO, and the speaker will be from AQIS.

**Vote of Thanks:** Tim Heard



## Notice of Next Meeting

Monday 8th November, 2010, 12pm

### ‘Australia’s Most Unwanted’

*a presentation by*

### Bill Crowe (AQIS)

Large Conference Room  
CSIRO Long Pocket Laboratories  
120 Meiers Rd, Indooroopilly

### ALL WELCOME

(please sign in at reception before meeting)



## People and Projects

### Bribie BugCatch Report

On Saturday October 9, probably the wettest weekend in SE Queensland since Adam was a boy, the Society ran the Bribie Island Bugcatch as scheduled. To the pleasurable astonishment of the organisers, Christine Lambkin and Geoff Monteith, about 50 people turned up.

"BugCatch" is the name given to the arrangement between the Entomological Society of Queensland and the Queensland National Parks and Wildlife Service (within the Department of Environment and Resource Management), whereby the QNPWS invites the Society to arrange collecting trips to particular National Parks where they require extra faunistic information. In this case, Amy Connolly, in the Noosa NPWS office, is working on a management plan for Bribie Island NP and she invited us to run a BugCatch there to gather a little more insect information for use in her project.

As we have done for the last few BugCatch days, we invited Dave Merritt and Kathy Ebert, from University of Queensland, to bring their entomology students along as it is a good opportunity for them to make their course collections and to see professional entomologists, and all their trapping methods, in action. They have a big enrolment of about 80 students this year in the introductory on-line entomology course, and though a lot of these do not live in SE Queensland, we still managed to get about 30 turn up on the day. Also from UQ were Penelope Mills, interested in apiomorph

galls, Rebecca Morley, who looks after the Entomology Curriculum Australia website, and postgrads Corinna Lange, Saul Thorpe-Townsend and Lisa Rigby.

The usual contingent turned up from the Queensland Museum: Geoff Monteith, Christine Lambkin, Federica Turco....even Susan Wright came in from her maternity leave, with husband Jeff, to spend the day and show off their beautiful new daughter Olivia. A strong contingent came down from the Bugs-for-Bugs labs in Mundubbera: Corine Vink, Alberto Guanilo and Pilar Vanaclocha Arocas.

We had great support from the NPWS ranger staff at Bribie and we are really grateful to Ranger-in-Charge, Graeme Bulley, for all his help. We had selected the Gallagher's Point area as the focus for collecting and NPWS closed the area to the general public for the day. An added bonus was a rented loo on wheels plus rented chairs and folding tables, all provided by QNPWS. Together with the couple of gazebo shelters that we took with us, these extras allowed us to survive the weather in comparative comfort.

Geoff, Federica and Kathy had installed a series of malaise traps, flight intercept traps, pitfall traps and dung beetle traps a few weeks beforehand and these were serviced on the day. Geoff will be maintaining those traps for a couple more months, with fortnightly servicing, so a considerable body of collections will accumulate, despite the poor weather of the BugCatch day itself. One target of the pitfall traps is the somewhat enigmatic carabid beetle, *Pamborus viridis*, the holotype of which has recently been found by Japanese workers to not accord with the widespread species that has been called by that name in Australia. Specimens of the "real" *Pamborus viridis* are very rare and one of them was collected by Henry Hacker on Bribie Island in 1911.



**Fig 1.** The Bribie BugCatch group at lunch on the Gallagher's Point road (Photo: Geoff Monteith).



**Fig 2.** Geoff Monteith (foreground) shows a pitfall catch to the UQ leaders Kathy Ebert (centre) and Dave Merritt (right) and students (Photo: Chris Lambkin).



We hoped for a repeat but the traps instead had specimens of both *Pamborus brisbanensis* and *Pamborus guerinii*, both new records for the island, but not the beast we sought!

One of the highlights of the day was a demonstration by Chris Moeseneder of his new "super net" for collecting his favoured cetonine flower chafer beetles from treetop blossom. Based on a lightweight telescopic antenna handle it expanded to a full 12 metres in height. Unfortunately the blustery, rainy day was not the day for effective use of such a net, at least not without the use of a safety harness, but we were all seriously impressed.

One interesting capture for the day was by student, Jay Nagle-Runciman, who found a female of the pentatomid bug *Anchises parvulus* brooding a batch of eggs which were in the process of hatching to first instars. Maternal care of this sort had not been recorded previously for this species. Fellow student, Billie Williams, captured the process on film.

In the evening about 30 of the hard core stuck it out for the light trapping. For this we retired back to the NPWS office. This is completely surrounded by bush and we were able to plug in to the power three mercury vapour light sheets facing in different directions from the building. We had a dry spot under the shelter of the awning of the machinery shed to eat takeaway pizza and red wine for dinner while the students were able to work on their collections on the folding tables which NPWS had transported in from the bush. Light trapping on such a cold, windy, rainy night could only be described as disastrous but the experience was probably good for the soul. By 10 pm everyone had headed home to Brisbane except for Geoff who retired to his tent at the beach for a second night of competing with the rats for the driest corner.

**Christine Lambkin & Geoff Monteith**  
BugCatch Coordinators



**Fig 3.** Chris Moeseneder shows off his 12 metre super net (Photo: Geoff Monteith).





**Fig 4.** A female of *Anchises parvulus* broods hatching eggs (Photo: Billie Williams).



**Fig 5.** Students Billie Williams (left) and Christine Goosems jump for joy with their nets (Photo: Eryn Schemioneck).

## Insects in Public Art — Some West Australian Sculptures

We've been running in the News Bulletin images of public art pieces in Queensland which have used insects as their theme. Thanks to David Knowles in Perth and Jack Hasenpusch in Innisfail we have learned of a series of large carved timber insects in the famous Kings Park gardens not far from the CBD in Perth, Western Australia. Charlotte Vaughan is the Education Officer for the gardens and she reports that they were constructed in 2009 when the Saw Avenue Picnic Area in Kings Park was refurbished, creating a nature-based children's play area with interpretive artwork inspired by WA's biodiversity. The play elements are made largely from natural materials, including recycled Kings Park timber, which form a naturalised landscape for children to explore. Some of the timber logs have been carved by local WA artist, Nic Compton, into giant insects. These include a phasmid which seems to be based on *Megacrania batesi* (Fig 1), a cycad weevil of the genus *Tranes* (Fig 2), a crusader bug, *Mictis profana* (Fig 3), and a spider wasp (Fig 4). Some are set in the ground like totem poles while others are horizontal and can be used as seats. The education people are currently preparing signage to accompany them which uses the sculptures in an informative "can you find me" game for children. Many thanks to David Knowles (Fig 1) and M.Bundock ( Figs 2-4) for the photographs.







2



3





4



## Entomological Society of Queensland Nomination for Membership Form

www.esq.org.au

Title \_\_\_\_\_ First name \_\_\_\_\_

Surname \_\_\_\_\_

Email \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_ postcode \_\_\_\_\_ Date \_\_\_\_\_

Nominated by \_\_\_\_\_

Seconded by \_\_\_\_\_

☐ General membership **\$30 AUD**

☐ Joint membership **\$36 AUD**

☐ Student membership **\$18 AUD**

I would like to receive my News Bulletin

☐ electronically (PDF) by email

☐ in hard copy by mail

☐ Cheque/Money Order enclosed

or Please charge my : ☐ Bankcard ☐ Visa ☐ Mastercard

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Name on Card \_\_\_\_\_

Expiry Date \_\_\_\_\_ Signature \_\_\_\_\_

**Please return completed form to :** Honorary Secretary  
Entomological Society of Queensland  
P.O. Box 537  
Indooroopilly  
Qld. 4068

**Please retain the receipt below for your records**

----- ✂  
**Entomological Society of Queensland—Receipt for payment of membership fees**

Name \_\_\_\_\_ Date \_\_\_\_\_

Amount paid \$ \_\_\_\_\_ for year/s \_\_\_\_\_

## **DIARY DATES 2010**

*Meetings held 2nd Monday of the month (or Tuesday if Monday is a public holiday)*

MAR—Monday 8th	Dr Chris Lambkin (QM)	Presidential Address & AGM
APR—Monday 12th	Dr Nancy Schellhorn (CSIRO)	Landscape Scale Pest Management in Vegetable Crops
MAY—Monday 10th	Dr Martin Shivas (BCC)	Brisbane's mangrove-breeding pest midge <i>Culicoides ornatus</i>
JUN—Tuesday 15th	Student Award + Notes and Exhibits Session	
AUG—Monday 9th	Dr Alejandro Costamanga (CSIRO Post Doc)	Impacts of established natural enemy assemblages on soybean aphid in Nth America
SEP—Monday 13th	Don Sands	The role of insects in the breakdown of leaf litter: implications for fire management and weed control
OCT—Monday 11th	Ross Kendal (Butterfly Encounters Pty Ltd)	The Evolution of a Butterfly Farmer
NOV—Monday 8th	Bill Crowe (AQIS)	Australia's Most Unwanted
DEC—Monday 13th	Notes and Exhibits + BBQ	

## **SOCIETY SUBSCRIPTION RATES**

<b>GENERAL:</b>	Person who has full membership privileges	<b>\$30pa</b>
<b>JOINT:</b>	Residents in the same household who share a copy of the <i>News Bulletin</i> , but each otherwise have full membership privileges.	<b>\$36pa</b>
<b>STUDENT:</b>	Students and others at the discretion of the Society Council	<b>\$18pa</b>

Student membership conveys full membership privileges at a reduced rate.

## **THE AUSTRALIAN ENTOMOLOGIST SUBSCRIPTION RATES**

<b>AUSTRALIA:</b>	Individuals	<b>AU\$33pa</b>
	Institutions	<b>AU\$37pa</b>
<b>ASIA/PACIFIC:</b>	Individuals	<b>AU\$40pa</b>
	Institutions	<b>AU\$45pa</b>
<b>ELSEWHERE:</b>	Individuals	<b>AU\$45pa</b>
	Institutions	<b>AU\$50pa</b>

Subscriptions should be sent to the Business Manager,  
The Australian Entomologist PO Box 537, Indooroopilly QLD 4068.



# THE ENTOMOLOGICAL SOCIETY OF QUEENSLAND



## NEXT MEETING

**12:00pm ~ MONDAY 8th November**

Large Conference Room  
CSIRO Long Pocket laboratories  
120 Meiers Road Indooroopilly

Main Business:

**‘Australia’s Most Unwanted’**

*a presentation by*

**Bill Crowe**

Australian Quarantine and Inspection Service (AQIS)

## VISITORS WELCOME

(please sign in at reception before meeting)

---

## NEXT NEWS BULLETIN

Volume 38, Issue 8 (November 2010)  
due early December

## CONTRIBUTIONS WELCOME

**DEADLINE - Thursday 25th November**  
Send your news/stories/notices to the editor  
( [justin.bartlett@deedi.qld.gov.au](mailto:justin.bartlett@deedi.qld.gov.au) )