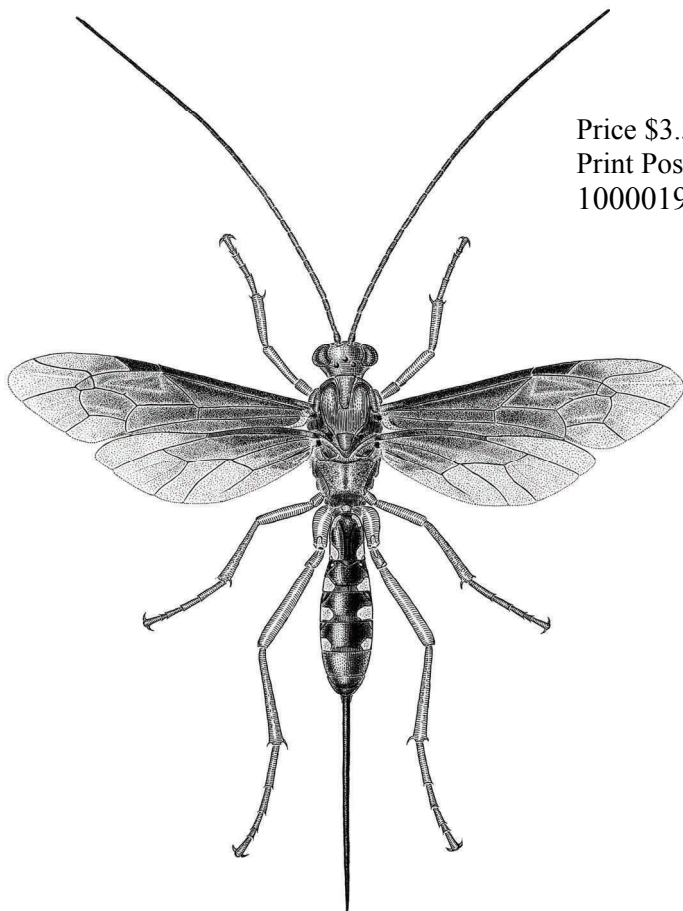


ENTOMOLOGICAL SOCIETY OF QUEENSLAND INC

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THE ENTOMOLOGICAL SOCIETY OF QUEENSLAND

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Front Cover Illustration: Ink illustration by William Manley of a female *Lissopimpla excelsa* (Costa, 1864) (Hymenoptera: Ichneumonidae: Pimplinae), a parasitic wasp (image copyright Qld Department of Agriculture, Fisheries & Forestry).

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ENTOMOLOGICAL SOCIETY OF QUEENSLAND NEWS BULLETIN

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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 50th 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 4th edition, 1999". Authors alone are responsible for the views expressed.



The Entomological Society of Queensland

Minutes for October General Meeting

Held in Seminar Room 1, Ecosciences Precinct, Boggo Rd, Dutton Park, Tuesday October 8th at 1:00pm

Attendance: *Members:* Nadine Baldwin, Justin Bartlett, Bradley Brown, Richard Bull, Sarah Corcoran, Lixin Eow, David Evans Walter, Alexandra Glauerdt, Andrew Hayes, Tim Heard, Andrew Hulthen, Simon Lawson, Diana Leemon, Lance Maddock, Penelope Mills, Geoff Monteith, Mona Moradi, Peter Osborne, Bill Palmer, Cate Paull, Matt Purcell, Nancy Schellhorn, Mark Schutze, Geoff Thompson, Kathy Thomson and Desley Tree.

Visitors: Yuvarin Boontop, Glen Callaghan, Paul de Dailno, Rosie Godwin, Craig Marsden, Sakuntala Muthuthantri, Kiemoras Nagalingam, John Ness, Aaron Niz, Steven Rice, Tracey Steinrucken, Rebecca Syme and Giorgio C. Venturieri.

Apologies: Lyn Cook, Kathy Ebert, Julianne Farrell, Brenton Peters, Federica Turco.

Minutes: The minutes of the September meeting were circulated in News Bulletin Vol. 41, Issue 6, October 2013.

Moved the minutes be accepted as a true record: Simon Lawson. *Seconded:* Desley Tree. *Carried:* Unanimously

Nominations for membership:

The following nomination for Membership was received and approved by Council and are put forward for election:

General Membership:

Dave Walter, Woolloongabba, 4102.

Nominated: Helen Nahrung

Seconded: Owen Seeman

Carried: Unanimously

General Business

Chris Moeseneder has tendered his resignation in regard to his role as Bulletin Editor. Geoff Monteith has been voted in as the new Bulletin Editor for the remainder of the year. His details will be included in the next bulletin.

The next BugCatch event is scheduled for Sunday, October 12th and will be held at the Franke Scrub Reserve, near Toowoomba.

Main Business

Today's lecture, entitled "*More than a honey machine: vision and navigation in honeybees and application to robotics*", was presented by Professor Mandyam Srinivasan, from the School of Information Technology and Electrical Engineering at the Queensland Brain Institute, The University of Queensland, St. Lucia.

Vote of thanks: Bradley Brown thanked the speaker on behalf of members.

Next Meeting: This will be at 1:00pm Tuesday, November 12th, and Prof. Helen Wallace of the University of the Sunshine Coast will speak on: "*Promiscuous plants and strange bee behavior: reproduction in Australian plants*". See details elsewhere in the bulletin.



MORE THAN A HONEY MACHINE: VISION AND NAVIGATION IN HONEYBEES AND ITS APPLICATIONS TO ROBOTICS

by Professor M. V. Srinivasan
Professor of Visual Neuroscience, Queensland Brain Institute,
University of Queensland

The goal of our laboratory is to understand how vision guides and shapes behaviour. The webpage for our lab group is at <http://web.qbi.uq.edu.au/srini-lab/>. Finely-tuned behaviour is critical to the survival of any species, and this competition for survival promotes the evolution of better visual systems. This is readily apparent to anyone observing a bird achieving a collision-free flight through a dense forest, a bee orchestrating a smooth landing, or a president ducking to evade a flying shoe. Today's robots perform such tasks with far less finesse. Our mission is to better understand how the eye and brain solve complex visuomotor tasks, and to explore the possibilities of using this understanding to design novel strategies for machines that see, perceive, and fly. There are three areas of study in our laboratory, involving work with honey bees, bumblebees and robotic flight devices.

1. Low-level vision and navigation in honeybees:

A. Landing.

We have been investigating the sensory cues that honeybees use to guide the final moments of their landings, just before touchdown. We have found that bees come to a near-stationary hover 10-15mm from the landing surface, regardless of the tilt of the surface. During this hover phase the antennae are oriented approximately perpendicularly to the surface, independently of its tilt (Figs 1 & 2). The positions of the tips of the six feet and the antennae just prior to landing all lie in a plane inclined at approximately 60° to the horizontal, so that they will all contact a surface simultaneously when the surface has this inclination. Thus, it appears that the bee's 'undercarriage' is designed for landing on

substrates that are tilted at approximately 60° to the horizontal. More information about this on-going study is available in Evangelista *et al* (2010).



Fig. 1. A honey bee in free flight.



Fig. 2. A honey bee about to land. Note position of antennae and legs.

B. The streamlining response in honeybees

Our studies show that bees raise their abdomen in response to the visual stimulus, and this elevation increases as the speed of the stimulus is increased (Fig 3). This streamlining response is elicited even in the absence of wind. Panoramic visual stimulation is necessary to elicit a strong streamlining response, thus highlighting the importance of full-field stimulation in investigating visually evoked behaviour in insects. Image motion in the lateral field of view makes the strongest contribution to the



Fig. 3. A tethered bee, (A) without stimulus and (B) after visual stimulus but without air current.

response. More information about this study is available in Luu *et al* (2011).

2. Visual guidance of flight in birds:

A. Edge detection in landing budgerigars:

We have been investigating the visual cues that determine where a bird will land. Our results show that budgerigars use visual edges in the environment to target and guide landings. Edge detection in the context of landing appears to be mediated by a colour-blind pathway, although the budgerigar possesses tetrachromatic colour vision. More information on this ongoing study is available in Bhagavatula *et al* (2009).

B. Visual guidance of bird flight through narrow passages:

We have been examining the visual cues that budgerigars use to fly safely through narrow passages, by filming their flight trajectories when they fly along a tunnel whose walls are decorated with horizontal or vertical stripes. Our results show that when both walls carry vertical stripes (and therefore present strong image motion cues), the birds fly close down the middle of the tunnel, i.e. equidistant between the two walls (centre). When one wall carries vertical stripes and the other carries horizontal stripes (which present weak or no image motion cues), the birds fly very close to the wall that carries the horizontal stripes (left/right). These results indicate that budgerigars negotiate narrow passages by balancing the velocities of image motion (optic flow) that are experienced by the two

eyes. More information on this ongoing study is available in Bhagavatula *et al* (2011).

3. Biologically inspired vision systems for guidance of autonomous aerial vehicles:

Our work with honeybees has shown that insects use cues derived from image motion (optic flow) to guide and control a number of aspects of flight - such as the speed and height of flight, obstacle avoidance and landing. Work in other laboratories has shown that flying insects monitor the profile of the horizon to sense and stabilise their attitude. We are using these principles to design and test vision systems for the guidance of model aircraft. Our aims are two-fold: (a) to test our hypotheses about the strategies of visual guidance of insect flight in real, natural environments, and (b) to explore the possibility that biology may offer alternative solutions to the problem of flight guidance, that are simpler and computationally less expensive. Examples can be viewed at <http://www.youtube.com/user/qbibiorobotics/videos>

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NOTICE OF NEXT MEETING

Tuesday 12th November 2013, 1.00 pm



Professor Helen Wallace

Associate Dean (Research) and Professor
in Agricultural Ecology
University of the Sunshine Coast, Caloundra

Promiscuous plants and strange bee behaviour: reproduction in Australian plants

This talk will cover the reproductive biology of Australian plants, in particular the eucalypts, and will explore some of their relationships with insects including some rather bizarre seed dispersal mechanisms. This will include the dispersal of the seed of certain eucalypts by native social bees.

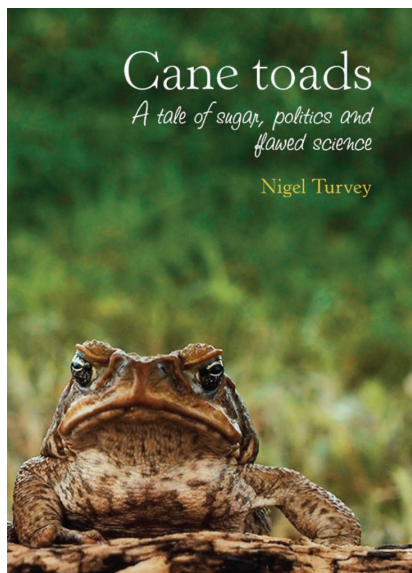
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ABOUT THE SPEAKER Professor Wallace is and was a foundation staff member of the Faculty of Science at USC in 1997. Prior to moving to the USC, Professor Wallace taught biology at La Trobe University and Central Queensland University. She received her PhD from the University of Qld in 1994 on bees and the pollination of macadamias. Her research is focused on the science of plant reproduction and entomology. Her interests include both theoretical and applied aspects including ecology, conservation, horticulture, and forestry. Her research projects have included bee biology, plant-insect interactions, pollination, fruit set, fruit, nut and seed production and postharvest processing. She has a particular interest in seed dispersal by bees and reproduction in Australian plants.

The Library
Ground Floor, Ecosciences Precinct
Boggo Road, DUTTON PARK
More venue details available at
<http://www.esq.org.au/meetings.html>

ALL WELCOME

NEW BOOK AND BOOK LAUNCH



Cane Toads: a tale of sugar, politics and flawed science.

By Nigel Turvey, Sydney University Press, 265 pp, paperback, 148 x 210 mm, 2 maps, 32 plates, 620 footnotes, 362 refs., \$35, for release 8 November, available at <http://purl.library.usyd.edu.au/sup/9781743323595>

Queensland entomologists are famous for the remarkably successful introduction of *Cactoblastis* Moth against the invasive scourge of prickly pear in 1926. It's a shining light among biological control successes. But, perhaps buoyed by that success, we were complicit a few years later in also introducing the Cane Toad, which was to become the nightmare it is today. We weren't alone in placing hopes on the warty amphibian. Originally from northern South America, toads were purposefully introduced first to sugar plantations in the Caribbean, and then to some 138 other countries. They are now ranked among the world's most invasive species. This book tells the toad's story, right from its initial

contact with European man in Brazil in 1532 until they arrived in the Kimberley last summer. It's a book we can learn much from.

Queensland's sugar scientists released the toad into North Queensland cane fields in 1935. Their dream was that they would consume the native melolonthine cane beetles whose larvae destructively fed on the roots of sugar cane. They were supported by cane growers, politicians, the nation's leading scientists, the premier of Queensland and the prime minister of Australia. Only a lone voice objected. In the following 70 years they spread as far as western NSW and Western Australia.

This story is about good intentions, unintended consequences and of simple acts leading to catastrophic outcomes. It is about scientists so committed to solving a problem, serving their country, their leaders and the industry that employed them, that they are blinkered to adverse impacts. There are lessons to learn from the toad's tale. And as the tale shows, we still come perilously close to repeating the mistakes of the past.

Author Nigel Turvey resides in Darwin where, as an Adjunct Professorial Fellow in the Research Institute for Environment and Livelihoods at Charles Darwin University, he supervises postgraduates and writes. Nigel is the author of *Terania Creek: rain-forest wars*. He also manages planted forests in Queensland and is Chairman of KeepTheHabitat, tackling ways to stop tropical deforestation.

There will be a free book launch event at the Queensland Museum at 12.30pm on Wednesday, Nov. 13. Glen Ingram, past QM herpetologist and patron of the Frog Society, will launch the book and Nigel Turvey will give an illustrated lecture. Check further details and RSVP at <https://canetoads.eventbrite.com.au/>

DAVID RENTZ GET HIS GONG



We reported in News Bulletin 41(5) that David Rentz had been made a Member of the Order of Australia in this year's Queen's Birthday Honours list. The formal award was made by the Governor-General at a garden party at Government House in Canberra on September 12 and our pictures show the medallion awarded, and (L to R) Barbara Foster Rentz, Her Excellency the Governor-General Quentin Bryce, David Rentz and Murray Upton. The flavour of the day is reflected in Dave's own account: "The GG is a remarkable person and knew something about every recipient. She was wired for sound and talked about 3 minutes to each one, without notes. She said to me

that she knew I studied Orthoptera which included grasshoppers, crickets and katydids (then I chimed in "and cockroaches") and she said "that was not in my brief" to the amusement of the audience. Then later, and the following night at dinner, she talked more to Barbara than to me about hair, dress colours, etc. And I was wearing a Dinner Suit for the second time in my life!" Dave says the medallion tends to get tangled in his camera straps so he's not planning to wear it ALL the time.

Congratulations, Dave, and thanks for flying the entomology flag so well in so many ways.



Paraphisis agrees! (Photo: D. Rentz)

A NEW ERA FOR THE CAPE TRIBULATION CANOPY CRANE

by David Rentz, Kuranda

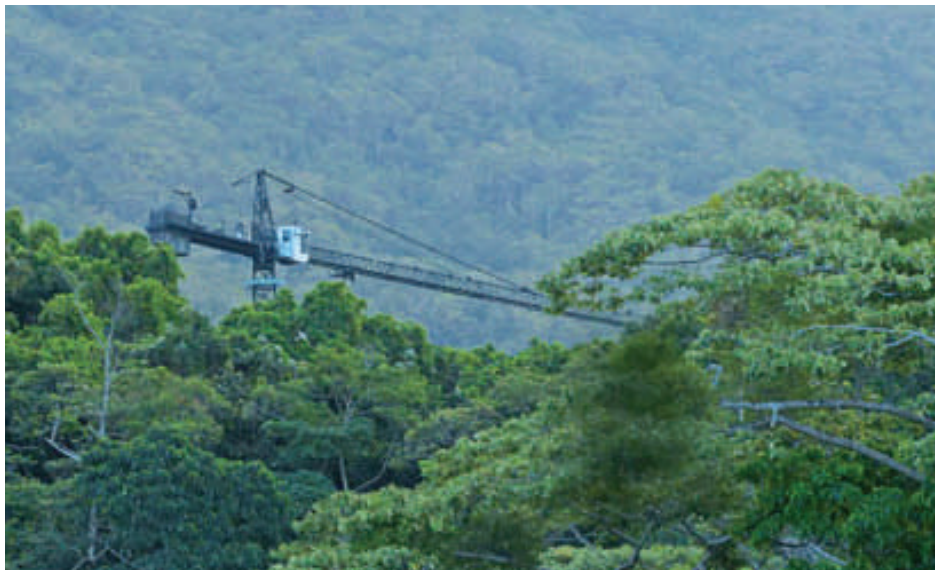


Fig 1. The Cape Tribulation canopy crane.

In 1998 a consortium comprised of James Cook University, Griffith University, University of Queensland and the CRC for Tropical Rainforest, with support of an ARC grant, installed a giant rainforest canopy crane in lowland rainforest just south of Cape Tribulation (Figs 1-2). It is a proper crane, the type you see mounted on the tops of buildings under construction in the big cities, and is maintained and operated by a professional crane driver. It was designed as a research facility to enable access to the rainforest canopy and has a height of 47m, a boom radius of 55m and a gondola carrying 3 people which can descend to the canopy at any point within that radius. Considerable insect research was undertaken in the early years, mostly by teams under Nigel Stork at JCU and Roger Kitching at GU. Further information about the crane and past research is available at http://www.rainforest-crc.jcu.edu.au/publications/canopy_crane.htm



Fig 2. The rainforest beneath the crane.

The crane was also planned to be a draw-card for tourists at the adjacent Coconut Beach Resort which also supported it.

But the high cost of maintenance and the theory of “economic rationalism” (remember that this is what has destroyed most of the good things in museums, and research institutions) meant that the people who needed to use it could not afford the costs. The area was also impacted by a couple of the recent destructive cyclones and the resort closed its doors meaning the crane was no longer a tourist attraction. As a result, the crane has fallen into disuse in recent years.

But “out of the mud grows the lotus”. Recently JCU University made a decision to rehabilitate the site. The money was procured and is now being spent. The grass-land site not far from the crane is being developed to house some 50 guests be they students or researchers. It will be fully equipped with sleeping facilities, kitchen,



Fig 4. Dr Tobin Northfield, JCU Cairns.

microscopes and computers with internet connections. This is not fantasy, the work is underway and completion is expected by next May.



Fig 3. Dr Lori Lach, JCU Cairns.

Coincidentally, the University has hired several established ecologists who plan to use the site for teaching as well as research. These include two entomologists who have been added to the JCU Cairns Campus staff at Smithfield, on the northern fringes of Cairns. **Dr Lori Lach** (Fig 3) is an ARC Research Fellow, and studies the dynamics of invasions, in an attempt to deal with the many invasive species we have in this country. She's a graduate of U. Calif. (Berkeley) and Cornell and worked in Kenya and Mauritius before coming to UWA in Perth in 2005. She is still affiliated with UWA. **Dr Tobin Northfield** (Fig 4) is a Lecturer, interested in predator-prey relationships and evolutionary ecology of communities. He was trained at U. Florida and Washington State U. followed by a USDA postdoc at U. Wisconsin. Both Tobin and Lori are on the scene and are anxious to become acquainted with the local human entomological community.

I have been asked to develop a representative collection of insects in the Rainforest Canopy Crane area which will be housed on the site in an air conditioned and climate-controlled room. Buck Richardson and I will both be taking photos of the insect fauna as we make the collection. Collecting and photography have commenced and we plan to take monthly trips to the region until the project is completed. Photos are presently being added to my Flickr site: <http://www.flickr.com/photos/naturenoises/> and can be viewed by anyone. They are in the "Rainforest Crane Survey" set. Some examples are shown here (Figs 5-7). Concurrently, Dr David Ting is making a similar collection of plants for the same purpose. He is also labelling many of the trees and shrubs on the site. This will be very useful for future studies.

As indicated above, Lori and Tobin would like to meet local entomologists, both professional and amateur. We have set aside the date of Saturday 8 February, 2014 at James Cook University, Smithfield at 10.00 am for a get together. The university will provide a BBQ lunch. Please pass this word on to anyone you think would be



Fig 5. *Penalva flavocalceata* (Anostomatidae). The White-Kneed King Cricket lives in burrows and scavenges on the forest floor at night.



Fig 6. *Desmoptera truncatipennis* (Pyrgomorphidae). One of the few short-horn grasshoppers in the rainforest, this species rests camouflaged among the leaf litter during the day and climbs low shrubs to feed on leaves at night.



Fig 7. The prionine cerambycid *Agrianome spinicollis*.

interested in attending. We had a BBQ at Max and Margaret Moulds' place about 6 years ago and were astounded there were so many insect folk in the Cairns area. Please let me know if you plan to come. Email: orthop1@tpg.com.au.

It thus seems that JCU is making an attempt to revitalise entomology at the university and they seem to understand its importance relative to other disciplines. Let's hope this all works out.

PIRATE SPIDER REQUEST

By Danilo Harms¹, Cor Vink² and Mark Townley³

¹ School of Animal Biology, The University of Western Australia, 35 Stirling Highway, Crawley, WA 6009; Email: d.harms01@googlemail.com

² Canterbury Museum, Rolleston Avenue, Christchurch 8013, NZ; Email: cvink@canterburymuseum.com

³ Research Computing & Instrumentation, University of New Hampshire, Rudman Hall, 46 College Road, Durham, NH 03824, USA; Email: mtownley@cisunix.unh.edu

This is a request for any pirate spider specimens of the family Mimetidae (Araneae: Araneida) from Australasia and East Asia. Pirate spiders feed on other spiders by 'boarding' their webs. We are aiming to derive a molecular phylogeny for the genus *Australomimetes* and investigate fine aspects of morphology using Scanning Electron Microscopy. Pirate spiders have distinctive raptorial spines on the forelegs and can be found at night whilst invading the

webs of their prey, primarily orb-weaving (Araneidae) and comb-footed (Theridiidae) spiders. They can be common around houses, in gardens and bush properties. We would appreciate any material (dead in ethanol or alive) to be sent to us. Fig 1 shows one of 31 described species in the genus. Note the raptorial spines (long spines interspersed by shorter ones) on the forelegs and the silvery triangular patch on the abdomen, typical for larger species

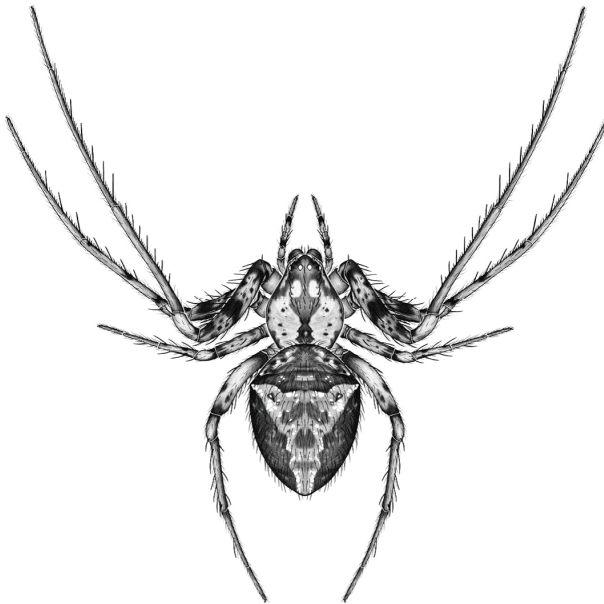


Fig 1. *Australomimetes robustus* in dorsal view. Illustration by Nadine Dupérré (American Museum of Natural History).



13th INTERNATIONAL SYMPOSIUM ON SCALE INSECT STUDIES, SOFIA, BULGARIA. SEPTEMBER 2-5, 2013.

By Penny Mills, School of Biological Sciences, UQ

The 13th International Symposium on Scale Insect Studies (ISSIS) was held on 2–5 September in Sofia, Bulgaria at Park Hotel Vitosha. The first conference was held in 1972 in Canberra, Australia, and it is held every three years (originally every four years). It was organised by Katia Trencheva, Georgi Trenchev and Rumen Tomov from the University of Forestry in Sofia. About 70 delegates from approximately thirty countries attended including Argentina, Australia, Belgium, Brazil, Bulgaria, Chile, China, Colombia, Croatia, Egypt, France, Greece, Hungary, Israel, Italy, Japan, Mexico, Netherlands, Pakistan, Poland, Portugal, South Africa, South Korea, Sweden, Taiwan, Turkey, United Kingdom, USA (Fig. 1).

Once the meeting was officially opened, sadly first on the agenda were the eulogies for coccidologists who had passed away since the last meeting including Jack Munting (South Africa), Ferenc Kozár (Hungary) and Rosa Henderson (New Zealand).

There were approximately thirty talks which covered a broad range of topics such as phylogenetics, systematics, faunistics, symbiosis, behaviour, general biology, ecology, bio-control and taxonomy (with the focus on scale insects of course!). The most entertaining talk of the symposium was given by Paul Lin from the Cook Lab at UQ, who has recently submitted his thesis. He had us all in stitches about “his



Fig.1. Coccid conference delegates outside the hotel where the conference was held.

naughty girls” and “invisible boys” in his talk on species delimitation and cryptic diversity in two parthenogenetic coccid species. The posters were as varied as the talks, with approximately forty on display during the conference. The full program can be seen at <http://issis-bg.com/>

Nate Hardy (USA), who many ESQ members will remember from when he was at DPI (DAFF) in Brisbane, was honoured with the Young Scientist Achievement Award (Fig. 2). Three other coccidologists were honoured for their contributions to the world of scale insects; Daniele Matile (France), Imre Foldi (France) and Jan Gilomoe (South Africa). Unfortunately, Jan was the only delegate at the meeting to receive his award.

During the middle of the conference, a field trip had been organised to visit an old fort and church near Asenovgrad, which is about two hours south-east of Sofia, the



Fig.3. Church of St. Mary of Petrich near the fort in Asenovgrad.

capital (Fig. 3). There were several non-scale insect finds around the fort, including massive psyllid galls brimming with insects (Fig. 4). There was also wine-tasting and lunch at Hotel Todoroff, about 15km south-west of Plovdiv, the second-largest city in Bulgaria.

The conference dinner was held in an authentic Bulgarian restaurant in Sofia. There was so much food that most tables had trouble eating and drinking everything that had been served. There was also entertainment with a trio of men playing traditional music. Many of the delegates took to the floor to dance to the music, while several delegates who remained in their chairs were serenaded by the roving musicians.

Although we said goodbye to many of the delegates once the conference ended, twenty of us remained and went on the post-conference excursion, and had a chance to visit other areas of Bulgaria, such as the Valley of the Thracians near Veliko Tarnovo and the massive ruins of Perperikon, the largest megalith ensemble known in the Balkans.



Fig. 2. Nate Hardy receiving his award from Penny Gullan.



Fig.4. Massive psyllid gall found near the fort of Asenovgrad.

The proceedings of the 2013 conference will be published in a special edition of *Acta Zoologica Bulgarica*. Before the close of the conference, delegates were given four options as to where ISSIS 2016 (XIV) would be held: Catania, Italy; Montpellier, France; Tbilisi, Georgia; or Taiyuan, China. After impressive talks by the representatives of each place to try and sway us, the delegates voted for the next ISSIS to be held in Catania, Italy.



WANT TO JOIN THE SOCIETY ?

Visit our website at <http://www.esq.org.au/> where you will find nomination forms and full details of fees and addresses. There are also forms for existing members to use to pay their subscriptions. Coming meetings and excursions are listed. Procedures for publishing in our journal, *Australian Entomologist*, are explained with a full Guide to Authors plus forms for taking out a subscription to the journal.

IG NOBEL PRIZES FOR 2013

The Ig Nobel Prizes honour achievements that first make people **laugh**, and then make them **think**. The prizes are intended to celebrate the unusual, honour the imaginative — and spur people's interest in science, medicine, and technology. They are awarded each year (since 1991) in a hilarious gala ceremony at Harvard University and the prizes are actually presented to the winners by real Nobel Prize laureates.

In 2011 we reported on a win by our very own David Rentz who shared an award with Canadian reproductive behaviourist, Darryl Gwynne, for their study of the WA jewel beetle, *Julodimorpha saundersii*, which mistakenly mates with discarded stubby beer bottles.

The 2013 Ig Nobels were awarded on September 12 and once again entomologists carried off one of the prizes. The “Joint Prize in Biology and Astronomy” went to Marie Dacke (Sweden, Australia), Emily Baird (Sweden, Australia, Germany), Marcus Byrne (South Africa, UK), Clarke Scholtz (South Africa), and Eric J. Warrant (Sweden, Australia, Germany), for discovering that when dung beetles get lost, they can navigate their way home by looking at the Milky Way. Their work was done in South Africa on the large ball-rolling species, *Scarabaeus satyrus*. Marie has spent time at ANU in Canberra and she and Clarke visited Brisbane a few years ago to try to study visual orientation in one of our dung beetles, *Cephalodesmus armiger*. You can watch a fabulous lecture by Marcus Byrne on the work that earned them the Ig Nobel at http://www.ted.com/talks/marcus_byrne_the_dance_of_the_dung_beetle.html

PRIVATE COLLECTIONS DONATED TO THE QUEENSLAND MUSEUM

During the year three important private collections of insects have come to the Queensland Museum, two of them following the deaths of the owners. The first was the Odonata collection of the late Barry Kenway, the second was the Deniss Reeves and Joan Bryan Odonata Collection, and the third was the Lepidoptera and Coleoptera collection of the late Murdoch DeBaar.

Barry Kenway (Fig. 1, 1934 - 2013) was a science and maths teacher serving many years at Toowoomba State High School up until his retirement in the late 1990s. He took up dragonfly study and became very active with the Toowoomba Field Naturalists Club. His collection is made up of approximately 1000 papered dragonflies mostly from around the Toowoomba region. These specimens are a valuable addition to the Museum's dragonfly collection.



Fig. 1. Barry Kenway

Deniss Reeves (Fig. 2) is a retired pharmacist who spent the early part of his life in Tasmania before coming to Brisbane to live many years ago. In Brisbane he was a stalwart of the Queensland Naturalists Club, rarely missing a field outing and these gave him the opportunity to collect all over the State as well as on the more adventurous expeditions overseas which that Club used to run. In recent years he was greatly assisted by his partner Joan Bryan, who tackled dragonfly collecting on to the end of a distinguished career as a medical entomologist specialising in malaria problems. The collection comprises 4876 specimens representing 197 species from Australia, plus 1345 specimens from elsewhere, mostly the Solomon Islands and New Guinea.

Specimens in both these dragonfly collections were stored in individual paper triangles (Fig. 3), one of the traditional ways of keeping dried Odonata which are notoriously fragile as pinned specimens. This presented a problem of storage at the Queensland Museum which was not equipped to store large numbers of specimens in this form. However due to generous donations to the Queensland Museum Foundation by friends and family of Barry, Deniss and Joan in both the Toowoomba and Queensland Naturalist Clubs, more than \$5000 became available to purchase from the USA a special cabinet with deep drawers specially designed for papered specimens. On June 5 the QM Entomology Department hosted a thank-you function organised by Susan Wright and Chris Burwell for 64 friends and family to thank them for their generous donation. The new cabinet was unveiled with a suitably inscribed plaque. The identification of all specimens has now been checked by curator Chris Burwell, and, with the assistance of



Fig. 2 (left). Joan Bryan and Deniss Reeves, in front of the new dragonfly cabinet, both wearing their odonatan finery. Fig. 3 (right). Dragonflies stored in paper triangles.

volunteer Melanie Schneemilch, the whole collection has now been registered and databased.

Murdoch DeBaar (Fig. 4, 1945-2011) was born in Holland and started his Australian career as a cadet technician in forestry camps back in the hard old days when forestry staff lived in lonely barracks out in the bush, often without electricity, and cooking over smoky fireplaces by lantern light. He served time at Imbil, on Fraser Island and at Archookoora. Interested in insects from an early age, his talents were recognised and he was plucked from the bush to serve as curator of the State Forestry insect collection in Brisbane and spent the second half of his career in that capacity. He had a strong private interest in both butterflies and scarab beetles and built up a significant collection at home, with many important records from his lush garden at Corinda where he lived for many years. He published many papers on butterflies and had a special interest in the crow butterflies (*Euploea* spp) and built an important collection of extra-Australian species to complement the local species. Murdoch was keen on insects that bred on mistletoes and on those that lived in mangroves and often gave short talks to nature groups on those

topics. He prepared impressive display cases on these topics and his mistletoe case is shown here (Fig. 5). Murdoch was also one of the band of local butterfly collectors who had a passion for exploring the butterfly fauna of the remote Torres Strait islands, especially Duaun (Fig. 6), and joined many of the trips which made significant additions to the Australian fauna. Murdoch's valuable collection was donated to the Queensland Museum in mid 2013 by his widow, Glenda.



Fig. 4. Murdoch De Baar

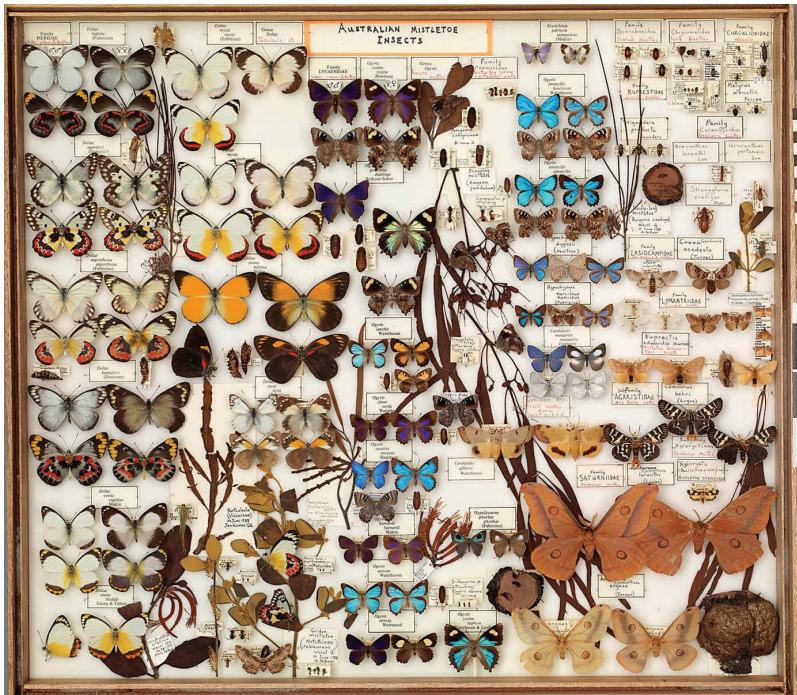


Fig. 5 (top). Murdoch's display case of insects associated with mistletoes.
Fig. 6 (bottom). Murdoch swinging the long net on Dauan Island, Torres Strait, in 2010.

Entomological Society of Queensland 2014

\$500 Student Award

This is an award by the Society to encourage entomological research. Entries are judged by a panel of three entomologists appointed by the president of the Society. The winner will be announced at the May 13 General Meeting and is then invited to present a summary of their research at the June 10 Notes and Exhibits meeting of the Society.

Honours, Diploma and 4th year Degree students who received their qualification from any Queensland tertiary education institution in 2013 or 2014 may submit their entomology-based thesis or report for consideration.

Entrants need not be Society members.

These reports can be directed to the Society's senior Vice-president at the address listed on the entry form. However, please note that a hard copy of your thesis/report does not need to be submitted, and the submission of a PDF version is encouraged. This should be emailed together with a signed copy of the completed entry form to Bill Palmer at bill.palmer@daff.qld.gov.au

Closing date for submissions is Friday 11th April 2014

Entomological Society of Queensland

2014 Student Award Entry Form

Name

Title of thesis or report

Degree

Supervisor

Date of Examiners report or grading

Return address for thesis/report (if applicable)

Signature_____ Date_____

**Send a copy of your thesis/report with a signed and completed entry form to:
Senior Vice-President of the Entomological Society of Queensland**

by email : bill.palmer @daff.qld.gov.au

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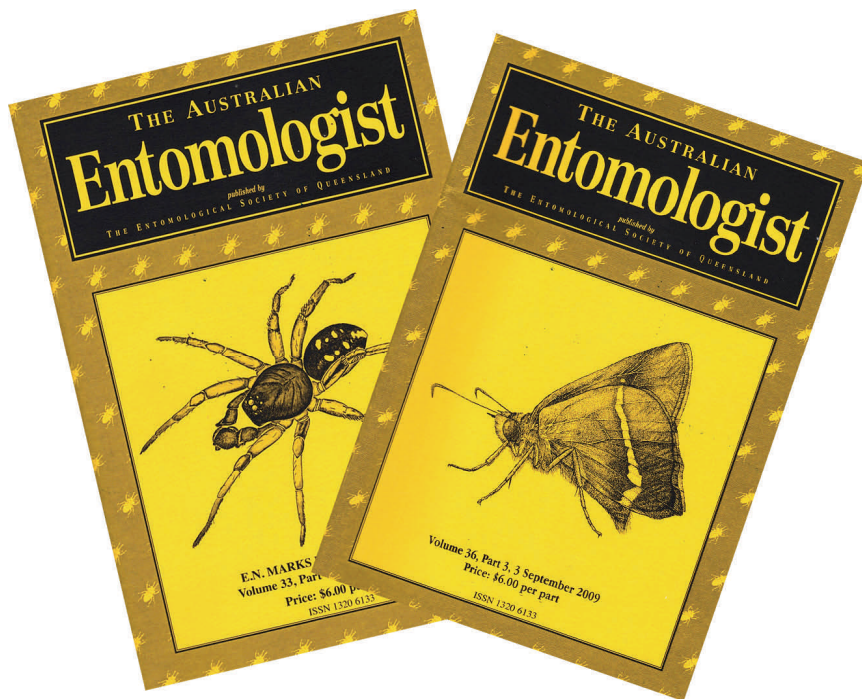
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DIARY DATES 2013

Nine general meetings held per year on the 2nd Tuesday of the respective month

MAR—Tuesday 12th	Geoff Thompson	AGM and President's Address
APR—Tuesday 9th	Michael Ramsden	<i>Sirex</i> wood wasps in Queensland
MAY—Tuesday 14th	Dr Mike Furlong	Plant responses to herbivory: complex interactions between parasitoids, predators and prey
JUN—Tuesday 11th	Notes & Exhibits / Student Award Presentation	
AUG—Tuesday 13th	Dr. Doland Nichols	Bell Miner associated dieback of eucalypt forests
SEP—Tuesday 10th	Dr. Ken Walker	Perkins Memorial Lecture "My Digital Evolution and its Consequences"
OCT—Tuesday 8th	Prof. Mandyam V. Srinivasan	More than a honey machine: vision and navigation in honeybees and applications to robotics
NOV—Tuesday 12th	Prof. Helen Wallace	Promiscuous plants and strange bee behaviour: reproduction in Australian plants
DEC—Tuesday 10th	Notes & Exhibits and Xmas BBQ	

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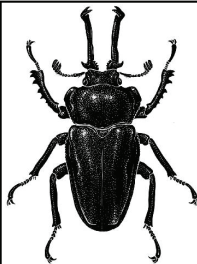
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STUDENT:	Students and others at the discretion of the Society Council	\$18pa

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THE ENTOMOLOGICAL SOCIETY OF QUEENSLAND



NOTICE OF NEXT MEETING

Tuesday 12th November 2013, 1.00 pm

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Professor Helen Wallace

Associate Dean (Research) and Professor in Agricultural Ecology
University of the Sunshine Coast, Caloundra

*Promiscuous plants and strange bee behaviour:
reproduction in Australian plants.*

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The Library
Ground Floor, Ecosciences Precinct
Boggo Road, DUTTON PARK
More venue details available at
<http://www.esq.org.au/meetings.html>

ALL WELCOME
(sign in at front desk)

NEXT NEWS BULLETIN
Volume 41, Issue 8 (December 2013)
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DEADLINE - Wednesday November 20, 2013
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