ENTOMOLOGICAL SOCIETY OF QUEENSLAND INC

NEWS BULLETIN

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THE ENTOMOLOGICAL SOCIETY OF QUEENSLAND

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Front Cover Illustration: Illustrations by Bill Haseler, 1964 President of the Entomological Society of Queensland, of four leaf-mining beetles introduced for the biological control of lantana. The beetles are, clockwise from top right, *Octotoma scabripennis* Guerin-Meneville, *Uroplata girardi* Pic, *Octotoma championi* Baly and *Uroplata fulvopustulata* Baly (Coleoptera: Chrysomelidae: Hispinae). All species are now established in Australia.

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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 Tuesday of each month (March to June, August to December). 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 (dwalter@usc.edu.au).

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, 1885), family Lucanidae (Coleoptera). Its magnificent purple and green colouration makes it one of the most attractive beetle species in Australia. Other common names include Rainbow, Golden and Magnificent Stag Beetle. It is restricted to the rainforests of northern Queensland.

ENTOMOLOGICAL SOCIETY OF QUEENSLAND

Minutes for General Meeting

8 April 2014

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

Chair: Bill Palmer - Bill opened the meeting with a special welcome to today's visitors from the ***Butterfly and Other Invertebrates Club (BOIC)***
Attendance: Dennis Bell, Gary Cochrane, Kathy Ebert, Bjorn Fjellstad, Graham Forbes, Alexandra Glauerdt, Manon Griffiths, Peter Hendry, David Holdom, Mark Hunting, Ross Kendall, Judy King, Chris Lambkin, Kevin Lambkin, Diana Leemon, Jason Maté, Penny Mills, John Moss, John Ness, Bill Palmer, Brenton Peters, Noel Starick, Helen Schwenke, Tom Semple, Alisha Steward, Geoff Thompson, Federica Turco, David Walter, Belinda Walters, Richard Zietek.

Visitors: John McKeown, Kumarar Nayalingani, Birte Schoettker, Wilmot Senaratue, Darren Smallwood, Dennis Tafe, Leah Tafe, Peter Woodall

Apologies: Julianne Farrell, Mark Hopkinson, Simon Lawson, Ron May, Morris McKee, Geoff Monteith, Helen Nahrung, Don Sands, Nancy Schellhorn, Owen Seeman, Susan Wright

Minutes: The minutes of the last meeting were circulated in *News Bulletin* Vol. 22 Issue 1.
Moved the minutes be accepted as a true record: Federica Turco
Seconded: Kathy Ebert
Carried: All

Nominations for membership:
The following nominations for Membership were received and approved by Council and are now presented to the general meeting for approval:

General

1. Dr. Jurgen Otto, 19 Grevillea Ave, St Ives, NSW 2075. Nominated by Robert Whyte, seconded by Chris Lambkin, Carried: All

2.Dr Ben Hoffman, C/CSIRO PMB 44, Wimellie NT 0822. Nominated by Chris Lambkin, seconded by Kathy Ebert, Carried: all

Student

3. Mr Weng Chow, 29 Matfield St. , Moggill Q 4070. Nominated by Steve Frances, Seconded by Penny Mills, Carried: all

4. Ms. Lisa Rigby, 5/89 Haig St, Gordon Park, Q 4031. Nominated by Steve Frances, Seconded by Penny Mills Carried: all

Joint

5. Nr. Miguel Lanegra and Lynne Paulk, 20 Mathieson St. Carrington, NSW 2294 Nominated by Christine Lambkin seconded by Kathy Ebert Carried: all

General Business:

1.Council has decided to email everyone a copy of the bulletin in addition to the hard copy to those that have requested hard copies. We will also be sending out complimentary bulletins to our sister societies.

2. A subcommittee has been formed to put together a website gallery and archive of early Queensland entomologists. If any members have photos or historical information which may be useful, please contact Bill Palmer or Geoff Monteith.

3. **Permit holders please note that if you have odd requests from National Park Rangers** please let Chris Lambkin know as there has been some communication difficulties with Park Rangers lately.

Main Business:

Our guest speaker was **Mr Mike Barnett**, who shared his interesting experiences and wonderful photos about the ***Butterfly species and habitats in Africa***.

Next meeting: 13 May 2014, 1pm

Meeting closed: 2:10pm

Greetings from the new *News Bulletin* Editor Dave Walter

Some of you may remember me from a number of years ago before I left Queensland for family reasons for a decade of snow and ice in Canada. Now I'm back in the land of sunshine and fantastic arthropods and, although theoretically retired and ready to concentrate on interesting mites, I find myself as your new editor.

The *News Bulletin* is an integral part of the *Society* because it helps to keep us interconnected as well as publishing essential details of *Society* busness. In recent years, Geoff Montieth and Justin Bartlett have been putting together a very professional looking *Bulletin*. Those of you that recieve a printed version of the *News Bulletin* are familiar with its A5 Booklet format, i.e. A5 Portrait pages arranged side-by-side on A4 Landscape paper in such an order that the paper can be printed on both sides and then stapled and folded in the middle to form a booklet.

Booklet printing is labour intensive and prone to error if done by hand, but easily done with professional publishing software such as *Microsoft Publisher* or *Adobe InDesign*. These programs are costly, require considerable training to use even at a basic level and lack many basic word-processing features such as text-wrapping between columns and pasting with format preserved.

The last issue was my first and I think I made every error possible from not thinking in fours (the printed text is in sets of 4 pages, otherwise blank pages must be included) to overrunning columns to missing lost formating (e.g. italics for Latin binomials). However, thanks to Geoff, Kathy, Penny and Justin, most of the mistakes were found and we hope you enjoyed the last issue.

With this issue, the Council has decided to send the pdf version to all members for whom we have an email. This involves no extra time or cost: the pdf version is easy to produce and disseminate. Although we hope that eventually all come to appreciate the value of pdf versions, those members (about 2/3rds) who prefer the printed version will continue to receive it, although costs may rise with postal rates.

Please send any comments or copy to: dwalter @usc.edu.au

Opportunities

RESEARCH AND TEACHING FELLOW IN ENTOMOLOGY

Faculty of Agriculture & Envronment, Plant & Food Science, University of Sydney

REFERENCE NO. 686/0314

All applications must be submitted via the University of Sydney careers website: **sydney.edu.au/recruitment** and search by the reference number for more information and to apply.

CLOSING DATE: 5 May 2014 (11:30pm Sydney time)

Seven Network's *Beauty and the Geek* is casting for a new series and looking for male entomology students or entomologists. The casting producer has contacted our Society and asked to put the word out to all interested and eligible society members.

If you are between 18-30 years old, single and find this of interest, fill out an application **atwww.beautyandthegeek.com.au** for your chance to win a large cash prize. **Closing Date 30 May 2013**

Want to improve your macrophotography skills? Join professional insect photographer **Alex Wild** for a hands-on workshop in the beautiful gardens of the Tanks Arts Centre in Cairns, Australia, Sun, July 13, 2014. For more details **contact: alwild@myrmecos.net**

http://www.eventbee.com/event?eid=127915841&fb_comment_id=fbc_657549574306804_5533796_664639586931136#f17bd365c4

Postdoctoral researcher to work with Prof Geoff Gurr & his team in China at Fujian Agriculture and Forestry University

(FAFU) where Prof Gurr is establishing a 'satellite' laboratory to complement his group at Charles Sturt University, Australia.FAFU has a picturesque campus in the sub-tropical city of Fuzhou in south-eastern China with modern research facilities and laboratory equipment. **http://www.fafu.edu.cn/english/**

Commencing - ASAP **Duration** - Three years **Fraction** - Full time (possible job share)

Salary - US$50,000 plus subsidized housing on campus.

The appointee will work in Prof Gurr's group in the Institute for Applied Ecology at FAFU in which English is widely spoken. The Institute's most recent achievement was to publish the diamondback moth genome (You et al. (2013) ***Nature Genetics*** 45, 220–5) and exciting follow-up work on several fronts is underway. The postdoc's role will involve developing a project with Prof Gurr and colleagues at the interface of insect ecology and pest management. Operating funds are available to support an immediate start to the project. The postdoc will also be involved in developing applications for additional funding to extend that project and initiate related work. Duties will also include assisting other members of the group, including Chinese PhD students preparing journal articles, as well as contributing to the broader internationalization of the Institute.

Applicants should have a PhD, and ideally postdoctoral experience, in a field such as insect ecology, insect-plant interactions, insect vector biology, plant protection, plant defence mechanisms.

Practical experience will be advantageous in areas such as (but not limited to): molecular ecology, phylogeography, bioinformatics, geospatial data analysis, landscape genetics, plant metabolite analysis.

It is essential that applicants have excellent English, proven capacity in scientific writing and preparing manuscripts for submission, plus an ability to play a leading role in preparing funding applications.

Applications open until 30 April 2014 or until position filled.

Further details from Geoff Gurr: ggurr@csu.edu.au

NOTICE OF NEXT MEETING

Tuesday 13th May 2014, 1:00 pm

Confessions of a Commercial Entomologist

Dan Papacek

Personal background:

Dan graduated in Agricultural Science from the University of Queensland in 1978 with a major in entomology and First Class Honours. He started his career in Mundubbera with a large citrus orchard implementing Integrated Pest Management and is still in Mundubbera 36 years later. He soon developed a very strong collaboration with DPI entomologist Dan Smith and that relationship lasted 26 years until his unfortunate death almost 10 years ago. Dan and his wife founded ***Bugs for Bugs***, a commercial supplier of biological control agents in 1981 and he is now the part owner, director and manager. Over the years he has collaborated with colleagues in state departments of agriculture, CSIRO and the universities and has coauthored 26 publications on various aspects of IPM and biological control. In 2000, he was recognised with a **Member of the Order of Australia** (AM) for services to the citrus industry in the field of Integrated Pest Management.

Summary of talk:

Dan's life as an entomologist who has developed a successful career in the commercial world.

He will provide an overview of the range of biological control agents currently available in Australia for horticultural use. Techniques involved in commercially rearing agents will be discussed using a specific example. In conclusion, Dan will offer some insight into his thinking on integrated pest management and how it can be made to work for Australian farmers.

Venue: Seminar Room
Ground Floor, Ecosciences Precinct
Boggo Road, DUTTON PARK. BRISBANE.
More venue details available at
http://www.esq.org.au/events.html

Butterflies and their habitats across the Afro-Tropical region

Mike Barnett, Brisbane

The subject of this talk should be of scientific and travel interest for most people here. There are, of course, many butterflies north of the Atlas Mountains in the north-west, and in the main expanse of the Sahara in the North and east, but these share more features with their European and Middle-Eastern relatives, and don't have the benefit of the lush vegetation which promotes the diversity of species which we find further South.

Butterflies in Australia

There are comparisons to be made with Australia where the "Torresian Region", which covers the tropical north-east and embraces all of eastern Queensland and parts of north-eastern New South Wales, has about 315 species out of Australia's total species count of about 390. Australia also has small pockets with endemic species in specialised localities. Examples of these would be *Trapezites waterhouse* (Mayo & Atkins) from Western Australia, *Nesolycaena caesia* (d'Aupice & Miller) found in northern Western Australia, and *Danaus genutia* (Cramer). The harsh climate of the Australian interior limits the butterfly populations.

A 'new' species of *Acraea* has recently turned up in the north and west of Australia, but this is more of a range extension of a species already established in Papua New Guinea, Indonesia, and further north, where it is sometimes known as *A. terpsicore* L.

Here in Australia, we have given all our butterflies English names, but in Africa, there are too many species to do this, and thousands of species are from countries which aren't English speaking. So, even among English-speaking amateur entomologists in Africa, we tend to use their Latin names.

In Africa habitats for butterfly abundance or rarity are much the same as here. It's a question of food plants and their distribution. In Australia, there is no absolute proof that we have 'lost' any species yet, because of destruction of habitat, although one species, *Argyreaus hyperbius* (L.) on the east coast has, to the best of my knowledge, not been seen for some years now. It may well have disappeared completely, although its food plant, wild violet, is common. It is, however, still found in PNG, in other parts of SE Asia, and even represented in one disjunct locality in Ethiopia.

Africa by contrast

The contrast in numbers of butterfly species which we're used to here in Australia, compared with the number in the Afro-Tropical region is a challenge to anyone with a keen interest in butterflies. In Africa, there are at least 3,600 species across the continent, with a handful of new species being discovered every year. Experts, generally in Europe, but led by regional experienced entomologists who have studied butterflies scientifically for many years, continually describe and name new species.

There are a few inexplicable cases where a specific butterfly turns up unexpectedly in an isolated place. Some of you may recognise the genus '*Euploea*', (referred to collectively here as "crows"). It is a SE Asia genus, with its headquarters in PNG, but stretching as far westwards as India.

Fig 1. The main road to Vohemar in north-eastern Madagascar.

But, amazingly, one unique species clings onto existence in the Seychelles islands, 1500 km from the African mainland, where there are no other *Euploea* sp. and 2500 km from India.

The prime habitats for the more spectacular butterflies in Africa remain the rain forests of the central African region, although there are 'endemics' in some much more unlikely places. The diversity of plant species, epiphytes, ants and lichens, all of which play their part as larval hosts, is extensive. Seemingly depauperate surroundings can harbour a wide range of butterfly species, sometimes seasonally abundant. This also means that anyone wanting to examine these butterflies sometimes has to undertake a long journey. A collecting trip may involve crossing country borders, which may be either unsafe, difficult to obtain visas for; and may require planning for seasons. Often, seasons will be inconsistent between successive years for no obvious reason. Roads and tracks may become difficult (**Fig 1**), fuel supplies unreliable, and self-sufficiency is essential. These conditions can also make an overland journey exciting to both plan and carry out!

Fig 2. The only specimen of *Pseudaletis barnetti* collected in Mabira forest by the author near Kampala and now housed at the ABRI collection Nairobi.

Life histories of hundreds of African species still aren't known, and therefore have never been described. However, in Australia, we have looked at ours in more detail, but around 50 life histories still aren't thoroughly known. It should be mentioned in this connection, that a comparatively small number of very persistent entomologists have achieved the present level of research. And it has been completed only in the last 40 years. All the families found in Australia are represented in Africa, with greater diversity, with one important exception: in Africa, there are no *Ornithoptera*, which includes our largest and most spectacular species, the birdwings. Headquarters for these is further north, so we only have a representative three species in Australia, one of which has found its way discontinuously, as far south as northern NSW. But it can be argued that Africa more than compensates for this by its great range of say, *Charaxes*, comprising nearly 200 species on that continent alone. Many of these are imposing species with strong and purposeful flight. By contrast, Australia has just one *Charaxes* representative, itself confined to North-east Queensland, as a range-extension from PNG.

The ability of some individual butterfly species to imitate others is well-developed in Africa. Evolution has resulted in insect-eating birds with the ability to recognise some species of butterflies to be unpleasant-tasting to them, so they have learned to leave them alone. A few different species of butterflies have evolved in conformity. Both colours, wing-shape and flight-patterns of the imitating species are very similar to their models, so they achieve protection by deception: a phenomenon often referred to as Batesian mimicry.

Butterflies, whether in Africa or Australia have found their way, via their food plants, into the remotest, most inhospitable corners of the continents. Because butterflies exploit the most diverse range of food plants growing in lush rainforest, it can be surprising where you can still find them. Exposed hill-tops, marshland, and semi-desert scrub can all be habitats; often for species not found elsewhere. That doesn't mean they complete their entire life-cycles at the top of hills. Hill-topping behaviour is more likely to mean the butterflies have moved from the area of their food plant, to find, in the case of males, a well-placed territory to locate females. From here they stage short, threatening flights from their perches, to keep potential competitors at bay. Females are not so commonly seen on hill-tops; sometimes seen "just passing through". Another characteristic feature of many Australian lycaenid butterflies, found equally with African species, is their larval stage shares a symbiotic relationship with certain ants. Details of this aren't generally as well-researched in Africa, because of the comparatively vast array of lycaenids. Many ants' nests, sometimes forming the larva's home, are high from the ground and securely attached around a branch. A large variety of African lycaenids feed, near

Fig 3. *Atericarabena* sp. endemic to Madagascar

their ‘host-ant’ nests, but also on lichens growing on the trunk and branches, exposed to the sun, and in full view of predators. This remains something of a mystery.

Not all butterflies are attracted by flowers. Some, generally forest species, will perch on a green leaf; others on the ground; others on grass-stems and others even on bare wire cables. Being cold-blooded they need to sun-bathe in the mornings to become active. Some species have a preferred time of day to fly. If there is a dull, rainy or cold start to the day, and if that interrupts their preferred flight-period, even if it becomes sunny and warmer later, they don’t fly at all that day, but they try again tomorrow. Others are more flexible: fly throughout the day, but aren’t usually active in cool or dull weather.

An exciting feature of observing butterflies in Africa is the possibility of finding a species new to science. Even though the continent has been well-collected since the middle of the nineteenth century, still 1-2 new species are described each year. My own stroke of good fortune was to capture the single specimen from which *Pseudaletis barnetti* (Collins & Libert) was described (**Fig 2**). More frequently, it is possible to turn up a species never before found in a given region or country. This can lead to a remarkable extension of the so far known range.

Forest clearance, cultivation, and-increasing population density has fragmented the continuity of habitat. Once, Central Africa was a huge continuous forest zone, now butterfly ‘communities’ have often to struggle on in reduced habitat patches. Sometimes in a ‘new’ locality, a sub-species is recognised, providing it has consistent differences with the recognised species, so far established.

Fig 4. The nymphalid *Cyrestis camilus* (Fabricius) is the sole mainland African member of its genus and is found throughout the central forest zone.

The Central African Rainforest zone (and its fragmented extensions) has been collected comprehensively by resident collectors, who may remain in one locality for months or even years. They carefully note what they have been collecting. It is all the more fascinating to find this steady flow of newly described species, discovered when large accumulations of specimens are examined. For any collection, if individual specimens are to be of any scientific value, a record needs to be kept of the locality where each individual was found; height above sea-level (if known); and date. Usually recognition is given to the collector as well. Nowadays GPS looks after the locality, although it doesn't record whether it is forest, desert or open woodland.

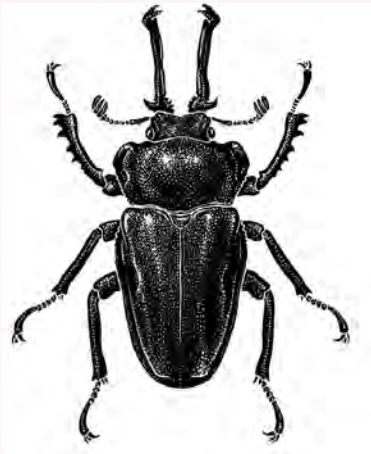
There is a central information-and specimen-collecting organisation called the "**African Butterfly Research Institute**" (ABRI), which has gained 'recognition as the portal for all new 'discoveries" to be made. ABRI maintains a reference collection of over a million specimens, carefully curated and kept safely in Nairobi. ABRI welcomes reports of extensions to the known range of any individual species, as well as providing unique access to its reference collection of over a million set specimens.

In summary, Africa has been a joy for a butterfly man like myself to pursue this interest. It has has involved finding many interesting and beautiful species such as **Fig 3**, all set in absolutely fascinating environs.

Recommended Books.

Braby, MF. (2000) *Butterflies of Australia: Their Identification, Biology and Distribution* CSIRO Publishing.

Vandeweghe, GR. (2010). *Les papillons du Gabon*. Wildlife Conservation Society/ Lannoo Printers, ISBN 098202634X, 9780982026342



GEMMELL & HARSLETT INSECT COLLECTION COMES TO QUEENSLAND MUSEUM

Fig 1. Sketch of Alec Gemmell drawn in 1944 by his brother-in-law, Robert Emmerson Curtis, who also lived in the Stanthorpe district and joined in collecting trips.

In February Susan and Jeff Wright and Chris Burwell spent four days at Amiens, near Stanthorpe, selecting specimens from the notable Australian insect collection of Alec Gemmell (**Fig 1**) for transfer to the Queensland Museum (**Fig 2**).

Alec, a Scottish-born WWI veteran, who developed a fruit farm, "Braemar", near Glen Aplin, became an avid beetle collector and was one of the pioneer collectors who first explored the rich *Leptospermum*-blossom beetle fauna for which the Stanthorpe area is still famous. He loved the jewel beetles (Buprestidae), and while he did not publish himself, he supplied many new species for description by coleopterists of the time, especially H.J. Carter in Sydney. His daughter Jean was born in 1925 and would have been just one year old when a devastating bushfire in November 1926 destroyed every orchard and building on the farm. Only their car survived, driven to safety by Alec. They rebuilt from the ashes with a small insurance payout of 750 pounds.

Fig 2. L to R: Alec Harslett Jnr (Jean's son), Jean Harslett, Susan Wright and Chris Burwell at Jean's house in Amiens selecting the specimens for the QM collection (Photo: Jeff Wright).

Jean absorbed nature from her family and, after receiving Waterhouse's

recently published *What Butterfly is that?* for her twelfth birthday, she went on to become an independent collector of butterflies and beetles.

In 1951 she married Robert Harslett and went to live on his family fruit and vegetable farm, "Mountain View", near Amiens in the same district, where she remains to this day having been widowed some years back. When her father died in 1965 his collection passed to her. She recognised its value at that time and in 1967 she donated a synoptic set of species to ANIC in Canberra, including no less that 256 species of Buprestidae. The rest was merged with her growing collection.

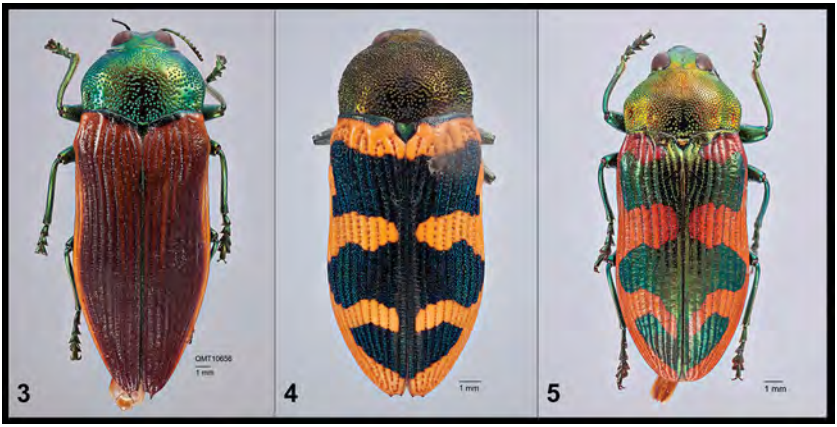
Jean became a pillar of the Stanthorpe community and a nationally recognised naturalist and historian. She is best known as an author of Stanthorpe's definitive history (Harslett & Royle, 1980) which ran to several editions, and in 2004 the **Jean Harslett Research Centre** was opened at the local museum with 16,000 of her historical photographs. She was a founder of the *Stanthorpe and District Field Naturalist Club* and was passionate about birds and butterflies. She is featured in the Queensland Museum's 1997 book, *Brilliant Careers-Women Collectors and Illustrators in Queensland* (Monteith 1997).

The best and most important specimens from the collection, a total of 2738 including some paratypes, were selected for transfer to Queensland Museum where they are currently undergoing conservation treatment before being incorporated into the main collection. Many are of species now rarely seen in the area. The Queensland Museum now has representatives of the three striking buprestids that have been named after Jean and her father Alec (**Figs 3-5**).

References

HARSLETT, M.J. & ROYLE, M. 1980. *They Came to a Plateau: the Stanthorpe Saga.* 213 pp, International Colour Productions (Stanthorpe).

MONTEITH, G.B. 1997. Jean Harslett. pp.67-68.In McKay, J. (ed.) *Brilliant Careers: Women Collectors and Illustrators in Queensland.* 80pp, Queensland Museum (Brisbane).



Figs 3-5. Jewel beetles named for Alec and Jean. 3. *Castiarina jeaneae* (Barker, 1983) . 4. *Castiarina alecgemmelli* (Barker, 1987). 5. *Castiarina harslettae* (Deuquet, 1957).

FEMALE OF AUSTRALIA'S ENIGMATIC GIANT PHASMID FINALLY CAPTURED

Geoff Monteith, Queensland Museum

Fig 1. Maik Fiedel with the first female captured of *Ctenomorpha gargantua* (Photo: Maik Fiedel).

The longest insect in Australia, and perhaps the longest in the world, has been known from just a couple of photographs taken in the Cairns region of North Queensland by members of the public over recent years. It's a phasmid called appropriately, *Ctenomorpha gargantua* Hasenpusch & Brock, and it has been known, as specimens, until now, only from the much smaller males that come to lights. It is quite extraordinary that such a giant insect as the female could have escaped collection from this well-populated and well-collected region over the last 150 years since settlement.

Congratulations to **Maik Fiedel**, one of the insect keepers at the Museum of Victoria's live insect display, who finally nabbed a specimen while head-lighting just before midnight along the Copperlode Dam Road behind Cairns on January 20 of this year (**Fig 1**).

The specimen was taken hanging from the foliage of a low tree (**Fig 2**) and may have been blown down from the high canopy where the species probably normally lives and which would explain why they are so rarely encountered. The stick insect was 500mm long (including front legs), somewhat less than a 615mm monster photographed a few years ago at Kuranda. It did not live long but laid 14 eggs before expiring and these are being carefully nurtured at MV in hopes of getting the species into culture. The history of discovery of this spectacular creature is worth recording. The genus *Ctenomorpha* is confined to Australia and is recognisable by its extremely long cerci. It was long known from a single

Fig 2. The giant phasmid in the position where it was discovered (photo: Maik

species, *C. marginipennis* Gray, found in coastal parts of Tasmania and SE Australia. However, a couple of specimens of males of obviously a second species, taken at light, were known in collections from tropical Queensland, far beyond the range of *C. marginipennis.* Then, in 1996, Geoff Monteith at the Queensland Museum, was sent two photographs of a large phasmid taken by Mr T Fayne-Scott of a specimen hanging on the outside of a caravan at the end of Whiteing Road on the high slopes of Mt Fisher at the southern end of the Atherton Tableland. In one photograph (**Fig 3**) a tape measure is held beside its body indicating an overall (cerci to tip of front legs) length of 525mm and a head/body length of almost 300mm.

The specimen was not retained. The photograph was then sent to British phasmid expert Paul Brock who identified it as being probably the female of the unplaced *Ctenomorpha* males

Fig 3. First female photographed in 1996 at Mt Fisher
(Photo: T. Fayne-Scott).

from the same region. He included the photograph in his forthcoming book (Brock 1999) aimed at amateur breeding enthusiasts and pointed out that its length was on a par with the longest phasmids in the world (Asian species of *Phobaeticus*) which were then know to reach about 300 mm head/body.

Paul and his Australian colleague, Jack Hasenpusch, went on to formally describe the species in 2006 based on males from Kuranda, Mourilyan and Garradunga (Hasenpusch & Brock, 2006). Jack lives within the range of the species and many of the paratypes were males that came to light at his Garradunga property. In that paper they note that some larger species of Asian *Phobaeticus*, reaching 357mm female head/body, had since been discovered and the London Natural History Museum's book of definitive statistics of large insects (Beccaloni, 2010) illustrates that record breaking female specimen of *Phobaeticus chani* from Sabah.

This seemed to take our big *Ctenomorpha gargantua* out of the running for a world-beater until an even larger female was photographed at Kuranda in 2009. The circumstances were remarkable. David Rentz, Australia's leading orthopteran expert, lives in (semi)retirement in the rainforest near Kuranda. One of his neighbours found butcher birds attacking a very large insect in his garden. He measured it, photographed it, and then released the insect in a safe place away from the birds. It had the astonishing overall length of 615mm, 100 mm longer than the Mt Fisher specimen.

Unaware that it was anything special, he later showed the photograph to David. The following conversation which probably included the exchange: "Where is the specimen now?/ I dunno!" is probably best not recorded in its entirety.

The photograph was passed to Jack and Paul and is included on p. 106 of their recent guide book to Australian phasmids (Brock & Hasenpusch 2009). Clearly that specimen may have had a head/body length more than the current Sabah record holder. Let's hope those 14 eggs from Maik Fiedel's female hatch, grow and prosper...there's a lot of national pride at stake!

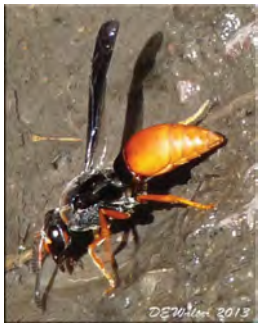
References

BECCALONI, G. 2010. *Big Bugs-Life Size*. 84pp, The Natural History Museum, London.

BROCK, P.B. 1999. *The Amazing World of Stick and Leaf Insects*. 165 pp. The Amateur Entomologists Society, Orpington, Kent, UK.

BROCK, P.B. and HASENPUSCH, J. 2009. *The Complete Field Guide to Stick and Leaf Insects of Australia* 204 pp, CSIRO Publishing, Collingwood, Vic.

HASENPUSCH, J. and BROCK, P.B. 2006. Studies on the Australian stick insect genus Ctenomorpha Gray (Phasmida: Phasmatidae: Phasmatinae), with the description of a new large species. *Zootaxa* 1282:1-15,



Bidentodynerus bicolor (Saussure)

Fire-tailed Potter Wasp

Miva, Qld
13 March 2013

GERMAN COLEOPTERISTS VISIT QUEENSLAND

Fig 1. Rene Tänzler (left) with beating sheet and Alex Riedel with litter sifter collecting in the rainforest at "The Head" in the Border Ranges south of Brisbane (Photo: Geoff Monteith).

Dr Alexander Riedel and his PhD student Rene Tänzler (**Fig 1**) are in Queensland for six weeks collecting in connection with their on-going research of the weevil genus *Trigonopterus*. Alexander is curator at the State Museum in Karlsruhe and Rene is nominally supervised by Roland Gerstmeier at the Technical University in Munich. Michael Balke at the State Museum in Munich is also involved in the research.

Alex and Rene spent their first week in southeast Queensland and visited Stradbroke Island, Lamington, the Border Ranges and Blackall/Conondale. They have now gone to North Queensland to spend a month working high and low altitude sites between Cooktown and Townsville.

Trigonopterus (**Fig 2**) includes very small wingless cryptorhynch weevils which mostly live in litter but one or two branches of the group are foliage feeders and walk around conspicuously on the upper surface of leaves. In New Guinea these foliage species, which are mostly shiny black, are mimicked by species in the jumping spider genus *Coccorchestes*. One of these mimic species and its similar spider occur at Iron Range in Queensland.

Alex has surveyed *Trigonopterus* intensively through the islands of Indonesia and especially the island of New Guinea where the group is very diverse with more than 250 species. He and Rene have collaborated with others in developing a new rapid methodology for incorporating both molecular and

morphological data into streamlined species descriptions. In a recent paper describing 101 new species from New Guinea based on 4624 specimens they describe their methodology as "a species discovery and description pipeline to accelerate and improve taxonomy by relying on concise expert descriptions, combined with DNA sequencing, digital imaging and automated wiki species page creation from the journal." This paper is available for open access (Riedel et al, 2013).

To cover the fauna their collecting methodology consist of large scale litter sifting and processing through Winkler funnels, as well as systematic beating of low vegetation and dead wood. There are only a few species described from Australia, all from the coastal regions of Queensland, but examination of the QM collection and their initial collecting experience indicates that there is quite a substantial fauna here. More grist for the pipeline...

Fig 2. *Trigonopterus parvulus*, one of 250 species in New Guinea (Photo: Riedel)

Reference

RIEDEL A, SAGATA K, SURBAKTI S, TÄNZLER R, BALKE M. 2013. One hundred and one new species of Trigonopterus weevils from New Guinea. *ZooKeys* 280: 1–150. doi: 10.3897/Zookeys.280.3906

A female Big Greasy aka *Cressida cressida* (Fabricius, 1775)

An unusual swallowtail and a tautonym. If you have a favourite arthropod tautonym, send it to dwalter@usc.edu.au (Photo DEWalter Amamoor State Forest 6 Feb 2014)

REPORT ON WEED BIOCONTROL SYMPOSIUM IN SOUTH AFRICA

Bill Palmer, DAFF, Brisbane

Five Queensland entomologists attended the 14th International Symposium for the Biological Control of Weeds held at the Skukuza Centre, in the Kruger National Park, South Africa in early March. These symposia are held approximately every 4 years and this one also celebrated the centenary of South Africa's biocontrol programme. It brought together about 170 of the world's practitioners and allows networking, a so necessary component for classical biocontrol.

Those from Queensland attending this year were 1987 ESQ president Rachel McFadyen (**Fig 1**); 2010 ESQ president Matt Purcell (**Figs 2**, **3**); Reiks van Klinken who gave papers on target prioritization and mesquite; Dhileepan (**Fig 2**) who gave papers on cat's claw creeper and prickly acacia; and Bill Palmer (**Fig 3**) who presented on Madeira vine and Australia's reduced scientific capacity for biocontrol and also caught up with several IOBC members. The symposium provided a very good synopsis of current activity around the world. While Australia's capacity is now much reduced, New Zealand, South Africa and now Europe are very active. A symposium initiative of substituting strictly timed 4 minute (sic) talks instead of posters was considered a great success. Much to the delight of the participants, the schedule allowed for early morning and evening game drives through the park. Four lions chased up trees by hyenas was perhaps the outstanding game sighting. The symposium ended with a commitment to meet again in Switzerland in 2017.

Fig 1. Mike Cripps (NZ), Alec McClay (Canada) with Rachel McFadyen. Alec sourced most of our parthenium insects in Mexico in the 1980s.

After the symposium's conclusion, Rachel went touring the parthenium areas and advised a parthenium workshop, Reiks headed west to see mesquite, while Dhileepan and Bill went with Stefan Neser to search for a gall on prickly acacia and see biocontrol efforts on lantana and parthenium.

Fig 2. Dhileepan and Matt Purcell at Symposium conclusion.

Fig 3. Bill Palmer, Max Cristofaro (Italy), Lincoln Smith (USA), Stefan Neser (South Africa) and Matt Purcell surveying the Sabie River.

Parthenium and mesquite are both becoming serious weeds in Africa and both will benefit from biocontrol agents developed for and successful in Australia.

On the other hand we were particularly impressed with an eriophyid flower gall mite released several years ago in South Africa for lantana. In some areas it had almost completely prevented flowering and was otherwise badly affecting the plants (**Fig 4**). The mite has more recently been released in Queensland, so we have fingers crossed for a similar result.

Fig 4. Stefan Neser in Swaziland examining lantana plants heavily galled by the eriophyid mite *Aceria lantanae.*

Tautonym - a Latin binomial in which the genus and species (and subspecies) names are the same
(from the Greek tauto-, the same, and -nym, a name)

Mt Mee Bug Catch

16 March 2014 D'Aguilar Range National Park

Chris Lambkin & Kathy Ebert

Fig 1. Chris explaining the Malaise trap to the *360 Degree Film* crew, UQ student Perry Bennion, and ESQ members Andy Wang and Peter Hendry. Photo Noel Starick.

Chris Lambkin (Queensland Museum) and Kathy Ebert (University of Queensland) organised the latest **ESQ Bug Catch at the Mt Mee QNPWS** grounds. ESQ members Chris, Kathy, Noel Starick, Robert Whyte, Ryan Norris (student who travelled from Gladstone), Peter Hendry, Richard Zietek, Andy Wang, Fede Turco, Liam O'Reilly (another young keen student), Jim Pulsford, Susan Wright, Penny Mills, Stephen Cameron, Kathy Thomson and Li-Xin Eow and 14 visitors used many collecting methods and light sheets were run from dusk. A crew from ***360 Degree Films*** filmed collection methods (using a drone in some cases **Fig 2**), and interviewed ESQ members (especially Chris for fly taxonomy, and Noel for his contact with George Bournemissza and the CSIRO Dung beetle project) for a documentary on Australian flies that may appear on ABC in August.

While the moth fauna was not in large numbers, one was completely new to **Peter Hendry**, *Xylodryas leptoxantha* (Turner, 1919). Characterized by the semicircular incise of the termen of the forewing, *X. leptoxantha* is a member

of the Geometridae in the subfamily Ennominae. In 1919, while pointing out some differences, Turner placed it under his new genus *Coelocrossa*. In 1922 Turner raised the genus *Xylodryas* making *Xylodryas leptoxantha* the type species. One moth that came in some numbers was the small hepialid *Elhamma australasiae* (Walker, 1856), with both males and females present. Others included, *Nataxa flavescens* (Walker, [Nov.] 1855) Anthelidae, *Parotis* sp. Geometridae and *Epicoma melanospila* (Wallengren, 1860) Notodontidae.

Robert Whyte and two friends were in pursuit of a few elusive spiders to collect and photograph for his book with fellow ESQ member Dr **Greg Anderson** – *A Field Guide to the Spiders of Australia* (due from CSIRO Publishing in 2015). They were particularly after *Arkys cornutus*, the Horned Arkys (**Fig 5**), an ambush predator in the orb weaver Family Araneidae. **Perry Bennion**, one of the UQ students, found an adult female for them within half an hour. The film crew interviewed and filmed Robert and his spiders.

A beetle found by another of the UQ students, **Alexandra Nance**, turned out to be *Uloma* (Tenebrionidae) – and the mites that live on it were *Diplogyniella gayi*. The mite family is Diplogyniidae, a favourite of Owen Seeman's who has published a couple papers on ones that live on subsocial wood cockroaches.

Also triggering interest were one of Australia's giant Diplura (also found by Alexandra), probably a species of *Heterojapyx* (Japygidae) (**Fig 3**, right) that are known to grow up to 50 mm long.

Last, but not least, a giant scale insect (Monophelebidae) (**Fig 7**) was discoverd - a sight most Bug Catchers had not seen before.

Fig 2. The film crew used a drone to film collection methods. Photo Noel Starick.

Fig 3. *Xylodryas leptoxantha* Photo. Peter Hendry. *Heterojapyx* sp. Dipluran. Photo Kathy Ebert

Fig 4. Fede (ESQ President) filmed at the light sheet, collecting beetles. Photo Kathy Ebert

Figs 5-6. Spiders *Arkys cornutus*: Araneidae, Arkyinae. Tiny (body 1 mm long); also a small Theridiidae. Photos: Robert Whyte

Fig 7. A giant scale insect Monophelebidae. Photo Kathy Ebert.

Northern Rivers' printmaker Jenny Kitchener has an exhibition at Tweed Regional Gallery celebrating those most intriguing of animals: insects. Kitchener pays homage to a small selection of insects, most of which are pollinators. Bees, butterflies, moths, beetles and dragonflies are featured in many of the works and play differing roles. **Exhibit ends 8 June 2014**

Read more: http://regionalartsnsw.com.au/event/array-jenny-kitchener-at-tweed-regional-gallery/#ixzz2zaqr7GXg

THE AUSTRALIAN ENTOMOLOGIST

A quarterly, full-colour magazine of original research on arthropods of Australia and adjacent regions.

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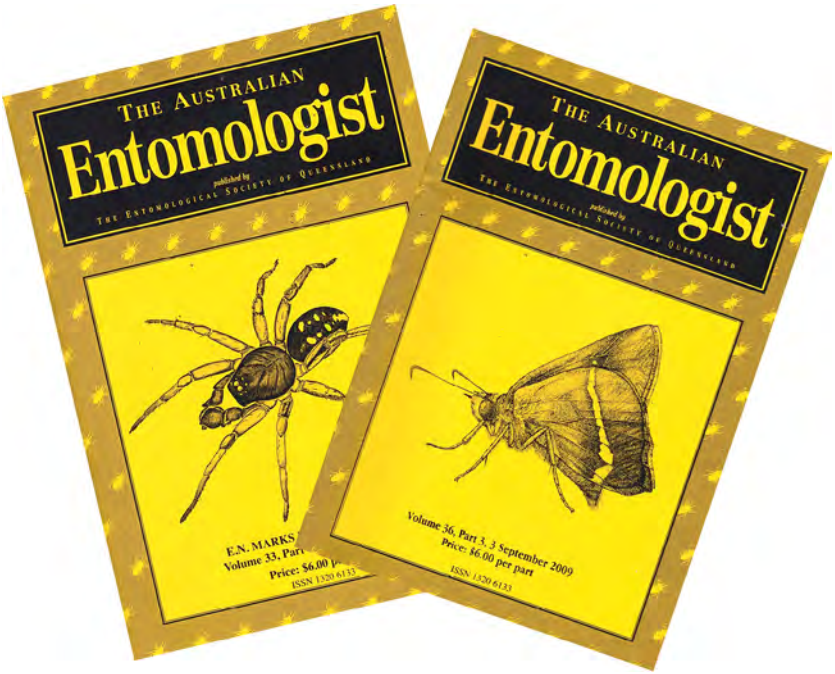

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Meetings & Conferences

Australian Entomological Society 45th AGM & Scientific Conference
September 28–October 1 2014
Shine Dome, Canberra, AUS
http://www.aesconferences.com.au/

17th International Union for the Study of Social Insects (IUSSI14)
July 13–18 2014
Cairns Convention Centre, Cairns, AUSTRALIA
http://www.iussi2014.com/

63rd Annual Meeting of the Lepidopterists' Society
July 16–19 2014
Yarrow Resort Hotel and Conference Center, Utah, USA
http://www.lepsoc2014.com/

8th International Congress of Hymenopterists Meeting
July 20–25 2014
Cusco, PERU
http://www.hymenopterists.org/meetings.php

51st Annual Meeting of The Association for Tropical Biology and Conservation
July 20–24 2014
Cairns, Queensland, AUSTRALIA
http://atbc2014.org/registration-accom/destination.php

July 21–25 2014
Smithsonian Institution's National Museum of Natural History, Washington DC, USA
http://ihs.myspecies.info/content/5th-quadrennial-meeting-july-2014

DIARY DATES FOR 2014/2015

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

MAR 2014-Tuesday 11th Dr Simon Lawson AGM and Presidential Address
Australians abroad: eucalypts and their insects

APR 2014-Tuesday 8th Mike Barnett *Butterfly species and habitats in Africa*

MAY 2014-Tuesday 13th Dan Papacek *Confessions of a Commercial Entomologist*

JUN 2014-Tuesday 10th Student Award Presentation/ Notes and Exhibits

AUG 2014-Tuesday 12th

SEP 2014-Tuesday 9th

OCT 2014-Tuesday 14th

NOV 2014-Tuesday 11th

DEC 2014-Tuesday 9th Xmas BBQ/ Notes and Exhibits

MAR 2015-Tuesday 9th Dr Bill Palmer AGM and Presidential Address

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THE ENTOMOLOGICAL SOCIETY OF QUEENSLAND

NOTICE OF NEXT MEETING

Tuesday 13th May 2014, 1:00 pm

Dan Papcek

Bugs for Bugs, Mundubbera

Confessions of a Commercial Entomologist

Venue: Seminar Room
Ground Floor, Ecosciences Precinct
Boggo Road, DUTTON PARK. BRISBANE.
More venue details available at
http://www.esq.org.au/events.html
ALL WELCOME

NEXT NEWS BULLETIN
Volume 42, Issue 3 (May 2014)
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