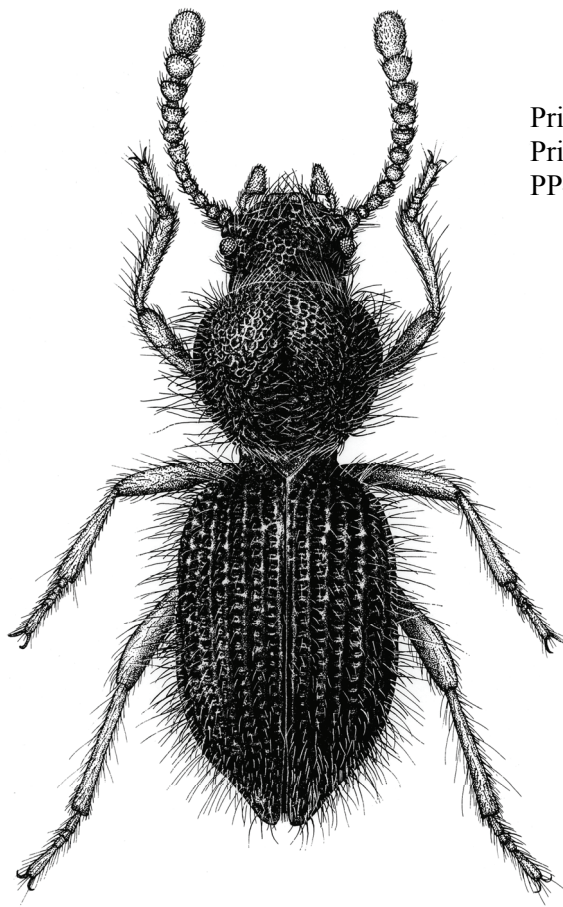


# ENTOMOLOGICAL SOCIETY OF QUEENSLAND INC

# NEWS BULLETIN



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Volume 40, Issue 8, November 2012

# THE ENTOMOLOGICAL SOCIETY OF QUEENSLAND

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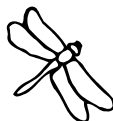
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**Front Cover Illustration:** *Apocryphodes thompsoni* Matthews, 1998 (Tenebrionidae; Adeliini). This specimen is a paratype illustrated by Geoff Thompson for the original description; collected from leaf litter in 1984 on one of Geoff Monteith's North Queensland field trips by Val Davies, Geoff Thompson and Julie Gallon, at Gayundah Creek on Hinchinbrook Island.

ISSN 1037-2989



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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 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.

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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.

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## Minutes of General Meeting

Held in the Seminar Room, Ecosciences Precinct, Boggo Rd, Dutton Park, Tuesday November 13, at 1.00pm.

**Chair:** Geoff Thompson.

**Attendance:** Justin Bartlett, Bradley Brown, Pat Collins, Lyn Cook, Sarah Corcoran, Kathy Ebert, Manon Griffiths, Andrew Hayes, David Holdom, Judy King, Chris Lambkin, Doug McCarron, David Merritt, Penny Mills, Shirley Mills, Geoff Monteith, Brenton Peters, Don Sands, Kathy Thomson, Geoff Thompson, Desley Tree, Federica Turco.

**Visitors:** Valerie Byrne, Maria Fernanda Cardoso, Sybil Curtis, Marianne Elkema, Caroline Fewtrell, Judy Gemmell, Susan House, Rajeswaran Jagadeesan, Ramandeep Kaur, Esther Lawless, Adele Outteridge, Hervoka Pavic, Wim de Vos, Sonya Winnington-Martin.

**Apologies:** Julianne Farrell, Simon Lawson, Morris McKee, Bill Palmer, Susan Wright.

**Minutes:** The minutes of the last General Meeting were circulated in News Bulletin Vol. 40, Issue 7, October 2012.

*Moved that the minutes be accepted as a true record:* Geoff Thompson

*Seconded:* Christine Lambkin.

Carried unanimously.

### Nominations for Membership:

There were no nominations for membership.

### General Business:

1. The President informed members of the deaths of Professor Doug Kettle, Dr Valerie Davies and Harry Standfast. Professor Kettle and Mr Standfast were both Past Presidents of the Society. Obituaries for Prof. Kettle and Dr Davies are included in the November issue of the Bulletin, with an obituary for Mr Standfast to appear in a subsequent issue.

2. The President gave a short introduction and demonstration of the Society's new website. Editing and development are continuing.

3. Officers for 2013 – A reminder that the nomination form for Council for 2013 is in the Bulletin.

4. Entry forms for the Student Award are in the Bulletin, please encourage eligible students to enter.

## Main Business

### A Marriage of Science and Art – the Museum of Copulatory Organs

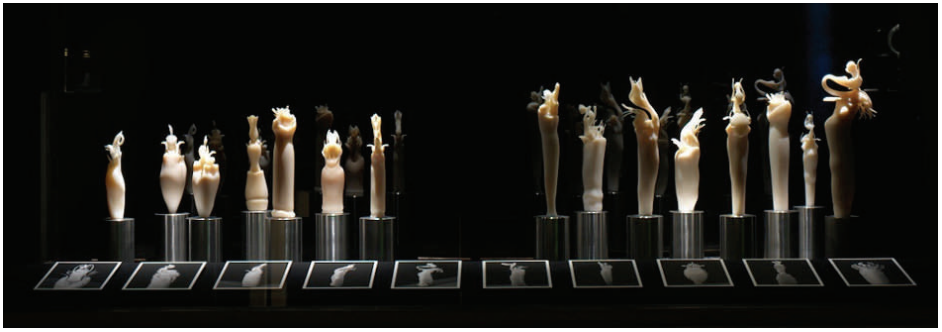
Maria Fernanda Cardoso

Ever since I was a child I have been observing small living things. Observation is a fascinating act. It is different from seeing, looking or watching. It is such an intense, active and deliberate act. It requires all of your attention and bodily focus, suspending all other thoughts and directing all sensory inputs towards the acquisition of perception through an almost immobile act.

Great insights, comprehension and revelations happen during those periods of intense observation for both artists as well as for scientists. Observation is perhaps one of the main activities we share in common between the arts and the sciences, and both train people to carefully observe in an active and deliberate way. Our processes can differ beyond that commonality, but less than most tend to think.

But what triggers the intensity of observation? I believe that one of the underlining affects that induce that act of observation might be found in what sociobiologist E. O. Wilson calls Biophilia. In his words, Biophilia is 'the innate tendency to focus on life and life like processes' (Wilson 1984, p1). I am a devoted biophilic. I feel strong affiliation with any form of life, but I have a particular affinity with insects.

I love the world of the small and can't get close enough to the small universes I explore. For this reason it's little wonder I made an art project that consisted of a fully-fledged real live performing flea circus (the Cardoso Flea Circus, 1994-2000).



### Intromittent Organs of Tasmanian Harvestman (2010-11)

Resin, metal and SEM scans.

Insects are incredibly interesting and yet we know very little about them. But if we observe them intensely, perhaps we can learn enough to be able to establish some sort of communication with them. We might also learn enough to understand what they like and don't like, and to begin to understand their reasoning and behaviour more deeply. I consider that kind of work very important for science, but also for art.

What I like most about working with insects in my artworks is that most people find them insignificant. I disagree. I want to make people stop and look at them in detail, to observe, even if only for a fleeting moment, some of the wonders of the insect world. People in general don't realise how important invertebrates are in the web of life and how much impact they have on our world and lives. Through my artworks I like to exhibit those aspects of insect's lives that blow my mind—such as their cryptic coloration, the patterns of butterfly wings, the strength of a flea jumping, or the complexity of their genitalia.

I have been working with small animals and plants for almost three decades. Despite this, the strength of the bio-images I create never ceases to surprise me. I believe that it is not just my skill as an artist that makes those bio-images strong. It is the imbedded emotion and innate connection that we have to other life forms that engages the viewer so powerfully. I am sure that all of you

entomologists fully understand the concept of biophilia, that powerful combination of attraction, admiration, curiosity and wonder that is triggered when looking at those fascinating, tiny and complex life forms: insects. The power of that bond drives our daily lives, for both you and me, artist and entomologists, over years of painstaking research, endless observation, documentation, photographing or even sculpting them. All of these processes form a very important act of knowledge acquisition and transfer. I live to observe, identify and to *represent* my observations to my audience, as many people don't normally stop to look, to observe those tiny wonderful creatures. I know I can make them stop, to look, and to observe new things.

Most recently, I have been trying to follow the rigid rules of scientific illustration to make and present my artworks in the tradition of Natural History Museums, for the creation of an unusual art project: the *Museum of Copulatory Organs* (MoCO for short). Inspired by a very long quote which hails 'flea genitalia as one of the wonders of the insect world' (Kennedy 1993, p28). I took it upon myself to investigate whether or not that claim was true. I found out that fleas were not alone in the world of 'genitalic extravagance' as renowned evolutionary biologist William Eberhard calls those complex genital morphologies in his incredibly insightful book *Sexual Selection and Animal Genitalia*. These genitalic



**Pollen is male (2011)**  
Nylon, wood and metal.

morphologies are so varied and interesting that I decided to make a new museum devoted to them. MoCO is the context I have created to exhibit the artworks I have made of invertebrate genitalia. Over the past four years I have made 2D (drawings and SEM scans), 3D (sculptural forms) and 4D models (video) of invertebrate genitalia. I focus on the weird and wonderful complexity of genital morphologies that are little known outside of a particular area of specialised scientific research.

My project aims to provide an artistic, scientific and educational context where one of the most important aspects of life on earth—sexual reproduction—can be observed, admired, understood and discussed in a multi-dimensional way. The study of reproductive morphologies can be traced back to the invention of microscopy, when Antony van Leeuwenhoek described sperm for the first time in the mid 17<sup>th</sup> century. Before that, people believed in the

‘spontaneous generation’ of life. A century or so later, the Linnaean taxonomical system for cataloguing plants was established, based on the cataloguing of plants’ reproductive traits.

For centuries, taxonomists have been using genitalia as taxonomic tools to describe and identify species. However, in the 1970’s some evolutionary biologists started to ask questions about the evolutionary reasons behind the evolution of these complex reproductive morphologies. Since that time there have been a handful of theories put forth to explain the phenomena of genital complexity. Some—like the Lock and Key theory, which seemed quite logical—were quickly discredited. One of the most convincing theories was that of *Sperm Competition* (Parker 1970) and later that of *Cryptic Female Choice* (Eberhard 1985). Others propose *Sexually Antagonistic Coevolution* (Arnqvist and Rowe 2005). I won’t explain these theories in the context of this



publication, but I do want to point to the fact that as an artist, I have created a new platform to present, learn and discuss the new knowledge that is being produced by several sciences. My work integrates this knowledge into an encyclopaedic type of institution (a Museum), making the knowledge physical and three-dimensional in the form of sculptural objects and images. All this complex information is communicated visually and sometimes tactilely to a wide audience through art.

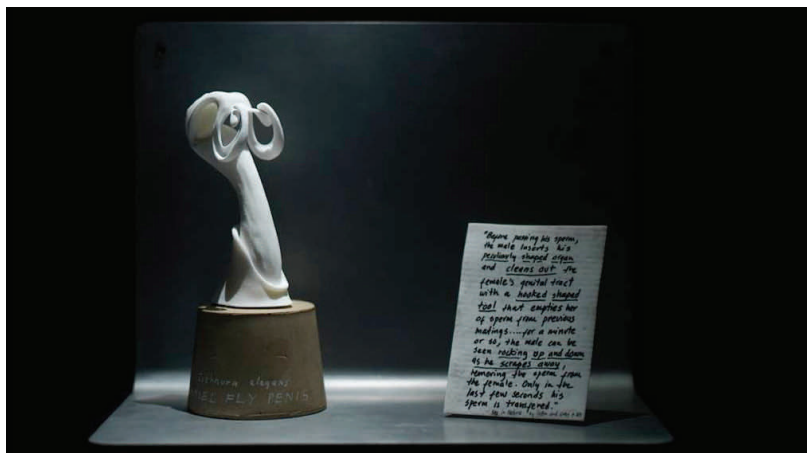
Our human relationship with the natural world is quite complex, and the specialisation in the sciences has distracted us from a more multilayered understanding of the natural world that we might have if we work in more interdisciplinary ways. It is my intention, through my art, to integrate everything that can be known about a

subject matter into material form. In MoCO's case, my interest is in reproductive morphologies and how to weave and present the complex and multilayered knowledge we have of them in a visual, tri-dimensional and educational way.

The aesthetic responses of the audience provide pathways to deliver the information I have gathered by reaching outside the boundaries of my profession. I utilise my skills as an artist (as a keen observer, but also as a maker and as a communicator) to create a multiplicity of effects. I also hope to educate my audience by providing a skills as an artist (as a keen observer, but also as a maker and as a communicator) to create a multiplicity of effects. I also hope to educate my audience by providing a more up-to-date knowledge about sexual reproduction, and to highlight some of the



**Snail Love Darts: The Original Cupid's Arrows (2011)**  
Nylon, wood, metal.



### Damselfly penis (2010-12)

3D print, rubber, plastic, ink, on aluminium shelf.

major misunderstandings that are still part of popular culture. I have recently submitted a PhD at the University of Sydney on the Aesthetics of Reproductive Morphologies. In order to make this project a reality I needed to become an expert in the field, and to earn the qualifications necessary to create an art and science institution of the kind I have envisaged and now manifested.

The audience reaction at the recent display of MoCO at Cockatoo Island in Sydney, as part of the Biennale of Sydney, was extraordinary, with half a million visitors witnessing the work that I displayed there. While MoCO was an artist's project within the context of an international Biennale, it is also an institution that has a longer, more permanent future in store. I am constantly adding to its collection, touring the exhibition and currently searching for a permanent location for the Museum.

The project has involved many collaborations with scientists, microscopists, photographers, a 3D artist and 3D printers. I am keen to expand the project by making further connections and looking for more opportunities to collaborate with scientists, naturalists, and artists interested in this exciting area.

### References

- ARNQVIST, G. and ROWE, L. (Eds.) 2005. *Sexual Conflict*. Princeton University Press.
- EBERHARD, W.G. 1985. *Sexual Selection and Animal Genitalia*. Harvard University Press, Cambridge, Massachusetts.
- KENNEDY, D. 1993. *Living Things we Love to Hate*. A Storey Publishing Book, Pownal, Vermont.
- PARKER, G. 1970. Sperm Competition and its Evolutionary Consequences in the Insects. *Biological Reviews* **45**: 525-567.
- WILSON, E.O. 1984. *Biophilia*. Cambridge, Mass., Harvard University Press.

### Vote of Thanks: Sybil Curtis

### Any other business:

The next meeting will be 'Notes and Exhibits' on Tuesday December 11 at 5pm. This is an informal meeting and members are invited to make brief presentations or bring along items of interest to display. Please contact Judy King or Geoff Thompson if you would like to contribute. The meeting will be followed by a BBQ, the cost will be \$5.00 for food. Soft drinks will be available for purchase.

The meeting closed at 2.05pm.



# NOTICE OF NEXT MEETING

*Tuesday 11th December 2012, 5pm*

~

## NOTES & EXHIBITS

followed by a

## CHRISTMAS BBQ

~

Speakers scheduled so far.....

**Geoff Thompson**

*Insect book plate etchings*

**Julianne Farrell**

*From death to dust - using insects to estimate  
post mortem intervals in Queensland*

**Abstract:** Research is being conducted over 2 years using pigs as human models to determine the forensically-important insect species that occur in south-east Queensland. Comparisons are also being made with insects collected from human remains at the Brisbane mortuary. Ultimately, the results of this research will be used to improve post mortem interval estimates for human remains in southern Queensland.

Julianne Farrell is a postgraduate student with the University of Queensland, studying insect succession in carrion. Before moving into forensic entomology, Julianne's background includes 6 years as a technical officer working on managing the development of phosphine resistance in stored grain insects; and 3 years leading research projects on mouse plague management and a new broad-acre rodenticide registration.

~

**BBQ to be held after meeting**

**cost: \$5/person - drinks available for purchase**

Ecosciences Library

Ground Floor, Ecosciences Precinct

Boggo Road, DUTTON PARK

**ALL WELCOME - Please sign in at front desk**

## PEOPLE AND PROJECTS

### Brenton Peters

Brenton Peters commemorated his first anniversary of retirement - having voluntarily separated from the Queensland Public Service on 1st October 2011. During his 33 years of public service he was the Queensland timber entomologist. He headed the West Indian Drywood Termite Program and published over 40 research papers on xylophagous insect pests in national and international peer-reviewed journals. His publication ..... "Peters, B.C., King, J. and Wylie, F.R. (1996). Pests of Timber in Queensland. (Queensland Forestry Research Institute, Department of Primary Industries, Brisbane)." ..... remains relevant and is available at: [http://www.daff.qld.gov.au/26\\_155.htm](http://www.daff.qld.gov.au/26_155.htm)

He was awarded a PhD from The University of Queensland (2004) and is passionate about termites and borers, especially in the urban environment. He runs a small consultancy business and is Honorary Treasurer of the Entomological Society of Queensland.



## OBITUARIES

### VALE EMERITUS PROFESSOR DOUGLAS STEWART KETTLE 28 Jan 1918 – 18 Oct 2012



I probably knew Doug Kettle much longer than anybody else in Australia as he had been my friend and mentor for many years. I kept in touch with him until I lost contact when he moved to sheltered accommodation. But let's begin at the Beginning.

#### EARLY YEARS 1918-1939

He grew up in Clapton, a suburb of London, and from an early age was a fan of Clapton Orient, a not very successful soccer team whose supporters reckoned that any draw was a win and any loss was a draw.

Aged 11 he won a scholarship and was offered a place at prestigious Mercer's School in Central London on the condition

that he learn adequate Latin to gain admittance. This had not been taught at his primary school but a dedicated teacher there taught him the basics and he quickly achieved the required standard.

He proved worthy of the scholarship both academically and in several sports including cricket in which he had a lifelong interest. At the end of his schooling his final results enabled him to enter directly into the second year of a BSc course at London's University College in 1936. A devout Christian all his life Doug became involved with the Student Christian Movement. He graduated in 1939 then attended a marine biology course in Ireland from which he returned on 1st September 1939 and two days later Britain and France declared on Germany.

## MILITARY LIFE 1940-1946

Although a strong pacifist he volunteered for service in the Royal Army Medical Corps and was ordered to report to Boyce Barracks, Crookham on January 15th 1940 (I would travel a similar path 16 years later and proudly wore the staff and serpent badge of the Corps). Non combatant it may be but as late as the 1960s only two double VCs had ever been awarded both to soldiers of the RAMC, at that time it had also held the majority of single VCs.

Having attained the Grade of Path Lab Technician, Grade III Corporal Kettle was then posted to the Army School of Hygiene to join the No 3 Malaria Field Unit for training in malaria control and diagnosis including mosquito dissections. Initially he was not keen on this move which was to change the entire course of his life but Orders is Orders in the military.

The Unit was scheduled to sail in March 1941 and he was given embarkation leave when he and his beloved girl friend Gladys became engaged; they were soon to be separated for several years.

His Unit ended up in Egypt fighting a war against anopheline mosquitoes and their nasty malaria parasites. Initially there was no clerk assigned to the Unit, guess who had to perform this task ? - Corporal D.S. Kettle BSc. The Military moves in even more mysterious ways than does the Divinity. A clerk finally being obtained Prof. worked on the surveys he was meant to carry out and now the real action began.

In early 1942 No 8 Malaria Field Laboratory (MFL) was formed to accompany the 8th Army and soon Staff Sergeant Kettle became senior NCO. Prior to the decisive battle at El Alamein troops were attacked by a new enemy *Anopheles pharoensis* which appeared in huge numbers causing a proportionate amount of disturbance. Rumours were rampant that Jerry had bred those pests and infected them with malaria, captured German records accused the British of a similar strategy and a team from No 8 MFL including Doug was sent to investigate.

It was not an enemy secret weapon just a huge rise in mosquito population boosted by climatic conditions. Other enemies plaguing troops on both sides included fleas and bed bugs in profusion plus true sandflies and soft ticks.

After victory at El Alamein in October 1942 Allied forces moved westward into the desert. Malaria Control Units were not required again until March 1943 when the army reached Libya and the Unit spent months cooling its heels in Cairo.

During this time Staff Sergeant Kettle developed the great interest in entomology which would dominate his life. He conducted a lab study on the effects of varying salinity on the anal papillae of freshwater larvae of *Anopheles sergenti*. Large amounts of numerical data were collected which he analysed using only the available basic statistical techniques. Much of his spare time was devoted to this over the rest of his service.

No 8 MFL moved to Libya, to Tunisia, then back to Libya in preparation for the invasion of Sicily starting July 10th 1943. Soon after his arrival Doug had his first hangover due to rough Sicilian wine.

Next morning he had a much worse experience when on a survey a mine exploded below his truck seriously injuring him in an arm and leg. Evacuated back to Tunisia he made a speedy recovery but bore the scars on his leg for the rest of his long life. He was then flown to a seaside convalescent unit in Algeria where the entertainment officer conscripted him to deliver lectures on subjects of his own choice. Alas this Unit was also plagued by the inevitable fleas and other pests.

In January 1944 Doug was posted to The Central Mediterranean School of Hygiene at Benevento, near Naples, in Southern Italy. A major epidemic of typhus had broken out in Naples starting in December 1943 which a joint British and American task force sought to contain. Doug is unclear about any participation on his part in this epic project, the first time in history typhus was halted and not allowed to burn itself out.

His duty at the Benevento School was to assist in courses on malaria and its control, he was given the nickname of “Cap” after Captain Kettle an intrepid seaman, hero of a series of popular novels of the time. In mid 1944 Cap Kettle moved closer to that rank when he was commissioned second lieutenant but was promoted to Lieutenant when transferred to No 10 MFL at Rome that December. He then became Captain Kettle in his own right towards the end of 1945.

In Rome he worked with distinguished Italian malariologists including Professor Raffaele who had discovered the location of the pre-erythrocytic stage of avian malaria parasites and was attempting, vainly, to solve the similar mystery in humans.

Many years later Doug told me that prior to WW2 Fascist Italy had claimed malaria had been largely eradicated, Allied malariologists were therefore surprised to find the disease was still very much endemic. On querying their Italian colleagues they were informed that Mussolini had ordered malaria be eradicated and as Il Duce was always right this was achieved...ON PAPER.

In June 1945 Captain Kettle found himself back at Mytchett School of Hygiene again, the demobilisation process was slow and he was first sent home on Overseas Leave and he and his beloved Gladys Horne were married at last in July 1945.

He was scheduled to leave for The Far East in 3 months but Japan surrendered in September and he remained at Mytchett. Here he gave some lectures and wrote an Army pamphlet on the control of rats which never seems to have been published, Ah The Army! While in those military doldrums he finalised his data on *Anopheles sergenti*, completed and submitted his thesis, and gained an MSc from London University in January 1946.

## CIVVY STREET IN UK 1946-1958

Finally demobbed in June of the same year he was transferred to the Army Reserve until 1959. Thus ended his military career.

In July 1946, free at last, Mr Kettle MSc did research at the Cooper Bureau on emergent pest control products but in July 1947 he took up an appointment at Glasgow University investigating the Scottish Midge *Culicoides impunctatus* which is a menace in the Scottish Highlands, as a folk song says “*With teeth like piranhas, They’ll drive Ye bananas, If Ye get one under Yer simmit* (Shirt)”.

He would work here until 1951 and during the sojourn Gladys gave birth to their first child Stephen. His work involving investigating possible control of this pest midge

proved unsuccessful due to its wide breeding habitat in marshland but he discovered new species of the midge and wrote keys for larvae and adults. He and Gladys also did great work as Sunday School teachers in the poor area of Maryhill.

After his contract ended he was given a further year's appointment to continue his research and submitted his publications to London University as a candidate for a DSc. He also applied successfully for a one year Carnegie Fellowship at Dundee University and learned at year's end he was now Dr D.S. Kettle DSc. As a result of his Glasgow work he published 8 papers on midges in 4 years.

At Dundee he taught classes in biostatistics and worked on rearing midge larvae then identifying emerging adults. At year's end he took up an appointment at the Zoology Department in Edinburgh where he worked and taught for several years. I first met him there as a 16 year old around 1953 and from the first found him a most approachable, down to earth, person who encouraged me, a humble cadet lab technician, in my own studies towards advancement.

In Edinburgh, among other things, he taught entomology classes for BVSc, and DTM&H, among others, then DTM when that course was established, first of its kind in U.K. Once ensconced he was able to resume his research on midges and led a small team investigating their pest status in Scotland. Field work in the Highlands proved a major problem as locals disdained anybody working on the Sabbath. One result of their work was to discover that *C. impunctatus* could be carried by winds for hundreds of metres without population reduction. This minute menace caused problems disproportionate to its size.

The Kettle's second son St John was born in Edinburgh in 1953 and students commemorated the birth of his daughter Anna the following year with a laudatory poem

starting "*Dr Kettle has proved his mettle*". In 1956 I was called up, as Doug was, to The Royal Army Medical Corps where I was fortunate to be sent to the Medical Entomology course at the Royal Army Medical College. This led me on demob to working closely with Doug and soon I was joining him grovelling in the mud. I enjoyed working with him until he was granted two years secondment to Jamaica to investigate the midge problem there. Between 1953 and 1961 he published 12 more papers on midges. In 1961 I moved to Northern Ghana and we had no contact for many years.

## **JAMAICA 1958-1960**

Doug established a Sandfly Research Unit in Jamaica and trained several locals in midge work, among them John Linley who became his protegee. He identified and studied local species and advised on possible control measures. Nine papers resulted from his two year stay.

## **KENYA 1961-1969**

Towards the end of his Jamaican sojourn he applied for the post of Professor of Zoology at Kenya's new University of Nairobi and was offered the position. On arrival he found several departments were concentrated in a single building, Arts, Chemistry, Biology, and Physics and classes was only up to pre Tertiary "A" level standards. New buildings were however scheduled. Initially there was only one secretary for Botany, Chemistry, Geology, Physics, and Zoology but soon secretaries were assigned to each Department.

New buildings for other disciplines including Zoology were soon built and Prof Kettle started the Zoology Department from scratch. First off he and his academic staff had to create a curriculum acceptable to the University of London then three students took the new BSc course, but numbers grew as did the amount of significant research from staff and postgrads.

Among other disciplines Doug taught genetics and cell biology.

Early on they developed close friendships with Dr Tony Harthoorn, from Vet Science and his wife Babs, a teacher at a new boys college for future Kenyan leaders. The three Kettle children also befriended the three Harthoorn kids - Peter, Jane, and Tina. This relationship would have very important results in later years. The family also became involved with local churches. Naturally Doug also played cricket and supported local rugby teams.

All expatriate staff had a major concern, the threat of Africanisation hanging over their heads like Damocles' sword. Despite the current harmonious situation feelings of insecurity grew here, as in other newly independent African nations.

In 1968 Prof. felt his work in Kenya was coming to a close and applied for the Chair of Entomology at the University of Queensland. At his interview in Brisbane one member of the panel claimed synthetic insecticides had surely made the study of Entomology irrelevant. Doug quoted Prof Buxton's answer to a similar query by a distinguished chemist.....*"Only a chemist would be naïve enough to believe that"*.

On that evening Prof. Fred Schonell informed him he had been accepted for the appointment. He left Kenya to take up his new post in 1969. Building a new Department and its courses had inhibited his personal research, nonetheless he had 6 papers bearing his name.

### **BRISBANE 1969 to DATE**

Once established in Brisbane he proceeded to drag the Entomology Department into the 20th century despite some local opposition. Around the same time I felt my Ghanaian activities were complete and sent cv's to several Australian States. Late in 1970 I received a telegram inviting me to

take up a position in the Entomology Department University of Queensland signed Professor Kettle. I expressed great interest and we caught up with each others' activities.

I was scheduled to return to Britain for debriefing and, as there was a long running postal strike, my wife and I travelled home through several stops en-route where progress of my appointment developed through local mail in other countries. Gladys Kettle met us at the old Quonset hut that was Brisbane airport and from then on the entire Kettle Family took us under their wing and helped us greatly in settling in.

In the Department Doug began organising new courses and I supported him in trying to reduce the *"She'll Be Right Mate"* attitude of some students, fortunately the extreme Left Wing Radicalism on campus then did not infringe on Entomology. University wide Courses were being transformed from the old Term System to that of three Semesters which offered a wider range of subjects.

An introductory Entomology Course, ET 101, was started under the capable teaching of Geoff Monteith and I helped Prof plan and develop two new courses in Medical Entomology. Existing courses in Ecology, Physiology, and Behaviour were expanded and improved and it was not too long before our postgrad population was considerably altered.

Gordon Hooper continued his capably run courses in Pest Management, even getting us a Gammacell. Under Doug's guidance the Department became a wonderful place in which to work. He became President of the Entomological Society of Queensland, roping me in as Secretary, and was also active in The Australian Entomological Society. A Departmental cricket team was formed which spread mayhem among those of other Departments, he played an active role and behind his back he was given the name *"The Bald Eagle"*.



Sadly his wonderful wife and pillar of support, Gladys, died from cancer in 1973. He was devastated by this great loss but even then he was soon back in harness teaching and working as hard as ever although the stress showed.

While in Kenya Tony Harthoorn had deserted his wife Babs and their three children to run off with another woman. Until she returned to Britain the Kettles remained close friends with Babs and the children. While on leave in Britain Doug and Babs linked up and on his return he called me to his office to tell me he planned to marry again.

Yes 'twas the wonderful Babs a worthy successor to Gladys, we met her soon after arrival and were most impressed by this no-nonsense lady. At their wedding at Christ Church St Lucia they were given to each other by the six children, now united in one Family, and Babs gave Doug new life and vibrancy. Since then we have shared in all significant events of our lives, both sad and joyous, his funeral being the most recent.

After 5 years Doug quit as Departmental Head but continued as Professor for many more years before becoming Emeritus Professor Kettle. The Department continued to grow and produce significant research under his successors until it became a victim of Economic Rationalism. During his tenure he also began work on his magnum opus textbook of Medical Entomology which went on to a second edition. Doug leaves behind a string of disciples among whom I am proud to be one but his great legacy is his book, may it continue playing a role in saving human lives for many years ahead.

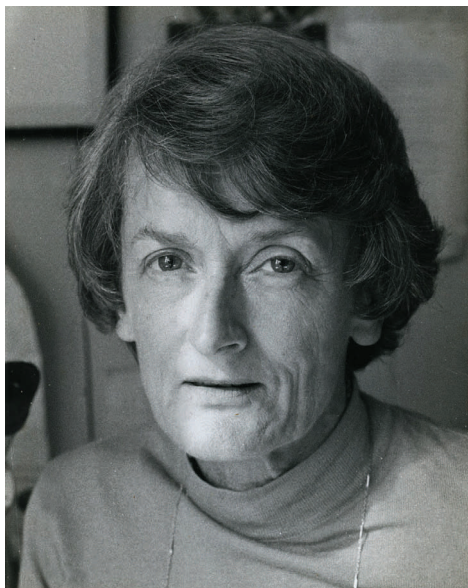
**ACKNOWLEDGEMENT.** Most of the information on Prof's earlier years and career was summarised from "My Life Part One - The First 50 Years" written by Prof and privately circulated to friends. Subject to the approval of St John Kettle I can email a copy to any interested colleague personally known to me.

**Tom Mc Rae**  
thomas.mcrae@bigpond.com



Prof. Kettle, circa 1990's.

**VALERIE ETHEL (TODD) DAVIES**  
**29 Sept 1920 – 29 Oct 2012**



*Preamble*

The funeral of arachnologist, Valerie Davies, was held in Brisbane on 7 November 2012. Here we reproduce the first three paragraphs of her daughter Rosemary's eulogy which outlines her education and the milestones of her life. This is followed by Geoff Monteith's eulogy which relates incidents from her career at the Queensland Museum.

*Rosemary Davies:*

Val was born Valerie Ethel Todd on 29th September 1920 in Wanganui, New Zealand. She was the third of four sisters - after Marjorie and Prue and before Heather - and is the last of the four to go. Her parents, James and Ethel, were farmers and her early childhood was spent on the family farm in Makirikiri. In many ways it sounds like a rural idyll: collecting the eggs, playing tennis and riding a pony to primary school with Heather on the back.

Val was rapidly identified as the brains of the family. She went to grammar school in Wanganui and then on to the University of Otago in Dunedin where she studied zoology and received Bachelor and Masters degrees in Science and, incidentally, met her future husband George. She was awarded a travelling scholarship to study for a Doctorate of Philosophy at Somerville College in Oxford and went there immediately after the end of the war. She returned to New Zealand in 1948 to marry George. They settled in Dunedin where George taught dentistry at the university and they had their three children: Christopher in 1950, John in 1952 and me in 1956.

George was appointed as Professor of Dentistry at Queensland University in 1963 (later Deputy Vice-Chancellor) and the family moved to Brisbane. Val had various part time appointments at Otago and Queensland universities during this period usually as what was called a "demonstrator" - though not the kind George was trying to keep out of the administration buildings. She always retained an interest in zoology, and spiders in particular. It wasn't until 1972, when she was 52 that she was appointed as Curator of Arachnids at the Queensland Museum. This was a job she absolutely loved. She retired reluctantly in 1985 but continued working on an honorary basis for almost another 20 years

*Geoff Monteith:*

Val Davies was the Queensland Museum's Curator of Arachnology for 13 years and then worked steadily on her spider research for another 20 years as an honorary. She was our "spider lady" and her career was curiously parallel with that of another great Australian "spider lady", her friend Barbara York Main, in Perth. Both were wives of Senior University Academics and juggled productive research careers against the demands of raising a family and being hostess to the social demands of high-level academic circles. They were friends, but

also great competitors. Luckily, perhaps, they were on opposite sides of the continent, and they had also chosen very different groups of spiders to work with. Barbara went for the big heavyweight mygalomorph spiders while Val made her name in sorting out tiny litter spiders in obscure families. She described more than 150 new species.

Val arrived at the QM in 1972, at a time when the demands of a young family were mostly behind her and she was ready to bring her spider research from the back burner to the front hot plate. The Museum had just begun a new era. There was a new young Director and a whole slew of young, well-qualified Curators had been appointed: Michael Archer, Martin Bishop, Jeanette Covacevich and so on. Though twice their age, Val was always incredibly young in outlook, and she slipped into the group with ease.

Val had come from a camping and tramping background in New Zealand and loved the bush. Soon after she arrived at the Queensland Museum, the Commonwealth announced the establishment of the funding body called ABRs, the Australian Biological Resources Study, and Val was part of a consortium of Queensland Museum and Australian Museum biologists who got substantial funding from ABRs to do a survey of rainforest fauna in eastern Australia. This set her off on years of adventurous group field trips to every corner of eastern Queensland, and enabled her to set the foundations for the magnificent arachnid collection that the Museum holds today and which, under the care of her successor Robert Raven, has generated research around the world on our spider fauna.

I came to the Queensland Museum a little later, in 1978, but I shared an interest in rainforests and Val and I had a few adventures in exciting places. I'm going to relate a couple of little stories from those trips, which tell us a little bit about this wonderful woman we honour today.

VAL WAS DETERMINED TO ALWAYS DO WHAT WAS RIGHT AND FAIR, BUT SOMETIMES HAD DEVIOUS WAYS OF ACHIEVING THIS.

You may have heard of EARTHWATCH, it's an American organization which supports scientific field research by mobilising volunteers who pay a share of the overall costs of the expedition and then have the privilege of being there to help as volunteers. Because they have to pay quite a bit for that privilege Earthwatch volunteers tend to be rather wealthy, often American, and sometimes a bit spoilt and demanding. To keep them happy, most EARTHWATCH expeditions house their volunteers in nearby tourist hotels or safari camp situations. In 1981, Val, John Stanisic and I were leaders of one of the first EARTHWATCH expeditions in Australia. Its object was to survey invertebrates along a transect line made by a Telecom Cableway which ran through trackless rainforest from sealevel to 1560m at the top of Queensland's highest mountains, just south of Cairns. The expedition lasted three weeks and the party consisted of about 20, with half being volunteers and the half being QM staff and visiting scientists. Sexes were about equal in both groups. There was no nearby accommodation for the volunteers, besides, we wanted them to be working in the rainforest at night, not cavorting in the hotel pool after a nice dinner. So the whole operation was run under canvas, with bigger tents at the bottom basecamp, and smaller back-pack tents when we hiked or rode the cable car to the series of higher level camps. Food was all camp cooking. It was all pretty tough stuff. Val was 62 and revelled in it, humping her pack up the mountain with the best of us. Toilet arrangements were a bit of an issue, especially at the basecamp where the whole party was often in residence simultaneously. There was a single septic toilet in the building housing the cable car motors, used by the men who came each day to operate the cable car. I had negotiated use of this

toilet but it was quite beyond the capacity of the whole party. So we decided that the females could use the indoor toilet and I dug a pit toilet away in the rainforest for the males and put a canvas screen around it. About a week into the adventure a deputation of middle-aged male volunteers came and complained that the “girls” were getting it too easy and they also wanted use of the indoor toilet. (Some of them had already been sprung sneaking into the indoor loo!). We leaders had a “council of war” and we made a Solomonic decision which Val suggested and wickedly went along with. That night I called the whole group together and told them that because it was impossible for the whole party to use the indoor toilet, the only alternative was to offer them another way of dividing the party between the two toilet options. What we proposed was that ALL the volunteers (read “wimps”), both male and female, use the indoor toilet, and ALL the Aussie staff (read “tough”), both male and female, use the bush toilet. Val, our 62 year old refined lady, piped up that she was quite happy to go bush to preserve the sensibilities of the poor, slighted male volunteers. I told them to consider this alternative and let me know if they wanted to change to this toilet regime. A couple of hours later the deputation of male volunteers came to tell me that, on reflection, they were happy to stay with the existing regime after all...and they meekly went off to the bush toilet, in the rain and wind, for the rest of the trip. Val was wickedly gleeful about the outcome.

VAL WAS ONE OF THOSE ANNOYING PEOPLE WHO ARE ALWAYS NEAT AND TIDY, NO MATTER HOW ROUGH THE CIRCUMSTANCES. WE HAD EVIDENCE THAT SHE MAY HAVE HAD SOME MAGIC ON HER SIDE IN THIS RESPECT ON A FIELD TRIP TO NORTH QUEENSLAND IN 1984.

An ambitious young Army officer had approached the Queensland Museum with an offer to assist us on an expedition to

anywhere, as long as it was exciting and challenging for his men. Val and I had dreamed of sampling the high parts of Hinchinbrook Island, so we suggested that. Within weeks, it seemed, our party of about 8 scientists from the Museum and QIMR were being strapped into side seats of a military Hercules transport plane at Amberley, with about 20 soldiers and a mountain of gear, en route to Townsville. From there we went by UNIMOG all-terrain trucks to a saltwater inlet south of Cardwell, one of the UNIMOGS being hopelessly bogged in the process. There, the army launched small inflatable Zodiacs for the crossing of the sea channel to Hinchinbrook. The soldiers had been issued tourist brochures showing the idyllic sandy beaches of the seaward coast of Hinchinbrook. Little did they know we were headed for the vast mangrove swamps of the landward side, where there were possible routes to the highlands. As leaders, Val and I were in the advance party to choose a campsite, and I remember us staring at each other across the boat, with raised eyebrows, as it slowly deflated on the way across. After frantic radio signals we were transferred to another craft in the nick of time. The field work went well, and we got good collections. On returning to the mainland ten days later, Val had an important “Plan B” to pursue. This was to try to collect and see alive for herself a fabulous new primitive spider, later to be called *Macrogradungula*, which we had discovered on top of a high mountain near Tully a year earlier. We convinced the army to supply rations and a few men to accompany our small party up our old flagged track. It was late November, unbearably hot, and we did the back-pack hike up almost 1000 metres vertical in one horrific day. Val was 64 and carried her full pack. The army guys, forced by regulations to carry heavy radio gear to maintain “coms” (army shorthand for communications), almost died. They had to return down the next day because they couldn’t get “coms” from the top camp, but we camped a couple of extra nights and Val





TOP. Valerie Todd, second from the left, with her three siblings and mother at Wanganui, New Zealand, about 1925. BOTTOM. That photograph! Val Davies, centre, in the field at Iron Range, Cape York Peninsula, with malacologist, Martin Bishop (right), and assistant Paul Filewood (left).

successfully got the spider she lusted after. During the first day we wandered round the forest, leaving our dirty, sweaty clothes from the ascent in our pup tents. Now, there's a pesky large orange blowfly, called *Calliphora augur*, in those high altitude forests, and it has the disarming ability of finding smelly things, and laying copious eggs on them, which rapidly hatch to maggots. Coming back to camp at the end of the day we found our clothes, and even our sleeping bags, a wriggling mass of eggs and maggots. But Val, serene and sweat-free as always, went completely unscathed. Not a single item of hers was fly-blown. This just went to show that, as with many other aspects of her life, there were no flies on Val Davies!

HOW WOULD VAL LIKE TO BE REMEMBERED? SHE GAVE US A HINT HERSELF.

During the 1980s we finally outgrew the old 1890s Queensland Museum Building next to the Exhibition Ground in Fortitude Valley and plans were made for a new building at Southbank to be occupied in 1986. This seemed an appropriate time to publish an account of the history of the QM since its foundation 125 years earlier. Patricia Mather, was commissioned to co-ordinate the volume and I got the job of writing the history of the terrestrial invertebrate sections, which included Arachnology. We needed photographs of all the key players, and of course Val Davies was one we needed for the spider section. Going through the Museum's photo archives I came across a striking photograph taken in the rain forest at Iron Range in remote Cape York Peninsula in 1977, during one of those early ABRs group expeditions. It shows three people. In the centre is Val, leaning against a small tree, in field clothes and with her spider-collecting pooter round her neck. She is fresh and cool and positively beaming. She is flanked by two young men. On her left is an uncomfortable and overheated looking Martin Bishop, an

English malacologist who spent a couple of years at QM. But VERY close on Val's left, and looking like a young Marlon Brando with dreamy eyes and positively exuding sensuality.....and wearing nothing but a jaunty cap and impossibly brief shorts held up by a heavy belt slung four inches below his navel, is Paul Filewood, a young chap who worked as a groundsman at the museum and sometimes helped on field trips. He's wearing an identical pooter to Val's around his neck, clear evidence that he was helping her. Goodness! I thought, that would be a great picture to use....but would Val agree? With some trepidation, I took the photograph to her and asked if we could use it in the DEFINITIVE history of the Queensland Museum. Yes, she said, that was EXACTLY how she wanted to be remembered. She was inordinately proud of that photograph.

So let's remember Val Davies that way: in the bush - in control - equipped to catch spiders - and flanked by a couple of spunky young men!

Geoff Monteith

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## NOTICES

### Death of Harry Standfast

Members will be saddened to learn of the death of former president, Harry Standfast AM, who passed away suddenly on Friday 2nd November at the age of 82. Harry was extremely well known for his work on mosquito and *Culicoides* transmission of diseases in humans and livestock and had worked in PNG in the 1950s, as well as later for QIMR and CSIRO. An obituary will appear in a future issue.

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### Seeking *Coequosa australasiae* (Sphingidae) eggs

Several years ago I contacted the society requesting assistance during the early



stages of this project. As a direct result of the society spreading that research request to its membership, we were able to document the previously unknown life history of *Tetrachroa edwardsii*.

The manuscript of our book on the Australian hawkmoths (Sphingidae), co-authored by Max Moulds, David Lane, and myself, is progressing well and now stands at about 450 pages. Unfortunately, and to some degree surprisingly, we have not been able to document the complete life history of the large and rather iconic, *Coequosa australasiae*. It is becoming a bit of a concern because we know that the current understanding of the species' life history needs to be modified. As a result, we need to rear the species from the egg and carefully document, both technically and photographically, each larval stage. I would ask you to spread the word through your membership to be on the lookout for a female

during the upcoming season. The females will readily lay in a paper sack without any nectar or larval foodplant inducement. The ideal situation would be that newly laid eggs would be overnight expressed. Any help that you can offer would be greatly appreciated.

**Jim Tuttle**

Phone: 0432 649 286

Email: [jtuttle164@hotmail.com](mailto:jtuttle164@hotmail.com)

### **Lygaeoidea (Hemiptera) Specimens Wanted: Dead or Alive**

Dr Renfu Shao at the Uni of Sunshine Coast seeks help in obtaining Lygaeoidea specimens for DNA work. Specimens preserved in ethanol or alive would be suitable.

Please call Renfu at 0450542980 or send an email to [rshao@usc.edu.au](mailto:rshao@usc.edu.au) if you can help.

# **WANTED ALIVE!**

## ***HARMONIA CONFORMIS***

### **FOR SEMIOCHEMICAL RESEARCH PROJECT**



### **PLEASE CONTACT HELEN NAHRUNG**

### **0421 514 393**

### **HNAHRUNG@USC.EDU.AU**

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## **Nominations for 2013 Office Bearers of the Entomological Society of Queensland**

Members are invited to use the following form to nominate office bearers for the Entomological Society of Queensland Inc. for 2013.

Nominations should be sent via email, fax or post and be referred to the:

**Honorary Secretary, Entomological Society of Queensland**

**PO Box 537, Indooroopilly QLD 4068**

Please return forms by end of January 2013.

A list of nominations received will be circulated in issue 10 of the News Bulletin, and an election held at the Annual General Meeting in March 2013. In the absence of a nomination for any particular office, the president may receive nominations at the Annual General Meeting.

Positions to be filled are as follows:

- Senior Vice President
- Honorary Secretary
- Honorary Treasurer
- News Bulletin Editor
- Councillors (3 positions)
- Business Manager (Australian Entomologist)

The Entomological Society of Queensland functions effectively because members play an active part in the Society. All members are encouraged to nominate for positions on the Council of the Society. If you want to know more about any of the Council positions, please contact one of the existing Council members listed on the front inside cover of the News Bulletin.

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## **Office Bearer Nominations Form 2013**

I nominate (name)

.....

For the position of

- Senior Vice President
- Honorary Secretary
- Honorary Treasurer
- News Bulletin Editor
- Councillor
- Business Manager (Australian Entomologist)

On the Council of the Entomological Society of Queensland

Nominated by

.....

Seconded by

.....

I accept the nomination

.....

(nominee signature)

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## **Entomological Society of Queensland 2013**

### **\$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 General Meeting and is then invited to present a summary of their research at the June 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 2012 or 2013 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 Simon Lawson  
at [simon.lawson@daff.qld.gov.au](mailto:simon.lawson@daff.qld.gov.au)

Closing date for submissions is Friday 12th April 2013

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## **Entomological Society of Queensland**

### **2013 Student Award Entry Form**

Name

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Title of thesis or report

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Degree

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Supervisor

---

Date of Examiners report or grading

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Return address for thesis/report (if applicable)

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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 : [simon.lawson@daff.qld.gov.au](mailto:simon.lawson@daff.qld.gov.au)**

**or by mail: Simon Lawson**

**DAFF — Forestry**

**Level 3A West**

**Ecosciences Precinct**

**GPO Box 267**

**Brisbane Q 4001**

# 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

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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 2012**

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

MAR—Monday 12th	Lyn Cook	AGM and President's Address
APR—Tuesday 10th	Stephen Cameron	Insect Evolutionary Genomics
MAY—Monday 14th	Bill Palmer	Weed biocontrol. Where to now?
JUN—Tuesday 12th	Notes & Exhibits / Student Award Presentation	
AUG—Tuesday 14th	Ross Wylie	Qld's fire ant war—upping the ante
SEP—Tuesday 11th	Owen Seeman	Australian Herbivorous Mites
OCT—Tuesday 9th	Jonathan Darbro	QMIR — mosquito control
NOV—Tuesday 13th	Maria Fernanda Cardoso	Museum of Copulatory Organs
DEC—Tuesday 11th	Notes & Exhibits and Xmas BBQ	

## **SOCIETY SUBSCRIPTION RATES**

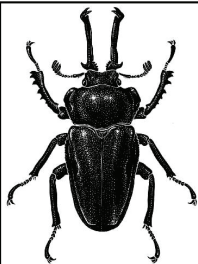
<b>GENERAL:</b>	Person who has full membership privileges	<b>\$30pa</b>
<b>JOINT:</b>	Residents in the same household who share a copy of the <i>News Bulletin</i> , but each otherwise have full membership privileges.	<b>\$36pa</b>
<b>STUDENT:</b>	Students and others at the discretion of the Society Council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

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## **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



## NOTICE OF NEXT MEETING

*Tuesday 11th December 2012, 5pm*

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## NOTES & EXHIBITS and CHRISTMAS BBQ

(meal \$5 - drinks available for purchase)

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Ecosciences Library  
Ground Floor, Ecosciences Precinct  
Boggo Road, DUTTON PARK

*More venue details available at*  
<http://www.esq.org.au/meetings.html>

**ALL WELCOME - please sign in at front desk**

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## NEXT NEWS BULLETIN

Volume 40, Issue 9 (December 2012)  
due late January

## CONTRIBUTIONS WELCOME

**DEADLINE - 4pm Friday January 11th, 2013**

Send your news/stories/notices to the editor  
( [justin.bartlett@daff.qld.gov.au](mailto:justin.bartlett@daff.qld.gov.au) )