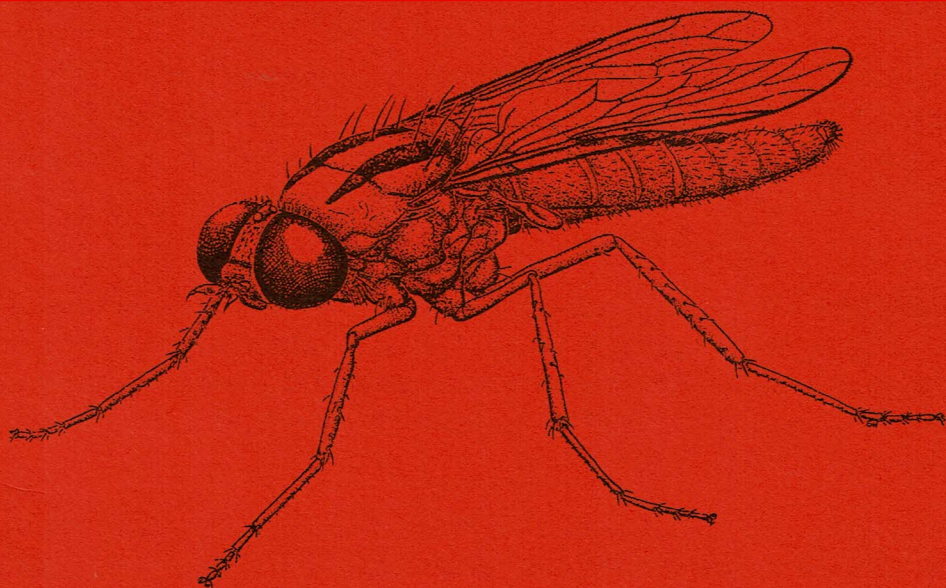




ENTOMOLOGICAL SOCIETY OF QUEENSLAND NEWS BULLETIN



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The **ENTOMOLOGICAL SOCIETY OF QUEENSLAND**, since its inception in 1923, has striven to promote the development of pure and applied entomological research in Australia and particularly in Queensland. Membership is open to anyone interested in Entomology. 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 in the Entomology Department, The University of Queensland at 6.30 pm on the second Monday of each month (March to June, August to December each year). Visitors and prospective members are welcome. Membership information can be obtained from the Honorary Secretary or other office bearers.

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 of the Australian region, including New Zealand, Papua New Guinea and islands of the south western Pacific. The journal is published in four parts annually.

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

COVER: A stiletto fly belonging to an undescribed genus and species of Therevidae (Diptera: Asiloidea) drawn by Shaun Winterton. Shaun and David Yeates are currently working on the systematics on this family, which is extremely diverse in the woodland and semi-arid habitats of Australia.

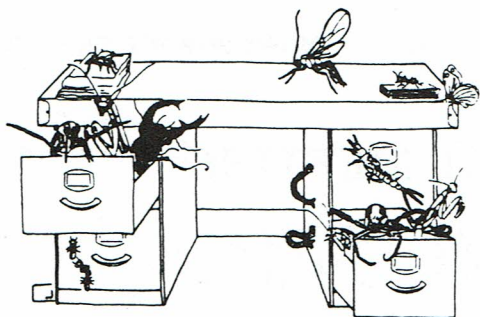
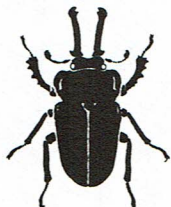


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The issue of this document does **NOT** constitute formal publication for the purposes of the "International Code of Zoological Nomenclature 3rd edition 1985". Authors alone are responsible for the views expressed.



GENERAL MEETING

Minutes of the General Meeting of the Entomological Society of Queensland Inc. held in Room 402, Hartley Teakle Building, University of Queensland, on 11 August 1997, at 6.30pm. Chaired by D. Yeates.

Attendance: L. Barton Browne, C.J. Burwell, C.M. Burwell, J. Christensen, S. Evans, E. Exley, S. Francis, D.S. Kettle, C. Lambkin, J. Lamy, A. Loch, E.N. Marks, D. Merritt, L. Miller, P. Mottram, L. Muir, H. Nahrung, C. Palmer, E. Reye, O. Seeman, A. Skivington, D. Walter.

Visitors: K. Latiner, D. Lice, N. Power, H. Proctor, B. Russell, C. Themsen, B. Weiss, A. Zwick.

Apologies: J. Christensen, E. Exley, T. Withers, D. Yeates.

Minutes: The Minutes of the last General Meeting were circulated in News Bulletin Vol. 25, Issue 3. It was moved C. Lambkin, seconded D. Walter that the Minutes be accepted.

Nominations:

Dr George Hangay
80 Gondola Road
Narrabeen NSW 2101

Nominated by L. Muir
Seconded by M. Moulds

Mr Eric Chitra
1 Kirralee Drive
Robina Island Q 4226

Nominated by D. Merritt
Seconded by E. Reye

Dr Tomonari Watanabe
CTPM/CSIRO
Meiers Road
Indooroopilly Q 4068

Nominated by P. Room
Seconded by T. Heard

In accordance with the Society's rules, these candidates will be considered for election at the next General Meeting.

Elections: The following nominations were received at the May General meeting and circulated in News Bulletin Vol. 25, Issue 4.

Jeff and Angela Skevington
4/5 Montrose Road
Taringa Q 4068

Nominated by D. Yeates
Seconded by G. Daniels

Dr Heather Proctor
Dept. of Entomology
University of Qld. 4072

Nominated by D. Walter
Seconded by D. Yeates

Dr Jenny Ovenden
Zoology Dept.
University of Qld. 4072

Nominated by G. Monteith
Seconded by C. Burwell

Beth Russell
130 Livesay Road
Moggill Qld. 4070

Nominated by C. Burwell
Seconded by L. Muir

The nominees were elected by a show of hands.

General Business:

The meeting was reminded that the next General Meeting in September is the Perkins Memorial Lecture to be given by David Rentz, CSIRO Canberra. The title of the lecture is 'The world's most unusual Gryllacridid - and other reasons to visit Queensland'.

Main Business:

Stuart Bunn

Director of the Centre for Catchment and In-Stream Research
Griffith University

"The role of aquatic insects in river food webs"

This talk focussed on the use of stable isotope analysis to determine the primary source of dietary carbon in aquatic invertebrates.

Much of Stuart's research has focussed on aspects of aquatic ecosystem function. This includes a long-term interest in the study of stream and river ecosystems and more recently, research on coastal marine ecosystems. Stuart has research projects underway at a series of catchment sites across Australia in collaboration with research groups, management agencies and local community groups.

In addition to his research on aquatic ecosystem function, Stuart has maintained an active interest in community ecology, with a particular focus on the factors that influence the structure and dynamics of stream benthic communities. This includes a recently completed project on responses of stream invertebrates to discharge related disturbance.

Stuart has also developed a collaborative program of research with A/Prof J. Hughes (Griffith University) on gene flow and dispersal among populations of stream invertebrates in small streams of the Conondale Ranges in south-east Queensland and, more recently, those in the Tully-Millstream area, far north Queensland.

Q. What are the implications for the blue-green algae from primary production?

A. A major influence of the algae is temperature, and the fact that it can grow in low light levels. The pastoral industry has been operating in this system for a long time and there has been no evidence of major slicks of blue-green algae as seen in the Darling River system. The important thing

from a management point of view is that, if most of the primary production in the river is happening in the littoral zone, then factors that affect the water's edge should be considered, ie water levels and trampling by stock.

Q. You mentioned that there have been proposals for cotton farming, on the Cooper system in particular. What implications do your findings have for the viability of these schemes, and for the health of the river systems should the farms go ahead?

A. There are big questions like what happens when you change the cycles of boom and bust? These river systems (Diamantina, Paroo, and Cooper) have the most unpredictable hydrological regimes of any river in the world. Any irrigation system that demands regularity of supply has no place in these systems. In addition, any regulation of flow in the rivers will favour exotic species. It is not feasible to build dams because of the 1:7,000 slope, so the proposals involve large on-farm storage and opportunistic flood plain harvesting of water. The reality is that Lake Eyre is at the bottom of these systems and the Cooper runs through the Coongie Lakes system and the whole productivity of these areas and the water bird ecology depends on how much water actually makes its way through.

The Vote of Thanks was given by Shaun Winterton. Shaun thanked Stuart for an interesting insight into the ecology of Australian freshwater systems. There seems to be many more questions than answers, and even in the South-East Queensland corner there is a lot of work to be done.

There being no further business, the President closed the meeting.

NOTICE OF FUTURE MEETINGS

8 September: Perkins Memorial Lecture, David Rentz presents 'The world's most unusual Gryllacridid - and other reasons to visit Queensland'

13 October

ENTOMOLOGICAL SOCIETY OF QUEENSLAND

PERKINS MEMORIAL LECTURE

*A biennial invited lecture to honour the memory of
Frederick Athol Perkins, first Head of University of
Queensland Entomology Department.*

SPEAKER

David Rentz
CSIRO Division of Entomology
Canberra

TITLE

*The World's Most Unusual Gryllacridid
- and Other Reasons to Visit Queensland*

WHEN

Monday, 8th September, 1997, at 6.30 pm.

WHERE

*Room 323, Hartley Teakle Building,
University of Queensland, St. Lucia*

SPONSORS

*Arrest-A-Pest Pty. Ltd.
Rhone-Poulenc Rural Australia Pty. Ltd.
Ciba-Geigy Australia Ltd.
CRC for Tropical Pest Management*

Drinks and nibbles will be served from 6.00 pm
in the Foyer adjacent to Room 323

EVERYONE WELCOME



PEOPLE AND PROJECTS



NEWS FROM QDNR

Alan Fletcher Research Station, Sherwood.

Julianne Farrell from Tropical Weeds Research Centre in Charters Towers has a ten-week appointment to rear *Homichloda barkeri* (Coleoptera: Chysomelidae), a prickly acacia biocontrol agent, through their quarantine generation, and to send eggs to Ruth Huwer in Charters Towers for mass-rearing. Further shipments of the beetle, and of geometrid larvae were received from Kenya.

Graham Donnelly's travel to PNG for the ACIAR Siam weed project was postponed, so he is heading to Quilpie to monitor release sites of a mesquite bruchid, *Algarobius prosopis*.

Michael Day travelled to Monto in July to release *Ectaga garcia* (Lep: Oecophoridae) moths on lantana, and to monitor *Charidotis pygmaea* (Col: Chysomelidae) release sites at which he found first-generation adults and feeding damage at several sites. Michael is presenting a seminar on lantana biocontrol in Fiji and will discuss possible agents for release in Fiji.

Wendy Lee, ANIC, Canberra spent four weeks based in Mareeba DPI. She was working with Ross Storey and Chris Reid (JCU) on the CRC-TREM dung beetle databasing project, namely transferring label data and beetle identifications to computer. Rumour has it that she went to ball room dancing one evening in Atherton but found the standard too high from what she was used to in the nations capital.

Barry Moore will be returning to Canberra soon. He found beetle activity slow in Julatten but spent some time with the Hasenpusch's in Garradunga and gossiped with Ross Storey in Mareeba.



NEWS FROM THE UNITED STATES
DEPARTMENT OF AGRICULTURE
Australian Biological Control Laboratories

Dr. Kerrie Davies, a nematologist from the University of Adelaide, visited the labs during July to look at fleshy, tip galls on *Melaleuca quinquenervia*. These galls, which are being evaluated for their biological control potential, are formed by a unique association between *Fergusonina* flies and *Fergusobia* nematodes. Kerrie will describe the nematodes while her colleague, Dr. Gary Taylor will be describing the flies.



NEWS FROM THE DEPARTMENT
OF ENTOMOLOGY
The University of Queensland

Jennifer Marohasy has been appointed as the new Environmental Manager for Canegrowers, who are based in Brisbane. Jennifer will be developing and overseeing the implementation of an Environment Management Strategy based on the environment policy of the Queensland Cane Growers Council.

David Yeates spent a week in Tasmania recently searching for the very tiny, wingless scorpion fly, *Apteropanorpa*, which hunts on the surface of snow. The material was needed for molecular studies of the Mecoptera. Despite the lack of snow, David, together with Peter McQuillan from Tasmania, maintained his remarkable collecting record and found not one, not two, but 50 of the fantastic beasts sheltering on vegetation in high altitude regions. Some were even brought back to the laboratory alive and beautifully photographed. The *Apteropanorpa* Dave and Peter collected so many of is a new species.

Chris Lambkin was delighted to receive the Entomological Society of Queensland Student Award at the June Notes and Exhibits Meeting for her Honours thesis: Characters, congruence, species-groups and bee flies (Diptera: Bombyliidae).



NEWS FROM THE QUEENSLAND MUSEUM Brisbane

Mr Graham Wishart, Gerringong, NSW, visited in for a week in late July in search of truth on the taxonomy of the trapdoor spider genus *Misgolas*, with little doubt the most speciose mygalomorph genus in Australia.

Ms Joy Lisa Boutin, visiting from New Zealand for the month of August, is working on the taxonomy of *Clubiona* in Australian and New Zealand.

Robert Raven made a visit to Pentlands and Townsville in early August to check traps at a Giraultian type locality of spiders and peer down some tarantula burrows.

Robert Raven and Phil Lawless made a trip with David Wilson and Dr Paul Aylewood, Department of Drug Design & Development (UQ), to Fraser Island to clear traps and locate more Funnelwebs for venom research.

Dr Akio Kimura, Laboratory of Medical Zoology, Osaka Prefectural Institute of Public Health, visited Robert Raven on August 15 to discuss

aspects of the Redback invasion of Osaka and a recent envenomation at Osaka airport.



NEWS FROM THE CRC FOR TROPICAL PEST MANAGEMENT

The Centre's IPI program has received a DIST International Science and Technology Program Major Grant to help fund collaborative research between the Centre, Dr Andrieu at INRA, Thiverval-Grignon, France, and Dr Prusinkiewicz at the University of Calgary, Canada. The title of the project is Virtual Agriculture: Synergy between France, Canada and Australia, and the aim of the collaboration is to understand how dynamic plant architecture, canopy microclimate, and pests interact, leading to improved management of pests and more powerful research tools for plant science. The IPI program has also had an enquiry from New Zealand's HortResearch about possible collaboration on using the "virtual plant" approach to help in maximising the contribution that natural plant defence processes can make to the production of fruit crops, particularly kiwifruit.

Gunter Maywald and Bob Sutherst leave soon for Kenya for 3 weeks to run two workshops, one for IGBP-GCTE/WHO/FAO on comparative epidemiology of vector-borne diseases in crops, livestock and humans. The other is a Tick Modelling Workshop for the joint ACIAR-funded ICIPE-CSIRO project to contribute to ICIPE's development of an electronic pest information network for Africa.

Toni Withers recently attended the New Zealand Plant Protection Society's 50th annual conference "Plant Protection in a Green Oasis" at Lincoln, Christchurch. A large portion of the conference focussed on recent international advances in plant protection and integrated pest and weed control. Toni presented a paper within the "non-target effects of biological control introductions and pesticides" symposium. Her talk was entitled "changes in plant attack over time in no-choice tests: an indicator of specificity", and appeared to be well received. International visitors to the conference included Dr Jim Cullen and Dr Jeff Waage from IIBC, U.K.

Research Request Flower Flies of Australia

Over the coming year or so, a new overview of the flower flies of Australia will be finalized. How comprehensive and useful this overview will be will depend on the cooperation provided by Australians. Over the past decade, the Australian flower fly fauna has been reviewed. Nomenclature and type specimens have been revised. A working CONSPECTUS has been prepared, which summarizes what is known as well as provides descriptions of numerous new genera and species noted. This work is currently based only on the material in the Australian National Insect Collection and Australian Museum, as well as those exotic collections holding types.

The working CONSPECTUS is available to all who respect intellectual property rights (Wells & Wellington need not apply). The CONSPECTUS provides identification keys to all known Australian flower flies, complete nomenclature and literature review, bibliography and a minimum of illustrations.

I appeal to flower fly collectors to assist with this important project. In particular, I seek your support of loans of specimens and information on distribution and biology. All assistance will be acknowledged. Authorship will be shared for major contributions, such as new species. For example, Susan Evans has now completed a revision of the genus *Episyrphus*, which she will publish shortly. Also, David Yeates and I are working on a LUCID version to the common Australian flower flies.

Please feel free to contact me for further information.

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NHB-168 Smithsonian Institution	cthompso@sel.barc.usda.gov
Washington, D. C. 20560	

Also see our Diptera WWW site at <http://www.sel.barc.usda.gov>

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NOTICE OF NEXT MEETING

The next meeting of the Society will be held at 6.30 pm on **Monday 8 September** in Room 323, Hartley Teakle Building, UQ.

The main business will be the **Perkins Memorial Lecture**: David Rentz presents 'The world's most unusual Gryllacridid - and other reasons to visit Queensland'. Refreshments will be served before the meeting at 6.00 pm in the foyer. **VISITORS ARE WELCOME!**