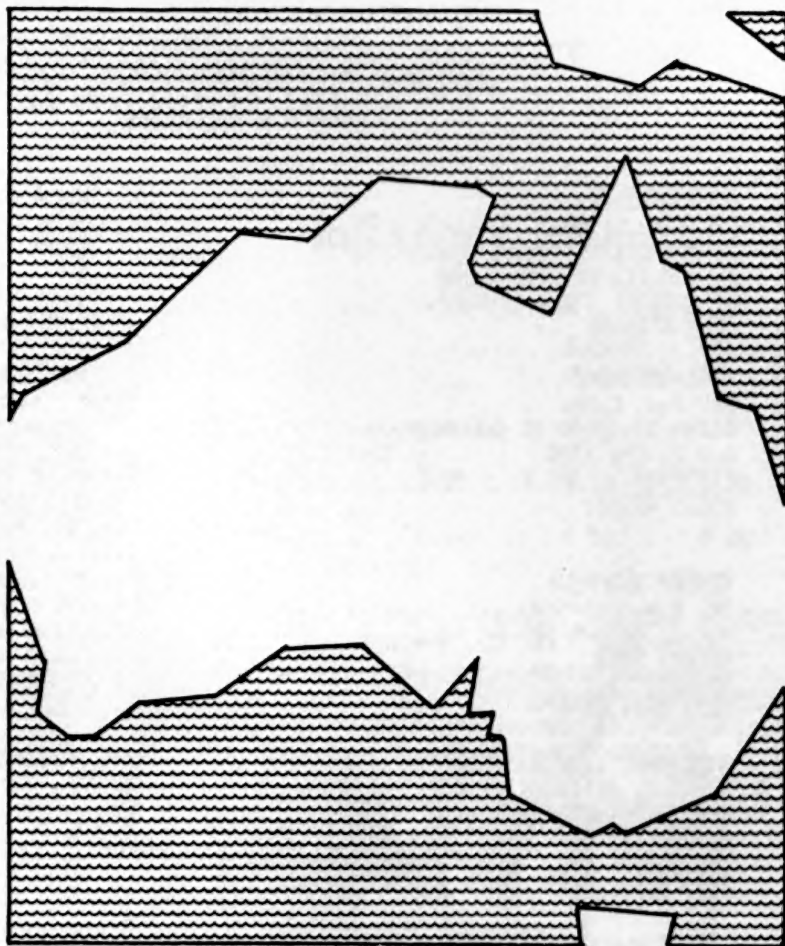
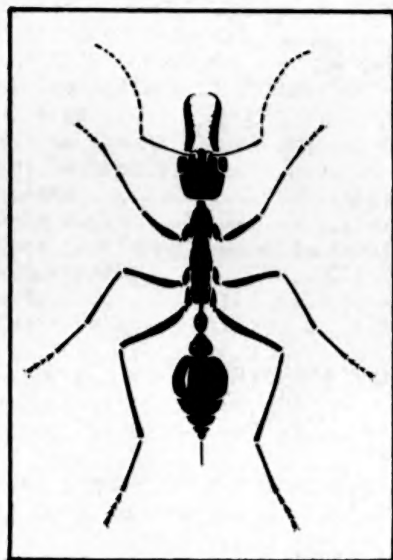


**Australian  
Entomological  
Society**



# **NEWS BULLETIN**

**VOLUME 22, PART 1, FEBRUARY 1986**

Registered by Australia Post  
PUBLICATION NO. QBG3480  
Price \$2.00

**AUSTRALIAN ENTOMOLOGICAL SOCIETY**  
**OFFICE BEARERS**

**PRESIDENT**

Dr. E.M. Exley  
Department of Entomology  
University of Queensland  
ST. LUCIA. QLD. 4067.  
(07) 3773658

**SECRETARY**

Dr. P.B. Carne  
CSIRO Division of Entomology  
G.P.O. Box 1700  
CANBERRA. A.C.T. 2601.  
(062) 465077

**CHIEF EDITOR**

Dr. N.W. Heather  
D.P.I. Entomology Branch  
Meiers Road  
INDOOROOPILLY. QLD. 4068.  
(07) 3779382

**TECHNICAL EDITORS**

Dr. I.D. Galloway  
D.P.I. Entomology Branch  
Meiers Road  
INDOOROOPILLY. QLD. 4068  
(07) 3779421

Dr P.G.Allsopp  
Department of Primary Industries  
EMERALD. QLD. 4720

Dr. M.P. Zalucki  
Entomology Department  
University of Queensland  
ST. LUCIA. QLD. 4067.  
(07) 3773640

**ASSISTANT SECRETARY**

Dr I.D.Naumann  
CSIRO Division of Entomology  
GPO Box 1700  
CANBERRA.ACT.2601

**ASSISTANT TREASURER**

Mr R.S.McInnes  
CSIRO Division of Entomology  
GPO Box 1700  
CANBERRA.ACT.2601

**VICE PRESIDENT**

Dr. G.H.L. Rothschild  
CSIRO Division of Entomology  
G.P.O. Box 1700  
CANBERRA. A.C.T. 2601.  
(062) 465861

**IMMEDIATE PAST PRESIDENT**

Professor T.O. Browning  
Entomology Department  
Waite Institute  
PMB No 1  
GLEN OSMOND. S.A. 5064.  
(08) 797901

**TREASURER**

Mr. T.A. Weir,  
CSIRO Division of Entomology  
G.P.O. Box 1700  
CANBERRA. A.C.T. 2601.  
(062) 465293

**BUSINESS MANAGER**

Mr. J.F. Donaldson  
D.P.I. Entomology Branch  
Meiers Road  
INDOOROOPILLY. QLD. 4068.  
(07) 3779419

**PUBLIC OFFICER**

Dr. P.B. Carne  
CSIRO Division of Entomology  
G.P.O. Box 1700  
CANBERRA. A.C.T. 2601.  
(062) 465077

**NEWS BULLETIN EDITOR**

Dr. G.B. Monteith  
Queensland Museum  
Gregory Terrace  
FORTITUDE VALLEY. QLD. 4006.  
(07) 522716

**ASSISTANT NEWS BULLETIN EDITOR**

Mr G.I.Thompson  
Queensland Museum  
Gregory Terrace,  
FORTITUDE VALLEY.Q.4006

(Office bearers continued on rear cover)

# AUSTRALIAN ENTOMOLOGICAL SOCIETY NEWS BULLETIN

## TABLE OF CONTENTS

Executive Report.....	2
New Members.....	2
Changes of Address.....	3
Other Items of Interest.....	4
Notice of 17th Annual General Meeting.....	5
Call for Nominations of Office Bearers.....	5
Regional News	
Australian Capital Territory.....	6
Western Australia.....	7
Queensland.....	8
Tasmania.....	10
Northern Territory.....	11
South Australia.....	11
Victoria.....	12
New South Wales.....	13
News from Affiliated Societies	
Entomological Society of Queensland.....	14
Royal Zoological Society of NSW.....	15
Entomological Society of Victoria.....	15
Coming Events.....	15
Vegetation Remnants: Their Role in Nature Conservation.....	16
New Books.....	17
Sale of Hobart Conference Proceedings.....	17
Coming Events.....	17
An Update from the Bishop Museum.....	18
Australasian Arachnological Society.....	18
Proxy Appointment Form.....	19
Office Bearer Nomination Form.....	20

## COPY DEADLINE FOR NEXT ISSUE

Material for publication in the May issue of the News Bulletin should be sent to the Bulletin Editor at his address opposite to arrive by Friday, April 25.

## NOTICE

MATERIAL IN THIS BULLETIN DOES NOT NECESSARILY REPRESENT THE VIEW OF THE AUSTRALIAN ENTOMOLOGICAL SOCIETY, AND SHOULD NOT BE REFERRED TO OR REPRODUCED WITHOUT PERMISSION OF THE AUTHOR OF THE MATERIAL

## BULLETIN ADVERTISING

	Single Issue	Four Issues
Full page (15 cm wide x 17 cm)	\$ 50	\$150
Half page (15 cm x 8.5 cm)	\$ 30	\$ 90
Quarter page (7 cm x 8.5 cm)	\$ 20	\$ 60

In addition, inserts will be distributed with the Bulletin at \$35 per time. These should be supplied folded so as not to project beyond the Bulletin pages and should be printed with "Supplement to the Australian Entomological Society News Bulletin".

All advertising must be approved by the Executive but should be submitted first to the News Bulletin Editor.

## 1986 SUBSCRIPTIONS

Society subscriptions became due and payable on January 1st. A subscription notice was included with the last News Bulletin (November 1985). Note that concession rates apply to subscriptions paid before March 1. Current rates are:

	Normal Rate	If paid before March 1, 1986
Ordinary members	\$30.00	\$25.00
Student members	\$15.00	\$12.50
Retired members	\$15.00	\$12.50
Joint members	\$35.00	\$30.00

If you have not paid yet then send yours at your earliest convenience to the Treasurer:

Mr T.A. Weir  
CSIRO Division of Entomology  
G.P.O. Box 1700  
CANBERRA ACT 2601

## EXECUTIVE REPORT

### Meetings

The Executive met on 11 November and 12 December 1985, and on 9 January 1986.

### Membership

Since the last Executive Report, 9 applications for membership were received, and 6 new members were elected. One death (of Dr T.E. Woodward) was recorded and 2 resignations accepted. At its January meeting the Executive terminated 12 memberships under Constitution Clause 21(c). Over the quarter there was a net loss of 10 members from 694 to 684, their geographical distribution now being:

QLD	157	VIC	81	TAS	25
NSW	155	SA	68	NT	15
ACT	109	WA	29	OVERSEAS	45

As a consequence of increased membership, both Queensland and NSW are now eligible for 3 (currently 2) Regional Councillors and Victoria will be eligible for 2 (currently 1). These vacant positions are listed in the "Call for Nomination of Office-bearers" elsewhere in this News Bulletin.

## NEW MEMBERS

We welcome the following new members:

### Elected 11 November, 1985

Mr G. Farrell, 7 Woodland Street, Doncaster, VIC. 3108. Grant is interested in Coccoidea, forest ecology and host-parasite relations. (Student Member).

Mr A. Fernandes, 2 Second Street, Taillem Bend, SA 5260. Altino is a secondary school student with a hobby interest in ants. (Student Member).

### Elected 12 December 1985

Ms R-M Coy, B.Sc. (Hons.), Zoology Department, Monash University, Clayton, VIC. 3168. Robin-Maree is a PhD student who is studying changes in soil invertebrate populations following bushfires in E. regnans montane forest. (Student Member).

### Elected 9 January, 1986

Mr J.W.O. Ballard, BSc (Hons.), MSc, DIC, Department of Entomology, University of Queensland, St Lucia, QLD 4067. John has worked on biting Diptera with the WA Department of Public Health. (Student Member).

Mr G.A. Milledge, BSc (Hons.), 56 Wilgah Street, East St Kilda, VIC. 3182. Graham is a part-time survey assistant in the Museum of Victoria. He is currently working on the taxonomy of Mantodea in collaboration with John Balderson (CSIRO Division of Entomology).

Mr R. de Keyzer, BSc, 3 Cornell Street, Blacktown, NSW 2148. Roger is interested in the taxonomy of Cerambycidae.

### Resignations

The Executive accepted resignations from Mr N.S. Le Souef (Victoria) and Mr J.W. Zhao (overseas).

### Death

The Executive recorded with deep regret the death of Dr T.E. Woodward on 22 November 1985. An obituary notice will appear in the next News Bulletin.

### Termination of Membership

The Executive terminated memberships of the following under the provisions of Constitution clause 21(c).

Mr T.S. Angeles (NT)  
 Mr M. Cermak (QLD)  
 Mr A.I. Doronila (VIC)  
 Mr P.R. Dyer (SA)  
 Mr D.J. Ferguson (ACT)  
 Mr G.R.J. Forbes (QLD)  
 Mr L.R. Greenup (NSW)  
 Mr G.P. Ingram (NSW)  
 Mr J. Jobe (O/seas)  
 Mr A.A. Kirk (O/seas)  
 Mr M.R. Perry (VIC)  
 Dr D.E. Swincer (SA)



## CHANGES OF ADDRESS

The following changes have been recorded since the Executive Report in the News Bulletin for November 1985. State of previous residence is shown in brackets.

- Dr J.P. Aeschliman, CSIRO Biological Control Unit, 335 Avenue Abbe Paul Parguel, 34100 Montpellier, France (France).
- Mr M. Arura, Buba Agricultural Research Centre, P.O. Box 1639, Lae, Papua New Guinea (PNG).
- Dr M.J. Beech, General Hospital, Nambour, QLD 4560 (QLD).
- Dr K.R. Brown, Department of Applied Biology, NSW Institute of Biology, P.O. Box 123, Broadway, NSW 2007 (NSW).
- Mr M.C. Calver, 51 Doney Street, Alfred Cove, WA 6154 (WA).
- Mr D.J. Dall, Department of Plant Pathology, Waite Institute, PMB 1, Glen Osmond, SA 5064 (SA).
- Mr J.H. Dove, Africa Sugar Consultants Ltd., 3rd Floor, Labama House, Sir William Newton Street, Port Louis, Mauritius (Mauritius).
- Mr K. Farrow, 18 Kerrie Place, Hornsby, NSW 2077 (QLD).
- Mr H.G. Greening, B.C.R.I., RMB 10, Rydalmere, NSW 2116 (NSW).
- Dr P.J.M. and Ms P. Greenslade, c/- CSIRO Division of Entomology, GPO Box 1700, Canberra, ACT 2601.
- Dr V.E. Harris, Entomology Department, 320 Agriculture Building, University of Arkansas, Fayetteville, AR 72701 USA (QLD).
- Dr E.P. Hodgkin, 86 Adelma Road, Dalkeith, WA 6012 (WA).
- Dr G.H.S. Hooper, Australian Plague Locust Commission, Department of Primary Industry, Barton, ACT 2600 (QLD).
- Dr P.A. Horne, 16 Nicholson Street, Research, VIC. 3095 (previously Mr)
- Mr D.K. Mardon, 22 Craignavie Estate, Killin, Perthshire FK21 8SH, UK (UK).
- Dr E.A. McMahan, Biology Department 010A, University of North Carolina, Chapel Hill, NC 27514, USA (USA).
- Dr R.E. Mesibov, P.O. Box 349, Smithton, TAS 7330 (TAS).
- Mr A.T. Mills, 2/89 Canberra Avenue, Griffith, ACT 2603 (ACT).
- Mr A.S. Molyneux, c/- 16 Willunga Street, Brookfield, QLD 4069 (SA).
- Mr C. Nadolny, 14/30 Haynes Street, Penrith, NSW 2750 (NSW).
- Mrs B. Pope, c/- 4/33 Glassey Street, Red Hill, QLD 4059 (NT).
- Mr B.A. Pyke, 11 Broadland Street, The Gap, QLD 4061 (QLD).
- Mr L.A.J. Radunz, 10 Dancer Street, Collingwood Park, QLD 4301 (ACT).
- Dr P.L. Robertson, Department of Organic Chemistry, University of NSW, P.O. Box 1, Kensington, NSW 2033 (NSW).
- Miss J.E. Shorthose, 20 Montrose Avenue, Netherby, SA 5062 (NT).
- Dr S. Simpson, Zoology Department, Oxford University, Oxford UK (UK).
- Dr A.V. Spain, CSIRO Davies Laboratory, PMB Aitkenvale, QLD 4814 (QLD).
- Dr J.T. St Ledger Moss, 32 Tooth Avenue, Paddington, QLD 4064 (NSW).
- Mr J.A. Sutherland, c/- British Embassy, Diplomatic Enclave Ramna 5, P.O. Box 1122, Islamabad, Pakistan (UK).
- Mr L.J. Wilson, CSIRO Division of Plant Industry, Cotton Research Centre, P.O. Box 59, Narrabri, NSW 2390 (QLD).
- Dr J. Woodward, Plant Cell Biology Research Centre, School of Botany, University of Melbourne, Parkville, VIC 3052 (NSW).

## OTHER ITEMS OF INTEREST

### Replacement of Councillors

With the departure overseas of Technical Editor Dr Vivienne Harris and ACT Regional Councillor Dr Barry Longstaff, the Executive appointed Dr Peter Allsopp and Dr Joanne Daly to these offices until the 17 AGM. The appointments were approved in a postal ballot of Councillors.

### Mackerras Medals

The Society's stock of 14 Mackerras Medals for Excellence in Entomology are examined annually. The 1985 examination revealed some deterioration, and the whole stock was very kindly treated and restored to first class condition by staff of the Royal Australian Mint.

### New Miscellaneous Publication

The Executive has agreed to publish the proceedings of a symposium on arachnology which will form part of the Scientific Meeting to be held in conjunction with the 17 AGM at Tanunda, South Australia, 10-15 May, 1986.

### Membership of FASTS

At a meeting held in Canberra on 12 November 1985, the Federation of Australian Scientific and Technological Societies was formed by 56 Foundation Member Societies with an aggregate membership in excess of 51000. This Society was represented by the Secretary who, with the prior approval of the Executive, nominated it for Associate Membership of the Federation.

### Location of Next Headquarters

A postal ballot of Councillors was held to determine where the Society's Executive should be located following the 17 AGM. There was unanimous support for a proposal that headquarters of the Society should remain in Canberra until the 19 AGM in 1988.

### Entries for Awards

Several nominations are expected for the 1986 award of the Mackerras Medal for Excellence in Entomology and the President has been asked to appoint a panel of judges. The name of the winner will be announced at the 17 AGM.

Similarly, quite a few entries are expected for the Competition for Biological Illustration and the Executive is currently forming a panel to adjudicate on the entries.

Regrettably no entries are expected for Student Awards for Outstanding Research.

### The Wells and Wellington Affair

Following on the note under this heading in the previous "News Bulletin" members may be interested in a further development.

We have learnt that the Introductions to the reptile and frog catalogues of the National Photographic Index of Australian Wildlife carry the following disclaimer "In the interests of rational taxonomy, and in accordance with the opinion of the Australian Society of Herpetologists, none of the nomenclatural changes privately published by R.W. Wells and C.R. Wellington are recognised in this work".

## AUSTRALIAN ENTOMOLOGICAL SOCIETY



## 17th A.G.M. & SCIENTIFIC CONFERENCE

to be held at the

**WEINTAL HOTEL/MOTEL  
TANUNDA, BAROSSA VALLEY  
SOUTH AUSTRALIA**

**10 - 15 MAY, 1986**

## THE AUSTRALIAN ENTOMOLOGICAL SOCIETY INC.

### NOTICE OF 17TH ANNUAL GENERAL MEETING

The Society's 17th Annual General Meeting will be held at Tanunda, South Australia, at 8.00 p.m. on Monday 12 May, 1986.

#### AGENDA

1. Opening.
  - \* 2. Announcements of Proxies and apologies.
  3. Deaths of Members recorded since the 16th AGM.
  4. General Announcements.
  - \*\* 5. Minutes of 16th AGM and business arising from them.
  6. Executive Annual Report, including Chief Editor's, Treasurer's, Business Manager's and News Bulletin Editor's Reports, and business arising from them.
  7. Competition Awards.
  8. Matters arising from 31st Council Meeting.
  9. Subscriptions for 1987.
  10. Appointment of Auditor.
  11. Announcement of Office-bearers and Councillors for 1986-87.
  12. Interim Report of Organising Committee for 17th AGM.
  - \*\*\* 13. Other business as arranged.
  14. Location and dates for 18th AGM.
  15. Closure.
- \* Nominations of proxies, on the proforma provided in this News Bulletin, should reach the Secretary prior to the opening of the meeting.
- \*\* Published in the News Bulletin for August 1985.
- \*\*\* Members wishing to propose additional items for discussion should advise the Secretary not later than 12 April, 1986.

### CALL FOR NOMINATIONS OF OFFICE BEARERS

The following offices will fall vacant at the Society's 17th Annual General Meeting on 12 May 1986. Nominations for election should be made on the form provided at the back of this News Bulletin and should reach the Secretary not later than 2 April 1986.

<u>Vacant Offices</u>	<u>Present Incumbent</u>
President	Dr E.M. Exley*
Vice-President	Dr G.H.L. Rothshild***
Secretary/Public Officer	Dr P.B. Carne***
Treasurer	Mr T.A. Weir***
Chief Editor	Dr N.W. Heather**
Business Manager	Mr J.F. Donaldson**
Technical Editor	Dr I.D. Galloway**
Technical Editor	Dr P.G. Allsopp**
Technical Editor	Dr M.P. Zalucki**
News Bulletin Editor	Dr G.B. Monteith**
Regional Councillors	
QLD	Mr C.G. Freebairn***
QLD	Mr A.P. Walford-Huggins***
QLD	Vacant****
NSW	Mr J.A. Macdonald***
NSW	Dr P.G. Gregg***
NSW	Vacant****
ACT	Mr D.B. McCorquodale***
ACT	Dr J.C. Daly***
VIC	Dr P.P. Stahle***
VIC	Vacant****
TAS	Mr P.B. McQuillan*
SA	Dr D.J. Cooper***
WA	Dr T.F. Houston*
NT	Mr T.L. Fenner***

- \* not eligible for re-election
- \*\* eligible for re-election for 2 further annual terms
- \*\*\* eligible for re-election for 1 further annual term
- \*\*\*\* new position as 3 States are now entitled to an additional Councillor
- + Council has decided, by a unanimous postal vote, that the Executive should remain in Canberra for a further 2 annual terms. Consequently a nominee for this office must be a resident of the ACT (Constitution Clause 24).

## REGIONAL NEWS

### AUSTRALIAN CAPITAL TERRITORY

#### CSIRO Division of Entomology

Members of the Division have made a number of important trips overseas in the last three months. In late November, Max Whitten travelled to Paris to join Peter Room and Jim Cullen and the Whitlams, Gough and Margaret, for the presentation of the UNESCO Science Prize for the Division's work on salvinia control. Max also attended a consultative meeting of the International Atomic Energy Commission in Vienna on the genetic sexing of medfly. In Spain, he assisted Keith Wardhaugh to turn over many dung pads and got a little too close to a Spanish bull. After a quick visit to Jim Cullen in Montpellier, he met Paul Dunn of USDA Biological Control of Weeds group in Rome where he discussed a cooperative venture on thistles. In Bangkok, he had discussions about ACIAR projects on mimosa and stored grains.

Richard Milner visited Thailand for three weeks in October and November to investigate the possibility of joint research projects on the use of pathogens in the control of insect pests. In early December, Bob Winks and Jonathan Banks attended an ASEAN Food Handling Bureau/ACIAR meeting to set up draft codes of practice for fumigation of grain and related products in SE Asia. Jonathan then flew to Arkansas in the USA to act as a consultant to Commodity Storage Ltd. Jonathan has also received a grant from ACIAR to study the combination of sealed storage with cooling for preserving the quality of barley. Barry Longstaff is about to depart with his family for twelve months at the University of Reading to study aspects of insecticide resistance in stored grain beetles.

The pheromone confusion technique developed by George Rothschild and Richard Vickers is now being used successfully by Biocontrol (Aust) in trials in California for use against oriental fruit moths. There are plans to market the product there next year.

The Division has had a large number of short-term visitors. Those to Stored Grains include: Mr Sirajuddin Ahmed, Deputy Secretary, Ministry of Food and Agriculture,

Pakistan in early December; two separate visits of delegates from China, one group at the beginning of November who attended a training course and Mr Jiang Xi, Deputy Minister, Ministry of Commerce, who headed a delegation of grain storage specialists in late November.

In late November, Prof Chen Ruilu and Prof Bao Xiang-zhi of the Entomology Laboratory Academy of Agricultural Sciences, Jilin Province, visited the radar unit (Alistair Drake) and Roger Farrow to discuss research on insect migration, especially armyworms, *Mythimna* spp. They accompanied a group of scientists from the Division on a radar trip to the Narrabri/Wee Waa area to see the radar in action.

Chris Moran, Department of Animal Husbandry, University of Sydney will be undertaking molecular studies with the Molecular Biology group for nine months with Alan Lohe while Wayne Knibb, University of New England, visited Bill Kalionis in the same group.

John Brettell, Chief Research Officer, Cotton Research Institute, Zimbabwe stopped over on October as part of his trip to Australia.

#### CSIRO Australian National Insect Collection

Bart Hacobian, Peter McQuillan and Ian Common visited to work with Ebbe Nielson on the 'Checklist of the Lepidoptera of Australia'.

'Sterility and the nature of species' was the title of a talk presented by Hugh Paterson, University of Queensland, to the Division.

The taxonomy group has heard talks on diverse subjects: Evan Sugden, Australian Museum, spoke on 'Current research on honeybees and active bees in New South Wales parklands'; Tim New, Latrobe University, on 'Recent work on Australian Neuroptera'; Dr W.D.L. Ride of Canberra C.A.E. on 'The Code of Nomenclature and its further development'; and Dr David Weissman, San Francisco Academy of Sciences, USA, on North American camel crickets (*Stenopelmatidae*).

Dr Lawrence Mound, Keeper of Entomology (BMNH), and Ms Annette Walker, DSIR, Auckland, visited Canberra in connection with their work on Thysanoptera.

Dr Jason Weintraub, Cornell University, USA, visited Canberra after completing field work in Indonesia. Dr Weintraub was



particularly interested in ANIC holdings of Agathia (Geometridae) and some butterflies.

Dr Rudolf Hauser, University of Berne, Switzerland, visited Mary Carver in connection with his behavioural studies of water bugs, in particular Gerris (Aquarius).

November was a popular month for cicada people to visit the ANIC: Max and Barbara Moulds, from Sydney, and Tony Ewart, from the University of Queensland. The Moulds were en route to collecting in "the West" and Dr Ewart was examining types in connection with his interests in cicada acoustics and taxonomy.

In December a contingent of lepidopterists (Ebbe Nielsen, Marianne Horkak and Ted Edwards) and a hymenopterist (Ian Naumann) spent a week examining and photographing types in the South Australian Museum, Adelaide.

In December, Bob Taylor and John Balderson spent 10 days on the Atherton Tableland. John was collecting mantids and other Orthoptera and Bob, ants. They were accompanied by Dr H. Imai, National Institute of Genetics, Mishima, Japan, and Dr M. Kubota, Kanagawa, Japan, who were obtaining ant material for chromosomal studies.

#### Department of Zoology, ANU

Penny Gullan, Milton Lewis and Chris Reid have recently returned from a collecting/museum visiting trip to South Australia and southern Western Australia. They were looking for Coccoidea, Lepidoptera and Coleoptera.

David McCorquodale & Joanne Daly  
Regional Councillors

## WESTERN AUSTRALIA

Social exchange between local entomologists was facilitated by a Society dinner at the University of Western Australia on 27 November. It was attended by 34 people (both members and non-members) including Secretary Phil Carne. The highlight of the evening was an address entitled "Insect Sex" presented by Dr John Alcock of Arizona State University.

Professor Robbin Thorp of the University of California, Davis, visited W.A. for three

weeks in October and November. He spent two weeks in the field with Terry Houston, discussed honeybees and pollination with various locals, and participated in an all-day seminar on honeybees in national parks organised by the Department of Conservation and Land Management. The seminar was aimed at airing and resolving some of the conflicts between the needs of beekeepers and conservation.

Dr Bill Wirth of U.S. Department of Agriculture and Alan Dyce (CSIRO Division of Tropical Animal Science, Sydney) visited Perth briefly in November during their travels in search of certain biting midges.

#### CSIRO Division of Entomology

Graham Hall is enrolling for a MSc Degree at the University of Western Australia to study the taxonomy and biology of Philonthus species (Staphylinidae) in south-western Australia.

Phil Carne and other senior scientists reviewing CSIRO conservation research visited the Division in November.

#### Department of Agriculture

Phil Michael attended the Heliothis workshop in New Delhi in November. The week-long workshop which was concerned primarily with biological control was attended by 70 people from ten countries and its proceedings may be published by mid 1986. Phil also visited institutes concerned with bio-control in Bangalore.

Stewart Learmonth, formerly Kununurra, is spending January and February in the Perth headquarters prior to moving to Manjimup.

#### Murdoch University

Jenny Davis and student Faye Christidis are being funded by the Department of Conservation and Land Management to undertake a study over summer of larval chironomids at Forrestdale (south of Perth). They will examine densities and the effects of spraying. Two Honours students will commence projects on macro-invertebrates (including insects) of Perth wetlands and Lake Muir in the South-West.

#### W.A. Institute of Technology

Tony Postle and Jon Majer made separate visits to the Kimberley Division in January to sample insect populations. Tony visited the Argyle Diamond Mine to collect generally and

Jon visited the Department of Agriculture's Research Station near Kununurra to assist a student establish baseline data studies on ant populations in orchards.

Terry Houston  
Regional Councillor



#### Queensland University, Entomology Department

Hugh Paterson has taken over as Head of Department from Elizabeth Exley.

Peter Allingham was awarded the F.A. Perkins Prize for senior entomology for 1985.

Myron Zalucki visited CSIRO in Canberra in mid-January to discuss pheromone trapping of *Heliothis* spp. in the channel country of western Queensland and New South Wales with Joanne Daly and Peter Gregg.

David Yeates has taken over from Valerie Davies as Chairman of the Taxonomy Discussion Group in Brisbane. In February he visits ANIC in Canberra for a week to study their holdings of the bee-fly genus, *Comptosia*.

A dinner was held in mid-December to farewell Gordon Hooper who has now departed to take up his new appointment in Canberra as Director of the Australian Plague Locust Commission.

#### Alan Fletcher Research Station

Rachel McFadyen visited central Queensland in January to inspect *Parthenium* insects.

Facilities at Sherwood are soon to be extended by the addition of a new glasshouse.

#### Forestry Department

Ross Wylie visited Atherton recently to advise on the control of a golden mealy bug (*Nipaecoccus aurilinus*) outbreak responsible for complete defoliation of fourteen ha. of Hoop, Bunya and Kauri pines. Long accepted as a pest of nursery stocks, this is the first major outbreak in Queensland plantations. Ross feels that drift from aerial spraying of nearby agricultural land, freed the mealy bugs of

their major predator, the mealy bug ladybird (*Cryptolaemus montrouzieri*). Control was established as ladybird populations recovered.

Murdoch De Baar and Michael Hockey are currently working on mangrove insects with a view to publish on new records.

#### Queensland Institute of Medical Research

Ian Fanning and Pippi Mottram are acting as consultants for the combined shires Moreton Bay mosquito control programme which is using Abate granules as a larvicide.

#### CSIRO Long Pocket Laboratories

"The Beak" put in an accommodating appearance in Brisbane in January. Don Sands (not "the Beak") assures me that this sighting is too far south for a new southern limit and that a wheeled conveyance was probably employed by this wayward ♀ (he was that close) *Libythea geoffroyi* ("the Beak"). Despite his vast experience and professed sobriety Don was unable to capture 'the Beak'. He has informed his co-butterfly watchers to be on the alert!

Wendy Forno visited Botswana for three weeks in January-February to advise their Department of Water Affairs on biological control of *Salvinia* in the Zambesi river system.

Matthew Purcell has been sampling in south-eastern Queensland for biocontrol agents of *Hydrilla verticillata* which is a serious weed in Florida, USA. He has collected a variety of insects feeding on *Hydrilla* and is collaborating with Richard Kassulke in a study on the biology of a promising weevil *Bagous australasiae*.

#### CSIRO - Buffalo Fly Group

Rob Sutherst, Gunter Maywald and Rob Floyd will attend ACIAR's workshop on "Tick Ecology and Epidemiology of Tick-borne Diseases in Africa" in February. The workshop is part of a collaborative modelling project between CSIRO and several African countries. During his visit Rob will participate in a formal review of the project, act as a consultant to FAO for their review of their regional projects and further the collaborative research as well as visiting tick projects in Zambia. Gunter will spend a week studying the activity of dung fauna in the Zambesi Valley.

Griffith University

Naomi Pierce has returned to Australia from Oxford University with research assistant Andrew Berry and two of her graduate students, Matthew Bayliss and David Nash. Naomi and Andrew will be working on a comparative study of lycaenid life histories in relation to myrmecophily and amino acid production of *Jalmenus* spp. Matthew and David will be working on lycaenid-ant population biology and nitrogen nutrition respectively. They will be at Mt Nebo until April and can be contacted on (07) 289 8254.

Rhondda Jones from James Cook University will give the Michael D. Sabath Memorial Lecture and a research seminar in March.

Mark Pillsworth and Yves Basset started PhD's this semester. Mark, formerly from University of Queensland Zoology Department is working on dispersal patterns in insect populations including ant lions and glow-worms. Yves completed his MSc at the University of Neuchatel, Switzerland, in 1984 and has worked at the British Museum since. His PhD is on community ecology of arthropods in a rainforest canopy.

DPI Entomology Branch

Ken Houston will be spending 3 weeks collecting on islands of Torres Strait as part of Quarantine surveillance. Islands visited will be Thursday Island, Saibai and Moa. Ken and his assistant Eddie Hamacek leave on January 28th, returning mid-February.

Bryan Cantrell flies to Canberra for 2 days, January 21 and 22, to attend a meeting of the Common Names Board in place of Ian Galloway who is temporarily incapacitated by a squash induced back injury.

Tom Passlow visits Canberra for 2 days February 13 and 14 to attend a meeting of the Plague Locust Commission.

Ian Galloway becomes a full time university student in February this year. He has approval to study the one year, post-graduate, course in Business Administration.

Dick Drew and Alan Allwood are in Malaysia commencing the ACIAR fruit fly project. This much delayed trip began on January 7, they are expected to return on 21 January.

Marlene Elson-Harris starts work in the DPI labs at Indooroopilly in March this year. She will be working for 18 months, examining the feasibility of taxonomy of the larval stages of the Tephritidae.

Dr Elmo Hardy will be visiting the DPI labs in April and May, working with Dick Drew on a review of the Tephritini.

Peter Allsopp recently completed his move from Toowoomba to Emerald.

A major workshop on Horticultural Entomology has been organised for January 29 to 31 at Mapleton. The aims are to review present pests and research programmes and to develop a three year programme of research and extension to meet the perceived future needs of horticultural pest control. The meeting will be lead by a number of DPI entomologists and 'outsiders' including George Rothschild, Don Sands and Myron Zalucki.

Congratulations to Graham White, who was awarded a PhD in November 1985 for his thesis "Population dynamics of *Tribolium castaneum* (Herbst.) with implications for control strategies in stored wheat".

Neil Heather will be attending a meeting of the Atomic Energy Commission in Chiang Mai, Thailand, for one week at the end of February in relation to his work using irradiation as a means of post harvest treatment for pests of fresh fruit.

Queensland Museum

The new Museum building is near to occupancy on the south bank of the Brisbane River and the first sections are scheduled to start to move in late February. The insect collections are scheduled (in theory anyway) to start to move in mid-April and hopefully we'll all be safely esconced in the new quarters by October 2 when the gala opening ceremony takes places.

A great loss was the death of Tom Woodward on November 22. He had worked at the Queensland Museum as an Honorary Associate since his retirement from the University of Queensland in 1983. An obituary will appear in the next News Bulletin.

Valerie Davies retired from the curatorship of arachnology in late 1985 and after a very brief disappearance turned up to continue her Museum work on spiders as an Honorary Associate. Congratulations to Robert



Raven who has now been appointed to the Curatorship and to Julie Gallon who has become the arachnology technician. Robert and Julie are spending 10 days collecting in the Eungella and Byfield districts in February.

Visitors to the Museum have included Allen Sundholm and Joe Bugeja of Sydney visited the Museum in January to look at jewel beetles on their way back from a trip to North Queensland; Gunther Theischinger, also of Sydney, visited to look at tipulid flies in January. Gordon Gordh, of University of California at Riverside, spent two weeks here in late December visiting Ted Dahms in connection with their collaborative studies on the Encyrtidae.

Geoff Monteith attends a workshop on the International Code of Zoological Nomenclature being convened by the Bureau of Flora and Fauna in Canberra in mid-February.

Chris Freebairn  
Regional Councillor

#### NORTH QUEENSLAND NEWS

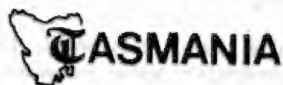
Rudy Mulder, a beetle enthusiast from Wollongong visited the DPI labs in Mareeba while on a collecting trip to the north.

Ross Storey, of DPI Mareeba, spent a week at the South Australian Museum in December studying A.M. Lea's types of the chrysomelid genus, *Rhyparida*. These beetles are pests of grasses in northern Australia and their taxonomy has been confused in the past.

Mark Heap from the Western Australian Department of Agriculture, based at Kununurra visited Mareeba as part of a tour of entomological laboratories. He had talks on a variety of crop situations shared with North Queensland.

Geoff Monteith (Queensland Museum), David Yeates (University of Queensland) and Doug Cook spent 3 weeks collecting in the north in November/December. They worked at Mt Finnigan, south of Cooktown, and at Iron Range.

Allen Walford-Huggins  
Regional Councillor



#### Department of Agriculture

Andrew Rath from the University of New England has joined the Department to work initially on the pathogens of root-feeding cockchafer, especially *Adoryphorus couloni*.

Gradon Johnstone attended the AWC-sponsored Symposium on Pasture Production and Utilization at Leura in December where he presented a keynote address on the impact of fungal and viral diseases on pasture.

Aleks Terauds is off to Kashmir again on 18 February for several weeks to advise local apple growers on pest management. Both Aleks and Margaret Williams are involved in lecturing to 16 Indian agriculturists who will spend several weeks in Hobart in February attending an Australian Development Assistance Course in Apple Technology.

An unusually damp and cloudy summer (record wet January in most parts of Tasmania) has upset the phenology of some pests and the consequences are awaited with mixed feelings.

Visitors have been few; Peter Stahle (Victorian Department of Agriculture) made fleeting contact on his way to Antarctica to study mites, and Ebbe Nielsen spent the long weekend in January visiting Peter McQuillan and catching up on hepialid material in local collections. An unwelcome visitor was the rose-grain aphid which was confirmed from Forthside in N.W. Tasmania in late November 1985 and is now widespread in cropping areas of the state.

#### University of Tasmania

Sutohn Suwonbutr from Bangkok, Thailand arrived in January to begin a Ph.D. under John Madden on aphid ecology in relation to the spread of viral diseases in Tasmanian agriculture.

Peter McQuillan  
Regional Councillor





## NORTHERN TERRITORY

### Northern Territory Museum

Mali Malipatil joined the Project Wallace Expedition in northern Sulawesi for six weeks during the second half of 1985. Collecting of lygaeids and reduviids was fairly productive. Species diversity was not as great as expected, but endemism was high. Quite a few new taxa and records are expected when study of the material is complete. Mali also spent a few days examining Heteroptera in the Zoological Museum at Bogor, Java.

The Museum recently acquired a collection of almost 500 set specimens of Malaysian butterflies assembled by W.A. Fleming, author of the 1975 work 'Butterflies of West Malaysia and Singapore'.

### NT Department of Primary Production

Many staff members have been on leave during the summer holiday period. In partial counterbalance, Prof Gordon Gordh of the University of California, Riverside, visited for a week just before Christmas. He was seeking parasites of pink bollworm, but it appeared that host numbers were very low at that time of year so prospects were not good. Ted Fenner volunteered to check towards the end of the wet season.

### NT Health, Medical Entomology Branch

The branch is presently undergoing disruptions with a move to temporary quarters in the old Darwin Police Station, complete with cells. Functions will hopefully be back to normal by February when the former demountable laboratory building is relocated to a new position in the grounds of the Royal Darwin Hospital.

Most of the branch has been recently involved in organisation of larval control of mosquitoes in the suburban swamps around Darwin after large hatches of salt marsh mosquitoes occurred following high tides and early rains. Follow up work on the extensive swamp drainage programme around Darwin is proceeding, with over half of the large coastal salt marsh, Leanyer Swamp, now draining efficiently before salt marsh mosquitoes can reach the painful stage. The recently computerized mosquito monitoring results being

prepared by Graham Dobson indicate a significant decrease in most pest mosquito species numbers, except for the salt marsh mosquito.

Peter Whelan attended the National Vector Control Course in Mildura in November, and three of the participants, Josia Loloma, Samuela Lagilagi and Nur Ali, Health Department Officers from the Fiji Islands, visited the branch in December to inspect local mosquito monitoring and control operations.

Wendy Kelton and Geoff Davis have begun the wet season processing of mosquitoes for virus isolation studies.

Stuart Smith took part in a shipborne vector mosquito and quarantine survey of the north coast of the Northern Territory in November, along with officers of the Commonwealth Quarantine Service, and confirmed the absence of *Aedes aegypti* from the coastal settlements visited.

The branch has recently published a booklet 'Mosquitoes of Public Health Importance in the Northern Territory and their control' and copies are available free from the Secretary, Northern Territory Department of Health, P.O. Box 1701, Darwin.

Ted Fenner  
Regional Councillor



## SOUTH AUSTRALIA

### Waite Institute, Entomology Department

Dr Garrell Long, Washington State University, returned to the US (via Indonesia) after spending three months working with Derek Maelzer on the management of insect communities in mixed cropping systems.

Dr William Kirk (Cambridge University) returned home after spending a year at the Waite working on the ecology of thrips.

The T.O. Browning Medal, an award for academic achievement in Fourth Year Entomology, was awarded in December to David Scobie. Professor Browning presented the medal.

The undergraduate students attended an entomological field camp in November, held at the Waite Institute's field station at Mortlock.

These camps are to become a regular part of the curriculum.

Debra Potter, Jeff Cornwall and Craig Feutrill have been accepted to study for Honours Entomology in 1986.

Andrew Austin undertook some field collecting in Flinders Chase, Kangaroo Island, in January.

Dr Roger Dennis, a former student of the Department and now working in West Germany, gave a seminar to the Department on the glycosphingolipids of Calliphora vicina.

Professor Sir Richard Southwood made a private visit to the Department in January.

On December 12th about 30 members enjoyed a Christmas luncheon at the British Hotel, North Adelaide.

#### SA Department of Agriculture

Steve McKillop has been appointed as an entomologist to work on millipede research.

#### University of Adelaide, Zoology Department

Alice Wells recently met with other trichopterists in Victoria and collected in the Jamieson Valley area.

#### CSIRO Division of Soils

Ken Lee is now Officer-in-Charge of the Soils Section in Adelaide. Ken recently spent two weeks sampling for earthworms in the Townsville region.

#### South Australian Museum

A book launching was held recently to launch two books published by the Museum: Eric Matthews' "Guide to the Genera of Beetles of South Australia, Part 4" and "Common Moths of the Adelaide Region", by Peter McQuillan and Jan Forrest.

David Cooper  
Regional Councillor

## VICTORIA

#### Plant Research Institute, Burnley

Terry Amos has left PRI Burnley, and the Victorian Department of Agriculture and Rural Affairs and been promoted to Manager of the Research, Inventory and Assessment Branch in the Victorian Department of Conservation, Forests and Lands. He will be based, for some of the time at least, at the Keith Turnbull Research Institute, Frankston. A farewell was held at PRI for Terry in November. He began in 1972 as a stored products entomologist, and became Principal Entomologist in 1979. We are sorry to see him leave PRI and wish him well in his new position, where his duties will include such things as the supervision of research into vertebrate pests, weeds and soil conservation and monitoring of pest populations and the effectiveness of field programmes. He will no doubt maintain an entomological interest in the programmes relating to the biocontrol of weeds and pests of crown lands and forests such as Sirex and European Wasp.

After several postponements of the departure date, Peter Stahle left on the "Nella Dan" in early January for his survey of moss-inhabiting invertebrates in the Bunger Hills in Antarctica. We trust the Nella Dan has better luck negotiating the pack ice than on its previous voyage.

Recent visitors to Burnley have included Dr Hafiz Ahmed, Director of the Grain Storage Research Laboratory, Pakistan and Dr David Webley, from the Australian Wheat Board in October. They met with Peter Williams to discuss farm grain storage techniques and grain-insect control.

Dr Song Haeu Young from the Dong Xin Dairy Farm, Jiang Su Province, China visited PRI in November. He was interested in biocontrol projects and spoke to Peter Stahle (red-legged earthmite control) and Peter Williams and Gordon Berg (red-headed pasture cockchafer control).

Peter Williams attended a Symposium on Pasture Production and Utilization, organized by the Australian Wool Corporation at Leura in December. He presented a paper on biological control of pasture pests. Peter Stahle presented a paper on the resistance of white

clover to attack, by the red-legged earthmite, but was unable to attend in person.

John Osmelak visited Murray Fletcher (B.C.R.I., Rydalmere) in November 1985 to discuss leafhopper taxonomy and draft a joint paper on leafhopper occurrences at Tatura over the past 5 years.

Garry McDonald has spent a week at CSIRO Entomology, Canberra with Joanne Daly screening moths of Mythima convecta (common armyworms) for genetic variability. In this study, the technique of electrophoresis is being evaluated for use in broader migration studies of the species.

Dr Maria Mayer de Scurrah from the International Potato Centre (CIP) Peru, a plant breeder and nematologist has returned to Peru after working at PRI during 1985 on breeding resistance to potato tuber moth, Phthorimaea operculella, in tubers for storage. Maria was involved in many aspects of potato production during her stay here, with interests in the areas of tissue culture, pest control, nematology and extension.

#### Museum of Victoria

Arturs Neboiss, Ken Walker and Tim New (Latrobe University) report the exciting news that in January they located a number of breeding populations of the previously thought extinct damsel fly species, Hemiphysia mirabilis, at Wilson's Promontary. This species which hadn't been taken for some 32 years was photographed in December 1983 by Dr Allen Davies, a serious amateur Odonata specialist, whilst on holiday from England. He gave the group the locality of his find. Subsequent to its establishment at Wilson's Promontary the group has made recommendations to the National Parks and Wildlife authorities on the management of these areas. Next spring the group will begin population dynamic and behavioural studies at the sites. Interestingly also at one of the establishment sites the group found the extremely rare day-flying caddis fly, Plectrotarsus gravenhorsti, which was the first caddis fly described from Australia.

#### LaTrobe University, Department of Zoology

Sorting of the material from the 1985 Krakatau trip is underway. It is hoped that a small group may visit the Islands again later this year.

Evan Schmidt is starting postgraduate

work with Prof. Ian Thornton on the Psocoptera of Tasmania.

#### Keith Turnbull Research Institute, Frankston

Ros Shepherd returned from Stellenbosch, South Africa recently after 2 years following the completion of her host-specificity testing of candidate species for Emex control.

Terry Amos transferred to Frankston from PRI, Burnley in November to take up his new appointment (see PRI report).

Gordon Berg  
Acting Regional Councillor

## **NEW SOUTH WALES**

### METROPOLITAN NEWS

#### Department of Agriculture, BCRI, Rydalmere

Changes in the administration of the Institute have been proposed in order to make research workers more accountable for their research in terms of the identified high priority problem areas for agriculture in the state. These changes should not effect the diagnostic and technical services provided by the Institute and most entomologists are confident that their current projects will continue. However, they have adopted a wait and see approach just in case.

Ted Woolcock (CSIRO Canberra) made the first NSW releases of Aphidius rhopalosiphii group near Gosford on 17 December. These parasites have been imported from Chile to combat cereal aphids and future releases in NSW and Victoria are planned for early 1986.

John Osmelak (Plant Research Institute, Victoria) spent two days in mid November with Murray Fletcher discussing leaf hoppers while Ruth Kerrusch (Woden School of Horticulture, Canberra) spent a day, 30 November, with the taxonomists, entomological and mycological, learning about the services available from the Department of Agriculture.

Barry Richardson (ABRS) visited the Institute to see the collections and meet taxonomic staff while holidaying in Sydney. Meanwhile Graham Brown visited entomological institutions while holidaying in Queensland over the Christmas break.



Australian Museum

Renovations to the Museum are underway and excavations have just commenced for the new building.

Dan Bickel has had his post doctoral fellowship extended for a further six months. With Gerry Cassis he visited south Queensland on a collecting trip in November.

School of Public Health and Tropical Medicine

Richard Russell ran his mosquito-vector control course in Mildura during November while Des Foley has been out collecting *Anopheles annulipes* for his sibling species study. David Booth (Horn Island Field Station) has just finished compilation of results for the last season. In addition Cath Richardson has just been appointed for six months on a Commonwealth and State Health Department Research Grant. She will be monitoring mosquito populations in riverine NSW.

Derek Charlwood (PNG) and Jeffrey Hii (Malaysia) visited the School during December.

Sydney University

Michael Gibson is to commence a project with Bayer on the general biology of the Argentine Stem Weevil (*Listronotus bonariensis*). This weevil is an economic pest of bowling greens.

Congratulations to Doug Chappell who obtained first class honours for his work on Symbiosis and Nitrogen Balance in Termites. Doug has been awarded a Commonwealth Scholarship and will commence a PhD this year.

Macleay Museum

Don Horning reports good collecting during his trip to Camden Haven. In addition, he collected many Hymenoptera on the sand dunes near Ocean Beach but unfortunately there were no chrysidids amongst them!

Robbin Thorpe identified all the Pike Bee Collection to genera (some seven thousand specimens) then 2500 to species (*Bombus*) during his stay.

Professor Alan Clements (London School of Health and Tropical Medicine) will spend a day with Don collecting Asilids later in

January.

Forestry Commission

Christine Stone plans to attend a workshop on pine bark beetles for foresters in Mount Gambier, South Australia, in April.

John Macdonald  
Regional Councillor

## NEWS FROM AFFILIATED SOCIETIES



### ENTOMOLOGICAL SOCIETY OF QUEENSLAND

The annual December barbeque, held at the DPI Entomology Branch, Indooroopilly, provided a most enjoyable conclusion to the Society's activities for the year. Fifty-six members and visitors were present for the evening. At the Notes and Exhibits meeting which followed, six short addresses were given on a wide range of interesting topics.

The total membership of the Society at the end of 1985 was 314. It was with deep sadness and a great sense of loss that the Society recorded the death of one of its most respected members, Dr Tom Woodward who passed away in Brisbane on 22nd November, 1985.

The next meeting of the Society will be the Annual General Meeting to be held at the University of Queensland on Monday, 10th March, 1986 at 7.30 p.m. when the Annual Reports for 1985 will be presented and the Council for 1986 elected. The retiring President, Dr Bryan Cantrell, will then give his Presidential Address to be entitled "Entomophagous Insects with particular reference to Diptera".

Nominations for all Council positions, except that of Junior Vice President, may be sent to the Secretary, Mr Greg Daniels prior to the meeting.

Margaret Schneider  
Representative Councillor





## ROY. ZOOL. SOC. OF N.S.W. ENTOMOLOGY SECTION

The Annual General Meeting was held in August 1985 and the following officers elected: Chairman, Clarry Chadwick; Honorary Secretary, Rudy Mulder; Honorary Treasurer, Jack Wilson; Council, Bert Brunet, Phil Congdon, Joe Stivala. Walter Wright gave an autobiographical account of his Thirty Years as an Economic Entomologist in New South Wales.

Owing to reconstruction work on our meeting facilities at the Australian Museum the next meeting had to be postponed until 10 December when John Freeland gave a talk on studies that had been made on Ant Behaviour.

In November and December three papers were published by our members in reputable journals.

C.E. Chadwick  
Representative Councillor



## ENTOMOLOGICAL SOC. OF VICTORIA

### ENTOMOLOGICAL SOCIETY OF VICTORIA

The Zoo le Souef Memorial Award for 1985 has been awarded to Max Moulds, who was selected from a strong field of candidates. Max's record of achievement in entomology, and his practical contributions through publications on several orders of insects, foundation of Australian Entomological Supplies and Australian Entomological Press, make him a very worthy winner.

The Society was well-represented at the recent official opening of the Butterfly House at the Melbourne Zoo, a project in which several members have participated substantially. At the well-attended December meeting, several members showed slides of entomological interest. Forthcoming meetings include Tim New on the Entomology of the Krakatau Islands (February) and a workshop on insect genitalia (May).

Joy Burns  
Representative Councillor

## COMING EVENTS

### 8th International Symposium on Trichoptera

To be held in Lyon, France, 21-26 July, 1986. The Symposium will be held at the Scientific University of Lyon which is located at Villeurbanne, near Lyon. A programme of field excursions and activities for associates is being arranged. Further details and registration forms are available in Australia from:

Dr Arturs Neboiss  
Department of Entomology  
Museum of Victoria  
71 Victoria Crescent  
ABBOTSFORD VIC 3067

### 16th Pacific Science Congress

Seoul, Korea, August 20-30, 1987. Advance information on this major conference has been released. An information booklet can be obtained from:

Organising Committee  
XVI Pacific Science Congress  
Seoul, 1987  
K.P.O. Box 1008  
Seoul 110, Korea

### 9th International Plecoptera Conference 5th International Ephemeroptera Conference

These two important conferences on aquatic insects will be held jointly at Marysville, Victoria, Australia from 18th-24th February, 1987. It is expected that registration for the conference will cost about \$100. Accommodation will be provided at the Marysville Hotel for \$350 for the full week including all meals.

For further information and registration form contact:

Dr I. Campbell  
Water Studies Centre  
Chisholm Institute of Technology  
P.O. Box 197  
CAULFIELD EAST VIC 3145

### Ecological Society of Australia Symposium: Ecology of the Australian Wet Tropics

Brisbane, 25-27th August, 1986.  
Enquiries to: Dr R.J. Kitching, School of Australian Environmental Studies, Griffith University, Nathan, Qld, 4111.

## VEGETATION REMNANTS : THEIR ROLE IN NATURE CONSERVATION

Over much of the world, land clearing has removed most of the natural vegetation, leaving only small remnants of the original vegetation. Areas previously containing important biological resources have been cleared and many plant and animal species are becoming restricted to remnants which now hold a vital store of genetic material. Unlike large areas in which natural processes continue to function, the smaller remnants are subject to a variety of disturbances that generally cause a decrease in the number of species. A workshop convened at Busselton in Western Australia by CSIRO and the Western Australian Department of Conservation and Land Management on September 22-27, 1985, addressed the question of how best to manage remnants to enhance their conservation value.

The workshop identified remnants as having the following attributes:

- \* they provide representative or selected samples of ecosystems that were once more extensive;
- \* they often contain landscape and biotic elements, including rare species, not otherwise protected;
- \* they can provide multiple samples of species throughout their former range, thus sustaining genetic variability;
- \* they provide stepping stones and/or corridors for many species and enhance gene flow;
- \* they are important to surrounding lands by affecting hydrology, nutrient cycling and erosion;
- \* they have aesthetic, educational and recreational values;
- \* they help create a public awareness of nature and nature conservation, especially amongst rural people.

Few remnants are large enough to sustain ecological processes at rates occurring before fragmentation and many are subject to disturbances originating in the surrounding cleared land. Management of some kind is therefore always required. Objectives for management should be clearly defined. These should be arranged in a hierarchy from the world level through regional to specific reserve level and from overall management objectives to those concerning the use of specific management techniques. The public should always be involved in defining these objectives and in developing the plans for their implementation as public participation is crucial.

Properly defined programmes of relevant research provide the basis for effective management of remnants. Research should include autecological studies, work on population genetics and studies of the dynamics of ecosystems. Some of the single species under investigation should include "umbrella" species - species that appeal to the public and politicians and, if conserved, will also protect remnants supporting a wide range of other organisms.

Research workers should communicate their findings in the scientific literature and in popular publications and provide realistic procedures for land managers to follow. To help achieve this, land managers, planners and researchers must work closely together at all levels.

As most management proceeds in the absence of adequate research knowledge, the proper monitoring of the results of management activities can contribute much to the understanding of the ecosystems being managed. Monitoring programmes should be long-term since changes in many important ecological processes can only be detected over a scale of decades or even centuries. Monitoring has for too long been considered third-rate science. Appropriate design and execution combined with hypothesis testing can make long-term monitoring attractive to a wider scientific community. Monitoring must not be too expensive or complicated. It must be relevant and some studies must be designed so they can be carried out by local managers and naturalists.

Most statements on nature conservation highlight the need to conserve gene pools. However, it appears that in relation to conserving remnant populations, too little is known about the effects of inbreeding, minimum viable population sizes, genetic drift, "bottlenecks", mutation, etc. There is a clear need to improve genetic theory and to document actual genetic events in small populations of species from a broad phylogenetic spectrum.

Natural vegetation including remnants is being destroyed world-wide at an alarming rate. Many remnants have no legal security to protect their conservation values. The workshop unanimously concluded that more effort must go into protecting remnants and, wherever possible, into expanding them by land acquisition. Education of the public is

essential to enable politicians to achieve this goal.

The workshop challenges scientists and naturalists who understand the values of native vegetation to spend a significant part of their time (say 10%) helping the public and politicians understand the role of remnants of native vegetation in nature conservation so that these valuable repositories of the world's heritage will not be lost forever.

Denis Saunders, Graham Arnold,  
Andrew Burbidge, Angas Hopkins  
(communicated by Dr T. New).

## NEW BOOKS

Two new titles have appeared in the attractive series of handbooks being produced by the South Australian Museum, as follows:

A Guide to the Genera of Beetles of South Australia, Part 4. Polyphaga : Byrrhoidea, Buprestoidea, Dryopoidea, Elateroidea, Cantharoidea, Derodontoidea and Bostrichoidea. By E.G. Matthews. 74 pp. Price \$10.50 plus \$1.50 postage. Available from Publication Sales, South Australian Museum, North Terrace, Adelaide, SA, 5000.

This is the fourth in the attractive series of booklets on the beetle genera of South Australia being progressively prepared by Eric Matthews. Part 4 has a striking illustration of a jewel beetle by Jenni Thurmer on the cover. As with the earlier parts it presents a series of illustrated keys to the genera of each family treated. Most genera are illustrated by line drawings or photographs, those of the Buprestidae being in colour. This series is highly recommended and has great usefulness far beyond the borders of South Australia.

A Guide to Common Moths of the Adelaide Region. By P.B. McQuillan and J.A. Forrest. 60pp. Price \$8.50 plus \$1.50 postage. Available as above.

One hundred and twenty-one species of common moths are illustrated in colour and black and white with information on their life history, distribution, foodplants and biology. Much of this information has been brought together from widely scattered sources for the first time. The book will be a valuable field guide for amateurs and professionals, not only in South Australia but also in other states since all the species mentioned range widely.

## FOR SALE HOBART CONFERENCE PROCEEDINGS



Copies of the Summary of Proceedings of the 16th Annual Conference, held at the University of Tasmania, 25-29 May 1985, are available for purchase by members. This sets out the scientific program and includes abstracts of the 46 papers read, notes on the 13 posters displayed and the names and addresses of the 90 delegates who attended.

Copies may be ordered at \$2.00 per copy (postage included) from the Assistant Secretary (AES), Dr I.D. Naumann, CSIRO Division of Entomology, G.P.O. Box 1700, Canberra, ACT 2601. Cheques should be made payable to the Society (NOT CSIRO).

## COMING EVENTS

### 6th International Congress of Parasitology

To be held in Brisbane, 24-30th August, 1986. Enquiries to: Conference Secretariat, Australian Academy of Science, G.P.O. Box 783, Canberra, Act, 2601.

### 56th ANZAAS Congress

To be held in Sydney, 19-26th November, 1986. Enquiries to: Executive Officer, ANZAAS, G.P.O. Box 873, Sydney, NSW, 2001.



## AN UPDATE FROM THE BISHOP MUSEUM

20 November 1985

Dear Colleague:

Some new developments have prompted the issuing of this letter. Thank you very much for your many letters and calls of support for the Department of Entomology and its collections; they have helped improve our staffing outlook here at the Bishop Museum.

The current situation is as follows. In Collection Management, thanks to the National Science Foundation, we will be operating on a new, provisional facilities grant for 18 months. This grant will support one and a half technicians, in addition to providing support for the collection. The administration has agreed to fund another 1/2 technician, and 2 half-time hourly technicians, which will greatly improve our performance and augment the facilities support. In addition to protecting the collections, we should be able to handle a major portion of our normal collection management operations. Also, a private donation for a year will support Dr G.A. Samuelson and a technician for the management of the Coleoptera collections.

Dr Francis G. Howarth has received notification of a grant award for studies in cave biology. This grant will reassociate him with the Museum for the 2-year period of the grant on a 9 month annual research appointment beginning February 1986.

The Museum administration has instituted a search for the position of Chair of the Department of Entomology, and this position is expected to be filled by July 1986.

The Department's publishing operations have been reorganized. The Journal of Medical Entomology is not affected and will continue as a bimonthly journal. However, publication of the International Journal of Entomology (previously Pacific Insects) has been suspended effective January 1986. The last issue, 27(4) is now in press. Also affected will be Pacific Insects Monographs and Supplements to the Journal of Medical Entomology, which will be amalgamated with Bishop Museum Bulletin series. Entomological

papers will be considered for publication in the Bishop Museum Occasional Papers annual series and the Bishop Museum Bulletins in Entomology.

Your concern and support is much appreciated.

Yours sincerely,

Gordon M. Nishida  
Collection Manager  
Department of Entomology  
Bishop Museum

### AUSTRALASIAN ARACHNOLOGICAL SOCIETY

The aims of the Australasian Arachnological Society are to promote interest and study in spiders and other arachnids of Australia, New Zealand and New Guinea. We do this by helping amateurs get information held in publications held primarily by professional arachnologists. The Society produces a quarterly newsletter which includes short observations by members, events of interest, and lists of publications on Australasian arachnids.

At present, membership is open to people who wish to increase their knowledge and that of others of Australasian arachnids. Membership fees for residents in Australia, \$3; in New Zealand and New Guinea, \$4; other members wishing newsletters sent airmail, \$10, or mailed at surface rates, \$5; Australian institutions, \$4; overseas institutions, \$8 surface mail.

Information concerning membership can be obtained from the Administrator of the Society,

Richard J. Faulder  
Agricultural Institute  
YANCO. NSW 2703

Robert J. Raven  
NEWSLETTER EDITOR.



## APPOINTMENT OF PROXIES

(This completed form should reach the Secretary prior to the meeting(s) concerned).

I, ..... of .....

being a member of the above-named Society, hereby appoint .....

..... of .....

as my proxy to vote for me on my behalf at the Council Meeting, Annual or

Special General Meeting, as the case may be, of the Society, to be held on

the 10th to 15th days of May, 1986 and at any adjournment thereof.

Signed this .....day of ..... 19 ....

(Signature) .....

(A photocopy of this form may be used)

CUT ALONG THIS LINE

## NOMINATION OF OFFICE BEARER

(This completed form should reach the Secretary  
by 2 April, 1986.)

I nominate .....

for election to the office of .....

Name of nominator .....

Signature .....

Date .....

I second this nomination

Name of seconder .....

Signature .....

Date .....

I accept this nomination\*

Signature .....

Date .....

\* The nominee is requested to attach a typed statement, no exceeding 300 words, which includes the following: his/her professional qualifications, address, institution, position held, fields of entomological interest, previous offices or appointments held in the Society; and other information which may be of Assistance to members should a postal ballot be required.

( a photocopy of this form may be used)

CUT ALONG THIS LINE





## REGIONAL COUNCILLORS

### QUEENSLAND

Mr. C.G. Freebairn  
Department of Entomology  
University of Queensland  
ST LUCIA, QLD. 4067  
(07) 3773658

Mr. A.P. Walford-Huggins  
P.O. Box 17  
MOLLOY, QLD. 4880.  
(070) 941262

### NEW SOUTH WALES

Mr. J.A. Macdonald  
CSIRO Entomology Research Stn.  
55 Hastings Road  
WARRAWEE, NSW. 2074  
(02) 4871756

Dr. P.C. Gregg  
Agronomy Department  
University of New England  
ARMIDALE, NSW. 2351  
(067) 732665

### AUSTRALIAN CAPITAL TERRITORY

Mr. D.B. McCorquodale  
Zoology Department  
Australian National University  
G.P.O. Box 4  
CANBERRA, ACT. 2601  
(062) 493139

Dr J.C.Daly  
CSIRO Division of Entomology  
GPO Box 1700  
CANBERRA, ACT. 2601

### NORTHERN TERRITORY

Mr. T.L. Fenner  
D.P.P. Agric. Quarantine Service  
Box 2268  
DARWIN, N.T. 5794.

### WESTERN AUSTRALIA

Dr. T.F. Houston  
Western Australian Museum  
Francis Street  
PERTH, W.A. 6000.  
(09) 3284411

### VICTORIA

Dr. P.P. Stahle  
Plant Research Institute  
Swan Street  
BURNLEY, VIC. 3121  
(03) 8101511

### TASMANIA

Mr. P.B. McQuillan  
Dept. of Agriculture  
St John's Avenue  
NEW TOWN, TAS. 7008.  
(002) 284851

### SOUTH AUSTRALIA

Dr. D.J. Cooper  
Entomology Department  
Waite Institute  
PMB No 1  
GLEN OSMOND, S.A. 5064.  
(08) 797901

## REPRESENTATIVE COUNCILLORS

### ENTOMOLOGICAL SOCIETY OF VICTORIA

Mrs. Joy Burns  
3 Inglis Street  
MORNINGTON, VIC. 3931  
(059) 753730

### ENTOMOLOGICAL SOCIETY OF QUEENSLAND

Miss M.A. Schneider,  
Entomology Department,  
University of Queensland,  
ST. LUCIA, QLD. 4067.

### ENTOMOLOGICAL SOCIETY OF NEW SOUTH WALES

Mr M.S. Moulds  
c/- Entomology Dept.  
Australian Museum  
P.O. Box A285  
SYDNEY SOUTH, N.S.W. 2000.

### ROYAL ZOOLOGICAL SOCIETY OF NEW SOUTH WALES

Mr C.E. Chadwick  
9/2 Francis Road  
ARTARMON, N.S.W. 2113

## OVERSEAS CORRESPONDENTS

### PAPUA NEW GUINEA

Mr M. Arura  
Bubia Agricultural Research Centre,  
P.O.Box 73  
Lae  
PAPUA NEW GUINEA

### NEW ZEALAND

Mr J. Tenquist  
Wallaceville Animal Res. Centre  
Private Bag  
UPPER HUTI, N.Z.

## SUSTAINING ASSOCIATES

AUSTRALIAN ENTOMOLOGICAL SUPPLIES  
BAYER AUSTRALIA LTD  
CIBA-GEIGY LTD  
CYANAMID AUSTRALIA PTY LTD  
DOW CHEMICAL (AUST.) LTD  
F. & B. CHEMICALS PTY LTD  
I.C.I. AUSTRALIA LTD  
SHELL CHEMICAL (AUST.) PTY LTD

## HONORARY MEMBERS

Dr J.W. Evans  
Dr E.N. Marks  
Dr K.R. Norris  
Dr C.N. Smithers