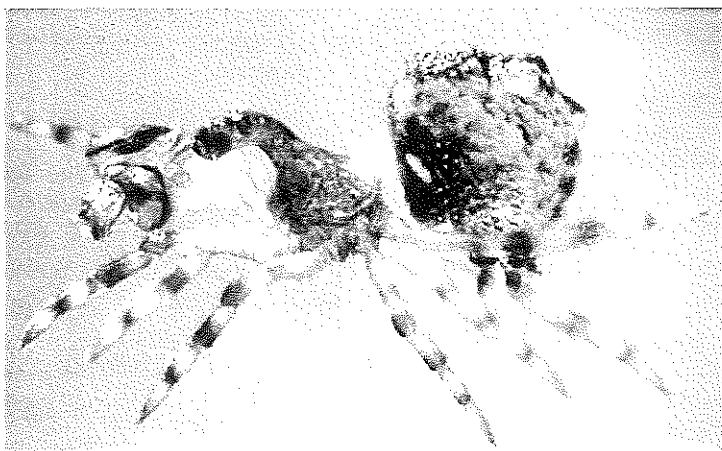


# AUSTRALASIAN ARACHNOLOGY



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## THE AUSTRALASIAN ARACHNOLOGICAL SOCIETY

We aim to promote interest in the ecology, behaviour and taxonomy of arachnids of the Australasian region.

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Membership is open to amateurs, students and professionals, and is managed by our Administrator :

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## ARTICLES

The newsletter depends on your contributions! We encourage articles on a range of topics including current research activities, student projects, upcoming events or behavioural observations.

Please send articles to the Editor:

Dr Tracey Churchill  
CSIRO Sustainable Ecosystems  
PMB 44 Winnellie  
NT 0822  
Australia.

email: [spider@octa4.net.au](mailto:spider@octa4.net.au)

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Contact our librarian :

Jean-Claude Herremans  
PO Box 291  
Manly,  
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**COVER PHOTOGRAPH:** A male *Phoroncidia* sp. from Western Australia by Karl Brennan

## EDITORIAL

CONFERENCE  
REVIEW

The recent highlight has been the international arachnological congress in South Africa, which was a great success. As many noted, it felt like a happy reunion of a big international family. Everyone enjoyed the chance to share their enthusiasm for arachnids away from the everyday demands of work. Our region was well represented with 16 delegates which were photographed at the congress dinner (the entertaining swazi dancers and rhinos lurking in the background are not in the picture!). This larger issue celebrates our congress with a report, photographs, updates from ISA meetings, and an insight into a post-congress field trip through eastern South Africa.

The congress also provided a rare opportunity for some of us to discuss issues regarding our own society. There is much enthusiasm to develop the society further, and the web page is on the agenda! In the meantime, I depend on our active members to help fill future issues of the newsletter: please send articles to my new home email address.

.....Tracey

NEW  
MEMBER

Welcome to:

Matthew Bruce  
Department of Biological Sciences  
Macquarie University NSW 2109

mbruce@rna.bio.mq.edu.au

The 15<sup>th</sup> International  
Congress of Arachnology

atBadplaas, South Africa in March 2001.

'Some impressions of a participant'  
by Dr Barbara York Main

Dept. Zoology,  
University of Western Australia  
Stirling Highway, Crawley WA 6009.

with some help from **Cor Vink**  
Lincoln University, New Zealand.

Badplaas doesn't mean what it might sound like to us - it means "bath place" (named after the hot spring baths at the Ventura resort - the Congress venue) and very beautiful it was, especially in the early mornings with spring fog across the surrounding landscape. The Congress was hosted "under the aegis of the International Society of Arachnology with the Agricultural Research Council Plant Protection Research Institute as the host institute".

Most attendees assembled at Hotel 224 in Pretoria on Sunday afternoon and travelled thence by bus to Badplaas where we were distributed to respective accommodation chalets. The 201 delegates (including accompanying persons) came from 34 countries with 16 from Australia and New Zealand (see photo). But there were many congress

stalwarts not there; some, sadly have died, others absent because of teaching or other commitments. For many of us present, wide eyed and eager, it was our first visit to South Africa. So it was not just the Congress but also a glimpse of another continent that excited us. We were not disappointed. But with a full programme of many parallel sessions, new and familiar colleagues to converse with and a whole new landscape to take in, what impressions remain? I can only highlight some of the facets which imprinted personally - the lasting impressions for others will be as diverse as the offerings of the week.

As with all Congresses there were many parallel sessions, with sometimes three sessions running simultaneously. That is okay if you are focussed on a particular discipline and of course for some workers it is biological "problems" rather than "arachnids" that provides their primary drive. But for many of us there were hard choices. Ecology, *Argyrodes* Symposium or Scorpion Symposium? Electronic Media, *Argyrodes* Symposium or Scorpion Symposium? Systematics or Social Spiders Symposium? Behaviour or Theraphosid Symposium? And with some parallel sessions five minutes out of sync, having to dash between the them to get to particular talks and *en route* meeting a colleague sprinting in the opposite direction that one just *had* to talk to, meant that there were inevitable losses from the agenda.

Although mostly dedicated arachnologists, a few participants would probably prefer to be known as specialists unravelling particular problems such as female choice, sperm competition, community structure, niche separation or ecosystem

health. Others were more interested in animal venoms or phenomena such as synanthropic fauna, effects of climatic change or fundamental biological distributions. And the Congress catered for all these aspects in its programme.

Of the 120 talks (three were plenary lectures) and 65 posters, the breakdown in subject matter on my very arbitrary classification was: Ecology / biogeography and behaviour (127), Taxonomy / biogeography / morphology (58). With regard to the presentations, although I have loosely grouped them as Taxonomic or Ecological I agree with Rudy Joque's comment in his plenary talk on genitalic polymorphisms, that there is now a "fading of the boundaries between taxonomy, ecology, ethology, biochemistry..." and that there is now a greater "interdependency".

Nevertheless I grouped the Ecological / Behavioural papers under six loose headings, three of which encompass several subsets of topics. Against each major heading I have listed the number of papers/posters which dealt with the respective inclusive topics as follows: General ecology (community structure, population density/dynamics, dispersal, agrobionts and pest control, reproductive biology, sexual selection and female choice, genetics, parasitism, ecological indicators, conservation) 28/12; Behaviour (communication, life histories, mimicry, symbiosis and kleptoparasitism, sociality, microhabitat separation and niche preferences, web building) 34/10; Biogeography, evolution and regional biodiversity (colonisation, faunistics, surveys and inventories, historical studies on Arachnida) 10/14; Integrated studies (taxonomy / ecology and evolution /

biogeography, morphology / behaviour and education) 4/1; Venoms (genetics, bites, development) 5/5; Miscellaneous (historical studies, ecological genetics, genetics & contaminants) 3/1.

So, after the Congress when the import of oral presentations and the array of posters have sifted and settled, which presentations come readily to mind as the most effective? Some of my (very biased) favourites amongst the short talks were: Joe Henschel's paper on the movements of males of the dancing white lady spider in the Namib dunes, for its' clear presentation and delightful graphics; a fascinating paper by Maciej Bartos on survival and nest building by the salticid *Yllenus arenarius* in very different sand dunes; the talk by Meg Cumming, who movingly demonstrated the interaction with, and adaptation to, the extremes of a human modified environment by indigenous salticids (39 species from 27 genera) in the microcosm of a domestic garden in Zimbabwe; Craig Baird's study of translocated *Tegenaria agrestis*, which has become a domestic hazard in North America where its venomosity is manifested (unlike in its native Europe); Charles Haddad and Ansie Dippenaer-Schoeman's account of the spiders (all 82 species of them!) which invade deteriorating termite mounds hence showing how important the decaying components of an ecosystem are to biodiversity; Jonathan Coddington's remarks on sheet webs of primitive and advanced spiders; Charles Griswold's talk on the systematics and biogeography of the Gondwanan Migidae; Jason Bond's talk on the application of molecular analysis to interpreting the species status of *Aptostichus simus*, the Californian dune trapdoor spider, and; Mary-Louise

Celerier's remarkable account of sustaining an interbreeding captive colony of the theraphosid *Scodra griseipes* for 30 years.

Amongst the posters there were some memorable presentations on mygalomorph behaviour and life histories (Martin Paulsen), venoms (Celerier), mimicry (Nelson and Jackson), proposition for a habitat quality index for forests (De Bakker, Desender and Maelfait), and ecological segregation of araneids in Ghana (J. and M. Edmunds). There were also interesting papers and posters on the richness and diversity of spiders and other arachnids on several continents/countries including Brazil (making us hope for a Congress there in the future!).

Other aspects which caught my attention were: the way in which some spider genera/species have become "models" for study (e.g., *Latrodectus*, *Stegodyphus* and *Agelenopsis aperta*); studies that build on a fund of pioneering work (of particular interest was Ayoub & Riechert's study where they have combined data on mitochondrial DNA with behaviour and morphology to interpret historical and/or recent origins of adaptations), and; the apparent richness of arachnids as part of the agricultural "wildlife" in Europe (e.g., as demonstrated by Bergthaler's poster on harvestman communities in hedgerows).

On a broader front I found the Plenary Talks excellent: Catherine Craig's fascinating and comprehensive talk on silk which included a comparative approach beyond just spider silk; Rudy Joque's presentation on polymorphism of male genitalia in spiders was delivered in

his usual inimitable style and with novel input posing theoretical enigmas; and Mark Harvey's grasp and coverage of the "minor" arachnid orders. I also enjoyed some of the shorter review papers such as Deborah Smith's all embracing and sharply organized review of all aspects of the ongoing research on *Argyrodes*.

One looks forward to the full publication of all the papers, most of which will be published as issues 2 & 3 in the volume 30 of the *Journal of Arachnology* next year). In the meantime there will still be some dipping back into the abstracts, which are available on-line at the ISA website:

<http://160.111.87.78/ISA/default.html>.

Despite some technical glitches, Rob Raven, Barbara Baehr and Mark Harvey managed to show us their interactive key to Australian subfamilies. Norm Platnick and Rob Raven presented the latest World Spider Catalogue, which is available online:

<http://research.amnh.org/entomology/spiders/catalog81-87/index.html>

and copies on CD-ROM were made available to Congress delegates.

We also had photographic and drawing competitions (with an excellent evening of slide showings presented by John Leroy) and an "art" exhibition; best student paper and poster competitions and a free for all arachnid "catch of the day" competition. And of course there were "business" meetings for the ISA Executive and Correspondents and the General ISA.

We all had an opportunity to go to either the Embuleni Nature Reserve or Kruger Park on the Excursion Day. We went to Kruger with that once-in-a-life-time-

opportunity to see the big animals of childhood picture books and TV nature films.

Of course it was fantastic, and yet, for a West Australian familiar with the wheatbelt infested with South African weeds, the first impression of the bushveld was of too frequently burnt bushland overgrown with those same "weeds" with paper cut outs of zebras, impala, buffalo, elephants, rhinoceroses and yawning lions pasted into the veld! Familiar with our salty crocs of the Kimberley (Western Australia) and Queensland, the lazy logs in a river we crossed aroused the same sense of awe and distant respect. But the baboons dancing in the roadside gutters were real enough, likewise a few belligerent warthogs and the recognizable bastards stepping gently through the bush just like the Australian species. We didn't see any leopards but were regaled with gruesome stories by the driver-guide. The landscape was great, particularly the koppies reminiscent of granite boulder piles in Australia. Thorn trees and nests of the weaver birds all added up to a kind of Kipling revisited experience.

The *Stegodyphus* social nests for me were particularly fascinating but which we had to enjoy from the safety of the tour vehicle. I was also left with the comfortable thought that I don't have to contend with "big and dangerous" animals when I'm working in the field in Australia - forget the taipans and tiger snakes, I can cope with them, but not a leopard or lion behind me! And the reason for my earlier contention, that the Australian semi-arid is richer in mygalomorphs than the dry parts of Africa (tell me if I'm wrong), was reinforced - perhaps because we don't

have those hooped or big footed herds pounding the sensitive earth.

The bus drives between Joburg and Pretoria, Pretoria and Badplaas, Badplaas and Kruger, Badplaas and Joburg were a bonus. There were some similarities with our Australian landscapes (the plantations and feral patches of eucalypts, the rocky hills, boababs, the orchards of sugar cane, bananas and avocado) and lots of things we know from African books (flat topped acacias, huge euphorbs and weird succulents). And the sweeping landscapes, wide like Australia but also different - where in Australia does one see so many people walking, people singly, in couples, in groups, everywhere along the roadsides? Yes, it was all a fantastic experience and we thank our Gondwanan colleagues for turning on a never-to-be-forgotten African spectacular.



**Dr Ansie Dippenaar-Schoeman:**  
congress organising committee leader.

### **Papers and posters\* by Australasians:**

#### Mathew Anstey

Proposed taxonomic and systematic work on an group of endemic New Zealand jumping spiders (Salticidae).\*

#### Barbara Baehr, Robert Raven and Mark Harvey

Traditional keys versus interactive keys, an advance or only trendy? The interactive key for the Australian spider families and subfamilies -an example.

#### Matthew Bruce, M. E. Herberstein, and Mark Elgar

Sensory exploitation and the function of web decorations in orb-web spiders (Araneae: Araneidae).

#### Tracey Churchill and J. A. Ludwig

Changes in spider assemblages in relation to landscape attributes along two grazing gradients in Northern Australia.

#### Valerie Todd Davies

A new spider genus from Tasmania, Australia (Araneae, Amphinectidae, Tasmarrubiinae).

#### Ansie Dippenaar-Schoeman, Mark Harvey and Elizabeth Kassimatis

The South African National Survey of Arachnida (SANSA): the pseudoscorpions (Arachnida: Pseudoscorpiones).\*

#### Mark Harvey

What do we know about the smaller arachnid orders? - a 2001 update, with prospects and challenges.



Australasian delegates in South Africa: (front row) Matthew Bruce, Ximena Nelson, Tracey Churchill, Barbara Baehr, Barbara York Main, Julianne Waldoock, Valerie Davies, Robert Raven, (back row) Mark Harvey, Cor Vink, Erich Volschenk, Katryn Salm, Mary Whitehouse, Matt Anstey, George Davies and (photographer) Graham Thompson.



Geoff Isbister, Tracey Churchill, David Hirst, Mike Gray and Bart Currie

Clinical effects in bites from formally identified spiders in tropical Australia.\*

Barbara Main

Biography of a mygalomorph trapdoor spider (*Gaius villosus* Rainbow) and demographic implications of longevity: is there an oedipus factor?

Ximena Nelson and Robert Jackson

How do salticids mimic ants?\*

Norman Platnick and Robert Raven

The World Spider Catalog: Internet and CD-ROM versions.

Robert Raven and Kylie Stumkat

Problem solving in the spider families Miturgidae and Ctenidae (Araneae) in Australia and New Zealand.

Katryn Salm and Robert Jackson

Interattraction and tolerance in mixed-species groups of salticids.

Cor Vink, Anthony Mitchell and Adrian Paterson

Making sense of Australasian lycosid generic relationships using 12S ribosomal DNA sequences.

Julianne Waldock, Mark Harvey, A. Sampey and P. L. J. West

Araneomorph spiders from the Southern Carnarvon Basin, Western Australia: a consideration of regional biogeographic relationships.\*

Mary Whitehouse, E. Shochat, M. Shachak and Yael Lubin

The influence of scale and patchiness on spider diversity in a semi-arid environment.

Marek Zabka and Simon Pollard

Zoogeography of Salticidae (Arachnida: Araneae) of New Zealand - first approach.



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AN  
ARACHNOLOGICAL  
ODYSSEY  
IN SOUTH AFRICA

by **Mark S. Harvey, Julianne M. Waldock and Erich S. Volschenk**

Department of Terrestrial Invertebrates,  
Western Australian Museum,  
Francis St, Perth,  
Western Australia 6000

The XV International Congress of Arachnology in Badplaas, South Africa, was an arachnological triumph. Lots of excellent papers to be heard, old friendships to be rekindled, new friendships to be made, and a wonderful cultural experience in an amazing country. Not content with the experiences of the congress, we decided to set off into the South African heartland in the excellent company of Robert Raven and Barbara Baehr of the Queensland Museum. An African adventure and an arachnological odyssey!

We started our journey by heading to the Drakensberg Mountains, a remarkable mountain range arising from a flat plain in the eastern portion of South Africa. The Drakensbergs extend for hundreds of kilometres, roughly in a north-south direction, and rise some 3,000 m above sea-level at their highest point. We spent several nights at Champagne Castle Hotel, nestled up high in the mountains, near the border of Lesotho, a land-locked "mountain kingdom". Our time at the Hotel was also shared with Phil Brownell, the noted scorpion physiologist from Oregon, who was amused by the antics of arachnologists lying flat on their bellies poring over trays of sifted litter searching for minute arachnids.

High above the surrounding plain, the Drakensbergs are an amazing sight harbouring a rich variety of wildlife. We were particularly interested in the patches of temperate rainforest which were dotted along the slopes of the mountains range which were within short walking distance of the hotel. *Nephila* were present in their webs, land crabs scampered near the edges of creeks, and a puff-adder was encountered along a walking track. Baboons occurred right through the mountains, and their predilection for the finest *haute cuisine* meant that they turned rocks searching for arthropods, in direct competition with us! Amongst the arachnological highlights were the presence of archaeids (*Afrarchaea* sp.) found on the underside of a rock, and other numerous spiders, pseudoscorpions and harvestmen to delight us all.

We reluctantly left the rarefied atmosphere of the mountains, to descend onto the plain and visit Pietermaritzburg. We visited the Natal Museum and it was

an amazing experience to examine the collection largely amassed and curated by the greatest African arachnologist, R.F. Lawrence, who died in 1986. The collection contained a number of wonderful specimens, including some amazingly large solifuges which would have been a treat to see alive! Collecting trips in the local area - including a trip to Town Bush, a temperate rainforest patch on the outskirts of the town - yielded arachnids large and small, and very wet socks, as it rained all day. Dr Bruno Lamoral, the former curator of arachnids at the Natal Museum, had left his arachnological pursuits and opened an optometrist's store in the main street of Pietermaritzburg. Erich Volschenk and Robert Raven paid their respects, whilst the rest of us loitered outside.

Our third port of call was Durban, which we ventured to for the day. A quick trip from Pietermaritzburg via a multi-laned highway, we avoided the town centre and headed a short distance up the coast to Umhlanga Rocks where we found some coastal dune rainforest that abounded with the giant amblypygid, *Damon annulatipes*. Late in the afternoon we were inspected by a troop of monkeys and observed a duiker (herbivorous mammal) at close quarters. We also spotted a golden mole burrowing through the soil. Several giant rolling millipedes (*Sphaerotherium* sp.) were also spotted walking confidently on a tree trunk.

Travelling through eastern South Africa was a cultural and arachnological experience of the highest calibre. People were friendly and helpful, and the experience of observing the African fauna - both large and small - in the field will not be lightly forgotten.



On an arachnological odyssey: Erich Volschenk and Julianne Waldock in the Drakensburg Mountains, South Africa.

Photos courtesy of M.Harvey & E.Volschenk



The field team. From left: Robert Raven, Barbara Baehr, Mark Harvey, Julianne Waldock, Philip Brownell and Erich Volschenk at the Champagne Castle Hotel.



## INTERNATIONAL SOCIETY OF ARACHNOLOGY

The congress in South Africa was, of course, the venue for the triennial meeting of the International Society of Arachnology. It was time to elect a new president and four members of the Executive Committee.

The committee now comprises:

President: Paul Selden (England)

Vice President: Charles Griswold (USA)

Past President: Robert Raven (Australia)

Secretary: Jason Dunlop (Germany)

Treasurer & Membership Secretary:  
Jonathon Coddington (USA)

Councillors: Tracey Churchill (Australia)  
Jason Dunlop (Germany)  
Rainer Foelix (Switzerland)  
Rudy Jocqué (Belgium)  
Yael Lubin (Israel)  
Karin Schütt (Germany)

**The ISA secretariat address is now c/-:**

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March 2001. Photo: T.B.Churchill

**Dr Paul Selden:** ISA president.

### Australian Correspondent:

Dr Barbara York Main was the first Australian correspondent for ISA (formerly CIDA), and has served in this position since the mid-1960's. We sincerely thank Barbara for her contributions over approximately thirty five years!



Dr Main. March 2001. Photo: T.B.Churchill

Dr Mark Harvey will now carry on this important role of ensuring the flow of information between the ISA and Australia on activities and publications.

## BOOK REVIEW



**'Catalog of the scorpions of the world (1758-1998).'**

**by Victor Fet, W. David Sissom,  
Graeme Lowe and Matt E.  
Braunwelder**

Published in 2000  
by the New York Entomological Society.  
ISBN 0-913-42424-2.

Question:

What is the type locality of *Scorpio waigiensis* Gervais, 1843 (now *Liocheles waigiensis*)?

Answer:

Waigiou Island, now Waigeo Island, Indonesia.

But until late last year, I wouldn't have been able to answer that question easily, as I would have had to burrow about in my filing cabinets looking for a copy of the paper. However, the publication of the "Catalog of the scorpions of the world (1758-1998)" allows me to quickly and reliably find such information.

The book starts with a very informative introduction which discusses, among other things, the procedures utilised

throughout the volume. The catalogue itself is divided into a number of chapters, of which most deal with each scorpion family recognised by the authors. Each family treatment is provided with a short introduction, and many subordinate taxa contain detailed notes detailing any nomenclatural or other problems. Each taxon has its distribution neatly summarised, making it easy to locate areas of interest. The bibliography consists of 59 printed pages and is clearly exceedingly authoritative. The volume also treats the numerous fossilised scorpion species which have been named, some of which date back to the Palaeozoic (the fossils, not the descriptions....).

The layout is easy on the eye, the print is crisp and clear and the paper is of the highest quality. I use this volume regularly and cannot congratulate the authors enough on their diligence and hard work. This product is a wonderful addition to the worlds arachnological catalogues, and deserves a place on the shelves of every scorpion enthusiast.

**Dr Mark S. Harvey**

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## CONFERENCE REVIEW

### ESA2000: Ecology in a Rapidly Changing World

Melbourne, Australia  
29 November - 1 December 2000

#### 'Spiders in a 'Rapidly Changing World?'

This annual conference of the Ecological Society of Australia was held at La Trobe University in Melbourne. It appears arachnids play a minor role in a 'rapidly changing world' since only a small number of related topics were presented. However, taking into account the traditionally wide variety of ecological topics presented at the ESA meetings, this was not surprising. And the diversity of topics is what makes these annual meetings so informative and interesting.

The conference was well prepared by John Morgan's Organising Committee (Department of Botany, La Trobe University) and, importantly, there was no shortage of drinks and nibbles during the breaks. Social events included the welcoming BBQ and the conference dinner, both of which we unfortunately missed. Minor organisational problems were easily excused. The wrong numbering of theatres in the conference program caused only a slight confusion at the start. And the timing of the three different sections could have been enforced more rigorously to make the change of sections between talks easier.

But overall, this ESA meeting was yet again an exciting experience which offered the opportunity to have a look far beyond the scope of your own research.

The scientific program started with a Post-Graduate Day on Tuesday covering a wide range of topics including 'Sex in alpine environments' (by S. Abbott, surprisingly a botanical talk) and one zoological presentation, 'The impact of the European honey bee (*Apis mellifera*) on a native bee: *Megachile (Hackeriapis)* sp.' (D. Paini).

Plenary speakers of the conference included Mark A. Burgman (University of Melbourne), Steven R. Carpenter (University of Wisconsin-Madison) and Tony M. Starfield (University of Minnesota). Mark gave an interesting talk on 'The role of mathematical models and human psychology in the management of ecological risks from genetically modified organisms' which emphasized the importance of quantitative, model-based risk analysis. He highlighted the need for scientific reforms in risk analysis for new technologies and their consequences for the environment. Steven's talk ('Ecological forecasting: opportunities and organising principles') focused on the prospects for quantitative ecological forecasts and their potential impact on ecology. Tony presented a fascinating insight into 'Spatial models for vegetation change in Alaska: modeling with caution'. He introduced a frame-based model which aims to predict vegetation change over hundreds of years in response to different scenarios of climatic change.

The majority of talks were presented in six symposia which had a strong emphasis on conservation and management. Titles

included: 'How can ecologists contribute to restoration?'; 'Ecology of towns and cities'; 'Colonisation and recruitment processes'; 'Measurement and monitoring of landscape condition'; 'Assessing and valuing ecosystem services', and; 'Sustaining regional Australia'.

Interestingly, all presentations with an arachnological content were placed in the Open Forum, presumably unrelated to the conservation issues above. Three talks were devoted at least partly to spiders:

Tyre, A. J., Possingham, H. P & Niejalke, D. P. 'Detecting environmental impacts on metapopulations of mound spring invertebrates: assessing the incidence function model'. This concluded that the incidence function model has only little power to detect environmental impacts on metapopulations of mound springs.

Harris, R. & York, A. 'The impact of grazing and burning on ground-dwelling spider assemblages in dry sclerophyll forests in north-eastern NSW'. This paper showed that within a framework of large scale environmental patterns (e.g. geology and forest type) the intensity of grazing affects smaller scale habitat components and, consequently, the structure and composition of spider assemblages.

Bruce, M. J., Herberstein, M. E. & Elgar, M. A. 'Signal conflict and the function of web decorations in orb-weaving spiders'. These authors found that webs with web decorations ('stabilimenta') of *Argiope keyserlingi* had a significantly higher prey capture rate than undecorated webs. However, they also showed that the predation risk is higher for webs with decorations, indicating a trade off

between foraging success and predation risk.

Three posters were mainly devoted to arachnology:

Framenau, V. W., Manderbach, R. & Baehr, M. 'Upland and Lowland Rivers: arthropod community structure of riparian gravel banks in an altitudinal gradient'. Our work investigated the carabid and lycosid fauna of river banks in the Victorian Alps and found significant differences in these assemblages between upland and lowland rivers.

Lamb, K., Munro, N. & Niejalke, D. P. 'Fire in the Desert: Impact of fire on artesian spring invertebrate communities in South Australia'. The research explored the effects of burning on mound springs of the Great Artesian Basin and showed that burning as a management strategy could be important to conserve endemic mound spring aquatic invertebrates and arachnids such as the lycosid *Lycosa arenaris*.

McCullough, T. P., Austin, A. D. & Hutchinson, M. 'General ecology of the obligate burrowing spiders associated with the endangered Adelaide pygmy blue tongue lizard'. Their poster gave a fascinating insight into the importance of the burrowing behaviour of some mygalomorphs and lycosids, as their borrows are utilized by a small, endangered lizard which is unable to excavate burrows in the prevailing hard and compacted soil.

**Volker Framenau & Melissa Thomas**

Department of Zoology  
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