Australasian Arachnology

Price \$3 ISSN 0811-3696 Number 83 February 2012



Newsletter of the Australasian Arachnological Society

THE AUSTRALASIAN ARACHNOLOGICAL SOCIETY

www.australasian-arachnology.org

Acari – Araneae – Amblypygi – Opiliones – Palpigradi – Pseudoscorpiones – Pycnogonida – Schizomida – Scorpiones – Uropygi

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

MEMBERSHIP

Membership is open to all who have an interest in arachnids – amateurs, students and professionals – and is managed by our Administrator (**note new address**):

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Membership fees in Australian dollars (per 4 issues):

	*discount	personal	institutional
Australia	\$8	\$10	\$12
NZ/Asia	\$10	\$12	\$14
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Cheques are payable in Australian dollars to "Australasian Arachnological Society". Any number of issues can be paid for in advance, and receipts can be issued upon request.

Members will receive a **PDF version*** of the newsletter *Australasian Arachnology*, with hard-copies available for libraries and societies. Members will be notified by email when their subscription has expired.

*NOTE. PDF-only as of Issue 80

ARTICLES

The newsletter *Australasian Arachnology* depends on the contributions of members. Please send articles to the Editor:

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Department of Terrestrial Zoology Western Australian Museum

Locked Bag 49, Welshpool DC, W.A. 6986

Email: michael.rix@museum.wa.gov.au

Articles should be typed and saved as a Microsoft Word document, with text in Times New Roman 12-point font. Only electronic email (preferred) or posted CD-ROM submissions will be accepted.

Previous issues of the newsletter are available at http://www.australasian-arachnology.org/newsletter/issues.

LIBRARY

For those members who do not have access to a scientific library, the society has a large number of reference books, scientific journals and paper reprints available, either for loan or as photocopies. For all enquiries concerning publications please contact our Librarian:

Jean-Claude Herremans P.O. Box 291

Manly, New South Wales 1655

Email: jclh@ihug.com.au

Professional members are encouraged to send in their arachnological reprints as they become available.

COVER ILLUSTRATIONS

Spiders from the Darwin area, tropical Northern Territory (clockwise from top-left): *Amyciaea albomaculata* (Thomisidae), an aggressive antmimic of *Oecophylla*; *Myrmarachne* sp. (Salticidae); *Herennia oz* (Nephilidae); unknown Salticidae sp. in observant repose.

Images by Greg Anderson.

EDITORIAL...

Welcome to Issue 83 of Australasian Arachnology. I'd like to begin this editorial by once again noting the steady stream of new members who are joining the society, and observing (as always) the exemplary recent research outputs in the Australasian region. The Australasian arachnological community continues to maintain a strong interest in our remarkable arachnid fauna, and continues to promote arachnology throughout the region. This is by no means a straightforward task, given the negative public perceptions that often accompany our eight-legged friends, and given the sometimes challenging research funding environment for taxonomic and biodiversity research. Certainly, having watched the society grow over the last twenty years, and having seen perceptions of the Australasian fauna change during that time, it is both reassuring and exciting to look ahead. With unparalleled population growth throughout the region and the world, and unprecedented pressures on our natural landscapes, habitats and remaining natural biomes, it is critical that arachnids (and indeed all invertebrates) continue to receive the growing recognition they deserve among ecologists, conservation biologists, legislators and the public at large. The 10th Invertebrate Biodiversity and Conservation Conference in Melbourne in December 2011 confirmed just how active research in this field is, and there is no doubt that Australasian arachnids will continue to be the focus of much positive attention over the next few years.

Continuing along this line I would like to further highlight the upcoming Australian Entomological Society/Australasian Arachnological Society Joint Conference, to be held in Hobart in November 2012. The AAS is offering up to two travel awards for students interested in presenting their research at this conference, and I would encourage all members to consider a visit to Tasmania for this event. The AES conferences have a long tradition and are

usually very well attended, and it is nice to see the collaboration between our two societies for this event

In this issue I have continued the 'Arachnid Research In Focus...' columns, featuring articles on the spider families Oonopidae and Migidae. Another new column format features 'photo essays', each with an explanatory editorial and associated images. These photo essays – in this issue featuring pictures by Greg Anderson and Sue O'Halloran - bring together arachnid images which are themed or tell a story, to highlight the amazing Australasian fauna and illustrate the many wonderful photos being taken. Robert Whyte also presents two stunning and richly-illustrated feature articles, on a remarkable jumping spider from the Queensland tropics and the beautiful araneid spiders of the genus Arkys. This issue is once again enhanced by the photos of Dr Greg Anderson, and I'd like to thank Greg for allowing his images to be reproduced in the newsletter.

I wish all members the very best for 2012, and please consider contributing articles for inclusion in future editions.

Cheers





Female Micromerys gracilis Bradley, 1877
(Pholcidae) from near Darwin, Northern Territory.
These delicate, rarely seen and exquisitely
camouflaged spiders live under broad green rainforest
leaves in tropical eastern Queensland and the
Northern Territory.
Image by Greg Anderson.

MEMBERSHIP UPDATES

New Members:

Amber Beavis Cook, A.C.T. 2614

Andrew Martin Edithvale, Victoria 3196

Wendy Moore Coburg, Victoria 3058

Brian RobertsSouth Yokine, Western Australia 6060

Nicola Watson Parkwood, Western Australia 6147

Janine Wojcieszek Brentwood, Western Australia 6153

Albert Wright Maldon, Victoria 3463

General Announcements



Student Travel Award/s for upcoming Australian Entomological Society (AES)/ Australasian Arachnological Society (AAS) Joint Conference in Hobart. The Australasian Arachnological Society is pleased to announce its joint support of the upcoming Australian Entomological Society Conference, to be held in Hobart, Tasmania in November 2012. AES conferences have traditionally enjoyed strong representation from entomology students across Australia, and as part of its commitment the

AAS is very pleased to be able to offer up to two domestic student travel awards to the value of \$500. These travel awards are open to all student members of the AAS currently enrolled at a tertiary institution, and who wish to present their research in either oral or poster format. To be eligible for the awards students should prepare a single page summary application detailing (i) their research and (ii) why they would like to attend, and email this application to the newsletter editor by 4 May 2012. Applicants will be judged by a panel of at least three professional members, and notified accordingly. For further details of the conference, including dates and the official see Conference Announcements website. (below).

Passing of Dr David Blest. It is with much sadness that we inform you of the passing of our friend and colleague, Dr A.D. Blest, aged 81.

David made considerable contributions to arachnology over the years in the fields of spider vision and Linyphiidae taxonomy (particularly Mynogleninae). David died early on the morning of 10 January (2012) in hospital, after fall at his home in Canberra, Australia

David's excellent sense of humour and huge breadth of knowledge will be sorely missed.

Cor Vink & Simon Pollard Christchurch, New Zealand



Female *Ligonipes* sp. (Salticidae) from near Sydney, New South Wales. Image by Greg Anderson.

Arachnid Research In Focus...Goblin Spiders (Oonopidae)

National Science Foundation (NSF) Planetary Biodiversity Inventory (PBI) Project: The Spider Family Oonopidae



New genus of Oonopidae from Western Australia. Image by Mark Harvey, W.A. Museum.

Taxonomy:

Family Oonopidae: currently 857 described species in 88 genera (and rising!).

Distribution:

Worldwide.

Précis:

The Goblin Spider PBI Project, funded by the U.S. National Science Foundation (NSF), aims to taxonomically document the world diversity of Oonopidae – a megadiverse lineage of haplogyne spiders found in virtually all major terrestrial habitats. Numerous collaborators from over 10 countries are working to revise a fauna estimated to be over 2000 species, having already added hundreds of new taxa since the project commenced. Goblin Spiders are active, six-eyed cursorial hunting spiders, with most species being ground- or litter-dwelling, and at least a few lineages adapted to arboreal habitats. The group is remarkably diverse at all levels, exhibiting an extraordinary diversity of

morphological traits and occupying the full spectrum of temperate and tropical habitats. Many taxonomic outputs from the PBI can be freely accessed via the American Museum's Scientific Publications portal, in either the Bulletin of the American Museum of Natural History or American Museum Novitates. See: http://library.amnh.org/scientific-publications.

Further information, including a full project description, species pages and participant information can be accessed via the project website. **See:**

http://research.amnh.org/oonopidae/projectdescription/projectdescription.php.

Arachnid Research In Focus...Migid Trapdoor Spiders (Migidae)

Cooper, S.J.B., Harvey, M.S., Saint, K.M. and Main, B.Y. (2011). Deep phylogeographic structuring of populations of the trapdoor spider *Moggridgea tingle* (Migidae) from southwestern Australia: evidence for long-term refugia within refugia. *Molecular Ecology* **20**, 3219-3236.



Female *Moggridgea* sp. from the Stirling Range National Park, Western Australia. Image by Mark Harvey, W.A. Museum.

Taxonomy:

Family Migidae: genus *Moggridgea* O.P.-Cambridge, 1875 (includes 33 described species from Africa and Australia).

Distribution:

South-western Western Australia and Kangaroo Island (South Australia); also throughout central and southern Africa and the Comoro Islands.

Précis:

This paper presents a molecular phylogenetic analysis and biogeography of the migid trapdoor spiders of the genus Moggridgea from south-western Western Australia. Migids are small, cryptic, burrowing mygalomorph spiders with a distinctive eye arrangement and relatively short legs and spinnerets. Most species build very small, highly camouflaged trapdoor-hinged burrows in the ground, on compacted clay banks or within the spongy bark of trees, usually in relatively moist habitats. In Western Australia, species of Moggridgea are restricted to the southern-most high rainfall province and surrounding areas, extending from near Bunbury in the west, to Waychinicup and Mount Manypeaks in the east, with additional outlying northern populations in the Porongurup and Stirling Range National Parks. Here the spiders are mostly rare and known from fragmented, localised populations in suitably moist or sheltered microhabitats, in many cases restricted to small, vulnerable populations in marginal or fire-prone habitats. Molecular analyses of these populations have revealed deep genetic structuring across the range of the genus in Western Australia, suggesting that late Miocene or Quaternary aridification cycles may have driven population divergences, even within the refugial mesic zone of southern Western Australia. This study also highlighted the effects of geographic features and the topography of the landscape in driving patterns of divergence, especially within montane habitats. This is the first molecular phylogeographic study on Australian Migidae and one of the first such studies on Western Australian Mygalomorphae. See:

http://www.ncbi.nlm.nih.gov/pubmed/2168919

<u>2</u>.

'Mimicry of Tropical Oecophylla'

Photos by Greg Anderson

The following images show three species of spiders, each in different families, mimicking tropical green tree ants of the genus *Oecophylla*. These photos were taken by Greg Anderson in the Darwin region, and highlight the amazing mimicry complexes that have evolved in response to these dominant ants.







Myrmarachne sp. (Salticidae; top), Amyciaea albomaculata (Thomisidae; middle) and an undescribed Theridiidae sp. (bottom) from near Darwin (Northern Territory); all mimicking the tropical green tree ant Oecophylla smaragdina.

Images by Greg Anderson.

Is it a beetle? No, it's a spider! by Robert Whyte

The Gap, Queensland 4061, Australia



Male Coccorchestes ferreus (Salticidae) from Iron Range, far north Queensland. Image by Greg Anderson.

These photographs by Dr Greg Anderson of the extraordinary jumping spider Coccorchestes ferreus Griswold, 1984 from the Iron Range, far north Queensland, show one of the strangest examples of mimicry in the spider world. This species apparently mimics a small black beetle, possibly a hard-bodied weevil in the genus Trigonopterus. Although the evolutionary 'drivers' behind different mimicry complexes can be hard to discern, this could be a form of mimicry where predators mimic a harmless model, allowing them to avoid being correctly identified by their prey or by their predators. Alternatively, it could also be a form of Batesian mimicry, whereby the mimic takes on the appearance of a dangerous, distasteful or poisonous model, in this case a potentially distasteful beetle.

In many cases mimics are like wolves in sheep's clothing, preying on the model they are imitating (known as aggressive mimicry). There are many cases of ant-eating ant mimics in the invertebrate world, notably amongst spiders and insects. However, this is probably not the case with *C. ferreus*. This spider may eat beetles, but it is more likely that it eats other more softbodied prey, as weevils might be a tough meal.



Male Coccorchestes ferreus (Salticidae) from Iron Range, far north Queensland. Image by Greg Anderson.

Coccorchestes ferreus is the only Australian species in its genus, with all the other described species known from New Guinea and New Britain. The genus was erected by Thorell in 1881, revised by Prószyński (1971) and revised again by Balogh (1980), at which time there were 39 valid species. Griswold's Australian C. ferreus was the 40th species, described only from the holotype found in 1949 by N. Krauss, now in the collection of the Queensland Museum. The specific name 'ferreus' refers to its location, Iron Range, and this is also the location where Dr Greg Anderson found his specimen.



Male Coccorchestes ferreus (Salticidae) from Iron Range, far north Queensland. Image by Greg Anderson.



Male Coccorchestes ferreus (Salticidae) from Iron Range, far north Queensland. Image by Greg Anderson.



Male Coccorchestes ferreus (Salticidae) from Iron Range, far north Queensland. Image by Greg Anderson.

References

Balogh, P. (1980). The genus *Coccorchestes* Thorell, 1881 (Araneae: Attidae). *Acta Zoologica Academiae Scientiarum Hungaricae* **26**, 61-88.

Griswold, C.E. (1984). *Coccorchestes* Thorell newly described from Australia (Araneae: Salticidae). *Bulletin of the British Arachnological Society* **6**, 147-148.

Prószyński, J. (1971). Redescription of type-species of genera of Salticidae (Aranei), VIII-X. Revision of the subfamily Coccorchestinae. *Annales Zoologici Warszawa* **28**, 183-204.

'Pollination is Risky'

Photos by Sue O'Halloran



Crab spider (Thomisidae) waiting on an orchid near Kojonup, Western Australia. Image by Sue O'Halloran.

These images, supplied by Sue O'Halloran, show crab spiders (family Thomisidae) waiting for prey on Western Australian orchids during the Spring wildflower season. These photos were taken at Farrar Railway Dam Reserve, west of Kojonup, and highlight the problems male flower wasps encounter while trying to find and mate with females. Many of these orchid species engage male flower wasps as pollination vectors, by duping them into thinking the flowers are themselves female wasps. Male flower wasps arrive at such flowers and try to mate with the orchids, only to receive a pollen packet in return. The second and third photos (below) show a male flower wasp that has not only been duped by an orchid, but also been captured by a waiting thomisid.

Such are the perils awaiting male flower wasps in Western Australia's woodlands!





Crab spider (Thomisidae) with a male flower wasp on an orchid near Kojonup, Western Australia. Images by Sue O'Halloran.

Australia's Crown Jewels: Australian *Arkys* species, treasures of the bush, a pictorial account

by Robert Whyte

The Gap, Queensland 4061, Australia

Australian *Arkys* species are some of our most attractive and most photographed spiders, yet many still remain undescribed and as a group their biology is barely known. These spiders are in the Araneidae, an orb-weaver family, yet *Arkys* gave up the web snare as a strategy and took up ambush hunting. Typically, they conceal themselves amongst green foliage, often with flowers, and grab their prey with strong front legs. They may subdue the prey with a venomous bite, or wrap it in silk for later consumption (or both). In rainforests, especially in south-eastern Queensland, they are easily seen going about their business.



Figure 1. Arkys lancearius Walckenaer, 1837 (Triangular Spider) – the type species of the genus Arkys. This is a beautiful ambush-hunting araneid found on the leaves of green shrubs throughout Australia including Tasmania. It is identifiable by the two large, yellow, roughly circular blobs in the anterior third of the upper surface of the abdomen, which also has a series of white spots (bordered by black) all around the outside margin. This species is the most common of the genus, quite abundant in forested habitats but rarely noticed. The species name 'lancearius' refers to a triangular spear-head or lance. Image by Greg Anderson.

The Triangular Spider, Arkys lancearius Walckenaer, 1837, is relatively rare in Brisbane, the heart of its natural range in south-eastern Queensland. Its history may parallel the history of the Richmond Birdwing Butterfly, an iconic species once common in Brisbane but displaced by industrial and suburban sprawl. Many invertebrates were no doubt displaced with the growth of Brisbane and the consequent habitat loss and pollution. Early botanical records by the Colonial Botanist Frederick Manson Bailey - an established botanist already in charge of the herbarium at the Queensland Museum spoke of the 'Three Mile Scrub' as being a subtropical paradise. The location of Three Mile Scrub has been confirmed by present-day Herbarium botanist Sandy Pollack as Ashgrove Avenue. This area previously must have been thick with Richmond Birdwing Butterfly and Triangular Spider. Nowadays to find the Richmond Birdwing Butterfly you will have to go to the fringes of its former range, Neurem Creek or Beerwah to the north, and Tamborine to the south.

During a recent visit to Pencil Creek, just west of Mapleton Falls National Park, all that was required to find Triangular Spider was to walk through the bush. We were soon festooned with *Arkys* falling from the foliage on their silken threads. Within a few metres it would have been possible to collect dozens, if not hundreds, of specimens for photography and study.

Arkys lancearius is the entry point for a fascinating genus. Both Aerea Urquhart, 1891 and Archemorus Simon, 1893 were found to be junior synonyms of Arkys Walckenaer, 1837, as was Neoarchemorus, described by Ramon Mascord in 1968 to differentiate spiders with legs outstretched as opposed to those that wait with legs folded. Being so unlike other orbweavers in their behaviour, it is not surprising that species of Arkys have found themselves assigned to different families over the years, including Thomisidae, Tetragnathidae and Mimetidae. Recent molecular studies have

compared the DNA across many species and confirmed their placement in the Araneidae (see Framenau et al., 2010).

In their 2010 publication Framenau et al. added four new species of *Demadiana* Strand, 1929 to the subfamily Arkyinae, and resolved many taxonomic problems within the group. Arkyinae is one of the smallest subfamilies in the Araneidae with about 34 species, and restricted to the Australasian region, the epicentre seeming to be Queensland with species found also in Indonesia, Papua New Guinea, New Caledonia as well as other parts of Australia.

The following pictures and brief descriptions highlight just some of the members of this genus, remarkable for their complex shapes and brilliant colours.



Figure 2. Arkys alatus Keyserling, 1890 is a small ambush hunter on foliage in all types of habitats with good rainfall from central Queensland to Victoria. It is a flattish spider with white, cream, dark-grey or brown overall colour and ornate patterns and knobs. The cephalothorax is just slightly longer than wide. The lateral eyes are on a projecting knob. The pattern on the abdomen can resemble a ghoulish looking skull or a spectral dog's head. The species name 'alatus' means winged. Image by Greg Anderson.



Figure 3. Arkys bulburinensis Heimer, 1984. The holotype for this species was collected and photographed by Raymond Mascord, seen in his 1980 field guide (plate 29.2 on page 77). This specimen collected October 2009 at Mapleton Falls National Park. Image by Greg Anderson.



Figure 4. Arkys cornutus L. Koch, 1872 is an ambush hunter, active on foliage at night. Its species name 'cornutus' means homed, referring to the horn-like projections at the front of the cephalothorax. Image by Robert Whyte.



Figure 5. Arkys curtulus (Simon, 1903). Sometimes called the 'Bird-dropping Spider' – but not to be confused with another araneid, Celaenia excavata (L. Koch, 1867) – this medium-sized spider hunts by ambush during the day on the exposed surfaces of green leaves, with legs drawn up, waiting for prey. Resembling a bird dropping, it is extremely well camouflaged and therefore rarely noticed, but is not uncommon in eastern mainland states from Victoria's south coast to Cape York and adjacent hinterlands. Its colours and patterns are extremely variable, ranging from brown through orange to black. Image by Robert Whyte.



Figure 6. Arkys dilatatus (Balogh, 1978) is a small, rather nondescript ambush hunter in coastal rainforest from southern to northern Queensland. The carapace, or top of the cephalothorax, is flat and covered with pale, forward-pointing hairs. The cephalothorax is longer than wide, with more or less straight sides, very slightly wider at the rear. Image by Greg Anderson.



Figure 7. Arkys speechleyi (Mascord, 1968) is well camouflaged for the rainforest, the greenish abdomen heavily sclerotised and with dimples reminiscent of *Dolophones* species. In 1968 Mascord established *Neoarchemorus* with *N. speechleyi* as the only species, based on the shape of the carapace and abdomen, eye pattern, and spine arrangement on the legs. The genus was later synonymised with *Arkys* by Framenau et al. (2010). Image by Robert Whyte.



Figure 8. Arkys vicarius (Balogh, 1978) resembles A. dilatatus but the abdomen is constricted to a waist nearly halfway along, slightly closer to the leading edge. The colour is variable but seems always to have a bright white section across the rear and penetrating inwards along the upper surface of the abdomen. Image by Robert Whyte.



Figure 9. Arkys walckenaeri Simon, 1879 is a small to medium-sized ambush hunter on foliage, waiting with outstretched arms for insects and other arthropods to come within range. It has a longer, narrower abdomen than many other similar Arkys species. It is found throughout mainland Australia's east coast and hinterland, mostly in the southern states. The former name 'clavatus' means studded with nails, referring to the pattern on the abdomen. This specimen collected along the McCartins Track, North Foster, Gippsland. Image by Michael J. Barritt.



Figure 10. Arkys sp. 'Mount Mee' is a small rainforest species with bright yellow flanks on the abdomen. Rather scarce in suitable habitat in southeastern Queensland around the Mount Mee region, but locally common in some pockets. Image by Robert Whyte.



Figure 11. Arkys sp. 'Mascord's Pretty Arkys' was recorded by Mascord in 1980 as an undescribed Archemorus species. He intended to name it 'A. pulcherrimus', but never managed to publish a description. Body length of the female up to 8 mm, the male about 5 mm. The double pointed abdomen (somewhat like the tent-web spider Cyrtophora exanthematica) and cross-like orange pattern on the cephalothorax are distinctive. Image by Robert Whyte.



Figure 12. Arkys sp. 'Candy-coloured Arkys' is a small, undescribed species found in subtropical and dry rainforest as well as lightly wooded eucalypt scrub. Its appearance suggests it is well camouflaged against bark, twigs, foliage and flowers in dappled sunlight. Image by Robert Whyte.

References

Framenau, V.W., Scharff, N. and Harvey, M.S. (2010). Systematics of the Australian orb-weaving spider genus *Demadiana* with comments on the generic classification of the Arkyinae (Araneae: Araneidae). *Invertebrate Systematics* **24**, 139-171.

Mascord, R. (1980). Spiders of Australia, A Field Guide. Reed Books, Sydney.

Recent Australasian Arachnological Publications

This column provides an informal list of arachnological publications issued since the last edition of *Australasian Arachnology*. These include publications on Australasian arachnids or papers written by Australasian arachnologists. If members would like to see their publications listed here please feel free to send me reference lists for the next edition.

Brown, S.D.J., Collins, R.A., Boyer, S., Lefort, M.-C., Malumbres-Olarte, J., Vink, C.J. and Cruickshank, R.H. (2012). SPIDER: An R package for the analysis of species identity and evolution, with particular reference to DNA barcoding. *Molecular Ecology Resources* in press.

Fitzgerald, B.M. and Sirvid, P.J. (2011). A revision of the genus *Pahoroides* (Araneae: Synotaxidae). *Tuhinga* **22**, 1-7.

Girard, M.B., Kasumovic, M.M. and Elias, D.O. (2011). Multi-modal courtship in the Peacock Spider, *Maratus volans* (O.P.-Cambridge, 1874). *PLoS One* **6**, 1-10.

Hill, D.E. and Otto, J.C. (2011). Visual display by male *Maratus pavonis* (Dunn 1947) and *Maratus splendens* (Rainbow 1896) (Araneae: Salticidae: Euophryinae). *Peckhamia* **89.1**, 1-41.

Kean, J.M., Vink, C.J., Till, C., Crosby, T.K., Marris, J.W.M. and Fagan, L.L. (2012). Real-time remote diagnostics for ecology: Wheeler's vision realised. *Frontiers in Ecology and the Environment* **10**, 99-104

Lattimore, V.L., Vink, C.J., Paterson, A.M. and Cruickshank, R.H. (2011). Unidirectional introgression within the genus *Dolomedes* (Araneae: Pisauridae) in southern New Zealand. *Invertebrate Systematics* **25**, 70-79.

Malumbres-Olarte, J., Vink, C.J., Ross, J.G., Cruickshank, R.H. and Paterson, A.M. (2012). The role of habitat complexity on spider communities in native alpine grasslands of New Zealand. *Insect Conservation and Diversity* in press.

Otto, J.C. and Hill, D.E. (2010). Observations of courtship display by a male *Maratus amabilis* Karsch 1878 (Araneae: Salticidae). *Peckhamia* **79.1,** 1-16.

Otto, J.C. and Hill, D.E. (2011). An illustrated review of the known peacock spiders of the genus *Maratus* from Australia, with description of a new species (Araneae: Salticidae: Euophryinae). *Peckhamia* **96.1**, 1-27.

Otto, J.C. and Hill, D.E. (2011). *Maratus vespertilio* (Simon 1901) (Araneae: Salticidae) from southern Australia. *Peckhamia* **92.1**, 1-6.

Otto, J.C. and Hill, D.E. (2012). Contests between male *Maratus vespertilio* (Simon 1901) (Araneae: Salticidae). *Peckhamia* **98.1**, 1-17.

Platnick, N.I., Dupérré, N., Ott, R. and Kranz-Baltensperger, Y. (2011). The goblin spider genus *Brignolia* (Araneae, Oonopidae). *Bulletin of the American Museum of Natural History* **349**, 1-131.

Platnick, N.I. and Dupérré, N. (2011). The goblin spider genus *Pescennina* (Araneae, Oonopidae). *American Museum Novitates* **3716**, 1-64.

Platnick, N.I. and Dupérré, N. (2011). The Andean goblin spiders of the new genus *Scaphidysderina* (Araneae, Oonopidae), with notes on *Dysderina*. *American Museum Novitates* **3712**, 1-51.

Rix, M.G. and Harvey, M.S. (2012). Phylogeny and historical biogeography of ancient assassin spiders (Araneae: Archaeidae) in the Australian mesic zone: evidence for Miocene speciation within Tertiary refugia. *Molecular Phylogenetics and Evolution* **62**, 375–396.

Sirvid, P.J., Zhang, Z.-Q., Harvey, M.S., Rhode, B.E., Cook, D.R., Bartsch, I. and Staples, D.A. (2011). Chelicerata: horseshoe crabs, arachnids, sea spiders. *In Gordon, D.P. (Ed.) New Zealand Inventory of Biodiversity. Volume Two: Kingdom Animalia. Chaetognatha, Ecdysozoa, Ichnofossils.* Canterbury University Press, Christchurch, pp. 50-89.

St Clair, J.J.H. (2011). The impacts of invasive rodents on island invertebrates. *Biological Conservation* **144**, 68-81.

Vink, C.J. and Dupérré, N. (2011). *Nesticus eremita* (Araneae: Nesticidae), redescription of a potentially

invasive European spider found in New Zealand. Journal of Arachnology 39, 511-514

Vink, C.J., Dupérré, N. and McQuillan, B.N. (2011). The black-headed jumping spider, *Trite planiceps* Simon, 1899 (Araneae: Salticidae): redescription including cytochrome *c* oxidase subunit 1 and paralogous 28S sequences. *New Zealand Journal of Zoology* **38**, 317-331.

Vink. C.J., McNeill, M.R., Winder, L.M., Kean, J.M. and Phillips, C.B. (2011). PCR analyses of gut contents of pasture arthropods. *In* Ridgway, H.J., Glare, T.R., Wakelin, S.A. and O'Callaghan, M. (Eds.) *Paddock to PCR: Demystifying Molecular Technologies for Practical Plant Protection*. New Zealand Plant Protection Society: Lincoln, pp. 125-134.

Wojcieszek, J.M. and Simmons, L.W. (2011). Male genital morphology influences paternity success in the millipede *Antichiropus variabilis*. *Behavioral Ecology and Sociobiology* **65**, 1843-1856.

Yoshida, H. and Koh, J.K.H. (2011). *Phoroncidia*, *Janula* and a new genus *Brunepisinus* (Araneae: Theridiidae) from Brunei. *Acta Arachnologica* **60**, 75-88

Żabka, M. (2012). *Phlegra* Simon, 1876, *Phintella* Strand 1906 and *Yamangalea* Maddison, 2009 (Arachnida: Araneae: Salticidae) – new species and new generic records for Australia. *Zootaxa* **3176**, 61-68.

Conferences



AES/AAS Joint Meeting

Where: Centre for Arts, University of Tasmania, Hobart, Tasmania

When: 25-28 November 2012

Website: http://www.cdesign.com.au/aes2012/

Contact: Conference Design Pty Ltd, 228 Liverpool Street, Hobart TAS 7000 (email: info@cdesign.com.au)

Registration opens early 2012. Deadline for receipt of Abstracts **1 June 2012**.

Note that the AAS will offer up to two travel awards for students to attend this conference; see General Announcements (above) for details on how to apply.



Southeast Asian Spider Symposium: Spiders of the Greater Mekong Region

Where: National University of Laos, Vientiane, Laos

When: 12-16 November 2012.

Website:

http://www.senckenberg.de/root/index.php?pag e_id=15244&preview=true

Contact: Dr Peter Jäger, Arachnology, Senckenberg, Senckenberganlage 25, 60325 Frankfurt, Germany (email:

Peter.Jaeger@senckenberg.de)

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Lynx spider (Oxyopidae) from near Chillagoe Caves, Queensland. Image by Greg Anderson.