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THE AUSTRALASIAN ARACHNOLOGICAL SOCIETY

The main aim of the society is to foster interest in arachnids in the Australasian region.

MEMBERSHIP

Information concerning membership may be obtained from the Administrator:

Richard J. Faulder Agricultural Institute Yanco, New South Wales 2703, Australia Email faulder@agric.nsw.gov.au

All membership enquiries (subscriptions, changes of address, etc.) must be directed to the Administrator.

Membership fees for residents in Australia, \$3; in New Zealand and Papua New Guinea, \$4; other members \$5 (surface mail) (airmail rates: \$10). Fees for Australian institutions, \$4; overseas institutions, \$8 (surface mail). Cheques should be made payable to "The Australasian Arachnological Society", and should be in Australian dollars. More than one year's subscription may be paid for at a time.

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BACK ISSUES

Back issues are available from the Administrator at \$1 per issue.

LIBRARY

Members who do not have access to a scientific library can write to our Librarian

Jean-Claude Herremans P.O. Box 291 Manly, New South Wales 2095, Australia

He has a large number of reference books, scientific journals and scientific papers available, either for loan or as photocopies. He also asks our professional members to send him a copy of any reprints they might have.

ARTICLES

Articles should be sent to the editor:

Mark S. Harvey Western Australian Museum Francis Street Perth, Western Australia 6000, Australia Email harveym@muswa.dialix.oz.au

and should be typed or legibly written on one side of A4 paper. Submission via email or on computer disk would vastly simplify publication. Don't forget to indicate the wordprocessing language used (e.g. WordPerfect 6.0, Word for Windows, MacWrite). The disk will be returned only upon request.

Cover illustration: Nicodamus peregrinus (Walckenaer) by Graham Milledge

SPIDERS IN MORWELL NATIONAL PARK

by Rob de Souza-Daw¹ and David Hirst²

¹Churchill, Victoria, Australia ²Arachnology, South Australian Museum, North Terrace, Adelaide, South Australia 5000

During the year ended 30 June 1995 de Souza-Daw conducted a survey of spiders in Morwell National Park. Located in eastern Victoria at around 38°22'S, 146°24'E, the Park covers an area of 500 hectares all of which has been subject to human disturbance. The Park was visited during daylight hours and at night, a total of 14 occasions.

Of the 281 specimens collected, representing 21 families, only four specimens were mygalomorphs, *Stanwellia grisea* and a *Bymainiella* species, which were found under logs. No excavation of burrows or pitfall trapping was carried out. A significant proportion of all spiders collected were nonadult.

Also common under logs were Stiphidion facetum which appeared to show a preference for those burnt by fire. Amaurobiids and desids were found in the hollows or deep grooves of the stringybark trees. Most clubionids. gnaphosids, heteropodids, lamponids and nicodamids favoured the bark of mature manna, mountain grey and blue gums. Two nicodamid species were collected: Ambicodamus southwelli and Novodamus nodatus. the jumping spiders, Of Paraplatoides nigrum and Helpis minitabunda were also found under bark of trees.

Creek banks supported populations of *Tetragnatha valida*, the long-jawed spider and the Fishing Spider *Dolomedes* sp., *Lycosa furcillata* and a *Trochosa* sp. were found in the moist conditions in the Park while other wolf spiders, including *Venator fuscus*, were found

among the drier leaf litter or under logs.

Among the spiders collected in the rainforest areas as a Nanometa sp. Some of the araneids found were collected from orb-webs constructed between the wires of the Park's fencing. Other man made structures supported populations of *Philoponella congregabilis* and *Badumna longiquus*.

The Department of Conservation and Natural Resources issued the requisite Research Permit. Specimens have been deposited either in the Museum of Victoria or the South Australian Museum. The identifications were by Hirst from whom a complete list can be obtained.

BOOK REVIEW: 'Australasian Spiders and their Relatives: Papers Honouring Barbara York Main'

by Peter Fairweather

PO Box 787, Griffith, New South Wales 2680, Australia

Harvey, M.S. (ed.) (1995). Australasian Spiders and their Relatives: Papers Honouring Barbara York Main. *Records of the Western Australian Museum Supplement* No. 52, pp. 1v, 1-263.

This is a splendid book of technical papers describing many aspects of arachnid biology relevant to this part of the world. Excellently put together on high quality glossy paper, it features superb SEM photographs and line drawings of taxonomic and anatomical detail. The authors make up a "Who's Who" of Australian arachnology and it all comes at a modest price. Even better is the fact that it celebrates the professional life of a remarkable Australian. Barbara York Main has had an incalculable impact on arachnology in Australia and internationally. Her many papers on the taxonomy, natural history and general biology of spiders and their kin are renowned. Her popular writings introduced many laypeople to the fascinating life histories of trapdoor spiders, among other facets of nature. Like many, I was inspired by her two guidebooks (from 1964 & 1976) on spiders. I remember making enormous use of the former, a real little handbook in indigo and then orange covers for different reprints.

Back to the book: I found the biographical sketch of Barbara York Main by Ernest Hodgkin to be an interesting insight into her career. Furthermore the volume includes a publication list of her 85 works from 1952 to 1993 (presumably there have been more in the two years hence). This is a very useful compendium to a highly productive career. Also touching are the tributes that many of the authors build into the Introduction or Acknowledgments sections of their papers. Many of these rang bells with me, as they will with anyone who was a budding amateur arachnologist during the 1960s and 70s.

The book contains 7 papers on aspects of the behaviour. ecology or conservation of arachnids. 12 on the systematics and morphology of spiders and another 8 on other arachnids. Eleven new species and 2 new genera are described. Fittingly at least 4 of the chapters spiders deal with 16 on mygalomorphs. There are 4 papers on the Acarina, 2 on scorpions as well as one each on schizomids, pseudoscorpions, harvestmen, chelicerates generally and spider parasitoids. Families to feature are the Salticidae, Heteropodidae, Theriidiae, Thomisidae. Araneidae, Gnaphosidae, Zodariidae and even the little known Hersiliidae. Social spiders (especially Diaea species) are dealt with in three chapters. Twenty-three of the papers are authored by Australians, 3 each by New Zealanders or Europeans and a sole

contribution comes from the USA.

Like many non-professionals, I got most from the general biology papers. Mark Elgar gives a thorough comparative review of the duration of copulation across spider families. Lyn Forster summarises the behavioural ecology of redback spiders concluding that they may be endemic after all. Alan Yen deals with the problems of conserving a group so well known by the public as to be disliked! He focuses on the threats to them as well as their benefits to us. Dave Walter documents the extraordinary richness of mites within domatia (tiny structures) on rainforest leaves. Graham Smith quantitatively describes scorpion abundances in the WA wheatbelt, an ecological approach that Australian arachnology has yet to really embrace but for which the pioneering work of Barbara York Main has prepared the ground so well.

I highly recommend this book to anyone interested in the state of the art of Australasian arachnology. Through the technical detail shines a deep fascination with the world of spiders and their kin, and an enormous appreciation of the contribution of Barbara York Main to our current understanding of this subject.

LIBRARY NEWS

Additions to reprint collection were received from:

Dr Francoise Athias-Binche (France) Dr Robert Jackson (New Zealand) Dr S. Mahnuka (Hungary) Prof. H. W. Levi (U.S.A.) Groupe d'étude des Arachnides Thanks to Tom Gush for assistance with photocopying.

BOOK REVIEW: 'Spider Genera of North America, with keys to families and genera, and a guide to literature'

by Jean-Claude Herremans

PO Box 291, Manly, New South Wales 2095, Australia

Roth, V.D. (1993). Spider Genera of North America, with keys to families and genera, and a guide to literature. Third edition. Soft-cover. 21.5 x 28 cm. 203 pages.

Available from Dr Jon Reiskind, Department of Zoology, University of Florida, Gainesville, Fl 32611, USA. Price not stated.

This book, produced by the author and dedicated to Willis J. Gertsch and Benjamin J. (BJ) Kaston, is a handy guide to the North American araneological fauna. It is divided into three parts. The first section (16pages) consists of several short chapters dealing with information such as abbreviations for U.S. States and Canadian Provinces, hints for the beginning student, addresses of main arachnological societies, updated glossary, and finally a list of useful publications.

The second section (14 pages) deals with the Mygalomorphae (8 families), while the last part (165 pages) treats the Araneomorphae (51 families). The book ends with a comprehensive index.

Throughout the book, the families are arranged alphabetically, each family being followed by a diagnosis, distribution and comments, if appropriate. Next, is a key to genera, then the references. I particularly liked this idea of having the references after each family description. It saves the reader from continually going back and forth at the end of the book to search for the relevant citation. The vast amount of data - descriptions, keys, drawings - are presented in a clear, easy to read text, thanks to a different font.

A publication like this one, written by such an authority as Dr Roth, rouses the highest expectations. After going through the publication, those expectations were amply fulfilled. As an identification guide, it is of great value to anyone interested in spiders. Congratulations to the author. The guide is now in the Society's library.

MEMBERSHIP

Changes of Address

Dr Robin Leech, Biological Sciences, Northern Alberta Institute of Technology, 11762 One hundred & Sixth Street, Edmonton, Alberta T5G2R1, Canada (email: robinl@nait.ab.ca)

Eric Brouwers, P.O. Box 210, Creswick Victoria 3363, Australia

Adrian M. Colebrook, 2/76 Grose Road, Faulconbridge, New South Wales 2776, Australia

Phil Taylor, 52 Aikmans Road, Merivale, Christchurch, New Zealand

Jenni Webber, P.O. Box 1173, Palmerston, Northern Territory 0830, Australia

New members

Bradley Durant, 17 Redgum Ave, Bellevue, Western Australia 6056, Australia

Helen Mackay, Science Department, The Waikato Polytechic, Private Bag 3036, Hamilton, New Zealand

John Noble, 30 Fiona Road, Beecroft, New South Wales 2119, Australia

Email addresses

Here are some new email addresses to add to the list provided in *Australasian Arachnology* 51:

Graham Brown:

graham.brown@dwnmus.magnt.nt.gov.au Grace Hall: HallGR@landcare.cri.nz Robin Leech: robinl@nait.ab.ca Helen Mackay: ScLHM@TWP.ac.NZ Norm Platnick: 72737.3624@compuserve.com Louis Sorkin: sorkin@amnh.org

RECENT PUBLICATIONS ON AUSTRALASIAN ARACHNOLOGY

Bartsch, I. (1996). Halacarines (Acari: Halacaridae) from Rottnest Island, Western Australia: the genera Agauopsis Viets and Halacaropsis gen. nov. Records of the Western Australian Museum 18: 1-18.

Bartsch, I. (1996). Werthella ampliata n. sp., a new psammophilous halacarid mite (Acari: Halacaridae: Copidognathinae) from Western Australia. Acarologia 37: 275-280.

Beard, J. and Walter, D.E. (1996). Australian mites of the genera *Paraphytoseius* Swirski and Shechter and *Paraambhyseius* Muma (Acarina: Phytoseiidae). *Australian Journal of Entomology* **35**: 235-241.

Churchill, T.B. (1996). Coastal heathland spiders: spatial distribution and biogeographic significance. *Records of the Queen Victoria Museum and Art Gallery* **103**: 151-158.

Fearn, S. (1996). Australian theraphosid spiders in captivity. *Monitor* 8 (1): 15-20.

Hudson, P. and Adams, M. (1996). Allozyme characterisation of the salt lake spiders

(Lycosa: Lycosidae: Araneae) of southern Australia: systematic and population genetic implications. Australian Journal of Zoology 44: 535-567.

Hunt, G.S. (1996). A review of the genus Pedrocortesella Hammer in Australia (Acarina: Cryptostigmata: Pedrocortesellidae). Records of the Australian Museum 48: 223-286.

Hunt, G.S. (1996). A review of the genus *Hexachaetoniella* Paschoal in Australia (Acarina: Cryptostigmata: Pedrocortesellidae). *Records of the Australian Museum* 48: 287-302.

Hunt, G.S. (1996). Description of predominately arboreal platermaeoid mites from eastern Australia (Acarina: Cryptostigmata: Plateremaeoidea). *Records of the Australian Museum* 48: 303-324.

Hunt, G.S. (1996). A review of the family Pheroliodidae Paschoal in Australia (Acarina: Cryptostigmata: Pedrocortesellidae). *Records* of the Australian Museum 48: 325-358.

Seeman, O.D. (1996). Flower mites and phoresy: the biology of *Hattena panopla* Domrow and *Hattena cometis* Domrow (Acari: Mesostigmata: Ameroseiidae). *Australian Journal of Zoology* 44: 193-203.

Smit, H. (1996). New species of water mites from New Zealand, with remarks on the water mites from ponds and lakes (Acari, Hydrachnellae). *Acarologia* **37**: 45-53.

Southcott, R.V. (1996). Description of a new Australian mite (Acarina: Trombidioidea), with comments on superfamily classification. *Records of the South Australian Museum* 29: 55-62.

Southcott, R.V. (1996). The ecology, lifehistory and morphometrics of the Australian chigger mite *Eutrombicula samboni* (Womersley) (Acarina: Trombiculidae). Acarologia 37: 299-316.

Thirunavukarasu, P., Nicolson, M., and Elgar, M.A. (1996). Leaf selection by the leaf-curling spider *Phonognatha graeffei* (Keyserling) (Araneoidea: Araneae). *Bulletin* of the British Arachnological Society 10: 187-189.

SUMMARY OF SOCIETY FINANCES FOR THE YEAR FROM 9 DECEMBER 1995

Initial amount in savings bank cheque 659.12 account CREDITS Total subscriptions & back issues 293.40 Payments for photocopies (Library) 237.96 Bank Interest 10.74 Total Credits 542.10 1201.22 DEBITS Front page masters for back issues 60.00 Postage of newsletter 50 142.17 Miscellaneous postage 66.00 State duties and taxes 0.57 **Total Debits** 268.74 Final savings bank balance 932.48

Term deposit at 13th December 1996 stands at \$1379.27.

FORTHCOMING CONFERENCES:

XIV INTERNATIONAL CONGRESS OF ARACHNOLOGY AND THE 22ND ANNUAL MEETING OF THE AMERICAN ARACHNOLOGICAL SOCIETY

The XIV International Congress of Arachnology will be held in conjunction with the 22nd Annual Meeting of the American Arachnological Society at the Field Museum, Chicago, Illinois, U.S.A., on 27 June to 3 July 1998. For details contact:

Petra Sierwald, Insects, Field Museum, Roosevelt Road, Lake Shore Drive, Chicago, 111 in 0 is U.S.A. 60605 (Email: SIERWALD@FMPPR.FMNH.ORG)

XTH INTERNATIONAL CONGRESS OF ACAROLOGY

The Xth International Congress of Acarology will be held in Canberra, Australia, from the 6-10 July 1998. For further details contact:

Bruce Halliday, CSIRO Division of Entomology, GPO Box 1700, Canberra, A.C.T. 2601, Australia

AUSTRALIAN ENTOMOLOGICAL SOCIETY 28TH AGM AND SCIENTIFIC CONFERENCE

The 28th Annual General Meeting and Scientific Conference of the Australian Entomological Society will be held in The University of Melbourne, Victoria, on 28 September - 3 October 1997. For further details contact:

Nancy Endersby, Institute for Horticultural Development, Agriculture Victoria, Private Bag 15, South Eastern Mail Centre, Victoria 3176, Australia

Telephone:(03) 9210 9222Facsimile:(03) 9800 3521Email:endersbyn@knoxy.agvic.gov.au

SOCIETY OF AUSTRALIAN SYSTEMATIC BIOLOGISTS NATIONAL CONFERENCE

The inaugural meeting of the newly formed Society of Systematic Biologists will be held in Adelaide, South Australia, on 29 September -3 October 1997. For further details contact:

Robyn and Bill Barker, The State Herbarium of South Australia, Botanic Gardens, North Terrace, Adelaide, South Australia 5000, Australia

Telephone: (08) 8228 2348, (08) 8228 2303 Email: rbarker@btg.lands.sa.gov.au bbarker@btg.lands.sa.gov.au