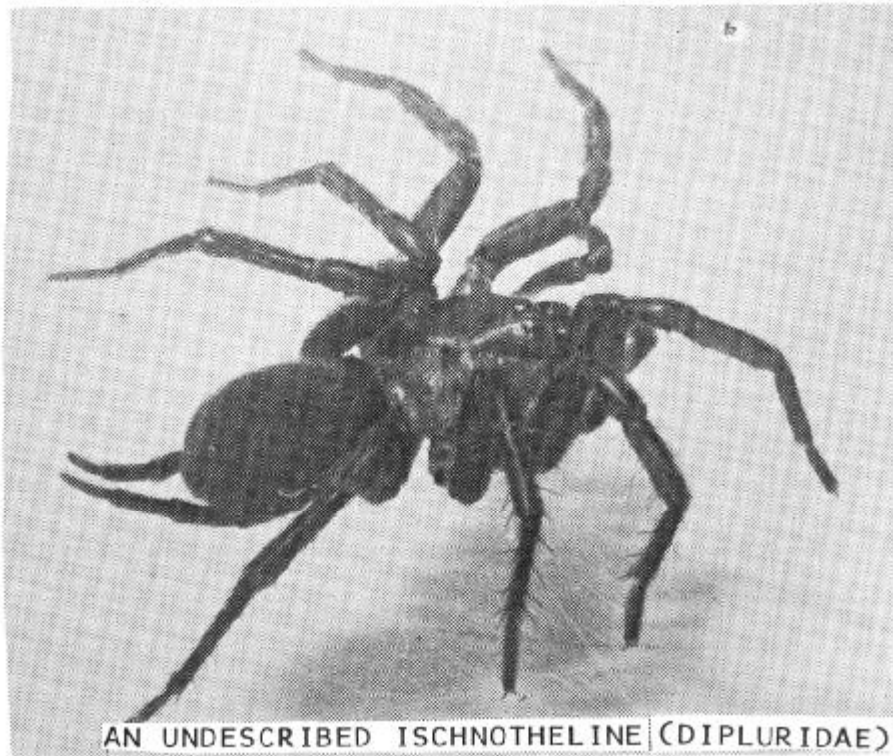


# AUSTRALASIAN



## ARACHNOLOGY:10

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## Australasian Arachnology :10

## MEMBERSHIP

Membership fees for 1982 for residents in Australia, \$2; in New Zealand and New Guinea, \$3; other members wishing newsletters sent airmail, \$10, or mailed at surface rates, \$5; Australian institutions, \$3; overseas institutions, \$8, surface mail. If possible subscriptions should be made out in Australian dollars.

Information concerning membership will be available from the new editor, Mr Richard Faulder, Yanco Agricultural Research Station, Yanco, N.S.W. 2703.

## ARTICLES

All articles should be sent to the editor at the above address and should be concisely written and neatly typed. New names of taxa must not be used in this publication until they are published in the form that fulfills the code of the International Commission for Zoological Nomenclature.

## PEOPLE

**NEW EDITOR.** Mr Richard Faulder (see above address) has generously accepted the editorship of Australasian Arachnology while the outgoing editor in New York during 1983. Richard's previous experience in editing similar newsletters will ensure that the 'whole show' is run somewhat more professionally than I have done. -Robert J. Raven.

Outgoing editor, Dr Robert J. Raven, will spend 1983 in New York expanding his knowledge of taxonomic and curatorial procedures while he learns more of mygalomorph spiders from other parts of the world and their relationships with Australian mygalomorphs. During 1983, Robert will be visiting other North American museums including the Museum of Comparative Zoology, Harvard University, and will attend the International Congress of Arachnology to be held in Panama during August 1-8. During 1984, Robert will be working at the Australian National Insect Collection, C.S.I.R.O., Canberra, expanding his and thence general knowledge of Australian spiders. The precise subject of Robert's 1984 research is probably evolving now. As outgoing editor I present my editorial below.

Dr Barbara York Main, arachnologically celebrated authoress and spider biologist, has received support from an Australian Biological Resources Study grant. As one of Australia's foremost arachnologists, Barbara will no doubt be able to increase her output and we will be enlightened in many interesting areas.

Dr Andy Austin, having been awarded his Ph.D., is now in residence at the Commonwealth Institute of Entomology, London.

## RECENT PUBLICATIONS ON AUSTRALASIAN ARACHNOLOGY

- Davies, V. Todd. 1982. *Inola* nov. gen., a web-building pissurid (Araneae: Pissuridae) from northern Australia with descriptions of three species. Mem. Qd. Mus. 20(3), 479-88.
- Jackson, R.R. 1982. The biology of *Portia fimbriata*, a web-building jumping spider (Araneae, Salticidae) from Queensland: intraspecific interactions. J. zool., Lond (1982) 196, 295-305.
- Jackson, R.R. & A.D. Blest. 1982. The biology of *Portia fimbriata*, a web-building spider (Araneae, Salticidae) from Queensland: utilization of webs and predatory versatility. J. zool., Lond. (1982) 196, 255-93.

## NEWSLETTER OF THE AUSTRALASIAN ARACHNOLOGICAL SOCIETY

- Levi, H.W. 1982. The spider genera Psechrus and Fecenia (Araneae:Psechridae). Pacific Insects 24, 114-38.
- Levi, H.W., Y.D. Lubin, & M.H. Robinson. 1982. Two new Achaearanea species from Papua New Guinea with notes on other theridiid spiders (Araneae: Theridiidae). Pacific Insects 24, 105-13.
- Muchmore, W.B. 1982. The genus Anagarypus (Pseudoscorpionida: Garypidae). Pacific Insects 24, 159-63.
- Muchmore, W.B. 1982. A new cavernicolous Sathrochthonius from Australia (Pseudoscorpionida: Chthoniidae). Pacific Insects 24, 156-8.
- Raven, R.J. 1982. Review: Ecological Biogeography of Australia. - A. Keast (ed.). 1981. Monographie Biologicae, Volume 41; Dr W. Junk, The Hague. xix + 2142 pp. \$495.00. Syst. Zool 31(2), 1982, 229-233.
- Raven, R.J. 1982. On the mygalomorph spider genus Xamiatius Raven (Diplurinae: Dipluridae) with the description of a new species. Mem. Qd. Mus. 20(3), 473-78.
- Raven, R.J. 1982. Systematics of the Australian mygalomorph spider genus Ixanatus Simon (Diplurinae: Dipluridae: Chelicerata). Aust. J. Zool. (1982) 30, 1035-61.

## NEW BOOKS

Preliminary Handbook for spider identification. A guide to the important catalogs, recent family and generic revisions with supraspecific keys to spiders of America north of Mexico. By Dr Vincent D. Roth. 1982.

Although an inexpensive production (\$5), this handbook of over 100 pages is already an invaluable starting point for American arachnologists. The author diagnoses 52 families and keys 368 genera. Keys to families are also given. Because of the format of the book - treated by families in sections that do not run on - allows easy updating without complete reprinting. Even though this book is on American spiders, I highly recommend it to (literature-starved) Australian arachnologists not only because a good number of genera treated are common to Australia but also because it is a valuable and interesting publication.

The book is available from Dr Vincent D. Roth, Resident Director, Southwestern Research Station, Portal, Arizona, 85632, U.S.A. for the princely sum of \$5 US - taking into account surface mail costs and exchange rates I suggest Australians send \$8 Aust.

## WANTED: BOLAS SPIDERS (DICROSTICHUS SPP.)

Ms Densley Clyne and Mr Jim Frazier of Mantis Wildlife Films need live specimens of Dicrostichus species, preferably D. magnificus but D. furcatus will do. The spiders will be used as a part of some films on Australian spiders for english television. The above producers are prepared to pay a search fee and postage and they do not mind how many they get. However, if females have egg-sacs they too should be sent but egg-sacs alone are of little help. The spiders should be sent to Mantis Wildlife Films Pty Ltd, 14 Taylors Rd, Dural, 2158, N.S.W. (Editor's remark: I hope members with assist this project because any interest that Australian spiders generate will be beneficial to the Society and its members.)

## AUSTRALIAN SPIDER TAXONOMY IN REVIEW

Robert J. Raven  
3 Dickson Tce, Hamilton, 4007, Queensland.

This year marks my tenth year of involvement in Australian arachnology

and this is my tenth issue of Australasian Arachnology. Therefore, I am taking this opportunity to do some accounting and review the field.

My first activity in arachnology was to compile a list of Australian spiders from Bonnet's (1939-1954) *Bibliographia Araneorum*. Because a subject area cannot progress independent of its taxonomy, it is there that I direct my attention. Unless otherwise stated, the following comments refer to the status by 1939.

About 1440 species known to Australia were described. The top ten authors in descending order of contribution of new species (see Appendix I for details) were L. Koch, Simon, Keyserling, Rainbow, Hogg, Thorell, Palleine (both alone and with Rainbow), Karsch, O. Pickard-Cambridge and Hickman; the remaining 160 or so species were described by about 37 authors. The present Australian spider fauna includes about 71 families (see Appendix II). That number may be high or low (by about 5 to 10) depending upon how much you know and whether you accept one or another classification. There have no overall reviews or major revisions since Simon's (1892-1903) 'Histoire naturelle des araignees'; however, Lehtinen (1967) included Australian taxa but did not revise species (some say, or genera) in the cribellate families, Mackay (1973 and subsequently) has been revising the Lycosidae, and Raven (1978, 1980) revised the Hexathelidae. As about 28 of the above families contain no more than 2 or possibly 3 genera, the largest task is the remaining 43 families.

Because about two-thirds of the Australian species known to 1939 were described in German, Latin or French in publications of very limited availability, the centres of serious taxonomic research in Australia is probably only about 5, if that many. But that number becomes reduced considerably if it is considered that revisionary spider taxonomy needs the initial guiding hand of experience in spider taxonomy. Now it is partially evident why spider taxonomy in Australia is so neglected. Interested students either struggle with incomplete and inadequate popular publications or give up! Through universities other possibilities become available. But there are only two spider arachnologists with the necessary links to universities - Dr Valerie Davies, Queensland Museum, Brisbane, and Dr Barbara York Main, Zoology Department, University of Western Australia, Nedlands. Although the number of spider-knowledgeable curators in Australia's museums is also two - the other being Mr Michael Gray, Australian Museum, Sydney - curators responsible for arachnids are usually helpful to those struggling amateurs. (It should be added here that amateurs need no more feel defensive of their status than may professionals feel aggressive about theirs. Lest we forget: an amateur built the Ark and professionals built the Titanic.)

Thus, the general situation in Australian spider taxonomy is poor. There are virtually no foundation revisions. The important early literature is not readily available and then must be translated. There are few centres of research and with ever-increasing university cut-backs, the situation will not improve. What can be done? Pot-boiler papers describing a few species and one or two genera may be useful and easy but obviously that is at the expense of revisions of families and superfamilies which must be of highest priority. But large revisions are generally expensive and can only be undertaken with considerable financial and staff support and with the co-operation of fellow arachnologists - that is the realm of the professional. The publication of a Catalogue of Australian spiders will be an invaluable important step; perhaps, the primary compilers of that catalogue will also undertake the revisions if they have not already begun to do so. Clearly, without those revisions or some sort of authoritative overall review arachnology in Australia will not rise to its real position of medical and economic significance and will remain the handmaiden of entomology.

APPENDIX I. Spiders found in Australia (ca. 300 genera). Authors with species described and percentage of total in 1939 in brackets: L. Koch, 427(29.8); Simon, 212(14.6); Keyserling, 149(10.4); Rainbow, 134(9.3); Hogg, 105(7.3); Thorell, 65(4.5); Palleine (and with Rainbow), 62(4.3); Karsch, 36(2.5); O. Pickard-Cambridge, 33(2.3); Hickman, 25(1.7); about 37 other authors, 159 (13.1).

## Newsletter of the Australasian Arachnological Society

## APPENDIX II. Australian spider families.

Nygalomorphae (7): Actinopodidae, Barychelidae, Ctenizidae, Dipluridae, Hexathelidae, Migidae, Theraphosidae.

Araneomorphae (64, given in broad taxonomic groups):

Gradungulidae, Hickmaniidae, Megadictynidae  
 Dinopidae, Dictynidae\*, Amaurobiidae, Psecridae, Uloboridae, Desidae, Nicodamidae, Amaurobioidae, Stiphidiidae, Amphinectidae\*, Neolanidae\*, Filistidae, Cecobiidae. (\* denotes families based on New Zealand species but presumed to have Australian representatives).  
 Agelinidae, Hahnidae, Hersiliidae, Zodariidae, Palpimanidae, Pisauridae, Dolomedidae, Lycosidae, Oxyopidae, Sicariidae, Theridiidae, Pholcidae, Linyphiidae, Archaeidae, Mecysmaucheniidae, Araneidae, Mimetidae, Cyatholipidae, Tetragnathidae, Nesticidae, Erigonidae.  
 Dysderidae, Oonopidae, Hadrotarsidae, Orsolobidae, Symphytognathidae, Anapidae, Mysmenidae, Theridiosomatidae, Segestriidae, Loxoscelidae, Ochyroceratidae, Scytodidae, Tetrablemmidae.  
 Ctenidae, Gnaphosidae, Sparassidae, Selenopidae, Thomisidae, Clubionidae, Salticidae, Toxopidae, Cycloctenidae, Liocranidae, Miturgidae, Zoridae, Lyssomanidae, Prodidomidae.

## REFERENCES

- Bonnet, P. 1939-1961. Bibliographia Araneorum. Toulouse, 1-3, 1-5058.  
 Lehtinen, P.T. 1967. Classification of the cribellate spiders and some allied families, with notes on the evolution of the suborder Araneomorpha. Ann. zool. Fenn. 4, 199-468.  
 McKay, R.J. 1973. The Wolf Spiders of Australia (Araneae: Lycosidae): 1. The Bicolor group. Mem Qd. Mus. 16(3), 375-98.  
 Raven, R.J. 1978. Systematics of the spider subfamily Hexathelinae (Dipluridae: Nygalomorphae: Arachnida). Aust. J. Zool. Suppl. Ser. 65, 1-75.  
 Raven, R.J. 1980. The evolution and biogeography of the mygalomorph spider family Hexathelidae (Araneae, Chelicerata). J. arachnol. 8, 251-66.

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## FEE INCREASE FOR 1983

Although fees for 1983 are not due for a couple of months, I must indicate that an increase is necessary. However, the increase only affects Australian, New Guinea and New Zealand members. (A full review of costs will be undertaken in early 1984.) The present increase is a direct result of the increase in the cost of ordinary letter mail from 20c when the newsletter was started in 1979 to the present cost of 27c. That increase is paralleled by a proportionately larger increase in bulk mailing costs and is aggravated by the annual \$20 fee Australia Post demands for registration of newsletters. If we are to benefit from reduced rate mailing we must post at least 182 articles per year within Australia. At present we do that easily (240-280). However, a number of members are unfinancial and that places an added burden on the society. To keep the newsletter funds buoyant the fees for Australian members is increased to the princely sum of \$3; and for New Zealand and New Guinea members should pay \$4.

## YOUR PRESENT FINANCIAL STATUS

If the below contradicts your knowledge of the facts you should write to Mr Faulder giving him the approximate date that you paid and how you paid, for example, cash, money order, cheque. If the statement is correct then please

for example, cash, money, cheque. If the statement is correct then please rectify or the next newsletter will not arrive.

YOU HAVE A DEBIT OF

\$10 \$6 \$5 \$4 \$2 \$1

YOU ARE PAID UP AND YOU ARE A CAREFUL MEMBER

YOU HAVE A CREDIT OF

\$40 \$20 \$10+ \$5+ \$2 \$1

SOME IMPORTANT REFERENCES IN AUSTRALIAN ARANEOLGY

- Koch, L. 1865. Beschreibungen neuer Arachniden und Myriapoden. Verh. zool.-bot Ges Wien, 15, p. 857-92.
- Koch, L. and E. Kaysorling. (as two separate authors in one volume) 1871-1883. Die arachniden australiens, nach der natur beschreiben und abgebildet. Nurnberg, 1871-1883, pp.1-1489, pl. I-CXXVIII.
- Simon, E. 1892 -1903. Histoire naturelle des araignees. Deuxieme ed. Paris, 1892-1903, 2 tomes in 8 parts.

More references will be given in future issues. The next 2½ pages are blank because no-one has contributed. The newsletter needs contributions more than it need money. So pick up you pens and let us try to let each other know what of interest is going on!