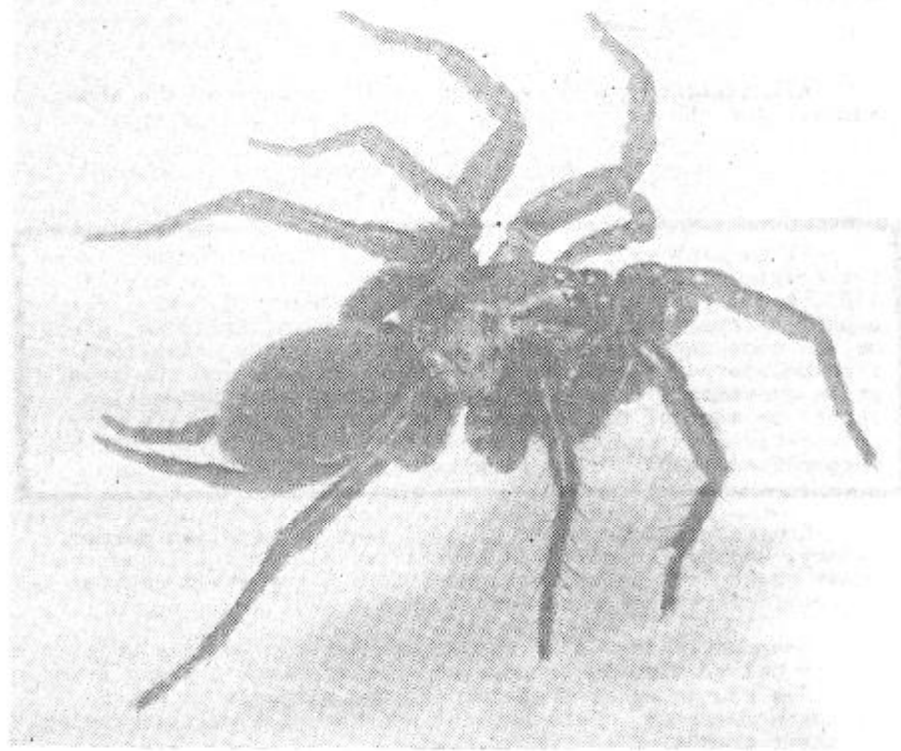


AUSTRALASIAN



ARACHNOLOGY : 9

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Australasian Arachnology : 9

MEMBERSHIP

Membership fees for residents in Australia, \$2; in New Zealand and New Guinea, \$3; other members wishing newsletters sent airmail, \$10, or mailed at surface rate, \$5; Australian institutions \$3; overseas institutions, \$8 (surface mail). If possible, subscriptions should be made out in Australian dollars. Information concerning membership is available from Dr Robert J. Raven, Editor/Secretary, Australasian Arachnological Society, P.O. Box 573, Fortitude Valley, 4006, Q, Australia.

ARTICLES

All articles should be sent to the editor at the above address and should be concisely written and neatly typed.

PEOPLE

It is with great sadness and shock that I (editor) note the tragic death of Vincenzo Roberto Salanitri, on May 15, 1982, known to his friends as Vince. Vince, 38, was a very capable preparator at the Queensland Museum, Brisbane, where he had made many friends over the past 2 years. Previously from Melbourne, Vince was enrolled in an M.Sc. on the population dynamics of the mygalomorph spider genus *Stanwellia*. Judged by some of his comments, Vince's findings were very provocative to some established ideas. It is hoped that his uncompleted thesis will, if possible, be published.

Congratulations to Mr Michael Gray, Australian Museum, Sydney, who has received an Australian Biological Resources Study grant for the collection of live *Atrax* specimens for biochemical taxonomic research.

Congratulations also to Mr Mark Harvey, Zoology Dept, Monash University, Melbourne, who has received a grant from the same source as Mr Gray but for the purposes of pseudoscorpion research. Both Michael and Mark are well-deserving of their grants.

Congratulations also to the Australian Biological Research Grants Committee for supporting the work of Messrs. Gray and Harvey and also for having the foresight to initiate long overdue projects cataloging the Australian spider fauna. The final product - a catalogue of described Australian spiders with distributions of species, ecological and biological information, and the location of types - is a vital initial part of any serious research in Australian arachnology, a long neglected field. Sadly, however, it may be some years before the entire volume is compiled. Perhaps as more Australian arachnologists are able to co-operate, the task will be shortened.

Mr Harry Parnaby, avid collector and student of Australian Sparassidae, appointed from Mr Gray's grant monies, passed through southern Queensland in late June in search of live *Atrax*. His efforts in Queensland's somewhat unexpectedly

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cooler winter were quite successful.

An international congress of toxinologists in Brisbane in mid-July brought together the distinguished arachnological toxinologist-immunologist, Dr Struan K. Sutherland, of Atraxotoxin and Funnel-web antivenom fame, Dr Ron Southcott of diverse arachnological and other accomplishments and Dr Julian White of Adelaide. All are members of the Society.

Mr Greg Anderson, of Kotara South, N.S.W., avid arachnologist, is now no doubt intrigued by Canadian arachnology and is enjoying the experience of those arachnologists. Greg won an overseas post-graduate scholarship to read biochemistry for his Ph.D. at a Canadian University. Congratulations, Greg.

Mr Richard J. Faulder, of Yanco Agricultural Research Station, N.S.W., has commenced research on the taxonomy of the mygalomorph spider genera, Aganippe (Ctenizidae) and Missulena (Actinopodidae). It is good to see more arachnological research being undertaken. Good luck, Richard. Richard was in Brisbane at the Queensland Museum in August, 1982.

I also sadly note the tragic deaths of Linsley Gressitt and his wife in a plane crash in China. Although not an arachnologist, Dr Gressitt's biogeographical research on insects had wide reaching implications and much of his work was on Pacific (New Guinea recently) insects.

Dr Robert Raven, Queensland Museum, has begun a review of the taxonomy of Australian Barychelidae while continuing with his research on Dipluridae and Hexathelidae. (But see p.4)

RECENT PUBLICATIONS ON AUSTRALASIAN ARACHNOLOGY

- Forster, L.M. 1982. Vision and prey-catching strategies in Jumping spiders. *American Scientist* (March-April, 1982): 165-75.
- Main, B.Y. 1982. Notes on the revised taxonomic position of the Black Wishbone spider Dekana diversicolor Hogg (Mygalomorphae:Dipluridae). *J. R. Soc. West Aust.* 65(1):25-9.
- Main, B.Y. 1982. Some geographic considerations of families of spiders occurring in New Guinea. pp. 583-602. In, *Biogeography and ecology in New Guinea*. ed. J.L. Gressitt. Dr Junk: The Hague.
- Robinson, M.H. 1982. The ecology and biogeography of spiders occurring in Papua New Guinea. pp. 557-582. In, *Biogeography and ecology in New Guinea*. ed. J.L. Gressitt. Dr Junk: The Hague.

BOOK WANTED

'Spiders', Australian Naturalist Library, by B.Y. Main, 1976, is wanted by Dr Struan K. Sutherland, Immunology Research, Commonwealth Serum Laboratories, 45 Poplar Rd, Parkeville, Vic. 3052.

BOOK AVAILABLE

'Australian Spiders', published by Nelson, by Densley Clyne, is available from Densley at 14 Taylors Rd, DURAL, 2158, N.S.W. for \$12 including postage within Australia.

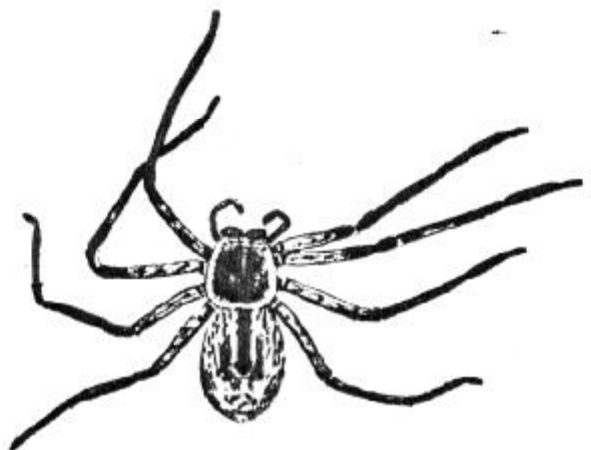
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LIVE SCORPIONS WANTED

Dr Maelicke, a toxinologist from West Germany at present visiting Queensland, wants any large scorpions LIVE and preferably from drier parts of Australia. Persons able to help Dr Maelicke should pack the scorpions well and send them to Dr Maelicke, c/- Dr Anne Cameron, Zoology Department, University of Queensland, St Lucia, 4067, Q., and your costs will be refunded.

LETTERS TO THE EDITOR

The enclosed drawing (below) is of a "foreigner" to these parts - this female Huntsman was brought to me by a young employee of a mixed business. The manager was unpacking a newly opened crate of bananas when this monstrous spider popped up! I believe there was considerable consternation! However, instead of being instantly mangled, the two chaps manoeuvred the spider into a cake display 'box' and securely taped the top part to the base. The top is transparent and therefore I was able to draw the spider without fear of it escaping amongst my clutter - have observed her delicately cleaning and combing her legs and feet. The nearest I can get to identification is *Isopoda immanis* (from John Child's book) but I cannot make 5 dark bands on the legs (I & II) or a mottled prosoma, as is stated for that species. Perhaps you can give a positive name. I neglected to ask whether the spiders were consigned from New South Wales or Queensland.



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from Mrs Kath Alcock, 40 MacDonnell St, Naracoorte, S.A. 5271

Editor's note: I am uncertain of the origin of Dr Child's diagnosis of *Isopoda immanis*. However, from your good colour illustration there is little doubt in my mind that the spider is what we find very commonly in Queensland and call *Isopoda immanis*.

ARTICLES

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WANTED: DICROSTICHUS SPP.

Ms Densley Clyne and Mr Jim Frazier of Mantis Wildlife Films Pty Ltd need live specimens of Dicrostichus magnificus preferably but if not D. furcatus specimens will suffice. The spiders will be used as apart of some films on Australian spiders for english television. The producers (above) are prepared to pay a search fee and postage and they do not mind how many they get. However, they want eggsacs if the female is with them.. Eggsacs alone are not much help. The spiders should be sent to Mantis Wildlife Films Pty Ltd, 14 Taylors Road, Dural, 2158, NSW. (I hope members will assist this project . I consider that any interest that Australian spiders generate will be beneficial both to the Arachnological Society and to its members. Editor's remark).

WANTED: AN EDITOR FOR THIS NEWSLETTER
FOR 1983.

The editor, Dr Robert J. Raven, has accepted a C.S.I.R.O. Postdoctoral Award to study the evolution and biogeography of some mygalomorph spider families . As part of that award, Robert expects to spend next year (1983) in New York, he will then return to Australia . Therefore , a person is needed to compile and edit Australian Arachnology for 4 issues. Robert will prepare the cover of those issues in advance. The person accepting the task should have access to a good scientific library in order to keep up with recent literature on Australasian arachnology. However, the library is not essential; a list may be made at the end of the year. The person should be interested and well organized. The newsletter should come out reasonably on time. They must be able to write good english and must be prone to little or no tendency to procrastinate. They must also have a good sense of what is of interest to members and what may be correctly published through this medium. Remember, Australian Arachnology is received internationally but is not an avenue for the publication of new scientific names. Preferably, the person should have ready access to a good typewriter and a reducing xerox. The Society cannot afford to pay for frills! The editor may also have to act as secretary and treasurer. However, those activities are not an enormous drain on a person's time. The present editor will be most pleased to hear from persons seriously able to accept the task and at that , the editor will explain some of the additional aspects of producing Australasian Arachnology. Write to Dr Robert J. Raven, P.O. Box 573 Fortitude Valley, 4006,Q.

Note: The present editor does not claim to have all of the above attributes but they are desirable.

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How do baby Dinopidae capture their food and 'hatch'?

Excerpts from a letter written by Ramon Mascord to the editor.

I solved a problem recently which has puzzled me for many years, how do baby Dinopidae capture their food? I photographed recently a small net at my home which was only 5mm wide by 3.4mm deep, and although it was similar in appearance, it does not have the cribellate strands of an adult net. Of the thousands of these spiders I have studied, this is the first time I have discovered a miniature net, or have had a chance to photograph same (another query to tick off my list). I also got a couple of good shots of an adult which, using its net, had captured a house cockroach. The cockroach was fully grown and its capture illustrated just another reason why spiders are helpful to man. I have observed young Dinopidae hanging in groups awaiting the right conditions to balloon and disperse. They look like small anchors as they hang head down with the front legs at right angles to their bodies and the rear legs stretched out behind. I have witnessed them ballooning on many occasions. On two occasions the swallows flying about got about 90% as the spiders gained height. No wonder they are never thick. Incidentally, young spiders do not eat their way out of egg-sacs. I witnessed young of *Dinopis bicornis* liberate themselves from a sac and they dissolve the point of exit with the chemical they use to break down tissue when eating. First, a small damp patch appears on the sac. At that stage I placed the sac under the microscope and watched. After ten minutes, the damp patch started to dissolve and collapse. Within a few minutes, the front legs of a tiny spider appeared at the patch and forced the remains of the patch out. Then the spiderling crawled out and others followed, one after the other. Another mystery for me solved.

More on Dinopidae

Robert J. Raven

Although I know that many east Australian mygalomorph spiders mature and mate in our winter and often under the protective cloak of rainforests, the plight of many Araneomorphae which are conspicuous by their winter 'absence' is a constant interest. It is not so much that a south coastal Queensland winter is extraordinarily cold (dropping to a relatively mild 4-6°C). However, it is a marked change from the humid hot summers (sometimes reaching 40°C.) when insect prey are annoyingly evident. In this part of the world in winter both insects and spiders are scarce. Thus it was to my surprize and delight that in the 'height' of our dry cold winter that I noted a group of young *Dinopis* clustered around an egg sac. A gentle prod of the web produced the necessary activity of living spiders. With continuing interest I have followed the destiny of these young for almost two months. Now, most have dispersed. They are not dead, for near the egg sac the telltale brown star-like spiders linger on their webs. How many have survived is difficult to know but one would expect that sufficient have survived to ensure a healthy dinopid host in my garden this summer.

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NEW MEMBERS, SINCE APRIL 1981

- Barton, Mr. N., Scientific Officer, Regional Veterinary Laboratory,
P.O. Box 483, Bairnsdale, Vic. 3875.
- Black, Mr D., Department of Biology, University of Papua New
Guinea, Box 4820, University Post Office, Papua New Guinea.
- Boulton, Mr. A., Zoology Department, Monash University, Clayton.
3168, Vic.
- Brignoli, Prof. P.M., Instituto di Zoologia dell'Universita , L'
Aquila, Italy.
- Brouwers, Mr R., 209 Ripon St South, Ballarat, 3350, Vic.
- Bullivant, Mr P.J., 31 Agnes St, Strathfield, Sydney, 2135, N.S.W.
- CotSELL, Mr. N., 17 McKeon St, Armidale, 2350, N.S.W.
- Cousins, Ms J., Department of Biology, Capricornia Institute of
Advanced Education, Rockhampton, 4700, Q.
- Faulder, Mr R.J., Yanco Agricultural Research Centre, Yanco, 2703,
N.S.W.
- Gallon, Ms J., 380 Wishart Rd , Mt Gravatt, 4122, Q.
- Herremans, Mr. J.C., P.O. Box 291, Manly, 2095, N.S.W.
- Humphries, Dr B., Biological Survey Department, West Australian
Museum, Frances St, Perth, 6000, W.A.
- Lane, Mr P.J., 11 Martin St, Tolland, Wagga Wagga, 2650, N.S.W.
- McArthur, Mr E., P.O. Box 26, Boonah, 4310, Q.
- Murphy, Mr P., Department of Zoology, University of Melbourne,
Parkesville, 3052, Vic.
- Preston, Mr B., c/- CRC Bank, P.O. Box 14, The Entrance, 2261, N.S.W.
- Price, Miss J., c/- P.O. Box 28, Mission Beach, 4855, Q.
- Roth, Dr V.R., Resident Director, Southwest Research Station,
American Museum of Natural History, Portal, AZ 85632, U.S.A.
- Sinclair, Mr D., c/- Queensland Museum, Gregory Tce, Fortitude
Valley, 4006, Q.
- Sutherst, Mr N., Main Western Rd, Mt Tamborine, 4272, Q.
- Wallace, Mr D., 50 Naughton St, Wandal, 4700, Rockhampton, Q.
- Wilson, Miss P.L., 12 Acacia St, Koorringal, Wagga Wagga, 2650,
N.S.W.

NEW SUBSCRIBERS

- Entomology Research Library, Res. Br. Agric. Canada CFP, Ottawa,
K1A 0C6, CANADA.
- Museum and Art Galleries of the Northern Territory, P.O. Box 4646,
Darwin, 5794, N.T.

CHANGES OF ADDRESS

- Anderson, Mr. G, c/- 14 Kenneth St, Kotara South, 2288, N.S.W.
- Clyne, Ms D., 14 Taylors Rd, Dural, 2158, N.S.W.
- El-Hennawy, Mr H., 41 El-Mantequa El-Rabia St, Heliopolis, Cairo,
Egypt.
- Hirst, Mr. D.B., c/- 10 Deakin St, Blair Athol, 5084, S.A.
- Johnson, Mr J., 33/25 Harrison St, Neutral Bay, 2089, N.S.W.
- Kochalka, Mr J, c/- Cuerpo de Paz, Embajada de los Estados Unidos,
Asuncion, Paraguay.
- Kupke, Mr J. 69 Warragamba Ave, Duffy 2611, A.C.T.
- Long, Mrs. E., P.O. Box 28, Mission Beach 4855, Q.
- Lubin, Dr Y., Department of Zoology, University of Florida,
Gainesville, FL 32611, U.S.A.
- Moran, Mr. R., 42 Wheadon St, Monash, 2904, A.C.T.
- Parnaby, Mr. H., c/- 47 Muston St, Mosman, 2088, N.S.W.
- Raven, Dr R.J., 27 Sanders St, Upper Mt Gravatt, 4122, Q.
- Wilkinson, Miss R., P.O. Box 5187, Cairns, 4870, Q.

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THE STRANGE BEHAVIOUR OF 'ISOPODA IMMANIS' IN CAPTIVITY

Philip J. Lane, 11 Martin St, Tolland, Wagga Wagga,
N.S.W. 2650.

Sometime ago I was presented with a female Huntsman spider, which had been taken on Willan's Hill in Wagga Wagga, for no other reason than I thought she was quite attractive and I would like to photograph her. Unfortunately, I did not in my diary any data pertinent to her capture or when I acquired her. I kept her in a 9" (22cm) petri dish about 1" (25mm) deep in which she appeared to be quite happy with her damp folded tissue. Occasionally, I fed her on various species of moths attracted to my porch light. There was no reluctance, on my captive's part, to take any and every moth offered.

Not being very brave, I photographed her in 'prison' and returned my prisoner to my study where our relationship continued on an amicable level until December 1981. On no occasion did she exhibit any signs of aggression towards me. She was shy of taking food while being observed but always took what was placed in her prison in her own good time.

Not very remarkable, you may say, but now comes the odd bit. About the middle of November (if memory serves me well) she produced a beautiful egg case. Again, unremarkable, you say. However, that egg case was spun on the lid of the petri dish and the eggs - 150 in all, of a quite distinctly emerald green colour and about a millimetre in diameter - all ended up on the floor of the dish. I did not witness the egg-laying but, from the pattern of eggs on the base of the petri dish, I deduce that she attempted to lay them on the base of the prepared receptacle. The egg case, when found, was complete but of course empty.

Why this abnormal behaviour? It intrigues me! Anthropomorphically, one might suggest that she had a mental breakdown as a response to captivity and confinement in such a circumscribed environment. Although, the dish was on top of a book case I don't think reflection would've been the cause, as between it and the brown top was a green cloth place mat which would tend to suppress her reflection, which (the reflection) may have induced the aberrant behaviour had it been visible. I can think of no other explanation to account for the phenomenon.

My *Isopoda* and I parted company just before last Christmas; I took her, together with my other arachnid guests, back to Willan's Hill. (Neighbours were going to look after my house over the holiday period. So rather than 'inflict' spiders upon them, I somewhat reluctantly turned my pets loose.)

I would be interested to here if anyone else has had any similar experiences with captive gravid arachnids.

Editor's note: Mr Lane provided slides of the spider which judged by its dorsal abdominal pattern is not *Isopoda immanis* although it is closely related.