

Memoirs of Museum Victoria

ISSN 1447-2546 (Print) 1447-2554 (On-line)

<http://www.museum.vic.gov.au/memoirs>

MELBOURNE AUSTRALIA

Memoir 60

Number 1

31 January 2003

Chief Executive Officer

J. Patrick Greene

Director (Programs, Research and Collections)

Robin Hirst

Scientific Editor

Gary C. B. Poore

Editorial Committee

Martin F. Gomon

David J. Holloway

Kenneth Walker

Robin S. Wilson

© The Museums Board of Victoria 2003

Typeset by Thatcher Pty Ltd
Printed by BPA Print Group

Museum Victoria, formerly the Museum of Victoria, was formed in 1983 by the merger of the National Museum of Victoria (established in 1854) and the Science Museum of Victoria (established in 1870). Museum Victoria undertakes research in order to contribute to a deeper understanding and appreciation of the origins, diversity and development of Australia's natural, cultural and scientific heritage, and applies this knowledge for the benefit of society. Museum Victoria publishes its scientific journal *Memoirs of Museum Victoria* (until 1983 *Memoirs of the National Museum of Victoria*) to further these objectives.

The *Memoirs* publishes papers on original research in the natural sciences pertinent to Victoria and/or the Museum's collections. All contributions are assessed by independent referees before publication.

From Volume 58 (2000) the *Memoirs* is available in electronic format as well as in printed form from the Museum Victoria website. Electronic publication will enable inclusion of supplementary information (such as extended data-sets) not available in the printed version.

The *Memoirs* is available in printed form by subscription or institutional exchange. Enquiries should be directed to the Librarian, Museum Victoria, GPO Box 666E, Melbourne, Vic. 3001, Australia (library@museum.vic.gov.au). Access to the electronic version of the journal is available free of charge and individual papers may be downloaded as .pdf files from this website. Reprints are available at cost.

Editorial Committee

The *Memoirs* of Museum Victoria is published by order of the Museums Board of Victoria. Acceptance of papers is handled by the Editorial Committee which will seek the widest possible advice from referees. Papers should be submitted in the first instance to the Scientific Editor, Museum Victoria, GPO Box 666E, Melbourne, Vic. 3001, Australia (memoirs@museum.vic.gov.au).

Scientific Editor
Gary C. B. Poore

Editorial Board
Martin F. Gomon
David J. Holloway
Kenneth Walker
Robin S. Wilson

Instructions to Authors

Three copies of the manuscript with accompanying plates and figures should be submitted to the Scientific Editor, Museum Victoria, GPO Box 666E, Melbourne, Victoria 3001, Australia (memoirs@museum.vic.gov.au). Authors should consult a recent volume of the *Memoirs* to acquaint themselves with format. Manuscripts must be typed on A4 paper, 1.5-spaced, on one side of the paper, or submitted totally in electronic form as attached files by email. Except for short papers (less than 10 manuscript pages) electronic presentation of the text and

figures of the final accepted manuscript (on disk or as an attached emailed file) is essential. PC format is preferred.

Papers should be arranged as follows: title (including higher classification of zoological taxa); authors' names and addresses (postal and email); abstract; key words; contents (only if the paper is very long); introduction and main text; acknowledgements; references; index (only if very long); and tables. Captions to text-figures and plates must be attached to the manuscript as final pages. Primary headings are in bold and left-justified; secondary headings in italics and left justified. Italics in the text should otherwise be restricted to generic and specific names. Paragraphs are indented with tabs. Measurements must be in the metric system (SI units).

Figure captions should follow this example:

Figure 1. *Storhyngurella hirsuta* sp. nov., male, holotype: a, b, dorsal and lateral views of body; c, d, frontal and lateral views of cephalon.

References should be listed alphabetically at the end of the manuscript. Journal titles must be in full. References to books must give the year of publication, edition, name of publisher and city of publication. Use the style and punctuation in the following examples for articles, books and chapters:

Paulin, C.D. 1986. A new genus and species of morid fish from shallow coastal waters of southern Australia. *Memoirs of Museum Victoria* 47: 201–206.

Last, P.R., and Stevens, J.D. 1994. *Sharks and rays of Australia*. CSIRO Publishing: Melbourne. 513 pp.

Wilson, B.R., and Allen, G.R. 1987. Major components and distribution of marine fauna. Pp. 43–68 in: Dyne, G.R. and Watson, D.W. (eds), *Fauna of Australia. General articles*. Vol. 1A. Australian Government Publishing Service: Canberra.

Reference citations use the following style: Paulin, 1986; Last and Stevens, 1994; Smith et al., 1990.

In taxonomic papers synonymies should be of the form: taxon, author, year, pages, figures. A period and dash must separate taxon and author except in the case of reference to the original description, e.g.

Leontocaris Stebbing, 1905: 98–99.—Barnard, 1950: 699.

Photographs must have clear definition and be submitted as either glossy or flat prints at the actual size for reproduction, or preferably as electronic files. Line drawings for text-figures should be in black ink on white card or drawing film. Original line drawings up to three times final size are acceptable but scanned B&W images at 600 dpi are preferred. Maximum full-page size is 175 mm wide by 224 mm; single column width is 85 mm. Clear lettering must be inserted.

Supplementary information (extended lists of material examined, databases etc.) should be submitted electronically with the original manuscript and will be included with material sent to referees. The Editorial Board encourages use of supplementary information to minimise the cost of printing as long as the requirements of the International Code of Zoological Nomenclature are met in the printed paper.

Contents

- 1 > Biology of the Anomura – foreword to this special issue
R. Lemaitre and C.C. Tudge
- 3 > Neurobiology of the Anomura: Paguroidea, Galatheoidea and Hippoidea
D.H. Paul
- 13 > Terrestrial adaptations in the Anomura (Crustacea: Decapoda)
P. Greenaway
- 27 > Marine hermit crabs as indicators of freshwater inundation on tropical shores
S.G. Dunbar, M. Coates and A. Kay
- 35 > Hermit crab population ecology on a shallow coral reef (Bailey's Cay, Roatan, Honduras): octopus predation and hermit crab shell use
S.L. Gilchrist
- 45 > Population dynamics and epibiont associations of hermit crabs (Crustacea: Decapoda: Paguroidea on Dog Island, Florida
F. Sandford
- 53 > The morphology of cardiac and pyloric foregut of *Aegla platensis* Schmitt (Crustacea: Anomura: Aeglidae)
T.S. Castro and G. Bond-Buckup
- 59 > Circadian and seasonal variations of the metabolism of carbohydrates in *Aegla ligulata* (Crustacea: Anomura: Aeglidae)
G.T. Oliveira, F.A. Fernandes, G. Bond-Buckup, A.A. Bueno and R.S.M. Silva
- 63 > Endemic and enigmatic: the reproductive biology of *Aegla* (Crustacea: Anomura: Aeglidae) with observations on sperm structure
C.C. Tudge
- 71 > A worldwide list of hermit crabs and their relatives (Anomura: Paguroidea) reported as hosts of Isopoda Bopyridae
J.C. Markham
- 79 > Geographic and distributional patterns of western Atlantic Porcellanidae (Crustacea: Decapoda: Anomura), with an updated list of species
B. Werding, A. Hiller and R. Lemaitre
- 87 > A checklist of marine anomurans (Crustacea: Decapoda) of Pakistan, northern Arabian Sea
F.A. Siddiqui and Q.B. Kazmi
- 91 > *Calcinus* hermit crabs from Easter Island, with biogeographic considerations (Crustacea: Anomura: Diogenidae)
J. Poupin, C.B. Boyko and G.L. Guzmán
- 99 > Hermit crab species of the genus *Clibanarius* (Crustacea: Decapoda: Diogenidae) from mangrove habitats in Papua, Indonesia, with description of a new species
D.L. Rahayu
- 105 > A new genus and species of hermit crab (Crustacea: Anomura: Paguridae) from Taiwan
R. Lemaitre
- 111 > Illustrated keys to families and genera of the superfamily Paguroidea (Crustacea: Decapoda: Anomura), with diagnoses of genera of Paguridae
P.A. McLaughlin
- 145 > A new theoretical approach for the study of monophyly of the Brachyura (Crustacea: Decapoda) and its impact on the Anomura
M. Tavares