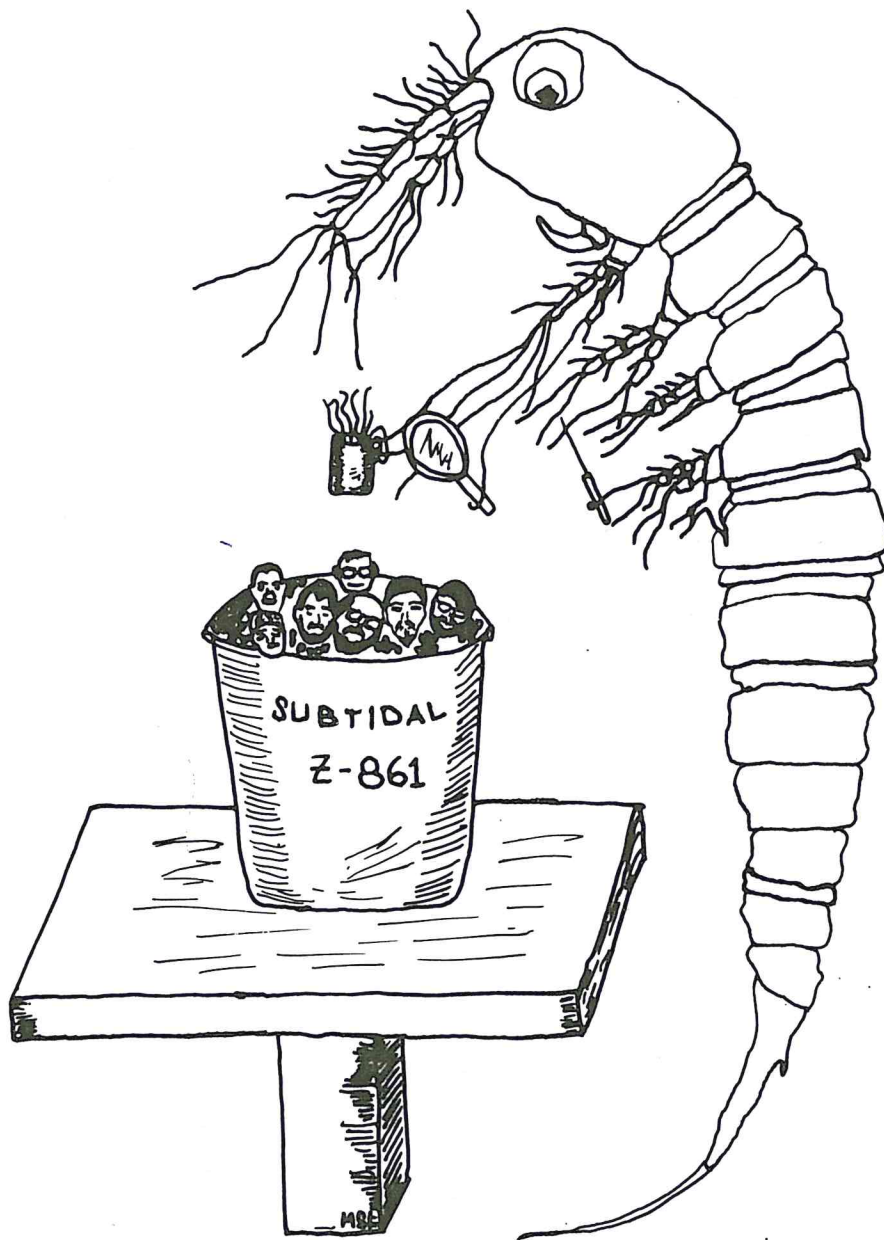


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NEWSLETTER OF THE ASSOCIATION
OF MEIOBENTHOLOGISTS



NUMBER 23

1974

P S A M M O N A L I A

Newsletter of the Association of Meiobenthologists

Number 23

February 1974

Editor: Bruce C. COULL, Belle W. Baruch Institute for
Marine Biology and Coastal Research, University
of South Carolina, Columbia, South Carolina
29208 USA

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Cover by M. Susan Ivester, University of South Carolina

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E D I T O R I A L

My first role as new Chairman of the Association and Editor of PSAMMONALIA is to express my, and the Association's, sincere thanks to our past Chairman and Editor, Wilfried Westheide. Under his direction, the Association has grown and prospered; hopefully, I can do as well as he did.

In order for me to do a good job and for PSAMMONALIA to flourish, I need your help in several ways. Firstly, the Association is not in good financial shape and we desperately need your \$3/year dues. The bill on the front of this issue will, we hope, prod you into paying. It is there for your convenience and to remind you that the Association cannot survive without money to produce the issues. I estimate each issue of PSAMMONALIA will cost about \$110 (\$35 for postage; \$60 printing; \$5 labels; and \$10 envelopes). Conservatively, that's \$440 to produce the 4 issues a year, probably a low estimate, since U. S. postage rates are due to increase in Spring 1974. Of the 247 members, 42 are exempt from paying dues (those in countries unable to export currency), leaving approximately 200 dues paying members. We need your dues to survive - so please send your 1974 or, if you prefer, your 1974/1975 dues (\$6) to John Tietjen, the Association's Treasurer. Should your dues not be paid by the time PSAMMONALIA #24 comes out, you will be reminded again in that issue. But if your dues are not paid after issue #24, we shall be forced to cancel your membership and stop sending PSAMMONALIA.

Furthermore, I need your help in sending the information about research program and literature citations. The Board of Correspondents is charged with primary responsibility for literature and encouraged to assist me in this endeavor. For PSAMMONALIA to serve as a medium for discussion and rapid dissemination of knowledge about meiofauna, I encourage you to use it to discuss your ideas and tell our membership about your research program. I plan to publish PSAMMONALIA in February, May, August and November, so if you have information, please try to have it to me the 15th of the preceding month.

You will note several changes in PSAMMONALIA. It is now offset print, rather than mimeographed. Why? Because offset is cheaper than mimeographing here at USC. I have converted the entire membership list to computer and your address label was produced by computer. Each computer label costs 2¢, and is much simpler than the hand-addressograph machine. This computer listing will also be available to future editors.

In closing, I want to welcome the new Committee Members and the new Board of Correspondents. Three more Correspondents are yet to be added and I expect to have these by the next issue.

Bruce C. Coull
Bruce C. Coull
Editor

FINANCIAL REPORT

As of 24 January 1974 Balance \$163.86

16 members have paid for 1974 and 3 members
for 1975

PLEASE send in your dues!!!!

John H. Tietjen
Treasurer

NEW MEMBERS

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(Deep sea microbenthos)

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North Carolina State University
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(Carbon flux through Juncus
marsh meiofauna)

John Conrad
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Garden City, N. Y. 11530, U.S.A.
(Meiofauna ecology; organism-
sediment interrelationships)

J. M. Ferris
Department of Entomology
Purdue University
Lafayette, Ind. 47907, U.S.A.
(Systematics-ecology of Nematoda)

J. P. Furstenberg
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A. F. Holland
Belle W. Baruch Institute for
Marine Biology and Coastal
Research
University of South Carolina
Columbia, S. C. 29208, U.S.A.
(Estuarine benthos)

M. Susan Ivester
Belle W. Baruch Institute for
Marine Biology and Coastal Research
University of South Carolina
Columbia, S. C. 29208, U.S.A.
(Niche separation of meiofauna; EM)

R. V. Levy
Department of Biology
Clark University
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(Seasonal studies on estuarine nematodes)

Phillip L. Lewis
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Southern station - Box 18
Hattiesburg, Miss. 39401, U.S.A.
(Littoral meiofauna in relation to
offshore oil drilling and production)

J. M. Sellier de Civrieux
Instituto Oceanografico
Universidad de Oriente
Cumana, Venezuela
(Benthic forams, Venezuela, in rela-
tion to environmental parameters)

David M. Thistle
Scripps Institution of Oceanography
P. O. Box 1529
La Jolla, Calif. 92037, U.S.A.
(Deep sea meiofauna; particularly
Harpacticoida)

John R. Tripp
Department of Biology
Florida Southern College
Lakeland, Fla. 33802, U.S.A.

Seth Tyler
Department of Zoology
University of North Carolina
Chapel Hill, N. C. 27514, U.S.A.
(Comparative microstructure of adhesive
organs of interstitial fauna)

Winona B. Vernberg
Belle W. Baruch Institute for Marine
Biology and Coastal Research
University of South Carolina
Columbia, S. C. 29208, U.S.A.
(Physiological ecology of meiofauna)

CHANGES OF ADDRESS

Roger P. Harris
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Citadel Hill
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Bruce E. Hopper
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Ottawa, Ont., Canada

Neil C. Hulings
Faculty of Science
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A N N O U N C E M E N T S

Courses:

A graduate-level course entitled Ecology of Benthic Micrometazoa will be offered at the University of Delaware Field Station during the first term of the Summer Session 1974. Instructor will be Dr. William D. Hummon. For further information write:

College of Marine Studies Field Station
University of Delaware
Lewes, Delaware 19958, U.S.A.

Meetings:

1st INTERNATIONAL MEETING OF MEIOFAUNA PHYSIOLOGICAL ECOLOGY,
25-29 September, 1974, Arcachon, France. For further information contact:

Dr. Pierre Lasserre
Institut de Biologie Marine
Université de Bordeaux
2 rue due Professeur Joyet, F-33120
Arcachon, France

9th EUROPEAN SYMPOSIUM ON MARINE BIOLOGY, 2-8 October 1974, Oban, Scotland.
Theme: "Biochemistry, physiology, and behaviour of marine organisms in relation to their ecology." For further information contact:

Dr. Harold Barnes
Dunstaffnage Marine Research Laboratory
P. O. Box 3
Oban, Argyll, Scotland

37th ANNUAL MEETING, AMERICAN SOCIETY OF LIMNOLOGY AND OCEANOGRAPHY,
24-28 June 1974, Seattle, Washington. Abstracts for contributed papers must be sent by 15 March 1974 to:

Dr. E. S. Deevey
Florida State Museum
University of Florida
Gainesville, Fla. 32601, U.S.A.

For local arrangements, contact:

Dr. C. J. Lorenzen
Department of Oceanography
University of Washington
Seattle, Washington 98105, U.S.A.

Literature:

Supplementary citations to the Bibliography of Marine and Brackish Water Gastrotricha (24 citations, Jan. 1974) and to the Bibliography of Fresh Water and Soil Gastrotricha (29 citations, Jan. 1974) are available on request from:

Dr. William D. Hummon
Department of Zoology and Microbiology
Ohio University
Athens, Ohio 45701, U.S.A.

Original lists of citations appeared in PSAMMONALIA in 1969 and 1973, respectively, the former already having been supplemented twice prior to the current listings.

A new Marine Biology series, "The Belle W. Baruch Library in Marine Science," has been initiated. Each volume is the result of a symposium and two volumes have been published so far: Vol. 1 (1973) Estuarine Microbial Ecology (L. H. Stevenson and R. R. Colwell, eds.); Vol. 2 (1974) Symbiosis in the Sea (Winona B. Vernberg, ed.). The volumes may be ordered from the University of South Carolina Press, Columbia, S. C. 29208, U.S.A. for \$25.00 each.

Result of Questionnaire from PSAMMONALIA #22:

Fourteen (14) members returned the questionnaire on whether PSAMMONALIA should stay as it is, whether it should be air mailed, and how often it should appear. The majority (9) felt it should be published 4 times a year as it has been. Eight felt it should not be mailed by air and 13 said it should not be limited to just literature citations. So, PSAMMONALIA will stay as it has been - an informal organ of the Association. I must add that 14 returns from a 247 member association leads me to believe most people really don't care what happens to PSAMMONALIA. I truly hope this is not the case!

B. C. Coull

NEWS FROM THE MEMBERS

W. D. HUMMOM, Ohio University: December, 1973, was spent doing research in the keys south of Miami, Florida. Gastrotricha from whole-beach transect samples were analyzed to gain more information on faunal similarities from beach to beach in a tropical region of carbonate sands. The aim is a more complete set of tropical carbonate beaches to compare with gastrotrich fauna of boreal silicious beaches. Of interest to me are the following parameters: species composition and diversity of gastrotrichs within each beach, similarity of fauna between beaches on both the local and regional scale, and distribution and abundance within each beach.

Whole-beach transects consist of samples taken from points located between low and high tide levels and between surface and groundwater depths. Sampling points are determined by means of a stratified sampling scheme and generally number 40-60, occasionally down to 20 or up to 80. Ten cm³ subsamples of sand are extracted by means of 7.5% MgCl₂. Animals are analyzed by means of a Zeiss Photomicroscope with Nomarski interference contrast optics and drawing tube.

G. C. RAO, Calcutta: The collections comprising diverse groups of interstitial fauna made in the intertidal sands of Andaman and Nicobar Islands during the faunistic expedition conducted by the Zoological Survey of India in April-May 1973, were sorted out. Bulk of the material consisted of Archiannelida, Polychaeta, Copepoda, Isopoda and Amphipoda; while the Hydrozoa, Turbellaria, Nematoda, Gastrotricha, Oligochaeta, Ostracoda, Tardigrada, Acarina, Gastropoda and Holothuroidea, were represented by small numbers. The taxonomic studies are progressing well at different stages and completion of the work may take a considerable period. However, the Turbellaria, Oligochaeta, Ostracoda and Acarina, are not being studied, at least for the present. Preliminary observations of the fauna revealed the presence of many a new species, in addition to the ones collected in an earlier expedition of these islands. Two descriptions, viz., a solitary hydrozoan Halammohydra rotundata n. sp. and a holothurian Trochodota havelockensis n. sp., were sent for publication. Two papers dealing with the Archiannelida and Gastrotricha, are in preparation.

A. D. McINTYRE, Aberdeen: Having recently completed a long-term study of the meiofauna of a sandy beach at Firemore in Loch Ewe on the Scottish west coast, we now turn our attention to other areas. We will not be completely deserting Loch Ewe, however, since we plan to continue the time series of meiofauna cores from a single intertidal station, and we still have a number of problems to clear up and samples to sort! Finally, because the Firemore Bay ecosystem has been so intensively studied and because we have reasonable working facilities there, we will continue to use the area as a study ground and will continue to welcome visiting research workers there. Much of our 1974 effort will be directed to sites of actual or potential pollution in various parts of the Scottish coast and we expect to be sampling several new areas both intertidally and subtidally, looking at both sandy and muddy sediments.

David Geddes is looking at the copepods from some of our earlier collections on the north and west coasts of Scotland, and will be able to produce a good picture of the population structure from a range of habitats.

We have just been joined by Miss K. Jayashree from Cochin who will be working with us for 3 years towards a Ph. D. on a study of nematodes. She will concentrate largely on the taxonomy and will pay regular visits to Plymouth to

be guided by Richard Warwick. Much of her effort will probably be concentrated on polluted sandy beaches in the Clyde where we have been working for several years and where our ecological studies will be continuing in 1974. In particular, we hope to do some experimental work to explain the unusual structure of the meiofauna populations on these beaches.

J. RENAUD-MORNANT, Paris: A marine sorting center is to be operated soon in Britany (Centre Oceanologique de Bretagne COB) with Dr. L. LAUBIER as director and Museum National as supervisor. Samples from oceanographic expeditions will be stored and sorted in Brest and biological material mailed to specialists. A meiofauna section is included.

As far as my work is concerned, I have carried on working on marine Tardigrada systematics, mainly deep sea Tardigrades where new forms are the most abundant, and littoral Mediterranean species collected by Niel Hulings. During a two months stay in French Polynesia, I collected meiofauna in different islands and described a new species of Echiniscoides. I monitored Mrs. Baccari's thesis on Mystacocarida anatomy: two papers on digestive tract and nervous system of Derocheilocaris remanei are under press. Working at Roscoff, Dr. Boucher has completed several papers on systematics of marine nematodes mainly on Desmodoridae, now in press.

RECENT LITERATURE

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