



NEWSLETTER OF
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P S A M M O N A L I A

Newsletter of the International Association of Meiobenthologists

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OFFICERS OF THE INTERNATIONAL ASSOCIATION OF MEIOBENTHOLOGISTS

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Donald J. ZINN, P. O. Box 589, Falmouth, Massachusetts 02541, U.S.A.

EDITORIAL

Happy 1975. Again, as in previous issues we urge those who have not done so to send their 1975 dues (\$3.00) as soon as possible to John Tietjen. If our records indicate you owe 1975 dues a "Notice of Payment Due" is attached; if it is not attached our records indicate you are paid through 1975. We were forced to drop 30 non U.S. members from the membership for nonpayment of dues. Do not let this happen to you.

We are happy to welcome newly elected Pierre Lasserre and Richard Warwick to the Executive Committee. Fifty-five ballots were cast in the recent election and the top four candidates were separated by only 6 votes. The election results are listed in the ANNOUNCEMENTS section.

Please note the appended additions to Eike Hartwig's ciliate Bibliography which was published with PSAMMONALIA #24 (May 1974). If you have additions or corrections, please contact Dr. Hartwig directly.

Enclosed with this issue of PSAMMONALIA you will find a list of members along with their addresses as of 1 January 1975. If your listing is incorrect, please let me know so I may correct our records.

Bruce C. Coull, Editor

FINANCIAL REPORT

Credits

Balance on Hand (prior to PSAMMONALIA #26)	\$735.56
Dues & Contributions received; minus bank service charges (10/15/75-1/1/75)	<u>98.20</u>
TOTAL	\$ 833.76

Debits

Cost of PSAMMONALIA #26	<u>\$133.86</u>
TOTAL	\$ 133.86
TOTAL BALANCE on hand, 1/1/75	\$ 699.90

John H. Tietjen, Treasurer

NEW MEMBERS

Stuart S. Bamforth
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NEWS FROM THE MEMBERS

R. J. FELLER, Univ. of Washington: I have recently completed a study of the population dynamics and production of a numerically dominant harpacticoid copepod, Huntemannia jadensis, on a sand beach in Puget Sound, Washington. This species appears to produce two cohorts per year, with the spring cohort reaching maximum densities of more than 500/10cm². Mortality is greatest in the naupliar stages, as expected. Estimates of production fall in the range of 500 to 1000 µgC/10cm²/yr. I have also successfully reared H. jadensis in the lab (after much difficulty finding a suitable food source) at several temperatures. Development is quite slow compared to other copepods in the sand. Growth from hatching to adult was predictably faster at higher temperatures and took on the order of two to three months. Quantitative replicate core samples from two other sand beaches in Puget Sound, collected weekly for one year, are presently being sorted and counted for comparison with the other beach.

T. FENCHEL, Univ. of Aarhus: The current research related to meiofauna studies at the Department of Ecology are centered around 4 projects: 1) Studies on the microbial sulfur cycle of marine sediments using radio-tracer methods and the vertical zonation patterns of sulfurbacteria; 2) The effect on microfaunal grazing on bacterial activity and phosphorus cycling in decomposer systems; 3) Mitochondrial structure, respiratory enzymes and symbiotic bacteria of anaerobic sediment ciliates; and 4) Physiology of detritus feeding and interspecific competition and coexistence of detritus feeding animals.

R. P. HIGGINS, Smithsonian Institution: As of October this year, I was given the opportunity of returning to full time research on kinorhynchs and tardigrades. I have accepted an appointment to the position of Senior Scientist and have been given laboratory space at the Smithsonian Oceanographic Sorting Center (SOSC) in Washington, D. C. (See change of address notice). My new position reflects the end of the Smithsonian's Oceanography and Limnology Program. Although the SOSC will continue as a unit of the National Museum of Natural History, the Mediterranean Marine Sorting Center in Tunisia and many other projects of my former office will be terminated by mid-1975. Congressional reduction of funds and Smithsonian policy changes have brought about this recent action. Needless to say, I feel fortunate to have experienced an interesting and productive role but even more fortunate to be able to return to full time research after six years as a science administrator.

News from Members (cont.)

M. S. IVESTER, Univ. of South Carolina: I am currently doing my Ph.D. research under the direction of B. C. Coull in the North Inlet, South Carolina area. My research involves niche fractionation in benthic harpacticoid copepods. I am trying to determine the niche breadth-niche overlap of species occupying five stations along a sediment gradient utilizing multivariate statistical methods. Once this is accomplished, I will take species with high overlap, i.e. those having the largest common niche space, and by using scanning electron microscopy will try to determine if morphological variations are present in the mouthparts. Dr. Coull and I have recently completed a similar study on haustoriid amphipods in which we found definite variations in mouthpart structures of four species. We feel that these variations are a means by which the species subdivide their common niche by differential utilization of the food resource.

C. JOUIN, Université Paris VI: My present aim is to complete fine structure anatomical studies on some Archiannelida (my Thesis 1970). My previous histological studies have shown that the pharyngeal bulb is different in Protodrilus, Protodriloides and Nerilla and that the muscle cells in the bulbs do not seem to be the aberrant type suggested by Jägersten. At the present time I am studying, at the ultrastructural level, the pharyngeal muscular bulb in three families: Protodrilidae, Saccocirridae and Nerillidae, from a comparative point of view. Other previously investigated structures will be studied at the ultrastructural level in different species of Protodrilidae and Nerillidae, along with the biology of the species: i.e. the spermatogenesis and fecundity in Protodriloides; structure of the cephalic sensory organs in Protodriloides, Protodrilus, Nerilla and Mesonerilla and structure of the enteronephridium in the family Nerillidae. Furthermore, during an expedition to French Polynesia, undertaken by the "Museum National d'Histoire Naturelle", I collected meiofauna at Moorea and Tahiti. I collected 10 species of Archiannelida and one new genus and two new species of Protodrilidae were found and are presently being studied.

T. G. KARLING, Stockholm, Sweden: The Swedish Museum of National History, Section of Invertebrate Zoology, owns a large collection of Turbellaria consisting of preserved material in alcohol, whole mounted specimens and serial sections. It has been brought together mainly by Sixten Bock, Einar Westblad and myself. It has now been increased by two valuable collections presented to the museum. The larger one comprises the material on which Ernst Marcus and Eveline Du Bois-Reymond Marcus have based their studies presented in several papers well known by the specialists. Ernst Marcus was professor in zoology at the University of Sao Paulo, Brazil, and the bulk of the material has been collected in the area of Sao Paulo. Dr. Eveline Marcus is the successor of Ernst Marcus as head of the Institution of Zoology in Sao Paulo, and Dr. Diva Diniz Correa has kindly agreed to send the collection to my institution where it is more accessible to specialists. The other collection consists of Turbellaria Kalyptorhynchia collected in the Mediterranean (Marseille area) and described by M. Brunet, Université Aix-Marseille. Specialists in Turbellaria are herewith informed that they can borrow material for comparative studies from these two collections as well as from our old collections by writing to me (Swedish Museum of Natural History, S-104 05 Stockholm, Sweden). Some specialists have already used this opportunity.

M. MAINITZ, Universität Wien: Presently I am working on my thesis, an EM-investigation of the bursa-organ in Gnathostomulida. Special emphasis is being paid to the different bursa-stages and types described by Riedl (1969), as well as to a possible connection between bursa-complex and stylet apparatus. I spent July-September, 1974 at UNC, Chapel Hill, working with R. M. Rieger and was lucky to gather a lot of specimens of several genera which I needed for my thesis.

News from Members (cont.)

During this time Dr. Rieger and I worked on a paper "Body-wall in gnathostomulids" which is almost finished. Six genera were investigated, Haplo-, Labido-, Semaeognathia, Gnathostomula, Austrognathia and Austrognatharia. Our work showed some differences between genera according to the evolutionary line within the phylum and it was possible to establish a common type of the gnathostomulid epidermis-cell, which seems to be rather uniform throughout the whole group. The results are compared to the body-wall in related worm-groups as well as to the occurrence of cyrtocytes in the epithelia of other groups.

P. SCHMIDT, Aachen: I am almost totally absorbed in teaching general biology to medical students and there is hardly any time left for research. I am still engaged in writing the results of our Galapagos studies and a few papers are in print. They deal with descriptions of species of various groups. The ecological data will be published later. My main interests are at present the problem of speciation in the sea, especially as far as the interstitial fauna is concerned, and, naturally enough, the interstitial fauna of the Pacific Ocean.

ANNOUNCEMENTS

Executive Committee Election Results:

Fifty-five ballots were cast in the recent election for the 2 vacant Executive Committee positions. Pierre Lasserre and Richard M. Warwick were elected and their terms of office run from 1 January 1975 to 31 December 1976. As required by the Association's Constitution the election results are listed below:

Phillippe Bodin	- 6
Ragnar Elmgren	- 10
Pierre Lasserre	- 22
Wolfgang Sterrer	- 17
Hjalmar Thiel	- 19
Pierre Vitiello	- 7
Richard Warwick	- 23
J.B.J. Wells	- 5

Meetings:

38th ANNUAL MEETING, AMERICAN SOCIETY OF LIMNOLOGY AND OCEANOGRAPHY,
23-26 June 1975, Dalhousie University, Halifax, Nova Scotia, Canada.

Abstracts were due 1 January 1975. For local arrangements contact:

Dr. Robert O. Fournier
Dept. of Oceanography
Dalhousie University
Halifax, Nova Scotia, Canada

Limericks: The 2 limericks below were apparently composed at the Arcachon "1st International Meeting of Meiofauna Physiological Ecology" by Northern Ireland's premiere meiofaunalogist and submitted to PSAMMONALIA by Eike Hartwig. Limerick 1 is dedicated to Jeanne Renand-Mornant and Limerick 2 to Pierre Lasserre.

Announcements (cont.)

- 1) "There was a young Lady who carried
Research out, on sands dry and arid
From Europe to Asia
She studied Crustacea
They called her Miss Ta Cocarid"

- 2) "Said Pierre, one drunk evening in winter
We'll form un groupe écophysiologique splinter
Like Columbus before
We'll discover a shore
With Santa Maria Nina and Pinta"

RECENT LITERATURE

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Additions to the Bibliography of the Interstitial Ciliates (Psammalia No. 24)

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Legend regarding contents of papers:

- (B) Biology, morphology
- (D) Distribution, biogeography, ecology
- (G) General and review
- (K) Key
- (N) References with no species designation
- (O) Original description (s)
- (S) Systematic, taxonomy

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