

# PSAMMONALIA

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OLAV GIERE

Editor

Zoological Institute  
and Zoological Museum  
University of Hamburg  
Martin-Luther-King-Pl. 3  
D-2000 Hamburg 13  
Fed. Rep. Germany

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Membership in the Association is open to anyone who wishes to join. There are no pre-requisites. Annual dues of 4 US Dollars, payable in Deutsch Mark (12,00 DM), include subscription to PSAMMONALIA. Payment for one year in advance is acceptable. Payment should be made to Dr. A. Faubel, International Association of Meiobenthologists by international money order or draft in Deutsch Mark on a West-German bank. I.A.M. account no. is 1238/124844 at Hamburger Sparkasse.

PSAMMONALIA is issued quarterly in February, May, August and November.

Dear colleagues,

During the long leisure hours on my flight from a research stay at Bermuda back to Europe I went through the scientific impressions and ideas that had occurred to me. It was certainly one of the prime stimuli to enjoy the ever fascinating microscopic world of coralline sand and the meiofauna inhabiting it. Whoever had the occasion to study sand samples from sheltered coral reef areas will be struck by the diversity and abundance of interstitial life.

In Bermuda's coralline sand most meiofauna animals are of whitish appearance - numerous polychaetes with varying patterns of white skin pigments, ostracods with white shells, isopods with white bands and stripes in their integument, oligochaetes with white annuli, tiny holothurians and sipunculids laboriously working their way through the white grains, slender white harpacticoids rushing through the eye field, even nematodes with a fur-like 'mantle' of white bacteria. To the observer, this abundant and bizarre community is as fascinating as are the white and pink shell fragments, the spines of sea urchins and the beautiful skeletons of Foraminifera. Compared with samples from our European boreal sediments, this is a gorgeous walk through a wonderland of fantastic forms and marvellous colours, a microcosm (or should I say 'meiocosm!') being in no way less spectacular than the famous coral reef macrofauna community.

However, as far as I am aware, there is no comprehensive study of this meiofauna of coralline sands. Well, nobody could do this task alone - the huge variety of forms needs a team of specialists - but after all, there have been brought together groups for less interesting scientific problems!

I could envisage, in a first step, a taxonomic base-line study done by specialists for the various groups in a workshop-like atmosphere, to be accentuated in a following phase by ecological studies and ecophysiological

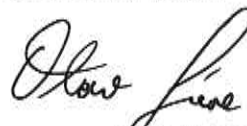
experiments - think alone of the striking phenomenon of an almost general white body coloration!

Well, I will not go into considerations on the possible reasons for the neglect of this intriguing field, but I don't hope this 'gap' in meiofauna research has its parallel in another phenomenon, the apparent lack of interest among students of biology in special meiofauna courses which repeatedly has been reported to me at different occasions by various colleagues. - Of course, in times where it is a fashion to shorten down our educational schedules at universities to a 'slim' minimum (they call it 'effective'), in which whole phyla like gnathostomulids, gastrotrichs, kinorhynchans and tardigrades remain omitted, where one cockroach has to serve as the type for all insects, one crayfish for the whole crustacean class, where diversity is considered distracting rather than fascinating, where even advanced students tend to confuse meio- with macrofauna, in these days this should not be too surprising.

An improvement of this deplorable situation can be achieved by stressing the range of meiofauna in the food web, its value in pollution studies and its role for understanding general ecological implications. Sadly enough, new phyla (Loricifera) and amazing ecological peculiarities ('sulfide animals', 'gardening' of bacteria) apparently don't do it!

Nevertheless, enjoy your summer!

Cordially, yours



Olav Gjere

#### INFORMATION PLEASE

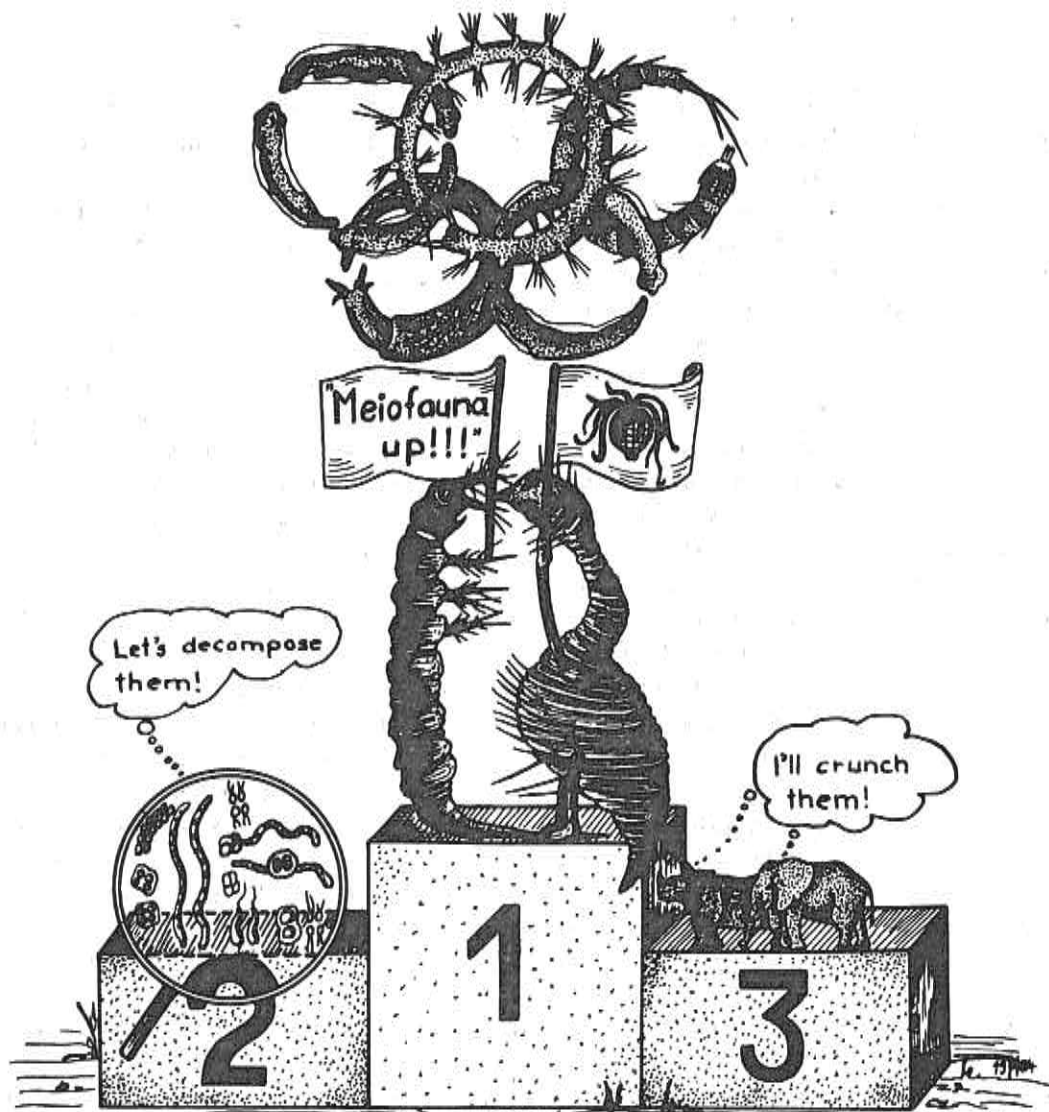
We received a request for information on addresses and prerequisites for scholarships, grants and fellowships available in the various countries of I.A.M. members. This kind of information is often badly needed and could help to promote exchange of meiobenthologists in the various laboratories. We welcome any information and will publish a compiled list of this in a forthcoming issue of PSAMMONALIA.

#### GROUND RULES for successful work:

- Experiments must be reproducible; they should all fail the same way.
- First draw your curves, then plot the data.
- In case of doubt, make it sound convincing.

#### INTERSTITIOLOGY

You know these ingenious specialists,  
Top-ranked in all application lists,  
Who always find holes,  
To get to their goals.  
They are what I call "interstitialists"!



#### CHANGE IN THE CONSTITUTION

In PSAMMONALIA No. 62 (Nov. 1983) some important changes in our constitution have been proposed. The required mail ballot resulted in 30 'yes' votes and 2 'no' votes for the change of Article 6. Hence, in future the Chairperson and Treasurer will be elected every three years.

Bylaw 5: 32 'yes' votes. The Bertil-Swedmark-Fund will be abolished. The small amount of money collected so far (70%) will be transferred to the treasurer.

In one of the next issues the complete constitution of the International Association of Meiobenthologists, as it stands now, will be published. This is all the more needed since we have so many members who are not informed about the paragraphs in the constitution.

Allow me some personal remarks on this voting, after all it affects directly the activity of the chairman: As you can see, we received (after only two reminders) altogether 32 (double-) votes, i. e. from about 10% of our members. We feel honoured by this overwhelming sign of interest in the affairs of IAM. Not to mention the tremendous in-

tinue this way, we will in more than 4 ballots end up with a 160% participation!! Baskets full of mail, wow!

Some more serious words now for the relevance of this amendment, as I see it: Having now a three-years term for the leading group of IAM, administration activities are optimally synchronized with our triannual Meiofauna Conferences. This seems to me a logical step, since now the new chairperson can be elected at the Meiofauna Conference which would ensure a high voting attendance. This is not only personally more satisfying to the elected person, but renders also a better basis for future work in IAM: Many coordinations between the old and the new chairperson and their teams can be arranged in personal talks before the new term starts in the following January, much advice provided and improvements recommended. From my own experience I know how much this contributes to a smooth start. This will easily outweigh the 'disadvantage' of being in office for a longer period of time and, thus, having more work to invest in the organisation of IAM and PSAMMONALIA. But, have you done your job for two years, you have gained so much routine that another year doesn't seem to make too much difference - even if you don't have many hel-

NEW OR REINSTATED MEMBERS

Again a real flood of new and reinstated old members! Welcome every particular one to IAM! Regrettably enough, only few held it for adequate to send us a 'self-introduction' in order to let all others know who they are, what they are doing etc. Don't you think it is much nicer to make yourself known not just by name and address? Here you get the chance, so, feel free to make up for this in the next issue!

Ana Isabel CAMACHO  
Museo Nacional de Ciencias Naturales  
Castellana, 80  
28046 - MADRID  
Spain

I think that it is time for me, a Spanish biologist working on freshwater interstitial fauna (I am doing my doctoral thesis), to belong to the IAM. Although my taxonomic specialty, Snycarids (Crustacea), have no marine representatives, I think that the techniques used in marine meiobenthology could be useful for freshwater mesopsammon too.

In my thesis I intend to do a revision of methodologies; general ecology etc. of this environment.

Stephen R. FEGLEY  
3407 Arendell St.  
U.N.C. Institute of Marine Sciences  
MOREHEAD CITY, N.C. 28557  
U.S.A.

My interests in meiofauna extend over ecological, evolutionary, and systematic questions. Currently I am examining the role that waves and currents play in structuring interstitial communities in sandy habitats. My areas of technical expertise include creating experimental designs, using statistical analyses, making systematic descriptions, and understanding hydrodynamics.

Heinz PEPPER  
Institut für Hydrobiologie  
und Fischereiwissenschaft  
Universität Hamburg  
Zeiseweg 9  
2000 HAMBURG 50  
Fed. Rep. Germany

I am working for my doctoral thesis in the laboratory of Dr. Hjalmar Thiel, on the oxygen consumption of meiobenthic species, especially of marine ostracods, under various conditions. For the respiration measurements, a new continuous-flow apparatus with micro-n<sub>2</sub>-electrodes is used. All ex-

periments are run at ambient temperatures and salinities, and most include sediment in the respiration chamber to simulate more natural conditions.

It would be interesting to get in contact with other scientists working on respiration rates of meiobenthos.

John H. TIETJEN  
Department of Biology  
City College of New York  
NEW YORK, N.Y. 10031  
U.S.A.

By the time that this is read, I will hopefully have returned from a successful cruise on which samples of abyssal and hadal sediments were taken from the Nares and Hatteras abyssal plains, and the Puerto Rico Trench. The cruise will have accomplished two things: enabled me to obtain deep-sea meiofauna samples (particularly nematodes), and freed me from the shackles of administration as Biology Department Chairman. My research interests are once again focussed on deep-sea meiobenthic ecology, with a secondary interest in brackish-water benthos (how's that for spanning the environmental gap?).

Thomas M. ILIFFE  
Bermuda Biological Station  
Ferry Reach 1-15  
BERMUDA

My present research involves a faunal survey of marine caves of Bermuda and elsewhere. To date, we have discovered over 50 new species of meio- and macrobenthic invertebrates inhabiting Bermuda's extensive inland cave systems including 1 new order (of peracarid Crustacea), 2 new families (of Ostracoda and Isopoda), and 6 new genera of Copepoda (2), Isopoda, Amphipoda, Mysidacea, and Caridea. Most of our collections are made utilizing advanced cave diving equipment and methods to sample from sometimes considerable horizontal penetrations (up to 1 km or more) into the underwater caves. We have also made expeditions to marine caves in the Bahamas, the Turks and Caicos Islands, and the Canary Islands. In the Caicos Islands, we found a new species of Ramipedia, the previously monotypic new crustacean class that had just been described by Till

Yager from a marine cave on Grand Bahama Island in 1981. In addition, we have discovered a new family of shrimps and an ostracod from the same new family as we had collected in Bermuda. Several months later, we unexpectedly found Ramipedia in a sea water flooded lava tube cave in the Canaries. The presence of the phylogenetically ancient Ramipedia in isolated marine caves of both the eastern and western regions of the Atlantic Ocean probably resulted from continental drift and indicates a Tethyan origin predating a relatively narrow separation of the Atlantic Ocean. Other troglolithic marine invertebrates show affinities with deep-sea species. The new peracarid order for example was simultaneously discovered in Bermuda caves and from 1,000 m depths off the coast of Surinam.

Gary FITZHUGH  
Center for Wetland Resources  
Louisiana State University  
BATON ROUGE, LA 70803-5701  
U.S.A.

Maria BALSAMO  
Istituto di Zoologia  
Via Università 4  
41100 - MODENA  
Italy

N. C. DATTA  
Fishery & Ecology Res. Unit  
Univ. of Calcutta  
CALCUTTA - 700019  
India

Nathan W. RISER  
Marine Science Center  
Northeastern University  
East Point  
NAHANT, Mass. 01908  
U.S.A.

John C. KERN  
Oregon State University  
Marine Science Center  
NEWPORT, Oregon 97365  
U.S.A.

I am particularly interested in learning of the existence of caves containing tidal brackish or salt water pools, especially those caves that are apparently extensive or somewhat removed (100 m or so) from the sea. We have developed the techniques necessary for investigating the marine cave environment and would like to participate in cooperative investigations in virtually any part of the world. We would welcome any leads as to the locations of marine caves as it is sometimes the more remote areas which prove to be most promising. At present, over 30 taxonomists are identifying our collected material. We often work cooperatively on collecting specific material for non-cave-diving scientists.

Thomas G. CHANDLER  
Alan DECHO  
Judy WILLIAMS HOWZE  
all: Department of Zoology and Physiology  
Louisiana State University  
BATON ROUGE, LA 70803-1725  
U.S.A.

Roberto BERTOLANI  
Istituto di Zoologia  
Via Università 4  
41100 - MODENA  
Italy

Reinhard RIEGER  
Univ. of North Carolina  
Department of Biology  
Coker Hall 010 A  
CHAPEL HILL, N.C. 27514  
U.S.A.

Donald C. WOODS  
Department of Biology  
Univ. of Alabama  
P.O. Box 1927  
UNIVERSITY, Alabama 35405  
U.S.A.

CHANGED ADDRESSES

Miranda MacQUITTY  
Queen Mary College  
School of Biological Sciences  
Mile End Road  
LONDON E 1 4NS  
England

## NEWS FROM THE MEMBERS

Our new member Tom Iliffe from Bermuda (for address see p.4) would be grateful for information how to purchase the flotation substance LUDOX-AM (produced by Du Pont de Nemour) in the USA: Address of distributor(s), quantities packed for sale, actual prices.

Dra. Estela C. Lopretto kindly informs all meiobenthologists about the publication of a book (in Spanish) by AGEITOS DE CASTELLANOS, Z.J. & LOPRETTO, E.C.: Los Invertebrados. Tomo I: Los Protistas de Filición Animal. Publ. by: M. Eudeba, Buenos Aires, XVIII + 390 pp, 192 figs, 1983. Further information available from: Dra. Estela C. Lopretto, Museo de La Plata, Casilla de Correo 326, 1900 LA PLATA - Pcia. Buenos Aires, Rep. Argentina.

## ADDRESS MISSING

We do not know the present address of K. SCHIRL, formerly: Unterthunberg 6 A-4872 NEUKIRCHEN/VOCKLA, Austria

R. H. TITGEN, formerly: 1744 Kilbourne Pl., NW WASHINGTON, D.C. 20010, U.S.A.

## NEW JOURNAL

As many of you will be aware, there has been established a new journal, "The Psammologist", mainly focussing on sand and beach studies. It is published in the Republic of South Africa, its first issue came out in February 1984. I will not discuss here the necessity of another new journal in times of ever tighter library budgets all over

the world (but perhaps is South Africa the golden exception?). However, as the present editor of our traditional PSAMMONALIA (founded in 1966) I regret very much the apparent lack of imagination in our colleagues from South Africa to find a better title not prone to confusion with PSAMMONALIA. Or is our newsletter's title so unique and without alternative that they held it for adequate to cling to such a similar name?

## A BIBLIOGRAPHY OF THE INTERSTITIAL CILIATES (PROTOZOA): (Part 2)

EIKE HARTWIG, Zoological Institute and Museum, University of Hamburg, FRG

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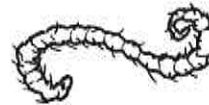
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"Our universe is not populated by mathematical models, and if the organisms contradict the theories it is not the organisms that have to be corrected."  
(M.T. GHISELIN, Science)

I once knew a copepod freak,  
And 'truth' was all he would seek.  
His procedure would sell you,  
But all he would tell you  
Were lies about immunotechnique.  
(S. BELL & G. HICKS)

CONGRESS ANNOUNCEMENT

The 'Third International Congress of Systematic and Evolutionary Biology' (ICSEB-III) will be held on July 4 - 10<sup>th</sup> 1985 at the University of Sussex, near Brighton, England. Beside other 'Congress Symposia' (e.g. 'Symbiosis in Evolution', 'Co-evolution and Systematics') there will be a 'Special Interest Symposium' on "The Evolution of Marine Meiofauna", organised by Howard M. PLATT. The provisional programme includes papers of Boaden, Kristensen, Rieger, Patterson, Platt, Vidal, Westheide. For further information write to Prof. Barry Cox  
c/o ICSEB Congress Office  
130, Queen's Road  
BRIGHTON, Sussex BN1 3WE  
England

POLLUTIONALIA

"There is nothing that can tell us better what kills an organism than the organism."  
(H.M. PLATT, 1983)

LAST, BUT NOT LEAST

Call for photos

Our present 'summer' in Northern Germany with its crisp polar air and refreshing (acid) rain fronts reminds me of Christmas times. So it came to my mind to further promote a most enjoyable habit, namely sending 'scientific' Christmas wishes, and to 'institutionalize' a regular competition:

The Competition for the Best Meiofauna Christmas Card

The winner, who will be selected by the PSAMMONALIA publishing team, will be assured of fame, career and wealth (fame: surely, career: perhaps, wealth: hm...). The winning card will be published as a real PHOTO in PSAMMONALIA! However, for the sake of an undisturbed and enjoyable Christmas time, we will refrain from publishing the photo of the winner. So, let your fantasy carry you away, find the best profile of your beloved little beasts, do the most artistic photomontage and send it to us. Who knows, there may be a poster exhibit on 'Famous Meiofauna Christmas Cards' at the next Meiofauna Conference?

