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*This Newsletter is not part of the scientific literature for taxonomic purposes*
OFFICERS
Newsletter of the International Association of Meiothermologists

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EDITORIAL

Meiofaunal Diversity

The worldwide meiofauna biodiversity study is now underway. This study was organized by the Plymouth Marine Laboratory group last year. The idea that the international meiofauna community might organize and carry out a world-wide biodiversity experiment was first proposed by Dick Warwick in February 1991 (Psammonalia 91). He had a good response (Psammonalia 92) and continued planning with a meeting of participants at the Eighth International Meiofauna Conference in August 1992. The colonization experiment consists of deploying artificial substrates in similar habitats around the world over five months. The habitat is a sublittoral rock or hard substrate at a depth of 10-15 m. In May 1993, the substrates were deployed in the northern hemisphere, and substrates are to be deployed in November 1993 in the southern hemisphere. Good luck!

There is much talk today about the importance of "biodiversity" and sustainable resources. Of course, these people are talking about tropical rain forests, birds and insects. No one who can influence policy seems to care about aquatic biodiversity, especially meiofaunal diversity. We know meiofauna are very diverse. I just sampled 10 stations in the Gulf of Mexico. In the top 2 cm of a 2.8 cm² core, we typically found 8 species of harpacticoids and 16 species of nematodes. On the California continental shelf, Frank Fiers and I found 115 species of harpacticoids and only 15 were described. All of us who have sampled meiofauna in new areas have run across many new species. Yet, a typical invertebrate zoology textbook (e.g., Barnes, 1987) reports that there is only about 7,500 species of Copepoda and 12,000 species of Nematoda. This is absurd! In his dissertation, Frank Fiers estimated that there must be closer to 750,000 species of Harpacticoida in the world based on the rate of discovery of new species. Robert May (1988, Science 241:1441) estimated that there are 10^{18} species of Nematoda on earth. All marine papers I consulted suggested that there are about 10,000 marine species. I was surprised the number is so low. I thought that there would be at least a million marine species. But, my colleagues suggest that the rate of new nematode species in samples is only 20-40%, suggesting that there may be only about 4,000 to 8,000 species left undescribed. Is this true? We urgently need a new review paper that would update the estimates on how many meiofauna species exist on earth.

If there are still many new species to be discovered, who will describe them? The state of systematics has been in decline for many years. Edward Wilson wrote and editorial in Science in 1985 (vol. 230) suggesting that it was time to "revive systematics." Clearly, his advice has gone unheeded. In fact, since then some museum staffs have been decimated. Is this wise? In a way it is our own fault. Many of us have derided systematics as a soft or descriptive science. This is a value judgment. We all must be more supportive of systematics or we will never gain a true appreciation of world-wide diversity.

Habitats on earth deteriorating and disappearing at an alarming rate, and perhaps some diversity on earth has already been lost. It is certainly endangered. We urgently need new studies to determine if we can still find species that were described in communities at the turn of the century. I have found it very difficult to find all the species listed from the Texas coast in papers in published the 1940's and 1950's. Have we lost diversity in shallow marine ecosystems? Wouldn't macrofauna and meiofauna communities be ideal test cases? I think the answer to both questions is yes. What do you think?

UTMSI SUPPORTS IAM

The University of Texas Marine Science Institute (UTMSI) has given a $400 gift to the International Association of Meiobenthologists (IAM). The gift was presented to Paul Montagna by the Institute's Director, Dr. Robert Jones. The money will be used to offset publication and mailing costs for Psammonalia. If there are excess funds at the end of the current stewardship, then the money will be transferred to the Bertil Swedmark Fund. -ed.

DUES AND MEMBER SERVICES

Bob Feller will accept dues (10 US dollars per year) in US currency only, as the expense for conversion is prohibitive. If you are not sure if you your dues are current, check the date in the upper right hand corner of the mailing label. Please send your dues right away if you are not current. Please use the membership form at end of newsletter.
Paul Montagna requests that all members send their e-mail address or addresses to him. You can mail it or e-mail a message on bitnet: PAUL@UTMSI or internet: PAUL@UTMSI.ZO.UTEXAS.EDU

Margaret Palmer reports that she found some extra copies of the EIMICO photograph and would be happy to send them to anyone who wants one (some people had to leave the meeting early and didn't get a photo). Second, we want to encourage contributions to the Swedmark travel fund by offering to send Psammonalia tote bags to anyone who makes a contribution to the fund. Bob Feller suggests that people add a contribution (of whatever size) to their membership renewal and he will send Margaret names and addresses so she may send out tote bags. If anyone sends a contribution directly to Mike Gee or Dick Warwick, just drop me a note & I'll send you a tote bag. My e-mail address: MP3@UMAIL.UMD.EDU and my bitnet address: 209194@UMDD.

Mike Gee oversees the Bertil Swedmark fund in the U.K., the purpose of the fund is to use the accumulated interest to help students or others who wish to attend the triennial International Conference. This fund was originally donated by Bertil Swedmark. It is in a U.K. Building Society where the current rate of net interest is 4%. At present, the Fund will produce approximately £150 (~$225 U.S. dollars at present exchange rates) over three years. 75% of this amount would not go very far to helping even one overseas student attend the conference. The Fund could be increased by the further contributions or gifts from members who feel in a position to do so.

CONGRATULATIONS

Dr. Rudy L. Herman
Nominated as Vice-Director for science policy for the Flemish Government (from 1/5/93 onwards)

IAM\PML GLOBAL BIODIVERSITY PROJECT

The project is now underway and sampler packs have been sent to participants in the northern hemisphere for putting out at the beginning of May. Three replicate artificial substrate units of four pan scourers will be located at four hard bottom sites in 10-15m of water in each of the following locations:

EUROPE

Millport, Scotland (Dr. Peter Barnett); Plymouth, England (Judy Gobin); Netherlands (Dr. Carol Heip); Valencia, Spain (Santiago Moreno).

NORTH AMERICA

Hawaii (Fred Dobbs); Beruda (Dorte Wesphaelen);

CARIBBEAN

Trinidad (Judy Gobin)

JAPAN - Arranged by Dr. Yoshihisa Shirayama.

Hokkaido (Dr. Hiroyuki Takeuchi); Kumamoto (Dr. Satoshi Nojima); Okinawa (Dr. Kazuhiro Sakai).

S.E. ASIA

Thailand (Dr. Chittima Aryuthaka); Indonesia (Dr. Carol Heip)

We also have a promise of a site in Crete (Dr. Eleftheriou) for May 1994.

ASU's will be put out in the southern hemisphere on November 1st at the following locations:

NEW ZEALAND

North and South Island (Simon Thrush)

AUSTRALIA

Rockhampton, Southern Queensland (Primitivo Acocet); Sidney, New South Wales (Warwick Nicholas); Melbourne, Victoria (Dr. Gary Poore)

AFRICA

Mombasa, Kenya (Dr. Carlo Heip); Port Elizabeth, SA (Dr. Anton McLachlan); Durban, SA (Dr. Jeannette Whitehorn); Sodwana, SA (Dr. M.H. Schleyer).

We have no locations in the latitudes above 50° and from the Atlantic and Pacific coasts on North and South America. We are also very short of global locations 10°N to 10°S of the equator. So if any members can oblige or have contacts with diving facilities in these regions could they please let the Project Coordinator know (Mike Gee, Plymouth Marine Laboratory, Prospect Place, The Hoe, Plymouth PL1 3DH, U.K.) so that arrangements can be made for AU placement in 1994.

The samples from the northern hemisphere locations will be retrieved at the end of September. So far we have had the following offers to participate in identification of various "hard bodied" groups: mites and tectagid harpacticoids (Ilse Bartsch); other harpacticoids (Mike Gee); nematodes (Melanie Austen and Richard Warwick); caprellid amphipods (Dr. Ichiro Takeuchi; isopods (Dr. Gary Poore). We still need offers for the other meiofauna groups and for the amphipods, molluscs and polychaetes. -Mike Gee
NEWS FROM MEMBERS

Tidbits

Joan M. Bernhard,
I have just returned from a 6 month Fulbright Fellowship in Norway. I am currently a postdoc at the Wadsworth Center for Labs and Research, P.O. Box 509, Albany, NY 12201-0509. However, I will probably only be here for another 6 months, all pending grants (and job applications) of course.

Fred C. Dobbs,
Is continuing explorations into several aspects of the ecology of marine sediments, with an emphasis on the deep sea Equatorial Pacific samples (^14C-glutamate, ^3H-Tdr and ^3H-Ade, lipids, direct counts—all from sediments) and Loigh Seamounts since going there 3 years ago. (What it all means in practical terms (as he puts it) is he busting his hump as a non-tenure researcher, self-supporting 100% and not publishing enough—ask his dean!) He is sitting more at his desk than he would like, or at sea than he would like—not enough time in the lab.

Tom Shirley,
All of our state/university telephone numbers changed recently. My telephone number is (907) 465-6449 and my FAX is (907) 465-6447. Volker Storch and I were recently in New Zealand for two weeks, collecting priapulids. We had a grand time, but unfortunately didn’t find time to visit with many of our NZ colleagues. That’s sufficient excuse to warrant a return trip.

Antonio Todaro,
I am currently a postdoc in the John Fleeger* laboratory at Louisiana State University. Among other “things” I am working on marine gastrotrichs (which are my first love) of the Gulf of Mexico. I recently had a brief collecting trip to South Texas driving a 1985 rusty Renault.
Antonio presented a fantastic poster with many photographs at the Benthic Ecology Meeting in Mobile, Alabama based on his recent collections. —ed.

John Coles
Writes he went to the Annual General meeting of the Ray Society at the Natural History Museum in London on the 24th of March and he quotes from the draft report of the council—about the translation of Dr. Sievert Lorenzen’s work on free-living nematodes: The publication of the volume on free-living nematodes, a translation from German and update of the work by Sievert Lorenzen, has been delayed because of editorial problems. These problems were exacerbated by the need to find a new agent for the Society’s works. However, the problems appear to have been resolved and the work should be published this year....

Dieter Walossek
It has been some time ago (Vienna ’89) that I was asked to “invent” some more meiofauna forms from Cambrian sediments and non-arthropoda if possible. I can tell you now that we—Klaus Müller and I—were successful. From Middle-Cambrian, organic-rich limestones, we have produced small tubes that look like loricas of priapulids. It is like the one of *Tubulichthys coralicola*, having 20 regular longitudinal plates (approx. 500 μm). Being warned by Dick Warwick’s comments about loriciferans (*Psammonalia* 89/1990—we’ve read it, Dick!), we’re still hesitating to state that they were baby priapulids, but, well, could have been. At least adult priapulids are abundant in faunas of the Middle-Cambrian Burgess Shale type, occurring in a number of species. Recently there’s been evidence accumulating, that a widespread group of ancient worms with long, finely annulated and papillated tail, the palaeoscocoleids, may be related to priapulids and these co-occur in our samples. Anyway, phosphatization of softies works out, and I’ll keep you informed about our progress.

Shira Sirayma
My telephone number will change to 03-3531-6469 from 16 March local time. The new number will also accept fax transmission. My bitnet address (SIRAYAMA@JPNORIUT) will expire in February 1994 due to replacement of computer system of my institute. I will have internet address from 1994 as SIRAYAMA@AIX3.ORG.U-TOKYO.AC.JP

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Requests

Wolfgang Riess  
Are there any Mensa-members in the IAM? Mensa  
from Hamburg/Germany seeks contact with other  
Mensa's working in marine biology or other biological  
fields. Please send mail to: Wolfgang Riess,  
Hermann-Kauffmann-Strasse 42, 2000 Hamburg 50,  
GERMANY

NEW MEMBERS

Wolfgang Riess  
Zoologisches Institut und Museum  
c/o Prof. O. Giere  
Universität Hamburg  
Martin-Luther-King-Platz 3  
2000 Hamburg 13  
GERMANY

Wolfgang is going for his masters, working on  
nematodes at the tidal sand flats of the River Elbe.  
Studying nematodes of the genera Tobrilus (Andrassy  
1959), particularly biomass/production-dynamics.

Nozomu Iwasaki  
USA Marine Biological Institute  
Kock University  
Usa-cho, Tosa  
Kochi 781-11  
JAPAN

Nozomu is studying the ecology of harpacticoid  
copepods, particularly intra- and interspecific  
relationships.

RECENT LITERATURE

Use of a photographic slide mount for nematode
preparations. Nematological 39:135-.
development of *Mesocyclops aequatorialis similis* and *Thermocyclops consimilis* (Copepoda: Cyclopoida) from Lake Awasa, a tropical rift valley lake in Ethiopia. Canadian Journal of Zoology 70:2283-2297.


Jensen, P., Rumohr, J. & Graf, G. Sedimentological and biological differences across a deep-sea ridge exposed to advection and accumulation of fine-grained
Petrovsky, T. & Keyser, D. 1992. Leptocythere ostrowskensis sp. n. (Crustacea, Ostracoda, Cytheridae) aus dem Bec Vegoritis (Ostrorsko Ezro) in NW


THANKS

This issue of Psammobia came about due to the efforts of many individuals. The editorial staff thanks the following members for their contributions:

M. Palmer
J. W. Cole
Bruce Coull
Preben Jensen
Zhang Zhinan
James Ward
Andrew Gooday
Mike Gee
Robert Feller
Nicole Coineau
Donald Zinn
Rony Huys
International Association of Meiobenthologists

Application for Membership or Renewal

The International Association of Meiobenthologists is a non-profit scientific society representing meiobenthologists in all aquatic disciplines. The Association is dedicated to the dissemination of information by publishing a quarterly newsletter and sponsoring a triennial International Conference. The newsletter, *Psammonalia*, is published mid-month in February, May, August and November. The next International Conference will be in the summer of 1995.

Membership is open to any person who is actively interested in the study of meiofauna. Annual membership dues are $10 US and you may pay up to 3 years in advance, i.e., $30. New members will receive *Psammonalia* beginning with the February issue of the current year. If you are able, please add extra money to be contributed to the Bertil Swedmark Fund, which is used to help students or others who wish to attend the triennial International Conference.

Please check appropriate box:

- [ ] New member
- [ ] Renewing member

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City, St/Prov ____________________________________

Zip/Postal Code _________________________________

Country _________________________________________

$US ________ enclosed for ____ years membership at $10/year.

$US ________ enclosed to contribute to the Bertil Swedmark Fund.

$US ________ TOTAL

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