

PSAMMONALIA

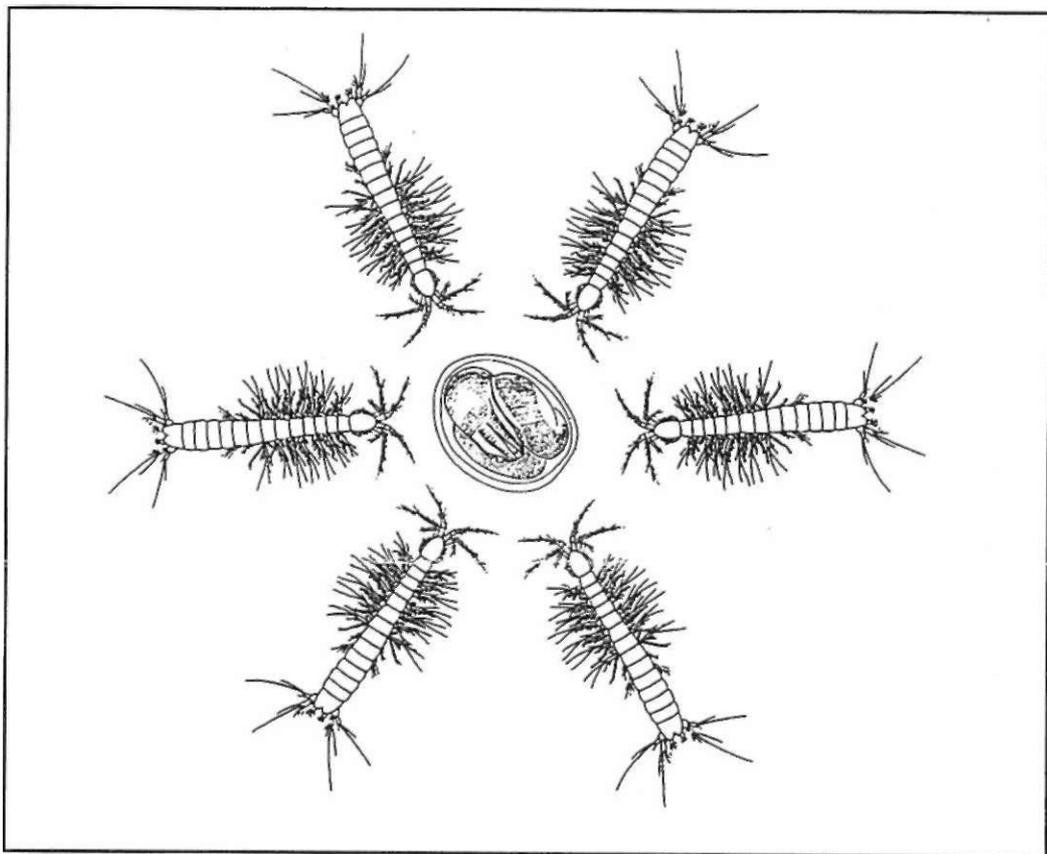
Newsletter of the
International Association of Meiobenthologists



Number 115, February 1997

Composed and Printed at The University of Gent,
Department of Morphology - Systematics and Ecology, Marine Biology Section, K.L. Ledeganckstr. 35,
B-9000 Gent, Belgium.

Meiofauna admiring the birth of a new nematode



This Newsletter is not part of the scientific literature for taxonomic purposes

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International Association of Meiobenthologists - Founded 1966

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You may make your donations to the *Bertil Swedmark Fund* directly to the IAM bank account (account number 6586667) of the Lloyds Bank (Sort code 30-96-68), 8 Royale Parade Plymouth PL1 1HB, UK.

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Marleen De Troch, Tom Moens, Ann Vanreusel,
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IN MEMORIAM

Jacques Castel

Jacques Castel, meiobenthologist at the Marine Station of Arcachon, France, died suddenly January 12, 1997 from cardio-vascular problem. He was only forty-five and no one among his family and colleagues could expect such a tragic end. After preparing his PhD thesis in Pierre Lasserre's laboratory, Jacques spent all his career of researcher at the Laboratory of Biological Oceanography at Arcachon. His research topics were the dynamics and ecological adaptations of the small metazoans in lagoons and estuaries; actually, most of his studies dealt with copepods in the eutrophic ecosystems along the French Atlantic coast, especially the Gironde Estuary and Arcachon Bay. Jacques was both a zooplanktonologist and a meiobenthologist, but, above all, he was a copepodologist. I don't know if he really loved 'his' copepods (we often joked about their intellect) but I know he soon realized how copepods, either pelagic or benthic, could be valuable models for studying and understanding the fundamental principles of marine ecology. During his too short career he published a hundred papers and supervised some twenty PhD students. He also participated in several national and European programmes. Jacques was a quiet man and a good scientist. I, and many of us, lost more than a colleague.

Guy Bachelet
7 February 1997

Donald J. Zinn

Dr. Donald J. Zinn, a long-time advocate of meiobenthology, died of cancer 18 September 1996.

He was the husband of Margery (Pool) Zinn who survives him along with two sons and a stepdaughter, a brother, two sisters, and several grandchildren.

Don received his bachelors's degree from Harvard University in 1933, a masters's degree from the University of Rhode Island in 1937. He was working on his doctoral research in 1939 at Woods Hole, Massachusetts when he met Robert W. Pennak during the latter's summer research the Marine Biological Laboratory. Studying the same beach interstitial habitat, they co-discovered the *Mystacocarida* which was the subject their 1943 publication. In terms of the early history of meiofaunal studies in the United States, this, perhaps, was one of the more notable landmarks.

Don received his doctorate from Yale University in 1942 and then served in the Army Air Corps during World War II. Unknown to most of us, he was a pioneer in the field of aviation physiology, producing a number of publications on this subject. After the war he took a position as naturalist at the Woods Hole Laboratory and in 1947 joined the faculty of the University of Rhode Island where he worked as a marine ecologist and professor of zoology for 28 years until his retirement in 1974. He was a long-time associate of the National Wildlife Federation and served as its National President from 1967 to 1970 and an even longer associate of the Marine Biological Laboratory at

Woods Hole. He was committed to volunteer service in many organizations in his community, and in the areas of natural history, environmental policy and conservation. In addition to several publications on meiofauna, he was author of two textbooks, "The Handbook for Beach Strollers from Maine to Cape Hatteras" and "Marine Mollusks of Cape Cod."

Any meiobenthologist who has visited Woods Hole probably remembers Don in a special way. He was an effervescent meiobenthologist whose wealth of knowledge about the natural history of meiofauna never reached its zenith or the extensive publication that it deserved. What I remember of Don is his power to encourage, to instill enthusiasm, to support the quest for knowledge about meiofauna. These characteristics certainly played a role in the founding of *Psammonalia* and, ultimately, the organization we now call the International Association of Meiobenthologists. If there are beaches in heaven, we can be sure that Don will be able to tell us all about what exciting research challenges are there for us to pursue when we make our own collecting trip there.

Bob Higgins

EDITORIAL

After a freezing month of January in Belgium (3 weeks of about minus 10 °C) I'm looking forward to the forthcoming Spring and Summer ... Indeed, it seems that we in Europe are really adapted to warmer temperatures since a lot of our scientific activities are situated in the tropics (by the way, in March I will be one week in Kenya and two weeks in Ecuador). The affinity for warmer regions was also noted in the recently published 'Inventory of Marine Biodiversity Research projects in the EU/EEA Member states' (edited by Richard Warwick, Raquel Goni & Carlo Heip). This inventory is a comprehensive guide of the actual research in the above mentioned field in Europe.

The 5 DIVERSITAS core programme elements were investigated and split into research within European Waters and Research outside European waters both performed by following European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, United Kingdom).

Within the tables, I searched for meiofaunal projects and came to the following conclusions:

The numbers mentioned in the table are the numbers of projects which include meiofauna:

| 1. BIODIVERSITY AND ECOSYSTEM FUNCTIONING | | |
|---|---------------|----------------|
| | within Europe | outside Europe |
| Belgium | 2 | 3 |
| Greece | 1 | |
| France | | 1 |

2 ORIGIN, MAINTENANCE AND CHANGE

| | within Europe | outside Europe |
|------|---------------|----------------|
| U.K. | 5 | 1 |

3.SYSTEMATICS,INVENTORYING AND CLASSIFICATION

| | within Europe | outside Europe |
|-------------|---------------|----------------|
| Belgium | 2 | 4 |
| France | 1 | |
| Germany | 1 | 3 |
| Netherlands | 1 | |
| Sweden | 1 | |
| Austria | | 1 |

4. MONITORING AND BIODIVERSITY

| | within Europe | outside Europe |
|---------|---------------|----------------|
| Belgium | 1 | |

5.CONSERVATION,RESTORATION AND SUSTAINABLE USE

| | within Europe | outside Europe |
|-------|---------------|----------------|
| U.K. | | 1 |
| TOTAL | 15 | 14 |

Conclusion : as much meiofauna research is going on outside Europe as within European waters by European laboratories. Most of these last activities are within the tropics.

meiofaunal research and try to make a lot of effort to promote meiofauna among young scientists if we will not be working soon on a dying science !!!!

Meiobenthic research has still many unsolved problems. At these days, I'm convinced that we have good books for determination, although many new species still need to be described. But this alone may not hamper anymore the scarcity of interest.

University people amongst us may not forget to teach about meiofauna and secondly, we have to put a lot of effort in getting this science financed....
NEVER GIVE UP !!!

MONEY BUSINESS

Bertil Swedmark Fund.
Statement of Accounts to 31st December 1996

This fund was originated from a bequest of £ 1000 from Dr Bertil Swedmark, to encourage the study of meiofauna amongst students. However, the money was held within the general IAM funds until 1993 when the treasury was handed over from Plymouth to South Carolina. The money is held in the IAM Account Number 6586667 of Lloyds Bank (Sort code 30-96-68), 8 Royal Parade, Plymouth, PL1 1HB, UK. The account opened in October 1993 with the original £ 1000 and a sum of money donated by the organizers and participants of the Maryland Conference. The accounts to December 1996 are as follows :

| | Capital (£) | Interest (£) | Total (£) |
|------------------|-------------|--------------|-----------|
| Oct. - Dec. 1993 | 1267.06 | 5.03 | 1272.09 |
| Jan. - Dec. 1994 | 125.01 | 38.95 | 163.96 |
| Jan. - Dec. 1995 | 388.17 | 54.39 | 442.56 |
| Jan. - Dec. 1996 | 710.65 | 47.78 | 758.43 |
| TOTAL | 2490.89 | 146.15 | 2637.04 |

UK Bank Interest rates are very low at the moment (Jan. - June 1996 at 2.37 %; June - Dec. 1996 at 2.13 % on accounts between £500 - £5000). So interest is only accumulating very slowly. The capital income in 1996 was entirely through the generous contributions of members. You make a donation to the BSF either directly into the bank account (in sterling) or by sending them to the treasurer or assistant treasurer with your subscription.

Reports of the treasurers

The **Belgian treasurer** received 33.679 BEF (about 1000 \$) from membership dues in 1996. We spented however 65.667

However, on a total of 610 recorded projects, only 29 or about 5 % are dealing with meiofauna. TOO FEW is my personal opinion about this. We really have to do something about

BEF to produce the issues 111 to 114. About 50 % of this costs were made to multiply the issues and the other 50 % to distribute the numbers by mail. Since we started with 37.088 BEF which we received from the previous treasurer (the actual assistant-treasurer), the capital left on our Belgian account amounts 5.200 BEF. We received about 3.400 BEF as donations for the Swedmark Fund which are not yet incorporated in the former table.

The **U.S. assistant - treasurer** received dues payments from 66 members during 1996 totalling \$1.865. Expenditures included \$ 440 for photocopies of back issues of *Psammonalia* (which we sold for \$500). A total of \$197 was donated to the Swedmark fund, plus we transferred an additional \$ 1000 to this fund. This leaves a balance of \$ 4701,39 in the US account.

ANNOUNCEMENTS

Baltic meiofauna meeting

Twenty researchers working in six countries bordering the Baltic Sea took part in a meiofauna meeting at the Askö Laboratory in the Stockholm archipelago 9th to 12th of September 1996. The main aim of the meeting was to bring together meiofauna researchers working in the Baltic Sea to: 1) present the various meiobenthic research projects carried out in each country, with special emphasis on the Baltic region. 2) discuss the possibilities of co-working on research topics that groups or individual scientists have in common 3) increase the possibilities of visiting students or scientists between the various research centres 4) discuss future funding for meiofauna research programmes in the region at an international level. More than half of the participants were post-graduate students, some in their initial phase of studies while others soon completing their theses.

The research projects presented at the meeting included: Systematics of free-living nematodes, meiofauna as food for juvenile fish, benthic-pelagic coupling (using both stable and radioactive isotopes), uptake of dissolved free amino acids by oligochaetes, sulphide resistance of harpacticoids, effects of anoxia on meiobenthos, several distribution studies both spatial and temporal, size spectra studies and tropical meiobenthic research.

A strong interest for co-operation between researchers or research groups was expressed. Individual short time visits are planned. International co-operation on special research topics was discussed without any firm conclusions. It was decided to continue such meetings every second or third year. The group was christened the Baltic meiofauna research group (BALMERG) and I will act as its contact person until next meeting.

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Evolution of Biological Diversity: From Population Differentiation to Speciation

London, UK July 9-10 1997

A discussion meeting at The Royal Society, Carlton House Terrace, London UK. Organized by Robert May and Anne Magurran.

Contact:

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PaleoForams '97

Western Washington University, Bellingham, WA, USA, 17-21 August 1997

First announcement and call for papers

Organizers:

Charles A. Ross, Department of Geology, Western Washington University; June R.P. Ross, Department of Biology, Western Washington University; Paul Brenckle, Amoco Production Company, Houston, TX

Pre-conference Field Trip:

14-16 August 1997, Late Devonian through Permian strata of accreted terranes in southwestern British Columbia (Canada), organized by J.H.W. Monger (Geological Survey of Canada) and others.

Post-conference Field Trip:

22-24 August 1997, Carboniferous of Arrow Canyon and the mid-Carboniferous boundary, southern Nevada, (USA), organised by Rick Page (US Geological Survey) and Paul Brenckle.

An initial list of topics for which talks and/or posters are solicited include: Evolution, dispersal, and paleobiogeography; Classification and taxonomy; Biostratigraphy and zonation; Paleocology and sedimentary environments of deposition; Biological interpretations and significance; Numerical and statistical methods; Composite standard sections and their utility in Foraminifera biostratigraphy; New techniques.

At this time the organizers welcome additional topics that participants wish to have included.

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Crustacean Society Summer Meeting
Mobile, Alabama - May 21-24, 1997

Symposia:

Biodiversity of Latin American Crustaceans (organizer: Dr. Elva Escobar-Briones).
A Symposium in honor of Dr. Austin Williams (organizers: Drs. Ray Manning and Darryl Felder).

Organizers:

Richard Modlin, modlinr@email.uah.edu
Ken Heck, kheck@jaguar1.usouthal.edu

For further information:

url: <http://www.lam.mus.ca.us/~tcs/events.html>

International Symposium on Foraminifera

Monterrey, N.L., Mexico, 7 July - 11 July, 1998

Once again, thanks for your prompt reply to our first circular, so far we have more than one hundred colleagues that expressed an interest in participating in FORAMS'98. We have received a number of suggestions for Theme Sessions, Symposia, Working Group Meetings and Short Courses. We are in the process of addressing each of these suggestions and we will contact the corresponding proponents.

Field trips are a must for FORAMS98. Two field trips are planned: A pre-meeting trip to Tertiary localities of the Gulf Coastal Plain of Mexico which will include the type locality of a number of foraminiferal species. A whole day of this trip will be devoted to larger forams. A post-meeting excursion to the Mesozoic including Jurassic and Cretaceous outcrops of the Mexican Cordillera.

For more information contact:

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Interests: Taxonomy, interstitial Copepoda, Gastrotricha, Tardigrada

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Interests: Marine coastal meiofauna, nitrogencycle
I am a PhD student at the University of Ottawa (Ottawa, Ontario) and I work as a Scientific Advisor at the Biodôme de Montréal (Montréal, Québec). I study the role of meiofauna in the nitrogen cycle of cold marine mesocosms. The overall goal of my research is to establish and quantify the role of meiofauna in the

mineralization of organic nitrogen and nitrification of resulting ammonia in a 3 million-liter mesocosm. Through laboratory experiments, I compare the apparent rate of production of ammonia, nitrites and nitrates in microcosms inhabited with different meiofaunal densities. Each rate is measured in beds of sand (from rapid sand filters), gravel (from the bottom of the basins) and bioballs (from the trickling filter), using food particles of different sizes. The long term goal of this project is to increase our knowledge of meiofaunal ecology in order to develop better biological filtration systems for marine wastewater.

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Interests: Meiofauna community structure: actively contribute to the 'Seagrass ecosystem project in Lombok Island, Indonesia', since 1992-1996, with the main field on the study of meiofauna; and study on the environmental perturbation by using meiofauna as an indicator.

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Interests: I am a cell biologist/protistologist interested in the physiological ecology of benthic Foraminifera. My particular interest is in the larger agglutinated Foraminifera that are among the major meiofaunal groups of polar and deep-sea settings. My lab specializes in biomedical uses for these organisms (e.g. natural product chemistry).

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Interests: Gastrotricha of Chesapeake Bay, physiology and ecology

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Interests: Since my Msc on barnacle larvae with Dennis J. Crisp at Menai Bridge, UK, back in 1975, I have been working in Papua New Guinea (giant clam biology) and Australia (octopus visual acuity). A couple of years ago I 'found' the meiofauna of the temperate mangrove system in Victoria and I'm now 12 months into a part-time PhD study (I teach marine biology at Deakin Uni. full time) of the ecology of the meiofauna in the temperate mangrove ecosystem. My initial interest covered the maintenance of distinctive assemblages in the sedimentary and adjacent phytal habitats provided by the pneumatophores. I am moving towards investigating the role of components of the mangrove meiofauna in macro/meio trophic relations.

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A WORD FROM THE PRODUCTION EDITOR

Since the last issue of *Psammonalia* (Nov. 1996), a lot has changed in my life. Next to becoming a daddy, I managed to get a new job as the curator of the Zoology Museum of the University of Gent. In this new position, I would like to take this opportunity to present our museum as a possible collection address for all you meiofauna-taxonomists out there. If you are working on taxonomy of any meiofauna group, do not hesitate to send us type material of your new species to register and add to our recognized type collection. The address for this is :

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Membership is open to any person who is actively interested in the study of meiofauna. Annual membership dues are 300 Belgian francs (\$ 10 US) and you may pay up to 3 years in advance, i.e. 900 BEF (\$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.

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