

PSAMMONALIA

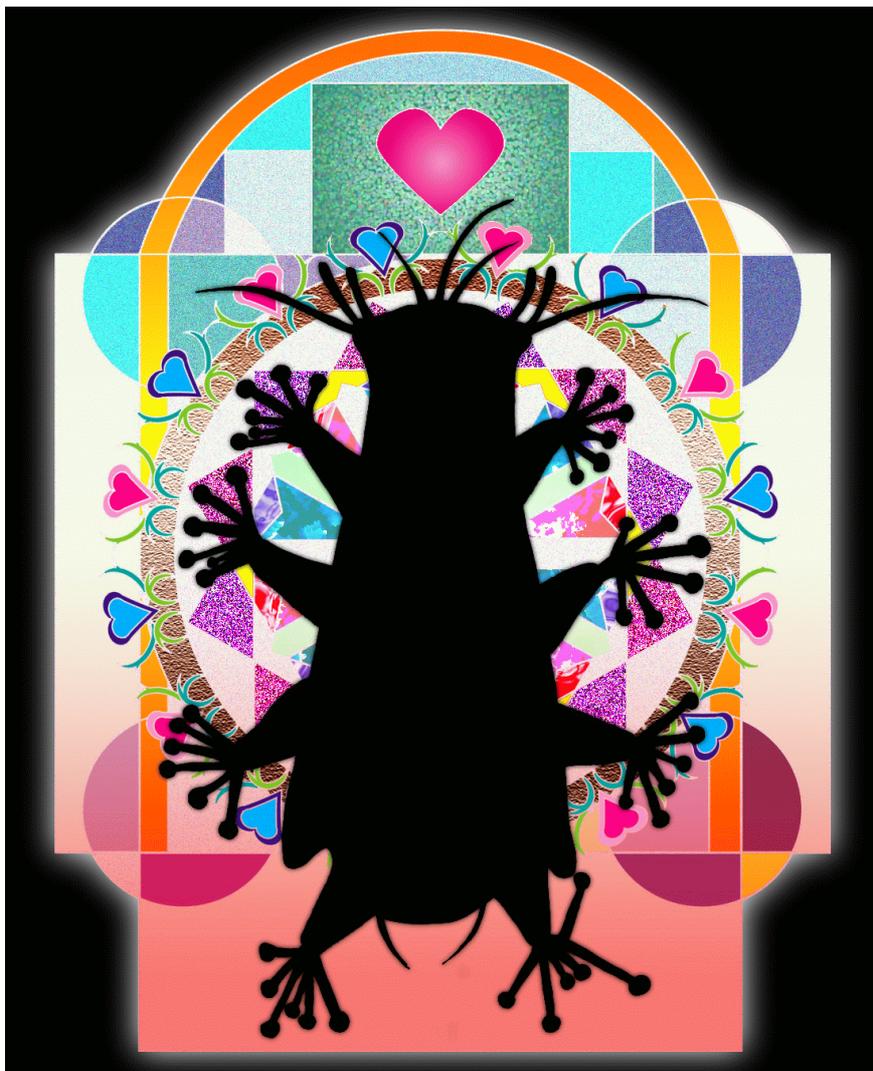
Newsletter of the
International Association of Meiobenthologists

Number 128, August 2000



Composed and Printed at Seto Marine Biological Laboratory,
Kyoto University
Shirahama cho, Wakayama Prefecture, 649-2211, Japan

Queen of Meiofauna



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

Editor: Yoshihisa Shirayama
email address : Yshira@seto.kyoto-u.ac.jp

Executive Committee

Yoshihisa Shirayama, Chairperson

Magda Vincx, Past Chairperson, *Lab. Morfologie, Universiteit Gent, Ledeganckstraat 35, B-9000 Gent, Belgium*

Ann Vanreusel, Treasurer, *Lab. Morfologie, Universiteit Gent, Ledeganckstraat 35, B-9000 Gent, Belgium*

Robert Feller, Assistant Treasurer and Past Treasurer, *Belle Baruch Institute for Marine Science and Coastal Research, University of South Carolina, Columbia SC 29208, USA*

Gunter Arlt, Term Expires 2001, *Rostock University, Department of Biology, Rostock D18051, GERMANY*

Teresa Radziejewska, Term Expires 2001, *Interoceanmetal Joint Organization, ul. Cyryla I Metodego 9, 71-541 Szczecin, POLAND*

David Thistle, Term Expires 2004, *Department of Oceanography, Florida State University, Tallahassee, FL 32306-3048, USA*

Guy Boucher, Term Expires 2004, *URA 699 CNRS, Biologie des Invertébrés Marins MNHN, Pavillon Chevreur 57, Rue Cuvier 75005, Paris, France*

Ex-Officio Executive Committee (Past Chairpersons)

Robert P. Higgins, Founding Editor, 1966-67

John S. Gray 1970-71

Bruce C. Coull 1974-75

William D. Hummon 1978-79

Carlo Heip 1982-83

John W. Fleeger 1987-89

Paul A. Montagna 1993-1995

W. Duane Hope 1968-69

Wilfried Westheide 1972-73

Jeanne Renaud-Mornant 1976-77

Robert P. Higgins 1980-81

Olav Giere 1984-86

Richard M. Warwick 1990-92

Magna Vincx, 1996-1998

Board of Correspondents

Bruce Coull, *School of the Environment, University of South Carolina, Columbia, SC 29208 USA*

Dan Danielopol, *Austrian Academy of Sciences, Institute of Limnology, A-5310 Mondsee, Gaisberg 116, Austria*

Roberto Danovaro, *Facoltà de Scienze, Università di Ancona, ITALY*

Andrew Gooday, *SOC Empress Dock Southampton, UK*

Duane Hope, *Department of Invertebrate Zoology, National Museum Natural History, Smithsonian Institution, Washington, DC 20560, USA*

Tom Moens, *University of Gent, Marine Biology Section, K.L. Ledeganckstr. 35, B-9000 Gent, BELGIUM*

Alex V. Tchesunov, *Dept. Invertebrate Zoology, Biology Faculty, Moscow Lomonosov State Univ., Moscow 119899, RUSSIA*

Zhang Zhinan, *Department of Marine Biology, Ocean University Of Qindgao, Qindgao, Shangdong, PEOPLES REPUBLIC OF CHINA*

Susetiono, *RD centre for oceanology, Indonesian institute for sciences, Jakarta, Indonesia*

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.

EDITORIAL BOARD

Motohiro Shimanaga, Yoshihisa Shirayama



EDITORIAL

Dear member.

There is a good tradition in our society. It is that we will meet together, present our most recent progress in meiobenthology and exchange idea to each other every three years at the international meiofauna conference. It is now time for preparing your paper to present in our next conference (Eleventh International Meiofauna Conference, ELIMCO) at Boston in July 2001. A brief information of the conference convened by Paul Montagna is in this issue.

Executive committee of IAM discussed the use of Bertil Swedmark Fund, and decided to provide three awards to young scientists. Details for this award will be found in the next issue.

How do you think about meeting every three years? In Japan, most projects are planned for three years. There are some exceptional case, e.g. 5 years project, but it must have a review in the middle of the term to continue for the term. From this point of view, meeting in every three years seems an appropriate interval.

This type of funding system is in most case good to enhance the progress of science. However, certain type of study can not fit to it. Some ecological studies, such as long-term monitoring, always do not suit to this type of funding system. It is impossible to compose monograph of certain animal group in such a short term.

Recently, taxonomists are decreasing in every country. One of reasons for it might be such difficulties for getting research funds. However, I think there are some other reasons. For example, taxonomists are unique in each taxon. In our marine course, a brief introduction of molecular phylogeny is given. At the end of the course, every students can obtain a dendrogram of variety of marine organisms. We however can not expect any of these students will become possible to identify nematodes or harpacticoids to a genus level within a week. For professional biologists, molecular work has wide applicability, namely a guy who worked on molecular phylogeny of nematodes can use the same technique on the study of copepods very easily. However, nematode taxonomists can not dissect limbs of copepods instantly. In addition to the technique, the literature on nematode taxonomy is useless for the identification of copepods.

How can we save taxonomists? It is one of major issues that our association should wrestle. Ecologists must appreciate their contribution to the natural science, and taxonomists must appeal how taxonomy is interesting and worth to do. I believe meiofauna conference is a great opportunity to do fruitful exchange between them. Thus please go to Boston in the next summer with your exciting scientific results.

ELIMCO Planned for Boston, USA, July 16 - 20, 2001

The Eleventh International Meiofauna Conference "ELIMCO" will be held July 16 - July 20, 2001. The meeting will be held on the campus of Boston University (BU). BU is a good location, right on Back Bay, on a trolley line, close to downtown Boston, three miles from Logan International Airport, and can be reached by subway <<http://www.bu.edu>>.

The conference organizing committee is headed by Paul Montagna <paul@utmsi.utexas.edu>, who will organize the overall schedule and oversee registration. The program and program booklet will be produced by John Fleegeer <zoflee@lsu.edu>. The logo and t-shirts will be produced by Joan Bernhard <jmberha@sophe.sph.sc.edu> and one of her students. Keith Walters <kwalt@mtsu.edu> will update the IAM website with conference information and facilitate abstract submission and registration over the website <http://www.mtsu.edu/meio/meeting.html>. Please feel free to contact any member of the organizing committee if you have suggestions, or want to volunteer to help organize the conference.

The conference theme will be "Meiofauna Studies for the New Millennium." The meeting will solicit oral and poster presentations. Session on the following topics are expected:

ecotoxicology, experimental models in population and community ecology, microbial food webs, and biotic and environmental interactions. Suggestions for further topics should be addressed to John Fleegeer.

A special session on meiofaunal diversity is planned to estimate how many species of meiofauna exist. This session will help highlight the great diversity of meiofaunal taxa, to help promote meiobenthology in biodiversity studies. So far, speakers have agreed to present papers on harpacticoids (Rony Huys and Sophie Conroy-Dalton), ostracods (C. Annapurna), nematodes (John Lamshead), and protozoa (David Patterson), and freshwater meiofauna (Jenny Schmid Araya). There is a desperate need for participation by turbellarian, oligochaete or other "worm" specialists. Most of the "lesser known" taxa are not represented either. So, if you would like to participate please contact Paul Montagna.

The schedule will be similar to past conferences. There will be a welcoming reception Sunday evening, opening session Monday morning, a poster session/reception Tuesday afternoon, a free day Wednesday, oral sessions Thursday and Friday, and a conference close-out banquet on Friday evening. To participate in all events, you should arrive Sunday and depart Saturday.

Final costs (US\$ only) for the conference are not available, but it is estimated they will be very

reasonable. Registration will be around \$250. Dorm rooms will be about \$50 per night. A breakfast and lunch meal plan will be offered for about \$14 per day. Parking is available for about \$7 per day. The next announcement will detail exact prices and other registration information. You will be required to pay for room, meals, and registration in advance, by April 1, 2001.

The executive committee has decided to offer three Swedmark Travel awards. The awards are made possible because of the income from raffles at the two previous meetings. The awards will cover the registration fee. Another raffle of meiofaunal memorabilia is planned to benefit the Swedmark fund. Instructions on who is eligible and how to apply for the award will be in the next newsletter.

Errata of Membership directory

Following comments arrived to the editor regarding errata of the membership directory enclosed with *Psammonalia* NO. 126.

Janet Gwyther

School of Ecology & Environment, Deakin University, Geelong, Victoria 3217, Australia. janetg@deakin.edu.au

Tom Shirley

Tom.Shirley@uaf.edu

Paul Montagna

University of Texas at Austin, Marine Science Institute, 750 Channel View Drive, Port Aransas, Texas 78373, USA, Phone: 361-749-6779, Fax 361-749-6777, E-mail: paul@utmsi.utexas.edu, Homepage: <http://www.utmsi.utexas.edu/staff/montagna>

Warwick Nicholas

274 Duffy St., Ainslie, Canberra, ACT, 2602, Australia

Questionnaire in #126

To date, I received only 12 replies to the questionnaire in the last page of the *Psammonalia* #126. I thus abandoned making report in this issue. Though very fragmental, I will analyze these replies and make comments in the editorial in the next issue of *Psammonalia*.

Annual dues

Please pay your annual dues for the year 2000 now and your advanced payment for the year 2001 is welcome. Your payment status in July 2000 is shown on the address label of this issue.

ANNOUNCEMENTS

Meetings

Fourth International Nematology Symposium Moscow, Russia June 10-14, 2001

provisional scientific programme :
Phylogeny & Systematics, Control & Suppressants, Ecology and Host-Parasite Relationships, Methods & Techniques, Biogeography and Biodiversity, Pathogen & Host Interactions, Molecular Biology & Genetics, Computers & Teaching, Identification & Diagnostics, Entomogenous nematodes, Plant Parasitic nematodes, Freshwater nematodes, Marine nematodes, Soil nematodes, Parasitic nematodes of vertebrates, Behavior and Physiology

Symposium venue is the famous building complex of the Moscow State University constructed in so-called "Stalin baroque" style. The University is located on the summit of the Moscow hills with a view to the whole historic center of the city (Kremlin, Red Square, Christ the Saver Cathedral, Lenin Library, etc.).

The Cultural & Social Programme consists of a city tour with English-speaking guides (Sunday, June 10) including an excursion in the Moscow Kremlin with a visit to the famous Armory Chamber, a boat trip along the Moscow River, plus receptions and banquet. Additional activities for accompanying persons are available. A post-symposium tour to St. Petersburg can be organized for a group of 10 or more participants.

The official language of the Symposium is English and Abstracts and presentations will be in English.

Accommodations in a three star hotel in the historic center of the city, a three star hotel near the Moscow State University, and the University dormitories provide participants with a range of comfortable single rooms, or double rooms when the participant is traveling with an accompanying person.

Registration Fee of \$160 includes symposium materials and symposium service, banquet, general excursion in Moscow Kremlin, airport transportation on the day of arrival, coffee and tea during Symposium.

For full details of costs, registration forms, scientific and cultural program, etc., contact :

Dr. Alex Ryss

Zoological Institute, RAS, Universitskaya emb. 1, St Petersburg 199034, Russia. FAX: +7 (812) 3236955 TEL: +7 (812) 3280611, E-MAIL: alexryss@AR4280.spb.edu

Meeting announcement and registration materials can be found at: <http://www.ianr.unl.edu/son/>

**Seventh International Polychaete Conference
2-6 July 2001
Reykjavik, Iceland**

Since the first circular was sent out, over 200 scientists have returned the preliminary registration form, together with 175 provisional titles for oral or poster presentations. Three special plenary sessions are planned but subjects have not yet been decided yet.

Besides being e-mailed or faxed to all those who sent the preliminary registration form, this circular will be available at the address: <http://www.ni.is/7IPCI/>

All information concerning the conference will also be made available through the ANNELIDA list. To subscribe just type subscribe annelida in the body of an e-mail to biosci-server@net.bio.net (remember to remove eventual signature).

Please fill out the appended registration form carefully. The requested information will be considered definitive. You can also (and preferably) register directly on our homepage: <http://www.ni.is/7IPCI/> or print out a Word document <http://www.ni.is/7IPCI/POLY2.htm> and post the registration to us.

**7th International Conference on
Coelenterate Biology
and
Annual European Meeting of the
International Coral Reef Society
21-25 October 2001
Eilat, Israel**

See our Web site & call for papers at: <http://www.congress.co.il/iccb-isrs>

The program of the joint meeting, and details regarding registration, accommodation and pre/post congress tours will be updated on the Web Site of the congress. Early registration is recommended.

For further information and assistance please contact the Congress Secretariat (Miri Dory): Team4@congress.co.il or Fax: +972-3-6133341.

**Coastal Zone '01 conference
July 15-19, 2001
Cleveland, Ohio**

Abstracts for oral and poster presentations will be accepted until September 8, 2000. Stop by <http://www.csc.noaa.gov/cz2001/> for all the information you need on Coastal Zone '01.

**Second Symposium on
Marine Conservation Biology
June 21-26, 2001
San Francisco State University**

In response to growing interest since our first Symposium on Marine Conservation Biology at the University of Victoria, British Columbia in 1997, Marine Conservation Biology Institute (MCBI), with co-sponsorship of the Society for Conservation Biology (SCB), will hold the Second Symposium on Marine Conservation Biology next summer in San Francisco, California.

The Second Symposium will be a forum for established researchers and students in the natural and social sciences (including oceanography, marine biology, fisheries science and anthropology) and for science-minded managers and others interested in the science of protecting, restoring and sustainable using biodiversity in the world's estuaries, coastal waters, enclosed seas and open oceans.

It will feature:

- 1) invited papers, contributed papers and poster sessions skills workshops
- 3)) a participatory forum on funding for research and training, as well as other policy issues
- 4)) special accommodations for reporters to encourage coverage of emerging issues
- 5) 5) a popcorn and video night to showcase research-related footage by participants
- 6) displays by publishers and other vendors
- 7) sign language and foreign language interpreters upon request, and field trips that take advantage of the Bay Area's outstanding natural, scientific and cultural resources.

To ensure the quality of the Second Symposium, a Scientific Advisory Committee (for its membership, see www.mcbi.org) is helping to shape the meeting's structure and content.

We could not be holding this event without the generosity of the Pew Charitable Trusts and the David and Lucile Packard Foundation. We invite other foundations, individuals, companies, academic institutions, NGOs and government agencies to join them as founders of this landmark event.

In mid-August, MCBI and SCB will be posting a detailed announcement with information on registration, field trips, housing, meal plans, etc. Scientific conference coordinator Julie Morrison will be handling all Second Symposium logistics. For more information, please contact Julie at juliem@selway.umt.edu or at her toll-free phone number: 1-877-712-3777.

Position available

PhD Opportunities

**Environmental Research Institute
University College Cork, Ireland**

It is expected that the Irish Higher Education Authority will make an announcement in mid July 2000 that a new multidisciplinary Environmental Research Institute (ERI-ECOSITE) will shortly be created at University College Cork. In the medium term (2-3 years) this will involve the building of a new ERI-ECOSITE building, probably on the shores of Cork Harbour. However, in the near future (October-Christmas 2000), recurrent and capital funding will be available for numerous research projects, employing around 50 postdoctoral and postgraduate research assistants. This preliminary advertisement concerns two postgraduate assistantships that will permit the recipients to register for PhDs.

Both assistantships will be funded to accomplish work over 3 years at Lough Hyne, a world-famous Marine Nature Reserve that is a hotspot of biodiversity and a remarkable highly-sheltered environment (effectively a marine lake, connected to the Atlantic by narrow rapids). Lough Hyne has been nominated as an ECOSITE as part of the ERI-ECOSITE development. The assistantships are designed to accomplish two separate but related areas of research, briefly described below:-

1) 'Using marine migrations to assess biodiversity' (supervisors: Dr David Barnes and Dr Anne Crook)

A mere 7% of the world's oceans has been sampled specifically for 'biodiversity'. Animals living in the marine environment may migrate at some stage in their life history and are capable of movement in a variety of planes both temporally and spatially. Research will focus on how these processes could potentially alter the biodiversity of a given habitat. The Lough Hyne site, with its varied marine flora and fauna, combined with existing laboratory and SCUBA facilities provides an ideal opportunity to conduct such research. In-water research will utilize state of the art equipment such as digital imagery and more time-tested approaches.

2) 'Zooplankton dynamics of Lough Hyne' (supervisor: Professor John Davenport)

Lough Hyne features great variations in current velocity. Areas close to the Rapids are refreshed on every tide and are presumably affected by advection from the Atlantic. Areas of the Lough remote from the Rapids feature extremely low current velocities and water turnover is very slow. Deep areas of the Lough become hypoxic/anoxic in the summer and are known to contain rare and specialized zooplanktonic organisms. The Lough zooplankton is as yet poorly studied. The project will redress this deficiency and provide information about zooplankton community dynamics and migrations. The work will involve modeling and careful sampling design.

Candidate qualifications:-

1) Mandatory.

- Appropriate first degree at Upper Second level or better

- Driving licence

- Diving expertise (BSA Advanced or 50+ logged open water dives)

2) Desirable.

- Taxonomic skills

- Statistical expertise

Stipend:-

£ IR 7000 per annum + PhD fees

Starting date:-

Not yet clear (depends upon HE announcement timing).

Could be as early as October 2000 or as late as January 2001. If you are interested in either of these assistantships, please contact the following (from whom further information is available):

Professor John Davenport, Department of Zoology & Animal Ecology, University College Cork, Lee Malts, Prospect Row, CORK, Ireland E:mail j.davenport@ucc.ie Tel (021) 904355

Postdoctoral Researcher

Marine Nearshore Ecosystem Dynamics

Opening Date: August 25, 2000; Closing Date: September 29, 2000 for full consideration; Starting Date: October 15, 2000 (or when available)

Responsibilities:

The appointee will join a Marine Ecosystem Dynamics consortium (MEDC) which includes marine scientists involved in the study of nearshore marine ecosystem dynamics in the Pacific Basin, including the coasts of Oregon, California, central Chile and the South Island of New Zealand. The position is funded by a grant from the Andrew W. Mellon foundation. Responsibilities include primarily data analysis, synthesis and integration across the data sets from each region, helping to establish and maintain a web-based data management and archival system, and publication of results. The successful candidate will work closely with marine and larval ecologists, physical and biological oceanographers, and other information specialists. The successful candidate will be based in the Zoology department at Oregon State University in Corvallis. The position requires regular travel including several trips per year to UCSB and one trip per year each to Chile and New Zealand with the aims of coordinating and developing the database system, and working with scientists in each group On data analysis, synthesis and integration. The ultimate goal of the project is to achieve an understanding of the dynamics of inner shelf ecosystems, including rocky intertidal and subtidal regions, and the adjacent pelagic habitats. The approach involves the integration and synthesis of coordinated studies of the continental shelf physical environment, species interactions, recruitment, larval transport, phytoplankton and benthic algal ecology, and population dynamics and physiological

performance of keystone species. Activities will also include interaction and coordination with similar activities ongoing at the other Mellon MEDC members (University of California at Santa Barbara, Pontificia Universidad Catolica, Santiago, Chile and University of Canterbury, Christchurch, New Zealand) and with PISCO (Partnership for Interdisciplinary Studies of Coastal Oceans: A Long-Term Ecological Consortium) institutions (UCSB, UC Santa Cruz, Hopkins Marine Station of Stanford University).

Qualifications:

Ph. D. in Marine Ecology, with particular expertise and interest in analytic, integrative and synthetic approaches, and strong interests in investigating cross-scale linkages between physical and biological environments. Ability to work both independently as well as collaboratively. Strong computational, statistical and Internet skills are necessary. Preference will be given to candidates with a demonstrated record of ability to carry projects through to completion, including publication in top journals.

Salary and Appointment Period:

\$40,000/12 months at 1.0 FTE, renewable at the discretion of the hiring supervisor.

Application:

Send a Letter of Application, Curriculum Vitae or Resume, and names, addresses, phone numbers and email addresses of two references to:

Drs. Gary Allison, Bruce Menge or Jane Lubchenco, Department of Zoology, Oregon State University, 3029 Cordley Hall, Corvallis, OR 97331-2914, Telephone 541-737-8403, email: allison@bcc.orst.edu

Program Assistant

Marine Conservation Biology Institute

Marine Conservation Biology Institute (MCBI) is seeking a Program Assistant in its Redmond WA headquarters. (Redmond is a suburb located approximately 15 miles from Seattle.) MCBI is a nonprofit, tax-exempt organization dedicated to advancing the science of marine conservation biology and promoting cooperation essential to protecting and restoring the Earth's biological integrity. To learn more, please visit our web site at www.mcbi.org

The Program Assistant will work in Redmond with the President and other staff to further MCBI goals by:

- 1) Doing research, writing, and otherwise helping to develop MCBI positions on policy issues
- 2) Helping to communicate and advocate MCBI positions to Congress, federal agencies, other non-governmental organizations, funders, the scientific community and the general public, in both written and oral form
- 3) Helping to identify emerging marine conservation issues, assisting with organizing and facilitating scientific workshops and symposia on these issues, and generating products directed towards policymakers, the public and the scientific community

- 4) Assisting with other MCBI activities such as fund-raising, press events and administrative tasks, as deemed necessary

Minimum qualifications:

Bachelor's degree in conservation biology, ecology, environmental studies or one of the marine sciences experience with Windows and its office applications. Excellent oral and written communication skills. Excellent library and Web research skills. Reliable, well-organized, attentive to details, able to maintain confidentiality, juggle priorities and meet deadlines, possess a courteous, positive, professional manner. Able to work both as a member of a close-knit team and independently with little supervision. Willing to do occasional overnight travel.

Desirable attributes:

Graduate training or experience in one of the above fields and in public policy issues, especially at the national level. Experience in foundation or major donor fund-raising Experience in outreach, either PR or news media. Knowledge of Web site design/ maintenance. MCBI provides competitive salaries, excellent benefits (including health insurance and a 403(b) pension plan with employer matching) and a rewarding work experience in an informal, smoke-free home office environment. We encourage candidates from groups traditionally under represented in the sciences.

Start Date: ASAP

To apply, send resume (including names and contact information for three references) with cover letter (maximum 3 pages total) and a writing sample to: Jocelyn Garovoy, Program Assistant Search Coordinator, Marine Conservation Biology Institute, 15806 NE 47th Court, Redmond WA 98052, USA, Phone: (425) 883-8914, Fax: (425) 883-3017, email: jocelyn@mcbi.org

Interesting websites

Can of Worms

For those of you who haven't yet discovered it, Annelid Resources site is one of those singled out by Net Watch in a recent issue of Science (vol.289, no. 5479, 28 July 2000). For more details see the following URL.

<http://www.sciencemag.org/content/vol289/issue5479/netwatch.shtml>

Animals4ever

a non-profit organization in Belgium, has put its website <http://www.animals4ever.com/> online. The site has the aim to group all animals on the web in one place. It is unbelievable interactive.

Taxonomic database - ZooBase -

available at <http://taxon.newmail.ru>

ZooBase designed for navigating through

literature, taxonomic descriptions and synonymy of nominal species. It provide information who and where has described this species as valid, who and where has included this species in the synonymy of other species and so on.

ZooBase is an universal software, i.e. user can easily update the database by information on the taxonomic group he studies, so, it should be interesting for many taxonomists.

There are many programs for systematics, some of them are simply electronic keys for species identification (useful for students, but not for specialists), others require drawing up a list of valid species. But what to do, if one specialist says that some species is invalid, while other continuously uses this name as valid?

This problem does not exist in ZooBase. ZooBase is a collection of headings of species description compiled from taxonomic papers, accompany with the synonyms given in these papers. And the search system allow to find necessary records and display them in proper format.

For additional information see <http://taxon.newmail.ru>

New Book

Oceanographic processes in coral reefs: Physical and Biological Links in the Great Barrier Reef

Eric Wolanski has edited a new scientific book entitled above. This book quantifies the physics-biology links in coral reefs and adjoining mangroves and seagrass from case studies in Australia, SE Asia and East Africa. This book will be published in the year 2000 by CRC Press, Boca Raton, Florida. The web address is <http://www.crcpress.com/us/product.asp?sku=0833++&dept%5Fid=1>

News from members

Obituary

I received a note from his wife, Ms. Jean Bird, that Dr. Alan Francis Bird, a famous nematologist, died suddenly and unexpectedly at the end of last year. I believe many of you use his book, *The Structure of Nematodes*, as a bible of your nematological study.

From Marianna Kirchner

After over 25 years in the fields of meiofauna microbiota and phytoplankton, I will hang my labcoat on the nail and retire in Jun 2001. During my active years, I have accumulated numerous reprints many of which may now be considered literature classics and difficult to obtain again. Before these treasures end in the paper shredder or in some dusty boxes never to be seen again, I would like to offer them to any interested students, colleagues, institutes or libraries. Unfortunately a list of the literature is not available. Requests may be sent to:

Dr. Marianna Kirchner (nee Rieper)
Biologische Anstalt Helgoland, AWI-Stiftung
D-27498 Helgoland, Germany
Fax (+49) 4725 819 283
e-mail mkirchner@awi-bremerhaven.de

From Bruce Coull

I am completely recovered from my heart surgery and feel better than I have in 10 years - and also weigh 16 kg less than when I had the surgery.

(It maybe difficult to recognize Bruce in Boston.)

Census of Marine Life

The Census of Marine Life has begun in earnest with 8 projects recently funded that contribute to the development of electronic system development, and data compilation; all part of the Ocean Biogeographical Information System (OBIS) . While the programme is dominated by USA groups, 2 projects (fish, molluscs) include the Paris Museum, one the Swedish museum, and taxonomists in Frankfurt, Marseille, and Banyuls and Villefranche-sur-mer laboratories are involved in a project on zooplankton.

For details of the projects see www.nopp.org, of CoML see www.coml.org

Report

9th Deep-Sea Biology Symposium, Galway, Ireland

The 9th Deep-Sea Biology Symposium, organized by Dr. John Patching and his crew of the Marine Microbiology group at the Martin Ryan Marine Science Institute, was held within 25-30 June, 2000 at the National University of Ireland in Galway, Ireland. The Symposium was extremely interesting and tightly packed with presentations and events. I am pleased to report that the meiofaunal research was fairly well represented, as a number of papers and posters dealing directly or indirectly with deep-sea meiobenthos were presented. Among the oral contributions of interest to IAM members were (listed in order of presentation):

"Responses of the main components of the sediment community to trophic changes at the Porcupine Abyssal Plain" (J.Galeron, A.Vangriesheim, M.Sibuet, A.Vanresusel, K.L.Mackenzie, A.J.Gooday, G.A.Wolff)

"How similar are nematode communities from diverse bathyal sites" (A.Vanreusel, A.Muthumbi, S.Vanhove, M.Vincx)

"Genus-level biodiversity of deep-sea meiobenthic nematodes and harpacticoid copepods: a Clarion-Clipperton Fracture Zone (NE Pacific) example" (T.Radziejewska, V.V.Galtsova, I.Drzcimski, L.Kulangieva, V.Stoyanova)

"Monterey Bay meiofauna: quantitative estimates A Long a depth gradient" (K.R.Buck)

"Trends in the taxonomic composition of deep-sea benthic Foraminifera with increasing bathymetric

depth" (J.A.Hughes, A.J.Gooday, J.W.Murray)
 "Benthic foraminifera A Long an offshore-fjord gradient: a comparison with amphipods and molluscs" (D.Klitgaard-Kristense, L.Buhl-Mortensen)
 "Sessile suspension feeders as a source of habitat heterogeneity - a hint from the Arctic deep-sea meiofauna" (K.Vopel, T.Soltwedel)
 "Smallest benthic biota under the perennial ice coverage of the central Arctic Ocean" (I.Schewe, T.Soltwedel)
 "Nematode community structure at the Arabian Sea Oxygen Minimum Zone" (A.A.Cook, P.J.D.Lambshhead, L.E.Hawkins, N.Mitchell, L.Levin)
 "The TransMediterranean Cruise (June 1999) of the MTP II project MATER. Major objectives and preliminary results from the deep benthic environment of the Mediterranean Sea (A.Tselepidis, N.Lampadariou, T.Polychronaki, E.Hatziyanni)
 "Metazoan meiobenthos responses to sedimentation events in the deep northwestern Mediterranean (L.Guidi-Guilvard, J.-C.Miquel, A.Khripounoff).

The Symposium programme can still be viewed at <http://www.marinemicro.nuigalway.ie>, while the book of abstract can be purchased from Dr. John Patching at Marine Microbiology Section, Marti Ryan Institute, NUI, Galway, Ireland at £ 8.

(Tereza sent me this report. Thanks.)

Congratulations for Ph.D. Degree

Hanan Mitwally

I'm from Egypt and was working on my Ph. D in USA under supervision of Dr. Montagna. I left USA on October 12 1999 after I finished my research there. On my arrival home (Alexandria, Egypt), I turned my thesis to the University (November 22 1999). So it is my pleasure to let all the meiobenthologist know that I successfully passed my final defense. I got my Ph. D degree on January, 25, 2000.

My scholarship was funded by the Egyptian government according to exchange visitor program between Egypt and USA. My thesis titled "Ecological and systematic studies of the interstitial fauna and benthic diatoms in the sandy beaches of Alexandria". The main language is English. It came out with four main ideas (chapters) beside the introduction, general conclusion, and arabic summary. Each chapter was treated as a separate paper (Abstract, Introduction, Material and methods, Results, Discussion, and Conclusion). Chapters two and three were submitted to different journals. Chapter three has been accepted but we have not got any news about chapter 2 yet.

Chapter I: Introduction

Chapter II: Sandy beaches meiofauna near Alexandria, Egypt. A comparative descriptive study.

Chapter III: Egyptian interstitial harpacticoid, Copepoda. (Taxonomy)

Chapter IV: Trophic groups of free-living nematodes in

Egyptian beaches.

Chapter V: Benthic Diatom as Source of Food for Meiofauna

Chapter VI: General conclusion

The early stages of my research were done in Egypt. All the laboratory work concerning the physico-chemical factors, sediment composition, identification of meiofaunal group to higher taxa, and benthic diatom identification were done at University of Alexandria, Faculty of Science, Oceanography Department. This part of work was supervised by four Egyptian professors (none of them is meiobenthologist). All the laboratory work related to further confirmation on identification of meiofaunal higher taxa, the identification of Harpacticoida species level, classification of free-living Nematoda trophic groups, all statistical analysis, and writing and editing the dissertation (tables, figures, and text) were done at the University of Texas at Austin, Marine Science Institute, Port Aransas, Texas, USA.

As soon as I got my Ph. D. degree, I got my permanent job as a lecturer in University Of Alexandria on February 22, 2000. I have a hug new biological laboratory in our department but ,unfortunately, with zero facilities. I would like to keep Egypt on meiofauna for ever. Egypt is characterized by its geographical location on both Red and Mediterranean seas (marine water). In addition to The River Nile as a big source of fresh water. Therefore, I'm looking for a post -doctor according to a definite plan or project. My idea is either to sample from Egypt and sampling treatment will be abroad in well developed lab or to do all the work in Egypt. Working in Egypt needs to improve my lab with extrabudgetary projects. Hug spots of natural gas were discovered recently in front of Suez Canal.

I'm looking forward to hearing from who may concern about my announcement. Here is my present address; Dr. Hanan Mitwally, University of Alexandria, Faculty of Science, Oceanography Department, Moharram Bay, 21151 Alexandria, Egypt. Phone (203)-48-43-171 or 172 Fax (203) 49- 117-94, E-mail h_mitwally@yahoo.com

Welcome!! New Members

Natalia P. Fadeeva

Dept. Ecology, Biology Faculty, Far East State University, 8 Sukhanova St., 690000, Vladivostok, Russia E-mail: vfadeev@mail.primorye.ru

My main interests concern meiofaunal community structure in chronically polluted areas from urban sewage. I work in Golden Horn Bay, Sea of Japan, a port of Vladivostok. I use stable carbon isotopes to investigate food chains contaminated with hydrocarbons and specializes on nematodes and harpacticoid copepods and has lots of taxonomically interesting material from shallow water collected mainly in the east Pacific

Ocean.

Glenn Zapfe

Gulf Coast Research Laboratory, P.O. Box 7000, Ocean Springs, MS 39566-7000, USA

e-mail: glenn.zapfe@usm.edu

I am currently a Master's student at the Gulf Coast Research Lab.

Kai Horst George

FB7/AG Zoosystematik and Morphology, C.v.O.-Universität, Oldenburg, D-26111, Germany, TEL: +49-(0)441-798-3370 FAX: +49-(0)441-798-3261 E-mail: kai.h.george@uni-oldenburg.de

The main topics of my scientific work are the phylogeny, zoogeography, and biodiversity of Harpacticoida (Crustacea, Copepoda). With respect to phylogeny, I focus on the family Ancorabolidae Sars, 1909, of which I described several new species in the past years. The aim is to present a detailed phylogenetic analysis of this family. Moreover, the description of new Harpacticoida is a considerable part of my systematic work. Although I originate from systematics, my recent investigations are increasingly dedicated to community and diversity analyses of littoral, sublittoral, and deep-sea harpacticoid assemblages. In my PhD thesis I studied community structure and species diversity of harpacticoid associations of the Magellan Region and the Antarctic. At the time, I examine the harpacticoid fauna of the Great Meteor Seamount in the Mid-Atlantic.

Sol Ojeda

Apartado Postal 154, Cumaná, Edo, Sucre, Venezuela 6101, TEL: +58-93-515780 FAX: +58-93-91174 E-mail: sojeda@sucre.udo.edu.ve

I am teacher of the Universidad de Oriente, Venezuela. I realized my thesis to obtain the Magister Scientiarum in Marine Biology, on the spacial and temporal variation of the meiofauna of a local beach. Actually, I'm preparing the first article for publication. for what I need modernized bibliography that it is difficult to obtain in my country. I have carried out other works in meiofauna, which appear in the expanded abstracts of the VII and VIII Congreso Latinoamericano sobre Ciencias del Mar, carried out in Brazil 1997 and Peru 1999, respectively.

Address changes or New e-mail information

David Masalles

C./ Corcega, 545, 2, 1a, 08025 BARCELONA, SPAIN
e-mail: cc119146@cconline.es

John Moverley

Marine Invertebrates, Museum Victoria, GPO Box 666E, Melbourne, Victoria 3001, Australia

Guilherme R. Lotufo

Universidade de Sao Paulo, Departamento de Zoologia, Inst. Biociencias, Caixa Postal 11461, Sao Paulo, SP, 05422-970, Brazil, e-mail: lotufog@yahoo.com

Marina A.Colangelo

Dip. Biologia Evol. Sperim., University of Bologna, c/o Via Tombesi dall'Ova, 55, 48100 RAVENNA, Italy, TEL: +39-0544213831 FAX:+39-0544213831 E-mail: marina@ambra.unibo.it

Rick Hochberg

46 College Rd, Rudman Hall, University of New Hampshire, Durham, NH 03824, E-Mail: rickh@cisunix.unh.edu

Vitiello

Parc Berger - Phoebus E, Marseille, 13009, France, TEL: 33-04-91-82-91-08, FAX: 33-04-91-82-91-08, E-mail: vitiello@com.univ-mrs.fr

Tom Shirley

Tom.Shirley@uaf.edu

Nicola Reiff

nicola_reiff@gmx.de

RECENT LITERATURE

(To make this section as complete as possible, please do not forget sending literature information via e-mail to the editor when you publish papers.)

Aarnio, K (2000) Experimental evidence of predation by juvenile flounder *Platichthys flesus*, on a shallow water meiobenthic community. Journal of experimental marine biology and ecology 246: 125 - 138.

Aguirre, LA and Diaz, RS (2000) Population structure, gonadal maturity and feeding habits of *Eugerres plumieri* (Gerreidae) in the Pom-Atasta fluvial-deltaic system, Mexico. Ciencias Marinas 26: 253 - 273.

Armonies W and Reise K (2000) Faunal diversity across a sandy shore. Marine Ecology Progress Series 196: 49 - 57.

Artois TJ and Schockaert ER (2000) Interstitial fauna of the Galapagos: Typhlopolycystidinae (Platyhelminthes Polycystididae). Tropical Zoology 13: 141 - 158.

Artois TJ, Vermin W and Schockaert ER (2000) Rhabdocoela (Platyhelminthes) from the Weddell Sea (Antarctica) with the description of eight new species. Belgian Journal of Zoology 130: 103 - 110.

- Atilla N and Fleegeer JW (2000) Meiofaunal colonization of artificial substrates in an estuarine embayment PSZN: Marine Ecology 21(1): 69 - 83
- Bazzanti M (2000) Macrobenthic nematodes as biological indicators in a Mediterranean lowland river in Central Italy: a case study. Archiv fur hydrobiologie 148: 59-70.
- Bernhard JM (2000) Distinguishing live from dead foraminifera: Methods review and proper application. Micropaleontology 46: 38 - 46.
- Bennett A, Bianchi TS and Means JC (2000) The effects of PAH contamination and grazing on the abundance and composition of microphytobenthos in salt marsh sediments (Pass Fourchon, LA, USA): II: The use of plant pigments as biomarkers. Estuarine Coastal and Shelf Science 50: 425 - 439.
- Blome D and Riemann R (1999) Antarctic sea ice nematodes, with description of *Geomonhystera glaciei* sp nov (Monhysteridae) Mitt. hamb. zool. Mus. Inst. 96: 15 - 20
- Bodiou JY (1999) The modes of predation on benthic copepods by fishes. Vie et Milieu Life and Environment 49: 301 - 308.
- Bone D and Klein E (2000) Temporal variations in a tropical soft-bottom community, Venezuela. Journal of Coastal Research. 16: 278 - 286.
- Borgonie G (2000) Symposium 'Biodiversity in the phylum Nematoda' - 17 September 1999, University of Gent, Belgium - Foreword. Nematology 2 Part 1: 1.
- Borgonie G, Jacobsen K. and Coomans A (2000) Embryonic lineage evolution in nematodes. Nematology, 2: 65 - 69.
- Bott TL and Borchardt MA (1999) Grazing of protozoa, bacteria, and diatoms by meiofauna in lotic epibenthic communities. Journal of the North American Benthological Society 18: 499 - 513.
- Carman KR, Fleegeer JW and Pomarico SM (2000) Does historical exposure to hydrocarbon contamination alter the response of benthic communities to diesel contamination? Marine Environmental Research 49: 255 - 278.
- Carta LK and Carta DG (2000) Nematode specific gravity profiles and applications to flotation extraction and taxonomy. Nematology, 2: 201-210.
- Chen GT, Herman RL and Vincx M (1999) Meiofauna communities from the Straits of Magellan and the Beagle Channel. Scientia Marina 63 Suppl. 1: 123 - 132.
- Clement M and Moore CG (2000) A revision of the genus *Halectinosoma* (Copepoda: Harpacticoida: Ectinosomatidae): the *H. herdmanni* (Scott and Scott) group of species. Zoological Journal of the Linnean Society 128: 237 - 267.
- Coomans A (2000) Nematode systematics: past, present and future. Nematology, 2: 3 - 7.
- Cottarelli V, Bruno MC and Berera R (2000) *Parastenocaris corsica* sp nov and *Parastenocaris silvana* sp nov., first Parastenocarididae from groundwater of Corsica (Copepoda, Harpacticoida). Crustaceana 73: 345 - 364.
- Cowie PR, Widdicombe S and Austen MC (2000) Effects of physical disturbance on an estuarine intertidal community: field and mesocosm results compared. Marine Biology 136: 485 - 495.
- D'Addabbo MG, Grimaldi SD and D'Addabbo R (2000) *Pseudostygarctus apuliae* (Tardigrada, Heterotardigrada): a new species from the lower Adriatic Sea. Italian Journal of Zoology 67: 125 - 128.
- Dahms HU (2000) Phylogenetic implications of the Crustacean nauplius. Hydrobiologia 417: 91 - 99.
- Decraemer W and Gourbault N (2000) New species of *Leptepsilonema* and *Polkepsilonema* (Nemata, Epsilonematidae). Cahiers de Biologie Marine 41: 25 - 46.
- De Ley P (2000) Lost in worm space: phylogeny and morphology as road maps to nematode diversity. Nematology, 2: 9 - 16.
- Dia M, Ghorbel M, Bouain A and Kone Y (2000) Diet of *Pagrus caeruleostictus* (Sparidae) of Nouakchott coasts (Mauritania). Cubium, 24: 81 - 88.
- Diederich J, Fortuner R and Milton J (2000) Genisys and computer-assisted identification of nematodes.

Nematology, 2: 17 - 30.

Di Sabatino A, Gerecke R and Martin P (2000) The biology and ecology of lotic water mites (Hydrachnidia). *Freshwater Biology* 44: 47 - 62.

Dittel AI, Epifanio CE, Schwalm SM, Fantle MS and Fogel ML (2000) Carbon and nitrogen sources for juvenile blue crabs *Callinectes sapidus* in coastal wetlands. *Marine Ecology Progress Series* 194: 103 - 112.

Dittmann S (2000) Zonation of benthic communities in a tropical tidal flat of north-east Australia. *Journal of Sea Research* 43: 33 - 51.

Dole Olivier MJ, Galassi DMP, Marmonier P and Des Chatelliers MC (2000) The biology and ecology of lotic microcrustaceans. *Freshwater Biology* 44: 63 - 91.

Edgar GJ (1999) Experimental analysis of structural versus trophic importance of seagrass beds. I. Effects on macrofaunal and meiofaunal invertebrates. *Vie et Milieu Life and Environment* 49: 239-248.

Edgar GJ (1999) Experimental analysis of structural versus trophic importance of seagrass beds. II. Effects on fishes, decapods and cephalopods. *Vie et Milieu Life and Environment* 49: 249 - 260.

Feltham DL and Chaplain MAJ (2000) Analytical solutions of a minimal model of species migration in a bounded domain. *Journal of Mathematical Biology* 40: 321 - 342.

Fiers F and Ghene V (2000) Cryptozoic copepods from Belgium: diversity and biogeographic implications. *Belgian Journal of Zoology* 130: 11 - 19.

Fiers F and Iliffe TM (2000) *Nitocrellopsis texana* n. sp from central TX (USA) and *N-ahaggarensis* n. sp from the central Algerian Sahara (Copepoda, Harpacticoida) *Hydrobiologia* 418: 81 - 97.

Galassi DMP, De Laurentiis P and Dole Olivier MJ (1999) *Nitocrellopsis rouchi* sp n., a new ameirid harpacticoid from phreatic waters in France (Copepoda : Harpacticoida : Ameiridae). *Hydrobiologia* 412: 177 - 189.

Gee JM (1999) A new species of *Cletocamptus* Schmankewitsch 1875 (Copepoda; Harpacticoida) from a mangrove forest in Malaysia. *Hydrobiologia* 412: 143 -

153.

Gee JM (1999) A revision of *Acrenhydrosoma* (Copepoda, Harpacticoida) with the establishment of *Dyacrenhydrosoma* gen. nov and *Paracrenhydrosoma* gen. nov and descriptions of two new species. *Cahier de Biologie Marine* 40: 337 - 357.

Gee JM and Mu FH (2000) A new genus of Cletodidae (Copepoda; Harpacticoida) from the Bohai Sea, China. *Journal of Natural History* 34: 809 - 822.

George KH and Schminke HK (1999) Sublittoral Harpacticoida (Crustacea, Copepoda) from the Magellan Straits and the Beagle Channel (Chile). Preliminary results on abundances and generic diversity. *Scientia Marina* 63 Suppl. 1: 133 - 137.

Gil RER (1999) Metallothioneins as molecular biomarkers of the heavy metal pollution in aquatic organisms. *Interciencia* 24: 366-371, 394

Gollasch S, Lenz J, Dammer M and Andres HG (2000) Survival of tropical ballast water organisms during a cruise from the Indian Ocean to the North Sea. *Journal of Plankton Research* 22: 923 - 937.

Gomez S (2000) Redescription of *Pseudostenhelia wellsii* Coull and Fleeger, 1977 (Copepoda, Harpacticoida) from a tropical coastal lagoon in the southeastern Gulf of California (Mexico). *Crustaceana* 73: 69 - 82.

Grongaard A, Pugh PJA and McInnes SJ (2000) Tardigrades, and other cryoconite biota, on the Greenland Ice Sheet. *Zoologischer Anzeiger* 238: 211 - 214

Hakenkamp CC and Morin A (2000) The importance of meiofauna to lotic ecosystem functioning. *Freshwater Biology* 44: 165 - 175.

Hoyt M, Fleeger JW, Siebeling R and Feller RJ (2000) Serological estimation of prey-protein gut-residence time and quantification of meal size for grass shrimp consuming meiofaunal copepods. *Journal of Experimental Marine Biology and Ecology* 248: 105 - 119

Hughes JE, Deegan LA, Peterson BJ, Holmes RM and Fry B (2000) Nitrogen flow through the food web in the

- oligohaline zone of a new England estuary. *Ecology* 81: 433 - 452.
- Karanovic T (1999) The taxonomic status of *Attheyella* (*B.*) *wulmeri* (Kerherve, 1914) (Crustacea : Copepoda : Harpacticoida). *Annales de Lomnologie* 35: 233 - 244.
- Karanovic T (2000) *Arenopontia* (*Neoleptastacus*) *huysi*, sp nov (Crustacea, Copepoda, Harpacticoida) from marine interstitial of Montenegro (SE Europe). *Helgoland Marine Research* 54: 33 - 38.
- Kolasa J (2000) The biology and ecology of lotic microturbellarians. *Freshwater Biology* 44: 5 - 14.
- Kovatch CE, Schizas NV, Chandler T, Coull BC and Quattro JM (2000) Tolerance and genetic relatedness of three meiobenthic copepod populations exposed to sediment-associated contaminant mixtures: Role of environmental history. *Environmental Toxicology and Chemistry* 19: 912 - 919.
- Krembs C, Gradinger R and Spindler M (2000) Implications of brine channel geometry and surface area for the interaction of sympagic organisms in Arctic sea ice. *Journal of Experimental Marine Biology and Ecology* 243: 55 - 80.
- Kroncke I, Vanreusel A, Vincx M, Wollenburg J, Mackensen A, Liebezeit G, and Behrends B (2000) Different benthic size compartments and their relationship to sediment chemistry in the deep Eurasian Arctic Ocean. *Marine Ecology Progress Series* 199:31 - 41.
- Lamshead PJD, Tietjen J, Ferrero T and Jensen P (2000) Latitudinal diversity gradients in the deep sea with special reference to North Atlantic nematodes. *Marine Ecology Progress Series* 194: 159 - 167.
- Lee W and Huys R (2000) *Bathylaophonte* gen. nov from deep sea hydrothermal vents and the polyphyly of *Paronychocamptus* (Copepoda : Harpacticoida). *Cahier de Biologie Marine* 40: 293 - 328.
- Lee W and Huys R (2000) New Aegisthidae (Copepoda : Harpacticoida) from western Pacific cold seeps and hydrothermal vents. *Zoological Journal of the Linnean Society* 129: 1 - 71.
- Litvaitis MK, Bates JW, Hope DW, Moens T (2000) Inferring a classification of the Adenophorea (Nematoda) from nucleotide sequences of the D3 expansion segment (26/28S rDNA). *Canadian Journal of Zoology* 78: 911 - 922.
- Long SM and Ross OBH (1999) Vertical distribution of nematodes (nematoda) and harpacticoid copepods (Copepoda : Harpacticoida) in muddy and sandy bottom of intertidal zone at Lok Kawi, Sabah, Malaysia. *Raffles Bulletin of Zoology* 47: 349 - 363.
- Martin GG, Speekmann C and Beidler S (2000) Photobehavior of the harpacticoid copepod *Tigriopus californicus* and the fine structure of its nauplius eye. *Invertebrate Biology* 119: 110 - 124.
- Maurer, D (2000) Viewpoint The dark side of taxonomic sufficiency (TS) *Marine Pollution Bulletin* 40: 98 - 101.
- McAllen R (1999) *Enteromorpha intestinalis* a refuge for the supralittoral rock pool harpacticoid copepod *Tigriopus Brevicornis*. *Journal of the Marine Biological Association of the United Kingdom* 79: 1125 - 1126.
- McAllen R and Scott GW (2000) Behavioural effects of biofouling in a marine copepod. *Journal of the Marine Biological Association of the United Kingdom* 80: 369 - 370.
- McArthur VE, Koutsoubas D, Lampadariou N and Dounas C (2000) The meiofaunal community structure of a Mediterranean lagoon (Gialova lagoon, Ionian Sea). *Helgoland Marine Research* 54: 7 - 17.
- McInnes SJ and Pugh PJA (2000) Zonation in Antarctic lake dwelling benthic meiofauna, with emphasis on the Tardigrada. *Zoologischer Anzeiger* 238: 283 - 288.
- Mielke W (2000) Two new species of *Cletocamptus* (Copepoda : Harpacticoida) from Galapagos, closely related to the cosmopolitan *C. deitersi*. *Journal of Crustacean Biology* 20: 273 - 284.
- Miliou H, Verriopoulos G, Maroulis D, Bouloukos D and Moraitou Apostolopoulou M (2000) Influence of life history adaptations on the fidelity of laboratory bioassays for the impact of heavy metals (Co²⁺ and Cr⁶⁺) on tolerance and population dynamics of *Tisbe holothuriae*. *Marine Pollution Bulletin* 40: 352 - 359.
- Miller WR and Miller JD (1999) Giant tardigrades of

- Terra Incognita*. Zoologischer Anzeiger 238: 295 - 302.
- Millward RN and Grant A (2000) Pollution induced tolerance to copper of nematode communities in the severely contaminated restronguet creek and adjacent estuaries, Cornwall, United Kingdom. Environmental Toxicology and Chemistry 19: 454 - 461.
- Mirto S, La Rosa T, Danovaro R and Mazzola A (2000) Microbial and meiofaunal response to intensive mussel farm biodeposition in coastal sediments of the Western Mediterranean. Marine Pollution Bulletin 40: 244 - 252
- Mobley KB and Fleeger W (1999) Diet of *Scartella cristata*: An artificial habitat associated blenny (Pisces : Blenniidae). Vie et Milieu Life and Environment 49: 221 - 228.
- Murray JW; Bowser SS (2000) Mortality, protoplasm decay rate, and reliability of staining techniques to recognize 'living' foraminifera: A review. Journal of Foraminiferal Research 30: 66 - 70.
- Nelson DR and Marley NJ (2000) The biology and ecology of lotic Tardigrada. Freshwater Biology 44: 93 - 108.
- Newell RIE, Alspach GS, Kennedy VS and Jacobs D (2000) Mortality of newly metamorphosed eastern oysters (*Crassostrea virginica*) in mesohaline Chesapeake Bay. Marine Biology 136: 665 - 676.
- Palmer CA and Edmands S (2000) Mate choice in the face of both inbreeding and outbreeding depression in the intertidal copepod *Tigriopus californicus*. Marine Biology 136: 693 - 698.
- Payne MF and Rippingale RJ (2000) Evaluation of diets for culture of the calanoid copepod *Gladioferens imparipes*. Aquaculture 187: 85 - 96.
- Peng YL and Coomans A (2000) Three species of Tobrilidae (Nematoda : Enoplida) from Li River at Guiling, China. Hydrobiologia 421: 77 - 90.
- Powlik JJ (2000) Orientation of *Tigriopus californicus* (Copepoda, Harpacticoida) to natural and artificial substrata. Crustaceana 73: 197 - 205.
- Qiu LH and Bedding R (1999) A rapid method for the estimation of mean dry weight and lipid content of the infective juveniles of entomopathogenic nematodes using image analysis. Nematology, 1: 655 - 660.
- Raffaelli D, Hall S, Emes C and Manly B (2000) Constraints on body size distributions: an experimental approach using a small scale system. Oecologia 122: 389 - 398.
- Ricci C and Balsamo M (2000) The biology and ecology of lotic rotifers and gastrotrichs. Freshwater Biology 44: 15 - 28.
- Rios C and Mutschke E (1999) Community structure of intertidal boulder cobble fields in the Straits of Magellan, Chile. Scientia Marina, 63 (Suppl. 1): 193 - 201.
- Robertson AL, Rundle SD and Schmid Araya JM (2000) An introduction to a special issue on lotic meiofauna Freshwater Biology, 44(1):1 3
- Robertson AL (2000) Lotic meiofaunal community dynamics: colonisation, resilience and persistence in a spatially and temporally heterogeneous environment. Freshwater Biology 44: 135 - 147.
- Robertson AL, Rundle SD and Schmid Araya JM (2000) An introduction to a special issue on lotic meiofauna. Freshwater Biology. 44: 1 - 3.
- Robertson AL, Rundle SD and Schmid Araya JM (2000) Putting the meio- into stream ecology: current findings and future directions for lotic meiofaunal research. Freshwater Biology 44: 177 - 183.
- Ruess L, Michelsen A and Jonasson S (1999) Simulated climate change in subarctic soils: responses in nematode species composition and dominance structure. Nematology, 1: 513 - 526.
- Rundle SD, Bilton DT and Shiozawa DK (2000) Global and regional patterns in lotic meiofauna. Freshwater Biology 44: 123 - 134.
- Rysgaard S, Christensen PB, Sorensen MV, Funch P and Berg P (2000) Marine meiofauna, carbon and nitrogen mineralization in sandy and soft sediments of Disko Bay, West Greenland. Aquatic Microbial Ecology 21: 59 - 71.
- Schierenberg E (2000) Early development of nematode

- embryos: differences and similarities. *Nematology*, 2: 57 - 64.
- Schmid Araya JM (2000) Invertebrate recolonization patterns in the hyporheic zone of a gravel stream. *Limnology and Oceanography* 45: 1000 - 1005.
- Schmid Araya JM and Schmid PE (2000) Trophic relationships: integrating meiofauna into a realistic benthic food web. *Freshwater Biology* 44: 149 - 163.
- Schratzberger M, Rees HL and Boyd SE (2000) Effects of simulated deposition of dredged material on structure of nematode assemblages - the role of burial. *Marine Biology* 136: 519 - 530.
- Shimamura M and Shirayama Y (2000) Response of benthic organisms to seasonal change of organic matter deposition in the bathyal Sagami Bay, central Japan. *Oceanologica Acta* 23: 91 - 107.
- Sibly RM, Williams TD and Jones MB (2000) How environmental stress affects density dependence and carrying capacity in a marine copepod. *Journal of Applied Ecology* 37: 388 - 397.
- Soltwedel T, Mokievsky V and Schewe I (2000) Benthic activity and biomass on the Yermak Plateau and in adjacent deep sea regions northwest of Svalbard. *Deep Sea Research* 47: 1761 - 1785.
- Swan CM and Palmer MA (2000) What drives small scale spatial patterns in lotic meiofauna communities? *Freshwater Biology* 44: 109 - 121.
- Thiermann F, Vismann B and Giere O (2000) Sulphide tolerance of the marine nematode *Oncholaimus campyloceroides* - a result of internal sulphur formation. *Marine Ecology Progress Series* 193: 251 - 259.
- Tita GS, Desrosiers G and Vincx M (2000) New type of hand held corer for meiofaunal sampling and vertical profile investigation: a comparative study. *Journal of the Marine Biological Association of the United Kingdom* 80: 171 - 172.
- Traunspurger W (2000) The biology and ecology of lotic nematodes. *Freshwater Biology* 44: 29 - 45.
- Trett MW, Urbano BC, Forster SJ, Hutchinson JD, Feil RL, Trett SP and Best JG (2000) Terrestrial meiofauna and contaminated land assessment. *Environmental Science and Technology* 34: 1594 - 1602.
- Tsalolikhin SY (2000) Review of the genus *Semitobrilus* (Nematoda, Enoplida, Tobrilidae). *Zoologicheskyy Zhurnal* 79: 267 - 271.
- Udalov AA, Burkovsky IV and Stoljarov AP (2000) Biology and establishment of population of mudsnail *Hydrobia ulvae* on the White Sea muddy sand intertidal. *Okeanologiya* 40: 56 - 64.
- Vancoppenolle B, Claeys M, Borgonie G, Tytgat T and Coomans A (2000) Evaluation of fixation methods for ultrastructural study of *Caenorhabditis elegans* embryos. *Microscopy Research and Technique* 49: 212 - 216.
- Veit Kohler G (2000) Habitat preference and sexual dimorphism in species of *Scottopsyllus* (Copepoda, Harpacticoida) with the description of *Scottopsyllus (S) praecipuus* sp n from the Antarctic. *Vie et Milieu Life and Environment* 50: 1 - 17.
- Vincent WF, Gibson JAE, Pienitz R, Villeneuve V, Broady PA, Hamilton PB and Howard Williams C (2000) Ice shelf microbial ecosystems in the high Arctic and implications for life on snowball earth. *Naturwissenschaften* 87: 137 - 141.
- Warwick RM and Robinson J (2000) Sibling species in the marine pollution indicator genus *Pontonema* Leidy (Nematoda : Oncholaimidae), with a description of *P mediterranea* sp nov. *Journal of Natural History* 34: 641 - 662.
- Winder M, Pehofer HE and Fureder L (2000) Distribution patterns of benthic crustaceans in a formerly meromictic lake with changing trophic conditions (Lake Piburg, Tyrol, Austria). *Archiv fur Hydrobiologie* 147: 519 - 533.
- Wyngaard GA and Rasch EM (2000) Patterns of genome size in the copepoda. *Hydrobiologia* 417: 43 - 56.
- Yunliang P and Coomans A (2000) Three species of Tobrilidae (Nematoda: Enoplida) from Li River at Guilin, China. *Hydrobiologia* 421: 77 - 90.

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.

Membership is open to any person who is actively interested in the study of meiofauna. Annual membership dues are 10 euro (\$ 10 US) and you may pay up to 3 years in advance, i.e. 30 euro (\$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 boxes:

G New member (*) G Renewing member 10 euro or \$10 G Change of address
 G Regular membership 10 euro or \$10 G Patron or Sustaining membership 50 euro or \$50

I want to receive PSAMMONALIA by **G Air mail (paper copy)** **OR** **G E-mail**

Name _____

Address _____

City, St/Prov _____

Zip _____ Coutry _____

Telephone _____ FAX _____

E-mail address _____

euro/ \$ _____ enclosed for ___ years. Regular member at 10 euro or \$10 /year. Patron or Sustaining member at 50 euro or \$50/year.

euro/ \$US _____ enclosed to contribute to the Bertil Swedmark Fund.

euro/ \$US _____ TOTAL

VISA/MASTER/EUROCARD number _____ Expiry date _____

Signature _____

For **North American members** : dues can be paid in US dollars. Make checks payable to Intl. Assoc. of Meiobenthologists. Send dues and applications to: Dr. Robert Feller, Belle W. Baruch Institute, Univ. of South Carolina, Columbia, SC 29208 USA

For **all other members** : dues can be paid in euro.. Make (euro)checks payable to Ann Vanreusel. If possible make use of the credit card transaction possibilities. Send dues and applications to : Dr. Ann Vanreusel, Marine Biology Section, Ledeganckstraat 35, B-9000 Gent , BELGIUM

(*) New members please introduce yourself in 10 lines International Association of Meiobenthologists