

# PSAMMONALIA

Newsletter of the  
International Association of Meiobenthologists



Number 116, May 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.

*Hot news : '...as a large migratory group of meiobenthologists is expected to land in the area of Plymouth sometime next year, ...'  
More details inside this issue.*

## TENTH INTERNATIONAL MEIOFAUNA CONFERENCE (XIMCO)



UNIVERSITY OF PLYMOUTH (U.K.)

27th-31st July 1998

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

**COUNCIL**

**International Association of Meiobenthologists - Founded 1966**

Editor: Magda Vincx  
 email address : Magda.Vincx@rug.ac.be  
 Production Editor : Dominick Verschelde

*Executive Committee*

- Magda Vincx**, Chairperson,  
**Ann Vanreusel**, Treasurer,  
**Paul A. Montagna**, Past Chairperson, *Marine Science Institute, University of Texas at Port Aransas, P.O. Box 1267, Port Aransas TX 78373, USA*  
**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 1998, *Interoceanmetal Joint Organization, ul. Cyryla I Metodego 9, 71-541 Szczecin, POLAND*  
**Yoshihisa Shirayama**, Term Expires 1998, *Ocean Research Institute, University of Tokyo, 1-15-1 Minamidai, Nakano-Ku, Tokyo 164, JAPAN*  
**James Ward**, Term Expires 1998, *Department of Biology, Colorado State University, Fort Collins, CO 80523 USA*

*Ex-Officio Executive Committee (Past Chairpersons)*

- |   |                               |
|---|-------------------------------|
| Robert P. Higgins, Founding Editor, 1966-67 | W. Duane Hope 1968-69         |
| John S. Gray 1970-71                        | Wilfried Westheide 1972-73    |
| Bruce C. Coull 1974-75                      | Jeanne Renaud-Mornant 1976-77 |
| William D. Hummon 1978-79                   | Robert P. Higgins 1980-81     |
| Carlo Heip 1982-83                          | Olav Giere 1984-86            |
| John W. Fleeger 1987-89                     | Richard M. Warwick 1990-92    |
| Paul A. Montagna 1993-1995                  |                               |

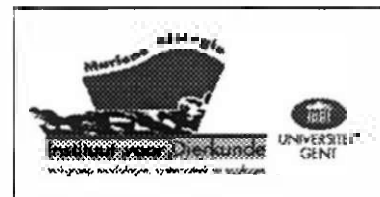
*Board of Correspondents*

- Bruce Coull**, *Belle Baruch Institute for Marine Science and Coastal Research, 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*  
**Nicole Gourbault**, *Muséum Nat. Hist. Nat., Bim - 57 rue Curie, Paris, 75231 Paris 5, FRANCE*  
**Andrew Gooday**, *Institute of Oceanographic Sciences, Wormley, Godalming, Surrey, GU8 5UB, 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, Qingdao, Shangdong, PEOPLES REPUBLIC OF CHINA*

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**

Marleen De Troch, Tom Moens, Ann Vanreusel,  
 Dominick Verschelde, Magda Vincx.



## IN MEMORIAM

Ulrich Einsle

\* 24 April 1935 - † 24 December 1996

Ulrich Einsle was not only a scientist with heart and soul, but also an athlete when he was young, his favourite disciplines being high jumping and sprints. He was highly interested in history and he also was a musician, to be exact, he played the accordion. In his student days Uli made dance music with his trio in the distinguished "Parkcafé" and in the villa "Haus Margarete" in Konstanz. Ulrich did joinery, partly rebuilt and completed his house in the "Sonnentauweg" and even put in a fire-place all by himself. He also liked working in the garden. As a scientist he knew how to quiet the croaking frogs in his pond when neighbours were complaining. What he did not like at all was to repair the car or to tinker at engines - apart from that he was an all-purpose man. Ulrich distinguished himself in the mid-sixties in the public discussion on the conservation of the threatened water of Lake Constance. He contributed to the monitoring programmes of the "Internationalen Gewässerschutzkommission für den Bodensee" [International water monitoring committee for Lake Constance]. From 1975 to 1980 he was even a member of the Konstanz municipal council as a representative of the "Konstanzer Freien Wählergemeinschaft" [Free Electors' Initiative of Konstanz]. Owing to his knowledge and experience in biology and freshwater fauna he became the nature protection expert of the district of Konstanz. In all of these honorary functions he threw off his modest reservedness and committed himself to the public welfare with enthusiasm and success.

Ulrich Einsle was born in Konstanz on 24 April 1935 and graduated from the Humboldt secondary school in 1954. He studied biology, chemistry and sports in Freiburg. The first impulses for his future scientific career came from Professor Friedrich Kiefer, the Grand Old Man of copepodology, who was his biology teacher. Uli completed his doctoral thesis on the genus *Cyclops* in Lake Constance in 1963 under the supervision of Professor Hans-Joachim Elster and Professor Kiefer. As a doctorand he already worked at the "Anstalt für Bodenseeforschung" in Konstanz [Institute for research on Lake Constance], temporarily as a scientific assistant. After taking his doctor's degree in February 1963 he worked with Professor Kiefer in a private employment holding a scholarship by the German Science Foundation. On 1st April 1966 the institute was put under municipal administration and he became a municipal employee of the town of Konstanz. When the "Anstalt für Bodenseeforschung" was put together with the "Landesanstalt für Umweltschutz" [Federal institute for environment protection] in Langenargen on 1st January 1970, Uli became a federal official. In 1982 he became the head of the branch office in Konstanz-Staad. In the summer of 1995 he moved to his new office in Langenargen. The main function of the federal institute is water monitoring in the federal state of Baden-Württemberg, especially the monitoring of Lake Constance.

However, Ulrich was always devoted to the taxonomy, systematics, and ecology of cyclopoids, which is demonstrated by his publications from 1959 until 1996.

*Cyclops* s.str., which was considered a taxonomically very

problematic genus all along, was in general recorded and classified morphometrically. Ulrich regarded this an unrenounceable method to describe a population at a certain moment. Applying chromatin diminution for the systematics of *Cyclops* s.str. allowed for an exact determination on a species level, although quantitative statements are not possible as yet. As a valuable tool for population analysis he lately applied enzyme electrophoresis which - combined with the two other methods - yielded quite surprising details. Uli focused his ecological research on the question of how daily periodicity influences the developmental rate of some *Cyclops* species. Owing to his rich collection of material he succeeded in proving the expected relationship in his experiments. He also investigated the annual occurrence of pelagic copepods, their vertical and horizontal distribution as well as their daily migrations in Lake Constance "Obersee", "Untersee" and "Seerhein", and particularly in the "Buchenseen" and "Mindelsee". Besides this work he helped supervising diplomands and doctorands in the field of limnology.

Until few weeks before his death Ulrich was busy completing scientific articles and he lived to see them published. He was very happy about dedicating *Cyclops heberti* to his Canadian friend and colleague Paul Hebert and about completing his contribution to the "Guides to the Identification of the Microinvertebrates of the Continental Water of the World" (H.J.F. Dumont) for determination of *Cyclops*, *Megacyclops*, and *Acanthocyclops*. He wanted this volume by all means to be published before the Conference on Copepoda in Oldenburg. Plans for other contributions to the "World Guide" and for other monographs of American and African cyclopoids, however, had to be abandoned.

Unfortunately, I came to know Uli very late. He was a kind man who never wanted to thrust himself forward with his qualities. Whenever I paid our friends in Allensbach a visit, we met in the institute or in the near-by restaurant "Schiff" directly at the landing stage of the ferry to Meersburg. I will badly miss these friendly conversations with Uli.

In the last years of his life Ulrich suffered from cancer of the tongue. He endured the post-operative consequences very, very patiently. The cancer, which he fought for more than three years, finally deprived him of speech. When I last met him he communicated with me on scraps of paper.

The radiotherapy had awful consequences. Every operation filled him with new hope, but ended up in disappointment.

Ulrich Einsle died on Christmas Eve 1996. He died much too early at an age of 61. His death is a painful loss to his wife Helga, his son Oliver, who also studies biology, and his 91 year-old mother Hildegard, who can still be found pulling weeds in the garden.

Thomas Glatzel, Oldenburg

## EDITORIAL

The front page of this issue contains the logo of the TENTH INTERNATIONAL MEIOFAUNA CONFERENCE (XIMCO) to be held in Plymouth next year. We wish the organisers and especially Mike Gee all the best and we are already looking

forward to meeting everyone there. As Paul Montagna reminded me a few weeks ago, the raffle at the banquet in Perpignan was great (Mike Gee will certainly remember it). It provided some fun and raised a good deal of money for the Swedmark fund. Together with Paul, I would like to suggest to the organisers of XIMCO to think about a similar activity again.

Perhaps each of us can help in providing prizes so that more than one category can be honoured. Personally I'm in favour of three categories of awards: (1) student award for the best presentation (and people should indicate if they want to compete with their paper); (2) award for the best poster and (3) award for the most original contribution to the symposium. I think that awards can stimulate young scientists to prepare good presentations and a committee can set some criteria for selection. In my opinion this will not influence the friendly and open character of the meeting at all but on the other hand can be a stimulus for young biologists to keep on believing in meiofauna importance (since you can get awards for it). Reactions to be sent to myself or to Mike Gee.

M. Vincx

## ANNOUNCEMENTS

### The Inference and Application of Phylogeny in Systematics and Evolutionary Biology

A 10-day Short Course sponsored by NERC and the Systematics Association

September 1-12, 1997

As part of the NERC Initiative for Taxonomy, the Glasgow Centre for Taxonomy is pleased to announce its biennial short course in taxonomy and systematics. The aim of this course is to provide an overview of modern methods of inferring evolutionary trees, together with the applications of trees in systematics, palaeontology and evolutionary biology.

The first part of the course deals with inferring phylogenies from a range of data, including morphological and molecular. Emphasis will be on "hands-on" experience using the latest software packages, several of which have been written by the course instructors (e.g., PAUP, Spectrum). Participants will be encouraged to bring their own data sets for analysis using new and established techniques.

The second part of the course focuses on applications of phylogenies to a range of biological questions, such as ancient biodiversity, biogeography, host-parasite coevolution, conservation, molecular evolution, macroevolution, adaptation, and medicine.

The course will be taught by a mixture of lectures, practical sessions, and informal evening discussion sessions. Course lecturers include David Swofford (Laboratory of Molecular Systematics, Smithsonian Institution), Nick Goldman (Univ. Cambridge), Andy Purvis (Imperial College), Ken Johnson, Mike Charleston, and Rod Page (University of Glasgow).

The cost of the course will be 500 pounds, to include Bed & Breakfast Accommodation (in University Halls of Residence), Course Manuals, Use of Equipment, etc. Because of the emphasis on practical work, the number of participants is strictly limited to 25; places will be allocated on a "first-come, first

-served basis" and a deposit of 100 pounds will secure a place. The course is not restricted to Ph.D. students, but is open to all who are interested in taxonomy and phylogeny.

### New Directions in Systematics - ESF Workshop

Hersonissos, Crete, Greece

15-18 October 1997

The fifth and final workshop of the European Science Foundation Network in Systematic Biology will look to the future of systematics, at a time when its importance is gaining new recognition.

Advances in biological techniques, the development of analytical tools to study huge data sets, and international interest in improving the conservation and management of biodiversity, are highlighting our basic need for a well-founded framework in which to generate, organise and communicate knowledge about the natural world. This workshop will focus on three areas which present opportunities and challenges to systematists in providing this framework:

- Taxonomic Challenges of Species-Rich Groups
- Links Between Developmental Biology and Systematics
- Bioinformatics: Communicating and Using Taxonomic Knowledge

Central objective of the workshop will be to develop the key elements of a proposal for an ESF-funded Programme in Systematic Biology. The purpose of this Programme will be to advance systematics by promoting European integration and collaboration, based around the three themes above. The workshop will recommend the most important issues to be addressed and the ways in which the Programme could best capitalise on Europe's extensive resources in systematic collections and expertise.

During the workshop, participants will divide into three working groups, each focusing on one of the themes. The working group sessions will include offered presentations.

Registration fee: 60 pounds sterling, including documentation.

Confirmed speakers include:

- Pere Alberch, Museo Nacional Ciencias Naturales, Madrid
- Mark Chase, Royal Botanic Gardens, Kew
- John Lambshead, The Natural History Museum, London
- Alessandro Minelli, President of the International Commission on Zoological Nomenclature
- Bernard Picton, Ulster Museum
- Ronald Sluys, University of Amsterdam
- Erko Stackebrandt, DSMZ
- Diethard Tautz, Zoological Institute of University of Munich

Short (10 minutes) presentations are invited for each of the three themes. Papers should be based on particular issues within the theme that could be addressed within a future European Science Foundation Programme. Titles of proposed presentations should be submitted as soon as possible to the address below.

Nicola Donlon  
ESF Network in Systematic Biology  
The Natural History Museum

Cromwell Road  
London  
SW7 5BD  
UK

**International Conference : New methods in Copepod taxonomy**

4-8 May 1998 - St Petersburg, Russia

**Topics:**

The central goal is to bring together researchers dealing specifically with morphology as it relates to taxonomy in various groups of Copepods, in order to better delineate species. New and rare used methods are of particular interest: DNA - analysis, chromosome analysis (chromosome diminution especially), enzyme analysis, hybridization of closely related species, LARVAL sign analysis., etc. Other topics include analysis of variability and taxonomic weight of signs used in describing copepods now to validate the many new species that have been described in the last decades using morphological details only.

In the context of this meeting two workshops are planned:

1. chromosome diminution
  2. hybridization techniques
- using the Fischer's Cyclopoid species.

Conference is dedicated to the memory of Dr. Ulrich Einsle.

For more information you can contact:

Victor R. Alekseev  
Zoological Institute of Russian Academy of Sciences  
199034  
St.-Petersburg  
Russia  
Fax: 7-812-114-0444  
E-mail: avr@zisp.spb.su

**NEWS FROM MEMBERS**

**Address changes**

Maria Balsamo  
Dipartimento di Scienze della Produzione Animale  
Via delle Scienze 208  
33100 Udine  
Italy  
Tel. ++ 39 432 558581  
Fax. ++ 39 432 558585  
e-mail: maria.balsamo@dspa.uniud.it

Evelyne Buffan-Dubau  
Dept. of Zoology and Physiology  
Louisiana State University  
Baton Rouge  
Louisiana 70803  
USA  
Tel. (1) 504 388 1755  
Fax. (1) 504 388 1763

e-mail: ebuffan@ix.netcom.com

Jian Li  
790 N. Marine Dr. #203  
Tumon  
Guam 96911  
USA  
e-mail: jlee@kuentos.guam.net

Ricardo Moreno-Osorio  
Cra. 58A #76A-41, Unidad 32, Int. 1, Apto. 203  
Metropolis, Santafe de Bogota D.C.  
Colombia  
South America  
Fax. 57-4-3324109 or 57-1-3113306  
e-mail: rmoreno@isagen.com.co

Netherlands Institute of Ecology  
Centre for Estuarine and Coastal Ecology  
PB 140  
4400 AC Yerseke  
The Netherlands

Kay Vopel  
Alfred-Wegener Institut für Polar- und Meeresforschung  
Tiefseeforschung, Columbus-Center  
27568 Bremerhaven  
Germany  
Tel. +49-471-4831-739  
Fax. +49-471-4831-724  
e-mail: kvopel@awi-bremerhaven.de

**New and changed e-mail addresses**

Leon Cammen: leon.cammen@noaa.gov  
Wilfrida Decraemer: decraemer@kbiniirsnb.be  
Ulrich Ehlers: uehlers@gwdg.de  
Christer Erseus: christer.erseus@nrm.se  
Piero Grimaldi: p.grimaldi@bioserver.uniba.it  
Carlo Heip: Heip@ccmo.nioo.knaw.nl  
Rod Millward: millwa@unix1.sncc.lsu.edu  
Mary Petersen: mepetersen@zsmuc.ku.dk  
Franz Riemann: friemann@awi-bremerhaven.de  
Wolfgang Riess:  
wolfgang@postgate.mpi-mm.uni-bremen.de  
Karlina Soetaert: Soetaert@ccmo.nioo.knaw.nl  
Beate Sopott-Ehlers: bsopott@gwdg.de  
Susetiono: susetiono@ambon.wasentra.net.id

**NEW MEMBERS**

Shin-ichi Hiruta  
Biological Lab. Hokkaido  
Univ. of Education at Kushiro  
085 Kushiro  
Japan  
e-mail: hiruta@atson.kus.hokkaidai.ac.jp

Tel. +81-154-41-6161  
Fax. +81-154-43-0855

**Interests:** Interstitial animals (marine, Ostracoda, Tardigrada);  
Myodocopid Ostracoda

Frank Romano, III  
Jacksonville State University  
700 Pelham Road North  
Jacksonville, AL 36265-1602  
Tel. (205) 782-5038  
Fax. (205) 782-5215  
e-mail: fromano@jsucc.jsu.edu

Lyudmila Vorobyova  
Odessa Branch, Institute of Biology of Southern Seas  
National Academy of Sciences of Ukraine  
37 Pushkinskaya St.  
Odessa 270011  
Ukraine  
Fax. (+0038 0482) 250918  
e-mail: hydrobiology@paco.odessa.ua

**Interests:** I am head of the department of Hydrobiology of  
Active Zones of the Sea. During 20 years I am working on  
meiobenthos of the Black Sea, Sea of Azov and coastal zones.

## RECENT LITERATURE

- \* Abebe, E, 1996. Aquatic nematodes from Ethiopia. The family Leptolaimidae Orley, 1880 sensu Lorenzen, 1981 (Chromadorida, Nematoda) with the description of *Anonchus coomansi* n. sp.. *Hydrobiologia*, 332: 1-26.
- \* Abebe, E & A Coomans, 1996. Aquatic nematodes from Ethiopia. Descriptions of *Achromadora inflata* n. sp., *Ethmolaimus zullinii* n. sp. and *Prodesmodora nurta* Zullini, 1988 (Chromadorida, Nematoda). *Hydrobiologia*, 332: 27-39.
- \* Abebe, E & A Coomans, 1996. Aquatic nematodes from Ethiopia. The genera *Chronogaster* Cobb, 1913, *Plectus* Bastian, 1865 and *Prismatolaimus* de Man, 1880 with descriptions of *C. ethiopica* n. sp. and *C. getachewi* n. sp. (Chromadorida, Nematoda). *Hydrobiologia*, 332: 41-61.
- \* Abebe, E & A Coomans, 1996. Aquatic nematodes from Ethiopia. The family Rhabdolaimidae Chitwood, 1951 sensu Lorenzen, 1981 (Chromadorida, Nematoda) with the description of *Udonchus merhatibebi* n. sp.. *Hydrobiologia*, 341: 197-214.
- \* Ahrens, MJ, G Graf & AV Altenbach, 1997. Spatial and temporal distribution patterns of benthic Foraminifera in the northeast water Polynya, Greenland. *Journal of Marine Systems*, 10: 445-465.
- \* Alekseev, VM, 1996. New information on free-living nematodes of the family Alaimidae (Enoplida) from fresh waters in the south far east of Russia. *Zoologicheskyy Zhurnal*, 75: 1132-1137. (In Russian).
- \* Aller, JY, 1997. Benthic community response to temporal and spatial gradients in physical disturbance within a deep-sea western boundary region. *Deep-Sea Research Part I*, 44: 39-70.
- \* Aller, JY & I Stupakoff, 1996. The distribution and seasonal characteristics of benthic communities on the Amazon shelf as indicators of physical processes. *Continental Shelf Research*, 16: 717-751.
- \* Anderson, ARA, IM Young, BD Sleeman, BS Griffiths & WM Robertson, 1997. Nematode movement along a chemical gradient in a structurally heterogeneous environment: experiment. *Fundamental and Applied Nematology*, 20: 157-163.
- \* Anderson, ARA, BD Sleeman, IM Young & BS Griffiths, 1997. Nematode movement along a chemical gradient in a structurally heterogeneous environment: theory. *Fundamental and Applied Nematology*, 20: 165-172.
- \* Austen, MC & PJ Somerfield, 1996. A community level sediment bioassay applied to an estuarine heavy metal gradient. *Marine Environmental Research*, 43(4): 315-328.
- \* Ayyad, SN, MM Abed & RH Abuzied, 1997. Biostratigraphy of the upper cretaceous rocks in Gebel Arif el Naga, northeastern Sinai, Egypt, based on benthonic Foraminifera. *Cretaceous Research*, 18: 141-159.
- \* Boaden, PJS, 1996. Habitat provision for meiofauna by *Fucus serratus* epifauna with particular data on the flatworm *Monocelis lineata*. *PSZNI Marine Ecology*, 17: 67-75.
- \* Buffandubau, E & J Castel, 1996. Diel and seasonal vertical distribution of meiobenthic copepods in muddy sediments of a eutrophic lagoon (fish ponds of Arcachon Bay). *Hydrobiologia*, 329: 69-78.
- \* Castel, J, P Caumette & R Herbert, 1996. Eutrophication gradients in coastal lagoons as exemplified by the bassin d'Arcachon and the Etang du Provost. *Hydrobiologia*, 329: 9-28.
- \* Colmenarejo, MF, MG Garcia, A Bustos, R Borja & CJ Banks, 1997. The influence of wastewater type and organic loading on the protozoan and metazoan population of a peat bed filter. *Journal of Environmental Science and Health Part A. Environmental Science and Engineering and Toxic and hazardous Substance Control*, 32: 145-152.
- \* Corner, GD, PI Steinsund & R Aspeli, 1996. Distribution of recent benthic Foraminifera in a subarctic fjord delta: Tana, Norway. *Marine Geology*, 134: 113-125.
- \* Cronin, TM & ME Raymo, 1997. Orbital forcing of deep-sea benthic species diversity. *Nature*, 385: 624-627.
- \* Davenport, J, PRO Barnett & RJ McAllen, 1997. Environmental tolerances of three species of the harpacticoid copepod genus *Tigriopus*. *Journal of the Marine Biological Association of the UK*, 77: 3-16.
- \* Defaye, D, 1996. Redescription of *Nitocra divaricata* Cappuis, 1923 (Copepoda, Harpacticoida) with first records from *Austropotamobius torrentium* Schrank. *Acta Zoologica Academiae Scientiarum Hungaricae*, 42 (2) : 145-155.
- \* Dubilier, N, R Windoffer, MK Grieshaber & O Giere, 1997. Ultrastructure and anaerobic metabolism of mitochondria in the marine oligochaete *Tubificoides benedii*: effects of hypoxia and sulfide. *Marine Biology*, 127: 637-645.
- \* Freckman, DW & RA Virginia, 1997. Low diversity Antarctic soil nematode communities: distribution and response to disturbance. *Ecology*, 78: 363-369.
- \* Gosselin, LA & PY Qian, 1997. Juvenile mortality in benthic

- marine invertebrates. *Marine Ecology Progress Series*, 146: 265-282.
- \* Gregg, JC & JW Fleeger, 1997. Importance of emerged and suspended meiofauna to the diet of the darter goby (*Gobionellus boleosoma* Jordan and Gilbert). *Journal of Experimental Marine Biology and Ecology*, 209(1-2): 123-142.
- \* Gusakov, VA, 1996. Finding of the marine crustacean *Paraleptastacus spinicauda* (Copepoda, Cylindropsyllidae) in the Oka River. *Zoologicheskyy Zhurnal* 75(12): 1884-1886 (In Russian)
- \* Hannah, F & A Rogerson, 1997. The temporal and spatial distribution of foraminiferans in marine benthic sediments of the Clyde Sea area, Scotland. *Estuarine Coastal and Shelf Science*, 44: 377-383.
- \* Haque, AM, M Szymelfenig & JM Weslawski, 1996. The sandy littoral zoobenthos of the Polish Baltic coast. *Okeanologiya*, 38: 361-378.
- \* Heymans, JJ & A McLachlan, 1996. Carbon budget and network analysis of a high energy beach/surface zone ecosystem. *Estuarine Coastal and Shelf Science*, 43: 485-505.
- \* Hosfeld, B & H Schminke, 1997. Discovery of segmental extranepridial podocytes in Harpacticoida (Copepoda) and Bathynellacea (Syncarida). *Journal of Crustacean Biology*, 17(1): 13-20.
- \* Humes, AG & JR Voight, 1997. *Cholidya polypi* (Copepoda: Harpacticoida: Tisbidae), a parasite of deep-sea octopuses in the North Atlantic and northeastern Pacific. *Ophelia*, 46: 65 &
- \* Huys, R, 1996. Superornammatremidae fam nov (Copepoda: Harpacticoida): An enigmatic family from North Atlantic anchiline caves. *Scientia Marina*, 60(4): 497-542.
- \* Huys, R & JM Gee, 1996. *Prionos* gen. nov. from the meiofauna of a Malaysian mangrove forest and the status of *Psammis borealis* (Copepoda, Harpacticoida, Paranannopidae). *Cahiers de Biologie Marine*, 37 (3) : 227-248.
- \* Ingolfsson, A & E Olafsson, 1997. Vital role of drift algae in the life history of the pelagic harpacticoid copepod *Parathalestris croni* in the northern North Atlantic. *Journal of Plankton Research*, 19: 15-27.
- \* Janetzky, W, PM Arbizu & JW Reid, 1996. *Attheyella* (*Canthosella*) *mervini* sp.n. (Canthocamptidae, Harpacticoida) from Jamaican bromeliads. *Hydrobiologia*, 339(1-3): 123-136
- \* Josefsen, AB & DJ Conley, 1997. Benthic response to a pelagic front. *Marine Ecology Progress Series*, 147: 49-62.
- \* Kendall, MA, RM Warwick & PJ Somerfield, 1997. Species size distributions in Arctic benthic communities. *Polar Biology*, 17: 389-392.
- \* Kouwenhoven, TJ, RP Speijer, CWM Vanosterhout & GJ Vanderzwaan, 1997. Benthic foraminiferal assemblages between two major extinction events: the paleocene El Kef section, Tunisia. *Marine Micropaleontology*, 29 (2) : 105 &
- \* Kuper, M & W Westheide, 1997. Ultrastructure of the male reproductive organs in the interstitial annelid *Sphaerosyllis hermaphrodita* ("Polychaeta", Syllidae). *Zoomorphology*, 117(1): 13-22
- \* Lampadariou, N, MC Austen, N Robertson & G Vlachonis, 1997. Analysis of meiobenthic community structure in relation to pollution and disturbance in Iraklion harbour, Greece. *Vie & Milieu*, 47: 9-24.
- \* Li, J, M Vincx, PMJ Herman & C Heip, 1997. Monitoring meiobenthos using cm-, m- and km-scales in the Southern Bight of the North Sea. *Marine Environmental Research*, 43: 265-278.
- \* Loubere, P, 1996. The surface ocean productivity and bottom water oxygen signals in deep water benthic foraminiferal assemblages. *Marine Micropaleontology*, 28: 247-261.
- \* McCabe, GT, SA Hinton, RL Emmett & BP Sandford, 1997. Benthic invertebrates and sediment characteristics in main channel habitats in the lower Columbia river. *Northwest Science*, 71: 45-55.
- \* Miliou, H, 1996. The effect of temperature, salinity and diet on final size of female *Tisbe holothuriae* (Copepoda, Harpacticoida). *Crustaceana*, 69: 742-754.
- \* Millward, RN, 1996. Intracellular inclusions in the nematode *Tripyleoides marinus* from metal enriched and cleaner estuaries in Cornwall, south west England. *Journal of the Marine Biological Association of the UK*, 76: 885-895.
- \* Morris, SC, 1997. The cuticular structure of the 495 myr old type species of the fossil worm *Palaeoscolex*, *P. piscatorum* (Priapulida). *Zoological Journal of the Linnean Society*, 119 (1): 69-82.
- \* Neira, C & M Rackemann, 1996. Black spots produced by buried macroalgae in intertidal sandy sediments of the Wadden Sea: effects on the meiobenthos. *Journal of Sea Research*, 36: 153-170.
- \* Nesteruk, T, 1996. Species composition and dominance structure of gastrotrich assemblages in water bodies of different trophic status. *Hydrobiologia*, 339(1-3): 141-148.
- \* Neudorfer, F, LA Meyer-Reil, 1997. A microbial biosensor for the microscale measurement of bioavailable organic carbon in oxic sediments. *Marine Ecology Progress Series*, 147(1-3): 295-300.
- \* Neuhaus, B, 1997. Ultrastructure of the cephalic sensory organs of adult *Pycnophyes dentatus* and of the first juvenile stage of *P. kielensis* (Kinorhyncha, Homalorhagida). *Zoomorphology*, 117: 33-40.
- \* Nicholas, WL, 1996. *Robustnema fosteri* sp. nov., gen. nov. (Xyalidae, Monhysterida, Nematoda), a common nematode of mangrove mudflats in Australia. *Transactions of the Royal Society of South Australia*, 120 (4): 161-165.
- \* Nicholas, WL & TG Marples, 1995. Observations on the geographical distribution and morphometrics of *Enoploides stewarti* Nicholas, 1993 (Nematoda; Thoracostomopsidae). *Bulletin van het koninklijk Belgisch Instituut voor Natuurwetenschappen, sectie Biologie*, 65: 41-51.
- \* Ohga, T & H Kitazato, 1997. Seasonal changes in bathyal foraminiferal populations in response to the flux of organic matter (Sagami Bay, Japan). *Terra Nova*, 9: 33-37.
- \* Palmer, MA & NL Poff, 1997. The influence of environmental heterogeneity on patterns and processes in streams. *Journal of the North American Benthological Society*, 16: 169-173.
- \* Peachey, RL & SS Bell, 1997. The effects of mucous tubes on the distribution, behavior and recruitment of seagrass meiofauna. *Journal of Experimental Marine Biology and Ecology*, 209: 279-292.
- \* Pempkowiak, J, J Kozuch & M Szymelfenig, 1996. Meiobenthic organisms as indicators of mixing processes in the

Baltic surface sediments. *PSZNI Marine Ecology*, 17: 175-179.

\* Piepenburg, D, WG Ambrose, A Brandt, PE Renaud, MJ Ahrens & P Jensen, 1997. Benthic community patterns reflect water column processes in the northeast water Polynya (Greenland). *Journal of Marine Systems*, 10: 467-482.

\* Powlik, JJ & AG Lewis, 1996. Desiccation resistance in *Tigriopus californicus* (Copepoda, Harpacticoida). *Estuarine Coastal and Shelf Science*, 43: 521-532.

\* Powlik, JJ, AG Lewis & N Verma, 1997. The response of *Tigriopus californicus* to chlorophytic macroalgae, including *Cladophora trichotoma* Kutzing. *Estuarine Coastal and Shelf Science*, 44: 327-337.

\* Pugh, PJA, 1996. Using artificial substrata to monitor how cryptofaunal Acari colonize littoral algae on subantarctic South Georgia. *Acarologia*, 37: 189-200.

\* Pugh, PJA & J Davenport, 1997. Colonisation vs. disturbance: the effects of sustained ice-scouring on intertidal communities. *Journal of Experimental Marine Biology and Ecology*, 210: 1-21.

\* Purschke, G & MC Muller, 1996. Structure of prostomial photoreceptor-like sense organs in *Protodriloides* species (Polychaeta, Protodrilida). *Cahiers de Biologie Marine*, 37(3): 205-220.

\* Razouls, C, 1997. Diversity and geographical distribution of pelagic copepods Platycopioidea, Misophrioida, Mormonilloidea, Cyclopoida, Poecilostomatoida, Siphonostomatoida, Harpacticoida, Monstrilloidea. *Annales de l'Institut Océanographique*, 72: 5 &.

\* Rowe, GT, GS Boland, EGE Briones, ME Cruzkaegi, A Newton, D Piepenburg, I Walsh & J Deming, 1997. Sediment community biomass and respiration in the northeast water Polynya, Greenland: A numerical simulation of benthic lander and spade core data. *Journal of Marine Systems*, 10: 497-515.

\* Schreiber, H, D Schoenen & W Traunspurger, 1997. Invertebrate colonization of granular activated carbon filters. *Water Research*, 31: 743-748.

\* Scott, DB, ES Collins, J Duggan, A Asioli, T Saito & S Hasegawa, 1996. Pacific rim marsh foraminiferal distributions: Implications for sea-level studies. *Journal of Coastal Research*, 12: 850-861.

\* Shull, DH, 1997. Mechanisms of infaunal polychaete dispersal and colonization in an intertidal sandflat. *Journal of Marine Research*, 55: 153-179.

\* Sinsabaugh, RL, 1997. Large-scale trends for stream benthic respiration. *Journal of the North American Benthological Society*, 16: 119-122.

\* Somerfield, PJ & KR Clarke, 1997. A comparison of some methods commonly used for the collection of sublittoral sediments and their associated fauna. *Marine Environmental Research*, 43: 145-156.

\* Span, A, B Antolic, A Simunovic, I Grubelic & S Jukic, 1996. Ecological features of the benthic community. *Acta Adriatica*, 37: 161-193.

\* Souza-Santos, LP, J Castel & PJP Santos, 1996. The role of phototrophic sulfur bacteria as food for meiobenthic harpacticoid copepods inhabiting eutrophic coastal lagoons. *Hydrobiologia*, 329: 79-89.

\* Stewart, AC & WL Nicholas, 1995. *Manunema pectenophora*

sp. nov. (Peresianidae, Leptolaimina), a nematode possessing unusual male supplementary organs. *Transactions of the Royal Society of South Australia*, 119 (4): 163-169.

\* Stott, LD, TP Hayden & J Griffith, 1996. Benthic Foraminifera at the Los Angeles county Whites Point outfall revisited. *Journal of Foraminiferal Research*, 26: 357-368.

\* Thiermann, F, I Akoumianaki, JA Hughes & O Giere, 1997. Benthic fauna of a shallow-water gaseohydrothermal vent area in the Aegean Sea (Milos, Greece). *Marine Biology*, 128: 149-159.

\* Timm, T, C Erséus & S Lundberg, 1996. New and unusual records of freshwater Oligochaeta from the Scandinavian Peninsula. *Nordic Journal of Freshwater Research*, 72: 15-29.

\* Traunspurger, W, 1997. Distribution, seasonal occurrence and vertical pattern of *Tobrilus gracilis* (Bastian, 1865) and *T. medius* (Schneider, 1916). *Nematologica*, 43: 59-81.

\* Traunspurger, W, 1997. Bathymetric, seasonal and vertical distribution of feeding-types of nematodes in an oligotrophic lake. *Vie & Milieu*, 47: 1-8.

\* Traunspurger, W & C Drews, 1996. Vertical distribution of benthic nematodes in an oligotrophic lake: seasonality, species and age segregation. *Hydrobiologia*, 331: 33-42.

\* Turpeenniemi, TA, 1997. Four new nematode species from the Bothnian Bay, northern Baltic Sea, with a redescription of *Microilaimus globiceps* de Man, 1880 (Nematoda). *Nematologica*, 43: 31-58.

\* Turpeenniemi, TA & H Hyvarinen, 1996. Structure and role of the renette cell and caudal glands in the nematode *Sphaerolaimus gracilis* (Monhysterida). *Journal of Nematology*, 28: 318-327.

\* Vopel, K, J Dehmlow & G Arlt, 1996. Vertical distribution of *Cletocamptus confluens* (Copepoda, Harpacticoida) in relation to oxygen and sulphide microprofiles of a brackish water sulphuretum. *Marine Ecology Progress Series*, 141: 129-137.

\* Webb, DG, 1996. Response of macro- and meiobenthos from a carbon poor sand to phytodetrital sedimentation. *Journal of Experimental Marine Biology and Ecology*, 203: 259-271.

\* Wharton, DA & NB To, 1996. Osmotic stress effects on the freezing tolerance of the Antarctic nematode *Panagrolaimus davidi*. *Journal of Comparative Physiology B, Biochemical Systemic and Environmental Physiology*, 166: 344-349.

\* Yushin, VV & VV Malakhov, 1997. Ultrastructure of the female reproductive system of the free-living marine nematode *Enoplus demani* (Nematoda, Enoplida). *Fundamental and Applied Nematology*, 20 (2): 115-125.

\* Zampi, M, S Benocci & S Focardi, 1997. Epibiont Foraminifera of *Sertella frigida* (Waters) (Bryozoa, Cheilostomata) from Terranova Bay, Ross Sea, Antarctica. *Polar Biology*, 17: 363-370.

\* Ziehis, W, M Huettel & S Forster, 1996. Impact of biogenic sediment topography on oxygen fluxes in permeable seabeds. *Marine Ecology Progress Series*, 140: 227-237.



## A WORD FROM THE PRODUCTION EDITOR

Regrettably, it seems that the "In Memoriam" column is becoming a regular item of Psammonalia. We want to express our sincere feelings of sympathy with the concerned families. Let us also all hope that this column can stay empty in the future issues of our newsletter.

To be able to end with a more pleasant tone, I would like to thank everyone who sent me their words of congratulations on my new job, and remind every systematist among you of the possibility for using our museum as a possible collection address for your type specimens. 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 :

Dominick Verschelde  
University of Gent  
Museum voor Dierkunde  
K.L. Ledeganckstraat 35  
B-9000 Gent, Belgium  
Tel : (0)9-264.52.28  
Fax : (0)9-264.53.44



Send your email reflections to :  
Dominick.Verschelde@rug.ac.be



**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 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.

Please check appropriate boxes:

- New member (\*)     Renewing member 300 BEF or \$10     Change of address  
 Regular membership 300 BEF or \$10     Patron or Sustaining membership 1500 BEF or \$50

Name \_\_\_\_\_ E-mail address \_\_\_\_\_

Address \_\_\_\_\_ Telephone \_\_\_\_\_

FAX number \_\_\_\_\_

City, St/Prov \_\_\_\_\_

Zip/Postal Code \_\_\_\_\_

Country \_\_\_\_\_

BEF / \$US      enclosed for \_\_\_ years. Regular member at 300 BEF or \$10 /year. Patron or Sustaining member at 1500 BEF or \$50/year.

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

BEF/ \$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 Belgian francs. Make (euro)checks payable to Ann Vanreusel. If possible make use of the creditcard transaction possibilities. Send dues and applications to : Dr. Ann Vanreusel, Marine Biology Section , Ledeganckstraat 35, B-9000 Gent , BELGIUM

*Interests:*

(\*) New members please introduce yourself in 10 lines



# TENTH INTERNATIONAL MEIOFAUNA CONFERENCE (XIMCO)

to be held at the

UNIVERSITY OF PLYMOUTH (U.K.)

on

27th-31st July 1998

Jointly organized by Plymouth Marine Laboratory and the  
University of Plymouth

**Conference Theme.** The conference will welcome contributions on all aspects of the ecology, physiology, behaviour and systematics of marine and freshwater meiofauna. Specific themes have not yet been decided upon but the following have been suggested by the organising committee: - 1. Biodiversity: global and regional patterns and processes in individuals to communities; 2. Ecosystem function; aspects of ecosystem function in polar, temperate, tropical, freshwater, coastal marine and deep sea habitats; 3. Specialist studies in systematics, behaviour and genetics.

**Conference organization.** The conference will be held in the Robbins Building of the University of Plymouth and very reasonably priced accommodation will be provided in the University Hall of Residence attached to the conference centre, close to the centre of town. Lecture (and poster) sessions will be scheduled for the morning and afternoon each day except Thursday afternoon when there will be a coach ride over the Dartmoor National Park to the Conference Dinner in the mediaeval banqueting hall of Buckland Abbey. There will also be an evening excursion up the Tamar estuary by boat. Visits to country houses, historic sites and coastal villages will be arranged for accompanying persons depending on demand. The full conference fee will probably be in the region of £130 (including the dinner) and the preferred method of payment will be by credit card.

**Registration. THIS IS THE ONLY GENERAL NOTIFICATION WHICH WILL BE GIVEN.** If you wish to be put on a mailing list for further notification and for registration forms you must fill in the expression of interest slip and return it by post, fax, or E-mail to the address below. Future communication will be conducted primarily by E-mail; details will be sent by post only to those people who return this form but are not on E-mail.

XIMCO (J.M. Gee); Plymouth Marine Laboratory; Prospect Place; West Hoe; Plymouth PL1 3DH; U.K.  
Tel. (0)1752 633100; Fax. (0)1752 633101; E-mail [ximco@plymouth.ac.uk](mailto:ximco@plymouth.ac.uk)

✂

**EXPRESSION OF INTEREST.** Please return by post, fax, or E-mail before 31st August 1997.

Tick where appropriate

- Please put my name on the conference mailing list for further information.
- It is probable that I will be attending the conference.
- It is probable that I will be accompanied by ..... persons.
- I plan to present a paper / poster whose theme might be .....

NAME.....

ORGANIZATION.....

POSTAL ADDRESS.....

Telephone..... Fax..... E-mail.....