

PSAMMONALIA

The Newsletter of the
International Association of Meiobenthologists

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Coastal Carolina University
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“Ok, so why did this issue take so long and why is that little girl laughing at me? Pass the sunscreen, please.”

The International Association of Meiobenthologists
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| | |
|--|---|
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| Robert Feller <i>Assistant Treasurer</i> | Baruch Institute for Marine Science, University of South Carolina, Columbia SC 29208 USA [feller@sc.edu] |
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| Antonio Todaro <i>(term expires 2007)</i> | Dipartimento di Biologia Animale, Univeristy di Modena e Reggio Emilia, Via Campi 213/d, I-41100 Modena, Italy |
| Kevin Carman <i>(term expires 2010)</i> | Department of Biology, A103 Life Sciences Annex, Louisiana State University, Baton Rouge LA 70803 USA |
| Emil Olafsson <i>(term expires 2010)</i> | Menntun Consultoría, C/Cava Alta 9, 2C, 28005 Madrid Spain |

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| Jeffrey Baguley | Baruch Institute for Marine and Coastal Sciences, University of South Carolina, Columbia, SC 29208 USA |
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| Lara Arroyo | Department of Zoology, The Natural History Museum, Cromwell Road, London SW7 5BD UK |
| Jyotsna Sharma | Department of Biology, University of Texas at San Antonio, 6900 North Loop 1604 West, San Antonio, TX 78249-0661 |

Editorial

Consistency, they say, is a virtue and if that is the case then I am proving at least consistent (I'll make no claims on virtue). For the second year in a row the February issue of *Psammie* has "gotten away from me." I could offer some lame excuses...basically teaching 2½ new graduate courses, proposal deadlines, etc., etc....but the fact is I've had much of the hard work (e.g., web vote, literature search) completed since early March. It's just "my bad" and I apologize! The result, however, is a double issue of *Psammie* chock full of news and info no self-respecting meiofauna-type can do without - enjoy!

The main topic of concern for every IAM member included in this issue is the *Psammionalia* survey vote described below. The Informal Planning Committee under direction of Dave Thistle has put forward a series of well considered changes to the dissemination of society news via *Psammionalia*. The vote is being held via the web and I would encourage every member to express their views. Please, since we are not requiring voter registration, no "Chicago-style" voting (where even the dead vote, and often). The web vote will remain open until the end of June with results available in the August issue.

Cheers,
Keith



Society Vote

Psammionalia Vote

Go to: <http://www.coastal.edu/meiofauna/survey>

Please vote on the recommended changes to *Psammionalia*. The survey can be accessed directly from the link above. The link will not be placed directly on the IAM website to limit non-member access and the "hanging chad" effect. Recommended changes are listed below along with the committee's reasoning in support of the change:

Recommendation 1. The society should communicate with its members twice per year.

The committee felt that the present rate of publication was higher than necessary given the balance between the work required to produce a communication and the need for communication. Several committee members suggested that three times per year was more appropriate than twice per year.

Recommendation 2. Communication should be primarily by a newsletter on the society's website.

Converting *Psammionalia* to an electronic form will save the cost of producing and mailing a paper version. It will also make the newsletter accessible to search engines, which should make the society more visible.

Recommendation 3. The chairperson should notify the members by e-mail when a new issue of *Psammionalia* has been posted.

Recommendation 4. Members without electronic access should receive a paper copy by mail.

Recommendation 5. After a new issue is posted, the previous issue should be archived on the web site intact.

The committee agreed that an archive that could be crawled by search engines would be desirable.

Recommendation 6. The most recent issue and the archives should be freely accessible.

Recommendation 7. After a new issue is posted, appropriate components of the issue that it replaces should be copied to topic areas on the web site.

The committee envisioned topic areas to include such things as methods.

Recommendation 8. Citations of recent publications by members, contributed by the members, should be included in the newsletter.

The committee agreed that space in the newsletter and therefore on the website should be devoted to recent publications of the members because it will allow the membership to become aware of advances in our field in a rapid and convenient manner.

Recommendation 9. The recent literature section should be omitted from the newsletter.

This recommendation was controversial. In brief, a small majority felt that producing the recent literature section was not necessary in an era of searchable data bases. They felt that the editor's time would be better spent

improving the web site. A large minority felt that the recent literature section was valuable. For example, because it includes important papers in all fields of meiofaunal research, non-specialists can become aware of papers outside their fields that they would not know to search for. Also, members without access to data bases value the recent literature section.

Recommendation 10. Membership in the society and the payment of dues should be separated from access to the newsletter.

The committee agreed that the newsletter should be available to any interested person and to search engines in a timely manner, so it will not be possible to charge for it. The society should offer other incentives for dues payments, such as the privilege of posting recent publications on the society's website, a link on the society's web site to the member's home page, or a reduction in the registration fee for the annual meeting.

Recommendation 11. The back issues of *Psammonalia* should be scanned and posted on the web site.

These issues contain valuable information on techniques and give citations to older papers on meiofauna that are not in data bases.

Recommendation 12. The back issues should be dismembered and relevant portions posted in appropriate topic areas on the web site.

Recommendation 13. The webmaster should be authorized to hire an

assistant to do the work on the back issues.

The committee agreed that this task was an appropriate way for the society to spend its money.

Member Commentary

The European Water Framework Directive, another boat missed?

The Water Framework Directive (also known as the WFD or Directive 2000/60/EC) is a legislative framework to protect and improve the quality of all water resources such as rivers, lakes, groundwater, transitional and coastal water within the European Union. The WFD was published and entered into force in December 2000 (Official Journal of the European Communities, L327, 22 December 2000, pages 1-72) and member states should have incorporated it into national law by the end of 2003. After this, a series of global steps should have been and must be taken to achieve "good status" of all European waters by 2015.

The directive requires inter-calibration and monitoring processes which shall be undertaken individually by the member states, but following some recommendations put together by a set of experts and working groups defined by the commission and the EU Joint Research Centre. Among the recommendations are instructions regarding which taxa should be monitored for each kind of water mass, according to traditional methodologies across the EU and relative ease, consistency and reliability of such methods to be implemented in all member states. A quick and overview of

the recommended taxa shows that those chosen as main indicators or quality elements are roughly macro-invertebrates for rivers, phytoplankton for lakes and a broad "benthic invertebrate fauna" definition for coastal and transition waters. Meiofauna is not mentioned. However, when authorities or experts are questioned regarding the possibility of using it as an optimal indicator group of taxa, the answer (if any) is mainly of uncomfortable ignorance or disinterest. Let's face it; meiofauna is NOT in the picture, despite being perhaps the sole group which can be used in certain environments such as beaches and estuaries, where macrofauna may be very scarce or non-existent.

We are all aware of the wonders of meiofauna for their use in pollution and disturbance studies. Meiofauna are ubiquitous, easy to sample, easy and cheap to store, easy to work with (though we have somehow managed to make everybody believe that they are impossible to identify and painstakingly tedious to manipulate – which is definitely back-firing against us) and have optimal qualities to detect disturbance in the habitats they occupy, as are their intimate association with the sediment, their high turnover rates, conservative reproductive strategies with an all-benthic life cycle, relatively stable populations which rapidly show a response to alterations in the environment, etc. Moreover, only small samples are needed and in case of pollution, taxa can be identified at high-level, simplifying the job even further.

Why then is meiofauna neglected? Why has it always been neglected? The WFD has not been the sole legislative

document requiring the implementation of monitoring strategies, and these strategies are certainly not solely European. Still there are very few programs which consider meiofauna as a quality indicator. Clearly something is not working. Either our message is not coming across, either our “representatives” in decision-making forums are not doing their job or we do not have such representatives (someone aware of meiofauna’s attributes) at all.

Sadly, it seems we are being left out as a “cult” group and it can only be our fault. Meiofauna papers are far from reaching high scientific standards and our efforts to let the world know about how good indicator organisms they are seem to be falling into a broken sack. We really need to sharpen up. And it is still not too late. The inter-calibration and particularly the monitoring processes are far from being defined. The monitoring will go on for many years and will provide not only a working framework but also research opportunities, specifically regarding ecological processes. We have a golden opportunity to place meiofauna on the map. A good sow will be bread for tomorrow. This is a boat we cannot afford to miss.

Lara Arroyo
nlarroyo@menntun.org

Member News & Information

MeioChile

MeioChile is now back on the web at:

<http://meiochile.matthewlee.org>

Menntun

We have just moved from the academic sphere to the world of business and intrigue (though God knows where it is worse) by setting up an international company based in Spain. Among others, we offer various services that are linked to meiofaunal research in form of courses and sample analyses and urge the members of *Psammonalia* to have a look at our homepage <http://www.menntun.org/> to see if we can be of any help. We are hoping that we can convince people working in benthic or phytal environments to incorporate meiofauna in their research with a little help from Menntun. See you all in Brasil when we arrive in our private jet dressed like Mick Jagger and Jennifer Lopez!

Lara Arroyo and Emil Ólafsson

Address Changes

Dr. Lara Arroyo
MENNTUN CONSULTORÍA S.L.
c/Cava Alta 9, 2^oC
Madrid 28005 Spain
e-mail: nlarroyo@menntun.org

Dr. Peter Frenzel
Institute of Geosciences
University of Jena
Burgweg 11
D-07449 Germany
Peter-Frenzel@t-online.de

Dr. Robert Higgins
122 Strawbridge Court
Ashville, NC 28803
828-285-2319
rphigginsphd@yahoo.com

Dr Stephen Jarvis
Marine Invertebrate Ecological Services
30 Mill Road
Mutford, Beccles
Suffolk NR34 7UR
UNITED KINGDOM
+44 (0)1502 475289 (home)
+44 (0)7956 527022 (mobile)
steve.jarvis@ic24.net

Dr. Emil Ólafsson
Menntun - Consultoría
C/Cava Alta 9, 2C
28005 Madrid Spain
<http://www.menntun.org/>
emilolafsson@menntun.org

Dr. Motohiro Shimanaga
Aitsu Marine Station
Center for Marine Environment Studies
Kumamoto University
Matsuchima, Amakusa, Kumamoto
861-6102 JAPAN
Tel +81-969-56-0277
Fax +81-969-56-3740
e-mail: motohiro@gpo.kumamoto-u.ac.jp

Dr. Thomas C. Shirley, Professor
Endowed Chair, Biodiversity &
Conservation Science
Harte Research Institute
Texas A&M University-Corpus Christi
6300 Ocean Drive, Unit #5869
Corpus Christi, TX 78412-5869 USA
Phone: (361) 825-2030
FAX: (361) 825-2050
Thomas.Shirley@tamucc.edu
HRI <http://www.hri.tamucc.edu/>

Dr. David Thistle's new email:
thistle@ocean.fsu.edu

New Members

Said Ali Alkady
PO Box 7307
Salmya 22084 KUWAIT
saidalkady@epa.org.kw

I am interested in studying the biodiversity of meiofauna along the Kuwaiti shores and using the benthic communities in a future program of marine pollution assessment and monitoring.

Matthew Boeckner
11434 76th Ave.
Edmonton, Alberta CANADA
boeckner@ualberta.ca

I am fascinated by the biology of benthic meiofaunal and macrofaunal invertebrates. These highly diverse and abundant animals are frequently overlooked but account for most of the oceanic biodiversity and play key roles in many important marine processes. I am currently determining what rules govern the assembly of these communities. I also wish to determine what factors affect colonization rates of new substrate and how diversity and abundance relate to substrate complexity (i.e. gravel, fine sand, mudflat, etc.). Additionally, I am addressing the highly neglected taxonomy of many of the marine meiofaunal groups (nematodes, copepods, ostracods, amphipods, acarines, etc).

My previous research interests included studies pertaining to ecological and zoological features of Acari, Collembola, Nematoda, Tardigrada and Rotifera inhabiting bryophytes. I was principally interested in determining how the distribution of these groups is

related to various gradients including substrate depth, elevation, seasonality and latitude.

Brian D. Gregory
1124 Pennsylvania Ave.
Bremerton, WA 98337 USA

Daniel Leduc
Portobello Marine Laboratory
University of Otago, Dunedin
PO Box 56 New Zealand
ledda951@student.otago.ac.nz

I am doing PhD research on meiofauna ecology at the University of Otago, New Zealand. I am particularly interested in getting in touch with people interested in helping me describe new nematode species from NZ.

Ana Travizi
Ruder Boskovic Institute
Center for Marine Research
Lab for Ecology & Systematics
Giordano Paliaga 5, 52210 Rovinj
Croatia
travizi@cim.irb.hr

Head of Laboratory for Ecology and Systematics. I am working on ecology of sedimentary and epibionthic marine meiofauna, particularly changes in community structure in response to environmental disturbance (e.g. anoxic and hypoxic events, appearance of invasive species, effects of mariculture etc) - including environmental quality assessment by means of biomonitoring using meio- and nematofauna.

My research interests are focused on systematics, biodiversity, biogeography, population dynamics, assemblage's structure, and ecology of free-living nematodes - especially those from

endangered, sensitive, and protected habitats. Till now I was focused on meio- and nematofauna from the Adriatic Sea, but I am open for collaboration with meiobenthologists from other regions.

Laurent Villiers
DGA/DSCEN
16 bis, Avenue Prieur de la Cote d'Or
ARCUEIL 94 114 FRANCE
laurentvilliers@tele2.fr

Je travaille pour le ministère de la Défense. Lors d'une affectation en Polynésie française je me suis intéressé à la méiofaune des lagons de Mumroa et de Fangataufa et plus particulièrement sur les copepodes harpacticoides.. Malgré que ne fasse pas partie d'un organisme de recherche, j'ai publié quelques modestes articles sur ce sujet.

Information Requests

Membership,

Dr. Feller has relayed an intriguing question and is asking for any input members might have on the subject of "off plumb" meiofauna distributions:

When quantitatively sampling a sediment surface with a core, one typically inserts the core perpendicular to the sediment surface, i.e., at a 90° angle. When confronted with a sediment surface that is not flat, for instance the side of a tidal creek that has a very steep slope, should you insert the core at a 90° angle relative to the sediment surface or should you keep the core at a 90° angle as if the slope itself was actually flat, i.e., insert the core at

an angle, like a plumb line, relative to the sediment surface? How does one quantify the vertical distribution of meiofauna in this high slope situation? The problem is, of course, less with a small diameter core than with a larger diameter core. Do animals relate to a sediment surface or do they relate to a gravitational gradient? Has anyone else lost sleep over this question?

Bob Feller
feller@biol.sc.edu

Sir,

May I kindly inform that I am working on a research program on the ecology and biodiversity of meiobenthos along the coast of Arabian/Lakshadweep Sea since 2004 and am attached to the Cochin University of Science and Technology, Kerala, India. As a part of my meiobenthic collection, I have several gastrotrich and polychaetes (belonging to genus *Pisione*) for species-level taxonomic identification.

Can you kindly give me the site address where I may be able to get the e-mail addresses of taxonomic experts of gastrotrich and interstitial polychaetes? Expecting your reply,

G. Priyalakshmi
Lecturer, Bharata Mata College,
Thrikkakara &
Researcher, Cochin University of
Science & Technology Kerala, India.
priyalakshmi@cusat.ac.in

Resources of Interest

**Crustaceana Monographs from
Brill Academic Publishers**

- 1 Larvae of Anomuran and Brachyuran Crabs of North Carolina
Stephan G. Bullard
- 2 The Biology of Terrestrial Isopods
Edited by S. Sfenthourakis, P.B. de Araujo, E. Hornung, H. Schmalfuss, S. Taiti and K. Szlavecz
- 3 Subterranean Copepoda from Arid Western Australia
Tomislav Karanovic
- 4 Callianassoidea of the world
Katsushi Sakai
- 5 Deep-sea Tanaidacea (Peracarida) from the Gulf of Mexico
Kim Larsen

Obituary

**Kenneth Tenore, 63
Coastal ecologist**

**BY JACQUES KELLY
THE BALTIMORE SUN
MAY 9, 2006**

Kenneth Tenore, a coastal ecologist who was a proponent of environmental ethics, died of acute pancreatitis Sunday at University of Maryland Medical Center. He was 63 and a resident of Hollywood in St. Mary's County.

For the past two decades, until he stepped down last year, Dr. Tenore had been director of the University of Maryland Center for Environmental Science's Chesapeake Biological Laboratory on Solomons Island. He was an expert on decaying bay grasses and their role in feeding crabs and marine worms. He continued to teach until he became ill.

Born in Cambridge, Mass., he received a bachelor's degree from St.

Anselm College in Manchester, N.H., and studied briefly to become a Benedictine brother. He earned his doctorate in oceanography from North Carolina State University in 1970, after conducting his early research on bottom-dwelling marine organisms and shellfish aquaculture.

"He was very much a scholarly man who once studied in a monastery and was deeply concerned with the ethics of science," said Margaret A. Palmer, who succeeded him as the lab's director. She said he was a pioneer in understanding how plant detritus moves into the marine food chain.

He was on the staff of the Woods Hole Oceanographic Institution in Massachusetts from 1972 to 1975 and the Skidaway Institute of Oceanography in Georgia from 1975 to 1983. The next year he became director of the laboratory on Solomons Island and developed programs in environmental chemistry and toxicology.

"He was a pioneer for our center in advancing the use of the interactive video system," said Donald F. Boesch, president of the Cambridge-based University of Maryland Center for Environmental Science.

Colleagues at the Solomons Island lab said Dr. Tenore also led collaborative research programs involving U.S. marine scientists and scientists from the Galicia region of Spain and Portugal. He frequently visited both countries and helped build enduring relationships between scientists.

At his death, he was leading the Navigator project, an international effort funded by the National Science Foundation and Luso-American

Foundation to study the ecology of coastal seas around the world.

Dr. Tenore founded and directed the Alliance for Coastal Technologies, an effort of research institutions, environmental managers and industry to study the use of sensors in environmental monitoring in coastal zones.

In early 1990s, Dr. Tenore taught a course in science and ethics with collaborators at the University of Notre Dame's Reilly Center for Science, Technology and Values in South Bend, Ind.

"He was an inspirational teacher who had a strong feeling for the philosophical and ethical issues in science," said Father Ernan McMullin, a retired Notre Dame professor.

A funeral Mass will be offered at 1 p.m. Friday at Our Lady Star of the Sea Roman Catholic Church, 14400 Solomons Island Road South.

Survivors include a brother, Louis Tenore of Norton, Mass.; and a sister, Elizabeth Tenore of St. Helena Island, S.C.

Recent Literature

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