PSAMMONALIA

Newsletter of the
International Association of Meiobenthologists

Number 99, February 1993

Composed and Printed at The University of Texas at Austin,
Marine Science Institute, Port Aransas, Texas U.S.A.

INSIDE PSAMMONALIA THIS QUARTER

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

OFFICERS

Newsletter of the International Association of Meiobenthologists

Editor: Paul A. Montagna
Internet address: PAUL@UTMSI.ZO.UTEXAS.EDU

Production Editor: Carrol A. Simanek

EDITORIAL

What is Psammonalia?

After assuming the editorship of our Associations newsletter, I asked myself: what do I do now? I really had little idea. So, I decided to look over old issues to see what other editors have done. Unfortunately, my back issues extend only to number 39, printed in February 1978. Bill Hummon was editor at that time. It is amazing to me how little the newsletter has changed in 15 years. As in the most current issue, there were sections entitled: editorial, dues payments, news from members, new members, address changes, and of course recent literature. A few other items have always been present from time to time, such as, budget reports, election results, meeting announcements, and obituaries. Occasionally, someone requests rare specimens or literature, or provides an exhaustive bibliography on a particular taxa. Once every three years, the Constitution of the Association and the membership list is printed. The previous format of the title page had not changed since it was designed by Bob Higgins in 1980. It is obvious that the purpose of *Psammonalia* is to foster communication among meiobenthologists by soliciting contributions from the membership.

Dick Warwick did a great job of trying to increase membership participation. I commend him for his effort. It is your newsletter, and it can only be successful through your participation. So, don't be shy, feel free to drop us a note on your news or views, and we will print it. To make submissions easier, I will start to catalogue and publish members e-mail addresses. All members should please send me their e-mail address.

I certainly don't plan to make great changes in the newsletter. I have taken the liberty to change the format a little. I have done this for the sake of economy and to enhance the presentation.

PAST TREASURERS REPORT

Mike Gee reports that over his three year tenure as Treasurer, the income from subscriptions (£3309.71) has almost exactly matched the production costs of *Psammonalia* (£3336.34). However, in 1990 there was a deficit of £635.12, and in 1991 a deficit of £13.82. Mike suggests that a reserve of £1000 in the Society Current Account should keep it in the black and the remainder could usefully be employed elsewhere, i.e., by incorporating it in the Bertil Swedmark Fund.

STATEMENT OF ACCOUNTS 1990-1992

	1990	1991	1992
INCOME:	£	£	£
Balance brought forward	3,066.81	2,543.77	2,515.96
Subscriptions	707.58	987.94	1,624.19
Contributions	27.00	-	-
Fees for back issues	-	2.29	-
Donations to Bertil Swedmark Fund	-	-	254.24
Interest (net)	85.08	63.72	27.11
TOTAL	3,886.47	3,597.72	4,421.50
EXPENDITURES:	£	£	£
Psammonalia - February	344.42	246.20	295.35
- May	304.41	249.09	202.08
- August	349.69	205.14	201.63
- November	344.18	381.33	202.92
Returned Subscriptions	.	.	10.00
TOTAL	1,342.70	1,081.76	911.98
BALANCE	2,543.77	2,515.96	3,509.52
Transfer to B. Swedmark Fund	-	-	1,254.24
Transfer to U.S.A.	-	-	2,255.28

The increase in subscription income for 1992 is a result of a number of members paying advance subscriptions at the Eighth International conference. The fall in bank interest income reflects the rapid fall in U.K. interest rates over the last year. U.K. base rates now stand at 6% compared with 15% in early 1991. Production costs of *Psammonalia* remained constant, the decrease in costs compared with 1990 is due to the introduction of printed matter airmail rates by U.K. Post Office in 1991.

Bertil Swedmark Fund

The purpose of the Bertil Swedmark Fund is to use the interest (or 75% of the interest) accumulated over a three year period to help towards costs of students or others who wish to attend the triennial International Conference. This fund at the moment stands at £1254.24 (£1000 originally donated by Bertil Swedmark and £254.24 received in donations and proceeds of T-shirt sales this year). It will be invested in a U.K. Building Society where the current rate of net interest (i.e., after the payment of U.K. income tax) on such an account is 4%. At present, the Fund will produce approximately £150 (~$225 U.S. dollars at present exchange rates) over three years. It may be possible to obtain Charitable Status for the fund (so avoiding the payment of U.K. Income Tax), which would increase income to approximately £200. 75% of this amount would not go very far to helping even one overseas student attend the conference. The fund could be increased by the Association contributing it's excess capital and by further contributions or gifts from members who feel in a position to do so. *-Mike Gee*

DUES AND MEMBER SERVICES

Bob Feller will accept dues (10 US dollars per year) in US currency only, as the expense for conversion is prohibitive. Please mail dues to him at:

Belle W. Baruch Institute
Univ. of South Carolina
Columbia, SC 29208 USA.

Make checks payable to Int. Assoc. of Meiobenthologists. You may pay up to 3 years in advance, i.e., $30. If you are able, please add extra money to be contributed to the Bertil Swedmark Fund. If you are not sure if you your dues are current, check the date in the upper right had corner of the mailing label. Please send your dues right away if you are not current, and remember to include your e-mail address with your mailing address.

Paul Montagna requests that all members send their e-mail address or addresses to him. You can mail it or e-mail a message on bitnet: PAUL@UTMSI or internet: PAUL@UTMSI.ZO.UTEXAS.EDU

NEWS FROM MEMBERS

Book in press

Olav Giere reports the book he has been writing for the last two years is now completed and has been sent to the publisher (Springer). The book, entitled "Meiobenthology - the microscopic fauna of aquatic sediments", covers all major topics of meiobenthos research. The book was based on lecture notes for an advanced course on meiobenthology that was taught at Hamburg University. After copy editing the book should contain about 300 pages and some 100 figures. Olav hopes the book will be published by the summer of 1993. The price has not been set, but Springer has been known to be an expensive publisher.

Video available

Jörge Ott reports that his video "The Meiofauna of Marine Sediments: Types and Characters" is available for distribution. The film was produced by he and Alexander Bochdansky at the University of Vienna. The movie shows the major groups of interstitial meiofauna (Cnidaria, Turbellaria, Gnathostomulida, Gastrotricha, Nematoda, Copepoda, Isopoda, Ostracoda, Annelida, Gastropoda, Tardigrada, and Tunicata) **live in color** (his emphasis, not mine). Important diagnostic characters are shown in high magnification. The video is 22 minutes with English text.

The video was available for viewing at EIMCO last August. It is very well done, and all copies quickly sold out. If you would like to order the video an advertisement and coupon is attached to the end of the Newsletter. *-ed.*

Recruiting students

Olav Giere scoffs at the idea that it is difficult to find students with enough interest to work in the field of meiobenthos. He suggests that you just have teach to them meiofauna and tell them what it is all about to make them interested.

At the Zoological Institute of Hamburg University a lecture course on meiobenthology has been listed in the teaching catalogue for many years. The winter term course meets for 2 hours per week. This is followed by a summer term course for advanced students on meiobenthology that is 3.5 weeks long. This course is held partly (for one week) at the well known island of Sylt and focuses on interstitial meiofauna. Here, the students whom have gained theoretical knowledge gain practical experience on how to work in the field. At the beginning there is a short general introduction to extraction methods, discrimination of major groups with fresh and fixed samples, diversity of groups, movements of fauna, evaluation of samples, etc., etc. Then small groups of 2-3 students are formed to work on selected projects, e.g., documentation of faunistic diversity (using video microscopy and other microscopical techniques), examples of horizontal and vertical distribution profiles, experiments on predation effects, meiofauna along macrofaunal tubes, etc. The results have to be evaluated and written up in small project reports. During the last 2 days, the groups present their data to the others, while gaining practice in delivering oral presentations. These seminars are critically evaluated for their contents and rhetoric presentation. The course concludes with a printed comprehensive "volume" on meiofauna.

Using this approach, Olav reports that a few of the students become really fascinated working with meiofauna and decide to go further with it and select meiofauna as their topic for a masters study. This is the pool where you can find your Ph.D. candidates.

Tidbits

J. W. Coles reports that he is still examining free-living nematodes in the Discovery Collections at the Institute

of Oceanographic Sciences, Wormley, near Godalming.

Paul Montagna will be spending six weeks in France next summer. He has received a "Senior Guest Scientist" grant from the French NATO program. Research will be performed in collaboration with Dr. Gérard Blanchard at the Centre de Recherche en Ecologie Marine et Aquaculture (CREMA) in L'Houmeau, France, which is a French government facility, part of the Centre National de la Recherche Scientifique (CNRS), Institut Francais de Recherche pour l'Exploitation de la Mer (IFREMER). Paul and Gérard will perform experiments to determine if meiofaunal grazing rates on microphytobenthos change as a function of the rate of primary production.

Address changes

Marcia Shofner
Department of Zoology
University of Maryland
College Park, Maryland 20742
USA

Dr. Walter Traunspurger
Zoologisches Institut der Universität München
Limnolgische Abteilung
Seidlstr. 25
8000 München 2
GERMANY

New members

Dr. Tapas Chatterjee
Indian School of Learning
I. S. M. Annexe
P. O. - I. S. M.
Dhanbad - 826004
Bihar
INDIA

Tapas specialization is the systematics and ecology of Halacarid mites.

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

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

RECENT LITERATURE

Anderson, R.V. 1992. Free-living nematode associations in Pool-19, Mississippi River. *Journal of Freshwater Ecology* 7:243-250.

Baranova, E.A. & Dashchenka, O.I. 1992. 3 new nematode species of the subfamily Hypodontolaiminae(Chromadorida,Chromadoridae). *Zoologichesky Zhurnal* 71:12-18 (in Russian).

Boutin, C., Messouli, M. & Coineau, N. 1992 1992. Phylogénie et biogéographie évolutive d'un groupe de Metacrangonyctidae, Crustacés Amphipodes stygobies du Maroc. II- Cladistique et paléobiogéographie. Avec l'examen comparatif de plusieurs logiciels de parcimonie [Phylogeny and evolutionary biogeography of a group of Metacrangonyctidae, stygobite Amphipod Crustaceans from Morocco. II Cladistics and paleobiogeography, with a comparison of several parsimony programs for microcomputers]. *Stygologia* 7(3):159-177.

Chatterjee, T. 1991. *Copidognathus eblingi*, A new species of Halacaridae (Acari) from Andaman Islands (Indian Ocean). *Journal of Bombay Natural History Society* 88(1):88-92.

Chatterjee, T. 1991. *Copidognathus gitae*, A new species of Halacaridae (Acari) from Visakhapatnam coast, Bay of Bengal. *Journal of Bombay Natural History Society* 88(2):272-275.

Chatterjee, T. 1991. A new species of *Copidognathus* (Halacaridae:Acari) from Chilka Lagoon, Bay of Bengal. *Journal of Bombay Natural History Society* 88(3):406-409.

Chatterjee, T. & Sarma, A.L.N. 1991. Review of Indian Ocean Halacaridae and prespechive of future research. In: Giopal, B. & Asthana, V. (eds.), Aquatic Sciences in India, pp. 189-196.

Cook, D.R. 1992. Water mites (Hydracarina), mostly from driven wells in New Zealand: taxa other than *Notoaturinea* Besch. *Stygologia* 7(1):43-62.

Dole-Olivier, M.J. & Marmonier, P. 1992. Ecological requirements of stygofauna in an active channel of the Rhoône river. *Stygologia* 7(2):65-75.

Ehlers, U. 1992. Frontal glandular and sensory structures in *Nemertoderma* (Nemertodermatida) and *Paratomella* (Acoela). Ultrastructure and phylogenetic implications for the monophyly of the Euphalthelminthes(Platyhelminthes). *Zoomorphology* 112:227-236.

Erséus, C., Giani, N. & Rodriguez, P. 1992. The

taxonomy of Spiridion Knöllner (Oligochaeta, Tubificidae), with a redescription of *Spiridion phreaticola* (Juget, 1987) comb. n. *Stygologia* 7(2):77-83.

Feller, R.J., Stancyk, S.E., Coull, B.C. & Edwards, D.G. 1992. Recruitment of polychaetes and bivalves: long-term assessment of predictability in a soft-bottom habitat. *Marine Ecology Progress Series* 87:227-238.

Feller, R.J., Stancyk, S.E., Coull, B.C. & Edwards, E.D. 1992. Recruitment of polychaetes and bivalves - long-term assessment of predicability in a soft-bottom habitat. *Marine Ecology Progress Series* 87:227-238.

Gourbault, N. & Decraemer, W. 1992. Marine nematodes from Polynesia Epsilonematidae and Draconematidae. *Australian Journal of Marine and Freshwater Research* 43:663-682.

Grosso, L.E. 1992. Protojaniridae (Isopoda Asellota) en aguas intersticiales continentales de Sudamérica. *Cuyojanira riojana* n. gen. n. sp. [Protojaniridae (Isopoda Asellota) in continental interstitial waters of South America. *Cuyojanira riojana* n. gen. n. sp.]. *Stygologia* 7(2):119-125.

Guozhen, Q., Zheng, N. & Yunlong, Q. 1992. Study on the assessment of organic pollution using marine nematodes in the intertidal zone of Qingdao Bay. *Transactions of Oceanology and Limnology* (In Chinese with English Abstracts) 53(3):48-55.

Jaume, D. & Garcia, L. 1992. A new *Psammogammarus* (Amphipoda: Melitidae) from Cabrera (Balearic Islands). *Stygologia* 7(2):107-115.

Jensen, P. & Nehring, S. 1992. Review of *Ptycholaimellus* Cobb (Nematoda, Chromadoridae), with descriptions of 3 species. *Zoologica Scripta* 21:239-246.

Kensley, B. 1992. New records of interstitial Anthuridea including Curassanthura, from the western Atlantis (Crustacea,Isopoda). *Stygologia* 7:187-.

Kensley, B. 1992. New records of interstitial Anthuridea including Curassanthura, from the Western Atlantic (Crustacea: Isopoda). *Stygologia* 7(3):187-192.

Kurdziel, J.P. & Bell, S.S. 1992. Emergence and dispersal of phytal-dwelling meiobenthic copepods. *Journal of Experimental Marine Biology and Ecology* 163:43-65.

McCall, J.N. 1992. Source of harpacticoid copepods in the diet of juvenile starry flounder. *Marine Ecology Progress Series* 86:41-50.

Miliou, M., Motaitouapostolopoulou, M. & Argyridou, M. 1992. Biochemical composition of *Tisbe holothuriae* (Copepoda, Harpacticoida) and its differentiation in relation to developmental stages. *Ophelia* 36:159-.

Morse, M.P. & Norenburg, J.L. 1992. Observations on and redescription of *Meiomenia arenicola* Salvini-Plawen, 1985 (Mollusca: Aplacophora), an interstitial solenogaster from Fort Pierce, Florida. *Proceedings of the Biological Society of Washington* 105:674-682.

Nordmeyer, H., Pestemer, W. & Rahman, A. 1992. Sorption and transport behaviour of some pesticides in groundwater sediments. *Stygologia* 7(1):3-11.

Prejs, K. & Prejs, A. 1992. Importance of predation in regulating density of meiofauna and macrofauna in seasonal tropical waters. *Hydrobiologia* 242:77-86.

Reid, J.W. 1992. *Acanthocyclops pennaki* n.sp. (Copepoda: Cyclopoida) from the hyporheic zone of the South Platte River, Colorado, U.S.A. *Transactions of the American Microscopical Society* 111:269-277.

Rogozin, A.G. 1992. A short revision of *Myostenostomum* (Turbellaria, Catenulida). *Zoologichesky Zhurnal* 71:5-17 (in Russian).

Rouch, R. 1992. Caractéristiques et conditons hydrodynamiques des éoulements dans les sédiments d'un ruisseau des Pyrénées. Implications écologiques. [Characteristics and hydrodynamic conditions of flow in the sediments of a stream in the Pyreneans. Ecological implications]. *Stygologia* 7(1):13-25.

Rouch, R. 1992. Un nouveau genre d'Ameiridae (Copepoda, Harpacticoida) dans le milieu hyportheque d'un cours de l'Arizona [A new genus of Ameiridae (Copepoda, Harpacticoida) in the hyporheic environment of a water course in Arizona]. Stygologia 7(3):149-157.

Schmidt-Dallmier, M.J., Atchison, G.A., Steingraeber, M.T. & Knights, B.C. 1992. Sediment suspension system for bioassays with small aquatic organisms. Hydrobiologia 245:157-162.

Sharma, A.L.N. & Chatterjee, T. 1991. Occurrence of *Copidognathus hastwigi* Bartsch (Halacaridae:Acari) from Indian Ocean. *Journal of Bombay Natural History Society* 88(2):300-302.

Smit, H. 1992. *Kawamuracarus sulawesiensis* sp.n., the first hyporheic water mite from Sulawesi, Indonesia (Acari, Hydrachnellae). *Stygologia* 7(2):127-128.

Strayer, D.L. & O'Donnel, E.B. 1992. The hyporheic nematode community of some streams in southeastern New York state, USA. *Stygologia* 7:143-148.

Strayer, D.L. & O'Donnell, E.B. 1992. The hyporheic nematode community of some streams in southeastern New York State, U.S.A. *Stygologia* 7(3):143-148.

Suresh, K., Ahamed, M.S., Durairaj, G. & Nair, K.V.K. 1992. Ecology of interstitial meiofauna at Kalpakkam

Coast, east coast of India. *Indian Journal of Marine Sciences* 21:217-219.

Todaro, M.A. 1992. Contribution to the study of the Mediterranean meiofauna, Gastrotricha from the Island-of-Ponza, Italy. *Bollettino di Zoologia* 59:321-334.

Tzetlin, A.B. & Saphonov, N.V. 1992. *Trochonerilla mobilis* gen. et sp. N., a meiofaunal Nerillid (Annelida, Polychaeta) from a marine aquarium in Moscow. *Zoologica Scripta* 21:251-254.

Westh, P. & Kristensen, R.M. 1992. Ice formation in the freeze-tolerant Eutardigrades *Adorybiotus coronifer* and *Amphibolus nebulosus* studied by differential scanning colorimetry. *Polar Biology* 12(8):693-700.

Zhinan, Z., Hongyue, D. & Zhishan, Y. 1993. A study on the meiobenthic community in an organically polluted beach of Qingdao Bay. *Journal of Ocean University of Qingdao* (In Chinese with English Abstract) 23(1):83-91.

Zobrist, E.C. & Coull, B.C. 1992. Meiobenthic interactions with macrobenthic larvae and juveniles: an experimental assessment of the meiofaunal bottleneck. *Marine Ecology Progress Series* 88:1-8.

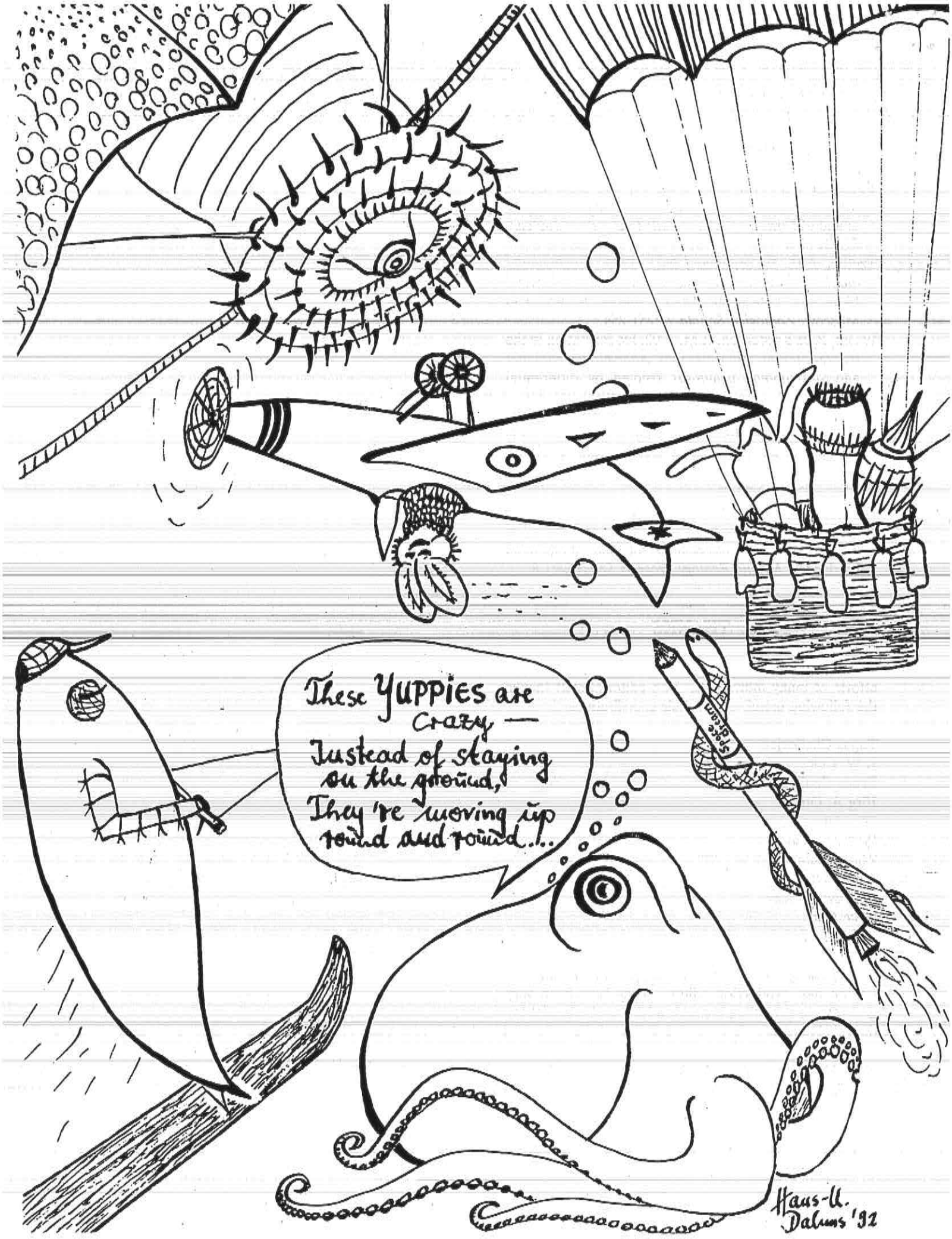
THANKS

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

Tapas Chatterjee
J. W. Cole
Bruce Coull
Jörg A. Ott
Olav Giere
Preben Jensen
Zhang Zhinan
James Ward
Andrew Gooday
Mike Gee
Robert Feller

We especially thank Dick Warwick, past editor, and Mel Austen past production editor. They have been very generous in providing me with advice and material for the this issue.

Hans-U. Dahms supplied this quarters cartoon look at meiofauna.


These YUPPIES are crazy —
Instead of staying on the ground,
They're moving up round and round...
Space Station
Haus-U. Dalum '92

!!! Finally available !!!

THE MEIOFAUNA OF MARINE SEDIMENTS: TYPES AND CHARACTERS

Videofilm by
Alexander Bochdansky & Jörg A. Ott
University of Vienna, Austria

The movie shows the major groups of interstitial meiofauna (Cnidaria, Turbellaria, Gnathostomulida, Gastrotricha, Nematoda, Kinorhyncha, Copepoda, Isopoda, Ostracoda, Annelida, Gastropoda, Tardigrada, and Tunicata) **live in color** - important diagnostic characters are shown in high magnification. 22 minutes, English text.

VHS copies available in PAL and NTSC. Price: AS 900.--

Distributed through PRO MARE , a non profit organization.

Please use the coupon below for ordering.
Please pay to the order of PRO MARE by international money order to Erste österr. Spar-Casse, Vienna, Austria (Bank Code Nr. 20111) account # 073-07268.

I (We) order ..... copy (copies) of:
THE MEIOFAUNA OF MARINE SEDIMENTS: TYPES AND CHARACTERS
Color, 22 minutes.

[_] PAL [_] NTSC

.....
signature

Please bill the following address:

.....
.....
.....

Send to: PRO MARE, Prof.Dr. Jörg A. OTT, Dept. of Marine Biology, University of Vienna, Althanstr. 14, A-1090 Vienna, Austria.