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"This newsletter is not deemed to be a valid publication for formal taxonomic purposes"

EDITORIAL

The one most important item in this issue is the announcement of EIMCO next year. NOW is the time to start thinking about discussion topics, papers you want to present and how you are going to find the funds to get there. Membership of IAM in the USA is falling rather alarmingly (is this genuine disinterest or simply absent-mindedness in renewing subscriptions?). So, to get the level of attendance achieved in Vienna is going to require a special effort from us non-Americans.

This time of year (for Northerners at least) is "silly season" for the press; thoughts are all on holidays and outdoor activities, and it is difficult to focus the mind on anything too serious. I can certainly think of better things to do on this beautiful sunny Sunday morning than sit in front of a word-processsor!

With increasing frequency, the notice-board in our Laboratory includes notes from scientists, both from the UK and abroad, offering house-swaps for holiday purposes. Although I have never taken up any of these myself, there seem to be many advantages. Firstly, accommodation costs are reduced to zero, and secondly there is somebody looking after your own house, feeding the pets, mowing the lawn, watering the garden etc. I believe that commercial agencies have even been set up to put potential house-swappers in touch with each other. An obvious thought is that Psammonalia could provide such a service free for IAM members, and what other agency could guarantee to reach an audience of 280 people in 36 countries? Also, meiobenthologists are such a trustworthy bunch that you could be sure that your house was in good hands. Such a scheme would be easy for us to operate: we would simply publish the details that participants send us, and leave potential swappers to make their arrangements privately. To ensure some degree of uniformity, I suggest that those interested send me the following details:

1. Location of house (country, town etc.)
2. Nature of accommodation (number of bedrooms etc)
3. Holiday attractions in the area
4. Chores that your guests will be expected to attend to (e.g. looking after pets, garden etc.)

I think this should be enough. Other details such as mutual use of automobiles can be sorted out privately. So, here's to the successful launch of Psammo-Travel Inc.

November 1991 marks the 25th anniversary of this Newsletter, and in our next issue Bob Higgins and Don Zinn (Editors of the first issue) have agreed to write a guest Editorial, giving their personal perspectives of our first quarter-century. Also, that first historic document will be reprinted in full! **Richard Warwick**

NEW MEMBERS

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A previous member who finally stumbled across a sterling 10 pound note with which to pay two years subscription.

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I have intended to become a member of IAM since the Vienna meeting in 1989 as I liked the conference atmosphere and the participants very much. Unfortunately a lot of personal things have happened in the meantime. For a few years I have been working on harpacticoids and their morphology, reproductive biology and systematics. My special laboratory crustacean is a groundwater harpacticoid *Parastenocaris phyllura*. I am also engaged on, and interested in, the life history of other groundwater animals. For the last few months I have been working on demographic studies of *P. phyllura*.

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Having FINALLY completed my Ph.D. on the Halacaridae of Ireland late in 1989 I took a year off and went to Australia, among other places. On my return I was reading through some back issues of Psammonalia where I read of a project funded by the UK Ministry of Agriculture, Fisheries and Food (MAFF) to compare meiobenthic community responses to different classes of pollutants (organic enrichment, toxic chemicals etc.) in UK coastal waters and evaluate meiofauna as pollution monitors. To cut a long story short, here I am and that's what I'm doing!

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I am presently doing a postdoc (with Sam Bowser) investigating test morphogenesis and bioadhesion in a large Antarctic agglutinated foraminifera. This work necessitates learning molecular biological techniques and immunologic methods. I will be here until June 1992. My office and laboratory phone numbers are (518) 473–3779 and (518) 473–3856; FAX (518) 486–4901.

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OBITUARY: WOLFRAM NOODT

(1927 – 1991)

It is with sorrow that we record the death in hospital on February 17th 1991 of Professor Wolfram Noodt of the University of Kiel, Germany.

Wolfram was born in Furstenwalde near Berlin on 29th June 1927; was called for military service when he was only 16 and returned from British internment in 1945. He began to study zoology, botany, geology, oceanography, anthropology and physics at Kiel University where, in 1953, he received his PhD under the supervision of Adolf Remane.

Over the next eight years he spent a great deal of time travelling, studying, advising and teaching in South America (Guatemala, Honduras, Chile, Peru, Bolivia, Argentina, Paraguay and Brazil) and built up a great collection of South American groundwater fauna. In 1961 he returned to Kiel to resume his job as a research assistant, was accorded a D.Sc. in 1964, and appointed Assistant Professor of Zoology in 1969.

Wolfram was a taxonomist and ecologist and specialised in two groups of Crustacea, the Harpacticoida and Bathynellacea (Syncarida) although he also published papers on mystacocarids and interstital amphipods. He began by working on harpacticoids and their biocoenotic relationships with emphasis on marine and freshwater interstital forms. Most of the descriptive work dealt with freshwater taxa, in particular the genus *Parastenocaris*, in which he has described 50 new species. His later work on harpacticoids was devoted to an ecological characterization of the members of this group.

His work on Bathynellacea included the first modern revision of the Syncarida as a whole which became the basis and a stimulus for all future work. With the breakthrough in the study of plate tectonics and its implications for zoogoegraphy, Noodt was the first to recognise the potential of the groundwater fauna to contribute to a reconstruction of former intercontinental land connections. The discussions of his papers revolved around questions of phylogeny, zoogeography and ecology of the groups he studied.

In the early 1980's Wolfram gradually turned away from original research and devoted more and more time to his graduate and PhD students, of which he had more than 50. He was very popular among students because of his open–mindedness, impartiality and support for them in University committees. He was also active in the peace movement Pax Optima Rerum at Kiel and a regular mem-

ber of the university church. His seminars, together with philosophers and representatives of the other natural sciences, on evolutionary problems won him a wide audience. He was among the first to discuss and propagate the ideas of the Club of Rome at the university and as a member of the "Politischer Club", an international forum in Berlin, he engaged in discussions on the future and welfare of mankind. He also served on a great number of University committees where he tried to contribute to the introduction of more democracy. Until his death he chaired a group seeking to establish a chair of Tropical Ecology, a field of research badly neglected in Germany. He had connections and friends all around the world and there is no wonder that every available seat was taken at his funeral, where even his own voice was heard through the reading of some of his poetry.

H. Kurt Schminke

FUTURE MEETINGS

EIGHTH INTERNATIONAL MEIOFAUNA CONFERENCE (EIMCO)
University of Maryland, College Park, USA
August 9 – 14, 1992

Margaret Palmer (University of Maryland) and **Bob Higgins** (Smithsonian Institution) are pleased to announce that **EIMCO** will be held on the University of Maryland Campus at the Campus Center for Adult Education. The welcoming reception will be held on Sunday August 9 from 4 p.m. – 10 p.m. and the formal program will begin Monday morning at 8:30 a.m. We plan on two concurrent sessions (depending on need) for Mon, Tues, Thurs and Fri. On Wednesday, there will be no papers since an excursion into Washington, D.C. for sightseeing is planned. A poster session is planned for Tuesday and coffee breaks, as well as a cocktail hour, will be held in this same room that day. Video displays may also be possible in this room if there is interest. On Friday night there will be a party (dinner, drink & band) to end the meeting.

Four special sessions have been planned thus far. The tentative dates and organizers are: "Biodiversity" on Monday, **John Lambshead** (Natural Hist. Museum, Cromwell Road, London SW7 5BD, Ph: 071 938 8731); "Freshwater & Groundwater" on Tuesday, **Margaret Palmer** (address below) & **James Ward** (Dept. Biology, Colorado State Univ. Fort Collins, CO 80523, ph: 303 491–5024); "Deep–Sea" on Thursday, **Yoshihisa Shirayama** (Ocean Research Inst., Univ. Tokyo, 1–15–1, Minamidai, Nakano–Ku, Tokyo 164 Japan, ph: 03 376–1251) ; "Tardigrada" (6th Int'l Symposium) on

Thursday, **Diane Nelson** (Dept. Biological Sciences, East Tennessee Sate University., Johnson City, TN 37614, ph: 615 929–4376).

Location: The University of Maryland Conference Center is located in College Park which is about 10 miles northeast of Washington, D.C. We are easily accessible from Washington National Airport (DCA) and from Baltimore Washington International Airport (BWI). College Park is **not** on the subway system as yet, so you must take a taxi or limousine from the airports or the train station (Amtrak goes into Union Station in downtown D.C.) to campus. BWI is by far the easiest airport if you are coming to the University of Maryland. We strongly DISCOURAGE flights into Dulles Airport (south of Washington) because it is quite far from us and there is limited ground transportation which is expensive (taxi from Dulles to campus will be about $75 next summer).

Costs: Registration prior to June 15 is $90 ($60 for students; $50 for spouses). After June 15 registration is $120. Registration includes all materials, coffee breaks, opening party Sunday, cocktails on Tuesday, and the dinner & party Friday night. Housing: dormatory rooms are available on campus for $24 per person per night (based on double occupancy) and some single rooms (rates not yet set) available on a limited basis. Two hotels, Holiday Inn and Comfort Inn, are about 2 miles from the conference center.

Abstracts will be due April 14 (forms will be available in Feb '92)

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REVIEW

Petersen, M.E. Kirkegaard, J.B. (ed.) 1991. ***Systematics, Biology and Morphology of World Polychaeta.*** Proceedings of the 2nd International Polychaete Conference Copenhagen 1986. Ophelia Sand 19, DK–5771 Stenstrup, Denmark.
price: 1490 DKK appr. 210 US $)

We are happy to see the **Proceedings of the 2nd International Polychaete Conference** held in Copenhagen in August 1986 finally printed. In spite of the long period of time between the conference and date of publication (the editors seemingly failed to read and follow the advice given in the editorial of 0. Giere in Psammonalia 71, February 1986!), this book is a valuable contribution to the the biology of polychaetes. Since the papers have passed through a regular reviewing procedure before final acceptance, the contributions are generally of a high standard. Some authors tried to actualise their papers by adding "notes in proof". The papers include much new information on most aspects of polychaetology. Although the authors came from more than 20 different countries, all papers are in English and have also been liguistically revised. One may imagine that the editors really had a hard job. This volume includes 67 regular papers on 668 pages, which indicates that they are more than just short communications normally included in many other proceedings. A systematic and a subject index allow easy access to items of interest, and there are cross references, all of which gives this volume more the character of a book on comprehensive polychaetology. The contributions have been arranged under the following headings: *systematics and evolution* (24 papers), *life history and reproduction* (13 papers), *ecology* (10 papers), *faunistics and distribution* (10 papers), *morphology and genetics* (6 papers), and *miscellaneous* (4 papers). The remaining presentations of the conference are presented by 35 abstracts at the end of this volume. For about half of them references are given to show where these papers have been published elsewhere. The papers of the volume cover polychaetes from a wide diversity of geographical areas ranging from polar regions to the tropics and a wide diversity of habitats ranging from sandy beaches and mangroves to the deep sea as well as hydrothermal vents. Thus, the phrase "world Polycheata" in the title of this volume does not promise too much.

Since meiofaunal polychaetes do not represent a single taxonomic group, it is difficult to mention all the papers which might be of interest for meiobenthologists. Moreover, this would also be beyond the scope of this review. However, the following polychaete taxa – at least in part belonging to the meiofauna – are represented in the volume: syllids (5papers, systematics, ecology) and dorvilleids (5 papers, systematics, larval morphology, faunistics chromosome analysis, isozyme electrophoresis, toxicology). From all other papers which might be of general interest, only the "brief biography of A.S. Ørsted with notes on his travels in the West Indies and Central America and illustrations of collected polychaetes" (T.Wolff & M.E. Petersen) shall be mentioned. This paper is a tribute to our knowledge of polychaetes and includes examples of so far unpublished watercolour pictures found in the archives of the Zoological Museum at

the University of Copenhagen. The illustrations may also help to ascertain the true identity of these polychaetes collected by Ørsted (= Oersted = Örsted), but which were described by Grube without any figures.

In conclusion, although there has been a long time between symposium and date of publication this volume is not a collection of outdated papers of unbalanced quality, but provides much new information at a variety of levels treating most aspects of polychaetology and it turned out well. In spite of its comparatively high price this volume is a must for biologists interested in marine biology. In accordance with the editors I also hope that this volume will not only serve as a reference to ongoing research, but also inspire future lines of investigation.

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EUROPEAN NETWORK OF GROUNDWATER ECOLOGISTS

Dr Jos Notenboom writes
"Description of background, objectives and planning
Introduction

During the Rastatt workshop on "Surface and groundwater invertebrates of European alluvial flood plains", 18–20 February 1991 the question arose how to organise a more extensive exchange of information between groundwater ecologists in Europe? Improving communication was considered as important in order to be better informed about each other's scientific activities and to help people to find partners in joint projects. Other points of discussion were on which research topics groundwater ecology must focus and along which concepts interdisciplinary projects can be developed? As a result of discussion it has been proposed to create a European network of groundwater ecologists which aims to be an informal communication structure for better exchange of information about each other's research plans and projects. Co–ordination of the network is in hands of Jos Notenboom, The Netherlands.

In this note the background of this initiative and the short and long term perspectives of the network are explained. It is mailed to anyone known to us working on or interested in the field of groundwater ecology. It is possible that interested people are forgotten or unknown to us therefore you are friendly requested to **hand this information on to all your colleagues who may be interested.**

Background

* Since a few decades zoo–ecologists and microbiologists are aware of the fact that a wide range of different organisms occur in aquifers. Through the activity of these organisms biological processes take place with impact on groundwater quality. On the other hand, sediment, hydrological and chemical–physical characteristics of the groundwater influence biological composition of groundwater communities.

* Our knowledge about the diversity and the distribution of groundwater organisms, and their habitat relationships is still fragmentary.

* One is aware of the adverse effect human activities have on groundwater quality. Think about percolation into subsoil of fertilisers, pesticides, and wastes, infiltration of polluted surface waters, and artificial groundwater lowering or rising. However, the damage these activities evoke to the groundwater environment as a whole is poorly understood.

*The loading of ground water by chemical substances has nowadays reached the same order of magnitude as the surface waters. Consequently the self–evident ly good quality of the groundwater as a source for drinking water is in danger. Chemical–physical analytical techniques are expensive and had thrown up many analytical problems, in addition, biomonitoring systems had to be designed for the surveillance of groundwater environment. Furthermore, environmental quality assessment can only be based on information of biological/toxicological effects.

* Groundwater ecology (stygology) is a scientific discipline integrating many aspects. The number of scientists involved in stygological studies is limited especially when the extension of the groundwater environment and the socio–economic problems are taken into consideration. Groundwater ecologists are scattered over different countries each with its own personal interest in animal group, part of the groundwater system and scientific discipline. Most of the studies performed are of qualitative nature providing scattered basic information which remains little applicable yet in other disciplines of earth and environmental sciences.

* Only through a more quantitative approach groundwater ecology is able to join developments in hydrogeology, geochemistry, and sedimentology altogether the disciplines which essentially contribute to the multi disciplinary field of groundwater ecology. The interest of

the society in groundwater ecology is increasing because without its contribution a sustainable development of groundwater resources is hardly realisable.

Perspectives

It is clear that a great effort in groundwater ecology had to be made. This is only possible if a good cooperation between groundwater biologists to one another and with other earth scientists is performed preferable in joint projects. More basic research is needed and the knowledge of this research yields had to be applied to contribute to the sustainable development of groundwater resources and to conserve its biodiversity. The aim of this network initiative is to disseminate ideas and to stimulate collaboration and joint projects but not to organise it. We have not the intention to organise newsletters and workshops we want to make use of existing means.

For several reasons we want to enhance communication between European scientists: to make effective use of their limited research capacity; to promote contacts between different specialists realising that achievment of groundwater ecology is only possible if zoologists, microbiologists, ecologists, hydrologists and geologists are attracted in joint activities; to be better prepared to apply effectively to international organisations for financial support of cooperative projects (the draft EC R&D programme in the field of environment 1990–1994, not yet accepted, for instance explicitly mentions development of biosensors to quantify biological/toxicological effects of groundwater pollution). We restricted this initiative to Europe mainly through practical reasons. It is well possible however that it can be opened to other countries in a later phase.

Planning

We want to invite you to participate by sending us summaries of current projects and plans for future research and cooperation. Give when possible a brief account of your results and what is underway, mention some references as well. These data will be processed and presented in a report, a kind of state of the art of European groundwater ecology. This report, including a list of adresses and institutions, may help you to find each other, colleagues with similar thoughts or with whom you want to collaborate. It may help you when you want to apply for a project to prove that your topic is up to date in Europe. A state of the art report is also a good means to introduce groundwater ecology towards other scientific disciplines and policy makers in and outside Europe. If you are not currently involved in groundwater ecology but want to start with it let us know and send information about your intentions.

The information you send us will be presented in a surveyable way and structured along some general themes. On the basis of the information provided we will make recommendations on what research is needed to yield insight into critical areas. As a next step we hope that definite ideas on future cooperative (international) projects emerge. Another goal is to stimulate the application of basic groundwater ecological knowledge in European groundwater management.

Schedule

* AUTUMN 1991: send back to Notenboom your information. Including (a) summary of current projects and a brief account of results, give (key) references; (b) plans for research projects and future cooperation. Don't forget to mention your institute, department, address, telephone and if available Fax number.

* WINTER 1991– SPRING 1992: Processing of data and preparation of state of the art report.

* February – September 1992: Exploring fund raising possibilities. Contacts between participants about joint projects, feasibility, concrete proposals.

* July 1993: Workshop on groundwater/surfacewater ecotones in Lyon. Presentation of research plans and first results."

Coordination

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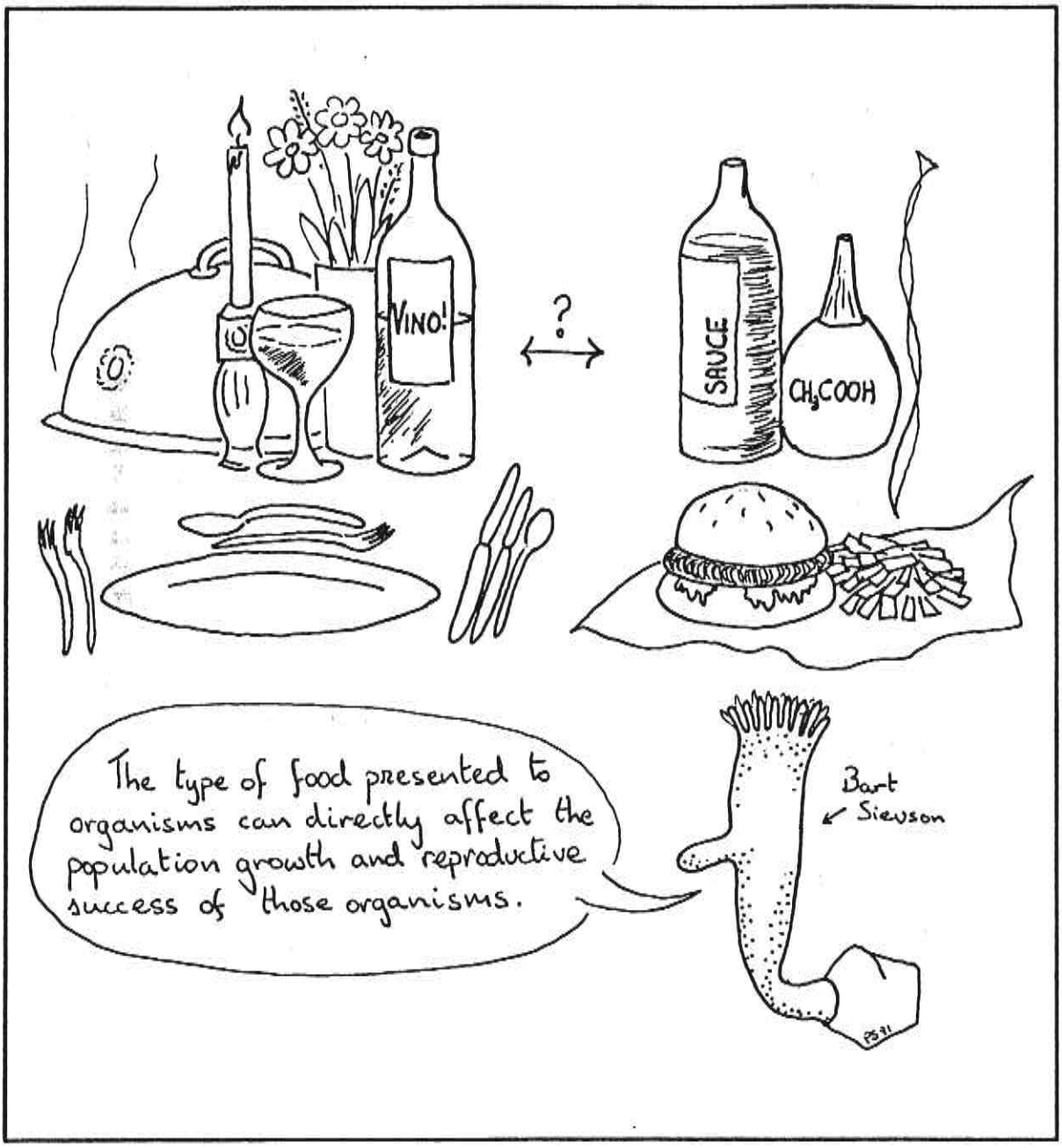
SOCIAL COLUMN

It has taken two years for Thomas Glatzel to get around to joining IAM because "a lot of personal things intervened" (see New Members). We now know what these personal things were as he and his wife Jutta had a baby girl named Laura in April – Congratulations – "and we get to fall in love over and over again every new day" (Montagna, Cited by M. Palmer in Psammonalia No. 92). Unless some other meiobentholgist informs us of their personal problems with respect to child production within the next few months, Laura will be the youngest participant booked to make her debut at the Eight International Meiofauna Conference in August 1992.



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International Conference on Ground-Water Ecology
Tampa, Florida
April 27-29, 1992

The U.S. Environmental Protection Agency is sponsoring, in conjunction with the American Water Resources Association and the Ecological Society of America, the "First International Conference on Ground-Water Ecology." The purpose of this conference is to call attention to the need for increased knowledge of this vital part of the ecosystem. The Conference will help focus emerging scientific studies, facilitate communication among researchers and water managers and sponsor panel discussions on applying knowledge of ground-water ecology to ground-water protection efforts. The conference will also help scope out options for appropriate governmental response to ground-water ecology concerns.

Ground-water is by far the largest available supply of fresh water on earth. The U.S. Environmental Protection Agency is charged with protecting this resource, not only for its role as a drinking water source, but also as a critical ecosystem. To do this effectively it has become evident that there is a need to better understand ground-water ecology. In this effort we are defining ground-water ecology in two ways: 1) the flora and fauna inhabiting the saturated and unsaturated zones of ground-water and how these organisms relate to their environment, and 2) the flora and fauna inhabiting surface waters that are sustained primarily/critically through ground-water discharge.

Participation is invited both nationally and internationally. Proceedings will be published. Papers will be presented orally on the following or other related topics:

- ☆ *Basic research needs related to ground-water ecology*
- ☆ *Water quality improvement resulting from activities of ground-water organisms*
- ☆ *Distribution and population dynamics of ground-water organisms*
- ☆ *Effects of pollutants on ground-water organisms*
- ☆ *Quantitative developments in ground-water ecology*
- ☆ *Biomonitoring using ground-water organisms*
- ☆ *Bioremediation of contaminated ground-water*
- ☆ *Microbiology of ground-water organisms*
- ☆ *Ecological effects of ground-water/surface-water interaction*
- ☆ *Simulation modeling of ground-water ecology*
- ☆ *Effects of atmospheric deposition on ground-water ecosystems*
- ☆ *State and local activities to manage ground-water for ecological benefits*
- ☆ *Watershed planning considerations*
- ☆ *Land management effects on ground-water/surface-water quality relationships*
- ☆ *Case studies of ground-water biomonitoring*
- ☆ *Impacts of scientific advances in ground-water ecology on Federal and State policies and regulations*

Papers, subject to acceptance, peer review, and editorial standards, will be published in a Proceedings. Each author must submit three (3) copies of their paper to the Technical Program Chairman at the meeting. PAPERS WILL BE LIMITED TO 10 PAGES. Detailed "Instructions to Authors" will be sent to submitting author at the time of acceptance. A camera-ready final copy of the paper will be due **JUNE 15, 1992.**

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Submission of Abstracts

The deadline for submission of abstracts is **SEPTEMBER 2, 1991.** The abstract should be submitted to the Technical Program Chairman John Simons, at the address given below. Submit three (3) copies. The abstract cannot exceed 200 words and must include the title of the paper, all authors' names, and their affiliations. The submitting author MUST INCLUDE, on a separate page, the FULL MAILING ADDRESSES (including position, student status if any, firm or institution, department, city, state, zip code, and country), and a telephone number for EACH AUTHOR. Acceptance notification will be made by **OCTOBER 18, 1991. ALL ATTENDEES, INCLUDING AUTHORS, WILL BE EXCEPTED TO PAY THE REGISTRATION FEE FOR THE MEETING.**

Meeting Announcement & Call for Papers