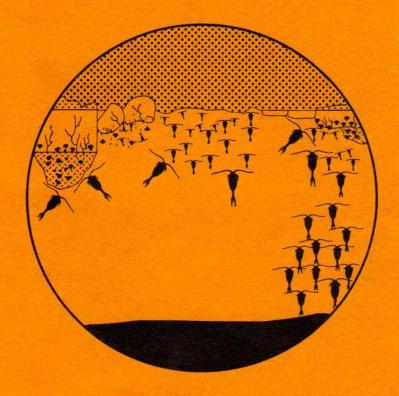
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Copepod Newsletter

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Sophie Conroy-Dalton (London), Danielle Defaye (Paris), Ju-shey Ho (U.S.A.), Adrianna Janora (Italy), Anna F. Paternak (Russia), Shin-ichi Uye (Japan), Chad Walter (U.S.A.).

This issue has been typed by: Angelika Sievers; cover as well as cartoons by M. Pottek (Fachbereich 7, Universität Oldenburg).

Cover: The life cycle strategy of the Antarctic calanoid copepod *Stephos longipes* (after SCHNACK-SCHIEL et al. 1995 - Prog. Oceanog. 36: 45-75).

Birthday:

80: Arthur Humes

EDITORIAL

A year with an exciting International Copepod Conference has passed by. It was a pleasure again to meet so many of you, some for the first time. We enjoyed your company, your contributions and the many inspiring conversations. We thank everybody who congratulated (four of the responses are given below) - Gus Paffenhöfer has provided a brief assessment of the conference.

Recalling all six international copepod conferences there seems to be some decline in less so morphological but systematic contributions. Systematic in a sense that homologous characters are screened for and used as apomorphies to separate monophyletic taxa and group them according to their phylogenetic relatedness. Such characters could be of various kinds: e.g. molecular, ontogenetic, zoogeographic, ecological, behavioural, histological, or characters with the best tradition, namely characters of the adult external anatomy. Although the latter seem to be old-fashioned, in many cases they provide the best comparative base, because most character information, at least on "lower taxon level" is available from adult morphology as yet. If this statement is provocative, then we achieved just what we have intended: raising a debate on the "most suitable characters" for systematic research. What is your opinion?

During this year's conference a new league of WAC officers was elected (see below). Also, we decided to raise the annual dues to 20 US \$ from 1997 onwards (to be transferred to the new treasurer John A. Fornshell (Alexandria, U.S.A.).

It has been decided in the meantime where our next International Conference on Copepoda will be held. A fantastic spot has been selected. It is a pity we have to wait until 1999 to go there (see below ...).

Please do not forget to send reprints of your papers to the "MONOCULUS-library" (which will certainly then appear in the next issue of MONOCULUS) and the "C.B. Wilson copepod library" (see below).

There is a rising amount of scientific publications on various aspects of copepod biology, some published in journals difficult to access. Therefore, we asked several colleagues for help in providing recent literature from their respective fields of interest. However, these sources turned out to be so vast that we could consider only a selected sample for MONOCULUS. We will try to get a legal permit to put all titles on the MONOCULUS-homepage from the WWW-service (under: http://www.hrz.uni-oldenburg.de/monoculus).

Candidate members of the WAC are reminded of sending a short article about e.g. themselves, their research interests and running projects to the editor of MONOCULUS.

This issue of MONOCULUS came about due to the efforts of several colleagues. The editorial staff especially thanks all those colleagues who volunteered in distributing MONOCULUS in their respective countries and those providing us with literature sources. The contributions of Gus Paffenhöfer, Janet Reid, Myles G. O'Reilly, and Eduardo Suárez-Morales, are greatfully acknowledged. We thank Angelika Sievers for constructive work on the text and as always Mark Pottek for providing us with caricatures depicting copepods' daily life.

Due to the delay of some contributions the newsletter this time is later than usual. Christmas and New Year are not that far anymore. We wish you all the best for both of these occasions:

A Merry Christmas and a Happy New Year!

A Brief Assessment of the Sixth International Conference on Copepoda

I had been asked to objectively and critically assess our recent copepod conference in Oldenburg. First of all, I would like to emphasize that Horst Kurt Schminke, Sigrid Schiel, Hans-Uwe Dahms, Thomas Glatzel, and the entire local organizing committee and associates organized and conducted this meeting very well. Having organized and run similar meetings, I am familiar with the efforts necessary to be successful. Hotels in Oldenburg were superb (considering of the low daily rate), and facilities at the University, plus equipment were excellent.

Concerning the conference and its science, it was felt that the format including symposia, i.e. longer, and sessions with shorter talks, and posters allowed for a range of different types of presentations. Although the relatively short talks in the sessions covered new ground, over 50 % of symposium presentations were not including much new research. I would have expected that particularly the keynote speakers would have been short on published data, present and discuss unpublished results, and provide an outlook into the future. They also could present hypothetical considerations which would stimulate discussions. Such presentations could also be published in the symposium proceedings which, in comparison to tightly refereed journals, should provide an opportunity to present such hypothetical or speculative considerations. At the end of each oral presentation there was usually ample time for questions, discussions and comments. However, at the end of the vast majority of talks which I attended, there was no, or a rather limited effort, to develop a discussion. The audiences were rather passive, despite the fact that there seemed to be in almost every talk some statements or comments which would have deserved input from the audience. For future copepod conferences, we ought to find a mode through which (a) the respective chairman or the organizing committee recommends to



each respective speaker to practice her or his talk in order to stay within the period allotted for speaking, thus leaving the time allotted for discussion for exactly that purpose. Of similar significance should be a clear reminder by the organizing committee to the participants to be ACTIVE participants by being involved in the discussion following those talks which would cover their field of expertise. Also, the respective chairman should make a serious attempt to stimulate a discussion at the end of a talk in case the audience is not presenting any questions. Ensuing discussions used to be the spice of a talk. Previous meetings of similar nature, such as the zooplankton production symposium in Plymouth in August 1994 suffered from the fact that almost every speaker utilized the speaking and discussion time for their talk thus leaving usually zero time for questions, although numerous colleagues would have liked to ask questions. We can benefit from all these experiences by developing a symposium format for speaking and subsequent discussions by stressing the significance of both.

If at all possible, we should avoid parallel sessions, unless we are able to present a large number of truly promising topics. I noticed that several sessions drew much larger audiences than the respective co-occurring ones.

Last, the significance of topics at future Copepod Conferences. Once we know about the location of the next Copepod Conference and its organizers, the president in conjunction with the international organizing committee and the head of local organizers, should suggest topics for the upcoming conference. Certain topics of significance could be addressed at consecutive conferences, i.e., one does not need a complete set of brand new topics at each conference. For example, phylogenetic or evolution-related presentations will probably always be of considerable interest, as those covering the extraordinary range of juvenile behaviour.

Finally, I would like to congratulate the organizers and their associates on the success of getting numerous scientists from financially disadvantaged countries to participate in the Sixth International Conference on Copepoda!

G.-A. Paffenhöfer (Savannah)

Four out of the Responses to the "Sixth International Conference on Copepoda"

Dear organizers ...

As one of the few WAC members who have attended all of the six copepod conferences, I was privileged to have the rare opportunity to witness a tremendous success of the Sixth International Conference on Copepoda held in the cradle of the WAC - Oldenburg, Germany. The local organizing committee led by Prof. Dr. Horst Kurt Schminke, had done a super job in their organization and conduction of the Sixth Conference. I am certain, this "Oldenburg Conference" will live in the history of the WAC as one of the most successful international conferences. The Sixth Conference was filled with excellent lectures, presentations, and posters just like the previous five conferences. However, in addition, this last conference boasts for: 1) hosting by far the largest number of attendants (more than 240 copepodologists from 38 countries), 2) the success in raising sizable funds to assist about one-fifth of the attendants to participate in the conference, 3) demonstration of copepodologists' talents on the stage, and 4) showing the excellent chefs out of the copepodologists. I hereby take my hat off again to the "Gang of Oldenburg" composed of Hans-Uwe Dahms, Thomas Glatzel, Hans-Jürgen Hirche, Peter Jaros, Sigrid Schiel, Horst Kurt Schminke, and Gerd Schriever. You have done a marvelous job!

Ju-shey Ho (Long Beach)

The conference in every aspect was a great success, a fitting tribute to your organizational skills. While the academic sessions were immensely beneficial and informative, the social activities (musical night and cooking night), so thoughtfully arranged, provided the relaxed atmosphere that promotes initimate interaction with other copepodologists. My special appreciation goes to all your helpers and assistants who went out of their way to make our stay in Oldenburg comfortable and our participation in the conference useful.

T. Ramakrishna Rao (Delhi)

Thank you and the organizing committee for the very interesting and informative meeting. We had a wonderful time in Oldenburg. I am well aware of the fact that it was a hard work for you all to organize the Symposium, but it was worth doing, the result was impressing.

Anna Pasternak (Moscow)

Vielen herzlichen Dank für das große Foto der Teilnehmer der Sixth International Conference on Copepoda; darüber haben wir uns sehr gefreut. Eine Videoaufnahme von der Tagung (Sendezeit war am 1. August) haben wir von Bekannten auf Helgoland bekommen; sie zeigte Interviews mit Ihnen, Herrn Paffenhöfer, usw., und ich durfte als Copepode mit den Füßen rudern. Die Conference in Oldenburg war für uns ein schönes Erlebnis; die Vorträge waren sehr gut und die Atmosphäre sehr freundlich und harmonisch. Allen Organisatoren einen großen Dank!

Marianne Kirchner (Helgoland)

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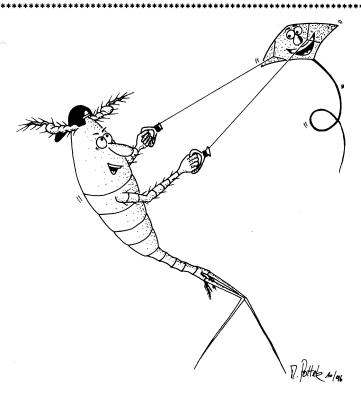
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Note from the Ad Hoc Committee on 1999 Conference Site

It is our great pleasure to report that the Seventh International Conference on Copepoda will take place in Curitiba, Brazil, in 1999. Dr. Rubens M. Lopes of Centro do Estudos do Mar, Universidade Federal do Parana is in the process of forming the Local Organizing Committee. A formal announcement of the next conference and background information about the conference site will be provided by the Local Organizing Committee and appear in the next issue of MONOCULUS.

1996-99 WAC Officers



ACTIVITIES of WAC members

My work in marine pollution monitoring continues though my institution - the Clyde River Purification Board - has now become part of the new Scottish Environmental Protection Agency. Please amend the membership records with this new institution name - my working address has remained the same.

My interest in copepods associated with marine invertebrates continues with copepod material being collected as a by-product of monitoring surveys of marine benthic communities undertaken by myself or colleagues in other organisations. Some of my material I have passed on to other workers - a nice specimen of *Botryllophilus norvegicus*, for instance, was presented to Shigeko Ooishi who published a beautifully detailed re-description in 1996. Her figure of the habitus appears on the front cover of MONOCULUS No. 31.

I have also begun, at last, to publish some papers myself including a note on commensalism between the harpacticoid *Bulbamphiascus imus* and the polychaete *Capitella capitata* (Moore & O'Reilly, 1993), as well as a review of the family Clausiidae with the description of a new genus and species *Megaclausia mirabilis* (O'Reilly, 1995).

More recently I was invited to examine a number of invertebrate associated copepods recovered by the National Museum of Wales during a survey of the benthic biodiversity of the southern Irish Sea. This included some interesting new records of *Nereicola ovatus*, *Seliodes bocqueti*, and *Aphanodomus terebellae*, as well as the apparent re-discovery of *Jeanella minor*, a highly transformed copepod of uncertain affinities unrecorded since the type-description by Scott in 1902. These are described in my contribution to a special volume published by the museum (see O'Reilly, 1995: in Mackie et al.).

Myles G. O'Reilly (Glasgow)

BIRTHDAYS
Vivian Gotto

BIRTHDAYS Vivian Gotto

Interviewing Copepodologists

Robert Vivian Gotto became 75 years old on the 13th September. MONOCULUS sent its congratulations in time and we all wish that he will stay as vital and active and enjoying his family, as we have seen during this year's copepod conference in Oldenburg. Remember him singing 'Danny Boy' on stage during our musical evening?

Being retired already since 1984 as a reader of zoology, belonging to the biology department of the Queen's University of Belfast (Northern Ireland), Dr. Gotto still keeps his interest in copepod biology, especially the ecology and life cycles of symbiotic copepods. He is one of the few members of the 'World Association of Copepodologists' who participated in all 'International Copepod Conferences' starting in Amsterdam 1981.

Dr. Gotto was born at the time of Northern Ireland foundation on 13 September 1921 in Belfast (North Ireland). There he went to high school and to Queen's University from 1940-43 thereafter, where he got his B.Sc. in 1943. From 1944-46 he had to serve military duty in the Air Force in, among other places, England, Scotland and Sri Lanka. In 1949 he finished his M.Sc. thesis on 'Plankton of Stranggoud Lough'. In 1964 he was honoured with a D.Sc. for his published work on associate (commensal, parasitic) copepods since the 1950's. Being a



lecturer and senior lecturer, and from 1980 a reader at Queen's University, he studied copepods mainly from the British Isles, but also from Norwegian and Australian coasts. In August 1947 Vivian married his wife Gwyneth who is a zoologist as well and who first worked as an assistant lecturer but later on for 33 years as a high school teacher. She usually accompanies him when participating at the copepod conferences. The couple has two children and one grandchild. A daughter is living in Washington D.C. and was married to a professor of palaeontology teaching at Harvard University. His son, being a 'Christmas-child' (born on the 25th December 1948) is living in Belfast. Both hold science degrees.

As a biologist Dr. Gotto has experienced a few remarkable extra-curricular activities. Like many senior colleagues, he was on duty with military service. His experience, however, sounds like a Robinson Crusoe adventure: In 1944 he was sent to the 'Cocos-Keeling-Islands' in the middle of the Indian Ocean to 'protect' a 'cable and wireless station' for ten months. With him another Irishman, about twelve Australians, and a Chinese cook. "We had our guns, but no ammunition" Gotto recollects. "Fortunately, we never had to use them. We had a wonderful life with plenty of food and drink, at one of the most beautiful places on earth." But Dr. Gotto's C.V. is also exceptional for another reason. He participated at the famous Wimbledon tennis championship five times (from 1949 to 1959) and played for the Irish Davis Cup Team. This sportive record is only outnumbered by his 49-year-old son who is mentioned in the 'Guinness book of records' for participating 122 times in squash games for Ireland. It seems as if sports have a long family tradition, since his father, Charles Gotto, was a famous hockey player.

"What is your main interest in copepod biology?" I asked him during a break of the copepod conference. "First of all, marine associate copepods, their taxonomy and biology, since I finished my studies on planktonic copepods in 1949. In the last years I became mainly fascinated by behavioural aspects such as host recognition and mate recognition". Being asked about the effects of the political situation in North Ireland on his private and professional lifesince not everyone is familiar with the Irish situation - he denies a major impact. Although—, one becomes accustomed to a situation with frequent violent outbursts. The everyday situation in academic life, however, is little affected." "What do you think about the future of

the WAC and systematics in general?" "Taxonomy has experienced a vanishing role in the last decades in the the concert of biosciences" he answered. "As other disciplines more and more recognize, the importance of a sound natural system of organisms is the base of all biology - I do think that systematics has to and in fact is already regaining territory." As for the WAC Vivian Gotto leaves us - the next generation - with a promising crescendo: "I took part at all international copepod conferences (from the first taking place in Amsterdam in 1981 to this one in Oldenburg) and I now see a growing number of participants, more and more elaborate presentations and thoughtful and sophisticated approaches on all aspects of copepod biology. This makes this systematic conference so special - to elucidate all the diversity of life using the taxon Copepoda as an example. Especially encouraging is the rising number of young colleagues and students who certainly will provide motivated stimulus for coming research on the Copepoda."

Hans-U. Dahms (Oldenburg)

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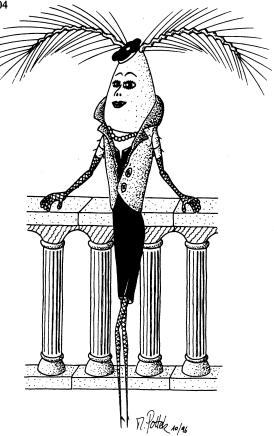
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Charles Branch Wilson (1861-1941) was the author of numerous works on Copepoda and Professor of Biology at the Massachusetts State Teachers College at Westfield. For many years he held the honorary appointment of Collaborator at the U.S. National Museum (now National Museum of Natural History), Smithsonian Institution. Most of the Museum's collection of copepods was entrusted to him for study, and the results of much of his research were published in the Proceedings and Bulletin of the Museum. Wilson bequeathed to the Museum his extensive library of copepod and argulid literature, together with his card files. The latter included a card for the author of each published work, and a card for each species and genus listing all known published references to that taxon, i.e. a synonymy. The donation also included Wilson's original illustrations, dismounted from their plates, and extra reprints of his own works.

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