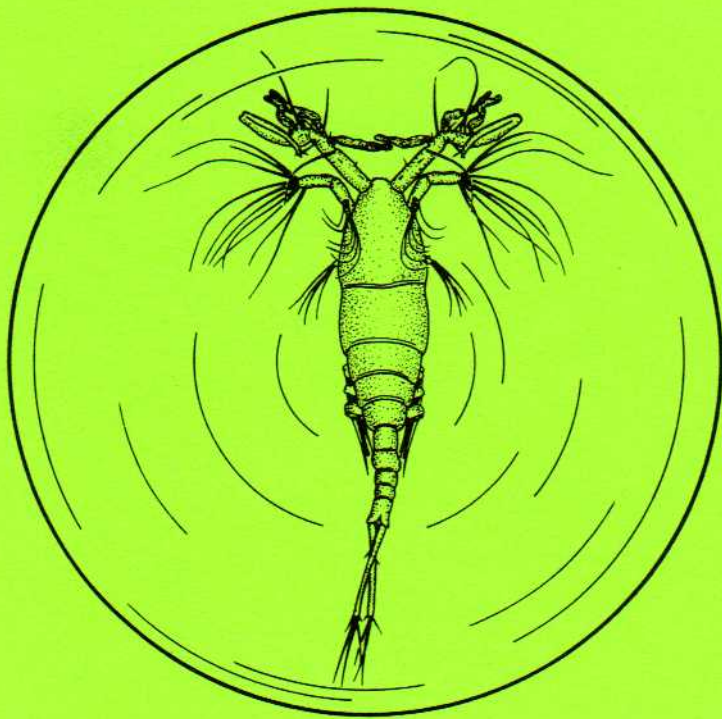


# MONOCULUS

Copepod Newsletter



Nr. 24

September 1992



Bibliotheks- und Informationssystem der Universität Oldenburg  
North American Edition distributed by National Museums of Canada

# MONOCULUS

Copepod Newsletter

Number 24

September 1992

Edited by: H. Kurt Schminke, Fachbereich 7 (Biologie), Universität Oldenburg, Postfach 2503, D-2900 Oldenburg, Germany.  
Gerd Schriever, Institut für Hydrobiologie und Fischereiwissenschaft, Universität Hamburg, Zeiseweg 9, 2000 Hamburg 50, Germany.  
Hans-Uwe Dahms, c/o Department of Biology, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1.

Cover by: M. Pottek, Oldenburg.

Produced by: H. Kurt Schminke and Bibliotheks- und Informationssystem (BIS) der Universität Oldenburg, Ammerländer Heerstr. 67/99, D-2900 Oldenburg, Germany.

Distributed in North America by: National Museums of Canada (Chang-tai Shih, National Museum of Natural Sciences, Zoology Division, P.O.Box 3434, Station D, Ottawa, Ontario, Canada K1A 6P4).

This issue has been typed by: Elke Feeken, Arbeitsgruppe Zoomorphologie, Fachbereich 7 (Biologie), Universität Oldenburg.

(This document is not part of the scientific literature and is not to be cited, abstracted or reprinted as a published document)

---

Died:

Siegfried Husmann (1915 - March 1992)

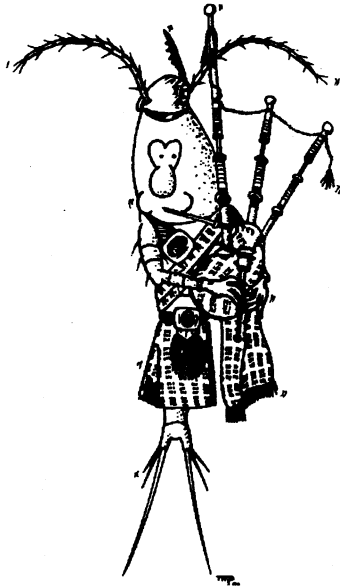
Deadline for the next issue of MONOCULUS: 15th March 1993

## Editorial

In MONOCULUS 19(1989) we opened a contest to find a name for Mark Pottek's copepod which appears in ever-changing disguises and which in the meantime has been borrowed also for issues of other newsletters. By now we have received two suggestions, the minimum number for a contest. Brian Bradley came up with "Coco" and Marc Bergmans with "McSilliped".

Some readers have expressed disappointment over the fact that our little copepod has no female companion. Stating the problem is one thing, resolving it quite another. Mark Pottek has pondered over the problem how to indicate the sex. The genital double somite is of no help because in a decent drawing one would expect it to be more or less hidden. As to the sexually dimorphic antennules, these would become a distinctive feature only after our little copepod comes of age. Judging from his antennules, he still is a youngster - in the "Coco-stage" as it were. We have to await his final moult into the adult Mr. McSilliped with prehensile antennules. It would be most appropriate if that transformation took place just in time to celebrate the next issue, which will be the 25th as everyone is aware. We might then have a chance - as also suggested by Marc Bergmans - to finally meet Miss O'Frioid, McSilliped's Irish girlfriend.

Membership of WAC is constantly growing. The new names appear in the Directory but one would like to know a little more. Therefore newcomers since publication of the "Survey of Copepodologists of the World" have been asked for a few words of introduction. We have received 23 responses which are published in this issue. The other contributions are by G. Boxshall, C. Cheng, H.-U. Dahms, D. Defaye, G. Gusev, V. Spiridonow and J.C. von Vaupel Klein. Many thanks to them and to our artists Birgit Schumacher and Mark Pottek.



*J. K. Minz*

*J. Schumacher*

*Jans-U. Jelinek*

7070707070

BIRTHDAY

7070707070

Bernard H. DussartBernard H. Dussart

## Interviewing copepodologists

This year, B. Dussart will celebrate his 70th birthday. I went to visit him at his home, situated in the Dordogne forest, only one kilometre from the world-renowned site La Ferrassie, where the skeletons of the Neanderthal Man were discovered. Now retired, he is still very active and involved in his work. He consecrated his professional life to numerous subjects, but the two most important were limnology and of course copepods, especially freshwater copepods.



With regard to limnology and more generally, the aquatic environment, he is busy writing at the moment a chapter of a book about the Dordogne, the well known river in south-west France, cradle of the Cro-Magnon Man. Now, let's come to copepods. B. Dussart installed microscopes, a library (with more than 6000 references concerning freshwater copepods) in the typical roof-tower of his Dordogne home, where he is nevertheless far from being isolated from the rest of the world! He enjoys communicating and is open to questions and exchanges of ideas, revealing the multifaceted diversification of his career.

He talks with discretion about his university studies at a difficult period for him, from 1941 to 1945, at the Faculty of Sciences of Paris and his professors of that époque: Pérez, Teissier, Drach, Prenant, Piveteau, with whom he began his first study on the middle ear of amphibians. Then, in 1945, he received a proposition to organise a lake research station at Thonon Les Bains (Haute-Savoie). *"Inspired by my youth and the taste of this adventure (development of a new structure), I abandoned the subject of my research at that time to consecrate myself entirely to hydrobiology."*

After a training period at Windermere, his research focused first of all, on lake zooplankton, then moved on to physical limnology which explains why his State thesis dealt with lake water movements. Thanks to his enthusiasm, the Thonon station has become a pole of interest for students who come each year to study limnology until then not taught in France. Little by little, a more intensive programme of courses was developed, national and international contacts were made. Finally, in 1957, the Centre de Recherches Géodynamiques de l'Université de Paris was created. These two centres have become, today, a permanent research complex (Institut de Limnologie) with laboratories, harbours, scientifically equipped boats, a library and comfortable accommodation facilities for students and scientists. The book "Limnologie", published in 1966 (and reprinted in 1992) is the only one in French concerning this subject. Since 1955, he organised annual congresses of the French section of SIL, which has since become the Association française de Limnologie (AFL). He was President of AFL from 1975 to 1979.

His expertise in the subject of limnology enabled him to become a consultant to the United Nations and the Comité français des Grands Barrages. He was thus able to participate in the elaboration of ecological recommendations prior to the construction of man-made lakes, as in Ghana and Ivory Coast in Africa as well as James Bay in Canada, where he once saw an aurora borealis which inspired him to write one of his poems and which remains a wonderful life-long souvenir. This particular field of interest drew him also to the other end of the world, to Cambodia and the Mekong where he initiated studies on the dynamics of sediments transported by this big river.

Always present in his baggage, was the ubiquitous plankton net kit! During a population dynamics course which he gave in Antananarivo, he took his first samples for the study of the copepod fauna of Madagascar. The unforgettable memory of his finding of a single male, at the same spot, of a cyclopid species that, 30 years earlier had been described by F. Kiefer from a single male is always with him. *"It was a male of Bryocyclops mandrakanus. To rediscover a single specimen of a species, which until then was only known by one specimen - isn't that the proof of the constancy of Nature? And, doesn't that prove that it IS worthwhile describing a species even when you only have a single specimen?"*

Altogether, he published more than 80 papers on freshwater copepods. He described 71 new species - in fact, we counted them together and he was the most surprised of both of us. Without any false modesty, he feels proud that F. Kiefer dedicated a genus in his name (the dedicated photograph of his mentor is on his desk). There is also a genus *Dussartiella* (an amphipod from Madagascar created by Dr. S. Ruffo) and several *dussarti* and *bernardi* species.

His knowledge of fish is another facet of his research. He published ten papers successively on coregones, charrs, lake trout. His interest in the biology of the coregone-group led him to study their nutrition and so he came to planktonic microcrustaceans, particularly copepods and amphipods in mountain lakes.

His frankness and his passion for current ecological problems and for instance, his concept of ecophase and its applications in ecology caused him certain enmity. But, as he says, "*Nobody is a prophet in his own country.*"

His career is of course not exempt from administrative tasks. In Thonon, then in Gif-sur-Yvette where he was Deputy Director of the Centre of Hydrobiological Research from 1963 to 1970. When the latter post was suppressed by the Direction of French Research, he went to the Muséum National d'Histoire Naturelle de Paris and finally, from 1974 to 1987, to the Biological Station of Les Eyzies, which is a field Station of Pierre et Marie Curie University (Paris VI). During the same period, he went to Canada, as a visiting professor, at the Université de Montréal (Québec), then at the University of Waterloo (Ontario). He has always considered teaching as a mission, at the risk of "irritating" his entourage (my own commentary! - but soundly confirmed by his children and grand-children ...!). "*I have always tried to be of help to everyone who asked me, students, colleagues, in my personal and professional life. I did not always succeed!!*"

Q. When and how did you observe your first copepod?

A. *In May 1945, in a sample from Lake Léman. I had just opened the first field station at Thonon with the available material of the époque, - a canoe, a simple plankton net and an old microscope! This station was intended to initiate a programme of limnological studies to improve fishing in Lake Léman. The first copepod I had ever seen was a Cyclops of the abyssorum group (in fact a C. a. praealpinus) and it was then that I discovered these beautiful animals and also the difficulty in identifying them!*

Q. Who, at this time, was working on copepods in France?

A. *In a note published in the Bulletin de la Société Zoologique de France, Dr. Lindberg wrote in 1950 that copepods were almost unknown in France. Jean Roy had just declined the offer to write the Faune de France about freshwater copepods. I had the audacity to propose replacing him and I began to collect information and samples and I contacted Dr. F. Kiefer in Konstanz. It was the beginning of a long correspondence which lasted until his death in 1987.*

Q. Were you encouraged to continue these studies?

A. *No. It was not my Administration's main topic of interest, and, unluckily, when the manuscript of the Faune de France was ready, the series Faune de France was suspended! I had to look for another publisher and that took me eight years, from 1958 to 1966. Then, thanks to Prof. P. P. Grassé's help, I finally found a publisher*

*(Boubée) and the first volume of "Les Copépodes des eaux continentales d'Europe occidentale" came off the printing presses in 1966.*

Q. You always insist on the necessity of precision in multiplying observations and drawings. How did you start?

*A. My colleague Dragesco gave me the first advises for drawing. Thanks to his help and with perseverance, I published my first drawings in 1957. I hope to have improved them since then....*

Q. Why did you continue on copepods?

*A. Because I was caught up in a chain of events which have never left me. As I was known for the identification of copepods, my colleagues sent me samples... and so, it goes on...*

Q. What do you enjoy most in copepod taxonomy?

*A. The difficulties due to the extreme diversity of their morphology. Not a day goes by when I don't discover some detail which merits a more profound observation and a better drawing. My problem is time - we need to spend so much time, observing, dissecting, drawing, photographing! And, thanks to copepods, I travelled a lot: Africa, Madagascar, South America, North America, South-East Asia and of course, Europe!*

Q. Do you think that today, copepodologists achieve better results than a few decades ago and if so, in what fields?

*A. Yes. On the whole, descriptions are more precise and more comprehensive, and drawings are better. We are not all as proficient as our elders of the beginning of the century like Sars, Giesbrecht, Kiefer, etc... and far too numerous are those who don't even know what to draw!*

Q. Do you think that the role of copepods in nature is sufficiently known and studied?

*A. It is a question of mode and media. It is much easier to publish papers on butterflies, mushrooms, birds or mammals, subjects considered useful to society than to sensitise people and above all, decision makers on the impact of copepods in nature. But imagine a natural catastrophe of the following type: copepods will have completely disappeared! There would not be any fish left in the lakes and oceans. Water purification would be weakened. Pollution would increase. In Africa and a part of Asia, people would no longer suffer from dracunculosis, their mortality rate would decrease. Then, malnutrition would increase, opening the door to famine and ... imagine ... How many politicians, technicians, and even scientists would be concerned?*

Q. I was told that during limnology training courses in the Massif Central (in Lake Pavin), the students prepared a copepod soup, did you taste it?

A. *No! but I've heard that it was excellent. We surely underestimate freshwater copepods: they could be used for multiple purposes ... if we knew more about their biology and their physiology.*

Q. After studying copepods for so many years, what do you think about freshwater copepodology progress?

A. *In 1945, the whole world used Gurney's book. Then, in 1959, the book by Wilson & Yeatman edited by Edmondson took over. In 1960, Kiefer gave elements for Europe. Then, there were the two books I published for Western Europe; used everywhere although they were not destined for that purpose. In the meantime, a lot of new species have been described and genera revisions have been numerous. That is why we would need a daily updated data bank to closely follow copepod taxonomy. The World Repertories (in three volumes) for Continental Copepods, listing the species known in the eighties and published by myself together with Daniëlle Defaye would need to be brought up-to-date, to take into account all recent discoveries (particularly the two first volumes). We need more scientists (and equipment) active on each continent and not all concentrated only in one or two rich countries. We also need a school where beginners from all over the globe could come to learn to identify, draw, and describe their findings in standardised terminology .... we can daydream ...!*

Q. I suspect that you were extremely fond of Thonon. Why did you leave?

A. *Because I was asked to become Deputy Director of the Centre of Hydrobiological Research in Gif-sur-Yvette near Paris. It was an opportunity for me to move nearer to Paris, where I was also engaged in scientific tasks at ORSTOM. Afterwards, I never had the opportunity to return to Thonon. So, after my work at the Museum, fate led me to the Biological Station of the University of Paris in Les Eyzies. And, that is how I became a "perigourdin", mad about cepes, foie gras, the excellent wines of Bergerac and the Dordogne and its history.*

Thus concluded my interview with Dr. B. Dussart, a born communicator, overwhelmingly enthusiastic, but also a good do-it-yourself-man, loving music (he plays violin and flute) and ready to do so much more !!!

Daniëlle Defaye, Muséum National d'Histoire Naturelle, Laboratoire de Zoologie (Arthropodes), 61, rue de Buffon, F - 75005 Paris



## **----- Scientists in Russia in Need for Help -----**

Dear colleagues,

Surely, you know the difficulties in our country which are likely to continue for another 3 years. Increase of prices up to 20 times for everything (food, clothes, service) results in an increase of people who have to live in poverty. A very difficult situation therefore arises for old people who are retired, including scientists. In St. Petersburg there is a lodging house for veterans of sciences where many old scientists (about 100 persons) have to live. Just now Dr. Bychowskaya-Pavlovskaya, Prof. Rubzov and other parasitologists and zoologists known abroad live there. This lodging house receives financial support from the Russian Academy of Sciences which covers only about 30 % of what is needed. As a result the house was forced to reduce food, service and treatment for sick old people. The same situation prevails in the St. Petersburg hospital of the Academy of Sciences.

All the world is hoping for an irreversibility of our democratic reforms and for a normalisation of life in Russia. We would therefore be very thankful for help for our retired scientists by means of financial support for the lodging house and hospital. Also drugs for medical treatment (of hypertension, heart attack, arteriosclerosis, diabetes, nephritis, ulcers and others) would be needed as well as food (especially dried milk, flour, butter, cheese, oil, sugar, canned meat, vitamins, tea and others) and other things such as bed-clothes, soap and so on.

Parcels can be sent to the following addresses:

1. Dr. A.I. Yankovskaja, Lodging house of Scientists, town Pushkin (St. Petersburg), Mayakovskogo 93, 189620, Russia.
2. Dr. S.I. Morozova, Hospital of Russian Academy of Sciences, Toresa Avenue 72, St. Petersburg, 194017, Russia.

With many thanks,

Prof. Poljansky, Prof. O.N. Bauer, Prof. A.V. Gusev (Zoological Institute, Academy of Sciences, St. Petersburg)  
20.04.1992

## Eighth International Meiofauna Conference 1992

The EIMCO '92 took place at the University of Maryland at College Park (Washington D.C.) from 9.-14.08.92. The conference was a great success and was well organised by its convenors Margaret Palmer and Bob Higgins who were assisted by several colleagues and students. There were 120 participants from 18 countries presenting 72 papers.

Fourteen presentations dealt exclusively with the primarily benthic copepod taxon Harpacticoida except for two contributions including the Cyclopoida. One was presented by Janet Reid and entitled "Relative latitudinal diversity of continental cyclopoid and harpacticoid copepods of the Americas", the other by G. R. Lotufo and C. E. F. da Rocha who talked about "Psammic marine copepods from Brazilian beaches". Harpacticoids were the research objects of several environmental bioassay and pollution studies carried out by Bruce Coull and Tom Chandler (together with Andrew Green, Liza Dipinto and E. Blood) and demonstrating a high-density meiofauna culture system for applied studies. Cynthia Decker showed "Field distributions and feeding behaviour of the harpacticoid copepod, Pseudobradya sp.". B. D. Robbins, Susan Bell and M. O. Hall gave a talk on "Harpacticoid abundance at multiple scales of patchiness: relationship to seagrass density and seagrass bed shape". In a special 'deep sea session' Gerd Schriever reported on "The influence of an artificial disturbance on the harpacticoid copepod community in the deep Southeast Pacific Ocean" and Hans Dahms demonstrated the "Biodiversity in a harpacticoid taxon from the deep sea" during a 'biodiversity session' earlier in the week. David Thistle and M.S. Foy presented a talk "On the vertical distribution of a benthic harpacticoid: field, laboratory, and flume results, plus an overview of ongoing work". Darcy Lonsdale et al. talked on "Changes in physiological rates and gut-cell structure associated with a "reproductive-resting" stage in a harpacticoid copepod". In a 'freshwater/ground water session' Vera Kowarc and K.J. Clauss showed the "Horizontal distribution patterns of a harpacticoid community" and Thomas Glatzel and H. K. Schminke provided new insights into the "Mating behaviour of the ground water copepod Parastenocaris phyllura (Harpacticoida)". Rony Huys talked about "Aspects of zoogeography, phylogeny and feeding biology of Leptastacidae (Copepoda: Harpacticoida)".

Most of the other contributions included harpacticoid Copepoda as one of the most abundant meiofauna taxa. The members and the new chairperson of the IAM (International Association of Meiobenthologists), Paul Montagna, are looking forward to the next meeting in 1995 to be held in southern France.

Hans-Uwe Dahms

## Sea Lice Workshop

A specialist workshop on the biology and control of sea lice (Copepoda: Siphonostomatoidea: Caligidae) will be held on 3rd and 4th September in Paris during the First European Crustacean Conference (31st August - 5th September). The workshop is organised by Geoff Boxshall (The Natural History Museum, London) and André Raibaut (Université de Montpellier II). The provisional programme comprises 23 oral presentations and 6 posters on caligid sea lice as well as 2 oral papers and 4 posters on other (non-caligid) parasitic copepods and branchiuran fish lice.

The proceedings of the workshop will be published as a hardback book entitled: **PATHOGENS OF WILD AND FARMED FISH: SEA LICE** by Ellis Horwood Ltd., a subsidiary of Simon & Schuster. It will form part of their existing series on Aquaculture and Fisheries and will be edited by Geoff Boxshall (London) & Danielle Defaye (Paris). The estimated publication date is JULY 1993.

The workshop has been awarded a small grant by the Fisheries Directorate of the European Economic Community (Programme AIR). This will be used primarily to provide assistance with travel for young scientists and to support publication of the proceedings.

G. Boxshall, London

---

### OFFER AND REQUEST CORNER

---

*Please send me a xerox-copy of the 1988 paper by the late T. Ito, referred to at the very bottom of page 12 of MONOCULUS no. 23. If you cannot let me have also a xerox-copy of an English, German, or French translation of this paper, could you very kindly advertise my request in the next number of MONOCULUS, in case somebody else has such a translation?*

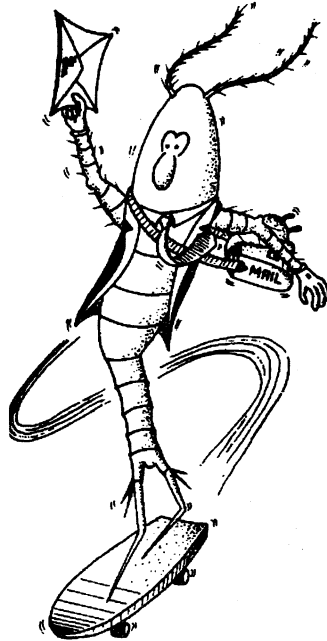
Kindly write to: Dr. R. Hamond, Scaldbeck House, Morsten, Holt, Norfolk, England NR25 7BJ.

## Arthropoda Selecta - a new journal

The publication of our journal "Arthropoda Selecta" has been started. The scope of the journal is the morphology, taxonomy, development, life-histories, geography, phylogeny and evolution of Crustacea, Chelicerata, Myriapoda and other arthropods, both recent and fossil, excluding particular papers on insects and mites. The journal is published mostly in English with extended Russian abstracts. Two issues have already been published and the third one should go to the printer in September. However, not everything is going perfectly, since the economic environment in East Europe still does not favour such small enterprises as ours. It has been the easiest way for our publishers to have an account in a Polish bank, but payment through this Polish bank was not convenient for our western subscribers.

So, if you decide to subscribe to "Arthropoda Selecta", you can simply inform us about your intention. You will receive the journal and, as soon, as we have reorganised the financial background, you will also receive a new address for payment. Subscription rates will not be increased. Moreover at least one free supplement per year will be available for our subscribers.

One further problem ~~should be kept in~~ mind. The mailing of foreign correspondence within the former Soviet Union is very slow and this can cause delays. You can use FAX or approach any member of the Editorial Board who is working outside Russia. We will inform our subscribers about such persons. Until Christmas 1992 I am such a person. I will be glad to answer any questions related to "Arthropoda Selecta".



"Arthropoda Selecta" is a chance to build a new bridge between eastern and western zoologists.

Vassily Spiridonov, Alfred-Wegener-Institut für Polar- und Meeresforschung, Am Handelshafen 12, D-2850 Bremerhaven, Germany

