Heinz Löffler passed away on 13 October 2006. His contribution to advancing the systematics and ecology/palaeoecology of several entomostracan groups (Copepoda, Branchiopoda, Ostracoda) is substantial. Of the 164 publications he wrote over 55 years, two-thirds dealt with Crustacea.

Heinz was an outstanding naturalist who travelled and sampled inland waters all over the globe. His scientific career started in 1949 when, as a young biologist from the University of Vienna, he participated in an expedition to Iran (Löffler, 1953b). He extensively studied the ecology and the fauna of various saline lakes. Three years later he presented the results in his Ph.D. thesis (Löffler, 1955a). His graduate and post-graduate studies were conducted in Sweden, at both Lund and Uppsala (Löffler, 1951, 1953a) and in the U.S.A. at Yale University. Especially the collaboration with Professor G. Evelyn Hutchinson had an important impact on his further career as a limnologist. The joint publication Hutchinson & Löffler (1956) became a classic in limnology.

His mentor in carcinology was Vinzenz Brehm, who worked at the Biological Station Lunz am See in Austria. As V. Brehm, Heinz Löffler became a specialist in the taxonomy of both planktonic and benthonic limnic entomostracans, i.e., copepods (harpacticoids, calanoids, and cyclopoids) as well as cladocerans and ostracodes. His experience with the Entomostraca of Iranian lakes was extended to the investigation of saline water bodies in eastern Austria (Seewinkel) around the Neusiedlersee (Löffler, 1959a,b,c). Parallel to the saline lakes, Löffler also investigated the aquatic subterranean fauna (ostracodes and copepods) from the groundwater-fed wells of this area (Löffler, 1960a,b). Here, he discovered new ostracode taxa, among which Pseudocandona pannonica (Löffler, 1960) and...
Fig. 1. Heinz Löffler (September 2000) speaking on limnology in Austria and on biodiversity of Crustacea. Lecture given at the Austrian Academy of Sciences in Vienna for a European course on groundwater ecology (photo D. L. Danielopol).

*Mixtacandona transleithanica* (Löffler, 1960). These collections still exist and are now being transferred to the Natural History Museum in Vienna.

Besides studying alkaline lakes during the 1950s and 1960s, Heinz Löffler investigated tropical high alpine lakes (>2500 m) in South and Central America (Löffler, 1954, 1960a,d), and in Asia, especially in Nepal, Borneo, and Sri Lanka [Ceylon] (Löffler, 1968c,d, 1969, 1973b) as well as in Africa (Löffler, 1964, 1965, 1968a,b). Beyond describing new species of copepods and ostracodes, Löffler made interesting observations on the microevolution of several crustacean groups, like harpacticoids and calanoids. The harpacticoid genus, *Maraenobiotus* from Nepal and Africa, for example, is represented by populations with clear morphological divergence from lake to lake. Löffler (1968d) explained such differences using biogeographical and/or ecological arguments. He pointed out that the crustacean fauna of the high alpine lakes in Central and South America as well as in Africa is of recent age, and often represented by psychrophilic species that spread from the north during the Quaternary. This hypothesis was again forwarded when he discussed the origin of the harpacticoids of the high alpine lakes of Andalusia, in Spain (Löffler, 1974c).

Between 1963 and 1965, Heinz was involved in a palaeolimnological project initiated by the German research organisation DFG. The task was to investigate
the ongoing trophic change of Lake Constance due to anthropogenic impacts. Löffler’s excellent knowledge on Ostracoda helped to reconstruct the history of the eutrophication state of this lake (Löffler, 1969). It became clear that certain ostracode species, like *Cytherissa lacustris* (G.O. Sars, 1882) could be widely used in Europe for the ecological indication of the thermic and/or trophic state of lakes. Löffler used this approach during the next 30 years of his scientific career. In Austria, he initiated systematic palaeolimnological studies, especially in Carinthia, where many lakes had become eutrophic or meromictic during the last centuries (e.g., Löffler, 1971, 1972a,b, 1975b,c).

Heinz had many human and intellectual strengths, above all an incredible enthusiasm in looking at aquatic habitats and their organisms; this enthusiasm was always conveyed to his students. Many of the palaeolimnological results published are due to the joint efforts of Löffler and his small group of young associates working on palynology, diatoms, and sediment chemistry. To this group of specialists, Löffler also brought the students enrolled in his limnology courses for practical summer work. Both trained scientists and novice students then together published descriptive reports about (palaeo)limnological work (e.g., Löffler, 1973a, 1974a, 1975a).

Heinz Löffler had a synthetic and anticipatory view on aquatic ecology, and on how it would develop in the future. He initiated multidisciplinary research of various lakes (his favourite was the Neusiedlersee) and, from the late 1960s to the 1990s, he produced, in cooperation with his research assistants and students, limnological research based on an ecosystemic approach. The monographic study on the Neusiedlersee is the paradigmatic result of this approach (Löffler, 1974b, 1979).

As a director of the Biological Station Lunz/See (elected in 1967) and later as a director (1970-1984) of the Limnological Institute of the Austrian Academy of Sciences, as well as head of the Zoological Institute of the University of Vienna (1974), Löffler mobilized students from Austria and abroad to work with him on several international projects, among which the OECD Eutrophication Programme (the Alpine project) and the Man and Biosphere programme. One of his important human and scientific successes was establishing an annual limnological course in Austria for students of the Third World; this began in 1974 and is still ongoing.

In recognition of his limnological activities, Löffler was elected president of the International Limnological Society (SIL) in 1983, acting for a period of five years. Many societies and universities invited Heinz to give courses and/or lectures. He was well known for his synthetic and lively presentation of natural science topics, accompanied by the beautiful photographs he took during his extensive field work all over the world.
As a dedicated environmentalist, Löffler invested much energy protecting the Danube wetlands, like the Lobau at Vienna, during the 1980s and 1990s. He participated in various international commissions as an expert evaluator of various engineering projects that threatened the environment (Löffler, 1986). In 1992, Heinz represented the European Community for the evaluation of the Gabcikovo Danube power plant and, in 1993, travelled for the World Bank to Uganda to evaluate the catastrophic environmental changes of Lake Victoria. Parallel to these environmentalist activities, he stimulated the scientific community by organizing various international meetings and editing various reports and books (Löffler & Danielopol, 1977; Löffler et al., 1999).

One final word about the broad interests of Heinz Löffler: he loved art, music, and history; he was an enthusiastic visitor of antiquariats, discovering interesting books or artworks; and he liked to visit and comment on various cultural events he attended in Vienna or abroad.

Looking back on the achievements of Heinz Löffler, especially to his successful investigations of saline water bodies and of high alpine lakes, or his successful combination of palaeolimnology and modern systemic limnological research, we have to thank him for the huge amount of information that he collected and presented in highly interesting publications. We also have to thank him for his open-minded and generous manner. One of our colleagues (Dr. Angel Baltanás, Madrid), when informed about Heinz Löffler’s death, gave for this sad event the following statement: “. . .undoubtedly, he [H. L.] was a giant in an era that is now completely gone”. Effectively, one has the feeling that nowadays it has become difficult or nearly impossible to repeat the performance of such achievements.

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REFERENCES

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