

FOREWORD

This volume represents the fourth in a series^{1,2,3} published following workshops of the international Hydrozoan Society. Having previously met in Ischia, Italy (September 1985), Blanes, Spain (September 1991) and Roscoff, France (September 1994), this time the Society decided to venture into the New World, holding its Fourth Workshop at the Bodega Marine Laboratory in Bodega Bay, central California, from September 19 to October 3, 1998. Fifty participants, representing 16 countries and professional levels from advanced undergraduate students to professors emeritus, contributed to the two week workshop. This volume is composed of some of the presentations from that meeting. The Hydrozoan Society workshops provide a unique opportunity for those of us who study hydroids and hydromedusae, usually in comparative isolation, to really get to know each other at a personal level and to share ideas and promote future collaborations between people of similar interests, even if we come from different disciplines.

The Bodega Marine Laboratory, established in 1966, has a special place in the history of hydrozoan studies, as Cadet Hand, John Rees, Claudia Mills, and Nando Boero have all worked there studying hydroids and medusae. When approached about hosting the Hydrozoan Society, both the Director James Clegg and Associate Director Paul Siri were enthusiastic, and thus the Bodega Marine Lab was selected as our venue. In addition to presenting original research papers and having daily topical round-table discussions, the Hydrozoan Society endeavors to do field-work during the course of the workshop. At the Bodega Marine Laboratory, we had a large teaching laboratory with running seawater tables and microscopes in addition to a conference room, projectors, library, dormitories and cafeteria. It was all very convenient and comfortable. We were surrounded by abundant wildlife, with large numbers of deer, songbirds and shorebirds, sea lions and even skunks. The lab residents were always smiling, willing to help and to do something for the "Hydrozoan people". This meant that our work was intense as usual, against a background of a happy environment. Being serious while smiling is the Bodega Bay formula. People work hard, but they are having fun; this is also the philosophy of the Hydrozoan Society. We gather not only to exchange our results and ideas, we get together to exchange our feelings. So Bodega Bay turned out to be a perfect place from every point of view. The success of the workshop resided in the number and diversity of attendees (this was the largest meeting in our short history) and in the quality of presentations and discussions. We saw unusual new live hydroid material, and are only sorry to report that a bloom of the freshwater jellyfish *Craspedacusta* occurred within a few miles of the meeting, but we did not learn about this unusual happening until after everyone had gone home; many of the attendees have never seen this species alive.

The Bodega Bay meeting occurred at a time of great change for international science, as the World Wide Web is coming into its own as a useful, authoritative venue. Within the last year, the essential and extensive hydrozoan bibliography compiled by Wim Vervoort⁴ (who was bent over his computer working on this opus throughout our Third Workshop at Roscoff) has been made accessible over the Web (<http://siba3.unile.it/ctle/mda/index.html>) through the efforts of Cinzia Gravili and Ferdinando Boero and the expertise of the Library and Computer Services of the University of Lecce. The next step will be to scan these articles and put them up on the Web in their entirety, eventually leaving little excuse for nonfamiliarity with even the most obscure literature.

Some of the discussions at the Fourth Workshop of the Hydrozoan Society centered around the need to standardize data across a large number of species for future comparative work, requiring the collaborative efforts of a wide variety of scientists, including natural his-

torians, ecologists, developmental biologists, systematists, geneticists, molecular biologists and others. The concept of a giant matrix, available to all via the Web, including perhaps 100 species, was discussed – in which cells could be gradually filled in by any number of scientists, eventually yielding a much clearer picture of many kinds of patterns in the Hydrozoa. Such a matrix could guide future research towards filling in large gaps in our knowledge. In discussing our future needs as Hydrozoan scientists, the germ of a grand collaborative scheme was developed, which has now begun to blossom in the form of a Partnership for Enhancing Expertise in Taxonomy (PEET) grant from the American National Science Foundation. This effort to train new hydrozoan specialists stems directly from the Fourth Workshop and is continuing to link participants from all over the world, including senior taxonomists from the U.S. and Canada and students from Brazil and Italy, and has already resulted in a field workshop in Italy in the summer of 2000.

So we stand now looking forward to ever-more rapid advances in international science, as Web-accessible databases are beginning to be assembled on innumerable topics. No such database is yet in place for the Hydrozoa; we await the real work in building a useful tool. Scientists around the world are now connected electronically, so questions can be asked and answered overnight from even the most distant locations – the days of two to three week turnaround time for questions by mail are for the most part over. Still each scientist works in his or her own context, asking questions that arise from their own observations and interests. We present in this volume a wide variety of papers written by scientists living all over the world in highly different circumstances. The papers are all about Hydrozoa, but beyond that they represent a wide range of topics, and provide the reader with an overview of our knowledge and interests at the turn of the century and millenium.

THE EDITORS

References

¹ Bouillon, J., F. Boero, F. Cicogna and P.F.S. Cornelius, eds. – 1987. *Modern Trends in the Systematics, Ecology and Evolution of Hydroids and Hydromedusae*. Clarendon Press, Oxford, 328 pages.

² Bouillon, J., F. Boero, F. Cicogna, J. M. Gili and R. G. Hughes, eds. – 1992. *Aspects of Hydrozoan Biology*. *Scientia Marina*, 56 (2-3): 296 pages.

³ Piraino, S., F. Boero, J. Bouillon, P.F.S. Cornelius and J. M. Gili, eds. – 1996. *Advances in Hydrozoan Biology*. *Scientia Marina*, 60 (1): 243 pages.

⁴ Vervoort, W. – 1995. Biography of Leptolida (non-Siphonophoran Hydrozoa, Cnidaria). Works published after 1910. *Zoologische Verhandelingen, Leiden*, 301, 29.xii.1995: 1-432.