Annals of Bryozoology 3

## Annals of Bryozoology 3: aspects of the history of research on bryozoans

Edited by Patrick N. Wyse Jackson & Mary E. Spencer Jones

International Bryozoology Association 2011



This volume is dedicated with affection to Giampietro Braga, a founding member of the International Bryozoology Association

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Cover illustrations

*Front: Flustra foliacea* from Sir John Graham Dalyell (1848) *Rare and remarkable Animals of Scotland*. Volume 2, London: John Van Voorst, 322 pp. *Back:* Portion of a plate from Alicide d'Orbigny's *Paléontologie française* (1850– 1852) showing the Cretaceous bryozoan *Retepora royana*. *Background:* Structure of *Flustra* from Robert Hooke's *Micrographia* (1665).

Photograph of Giampietro Braga courtesy of Abigail Smith.

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## PREFACE

Bryozoans are complex colonial invertebrates, that have a long geological range of nearly 500 million years, and which are today still found in most marine and freshwater ecosystems.

This volume contains a collection of ten papers that reflect the diversity of topics in the study of fossil and living Bryozoa. It is the third in a series that began with the publication of the first and second volumes by the International Bryozoology Association in 2002 and 2008.

A number of papers were presented at the conference of the International Bryozoology Association held in Kiel in 2010. The editors are grateful for the support of Priska Schäfer, the convenor of that meeting. We are also particularly grateful to all the contributors who have patiently awaited the production of this volume; in some cases a number of years has elapsed since submission. We are sure that both they and the readers will find this collection to be illuminating as well as fascinating.

The papers in this volume can be divided into several strands: biodiversity, biography, collections, entoprocts, research 'schools', although we have chosen to arrange them in alphabetical order by first author.

Recent concerns relating to the effects of global warming and climatic change have seen increased research focussed on polar regions. It is timely to examine the past records of faunas in these regions, and Nina Denisenko has provided an in-depth account and analysis of the bryozoan distribution from the East Siberian Sea. For many decades the bryozoans of the eastern coastline of the United States have attracted the attention of researchers, some of whom worked out of the splendid facilities at Woods Hole. More recently, research has been championed by Judy Winston who together with Peter Hayward has written on a major surveying initiative that has been conducted along the length of the coastline from Maine to Virginia. The Red Sea contains important marine ecosystems that have become better known since the opening of the Suez Canal. Andrew Ostrovsky and his colleagues here document the past research on the bryozoans of this body of water and list the taxa that have been found there.

Sometimes the profession or vocation of an individual hides their overriding passion; in this volume the work on bryozoans of several individuals is the focus of two contributions. In the distant past clerics frequently made important discoveries in the sciences, but by and large the opportunities for such work declined into the1900s. Nevertheless through their role as educationalists some clerics continued original research, amongst whom was the Iowa-born Reverend William Lynch. Mary Sears and Robert Woollacott have written of his work and research, primarily on the physiology of bryozoans, carried out against a backdrop of his role as an educationalist. Another unlikely bryozoologist was the English corset-maker George Robert Vine, whose life and

work was the focus of a long contribution published in the first volume of this *Annals* series. In this current volume we read that he was the subject of stinging criticism in print from the American palaeontologist Edward Oscar Ulrich who attacked his scientific credentials and personality. Vine, on his part, took such criticism remarkably calmly, didn't respond with counter-criticism, but simply continued his research.

Many museums contain significant collections of bryozoans and apart from providing invaluable data on faunal distribution, study of these collections can document interactions between institutions and scientists. In the Natural History Museum in London one particularly significant collection is that which was assembled by George Busk who authored the monograph on the bryozoans collected during the expeditions of H.M.S. *Challenger*. Much of his collection was acquired through the swapping of material with fellow naturalists. In this way he obtained the small collection of fossil bryozoans that had been collected by the eminent geologist Sir Charles Lyell in the Canary Islands in the 1850s. Consuelo Sendino and Paul Taylor have untangled the collecting history of these bryozoans and their subsequent dispersal. From further afield, from waters around Japan, the collections assembled by two naturalists, Kakichi Mitsukuri and Alan Owston came to London. These were obtained by Sidney Harmer, and are now the focus of increased interest given recent research on the faunas of Sagami Bay near Tokyo. Mary Spencer Jones and her colleagues document these specimens but also write of the period in the 1880s when Japan was opening up to western scientists and commercial interests.

Research on entoprocts has been on-going for two and a half centuries. Judith Fuchs here recalls important early research and brings the reader right up to date with cutting edge findings on the group.

In various parts of the world bryozoans have been studied since the early 1800s. In France much of this work has been centred on Paris and Jean-Loup d'Hondt brings to life the players in this work. In Russia researchers in St Petersburg and in Moscow continue to study bryozoans. In this volume Lena Viskova and Anna Koromyslova write about research on post-Palaeozoic bryozoans dealing with each geological period in chronological order from the Triassic to the present-day.

We dedicate this volume to Giampietro Braga, a founding member of the International Bryozoological Association. For many years he has conducted research on Cenozoic bryozoans of Italy and beyond, and has always been encouraging and supportive of the work of younger colleagues. He established the valuable online bibliography of bryozoans published by the Civic Town Museum of Rovereto (www.museocivico.rovereto.tn.it) and with Franco Finotti he has also published a comprehensive listing of bryozoan literature (2006) together with a supplement (2009).

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