

Foreword

The Mediterranean Sea is often thought of as the cradle of civilization. What is less well known is that it was Edward Forbes' study of the deeper benthos in the Aegean Sea that led directly to the early efforts of deep-sea biology on a global scale. Forbes was perhaps a little unfortunate in the site he chose to study the deeper zonation of the benthos. Below ~600 m depth he could find no fauna and thus suggested that no life existed in the sea below 600 m. Thus was born the 'Azoic Theory'. This theory did not last long. Although the stimulation to look for deep-sea fauna originated in the Mediterranean it was in the NE Atlantic using the naval vessels *Lightning* and *Porcupine* that animals were hauled from the deepest depths. From 1872 to 1876 HMS *Challenger* toured the water of the globe showing that there was a rich and varied deep-sea fauna. This stimulated the 'heroic' age of deep-sea biology where all the major oceans were sampled and culminated in the *Galathea* expedition shortly after WWII that finally demonstrated that a fauna could be found at all depths in the world's oceans.

The Mediterranean enjoyed this heroic age, best exemplified by the cruises of the *Princess Alice I* and *II* under the auspices of the Prince of Monaco. Recently there has been a new resurgence of interest in the deep Mediterranean. As a young ocean there has been much speculation as to the origin of its fauna and whether the deeper waters of the Mediterranean have a true endemic fauna. Diving to 500 m off Toulon in 1985 the seabed of the Mediterranean presented a barren aspect. But we should not be deceived. It was already recognised that in the deep-sea ocean it was the small organisms that contributed to biodiversity. This resurgence was triggered by two interrelated events. Firstly, marine labs round the Mediterranean employed dynamic young staff that wanted to look beyond the horizon and down into the deep. Secondly, the increasing cost of working offshore was ameliorated by integrated research programmes established through the scientific programmes of the EU.

This volume presents the first synthesis of the studies of these dynamic laboratories that border the Mediterranean. There are three main themes exemplifying the current state of knowledge of the deep Mediterranean. Studies of meiobenthos have shown that the biodiversity and biomass is very variable and appears to decrease to the east. The crustacean fauna has been particularly well studied and presents a wealth of new data and paradigms from the last 15 years. Lastly, the fish fauna is shown to be both diverse and extensive. With increasing interest in the biodiversity of the ocean as exemplified by the Census of Marine Life (CoML) this volume is a timely reminder of the contribution the Mediterranean has to make.

I hope this volume will act as a catalyst for the continued study of the deep fauna of Mediterranean Sea and will also offer a beacon for those interested in the many deep peripheral seas round the globe that still deserve scientific attention.

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