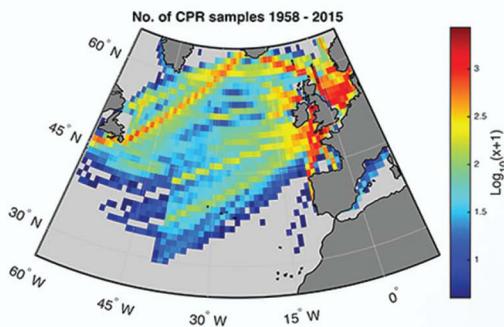
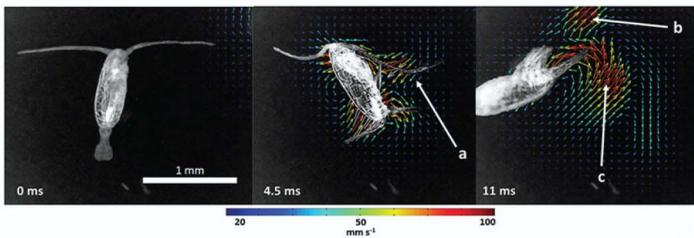


Trends in Copepod Studies

Distribution, Biology
and Ecology



MARINE
BIOLOGY

Marco Uttieri, Ph.D.
Editor

NOVA

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Chapter 1

TRENDS IN COPEPOD STUDIES

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ABSTRACT

Being present in almost any aquatic system and owing to their ecological role, copepods have been the focus of a large number of studies from taxonomy to global patterns. However, despite the wealth of information available today, our knowledge of their distribution, biology and ecology is still incomplete. Apparently, the more we learn about them, the more we are spurred on to advancing our research on these tiny crustaceans to fully grasp their significance and role. Through the contributions collected, this volume aims at providing new insight in copepod studies and a new foundation for future studies.

Keywords: copepods, distribution, biology, ecology

1. INTRODUCTION

The “insects of the sea”, the most abundant metazoans on Earth: over the years, copepods have been labelled in several different ways owing to their diversity of life

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Dr. Marco Uttieri received his Laurea degree (*magna cum laude*) in Environmental Sciences in 2001 from the University of Naples Parthenope (Italy). In 2006 he was granted a PhD in Dynamics of Marine Ecosystems by the Open University (UK). Dr. Uttieri is presently a researcher at the Stazione Zoologica Anton Dohrn of Naples (Italy); from 2012 to 2015 he was appointed as a researcher at the Department of Science and Technology of the University of Naples Parthenope. While there, he was also the professor of Fundamentals of Biology and Biodynamics of the Water Column, as well as member of the board of doctoral courses. Dr. Uttieri worked as a Principal Investigator on the MOKA (Modelling and Observation of zooplankton Organisms) project, financed by the Italian Ministry of Education, University and Research (MIUR), and was responsible of two research units in the Flagship Project RITMARE - The Italian Research for the Sea. Dr. Uttieri is the author of 28 articles and 7 book chapters indexed in Scopus.

“Copepods are for aquatic systems what insects are for terrestrial – successful, widespread, and a key link in the food web. Yet knowledge, as well as textbooks, on copepod ecology is scarce. Therefore *Trends in Copepod Studies – Distribution, Biology and Ecology* is very timely and covers a wide array of subjects, including long-term population trends, predator-prey dynamics, neurology, chemical ecology, invasiveness, as well as the inclusion of copepod genetics into the new molecular, or –omics, era. The broad coverage, as well as the many insightful in-depth excursions into copepod ecology, together make this book warmly recommended reading for researchers and advanced students, as well as for devoted laymen.”

Professor Lars-Anders Hansson
Department of Biology/Aquatic Ecology
Lund University, Sweden

“New insights on a range of current topics in copepod biology and ecology are provided in the twelve chapters. This work will attract wide interest and stimulate future directions for research”.

Professor Roger Harris
Plymouth Marine Laboratory

“Scientists involved in copepod studies will find in this book a broad avenue to enhance their knowledge on this important and ever-growing research topic. The book's scope, the range of data explored, and the large reputation of chapter's contributors are an invitation to read and appreciate this essential contribution to the aquatic sciences”.

Professor Rubens M. Lopes
Oceanographic Institute
University of São Paulo, Brazil

“The contents of this new book *Trends in Copepod Studies – Distribution, Biology and Ecology* span a variety of scientific approaches developed to study the biology and ecology of copepods. The volume offers a very interesting updated expertise dealing with the diversity of topics studied by copepodologists and confirm the key role of copepods in ecosystem studies”.

Professor Sami Souissi
Laboratoire d’Océanologie et de Géosciences (LOG)
Station Marine de Wimereux, Université de Lille, France

Front images: *Calanus helgolandicus* (L. Svetlichny); *Acartia tonsa* (Gemmell and Buskey, Chapter 10); CPR samples collected between 1985 and 2015 (Wootton *et al.*, Chapter 2).



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