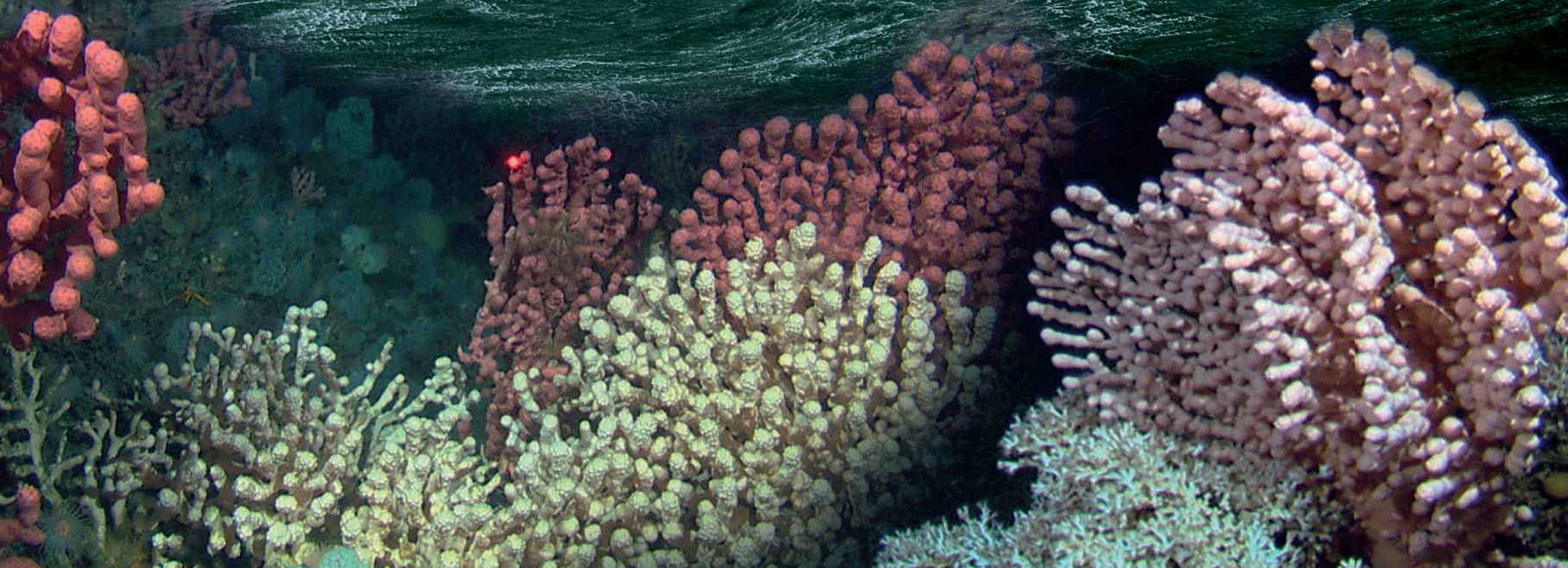


# THE NORWEGIAN SEA FLOOR

New Knowledge from MAREANO  
for Ecosystem-Based Management

Editors:

Lene Buhl-Mortensen, Hanne Hodnesdal and Terje Thorsnes





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**mareano**  
collecting marine knowledge



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## PREFACE

It is a great pleasure for us to present this book with exciting results from the first ten years of the MAREANO programme. Highlights from the mapping of the mid-Norwegian shelf, the sea areas off Lofoten, the southern Barents Sea, and the eastern Norwegian part of the Barents Sea are presented, and we hope that the content will be interesting and relevant for a wide audience. A book like this can only provide a tiny glimpse of the wealth of new knowledge gained from this extensive mapping programme, and we invite all readers to further explore the maps, databases, reports and publications generated by MAREANO, which are freely available via the programme web site: [www.mareano.no](http://www.mareano.no).

The release of this book would not have been possible without an immense effort from several hundred people. Dedicated ship crews, technicians and scientists have worked closely together across disciplines, securing vital knowledge for the management of the Norwegian oceans.

Norwegian Waters (2,28 million square kilometres on the northern hemisphere) contain extensive fisheries and petroleum activities operating side by side with vulnerable marine ecosystems. The need for comprehensive knowledge on the resources and ecosystems of the seafloor is fully recognised by the Norwegian Government and ocean management. Norway is now building up one of the world's most comprehensive databases for the seabed environment thanks to the political process leading to the initial funding of MAREANO in 2005.

Since the start in 2005, more than 174 000 square kilometres have been surveyed by MAREANO. The new knowledge that has been generated has proven vital for the implementation and revision of the Norwegian ocean management plans. The investigations have produced many spectacular results, creating significant national and international interest. The findings have been published as maps and reports on [www.mareano.no](http://www.mareano.no), in scientific presentations and publications, and in countless news stories on

the web, in printed media and television. The results from the first five years were summarised in the first MAREANO book in 2010, written in Norwegian. This present book is an English translation of this first volume with updated and extended information from the latest five years that we hope will appeal to an international audience.

Outputs of particular importance include high resolution bathymetric maps, detailed sediment maps and maps showing distribution of various habitats/ biotopes with associated diversity of species and vulnerable ecosystems. On a national level, scientists from MAREANO have been closely involved in the development of the official nature type classification in Norway. This has proven to be a fruitful cooperation, providing the foundation for a systematic nature type classification which will continue to be developed and integrated in mapping activities over the coming years.

MAREANO has cooperated with a number of universities, research institutes and the industry. Hopefully, to the mutual benefit for both parties. Companies have shared data and knowledge. The immense data generated by MAREANO have formed the basis for many related projects, both in Norway and internationally. The scientific cooperation with universities and research institutes nationally and abroad has given added value to MAREANO and increased the understanding of the benthic ecosystems.

Cooperation with, and participation in, several projects funded by the European Union have facilitated flow of data and knowledge between Norway and other European countries. MAREANO data have been central to the Norwegian involvement in these projects.

On behalf of MAREANO, the Editors and the Executive Group would like to thank those that have been involved in MAREANO, all dedicated people within their respective disciplines, and as well our cooperating partners in academia, industry and public organisations for making this book a reality.



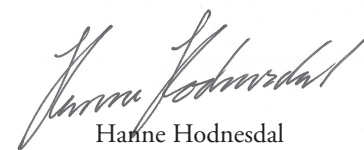
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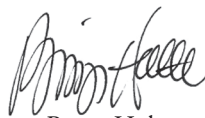
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The Geological Survey of Norway



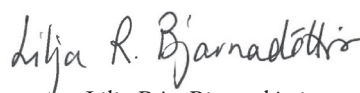
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*”Mareano will provide  
essential knowledge for an improved  
environmental-based management of  
the seas in the future”*

Heidi Sørensen,  
Secretary of State, Ministry of Climate and Environment.  
Spring 2008.