

Sampling area of the MAREANO survey in May–June this year. The Hydrographic Service mapped the area by multibeam echosounder last year.

MAREANO: mapping of the Norwegian seabed

BY YVONNE ROBBERSTAD

Norwegian waters cover a total of over 2 million km². As of today, the knowledge about the seabed in these waters is limited: What does the seabed consist of? What is the relationship between the physical environment, species diversity and biological resources? How are contaminants stored in the sediments? These questions are being addressed by the MAREANO programme.

In 2005 and 2006, the government allocated NOK 29 million to get the MAREANO programme started. Indications have been

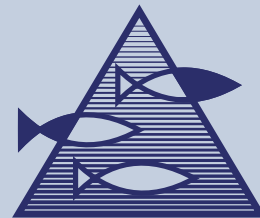
given that the first phase of the programme will be carried out from 2006 until 2010, with a total cost of around NOK 235 million. During this first phase 42,000 of the 2 mill km² seabed will be covered.

ARCTIC REGIONS PRIORITISED

The importance of MAREANO is specifically stressed in the Integrated Management Plan for the Barents Sea recently presented by the Norwegian Government. Extensive plans for exploitation of oil and gas reserves in Lofoten and the Barents Sea are being considered, and a sustainable management of the area is highly dependent upon improved knowledge of the Arctic ecosystems.

Surveys and basic studies of the physical, biological and chemical environment of the seabed will initially prioritise a number of environmentally sensitive areas of the Barents Sea and the Lofoten area.





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A MANAGEMENT TOOL

The aim of MAREANO is to give users from the authorities, research, the industry, and the general public direct access to neutral and reliable knowledge. Data from surveys and research will be collated in an online database at www.mareano.no.

A main component of the website is a tool where the user can combine data from various sources to produce informative charts. The datasets may be utilised in a number of ways: They will be the basis for monitoring bio-diversity status; they can be used to improve fishing efficiency at a lower cost and with a reduced environmental impact; and the biological production associated with the bottom areas may be assessed through this information. Potential conflicts between vulnerable spawning grounds for fish and planned offshore activities in the Barents Sea can also be visualised by using the information available on the website.

JOINT EFFORT

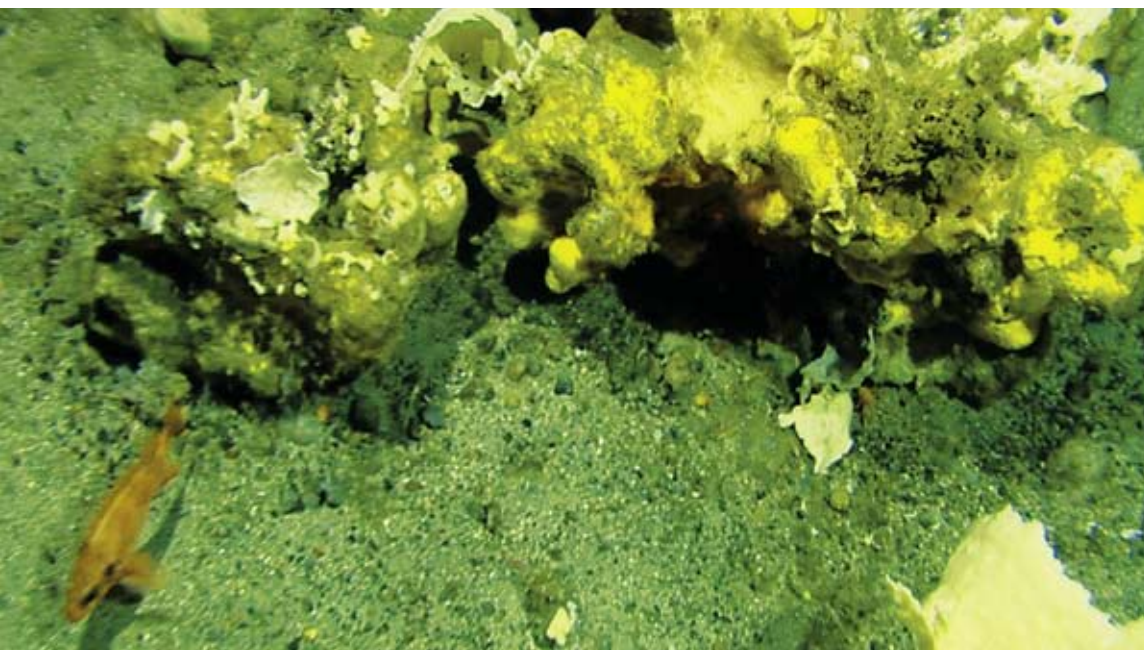
MAREANO brings together biologists from the Institute of Marine Research and geologists from the Geological Survey of Norway, as well as the Norwegian Hydrographic Office. The online database will be open to contributions from external sources of knowledge in the public and private sectors, such as local and regional government bodies and the offshore industry.

Unique images

The seabed off the Norwegian coast is characterised by deep fjords and shelf areas (deeper than 200 m) and the habitats are complex and not easily documented using only standard sampling gears. That is why the video rig, Campod, was built, with a high-resolution video camera and sensors enabling quantitative estimates of epibenthic megafauna. During the MAREANO survey last summer, the Campod provided video documentation of 80 kilometres of seabed at 200–400 metres depth with a resolution normally obtained only by diving in shallow waters.



Example of sponge found in the area.



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MORE ABOUT MAREANO

www.mareano.no (Norwegian website)
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