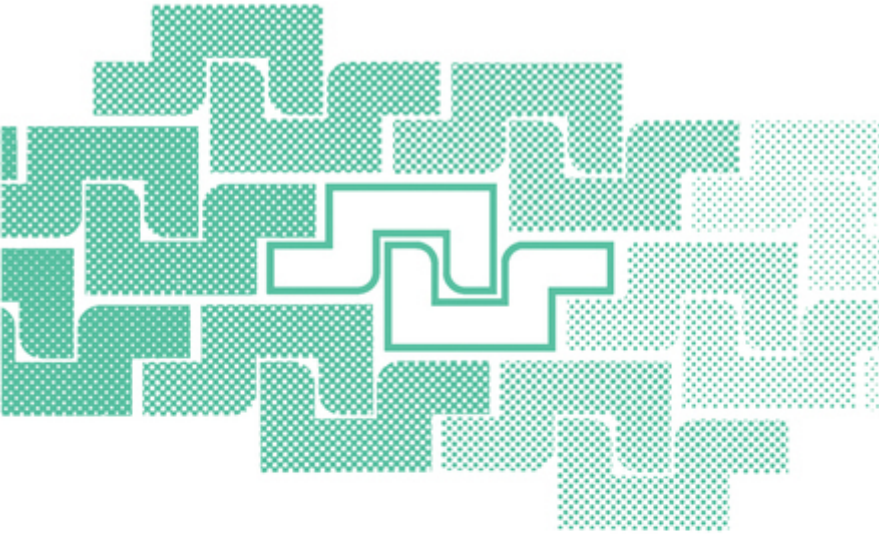

Jan Mayen Island in Scientific Focus

Edited by

Stig Skreslet

NATO Science Series

IV. Earth and Environmental Sciences – Vol. 45

Jan Mayen Island in Scientific Focus

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Series IV: Earth and Environmental Sciences – Vol. 45

Jan Mayen Island in Scientific Focus

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Foreword

The reader of this book will experience its scientific pluri-disciplinarity which reflects the wide range of expertise that convened for the NATO Advanced Research Workshop (ARW) in Oslo, Norway 11-15 November 2003, addressing a Joint International Scientific Observation Facility on Jan Mayen Island. According to NATO requirements the participants consisted of representatives from nations that were once separated by the Iron Curtain during the Cold War era. During that era, scientific disciplines were allowed to evolve in different directions within each block of nations, creating differences in the conception of problems, methodological approach, terms of expression, and ways of communication. It has been a challenge, but also a privilege to experience such differences, both during the NATO ARW itself, and in the editing of the contributions.

The two Co-Directors were faced with making scientists from different disciplines, research traditions, and nations understand each other. It was recognised that each of the participants were close to lay-men outside their own field of science. This was over-come by stimulating the use of simple words or scientific terms that are widely used in common English, rather than use specialised scientific terms and slang typical of each particular discipline. This has also been the ambition in the editing of this book, to make the information availble to not only members of the scientific community, but also to people working in public administration and politics. Hopefully, I have succeeded to some extent, but recognise that some parts may not be easily understood by other than the informed reader.

Acronyms are widely used in many scientific communities. To include other readers as well, the acronyms have been explained in the text, and they have also been inserted and defined in the index table at the end of the book, with reference to pages where they occur. I sincerely hope that the number of words that have been indexed is sufficient to make it easy to navigate among the wealth of information that is contained in this book.

Preface

This book is the product of a long process, starting during my flight back to Norway after the IGBP/GLOBEC Open Science Meeting in Paris 17-20 March 1998. I had observed plans presented by the World Climate Research Programme to implement a study of Climate Variability and Predictability (CLIVAR). My attention was drawn to the emphasis on Atlantic Thermo-Haline Circulation and the role of Greenland Sea Deep-Water formation. From my days as a very young research student spending two summers on Jan Mayen Island, facing the Greenland Sea when fog permitted, I realized that this particular CLIVAR task would not be an easy one. The waters are inhospitable even in summer and clearly worse during winter. The operation of ships would be costly and therefore infrequent and maybe very inadequate in relation to scientific wishes. It came to my mind that Jan Mayen itself was a research platform solidly moored on the Mid-Atlantic Ridge, and with permanent access to waters in question. It was tempting to explore the possibility of establishing a research station that could face science ranging from unique local studies to Global problems.

In the year that followed, I discussed the idea with international colleagues who I met on different occasions. I understood that many became intrigued by the possibility of running a research station on Jan Mayen Island. As member of a group advising the County Governor of Nordland about environmental management, monitoring and research on Jan Mayen I understood that a research station on the island should be multidisciplinary and address all fields of science, including anthropology and history. The infrastructure built to serve the Loran-C navigational system based on the island had the capacity to accommodate more persons than the crew operating it. The question was rather to line up convincing arguments for doing scientific research on the island and in its surroundings.

The NATO Science Programme "Bringing Scientists Together for Progress" offered a feasible framework for an Advanced Research Workshop that could identify potential scientific ambitions. It required that a

NATO ARW would identify new important topics and directions for future research. It was mandatory that it promoted working relationships between scientists from NATO countries and Partner Countries, i.e. previous Soviet republics and satellite nations.

I was very fortunate to have served as field assistant for Krzysztof Birkenmajer, an extremely experienced Polish geologist doing contract work for the Norwegian Polar Institute on Svalbard in 1962. In December 1999, I renewed my contact with him, now a Professor Emeritus in Krakow, Poland. He was delighted and consented to join as my Partner Country Co-Director. We enlisted an Organizing Committee consisting of Dr. Vladimir Byshev at the PP Shirshov Institute of Oceanology in Moscow, Russia, Professor Jens Meincke at the Insitut für Meereskunde, University of Hamburg, Germany, and Dr. Peter Wiebe at the Woods Hole Oceanographic Institute, USA. Sadly, only weeks before the NATO ARW came to reality the two latter members became victims of "force majeur" and could not enjoy the fruits of their support.

The Organising Committee carefully selected a limited number of scientists, securing a balanced representation of NATO and Partner countries, and a wide range of scientific training and experience. Some participants were seasoned polar field-workers while others were selected for their expertise in a particular field of science relevant to Jan Mayen research development. The final result was also thanks to Dr. Marek Lewandowski, a NATO representative who provided much appreciated assistance in the application process.

Our NATO ARW addressing a Joint International Scientific Observation Facility on Jan Mayen Island took place in Oslo, Norway 11-15 November 2003. Twenty two scientists offered key speeches and participated in group work where one session was devoted to information from six Norwegian public servants. The Co-Directors got time to contribute actively in the scientific work thanks to the reliable and pleasant support from our NATO ARW Secretary, Dr. Eric Mathey. After the meeting, I have been assisted by an editorial committee that helped draw together reports and conclusions. They are Krzysztof Birkenmajer, Louwrens Hacquebord, Keith A Hobson, and Igor A Melnikov.

I thank all involved persons for their contributions before, during and after the NATO ARW in Oslo. It will be to their credit if a research station on Jan Mayen materialises. I would in particular draw attention to my Co-Director "Kris" Birkenmajer, but not only for his transfer of scientific achievements in polar research to our NATO ARW. He introduced me to the Arctic and proved personal qualifications that I have tried to follow, both in science and in life. I am very happy for the opportunity to renew our friendship over a matter of importance and acknowledge that without this man our venture would never have occurred.

Acknowledgements

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