

Mini-Symposium on Arctic Oceanographic Processes, 1995

Introduction

J. M. Bowers, L. Føyn, and H. Loeng



During the last decade policy interest in conditions and the effects of human activities in the Arctic has increased. This has led to an international agreement among the eight Arctic states (Canada, Denmark, Iceland, Finland, Norway, Russia, Sweden, and the United States), concluded at Rovaniemi, Finland, in 1991, on an Arctic Environment Protection Strategy and, most recently, an agreement to establish an Arctic Council among these same states. Under the former agreement, much effort has been devoted during the period 1993–1997 to the preparation of an assessment of processes and conditions in the Arctic with particular reference to the effects of anthropogenic activities.

The papers in this section were first presented at a Mini-Symposium during the 1995 ICES Annual Science Conference in Aalborg, Denmark. The Mini-Symposium was convened as a means of providing information on recent scientific developments in the Arctic with particular emphasis on oceanographic processes, marine environmental conditions and associated monitoring, modelling, and assessment. An effort was made to ensure the inclusion of review papers on the biology, physical oceanographic modelling, and the formation and transport of sea-ice respectively as precursors to papers dealing with more specific topics.

The Arctic Assessment being carried out under the auspices of the Arctic Monitoring and Assessment Programme (AMAP) created under the Rovaniemi Agreement will be completed in June 1997. Several scientists involved in ICES activities have participated in, or contributed to, this assessment and ICES has some AMAP data-management responsibilities. The AMAP Assessment is very broad-ranging in scope covering topics such as demography, social conditions, human

health, processes, climate change, acid precipitation, arctic haze, and the presence and effects of three major classes of environmental contaminant: metals, persistent organic compounds, and radionuclides. Accordingly, ICES will hold a Theme Session on the Arctic during its Annual Science Conference in Baltimore, Maryland, USA, in September–October 1997, partly to ensure that up-to-date information on scientific understanding and the nature and results of this assessment are available to the ICES community.

These papers will serve to whet the appetite of those interested in oceanography, living resource management and environmental protection in cold environments. It is hoped that a further set of papers will be prepared, covering a wider cross-section of the marine interests reflected in the AMAP Arctic Assessment based primarily on presentations at the 1997 Theme Session. With the new commitments implied by the international agreements on the creation of an Arctic Council and the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities concluded in Washington, D.C., in November 1995, it seems likely that interest in the processes and conditions in the Arctic will increase further as a necessary background to enhancing the protection of its human population, biota and resources.

J. M. Bowers: Department of Fisheries and Oceans, P.O. Box 500, Halifax, N.S., Canada B3J 2S7.

L. Føyn: Institute of Marine Research, P.O. Box 1870 Nordnes, 5024 Bergen, Norway.

H. Loeng: Institute of Marine Research, P.O. Box 1870 Nordnes, 5024 Bergen, Norway.