

Editor's Page

For this number of the magazine we open with an excellent piece of research by A.C. Grant on marine sediments in northern Baffin Bay. Although the author has drawn his model on the basis of his own findings, subsequent work by other investigators has shown that his ideas are still fairly sound and will serve for a long time in the future. We have other work to describe in southern Baffin Bay, and early results suggest that it will corroborate the studies in the north and elsewhere in Baffin Bay.

In this number we have two papers dealing with the effects of post glacial fluctuations in sea level. The paper by H.W. Keene concerns itself with the evolution of salt marshes, which is particularly rewarding as dateable material is easily available. The contribution by C.E. McClellan and R.L. McMaster is significant in that it relates submarine morphology in the inshore area to that of the immediately adjacent shore, and to the occurrence of earlier subaerial events in the present-day marine locality. These principles hold widespread working application.

The submission by D. Monahan on the Gulf of St. Lawrence represents a continuing effort by the Canadian Hydrographic Service to include descriptive geomorphic and geologic notes with the publication of its Natural Resources Chart series on the offshore. We have attempted to keep the scale of the map without reduction in order to facilitate immediate substitution of earlier hydrographic sheets of this area. The Canadian Hydrographic Service is continuing to publish offshore maps dealing with bathymetry, surficial geology, bedrock geology, gravity, and magnetics.

Our final numbers deal with the benthic community in local waters. A fine monitoring study dealing with the foraminifera forms the basis of a long-term ecological study in various parts of the inshore Atlantic. Most important is the scope of this project which examines so many parameters in order to assess the true nature of the problem. Our other contribution is by A. Logan and J.P.A. Noble who has amassed substantial data to draw important conclusions on the role of the substrate in relation to benthic macro-organisms.

Our section on current research deals exclusively with the efforts of the Geological Survey of Canada in eastern Canada. As well as the continuation of its superb mapping program on land, the Geological Survey of Canada has recently put considerable support into the work being undertaken offshore by industry. The Survey has opened a new laboratory on the Bedford Institute campus, also federally owned and operated by the Department of the Environment, and part of its function will be the examination of well cuttings and cores obtained from the offshore areas. This section will work in close relationship with the Resource Management and Conservation Branch of the federal government, which administers the oil and gas regulations for the offshore. This branch also is custodian of all the offshore cores obtained in the eastern Canadian offshore. Apart from the necessary function of these two units at the Bedford Institute, the emphasis on economic production on the Atlantic continental shelf is clearly placed. We admire the general all-round support given to this idea. Conventional mapping is continuing on the adjacent land areas and is supported by studies in Quaternary geology and morphology. Offshore, the wells being drilled will offer the necessary control to the extensive geophysical program that has been underway by government, university and industry for a number of years. Soon the stratigraphic sections will be established, indeed, some are already as reported by N.L. McIver of Shell Canada when he spoke to the Atlantic Universities on the stratigraphy of the Nova Scotia offshore. Following the production of these sections will be the geological maps, amply supported by the results of seismic, magnetic and gravimetric data. Finally basinal analyses will be undertaken and the geological story of the Atlantic continental shelf will begin to unfold, and made accessible for exploitation by man.

We reported on three major conferences held recently: one on the annual geological conference of Atlantic and Maine Universities; one dealing with icebergs and their effect on offshore drilling activity; and the other on the exploitation of manganese deposits on the deep ocean bed. The students' meeting was the general success it has always been, and the introduction of a professional's day has brought seasoned geologists into direct contact with the students. Acadia University geology students organized and hosted the event which moved flawlessly. Once again we found it most refreshing to sit in the student's ranks again, and to hear a very high calibre of papers presented by the students. We may add that the professionals did very well and their efforts and attendance was appreciated by the students.

The Iceberg Seminar was a rather serious affair in view of the fact that offshore drilling rigs cost 30 to 40 thousand dollars per day which could be lost if the rig is threatened with the advance of an iceberg on course with the rig. Although the rock to be drilled is on the sea floor, the conference brought out the wide variety of problems in the atmosphere, watermass and at the air-sea interface, as well as the sea-bottom interface, not to mention ice, that must be confronted before successful drilling can be undertaken and achieved. Along with the regular geological and geophysical surveys, this meeting again placed stress on the economic development of the eastern Canadian offshore.