Editorial

This spring the annual meeting of the Geological Association is in St. John's, Newfoundland. No doubt many members will seize the opportunity to review, in the technical sessions and in the field, the remarkable growth in our understanding of the geology of Newfoundland. The publication in 1964 of a key paper by Harold Williams ("The Appalachians in Northeast Newfoundland – a two-sided symmetrical system": Am. Jour. Sci., v. 262, p. 1137-1158) coincided with the conception of sea floor spreading and plate tectonics. Just a little later, J. Tuzo Wilson suggested that plate movements were responsible not only for opening the modern Atlantic ocean, but also for opening and then closing an earlier, Paleozoic, "proto-Atlantic". William's symmetrical system enclosed remnants of both sides (and the "obducted" bottom) of this vanished ocean basin. Newfoundland at once became the first testing ground for the extension of plate tectonics to the interpretation of ancient mountain systems.

It is a matter of some pride to Canadians that not only was one of the originators of plate tectonics a Canadian but that the geologists at Memorial University in Newfoundland have played such a prominent role in extending this theory back in geological time. They have helped transform it from a game played by marine geologists and geophysicists into a practical working hypothesis for the field geologist. In this issue, we are happy to present a brief review of Atlantic margin studies by Williams and Stevens, and an article by their colleague, Strong, on the consequences of plate tectonics for mineral exploration in Newfoundland.

The last few years have seen a revitalization of geological studies in several parts of Atlantic Canada. Not only at Memorial but also at Dalhousie University, groups of young research workers have been engaged in work of such quality and breadth of interest that they are successfully challenging the traditional superiority of the better known (and better financed) graduate schools of central and western Canada. Where else in Canada does the young man go, who wishes to engage himself in the revolution in the earth sciences that has been brought about by plate tectonics and modern studies of the oceans?

It is now more than ten years since the Bedford Institute of Oceanography was officially opened at Dartmouth, N.S. Geologists interested in assessing progress during the first ten years could hardly do better than to look over a copy of Bedford's "Biennial Review, 1971/72", published recently (see also Geolog, v. 3, pt. 1, p. 24-25, 1974). The Bedford Institute now consists of 700 scientific and support staff, with an annual budget of $15 million, organized into three major laboratories: Atlantic Oceanographic Laboratory, Marine Ecology Laboratory (both part of the Department of the Environment) and Atlantic Geoscience Centre (a branch of the Geological Survey of Canada). The Atlantic Geoscience Centre was created in 1972 to combine activities in marine geology and marine geophysics, previously carried out in the Atlantic Oceanographic Laboratory, with new work in the fields of subsurface stratigraphic and petroleum geology. Offshore drilling and the need for environmental studies have combined to ensure the rapid growth of the new Centre.

Geologists from the Centre, together with those from Dalhousie, founded the Atlantic Geoscience Society, which has recently become an Associate Society of G.A.C. Not content with meeting only in Nova Scotia, they recently organized an ambitious two-day meeting, held in Fredericton, N.B. and attended by an enthusiastic group of geologists from throughout the Atlantic Provinces. U.N.B. had just a little earlier played host to the New England Intercollegiate Geological Conference, demonstrating (if there was any doubt) their resolve that not all the action in the Maritimes should seem to be centred in Halifax or Dartmouth.

The economic potential of the Atlantic seaboard, the variety of fascinating geological and geophysical problems displayed by the Atlantic Provinces, the superb quality of the coastal exposures, the intellectual vigour of the growing geological community and the famous scenery, climate and hospitality of the people should continue to attract increasing attention in the years to come.

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