The Avalon Terrane of the Northern Appalachian Orogen

This issue of MARITIME SEDIMENTS AND ATLANTIC GEOLOGY is the first of two consecutive special issues devoted to the publication of papers on varied aspects of the geology of the Avalon Terrane of the northern Appalachian Orogen. These issues represent an outgrowth of the "Workshop on Correlation and Subdivision Within the Avalon Terrane of the Northern Appalachians", held in conjunction with the Atlantic Geoscience Society Colloquium on Current Research in the Atlantic Region in Amherst, Nova Scotia, on January 17-18, 1986. In total, seventeen papers were presented as part of the Workshop, together with twelve poster displays. These provided an exciting and stimulating overview of current ideas and recent work on Avalonian geology. Abstracts for these presentations and poster displays were published in MARITIME SEDIMENTS AND ATLANTIC GEOLOGY, volume 22, number 2.

The papers published in these two Avalon special issues are representative of the range of presentations and displays during the Workshop. This first issue contains a compilation and overview by R.D. Nance of past and current ideas concerning the definition of the Avalon Terrane, its distribution, stratigraphy, and geological history, with an emphasis on problems in interpretation of these geological features. This is followed by a series of papers on more specific aspects of Avalonian geology, including Cambrian volcanism within the Avalon and correlative terranes (Greenough), the pre-Carboniferous geology of Cape Breton Island (Barr and Raeside), metamorphic rock units of the eastern Cape Breton Highlands (Raeside and Barr), a revised look at the stratigraphy and structure of Avalonian rocks of the Saint John, New Brunswick area (Currie), the results of recent mapping in the Caledonian Highlands of southern New Brunswick (McLeod), and an interpretation of Late Carboniferous tectonostratigraphy in the Saint John area (Nance).

The second issue, to appear in 1987, will contain an additional four papers, on sedimentological interpretations of Avalonian rocks in the Boston Basin (by A.D. Socci and G.W. Smith), Avalonian and adjacent terranes in eastern Massachusetts (by J.C. Hepburn, M. Hill, and R. Hon), the pre-Carboniferous geology of the western Cobequid Hills (by Pe-Piper and Piper) and the stratigraphy and depositional environment of late Precambrian rocks in the Antigonish Highlands (by J.B. Murphy and J.D. Keppie) of northern mainland Nova Scotia.

As organizer of the Avalon Workshop and editor of these special issues, I appreciate the support and assistance I have received from many individuals. In particular, I wish to thank the AGS Executive for sponsoring the Workshop in conjunction with their 1986 Colloquium and Laing Ferguson, general convener of the Colloquium, for taking on the extra work related to the Workshop. I thank the reviewers of the manuscripts presented in these issues for their careful and constructive work. And finally I wish to thank all those who participated in the Workshop in Amherst for their contributions to a very informative and stimulating event.

Sandra M. Barr
Editor