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resolved, but is clearly of environmental as well as economic importance. One wonders what other major surprises might be in store for us if we ever build a large tidal power plant.

A short article by Waller discusses environmental effects of tidal power. It seems that fisheries, which are of comparatively small economic importance anyway, would be largely unaffected. A potentially more important effect is alleged to be the increase in number of shipworms that could result from reduced water exchange. Migrating shorebirds, which feed extensively on mud flats at the head of the Bay of Fundy, are ignored.

Nothing is said of other possible tidal power sites in Canada, though Godin (1973) describes the potential, several gigawatts, of the large tides in Ungava Bay, and suggests that tidal power schemes in this area could be combined with hydroelectric power to produce a continuous output.

The volme is nicely produced. The typeface employed is unattractive, but the many illustrations and photographs, though printed on the same paper as the text, come through well. A rudimentary index has been compiled, but it is a pity that the editors did not take advantage of this as a symposium proceedings, rather than a collection of submitted articles, by including some record of the discussion that must have followed each lecture.

The oceanographer and geoscientist, perhaps aware of the somewhat limited potential of the tides, are apt to ignore tidal power. But the Bay of Fundy in particular does hold promise as a substitute for increasingly expensive thermal power and as a supplement to nuclear power. Its development cannot be left entirely to the engineer and politician.

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Most of the papers in this volume were presented at a symposium held at Sudbury, Ontario, in 1971, during the 24th Annual Meeting of the Geological Association of Canada. Some of the papers deal with rocks not strictly Huronian as that term is presently defined. In all, twelve papers are included: Nipissing diabase of the Southern Province, Ontario by K. D. Card and E. F. Pattison; The Huronian Supergroup, a Paleoaphebian succession showing evidence of atmospheric evolution, by S. M. Roscoe; Stratigraphy, petrography and paleocurrent analysis of the Aphebian clastic formations of the Mistassini-Otish basin, by E. H. Chown and J. L. Caty; Stratigraphy and depositional environments of Upper Huronian rocks of the Rawhide Lake-Flack Lake area, Ontario, by John Wood; Tillites and aluminous quartzites as possible time markers for Middle Precambrian (Aphebian) rocks of North America, by G. M. Young; the Proterozoic sedimentary rocks north and northeast of Sudbury, Ontario, by H. D. Meyn; Lower Huronian stratigraphy in Hyman and Drury Townships, Sudbury District, by F. Q. Barnes and F. J. Lalonde; Paleogeography of the Mississagi Formation and Lower Huronian cyclicity, by P. A. Palonen; A review of recently acquired geological data, Blind River-Elliot Lake area, by J. A. Robertson; Clastic dykes at Whitefish Falls, Ontario, and the base of the Huronian Gowganda Formation, by F. W. Chandler; Stratigraphic framework of Middle Precambrian rocks in Minnesota, by G. B. Morey; and The Penokean Orogeny in

northern Michigan, by W. F. Cannon.

On the whole this is a somewhat disappointing volume. This follows from the fact that much of it is organized geographically rather than topically and also because so much material is a restatement of what is already in print. Half of the papers deal with quite small and widely scattered areas and review the stratigraphy and structure of these areas with relatively minimal treatment of the sedimentation. Roscoe's paper on Huronian stratigraphy and the problem of the atmosphere and Young's paper on late Huronian glaciation are exceptions. Unfortunately the essential parts of both of these papers have been published elsewhere (Roscoe, 1969, and Frarey and Roscoe, 1970, in Geol. Surv. Canada Papers 68-40 and 70-40, and Young, 1970 in *Paleogeography, Paleoclimatology* and *Paleoecology*). Morey's paper on the geology of the Animikie of Minnesota and contiguous areas, a very good regional review, is another exception to the generally restricted geographical approach, but most of it, too, has appeared in print elsewhere (1972, Geology of Minnesota: Centennial Volume, p. 199-255).

The painstaking and extensive field mapping of Frarey, Robertson, Roscoe and others over the last decade or so has done a great deal to straighten out the stratigraphic problems of the original Huronian region and this volume adds very little on this topic. There are, incidentally, some six tables showing this stratigraphy in as many places in this book. The problems of Huronian sedimentation, however, are less well understood. Most authors touch only briefly on this topic. Foremost among the problems is the manner of formation and environment of deposition of the quartzites inasmuch as these form so large a part of the Huronian section. In general, only bits and pieces of evidence are presented. There is almost no effort made to develop a "model" from a study of the vertical profile despite the fact that the whole trend in field sedimentology is now in this direction. Only Palonen in his paper has attempted this approach.

In the reviewer's opinion, the quartzite problem is still far from solved. Most authors ascribe a fluvial origin to one or another of the several quartzites though Palonen, with some good evidence, believes the Mississagi of the Panache area to be marine. This problem has been discussed elsewhere (in Geol. Surv. Canada Paper 70-40, p. 153, 247, 257, and 263) and, excepting Palonen's paper, this volume adds very little to its solution.

It is surprising that a volume on stratigraphy and sedimentation says so little about the limestones of which there are several albeit token deposits in some cases, or even about the glacial conglomerates.

Other major problems are the question of the Precambrian atmosphere and the question of correlation between the Canadian and American Aphebian strata. The first question has been restated by Roscoe but without any advance from his earlier views. The second is most clearly summarized by Morey's paper. At present radiometric dates seem not to permit time equivalency. The Huronian predates the Animikie.

To end on a more positive note, this reviewer found the paper on the Otish Basin new and interesting. The presumed facies change from conglomeratic sandstone (Cheno) to dolomite (Albenel) in less than two miles (Chown and Caty, Fig. 3) is most noteworthy. Also noteworthy were the five polymict conglomerates, adjacent to or embedded in argillites in the Agnew Lake area described by Barnes and Lalonde (Fig. 3). All are Bruce or older.

It is to be regretted that this publication is blemished by an exceptional number of typographical errors.

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