

***Four Billion Years and Counting: A Book to Celebrate Canada's
Geological Heritage and International Year of Planet Earth***

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Summary

In 2006, the proposed multi-authored, popular book, "Four Billion Years and Counting: Canada's Geological Heritage" was identified as one of Canada's primary contributions to International Year of Planet Earth (IYPE, 2007-2009). To achieve this goal, a seven-person editorial board is marshalling the work of more than fifty expert contributors in order to publish both English and French editions in late 2008. Initial chapter drafts are now being woven into a narrative that will make sense to the reader and be coupled with new graphics and hundreds of contributed photographs. The book will highlight Canada's fascinating geological record, spanning the last four billion years. Canada has some of the oldest rocks on Earth, a record of the break-up and reassembling of land masses, and spectacular modern geological features such as mountains, canyons, waterfalls, and even volcanoes. Equally vital is Canada's wealth of minerals and energy resources, and its changing

climate over the eons. The book's first few chapters will explain such basics of geology as plate tectonics, geological time and the fossil record. This section will be followed by eleven chapters outlining Canada's geological evolution in a series of time slices. Novel paleogeographic maps are being developed to illustrate how the geography of Canada has changed over four billion years. The final section of the book, Health and Wealth, looks at ways in which geology directly affects Canadians and covers mining and energy, health, and the future. "Four Billion Years and Counting" should appeal to the non-geologist, and also attract the attention of geologists interested in regions or topics outside their specialty. The book will include a number of "hooks" to capture readers' attention, such as attractive photographs, paintings and schematics, and an easy-to-read text that will have been reviewed by specialists (for accuracy) and non-specialists (for readability). It's an ambitious project but one that will be a worthy legacy of International Year of Planet Earth.