

## Badlands written up in book on Ontario's geology



By Bill Rea

Ontario represents richness in terms of its geological make-up, and that is outlined in a new book, entitled *Road Rocks Ontario*.

It outlines more than 250 geological wonders in Ontario, and the Cheltenham Badlands are included in that group.

Written by Nick Eyles, and published by Fitzhenry and Whiteside, the book is an authoritative and informative account of Ontario's geological past. Making use of maps, as well as colour photographs, the book divides the province into five geographic areas. It also gives GPS coordinates for each site discussed.

The chapter on the Badlands opens with a subhead 'Alberta comes to Ontario,' commenting on how the vegetation and soil there has been stripped away, 'so that the area resembles the classic badland region of southern Alberta.'

It goes on to state the area was at the edge of a tropical sea about 400 million years ago. It also comments on the bright red of the Queenston shale as being the result of a high iron content.

'The term 'badlands' is in reference to the ease at which cattle broke their legs when driven through such areas,' Eyles wrote.

He also stated badlands are natural in Alberta, owing to a semi-arid environment combined with intense precipitation that runs over the shale. In the case of Cheltenham, the badlands were caused by overgrazing livestock, which stripped away the vegetative cover around 1900.

Eyles, who teaches geology at University of Toronto, also observed the badlands are a popular place for shooting TV commercials.

'The science of geology tells us about the past, but rocks have informed our present,' he wrote. 'Rocks are the skeletons of distinctive landscapes, such as the rolling Shield with its 'granite barrens,' its many glacially-cut lake basins, both Great and small, with their immense stores of freshwater and thousands of islands.'

The book also discusses the Niagara Escarpment and Oak Ridges Moraine.