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Review of *Great Plains Geology* by Robert F. Diffendal

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Great Plains Geology
by Robert F Diffendal Jr

Professor Robert Diffendal Jr’s little guidebook to the Great Plains of the USA makes for a fascinating read for an Englishman like me, who has never been there (but wants to). As he says in the article opposite, they rarely correspond to the impression most people have of them. For example, they are not just flat plains with cowboys herding longhorn cattle as you might imagine from the movies (in fact, they probably rarely were). Rather, it is clear from the guide that they can provide a visitor with an interesting mixture of geology, palaeontology, ecotourism and archaeology. In addition, they cover a vast area, including parts of southern Canada and northern Mexico. In fact, for me, they consist of an unimaginably large area and the author spends a certain amount of time just trying to define them.

The book is divided into three parts covering the geology and geological history of the Great Plains. The first two sections provide an overview of the geology, including the fact that much of this huge expanse was covered by a large inland sea during the Late Cretaceous and by ice sheets more recently. The latter part contains short but concise summaries of the distinct features of 57 sites and the aspects of these that the author finds interesting. These include their archaeology and ecotourism, as well as more geological features, for example, Ash Hollow State Historical Park (where the wagon tracks of the Oregon Trail can be seen) and Head-Smashed-In Buffalo Jump in Alberta (where ancient North Americans drove bison over the cliffs to kill them).

However, it is the geology and the palaeontology that dominate the guide. Each short section provides a very brief overview of the site, some directions and a colour photograph of the relevant feature. There are also schedules providing details of the geological subdivisions of the Great Plains, a chronology of the development of some of the geological concepts encountered in the book, and cautions for visitors to bear in mind.

There is also a glossary of the terms used.

Robert Diffendal is Professor Emeritus at the School of Natural Resources at the University of Nebraska-Lincoln in the USA and sometime contributor to this magazine.