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The Landscapes of Southern Alberta

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as Point Pelee or were set aside to preserve endangered wildlife such as the Wood Buffalo. Scenic Wonders of Canada is built around such features and by a skillful blending of outstanding colour photographs, a well written text and clearly presented, competently written "closeups", succeeds in some 375 pages, in giving the reader an appreciation for the natural beauty and natural history of Canada.

Forty-two outstanding scenic features are presented in the book. They range from Gros Morne National Park in Newfoundland, through Quetico Provincial Park in northern Ontario, the Cypress Hills of Saskatchewan, and the Queen Charlotte Islands to our newest national park, Auguittug on Baffin Island. A general text including historical comment introduces the principal subject; other attractions are briefly noted in paragraph form and the entire feature illustrated by a generalized relief map on which all points of interest are clearly shown. These maps are obviously not intended to be route maps as roads are not numbered nor are major highways marked.

Of particular interest are the one-page "closeup" articles that accompany each of the forty-two descriptions. They are concerned with topics such as physical geology, botany, ornithology, forestry, or the cause of the tides, and by themselves would be a good introduction to natural history for younger readers. Although we are shown how glaciers carved the fiords at Gros Morne, how caves form and how badlands develop, fossils do not seem to have attracted the writers although, of course, dinosaurs make their appearance. Equally lacking are any illustrations of the beauties of the mineral world.

This book should have broad appeal. It provides factual information interestingly presented, a collection of first-rate coloured photographs and the incentive to get out and see more of Canada's natural beauty.

MS received October 28, 1976

The Landscapes of Southern Alberta

By Chester B. Beaty University of Lethbridge Production Services, 95 p., 1975. \$3.50 (paperback only)

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"Life would be a pretty dull affair . . . without some interest in and understanding of the natural world in which we find ourselves." Such is the author's rationale for writing an elementary treatment of the geomorphology of southern Alberta. The book is designed for the layman (which accounts for the fact that it can be seen for sale in several drugstores in Calgary) but geologists and geographers not too acquainted with Alberta would probably learn something from reading it.

Southern Alberta can be divided on both structural and physiographic grounds into mountains, foothills, and plains provinces, and this natural subdivision provides the organization for the book. Introductory chapters are concerned with the traditional battle between tectonic and gradational forces and with bedrock geology. Various processes and structural features are defined, and rocks, geologic time, and southern Alberta stratigraphy are classified in a simplified fashion. The meat of the book is a chapter-bychapter treatment of mountains. foothills, and plains. For each province the author first describes the general geomorphic characteristics, including bedrock structure, effects of glaciation, and common landforms. He then discusses particular features which are unique or whose origins are debatable. These include the Frank slide, the Oldman River water-gap, and patterned ground on Plateau Mountain (in the mountains); the Foothills Erratics Train and Porcupine Hills meltwater channels (in the foothills); and aligned coulees, igneous stocks, prairie mounds, and hoodoos (on the plains). Treatment of controversial subjects (e.g., origin of prairie mounds) is generally fair. The

author promotes his own theories of coulee alignment and distribution of slumps (control by Chinook winds in both cases) but concedes nonuniversal acceptance.

The text is augmented by several line diagrams and many black and white photographs, which are adequately reproduced. The author notes that most of the photos were taken from major highways and roads, so that the scenes shown would be ones that people actually see. Another useful feature is a list of references at the back of the book.

As a popular, natural history-type work this book is a success (both my opinion and that of some laymen I know). The writing style is casual, perhaps conversational, with a touch of humour here and there; presentation of ideas is, for the most part, clear. But there is the occasional lapse. The lay reader would be confused by the poorly-presented classification scheme for mass movement and would wonder why some terms are used in tables long before they are defined in the text. He would probably be perplexed after reading the explanation of patterned ground (admittedly a very difficult subject to handle). More experienced readers will be surprised to learn that plate tectonics is based on the concept of "moving surficial slabs of rock" and that the earth's crust was created 4500 million years ago. These and a few other examples of misleading statements are unfortunate but perhaps forgivable in a work of this sort, where gross simplification is sometimes necessary.

The book would serve well as a text in Alberta high school science courses and low-level undergraduate geography courses. It is presently used as a textbook for a natural history course at the federal penitentiary at Drumheller, Alberta, and reportedly has been well received by the inmates.

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