

1984

Science Notes - Book News : *Geology of Iowa: Over Two Billion Years of Change*

Follow this and additional works at: <https://scholarworks.uni.edu/istj>



Part of the Science and Mathematics Education Commons

Let us know how access to this document benefits you

Copyright © Copyright 1984 by the Iowa Academy of Science

Recommended Citation

(1984) "Science Notes - Book News : *Geology of Iowa: Over Two Billion Years of Change*," *Iowa Science Teachers Journal*: Vol. 21: No. 1, Article 11.

Available at: <https://scholarworks.uni.edu/istj/vol21/iss1/11>

This Article is brought to you for free and open access by the IAS Journals & Newsletters at UNI ScholarWorks. It has been accepted for inclusion in Iowa Science Teachers Journal by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

Offensive Materials Statement: Materials located in UNI ScholarWorks come from a broad range of sources and time periods. Some of these materials may contain offensive stereotypes, ideas, visuals, or language.

Book News

In *Geology of Iowa: Over Two Billion Years of Change*, author Wayne I. Anderson presents a chronological account of the rock formations that underlie the farmland and cities of Iowa.

Recently published by the Iowa State University Press, *Geology of Iowa* begins with a description of the geologic setting of the state in the Stable Interior, a region of generally flat-lying sedimentary rocks that show little deformation. Anderson comments, "At any one location in Iowa, the rocks typically appear to be horizontal — as flat as a pancake."

Few Iowans realize that their state has spent more time under oceans than as dry land or that it was once an ancient rift zone, similar to present-day Africa. Beginning his chronological "time clock" of the billions of years of geologic time, Anderson describes the Precambrian Era that saw the formation of the oldest rocks in the state including the durable Sioux Quartzite of northwest Iowa. He discusses the Cambrian Period when sediment formed along sandy marine shorelines.

In *Geology of Iowa*, Anderson describes the Ordovician, Silurian, Devonian, and Mississippian periods that produced vast quantities of dolomite, fossil-bearing limestones, and a variety of other marine deposits. Important economic products associated with these rocks are summarized and related to the state's geologic past.

Other chapters document Iowa's Pennsylvanian Period, during which the region was a vast coal-forming swamp, and the Mesozoic Era, when gypsum beds were formed in salty coastal lagoons. During these periods of time before the continents drifted apart, Iowa was situated in an equatorial setting with a sub-tropical climate.

Later chapters describe major episodes of erosion, events of the Great Ice Age, and the coming of man.

The author explains the environment of deposition or formation for each of the state's major rock groups; he describes key fossils and relates them to Iowa's ancient environment. Specially prepared maps portray the various geographic settings of ancient Iowa. The state's geologically related resources and scenic areas are described and discussed as well.