
Introduction to Geology: Physical and Historical. *William L. Stokes and Sheldon Judson.* Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1968. xii+530 p. \$9.50.

According to the authors, this book ". . . is designed to serve as a complete text for a one-quarter or one-semester introductory geology course." A combination of two previous texts, *Physical Geology* and *Essentials of Earth History*, the book presents both of these facets of geology, with some omissions of material contained in the earlier texts.

The chapters on physical geology are, in many respects, similar to those in the previous text. Some chapters represent a combination of several chapters, while others have been revised. New chapters include "The stimulating problem of continental drift" and "Astrogeology." Historical geology occupies nine of the 23 chapters, a reduction from 20 chapters in the earlier book.

The format of this text, in many ways similar to *Essentials of Earth History*, shows several improvements over *Physical Geology*. With increased page size and approximately the same column width, the appearance has been improved. Photographs are excellent and many are clearer and larger than the same ones in the former texts. Non-glare paper adds to the ease of reading, and important words and definitions are now in boldface print, rather than in italic type as before.

Other than completely new topics, improvements in content include Hjulström's velocity-particle size curves, a world map of oceanic currents, a summary at the end of each chapter, shaded graphs, and some crustal sections without vertical exaggeration.

This book is well written and current; however, some shortcomings were noted. One shortcoming was noted in the section dealing with continental drift. Although the authors are "drifters," their introduction of the topic is unbiased. Twenty years ago one would be hard-pressed to find many North American supporters of the theory of continental drift. The situation today has changed and the statement on page 424 that, "intelligent thinkers . . . may soon find themselves taking sides in one of the most important scientific controversies of modern time . . ." fails to indicate adequately the reversal in opinion on this matter. In the section on natural resources, no mention is made of the importance of gravel.

The discussions dealing with the early history of man may have been improved by inclusion of a diagram showing phylogenetic relationships. Although James Hutton is mentioned in connection with rock cycles and the origin of granite (not indexed), his name is omitted from the introduction of uniformitarianism.

Some spelling errors include Fraser (p. 149) and Hjulström (p. 150 and 175), of which the latter is in some places also spelled correctly. In the first reference to journals, which does not occur until chapter 9, roman numerals are used for volume numbers, while the remainder of such references (except chapter 10) are in arabic numerals. This does not appear to be a carry-over from the older texts.

In general, this is an excellent text and should serve its designed purpose as an introductory text in geology, or even as a supplementary text in biology.

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