

REVIEWS

FOSSILS FOR AMATEURS: A Guide to Collecting and Preparing Invertebrate Fossils, by Russell P. MacFall and Jay Wollin (Second Edition). Published by Van Nostrand Reinhold Company, New York, Cincinnati, Toronto, London, and Melbourne, 1983, x + 374 pp., illus.; cloth edition, \$18.50; paper edition, \$12.50

This volume is written for the amateur collector of fossils (as the title states) and is intended to enable the untrained collector to learn enough about fossils and geology to pursue his hobby in a meaningful and non-destructive manner and gain both knowledge and intellectual satisfaction from his pursuit. Specific contributions of amateur collectors of the past and their numerous discoveries of the remains of previously unknown animals are reviewed in the first chapter. The role of "enlightened amateurs" in the advancement of paleontology is undeniably important and the necessity of communicating with and working with professional paleontologists is stressed in this volume. This is most welcome as too many amateurs do not follow careful and proper procedures resulting in the destruction and waste of both fossil materials and their own labors.

Later chapters are concerned with the vast extent of geological time and discussions of geologic processes, the nature of fossils, fossilization processes, burrows and trails, nomenclature and classification, and types of plant and animal fossils. Subsequent chapters deal with practical procedures and techniques used in collecting, cleaning, cataloguing, and preparing the specimens for study and photography and eventual display.

The book is well written and informative, well illustrated, organized and indexed. It should be read and used by all amateur collectors.

HEN'S TEETH AND HORSE'S TOES, by Stephen Jay Gould. Published by W. W. Norton & Company, New York and London, 1983, 413 pp., illus., \$15.50

Stephen Gould is one of the most popular and successful science writers presently active. His wit, sense of humor, and

tasteful perception of the best way to bring science to the attention of the non-scientist is unsurpassed in modern America. The present volume is a worthy addition to his many articles and several previous books on evolution and related subjects.

The thirty chapters are arranged in seven sections: the first, *Sensible Oddities*, is concerned with curiosities in Nature; the second, *Personalities*, consists of sensitive biographical essays on three geologists (Steno, Hutton, and Cuvier) and three biologists (Agassiz, Darwin, and Vavilov); the third comprises five chapters on *Adaptation and Development*; the fourth, *Teilhard and Piltdown*, is on the Piltdown Conspiracy and Man's place in Nature; the fifth, *Science and Politics*, treats creationism, race and creed; the sixth, *Extinction*, deals with the decline of dinosaurs and other items such as Hershey bars; the seventh and final section, *A Zebra Trilogy*, includes essays on zebras, the zebra's stripes, and quaggas, coiled oysters and flimsy facts.

This delightful volume is both entertaining and informative. It will be read and re-read by both geologists and biologists.

GEOLOGIE DE L'EUROPE, DU PRE-CAMBRIEN AUX BASSINS SEDIMENTAIRES POST-HERCINIENS, coordination de Jean Cogné et Maurice Slansky, Mémoire du Bureau de Recherches Géologiques et Minières, no. 108, Orleans, France, 1980, 308 pp., illus., paper \$30.60

The *texte intégral* of *Colloque C6: Géologie de l'Europe* of the twenty-sixth International Geological Congress is presented in this volume (one of three forms of publication of these proceedings). The papers are printed in English or French and are divided into four themes: Thème I, l'Europe Pré-varisque (4 papers); Thème II, Les Grandes Régions Varisques (6 papers); Thème III, Vers une Synthèse Paléogéodynamique du Domaine Varisque (5 papers); and, Thème IV, Les Bassins Post-Hercyniens (6 papers). It comprises a valuable contribution to the regional geology of Europe.

--H.C.S.