

women are now working and living in jungles, on remote islands, in isolated mountain areas as speleologists, as marine and wildlife biologists, environmentalists, or simply, as sportswomen. Though different in approach and interests, these women share many common characteristics. All combine a thirst for knowledge of the natural world with a desire to be independent workers. Whether engaged in research on sharks or riding the white waters of a wild river, all love and respect the wildlife and vegetation of the land. No matter what the occupation, they are all basically scientists, conservationists and feminists. Strong individualists, they also stress how they were helped by encouraging teachers, female role-models and scientific organizations such as the National Organization of Women Geographers. If you are interested in a detailed description of field work in the natural sciences, this book is not for you. If, on the other hand, you want to understand more about women who are trying new careers and lifestyles and you are willing to tolerate the author's disconcerting propensity to identify individual characteristics by astrological sign(!), then this should be a "good read." The historical and literary analyses are enlightening and the lives of the women themselves, inspiring. It should be of special interest to young women who are contemplating careers in the natural sciences or the great outdoors. Go to it, sisters!

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SAVING THE TIGER. *A Studio Book.*

By Guy Mountfort; Foreword by Peter Scott. Published for John Calmann & Cooper, London, by Viking Press, New York and Penguin Books, Markham, Ontario (Canada). \$16.95. 120 p.; ill.; index. 1981.

This slim volume consists of three parts: "The Life of the Tiger," "The Downfall of the Tiger," and "Back from the Brink," strengthened with 123 well-chosen illustrations, most in color, and a selected bibliography. A fairly high level of generalization is maintained throughout the book. The emphasis is not on presenting original data but in reporting the author's personal views on tiger ecology and behavior, and his participation in and a progress report on "Operation Tiger" (or as he puts it "... the crusade to save it," p. 116). The layout is striking; the writing clear and for a general audience. Besides being fun to look at, books such as this serve the purpose of putting into perspective and documenting the role of the "professional conservation personality" in international conservation efforts.

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PALEONTOLOGY & EARTH SCIENCES

WHY AND HOW: SOME PROBLEMS AND METHODS IN HISTORICAL BIOLOGY. *Foundations & Philosophy of Science & Technology. Pergamon International Library.*

By George Gaylord Simpson; Series Editor: Mario Bunge. Pergamon Press, Oxford and New York. \$40.50 (hardcover); \$20.00 (paper). viii + 263 p.; ill.; index. 1980.

For over fifty years George Gaylord Simpson has devoted a significant part of his prodigious scholarly work to a consideration of the principles of historical biology. He is not only responsible for the widespread use of the term "historical biology," but also, more than anyone else, for delineating the subject matter which it designates. This volume contains slightly modified articles and excerpts of articles on the subject not previously collected or published in book form. They are arranged under the six headings: "The Fossil Record," "Morphology, Homology, and Function," "Paleoecology and Faunal Analysis," "Systematics and Taxonomy," "Some Bits of Biometry," and "Biogeography." Introductions at the beginning of each section and comments on each reprinted paper provide the book with a cohesion and continuity not typical of collections of previously published works.

It may seem odd to say that a collection of papers, one of which was published as early as 1926, is timely. But the primary significance of this volume, however interesting it may be to historians of twentieth-century biology, lies in the fact that it provides a comprehensive introduction to the principles of historical biology, one that is in no way dated.

The aim of historical science is to infer the events of the past, to order them with respect to one another in space and time and, wherever possible, to recognize, and even to discover, causal relationships among them. Simpson, along with nearly every biologist and geologist of his time, has regarded the process by which this aim is accomplished to be highly eclectic. It is in fact this eclecticism, more than any other characteristic, which serves to distinguish historical science from theoretical science. Physicists attempt to produce theories that are, as nearly as possible, self-contained. Geologists and paleontologists, on the contrary, produce historical accounts that necessarily presuppose all sorts of general and specific knowledge, most significant among which is that provided by the theoretical sciences. Paleontologists reach outside biology for the very principle