cal education," "Problems in pharmacy," and "Pharmacy in literature and music." Each section begins with a student-oriented introduction (about two pages) and ends with some 40 to 80 citations of additional readings. A majority of the essays are by 20th century writers within Anglo-American pharmacy, with the main stress on the pharmaceutical profession (rather than on pharmaceutical science or the manufacturing industry).

The essays are well selected, judged within the editor's stated purpose of "inculcating proper ideals and necessary background of pharmacy" through a textbook of essays chosen for "interest, significance, appropriateness for an undergraduate audience, and understandability." To stay within this concept, it was necessary to omit "many worthwhile essays . . . because they were too technical and, hence, would be beyond the understanding of first-, second-, or third-year students" of pharmacy. Adherence to brevity and to the English language (without any translations) further narrowed the editor's range of choice.

The essays are responsibly written, but show the wide gamut of divergent styles and disparate topics characteristic of anthologies: For example, companion essays in the section on drugs are a semifictional account of the discovery of morphine and an essay on antibiotics by a Nobel Prize winner.

These essays are the seasoned survivors of some years of classroom experience with a wide range of assigned readings of the type here selected. The editor quite properly and usefully offers them to help ameliorate the fact that "course work directed specifically toward the development of professional enthusiasms, pride, and idealism has not been as universal, as generally well thought out, or as emphatic" as it could be.

For use in professional orientation courses, the present volume undoubtedly will be most effective when used for assigned supplementary readings in conjunction with a systematic textbook. Even seasoned pharmaceutical workers will enjoy taking up *Readings in Pharmacy*, whether to browse or buy; and every library with a pharmacy collection should find it worthwhile. The book is well printed, well bound, and briefly indexed.

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## Classical Zoology

**Introductory Zoology**. Lincoln Coles Pettit. Mosby, St. Louis, Mo., 1962. 619 pp. Illus. $7.50.

The onrush of modern biology has somehow left the descriptive, morphological aspects of that science far out in backfield. Genetics, physiology, cytology, ecology, experimental embryology, biochemistry, virology, bacteriology, and the like have, with their unending triumphs, long outshone the terrain, and, as they basked in their glories, these fields have made students feel apologetic for even taking an interest in such a drab subject as general zoology, although its subject matter was admitted to be of some value.

Pettit has, therefore, performed a signal service to biology by producing this text, which does an outstanding job of enlivening and modernizing a half-neglected, classical subject. In addition to rendering even the straight classificatory sections most readable, the author uses examples that are of immediate application in thought and teaching; he also adds much interesting, up-to-date, and diverse information, wherever it is relevant, by interweaving his accounts with the latest findings in genetics, ecology, animal behavior, medicine, and other lines of knowledge, all of which enrich the material immensely. These attributes not only redeem general zoology from the threat of desuetude, but they also turn the entire field into a vital and absorbing subject. The work, which is dedicated to Libbie Hyman, employs some of her suggestions in the reclassification of many invertebrate phyla.

The book is truly a text in introductory zoology which is wide in scope and rich in contents, one which scans the entire field and lays a solid background for every aspect of it. More than a third of the material is given over to human anatomy, general physiology, heredity, population, ecology, and evolution, all of which are excellently and interestingly handled down to the very latest modern detail, and are logically related to the story as a whole.

The final section, "Zoology and human destiny," is a fascinating survey with an original construction of the story of the origin of man and of his racial ramifications. This section also contains penetrating comments on science and religion, scientific freedom, science under Nazism and Communism, the population explosion, and other significant topics that one least expects to find in such a volume; yet these topics are treated in a fresh and stimulating manner, free from the meaningless slogans with which they are all too frequently bedecked, even by scientists of high repute. The book, which terminates with an informative brief essay on the history of zoology, is a remarkable, pioneering venture from beginning to end, and it fully achieves what it sets out to do—to introduce the student to the panorama of general zoology.

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## Space Medicine Symposium

**Psychophysiological Aspects of Space Flight**. B. E. Flaherty, Ed. Columbia University Press, New York, 1961. x + 393 pp. Illus. $10.

"One can say with confidence that we now possess all the basic knowledge required to keep a man alive in space for a limited, yet significant, period of time." With this sentence, General Otis O. Benson introduces the collected papers from the 1960 space medicine symposium conducted by the USAF School of Aviation Medicine, which are presented in this book. The book is organized into four sections: Technical Background, Critical Problem Areas, Problems of Human Reliability, and Special Techniques of Control. The range of contributors is remarkable—from program managers like Donlan of Project Mercury, through researchers in governmental biomedical laboratories, to the most respected of basic scientists like Magoun, Kleitman, and Halberg. Where the authors have applied themselves specifically to the problems of man in space, there seems to be general agreement with Benson's position.

The book is notable in several different respects. It contains a managerial description of the Mercury program. There are excellent summaries of such diverse subjects as sensory deprivation, the neurophysiology and neuroendocrinology of stress, circadian rhythms, and operator proficiency. Several aspects of isolation and confinement are presented, including results from space cabin simulators, water immersion devices, isolated arctic stations, and cubicles in university laboratories. One conclusion