

and Lorch, Allen). The question as to how to get useful water from the sea has been solved by marine birds by the use of nasal salt-secreting glands. These random samples are given to indicate that the book is a mine of information and is up to date.

*Comparative Physiology* is not recommended as light reading nor is it enlivened by anecdotes, puns, innuendos, double-entendres, nor colored pictures. As claimed by the publisher's flier it is "information-crammed." On the shelf of a high school library it is to be regarded as an invaluable reference book for the biology teacher and the gifted student.

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THE MERCK VETERINARY MANUAL, 2nd Ed., O. H. Siegmund, Ed., ix + 1624 p., \$9.75, Merck and Co., Rahway, New York, 1961.

Here is a book that belongs in every laboratory that maintains an animal colony. It also has potential users outside of veterinary medicine in fields such as parasitology, physiology, nutrition, and wildlife management.

The first three-quarters of the book, devoted to the diseases of large and small animals, is divided into sixteen sections each dealing, for example, with subjects such as allergy, digestive system, endocrine system, neoplasms, nutrition, parasitic diseases, etc. The second part deals with the toxicology of pesticides and other natural and artificial poisons. Other major divisions deal with poultry; fur, laboratory, and zoo animals; therapeutic procedures and laboratory examinations; and prescriptions. The book is thumb-indexed by sections, and there is a good comprehensive index.

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ECOLOGY AND DISTRIBUTION OF RECENT FORAMINIFERA, Fred B. Phleger, viii + 297 p., \$7.50, John Hopkins Press, Baltimore, 1960.

The Foraminifera are an important group of Protozoa that occur, for the most part, in marine or brackish environments. A few are found in fresh water. All have shells or skeletons of some sort. These shells have been preserved as fossils in geologic formations since Cambrian time. Because of their importance to the petroleum industry in locating oil deposits, fossil Foraminifera have been widely studied.

Phleger has brought together in this book the existing information concerning the ecology and distribution of the Foraminifera in the hope that present knowledge and future discoveries will make it possible to determine

the climatic and other conditions at the time the fossil deposits were laid down. There is a discussion of benthonic and planktonic populations under a wide variety of conditions. Many tables and charts show the distribution of species in these environments.

This book is certain to be useful to oceanographers and petroleum geologists. Teachers in schools in coastal areas and in regions where petroleum production is an important industry should have it as a reference for their students.

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HOW TO COLLECT SHELLS (A SYMPOSIUM), 2nd Ed., iv + 92 p., \$2.00, American Malacological Union, Route 2, Box 318, Marinette, Wisconsin, 1961.

This paper bound booklet brings together a large number of short articles by many authors. Many were written for the first edition in 1941, and others are reprints of articles from a variety of sources. They are grouped in this book in three sections: "Collecting Marine Shells," "Collecting Nonmarine Shells," and "Arrangement and Study of Shell Collections." The articles vary in length and quality, and this reviewer feels that the book needed a hard-boiled editor who would have given the text more uniformity and who would have directed it more to the needs of the beginner. There is a lot of information here about molluscs, for one cannot discuss collecting shells without considering the natural history of the animals that make them. The articles are interesting, and undoubtedly a beginner or an advanced collector will learn something about shell collecting from this book.

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SEX RATIOS AND AGE RATIOS IN NORTH AMERICAN DUCKS, Frank C. Bellrose, Thomas G. Scott, Arthur S. Hawkins, and Jessop B. Low, Illinois Natural History Survey Bulletin, Vol. 27, Article 6, pp. 391-474, \$1.00, Illinois Natural History Survey, Urbana, Illinois, 1961.

This study is an evaluation of sex and age ratios in North American duck populations. It also presents a discussion of waterfowl management and the way these ratios can be used to measure productivity. This monographic work is the result of over twenty years of research in the field and is extensively documented and illustrated. A large amount of information is included on waterfowl production and hunting, environmental relationships, breeding, and fly-