various other topics. Moreover, there is an extraordinarily large number of references that are so successfully linked to the tables that the source of specific items in the tables can be readily identified.

The enormous effort that created this monograph was under the joint sponsorship of the U.S. Air Force, Army, Navy, and Atomic Energy Commission, but the direction of the enterprise was the responsibility of the Committee on the Handbook of Biological Data, a unit of the American Institute of Biological Sciences.

Because a tremendous amount of data were handled in the preparation of the monograph, it is little wonder that there are some errors and some contestable interpretation of knowledge as portrayed in some of the diagrams. For example, the summation of lipid digestion and absorption (p. 179) is at least slightly erroneous, and it is questionable that fat per se is needed only as a source of essential fatty acids (p. 67). There may be additional needs for fat. Some errors were noted in the references. On the whole, however, the monograph appears to be remarkably accurate.

Biological scientists in general may be expected to have occasional need for this handbook, and students will find that many of the diagrams are unusually illuminating.

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Human Heredity. James V. Neel and William J. Schull. Univ. of Chicago Press, Chicago, 1954. vii + 361 pp. Illus. $6.

This new textbook on the formal genetics of man has a refreshingly different approach. It does not replace the older books on this subject but supplements them by covering much ground not adequately reviewed elsewhere. It will very probably satisfy an important need in this field for many years.

The presentation of the principles of monofactorial inheritance departs from the traditional method by including sex-linked, partially sex-linked, and holandric genes along with the general discussions of autosomal dominant and recessive genes. This has the advantage of placing the emphasis on the physiologic action of the gene rather than on pedigree form. From the teaching viewpoint, there are also advantages to a separate discussion of sex linkage. Fortunately, the book is so organized that an instructor could use either approach by making appropriate assignments in the text.

Probably the best feature of the presentation is the constant attention given to the statistical problems that are essential to an understanding of the subject. The authors state that they wish to emphasize the methodology of human genetics, and this they do very well. They warn that the reader without preparation in the calculus and biometry may experience difficulty, but they offer no apology and insist that such knowledge is essential to the serious student of human genetics. Although this may place a part of the text beyond the reach of many students and restrict its use to advanced courses, it also makes it a much more valuable work for advanced students and investigators.

In view of the wide variety of special statistical tests that have been proposed to test genetic hypotheses under varying conditions of data collection and to estimate various useful parameters, the authors have done an admirable job of generalizing and choosing the most useful methods for discussion. Maximum likelihood methods of estimation are used wherever possible, often to the exclusion of less efficient procedures. Several procedures are described that are not widely known and are difficult to find elsewhere. For example, Penrose's ϕ-statistic is a useful tool whose potentialities are rarely recognized. Owing to limitations of space, the worked examples omit most of the computational steps; but, since the correct results are stated, this should serve as a challenge to the student. Well-selected problems are given at the ends of most chapters, and several abridged tables useful in computation are included.

The discussions of genetic principles as applied to man are clear and concise. Population genetics, mutation, physiologic genetics, and other topics are treated as adequately as would seem possible in the available space, with intelligent choice of topics. In a number of places the authors indicate their opinions on the probable value of various possible avenues of future research. It is of interest to contrast their enthusiastic evaluation of many of these with their rather pessimistic view of the possibilities in linkage studies and twin studies.

The practical applications of genetics to human problems are grouped in the last three chapters under the headings of genetic counseling, medicolegal applications, and eugenics. The chapter on advice to families is excellent, with a realistic and understanding view of the many complex factors that must enter into any genetic counseling problem. On the other hand, the chapter on eugenics discloses a surprisingly conservative approach, and the authors are apparently under some misapprehensions concerning the modern "eugenics movement."

In summary, this book is generally of excellent quality. It will be quite useful as a textbook to advanced students in human genetics and to investigators in this field. It should also be of particular interest to medical investigators whose research leads them into areas where genetic factors are of importance. The mathematical training required will limit its use as a textbook by medical students and beginning students of genetics. The book is well indexed and is bound and printed in an attractive format.

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An Introduction to Molluscan Ecology. Distribution and population studies of fresh-water molluscs. Alan Mozley. Lewis, London, 1954. x + 71 pp. Illus. 9s.

The title of this book is a little misleading, since it is more a brief and partial summary of the ecology of a very few species of mollusks rather than an introduction to this vast subject. In fact, most of the data given are limited to a few fresh-water pulmonate snails of northern latitudes and a somewhat more detailed account of a few African pulmonate snails responsible as vectors for bilharziosis (schistosomiasis). Although the book has a subtitle of "Distribution and population studies of fresh-water molluscs," there is hardly any mention of fresh-water bivalves or fresh-water Prosobranchs. These two groups together outnumber the pulmonates by 10 to 1. Nevertheless, there are many observations made by an experienced field man on the ecology of these animals and methods of control of the disease-carrying forms.

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Fishes of the Western North Atlantic. Sawfishes, guitarfishes, skates, rays, and chimaeroids. Henry B. Bigelow and William C. Schroeder. Sears Foundation for Marine Research, Yale Univ., New Haven, Conn., 1953. Memoir 1, pt. 2. xvi + 588 pp. Illus. $15.

This book, carefully and accurately prepared for the layman and the specialist, forms part two of an ambitious project supported by the Sears Foundation for Marine Research. The general treatment and format are the same as those for part one, which was published in 1948 and included lancelets, cyclostomes, and sharks. The printed date of publication "1953" is in error since part two was not distributed until 1 Dec. 1954, the date it was mailed from Denmark.

Under each species the following sections occur: study material, distinctive