

nical terminology. Scant use is made of figures and the 29 plates are not only of mediocre quality but crammed together in the center of the book rather than being interspersed in the text as you might expect in a book in this price range. The price alone would preclude its use as a textbook in many courses or even as a reference in libraries with tight budgets. Such a comprehensive treatment (22 pages of references and 16 pages of subject and scientific indexes) of this very timely topic should not be priced out of the hands of those who could derive immediate benefit from it.

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WORLD PROTEIN RESOURCES, by Allen Jones. 1974. Halsted Press, New York. 381 p. \$17.50.

Protein is essential to life. Inadequate amounts and types of protein in the diet are major problems throughout the world. The author feels that there is no shortage of protein world-wide, rather that the problem is in inefficient distribution of protein foods, the failure to utilize certain protein sources and to thoroughly explore other sources. The book is divided into five parts. The first, an extensive "Introduction to Proteins" has nine chapters. Protein and amino acid chemistry, proteins in the diet, vitamins, proteins, minerals, allergy, and food preservation are covered in an informal and interesting style. This introduction provides a sufficient review of general nutrition so that the importance of proteins, interacting with the other components of an adequate diet, is made clear.

In the second part, "Animal Proteins," the author discusses common and uncommon sources of meat throughout the world. Among the more uncommon examples of interest to protein technology are snakes, which the author considers to be the sources of medical protein because boiled snakes are thought to have curative powers. Variability in meat, fat content, and simulated meat products are also discussed in this section. There are additional chapters on poultry, dairy protein, and fish products.

Chapters on cereals, fresh vegetables, oilseeds, legumes, vegetable genetics, and green leaf protein are found in part three. The pros and cons of individual plants as potential and actual protein sources are presented and discussed in an effective manner. There is hope that algae will provide low-cost protein from the sea. Algal protein sources, along with fungi, yeasts, and bacteria are considered as possible and actual sources of usable protein in part four. Areas of interest discussed in this section include aspects of the utilization of oil and of waste products as raw materials for protein production.

The fifth, final, and most valuable part of this book is entitled "Protein Economics." The problems facing world agriculture are many and complex, ranging from inflation to obsolete laws. The author attempts to calculate the potential output of protein possible on earth and suggests ways to approach this theoretical maximum. He also lists those factors, such as labor problems and the failure to utilize land suitable for cultivation, which tend to inhibit protein production. A discussion of the unique protein situation in about 40 selected countries is interesting and adds much to the book. In many cases it is apparent that solutions to the protein problem are not easy nor will they be quick in coming. Trends that may affect protein technology and thereby the future of man on earth are presented in the final chapter. Population growth, urbanization, fuel costs, health problems, and numerous other factors are shown to influence and be influenced by protein.

Tables of data are numerous, easy to understand, and provide much for the reader to consider. Unfortunately, references to literature used in the preparation of this book are not included. The literature available to the author must have been extensive and a collection of these sources of information would be helpful to many readers. This book is both well-written and timely and it should be of special value to nutritionists, agriculturalists, biologists, and concerned lay people.

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Education and Professional Concerns

U.S. COLLEGE SPONSORED PROGRAMS ABROAD, ACADEMIC YEAR, by Institute of International Education. 1974. Unipub, New York. 89 p. \$3.50 softback.

Available programs are listed country-by-country along with information on dates, cost, and sponsoring institutions and a short synopsis. The concise listings give a quick grasp of possibilities for the teacher desiring to study abroad for a year or for the undergraduate seeking a college or university that sponsors overseas study as part of a particular curriculum.

SUMMER STUDY ABROAD, by Institute of International Education. 25th ed., 1974. Unipub, New York. 86 p. \$3.00 softback.

This listing of college and university summer courses abroad is published yearly. The book includes a country-by-country listing of courses and sponsoring institutions and a brief summary of

the course with all-inclusive dates and costs. As with all IIE booklets, the thorough coverage of the area is apparent and the style permits easy access to desired information.

TEACHING ABROAD, ed. by Marjorie Beckles. 1973. Unipub, New York. 68 p. \$4.00 softback.

This booklet provides information on (i) U.S. Government Programs, (ii) foreign government programs, (iii) multinational programs, (iv) international corporation programs, (v) private associations and schools, (vi) volunteer teaching opportunities, and (vii) a list of publications and embassy addresses for future information. Each program listing includes criteria for employment, application deadlines, remuneration, and addresses of the sponsoring groups.

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Evolution

THE ECONOMY OF NATURE AND THE EVOLUTION OF SEX, by Michael T. Ghiselin. 1974. University of California Press, Berkeley. 358 p. \$12.95.

Michael T. Ghiselin may be familiar to the readers of *American Biology Teacher* as the author of the well-received *Triumph of the Darwinian Method* (reviewed in *ABT* 35[6]:360), which in 1970 won the Pfizer Prize of the History of Science Society. In his new book Ghiselin reveals the depth and breadth of his understanding of biology and the underpinning philosophical positions on which biological science is based. Ghiselin seeks to develop a Darwinian nonteleological view of the "natural economy," using a laissez-faire model rather than the traditional cooperative ideal. He reviews a variety of theoretical topics, most of which concern the evolutionary interpretation of sex and related reproductive phenomena.

Ghiselin repeatedly challenges the validity of purely theoretical systems and emphasizes the importance of empirical evidence, citing a large body of factual material on "reproductive strategies" in both the plant and animal kingdoms. The author's discussion is extensively documented with literature citations and the book is concluded with 69 pages of cited references. This extensive bibliography rightly suggests that this book is not light reading, but is rather an endeavor to be engaged in by the serious student of evolutionary biology. The casual observer must not be misled by such humorous chapter titles as "The Loves of the Plants, or, the Biological Role of Sex," "Love's Labor Divided, or the Union