

FOREWORD

Volume II of the *Biology Data Book* includes a wealth of new information. The section on BIOLOGICAL REGULATORS AND TOXINS has completely new tables on hypothalamic releasing and inhibiting hormones, a four-part table on chemicals produced by arthropods, a three-page table on mycotoxins, and an important table on neurotoxins in man. The ENVIRONMENT AND SURVIVAL section, in addition to revision of tables on temperature, radiation, and pollutants, has a new table on the effects of low concentrations of sulfur dioxide on vascular plants. PARASITISM—of plants on plants, animals on animals, and each on the other—has new tables on external and internal parasites of laboratory animals. The section on SENSORY AND NEURO- BIOLOGY, contains 29 tables that have not appeared in any of the previous handbooks.

The availability of new, critically evaluated information—that can be presented in tabular or graphic form—resulted in approximately 250 more pages than the originally announced estimate. The increase in size has delayed publication but provides a bargain for the purchaser. The 96 tables are based on contributions made by 260 eminent scientists who have given generously of their time and advice. FASEB acknowledges with appreciation their intellectual contributions.

Each volume is independently indexed and can be purchased separately by those wishing to have data limited to particular fields of interest. Volume I (published in 1972) covers genetics, cytology, reproduction, development, and growth. It includes tables giving the properties of biological substances and information about some of the many widely used materials and methods. It has tables on diet, culture media, and chemical indicators. In the appendixes there will be found keys to the scientific and corresponding common names of animals and plants. There are tables giving the taxonomic classification of all living things, and an estimation of the number of species in phyla and classes of the plant and animal kingdoms. Past history of living things is illustrated by a table on geologic distribution. In addition to chemical, physiological, and mathematical constants, there is also a bibliography on sources of organisms and equipment.

Volume III (to be published in 1974) will contain sections on nutrition, digestion, and excretion; metabolism; respiration and circulation; and blood and other body fluids. Those familiar with the Data Book Series will recognize that the last three sections have appeared as complete specialized handbooks: *Blood and Other Body Fluids*, 1961—2nd printing, 1966, and 3rd printing, 1971; *Metabolism*, 1968; and *Respiration and Circulation*, 1971. Other specialized handbooks published by FASEB were *Environmental Biology*, 1966, and *Growth, including Reproduction and Morphological Development*, 1962.

The FASEB Publications Committee listed on the following page has the responsibility for general guidance of the data book program and the selection of fields to be covered. A special Biology Data Book Advisory Committee also listed on the following page was chosen to determine what should be included and what should be excluded from the three volumes described briefly above. On the basis of their extensive experience in research and teaching, Advisory Committee members have also made suggestions as to authorities in particular fields who should be asked to contribute their services in the preparation of a table or a part of a table. Tables or portions sent in by more than one contributor are integrated by the handbook staff and then sent to two or more reviewers for critical evaluation. With the aid of Committee members, the staff has obtained remarkable cooperation in securing data for these volumes. The tables are organized to conform to established standards and are subject to critical evaluation and another review. Because of the intricate nature of the compilation, it has been found more efficient to have composition, editing, indexing, and the preparation of camera-ready copy done entirely within the Office of Biological Handbooks.

This volume is the first in a long series of biology data books that has been produced without financial support from any federal government agency. The Federation of American Societies for Experimental Biology has advanced the funds needed for its production. Let us hope that biologists everywhere in educational, industrial, and governmental activities will do their part in promoting wide distribution of this valuable compilation of quantitative data of the life sciences.

15 August 1973
Bethesda, Maryland

Raymund L. Zwemer, Chairman
Biology Data Book Advisory Committee

The Handbooks Project lost a good friend when Thurlo B. Thomas, professor of zoology and senior faculty member of Carleton College, died in his sleep of an apparent heart attack on 14 April 1973. Dr. Thomas gave generously of his time and many talents as a member of the 1964 Biology Data Book Advisory Committee, and also as a member of the Advisory Committee for the current revision of that volume. He will also be remembered as chief contributor of Appendix VIII in the 1964 edition of the *Biology Data Book*, and of Table 71 and Appendix IX in Volume I of this second edition.