MANPOWER RESOURCES IN THE BIOLOGICAL SCIENCES


This is the fifth and final report in a series based on data collected by the National Scientific Register. The other reports concern physics, chemistry and chemical engineering, mathematics, and the earth sciences. The fields of specialization included in this report are agricultural sciences, animal sciences, microbiology, plant sciences, other specialties, and general biology. The agricultural sciences comprise forestry, animals, agronomy, horticulture, soil science, and range science.

Agricultural scientists comprise the largest group of biological scientists checked in this survey. More than 8,000 or 40% of the total number supplying information classified themselves in some branch of agricultural science. The scientists who carry on research, teaching, and other professional activities in all areas of biology (excluding graduate students) are estimated to number about 50,000 or less than 1/10 of 1% of the nation’s labor force. Biological scientists are an older group than physical and earth scientists, whose professions have expanded more rapidly in recent years than most branches of biology. In 1951, the median age of biologists was 39, well above that for scientists in other fields. More than a fifth of the men biologists in the survey were members of military reserve organizations in 1951. The proportion of reservists was much higher in the younger age groups. In genetics, plant scientists, and bio-physics between 70 and 80% held Ph.D. degrees. In the agricultural sciences, however, scientists with bachelor’s degrees only comprised the largest educational group, representing close to one-half of all the surveyed agricultural scientists. Teaching was the chief endeavor of the largest group of biological scientists (35%), followed by research (32%), and administration (18%).

Other areas of information on biological scientists include citizenship status, educational background, women biological scientists, and various aspects of employment such as professional income, type of employer, and field of employment. Seven tables and 6 charts are included in the text and 30 additional tables in the appendix.

Anyone concerned with the education of soil and crop scientists should find this publication useful. Comparisons of agriculture and soil science may be made with the field of biological science as a whole or with a specific biological science or with other fields of science covered by the four previous reports mentioned above. Administrators and educators in colleges and universities should find this useful as an aid in laying plans for the education of future biological scientists—C. L. W. Swanson.

THE HOME GARDENING ENCYCLOPAEDIA


From Abelia to Zygopetalum this useful volume contains prodigious amount of practical how-to-do-it information for the home gardener. Annual, biennial, and perennial flowers, shrubs, vegetables, and small fruits, and the various cultural practices for the numerous individual plants in each of these groups make up the contents of this book. It is remarkable for the simplicity and clarity of its style; and excellent half-tone figures and line drawings illustrate many of the practices described in the text. There are also numerous charts with descriptive information in tabular form on annuals, bulbs, fruit pruning, hedge plants, vegetable seed sowing, vegetable ailments, fungicide and insecticide recipes, and a host of other topics. Although this is a British publication, American readers will have no difficulty whatever with it. The last section of the book, which is a calendar of garden activities, is written to include the warmer latitudes; thus the book will be of great use to gardeners anywhere.

MANAGING THE FARM BUSINESS


This book was written primarily for vocational agriculture students in secondary schools and students in junior colleges and agricultural institutes, but farm managers will also find this book helpful. Major management problems are discussed from the standpoint of the economic principles involved in decision making rather than a listing of cut and dried answers to the problems faced by farmers today.

Chapters 1 to 5 deal with the establishment of a farming enterprise, bringing out both the legal and economic problems faced there; chapters 6 to 12 discuss cropping systems and planning and management of various livestock enterprises; chapters 13 to 16 consider the economic problems of efficient use of machinery, labor, capital, and farm buildings; chapters 17 and 18 are concerned with marketing from the producer’s viewpoint; and the last three chapters deal with record keeping and other economic factors.

The principles outlined in the book are basic to all types of farms and examples have been taken from many locations in the country. The numerous illustrations used throughout the text were taken from a wide range of research studies and farm situations. The author, associate professor of economics and sociology at the Iowa State College, states that, to be of most use, the book should be supplemented with physical and economic data from the extension service and other agencies in the area where the book is used.

A STATISTICAL STUDY OF LIVESTOCK PRODUCTION AND MARKETING


This is the fifteenth in a series of monographs sponsored by the Cowles Commission for Research in Economics, and written in cooperation with the former Bureau of Agricultural Economics of USDA and the agricultural economics research group of the University of Chicago. The main emphasis of the study was placed on the development, application and testing of methods that might prove effective in analyzing interrelated segments of economic activity. The authors tried various methods, recent and traditional, of problem formulation and statistical analysis in an important and promising practical setting. The livestock complex was chosen for the study because of its importance, the availability of data and the possibility of obtaining information from previous studies.

The report is broken down into eight sections: introduction, the economic model, the observations, estimated relations, the production relation, the farm decision relations, the demand relation, and prediction tests. A 20 page appendix lists in detail the steps involved in the computations used in the text.