

that (in the present economic set-up) "agricultural or pastoral prosperity means accelerated ill-treatment of land".

This last phrase reveals his central approach. We have to think less about farmers and produce, more about the land. The land is man's basic resource. We must apportion its use not only according to our various human needs, but also according to its varying capacities of continuing yield, whether that yield be of food, wild life, timber, or recreational space. Above all, we must see that its yield capacity, of whatever sort, is not reduced (or even totally lost) by faulty or short-sighted exploitation. Man must learn to love the land, and to respect it.

This issue looms much larger and is being more thoroughly debated in the United States than in Western Europe, with its agriculturally propitious climate; but it is a fundamental issue for the world as a whole. We should be grateful to Fraser Darling for having brought it to our notice in such an arresting way.

JULIAN HUXLEY

PERSPECTIVE IN GENETICS

General Genetics

By Prof. M. J. Sirks. From the fifth Dutch edition, translated by Dr. Jan Weijer and D. Weijer-Tolmie. Pp. viii+628+5 plates. (The Hague: Martinus Nijhoff; London: B. T. Batsford, Ltd., 1956.) 70s.

Genetics

The Modern Science of Heredity. By Prof. Edward O. Dodson. Pp. vii+329. (Philadelphia and London: W. B. Saunders Company, 1956.) 45s. 6d.

THE key to the merits, and possibly to the shortcomings, of "General Genetics", by Prof. Sirks, is found in the preface. Here the author discusses, with considerable justification, the tendency in some recent text-books to give insufficient attention to the pioneer work. As Sirks puts it, "Modern textbooks seem to suggest that for Genetics 'Life begins at forty'". The stated aim of this book is "to establish an equilibrium between Genetics as it was built up before 1940, and Genetics as it has developed since".

Throughout the volume the reader is led through the early work, which is presented, sifted and weighed with delightful care. In particular, the account of pre-Mendelian theories is stimulating. The shortcomings of the book lie mainly in the treatment of some of the post-1940 material. The chapter dealing with the nature of genes is very uneven in quality. Here, many statements are ambiguous and some quite misleading. In dealing with extra-nuclear inheritance only half a page is allotted to the discussion of kappa while the antigens of *Paramecium* and respiratory enzymes of yeast are dismissed with only a reference. This will seem to many to be an over-correction of historical perspective. Further, in a brief discussion of bacteria Sirks writes of the absence of 'pure lines' and states "it is also not permissible to speak of bacterial mutations". Such statements surely give too little credit to the bacterial genetics of the past decade.

The book covers much of what might be taught in a first-year course, though its historical coverage is far greater than could be grasped by a student in one

year. For this reason, and because of its weaknesses in dealing with some of the more recent advances, the text-book will have a limited appeal for any but the most earnest student. Nevertheless the book will be welcomed by geneticists. The author has marshalled an immense amount of information and the extensive bibliography is excellent. The careful and comprehensive treatment of the early work of genetics, together with a good index, make this a unique reference book. As such it forms a very valuable addition to the literature of genetics.

"Genetics, the Modern Science of Heredity" is written primarily as a text for a first course. It covers the expected range from the laws of Mendel to physiological genetics, cytoplasmic inheritance, genetics and evolution and so on. Treatment of some aspects is rather scanty and one could, for example, have wished for a fuller account of genetics and evolution. However, the author may have felt that his terms of reference dictated such brevity. A brief historical account of genetics and a translation of Mendel's famous paper form two appendixes. A third appendix suggests laboratory exercises.

The basic principles are presented rigorously; the terms of genetics are, with a few exceptions, well defined; experimental findings and deductions from these findings are clearly set out. It is typical of the author's approach that the *ClB* test, which is often a temporary stumbling block for many beginners, is explained with perfect clarity. In each chapter Dodson has presented plenty of hard facts to be grasped and he draws cautious conclusions from them. But at no point does he close the door to further argument. This technique provides a satisfying account which avoids an excess of controversy and yet is not over-simplified. Well-chosen references for further reading are given at the end of each chapter. Illustrative examples from a refreshingly wide range of organisms are provided and the many drawings and photographs are well reproduced. A minor fault of the book lies perhaps in the author's desire to present a pleasing text. Generally he has been highly successful but occasionally one senses an over-anxiety to please. A few of the analogies are naïve and irritating; in a few instances the author is too dogmatic and at times one detects an excessive attempt to 'sell' the subject. This applies particularly to the chapter on human genetics.

Despite such minor faults, Dodson's aim is well fulfilled and his book will provide an excellent text for a first course of genetics.

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A NEW MONOGRAPH ON THE LINYPHIINAE (ARANEAE)

Die Tierwelt Deutschlands

Teil 44: Spinnentiere oder Arachnoidea (Araneae). Von Dr. Hermann Wiehle. Pp. viii+337. (Jena: Veb Gustav Fischer Verlag, 1956.) 38 D.M.

THE first volume on spiders (Salticidae) in this monumental series on the German fauna was published in 1926 by Friedrich Dahl, who founded the "Tierwelt Deutschlands". Further volumes, mainly by different authors, followed in the succeeding years dealing with other families, and in 1956, the centenary of Dahl's birth, this important addition by Dr. Wiehle on the family Linyphiidae was published. Although the group covered by this