Book reviews

Ladybirds. Michael E. N. Majerus. Harper Collins, London. 1994. Pp. 367. Price £14.99, paperback. ISBN 0 00 219935 1.

The New Naturalist series has a long and distinguished history spanning more than 80 volumes and 50 years. In that time it has contained monographs that have become classics and covered specialist topics on most areas of British natural history. From the outset it has been characterized by attractive presentation and good popularization by experts, both professional and amateur. Michael Majerus's *Ladybirds* is an excellent addition to the long tradition of the series. The author himself acknowledges the first book in the series, E. B. Ford's *Butterflies*, as the inspiration in his schooldays towards an interest, and later a career, in entomology and genetics. Now his own contribution covering a well-defined, attractive and familiar group of beneficial insects, will fire many a reader with a curiosity to discover more about them. *Ladybirds* is a book written by an enthusiast for enthusiasts.

Given this enthusiasm, it is no surprise to discover that the book is packed with information. Some of the detail, for example on geographical distributions and overwintering, is the result of another brainchild of the author: the Cambridge Ladybird Survey, a nation-wide network of amateur 'coccinellidophiles' formed ten years ago. There are 18 chapters plus appendices spanning everything from ladybirds in folklore and literature (a chapter I enjoyed greatly, but strangely entitled Historical Perspectives), to their morphology, phenology, ecology, genetics, evolution and conservation, as well as their role in biological control. Not surprisingly, given the subject, colour and pattern are treated extensively in three chapters and the chapter on genetics successfully illustrates Mendelian inheritance with coccinellid examples of this type of variation. In terms of information gained the book certainly represents value for money.

Loyal readers of *Heredity* and allied journals will be familiar with a long line of papers on the genetics and evolutionary biology of the 2-spot Ladybird and, to a lesser extent, the 10-Spot. The intricacies of melanistic polymorphisms, aspects of sexual selection and, more recently, male killing elements have been much studied. Michael Majerus gives the background to these topics and explains the details of their investigation in some depth and in a manner that is likely to be assimilable to the well-informed layman. This is typical of the book as a whole. A real effort has been put into the difficult task of making the science understandable to an audience much wider than the readership of this journal, and in general it succeeds.

I have a few minor quibbles with the illustrations. The 16 colour plates are a useful feature of the book but their quality is variable. Also, some of the line drawings, for example those in Chapter 15, have a rather 'home-spun' look to them. However, these slight reservations aside, *Ladybirds* is a worthy addition to a distinguished tradition. Apart from keen naturalists wishing to increase their understanding of an intriguing group of beetles, the book will also attract professional biologists as a reference work which is more complete and much more recent than Ivo Hodek's *Biology of Coccinellidae*. Even university geneticists looking for good ideas for project students might find it useful.

DAVID R. LEES
School of Pure and Applied Biology
University of Wales College of Cardiff
Cardiff CF1 3TL
U.K.

Genetic Engineering: Principles and Methods. Jane K. Setlow (ed.). Plenum Press, New York. 1994. Pp. 280. Price £58.00, hardback. ISBN 0 306 44795 9.

When I was asked to review this book I thought it would be a good way to obtain a costly methods book. I had visions along the lines of Sambrook¹, or Current Protocols², but smaller, with more theory. I was disappointed to find instead 15 review articles with turgid-sounding titles.

The book is one of an annual series of reviews published since 1979. It is a pale imitation of its (much) more famous colleague, *Methods in Enzymology*³. The advantage of *Methods in Enzymology* is that it is published in themed volumes. Thus you may be sure, on obtaining a chosen volume, to find several articles of interest to you. Not so for this series. In 1979 topics ranged from the genetics of *Xenopus* to soybean urease. This variety has not changed, and the current volume is divided equally between plant genetics, the genetics of yeast or higher organisms, and methods.

Some of the articles are interesting, which makes their boring titles even more of a pity. Not all of them stand

¹Sambrook, J., Fritsch, E. F. and Maniatis, T. *Molecular Cloning: A Laboratory Manual*, 2nd Edition (1989) Cold Spring Harbor Laboratory Press, New York.

²Ausubel, F. M. et al. *Current Protocols in Molecular Biology*, (1989). Greene Publishing, J. Wiley & Sons, Chichester.

³Colowick, S. P. and Kaplan, N. O. (eds.). *Methods of Enzymology*, Academic Press Inc., New York.