

the important role of some commercial publishers, notably Richard Groombridge and Lovell Reeve, in promoting the production of inexpensive natural history books.

With the advancement of serious research in the universities and the emergence of new disciplines such as ecology, the gap between the professional and the amateur has inevitably widened. Nevertheless, the appeal of natural history has always been the scope it affords the amateur. Mr Allen is particularly good in explaining its increasing popularity during the present century, due in part, he maintains, to the rediscovery of the countryside by bicycle and motor-car. It is now no

longer a matter for surprise when books like the Rev. W. Keble Martin's *Concise British Flora in Colour* (1965) become instant bestsellers.

Mr Allen is a keen field botanist and it is therefore understandable that he gives a fuller treatment to botany than to zoology. Nonetheless he has unearthed much new or forgotten material from a vast assortment of printed and manuscript sources to compile this fascinating story of the discovery of Nature, and of the men and women who devoted their lives to its study. □

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Changing attitudes to wildlife

Nature in Trust: The History of Nature Conservation in Britain. By John Sheail. Pp. xiv+270. (Blackie: Glasgow and London, May 1976.) £5.95.

BEGINNING with a short survey of man's attitudes to nature preservation in the sixteenth century, Dr Sheail has traced, during the years for which he has the most complete documentation, the changing attitudes to the protection of wildlife. When naturalists first thought about protection they concentrated on preserving rare and distinctive plants and animals by means of legislation. Later, as the science of ecology developed, the concept of habitat protection prevailed. But having come to this conclusion land purchase was still not straightforward. The Society for the Promotion of Nature Reserves (SPNR) came into existence to promote the purchase of land by others, particularly the National Trust, and did not in those early days have money itself.

This book is a recital of facts gathered from the archives and files of voluntary bodies, particularly the SPNR and the Royal Society for the Protection of Birds (RSPB), and from governmental organisations. The bulk of the material relates to the first half of this century and chiefly between 1920 and 1950. It records the activities of the various committees which were set up, or which set themselves up, to examine the types of land which required protection, the different ways of acquiring it, the setting up of scientific authorities to manage the reserves, to undertake research, to advise governments and others on scientific problems.

At one point in the 1930s no one had clear ideas of what they wanted—what, for instance, the relationship should be between national parks and nature reserves, and the Government gave up trying to solve the problem. Although

thought was given to environmental conservation in post-World War I reconstruction planning it fell to the voluntary bodies once again to persuade the Government to take action. Ultimately it was the committee headed by Sir Julian Huxley and the Nature Reserves Investigation Committee which began to produce the kind of recommendation that brought nature conservation out of the national park sphere of influence and that led to the establishment of the Nature Conservancy with its original triple function of reserve acquisition, research and scientific advice. Dr Sheail finally records briefly what has been happening since the 1950s.

I was enormously impressed by the facts that Dr Sheail has collected together and incorporated in his book. I wondered whether it would not have been possible to have digested them further or discussed their implication. He writes in an easy manner but at times I found it difficult to follow all the threads. The other point which rather worried me was that the book is described as *The History of Nature Conservation in Britain*. It is, however, more of a history of the development of the organisation side of nature conservation. There is no real discussion on the effect of writers, broadcasters and others who influenced the public to take a deeper interest in nature conservation, and various other activities.

I feel that the full history of nature conservation has still to be written. In saying this I am not denigrating what has been done in this volume. It is an enormous work of scholarship on one major aspect of the growth of conservation. It is readable and will be of great value and interest. As a history it has lessons for the present.

Peter Conder

Peter Conder has recently retired as Director of the UK Royal Society for the Protection of Birds.

Resistance in *Pseudomonas*

Resistance of Pseudomonas aeruginosa. Edited by M. R. W. Brown. Pp. ix+335. (Wiley-Interscience: London and New York, September 1975.) £14.

THIS book is intended to define the problems associated with drug-resistant *Pseudomonas aeruginosa* from a number of different angles, in chapters written by different authors. It suffers from the inevitable unevenness and repetition that result from diverse authorship in discussing a narrow field. The repetition is tiresome and it is clear that the editor did not exercise sufficient control over his team. For example, chapters 4 and 5 present four electron micrographs in common, one of which is inverted in one chapter in relation to the other. The action of EDTA on *Pseudomonas* is mentioned too frequently. The chapter on antibiotic inactivation and its genetic basis carries some curious statements. For example, there is confusion between the spread of resistance plasmids and that of pathogenic bacterial clones carrying them. Intestinal bacteria other than *Pseudomonas* are very loosely referred to as "enterics" in this chapter. It also uses the term "evolution" imprecisely, and presents the puzzling statement that "there is good evidence that two clones of Gram-negative bacteria specifying resistance to gentamicin, including *Pseudomonads*, have become widespread in France". If there is more than one *Pseudomonad* there is no room in two clones for other genera. And if there are one or more genera of bacteria other than *Pseudomonads* there is no room for a plurality of *Pseudomonads*.

The chapter on epidemiological typing presents details of a phage-typing scheme for *Pseudomonas* in such a way that no-one would realise that the principles and techniques it enunciates owe their origin and even terminology to the phage-typing schemes for *Salmonella typhi* and other salmonellae, none of which is mentioned. It seems rather late in the day to publish a photograph of a surface spot titration of phage (Fig 1, p196); and Fig 2 on the same page is a poor illustration of a phage-typing result.

Although valuable data are presented, there are faults, overstatements and omissions in all eight chapters of this book. All things considered it is of doubtful value at a price of £14.

E. S. Anderson