

Book reviews

Animal Behaviour: an Evolutionary Approach, 3rd edition

John Alcock

Sinauer Associates, Massachusetts,
1984, £19·80

Animals do an astonishing variety of things, and this is precisely why we find them so utterly fascinating. A measure of this diversity is revealed in John Alcock's book. Dipping into it one can find reference to caravanning of baby European shrews, young cichlids which browse on their mother's skin, flies which use their penises to remove rivals' sperm from their mates, frog-eating bats, a bell bird which utters its deafening chimes straight into the ear of its hen, and head hunting humans. But it is this phenomenal range of activity spread across the whole of the animal kingdom that makes animal behaviour such a bewildering subject. Furthermore, the mountains of contemporary literature are not easily scaled by those wishing to have an overview.

This, the third, and virtually rewritten edition of *Animal Behaviour* attempts very successfully to distil the discoveries of the last half-century into a coherent overview of why living creatures behave as they do. It is part of Professor Alcock's credo that evolutionary theory provides the key for understanding the great enterprises of animal activity. He employs a scheme that recognises the fundamental division between the stimuli that spur animals into action, and the factors that govern the survival of behaviour from one generation to another.

There are 15 chapters, covering among other topics, behaviour and genetics, development, ecology, the origins of behaviour, the roles of male competition and female choice in reproductive behaviour, and a concluding one about human behaviour, which might be thought by some to be a little cursory.

It is clear that John Alcock is no dry academic, but one whose enjoyment of animal behaviour is clearly demonstrated in the presentation of the text. Although a book for serious students of the subject, this edition is attractively packaged, with well chosen illustrations, and furthermore, is eminently readable.

Book reviews

I recommend it for those who wish for an up-to-date synthesis of the science of animal behaviour.

John Sparks

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EEC Environmental Policy and Britain. An Essay and Handbook

Nigel Haigh

Environmental Data Services Ltd,
40 Bowling Green Lane, London EC1R
0NE, 1984, £12·95

Nigel Haigh's book is a splendid essay on the EEC Environmental Policy, giving a balanced view of its effects together with a comprehensive handbook on the Directives, Regulations and Decisions that form part of the community policy and have an effect on Britain.

The essay deals with Britain's environmental policy and the EEC; the scope of the National and Community policy; the methods that are used for pollution control and, finally, the objectives of River Quality Policy. The essay provides a very balanced look at the short- and long-term effects of the EEC environmental regulations on Britain and our response to them.

The Handbook, the main thrust of the book, is a comprehensive account of water, waste, air chemicals, the Wildlife and Countryside Act and noise pollution, in the environment. Each aspect is dealt with systematically, showing the purpose of the Directive, giving a summary of it, the UK's compliance with it and the various problems encountered *en route*. The section dealing with bathing waters and the sewage problem can be usefully studied *before* you plan your seaside holiday.

The final part of the book summarises the effect on British legislation of the various EEC Directives, how well (or otherwise) we have complied with the policies and its effect on our own practices. The contribution that the UK makes to EEC policy and the future prospects round off this comprehensive study. A series of appendices guide you through the terminology used and

251

Book reviews

aspects of legislation still to be ratified. The only missing item is an index, which I think would be useful. However, the handbook sequence is logically arranged and details can be found.

The comments by the author on the various effects of EEC policy on Britain are set out in a perceptive assessment with rational comments. The reader is left to make his or her own judgements on such EEC statements (referring to its application in a plant protection context) as the definition of grass as 'lawn' as opposed to grass as 'Plant' where different regulations apply. . . .

A very useful explanation of the Directives, Regulations and Decisions enabled me to understand at last the finer points between them in an EEC context.

The author is to be congratulated on producing a useful account of all aspects of the EEC policy as they affect the environment and our policies in Britain.

Whether you are concerned with wildlife, water standards for freshwater fish or any aspect of the environment, you will find this book a valuable source of information. All conservationists should read the introductory essay.

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Primates of the World: Distribution, Abundance and Conservation

Jaclyn H. Wolfheim

University of Washington Press, Seattle and London, 1983, \$46.00

This volume is a magnificent assemblage of maps and data (especially the summary tables at the end), with a thorough discussion and evaluation of the status and threats for each of the 151 species of primate described. Following the explanatory introduction, each species (35 prosimians, 41 New World monkeys, 65 Old World monkeys and 10 apes) is dealt with in terms of: (1) taxonomy, (2) geographic range, (3) abundance and density, (4) habitat, (5) factors affecting populations—habitat alteration, human

predation, pest control, collection, (6) conservation action. There are then 40 pages of discussion of these different features, which are grouped into a constellation of ultimate (geographic range, body size, density and habitat) and proximate (habitat alteration and human predation) determinants of population status, the former related to survival, the latter to extinction. Thus, it is possible, from the impressive body of quantitative data amassed, to deduce a novel status rating for each species, with results more pessimistic than the *IUCN Red Data Book*, *CITES* or the US Endangered Species Act would predict—58 per cent of primate species threatened (34 per cent severely so, mainly on Madagascar and Asian islands) and 23 per cent vulnerable, with only 20 per cent 'safe' (IUCN gives only 15 per cent as endangered and 18 per cent as vulnerable). There is finally a vast and most useful bibliography containing about 1300 references.

This then is the book that primate conservationists need, and Jaclyn Wolfheim is to be congratulated on producing such a comprehensive survey, a truly formidable task. But why has it taken so long to produce and how relevant is it today? My correspondence file shows that the search for data started in 1973; the reference list contains virtually nothing published since 1979 (there are four references to one 1980 book). So what happened during the last four years, given the urgency of the conservation movement, and why could the book not be updated with the wealth of relevant information that has appeared since 1980? Since the plight of primates is demonstrably worse than that estimated by international agencies, then maybe the message this book contains today will promote the required action. But think what might have been achieved if this evidence had been made available four years ago? To be fair, maybe conservation agencies have had the results of this survey for some time.

Thus, it will be an invaluable reference book for primatologists for some time, synthesising what is known about the ecology, behaviour, distribution and conservation problems and achievements for each species. The numerous gaps in information, often crucial, should promote the necessary research and action. One sympathises with the

Oryx Vol 18 No 4