

In summary, I would say that this book would be a disappointment for many experienced reptile keepers. More detailed information about every topic is available in other texts. However, for the less experienced, the book brings together all the most important aspects of reptile keeping and should provide a sound basis on which to build.

One topic that I would have liked to see mentioned in these 'enlightened' days is environmental enrichment. Many people see reptiles as primitive, undemanding captive subjects. In reality they are very sensitive creatures indeed and very subtle changes to their environment can make all the difference to their quality of life. Enrichment should be part of reptile husbandry and not simply restricted to animals with fur or feathers.

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Stress: Conceptual and Biological Aspects

Frederick Toates (1995). John Wiley & Sons: Chichester. 339pp. Hardback. Obtainable from the publishers, Baffins Lane, Chichester, West Sussex PO19 1UD, UK (ISBN 0 471 96021 7). Price £50.

The term 'stress' has been widely used, misused and abused in the scientific and technical literature on animal behaviour, animal husbandry, animal welfare and animal suffering. The confusion resulting from its misuse has, at times, been so great that it has been suggested on several occasions that the term should be dropped once-and-for-all. In most peoples' minds, however, it still remains a useful concept: there may be difficulties in definition, but most scientific workers seem to know, in a general sense, what is being got-at when the term is used.

The literature on stress is immense. Much of the recent material on the possible underlying biological mechanisms has now been gathered together in Frederick Toates' most useful and well-written book *Stress: Conceptual and Biological Aspects*. The layout of this book is excellent: there is a substantial and detailed table of contents, a 32-page balanced introduction overview and a 10-page summarizing conclusions. In many ways these can be read together as covering the main thrust of the volume, with the intervening 250 pages being largely a detailed and closely argued development of the ideas initially presented in the introduction. There are some 650 papers, monographs and books listed in the references and there is a short but adequate index.

I approached this book by first reading the introduction followed by the conclusions and I then used the detailed table of contents to shop-around amongst the many items listed therein. I suspect many other readers will initially do the same. The problem with this somewhat haphazard approach on the part of the reader is that controversial terms and acronyms which have been developed and defined earlier in the text are sometimes being met-with for the first time. This may lead to misunderstandings and confusion. It would help, I think, in future editions – and there must surely, in due course, be further editions of this most valuable text – for there to be an appendix of terms, as defined and used by the author, and a list of acronyms.

It is perhaps a pity that more was not made of the difference, at the practical level, between stress, overstress and distress. In the reviewer's opinion there is a need to distinguish between these terms. All animals while alive are subject to stressors and show stress responses. As Selye stated in his 1974 book *Stress Without Distress* 'Complete freedom from stress is death'. The UK legislation makes it an offence, in general terms, to cause unnecessary pain, suffering, distress or lasting harm. It would have been helpful for field workers to have had further discussions in the text re realistic working definitions of overstress and distress.

This criticism is perhaps a little undeserved as the book does not pretend to be a practically orientated text, although there is a substantial section entitled 'Ethology Pure and Applied – Issues of Animal Welfare'. Nor does the book attempt to cover all aspects of stress: it concentrates, as the subtitle suggests, on the underlying concepts and biological mechanisms. These areas are covered superbly.

This is an excellent book which should be widely read and thought about by all scientists interested in the general area of stress, and more particularly by those applied scientists having to grapple with the welfare aspects of man's use and misuse of animals.

Reference

Selye H 1974 *Stress Without Distress*. J B Lippincott Co: Philadelphia, USA

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After the Ark: Religious Understandings of Ourselves and Other Animals

Martin Palmer and Elizabeth Breuilly (1996). Forbes Publications: London. 96pp. Paperback. Obtainable from Compassion in World Farming Trust (CIWFT), Charles House, 5A Charles Street, Petersfield, Hampshire GU32 3EH, UK (ISBN 1 899527 03 6). Price £8.95.

This book was commissioned by Compassion in World Farming Trust, and is essentially a teaching and learning manual for use in secondary schools, or indeed for any youth group wishing, or needing, to study and get engaged in the issues surrounding the welfare of animals.

I found it a challenging and perceptive publication and, despite some uncomfortable reservations concerning the selectivity of some of the information, I think that teachers in Religious Education and allied disciplines within schools, youth clubs or church, will find it a very useful resource.

Its style, for the most part, is refreshingly open and questioning and, as it states in the introduction, it 'encourages both students and teachers to think, to discuss, to disagree, and to decide for themselves'. Nearly every chapter begins with a series of questions, for example 'God only knows – does he?', 'Are we the most important part of the Universe?', 'Do all animals deserve the same?', 'Where do these rights come from?' These are usually then followed by some background information derived from a variety of selected religious and other texts and supported by challenging stories or poems. Most chapters conclude with a series of suggested and imaginative activities for the class, group or individual. It seems to me to be all very clear and interesting and, as an example for educational method, I cannot fault it.