

*Animal Welfare: a Cool Eye Towards Eden*, by J. WEBSTER. x + 273 pp. Oxford: Blackwell Science. £17.99 (paperback). ISBN 0 632 03928 0.

Using a colloquial style and clearly aiming at a general audience, John Webster presents his opinions in a way which is readable and useful but, nonetheless, annoying to scientists involved in animal welfare research. The best parts of the book for me are the well-thought-out ideas and general conclusions based on a wide perspective of the problems. The point, first made some years ago by Webster, that if a rabbit is living in cold, hungry isolation, whether it is a pet, food or experimental animal does not matter to the rabbit, or indeed to a scientist assessing its welfare. Statistics concerning the 630 farm animals which the average person will consume during a lifetime, as compared with the two mice per person used in scientific research, are interesting and justify the fact that threequarters of the book is principally concerned with farm animals. Webster argues that veterinarians should treat symptoms resulting in suffering as well as diagnosing and curing; overheating is a significant but avoidable cause of death in housed and transported animals, and the leg problems of broiler chickens affect very many individuals and are a particularly serious issue for the farming industry.

The book is infuriating because the author skates, pontificating, across a sea of partially presented evidence and variably justified assumptions. Many of the ideas which are presented are not attributed to their originator. Among the assumptions used but not justified are: hens which do not go outside in free-range units suffer from agoraphobia (p. 13); a tortoise which wanders, apparently at random, bumps into a lettuce and eats it may not want food (p. 20), and stereotypies look like a source of pleasure (p. 58). Indeed references to stereotypies range from the statement on p. 61 that the author does not accept that a system is cruel because it predisposes to stereotypies, to that on p. 84 that locomotor stereotypies are a sign that something is wrong.

Webster criticises 'single sentence definitions' of welfare, seriously misquotes (p. 10) this writer's definition, ignores the 1993 Broom & Johnson book, and then offers (p. 11) as his definition 'the welfare of an animal is determined by its capacity to avoid suffering and sustain fitness.' This is not a definition and whilst welfare is clearly much affected by such a capacity, it is not entirely determined by it.

The most detailed scientific information in the book concerns nutrients and energetics and is only marginally relevant. There is little detail, other than some from Bristol, on scientific studies of animal preferences or how to assess poor welfare. However, the last hundred pages of the book include useful reviews of the welfare of pigs, poultry, cattle, sheep, veal calves, breeding problems, horses and pets, hunting and shooting, fishing and whaling, wildlife parks, zoos and circuses, and scientific procedures. The book is compassionate but realistic so it will be very useful to non-specialists and has something to say to everyone.

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