

chapter on pigs (Temple Grandin) gives informative recommendations, although the reference list could have been more up-to-date, and the chapters on sheep and cattle (by Viktor and Annie Reinhardt) are clearly written with relevant illustrations (however, the figures should provide text that is all in English). The chapter on horses (Katherine Houpt and T S Ogilvie-Graham) provides information which is relevant not only for the horse as a research animal but also as a companion animal. The chapter by Detlef Fölsch *et al* provides a good overview of the needs of chickens and gives suggestions for a hen cage for laboratory purposes. However, the plan-views of the henhouse are difficult to interpret because of the small size of the figure.

The last chapter covers amphibians and reptiles (Michael Kreger). Unfortunately, it focuses mainly on reptiles and provides rather general information. Shredded newspaper as a floor covering for reptiles seems questionable to me. No attention has been paid to *Xenopus* and other frogs, although these are more frequently used in the laboratory than reptiles. A chapter on fish is missing entirely, which is a pity.

On the whole, this book is a useful tool for all scientists, veterinarians and laboratory animal staff to improve the housing conditions for their animals in order to enhance the animals' well-being and the quality of animal-based research. Although the uniformity of the chapters' design could be improved to facilitate reading, the book is accessible to scientists as well as animal technicians. Particularly helpful would have been a summary of each chapter describing the basic requirements, as is provided in the chapters on sheep, cattle, dogs, guinea pigs and gerbils.

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Love at Goon Park: Harry Harlow and the Science of Affection

D Blum (2003). Published by Wiley, The Atrium, Southern Gate, Chichester PO19 8SQ, UK. 352 pp. Hardback (ISBN 0470 85072 8). Price £17.99.

When I was sent the title of this book and asked to review it, I have to admit I was confused. It sounded more like a trashy novel than anything to do with animal research. When it landed on my desk, the appearance of the front cover did little to dispel that notion. Frankly if I saw it in the bookshop I wouldn't have given it a second glance. But then they say you can't judge a book by its cover, and in this case that is certainly true. The author, of course, gives it away; she is remembered for her earlier work, *Monkey Wars*.

This book is a portrait of Harry Harlow (1906–1981), a psychologist best remembered for his isolation experiments on infant monkeys. The book charts the path from his arrival at the University of Wisconsin at Madison, his disastrous first lectures, the movement of his work from rats to cats to frogs and then on to testing primates at the local zoo. Here he began to look at dominance behaviours and his interest in relationships began. Following through the trials of his own broken relationships, his addiction to work, his drinking and his depression, the book builds up a picture of a man who rose to every challenge put before him. Not a man you have to like, or whose methods you even have to agree with, but certainly one who should be admired for his perseverance. It outlines the challenges that Harry faced: decades of research asserting that emotions were unnecessary or unimportant and that close contact between parents and children was bad. Against a background of orphanages where infectious diseases took their toll and the majority of infants in them died, hygiene, quarantine and isolation were the order of the day. So why shouldn't one isolate infant monkeys to examine

the effect it had on them, to create a model of depression, to see how a socially inadequate individual exhibiting a range of stereotypic behaviours could function? Of course, he found out how damaging social isolation is, especially in such social animals as primates. He examined various permutations of the mother–infant relationship using a variety of surrogate mothers — a cloth mother, a wire mother, mothers that were warm and ones that were cold, ones which moved gently and ones which shook violently, ones which gave out a blast of air and ones which would suddenly thrust out brass spikes and push the infant away. He did recognise that it could be hard to watch the monkeys struggling toward a normal social life, in a rare acknowledgement that the experimenters suffered prolonged distress from these experimental efforts.

Harry Harlow died in 1981, the same year that the organisation People for the Ethical Treatment of Animals (PETA) was formed, and there has been much controversy over his work ever since. The final chapter in the book gives a well-balanced argument about whether we should be praising Harry for showing how devastating isolation could be or criticising him for carrying out experiments that would now be considered unethical. Harry was a man of an earlier generation in his attitude to women and to the suffering he inflicted on the monkeys. Yet Blum points out that his work demonstrated how the benefits of affection and kindness ripple through to the next generation, and the final tally of his studies is a body of knowledge about the devastating effects of social isolation and their extreme resistance to treatment. Harry demonstrated that we need not just to be loved, but to feel loved.

The book's style is easy to read, an ideal companion for a tedious train journey, and it actually became compulsive reading. Take it away with you this Christmas and read it. Even if you don't work with primates, or indeed any animals, it will make you rethink the nature of your own relationships with your parents, your children and those you love. And if you do work with animals, there is the added dimension of the ethics of the experimental work. Just where we should draw the line is a question that has no easy answer. This book doesn't make the answer any easier, but it certainly makes you ask the question again — and that is always a good thing. The isolation chambers have been dismantled and have never been rebuilt. Read this book and discuss it with your colleagues: do we want to make sure it stays that way?

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Conservation of Exploited Species

Edited by J D Reynolds, G M Mace, K H Redford and J G Robinson (2001). Published by Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, UK. 524 pp. Hardback (ISBN 0 521 78216 3); Price £75.00/\$120.00. Paperback (ISBN 0 521 78733 5); Price £29.95/\$45.00.

This book, the sixth in the *Conservation Biology Series*, is a collation of papers presented at a meeting held in London in 1999 on the conservation of exploited species. The 22 chapters from 36 contributors are grouped into six parts that deal with the biological, economic and social components of exploitation (or 'harvesting' — a more comforting term, as the editors point out).

Part I, having two chapters, introduces the general topic of exploitation and its role as a threatening process second only to habitat loss and degradation. These introductory chapters also provide an overview of what follows in more detail in later chapters on statistical issues