## Amphibian Medicine and Captive Husbandry

Edited by K M Wright and B R Whitaker (2001). Published by Krieger Publishing Company, 1725 Krieger Drive, Malabar, Florida 32950-3323, USA. 570 pp. Hardback (ISBN 0 89464 917 5). Price \$140.00.

Amphibia are a hugely diverse and much neglected class. Over 4000 extant species are described, belonging to three orders, Anura (frogs and toads), Caudata (salamanders, newts and sirens), and the Gymnophiona (the caecilians), and they range from being purely aquatic to arboreal. Species numbers have declined dramatically over the last 50 years, and the mass mortality incidents over the last 15 years have brought this class into the public consciousness as important indicators of ecosystem health. As well as increasing public interest in the health of wild amphibia, there is also a growing captive population with animals being kept as pets, for laboratory research and for conservation breeding. There is, however, little published information on the health and husbandry of these animals, and what little there is is patchy and often difficult to track down. *Amphibian Medicine and Captive Husbandry* goes a long way toward filling this gap and is likely to become an invaluable reference for all concerned with amphibian health and welfare.

The book is a multi-author text edited by Kevin Wright and Brent Whitaker, who are both veterinarians and amphibian enthusiasts. Their stated aim is to provide "a good starting point for the clinician interested in amphibians, as well as the most complete reference currently available for those with a strong interest in amphibian medicine". The book is 500 pages long and is divided into 27 chapters covering a wide range of topics including evolution and taxonomy, husbandry and nutrition, diagnostic and surgical techniques, pathology and therapeutics. The text is easy to read and is peppered with practical tips and information that can only have come from extensive experience in this field. Examples include use of a moistened plastic bag for restraint of lively patients and therapeutic cooling as an adjunct to antimicrobial therapy. There is good use of tables for easy reference and, in addition to over 130 full-colour plates, the book is beautifully illustrated by graduate students of the Johns Hopkins School of Medical Illustration.

I have two main criticisms of this book. First, there is a heavy bias toward North American publications and products. At times, the continued reference to products only available in North America can be a source of frustration to the more international reader; however, it does highlight that much of the text is written from personal experience, which in turn lends weight to the authors' recommendations. Secondly, in common with many multi-author texts, there are notable repetitions, omissions and inconsistencies between chapters on overlapping topics. For instance, the use of Columbia agar is advocated in one chapter because it selects for Gram-positive bacteria, and yet, in another chapter, Columbia agar is suggested as a medium for growing Gram-negative bacteria. Similarly, viral aetiologies are not specifically covered in the microbiology chapters, and yet they are frequently mentioned in the pathology chapter and are now thought to play a major role in some of the mass amphibian mortality incidents. Better use of cross-referencing in future editions would help to alleviate these problems.

This book pushes back the frontiers of amphibian medicine and husbandry. It will no doubt stimulate readers to fill some of the gaps in our knowledge and improve the health and welfare of these fascinating and important creatures. Although probably too much of an investment for the general practitioner with only the occasional amphibian patient,

I would thoroughly recommend that this book be on the shelves of all serious enthusiasts, amphibian keepers and their veterinarians.

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Super-Pets and Smart Owners: The Care of Familiar and Unfamiliar Creatures M Moore (2002). Published by Parapress Ltd, The Basement, 9 Frant Road, Tunbridge Wells, Kent TN2 5SD, UK. 166 pp. Paperback (ISBN 1 898594 74 0). Price £10.99.

The idea of a basic introduction to animal ownership, to promote animal welfare through education before purchase, is an excellent one. As a veterinary surgeon dealing primarily with exotic pets, about 90% of our caseload is the unfortunate result of poor husbandry and ignorance. To condense almost the entire animal kingdom into a small, easy-to-read text is a tall order for anyone and I applaud the author for this attempt.

However, it is my opinion that this book has been approached from the angle of a zoo-keeper rather than an average pet-owner. The author obviously has knowledge of keeping animals within a large and specialised environment such as a zoo. That is not to say that there are no specialist private keepers who have very well-maintained collections. They do a great deal of good in breeding captive stocks, which both takes the pressure from animals in the wild (which may be captured for the pet trade) and also provides animals for release back into the wild when habitats are made available in the future. The book illustrates that a huge range of species is available, but does not really outline those that are appropriate, particularly for someone with little or no experience. There is a vast difference between this specialised environment and the average domestic household.

The domestic pets such as dogs, cats, rabbits and guinea pigs are glossed over and need more emphasis. The crested seriemas, llamas, European lynx and gorillas are perhaps included just for interest, but there should be more emphasis on deterring people from even considering such specialised and dangerous animals in a domestic environment.

There are some inaccuracies in the text — for example, the feeding of dog food to vegetarian species such as Mediterranean tortoises and green iguanas is now known to be inappropriate and potentially harmful. There is no mention of feeding high-fibre grass and hay to rabbits and maloccluded incisor teeth will not wear down when rodents are fed macaroni — they need dental treatment and management by a veterinary surgeon. The illustrations are disappointing, but I understand that this is perhaps with a view to keeping the book affordable.

The general reference section at the end of the book offers hope: it is nicely presented, with bullet points giving a simple overview of husbandry and statistics relating to each species. However, the actual list would be more useful if it comprised species that are relatively simple to keep and gave recommendations for animals with which inexperienced owners should start.

Veterinary bills are mentioned and are said to be expensive, which should deter some people, but the People's Dispensary for Sick Animals (PDSA) is cited as an easy answer for people on benefits. There is no mention of pet insurance as a sensible option to budget for this inevitable expense. There is an increasing number of veterinary surgeons who have the necessary interest and expertise in treating exotic animals, but owners should be made aware