

BOOK REVIEWS

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Fifty Animals that Changed the Course of History. Edited by E. Chaline. Cincinnati, OH, USA: David and Charles Press (2011), pp. 223, £12.99. ISBN 978-1-4463-0143-2.

This is a well written and clearly illustrated coffee table book for the general public. At £12.99, it also represents very good value for money. The author sets out to select and describe 50 animal species (from small parasitic worms and leeches to large elephants and whales) that have had a major impact on the history of humans (featured last in the book). The 50 animals are classified by their function and impacts (edible, medicinal, commercial and practical). Besides the more obvious domesticated animals that we have used over the last 20,000 years or so, including horses, cattle, pigs, camels, goats, chickens and turkeys, llamas, and dogs and cats, the book includes serious pest species like the malaria mosquito, which evolved about 400 million years ago and which has killed millions of humans, being described as a 'tropical vampire'. At the other extreme, humans are described as the 'new kids on the block', with our genus, *Homo*, being barely 2.5 million years old and our species emerging from Africa only around 250,000 years ago. The chapter on 'us' alarmingly concludes that, in terms of evolution, humans have already reached 'the point of no return' in terms of climate change and depleting natural resources. I think the book will appeal to a broad audience of older children and adults. It is packed with interesting facts and written in an easily digestible style. I strongly recommend it to anyone interested in the history, evolution and ecology of animals, including humans.

Nick Birch

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Wild Crop Relatives. Genomic and Breeding Resources. Industrial Crops. Edited by C. Kole. Heidelberg, Germany: Springer (2011), pp. 183, £126.00. ISBN 978-3-642-21101-0.

This book on industrial crops is one volume in a series of 10 volumes on wild crop relatives edited by Chittaranjan Kole. Thirty-two authors from around the world have contributed to this volume. It is organised into 10 chapters in alphabetical order by genus: *Beta*, *Corchorus*, *Crotalaria*, *Dioscorea*, *Erianthus*, *Gossypium*, *Ipomoea*, *Manihot*, *Miscanthus* and *Saccharum*, although many readers will regard cassava, sweet potato and yams as staple foods rather than industrial crops. Furthermore, length of each chapter does not always correspond to economic importance; for example, there are 11 pages on *Erianthus* but only 10 on *Ipomoea*. While the editor has not imposed strict adherence to headings within chapters, the contents are much as might be expected from the series title. The reader will find information on the botany and taxonomy of the genus; the evolutionary history and phylogenetic relationships between wild and cultivated species; conservation and characterisation of genetic resources for use in breeding; genomic resources but including classical cytogenetics and molecular genetics; and some of the agricultural problems that arise from the close proximity of wild and cultivated species (e.g. gene flow from genetically modified plants and wild species as weeds). Each chapter ends with recommendations for future actions. The volume should prove a useful reference work for libraries, but research workers in future will probably expect to use good databases on genomic and germplasm resources. I also suspect that breeders will appreciate reviews of their crops that integrate genomic and germplasm resources with all of the other aspects of breeding.

John E. Bradshaw