

Pathology of Australian Native Wildlife. By Philip Ladds. CSIRO Publishing, Collingwood, Victoria, Australia. 2009. 640 pp. ISBN 978-0-643-09444-4. US \$172 (hardback).

Review by Peter Holz

Information concerning the pathology of Australian native wildlife is scattered far and wide through the peer-reviewed literature, numerous conference proceedings, and other grey literature. Much of it resides within the personal collections of pathologists working in zoos and universities, rendering these valuable data all but inaccessible to the people who deal with Australian wildlife throughout the world. Philip Ladds's mission was to exhume this knowledge and summarize it coherently in one volume providing access for all to this essential information. *Pathology of Australian Native Wildlife* represents the fruits of his endeavors. For the first time, all the available information on the anatomic pathology of Australian native wildlife, with the exception of fish, has been collected in one volume. Given the enormous range of species and the incredible amount of material, this was a very ambitious project. However, the author has succeeded in his aims and produced an extremely comprehensive book that will be of enormous value to pathologists, clinicians, and students alike.

The book's greatest strength is its consistent level of organization. It begins with a chapter on the "Pathology of Stress" describing stress-related pathology in various animal groups such as koalas, platypus, and antechinus with their synchronous postmating mortality. The next part of the book is divided by etiology into viral, bacterial, mycotic and algal-associated, protozoal, helminth, and ectoparasitic diseases, and those caused by exogenous toxins and neoplasia. Each one of these sections is further divided into chapters grouped by animals affected: terrestrial mammals, marine mammals, birds, reptiles, and amphibians. The chapters themselves are laid out in the same consistent style. Each disease agent is divided into species affected, history and clinical signs, gross findings, histopathology, and, where appropriate, electron microscopy. Because this is

a pathology book, there is no coverage of disease epidemiology, control, or treatment.

Following the sections on specific disease agents are chapters on congenital and genetic diseases; nutritional and metabolic diseases; diseases of physical exertion, trauma, and predation; and diseases of unknown etiology. The trauma chapter is particularly useful because it describes attacks by dogs, foxes, cats, and raptors. Despite the frequency of these confrontations, there is relatively little information in the literature about the nature of the injuries they cause and how to differentiate between them. Other common traumatic injuries that are frequently neglected, but are included here, are gunshot injuries and cranial trauma in birds. A description of lesions associated with electrocution, however, is absent.

The book concludes with an appendix of common and scientific names of Australian native wildlife vertebrates arranged alphabetically by common name and by scientific name.

All common diseases are thoroughly covered as well as many obscure and uncommon conditions. Information is up-to-date, and the author has included anecdotal reports as well as peer-reviewed literature to produce a truly comprehensive book. Each chapter contains numerous color photographs of gross and microscopic lesions. For a pathology book to have practical relevance, it is vital for photographs to be in color, as black-and-white images are too difficult to compare with gross necropsy findings and microscopic observations. Each chapter is comprehensively referenced, and the index is very well organized by both species and disease, making it easy to navigate around the book.

This book is essential for anyone dealing with native Australian animal diseases and pathology, and complements the recently released clinical book *Medicine of Australian Mammals*, edited by Vogelnest and Woods (2008).

LITERATURE CITED

VOGELNEST, L., AND R. WOODS (eds.). 2008. *Medicine of Australian mammals*. CSIRO Publishing, Collingwood, Victoria, Australia, 686 pp.

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About This Book. Pathology of Australian Native Wildlife brings together in one volume available information on the pathology of Australian native vertebrate wildlife, excluding fish. It provides rapid access to documented information on diseases in Australian wildlife, domiciled either in Australia or overseas. The book comprises 45 chapters, each detailing pathological changes caused by specific pathogens including viruses, bacteria, fungi, protozoa, helminths and ectoparasites, and other injurious agents and conditions such as toxins and neoplasia affecting terrestrial and marine mammals, b All the available information on the anatomical pathology of Australian native vertebrate wildlife. Saved in: Bibliographic Details.Â Diseases of Uncertain or Unknown Aetiology -- Appendix: Common and Scientific Names of Australian Native Wildlife Vertebrates -- Index. 520. |a All the available information on the anatomical pathology of Australian native vertebrate wildlife. 588. |a Description based on publisher supplied metadata and other sources. Wildlife of Australia. What is so different about Australia? Evolutionary/biogeographical history of Australia.Â Australiaâ€™s freshwater fish have all evolved relatively recently from marine ancestors â€“ we donâ€™t have the families common in other continents with a long evolutionary history of freshwater life. No attempt will be made here to cover the tremendous diversity of fish, just a few points of interest here: The Australian lungfish, a freshwater species capable of breathing in air, is considered a â€“living fossilâ€™ and is found in some of Queenslandâ€™s rivers. Only five other species occur worldwide, all in Africa and South American waters. It is strictly protected. Pathology of Australian Native Wildlife brings together in one volume available information on the pathology of Australian native vertebrate wildlife, excluding fish. It provides rapid access to documented information on diseases in Australian wildlife, domiciled either in Australia or overseas. The book comprises 45 chapters, each detailing pathological changes caused by specific pathogens including viruses, bacteria, fungi, protozoa, helminths and ectoparasites, and other injurious agents and conditions such as toxins and neoplasia affecting terrestrial and marine mammals, birds, reptiles an