Book Reviews

Source: Journal of Wildlife Diseases, 19(3) : 174

Published By: Wildlife Disease Association

URL: https://doi.org/10.7589/0090-3558-19.3.174

GUSTAFSON. 1975. Generalized contagious ecthyma in a sheep rancher: Diagnostic considerations. J. Am. Vet. Med. Assoc. 166: 262–263.

FALK, E. S. 1978. Parapoxvirus infections of the reindeer and muskox associated with unusual human infections. Br. J. Dermatol. 99: 647–654.

HEBERT, D. M., W. M. SAMUEL, AND G. W. SMITH. 1977. Contagious ecthyma in mountain goat of coastal British Columbia. J. Wildl. Dis. 13: 135–136.

KUMMENEJE, K., AND J. KROGSRUD. 1978. Contagious ecthyma (orf) in the muskox (*Ovibos moschatus*). Acta Vet. Scand. 19: 461–462.

———, AND ———. 1979. Contagious ecthyma (orf) in reindeer (*Rangifer t. tarandus*). Vet. Rec. 105: 60–61.

LANCE, W., W. ADRIAN, AND B. WIDHALM. 1981. An epizootic of contagious ecthyma in Rocky Mountain bighorn sheep in Colorado. J. Wildl. Dis. 17: 601–603.

PALMER, L. J., AND G. H. ROUSE. 1963. Muskox investigations in Alaska, 1930–1935. Bur. Sport Fish and Wildl., Dept. Int., Juneau, Alaska, pp. 26–27.

ROSSI, C. R., AND G. K. KIESEL. 1971. Microtiter tests for detecting antibody in bovine serum to parainfluenza 3 virus, infectious bovine rhinotracheitis, and bovine virus diarrhea virus. Appl. Microbiol. 22: 32–36.

SAMUEL, W. M., G. A. CHALMERS, J. C. STELFOX, A. LOEWEN, AND J. J. THOMSEN. 1975. Contagious ecthyma in bighorn sheep and mountain goat in western Canada. J. Wildl. Dis. 11: 26–31.

SMITH, A. C., W. E. HEIMER, AND W. J. FOREYT. 1982. Contagious ecthyma in an adult Dall sheep (*Ovis dalli dalli*) in Alaska. J. Wildl. Dis. 18: 111–112.

Journal of Wildlife Diseases, 19(3), 1983, p. 174

BOOK REVIEW . . .

A Host-Parasite Catalogue of the Avian Haematozoa, Gordon F. Bennett, Madonna Whiteway and Carla Woodworth-Lynas. Memorial University of Newfoundland Occasional Papers in Biology #5. International Reference Centre for Avian Haematozoa, Department of Biology, Memorial University of Newfoundland, St. John's, Newfoundland A1B 3X9, Canada. 1982. 243 pp. $15.00 Canadian.

This book is the culmination of a dozen years of original and literature research. It is a vast storehouse of information and it should be in the possession of anyone working on the biology of the blood parasites of birds. It is well organized and nicely keyed into the original literature references through citations to the two volumes of bibliography still available from the same Centre.

The first 200 pages contain an alphabetical listing of avian species arranged by host family. The parasites recorded in the literature or as unpublished records in the International Reference Centre for Avian Haematozoa are listed following each species name. Species that have been examined, but found to be uninfected are reported also. Synonyms are given where the host's name has been changed since the information was published.

A total of 3,816 avian species are listed representing 152 of 172 (84%) of the extant avian families. Species of *Haemoproteus* are recorded from 1,732 species representing 67% of the infected avian species. Other genera of blood parasites occurred as follows: microfilariae (48%), *Plasmodium* (42%), *Leucocytozoon* (39%) and *Trypanosoma* (30%). Other infrequently encountered hematozoa are listed.

The number of species infected with the various hematozoan genera is summarized by avian family. It is interesting to note that nearly all species of certain families are susceptible to at least one genus of blood parasite, whereas species of other families are rarely, if ever, found positive. This is only a superficial indication due to the vast disparity in the numbers of individuals examined, but in some cases, these findings correspond nicely to recent reviews based on the prevalence of blood parasites in birds from entire continents.

There are also listings of the species of *Haemoproteus*, *Plasmodium*, *Leucocytozoon* and *Trypanosoma* that occur in birds. Each species of parasite is followed by the authority for the species and the type host and family.

An index to the families and genera of avian hosts greatly assists in the location of the desired avian species.

To reiterate my feelings about this volume as mentioned in the beginning of this review, it is a bargain for the price and is going to be invaluable to parasitologists from around the world.

Ellis C. Greiner, Department of Preventive Medicine, College of Veterinary Medicine, University of Florida, Gainesville, Florida 32610, USA.

1967. Johne's disease in a moose (*Alces alces*). Bull. Wildl. Dis. Assoc. 3: 183–184.

TEMPLE, R. M. S., C. C. MUSCOPLAT, C. O. THOEN, E. M. HIMES, AND D. W. JOHNSON. 1979. Observations on diagnostic tests for paratuberculosis in a deer herd. J. Am. Vet. Med. Assoc. 175: 914–915.

THIERY, J. P. 1953. La maladie de Johne. Bull. Off. Int. Epizoot. 40: 129–135.

UNITED STATES DEPARTMENT OF AGRICULTURE. ANIMAL AND PLANT HEALTH INSPECTION SERVICE. 1974. Laboratory Methods in Veterinary Mycobacteriology (Rev. Ed.). U.S. Department of Agriculture, Ames, Iowa, pp. 34–45.

VANCE, H. N. 1961. Johne's disease in a European red deer. Can. Vet. J. 2: 305–307.

WILLIAMS, E. S. 1981. Spontaneous and experimental infection of wild ruminants with *Mycobacterium paratuberculosis*. Ph.D. Dissertation. Colorado State University, Fort Collins, Colorado, 362 pp.

———, S. P. SNYDER, AND K. L. MARTIN. 1983. Pathology of spontaneous and experimental infection of North American wild ruminants with *Mycobacterium paratuberculosis*. Vet. Pathol. 20:274–291.

———, T. R. SPRAKER, AND G. G. SCHOONVELD. 1979. Paratuberculosis in free-ranging bighorn sheep and a Rocky Mountain goat in Colorado. J. Wildl. Dis. 15: 221–227.

Journal of Wildlife Diseases, 19(3), 1983, p. 191

BOOK REVIEW . . .

Animal Disease in Relation to Animal Conservation, M. A. Edwards and U. McDonnell, eds. Academic Press, Inc., 111 Fifth Avenue, New York, New York, USA. 1981. 336 pp. $49.00 US.

This publication is the proceedings of a symposium held in 1981 by the Zoological Society of London. The symposium was designed to review the relationship of animal disease to animal conservation. It explored the direct effects of disease on wildlife populations, as well as the effects of human and domestic animal activities, including disease control, on wildlife populations. These activities often resulted in conflict between the moral need for animal conservation and the human need for disease control.

Each chapter of this publication is the contribution of an individual scientist(s); it includes a list of relevant references and a record of the discussion period which transpired. The latter includes remarks by his royal highness, The Prince Philip, President of the World Wildlife Fund. Appropriate figures and tables illustrate each presentation.

To present the subject, the chapters of this book are grouped into four sections. In the first section, specific diseases are discussed including rinderpest and its control in Africa, trypanosomes and its impact on wildlife, rabies in wildlife, myxomatosis and its evolution, and botulism in waterfowl. Interesting reviews on each of these diseases are provided with the emphasis on European, African, and/or Asian epidemiology. Too often we consider the boundaries of wildlife disease to be limited to North America. For example, trypanosomiasis control, including the tsetse fly, illustrates the importance and need for the integration of ecological, geographical, agricultural, and sociological factors in land use planning, and disease control.

The second section of the publication discusses animals as reservoirs of disease and provides examples including influenza, leishmaniasis, trichinosis and hydatid disease. It is fascinating, as well as enlightening, to explore the life cycle and epizootiology of *Trichinella spiralis* in leopards, hyaenas, jackals, and lions.

The third section stresses epidemiological principles and policies. The major methods of transmission are discussed and the epidemiology of plague in the United States is used to illustrate these principles.

The last section of the book discusses conservation in relation to animal disease in Africa and Asia and the control of disease in wildlife including its reduction when a threat to man or domestic animals occurs.

A major aim of the symposium was to make the scientific community aware of the complexity of the relationship between animal disease and animal conservation. This aim is met and excellent examples of this complexity are illustrated in the chapter on the badger/cattle, TB controversy in the United Kingdom, and the chapter on trypanosomiasis in Africa where control measures often directly or indirectly threaten wildlife.

This book will be an important addition to the library of anyone interested in wildlife and their diseases. It vividly documents that epidemiology is a world-wide subject and it uses excellent examples to illustrate this. As the teacher of a course in diseases of wildlife, I welcome this new information on diseases, hosts, and epidemiology in other parts of the world. It will provide new and broader concepts on wildlife disease and wildlife conservation. As the editors state, "This publication will be essential reading for all conservationists, veterinarians, and public health workers, and for those physicians and agriculturists concerned with this important and challenging subject."

Daniel O. Trainer, College of Natural Resources, University of Wisconsin, Stevens Point, Wisconsin 54481, USA.

VELLARD, J., AND J. PENTEADO. 1931. Une queue multiple de *Procyon*. Bull. Soc. Zool. Fr. 56: 355–360.

WATT, J. A., AND R. M. BARLOW. 1956. Microphthalmia in piglets with avitaminosis A as the probable cause. Vet. Rec. 68: 780–783.

WELEBER, R. G. 1975. Abnormalities of the eye. *In* The Development of the Eye, A. A. Pearson (ed.). University of Oregon Health Services Center, Portland, Oregon, 125 pp.

WHITNEY, L. F., AND A. B. UNDERWOOD. 1952. The Raccoon. Practical Science Publ. Co., Orange, Connecticut, 177 pp.

WRIGHT, P. A. L., AND J. G. CARR. 1965. Dominant microphthalmia in the fowl. J. Pathol. Bacteriol. 89: 681–689.

Journal of Wildlife Diseases, 19(3), 1983, p. 243

BOOK REVIEW . . .

Diseases of the Reptilia, John E. Cooper and Oliphant F. Jackson, eds. Academic Press, New York, USA. 1981. Vol. I, 408 pp. Vol. II, 232 pp. Vol. I, $62.50 US; Vol. II, $41.00 US.

This multi-authored two-volume work is intended to be an "up-to-date guide to diseases of reptiles" with emphasis on captive reptiles. The editors state their hope that the book will provide accessible data on diseases of reptiles. To these ends, the books are successful. The books contain contributions from clinicians, pathologists, microbiologists, parasitologists, and zoologists.

The volumes are divided into four primary sections: Background, Infectious Diseases, Non-infectious Diseases, and Clinical Aspects. The Background Section contains chapters on anatomy and physiology, pathology and histopathological techniques, and microbiology and laboratory techniques.

The remainder of Volume I is devoted to infectious diseases and includes discussions of viruses, bacteria, fungi, actinomycetes, protozoa, endoparasites, and ectoparasites. This section provides an excellent review of the existing body of knowledge concerning the infectious agents affecting reptiles. The three chapters on parasites are comprehensive and probably represent the most complete assemblage of reptilian parasite/host records published to date. Some new material from the various author's files is scattered throughout the text. Among the most notable in this regard, is the publication of twenty-five new cases of fungal disease from the records of the London Zoo. Unfortunately, and presumably due to the delay between preparation of the manuscripts and final publication, several recent important discoveries in reptilian virology are not included.

Traumatic and physical diseases, nutritional diseases, neoplastic diseases, congenital and developmental diseases, and other miscellaneous conditions are covered in the Non-infectious Diseases Section. The chapter on neoplastic diseases is particularly well-done with an extensive listing, in chart form, of all previously published reports of reptilian neoplasms.

The section on Clinical Aspects contains information on diagnosis, treatment, anesthesia, and surgery. The final chapter of the book is a noble attempt to bring order to the diverse and often conflicting information concerning drugs and dosages. Much of the Clinical Aspects Section, however, lacks the detailed discussion found elsewhere in the book. Coverage of surgical techniques is superficial, and persons contemplating a surgical procedure on a reptile for the first time, will not find the information particularly helpful. There is virtually no discussion on hematology or clinical chemistry other than a brief resumé of sampling techniques.

In the book as a whole, little emphasis is placed on important environmental factors such as temperature, humidity, and photoperiod and their relationship to reptilian disease processes. Future editions could be improved by the inclusion of a chapter devoted to these environmental influences which so profoundly affect the pathogenesis and course of reptilian disease.

The book is conservatively illustrated with black and white photographs and line drawings. More illustrations would enhance the text, although certain individual chapters are supplemented with an abundance of illustrative material. Charts summarizing and/or augmenting information presented in the text are used to good advantage.

Extensive bibliographies are provided at the end of each chapter, and of themselves constitute a valuable contribution to those pursuing the study of the diseases of reptiles. Titles of articles are not included in the references. This omission, for which the editors apologize, creates more of an inconvenience than serious deficiency, however.

Clinicians and vivarium personnel, though they may value this book as a reference, are apt to find its overall impact disappointing. The real strength of the book lies in its use as a broad reference reflecting the state of the art, and as a guide to the existing literature on reptile diseases. The book should serve the scientific community well in this capacity.

Roger E. Brannian, Kansas City Zoological Gardens, Swope Park, Kansas City, Missouri 64132, USA.

KURTZ, H. J., AND P. D. KARNS. 1969. Polioencephalomalacia in a white-tailed deer (*Odocoileus virginianus borealis*). Pathol. Vet. 6: 475–480.

LEE, J. Y. S., AND P. B. LITTLE. 1980. Studies of autofluorescence in experimentally induced cerebral necrosis in pigs. Vet. Pathol. 17: 226–233.

LITTLE, P. B. 1978. Identity of fluorescence in polioencephalomalacia. Vet. Rec. 103: 76.

LOOMAN, J., AND K. F. BEST. 1979. Budd's Flora of the Canadian Prairie Provinces. Agric. Canada Publ. 1662. Hull, Quebec, Canada, 824 pp.

MARKSON, L. M., AND N. GILES. 1973. Cerebrocortical necrosis in a fallow deer (*Dama dama*). Vet. Rec. 93: 243–246.

PADOVAN, D. 1980. Polioencephalomalacia associated with water deprivation in cattle. Cornell Vet. 70: 153–159.

RAISBECK, M. F. 1982. Is polioencephalomalacia associated with high sulfate diets? J. Am. Vet. Med. Assoc. 180: 1303–1304.

REED, D. E., H. SHAVE, M. E. BERGELAND, AND C. E. GATES. 1976. Necropsy and laboratory findings in free-living deer in South Dakota. J. Am. Vet. Med. Assoc. 169: 975–979.

SAPIENZA, D. A. 1981. An hypothesis for the etiology of polioencephalomalacia. Ph.D. Thesis. Kansas State Univ., Manhattan, Kansas, 167 pp.

TOURNUT, J., C. LABIE, AND J. ESPINASSE. 1967. Identification en France, de la "nécrose du cortex central" (N.C.C.) chez plusiers espèces de ruminants. Rev. Med. Vet. (Lyon, Toulouse) 118: 883–896.

TRUEMAN, K. F., AND D. C. CLAQUE. 1978. Sodium chloride poisoning in cattle. Aust. Vet. J. 54: 89–91.

WOBESER, G., AND W. RUNGE. 1979. Polioencephalomalacia in white-tailed deer in Saskatchewan. Can. Vet. J. 20: 323–325.

ZIFFO, G. S., AND D. M. INGLIS. 1974. Examination of brain tissue. Vet. Rec. 94: 252.

Journal of Wildlife Diseases, 19(3), 1983, p. 252

BOOK REVIEW . . .

Wildlife Diseases of the Pacific Basin and Other Countries, M. E. Fowler, ed. Wildlife Disease Association, Inc., P.O. Box 886, Ames, Iowa 50010, USA. 1981. 262 pp. $19.00 US plus $1.00 postage (softback).

This proceedings contains the papers presented at the Fourth International Conference of the Wildlife Disease Association (WDA) held in Sydney, Australia, on August 25–28, 1981. The major emphasis of the conference was on wildlife diseases unique to the Pacific Basin, but also included is information on wildlife disease problems in Europe, Scandinavia, Africa, North America, and Asia.

The proceedings is divided into seven major sections, the first of which includes welcoming, presidential, keynote, and overview addresses of the conference. Of particular interest is the review of the development and growth of the WDA during its first 30 years. This article traces the history and accomplishments of the organization and its leaders. Also in this section are four good reviews of wildlife disease problems in the Pacific Basin which set the stage for many of the technical papers that follow.

The second section contains articles on zoonotic diseases. Within this section are exceptionally good epidemiologic reviews on La Crosse virus, Ross River virus, and Murray Valley Encephalitis virus. Other articles cover specific aspects of certain zoonoses.

The next section deals with infectious diseases and contains a good mixture of articles dealing with different diseases, geographic locations, and wildlife species. Original research on a carrier status for duck plague virus, a bibliography on diseases of wombats, a review of the epizootiology of malignant catarrhal fever, and an article with new perspectives on anthrax highlight this section.

The fourth section on parasitic diseases contains several good papers including descriptions of *Besnoitia*-like agents in flamingos, a review of parasitism in kiwis, and a review of anaplasmosis. The best of this section, however, is the intriguing account of the introduction and spread of sarcoptic mange in red fox populations in Sweden.

The fifth section on nutrition and toxicology is brief and limited to only five papers. The following section on special animal groups is much more varied and contains several interesting articles. Many papers in this section deal with diseases of marine species and would be of special interest to researchers in this field.

The last section relates to wildlife diseases in a general way and includes subjects such as avian rehabilitation, suggestions for preventing capture myopathy, and reference hematology values for several species of birds. These articles should be particularly useful to individuals working in these areas because they are clear, concise treatments of the subjects.

As noted by Editor Fowler, papers were neither refereed nor edited to conform to uniform style. Thus, the proceedings contains a few typographical errors, grammatical miscues, and inconsistencies, but these problems are a minor inconvenience to the reader.

This publication has an amazing number of tables (74) and figures (96) for a conference proceedings, and these add measurably to its appeal. As with most conference proceedings, it would be a rare individual who would have occasion to refer to each article, nevertheless, the varied subjects insure that there will be at least some papers of interest to every wildlife disease worker. For members of the WDA, the highlights of the history and development of their organization are alone worth the $19.00 cost!

W. R. Davidson, Southeastern Cooperative Wildlife Disease Study, Department of Parasitology, College of Veterinary Medicine, The University of Georgia, Athens, Georgia 30602, USA.