Book review — Boekresensie

Cattle Plague — A History

C A Spinage

2003. Kluwer Academic/Plenum Publishers, New York, 765 pp., hard cover. ISBN 0-306-47789-0.

The title of this book that deals with an historical account of rinderpest, points to the fact that a sizable portion is dedicated to events that took place in the 19th century. The name rinderpest, which is of German origin, became more in use in the 20th century, especially in southern Africa after Sir Arnold Theiler presented a report to the local government in 1896. The author Clive A. Spinage has succeeded admirably in combining in one book a formidable amount of information emanating from all over the globe and spanning a period of more than 5000 years. Theiler wrote in an information brochure dated 1896 that the disease had already been mentioned in the 4th century AD, but other historians have referred to treatment of cattle with clinical signs compatible with rinderpest by the Ancient Egyptians 5000 years ago.

The 5 parts of the book are divided into 30 chapters, of which two-thirds are supplemented with black and white pictures, figures, maps, tables and graphs.

In Part I the nature of the disease, including the species affected, geographical distribution, and theories on the origin of rinderpest are discussed. Parts II, III and IV are dedicated to the history of rinderpest in Europe, including control measures, legislation, cures and remedies that were attempted. The book is concluded in Part V with the history of rinderpest in Asia and Africa, the latter Part representing about one third of the information in the book.

Of particular interest to readers in Africa is the information relating to the devastation that struck Africa's ungulate fauna in 1889, and that swept the entire continent between 1889 and 1896. The effect of rinderpest on African game and its possible role in the control of the disease is dealt with specifically. It has been stated by several persons involved in current global efforts to eradicate rinderpest, that the disease lends itself to eradication by virtue of 2 pivotal characteristics of the virus. The 1st is the fact that the virus is an excellent immunogen producing life-long immunity in susceptible hosts. It therefore is an excellent candidate as a vaccine virus, a fact that was amply demonstrated during the past 6 decades in the field, especially in Africa. The 2nd is the concept that wild animals do not act as long-term carrier hosts in nature. Although rinderpest can pass between wildlife and cattle, the current perception is that the disease disappears naturally in wildlife once it is eliminated from cattle. The author started his discourse on this aspect by emphasising that although wildlife is important in the dissemination of the virus during outbreaks, the disease burns itself out in those species with a low innate resistance, and those with a high innate resistance are unlikely to excrete significant concentrations of virus. He cites several reports that confirmed that the disease was unable to maintain itself in large wildlife populations following control of the disease in the cattle population.

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Information on susceptibility of wild animal species, specific effects on African game, the role of African game in the epidemiology or rinderpest, and the relation between rinderpest and tsetse flies are dealt with in detail and contains valuable reference material for persons interested in those aspects of rinderpest.

The book quite rightly gives a lot of prominence to the economic and social effects the disease had in Europe, Asia and Africa. In South Africa, the great African rinderpest panzootic that appeared South of the Zambezi river in 1896, has been described as a national disaster that had profound social effects on the citizens of the former Transvaal who experienced the biggest losses. The wide and diverse ramifications of the disease in Europe and Africa where it was much more epidemic in nature compared to its enzootic appearance in Asia, are put in historical context by the author. The historical facts of the global rinderpest eradication campaign is adequately addressed in the book, from the role that wars and governmental mismanagement played in the resurgence of rinderpest after the 1970s, to current

approaches to eradicate the only remaining rinderpest virus, namely lineage 2 virus in the pastoral ecosystem of southern Somali and northern Kenya.

Although several publications dealing with aspects of rinderpest have become available during the last few decades, this book must be rated as the most comprehensive historical review of the disease. The book covers all aspects of rinderpest, including the causative organism (and speculation about the origin of the 1889 outbreak), the clinical disease, the epidemiology, the control of the disease and its socio-economic implications. It can be recommended to anyone who wishes to obtain information relating to any aspect of this disease that is recognised as the most lethal viral disease of cattle known to mankind. Even as a source for general reading, it should provide many hours of interesting reading.

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