

BOOK REVIEW

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BOOK REVIEW

MYXOMATOSIS, by Frank Fenner and F. N. Ratcliffe. Cambridge University Press, London, New York and Ibadan. 1965. 379 pp.

Myxomatosis is a disease caused by a myxoma virus. It was first recognized in a laboratory rabbit in South America in 1898 and since then has been reported to occur sporadically in laboratory rabbits in several areas in the southern half of the western hemisphere. This virus is remarkably host specific, causing a mild infection in *Sylvilagus* spp. sometimes evidenced by a benign, localized, often persistent tumor in the skin, but no apparent mortality. In *Oryctolagus* spp., the European rabbit that has been used extensively for laboratory and commercial purposes throughout the world, the myxoma virus causes a much more extensive infection, usually fatal.

No other susceptible hosts are known.

Myxomatosis has been reported in commercial rabbitries in California and Oregon since 1930. In 1954 myxomatosis was deliberately introduced into wild *Oryctolagus* in Tierra del Fuego and has since caused extensive outbreaks there and further north in Chile. The major impact of myxomatosis has occurred (a) in Australia where it was deliberately introduced in 1950 to control the established wild population of the European rabbit and (b) in Europe where it was introduced on a private estate in France in 1952 to control a local rabbit population but has since spread over much of Europe and the British Isles.

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Fenner and Ratcliffe are well qualified to write this volume because of their close association with the Australian studies. Fenner is Professor of Microbiology at the Australian National University and Ratcliffe was formerly Officer-in-charge of the Wildlife Survey Section of the Australian Commonwealth Scientific and Industrial Research Organization. They and their staffs were responsible for most of the research on myxomatosis in Australia. The history of myxomatosis during the past decade and a half establishes a classic of the development of a disease agent as a control mechanism of a wild animal population. The first part of the book outlines the history of the spread of the wild European rabbit in Australia and presents a detailed account of recent research on the biology of the wild rabbit. This is followed

by a technical description of the myxoma virus, its transmission by mosquitoes and other insects, the course of the disease in the European rabbit, and subsequent changes in the virulence of the virus and in the resistance of the rabbits to it. The final chapters document the history of the disease in the four continents where it occurs, and discuss its continuing evolution.

The authors have done an excellent job of telling this story in a concise and interesting fashion. It is well documented with a complete bibliography and a helpful index. Illustrations, charts and tables increase the value of the book. The reader's interest is enhanced by inclusion of photographs of many of the personalities who were involved in the research and operations that provided the data for this monumental work. Carleton M. Herman.