

Myxomatosis, by F. Fenner and F. N. Ratcliffe. Cambridge University Press, £5.

The wild European rabbit is a very successful species. It is also a major pest of agriculture and forestry. For centuries men have tried to control wild rabbits with varying success; in 1896 the possibility of using a biological method of control arose with the recognition of an infectious and highly lethal disease among laboratory rabbits in the Institute of Hygiene in Montevideo. It was not until 1942 that myxomatosis was shown to be a benign disease of the South American wild rabbit *Sylvilagus brasiliensis*, from which source the laboratory rabbits were infected. By this time several unsuccessful attempts had been made to introduce myxomatosis into populations of wild European rabbits, both in Europe and Australia. But in 1950 renewed attempts made on the Murray river, in areas well stocked with mosquitoes, led to the dramatic spread of the disease in Australia and the death of thousands of millions of rabbits over the next few years.

In 1952 myxomatosis was introduced to wild rabbits in France, and in 1953 spread to Britain. But here, as in Australia, strains of myxoma virus of reduced virulence have evolved and a high proportion of fully susceptible rabbits now survive the disease. In addition, natural selection favours the survival of rabbits having innate resistance to the disease. These two factors severely limit the effectiveness of myxomatosis as a means of biological control.

Because rabbits compete with sheep for pasture, Australian interest in rabbit control, and in myxomatosis, is very keen. This has led, over the past 15 years, to a great burst of activity among ecologists and virologists and very fruitful collaboration between them. Much of this work has been published in scientific journals, but this book is a concise, comprehensive account which brings together a great variety of studies and appropriate background information. Clearly written, with unquestionable authority, it is a classic work on its subject. Moreover, since myxomatosis has provided the first opportunity to study the part played by an infectious disease in the evolution of a common mammal, it is of interest to all biologists.

H. V. THOMPSON.

An Ecological Approach to Conservation, by Russell L. Hamm & Larry Nason. Burgess Publishing Co., Minneapolis, \$6.75.

The authors establish very clearly in their second chapter that "ecology is related to conservation in that ecology may be said to be the science from which conservation must find principles and direction." Alternatively one could say that conservation consists in the application of ecological principles to particular situations, that ecology is a science where conservation is both an ethic and a technology.

The theme of the ecological basis of conservation is well sustained throughout this important and wide-ranging book. Its thirteen chapters include such subjects as water and soil conservation, air pollution, mineral and wildlife conservation, chemical pollution, population dynamics, agricultural and home and yard conservation, i.e. how to lay out and maintain one's back garden. Such vast scope inevitably implies superficiality, but this is offset by a proliferation of references.

Understandably the emphasis is strongly American, both in layout and language, in examples and references, and also in the fairly full treatment of the administrative aspects of conservation. So while anyone interested in conservation will learn much from this stimulating book, I doubt if it will meet the great need for a simple but comprehensive account of conservation for use by British teachers.

P. J. NEWBOULD.