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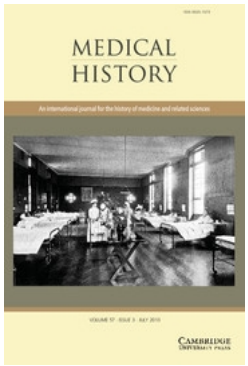

Frank Fenner and Bernardino Fantini, *Biological control of vertebrate pests: the history of myxomatosis, an experiment in evolution*, Wallingford, CABI Publishing, 1999, pp. xii, 339, illus., £60.00 (0-85199-323-0).

Lise Wilkinson

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incalculable. The recollection still makes me cringe. There but for the grace, etc.

The benefits to be gained from having a friendly expert to advise on technical matters are thus enormous. This is essentially the role Wolbarst's book might fulfil for historians interested in medical imaging. It supplies clear, cogent and accessible accounts of how the various imaging technologies work. This historian, for one, was forced to confront the fact that his understanding of the principles of MRI was somewhat defective. A noteworthy feature of the text is that the physical and technical descriptions are very usefully supplemented with illustrative clinical cases. How the machines serve, sometimes indeed constitute, the process of diagnosis, and how they guide therapy, are effectively conveyed. Safety issues receive a concise but sophisticated and eminently reasonable assessment.

This is not, however, a book that historians should resort to to learn about history. Despite the publisher's claims to the contrary, the accounts of the development of the various techniques are slight and partial. I spotted one error. Wolbarst implies (p. 136) that B-mode ultrasound derives its name from reference to the brightness of the image. This is not the case. The terms A-mode and B-mode originated with radar imaging and were so designated merely to distinguish one from the other. C-mode and D-mode also exist. Perhaps physicists in turn need historical advisors.

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Frank Fenner and **Bernardino Fantini,** *Biological control of vertebrate pests: the history of myxomatosis, an experiment in evolution*, Wallingford, CABI Publishing, 1999, pp. xii, 339, illus., £60.00 (0-85199-323-0).

In 1983 Frank Fenner delivered the Royal Society's Florey Lecture in London. Its title: 'Biological control as exemplified by smallpox eradication and myxomatosis' defined two lasting interests and major achievements in Fenner's scientific career, and also the scope of his involvement in historical research on virus diseases and virology of recent years. He was awarded the Japan Prize for his part in the WHO's worldwide smallpox eradication campaign, successfully concluded in 1979; and he worked on myxomatosis in his native Australia from 1951 to 1965 when he published, with F N Ratcliffe, *Myxomatosis*, a standard text on the disease. The current volume may be seen as a sublimation of the latter interest, and is a happy outcome of collaboration with Bernardino Fantini, the Italian Director of the Louis Jeantet Institute for the History of Medicine at the University of Geneva.

In a lucid text, the authors use myxomatosis and its virus in rabbits as a model in a comprehensive examination of historical aspects of the development of biological control of vertebrate pests and its origins. Emphasis here is on developments in Europe and in particular in Australia, where the European rabbit was first introduced in the mid-nineteenth century as a food reservoir for shipwrecked sailors, and where much early twentieth-century and later work on the disease and its possibilities as a control measure was carried out. The rabbits in a rapidly expanding population were initially valued as game animals, or trapped for their meat and skins; but because of their sheer numbers they soon came to be seen as a destructive agricultural pest, and within fifteen years of their introduction, laws to control the growing threat were being put into place. A variety of methods were used: trapping, shooting, destruction of burrows, and building of rabbit-proof fences. Not until 1951 did biological control of Australia's rabbit plague become possible. In that year experiments, carried out on behalf of the Council for Scientific and Industrial Research (CSIR) in Australia,

confirmed a high degree of species specificity of myxoma virus subtypes, and their mechanical transmission by mosquitoes and fleas. Only then could the hard work carried out by Fenner and co-workers begin: and to study virus virulence and subsequent changes in genetic resistance of rabbits and of virus. A vaccine to protect rabbits in commercial rabbitries was developed in 1954.

Early chapters give background information concerning pest animals and plants in general, and rabbits in particular, and methods of biological control, before concentrating on myxomatosis and the European rabbit in Australia and Europe, including the fierce arguments and controversies surrounding introduction of control: the rabbit breeding industries and the gourmets fond of cooked rabbit, versus the foresters and farmers who welcomed control by myxomatosis.

Having provided extensive coverage of, and insight into, the mechanics and ensuing consequences of biological control of rabbit plagues by means of myxomatosis—virological, economic, environmental and ecological—the authors introduce a later alternative means of virological rabbit control: the calicivirus of rabbit haemorrhagic disease (RHDV), first observed in China in 1984. It subsequently appeared in Europe and elsewhere, making inroads in commercial rabbitries until an inactivated virus vaccine became available. The virus has since been the subject of extensive tests with a view to possible use for rabbit control in Australia and New Zealand. There are still unanswered questions to be considered about effectiveness, safety, attenuation of the virus, and developing resistance in rabbits. Whether this disease will ever be an acceptable alternative to myxomatosis for rabbit control in the antipodes is not clear, and will not be for some time to come.

Concluding chapters in this satisfying account of biological pest control cover 'Ecological and environmental effects of biological control', 'Theoretical aspects of microbial control of vertebrate pests', and 'Coevolution of parasites and hosts'. The inclusion of concise illustrated biographies of the main players in this story is a welcome and informative addition, well worth copying in other such "multi-biographical" scientific histories. It is a book which will appeal to biologists and historians of science alike, and should be recommended to their students.

The book is generously illustrated and attractively produced. One minor quibble for the sake of future editions: references to Pasteur's early work on phylloxera are quoted repeatedly (p. 63) as published in *Comptes rendus hebdominaires des séances de l'Académie des Sciences*—surely that should be *Comptes rendus hebdomadaires des séances* ... The copy editor must have slipped up on that one.

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Thomas Dormandy, *The white death: a history of tuberculosis*, London and Rio Grande, Hambledon Press, 1999, pp. xiv, 433, illus., £25.00 (1-85295-169-4).

Thomas Dormandy's *The white death: a history of tuberculosis*, recounts the medical history of tuberculosis and the experiences of renowned men and women who combated it. Most of the personal narratives that Dormandy examines have already been analysed by others. An image of the three Brontë sisters dominates the cover, the face of Keats near death is the frontispiece. Dormandy begins the study with an explication of Edvard Munch's widely reproduced image of the deathbed of his sister Sophia. "The girl sits propped upon pillows", Dormandy notes. "Her face has become almost transparent ... Next to her, the mother's head is sunk on her chest,