

Review by Justine Philip:

Myxomatosis, Hilary Stern

WikiJournal

The paper covers the scientific description of the Myxomatosis virus and its presentation, however it is lacking in an account of the complex social, political and ethical impacts that this virus had on the scientific and general community.

Myxomatosis exposed the dangers of employing biological warfare against "pest" species by the agrichemical farming industry in peacetime. The term vermin or pest species, is in itself a cultural construct, not a scientific description; rabbits might have been problematic to sheep farmers but were a valuable resource to other members of the community, and a valued cultural asset in their country of origin.

The Myxomatosis virus was never released, it escaped confinement and then it proved impossible for governments to police the movement of the virus once it was out in the community (Olsen 1998, Cooke 2014).

The resulting impact was removal of a valuable resource that while not a huge export earner, was a valuable and free resource, particularly important to low income and indigenous communities (Philip 2017, Philip 2018). These communities were deprived of a plentiful, nutritious food source, and often a source of primary or supplementary income, supplying industries reliant on rabbit fur, pelts, meat etc. These industries went bankrupt after the release of Myxomatosis, and trappers and hunters were superseded by a new wave of increasingly intensive agricultural farming operations. By the 1960s, it was cheaper to raise a chicken from a hatchling

to slaughter in a factory farm, than to go out and shoot a wild rabbit - chickens replaced rabbit meat as a staple food source for much of the population (see Ether and Cottle, 2015).

A thorough account of Myxomatosis also must include content on pertinent issues such ethical considerations, and the extreme animal cruelty and suffering that resulted from the disease. There was widespread condemnation of this use of biological warfare against wildlife by leading animal welfare organisations, veterinarians, and public figures (Winston Churchill for one) and general public. The negative impacts on ecosystem health also are often absent from scientific studies, including the possible extinction of symbiotic species.

The exposure of the community to millions of infected and dying animals was deeply distressing to children to witness, and concerned many elder members of the community. Animal protection groups worldwide condemned the release of the virus. The RSPCA in the United Kingdom raised significant funds to help euthanise as many rabbits as possible, to prevent their inevitable lengthy and painful death. The disease left millions of rabbits blinded and starving, an estimated 99% of rabbits in the United Kingdom were killed by the disease, and 90-90% in France following its illegal release in Europe.

Important areas to cover:

1. The impossibility of containment

A key point with myxomatosis is that it did not behave the way the scientific trials in Australia in 1949 had predicted that it would. After extensive trials in the late 1940s, they had concluded that an introduction would be a failure and were about to abandon the study, when the myxomatosis virus escaped from a field site in the Riverina of NSW (see *PERSPECTIVE Promising new weapon in the war on rabbits* 1992). With unseasonably favourable weather for the mosquito vectors that year, the results were staggering - myxomatosis decimated the Australian rabbit population (Cooke, 2014 p.58). This highlights the unpredictability and danger of employing biological weapons, a lesson repeated again with the introduction of calicivirus in 1995 that also escaped during trials and spread fast across Australia (Olsen, 1998, pp. 65-66). Cooke (2014 p. 65) wrote that the virus did not behave "as predicted based on European experience."

2. The impact on the European and UK rabbit populations.

News of Australia's success in reducing rabbit numbers quickly reached Europe. All it took was one elderly, errant, self motivated physician. Dr Paul Delille took it upon himself to obtain a virus sample via his scientific contacts, and he released it on his farm near Deux in France in 1952 (Bartrip 2009). By August 1953 the virus had spread through most of France and many other Continental countries before jumping the English Channel and spreading like wildfire through the UK - aided by many farmers keen to rid their lands of "the rabbit pest".

3. Animal cruelty and welfare considerations.

The RSPCA published advertisements in the UK press:

"Stop the deliberate spreading of MYXOMATOSIS!—Victims of this horrible disease—blind, misshapen, tormented—are being caught for sale as carriers, to be let

free in infection-free areas Nothing can justify this callous encouragement of animal suffering, and the RSPCA appeals for your moral and material support in demanding an immediate legal ban."

From the 1890s through to the end of World War 2, rabbits provided a thriving trade in meat and fur for Australia. The industry prospered through times of drought, war, and economic downturns – events that severely impacted on the sheep and cattle industries and resulted in decades of hardship for pastoralists (Eather & Cottle, 2015). At the time that the rabbit industry was first expanding, the national sheep flock decreased from 106 million to 54 million (1892 to 1904). “In 1929 the rabbit industry was reported to be Australia’s largest employer of labor” (Eather & Cottle, 2015, p. 1).

At this time, over 20,000 trappers worked full-time trapping for carcasses or skins, or poisoning for skins. Thousands were employed in numerous freezer works located in rural towns and capital cities; grading, sorting, packing, skinning and transporting carcasses by the tens of millions. In addition there were thousands employed in the fur industry, and selling rabbit meat directly to the public through street stalls and shops, making felt hats out of the rabbit skins (Eather & Cottle, 2015). Philip, 2017, recorded:

Even the ‘scraps’ went into fertilizer, animal feed, and to make gelatin. Around four billion rabbit skins were exported between 1904 and 1947. An estimated 27 million rabbits were consumed by Australians each year during the 1940s (ABC, 2015).

Australian soldiers in World War 2 marched into battle wearing slouch hats made of rabbit skins – ten rabbits per hat, and Australia produced 5,500,000 hats during the war.

Last of the Lantern Swingers. A story of the rabbit industry in Sunraysia, historian G B Eggleton concluded that “*the industry was a far better solution to the rabbit problem than either poisoning or myxomatosis.*” The Governments of Australia and New Zealand

banned the trade in rabbit products in the 1950s bringing an end to what had been a thriving economy. The impact of rabbits on the environment was arguably no more damaging than the sheep and cattle industry.

An example of public misinformation about the rabbit pest appears here with the publication of a photo in 1905 claiming that rabbits had killed everything outside of the fenceline. Environmental historian Don Garden (2005), featured the 1905 photo, Figure 16-9, of rabbit-proof fencing, in the *Australia, New Zealand, and the Pacific: an Environmental History*, as an illustration of the propaganda supporting rabbit eradication in the early days of Federation. Garden (2005, p. 74) recorded:

This image was intended to demonstrate the effectiveness of rabbit-proof netting fences by showing the contrast between a paddock eaten bare by rabbits and adjacent area protected from them. However, the picture may not be so clear.

Desperate rabbits might well be able to cross such a low fence, so one suspects that overgrazing by sheep was part of the reason for the loss of vegetation.



Figure 16-9 “The rabbit pest: two sides of a netting fence.” Cobar, New South Wales 1905. Source: State Library of New South Wales At Work and Play 02766

To end, consider the quote from the Secretary of the World League for Protection of Animals of biological warfare in 1951: "*no good ever came out of cruelty.*"

References

- Bartrip, P. W. J. (2008) Myxomatosis in 1950s Britain, *Twentieth Century British History*, Volume 19, Issue 1, Pages 83–105, <https://doi.org/10.1093/tcbh/hwm016>
- Cooke, B. D. (2014). *Australia's War Against Rabbits. [Electronic resource]: The Story of Rabbit Haemorrhagic Disease*. Retrieved from <https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat0006a&AN=melb.b5593806&site=eds-live&scope=site>
- Coman, B. J. (1999). *Tooth & nail: The story of the rabbit in Australia*. Retrieved from <https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat0006a&AN=melb.b2480069&site=eds-live&scope=site>
- Eather, W. & Cottle, D. (2015). The Rabbit Industry in South-East Australia, 1870-1970. *Proceedings of the 14th Biennial Labour History Conference, Eds, Phillip Deery and Julie Kimber*. Presented at the Melbourne. Retrieved from <http://labourhistorymelbourne.org/the-rabbit-industry/>
- Eggleton, G. B (1982). *Last of the lantern swingers* (1st ed). Mildura, Vic.: Parraweena Publishing.
- Garden, Don. (2005). *Australia, New Zealand, and the Pacific: An environmental history*. Santa Barbara, California: ABC-CLIO.
- Olsen, Penny. (1998). *Pest Animals. New Solutions to Old Problems*. Australia: Bureau of Resource Sciences and Kanagoo Press:
- PERSPECTIVE Promising new weapon in the war on rabbits (1993, April 28). *The Canberra Times* (ACT : 1926 - 1995), p. 25. Retrieved October 26, 2019, from <http://nla.gov.au/nla.news-article126985302>
- Philip, J. (2017). *Representing the Dingo. An Examination of Dingo–Human Encounters in Australian Cultural and Environmental Heritage* (PhD Thesis, Ecosystem Management). University of New England, Armidale NSW.
- Philip, J. (2018). The Institutionalisation of Poison: A historical review of vertebrate pest control in Australia, 1814 to 2018. *Australian Zoologist*. Retrieved from [DOI: https://doi.org/10.7882/AZ.2018.025](https://doi.org/10.7882/AZ.2018.025)

Rabbit control ephemera collection. (2016) National Library of Australia. [website}

<http://www.nla.gov.au/content/rabbit-control-ephemera-collection>