

Rabbits in SA: Snapshots from 1920-2020

The Rabbit Industry

By the 1920s trapping rabbits and fur trading were significant industries. Notwithstanding the occasional aberration, pastoralists and trappers shared an essential objective: to kill rabbits. Where they differed was on the ultimate goal – the pastoralists wanted to get rid of every last rabbit, never to think about them again; the trappers wanted an ongoing industry that would keep delivering the relative riches to which some were now accustomed, and to which others aspired.

Newspapers regularly carried pieces marveling at the money to be made not only by the trappers but also by skin merchants. Even third-rate furs were finding their way into an ever-expanding hat manufacturing market, from which evolved the Australian icon: the Akubra. At the same time newspaper advertisements were about methods of extirpation: traps, poisons, bait layers, netting for fences and fumigants.

The Wall Street crash in 1928 took with it the luxury fur trade which included rabbit as *faux* seal, but by the 1930s there was a developing need for cheap food. So the 'rabbit industry' survived, providing both employment and sustenance to many, and poised to 'explode' as Australia eventually emerged from the Great Depression.

Myxomatosis

While Australia kept doing what it had been doing for seventy or so years, research proceeded slowly on biological control: myxomatosis. In 1937 a trial site was established on Wardang Island. A decade later CSIR (precursor of CSIRO) reported positive results for the virulence, durability and target specificity of myxomatosis but were searching in vain for a vector to transmit the virus under natural conditions.

Work on myxo proceeded slowly, and even more so in the 1940s when CSIR became increasingly involved in defence research. By the cessation of World War II rabbit numbers were breaking all records, but CSIR effectively walked away from the problem – or at least from the viral solution.

During this period Dr Jean Macnamara publicly voiced her concern that inadequate resources were devoted to myxo research and furthermore that testing at Wardang Island was inappropriate, being atypical of country most affected by rabbits. This criticism did not go down well with the scientific establishment and in practical terms was ignored.

Finally on 2 January 1951 myxo appeared near a trial site at Corowa. Spread by mosquitoes, it immediately began killing huge numbers of rabbits. At that time approximately 100 million rabbits were taken to market annually, making no obvious dent in the population. Following myxo that market halved, even before myxo was properly established in SA, WA and Tasmania. It was not until about 1959 that professional trapping became unviable in SA.

By the 1960s myxo was losing its potency and evidence showed that it had limited penetration into arid country where mosquitoes were seldom found. This prompted field trials in 1968 with the European rabbit flea as an alternative vector. Twenty years later the flea had made some contribution to the spread of myxo, but not into the low rainfall country that was its target. As a 'last resort', a Spanish flea was introduced in 1993 and by 1995 was showing promising indications that it would persist in extremely dry conditions. Whether it would spread within a realistic time frame was doubtful.

Notwithstanding its success in reducing rabbit populations, myxo was widely seen as a very cruel treatment. Even its strongest advocates agreed that more humane solutions should be sought. In 1985 steel jaw traps became illegal in SA and restrictions were placed on the use of 1080 poison.

That the rabbit problem was far from over finally sank in to the wider public in November 1988. Peter Bird of the SA Animal and Plant Control Commission took what was to become the most widely published rabbit photo of all time.



Rabbits at Quinyambie Station. Image: Peter Bird

On Quinyambie station, after a couple of wet years an estimated 20 million rabbits did not obey the rules of sustainable development. Breeding with such rapidity in the abundant vegetation they simply ate themselves out of food and water. The tragic images of thousands of emaciated rabbits scurrying amongst the corpses of brethren in search of shade rammed home the awful truth. This horrifying story found its way into the most unlikely publications, magazines that would never publish rural or environmental issues but thrived on sensation. If that was what it took to raise awareness of the need for a new weapon to complement myxo, then so be it.

Calicivirus

In 1991 a strain of the Rabbit Haemorrhagic Disease virus (RHDv – a calicivirus), sourced from the Czech Republic, arrived at the Australian Animal Health Laboratory (AAHL) in Geelong with the blessing of the ministers for primary production and for environment. There it was screened for safety to humans, domestic animals and native fauna, bearing in mind possible future mutations; and for efficacy, measured against alternatives – will it kill and continue to kill subsequent generations of rabbits, and will the disease spread. And there was a further caveat: death should occur quickly and with little evidence of distress.

Expectations were high in March 1995 when RHDV and rabbits arrived at the quarantine facility on Wardang Island. Here was a research and development project, thoroughly planned and likely to deliver in perhaps a couple of years' time, rabbit control or perhaps even extermination. The issue to be settled at Wardang was not how does the disease work, but how to make it *best* work. The feeling among scientists was that the opportunity presented by myxomatosis had been largely squandered (through lack of follow-up) and was not to be repeated with RHD.

On the last weekend in September 1995 a dead rabbit was found at Point Pearce on Yorke Peninsula. It tested positive for RHDv.

Over the following 12 months RHD did everything it was supposed to do and nothing more. It killed only rabbits, displaying none of the grizzly symptoms that horrified many about myxo. It spread far and wide, albeit erratically, and showed no sign at all of interfering with other control methods. Graziers and environmentalists were generally delighted; shooters, processors and pet owners infuriated. In October 1996 all Australian governments approved the release of RHDv.

Rabbit-Free Australia

In 1992 pastoralist Keith Greenfield (of Billa Kalina station) proposed a national fund to support research into the rabbit problem. Keith backed up this proposal with a \$10,000 donation and so was born the Foundation for Rabbit-Free Australia. This was soon followed by a \$150,000 sponsorship from Western Mining Corporation.