

Snapshots from the early history of rabbits in South Australia.

Summary

- Initial attempts to introduce rabbits were unsuccessful, partly due to predation by native animals.
- Early Colonists persisted and gradually became successful in releasing rabbits, including a major release at Anlaby Station near Kapunda.
- Once established rabbits began to spread rapidly, and their destructive nature became evident. Their status soon changed from 'Game' to 'pest'.
- Legislation and the best efforts of landholders failed to contain the spread of rabbits or to suppress them once they established. Values assigned to rabbits were sometimes considered to work against their control.
- Rabbit populations were boom and bust, in line with seasonal cycles. The 'busts' were especially damaging to the environment, but rabbits always recovered rapidly.
- The 'rabbit problem' morphed as did the settings around it.
 - Native predators were reduced through non-selective means with off-target impacts on ecosystems.
 - Technologies advanced gradually with new treatments, e.g. poisons and warren ripping, becoming available.
 - The Colony of South Australia went from facing critical shortages of food, to being a regular importer (e.g. overlanding stock), to being more self-reliant on local produce and then an exporter of grains and wool.
- It wasn't until the release of myxomatosis as a biological control in the 1950s that the tide really began to turn on wild rabbits in Australia.

Establishment

Rabbits arrived with the first colonists in South Australia, aboard the John Pirie in 1836. Rabbits were released at various sites in the following years, including Encounter Bay and Henley Beach, but the early attempts were suppressed by dingoes and wild dogs. By comparison, rabbits released onto Granite (formerly Rabbit) Island, Wright and West Islands, flourished.

Rabbits were available from the Adelaide Market in 1843, were running wild in Adelaide gardens by 1864, and were being bred on market gardens in the Adelaide Hills in 1871.

Just prior to 1870 rabbits were released at Anlaby Station near Kapunda, from which they spread widely – the South Australian equivalent to the Barwon Park release in Victoria. The Governor attended for a day's shooting in 1870. By 1875 rabbits were established as far as the southern Flinders Ranges.

In 1864, rabbits were granted protection from hunters for 4 months per year (during the main breeding season) under the Games Act. However, public attitudes soon changed and in 1875 the Rabbit Destruction Act came into being, giving district councils the power to compel landowners to destroy rabbits on their land. The Act was strengthened in 1878 making the Commissioner of Crown Lands responsible for the control of rabbits on all Crown land and pastoral leases, and forbidding the release of a rabbit into the wild. A Rabbit Suppression Act followed in 1879.

Bounties on rabbit scalps were introduced along with the obligations on landholders to destroy rabbits. The Rabbit Meat Preserving Company was established in Kapunda in 1877, processing 6,000 rabbits a day, with the tinned produce exported to London.

The early zeal to introduce and release rabbits, overcoming predators of the day, was very quickly replaced by a realisation that a devastating pest had been established. The control options available to the early Colonists were fumigation with carbon bisulphide, trapping, dogging, netting, shooting and poisoning.

Efforts to control

By the early 1880s the eastward spread of rabbits from Kapunda had merged with those spreading west from Barwon Park, 'forming a single block of infested country from Spencer's Gulf to the western slopes of the Great Dividing Range'. They continued to spread, averaging 110-130 kms/yr, to the west and north.

Barrier fences were added to the armoury in the fight to contain rabbits, but proved of little effect apart from momentarily delaying the advance. There was speculation that the values now associated with rabbits, such as bounties, undermined the effectiveness of other controls. A conference in Brisbane in 1888 resolved that scalp bonus systems should be prohibited.

Where rabbits established they suppressed the regeneration of many perennial tree and shrub species, overgrazed palatable species resulting in unpalatable or undesirable plants increasing, denuded soil surfaces and accelerated erosion. They competed with stock for forage and with other wildlife, like bilbies, for habitat. In the 1880s grain yields in the south east of South Australia were halved by rabbits. Rabbits also became a major food source for wild dogs/dingoes, cats and foxes, with consequent higher populations that impacted on wildlife and stock.

During drought the impact from rabbits was even more as they hung on until landscapes were devastated. The eventual crashes in rabbit numbers led to human health problems with rabbit carcasses fouling water supplies. As good seasons followed drought rabbits were able to rebound, thanks to their propensity to breed rapidly.

At the time of European settlement, mainland Australia hosted a suite of predators that preyed on rabbits. They included the dingo, four quoll species, a range of raptors such as the wedge-tailed eagle, little eagle, brown falcon and swamp harrier, and goannas. Rabbits did not establish on Kangaroo Island following a deliberate release there sometime in the mid 1800s, probably because of predation from abundant goannas.

Several of the predators were extensively hunted by early settlers to protect their livestock and poultry. Strychnine became available in the 1850s, making it feasible to control dingoes and quolls at a local scale. Cyanide and phosphorus were also applied for rabbits, especially in the early 1900s – all of which are non-selective, killing off-target species as well.

As Australia recovered from the Federation Drought the rabbit industry flourished with interest in both carcasses and skins. In the early years of World War I the Border Preserving Works (at Mt Gambier) was sending 33 tonnes of preserved rabbit per week to Britain. Throughout the years of the Great Depression rabbit trapping was a major source of sustenance for many and rabbit exports almost matched those of lamb.

Government legislation and other initiatives, plus efforts from landholders, had failed to stop the spread of rabbits or to contain their impact in the 100 years since the early Colonists fought to introduce and release them. Commercialising rabbits, so 'they may pay for their own demise', appears to have been similarly unsuccessful in terms of reducing the rabbit population.

A Case Study - Conclusions

The South Australian story is an example of what occurred across the nation. A succession of learnings becoming apparent and remedies being applied too late. The problem kept growing and morphing before attempted solutions were applied. Landscapes, societies and ecological systems all changed through these years with a complex web of interactions involved.

Some changes, such as the poisoning and hunting of native predators and the clearance of bushland for towns and agriculture, favoured the survival of rabbits. Attempts to commercialise rabbit control through bounties and transforming the pest into produce for export confused and, at times, undermined efforts to control rabbits. Meanwhile rabbits increasingly contributed to environmental decline. Their advance was directly associated with the loss of native fauna like bilbies and a significant factor behind wide-spread soil erosion that was evident in the early 1900s, resulting in the advent of soil conservation legislation; the Sand Drift Act (1923) and the Soil Conservation Act (1939).

Over time, farming systems evolved and engine-driven mechanisation increasingly took over from horse-power, giving land managers more effective control options (like warren ripping with the aid of tractors). However, it wasn't until the release of myxomatosis as a biological control in the 1950s, following extensive trials on Wardang Island, that the tide really began to turn on wild rabbits in Australia.

This case study is based largely on information provided by the Government of South Australia, Department of Primary Industries and Regions, in a '[History of Agriculture in SA; Pest animals and weed management](#)'. For more information, see:

- [Rabbits 1836 – 1880](#)
- [Rabbits 1881 - 1920](#)

For more information on the history of rabbits throughout Australia, see '[Those Wild Rabbits. How they shaped Australia](#)' by Bruce Munday, first published by [Wakefield Press](#) in 2017, which has also been a source of material for this study.