

## Successful feral pig eradication on Quail Island



## Quail Island - why it is a significant place

In 2019, feral pigs were eradicated from Quail Island in Western Port, Victoria. Accessible at low tide from the northern shoreline of Western Port, the 880 ha island is managed by Parks Victoria, with support from pest plant and animal management contractors. The island's name reflects its post-colonial history - native quail were raised on the island for hunting purposes.

Quail Island is within the 60,000 ha boundary of the Western Port Ramsar site that meets the criteria for Wetlands of International Significance. Vegetation communities on the island have re-established since the failed grazing endeavours during the 1800's and now provide dense canopy cover for native fauna. The island provides habitat for populations of threatened species, including the Southern Brown Bandicoot and Orangebellied Parrot. The importance of the island's habitat is reflected with a captive breeding and release site nearby for the Orange-bellied Parrot.

## Feral pig eradication effort

In the 2000's, a small number of feral pigs were illegally introduced to Quail Island for recreational hunting purposes. As the feral pig population established on the island, significant disturbance to soil and vegetation structure occurred. Damage was readily observed across the island on saltmarsh, sand heathland and the ephemeral freshwater point with rooting, creation of wallows and trails. The disturbance to soil enabled the establishment of weeds, while the water point was reduced to a muddy puddle. This limited its use by native species to support their populations. It was also believed that feral pigs impacted native fauna by direct predation. Secondary effects of feral pigs on native fauna were likely associated with changes in soil structure, vegetation disturbance and the creation of tracks that were exploited by red foxes. Complaints were also received from adjoining landowners who reported impacts to their property and livestock losses due to feral pig activity.

Efforts to remove the feral pig population was supported by reclassification of the land tenure, now recognised as the North Western Port Nature Conservation Reserve, which provided greater powers to land managers.

Early removal efforts involved baiting and ground shooting to periodically remove pigs. However, this effort was insufficient to remove all individuals. Surviving pigs had become wary of control measures being used, with this behaviour likely the result of earlier interaction with recreational hunters. A trap was constructed but was vandalised.

In May 2019, a conventional, aerial shooting operation was conducted on Quail Island by Parks Victoria. Four feral pigs were removed after 195 minutes of search effort. However, a sow and two adult boars were not detected by the aerial shooting team. Photographs from the trail camera array installed on the island as part of the eradication program, indicated that the sow was in poor condition. She was last

detected alive in August 2019. The two remaining adult boats were subsequently removed in December 2019 by contracted ground shooters, when they were attracted to free-feeding stations that had been installed.

## Benefits from feral pig eradication on Quail Island

Over the past five years, following the successful removal of Quail Island's feral pig population, the soil has stabilised and vegetation has recovered. Trails created by pigs across the island through vegetation are now indistinguishable. Depressions associated with old wallows and trails around the saltmarsh edge remain, but are now vegetated. Importantly, the ephemeral water body now holds fresh water year-round and is densely fringed with vegetation.

The population of red foxes remains a critical limiting factor for terrestrial wildlife species on Quail Island. A recent review supported by Melbourne Water recommended removal techniques to maintain a greater pressure on fox populations to directly benefit fauna on and around Quail Island.

This success story highlights the importance of science informing management, and collaboration supporting positive environmental outcomes.

For further information:

Bolden, A. and Johnston, M. (2020). The Victorian Naturalist, 137(6), 219-227.

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Feral pig damage, Photo credit Alisson Bolden



Royal Spoonbill, Photo credit Michael Johnston





