

## Pigs of the Roaring 40s: Feral pig management and research on Flinders Island, Tasmania



Tasmania is fortunate to be the only state in Australia not to have established feral pigs, apart from an isolated population on Flinders Island in the Furneaux region of Bass Strait. The island supports a range of agricultural and natural values and is an important region for the Palawa people of Bass Strait. Like elsewhere in eastern Australia, feral pigs have taken advantage of a few good seasons, and the population has boomed across the island. For reasons unknown, pigs are distributed along the eastern, southern, and northern coastlines, with the western and central areas of Flinders island remaining mostly pig free, despite suitable habitat and ample water resources.

Damage (mostly rooting and browsing) resulting from feral pig activity occurs across open grazing lands in the winter and in the cool rainforest and melaleuca gullies in the summer. It is these patterns of apparent seasonal movement on Flinders Island that Biosecurity Tasmania hopes to unravel by deploying GPS collars on feral pigs. Matthew Pauza, Biosecurity Tasmania, remarks "We know from other larger spatial studies that feral pigs appear to have small shifting home ranges. We are particularly interested in understanding the spatial and temporal patterns of movement on the island. We hope to use this information to better target pigs and help land managers implement effective feral pig management across all land tenures on the island."



Flinders Island provides a unique set of challenges, with only 900 human residents and hundreds of thousands of wallaby, pademelon and possum. Efforts to control feral pigs are hampered by an abundance of non-target species, time-poor land managers and ever-changing weather conditions. Matthew says, "We are very fortunate to have the support of most land managers and very grateful of on-ground assistance by stock hands in the north and south of the island that keep free-feeding stations and camera traps running while we aren't on the island".

The change in seasons and environment conditions sees a shift in the behaviour of feral pigs and people on the island. Matthew describes the methods used with multiple free-feed sites, HOGGONE<sup>®</sup> bait boxes and traps being deployed at key sites across the island. "Given that control has been difficult due to small sounder sizes, a tendency for feral pigs to disappear after a few nights of free feeding, and the inclement weather of the roaring 40s playing havoc with HOGGONE deployment and trapping efforts, we have managed to remove approximately 90-100 pigs from the island since January 2023". All carcasses found are sampled for DNA, blood is taken for serology and haematology. A subset of pigs are necropsied for gross morphology and tissue taken for histopathology and exotic disease surveillance.

Camera-trap surveys have shown that the removal of a known number of pigs from an area has resulted in a reduction or ceasing of ongoing damage and absence of pig detection at these sites. Although not entirely robust, the results suggest that control at high value sites (i.e. Ramsar wetlands) can reduce the impact of feral pigs in the short-term.

Monitoring abundance of the pig population also has its challenges on the island with an extremely high abundance of macropods and possums thwarting any attempts to establish a landscape-scale camera-trap array. The dense vegetation that covers large areas of the island means that aerial surveys are not possible.



Several trials are underway, including:

- Time-lapse cameras covering known and likely foraging areas may provide point location survey data from which abundance indices can be determined and monitored through time.
- Use of a drone to map and monitor areas of damage and the use of thermal imaging to undertake counts of feral pigs along pre-determined transects.

An increase in control efforts will take place this winter, with a large-scale multi-property baiting operation to take place in high feral pig density areas, GPS collars to be deployed across the island and further trials to be conducted to assess the efficacy of various monitoring techniques.

## Can you help?

The Flinders Island team are happy to hear from anyone who is keen to provide advice on feral pig management on islands, specifically around population monitoring techniques in low pig densities and densely vegetated landscapes.

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Questions? Email us at contact@feralpigs.com.au June 2024