



Using Rainforest Research

Paradox of the pig: feral status and control in the Wet Tropics

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Few environmental issues within the Wet Tropics World Heritage Area generate the level of contention as does the feral pig (*Sus scrofa*). In the past, control and management strategies for these animals have been as varied, numerous and disconnected as the agencies, individuals, industries and communities who are directly or indirectly affected by them.

Issues surrounding feral pigs range from environmental, economic and social impacts through to health, medical, veterinary and cultural concerns. Potential solutions for control are equally numerous, but none is readily accepted by all stakeholders as wholly efficient, necessary or even as addressing what is seen by different sectors as their main priorities. The feral pig problem is much more complex in this region than anywhere else in Australia.

Environmental impacts

The WTWHA contains some of the most diverse, complex and ancient ecosystems in Australia. Pigs are certainly the most visible and significant introduced animal species in this ecosystem. Their ecological impacts include soil disturbance, preying upon and competing with native animals and plants, and contributing to the spread of weeds and exotic fungi. Feral pig diggings along streams and roadsides in an otherwise naturally beautiful environment also create an aesthetic impact that is not easily overlooked.

Economic and social impacts

Horticultural crops suffer significant economic damage from pig activity. This impact is compounded by tension between landholders and authorities over the management of the Wet Tropics Area. Those farmers who consider the feral pig a complete pest, can no longer hunt these animals once they enter World Heritage land, and they now view this land as a safe breeding ground for the pigs.



The feral pig (*Sus scrofa*)

Human and animal health risks

Pigs are well known as carriers of disease and the potential of the north Queensland feral pig herd to host and transmit a range of exotic diseases threatening to both human and animal

health is of growing concern. Japanese encephalitis is a potentially fatal human disease spread by mosquitoes and pigs. In this case, the pigs amplify the disease and increase the likelihood of transmission to humans. Other livestock diseases such as Foot-and-Mouth could become endemic if they arrive and establish in the feral pig herd. Such an event would have crippling consequences for the meat export industry in Australia.

Not everyone wants pigs dead

These impacts notwithstanding, the eradication of feral pigs would have adverse economic and cultural impacts on other sectors of the community. Pig hunting is not only a significant recreational activity but also supports individuals involved in the wild game industry. The removal of such livelihoods could have a severe effect on the economies of some small rural communities.

Pig hunting for human consumption is also fundamental to many remote Aboriginal communities on Cape York. Feral pigs provide a high-quality, low-cost food source to these people and are culturally significant in the maintenance of traditional forms of wildlife harvesting and interactions of people with country.

Eradication of feral pigs would cause economic hardship and cultural impacts to these communities who would understandably, oppose such a policy.

Providing science for the conservation and management of Australia's World Heritage tropical rainforests.



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The Rainforest CRC is a research partnership involving the Commonwealth and Queensland State governments, the Wet Tropics Management Authority, the tourism industry, Aboriginal groups, CSIRO, James Cook University, Griffith University and The University of Queensland

Such concerns and interests are obviously in direct opposition to those described above, creating a potential source of tension between government and community with regard to the control and management of feral pigs in the Wet Tropics.

Possibility of Eradication

Experience has shown that eradication of pigs over wide areas is not practical, and even sustained reductions in population sizes are difficult to achieve. Feral pigs are adaptable, can thrive in a range of habitats, are highly mobile and have a high reproductive potential. Several conflicting factors also need to be considered:

- Feral pig control by conventional means is expensive and becomes more so as their populations become sparser. Trapping pigs in Australia can cost up to \$100 per pig but they persist easily in inaccessible areas and recover quickly from any reduction in numbers either by immigration or reproduction.
- While feral pigs are known to cause economic damage to horticultural industries, this has not been quantified and therefore cannot be offset against the cost of control. Pig damage tends to aggravate farmers during a strong market, but if the market is low and fruit dumped accordingly, the pigs provide a service in cleaning up fruit dumps which would otherwise harbour fruit flies.
- Aboriginal people recognise the cultural value of pigs but they also acknowledge they can damage some native bush resources.

Striking a balance

What is needed is an understanding of the relationship between different levels of reduction in pig abundance and the magnitude of the economic and environmental benefits gained. Clearly there is a threshold population size above which they do significant harm, but below which their impact can be tolerated and their services enjoyed. Understanding the level of this threshold, and evaluating the cost of holding the pig population below it can only be achieved by large-scale experiments in population control within an adaptable management framework.

Certainly, given the impossible task of eradicating pigs completely - we must learn to live with them.

The ecological damage of pigs tends to be highly concentrated in certain micro-habitats like the fringes of swamps and wetlands
(photographs: Jim Mitchell)



Pig trapped by the community based feral pig trapping program; around 2000 pigs are killed annually under this scheme.

Further Information

The Rainforest CRC has published the proceedings from a Feral Pig Workshop held in Cairns in March 1999. The publication addresses the feral pig issues in the Wet Tropics in detail. To obtain copies contact:

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