NATIONAL FERAL PIG ACTION PLAN

FACTSHEET

What role could feral pigs play in the transmission of Foot and mouth disease (FMD)?

This factsheet should be read in conjunction with the National Feral Pig Action Plan's Foot and mouth disease (FMD) factsheet.

FMD is a highly contagious virus disease of animals that affects cloven-hoofed animals, including cattle, buffalo, camels, sheep, goats, deer and pigs. It is one of the most serious livestock diseases. An incursion would be devastating to Australia's economy if it was to occur.

Any spread of FMD into populations of feral animals, including feral pigs, would make the control of FMD in Australia more difficult and could extend the time period to establish proof of freedom and market access.

Factors that may affect FMD transmission

The likelihood of feral pigs contributing to the spread of FMD in Australia will depend on how long the virus can survive in our climate and the particular strain of FMD present.

Some important host and environmental factors include:

- Regional distribution and abundance of feral pigs
- Climatic conditions
- Contact rates with other susceptible animals, such as cattle, sheep, goats and buffalo
- Habitat suitability.

It isn't possible to eliminate the risks of feral animals transmitting FMD or other livestock diseases.

Importance of biosecurity

- It's vital for all land managers to have an up-to-date biosecurity plan in place that includes feral animal management, supported by stringent biosecurity practices.
- Destroy declared pests, including feral pigs, by working collaboratively with others in coordinated best practice control programs.
- Report any signs of disease in feral and domestic animals to the Emergency Animal Disease Watch Hotline 1800 675 888 or your local veterinarian.
- Awareness, preparedness and prevention through good biosecurity by all land managers are the best measures to mitigate the introduction and spread of any disease.

Potential role of feral pigs in an FMD outbreak

This was explored in 2015 in an Australian disease modelling study[1] based on an outbreak in the Kimberley region of Western Australia. This study looked at how feral pigs and domestic cattle may interact. The modelling suggested that feral pigs, at a density of 1 pig/km^2 of suitable habitat, would not be able to sustain an FMD epidemic on their own.

This modelling study also showed that:

- Higher concentrations and movements of cattle were more significant at maintaining an FMD outbreak.
- While feral pigs slightly exacerbated FMD outbreaks, their role was found to be much less important than domestic cattle.
- As long as FMD was controlled in cattle, FMD died out in feral pigs without further action.
- Smaller and shorter outbreaks resulted when FMD was controlled in feral pigs at the same time as cattle.

Modelling found that the control of an FMD outbreak in feral pigs was possible if a strategic best practice management approach (using combinations of aerial shooting, baiting and trapping) was employed, especially when this was done in conjunction with cattle control measures.

It was concluded that both cattle and feral pigs should be targeted for control to eradicate the disease as quickly as possible. This has also been the case for successful control of outbreaks in other countries during FMD outbreaks.

A report commissioned by Wildlife Health Australia in 2013[2] also concluded that wild and feral populations of animals pose a low risk of transmitting FMD to domestic livestock.

For more information, including links to FMD resources, please visit our website: www.feralpigs.com.au/diseases/

1. Ward, M.P., Garner, M.G. and Cowled, B.D. (2015). Aust Vet J 93(1-2), 4-12. doi: 10.1111/avj.12278.
2. Bunn, C. (2013). https://www.wildlifehealthaustralia.com.au/Portals/0/Documents/ProgramProjects/FMD_Aust_Wildlife_Gap_Analysis_Priorities_2013.pdf

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