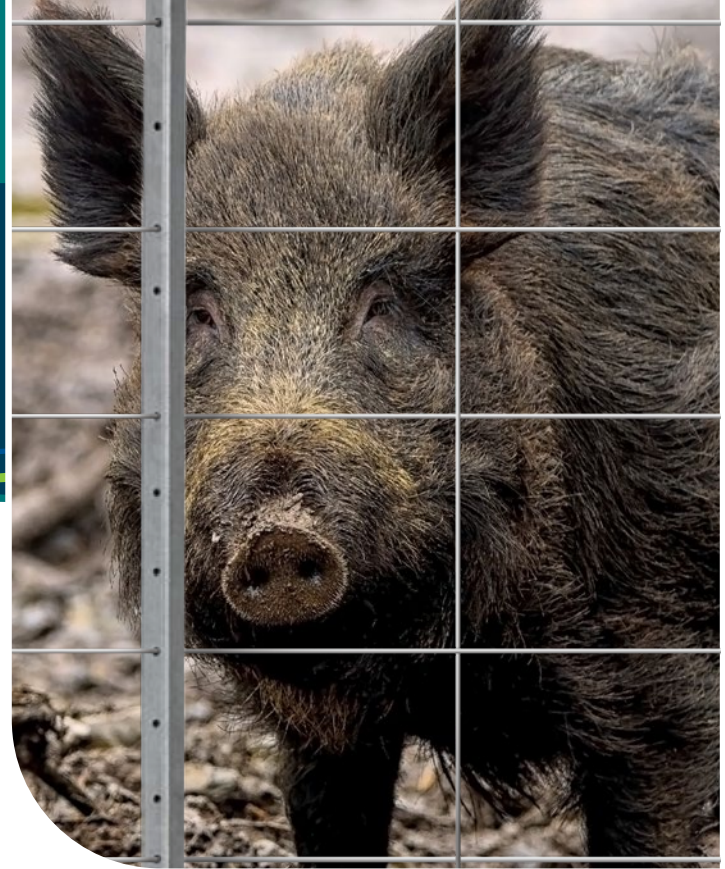


# Pig Exclusion Fencing

## in the Mackay Whitsunday Isaac NRM Region



### FERAL PIG IMPACT ON AGRICULTURE

Feral pigs have a major impact on our region’s agricultural industry, causing significant financial loss to our farmers and graziers. The annual economic impact of feral pigs on agriculture within the Whitsunday Regional Council area has been calculated at \$7,546,197:

Total annual economic cost of feral pig damage on agricultural producers in the WRC region				
Category	Livestock	Sugarcane	Horticulture	Total
Lost productivity	\$2,368,433	\$689,472	\$4,044,876	\$7,102,781
Infrastructure damage and fencing costs	\$135,961	\$147,414		\$283,375
Feed replacement	\$132,243			132,243
Livestock vaccination	\$27,799			\$27,799
<b>TOTAL</b>	<b>\$2,664,435</b>	<b>\$836,886</b>	<b>\$4,044,876</b>	<b>\$7,546,197</b>

Source: p. 5, Estimating the economic impact of feral pigs in the Whitsunday Regional Council, Synergies Economic Consulting Pty Ltd, Final report to Whitsunday Regional Council, May 2020

Feral pigs cause economic losses to the sugarcane and horticultural industries by consuming high value crops and damaging cultivated land. They can reduce cattle fertility and weight gain by spreading disease (increasing vaccination costs), and consuming forage crops and pastures. Pigs can also damage fencing, watering and irrigation infrastructure.



Pig activity adjacent to tidal flat



Damage to Mangoes (supplied by Whitsunday Regional Council)



Feral pig damage to cane (supplied by WRC)

## FERAL PIG IMPACT ON THE ENVIRONMENT

Feral pigs impact the environment by

- (a) damage to habitats and
- (b) direct damage to animal species (DNRM 2004).

Feral pigs damage the natural environment (particularly riparian areas and wetlands) through their feeding, wallowing and rooting activities.

Ground disturbance on streambanks results in increased erosion risk during storm runoff and flood events. Pig activity degrades water quality and spreads weeds (Department of Agriculture and Fisheries DAF 2022).

**FENCING IS MOST SUITABLE  
FOR HIGH VALUE AREAS**

Fencing requires significant capital investment, therefore it is most suitable for use in high-value areas, for both agriculture and the environment (e.g. riparian zones and wetlands) (Ag Econ 2020) (DNRM 2004).

While initial construction cost may be high, this initial outlay may be recouped over time due to a consequent reduction in crop losses and erosion. Individual landholders can weigh up the business case (payback time) for investing in fencing based on the cost/benefit ratio for their particular enterprise.

Experience in the MWI region indicates that in 2022/23 the commercial contractor rate (including all materials and construction) to install a pig exclusion fence can be up to:

- \$18,000 (excl gst) /km for a robust mesh fence
- \$9,500 (excl gst)/km for a plain wire electric fence.

Construction costs may be less if the landowner elects to build the fence themselves, but landowner labour costs should still be considered.



Feral pig (supplied by WRC)



The following provides an example cost/benefit scenario for 1 km of mesh exclusion fencing constructed on a 100 hectare sugarcane farm, with 700 m of frontage to the O'Connell River (the expected life of the fence is 15 years):

- **Cost** of fence construction and maintenance:
  - Installation of 1 km of permanent mesh exclusion fence = \$18,000/km.
  - Add annual fence maintenance costs of 2% of construction cost = \$360/km/year or \$5,400 (over 15 years)
  - Total fencing cost = \$23,400 (over 15 years) or \$1560/year
- **To payback** \$1560/year fencing costs, a total of 39t of cane/year (at \$40/t) would need to be saved from pig damage each year.
  - If pigs were only impacting the first 25 m of the 700 m creek frontage (i.e. 1.75 ha), an increase in cane yield of 22t/ha/year along this strip would be all that would be required to pay back the fence.
  - OR where pigs have completely damaged a whole area of an 80t/ha/year crop, only 0.5ha/year would need to be saved from pig damage to payback the fence.

(Please note: the above calculation is for illustrative purposes only and actual figures should be used when considering options for your own enterprise)

*“The most effective pig-proof fences include commercially fabricated sheep or pig netting held close to the ground by barbed wire. Continuous maintenance is needed to repair breaches made in the fence by pigs or other animals, fallen timber and floods” (Mitchell 2011a, p/32)*

Electric fences, including the electrification of an existing conventional fence stock fence (e.g. using outriggers) are also an option. A fence that combines both mesh and electrification is also an alternative (Mitchell 2011a).

Fencing shifts (rather than controls) the impact, so it is more effective if carried out in cooperation with neighbours (Ag Econ 2020). Working with neighbours presents opportunities for cost sharing and strategic targeting of key harbourage areas. A coordinated, district approach to fencing key problem areas may reduce the need to fence entire properties.

Fencing is not just a stand-alone measure and is best used as part of a suite of integrated control measures which also includes trapping, shooting, dogging, and poisoning (Mitchell 2011a).



Feral pig damage

#### Advantages of exclusion fencing :

- Effective method of reducing or eliminating damage quickly
- Most suitable for small high value areas
- Can be cost effective when the eliminated or reduced damage off-sets the initial cost of the fence
- Can be used for local eradication
- Modification or electrification of existing fences is highly cost effective

(Mitchell 2011b)

#### Disadvantages of exclusion fencing:

- Pig population is not reduced
- High establishment costs
- High maintenance costs, especially vegetation control
- Subject to failure with adverse weather conditions (e.g. floods, poor earthing of electric fences)
- Pigs will sometimes break through fences if a high value food or water resource is inside
- Not suitable for large areas or in remote locations
- Can disrupt movements of native fauna and cause entanglement (use of a plain top wire is recommended, consider turtle gates where relevant)
- Human error due to leaving gates open or poor inspection/maintenance.
- Fencing can impede movement of machinery on headlands

(Mitchell 2011b)



## TOOLS AND RESOURCES



**Exclusion Fencing For Feral Pig Control,**  
NQ Dry Tropics Fact Sheet accessible at:

[https://sugarresearch.com.au/sugar\\_files/2017/02/Exclusion\\_fencing\\_for\\_feral\\_pig\\_control.pdf](https://sugarresearch.com.au/sugar_files/2017/02/Exclusion_fencing_for_feral_pig_control.pdf)

**Fencing Selection and Maintaining Integrity**  
Reef Catchments Fact Sheet

<https://reefcatchments.com.au/resources/pac-fact-sheet-fence-selection/>



**Feral Pig**  
Department of Agriculture and Fisheries Fact Sheet

[https://www.daf.qld.gov.au/\\_data/assets/pdf\\_file/0005/70925/feral-pig.pdf](https://www.daf.qld.gov.au/_data/assets/pdf_file/0005/70925/feral-pig.pdf)

[feralpigs.com.au](http://feralpigs.com.au)



[mackayregionalpestgroup.org.au](http://mackayregionalpestgroup.org.au)



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## Acknowledgements:

Bren Fuller, Land Protection Officer, Whitsunday Regional Council

Scott Hardy, Manager Natural Resource Management and Climate, Whitsunday Regional Council

