



Beef producers: biosecurity pays

The value of putting a series of optimal measures in place to prevent the spread of pests and diseases into a 'typical' beef herd has been estimated at a \$1.60 return for every dollar spent.

This positive return is a key finding in a report commissioned by Animal Health Australia on "*The economic benefits of implementing biosecurity measures in a NSW North Coast cattle herd*".

Report co-author and Director of Agricultural and Resource Economic Consulting Services (ARECS) Pty Ltd, Dr Ian Patrick, said the key conclusion is that biosecurity measures more than pay for themselves, up to a point.

"We chose a self-replacing 100 cow operation because it's a fairly simple production system with biosecurity alternatives.

"Using a ten year discounted cash flow, we started by calculating cattle enterprise income with no disease. We then made some arbitrary estimates of the impact of some common diseases on production if no biosecurity measures were taken.

"The introduction of disease had the potential to cut income by half," Dr Patrick said.



The diseases assessed were: Pestivirus (BVDV), Salmonella, Vibriosis, internal and external parasites (eg worms and ticks), and Neospora. The next step was to review the cost of implementing biosecurity measures and how well they minimise disease risks and costs. These measures included:

- limit or manage visitor access to the farm
- ensure vehicles, clothing and equipment are cleaned or disinfected
- source quality assured feedstuffs
- monitor and protect water and feed supplies
- fence off risk areas (eg contact with other stock)
- quarantine introduced animals
- vaccinate the herd.

Costs were divided into: labour requirements; inputs such as antibiotics, cleaning agents and repairs and maintenance of infrastructure; and capital costs for one-off purchases or construction to improve biosecurity. Dr Patrick found that costs are vital.



“It will certainly be beneficial to introduce simple measures such as quarantining new animals, cleaning trucks, monitoring herd health and locking gates. These are cheap and have the potential to minimise the risk of disease entry significantly.

“Larger capital costs, such as new fences and concrete wash-down bays, are not always viable when you consider just the on-farm benefits – although we believe there would be arguments for some of these if wider community benefits were included.”

The study confirmed that full implementation of all possible biosecurity activities for such a cattle operation would require large increases in labour, input costs and capital requirements.

In other words, Dr Patrick said, by understanding the disease risks, it is possible to develop and implement a farm biosecurity management plan that is appropriate, optimal and cost-effective.

The study just assessed on-farm costs and benefits, it didn't go as far as accounting for the 'public good' of preventing disease spread and protecting trade.

Whether you are a livestock producer, a plant producer or both, Farm Biosecurity is important. It incorporates day to day practices that keep pests and diseases out. Good biosecurity will protect our animals and plants, and enterprises and industries.

The full report, “The economic benefits of implementing biosecurity measures in a NSW North Coast cattle herd” is available from www.animalhealthaustralia.com.au.

Secure your farm: secure your future. Further information: www.farmbiosecurity.com.au

If you see anything unusual on your property call the Emergency Animal Disease Watch Hotline on 1800 675 888, or the Exotic Plant Pest Hotline on 1800 084 881

Captions:

Photo 1 - The case study is based on a 100 cow self-replacing beef cattle herd

Photo 2 - Quarantine new animals