



Invasive Animals Cooperative Research Centre

Frequently Asked Questions

REPORT:

The economic impacts of vertebrate pests in Australia

What are the main impacts of feral animals?

Invasive animal pests have a wide variety of impacts on the economy, the environment and society.

Invasive pests can cause considerable damage to agriculture and the environment. Wild dogs and foxes kill livestock, and rabbits compete for pasture. Landholders often cannot run sheep where there is a threat of predation by wild dogs. Feral pigs destroy vegetation, damage fencing and foul waterholes. Wild horses also foul waterholes and can spread weeds. Foxes, feral cats, and other pests threaten the survival of many native mammals and birds.

While it is recognised that invasive or feral animals can be either a pest or a resource, the impact is considered negative where an animal causes more harm than good to a valued resource.

Further information:

The pest portal - www.feral.org.au

Invasive Animals Cooperative Research Centre - www.invasiveanimals.com

What are the report results?

The report estimates the total economic impact of selected pest animals through their effect on major agriculture industries and expenditure on research and management in Australia at \$743.5 million.

The impact on agriculture of birds, rabbits, wild dogs, mice, foxes and feral pigs is estimated at \$620.8 million.

Costs to major agriculture industries are:

Industry	\$m
Horticulture	313.1
Beef	187.7
Wool	71.3
Lamb	20
Grains	5.9
Total	620.8

The report also estimates the cost of expenditure on management, administration and research by government and landholders as being:

Expenditure by	\$m
Commonwealth	12.6
States & territories	75.5
Landholders	34.6
Total	122.7

Further information:

Gong et al (2009) The economic impacts of vertebrate pests in Australia, Invasive Animals Cooperative Research Centre, Canberra. Available at: www.feral.org.au or www.invasiveanimals.com

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What is and isn't covered by the analysis?

Estimating the costs of pest animals is difficult because they vary from region to region and intensive efforts are required to collect the data. Expenditures continually change due to factors that influence the status of a pest and the current and expected importance of animals as pests. The significance of a pest also varies with climatic conditions.

The estimates cover the impact on agriculture of four introduced, invasive pest animals (foxes, rabbits, wild dogs, and feral pigs). The analysis also includes estimates, taken from literature, of the impact of birds on horticulture and mice on grains. Not all invasive species were reported on for reasons outlined in chapter 2 of the report.

A 'snapshot' of the annual costs in expenditure on administration, management and research by government and landholders is also included in the report. The full methodology is outlined in chapter 3 of the report.

Researchers were unable to collect all the data on control costs from all government agencies. Estimates of the environmental loss in Australia as a whole are not possible because of lack of data and have not been included in the report.

This current report deals with 6 groups of species rather than the 12 major introduced pests of the previous study (referring to the McLeod report. See 'what do previous studies say?' below) and does not attempt to consider the environmental or social costs of invasive animal impacts. As the economic, environmental and social costs have been separated, the economic impacts of certain pest species (for example, foxes and dogs) appear to have been reduced in this recent report.

The current report does not consider the significant broader economic costs of invasive animals as reservoirs of viruses and disease (for example, the potential economic impact of feral pigs transmitting diseases such as foot and mouth disease are not considered).

So this annual total of \$743.5m underestimates the impact of invasive pests in Australia.

Further information:

Gong et al (2009) The economic impacts of vertebrate pests in Australia, Invasive Animals Cooperative Research Centre, Canberra. Available at: www.feral.org.au or www.invasiveanimals.com

Why is the data needed?

The results from this research help to demonstrate the importance and the scale of the pest animal problem and the willingness of governments and the community to invest in control. It helps pest animal managers to more completely take account of the costs of invasive pests, and leverage further resources to tackle the problem.

More generally, this information helps to target the allocation of the limited resources available for the management of pest animals to ensure their most efficient use.

The IA CRC uses information such as the data included in this report to assist prioritising research efforts, such as on rabbit calicivirus and investing in wild dog control programs.

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Although the cost of research, administration and management are high, even with a pessimistic scenario that only 2.5% of the losses can be avoided, benefits from research effort investment still exceed the costs.

The primary purpose of the report is for decision-making—that is: raising general awareness, drawing attention to specific issues, demonstrating the size of the problem, defining broad problem areas and formulating broad policies.

Further information:

Invasive Animals Cooperative Research Centre - www.invasiveanimals.com

What do previous studies say?

In 'Counting the Cost', McLeod (2004) undertook what is perhaps the only previous comprehensive national study of losses in agriculture and the environment, for a large number of invasive pest species. He estimated the impacts of 12 major introduced pests, namely the European fox, feral cat, rabbit, feral pig, feral dog and dingo, house mouse, carp, feral goat, cane toad, wild horse, camel, and kangaroo. The annual impacts on agricultural production were conservatively estimated to be \$373.9m, which included both production losses and the costs of control.

Although it is helpful to make broad observations on the differences between the reports, there is little point in comparing the specific research results of the annual economic impact of pest species as the methodology differs greatly.

Further information:

McLeod R (2004) Counting the Cost: Impact of Invasive Animals in Australia, Cooperative Research Centre for Pest Animal Control, Canberra. Available at: www.feral.org.au or www.invasiveanimals.com

What is being done about invasive animal management?

Strategies and policies for management of invasive animals vary greatly between geographic regions, through seasons and across time. They vary with the animals of concern and the options available for control and management.

The report outlines several measures being taken by government agencies and landholders. Further information on management options and activities can be found by jurisdiction (for example, through local Natural Resource Management Groups), or by species (for example, the Rabbit Management Advisory Group), or by both (for example, the Canberra Indian Myna Action Group).

Rabbit control and wild dog management are just two areas considered by several IA CRC programs. The Australian Government, through the Caring for our Country program, is currently negotiating with the IA CRC to improve the effectiveness of rabbit calicivirus. With support from Australian Wool Innovation, a new bait toxin for wild dogs and foxes—which has an antidote for working dogs available—is currently being trialled in areas of NSW and Queensland.

Further information:

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Further information:

Gong et al (2009) The economic impacts of vertebrate pests in Australia, Invasive Animals Cooperative Research Centre, Canberra. Available at: www.feral.org.au or www.invasiveanimals.com