



## Inquiry into barrier fences in Queensland

### This paper

This paper provides background information about the Agriculture and Environment Committee's inquiry into barrier fences in Queensland which are maintained by the Queensland Government. Queensland has two such barrier fences:

- The Wild Dog Barrier Fence, managed by the Department of Agriculture and Fisheries (DAF), and
- The Darling Downs-Moreton Rabbit Fence, managed by the Darling Downs-Moreton Rabbit Board (DDMRB).

### The inquiry

The committee has resolved to investigate and report on the Queensland Government's barrier fences. The committee is undertaking this inquiry in accordance with its portfolio public works responsibilities. The responsibilities of portfolio committees of the Legislative Assembly, are specified s.94 of the [Parliament of Queensland Act 2001](#).

### Terms of reference:

The committee will investigate and report to Parliament on:

- the management of the Wild Dog Barrier Fence by DAF
- the management of the Darling Downs-Moreton Rabbit Fence by the DDMRB
- the effectiveness of barrier fences at protecting stock and crops from wild dogs, rabbits and other introduced species
- the unintended impacts of barrier fences on native species
- recent upgrades to sections of the Wild Dog Barrier Fence by DAF, and
- whether barrier fences should be expanded to other areas of the State to protect stock.

### Barrier fences in Queensland

The construction and maintenance of barrier fences have been key strategies for managing invasive pest species in Queensland since the 1880s.

Today, the Queensland Government maintains two substantial barrier fences. These are the Wild Dog Barrier Fence, and the Darling Downs Moreton Rabbit Fence. **Figure 1** shows the location of these barrier fences.

### Wild Dog Barrier Fence

The Wild Dog Barrier Fence extends 2,560 kilometres and connects with the New South Wales Border Fence and the South Australian Dog Fence to form the Dingo Fence which is the longest man-made structure in the World.

The Wild Dog Barrier Fence protects sheep grazing areas of southern and south-western Queensland, and is supported by a network of local government managed wild dog check fences. The fence is managed by Biosecurity Queensland which is part of the Department of Agriculture and Fisheries (DAF).

On behalf of the department, a group called the Wild Dog Barrier Fence Panel oversees management decisions relating to the Wild Dog Barrier Fence.



Section of the Wild Dog Barrier Fence, Western Queensland.  
Photo courtesy of the Department of Agriculture and Fisheries (2015).

The annual budget for management and maintenance of the fence is approximately \$2.2 million, half of which is funded by the Queensland Government. The remaining budget is funded from precept levies established under s.209 of the *Land Protection (Stock Route Management) Act 2002* and paid by councils in areas benefitting from the maintenance of the fence.

### Darling Downs-Moreton Rabbit Fence

The Darling Downs-Moreton Rabbit Fence extends for 555 kilometres from Lamington National Park in the east to Goombi in the south-west of the state where it connects to the Wild Dog Barrier Fence.

The rabbit fence is designed to prevent the spread of rabbits from southern and western areas into protected areas of the Darling Downs, the Lockyer Valley and South East Queensland.

The fence is managed by the Darling Downs-Moreton Rabbit Board (DDMRB). The DDMRB is funded by eight local governments in areas protected by the fence at a cost of approximately \$1.6 million annually.

The history of the rabbit fence in Queensland is linked to the northward invasion of rabbits in the 1880s. Domestic rabbits were first brought to Australia with the First Fleet. Wild rabbits were deliberately released in Victoria in 1859, and quickly spread throughout Victoria and New South Wales, reaching south-western Queensland in the 1880s.



Section of the Darling Downs-Moreton Rabbit Fence.  
Photo courtesy of the Department of Agriculture and Fisheries (2015).

### The impacts of wild dogs

The term 'wild dog' refers collectively to purebred dingoes, dingo hybrids, and domestic dogs that have escaped or have been deliberately released.<sup>1</sup> Dingoes (*Canis lupus dingo*) originated in Asia where they were present possibly 10,000 to 14,000 years ago and were

derived from wolves. Aboriginal people brought the dingo to Australia approximately 4,000 years ago. Domestic dogs (*Canis lupus familiaris*) were brought into Australia by Europeans in 1788 and their release into the wild has continued since.<sup>2</sup>

Wild dogs are the largest mammalian predator on mainland Australia.<sup>3</sup> Wild dogs are dispersed over most of mainland Australia except the intensively farmed areas of south-west Western Australia, South Australia, New South Wales and Victoria.<sup>4</sup> The exact wild dog population distribution and density in Queensland is unknown.

Despite dingoes being protected as a native species, all wild dogs were declared pests on agricultural land because of the substantial livestock losses they inflicted, primarily on sheep.<sup>5</sup>

Estimates of the economic impact of wild dogs on rural industries in Queensland vary from \$22.28 million<sup>6</sup> to as high as \$67 million annually (based on producer estimates of production loss and processor figures of discounted dog-bitten animals).<sup>7</sup>

According to Agforce, the sheep industry in Queensland has been in steady decline over many years and whilst there are many reasons for this, the impact of wild dogs has been a major contributing factor for many exiting sheep producers.<sup>8</sup>

Another method of control for wild dogs is baiting. Fluoroacetate (1080) poisoned meat bait are laid on public and private agricultural land to reduce the impact or spread of wild dogs.<sup>9</sup>

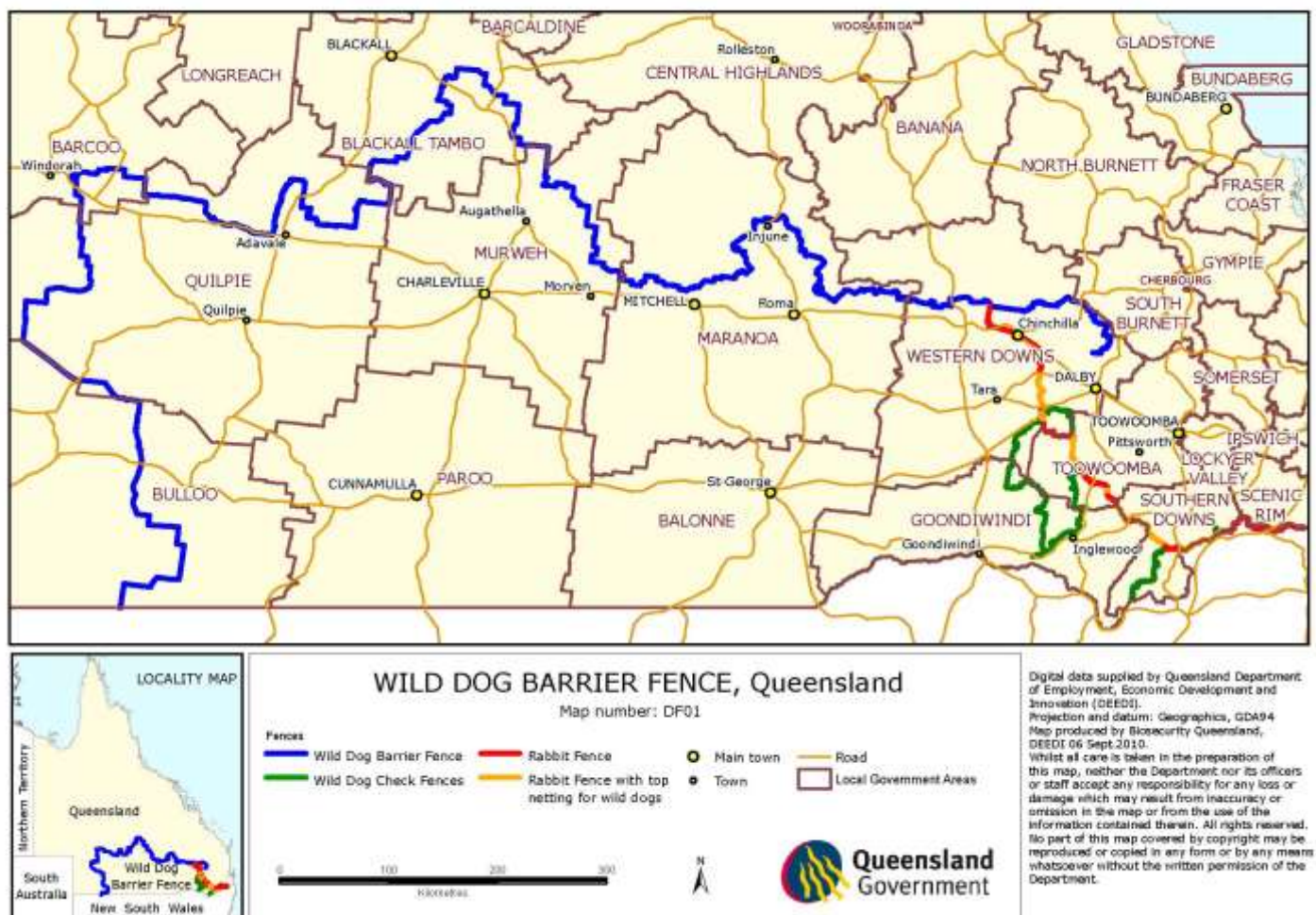
There has been no cost-benefit analysis (CBA) of environmental or ecosystem impacts.

The ecological role of wild dogs and dingoes is not fully understood but many studies highlight the importance of maintaining an apex predator. Wild dogs can selectively hunt medium-to-large-sized prey, and small mammals, reptiles and invertebrates when larger prey is scarce. It has been suggested that wild dogs can control populations of kangaroos (which are the largest native herbivores).<sup>10</sup>

There have also been studies that indicate that where dingoes or wild dogs are present, foxes and feral cats are rare. Therefore it has been argued that the suppression of the apex predator may have contributed to high rates of extinction of native mammals by allowing the density of foxes and cats to increase.<sup>11</sup>

It has been reported that wild dog attacks on stock and companion animals also cause significant psychological stress on livestock owners.<sup>12</sup>

**Figure 1: Barrier fences in Queensland**



Source: Department of Agriculture and Fisheries (2015).

### Rabbits (*Oryctolagus cuniculus*)

Since its release in the 1800s in Australia, rabbits have become one of the most widely distributed and abundant mammals. Rabbits occur nearly anywhere south of the Tropic of Capricorn but their distribution north of the Tropic of Capricorn is fragmented. However estimating actual density of rabbits is difficult.<sup>13</sup>

Rabbits are considered to be one of Australia's major agricultural and environmental animal pests. Overall loss caused by rabbits to agriculture and horticulture is estimated to be around \$206 million annually.<sup>14</sup>

Rabbits graze on native and introduced vegetation, crops and pastures. Rabbit grazing also prevents regeneration of crops and seedlings. Their burrowing and digging leads to a loss of vegetation cover, which leads to soil erosion and prevents regeneration of

native vegetation. Rabbits also compete with native animals for food and shelter and destroy the landscape.<sup>15</sup>

Rabbit damage and control costs at the property level vary depending on the land use or enterprise, climate and rainfall, and control methods used.<sup>16</sup>

The impact of rabbits on agriculture and conservation will continue to grow, unless continuous effort is put into long-term, integrated rabbit control.

Introducing and selling rabbits in Queensland is not permitted and penalties apply. Limited numbers of permits for domestic rabbits are only available from Biosecurity Queensland for research purposes, public display, magic acts or circuses. Before a permit is granted, a number of guidelines need to be fulfilled.



## How to get involved

The committee welcomes public participation in their work. By sharing your views with the committee, you will help to ensure that Queensland barrier fences are well managed and delivering value for money for taxpayers.

### Register your interest

You can [subscribe](#) to receive regular email updates about the work of the Agriculture and Environment Committee, including updates about this inquiry.

We will notify you of dates and venues for the committee's public hearings for the inquiry.

### Make a written submission

The committee invites written submissions for its inquiry. [Guidelines](#) on making submissions are available from the committee's webpages or by calling the committee's staff on **07 3553 6662**.

Written submissions should be sent by **post** to:

**Research Director  
Agriculture and Environment Committee  
Parliament House  
BRISBANE QLD 4000**

or by **fax** to 07 355 36699

or by **email** to: [aec@parliament.qld.gov.au](mailto:aec@parliament.qld.gov.au)

**Submissions close on 29 February 2016.**

## Committee Members

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## References

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- <sup>3</sup> Allen, L. R, 2015, 'Demographic and functional responses of wild dogs to poison baiting.' *Ecological Management & Restoration* 16.1: 58-66.
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- <sup>5</sup> Allen B. L. and West P, 2013, 'Influence of dingoes on sheep distribution in Australia.' *Australian Veterinary Journal* 91, 261-267.
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- <sup>7</sup> Agforce, 2009. 'Major economic costs associated with wild dogs in the Queensland grazing industry.' Agforce.
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- <sup>9</sup> APVMA, 2008, 'Review findings for sodium monofluoroacetate: The reconsideration of registrations of products containing sodium monofluoroacetate and approvals of their associated labels, Environmental Assessment'. Australian Pesticides and Veterinary Medicines Authority, Canberra.
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- <sup>15</sup> Invasive Animals CRC, '[European rabbit](#)', Australian Government, Department of Industry and Science
- <sup>16</sup> Invasive Animals CRC, '[Economic and environmental impacts of rabbits in Australia](#)', Australian Government, Department of Industry and Science