

# Feral fallow deer

*Dama dama*



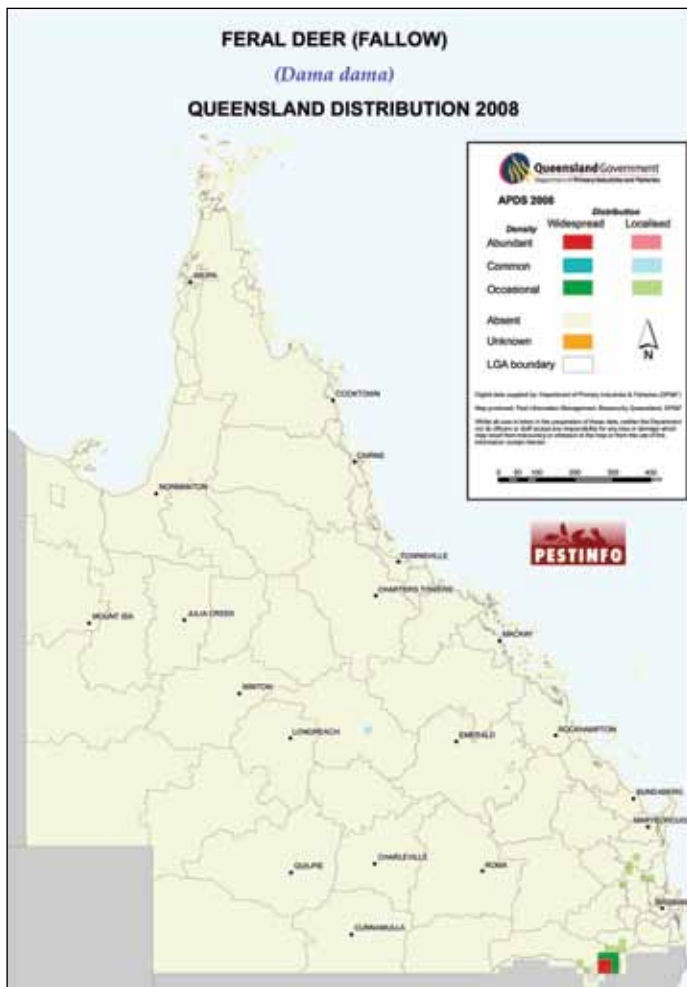
## Declaration details

The feral or wild fallow deer is a declared Class 3 pest animal under the *Land Protection (Pest and Stock Route Management) Act 2002*. It is an offence under the Act to introduce, feed, supply or release Class 3 pest animals without a permit.

Landholders are required to control numbers on their land when their land is in or adjacent to environmentally significant areas.

Fallow deer are contained within a deer-proof fence; for example, farmed fallow deer or fallow deer held by a game park are not declared. Any fallow deer not contained within a deer-proof fence are considered feral or wild and subject to control under the *Land Protection (Pest and Stock Route Management) Act 2002*. The natural disposition of deer means that farmed animals escaping captivity quickly revert to the wild state.





Digital data supplied by: Queensland Primary Industries and Fisheries (QPIF).

Map produced by: Pest Information Management, Biosecurity Queensland, QPIF

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Managing wild fallow deer is important to protect our agricultural industries, for native flora and fauna conservation, and to avoid social impacts.

Wild deer damage crops, pastures and forestry plantations and compete with livestock for pasture. Wild deer can alter the structure and composition of endangered ecological communities.

## Habitat and distribution

Fallow deer are native to Iran and Iraq but were introduced to Europe in Roman times. They are the common park deer of England. Fallow deer were the first species of deer to become established in Australia.

In Queensland, fallow deer were successfully released at Westbrook and Warwick on the Darling Downs between 1870 and 1872. The Pikedale population, south-west of Warwick, is now the major wild fallow deer herd in Queensland. The herd numbers around 2800 and is

broadly contiguous with larger numbers of fallow deer on the New England Tableland in New South Wales.

In recent years, five other fallow populations in Queensland have been identified, three originating from deer farm escapes (two in southern Queensland and one near Rockhampton) and two from translocations (one in southern Queensland and one in the Wide Bay area). These herds are all estimated to number fewer than 100 animals.

Southern Queensland is close to the northern limit of suitable habitat for fallow deer in Australia. However, the species could expand its range in southern border areas if translocations continue.

## Commercial use of wild fallow deer

### Commercial harvesting

Fallow deer can be trapped for the wild venison trade. Trapping deer to use as foundation stock for a farmed herd is less viable due to the animal welfare and human safety aspects of handling wild deer.

### Recreational deer hunting

The cost of deer control may be minimised by enlisting or utilising commercial or recreational hunters to assist in the control. Landholders wishing to engage a third party to assist in deer control on their property should carefully consider a number of points before allowing access to their property, including conditions of access, public liability insurance, and references.

## Description and general information

Fallow deer come in four colour varieties ranging from white to black. Their most common colour is tan or fawn with white spotting on the flanks and a white rump patch outlined with a black horseshoe pattern.

Adult bucks stand up to 90 cm at the shoulder, does around 80 cm. Adult bucks weigh around 90 kg, does around 45 kg.

Male antlers are flattened and palmate with numerous points, and up to 70 cm long.

Fallow deer are normally found in groups of three or four in quite dense habitat, but large groups occur in open country. They are most active at dawn and dusk. When alarmed, they display a bouncy gait.

Predominately grazers with a preference for improved pasture, fallow deer will browse acacia, blackberry and the tips of rushes and bracken. They prefer open, grassy glades in forest, with dense understorey a favoured retreat.

Mature bucks live apart from the does until the start of the rut. The breeding season usually begins in April and lasts six to eight weeks, with males remaining aggressive until early August. The gestation period is about 230 days and females usually produce a single fawn.

Males take possession of a territory and mark the boundaries by thrashing vegetation and making shallow scrapes with their forefeet. They utter a hoarse rattling sound to call females in oestrus to the territory.

## Potential damage

### Production losses

Wild deer are opportunistic and highly adaptable feeders that both graze and browse. Their diet is largely determined by what is locally available, but because they require a diet twice as high in protein content than cattle—and with significantly higher quantities of digestible vegetable matter—they will normally feed selectively on the highest quality plants in a pasture. Because of this, deer can impose substantial costs on primary producers.

Wild deer have been reported to cause damage to a wide variety of agricultural crops, pastures and forestry plantations. Wild deer also directly compete with cattle and other livestock for pasture.

Other impacts on rural enterprises include damage to fences, spreading of weeds and fouling of water holes.

### Parasites and diseases

Feral deer are susceptible to exotic livestock diseases including foot-and-mouth disease, rinderpest, vesicular stomatitis, rabies and blue tongue. Unchecked, wild herds could play a major role in the spread of infection and act as a reservoir if these diseases are introduced to Australia.

Feral deer are also susceptible to a number of diseases and parasites currently in Australia including cattle tick, leptospirosis and ovine and bovine Johne's disease.

The main concern is the cost in lost livestock production or the spread of disease to free areas (e.g. bovine Johne's disease). However, some of the diseases and parasites also have significant implications for human health.

### Environmental impacts

Because deer are large animals they are capable of damaging native vegetation by browsing and trampling understorey and seedling plants, and ring-barking young trees.

Deer are also selective feeders. Over time, their browsing will influence the variety and abundance of native plant species. A significantly lower diversity and abundance of plant species is evident in environments where deer densities are high.

Feral deer can significantly impact ecologically fragile areas and have the potential to eliminate threatened plant species from an area.

Other environmental damage attributable to wild deer is the fouling of waterholes, the spreading of weeds, overgrazing causing erosion (and the subsequent degradation of water quality in creek and river systems).

## Social impacts

Fallow deer occur in both rural and peri-urban areas of south-east Queensland. Grazing deer may damage parks, residential gardens and fences in outer urban areas. In some areas, orchards and other horticultural enterprises may suffer considerable damage. Where close to major roads, wandering deer represent a serious traffic hazard and may cause motor vehicle accidents.

There is also the potential threat to human health of rutting stags, particularly in peri-urban areas where deer may become habituated to people.

## Control

Prevention and early detection is the best cure.

The first and most effective step to managing the impacts of deer in Queensland must be to prevent more deer entering the wild.

Thirty-five per cent of all current wild deer populations have resulted from deer farm escapes or releases, with a significant percentage of the remaining populations resulting from the deliberate translocation of deer.

Under the *Land Protection (Pest and Stock Route Management) Act 2002*, the release or translocation of wild fallow deer is prohibited. Farmed deer and deer in game parks must be contained in deer-proof fences and it is the responsibility of the owner to ensure that deer are contained. Failure to do so is a breach of the Act.

### Early detection

If you see fallow deer in areas outside the core fallow range south-west of Warwick, please report them immediately to Queensland Primary Industries and Fisheries on 13 25 23. Early detection of new populations will allow more effective control.

### Coordinating control

In many cases, deer control is best done as a joint exercise, involving all land managers in the district. Local governments and landcare groups can assist coordinate efforts.

## Shooting

Shooting must be carried out by trained personnel with appropriated firearms licenses. Shooters must possess the necessary skill and judgment to kill deer with a single shot. Lactating females should not be shot, but, if they are inadvertently shot, efforts should be made to find the young and euthanase them.

### Ground shooting

Although time consuming and labour intensive, ground shooting is considered to be the most effective and humane technique currently available for reducing wild deer populations. Such shooting is usually done at night from a vehicle, with the aid of spotlights.



### Helicopter shooting

Helicopter shooting is effective in inaccessible areas such as broadacre crops, swamps and marshes. However, most new deer populations in Queensland are at comparatively low densities and in areas of thick cover and therefore helicopter shooting is unlikely to be an economic option. This form of control also risks disturbing and dispersing the deer population.

### Recreational hunting

Hunting is a means of reducing populations. Several recreational hunting operators offer access to hunt wild fallow deer on land holdings south-west of Warwick.

### Trapping

Trapping may be an option for deer control in some circumstances. The simplest form of trapping for deer involves a self-mustering trap.

Traps must be monitored closely and deer should be promptly tranquilised or euthanased after trapping. Deer mortalities of 3–7 per cent post-trapping have been recorded in US studies and animal welfare issues must be considered in using this method.

### Further information

Further information is available from your local government office, or from your local primary industries and fisheries biosecurity officer: contact details are available through 13 25 23.

Fact sheets are available from Queensland Primary Industries and Fisheries service centres and the Queensland Primary Industries and Fisheries Business Information Centre (telephone 13 25 23). Check our website at [www.dpi.qld.gov.au](http://www.dpi.qld.gov.au) to ensure you have the latest version of this fact sheet. The control methods referred to in this pest fact should be used in accordance with the restrictions (federal and state legislation, and local government laws) directly or indirectly related to each control method. These restrictions may prevent the use of one or more of the methods referred to, depending on individual circumstances. While every care is taken to ensure the accuracy of this information, Queensland Primary Industries and Fisheries does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.

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