

Feral chital deer

Axis axis (sometimes known as axis deer or Indian spotted deer)



Declaration details

The feral or wild chital deer is a declared Class 2 pest animal under the *Land Protection (Pest and Stock Route Management) Act 2002*. It is an offence under the Act to introduce, feed, keep, supply or release Class 2 pest animals, without a permit.

Landholders are required to control wild chital deer numbers on their land.

Chital deer that are contained within a deer-proof fence (e.g., farmed chital or chital held by a game park) are not declared. Any chital 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.

It is important to manage wild chital deer 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.

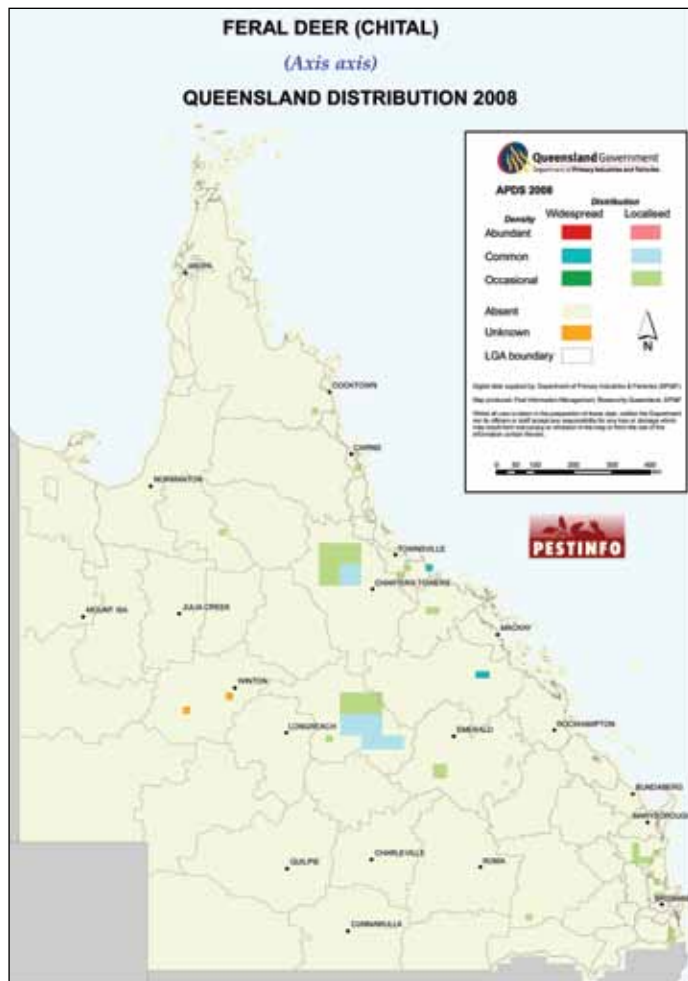


Commercial use of wild chital deer

Commercial harvesting

Chital 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.

Habitat and distribution



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

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

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Chital deer are native to the Indian Subcontinent. A small number of chital were released in 1886 at Maryvale Station near Charters Towers. The liberation succeeded and a substantial chital population was established in the local area.

Much of inland Queensland appears climatically suited to chital. However, until recently, they remained concentrated in their original release area.

Lately, five new chital populations have become established from deer farm escapes or translocations around Townsville and Charters Towers. Another seven populations have been established through translocations in the Gulf, and in central and southern Queensland.

The main Charters Towers herd is estimated to number around 10 000 animals, although numbers can fluctuate significantly between good seasons and drought. There is also an estimated 2000 chital on Rita Island, at the mouth of the Burdekin River. Populations in the hundreds have been identified in the Gulf and near Texas on the southern border.

Recreational deer hunting

The cost of deer control may be minimised by enlisting or utilising commercial or recreational hunters to assist in 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

Chital deer have a rusty red to dark brown coat with permanent white spots appearing as broken lines along the body. Other distinguishing features are their prominent white throat and large tail.

Adult stags stand up to 95 cm at the shoulder, while hinds are smaller. Adult stags weigh 75–100 kg, hinds up to 50 kg. Stags have three tined antlers on a long, upright beam, 55–70 cm.

Large herds consist mainly of females and their young, together with two or three stags. They are most active at dawn and dusk and often bed down under the shade of trees during the heat of the day. Deer are nervous animals and susceptible to panic, while trapped animals may be difficult to manage.

Chital deer are usually confined to the tropical and subtropical areas of Australia and prefer woodland, forests, and clearings near waterways.

The breeding season is non-seasonal, although fertility may be influenced by seasonal conditions. In Australia, most chital stags are in hard antler in the first half of the year and the majority of calves are born in the second half of the year. However, it is possible for stags to rut at any time of the year and calves have been observed in April and May and from September to November. In good seasonal conditions hinds may display post-partum oestrus and produce three calves in two years. The gestation period is about 234 days. Multiple births are not uncommon in native habitat but in Australia fertility may be influenced by the environment.

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 and with significantly higher quantities of digestible vegetable matter than cattle, 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

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

Wild 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 by 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.

Wild 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

Wild chital are generally not established close to urban areas. In rural areas, wandering deer can represent a serious traffic hazard and may cause motor vehicle accidents.

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 chital 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 chital in areas outside the core chital range around Charters Towers, 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 licences. Shooters must possess the necessary skill and judgment to kill deer with a single shot. Lactating females should not be shot, but if 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 deer populations. Several recreational hunting operators offer access to hunt wild chital on land holdings in the Charters Towers area.

Trapping

Trapping may be an option for deer control in some circumstances. The simplest form of trapping 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% 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 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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