

Feral deer in the Wet Tropics

Introduction

Recent research undertaken by the Rainforest Cooperative Research Centre (CRC) has found that feral deer are more widespread in the Wet Tropics than first thought. The research has found these deer are capable of breeding rapidly to form large herds that could cause significant, and possibly irreversible, environmental damage.

Feral deer also pose a significant threat to agricultural production and could become a major road safety hazard.

The good news is that, as a threat, feral deer populations in the Wet Tropics are still at a stage where they can be managed, if not eradicated. Control will require a combination of on-ground action as well as policy and legal initiatives.

Current action

The Wet Tropics Management Authority, with Natural Heritage Trust funding, is coordinating a regional feral deer education and awareness program. The program has the support of a number of government and community agencies through the FNQ Pest Advisory Forum.

The intent is to gain a better understanding of the distribution of feral deer in the Wet Tropics and then to use that information as the basis for determining the need for action, both on-ground and regulatory.

Deer - a long history in Australia, but more recent arrivals in the Wet Tropics

Many long-established feral deer herds in Australia are the result of planned releases by acclimatisation societies in the 1800s and early 1900s. From these releases there are established herds in Queensland on the Torres Strait islands, the Charters Towers area, and southern and southeast Queensland. There are an estimated 200,000 feral deer in Australia in 218 known herds. It is believed there are about 30,000 of these deer in Queensland in about 20 established populations.

Recent research has found that of the 218 herds, only 14 are long established populations with 77 being escapes from deer farms and 127 the result of deliberate translocation and release (Moriarty, 2004).

It appears a number of herds established at the same time as a general decline in the farmed deer sector in the early 1990s. Some deer escaped, some were deliberately translocated, and some were sold to small landholders and hobby farms with inadequate deer enclosures.

The Rainforest CRC study found most reported deer sightings in the Wet Tropics were concentrated around existing or former deer farms. There were also reports of smaller herds that may have originated from hobby farms.

Where are they?

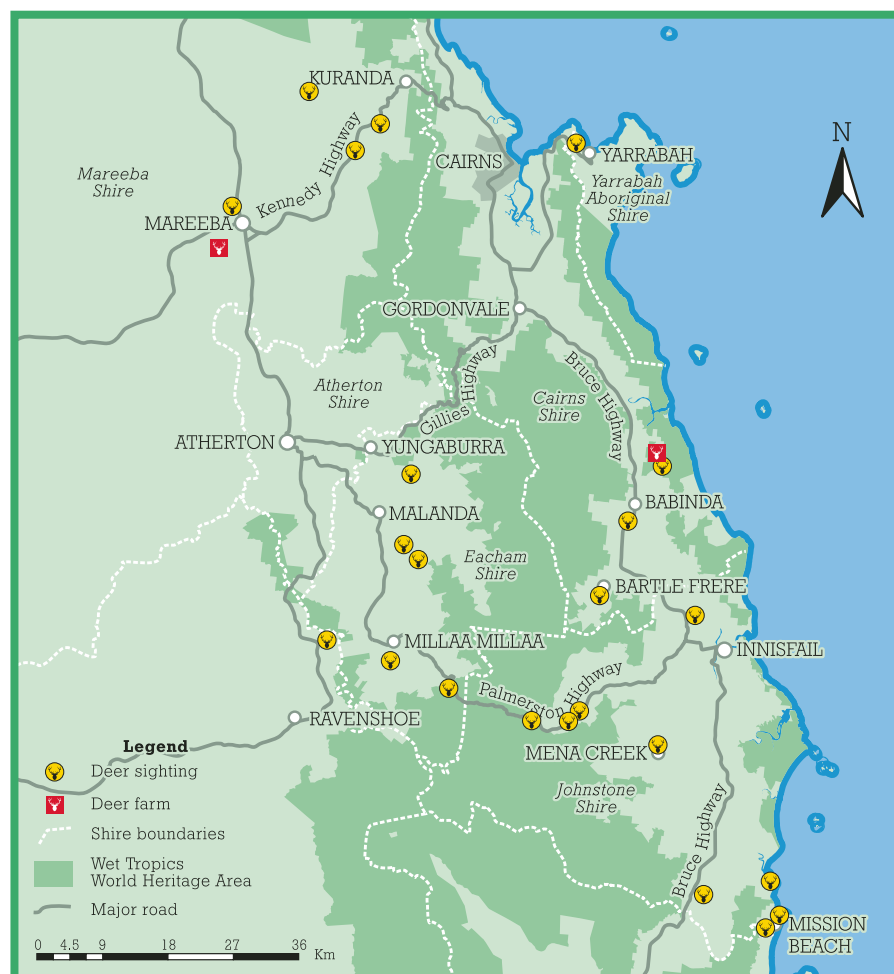
Reported feral deer sightings so far in the Wet Tropics have been limited to the Cairns, Johnstone, Eacham and Mareeba local government areas.

Sightings have been reported at East Russell, Yarrabah, Bartle Frere, East Palmerston, Crawfords Lookout, Mission Beach, Granadilla, Tarzali, East Evelyn, Lake Eacham, Mareeba, Koah and Speewah.

The accompanying map shows the location of feral deer sightings as well as the location of present deer farms.

What are they?

Reports and descriptions indicate that most of these sightings may be rusa deer, a deer that originates from Indonesia. Other species such as fallow (native to continental Europe) and chital (India and Sri Lanka) may also be present.



Feral deer sightings and deer farms currently in operation.



The problem with feral deer

1. They breed rapidly

Experience in Australia and overseas has found that feral deer herds, once established, have the capacity to increase dramatically in favourable conditions. For example about 20 chital deer arrived on the 9000ha Rita Island at the mouth of the Burdekin River in the late 1970s. A 2004 inspection estimated there may be more than 2,000 deer now in the area.

Several deer species, including rusa and chital, are tropical species and bioclimatic analysis has found that both species could spread through significant areas of northern Australia, as could sambar and hog deer, species not presently in Queensland.

2. They damage the environment, commercial agriculture and domestic gardens

Feral deer damage vegetation through browsing, grazing, trampling and ringbarking through the rubbing of antlers. They show preferences in their feeding which can lead to a permanent change in the vegetation variety in forest areas. They disperse weeds and degrade water quality through wallowing, bank erosion and faecal contamination.

Deer damage revegetation plots and commercial crops. Fruit orchardists at Babinda have recently reported deer ringbarking trees.

Where feral deer are present near the edge of urban areas, eg Sydney's outer areas, deer have caused damage to home gardens.

3. They have the potential to spread diseases and parasites

Feral deer appear to have the potential to transmit a range of diseases and parasites of agricultural livestock and humans including the cattle tick, leptospirosis, Johne's Disease, malignant catarrhal fever, screw worm fly and Surra. There is particular concern that feral deer in northern Australia may act as vectors for the introduction of exotic diseases and parasites from southeast Asia.

4. They pose a threat to public safety

As large animals, deer are a significant road safety hazard. Deer-vehicle collisions cost hundreds of millions of dollars annually in Europe and America.

The presence of feral deer also often leads to illegal shooting activity near habited areas.

A strategy to control feral deer in the Wet Tropics?

The Department of Natural Resources and Mines is considering many options for the management of wild deer in Queensland. One option, outlined in the feral deer Pest Status Review proposes:

- The four species of deer already established in Queensland (red, rusa, chital and fallow deer) be declared Class 2 pests across Queensland but that this declaration only apply outside the historically established ranges of these species. Class 2 status means all landowners must take reasonable steps to rid their land of these pests.
- All other deer (including the tropical species, sambar and hog deer) not yet established in Queensland be declared Class 1 pests. Class 1 status means these pests must be eradicated from the State.
- Regulations for the identification and management of farmed deer to prevent them passing back into the wild.

The review argues that this combined approach acknowledges the historical importance of wild deer populations in some parts of Queensland (such as sections of southeast Queensland and areas near Charters Towers) and the high value that some groups in the community place on these populations. In seeking to limit the spread of feral deer beyond their historical ranges, the review recognises that deer pose a significant environmental and social threat if allowed to further spread into new areas.

The need to better manage farmed deer recognises both the potential economic importance of this industry as well as the need to manage farmed deer to prevent them passing into the wild.

In the current absence of statewide controls, the Rainforest CRC report recommends local governments in the Wet Tropics could take similar actions to collaboratively control feral deer in this bioregion through pest species declarations and the effective regulation of deer farming.

The report advocates a coordinated regional approach to feral deer across local governments in the Wet Tropics bioregion for both the keeping or farming of deer and the declaration of feral deer as Class 1 pests.

How you can help

If there are deer in your area, or you see deer when out travelling we would like to know:

- Location (as specific as possible)
- Time/date of sighting
- Species (if known)
- Numbers (if possible the number of bucks, does and young)
- What the deer were doing (eg on the move, feeding on the edge of the forest etc)
- Have you seen them at this location before?
- Is it an open or fenced area?
- Did you see identification tags or brands?

Please call the Deer spotting hotline on 1800 119 829 with your information.

Information provided will be followed up locally by appropriate state and local government officers. All information received will be collated and used as the basis for determining future action.

References and further reading

Hudson S. (2005), Feral Deer in the Wet Tropics Bioregion: Distribution, Abundance and Management. School of Tropical Biology, JCU, and Rainforest Cooperative Research Centre, Cairns.

Jesser, P (2005), Deer in Queensland: Pest Status Review. Department of Natural Resources and Mines, Brisbane.

Moriarty, A. (2004), *The liberation, distribution, abundance and management of wild deer in Australia*. Wildlife Research 31:291-299



DEER SPOTTING HOTLINE 1800 119 829

Photos courtesy Queensland Department of Natural Resources, Mines and Water, and New South Wales Game Council