# Northern Rivers Feral Deer Identification Guide



Menil (spotted) Fallow Buck, Western Sydney Parklands.

### Fallow Deer (Dama dama)

#### Introduction and distribution

Fallow Deer were introduced to Tasmania in the 1830's and mainland Australia around the 1880's from Europe. Fallow deer are the most widespread and established of the feral deer species in Australia. They occur in Queensland, New South Wales, Victoria, Tasmania and South Australia.

#### Habitat and herding

The Fallow Deer are a herd deer inhabiting semi-open scrubland and frequent and graze on pasture that is in close proximity to cover. They breed during the April/May, fawns are born in December and the bucks cast their antlers in October. Antlers are regrown by February. In rut, the buck makes an unmistakable croak, similar to a grunting pig. The calls vary from high pitched bleating to deep grunts.

### Chital Deer (Axis axis)

#### Introduction and distribution

Chital Deer were introduced to Australia from India in the 1860s. Wild populations of Chital exist in Queensland near Charters Towers, with other smaller isolated population in NSW, South Australia and Victoria. Range and densities are increasing from isolated pockets and deliberate release for hunting.

#### Habitat and herding

Chital deer are herbivores that browse on a variety of grasses, fruit and leaves. They are gregarious and can form groups of more than 100 individuals. They do not have a defined breeding season, and are capable of producing three offspring in two years. Chital deer will eat their shed antlers if their diet is lacking the vitamins and minerals. Females will separate from the herd during birthing and rearing of young.



#### Antlers

Flattened antlers up 50 cm with numerous points. Penile sheath.

Adams apple.

#### Both sexes (Buck/Doe)

Highly variable in colour including red, black, white and menil (spotted).

Heart shaped pale rump patch with black outline. Long tail.



Up to 90 cm 85 kg



Up to 80 cm 60 kg

#### Antlers

Smooth and slender with usually three tines on each up to 89 cm

#### Both sexes (Stag/Hind)

Striking white throat patch. Reddish to chestnut brown coat with dark brown/black muzzle white spots.

Long tail.

Have a distinctive high-pitch alarm call when disturbed.



Up to 95 cm

Up to 80 cm 40–50 kg

### Hog Deer (Axis porcinus)

#### Introduction and distribution

Hog Deer were introduced to Australia from India and Ceylon in the 1860's. Hog deer only occur in Victoria and NSW.

#### Habitat and herding

The Hog Deer is a herding animal and is found in the coastal tea-tree swamp areas. They prefer to graze at dawn and dusk. Hog Deer do not cast their antlers in a regular fashion, however, around August to October is most common.

### Rusa Deer (Cervus timorensis)

#### Introduction and distribution

Rusa Deer were introduced to Australia from Malaysia in 1868. Rusa are found in New South Wales, widely distributed along the NSW Coast, Queensland and South Australia. Only isolated populations are found in Victoria.

### Habitat and herding

Rusa Deer are herbivores that graze a wide range of grasses, shrubs and trees. They often form small groups. Rusa deer can breed all year round, and usually produce one calf between March and April. Rusa deer can hybridise with sambar deer and produce fertile offspring.

They can also hybridise with red deer, but only produce fertile female offspring. The male rusa deer often decorates its antlers with twigs and grass during the breeding season to establish dominance over other males.



Up to 70 cm

55 kg

#### Antlers

Usually three points on each side, thin up to 35 cm.

#### Both sexes (Stag/Hind)

Uniform, yellow-brown to red-brown coat.

May have white spots in summer and a dark brown coat in winter. Underside is white/cream.

Smallest deer species in Australia.



Up to 110 cm

135 kg

#### Antlers

Antlers three lyre-like tines up to 96 cm.

Males have mane.

#### Both sexes (Stag/Hind)

Coat is coarse.

Heavy dark grey-brown during winter.

Reddish-brown during summer with light chest and throat spots.



Up to 95 cm 90 kg

Up to 60 cm 30 kg

### Red Deer (Cervus elaphus)

#### Introduction and distribution

Red Deer were introduced to Australia from England in 1860. Red Deer occur in Victoria, New South Wales and Queensland. In New South Wales, they occur in isolated populations.

#### Habitat and herding

Red Deer have a strong herding instinct and highly developed social order. Breeding is mainly in April, and females give birth after an 8–9 month gestation period. Males are only territorial during mating season and roar to attract receptive females. Antlers are cast in October/ November and reformed by February.

They favour mixed grassland, rainforest and woodland areas. They may be seen in the open but usually only when nearby to thick timbered vegetation. They mainly browse on woody trees and shrubs as well as grasses, sedges and forbs.



#### Multi -

Antlers

Multi-pointed complex, up to 90 cm.

#### Both sexes (Stag/Hind)

Up to 120 cm Ears are n 135–220 kg pointed.



Up to 90 cm 95 kg

Large pale rump patch. Ears are normally long and pointed.

Grey-brown in winter. Reddish in colour during summer.

Short tail.

Calves have distinct white spots.

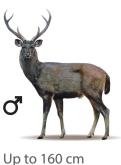
### Sambar Deer (Cervus unicolor)

#### Introduction and distribution

Sambar Deer were introduced to Australia from India, Ceylon and Malaysia in the 1860s. Feral populations of sambar are established in South Australia, Victoria and NSW. Sambar Deer have serious environmental impacts and are spreading across much of NSW. They are absent from other states.

#### Habitat and herding

Sambar Deer are often regarded as solitary animals and are almost never found in herds. They are herbivores that graze a wide range of grasses, shrubs and trees, depending on the season and food availability. They are semi-nocturnal preferring to remain hidden during the day. They can also easily swim with their bodies fully submerged and only their head above water. They can breed throughout the year, with a peak in September and October.



**Antlers** Lyre-like, 3 tines per antler up to

75 cm.

#### Both sexes (Stag/Hind)

Prominent bat like ears with pale inner.

Uniform dark brown coat with ginger and cream under-parts and light buff colour under chin. Hair is very stiff and coarse.



300 kg

### **Environmental impacts**

Deer are on the move across Australia and we need to correctly identify the different species in order to manage and reduce the impacts they are having.





The impacts deer are having on our environment include:

- · create traffic hazards and cause vehicle accidents
- antler rubbing damages native plants, garden trees, forestry, vineyards and orchards
- browse and trample gardens, agricultural produce, native vegetation and can change vegetation structure and composition
- create new game trails (erosion, increase access feral predators)
- display intimidating or aggressive behaviour towards people, livestock and domestic pets
- competing with native stock and native herbivores
- damage fences
- spread weeds
- potentially spread pathogens affecting agriculture (such as foot and mouth disease) and human health (including leptospirosis and cryptosporidium).



### Scats and tracks

## Deer can be elusive and hard to observe. Therefore, identification of scats and tracks can be valuable for monitoring of the presence and abundance of deer.

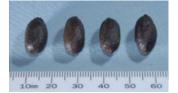
#### **Deer scats**

Deer produce rounded, oval or oblong scats that may be deposited either singly or in clumps containing large numbers of pellets. Clumps of deer scat usually break down into separate pellets upon contact with the ground. The size and form of scats may vary within and between different species of deer.

In a field situation, deer scats can be most easily confused with those produced by other introduced herbivores such as goats and sheep.

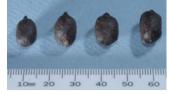
#### **Fallow Deer**

Goat



### Red Deer





- distinct pointed end
- irregular shape



- cylindrical shape
- end dimpled or rounded.



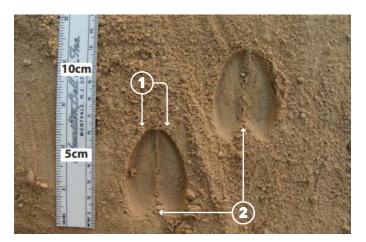


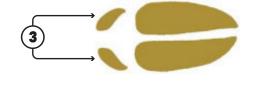
Clumped and scattered Fallow Deer scats.

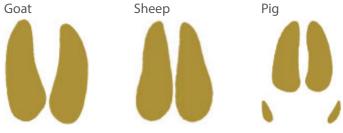
### **Deer tracks**

#### **Distinguishing features**

- Not easily distinguished from goat, sheep or pig but generally larger
- Two elongated toes make up the hoof (1)
- Slight gap between toes on both feet (2)
- In soft soil, can leave impression of dew claw behind print (3)







### Record your data with DeerScan



DeerScan (a component of FeralScan), is a free community resource for recording sightings of feral deer, reporting the damage they cause, and documenting control actions you undertake – <u>www.deerscan.org.au</u>

#### How to get started

#### 1. Register your details

Register your details in DeerScan or simply record information with a valid email address. You do not need to register but it will make it easier for you to view your own data, and enable the FeralScan team to contact you about deer information in your local area.

#### 2. Map your observations

Record wherever you see deer, what species you have seen, what problems they have caused, and control activities such as ground shooting. To enter data, zoom to your current location and place a marker on the map, then insert the details of your observation in the form provided. Smart phone users can use the free FeralScan App to enter data while in the field.

#### 3. Submit your record

Submit your record and view the details in the All Sightings or My Data tabs. View other observations in your local area entered by other community members. You can also upload your photos to the Photo Gallery and they will display on the website.

Information you enter about feral deer and their impacts in your local area will help local biosecurity authorities to manage feral deer populations to reduce the damage they are causing. Feral deer are becoming a major pest throughout Australia – your help is important!!

Please note: All deer information you enter will be managed securely and discretely.



### Notes on antlers

Antlers are an outgrowth of the skeletal system of deer and are grown and shed annually by males. Initiation of antler development, subsequent growth and eventually shedding are regulated by testosterone. During growth the antlers are covered in a sensitive skin coated with hair, known as velvet. As the antler approaches full development, blood flow to the velvet is restricted and it dries and flakes. During this time deer may rub off the velvet by thrashing the vegetation, resulting in a clean or polished set of antlers.

The size, shape and arrangement of tines on antlers can be used to identify a species. However, it can take several years of successive growth for an animal to produce full antlers that are suitable to identify the species. The first set of antlers a male grows are usually unbranched and called spikers.



Yearly antler development of Sambar Deer.

Source: Frank Knight, Field Identification guide for the Australian Alps

This brochure was developed by the Cumberland Land Conservancy, Landcare NSW, Greater Sydney Landcare Network, Local Land Services and Department of Primary Industries through funding received from the Managing Established Pest Animals and Weeds initiative, part of the Australian Government's Agricultural Competitiveness White Paper, the government's plan for stronger farmers and a stronger economy.



#### Information sources

#### NSW primefact

Game Management Authority, Victoria. May 2019 <u>www.gma.vic.gov.au/hunting/deer/deer-species</u> Claridge, A.W. (2016) Introduced Deer Field Identification Guide for the Australian Alps. Office of Environment and Heritage, NSW National Parks and Wildlife Service, Queanbeyan, New South Wales. theaustralianalps.files.wordpress.com/2018/03/0012-introduced-deer-field-identification-guide-2016.pdf