











# Feral goats, pigs and deer Ungulates

# PEST ANIMALS EVERYONE'S RESPONSIBILITY

Feral goat *Capra hircus*Feral deer:

Red – Cervus elaphus scoticus Fallow – Dama dama Sika – Cervus nippon Feral pigs Sus scrofa

"Ungulate" means hooved animal

## Why are feral ungulates a problem?

Feral goats, pigs and deer have been nominated as among 100 of the "World's Worst" invaders. They all pose a serious threat to New Zealand's native forests and economy.

#### Threat to our native forests

Feral deer and goats:

- Eat native plants both seedlings and adult plants
- Contribute to erosion by destroying plants which help to hold the soil in place

#### Feral pigs:

- Dig up large areas of vegetation, destroying habitats for native snails and invertebrates
- Eat native invertebrates, plants and birds
- Prey on ground-nesting birds and their eggs

Feral deer, goats and pigs hamper forest regeneration by browsing and trampling seedlings and saplings in the understorey (a lower tier of shrubs and small trees under the main canopy of forest trees). Browsing opens up the forest floor to create a habitat more suitable for possums and less suitable for natives, such as kiwi.

# Threat to our agriculture and forestry

Feral deer and pigs are a threat to animal health and farm production because they are known carriers of bovine Tb. They can spread the disease to farmed cattle and deer and animals in the wild.

Feral pigs damage root and maize crops, dig up young trees, may kill newborn lambs and damage pasture through digging in search of food. The uprooted pasture creates ideal conditions for weeds.

Goats can severely damage exotic forestry by trampling seedlings, browsing young trees and stripping bark from older trees.



#### Impact on humans

Feral pigs can spread the disease trichinosis among domestic pigs. It can then be transferred to humans from eating infected meat. Feral pigs can decimate lawns and vegetable gardens. Feral goats and deer are known to destroy decking, railings and other wooden structures around homes.

# How do I know if I have feral ungulates?

Feral ungulates are those living in the wild that are not suitably identified or restrained. They have often escaped or been released. They are large animals that can be very destructive to the natural environment. Obvious damage caused by feral ungulates could be:

- Uprooted seedlings
- Digging up of lawn or vegetable gardens
- Chewed bark, leaves or branches

Feral ungulates like to rub up against trees and other solid structures, such as decking and railings. They may leave hair on these surfaces.

Feral ungulates may leave footprints behind, particularly in muddy areas:

- Deer footprints show two sharply defined pointed toes
- Pig footprints are rounded
- Goat footprints leave a kidney-shaped print

Larger feral deer or pigs may show dewclaw prints – two small kidney-shaped prints in line with the hoof prints.

Feral goat and deer pellets are very similar. They are both smooth and oval and may be found scattered or in groups. The difference is in the size. Goat pellets are smaller than deer, approximately 10mm wide. Deer pellets are closer to 20mm. Pig droppings are usually dark, flattened, roughly oval pellets joined in a large cylinder. The size and shape depends on the size of the animal and its recent diet.



Pig rooting



Feral nanny goat

# How do I control feral ungulates?

Prevention or shooting are the best methods of control for private landowners. Trapping is available for feral pig control. Poisoning of feral animals is best left to skilled operators because no poison is available without the operator holding a pesticide licence. There is currently no toxin available for feral pig control.

Greater Wellington will provide advice to landowners where feral ungulates are causing significant environmental damage.

## Shooting

If done professionally, shooting can control small numbers of feral ungulates. All three feral ungulates are intelligent animals, so ineffective and indiscriminate shooting will only make future control more difficult. It is strongly recommended that only experienced hunters carry out this work. As with the culling of all animals, Greater Wellington reminds hunters to kill animals quickly and humanely. Contact a member of your local pig hunting or deer stalkers club. They may be able to assist.

# **Trapping**

Feral pigs can be caught with cage traps but it requires experience to operate them proficiently. Greater Wellington may be able to supply a trap for short-term use.

Place bait in your trap but don't set it. After a week goes by, re-bait the trap with the same amount and type of bait and then set it.

Pigs are attracted to bait with a strong odour. Bait can include offal, grain, commercial pig or poultry pellets, vegetables or fruit. Large amounts of bait will be required – around 10-20kg each time.

Traps should be set:

Only at sites where you have the express permission of the landowner

- Where vegetation can provide shade and shelter
- Near identified pig runs
- Where pigs are frequenting or feeding regularly

All traps must be inspected daily. Trapped pigs must be destroyed by shooting as quickly and humanely as possible.

#### Prevention

Prevention is the best option in the urban situation. Cleaning up scrubby gullies and burning rubbish piles will reduce the feral pigs' and goats' desire to enter your property. Good fencing will help to exclude feral ungulates. The recommended requirements for a feral goat and pig proof fence are a standard 9 wire high tensile fence with 5 posts every 20 metres, 3 battens per bay and angled strainers on the inside of the fence.

# Feral ungulates – rules and responsibilities

Feral deer, goats and pigs are all declared wild animals under the Wild Animal Control Act 1977. The Department of Conservation has primary responsibility for feral ungulate management under this act. Under the Wild Animal Control Act 1977, a feral deer, goat or pig is any animal that is:

- (a) not held behind effective fences or otherwise constrained; or
- (b) not identified in accordance with a recognised identification system

Any feral ungulate that invades a property may be destroyed or otherwise disposed of by the landowner. Non-feral (tagged) goats that trespass may be dealt with under the Impounding Act 1955. For further information contact your local Territorial Authority.

It is an offence under the Wild Animals Control Act 1977 to release feral deer, goats and pigs into the wild or carry out any act which will encourage or cause an increase in the population of feral animals.

# Why do we have feral ungulates?

#### Pigs

Feral pigs were introduced into New Zealand as a food source by early explorers and settlers in the late 1700s. Pigs escaped from early farming practices and quickly became established in many parts of the country.

#### Goats

Goats were first introduced into New Zealand by whalers and sealers during the 1800s for food supply. They were then continually introduced to New Zealand to keep vegetation down, control weeds and for farming.

#### Deer

There are three species of feral deer found in the region:

- Red deer (Cervus elaphus scoticus) a native of Europe
- Fallow deer (Dama dama) a native of the Mediterranean
- Sika deer (Cervus nippon) a native of Japan

#### **Description**

	Pigs	Goats	Red deer	Sika deer	Fallow deer
Height	80cm	75cm-90cm	95cm-130cm	70cm-95cm	85cm-95cm
Weight	40kg-80kg	25kg-70kg	85kg-215kg	45kg-85kg	30kg-85kg
Description	Feral pigs often live in family groups and can form large "mobs". The have long canine teeth	Males are bearded and have a strong smell during the breeding season	Short, pointed ears and short tail	Small round ears and long white tail	Long pointed ears and long tail hair
Antlers, horns or tusks	Both sexes grow tusks	Both male and female goats have horns. Billy horns are broad and spreading, while the nanny has a pair of slender hooked spikes	Round, up to 10 or more points	Small and round up to 8 points	Branched and spiked, palm-shaped at the top

Deer were first introduced to New Zealand for sport hunting. Their number rose quickly and spread across the country in the favourable climate. Red deer became the most widespread and by 1940 had colonised the most suitable habitats throughout New Zealand. Sika deer are a recent introduction to the region. They were illegally released into Kaitoke Regional Park in 1992. Fallow deer have been illegally introduced to many parts of the region, usually located on private land.

Over time, the feral ungulate population grew to large numbers and were competing with livestock. The feral ungulate population was also impacting on New Zealand's indigenous forests and grasslands, leading to a loss of many native plant species. By the early 1900s deer and goats had become major pests. The Government carried out control campaigns initially in areas where they were impacting on sheep productivity and later to protect conservation values.

#### **Habitat**

All feral animals occupy a wide range of habitats. They are found in both native and modified forests, grasslands, shrublands, wetlands, agricultural areas and forest plantations. All feral animals like open areas in which to rest or sun themselves, but at night or in bad weather they may seek shelter under rocky outcrops or other places where they can keep dry.

#### **Food**

Deer are grazers that eat introduced and native grasses, leaves and seedlings, herbs, fungi, mosses and fodder crops. Feral pigs are omnivorous, opportunistic feeders, eating almost anything including grasses, crops, seeds and dead animals. Goats are extreme generalist herbivores and will forage on a wide range of plants, many of which are unpalatable to other animals. Goats can subsist on poorer quality plants than most herbivores.

### **Breeding**

Feral deer, goats and pigs can breed at any time of the year.

- Goats regularly produce twins and reach breeding age at 6 months
- Deer produce only one offspring, have a gestation period of 240 days and reach breeding age at 1 or 2 years
- Pigs produce 6 to 10 piglets per litter, have a gestation period of 112 to 114 days and reach breeding age between 10 and 12 months



Mature red feral deer stag

For more information, contact Greater Wellington:

