



The challenge

We all want the native species of Aotearoa New Zealand to be safe and thriving alongside us. Introduced wild browsing animals (deer, goats, pigs, tahr and chamois) negatively impact forest ecosystems if their numbers get too high, threatening many native species, reducing their resilience to storm damage, and affecting access to rongoā (medicinal) and taonga (treasured) species.

Wild deer, goats, pigs, tahr and chamois were originally introduced very early in Aotearoa New Zealand's colonial history, and people value hunting these animals for food, sport and business purposes. However, these introduced browsing animals have no natural predators in Aotearoa New Zealand, so their populations increase quickly. We need to be able to reduce the pressure on native plants and habitats caused by these animals, while respecting recreational and cultural values at a conservation site.

From the 1930s to the 1990s,
Government-led culling and the
commercial market kept numbers down.
But over the past 20 years, this kind
of activity has decreased, resulting
in wild browsing animals becoming
more widespread and abundant across
most of Aotearoa New Zealand's
natural ecosystems.

Iwi, hapū and whānau, conservationists, and people who farm, hunt and work in government all want to improve how wild deer, goat, pig, tahr and chamois numbers are managed to ensure that Aotearoa New Zealand's special places are protected into the future.

Our role in wild animal management

Under the Wild Animal Control Act 1977, the Department of Conservation Te Papa Atawhai (DOC) is responsible for:

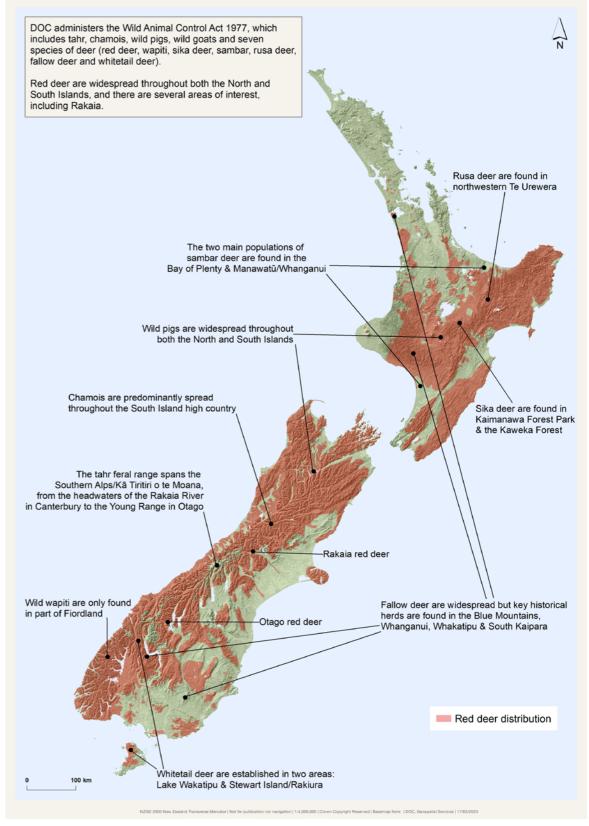
- managing populations of wild animals at priority DOC-managed conservation sites
- taking a leadership role across all land to ensure concerted action against the damaging effects of wild animals on vegetation, soils, waters and wildlife
- monitoring deer farm compliance in regulated areas
- administering concessions for wild animal recovery operations on public conservation land (PCL) to enable wild deer, goats, pigs and chamois to be commercially recovered for processing into venison and by-products.

The Wild Animals Management
Programme (the Programme) aims

to maintain or achieve wild-animal-free areas, prevent the spread of wild animals into new areas and manage their numbers elsewhere to reduce pressure on native plants and habitats. This Programme complements the work DOC already does to protect native birds, bats, frogs, insects and other animals through controlling introduced mammalian predators.

Currently, the Programme covers over 15% of PCL, which is about 1.3 million hectares. DOC cannot manage wild animals everywhere, but by working alongside iwi, hapū and whānau, hunters, private landowners, and local government, as well as many conservation groups, businesses and communities, we can make a bigger difference for nature while still maintaining the cultural, social and recreational values of these places.





Wild animal distributions

The animals

The map on the previous page shows some of the distributions of introduced browsing animals and herds that are important to the hunting sector across Aotearoa New Zealand.

Wild deer:

- were initially introduced for sport, are highly valued for hunting and are harvested commercially for venison
- are well established throughout Aotearoa New Zealand, with the exception of Northland, Mount Taranaki and some offshore Islands
- include seven different species that have established in the wild: wapiti, sika, fallow, rusa, sambar, whitetail and red deer
- damage native forests by feeding on plants, trees and seedlings.

Wild goats:

- were introduced for food, weed control and commercial fibre – they are less popular as a hunting species
- eat the foliage of most trees and plants, which prevents forest regeneration
- occupy roughly 14% of Aotearoa
 New Zealand and breed quickly –
 their total population size is unknown
 but is estimated to be several
 hundred thousand.





Wild pigs:

- are well established throughout Aotearoa New Zealand and hunted for sport and food
- are omnivores, eating plants, insects, frogs and earthworms, as well as eggs or animals such as groundnesting birds, young rabbits, newborn lambs and lizards
- are significant predators of native land snails
- breed quickly the sows can breed from 5–8 months old and have two litters per year, averaging six piglets per litter.

Tahr:

- are large goat-like animals that are native to the central Himalayan ranges of India and Nepal
- were introduced for sport and are highly valued for hunting
- were estimated to number 29,800 on PCL in 2023
- can damage plants that provide vital food and shelter for native animals, including snow tussock and alpine buttercups and daisies.



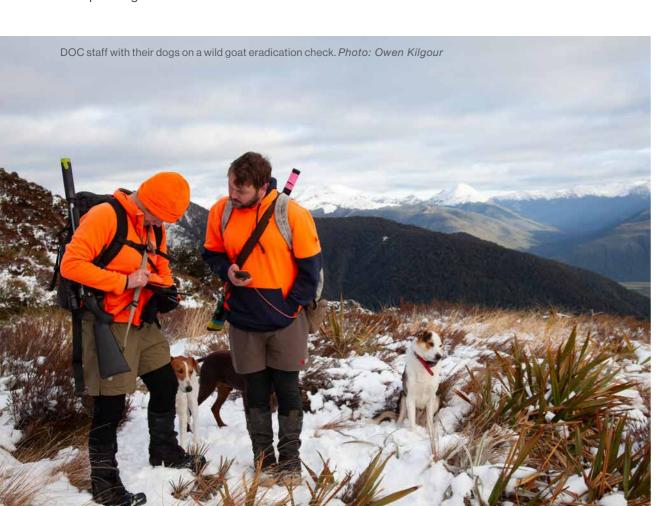


6

Chamois:

- are small goat-like animals that are popular with hunters
- are found throughout the high country of the South Island and in some lowland forests, from the Marlborough Sounds in the north to Fiordland in the south
- are renowned for their ability to occupy a range of mountain habitats and will spread into lower altitude forest areas, especially on the West Coast
- can cause significant damage to alpine vegetation.





Restoring the mauri of native ecosystems

The damage introduced browsing animals cause to native plants and habitats can have flow-on effects to the function of the ecosystems within Aotearoa New Zealand. An ecosystem is like a spider web – with all its strands intact, it is strong and resilient, but with every strand that is broken, it becomes weaker and its integrity is diminished. In te ao Māori (the Māori world view), this is the concept of mauri – that every living thing has an essence.

DOC acknowledges the concepts within te ao Māori that describe the inseparable bond between people and the environment. Wairuatanga (spirituality) and kaitiakitanga (guardianship) are te ao Māori concepts that recognise that if the environment is ailing, people are also weakened.

Taonga species need to be preserved for the benefit of future generations, and DOC is committed to working with iwi and hapū to honour these principles and concepts through the Programme.

The native species that need our help

Most introduced wild browsing animals are picky eaters – they will eat and damage some plants, while leaving others untouched. This means that some plants are particularly at risk from wild animals, even when numbers are low. The plants that are avoided may benefit from the lack of competitors and come to dominate the forest or alpine areas.

Preferred plants usually have leaves that are large and soft, have a high nutrient content, are low in fibre, and contain low amounts of aromatic chemicals that smell or taste bitter or peppery. They are often fast-growing plants that are important for healing a forest after disturbance, stabilising slopes and preventing erosion. Their soft leaves also break down quickly, returning nutrients to the system. Some have berries and are important food sources for native animals, and others create shelter and shade for native snails and other invertebrates.

Read more below about some of the native species that are preferred by introduced wild animals and the important roles they play in Aotearoa New Zealand's ecosystems.

Pāpāuma/broadleaf:

- is a favourite food of wild deer and goats
- can be important in early successional forests, as it forms a mid-tall canopy that creates a nice habitat for slow-growing trees like rimu
- has berries that are essential food for kererū, tūī and korimako/bellbirds
- produces leaf litter that creates habitat for *Powelliphanta* snails in the Kaweka Forest
- is used as a rongoā plant for skin irritations.

Māhoe/whiteywood:

- is a favourite food of wild deer, goats and wallabies
- has fast-growing roots that help to hold land together
- is a good indicator that a forest is regenerating
- has berries that are eaten by kererū, tūī, tauhou/waxeyes, korimako, insects and some species of geckos
- is an important rongoā plant and the juice from its berries is used in tattooing.

Makomako/wineberry:

- is a favourite food of wild deer, goats and possums
- has flowers and berries that attract native birds, bees, lizards and insects
- has fast-growing roots that help to hold land together
- is a good indicator that a forest is regenerating.







Kareao/supplejack:

- is a favourite food of wild deer and goats
- has fruit and leaves that are a major food for k\u00f6kako
- was traditionally used to make ropes, hīnaki (eel/fish traps) and kites
- has soft young stems that can be eaten.

Ngutu-kākā/kākābeak:

- is categorised as Threatened Nationally Critical
- is browsed by deer, goats, pigs, hares, stock and introduced garden snails
- is a nitrogen-fixing plant that enriches soil and nourishes neighbouring plants
- is used by Māori for gifting and trading
- is used as a rongoā plant to reduce fever.

Karamū:

- is a favourite food of deer, goats and wallabies
- is part of the understorey and forest edge community
- is a food and habitat for bees, tūī, korimako and tauhou
- is quick growing and helps to control erosion and stabilise new slips
- reduces the amount of rainfall reaching the forest floor, decreasing the likelihood of slips.

10

How DOC manages wild animals

Management operations for deer, goats, pigs and tahr can differ between sites. DOC's management approach and priorities are based on several factors, including:

- the biodiversity value of a site (for example, the amount and types of native plants that are present)
- the impact the management operations will have on vegetation
- other threats and pressures at a site (for example, the presence of possums or the risk of wild animals reinvading from neighbouring land)
- the feasibility of carrying out operations (for example, what the terrain is like and how much an operation might cost)
- other conservation activities happening at a site.

Methods used to manage wild animals

Hunting and shooting

Aerial and ground hunting and shooting are the most common methods used for wild animal management. DOC uses a combination of professional hunters and staff with highly trained indicator or bailing dogs for locating animals for removal. Trapping and mustering are also used.

Biosecurity work

Biosecurity measures are used to prevent further species from being introduced, limit the spread of introduced wild animals and remove incursions. This work could include fencing, compliance checks for deer farms or carrying out eradications when an incursion has occurred on land that is meant to be free from wild animals.

Research and monitoring

Research and monitoring are used to understand population numbers and the impact these have on plants and ecosystems. These are important tools in wild animal management and are used to prioritise where management occurs.

Working together can make a difference

Introduced browsing wild animals move across both public and private land. Iwi, hapū and whānau, and people who farm, hunt and work in government are working together to ensure that priority conservation areas can be better managed and protected for the future.

Through the Programme, DOC is:

- working with Northland Regional Council to achieve a deer-free Northland
- working with Tiakina Kauri to develop a strategy and undertake specific actions to improve our understanding of pig management – this includes research and development of tools and best practice for both monitoring and controlling wild pigs

- prioritising controlling tahr in national parks to protect these special places and tahr populations outside the feral range to prevent further spread and impact
- undertaking regular goat control to reduce pressure on vulnerable ecosystems
- partnering with Ngāti Porou and Te Whānau ā Apanui to restore the Raukūmara forest through the Raukūmara Pae Maunga project
- contributing funding to a hunter-led conservation project by the Sika Foundation that is managing deer numbers in Kaimanawa Forest Park.





How to get involved

DOC cannot do this work alone. If we all play a part to protect Aotearoa New Zealand's native plants and habitats, the difference will be even greater and longer lasting. There are lots of ways that you can help.

Report sightings in wild-animal-free areas

If you encounter a wild animal in an area that DOC is working to keep wild animal free, report it to wildanimalmanagement@doc.govt.nz.

If you are in Northland and spot a wild deer, call the 24/7 Deer Hotline on **0800 FIND DEER** (0800 346 333).

Take part in a hunt

There is an opportunity to align hunting efforts with conservation.
Hunting is a valued activity in Aotearoa New Zealand, and people hunt deer, goats and pigs for food, business and recreation. To find a hunting area near you, and for more information, visit www.doc.govt.nz/hunting.

Tell DOC about the biodiversity and threats you see

Hunters often access Aotearoa New Zealand's remote backcountry and wilderness areas. Our DOC offices get valuable information about nature and biodiversity from hunters – for example, about sightings of whio/blue duck or reports of invasive weeds. Contact a DOC office with your observations and reports and help safeguard Aotearoa New Zealand's unique biodiversity.

Manage wild animal numbers on your land

If you are a landowner, you can control wild animal numbers by contracting hunting professionals or giving access to recreational hunters (who can be contacted through a local hunting club) and collaborating with other landowners or organisations near you. Wild animals do not respect property boundaries, so work with your neighbours to increase the effectiveness of your management.

If you are a deer farmer, make sure you comply with the appropriate deer fencing and permit regulations for your area.

Contribute to other conservation initiatives

To get involved with community conservation groups working around the country, visit www.doc.govt.nz/volunteergroups.

Get advice from DOC's Wild Animals Management Team

DOC's team can give you advice on methods, best practice, safety, legislation and regulations. They can also connect you with other groups or organisations in your region. Email the team at wildanimalmanagement@doc.govt.nz.

For more information about DOC's Wild Animals Management Programme, visit www.doc.govt.nz/wild-animals.

14

