



Introduction

The Department of Conservation's (DOC's) Wild Animals Management Programme (the Programme) manages populations of wild goats, deer, pigs, and tahr at priority sites to protect native plants and habitats and prevent the spread of wild animals into new areas.

DOC is working towards achieving the goals of Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy (ANZBS). ANZBS sets a vision for biodiversity in Aotearoa New Zealand from 2020 to 2050. Objective 11 in the strategy is to ensure "biological threats and pressures are reduced through management". It describes three goals for reducing the impact of introduced wild animals or 'browsers'.

In June 2022, Te Ara ki Mua was launched, a national framework to improve the management of deer, tahr, chamois, goats, and pigs. In partnership with whānau, hapū, and iwi, DOC and the New Zealand Game Animal Council will implement this framework. It is designed to support everyone involved (from landowners to central government) to work collectively to achieve the ANZBS goals. The framework describes actions to reduce the impact of wild animals while balancing different cultural and recreational values.

DOC is responsible for managing wild animals on public conservation land and has a leadership role in the wild animal management sector.

This document provides a summary of DOC's Programme achievements over the 2022/23 financial year and plans for the 2023/24 year.

Wild deer, goats, pigs, and tahr: Why management matters

Wild goats, deer, pigs, and tahr eat and damage native plants and habitats – in many places, they threaten how ecosystems function. They can change the type and number of plants present, change soil composition, and prevent forest regeneration. Managing wild animals to reverse these effects will help protect native plants and habitats and increase forests' health and resilience in dealing with climate change.

DOC monitors sites on public conservation land across the country for the faecal pellets (droppings) of deer, goats, sheep, tahr, and chamois. This provides our teams with an indicator of wild animal numbers. From 2013 to 2022, the number of faecal pellets almost doubled, indicating growth in wild animal populations.



Forest damage by wild goats. *Photo: Daniel Van der Lubbe, DOC.*



Highlights of 2022/23

It has been a big year for the Programme. Budget 2022 saw a \$30-million increase in investment in deer management and goat control over the next four years.

Increasing capacity and capability to deliver

The extra investment from Budget 2022 allowed the Programme to build internal capacity and capability to enhance delivery. DOC expanded the existing programme with an additional \$5.2 million for the 2022/23 financial year.

This year, the Programme has:

- established a national programme team to increase efficiencies, work at a larger scale, and deliver on the extra investment
- set up a centralised procurement process for professional ground hunters
- made improvements to operational best practice and set up a wild goat best practice network group
- improved the Safe Aerial Hunter System and rolled out a new aerial hunting training course.

In addition, the Programme developed a tool to help DOC make better decisions about where to manage wild animals. There are more places with wild animals than we can afford to actively work in, so it's crucial we are clear about where we should focus our efforts and why. To assist with this, we've created a tool that considers things like the environment, the types of animals present, and the threats those animals pose. It also considers practical information, like how easy it is to do the work, how much the work will cost, and who else is working there. This tool will help us decide where to prioritise our efforts when managing wild animals. We will be improving this tool over time.

Management and control operations

This year, DOC's Regional Operation teams substantially increased their operational delivery work.

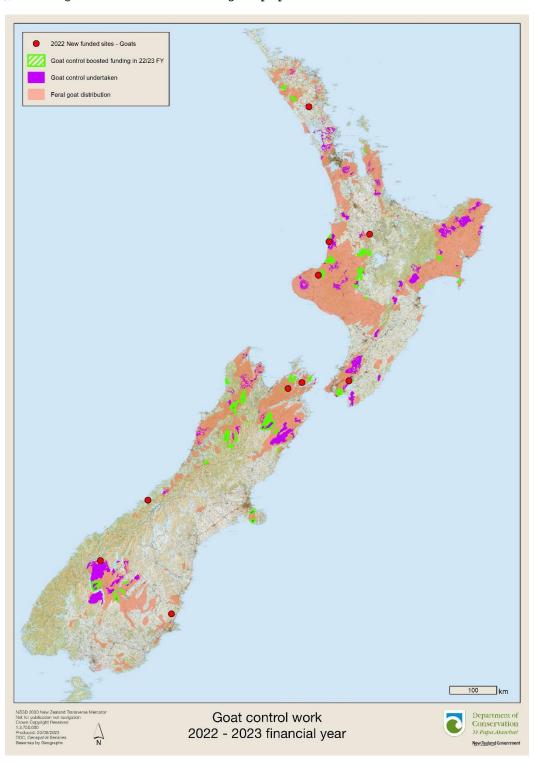
Wild deer and goats are present throughout New Zealand, becoming more widespread and abundant and having an impact on ecosystems across the country.

In 2022/23, deer management and goat control had a significant boost, with a particular focus on goat control. Investment increased by \$2.7 million. We delivered an additional 196,000 hectares of goat control and an additional 48,000 hectares of deer control over the year.

As well as control operations, other operational work has included: conducting compliance checks on deer farms, undertaking surveys to detect pockets of wild deer in Northland, and carrying out eradication checks.

For example, this year with the extra investment, the Programme was able to run an intensive check to determine the success of removing goats from the Crooked Mary / Lake Christabel block in the western South Island. No traces of goats were found. Thanks to the successful removal operations over several years, funding and efforts can now move from ongoing control at this site to goat control at other priority conservation sites.

In 2022/23, the Programme controlled wild goat populations at the sites shown on the map below.





Tahr control programme

The Programme developed an annual operational plan to control tahr and achieve the objectives of the Himalayan Thar Management Policy 1991 and Himalayan Thar (tahr) Control Plan 1993.

The tahr control operational plan for 2022/23 was successfully delivered. DOC's official control operations removed over 6,300 tahr from July 2022 to June 2023, including over 900 through ground-based hunting in the Hooker-Landsborough and Adams Wilderness Areas. Recreational hunting from known sources (eg, West Coast tahr ballots) removed over 1,300 additional animals; the unreported recreational contribution was likely to be significantly more.

2022/23 was also a big year for tahr monitoring. We completed a three-year process to remeasure historic tussock plots to assess browse impact. Additionally, we piloted a new tahr browse impact assessment method and initiated surveys to update estimates on the tahr population within management units. Results/analyses from all three projects are expected during 2023/24.

Bradshaw Deer Control Programme, Fiordland: Protecting alpine ecosystems

Managing deer in the Bradshaw region of Fiordland National Park helps protect the deer-free Secretary Island and the Murchison Mountains, home of the takahē. This is important as we need to protect takahē food species from deer browsing.



Takahē in the Murchison Mountains, Fiordland National Park. Photo: James Reardon.org.



Historically, alpine plant communities sensitive to deer browse have been protected by commercial venison recovery operators removing deer. This was until the industry experienced a downturn between 2019 and 2023.

A target of more than 600 deer was set to help protect the alpine vegetation, informed by an alpine deer browse monitoring programme. In the 2022 season, 751 deer were successfully removed from a combination of commercial venison recovery (319 removed) and DOC-led non-commercial control (442 removed).

Coordination and collaboration

Wild animals move across both public and private land. Increasing coordination between iwi/hapū, landowners, agencies, and hunters has been a key focus for the Programme to effectively manage wild animals.

The Programme has:

- established a national coordination group (The group is a forum to prioritise and coordinate actions for effective wild animal management. There is a diverse range of organisations involved, including the conservation sector, hunting sector, Māori organisations, primary industry groups, as well as research institutions.)
- worked with Northland Regional Council to support a deer-free Northland vision and plan an eradication for Russell Forest
- contributed funding to support a Jobs for Nature project with Sika Foundation to manage deer in the Kaimanawa Remote Experience Zone, which is approximately 15,000 hectares. In 2022, as part of the Sika Foundation's Adaptive Deer Management Plan, a total of 338 animals were removed, using a combination of facilitated recreational hunter access and professional ground and aerial hunting. In early 2023, monitoring began on seedling growth and faecal pellet counts to help understand changes in deer abundance. Deer management operations will continue in 2023/24, and we will continue monitoring to

understand how the forest is recovering in response to these efforts.



Canopy collapse in Kaimanawa Forest due to a range of natural factors. Deer likely play a role in preventing canopy trees from regenerating. *Photo: Sika Foundation.*



Trail cam footage of sika deer in Kaimanawa Forest. Deer can prevent forest regeneration. *Photo: Sika Foundation.*



Outlook for 2023/24

Wild animal management is complex and resource intensive, and different sites have different needs.

Management and control operations

The Programme priorities for the upcoming year will be to maintain (or achieve) wild-animal-free areas, prevent wild animals spreading into new areas, and enhance and expand existing operations.

The Programme aims to expand deer management and goat control work where possible. Plans for 2023/24 include:

- intensifying goat control and expanding into new areas
- continuing and expanding deer management in Kaimanawa Forest in partnership with the Sika Foundation
- continuing and expanding deer management in Fiordland
- implementing the 2023/24 tahr control operational plan.

protect deer-free areas, including a significant focus on Northland, along with islands in Fiordland and the Marlborough Sounds.

Prioritising work comes with tough choices, for example, keeping areas deer and goat free comes at the expense of carrying out work in other places to manage numbers.

Coordination and collaboration

- Draft a Deer Management Plan for Ruahine Forest Park with the community.
- Work with regional councils to develop plans for wild animal management across private and public land.
- Work with the Game Animal Council to better align recreational and commercial hunting with conservation objectives.
- Run a national wild goat hunting competition in partnership with the New Zealand Deerstalkers Association.
- Continue to work with Tiakina Kauri of Biosecurity New Zealand to support pig management in kauri lands - pigs are thought to be the main wild animal vector of kauri dieback.



Wild Deer Free Northland

The Programme will continue working with Northland Regional Council to achieve a wild-deer-free Northland. This will include sika eradication in Russell Forest and compliance work on deer

To complement Wild Deer Free Northland, operations will also aim to limit wild goats to safeguard native plants from both deer and goat damage.

Northland is home to several unique native plant species, including the pictured native *hibiscus diversifolius* – a threatened plant of the Northland region that is highly palatable to introduced wild animals. Managing wild animals can help safeguard native plants like this one.

🔯 Native hibiscus diversifolius in flower, Te Paki, Far North. Credit: Peter James de Lange.





DOC staff, with their dogs, on a wild goat eradication check Photo: Owen Kilgour, DOC.

Increasing capacity and capability to deliver

The Programme will continue to build our internal capacity and capability to work at a larger scale and deliver on the extra investment. In 2023/24, we plan to:

- continue with monitoring design work to assess the links between deer and goat control, abundance, and ecological outcomes (This knowledge will be critical for future investment and effective management.)
- increase communications and share the story of DOC's wild animal management work to help raise awareness of the issue, opportunities, and encourage collective action
- run workshops with DOC's professional hunting contractors to understand challenges

they face and ensure the hunting sector has the necessary tools and support for the job

- scope a review on policies and legislation related to wild animal management to understand how such policies can be best applied across agencies
- begin upgrading the hunting permit system
- finalise the independent system analysis on wild animal recovery operations to better understand potential issues and improvements
- initiate a similar analysis for aerially assisted trophy hunting
- investigate the benefits of standardising our ammunition supply and centralising our procurement
- implement a new policy for detecting wild animals using trained dogs to maintain consistent and reliable standards.