

5.2.8 Animal Pests And Wild Animals

- managing the effects that animal pests have on fulfilling statutory obligations to adjoining landowners and indigenous biodiversity
- controlling and eradicating wild animals where necessary and practicable
- managing recreational hunting areas (RHAs)

Current Situation

Background

Both animal pests and wild animals pose threats to natural values in Canterbury. It is important to differentiate between animal pests and wild animals for statutory purposes. The Department defines an animal pest as any animal that poses an existing or potential threat to indigenous ecosystems processes, habitats or species. Wild animals are defined in the Wild Animal Control Act. However, the basic management principles and control techniques are identical in both. These are:

- prioritising management on the significance of the actual or potential impacts of the pest or wild animal on identified natural values
- controlling on the basis of achievable goals with present resources and technology
- the level of control applied must be the method that is best able to meet the natural values threatened
- areas for control will be managed as discrete management units
- The Department will control wild animals where recreational and commercial hunting is insufficient to maintain natural values

Animal Pests

Various animal pests pose major threats to natural values in Canterbury. Some of the most significant are:

- the impacts rabbits have in dry intermontane basins on the tussock grassland ecosystems, particularly in the Waitaki basin.
- predation on native riverbed birds by rats, mustelids and cats
- the impacts of wallabies on native tussock grasslands and forest remnants in the Pareora area
- predation by mustelids and rats on forest birds, particularly in beech forest ecosystems in the Waimakariri and Hurunui areas
- the impacts of brushtail possums on podocarp hardwood forests on Banks Peninsula
- the impacts of wasps on beech forest ecosystems (including invertebrates, birds and reptiles) and on recreation
- the impacts of thar on the tussock grasslands and shrublands of the central Southern Alps/Kā Tiritiri o te Moana and inland mountain ranges
- predation by cats on wildlife, particularly in areas adjacent to dwellings
- the threat from dogs to ground-dwelling birds, particularly kiwi (see 5.3.4 Visitor Impacts and Safety).

Current pest management in Canterbury is dominated by the need to meet statutory requirements for rabbit and wallaby control. At present these animal pests are under control on lands managed by the Department, enabling natural values to be maintained.

However, predators such as mustelids, rats and wasps are having major impacts on many indigenous ecosystems, birds, invertebrates and reptiles. The Department released a national wasp control plan in 1995.

Important areas where a significant problem either exists or could develop include:

- stoats predating forest bird species such as yellowhead/ mohua and great-spotted kiwi/rotoa
- wasps competing for food with birds such as South Island kākā and threatening recreational experiences in northern montane beech forests
- ferrets and cats predating penguins around Banks Peninsula
- hares browsing on mountain grasslands

Some gamebirds (e.g. Canada geese) are considered by some people to be a pest but their management is as a gamebird by the Fish and Game Councils with whom the Department has close liaison (see 5.1.4 Communication and Liaison).

Wild Animals

Various wild animals pose threats to natural values in Canterbury. The most significant are:

- the impacts of deer, thar and chamois on alpine, beech forest and subalpine vegetation
- the impacts of goats on podocarp and hardwood forests on Banks Peninsula

Some wild animals have significant commercial and recreational values; for example, deer for farming, feral meat recovery and recreational hunting.

Issues that require additional management resources include:

- monitoring the trends of deer, chamois, wallaby and thar in alpine grasslands and beech forests
- managing RHAs in accordance with national policy
- gazettement areas for permitting or prohibiting deer species
- authorising safari hunting

Himalayan Thar

The Himalayan Thar Control Plan 1993 implements the Himalayan Thar Management Policy 1991. The plan outlines the management necessary to achieve the sustained control of thar; prescribes intervention levels (which vary between areas) to which thar populations are to be reduced and kept below to avoid unacceptable damage to natural values. The policy recognises that thar cause impacts on alpine ecosystems and that they provide both recreational and commercial hunting opportunities. The plan is due to be reviewed in 1998.

Recreational Hunting Areas (RHAs)

Canterbury has two recreational hunting areas, one overlying Lake Sumner Conservation Park and the other over Mount Thomas and Mount Oxford conservation areas. Both are popular with hunters. These RHAs are an example of the extensive range of hunting opportunities available in Canterbury. The purpose of RHAs is to protect recreational hunting opportunities from commercial exploitation. Pressure from commercial hunting has declined dramatically since it peaked in the 1970s. It no longer poses any significant threat to recreational hunting opportunities in most areas, however it is a threat in the Lake Sumner and Mount Oxford RHAs. This situation is not expected to change over the next five to ten years. National parks, reserves and conservation areas also provide ample scope for hunting opportunities.

Statutory Framework

General

The Department's animal pests and wild animal management work is given general legislative effect through the Conservation Act 1987, the Reserves Act 1977 and the National Parks Act 1980, that all seek to protect natural values.

More specific legislation includes the following:

Wildlife Act 1953

The *Wildlife Act 1953* specifies animals to be subject to the *Wild Animal Control Act*, and also the various controls on bird species, including wildlife causing damage. Section 7C provides for the Minister to authorise the farming of unprotected animals such as ferret.

Biosecurity Act

The Biosecurity Act 1993 is legislation under which the control of animal and plant pests can be undertaken. The Act enables various parties to take a range of measures to ensure animal pests are adequately controlled through preparing national and regional animal pest management strategies. A strategy specifies the actions that must be taken to achieve control of a pest, the management agency responsible for implementing the strategy, how the strategy will be funded, the extent that land occupiers are required to be involved, and specifies enforcement measures to ensure compliance with these requirements. Provisions of the Agricultural Pests Destruction Act 1967 remain in effect during a transitional period.

The Ministry of Agriculture and the Animal Health Board are responsible for pest control for animal health, such as controlling possums for their tuberculosis threat. The Department liaises with them where control for natural values and animal health overlaps, or otherwise occurs on lands managed by the Department.

Wild Animal Control Act

The Wild Animal Control Act 1977 defines wild animals (for example, deer, thar, chamois, goats and pigs) and enables the Department to control wild animals generally and to eradicate wild animals where necessary and practical. The focus of the Act is to 'ensure concerted action against the damaging effects of wild animals on vegetation, soils, waters and wildlife'.

The Wild Animal Control Act also provides for Recreational Hunting Areas (RHAs) under s.27. In these areas, recreational hunting is to be the main form of wild animal control. Under the Act, control plans for RHAs must be revised at intervals of no greater than five years. Section 28 of the Act requires that each recreational hunting area be managed under a wild animal control plan, and that this be a publicly notified process.

A Himalayan thar control plan was approved in 1993. A Department of Conservation national possum control plan and a national feral goat control plan were approved in 1993. A national deer control plan is in preparation.

Safari parks, under section 12B of the Wild Animal Control Act, must be authorised by a permit. A safari park is defined as 'a farm where income is derived from wild animals being hunted on the farm'.

For deer farming the Minister has the powers to gazette areas or places where the farming of all deer or particular species of deer is either permitted or prohibited under section 12A(2) of the Wild Animal Control Act. Deer species not present in the wild in the South Island, such as sika and rusa deer are totally prohibited.

Under section 24 of the Wild Animal Control Act, the Director-General may license operators by permit for Wild Animal Recovery Services (WARS), and determine the maximum number of aircraft to be permitted to operate for any species of wild animal in the Conservancy or area. The Director-General needs to determine the optimum density of wild animals to achieve the purposes of this Act. The relevant criteria in considering whether to amend, suspend, or cancel the permit are given in section 26 (4) of the Act.

Freshwater Fisheries Regulations 1983

These regulations specify fish declared to be noxious fish (see 5.2.4 Freshwater Ecosystems) and available actions to control them.

Objectives

- To identify significant animal pests on land managed by the Department, assess the risks they pose to natural values, and undertake control where it best contributes to indigenous biodiversity and landscape protection.
- To fulfil responsibilities for pest control and maintain good neighbour relationships with all adjoining landholders by co-operatively undertaking boundary pest control responsibilities as specified in regional pest management strategies.
- To foster recreational hunting in Canterbury to protect indigenous plants, reduce wild animal densities, provide recreational satisfaction and reduce management costs.
- To authorise a competitive range of operators for wild animal recovery services to efficiently reduce the adverse effects of wild animals on vegetation, soil, water and wildlife.
- To approve or prohibit deer farming of all or certain species of deer based on the presence of feral deer in the area, the impacts of escaped deer on native flora and fauna and control costs.
- To approve appropriate safari parks where the risk of wild animals escaping can be avoided, remedied or mitigated.

Implementation

The Conservancy will:

1. Prepare and maintain animal pest and wild animal strategies to provide clear priorities for pest and wild animal control and monitoring programmes required for their management. Each document will identify where the species occurs, its impact on natural values, intervention levels, and where and how controls will be implemented. In addition, all will set practical performance levels that are measurable and auditable. All will be in accordance with current national control strategies or guidelines. The strategies will assist in the implementation and achievement of this CMS.
2. Prepare contingency plans on how the Conservancy will react to liberations or escapees. If illegal or accidental introductions occur in environmentally important areas, all practical steps will be taken to remove them. Where possible, the cost of these operations will be recovered from those responsible for the release.

3. Focus pest control where there are indigenous biodiversity and landscape conservation priorities.
4. Undertake control operations when rabbit densities reach or exceed level 3 on the MacLean Scale, and follow-up operations where appropriate. (Follow-up operations may be at less than level 3 of the MacLean Scale.)
5. Meet requirements of national or regional pest management strategies prepared in accordance with the Biosecurity Act (such as a rabbit strategy) where the Crown agrees to be bound by that plan.
6. Identify key areas of land managed by the Department and set priorities for pest and wild animal management in those areas where they are identified as a threat. (5.2.3 Land Ecosystems, Implementation 3 provides the basis for assessing natural value priorities). Priorities for management will then be set on the basis of:
 - the natural significance of the value identified
 - the types and level of threat to each identified value
 - the value of the management gain from the effort directed at the threat to each identified value
7. Select from the following control approaches to best use available resources to minimise long-term management costs:
 - Eradication: the permanent removal of all individuals of a species from a location. There must be:
 - no or a very low, probability of re-invasion from outside sources;
 - effective control methods available which can:
 - target all individuals in the population
 - remove individuals faster than the rate of increase of the species
 - still remove individuals at very low densities
 - certainty that the eradication programme can be completed.
 - Sustained control: ongoing, regular control that reduces animal numbers and maintains them at a lower pre-determined level which protects the values under threat. This can be undertaken by the Department or by sustained harvesting, by recreational and/or commercial hunters.
 - Zero density: total eradication in a particular area and the ongoing control of any animals migrating into that area.
 - No solution: no management solution exists at present for technical reasons or because research is needed.
8. Liaise with individuals and groups, including adjacent landholders, seeking co-operation and assistance to achieve pest and wild animal control objectives and the protection of natural values.
9. Co-ordinate control operations with adjoining landholders or administering authorities where possible, such as the Ministry of Agriculture, the Animal Health Board and regional councils, where animal health and natural value control overlap.
10. Train staff in the safe handling, use and storage of poisons, traps and other control techniques, and comply with all storage and other safety requirements.
11. Advocate for suitable poison application rules in regional plans.
12. Advocate through district and regional plans to raise awareness of threats posed by animal pests and wild animals to indigenous ecosystems.
13. Participate in educational programmes to raise awareness of animal pests and wild animal threats, in particular:
 - the deliberate spread of animal pests
 - the threats animal pests pose to indigenous biodiversity and the need for control techniques
14. Support and encourage research into the following aspects of pest and wild animal control:
 - improving biological control for targeted species including possum, rabbits, stoat and wasps
 - improving control techniques for targeted predators including stoat, rat species and wasps
 - improving the cost-effectiveness of pest and wild animal control
 - improving the effectiveness of recreational hunting
 - assessing recovered carcasses for disease, such as bovine tuberculosis
15. Undertake operational monitoring of all pest control operations, including the following:
 - pre-monitoring of natural condition and animal densities
 - post-operation density performance monitoring to determine project effectiveness
 - various post-operation monitoring of natural values to determine improvements in natural quality
16. Control wild animals such as deer, pig, chamois and thar in most areas by recreational hunters and/or commercial operators, unless monitoring shows this to be ineffective.
17. Continue to assess recreational hunting in RHAs for its effectiveness in adequately protecting the vegetation, soils, water and wildlife of the area.

18. Vary or revise the following wild animal control plans at least every five years or sooner as required, in accordance with the Wild Animal Control Act 1977:
 - Oxford Recreational Hunting Area (Griffiths, 1982)
 - Lake Sumner Recreational Hunting Area (Belton, 1986)
 - Himalayan Thar Control Plan 1993
19. Encourage and allow for recreational hunting by permit only on appropriate land managed by the Conservancy.
20. Determine priority areas for wild animal control and relevant wild animal density thresholds based on their impacts on indigenous vegetation, and the significance of that vegetation.
21. Determine the number of aircraft to be permitted under a WARS licence. This may be for any species of wild animal, for the Conservancy, or any part thereof having regard to:
 - the provisions of the Wild Animal Control Act
 - the requirement to protect native flora and fauna
 - conflict with other legitimate uses of lands managed by the Department
22. Recommend to the Minister to gazette areas where the farming of any or all deer species may be permitted or prohibited based on the following criteria:
 - whether feral deer of the same species are already established in the area
 - whether deer-induced modification of the environment (if the deer escape) is likely to differ from the modification of the environment caused by introduced animals already present
 - whether the presence of that species of deer is likely to cause additional control costs (section 5.5.6 Environmental Protection applies)
23. Recommend to the Minister the authorisation of the farming of unprotected animals, pursuant to the Wildlife Act, where adverse effects can be avoided, remedied or mitigated (5.5.6 Environmental Protection applies).
24. Support Fish and Game Councils in the implementation of the South Island Canada Goose Management Plan by:
 - allowing access to land managed by the Department to control geese when compatible with other natural, historic and recreation values
 - undertaking Canada goose management, if required

Priorities

Primary

The existing ongoing departmental control programmes (e.g. possums) will continue to have the highest priority, along with the requirements of regional pest management strategies.

Secondary

The secondary priority is the protection of indigenous biodiversity and landscapes that fall outside the programmes. Criteria for this are established in section 5.2.3 (Land Ecosystems, Implementation 3).

As part of this priority, the existing RHAs will be reviewed, in accordance with a proposed national deer control plan, to ensure they are an effective and efficient management tool for wild animal control.

Priority Sites and Species

Priority sites have been determined on the following basis:

- meeting the requirements of national priorities under the Department's national possum plan (1993), the national feral goat control plan (1993) and the national wasp control plan (1995)
- meeting the needs of the Himalayan thar control plan (1993)
- reflecting qualitative assessments of key ecosystems and species at risk from animal pests and wild animals in Canterbury
- reflecting the impact the animal pest has on recreational users

All eight of the priorities in Table 23 seek to protect indigenous biodiversity, although it is acknowledged that wasp control is primarily for recreational reasons until new technology is developed. These priorities will form an interim basis for directing major animal pest and wild animal control effort in Canterbury until animal pest and wild animal strategies are completed. If an ecosystem protection strategy is prepared (see 5.2.3 Land Ecosystems) this may also affect priorities.

Less Achievable Tasks

Tasks that may not be undertaken or completed include:

- eradicating any of the currently acclimatised species
- possum control for the purpose of protecting beech forest ecosystems
- wide-scale wasp control for the protection of beech forests, native invertebrates, birds and recreationists
- chamois control in North Canterbury for the protection of alpine and subalpine vegetation
- stoat, other mustelid, cat or rat control for the protection of native invertebrates and birds

Table 23: Key Animal Pests and Wild Animals Priorities

Theme	Issue	Methods	Result Sought	Place
Podocarp forest - possums	Palatable plant species, some of which are rare or at their distributional limit	1. Chemical 2. Trapping	Possum densities reduced to levels at which defined natural values are not compromised	Banks Peninsula
Podocarp forest, shrubland and tussock grasslands - goats	Palatable plant species, some of which are rare or at their distributional limit	1. Shooting 2. Dog control	Goat numbers reduced and managed to low densities, protecting defined natural values	Banks Peninsula
Mountain lands and tussock grasslands - thar	Tussock grasslands at high altitude and some highly palatable plant species	1. Recreational hunting 2. Commerical hunting 3. Departmental control	Thar numbers controlled to appropriate density, protecting defined natural values as identified in the thar control plan	Waitaki Rangitata
Grasslands, herbfields and riverbeds - rabbits	Tussock grassland communities and rare wildlife through the predator-prey relationship	1. Chemical 2. Shooting 3. Rabbit fencing	Natural values are protected by maintaining numbers below prescribed densities	Waitaki
Podocarp forests and tussock grassland in foothill areas - wallaby	Palatable native plants	1. Chemical 2. Shooting	Wallaby control plan implemented thereby ensuring natural values are maintained	Pareora
Braided riverbeds - mustelids and cats	Ground-nesting birds such as black stilt, wrybill and black-fronted tern	Trapping	Integrated habitat restoration and pest control, lowering predator take of riverbed bird populations	Waitaki (Project River Recovery)
Beech forest bird communities - stoats	Kaka, yellowhead, great-spotted kiwi	1. Hurunui mainland island habitat 2. Trapping	Pest control targeted, lowering predator take. Forest bird populations maintained and enhanced	Waimakariri (Arthur's Pass National Park) Hurunui (Lake Sumner Conservation Park)
Beech forest - deer	Lack of ecological objectives for RHA management	1. Recreational hunting 2. Monitoring	Recreational Hunting contributing to maintaining a desired ecological condition	Puketeraki (Mount Oxford)