

# Pests and biosecurity

*A number of plant and animal pests and the disease bovine Tb pose serious economic and environmental threats to Canterbury, affecting production from land, increasing the risk of soil erosion, reducing the vigour and diversity of native vegetation and killing native birds and bats.*

## Key issues for 2008/09

**Threat posed by bovine Tb:** Bovine Tb continues to be a threat to deer and cattle exports. Implementing the National Pest Management Strategy is funded jointly by the Animal Health Board and Environment Canterbury. Large-scale operations are carried out to control feral vectors of bovine Tb, including possums and ferrets. Programmes under the current strategy are scheduled to end in 2012/13.

**Animal pest threats to production from land:** While rabbit haemorrhagic disease has greatly reduced rabbit levels, there are signs in some areas that its effectiveness is reducing and it is expected that conventional control methods will increasingly be required. Continued effort is required to control wallabies within the wallaby containment area. Ongoing effort is required to eradicate the small residual rook population.

**Plant pest threats to production from land:** Containing the spread of plant pests such as gorse and broom, and reducing infestation of nassella tussock requires ongoing effort to ensure that land is not lost from production. Ongoing effort is required to eliminate plants identified as total control plant pests<sup>1</sup>.

**Animal and plant pest threats to biodiversity:** Protection of indigenous biodiversity requires ongoing management to limit the impact of animal pests and the spread of specific plant pests such as wilding trees, boneseed, old man's beard and wild thyme.

### » What's changed since the 2006-16 LTCCP?

The Varroa bee mite has been found in the South Island, resulting in the Varroa Agency Board advising that no contribution is required from 2007/08 onwards.

**Note:** From 1 July 2008 the Animal Health Board will take direct control of bovine Tb vector control management services currently provided by Environment Canterbury. For 2008/09 Environment Canterbury will continue to provide management supervision, with the Board contracting vector control and monitoring activities directly. Environment Canterbury will continue to collect the regional share through a targeted rate in 2008/09 to contribute to the national pest management strategy.

<sup>1</sup> Total control plants are: African feather grass, African love grass, baccharis, bur daisy, coltsfoot, entire marshwort, saffron thistle, taurian thistle and white-edged nightshade.

The pests and biosecurity group of activities contributes to the following community outcomes:

- A strong economy
- Business and farming activities do not harm the environment
- Environment, in general, is to be looked after
- Native plants and animals can thrive

Environment Canterbury's role is as the lead agency for managing pests under the regional pest management strategy and as a supporting agency for pests under national pest management strategies.

# Levels of service

These services deliver Environment Canterbury's contribution to the community outcomes.

## Uncertainties

For 2008/09 the following is uncertain:

- a) the future effectiveness of rabbit haemorrhagic disease.
- b) the level of Government funding for regional council implementation of the National Pest Management Strategy for bovine Tb.

### » What's changed since the 2006-16 LTCCP?

Previously, the level of Government funding for implementation of the National Pest Management Strategy for bovine Tb beyond 2012/13 was uncertain.

The Animal Health Board has announced that it intends to resume direct control of vector management operations.

## Assumptions

For 2008/09 it is assumed that:

- a) rabbit haemorrhagic disease will become less effective, particularly in rabbit-prone areas.
- b) until the delivery of bovine Tb vector control programme is finalised it is assumed that Environment Canterbury will continue to provide this service.
- c) community-initiated programmes for bovine Tb will assist to ensure that the gains made by the National Pest Management Strategy in relation to possum reductions are not lost.
- d) no budget provision has been made to respond to new pest incursions.

### » What's changed since the 2006-16 LTCCP?

No change.

## 1. Eradicating total control plant pests to reduce their impact on production from land and on biodiversity

### Measure

The number of sites infested with total control plants where seed is set.

### Target

None.

Number of sites	
2004/05	None
2005/06	None
2006/07	None
2007/08	Forecast: none
2008/09	Target: none
2009/10 to 2015/16	Target: none

Source: Environment Canterbury

Note: Total control plant pests are African feather grass, African love grass, baccharis, bur daisy, coltsfoot, entire marshwort, saffron thistle and white-edged nightshade. There were 216 infested sites at June 2005.

### » What's changed since the 2006-16 LTCCP?

No change.

## 2. Regulating the spread of gorse and broom to limit the impact on production from land

### Measure

The change in the area of farm land affected by gorse and broom.

### Target

No change.

Source: Environment Canterbury.

Note: The use of satellite technology to monitor changes in extent of gorse and broom infestation is currently under development. It is expected to have a report on this in 2008/09. This could further delay reporting if this technique is unsuccessful.

### » What's changed since the 2006-16 LTCCP?

This is a new measure and target that was proposed in the 2006-16 LTCCP and added in the 2007/08 Annual Plan.

## 3. Eradicating boneseed from outside the Port Hills zone to protect indigenous biodiversity

### Measure

The area outside the Port Hills zone infested with boneseed subject to control plan to prevent seed setting.

### Target

See table below.

Total area under control	
2003/04	Nil ha
2004/05	250ha
2005/06	373ha
2006/07	373ha
2007/08	Forecast: 373ha
2008/09	Target: 373ha
2009/10	Target: 373ha
2010/11	Target: 373ha
2011/12	Target: 373ha
2012/13	Target: 373ha
2013/14	Target: 373ha
2014/15	Target: 373ha
2015/16	Target: 373ha

Source: Environment Canterbury

Note: Control work is also being undertaken on the extensive boneseed infestation inside the Port Hills zone (approximately 2,950ha) with a view to reducing the infested area by 20% (approximately 600ha) by 2015.

### » What's changed since the 2006-16 LTCCP?

No change.

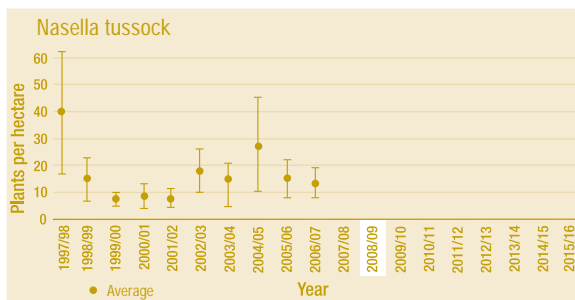
#### 4. Regulating the spread of nassella tussock to reduce the impact on production from land

##### Measure

The number of nassella tussock plants per hectare (based on randomly located transects).

##### Target

A decline in the number of nassella tussock plants per hectare.



Source: Environment Canterbury

Note: Error bars show the range within which 95% of measurements lie. The dot shows the average of all measurements.

##### » What's changed since the 2006-16 LTCCP?

No change.

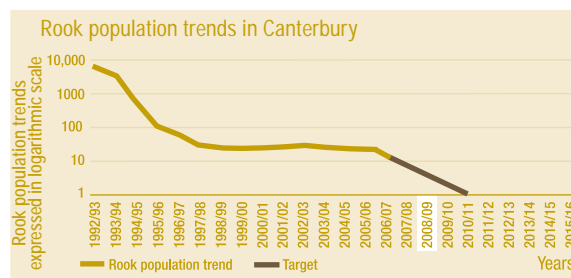
#### 5. Eradicating rooks to reduce their impact on production from land

##### Measure

The number of rooks.

##### Target

All rooks eradicated by 2011.



Source: Environment Canterbury

##### » What's changed since the 2006-16 LTCCP?

No change.

#### 6. Regulating the density of rabbits to limit their impact on production from land and on the environment

##### Measure

The effectiveness of rabbit control programmes or rabbit haemorrhagic disease on properties where rabbit densities have exceeded level 3 on the modified McLean scale, in reducing the density to below level 3.

##### Target

100% effective on all properties.

Effectiveness	
2005/06	100%
2006/07	100%
2008/09	Target: 100%
2009/10 to 2015/16	Target: 100%

Source: Environment Canterbury

Note: The modified McLean scale has 8 levels, ranging from 1, no rabbits present, to 8 where rabbits are likely to be seen in extremely large numbers. At level 3 odd rabbits are seen; signs and some buck heaps show up, with pellet heaps spaced 10m or more apart on average (refer to the Regional Pest Management Strategy 2005 for further information). Where rabbit levels exceed level 3 and rabbit haemorrhagic disease is likely to be effective, no formal control programme is required.

##### » What's changed since the 2006-16 LTCCP?

No change.

## 7. Regulating the spread and density of wallabies to limit their impact on biodiversity and production from land

### Measure 1

The effectiveness of wallaby control programmes, on properties in the wallaby containment area where wallaby densities have exceeded level 3 on the Guilford wallaby infestation scale, in reducing the density to below level 3.

### Target

100% effective on all properties.

Effectiveness	
2005/06	100%
2006/07	100%
2007/08	Forecast: 100%
2008/09	Target: 100%
2009/10 to 2015/16	Target: 100%

Source: Environment Canterbury

Note: The Guilford wallaby infestation scale has five levels, ranging from 1, no sign seen, to 5 with high probability of seeing wallabies. At level 3 frequent faecal and track signs are seen, but only in isolated pockets, with the likelihood of seeing some wallabies (refer to the Regional Pest Management Strategy 2005 for further information).

### Measure 2

The number of wallaby populations outside the wallaby containment area.

### Target

None.

Number of populations	
2005/06	None
2006/07	None
2007/08	Forecast: none
2008/09	Target: none
2009/10 to 2015/16	Target: none

Source: Environment Canterbury

### » What's changed since the 2006-16 LTCCP?

No change.

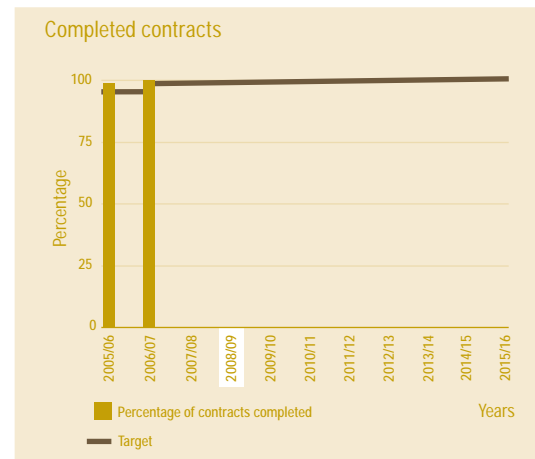
## 8. Managing bovine Tb vector control to protect exports of beef and deer products

### Measure

The percentage of contracts where vector control has been completed to the specifications of the Animal Health Board.

### Target

100%



Source: Environment Canterbury

### » What's changed since the 2006-16 LTCCP?

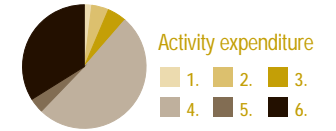
The new measure and target replace those in the 2006-16 LTCCP, which related to the number of cattle and deer herds infected with bovine Tb. Achievement of the previous target was dependent on others involved in the beef and deer industry complying with the Animal Health Board's management requirements. The new measure and target better reflect Environment Canterbury's contribution to the community outcomes.

For 2008/09 the contracts referred to in the measure relate only to management supervision of vector control and monitoring contracts (which are contracted directly by the Animal Health Board).

# Activities

## What we plan to do

Work programmes for 2008/09 are set out below.



### » Variation from 2006-16 LTCCP

Changes have been made to Activity headings: 'Policy making and planning' has been renamed 'Planning and consents' and 'Regulating and enforcing' has been renamed 'Regulating'. These changes better reflect the way the Council's responsibilities are organised internally and delivered to the community. Items listed under the headings 'what we plan to do' affected by these new arrangements have been moved to their new activity.

In 'Operations', co-ordination of rabbit control operations and obtaining a region-wide consent for 1080 have been added.

## 1. Investigations

This activity investigates pest-related issues.

### What we plan to do

#### Year 2008/09

- Investigate pest management issues.

» This work has no identified significant negative effects on community well-being.

## 2. Planning and consents

This activity develops policy for managing pests and biosecurity and monitors the effectiveness and efficiency of that policy.

### What we plan to do

#### Year 2008/09

- Prepare and report on Regional Pest Strategy Operational Plans.
- Work with communities to develop community-initiated programmes.

» This work has no identified significant negative effects on community well-being.

### 3. Monitoring

This activity monitors trends and plant and animal pest levels.

#### What we plan to do

##### Year 2008/09

- Monitor and report trends for infestations of African feather grass, African love grass, baccharis, bur daisy, coltsfoot, entire marshwort, saffron thistle, taurian thistle, white-edged nightshade and nassella tussock.
- Develop techniques for monitoring and reporting trends for infestations of gorse and broom.
- Monitor and report trends for populations of rooks, rabbits and wallabies.
- Monitor and report effectiveness of pest control programmes on biodiversity.
- Undertake surveillance for potential pests.

» This work has no identified significant negative effects on community well-being.

### 4. Operations

This activity implements plant and animal pest control programmes.

#### What we plan to do

##### Year 2008/09

- Manage Animal Health Board contracts to control feral vectors of bovine Tb.
- Undertake rook control.
- Undertake rabbit control in the Banks Peninsula Pest Rating District.
- Undertake pest control work in targeted areas to protect indigenous biodiversity.
- Undertake small-scale management programmes to eradicate newly-identified plant pests which have the potential to become invasive.
- Release bio-control agents in rating districts.
- Undertake operations to remove African feather grass, African love grass, baccharis, bur daisy, coltsfoot, entire marshwort, saffron thistle, taurian thistle and white-edged nightshade prior to seeding.
- Undertake wilding conifer control in targeted areas.
- Provide information about didymo to reduce its rate of spread.
- Co-ordination of rabbit control operations for groups of land owners.
- Obtain a region-wide consent for use of 1080.

» There is a perception that the use of some pesticides may have a significant negative effect on the social and environmental well-being of the community. However, this is mitigated through the use of best practice and strict observance of resource consent conditions regarding its use. Economic well-being is increased as a result of increased production from land, arising from control of pests. There is also a significant benefit to environmental well-being as a result of the enhanced protection of indigenous biodiversity arising from the control of pests.

### 5. Communicating, educating and advocating

This activity informs the community about pest issues and engages with affected landholders.

#### What we plan to do

##### Year 2008/09

- Facilitate pest liaison committees throughout Canterbury.
- Provide public information about the control of plant and animal pests.

» This work has no identified significant negative effects on community well-being.

### 6. Regulating

This activity manages compliance and enforcement of the requirements of the Regional Pest Management Strategy 2005.

#### What we plan to do

##### Year 2008/09

- Undertake property inspections on pest-prone land and advise land owners/occupiers when control work is required under the Regional Pest Management Strategy 2005.
- Undertake enforcement action where land owners/occupiers have failed to carry out work required under the Regional Pest Management Strategy 2005.
- Undertake surveillance of nurseries and places where plants are sold and propagated.

» Meeting the cost of complying with the Regional Pest Management Strategy 2005 may have a significant negative effect on the economic well-being of the community. However, this is outweighed by increased economic well-being as a result of increased production from land, arising from the control of pests. There is also a benefit to environmental well-being as a result of the enhanced protection of indigenous biodiversity arising from the control of pests.

## Financial summary

\$ in thousands	Annual Report 2006/07	Annual Plan 2007/08	LTCCP 2008/09	Annual Plan 2008/09
<b>Operating Revenue</b>				
General rates	2,094	2,201	2,338	2,138
Targeted rates	2,029	1,754	2,211	1,493
Statutory charges/User pays	152	86	88	593
Grants	4,843	6,007	6,154	543
Interest	68	63	52	184
<b>Total Operating Revenue</b>	<b>9,186</b>	<b>10,111</b>	<b>10,843</b>	<b>4,951</b>
<b>Operating Expenditure</b>				
Expenditure	8,646	10,278	10,843	5,318
Interest	-	-	-	-
Depreciation	-	-	-	1
<b>Total Operating Expenditure</b>	<b>8,646</b>	<b>10,278</b>	<b>10,843</b>	<b>5,319</b>
Operating Surplus/(Deficit)	540	(167)	-	(368)
Operating Surplus/(Deficit) transferred to Pest Reserve	540	(167)	-	(318)
Operating Surplus/(Deficit) transferred to General Reserve	-	-	-	(50)

### Capital Expenditure

Capital expenditure associated with this group of activities is funded from general funds and included as depreciation expense.

For more information on source of funds and rationale for selection, see:

#### Funding and Financial Policies

2006/16 LTCCP Part B

Pages 3-33

#### » Variation from 2006-16 LTCCP

The targeted rate contribution to the Varroa Agency Board is not required in 2008/09.

Additional user pays funding has been included to cover anticipated animal pest control work.

Bovine Tb grants are \$1million less due to the work programme being smaller than anticipated and \$4.6million less due to the Animal Health Board resuming responsibility for contract work.