

Executive summary

This report reviews the Taranaki Regional Council's performance and achievement on its pest animal management functions for the 2005/2006 year. The report also fulfils the Council's statutory obligation under section 85 of the Biosecurity Act to review and report back on its performance as management agency with respect to activities undertaken under the *Pest Management Strategy for Taranaki: Animals*.

The implementation of the 'Self-help Possum Control Programme' on the Taranaki ring plain continues to be the main focus of the Council's pest animal management activities. This programme focuses on the Council treating properties and then facilitating the land occupiers' maintenance of reduced possum numbers. Set out below is a summary of the main activities carried out by the Council in 2005/2006:

- As of 30 June 2006, 3,481 properties comprising approximately 213,000 hectares have been incorporated in the Self-help Possum Control Programme and occupiers are undertaking possum control maintenance. The Programme now covers approximately 95% of privately owned land on the ring plain.
- The Council commissioned contractors to undertake initial possum control on 314 properties, covering 10,332 hectares in the north eastern Inglewood operational areas. Monitoring results to date record an 80 -82% reduction in possum numbers in the operational area.
- The Council facilitated maintenance on 2,877 properties to ensure occupiers in the Self-Help Possum Control Programme were undertaking appropriate and effective possum control.
- The Council inspected 505 properties in the Self-help Possum Control Programme to ensure occupiers were complying with the strategy rule to control possums.
- Inspections confirm that overall compliance with the strategy rules for possum control has been satisfactory. Three Notices of Direction directing occupiers to control possums were issued.
- Monitoring confirms that occupiers in the Self-help Possum Control Programme have been very effective in maintaining reduced possum numbers in areas treated by the Council. In 2005/2006, the mean Residual Trap Catch for properties in the Programme was 4.1%.
- The Council undertook targeted possum control on 8 properties in the Self-help Possum Control Programme or bordering the Programme.
- The Council responded to 20 enquiries for advice and information on rabbit control. No enforcement action needed to be taken with respect to land occupier obligations to control rabbits.
- The Council responded to 175 public enquiries pertaining to pests – most enquiries pertained to mustelids, possums and magpies.
- Through the Council's pest management activities, significant parts of Taranaki have effective long term pest control, which contributes towards community

efforts to enhance agricultural production and indigenous biodiversity and amenity values in the region.

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1. Introduction

1.1 Purpose

This report reviews the Taranaki Regional Council's ('the Council') performance and achievement on its pest animal management functions for the 2005/2006 year.

The report also fulfils the Council's statutory obligation under section 85 of the Biosecurity Act 1993 to review and report back on its performance as management agency with respect to activities undertaken under the *Pest Management Strategy for Taranaki: Animals*.

1.2 Background

The Council has accepted responsibility for pest animal management in the Taranaki region, a responsibility derived from the Biosecurity Act 1993.

Under the Biosecurity Act, the Council prepared and adopted its second pest management strategy – the *Pest Management Strategy for Taranaki: Animals* – in 2001. The Strategy provides a strategic and statutory framework for the management of 18 animal species identified as pests in the Taranaki region. Pest animals in the Taranaki region are:

- Rook;
- Brushtail possum;
- European rabbit;
- Feral cat;
- Feral deer – Red, Sika, Sambar, Fallow, Rusa, White-tailed and Wapiti deer;
- Feral goat;
- Feral pig;
- Magpie;
- Mustelids – Ferret, Stoat and Weasel; and
- Brown hare.

The Council also undertakes general 'non-strategy' functions under the Biosecurity Act. Non-strategy functions focus on the provision of advice and information relating to other potentially harmful animals.

1.2.1 Objective

The overall objective for pest animal management activities for 2005/2006, as set out in the Council's *2005/2006 Annual Plan* is to:

"Control pest animals to minimise their adverse effects on biodiversity, primary production and the regional economy and environment."

1.2.2 Performance measures

In response to the above objective, the Council adopted the following performance measures for 2005/2006, as set out in the Council's *2005/2006 Annual Plan*:

- Implement the Council's *Pest Management Strategy for Taranaki: Animals*, which, in brief, comprises:
 - extending the *self-help possum control programme* on the Taranaki ring plain by undertaking initial control operations on not less 12,000 hectares primarily in the north western Inglewood area;
 - supporting the *self-help possum control programme* by ensuring that landholders maintain possum populations within acceptable limits on land already included (204,000 hectares);
 - facilitating control of rabbit infestations;
 - undertaking monitoring, surveillance and, where necessary, control of other pest animals, including rabbits, feral goats, deer and magpies;
 - undertaking direct control and eradication of rooks.
- Monitor, provide advice on, and, if necessary, implement small-scale control of unwanted animal organisms.
- Respond to enquiries and information requests within ten working days.

2. Report on progress

2.1 Establish and support the Self-help Possum Control Programme

The implementation of the 'Self-help Possum Control Programme' on the Taranaki ring plain continues to be the main focus of the Council's pest animal management activities. Possums are arguably New Zealand's number one pest and are having an extraordinary impact on agricultural production, animal health and indigenous biodiversity values. The Programme is effectively a joint programme between the Council and land occupiers and achieves a level of possum control that would otherwise be beyond the resources and capability of any one party to manage alone.

The Self-help Possum Control Programme is focused on the Taranaki ring plain and its aim is to reduce possum numbers to low levels (ie, less than 10% residual Trap Catch) and keep possums numbers at that low level.

2.1.1 Undertake initial control

In 2005/2006, possum control activities were tendered and fully contracted out. The initial possum control was carried out on three contract blocks in the north western Inglewood operational (see Figure 1).

Each year, the Council aims to expand the area of ring plain included in the Self-help Possum Control Programme by around 12,000 hectares. However, a shortage in contractors locally available to carry out the planned initial possum control led to a later than normal start to control operations in 2005/2006. The combined initial possum control for 2005/2006 involved 314 properties covering 10,332 hectares – this was slightly less than the Council's annual target of 12,000 hectares.

The Self-help Possum Control Programme is only extended to those areas where Council has obtained at least 75% occupier support to be in the Programme recognising that following initial possum control, occupiers then assume responsibility for on-going possum control. Of note, over 96% of local land occupiers supported having the Programme extended into their area.

In relation to the effectiveness of the initial possum control, the Council aims to reduce



Figure 1: Self-help Possum Control Programme

possum numbers to below 5% Residual Trap Catch. Of note, possum numbers kept below 10% Residual Trap Catch pose no or little threat to agricultural production, substantially lower the risk of animal diseases such as Bovine Tuberculosis becoming established in and spreading to feral animal populations, and will protect most indigenous biodiversity values. When achieving a 5% Residual Trap Catch, not only are the benefits of that control enhanced but it also allows land occupiers some lee-way in terms of their possum control responsibilities (ie, after initial possum control, land occupier obligations apply that require occupiers to maintain possum populations below 10% residual trap catch – see section 2.1.2 below).

Monitoring results for two of the contracted blocks – Upland Road and Waiwhakaiho – confirm that the Council achieved and bettered its 5% Residual Trap Catch target for initial possum control (Figure 2). Following initial possum control, possum numbers were reduced from a 19.8% Residual Trap Catch to 3.6% (a 82.1% reduction in possum numbers) in the Upland Road control area, and 22.1% to 4.4% (a 80.2% reduction in possum numbers) in the Waiwhakaiho control area.

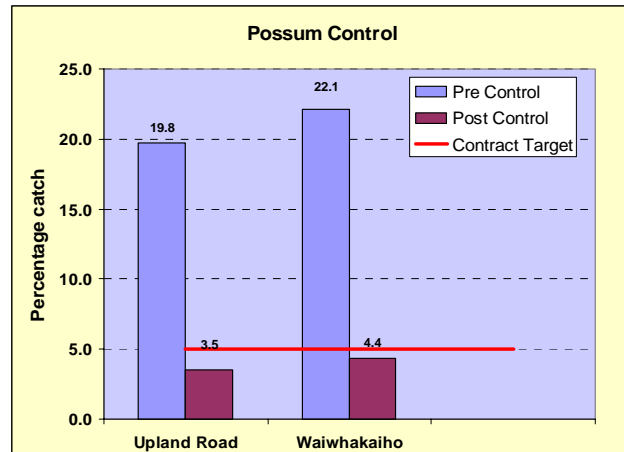


Figure 2: Possum control monitoring results for the Upland Road and Waiwhakaiho initial control areas

At the time of preparing this report, no monitoring results for the Lepperton area (the third contract block) were available due to delays in carrying out the control. However, the control has been undertaken and the monitoring results are expected to be available in early August.

As at 30 June 2006, 3,481 properties comprising approximately 213,000 hectares have been incorporated into the Self-help Possum Control Programme. This represents approximately 95% of privately owned land on the ring plain where possum infestation levels have been reduced to a level that protects agricultural production values and animal health on the ring plain. Reducing infestations of possums also protects indigenous biodiversity values on the ring plain and contributes to the protection of such values in the Egmont National Park.

2.1.2 Support land occupier maintenance

Each year, the Council facilitates possum maintenance control by providing an advisory, inspectorial and enforcement service for all properties in the Self-help Possum Control Programme and for which the Council has, in previous years, undertaken initial possum control.

In 2005/2006, Council officers contacted 2,877 occupiers to provide property specific advice and other assistance to properties that have been treated and incorporated in the Self-help Possum Control Programme. Such advice and assistance seeks to co-ordinate occupiers' possum control efforts and promote regular maintenance once they are in the Programme. All properties were advised

to undertake possum control that year (whereas in the preceding year, some coastal properties with little possum habitat were advised that, due to monitoring confirming low possum numbers in the area, they would not need to undertake possum control maintenance that year).

The Council also inspected properties to ensure that occupiers were complying with the strategy rule to maintain possum numbers at below a 10% Residual Trap Catch level and that contractors were achieving their performance targets in terms of initial control. In 2005/2006, Council officers undertook 505 monitoring lines within the Self-help Possum Control Programme area.

In terms of compliance monitoring, the Council's focus was on Category C properties (ie, properties in the Programme that, without possum control, may harbour high possum densities). The inspections confirmed that overall occupier compliance with the strategy rules for possum control has been satisfactory.

In 2005/2006, Council officers served three Notices of Direction on occupiers directing them to control possums on their land (comparable with the three Notices of Direction served in the preceding year). All Notices of Direction were complied with.



Regular property specific advice and assistance is provided to all occupiers in the Programme

In other instances, where Council officers identified concerns relating to high possum levels, occupiers were warned of the need to undertake possum control. Subsequent inspections confirmed that occupiers had responded to that advice and undertaken the required possum control. No other enforcement action (ie, default action or prosecution) was necessary.

Of note is that since the inception of the Self-help Possum Control Programme, the Council has rarely needed to undertake enforcement action to enforce land occupier obligations to control possums. The Council has never needed to undertake prosecution action. Furthermore, it has only needed to undertake default action (ie, where the Council undertakes possum control and recovers the costs from the occupier) on two occasions – the latest being January 2000.

Table 1 summarises Council activities undertaken in 2005/2006 to facilitate maintenance of the Self-help Possum Control Programme – including a comparison with the preceding two years.

Table 1: Measures to facilitate maintenance

| Measures adopted | 2003/04 | 2004/05 | 2005/06 |
|---|---------|---------|---------|
| No. of properties in the Programme | 2,930 | 3,193 | 3,481 |
| No. of properties contacted for maintenance | 2,706 | 2,790 | 2,877 |
| No. of properties inspected | 502 | 648 | 505 |
| No. of Notices of Direction | 0 | 3 | 3 |
| Other enforcement action | 0 | 0 | 0 |

In recent times, the Council has monitored possum numbers for properties in the Self-help Possum Control Programme to determine the effectiveness of the land occupiers' maintenance. In 2005/2006, the Council randomly selected and monitored 305 properties to determine possum numbers (compared with 313 the previous year) – these properties represent approximately 9% of the properties in the Programme. Monitoring results for 2005/2006 indicate that the mean Residual Trap Catch for properties in the Programme was 4.1% (Figure 3). This was a slight decrease from the preceding year (when the mean Residual Trap Catch for properties in the Programme was 4.7%) and is significantly lower than the 10% Residual Trap Catch target that occupiers are required to achieve in terms of on-going possum control.

Based upon trends over time, the monitoring confirms that, following initial control, occupiers have been very successful at maintaining possums at very low levels.

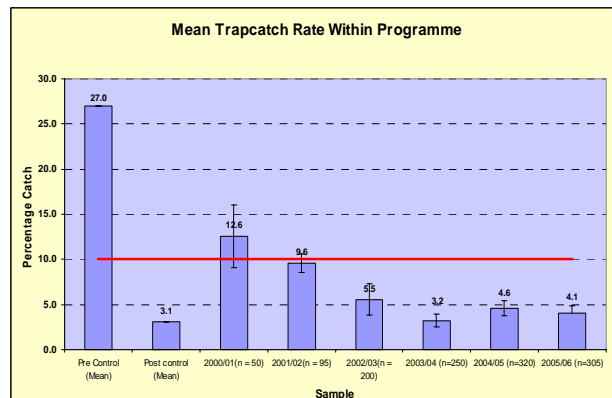


Figure 3: Effectiveness of possum maintenance over time

2.1.3 Maintenance assistance

In accordance with the *Pest Management Strategy for Taranaki: Animals*, the Council undertakes further possum control on properties in the Self-help Possum Control Programme where, through no fault of the occupier, further possum control is required to protect the integrity of the Programme.

In 2005/2006, the Council provided targeted assistance to 10 properties (compared with 12 properties in the preceding year). Targeted assistance involved Council officers trapping possums on properties where there was a history of pest control but which, for a variety of reasons (eg, poison shyness, the large amount of bush/pasture margin), needed extra assistance.

In addition to the above, the Council treated eight additional property outside the Self-help Possum Control Programme but which had the potential to impact on the Programme. This property was treated by the Council at no cost to the occupier.



Council officer trapping for possums

2.2 Facilitate control of rabbits

In 2005/2006, the Council received and responded to 20 requests for information in

relation to the control of rabbits (compared with 33 requests in the preceding year).

The Council did not receive any complaints pertaining to an occupier failing to adequately control rabbits on their land. Subsequently, no property inspections or enforcement action were necessary.

Facilitating rabbit control activities ensures that rabbit infestation levels do not affect neighbouring properties thereby protecting agricultural production values – particularly on sheep and beef properties. It also protects silviculture and horticulture values.

2.3 Monitor and control other pest animals

2.3.1 Monitoring and control of other pests

Most pest control undertaken by the Council is associated with the Self-help Possum Control Programme. However, as circumstance permit, the Council will undertake other pest control in response to public enquires or as a 'by-kill' (ie, control of pest animals while Council officers were carrying out possum control/monitoring activities).

In 2005/2006, the Council destroyed 446 magpies following public reporting of birds which were a particular nuisance eg, a threat to children.

In February 2005, in response to anecdotal evidence of increased hare numbers in the region, the Council undertook a hare monitoring/control operation.

As indicated in Figure 4, the monitoring results confirmed that hare population density levels increase with altitude. This has implications for the implementation of the Council's Riparian Management Programme in terms of the potential threat hares pose to newly planted riparian margins. However, the monitoring did not indicate that hare numbers in the region were higher than usual.



Council officer setting a cage trap for stray and feral cats



Figure 4: Predicted hare population density in the Taranaki region

Most other pest control undertaken by the Council in 2005/2006 was confined to by-kills. The Council also continued its support of the North Taranaki Branch of the RSPCA. Ten traps have been loaned long-term to the Society resulting in a huge rise in the capture of both stray and feral cats – mostly in and around New Plymouth.

Table 2 summarises the number of animals killed under such circumstances.

Table 2: By kills and other pest control

| Pest animals | Number of animals destroyed | | |
|--------------|-----------------------------|--------------|--------------|
| | 2003/04 | 2004/05 | 2005/06 |
| Possums | 299 | 34 | 62 |
| Rabbits | 302 | 242 | 457 |
| Rooks | 4 | 1 | 0 |
| Feral goats | 3 | 52 | 178 |
| Hares | 114 | 126 | 421 |
| Mustelids | 20 | 26 | 23 |
| Magpies | 332 | 572 | 446 |
| Feral cats | 539 | 217 | 431 |
| Feral pigs | - | 1 | 6 |
| Total | 1,613 | 1,271 | 2,024 |

2.3.2 Eradication of rooks

The Council remains committed to eradicating rooks from Taranaki. Rooks are extremely difficult birds to control and, once established, can represent a serious problem.

In 2005/2006, the Council received 11 enquiries regarding rooks in Toko, Eltham and New Plymouth areas. Despite investigations no nests were found.

Activities to control rooks for eradication purposes have so far prevented the establishment of rooks in Taranaki thereby protects agricultural and horticultural production values in the region.

2.4 Respond to requests for information and other enquiries

Each year, the Council receives numerous requests from the public for information on pest management. All public enquiries are recorded and responded to and a report made with respect to each investigation. Council's response varies from providing advice and information over the telephone, and the distribution of information pamphlets and booklets to and providing property specific advice and other assistance related to pest control.

In 2005/2006, the Council received and responded to 175 specific requests from the public for information on pest animal management (note that these do not include enquiries about animals that are not 'pests' – refer section 2.5 below). This represents a 4.9% decrease in the number of

Table 3: Number of pest related enquiries

| Pest animals | 2003/04 | 2004/05 | 2005/06 |
|--------------|------------|------------|------------|
| Possums | 37 | 44 | 40 |
| Rabbits | 28 | 33 | 20 |
| Rooks | 8 | 8 | 11 |
| Feral goats | 1 | 2 | 4 |
| Hares | 1 | 4 | 4 |
| Mustelids | 49 | 51 | 47 |
| Feral deer | - | - | 3 |
| Feral pigs | - | 1 | 2 |
| Magpies | 37 | 38 | 31 |
| Feral Cats | 9 | 3 | 13 |
| Total | 170 | 184 | 175 |

enquiries compared with the preceding year (Table 3).

Most public enquiries relate to requests for information on the control of mustelids, magpies, possums and rabbits. The Council's pest advisory activities facilitate land occupier efforts or ability to control pests and contributes towards the protection of agricultural production and indigenous biodiversity and amenity values.

2.5 Monitor, provide advice and, if necessary, implement small-scale control of unwanted animal organisms

No small-scale management programmes under section 100 of the Biosecurity Act were considered in 2005/2006. Notwithstanding that, there were other harmful animals that are not declared to be 'pests' or 'unwanted organisms' that Council officers provided advice on and occasionally controlled.

In January 2006, Argentine ants were discovered in Taranaki. In response to this discovery, Council investigated potential infestations, undertook some control measures, and launched an intensive media campaign to promote public awareness and encourage public reporting of other potential infestations.



The Argentine ant is considered one of the world's most invasive and problematic ant species

In 2005/2006, the Council responded to 111 enquiries for advice on Argentine ants. Council investigations have confirmed the presence of significant infestations in Waitara and Bell Block (covering approximately 400 to 500 properties combined). Smaller infestations have also been confirmed at Oakura, Westown and Patea (covering approximately 20 properties combined).

The discovery of Argentine ants in Taranaki has prompted the Council to include the ants as a pest in the *Proposed Pest Management Strategy for Taranaki: Animals* (2006), which has been prepared as part of the review of the current Strategy. The Council has also sourced and is supplying to affected land occupiers, at cost, the only two pesticides available in New Zealand that are known to be effective against Argentine ants – *Xtinquish* ant bait and *Ant Stop Granuals*. As at 30 June 2006, 90 tubes of these pesticides had been supplied to affected properties.

In 2005/2006, the Council also responded to 39 requests for advice and information in relation to the control of other animals not declared to be 'pests' or 'unwanted organisms'. These primarily related to the control of bees and wasps, spiders etc. The Council responded to and actioned all enquiries within ten working days.

3. Conclusion

In conclusion, the Council substantially met all its performance targets for 2005/2006 set out in the Council's *2005/2006 Annual Plan* for its pest animal management functions.

This report reports on the fifth year of the implementation of the *Pest Management Strategy for Taranaki: Animals*. Implementation of the Self-help Possum Control Programme continues to be the focus of the Strategy. As at 30 June 2006, 3,481 properties comprising approximately 213,000 hectares – representing approximately 95% of privately owned land on the ring plain – have been incorporated into the Self-help Possum Control Programme.

In 2005/2006, the Council commissioned contractors to undertake initial possum control on 314 properties in the north eastern Inglewood operation area. The Council also provided an advisory, inspectorial and enforcement service for properties already in the Programme.

Through its monitoring, the Council can confirm that:

- The Self-help Possum Control Programme is achieving effective long-term possum control for properties in the Programme
- Inspections confirm that occupiers are proactive in their maintenance
- Occupiers in the Self-help Possum Control Programme are maintaining reduced possum numbers at very low levels, though it is noted that possum infestation levels will increase rapidly, within a short time, if the occupier does not undertake regular and timely maintenance.

Through the Council's pest management activities, significant parts of Taranaki have effective long term pest control, which contributes towards community efforts to enhance agricultural production and indigenous biodiversity and amenity values in the region.

This report will be forwarded to key interested stakeholders for pest management.

