

Executive summary

This report reviews the Taranaki Regional Council's performance and achievement on its pest plant 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: Plants*.

Set out below is a summary of the main activities carried out by the Council in 2005/2006:

- In 2005/2006, the number of properties identified as having significant infestations of 'containment pest plants' (ie, Category C properties) slightly increased. Council officers inspected 89 Category C properties at least three times, and 717 Category B properties at least once. Since 1996, there has been almost a 56.6% decline in the number of properties classified as Category C.
- Compliance with the strategy rules has been satisfactory. In total, 207 Notices of Direction to control pest plants were issued. All the Notices (which expired before 30 June 2006) were complied with and there was no subsequent need for further enforcement action.
- The Council continued its programme of releasing biological control agents in the region – this included three releases of the Scotch thistle gall fly, *Urophora stylata* and one release of gorse soft shoot moth larvae *Agonopterix ulicetella*.
- The Council received and responded to 81 complaints pertaining to pest plants. Most enquiries related to *Ragwort*, *Gorse*, and infestations of *Old Man's Beard*. Twelve further complaints were received in relation to plants not declared pests.
- The Council inspected 38 plant nurseries and retail outlets in Taranaki to ensure they are not selling, propagating or distributing pest plants. In conjunction with these inspections the Council looked for and enforced a ban on 80 other pest plants banned from sale, propagation and distribution under the National Pest Plant Accord.
- As at 30 June 2006, the Council received and responded to 232 requests for information about weeds and other plants. Most of these requests (148) related to pest plant species.
- The Council provided advice and information and published advertisements and other press items highlighting new land occupier obligations relating to Common and Purple Pampas (rules took effect on 1 July 2004).
- In relation to 'eradication pest plants' the Council treated 76 properties and directed land occupiers to treat a further 28 infestations. As at 30 June 2006, the Council has undertaken control on 209 properties since the Strategy became operative in 2001 (with some of these properties being visited more than once). This control has addressed the control of all 'eradication pest plant' infestations that were known as of 2001 (when the current Strategy became operative), the

control of most infestations subsequently discovered after that time, and, as appropriate, the retreatment of these sites.

- Through its pest plant management activities, the Council in conjunction with the community have restricted the spread of invasive pest plants and protected agricultural production values and environmental values in the region.

Table of contents

1.	Introduction	1
1.1	Purpose	1
1.2	Background	1
1.2.1	Objective	1
1.2.2	Performance measures	1
2.	Report on progress	3
2.1	Provide information on pest plants	3
2.2	Inspection programme	4
2.2.1	Inspections	4
2.2.2	Notices and enforcement	5
2.3	Biological control programmes	6
2.4	Respond to public complaints	7
2.5	Plant nursery and retail outlet inspections	7
2.6	Direct control of 'eradication pest plants'	8
2.7	Monitor, provide advice and, if necessary, implement small-scale control of unwanted plant organisms	9
3.	Conclusion	11
	Appendix I: Pest plants of the Taranaki region	13

List of tables

Table 1	Number of public enquiries	3
Table 2:	Number of Notices of Direction	5

List of figures

Figure 1:	Number of Category C properties	5
Figure 2	Number of complaints for pest plants in 2004/05 and 2005/06	7

1. Introduction

1.1 Purpose

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

1.2 Background

The Taranaki Regional Council ('the Council') has accepted responsibility for pest plant management in the Taranaki region, a responsibility enabled by the Biosecurity Act 1993.

Under the Biosecurity Act, the Council prepared and adopted the *Pest Management Strategy for Taranaki: Plants* (2001). The Strategy provides a strategic and statutory framework for the control and eradication of plants identified as pests in the Taranaki region. Through the Strategy, the Council is also empowered to exercise the relevant advisory, enforcement and funding provisions available under the Biosecurity Act.

1.2.1 Objective

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

"Control or eradicate pest plants 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: Plants which, in brief, comprises:*
 - *undertaking the direct control and eradicating all known infestations of Senegal Tea, Climbing Spindleberry, Mignonette Vine, Giant Reed and Darwin's Barberry in the region*
 - *confining the spread of and, where appropriate, reducing the extent of 'eradication' and 'containment' pest plants through a programme of inspections and, where necessary, enforcement on all Category C properties at least three times per year, on all Category B properties at least once per year, and on Category A properties as time permits*
 - *responding to and taking necessary actions on all pest plant complaints within five days of receipt*
 - *inspecting all plant nurseries and retail outlets to promote and, where necessary, enforce the prohibition from propagation, sale or distribution, of all pest plants*
 - *facilitating the development of effective biological control programmes for pest plants particularly Old Man's Beard and Giant Buttercup*
 - *Undertaking a publicity and education programme in relation to the control of all pest plants in the Strategy, particularly Mignonette Vine, Darwin's Barberry and Chilean Rhubarb.*

- *Monitor, provide advice on and, if necessary, implement small-scale control of unwanted plant organisms.*
- *Implement the National Pest Plant Accord, inspecting all plant nurseries and retail outlets to promote and, where necessary, enforce the prohibition from propagation, sale or distribution of specified unwanted plant organisms.*

2. Report on progress

2.1 Provide information on pest plants

Each year, the Council receives numerous requests from the public for information on pest plant management. In 2005/2006, the Council received and responded to 232 public enquiries relating to pest and other harmful plants, including poisonous plants.

Of the public enquiries received in 2005/2006, most (63.8%) related to pest plant species. There were 148 public enquiries on pest plant species with there being more public enquiries on *Gorse* and *Old Man's Beard* than any other plant. The Council also received and responded to another 84 information requests related to other weeds (ie, non-pest plants) or were enquiries of a more general nature (Table 1).

The number of public enquiries relating to pest plant management received by the Council in 2005/06 is at a comparable level to the preceding year. The Council's website www.taranakiplants.net.nz is a popular website and may have diverted many queries that in the past would have come to the Council.

The Council continued to undertake an advice and education campaign informing land occupiers and contractors of new obligations to control pest plants – particularly *Common and Purple Pampas* (rules took effect on 1 July 2004) and worked with the local Department of Conservation office in producing their *Gunnera tinctoria* information leaflets. The Council also continued to provide advice and education

Table 1 Number of public enquiries

Pest plants	Number of public enquiries		
	2003/04	2004/05	2005/06
Pest plants			
Gorse	41	18	34
Old Mans Beard	17	9	31
Wild Ginger	43	11	14
Ragwort	21	2	14
Giant Buttercup*	34	4	13
Chilean Rhubarb*	6	5	9
Mignonette Vine*	3	3	9
Common & Purple Pampas	19	7	2
Other pest plants	19	46	22
Total	203	105	148
Other plant related enquiries	112	134	84
Total enquiries	324	239	232

* Declared pest plants in 2001



Public requests may relate to the identification of plants, information on their control or assistance in calibrating spray equipment and such like

in the form of pamphlets addressing land occupier obligations.

Council officers, as part of the Council's inspection programme, also provides the land occupier with information on the control of any infestations of 'regional surveillance' pest plants, National Accord pest plants and other harmful plants.

2.2 Inspection programme

2.2.1 Inspections

The Council implements a programme of property inspections to ensure occupiers are complying with any strategy rules requiring them to control pest plants on their land. The inspection programme is based on the following categories:

- **Category C:** properties that currently, or in the previous season, have had significant infestations of 'containment pest plants' (plants declared to be containment pest plants are identified in Appendix I) on the property. These properties are inspected at least three times in a year.
- **Category B:** properties that are managed to the satisfaction of the Council but have recently had significant infestations of 'containment pest plants' on the property. These properties are inspected at least once a year.
- **Category A:** properties that are managed to the satisfaction of the Council and have not recently had significant infestations of 'containment pest plants' on the property. These properties are visited as time and resources permit or in response to a public complaint.

In 2005/2006, Council inspected all 89 Category C properties at least three times. On the first visit, Council officers inspect the property and, if need be, provide information to the occupier on the best timing and treatment methods for effective pest plant control. On a second visit, officers check progress with respect to the implementation of advice and, if necessary, serve a Notice of Direction (the first step towards possible enforcement action). On the third visit, officers confirm whether the occupier has undertaken effective pest plant control. In the event that the occupier has not, enforcement action would generally follow.

The increased number of Category C properties from the preceding year (there were 72 Category C properties in 2004/2005) represents a 23.6% increase. This increase is attributed to increased Council focus on environmental pest plants and the application of new land occupier obligations relating to



Officer inspecting farm property and providing advice on how to control pest plants

Pampas Grasses.

Over the last decade there has been a significant decrease in the overall number of Category C properties. Since 1 July 1996, there has been a 56.6% decline in properties classified as Category C (refer Figure 1). This long term decrease is attributed to good compliance by land occupiers in the management of agricultural pest plants.

However, as the Council increases its focus on environmental pest plants (particularly *Old Man's Beard*, *Chilean Rhubarb*, *Pampas Grass* and *Wild Ginger*), and land occupiers are made aware of their obligations to destroy such plants, it is anticipated that there is likely to be a temporary increase in the number of Category C properties.



Figure 1: Number of Category C properties

In 2005/2006, Council also inspected 714 Category B properties (1,106 the previous year), at least once, to confirm that pest plants were being managed effectively on these properties. Where appropriate, Council officers provided advice on pest plant control or, if necessary, determined whether properties should be added to the Category C list or lowered to the A list.

Council officers also visited over 4,000 Category A properties – this was in association with urban surveys covering several townships in the region, as well as visits in response to requests for information from land occupiers or in response to public complaints about pest plant infestations.

Since 1 July 2004, new land occupier obligations to control *Common* and *Purple Pampas* apply. As a result of these new obligations, the Council has set up an inspection programme categorising properties with known infestations as Category A and B properties, inspected over 130 properties for Pampas Grass (ie, *Common* and *Purple Pampas*) and, as appropriate, distributed advice and information or undertaken enforcement action. Given that 2005/2006 represents the second year of land occupier obligations for Pampas Grass, Council officers' efforts have shifted from an emphasis on advice and information to that of enforcement. In 2005/2006, 36 Notices of Direction were served on land occupiers to control Pampas Grass.

2.2.2 Notices and enforcement

During 2005/2006 the Council issued 207 Notices of Direction directing land occupiers to control pest plants (this represents almost a 150% increase from the preceding year). The Notices of Direction primarily related to the control of *Gorse*, *Wild Ginger*, *Ragwort* and Pampas Grass (Table 2).

Despite the increase in the number of Notices of Direction served in 2005/2006, overall land occupier compliance with the strategy rules in the *Pest Management Strategy for Taranaki: Plants* has been satisfactory. Most of the increase is attributed to the Council's increased focus on environmental pest plants such as Pampas Grass and *Wild Ginger* in New Plymouth. Of note, all Notices were complied with and no further enforcement action was necessary in 2005/2006.

Through property inspections and the enforcement of rules requiring land occupiers to control pest plants, the Council in conjunction with land occupiers have generally restricted the spread of invasive pest plants and protected agricultural production values and environmental values in the region.

Table 2 Number of Notices of Direction

Pest plants	Number of Notices		
	2003/04	2004/05	2005/06
Wild Ginger	100	19	46
Gorse	24	19	41
Old Mans Beard	9	6	35
Ragwort	14	18	32
Broom	-	1	17
Common & Purple Pampas*	-	2	15
Chilean Rhubarb*	3	4	13
Giant Buttercup*	14	13	6
Darwin's Barberry*	1	-	2
Nodding Thistle	4	1	0
Total	169	83	207

* Declared pest plants in 2001.

2.3 Biological control programmes

The Council has a programme for releasing biological control agents in the region as a means of promoting sustainable and effective long-term pest plant control. Such agents include beetles that 'dine' on *Ragwort*, flies that infest *Nodding Thistle* and a fungus and leaf miners that damage *Old Man's Beard*.

In 2005/2006, biological control agents were released at four sites. Scotch thistle gallfly pupae were released at three sites and gorse soft shoot moth larvae were released at one site.

In relation to the distribution of biological control agents for *Old Man's Beard*, monitoring confirms that both the Leaf Fungus (first released in 1997) and the Old Man's Beard Leaf Miner (first released in late 1996) are becoming increasingly widespread. The effect of the fungus is to cause 'die-back' on the leaves of *Old Man's Beard*, which along with the Leaf Miner, weakens the plant. To date the effect of these biological control agents has not manifested itself by destroying the plants; however, their



Release of the Leaf Fungus in 1997

effects should become increasingly apparent over time.

2.4 Respond to public complaints

In addition to its inspection programme, the Council records and takes action in response to any public complaint received in relation to pest plants. Responding to public complaints is an integral part of the Council's inspectorial and enforcement activities.

In 2005/2006, officers responded to 81 complaints from the public pertaining to pest plants (compared with 53 complaints in 2004/2005). This represents a 56.6% increase in the number of complaints relating to pest plants compared to the preceding year. Most enquiries related to *Ragwort* and *Gorse* (Figure 2). All properties for which a complaint was received, were inspected within five days and, where appropriate, advice was given or enforcement action taken.

Twenty two Notices of Direction to control pest plants were issued following receipt of public complaints. The Council values the input from the public in notifying it of pest plant infestations in the region.

Twelve further complaints were received in relation to plants not declared pests. Where appropriate, advice and information on the plant's control options or 'pest' status was provided.

2.5 Plant nursery and retail outlet inspections

Many pest plants were initially introduced as garden plants. However, on a plant being declared a 'pest', the propagation, sale and distribution of that plant becomes prohibited under the Biosecurity Act.

In 2005/2006, Council officers inspected 38 plant nurseries and retail outlets known to be growing or selling plants.

Pursuant to its agreement to participate in the National Pest Plant Accord (in conjunction with other regional councils and relevant central government departments), the Council also inspected the plant nurseries for 92 National Accord

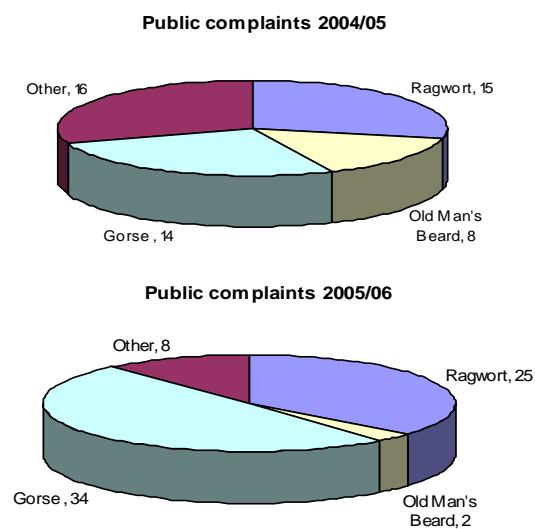


Figure 2: Number of complaints for pest plants in 2004/05 and 2005/06

pest plants that have been declared 'unwanted organisms' and which are also prohibited from propagation, sale and distribution.

To assist nurseries and retail outlets to identify which plants are banned from propagation, sale or distribution, the Council distributed relevant information including copies of the National Pest Plant Accord list. There was one instance where nursery inspection identified a banned plant – *Gunnera tinctoria*. In this instance, the plant was accidentally being propagated for sale (as a seedlings, probably introduced to a potting shed by birds). Therefore, the owners were instructed to destroy the seedling and no further action was necessary.



Officers visit plant nurseries and retail outlets to ensure retailers are aware of their obligations and are not selling or displaying pest plants

2.6 Direct control of 'eradication pest plants'

Following the *Pest Management Strategy for Taranaki: Plants* becoming operative in July 2001, the Council undertook to carry out direct control programmes for 'eradication pest plants' (eradication pest plants are identified in Appendix I). These are pest plants of limited distribution in the region for which the Council aims to prevent their establishment by destroying all known infestations in the region.

As at 30 June 2006, the Council has undertaken the direct control of 'eradication pest plants' on 209 properties since the *Pest Management Strategy for Taranaki: Plants* became operative in 2001 (with some of these properties being visited more than once). In relation to 'eradication pest plants' the Council has successfully met its Strategy targets of destroying all 'eradication pest plant' infestations that were known as of 2001 (when the current Strategy became operative). In addition, the Council has responded to the discovery of new infestations of 'eradication pest plants'. All new infestations are treated, as soon as practicable, by the Council or by the land occupier (in accordance with land occupier obligations). Both known and newly discovered infestations, following treatment, need to be revisited and retreated to ensure treated plants do not recover nor seedlings emerge.

For 2005/2006, the eradication focus was on the control of *Mignonette Vine*, *Climbing Spindleberry* and *Darwin's Barberry*. The Council treated 38 properties around the region for *Mignonette Vine*, 15 properties for *Climbing Spindleberry*, and 16 properties

for *Darwin's Barberry*. Darwin's Barberry on an additional 30 properties were treated by the land occupiers (this represents 59% of all known infestations).

In relation to *Giant Reed*, the Council treated three infestations at Waiwhakaiho, Normanby and Manaia. Control of one of these infestations was a retreatment, with the other two being newly discovered infestations.

In 2004/2005, the Council also inspected and re-treated the only two known infestations of *Senegal Tea* in Taranaki, on properties at Tarata and Stratford.

All the direct control operations successfully destroyed targeted infestations, although on-going surveillance and re-treatment of some of the plants will be required to ensure treated plants do not recover nor seedlings emerge.



Officer treating *Darwin's Barberry*. The plant is cut and the stumps then treated with a herbicide.

2.7 Monitor, provide advice and, if necessary, implement small-scale control of unwanted plant organisms

The Council, as part of the Council's inspection programme, records infestations of regional surveillance pest plants and National Accord pest plants. The Council will, in special circumstances, also undertake the control of pest plants and other harmful plants of limited distribution.

In 2005/2006, the Council treated *Wild Ginger* (at 42 sites), *Chilean Rhubarb* (at 8 sites), *Old Man's Beard* (at 7 sites) and *Common or Purple Pampas* (at 5 sites). This occurred in situations where it was the most cost effective form of action and it was appropriate to do so.

Council officers also undertook the control of three other harmful plant species. *Moth Plant* was successfully treated at one site, *Banana Passionfruit*



Banana Passionfruit – a weed of limited distribution. This infestation was treated and destroyed in May 2006

at two sites, and *Boneseed* at four sites. These plants are of limited distribution in the region and potentially could have an extraordinary impact on indigenous biodiversity values if the plants become established in the region.

The declaration of a small-scale management programmes under section 100 of the Biosecurity Act was not considered necessary given that the Council obtained permission from affected land occupiers to undertake the aforementioned eradication actions.

3. Conclusion

In summary, the Council met all of the performance measures for pest plant management functions, as set out in the *2005/2006 Annual Plan*. The 2005/2006 financial year represents the fifth year in the Council's implementation of the *Pest Management Strategy for Taranaki: Plants*. Overall occupier compliance with Strategy rules continues to be satisfactory with the number of properties with significant pest plant problems (ie, Category C properties) having significantly declined over time – although improvement is needed for Pampas Grass.

Through its pest plant management activities, the Council, in conjunction with the community, have restricted the spread of invasive pest plants and protected agricultural production and environmental values in the region. Considerable progress has been made in preventing the establishment of pest plant species of limited distribution, while the externality impacts of more widespread pest plants are also significantly minimised.

The Council is currently in the process of reviewing its *Pest Management Strategy for Taranaki: Plants* and has recently publicly notified a revised Strategy that builds on the success of the current Strategy. With continued land occupier and public support for the *Pest Management Strategy for Taranaki: Plants* the Council believes it will continue to promote effective action against pest plants and meet Strategy objectives.

This report will be forwarded to key stakeholders in relation to pest plant management.

Appendix I

Pest plants of the Taranaki region

The Taranaki Regional Council has determined that different pest plant species warrant different types and levels of regional intervention according to the objective trying to be achieved. For the purposes of *the Pest Management Strategy for Taranaki: Plants (2001)*, the following terminology applies:

Eradication pest plants: pest plants that are of limited distribution or density in a region and for which the long-term goal is eradication. These are:

- *Senegal Tea,*
- *Climbing Spindleberry,*
- *Mignonette Vine,*
- *Giant Reed,* and
- *Darwin's Barberry.*

Containment pest plants: pest plants that are abundant in suitable habitats in a region or part of a region and for which the long-term goal is to prevent the spread of the plant to new areas or to neighbouring properties. These are:

- *Giant Buttercup,*
- *Chilean Rhubarb,*
- *Common Pampas and Purple Pampas,*
- *Old Man's Beard,*
- *Kahili Ginger and Yellow Ginger,*
- *Wild Broom,*
- *Australian Sedge,*
- *Ragwort,*
- *Gorse,*
- *Nodding and Plumeless Thistles,* and
- *Variegated Thistle.*

Surveillance pest plants: pest plants for which there is no strategy rule requiring the land occupier to undertake control measures. Objectives for surveillance pest plants are to ban their sale, propagation and distribution and to promote their voluntary control. These are:

- *Brush Wattle,*
- *Egeria Oxygen Weed,*
- *Japanese Walnut,*
- *Lagarosiphon Oxygen Weed,* and
- *Spanish Heath.*

