

STAFF REPORT

TO: Environment & Planning Committee

FROM: Lindsay Vaughan, Biosecurity Co-Ordinator

REFERENCE: B103

SUBJECT: ANNUAL BIOSECURITY REPORT - REPORT REP10-12-13 -

Report prepared for meeting of 16 December 2010

1. PURPOSE OF REPORT

The purpose of this report is to present the Operational Plan for the 2010/2011 Financial Year and to summarise the achievements described in the Review of the 2009/2010 Pest Management Operational Plan. Both these plans sit under the Tasman-Nelson Regional Pest Management Strategy 2007-2012. Tasman District Council is the Management Agent for implementation of this Strategy in Tasman District and Nelson City.

2. BACKGROUND

The Biosecurity Act 1993 requires councils to produce an Operational Plan for the current financial year and to review the Operational Plan for the previous financial year.

3. 2010/2011 OPERATIONAL PLAN

This Plan covers the fourth year of the Tasman-Nelson Regional Pest Management Strategy, which is due to be reviewed in 2012. The Plan is similar to previous plans and reflects a consistent approach to management of the 57 pests in the Strategy. It covers the thirteen Total Control pests where the long-term goal is eradication, the seventeen Progressive Control pests where the goal is a reduction in their density and distribution, the thirteen Containment pests where the goal is to prevent their spread, the ten Boundary Control pests, and the four Regional Surveillance pests. The total estimated costs for the current financial years is \$462,000.

4. REVIEW OF 2009/2010 OPERATIONAL PLAN

- This Review covers the third year of the Tasman-Nelson Regional Pest Management Strategy 2007-2012.
- Trend Monitoring. Trend Monitoring is designed to provide a picture of progress over time. It uses the number of properties containing the pests, the time that these properties have been infested, and the level of activity on the

property. There are four categories - **New** (first found in the last financial year), **Active** (live material present), **Monitoring** (live material recorded within the last three years) and **Historic** (live material not seen for more than three years). The results for the Total Control Pests can be seen in the Operations Plan.

- Total Control Pests. There are thirteen high-risk pest plants in this category in the Strategy where the long-term goal of eradication is considered to be feasible. All known Active and Monitoring sites of the Total Control Pests were inspected and all live material was destroyed. Historic sites are inspected annually or biennially, depending on the period of time since live material was last seen and the seed viability of each species.
- Progressive Control Pests. There are seventeen pests in this category, eleven plants, five fish and one bird. Good progress has been made in reducing the density and distribution of many of these pests; eradication is not considered feasible because of their distribution and persistence. There are major challenges in Golden Bay with controlling Old Man's Beard and Banana Passion Vine, despite the good work being undertaken by community groups and a local Weedbusters group. The Department of Conservation has been responsible for controlling pest fish and been involved in a vigorous campaign to eradicate them over the last decade.
- Containment Pests. There are eleven plant and animal pests in this category and the aim is to prevent their spread. A significant effort has gone into preventing their spread but many of the existing tools are inadequate for the task. Invasive ants are continuing to spread in the urban areas and more recently into the rural areas; Purple Pampas is continuing to spread in rural areas, and Gorse and Broom are continuing to spread in the Howard-St Arnaud area. The numbers of animal pests such as magpies, feral cats, feral rabbits and mustelids fluctuate over time on a seasonal basis and the effectiveness of control operations vary. There are increasing numbers of community groups becoming actively involved in controlling pest animals to protect and enhance biodiversity, particularly birdlife.
- Boundary Control Pests. There are ten pest plants and plant diseases in this
 category and the aim is to stop their spread onto adjoining clean sites. The
 most common pests are gorse, blackberry and broom and the Council becomes
 involved only if neighbours are unable to resolve issues. Numerous enquiries
 were received on the boundary specifications for the different Boundary Control
 pests; there were four requests for intervention.
- Regional Surveillance Pests. There are four plant pests in this category and the aim is to monitor their distribution and impact during the term of the Strategy. New sites have been mapped for two of the four pests and the Department of Conservation has provided a recent report on the distribution of wilding conifers into Mt Richmond Forest Park. Discussions have been held with DOC and the two major forestry companies.
- Pest control in high-value sites. There are six high value public sites within Tasman District where the Council is involved in controlling pest plants and animals. Most of the effort has gone into Torrent Bay in a programme led by the Council with co-funding by the Department of Conservation and some local

landowners. Pest control has been extended to pest animal control on adjoining areas as a result of funding by the Abel Tasman Birdsong Trust, using contributions from tourists collected by tour operators in the Park, and Council is working with members of the Trust.

- Biological control. Biological control is an important tool for long term control and the Council contributes to funding of the Landcare Research programme through the Biocontrol Research Collective involving thirteen regional councils and the Department of Conservation. A total of 21 biocontrol agents are present in Tasman on 10 pest plants. The most successful results have been achieved on ragwort with the ragwort flea beetle and the cinnabar moth; some progress is being made with agents for gorse and broom. The recent introduction of the Buddleia weevil is providing promising results, although its natural rate of spread is slow and we will be looking to introduce it into new sites.
- National Plant Pest Accord. This Council is a signatory to the National Plant Pest Accord that has been developed to prevent the sale, propagation and distribution through wholesale and retail outlets of introduced plants that are likely to establish and spread. The list is reviewed regularly and new plants are added following input from a Technical Advisory Group. Surveillance of nurseries and retail outlets within Tasman and Nelson, and enforcement where necessary, is a Council responsibility and staff have been trained to identify these plants. The identification of cultivars poses taxonomic challenges and Landcare Research is used to confirm identification when necessary.
- Education and advice. While much of the work of the staff involves providing
 information and advice to landowners on identification and management of
 Strategy pests, this category primarily covers the development of displays for
 important events such as Ecofest, the production of brochures, and the Pest of
 the Month articles in Newsline.
- Other pests. Council biosecurity staff have worked with Biosecurity NZ and other stakeholders on education and advocacy programmes to manage a number of other pests. These have included Didymo (a freshwater pest), Didemnum (a marine sea squirt) and the Great White Cabbage Butterfly.
- Marine biosecurity. The Council participates in the Top of the South Marine Biosecurity Partnership, along with the Nelson City Council and Marlborough District Council and MAFBNZ, NIWA, Cawthron Institute and the aquaculture industry, with funding from the councils and MAFBNZ. This is a pragmatic response to improve regional coordination to meet marine biosecurity challenges in an area with high natural values which is hoping to see the development of a viable and responsible aquaculture industry. A contract was awarded to Mincher Campbell Ltd to develop operation plans that sit under the Top of the South Marine Biosecurity Strategic Plan prepared by Peter Lawless and to develop a major advocacy programme targeting boat owners.

5. REVIEW OF THE BIOSECURITY ACT

Following two major reports and extensive consultation with stakeholders, there are significant changes proposed for the Biosecurity Act and these will affect future

Regional Pest Management Strategies. These changes include binding the Crown and its agents to meet RPMS requirements, changing the name from RPMS to **Regional Pest Management Plans**, using a consistent approach for analyses of the pest to go into the Strategy, and use of a standard classification for the groups of pests. It may also mean that the Crown is likely to have a greater say in the content of future Strategies

6. RECOMMENDATION

It is recommended that the Committee:

Receive this Report REP10-12-13 "Annual Biosecurity Report"

Approve the Regional Pest Management Operational Plan for 2005/2006.

Accept the Review of the Operational Plan for 2009/2010.

Lindsay Vaughan Biosecurity Co-Ordinator





Operational Plan

for the Tasman-Nelson Regional Pest

Management Strategy

2010/2011

TABLE OF CONTENTS

			Page No.
1	Intro	oduction	1
2	Purp	pose	1
3	Link	kages	1
4	Man	nagement Regimes – Declared Pests	2
-	4.1	Total Control Pests	
	4.2		
	4.3		
	4.4		
	4.5		
	4.6	National Pest Plant Accord	
	4.7	Pests in Sites of High Public Value	10
	4.8		
	4.9		
LIST	OF T	ABLES	
Table	: 1: To	otal Control Pests	3
		rogressive Control Pests	
		ontainment Pests	
		oundary Control Pests	
		egional Surveillance Pests	

1 INTRODUCTION

Under the Biosecurity Act 1993, the Tasman District Council and Nelson City Council first prepared the joint Tasman-Nelson Regional Pest Management Strategy in 1996. The Strategy was reviewed in 2001 and again in 2007.

The Strategy covers 57 pests that can cause significant damage to our environment and to the Tasman-Nelson region's primary industries. Under the Strategy, the responsibility for control lies primarily with the land occupier. Tasman District Council is the Management Agency for implementation of the Strategy and has the responsibility to ensure that land occupiers are meeting their obligations for pest management on their properties.

Tasman District Council is continuing to work with land occupiers and will provide education and advice on methods of controlling animal and plant pests. Where possible, biological control methods will be used to control widespread pests.

This Operational Plan has been prepared in accordance with Section 85 of the Biosecurity Act 1993. This Operational Plan identifies and outlines the nature and scope of activities to be undertaken by the two councils in the implementation of the Strategy for the year 2010/2011. The Operational Plan will continue to be reviewed annually for the duration of the Strategy. Performance targets and other measures by which performance may be judged are identified and will continue to be refined as more information becomes available.

2 PURPOSE

The purpose of the Operational Plan is to document how the Strategy is to be implemented by Tasman District Council. This enables stakeholders to annually examine the performance of the Council as the Management Agency for the Strategy.

3 LINKAGES

The Operational Plan is integrated, as far as possible, with the Tasman District Council's 2010/11 Annual Plan and the 2009/2019 Ten Year Plan. Both plans provide overviews of the Tasman District Council functions and these include its pest management activities. They should be read in conjunction with the Tasman-Nelson Regional Pest Management Strategy.

Bovine tuberculosis feral vector control is another significant pest management activity in the District. It is covered by a National Pest Management Strategy, and the Animal Health Board is responsible for preparing an operational plan and reporting on its implementation. Tasman District Council is a significant funder of this programme and issues resource consents for this work.

4 MANAGEMENT REGIMES – DECLARED PESTS

The Regional Pest Management Strategy incorporates 57 pests ("declared" pests) which cause, or are capable of causing, significant damage to the Tasman-Nelson region's environment or its primary industries.

The Strategy groups the individual pests into five categories, with varying levels of intervention. In most situations, the land occupier is responsible for meeting the standards and rules for each pest, although Biosecurity officers will often assist with Total Control pests.

As the management agency, Tasman District Council is responsible for ensuring that occupiers comply with their obligations, that surveillance is carried out to determine new infestations of pests, and land occupiers are advised of the most appropriate methods of control for each pest.

All declared pests are banned from sale, propagation, breeding, distribution and commercial display.

4.1 TOTAL CONTROL PESTS

These pests are limited in their distribution, but could cause significant adverse effects on primary industries in the Tasman-Nelson region and/or indigenous biodiversity. The ultimate goal is eradication. Land occupiers are required to destroy all plants at regular intervals to ensure that the extent of the plant populations will be reduced and seeding prevented.

Table 1: Total Control Pests

Pests		
African Feather Grass	Bathurst Bur	
Boxthorn	Cathedral Bells	
Climbing Spindleberry	Egeria	
Entire Marshwort	Hornwort	
Madeira Vine	Phragmites	
Saffron Thistle	Senegal Tea	
Spartina		

Total Estimated Cost 2010/2011	\$33,000

Strategy Objectives

1 Eradication from areas under the jurisdiction of Tasman District Council and Nelson City Council.

2010/2011 Performance Indicators

- 1 Work with land occupiers to destroy Total Control Pests at all known sites.
- 2 Carry out surveillance for new infestations.
- 3 Prevent new infestations from establishing.
- 4 Update the trend monitoring database.

4.2 PROGRESSIVE CONTROL PESTS

The pest plants are reasonably widespread in the Tasman-Nelson region and have specific biological characteristics (such as long seed viability) that make eradication difficult, but it is feasible to reduce the distribution and density. Land occupiers are required to destroy and manage the infestations to prevent spread onto land that is clear of the pests and to progressively reduce the distribution and density of plants at the known infested areas. The Council will be responsible for controlling rooks.

The five species of pest fish pose a significant threat to native aquatic fauna and can adversely affect water clarity. Control of these fish will be undertaken by the Department of Conservation.

Table 2: Progressive Control Pests

Pests		
Banana Passion Vine (Golden Bay)	Boneseed (outside the Port Hills)	
Chinese Pennisetum	Gambusia	
Koi Carp	Nassella Tussock	
Old Man's Beard (Golden Bay to Kaiteriteri,	Perch	
Upper Buller Catchment)		
Purple Loosestrife	Reed Canary Grass	
Reed Sweet Grass	Rooks	
Rudd	Tench	
Variegated Thistle	White-edged Nightshade	
Wild Ginger (Golden Bay to Kaiteriteri)		

Total Estimated Cost 2010/2011	\$107,000

Strategy Objectives

1 To reduce the distribution and density of Progressive Control Pests in the Tasman-Nelson region.

2010/2011 Objectives

- Destroy isolated infestations and reduce the density and/or distribution of Progressive Control Pests on severely infested sites.
- 2 Minimise seeding at infested sites.
- 3 Respond to reports of rooks with three working days of notification.
- 4 Develop and maintain a spatial database for these pests to allow monitoring of trends.

Section 4.2: Management Regimes – Progressive Control Pests 21 October 2011

Performance Indicators

- 1 Destroy all Progressive Control Pests seen at known sites.
- 2 Ensure the occupiers of land with pest infestations are aware of their responsibilities.
- 3 Carry out surveillance for new infestations.
- 3 Prevent new infestations from becoming established.
- 4 Monitor changes in the known distribution of these pests
- The Department of Conservation will inspect properties with known or suspected infestations of the pest fish, and undertake control, as set out in Memorandum of Understanding with the Management Agency.

4.3 CONTAINMENT PESTS

Containment Pests refer to pests that are abundant in parts of the Tasman-Nelson region. The long-term goal is to prevent the spread of these pests to adjoining properties, or to parts that are not currently infested.

Table 3: Containment Pests

Pests		
Argentine Ants	Australian Magpies	
Broom (Howard-St Arnaud)	Brushtail Possum	
Darwin's Ants	Feral Cats	
Feral Rabbits and Hares	Gorse (Howard-St Arnaud)	
Lagarosiphon	Mustelids (Stoats, Weasels and Ferrets)	
Purple Pampas		

Total Estimated Cost 2010/2011	\$137,000
--------------------------------	-----------

Strategy Objectives

To prevent the spread of Containment Pests to adjoining properties or other parts of Tasman and Nelson that are not currently infested.

2010/2011 Objectives

- 1 Destroy isolated infestations and reduce incidence in other sites.
- 2 Keep un-infested areas free of Argentine and Darwin's Ants and slow their rate of spread.
- 3 Provide advice to occupiers on methods to control these pests
- 4. Lend traps on a short-term basis to control Magpies, Possums, Mustelids, Feral Cats. Feral Rabbits and Hares.

Performance Indicators

- 1 Undertake surveillance for infestations of Pampas and Lagarosiphon, and ensure compliance with Strategy rules.
- Identify areas of Argentine and Darwin's Ant infestation, monitor their spread, advise affected occupiers of the most effective methods of control, encourage the development of new products for control, and co-ordinate occupier control.
- 3 Respond to requests for help with animal pest control.
- 4 Maintain a trend-monitoring database for plant and ant pests.

4.4 BOUNDARY CONTROL PESTS

The benefit from controlling pest plants generally falls to the individual land occupier. An adjacent occupier whose land is clear, or being cleared, of the pest can reasonably expect to be protected from invasion of the pest across the property boundary. When a reasonable complaint is made by the adjoining occupier, Council will intervene by requiring land occupiers to maintain their boundaries clear of pests to the nominated distance, except for fireblight when control will be undertaken by the pipfruit industry.

Table 4: Boundary Control Pests

Pest	Distance from boundary
Australian Sedge	20 metres
Blackberry	10 metres
Black Spot, Codling Moth, Powdery Mildew	500 metres from pipfruit orchard
Broom (outside Howard-St Arnaud)	10 metres
Buddleia	50 metres
Fireblight	500 metres from pipfruit orchard
Giant Buttercup	5 metres
Gorse (outside Howard-St Arnaud)	10 metres
Nodding Thistle	20 metres
Ragwort	20 metres

Total Estimated Cost 2010/2011	\$10,000

Strategy Objectives

To control the spread of Boundary Control Pests from adjacent properties or road reserve to land that is clear, or being cleared, of these pests.

2010/2011 Objectives

To intervene in response to any reasonable complaint of non-compliance by an adjoining land occupier.

Performance Indicators

Follow up all reasonable complaints that meet policy requirements for enforcement in the Strategy within five working days.

4.5 GENERAL SURVEILLANCE AND REGIONAL SURVEILLANCE PESTS

Regional Surveillance Pests are pests for which there are no rules requiring occupiers to undertake control, but they are still banned from sale, propagation, breeding, distribution or commercial display. General surveillance involves work that is undertaken to identify new pests and changes in the distribution of existing pests.

Table 5: General Surveillance and Regional Surveillance Pests

Pests		
Parrot's Feather	Undaria	
Pinus contorta (Lodgepole Pine)	Yellow Flag	

Total Estimated Cost 2010/2011	\$37,000

Strategy Objectives

To assess the distribution and monitor the spread and impact of Regional Surveillance Pests.

Specific Performance Indicators

To map the distribution of Regional Surveillance Pests to allow an assessment of the level of risk posed by these pests.

4.6 NATIONAL PEST PLANT ACCORD

The National Pest Plant Accord was developed in 2001 as a cooperative agreement between the Nursery and Garden Industry Association, regional councils and government departments with biosecurity responsibilities. The Accord lists plants that could escape from gardens and become weeds, adversely affecting productive land or areas of mature or regenerating native bush. It is intended to minimise the number of "weedy" plants being sold to gardeners. Council staff visit nurseries and retail outlets to ensure that they are meeting their Accord commitments.

There are currently 125 plants listed in the Accord. All these plants are classified as Unwanted Organisms under the Biosecurity Act 1993; they are banned from propagation, sale and distribution in New Zealand. Twenty of these have also been included in the Tasman-Nelson Regional Pest Management Strategy and have rules for their control.

Objective

To prevent the sale, propagation, breeding, distribution or commercial display within New Zealand of any pest plant that is determined to be an unwanted organism under the Biosecurity Act 1993.

Performance Indicators

- 1 Ensure all plant outlets have a current copy of the New Zealand Pest Plant Manual of National Surveillance Plants which lists the plants that are banned from sale, propagation and distribution.
- Inspect nurseries and other plant outlets for any plants identified on the National Pest Plant Accord and enforce the destruction of these plants if required.

4.7 PEST CONTROL IN SITES OF HIGH PUBLIC VALUE

The public see widespread pests, such as Old Man's Beard and Possums, as having the greatest impact on the Tasman-Nelson region. However, controlling these pests across the whole of the region is prohibitively expensive in the absence of suitable biocontrol agents. The most reasonable and practical approach is to target these pests at sites of high public value where they are having the greatest impact.

All pests at a particular site will be controlled where practical. The objective is the protection of the values of the site, and is not specific to particular designated pests. As this pest control work benefits the whole community, it is funded from the general rate. There are no requirements on land occupiers to carry out control on these sites, but land occupiers and communities in close proximity will be encouraged to carry out pest control. There is no point just removing Old Man's Beard from a site if Banana Passion Vine or some other climber will simply replace it. The focus will be on achieving the greatest benefit from the available resources, with consideration given to the ongoing pest control work that will be required if benefits are to be achieved long-term.

Tasman District Council and Nelson City Council will be responsible for allocating their own funds for sites in their regions.

Total Estimated Cost 2010/2011	\$29,000
--------------------------------	----------

Strategy Objectives

1 To control nominated pests on land designated as high public value sites.

2010/2011 Objectives

- 1 . Tasman District Council has selected sites using the following criteria:
- ecological value;
- amenity value;
- cultural value;
- public access and recreation values;
- feasibility and cost of effective control;
- history of pest control.
- 2 . Pest control programmes are undertaken at
 - Dart/Wangapeka
 - Lee Valley Reserve
 - Torrent Bay
 - Upper Baton
 - NCC sites

ı	D	or	F۸	rm	an	00	Ind	icators	
	_	ei i	ıu		ап	ıce	ma	icators	

1 To implement management plans for each site to prote	ct the v	values of	each site.
--	----------	-----------	------------

2	To assist individuals and community groups to carry out pest control work at and
	adjacent to high public value sites.

4.8 BIOLOGICAL CONTROL

When pests have become widespread, the benefits of control generally apply to individuals. However, biological control is a notable exception. It can be cost-effective to limit the impacts of widespread pests by using biocontrol agents. The benefits will apply across the wider community. Traditional control practices are increasing in cost, and may be restricted by changes in land use and by changes in public attitude, and biological control may be the only practicable long-term management option available.

Regional Councils have formed a Biocontrol Collective with Landcare Research and the Department of Conservation and meet annually to determine the direction of the research programme for the following year and agree on funding contributions. The Management Agency has agreed to contribute \$24,800 to the 2010/11 research programme.

Total Estimated Cost 2010/2011	\$48,000

2010/2011 Objectives

- To contract Landcare Research to undertake research into biological control through the Regional Councils Biocontrol Collective and provide new populations of biocontrol agents and technical advice.
- 2 To purchase new biological control agents, monitor release sites, and report on progress.
- To increase the distribution of the biological agents throughout the Tasman-Nelson region and provide information and advice to land occupiers.

Performance Indicators

- Promote the development of biological control by Landcare Research within the collective programme for: Alligator Weed, Banana Passion Vine, Barberry, Boneseed, Smilax, Broom, Chilean Flame Creeper, Chilean Needle Grass, Nassella Tussock, Climbing Asparagus, Wild Ginger, Moth Plant, Old Man's Beard, Wandering Jew, and Woolly Nightshade.
- Monitor release sites of Californian Thistle Gall Fly, Broom Seed Beetle and Psyllid, Gorse Pod Moth, Thrips, Spider Mite, Colonial Hard Shoot Moth and Soft Shoot Moth, Nodding Thistle Gall Fly, Receptacle Weevil and Crown Weevil, Old Man's Beard Leaf Fungus, Leaf Miner and Sawfly, Ragwort Flea Beetle and Cinnabar Moth, and Scotch Thistle Gall Fly.
- Distribute established biocontrol agents to new parts of the Tasman-Nelson region.
- 4 Research biological control techniques to improve their effectiveness.
- 5 Identify appropriate training needs and utilise training opportunities.

4.9 Provision of Education and Advice

Total Estimated Cost 2010/2011	\$62,000
--------------------------------	----------

2010/2011 Objectives

1 To educate the public in the identification of pests and the most appropriate methods for controlling them.

Performance Indicators

- 1 Continue to distribute pamphlets and pest information that identify the pests in the Strategy, and explain its requirements.
- 2 On request, provide pest control workshops throughout the Tasman-Nelson region to encourage individuals and groups to carry out pest control.
- 4 Prepare biosecurity displays and attend community events such as Ecofest.
- 5 Stage field days in conjunction with other organisations and people with biosecurity expertise to broaden understanding and transfer new ideas.
- 6 Prepare regular newsletters and media releases on topical pest issues.





Review of the 2009-2010 Operational Plan

for the Tasman-Nelson Regional Pest

MANAGEMENT STRATEGY

TABLE OF CONTENTS

		Page No.
INTR	ODUCTION	1
LINK	(AGES	1
1	Total Control Pests	2
2	Progressive Control Pests	8
3	Containment Pests	10
4	Boundary Control Pests	13
5	General Surveillance and Regional Surveillance Pests	15
6	Pest Control in Sites of High Public Value	16
7	Biological Control	18
8	National Pest Plant Accord	20
9	Provision of Education and Advice	21
9	Other Pests	23
LIST	OF TABLES AND FIGURES	
Table Table	e 1: Pest Fish Data 1998 – 2009 e 2: Summary of Boundary Clearance Activity e 3: Principal Pests to be Controlled in Sites of High Public Value e 4: National Interest Pests Managed by Biosecurity New Zealand	13 16
Figur	re 1: Trends in Pest Fish Sites 1998 - 2009	9

INTRODUCTION

Section 85(1)(b) of the Biosecurity Act 1993 requires the Management Agency for every pest management strategy to review the Operational Plan annually, and if the Management Agency thinks fit, to amend it and to report on the Operational Plan and its implementation no later than five months after the end of the financial year.

The Operational Plan details the main activities required by the Tasman-Nelson Regional Pest Management Strategy, (the Strategy). The following report by Tasman District Council in its capacity as the Management Agency assesses each of these activities, and comments on relevant issues.

LINKAGES

This Review of the Operational Plan should be read in conjunction with the Tasman-Nelson Regional Pest Management Strategy. It is integrated, as much as possible, with the Tasman District Council's Annual Plan Report and the Ten Year Plan. The Annual Plan Report provides an overview of all Tasman District Council functions, including pest management activities, for 2009-2010.

Bovine tuberculosis feral vector control is another significant pest management activity in the District. This is subject to a National Pest Management Strategy, where the Animal Health Board is responsible for preparing an operational plan and reporting on the Strategy's implementation. Tasman District Council is a significant funder of this programme and issues resource consents for this work.

TOTAL CONTROL PESTS

Estimated Project Cost \$25,000

Actual Project Cost \$20,525

Total Control Pests refer to high-risk pests that are of limited distribution or density in the region for which the long-term goal is eradication.

STRATEGY OBJECTIVE

1

1 Eradicate Total Control Pests from the Tasman-Nelson region.

2009-2010 Performance Indicators

- 1 Work with land occupiers to destroy Total Control Pests at all known sites.
- 2 Carry out surveillance for new infestations.
- 3 Prevent new infestations from establishing.
- 4 Update the trend monitoring database.

Achievements

General

- All active and monitoring sites of Total Control Plant Pests (African Feather Grass, Bathurst Bur, Boxthorn, Cathedral Bells, Climbing Spindleberry, Egeria, Entire Marshwort, Hornwort, Madeira Vine, Phragmites, Saffron Thistle, Senegal Tea and Spartina) were inspected during the year. Any plants found were destroyed, and/or control programmes initiated. On all sites, plant numbers were reduced. Historical sites where live plants have been absent for several years are usually inspected biennially.
- 2 Data is recorded on hand-held IPAQs for each site and transferred to the pest database for storage and analysis.

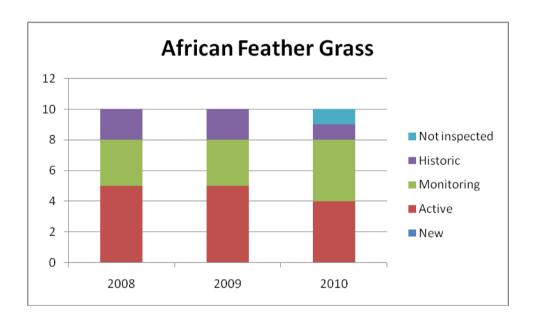
Trend Monitoring

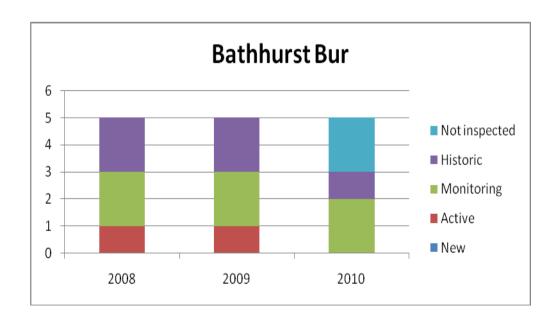
The database for recording pest distribution and abundance was developed to hold the information recorded on the IPAQs. Site locations are stored in the Council pest database, along with the site classification and any relevant information. The site classification is based on the level of activity and provides a method of trend monitoring. This was used in the pest distribution maps in the back of the current Strategy but the criteria for classifying the sites has been revised to bring them into line with that described by Halloran (Halloran, P (2006), *Measuring performance of invasive plant eradication efforts in New Zealand*,

New Zealand Plant Protection 59: 1-7) and provides an useful picture of the long-term trends. The criteria are described below.

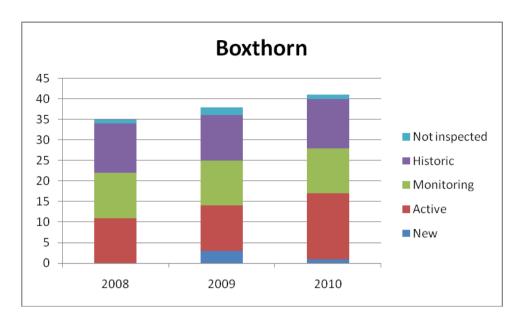
- **New sites** are those that have been reported for the first time in the financial year shown, identification has been confirmed, and live material is present.
- Active sites are sites that are being treated (or retreated) in the current financial year with live material present.
- **Monitoring sites** are sites which have previously been treated and no live material is present, but it has been present within the last three years.
- **Historic sites** are those for which no live material has been present for more than three years.

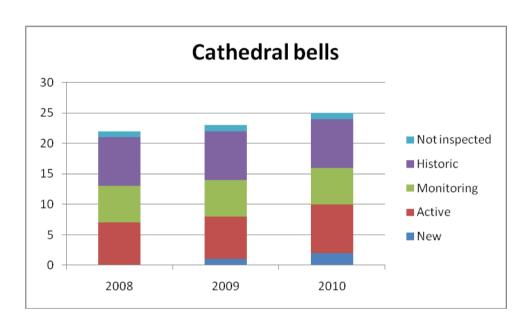
The results for individual species are illustrated below.

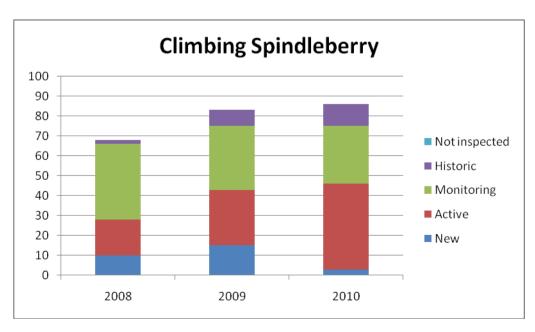




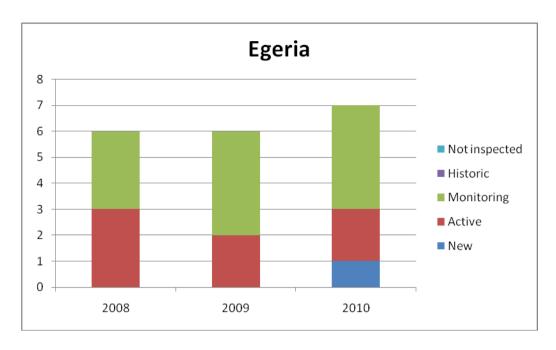
Section 1: Total Control Pests November 2010

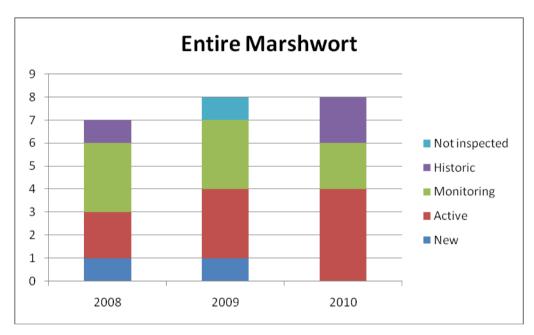


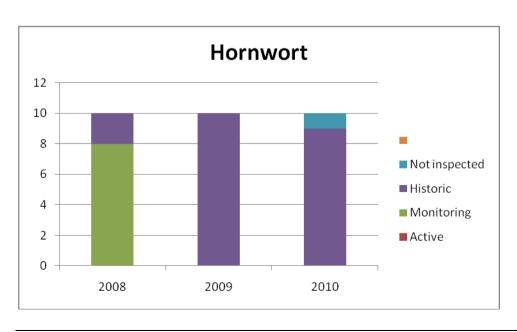




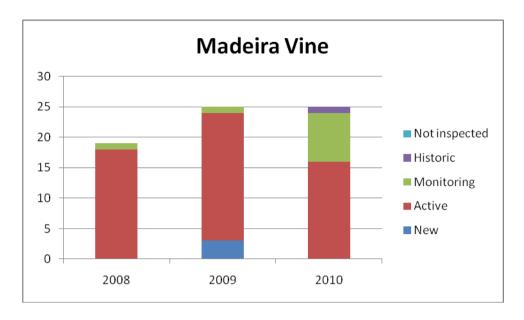
Section 1: Total Control Pests November 2010

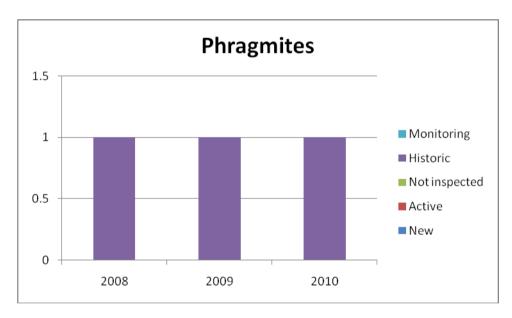


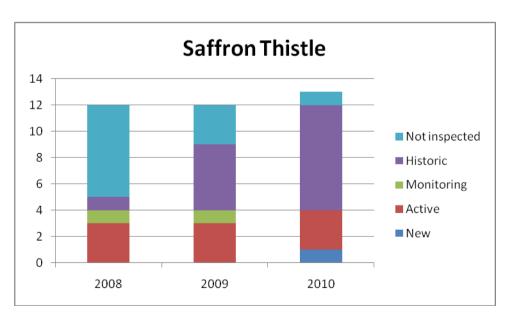




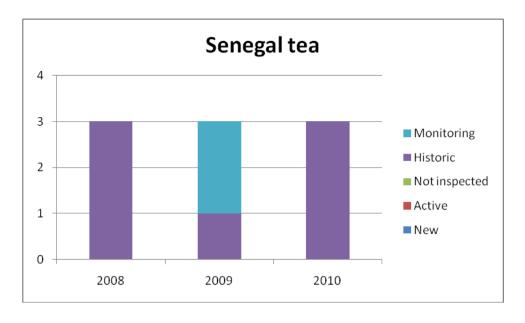
Section 1: Total Control Pests November 2010







Section 1: Total Control Pests November 2010



2 PROGRESSIVE CONTROL PESTS

Estimated Project Cost \$80,000

Actual Project Cost \$75,322

Progressive Control Pests are pests that are unlikely to be eradicated from a region because of their biological characteristics such as long-term seed viability.

STRATEGY OBJECTIVE

To reduce the distribution and density of Progressive Control Pests in the Tasman-Nelson region.

2009-2010 OBJECTIVES

- Destroy isolated infestations and reduce the density and/or distribution of Progressive Control Pests on severely infested sites.
- 2 Minimise seeding at infested sites.

Performance Indicators

- 1 Destroy all Progressive Control Pests seen at known sites.
- Ensure the occupiers of land with pest infestations are aware of their responsibilities.
- 3 Carry out surveillance for new infestations.
- 3 Prevent new infestations from becoming established.
- 4 Monitor changes in the known distribution of these pests

ACHIEVEMENTS

General

- The distribution and density of Progressive Control Pests have been reduced at most sites.
- 2 The pest monitoring database is updated.
- 3 Surveillance has concentrated on recording the location of the sites of the Progressive Control Pests that were introduced into the Strategy.

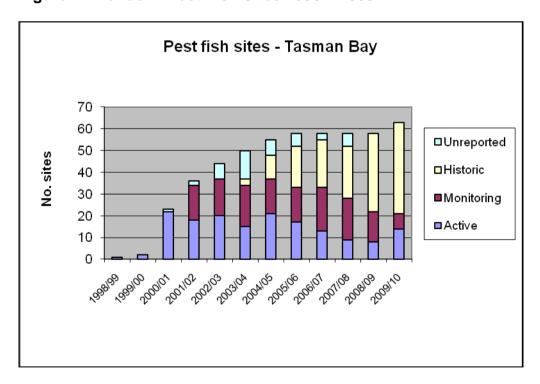
Trend Monitoring

Trend monitoring using the Halloran classification has been applied to pest fish in waterways in eastern Tasman which have been controlled by the Department of Conservation for the last eight years, who has provided this data. The species involved are *Gambusia*, Koi carp, Perch, Rudd and Tench.

Table 1: Pest Fish Data 2000 - 2008

Year	Active	Monitoring	Historic	Unreported	Total
1998/99	1				1
1999/00	2				2
2000/01	22			1	23
2001/02	18	16		2	36
2002/03	20	17		7	44
2003/04	15	19	3	13	50
2004/05	21	16	11	7	55
2005/06	17	16	19	6	58
2006/07	13	20	22	3	58
2007/08	9	19	24	6	58
2008/09	8	14	36		58
2009/10	14	7	42		63

Figure 1: Trends in Pest Fish Sites 1998 - 2009



This illustrates:

 the rapid increase in the number of sites containing pest fish over the first eight years, following discovery of the first sites in 1998;

Section 2: Progressive Control PestsNovember 2010 the significant reduction in the number of Active and Monitoring sites over the last five years, following intensive surveillance and treatment.

3 CONTAINMENT PESTS

Estimated Project Cost \$105,000

Actual Project Cost \$123.337

STRATEGY OBJECTIVE

To prevent the spread of Containment Pests to adjoining properties or other parts of Tasman and Nelson that are not currently infested.

2009-2010 OBJECTIVES

- 1 To require treatment of pest plants and ants.
- 2 To promote and encourage control of animal pests.

PERFORMANCE INDICATORS

- 1 Monitor changes in the known distribution of the pests.
- 2 Undertake surveillance of uninfested land.
- Where possible, prevent the establishment of new infestations.
- 4 Ensure the occupiers of land with pest infestations are aware of their responsibilities.

ACHIEVEMENTS

General

- A significant effort has gone into preventing the spread of Containment Pests but the existing tools are inadequate for the task. There is no objective data to indicate what is being achieved with the management of animal pests such as Magpies, Feral Cats, Feral Rabbits and Mustelids.
- The invasive ants are slowly spreading, as are Purple Pampas and Gorse and Broom in the Howard-St Arnaud area. A more appropriate role for future management of these widespread pests will be for Council to provide an education and support role for landowners rather than having a specific requirement on landowners.

Comments on Individual Pests

1 Argentine and Darwin's Ants

- Argentine ants were first identified in Tasman-Nelson in 2001 at Port Nelson. Darwin's ants have been here for a much longer period of time, probably since the mid-1980s.
- There are more than 800 urban and 12 rural properties known to be infested with Argentine Ants and more than 140 urban and 30 rural properties known to be infested with Darwin's Ants.
- Argentine Ants are spreading along footpaths and road edges at up to 150 metres per year. On rougher terrain (across gardens and lawns), the rate is up to 50 metres per year. Baited properties can be re-infested within 12 months from unbaited neighbouring properties. They cross over roads and under them in culverts and drains.
- For Darwin's Ants, the natural rate of spread is slower, up to 50 metres per year along hard surfaces. On rougher terrain, it is probably 20-30 metres per year. Baited properties can be re-infested within 24 months from unbaited neighbouring properties.
- Effective baiting of Argentine Ants usually provides sufficient control for two years, but reinvasion from unbaited sections may require annual baiting.
 For Darwin's Ants, effective baiting usually provides sufficient control for three to four years. Again, reinvasion from unbaited sections may require more frequent baiting.
- The Council was able to employ a well-qualified science graduate to undertake surveillance of Argentine and Darwin's ants.
- Updating our data on distribution of these two species of ant, advising residents of the presence of invasive ants on their properties and of the need to bait and providing them with information, has become a major logistical task.

3 Australian Magpie

 There is a continuing seasonal demand for traps and call birds, but at a lower level than in previous years. Some of the more committed occupiers have purchased their own traps. Seventeen birds were removed from the Takaka Valley and fifteen from the Riwaka Valley to reduce the risk of reinvasion.

4 Broom and Gorse (Howard-St Arnaud)

 Most known sites remain active due to long period of seed viability and the start up of logging is expected to reactivate a number of sites and increase the risk of spread. Harvesting commenced in *Pinus muricata* stands in Teetotal and Stations Creeks near St Arnaud in October 2009. All machinery was cleaned before starting to prevent the introduction of weed seeds.

5 Brushtail Possum/Mustelids/Cats/Rabbits/Hares

There is a continuing demand for traps and requests for advice on control.
 The Biosecurity Officers provide a very good service to occupiers.

 Control operations were mounted on small populations of rabbits in coastal properties in Motueka and Kaiteriteri.

6 Lagarosiphon

 Occupiers are advised of the Strategy requirements and advice is provided on treatment options.

7 Purple Pampas

 Plants continue to be found (and destroyed) around areas of scrubland and pine forest known to be infested. New sites are usually associated with soil disturbance associated with roading and forest harvesting operations.

4 BOUNDARY CONTROL PESTS

Estimated Project Cost

\$8,000

Actual Project Cost \$6,385

Boundary Control Pests are a group of horticultural, agricultural or forestry pests that are widely distributed.

STRATEGY OBJECTIVE

1 To control the spread of Boundary Control Pests from adjacent properties or road reserve to land that is clear, or being cleared of these plants.

2009-2010 OBJECTIVES

To intervene in response to any complaint of non-compliance by an adjoining land occupier.

PERFORMANCE INDICATORS

1 Follow up complaints that satisfy the policy for enforcement in the Strategy within a five day working period.

Table 2: Summary of Boundary Clearance Activity

Pest	Requests for Boundary Clearance
Australian Sedge	Nil
Blackberry	Nil*
Broom (outside Howard - St Arnaud)	2*
Buddleia	Nil
Codling Moth, Black Spot and Powdery Mildew	Nil
Fireblight	Nil
Giant Buttercup	Nil
Gorse (outside Howard - St Arnaud)	7
Nodding Thistle	Nil
Ragwort	Nil

^{*} There have been numerous requests from occupiers for detailed specifications in regard to Gorse, Broom and Blackberry and these mostly allowed landowners to resolve boundary issues. There were nine requests for Council intervention.

ACHIEVEMENTS

1 Biosecurity Officers have dealt effectively and efficiently with issues raised by requests.

ENFORCEMENT

Section 4: Boundary Control PestsNovember 2010 1 Three landowners were served with a Notice of Direction.

5 GENERAL SURVEILLANCE AND REGIONAL SURVEILLANCE

Estimated Project Cost \$30,000

Actual Project Cost \$28,403

General surveillance is work that is undertaken to identify new pests and changes in the distribution of existing pests. Regional Surveillance Pests are four pests which may pose a future risk but there is limited information on the present distribution. These are being monitored and advice is provided to landowners to promote voluntary control.

STRATEGY OBJECTIVE

To assess the distribution and monitor the spread and impact of Regional Surveillance Pests.

2009-2010 OBJECTIVES

To continue assessment of the distribution and monitor the spread and impact of Regional Surveillance Pests.

PERFORMANCE INDICATORS

To map the distribution of Regional Surveillance Pests to allow an assessment of the level of risk posed by these pests.

ACHIEVEMENTS

- Surveillance has identified sites of Yellow Flag, Parrot's Feather and *Pinus contorta* but there has been no surveillance of *Undaria*.
- Nelson City Council contractors continue to remove *Pinus contorta* trees from the Champion Creek (Roding Waterworks Reserve) area.

6 PEST CONTROL IN SITES OF HIGH PUBLIC VALUE

Estimated Project Cost \$23,000

Actual Project Cost \$31,884

STRATEGY OBJECTIVE

1 To control nominated pests on land designated as high public value sites.

2009-2010 OBJECTIVES

1 Tasman District Council will control designated pests as part of follow-up programmes at the following sites:

Table 3: Principal Pests to be controlled on Sites of High Public Value

Site	Principal Pest(s)
Dart/Wangapeka confluence	Old Man's Beard
Marahau	Old Man's Beard
Torrent Bay	Animal and Plant Pests
Upper Baton	Old Man's Beard
Lee Valley Reserve	Old Man's Beard and other pest plants
Nelson City Council reserves	Old Man's Beard and other pest plants

PERFORMANCE INDICATORS

- 1 To implement management programmes for each site to protect the values of each site.
- 2 To assist individuals and community groups to carry out pest control work on and adjacent to the high value sites.

ACHIEVEMENTS

1 Emmaus Farm

 The occupier and QE2 National Trust are continuing to release around recently planted seedlings.

2 Lee Valley

 Old Man's Beard, Barberry seedlings and Wandering Jew continue to be controlled by spraying and new plantings released.

3 Torrent Bay

- This programme is a joint venture between the Council, local landowners and the Department of Conservation. There are 103 possum traps and 73 stoat traps distributed over 514 ha and caught 135 possums, 25 stoats and 125 rats.
- Possums, Mustelids, Rats and Mice continue to be trapped. There has been a significant drop in the number of animals trapped and occupiers have commented on increased number of native birds, especially the nectar feeders.
- There is ongoing removal of pine trees from Tasman District Council land and adjoining private land as part of a Wilding Pine control programme. Abel Tasman Sea Shuttles, a local concessionaire, have been involved in wilding pine removal from foreshore areas.
- The Abel Tasman Birdsong Trust was set up in December 2007. This is funded by a small levy on day visitors travelling by boat into Abel Tasman National Park and will fund pest control in southern end of the Park. In Feb 2009, it set up a mustelid trap line from Yellow Point to Marahau along the Abel Tasman walking track and volunteers from Marahau are servicing these traps.

4 Upper Baton

- Old Man's Beard vines were cut and stumps were treated in the public use and fishing access areas along the Upper Baton River edge between the gorge and the swing bridge.
- Subdivision, a change in land use and restriction of public access will require a review of this programme.

5 Dart and Wangapeka Confluence

- Vines of Old Man's Beard were cut and stumps treated and rambling growth was sprayed on the only known site in the Upper Wangapeka.
- Council and DOC staff worked together on controlling Old Man's Beard on the western end of Mt Jones.

6 Marahau

 Regrowth and new plants of Old Man's Beard were found and treated by cutting and treating, and new infestations were found in Otuwhero Valley. Gunnera (Chilean rhubarb) has been found on the banks along the lower reaches of the Marahau River and will require treatment to control it.

7 Community Groups

Pest control work is being undertaken by a substantial number of community groups in the Tasman-Nelson regions, particularly in sites with high biodiversity values or in areas close to suburbs. The groups include Friends of Flora, Friends of Rotoiti, Friends of Cobb, Friends of Mangarakau Swamp, Onekaka Biodiversity Group, Abel Tasman Birdsong Trust, Birdlife on the Grampians, Marsden Valley Traplines, Native Bird Recovery Richmond, the Tasman/Nelson Weedbusters,

7 BIOLOGICAL CONTROL

Estimated Project Cost

Total costs \$39,000

Actual Project Cost

Landcare Research Contract \$20,000
Biocontrol agents \$5,000
Weed identification \$600
Council costs \$16,906
Total \$42,506

2009-2010 OBJECTIVES

- 1 To contract Landcare Research to undertake research into biological control through the Regional Councils Biocontrol Collective and provide new populations of biocontrol agents and technical advice.
- 2 To purchase new biological control agents, monitor release sites, and report on progress.
- To increase the distribution of the biological agents throughout the Tasman-Nelson region and provide information and advice to land occupiers.

PERFORMANCE INDICATORS

- 1 Monitor the biological agents already present in the Tasman-Nelson region and collect the successful agents and release to new sites.
- 2 Support research into biological control techniques and their implementation.

NEW RELEASES

- Three releases of the Buddleia Weevil were made. It appears to have successfully established and is slowly spreading.
- A further release of the Broom Leaf Beetle was made to supplement the release made in the previous year.

COLLECTION AND RELEASE

- 1 Biosecurity staff monitored earlier releases of:
 - Broom Psyllid.
 - Broom Seed Beetle.
 - Colonial Hard Shoot Moth.
 - Gorse Pod Moth.

- Gall Fly at Wakefield.
- Portuguese Gorse Thrips. These are continuing to spread on Rough Island and along the Waimea River berms and are having a significant impact on gorse. They are now spread to the hill country between Nelson City and Richmond.
- Nodding Thistle Crown Weevil numbers have increased and a number of weevils were harvested from Wantwood Station and from Dick's property.
- Ragwort plume moth is now well established and spreading slowly from their original release sites.
- Under its contract with the regional councils, Landcare Research continues to investigate methods to maximise the effectiveness of biological control techniques, and to develop biological controls for a range of pest plants, selected by the regional councils in the Biocontrol Collective.

8 NATIONAL PEST PLANT ACCORD

Estimated Project Cost

Total costs

\$20,000

Actual Project Cost

Total costs

\$17, 554

STRATEGY OBJECTIVE

To prevent the sale, propagation or distribution within New Zealand of any pest plant determined as an unwanted organism under the Biosecurity Act 1993.

PERFORMANCE INDICATORS

To inspect nurseries, roadside stalls and other plant outlets for any plants identified on the National Pest Plant Accord and enforce the destruction of these plants if required.

ACHIEVEMENTS

- New nurseries and plant retailers were inspected to ensure that no plants listed on the National Pest Plant Accord were being sold.
- 2 Cultivars of some species continue to cause difficulty in identification.
- Two staff members attended a course in Wellington to assist with identification of a substantial number of plant pests that have been added to the Accord.
- 4. A small pot, infested with African Clubmoss, was removed from a nursery and destroyed. The owner asked to inspect and destroy any other specimens.

9 PROVISION OF EDUCATION AND ADVICE

Estimated Project Cost \$45,000

Actual Project Cost \$45,304

2009-2010 OBJECTIVES

- 1 Raise the public awareness of pests and emphasise the environmental and production benefits from effective control programmes.
- 2 Respond to all requests for advice and information so as to assist the community to effectively control pests. In particular, assist groups and individuals wanting to control designated pests, including animal pests.
- 3 Provide land occupiers with a plant identification service and advice on appropriate methods of control.

PERFORMANCE INDICATORS

- Distribute pamphlets identifying the pests in the Strategy and explaining its requirements.
- Organise public awareness campaigns involving media releases and handouts on pests that feature identification, controls and occupier responsibilities.
- Prepare and set up biosecurity displays for conferences and appropriate community events such as Ecofest.
- Organise field days with staff from other organisations and with people who have some biosecurity involvement to broaden their knowledge and understanding, eg, local authorities, Landcare Research and Department of Conservation.
- Organise field days for landowners to broaden their knowledge and understanding of pest control operations, in association with other biosecurity providers.
- 6 Provide advice and assistance to individuals and groups carrying out pest control.
- Forward plant samples to Landcare Research (terrestrial plants) and NIWA (aquatic plants) for identification and notify occupier of pest status and the appropriate control measures.

ACHIEVEMENTS

Public Enquiries

1 The pamphlet on Argentine and Darwin's ants was updated.

- Biosecurity Officers responded to a wide range of public enquiries on identification and control of animal and insect pests that included Mustelids, Rabbits, Feral Cats, Rats, Possums, Wasps, Ants and other Insects.
- Biosecurity Officers responded to a wide range of public enquiries on identification and control of plant pests.

Public Awareness Campaigns

- A monthly series of biosecurity articles ("Pest of the month") continue to be published in the newsletters of the two councils.
- Officers provided advice and lent traps to residents to control possums, mustelids, magpies and rabbits.
- Information packs on the National Pest Accord were distributed to selected wholesale and retail nurseries.
- The Biosecurity display at Ecofest covered a number of vines and control measures, along with pamphlets on the Great White Butterfly.

Top of the South Marine Biosecurity Partnership

- A marine biosecurity partnership has been established to publicise the importance of marine biosecurity. It is funded by the three Top of the South councils and MAFBNZ, with \$20,000 from each of the councils and this is matched by a contribution of \$60,000 from central government and an in-kind commitment from the aquaculture industry.
- Peter Lawless was contracted by MAFBNZ to work with stakeholders to prepare a Strategic Plan and this was completed early in 2009.
- 3. In July 2009, a contract to develop operational plans that sat under the Strategic Plan was awarded to MCL Ltd; the directors are Russ Mincher and Al Campbell. It also required a major advocacy programme targeting boat owners during the summer holidays.
- The contract is overseen by a management committee comprising representatives of the funding parties and iwi and is chaired by Paul Sheldon.

10 OTHER PESTS

UNWANTED ORGANISMS

1 Didymo

The first identification of Didymo (*Didymosphenia geminata*) in the Tasman-Nelson region was in the Upper Buller River in September 2005. Local staff worked with MAFBNZ, the Department of Conservation, and Fish & Game New Zealand to erect and maintain notices, undertake sampling, to liaise with local residents, and to support a summer advocacy programme. MAFBNZ have provided the Council with funding of \$20,000 for a summer freshwater advocacy programme and this work is contracted out to the Nelson-Marlborough branch of Fish and Game. Additional funding has been provided to the Department of Conservation to continue a water sampling programme and provide advocacy at Waikoropupu Springs, the Rotoiti boat shows and the Buller kayak festival.

2 Termites

Subterranean Termites (*Coptotermes acinaciformis*) were identified on two properties in Richmond in 2006 and on a property in Nelson in 2008. Biosecurity New Zealand has undertaken a sophisticated baiting campaign and is confident that it will achieve eradication.

3 Sea Squirt

Didemnum vexillum, a sea squirt that has colonised mussel farms and salmon farms in the Marlborough Sounds, has been found at Port Nelson and Port Tarakohe. Biosecurity Officers were involved with some surveillance and control.

Styela clava, a colonial sea squirt, was found on wharf piles at a number of locations in Port Nelson and removed. A single specimen was also found on a fishing boat in Port Tarakohe and removed during a comprehensive survey for targeted pests by NIWA divers. The boat had recently arrived from Port Lyttleton when it had been berthed for the previous three years

NOTIFIABLE ORGANISMS (PLANTS)

These were originally classified under the Noxious Plants Act 1978 as Class "A" Pest Plants. They include Cape Tulip, Johnson Grass, *Salvinia*, Water Hyacinth and Water Lettuce. Water Hyacinth was found in Stoke and eradication was managed by Ministry of Agriculture & Forestry.

Notifiable Organisms are classified under the Biosecurity Act and are required to be reported if they have not previously been recorded in the region.

NATIONAL INTEREST PESTS

MAFBNZ has selected 11 very high-risk pests that Central Government will be responsible for managing. These are listed in the following table.

Table 4: National Interest Pests Managed by Biosecurity New Zealand

Common Name	Species	Goal
Salvinia*	Salvinia molesta	Eradication
Water Hyacinth*	Eichhornia crassipes	Eradication
Johnson Grass	Sorghum halepense	Eradication
One-leaf Cape Tulip	Moraea flaccida	Eradication
Pyp Grass	Ehrharta villosa	Eradication
Phragmites	Phragmites australis	Eradication
Hydrilla*	Hydrilla verticillata	Eradication
Hornwort*	Ceratophyllum demersum	Eradication in the South Island
White Bryony	Bryonia cretica subsp dioica	Eradication
Rainbow Lorikeet	Trichoglossus haematodus	Control to zero density
Manchurian Wild Rice	Zizania latifolia	Eradication of outlier populations

^{*} Aquatic plants

Five of these pests have been present in Tasman District in recent times. Johnson Grass, Water Hyacinth, Salvinia, Hornwort and Phragmites have been eradicated from known sites. The Council will continue to undertake surveillance of these sites.

OTHER PESTS

1 Great White Butterfly

The first known New Zealand incursion of the Great White Butterfly, a European relative of the smaller common white butterfly, occurred in Nelson in May 2009 when six caterpillars were found on a Nasturtium plant on private property about 2 km from Port Nelson. It has subsequently been identified on twelve sections within six km of the Port. MAFBNZ organised hand spraying on all properties and ran a low-key publicity campaign asking for further sightings. They have undertaken a comprehensive analysis of the control options and completed a cost-benefit study and distributed these for comment to stakeholders.

2. Saltmarsh rush

A small (20 sq m) site of the introduced salt marsh rush, *Juncus gerardii*, was found in the Moutere Inlet and sprayed. It is a highly invasive pest and the only known infestation in the Tasman-Nelson region.