Regional Pest Management Strategy
Operational Plan Report
2014/2015

MARLBOROUGH DISTRICT COUNCIL

Cover Photos

Front cover: Spill-over fringe spread of wilding conifers (in this case *Pinus contorta*) from the former Catchment Board planting in the Wye catchment, Wairau Valley.

Rear cover: One of the few Chinese Pennisetum (*Pennisetum alopecuroides*) plants now being found in Marlborough.

Regional Pest Management Strategy Operational Plan Report 2014/2015

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Executive Summary

The majority (89%) of performance measures have been achieved throughout the year. This is an increase on the previous year where 86% of measures were achieved.

The Total Control pest programme continues to be a focus for Biosecurity staff as there are ongoing challenges in attempting to achieve the desired outcomes for these species. While targets are being met in the sites that are visited, effectively controlling the species can be a challenge by way of the biological nature of the specific species, the location of the infestation, or a combination of both. As is commonly touted, the 95% of the investment when attempting an eradication of a species can be spent on the last 5% of the population. Nonetheless, the infestation levels for the majority of these species are either still trending downward or are being maintained at a steady, low level.

There continues to be improvements in the delivery of the Containment Pest programmes and in particular activities relating to Chilean Needle Grass. For the first time in a number of years, there has been the complete delivery of both inspections on properties and strategic control work on all known sites where Chilean Needle Grass has been found. Spread risks relating to Chilean Needle Grass are ever present, with a number of new sites discovered in 2014/2015 - some suspected to be more recent but also some that are likely as a result of activities in previous years.

A range of educational activities have been delivered by Marlborough District Council staff as part of the ongoing programme to maintain awareness of the risk posed by invasive species and promote positive ways the community can assist. There has been a presence at all A&P Shows around the district and a number of specific focus group meetings and/or presentations provided.

Other non-regulatory activities are also ongoing and were delivered in 2014/2015. This included managing research requirements to support the registration of Taskforce herbicide, managing operational aspects of the ongoing marine pest incursions in the Sounds and providing input into a number of Sustainable Farming Fund (SFF) projects underway that have specific benefit to the Marlborough community.

1. Introduction

The Regional Pest Management Strategy for Marlborough (the Strategy) was made operative on 17 December 2012. It was the result of a review that spanned major amendments to the Biosecurity Act 1993 in September 2012. Because of this, the review was carried out under transitional provisions within the Act which meant it was completed under the previous version of the legislation. This report will also retain the terminology and structure as per the existing Strategy until such a time it is reviewed under the new legislation.

The purpose of the Strategy is to provide a framework for the efficient and effective management or eradication of pests and unwanted organisms so as to:

(a) Minimise actual and potential adverse and unintended effects associated with the targeted pests; and

(b) Maximise the effectiveness of individual pest management through a regionally co-ordinated approach.

The Strategy classifies a number of plants and animals in the region as pests, and specifies the management regime for each pest. For each pest the management programme sets out the effects of the pest to be addressed, the objective to be achieved and the main methods to achieve the objective, including rules relating to each pest.

1.1. Purpose of Operational Plan Report

The Operational Plan for 2014/15 was prepared in accordance with Section 100B of the Biosecurity Act 1993 and identifies and outlines the nature and scope of activities the Marlborough District Council intends to undertake in the implementation of its Regional Pest Management Strategy. This report outlines progress of the Operational Plan in the 2014/15 year and outlines key achievements/performance measures for the year.

1.2. Linkages

The Operational Plan (and subsequent Reports) is integrated, as far as possible, with the Marlborough District Council's Regional Policy Statement, Resource Management Plans and the Marlborough District Council Long Term Plan 2012-2022. The Long Term Plan provides an overview of all Marlborough District Council functions, including pest management and biosecurity activities.

This Operational Plan Report should also be read in conjunction with the Strategy.

2. Pest Management Programmes

2.1. Introduction

The Strategy classifies 33 plant and 4 animal species as pests because they cause, or are capable of causing, a significant negative impact on Marlborough's economy and/or environment. The Strategy separates individual pests into classifications, which require various levels of intervention.

The management regime for each pest applies to all or a specified part of the land within the district. In most situations the obligation lies with the land occupier to actually carry out the control of these pests. The only exception is for pests classified as 'Total Control' where either the Marlborough District Council or the Department of Conservation will implement control programmes directly.

Marlborough District Council is primarily responsible for the co-ordination of pest control programmes, ensuring occupiers comply with their obligations, carrying out surveillance to determine new infestations of pests and educating and advising land occupiers as to the most appropriate form of control for each pest.

2.2. Pest Plant Status

The table below summarises the district's pest plants and their designated status as classified in the Strategy.

Plant Pest Species	Status	Comments
African Feather Grass	**Total Control**	Marlborough District Council initiative. These pest plants are limited in their distribution but have the potential to severely affect either pastoral farming or cereal harvesting and/or environmental values in the district. Implementation of these programmes is delivered by the Marlborough District Council.
Bathurst Bur		
Bur Daisy		
Saffron Thistle		
Giant Needle Grass		
Chinese Pennisetum		
Parrots Feather		
Boneseed	**Total Control**	Marlborough District Council/Department of Conservation joint initiative. These pest plants are limited in their distribution but have the potential to invade large areas of the district's indigenous forest, scrub or waterways. Implementation of these programmes is delivered by the Marlborough District Council/Department of Conservation. The cost of control for these pest plants is shared between the Department of Conservation and the Marlborough District Council.
Climbing Spindleberry		
Eel Grass		
Madeira Vine		
Moth Plant		
Spartina		
Evergreen Buckthorn		
Senegal Tea		
Cathedral Bells		

Plant Pest Species	Status	Comments
Nassella Tussock	Containment Control	Land occupiers are required to annually destroy all plants on their properties before they produce seed.
Chilean Needle Grass		Land occupiers are required to annually destroy plants on their properties before they produce seed. The degree of intervention required by land occupiers to manage these pest plants depends on the classification of each property. The control requirements range from the destruction of all plants on Fringe properties to a boundary control regime on Core properties.
White-edged Nightshade		
Kangaroo Grass		
Broom and Gorse		Land occupiers are required to progressively control Broom in the Upper Awatere and Broom and Gorse in the Upper Wairau River catchments. All land occupiers are required to destroy all Broom and Gorse plants within 10 metres of their property boundary if the adjacent property is free of these pest plants.
Ragwort		Land occupiers are required to destroy Ragwort plants within 50 metres of their property boundary if the adjacent property is free of this plant pest.
Nodding Thistle		Land occupiers are required to destroy Nodding Thistle plants within 100 metres of their property boundary if the adjacent property is free of this plant pest.
Contorta Pine		Land occupiers are required to destroy all plants with the exception of properties located directly adjacent to the Wye Reserve.
Reed Sweet Grass		The Marlborough District Council is responsible for controlling this pest plant.
Blue Morning Glory	Surveillance	The key objective for management of these pests is to monitor their distribution, their impacts and gain some understanding of the spread of these organisms over time.
Climbing Asparagus		
Egeria		
Cotton Thistle		
Kahili Ginger and Yellow Ginger		
Lagarosiphon		
Purple Loosestrife		

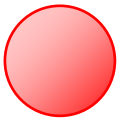
2.3. Animal Pest Status

The table below summarises the district's animal pests and their designated status as classified in the Strategy.

Animal Pest	Status	Comments
Rook	**Total Control**	Successful Rook control has been carried out in Marlborough and ongoing surveillance to monitor any re-establishment continues. No rookeries have re-established since 2005. If Rooks were allowed to re-establish they are capable of causing significant damage to cereal crops and pasture. The Marlborough District Council will carry out any Rook control within its district with the aim of eradication.
Rabbits	**Containment Control**	High Rabbit populations affect soil and water quality have a detrimental impact on economic production and increase the risk of soil erosion. It is the Marlborough District Council's responsibility to ensure land occupiers comply with their obligation to control Rabbits. Marlborough District Council will continue to carry out Rabbit population trend monitoring and offer advice on control.
Possums		Possums cause extensive defoliation of native forest and predate on native fauna. At present in Marlborough there are no Possums on our offshore islands. A rule in the Strategy prohibits the release of Possums onto any offshore island in the Marlborough Sounds. Possums are vectors of bovine Tb and can cause large economic loss to the beef and dairy industry. Possums also cause extensive damage to young commercial forestry plants. Currently AHB undertake Possum control.
Invasive Ants	**Surveillance**	Darwin Ants are in the Strategy as an invasive species that originates from Australia. Surveillance for these and other invasive ants will be carried out annually to determine their presence and/or distribution.

2.4. Performance Scoring System

To help guide readers through the ensuing performance measures, a traffic light system has been adopted to highlight those measures achieved, partially achieved or not achieved.

Symbol	Definition
	Achieved. All actions have been taken with the measure achieved.
	Almost Achieved. Actions have been undertaken but the measure has not been fully achieved for reported reasons.
	Not Achieved. Actions have not be undertaken to the level required or not been undertaken at all and the measure has not been achieved.
	Not applicable. No actions were required to measure against the target.

3. Total Control Pest Objectives and Performance Targets

Objective
To eradicate Total Control pest plants from Marlborough.

Performance Targets	Reporting	Performance	Action Taken to Meet Targets
3.1 100% of active, High Priority Total Control Pest sites are controlled annually by 30 June. (1)	98% of active, High Priority sites were visited in 2014/2015 A total of 304 active, High Priority sites were targeted for control in the 2014/2015 year. 299 sites in total were visited and control undertaken. 100% of all active Moth Plant sites were visited. Surveillance work carried out at an additional 23 sites, 10 of which resulted in new sites. These new sites have been registered/mapped and prioritised for follow-up work.		• Plan, implement and manage services required to carry out control operations. • Carry out surveillance work for each of the 16 Total Control pest plants including Spartina Grass to make up a minimum of 200 hours. • Record and maintain pest plant abundance and distribution data to enable trend monitoring over the duration of the Strategy.
3.2 Carry out not less than 200 hours of surveillance and subsequent control for Total Control pest plant species annually by 30 June. (1)	69.25 hours of surveillance work for Total Control pest plants were carried out in 2014/2015 resulting in an additional 225 plants destroyed (not including Spartina) on top of control operations at known sites. This is compared to 76.70 hours in 2013/2014 resulting in 336 plants destroyed (not including Spartina). 1104 hours of control work was carried out in 2014/2015 for Spartina. Most of this time is attributed to searching (surveillance) rather than actually controlling (destroying) any plants found. A total of 27 stems/patches of Spartina were sprayed.		
3.3 A measured decline to <3000 pest plants (excluding Boneseed) destroyed annually over all sites by 30 June.	1299 pest plants were destroyed over all sites. 20 kilograms of Eel Grass was also removed from Waterlea Creek.		

Objective
To ensure Rooks do not establish in Marlborough.

Performance Targets	Reporting	Performance	Action taken to meet Targets
3.4 Annually monitor all sites that previously had Rooks in residence with the last 10 years and investigate any sightings within 2 working days.	There is one site in Marlborough that last had Rooks temporarily in residence in 2011. This site was not visited this season. No sightings were reported to Marlborough District Council.		• Carry out an annual Rook survey and report on the presence of Rooks at previous active sites. • Actively sought public and land occupier reports of sightings of Rooks.
3.5 Undertake a public awareness campaign annually in Spring to facilitate sightings of Rooks.	Article on 'Pest of the Month' Marlborough District Council website was used to foster awareness and report sightings. No reports of Rook activity were received by the Marlborough District Council.		

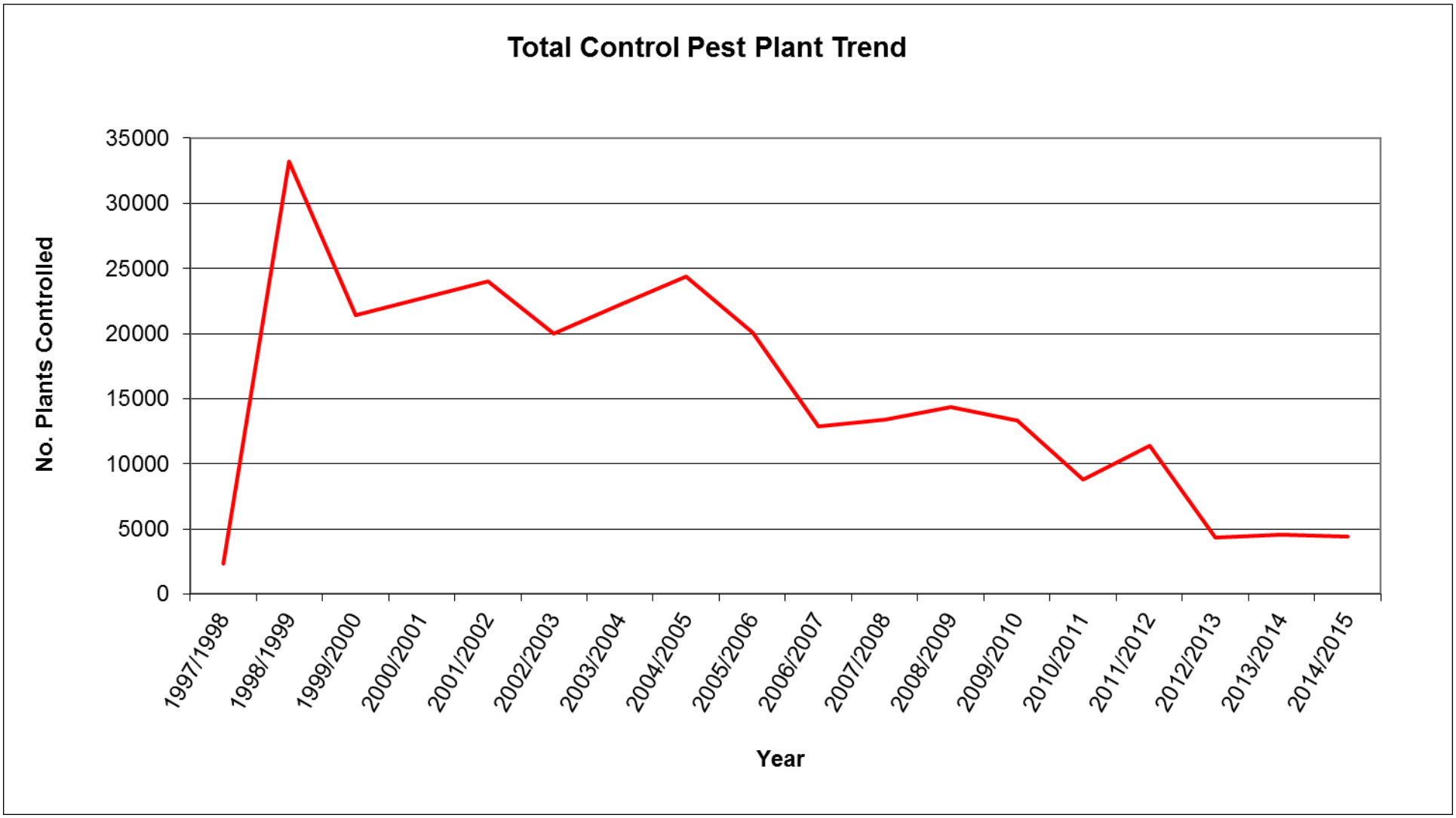
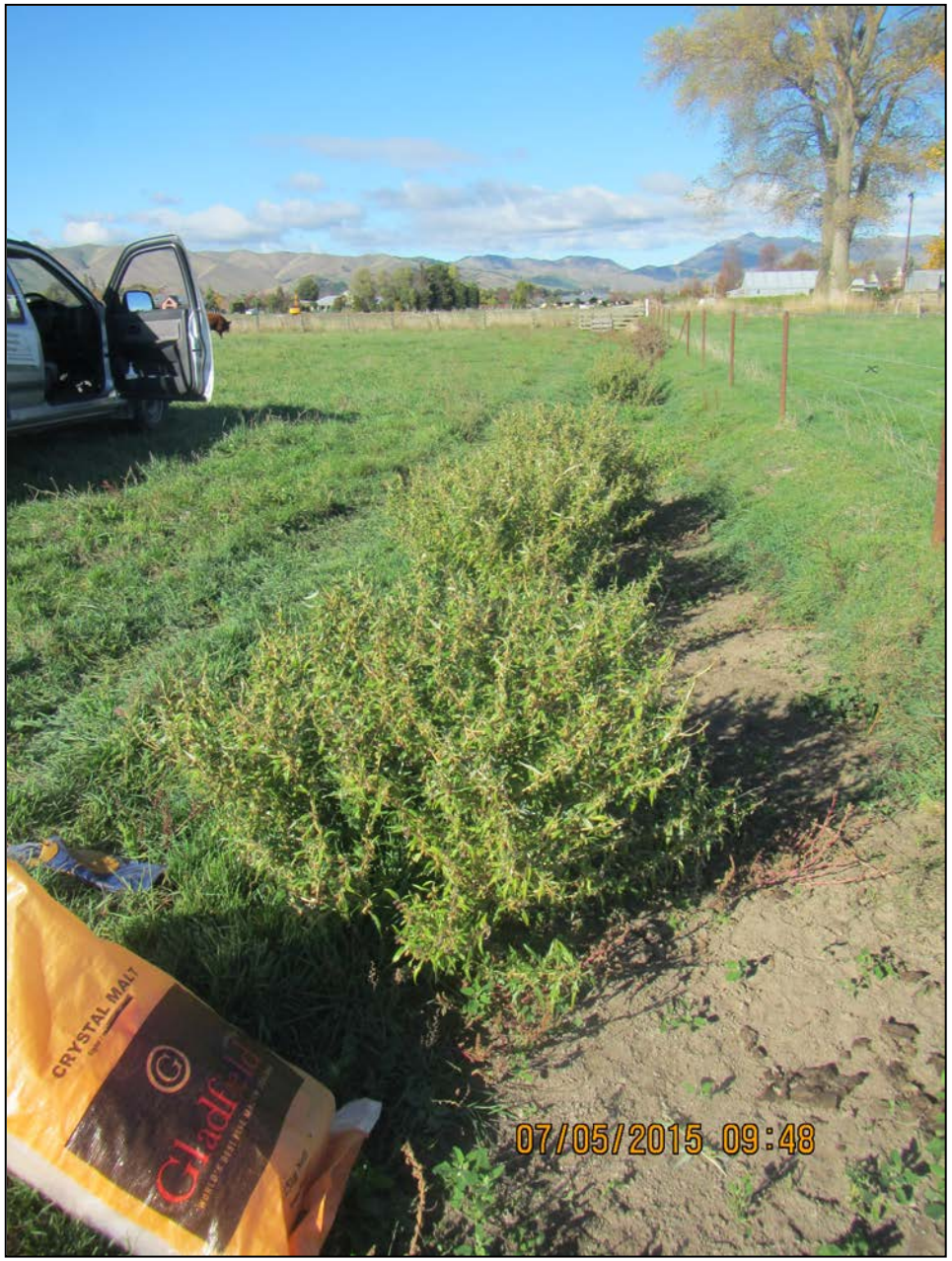


Figure 1: Total Control Pest Plants Trend

Note: Individual trends can be found in Appendix 1.



Far Left – A flare-up of Bathurst Burr (*Xanthium spinosum*) discovered in May 2015 near a historical site on the outskirts of Blenheim due to soil disturbance

Above – Joint operation with the Department of Conservation to control Boneseed (*Chrysanthemoides monilifera*) in Queen Charlotte Sound and Tory Channel.

Left – A Council Biosecurity Officer hand-pulling a young Boneseed plant after being unloaded onto the shore by the Department of Conservation vessel.

4. Containment Control Pest Objectives and Performance Targets

Objective

To prevent any increase in the distribution and density of pest plants and reduce infestation levels where possible.

Performance Targets		Reporting	Performance	Action Taken to Meet Target
4.1	Annually prepare and distribute pest plant control programmes to land occupiers, as required, annually by the deadline set for the relevant containment pest species.	***Note:** The 12 month period for Nassella Tussock data commences in the previous financial year on 1 March 2014. 440 control programmes were issued to land occupiers with Containment Control pest plants.		• Annually prepare control programmes for all land occupiers where active facilitation by Marlborough District Council is warranted. • Prioritise sites for inspection and carry out inspections or verify compliance. • Make contact with those landholders with a 'Core' Chilean Needle Grass property to ensure compliance with boundary control rules and foster further best practise management.
4.2	Annually inspect a combined minimum of 85% of Nassella Tussock, Kangaroo Grass and White-edged Nightshade sites to confirm the issued control programme has been completed to standard. **(1)**	A total of 372 control programmes were issued for the containment pest plants Nassella Tussock, Kangaroo Grass and White-edged Nightshade. 315 of the 372 or 85% of properties issued with a control programme were inspected to confirm completion to standard.		
4.3	An annual inspection is made with 100% of Chilean Needle Grass Fringe sites to inspect for compliance, undertake education/assistance or undertake control activities**.**	All 44 Fringe sites for Chilean Needle Grass were inspected for compliance.		
4.4	Annual contact is made with 100% of Chilean Needle Grass Core sites to either inspect for compliance or undertake education/assistance activities.	All 24 Core sites for Chilean Needle Grass were inspected for compliance.		

4.5	Undertake an annual surveillance, and carry out required control works, on 100% of Fringe Chilean Needle Grass sites where Council undertakes strategic management.	100% of these sites were controlled this season		• Undertake the strategic management of pests on some sites classified at Fringe.
4.6	Investigate any new reports of potential Chilean Needle Grass infestation within 2 working days.	7 new reports of Chilean Needle Grass which were all investigated within 2 working days.		
4.7	< 40 land occupiers issued with notices of direction due to non-compliance with Strategy rules within the 12 month period to 30 June.	25 land occupiers were issued with a Notice of Direction due to non-compliance with Strategy Rules.		• Carry out enforcement action where required to ensure that occupiers meet their obligations to control pest plants.
4.8	Annually undertake not less than 200 hours of Containment Control pest plant surveillance by 30 June. (1)	921.7 hours of surveillance work was carried out for Containment Control pest plants. Out of that total, 653 hours were spent on Chilean Needle Grass surveillance covering 105 properties. Chilean Needle Grass was found and destroyed on 44 of those properties.		• Any spread of pest plants to be recorded by GPS or field map notation and captured on the Marlborough District Council GIS for later mapping and area calculation.
4.9	Annually complete all Reed Sweet Grass control programmes by 30 June.	All Reed Sweet Grass control operations were completed. Gibson Creek, Roberts, Pukaka and Marukoko Drains were targeted twice to control any re-growth before autumn frosts. Control work is in its early stages as the new site found on the Northbank of the Wairau and was again sprayed out by handgun. The D'Urville Island site was not visited in 2014/15 but will be targeted in 2015/16 under a biannual cycle.		• Continue to progress the Reed Sweet Grass control programme on D'Urville Island as well as those sites on the mainland.

4.10	Annually complete planned control operations for Pinus Contorta by 30 June.	Two control operations for wilding conifers were planned for 2014/15. First, an aerial basal bark application targeting low density trees surrounding the Wye Reserve Containment area. Second, a ground operation in areas with tree densities too high for efficient use of the helicopter. The aerial operation was delivered in June 2015, but due to staff capacity issues, the ground operation contract works was not delivered and funds are to be carried forward to complete these tasks.		• Plan and target specific areas of control where Pinus contorta has spread from the containment area.

Objective

To minimise the impacts that feral Rabbits have on pasture production, crops, forestry plantations and soil conservation values in Marlborough by maintaining feral pest Rabbit populations at levels at or below the maximum allowable level (MAL) identified for the two sub-regions, the 'Upper Awatere/Clarence' and the 'Remainder of the area within the District'.

Performance Targets		Reporting	Performance	Action Taken to Meet Target
4.11	Annually create a schedule of 'high-risk' properties requiring inspection by 31 January each year.	A schedule of high risk properties was created on 12 January 2015.		• Identify a geographical representative sample of properties deemed 'high risk' of Rabbit population increase by 31 January and implement an inspection regime. • Where Rabbit infestations exist above the maximum allowable level, issue advice and where possible provide an adaptive management approach to ensure the land occupier can meet their responsibilities. If this issue persists, issue a Notice of Direction.
4.12	Undertake annual inspections on properties deemed high-risk by 30 June.	A total of 36 property inspections were undertaken to assess Rabbit population levels.		
4.13	Prepare and distribute a Notice of Direction to land occupiers where populations persist above the MAL for greater than 12 months from the problem being identified and advice provided.	No Notices of Direction were required.		

4.14	Less than 2 land occupiers are known to be in breach of the ≤ MAL 4 Strategy rule as at 30 June each year.	No properties are known to be in breach of the ≤ MAL 4 Strategy rule.		
4.15	Less than 6 land occupiers are known to be in breach of the ≤ MAL 3 Strategy rule as at 30 June each year.	2 properties were found to be in breach of the ≤ MAL 3 Strategy rule.		
4.16	Annually undertake trend monitoring across the 13 established night count transects by 30 June.	10 of the 13 transects were completed this season. Two transects were inaccessible, and one also inaccessible due to weather and track conditions.		• Carry out the planned population trend monitors.

Objective

To prevent the establishment of Possums on offshore islands in the Marlborough Sounds.

Performance Targets		Reporting	Performance	Action taken to meet Target
4.17	Respond to reported sighting of Possums on offshore islands within five working days.	No sightings have been reported.		• Solicit public feedback on any Possums sighted on all offshore islands. • Report all sightings to the Department of Conservation who will undertake investigations with Marlborough District Council staff in support, if required.

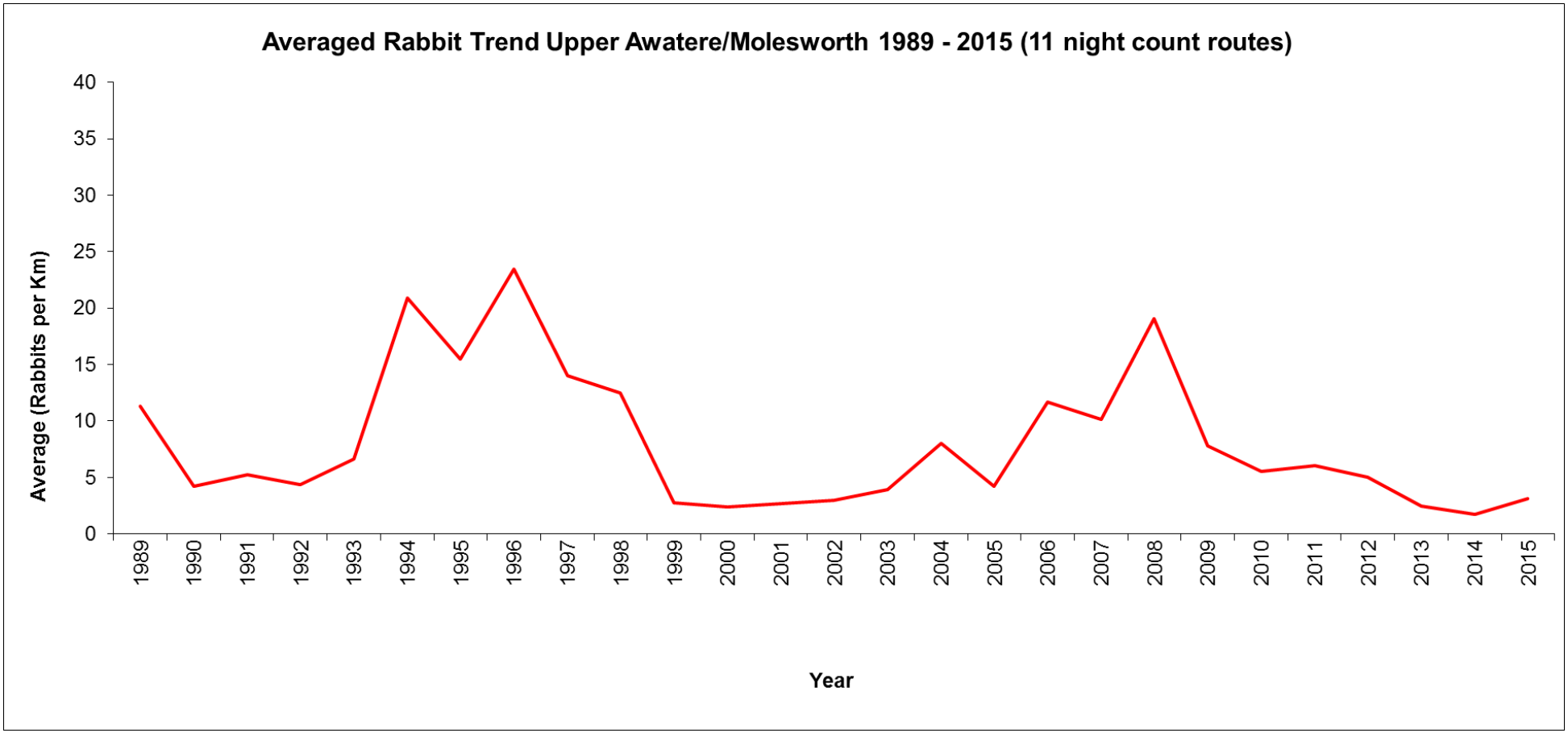


Figure 2: Averaged Rabbit trend from the Upper Awatere/Molesworth night count routes

Far Left – Chilean Needle Grass (*Nassella neesiana*) plants found and targeted for strategic control by Council Biosecurity staff at a small, isolated site near Blenheim.

Left, Top – New roadside warning signs designed and erected by Marlborough District Council when entering Blind River - an area of Marlborough highly infested with Chilean Needle Grass.

Left, Bottom – Marlborough District Council using aerial control methods to carry out the management of a greatly expanded infestation of Chilean Needle Grass discovered on the Wither Hills Farm Park in December 2014.

5. Surveillance

Objective

To monitor the distribution, the impacts and the spread of surveillance pests, fund appropriate research projects regarding surveillance pests and educate the public as to their identification and most appropriate method of control.

Performance Targets	Reporting	Performance	Action Taken to Meet Target
5.1 Undertake surveillance activities to evaluate pest distribution and impacts for invasive ant species and report findings by 30 June each year.	Monitoring and subsequent control work was undertaken at the Rarangi foreshore and residential site for Argentine Ant infestation in collaboration with the Department of Conservation.		• Inspect properties to determine their pest status. • Act on feedback from the public in relation to new pest infestations or instances of any unwanted organism or potential incursion of a harmful organism. • Record new and update existing pest distribution on the Marlborough District Council's GIS database. • Utilise contract services to assist in the undertaking of control/ surveillance work for pest plants and animals.
5.2 Annually undertake not less than 100 hours of surveillance for pest spread, other than Total Control pest species, outside known sites and evaluate pest distribution and impacts. (1)	84.3 hours of active surveillance was carried out for Surveillance pest plants and other species of interest. This included the first active surveillance carried out for Plague skinks (also known as Rainbow skinks) in the Picton area and targeted wholesale nursery outlets near Blenheim. Plague skinks are not known to be in the South Island. 95.5 hours of passive surveillance for aquatic pest plant species was carried out throughout the year during control efforts for Reed Sweet Grass, Parrots Feather and Eel Grass.		
5.3 Update records, within five working days of finding or being informed of any pest plant or pest animal, while carrying out surveillance.	A new infestation of a species of interest (Tall Wheat Grass) was identified in the Cob Cottage Road area south of Blenheim. Through improvements in recording systems, the Marlborough District Council database and spatial records were updated on the same day.		

6. Ecological Threats

Objective

Encourage community initiatives and site led management programmes. Identify sites with significant ecological value where the reduction of a range of ecological pest threats would be effective in protecting those values. Provide information material and advice on impacts, threats and control options.

Performance Targets	Reporting	Performance	Actions Taken to Meet Target
6.1 Provide annual support to land occupiers where pest animal/plant issues have been identified as a threat to the integrity of a designated Significant Natural Area (SNA) on their property.	Through the SNA programme managed by the Marlborough District Council's Environmental Group, pest/weed work was carried out on 17 SNA sites across Marlborough in 2014/15. 16 of these sites the focus was on weed control (primarily Old Man's Beard and wilding pines). 1 of these sites the assistance was for pest animal control on D'Urville Island.		• The Marlborough District Council has a voluntary landowner assistance programme applying to significant natural areas sites, which includes pests/weed threat works. • The Marlborough District Council actively supports community led pest management initiatives.
6.2 To encourage community led pest management initiatives.	Active support has been provided to the following community groups: • Waima Valley Ecological Restoration Society - funding and in-kind support toward the ongoing Old Man's Beard project through a Weedbusters Grant (funded jointly by Marlborough District Council and the Department of Conservation). • Grovetown Lagoon Restoration Project - funding and in-kind support. • Marlborough Sounds Restoration Trust - providing an annual contribution toward the wilding pine control programme and in0kind support by way of mapping and GIS services.		

7. Educational Activities

Introduction

The Marlborough District Council recognises the advantages of a strong advisory and educational role in pest management and therefore takes a very active role in providing information and advice on the various impacts caused by pests and the best methods for controlling animal and pest plants.

Objective

To educate the public in the identification of regional plant and animal pests and promote and encourage the most appropriate management and control options.

Performance Targets	Reporting	Performance	Actions taken to meet Target
7.1 Annually review and, where necessary, publish/refresh pest fact sheets for pests listed in the Regional Pest Management Strategy.	No new fact sheets have been prepared due to the pending review of the Strategy. Existing publications and fact sheets have been distributed at every opportunity. Through the Chilean Needle Grass Sustainable Farming Fund national programme, new pamphlets, seed ID cards, Chilean Needle Grass awareness videos and farm biosecurity signage has been developed and circulated wherever possible.		• Promote a strong advisory and educational role to create a greater understanding of land occupier pest management roles and responsibilities. • Continue to provide input into the Ministry for Primary Industry-led Chilean Needle Grass Working Group. • Liaise with the Marlborough District Council's website manager to coordinate website updates.
7.2 Annually organise and attend at least one pest specific focus group meeting and at least one pest related field day.	Marlborough District Council Biosecurity staff have attended several public events. These have included: • Marlborough A&P Show 7-8 November 2014 focusing on Chilean Needle Grass awareness; • Flaxbourne Show 22 March 2015; and • Rai Valley Show 7 March 2015; both also focusing on Chilean Needle Grass.		

	Two presentations were given to Merino Association events, also two presentations were given at Wine Marlborough events focusing on Chilean Needle Grass issues. A Chilean Needle Grass display stand was attended at the Rural Contractors Conference 23-25 June 2015. Chilean Needle Grass Action Group continues to hold monthly meetings. As a result of the ongoing policy review, two Pest Management Focus Group meetings were held on 6 May and 25 June 2015. While focussed on policy aspects, there was also a degree of education when discussing key pest programmes.		
7.3 Each year, review the overall structure and scope of information on the Marlborough District Council's website and initiate updates by 30 June.	New newsletters and updated current information on control techniques and information have been added to the appropriate webpages as they come through.		

8. Biological Control Programme

Objective

To enhance the establishment of biological control agents for a range of pest plants, with the aim of achieving an environmentally acceptable and cost effective method of control.

Performance Targets	Reporting	Performance	Actions Taken to Meet Target
8.1 Agree on annual biological control programme outcomes in conjunction with the Biological Control Collective Group by 31 July each year.	The Marlborough District Council continued to support a National Biocontrol programme managed through the Biological Control Collective Group and implemented by Landcare Research. A draft work programme was agreed upon 12 June 2015 for the 2015/2016 financial year.		• Contribute to the collective biological control programme managed by Landcare Research. • Assist Landcare Research to Complete Nation-wide Assessment of Ragwort biocontrol agents • Monitor the distribution of biological control agents and harvest and release biological control agents where required to enhance their distribution. • Undertake serological sampling of Rabbits to assess immunity status against the Rabbit Haemorrhagic Disease (RHD).
8.2 If requested, and if feasible, provide biological control agents which have established in the region, to occupiers on request, for the purpose of further distribution.	Two requests for biological control agents were received in 2014/15; one for the movement of Broom agents from Middlehurst Gorge to the Clarence catchment and a second for direct release of agents again in the Clarence catchment. Given the timing of the requests and remoteness of both the harvest and release sites, resourcing was not available from Marlborough District Council to respond directly. However, alternative arrangements were found in both instances. Firstly, harvesting and release education was provided by Marlborough District Council to a contractor working in the high country which would enable harvesting and re-release to be carried out by them. Secondly, financial support was provided to an Environment Canterbury-led project for a mass release of Broom Gall Mite into heavily infested areas of Broom in the Clarence catchment. This occurred in April 2015.		

8.3 Monitor and gather information on the establishment of any new biological control species released within the region by 30 June each year.	A total of 11 previous release sites for various biological control agents were inspected in 2014/2015. Standard monitoring sheets were used and data collected both stored and supplied to Landcare Research who developed the agents for release.		
8.4 Complete Rabbit Haemorrhagic Disease (RHD) immunity level survey by 30 June each year.	Due to low Rabbit levels, a full RHD survey (3 sites) was not possible this year. As a result, one site was selected - Avondale area. A full sized sample was managed off one property.		

9. National Pest Plant Accord

Objective

To prevent the sale, distribution or propagation within New Zealand of any plant pest listed in the National Plant Pest Accord.

Performance Targets	Reporting	Performance	Actions Taken to Meet Target
9.1 Undertake a minimum of four casual plant outlet inspections annually by 30 June.	A total of 6 inspections were carried out on casual outlets selling plants such as roadside stalls, car boot sales and markets. No National Pest Plant Accord listed species were found to be for sale.		• Inspect casual plant outlets for banned plants. • Inspect commercial retail outlets for banned plants. • Ensure compliance with obligations. • Promote a strong advisory and educational role in association with the National Pest Plant Accord. • Record and report inspection results to the Ministry for Primary Industries. • Ensure all inspections are carried out by a warranted officer.
9.2 Inspect a single, selected commercial retail outlet each year by 30 June.	4 commercial outlets were inspected. No National Pest Plant Accord listed species were found to be for sale. One of these inspections was a follow-up from a non-compliance discovered in 2013/2014 where the outlet had *Lagarosiphon major* and *Cotyledon orbicula* on display, but not for sale.		
9.3 Respond to all complaints relating to the sale of National Pest Plant Accord listed plant species within 3 working days.	No complaints about the sale of National Pest Plant Accord plants were received.		

10. Research

Introduction

The Marlborough District Council understands the need for research in the field of pest management and provides funding for a number of research projects.

Objective

To support research programmes which benefit pest programmes in the Marlborough district.

Performance Targets	Reporting	Performance	Actions Taken to Meet Target
10.1 Ensure all research activities being undertaken or committed to be approved and involvement documented by 30 June each year.	The major research project to gather further residue and efficacy data for Taskforce herbicide continued in 2014/2015. The bulk of activities related to the collection of samples from the trial sites. This also included the pilot trial established in a vineyard exploring both residue profiles and subsequent exploration of herbicide placement as a result of some unintended vine damage from the first treatment. The results from these long-running trials are expected to be formally reported by June 2016. Marlborough District Council has again provided financial support toward two ongoing Sustainable Farming Fund research projects. The first is exploring Rabbit Haemorrhagic Disease Virus (RHDV) and 2014/2015 was the last year of the project. The second is exploring the potential of a newly discovered mite that lowers the health of *Vespula sp*. Wasp colonies, as a biological control agent. This is into its second year of a 3 year project		• Evaluate proposals and gain approval for any expenditure. • Evaluate proposals and gain approval for any expenditure. • Verify appropriate use of budget and ensure outcomes are documented and reported. • Plan and undertake research trials in a cost effective manner

11. Biosecurity Programmes – Other

Objective

To facilitate partnerships with industry and the Crown in the management and coordination of national pest and unwanted organism programmes.

Performance Targets	Reporting	Performance	Actions Taken to Meet Target
11.1 Implement activities relating to the Freshwater Pest Partnership Programme by 30 June each year.	Fish & Game were again contracted to deliver the Summer Freshwater Pest Advocacy programme in Marlborough. Fish & Game either employed or contracted resources to deliver both the Nelson/Tasman and Marlborough programmes. Deliverable included attendance at numerous events along with a large amount of waterside advocacy carried out over the summer.		• Support National Freshwater Pest Partnership Programme in partnership with support from the Ministry for Primary Industry. • Attend committee and partnership meetings of the Top of the South Marine Biosecurity Partnership as well as provide financial support. • Led the 'regional response' to incursion of marine pests into Marlborough waters.
11.2 Provide on-going support in the implementation of the Top of the South Marine Biosecurity Strategy.	Active participation and agreed funding was supplied to the Top of the South Marine Biosecurity Partnership throughout the year. Numerous operational activities were managed by Marlborough District Council staff in relation to the two incursions of marine pests detected in 2013/2014. Dive surveys using contractors were carried out in July & November 2014 and again in May 2015. These surveys had the duel purpose of suppressing the *Styela clava* population and conducting both targeted and broad surveillance for *Saballa spallanzanii*. Over the course of these surveys, Styela has shown to be relatively well established in both Picton and Waikawa. However, only 5 individual specimens of Sabella have been detected in Picton Marina. Work in this area is ongoing with strategic discussions occurring regularly between Marlborough District Council, Ministry for Primary Industry and stakeholders/interested parties. There remains ongoing threat from new introductions of marine pests - primarily through fouled vessel hulls. An example of this was the detection of a vessel in May 2015 that had both Styela and Sabella on its hull. The vessel owner was very helpful and voluntarily slipped the vessel the following day.		

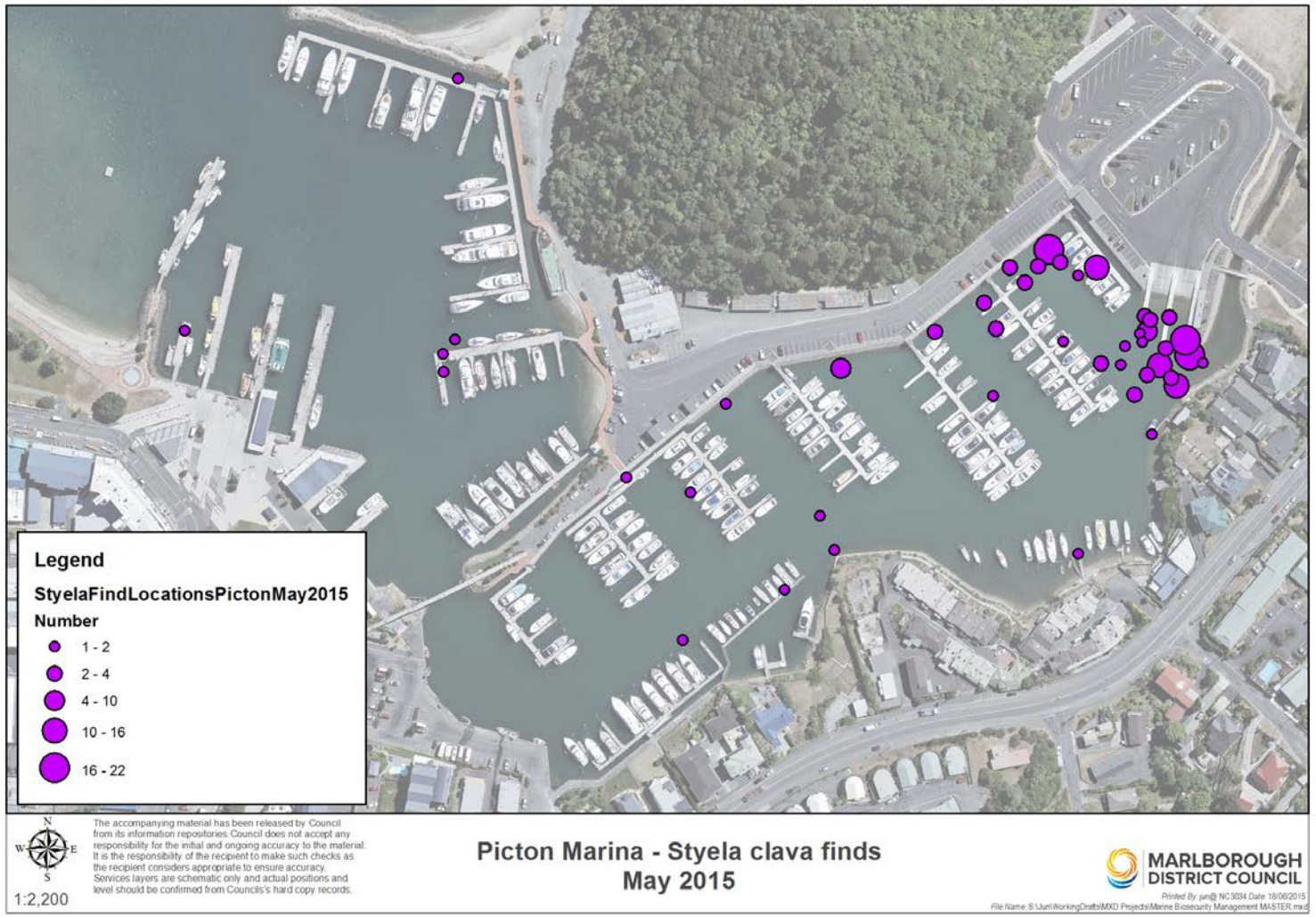


Figure 3:. Find location data for Styela clava from the May 2015 dive survey in Picton Marina.

Figure 4: A screen shot from video taken by divers assessing the vessel detected in May 2015 with clearly visible *Styela clava* and juvenile *Sabella spallanzanii* on its keel.

12. Review of the Operational Plan

In accordance with Section 100B(1)(b) of the Biosecurity Act 1993, a review of the Operational Plan was carried out on 2 July 2014. Some amendments were deemed necessary in accordance with Section 100B(1)(c). The proposed amendments to the Operational Plan 2013-2017 are outlined below:

Section	Current Target	Proposed Change	Reason
3.1	100% of active, High Priority Total Control Pest sites are controlled annually by 30 June. (1)	100% of High Priority Total Control Pest sites are controlled annually by 30 June. (1)	Wording alteration to align with data system improvements. Through improvements in data recording systems, all Total Control Pest sites can now have a status automatically applied as Active (pest found in last year), Monitoring (pest found up to 1 - 5 years ago) and Historic (pest last found >5 years ago) dependent on activity data. Each year, sites scheduled for control the following year are deemed High Priority. These will always consist of all Active and Monitoring sites and potentially some historic sites by way of confirmation.
3.3	A measured decline to <3000 pest plants (excluding Boneseed) destroyed annually over all sites by 30 June.	A measured decline to <5500 pest plants destroyed annually over all High Priority sites by 30 June.	Given the success of both the Total Control pest plant programmes, and Boneseed programme specifically, there is no longer the need to exclude Boneseed and split out that specific programme for reporting. Also, some alteration in target wording to align with 3.1 in reference to sites where control work is being carried out.

13. Monitoring and Review of the Strategy

The Strategy specifies how the effect of the Strategy is to be monitored throughout its duration. The term 'effect' covers two main areas:

- The effectiveness of the Strategy in terms of achieving its stated objectives.
- The environmental effects of the Strategy's implementation.

A combination of techniques is used to measure the effectiveness of the Strategy in terms of achieving its stated objectives.

1. Long-term monitoring - for example, Rabbit trend monitoring.

2. The analysis of outputs:

    a) The level of non-compliance for landholder obligation programmes. The analysis of non-compliance can be used as a proxy for the progress against the objective of each programme.

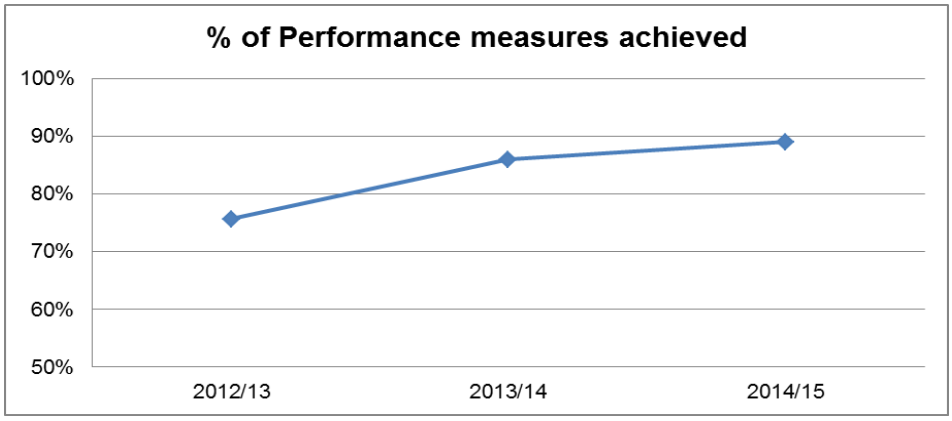
    b) Whether plants are found and destroyed for Total Control species. The number of plants destroyed each year for Total Control species is used to track the status of both the sites where plants are found and the quantum of the infestation across Marlborough.

14. Performance Overview

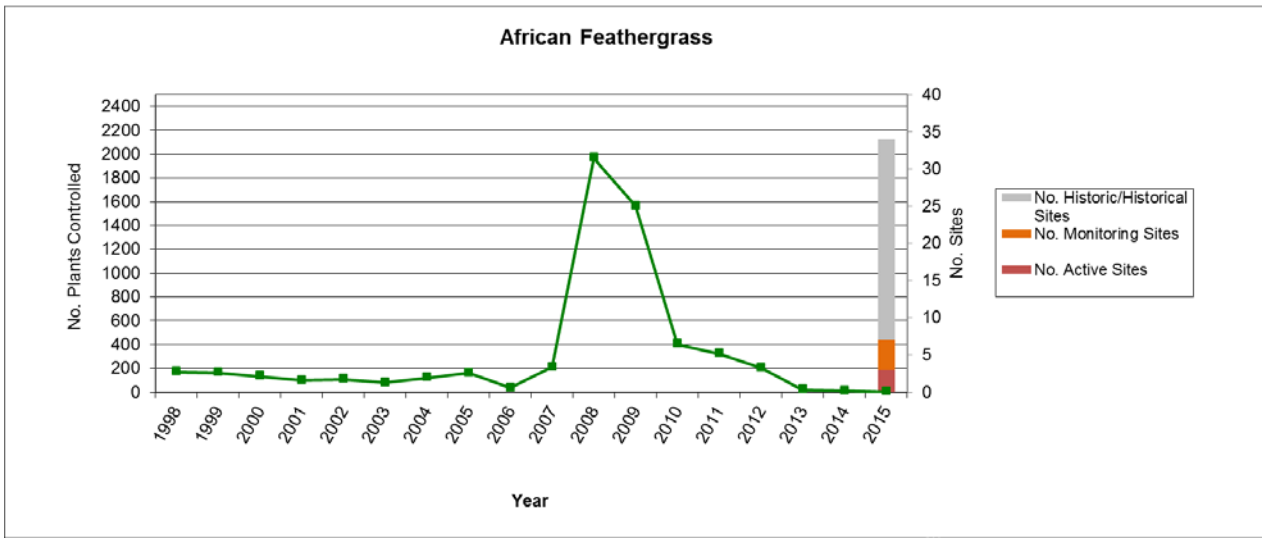
Overall scoring of Performance Objectives (excluding those that are not applicable):

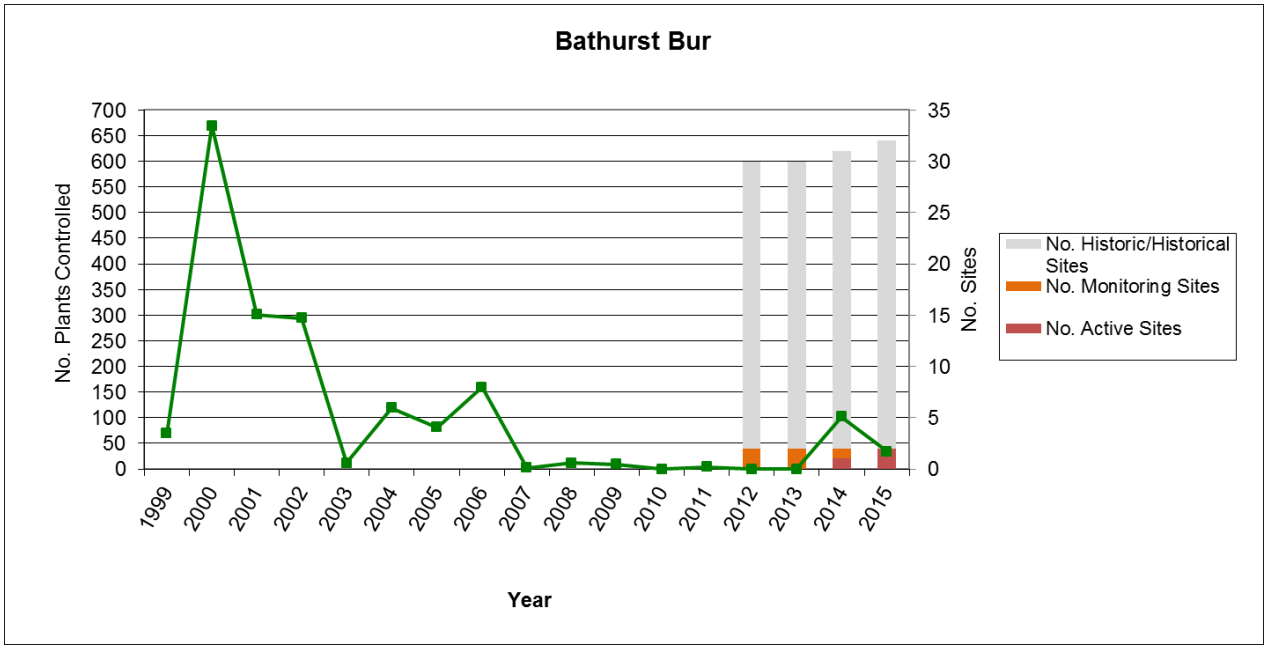
Measure	2014/2015 Score
Achieved	33 (89%)
Almost Achieved	3 (8%)
Not Achieved	1 (3%)
	37 (100%)

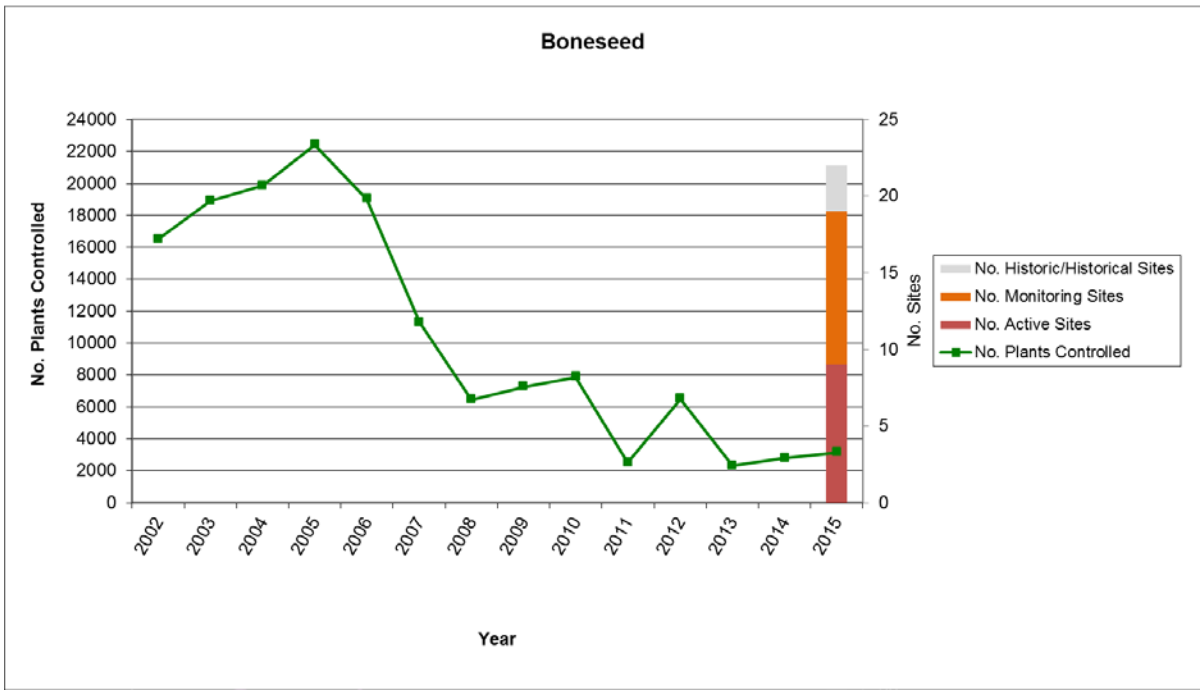
14.1. Performance Trend

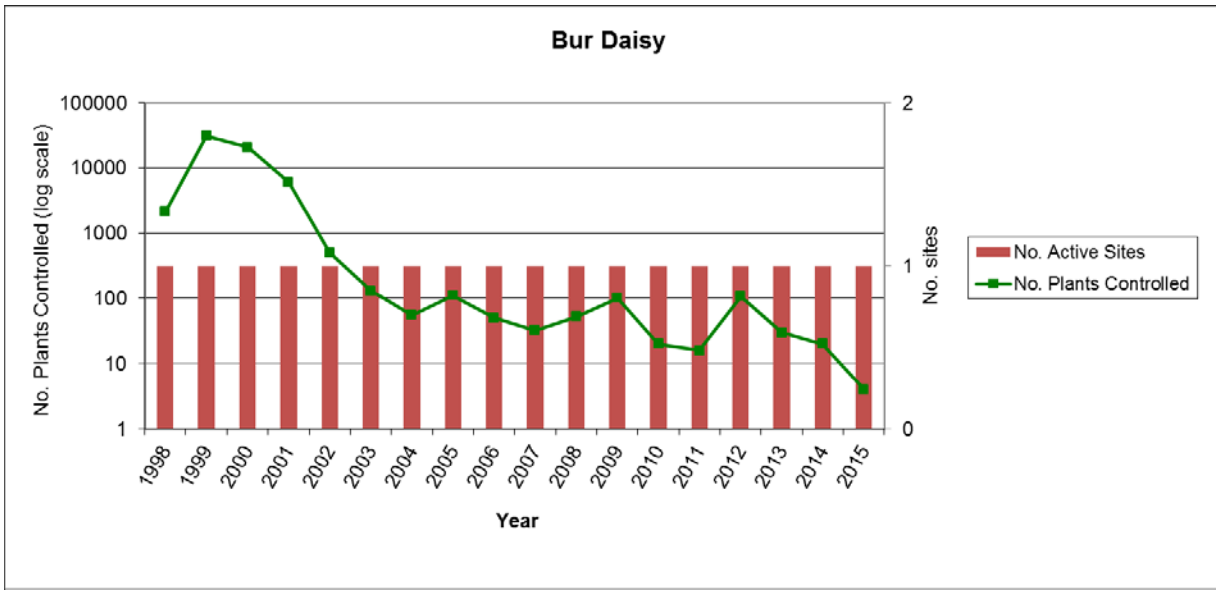


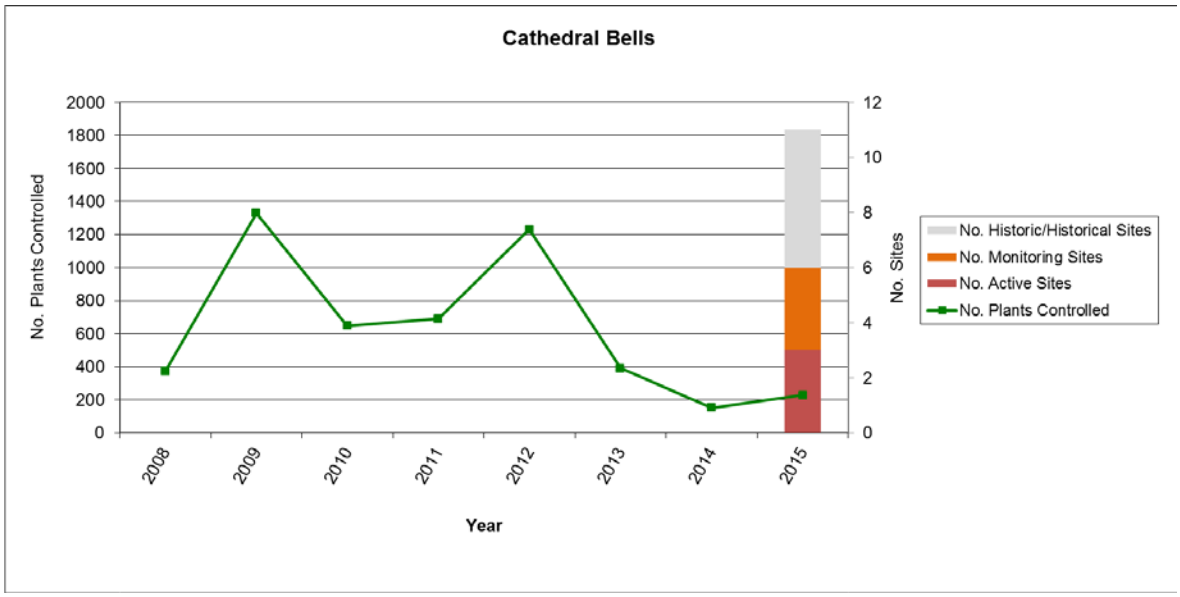
Appendix 1 – Total Control Pest Plant Data Trends

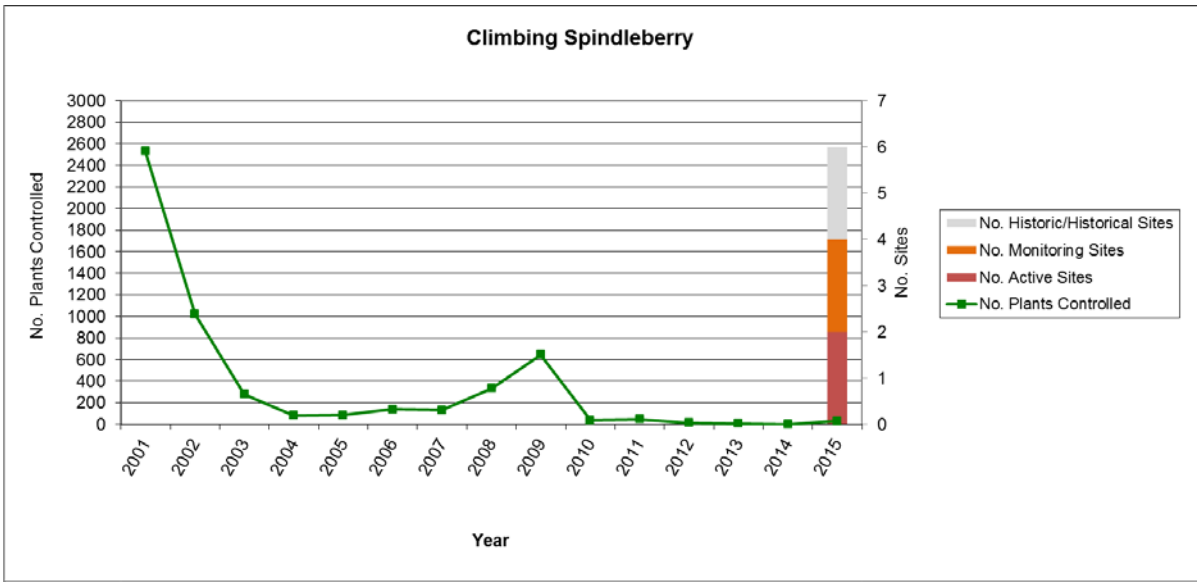


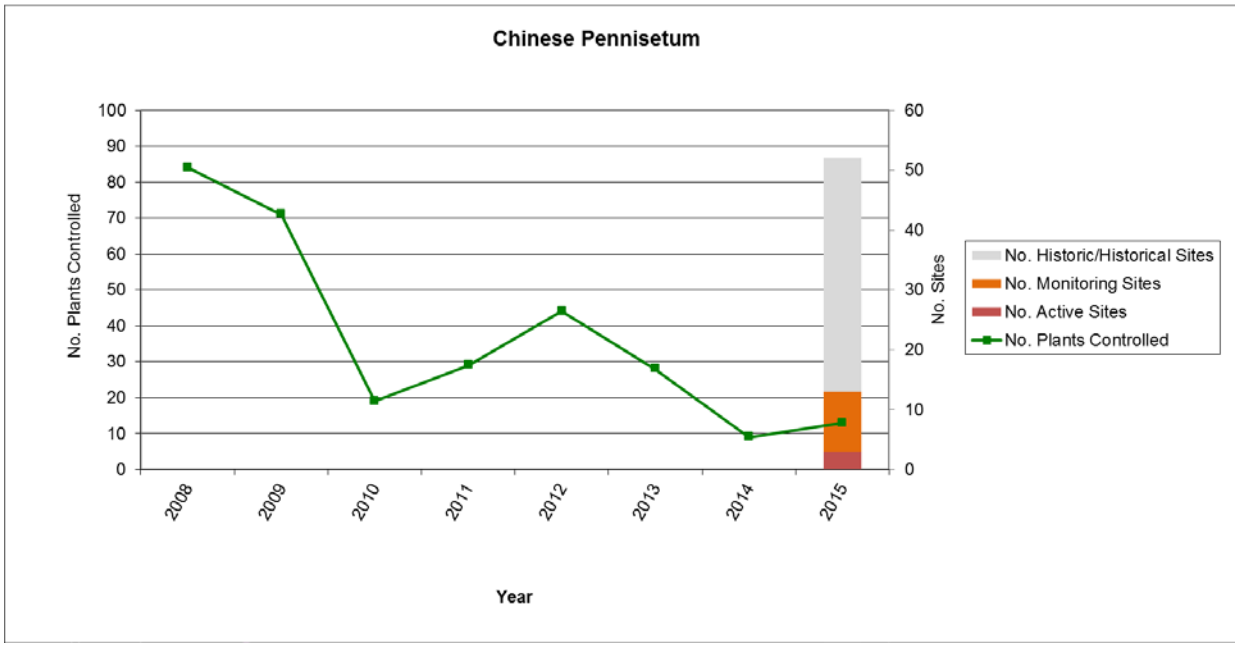


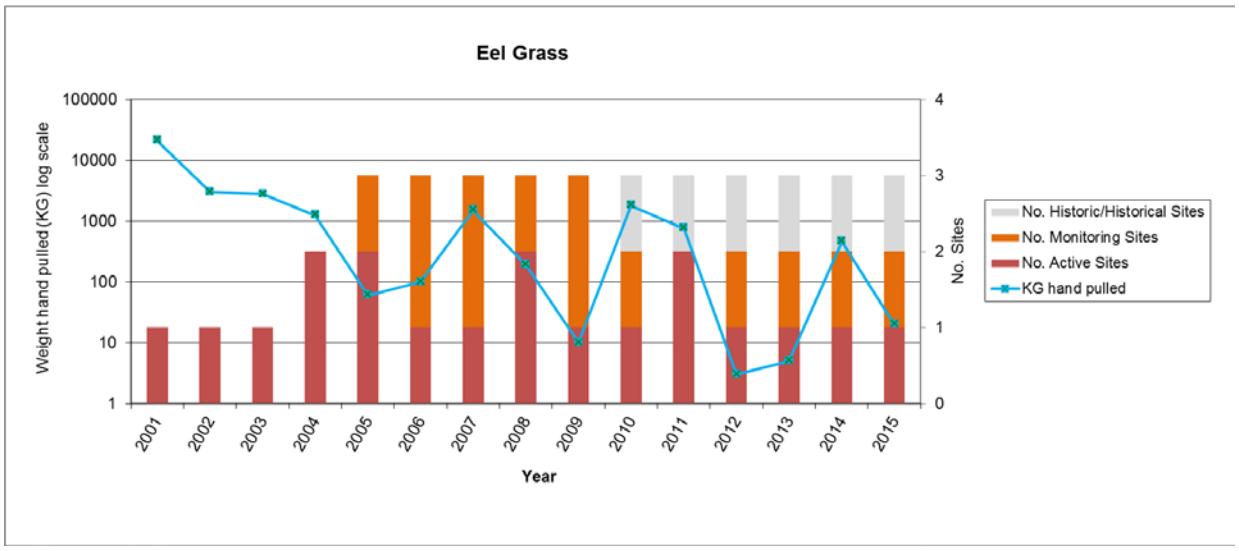

Boneseed
No. Plants Controlled
No. Sites
Year
No. Historic/Historical Sites
No. Monitoring Sites
No. Active Sites
No. Plants Controlled

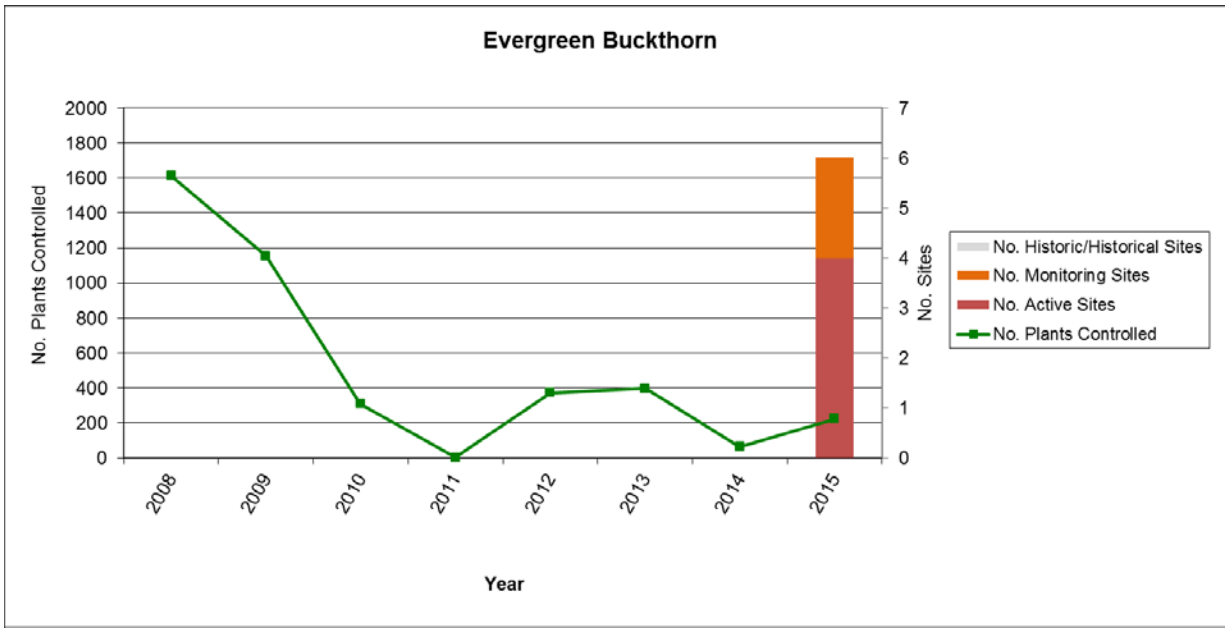

Bur Daisy
No. Plants Controlled (log scale)
No. sites
Year
No. Active Sites
No. Plants Controlled

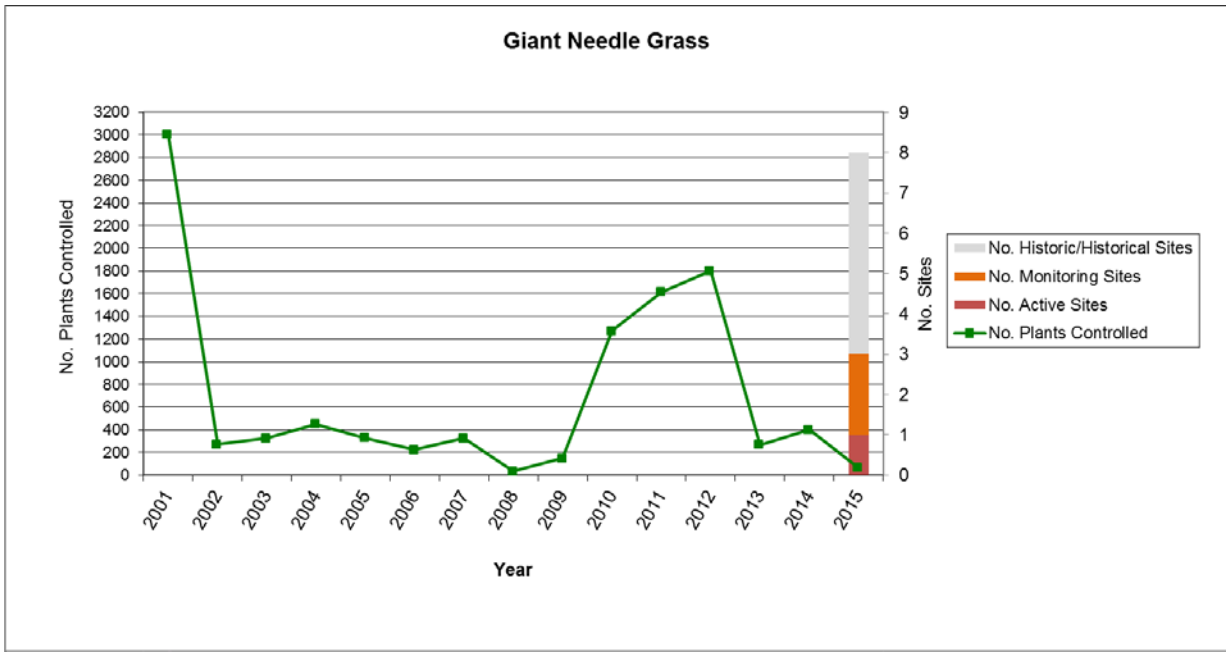

Cathedral Bells
No. Plants Controlled
No. Sites
Year
2000
1800
1600
1400
1200
1000
800
600
400
200
0
12
10
8
6
4
2
0
2008
2009
2010
2011
2012
2013
2014
2015
No. Historic/Historical Sites
No. Monitoring Sites
No. Active Sites
No. Plants Controlled

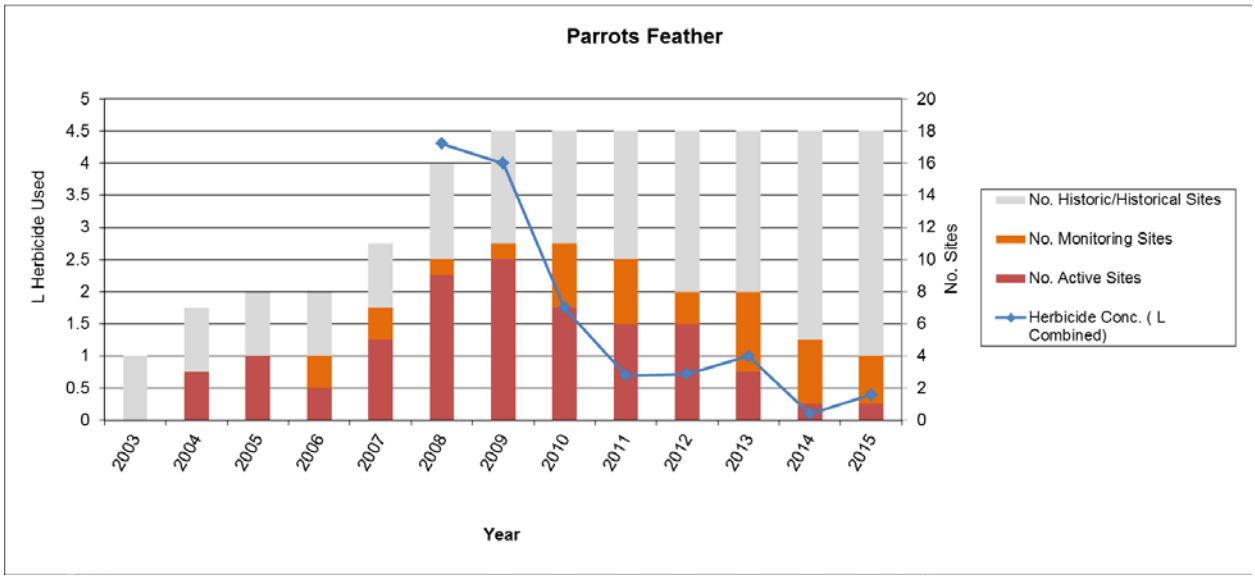

Climbing Spindleberry
No. Plants Controlled
No. Sites
Year
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
7
6
5
4
3
2
1
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
No. Historic/Historical Sites
No. Monitoring Sites
No. Active Sites
No. Plants Controlled

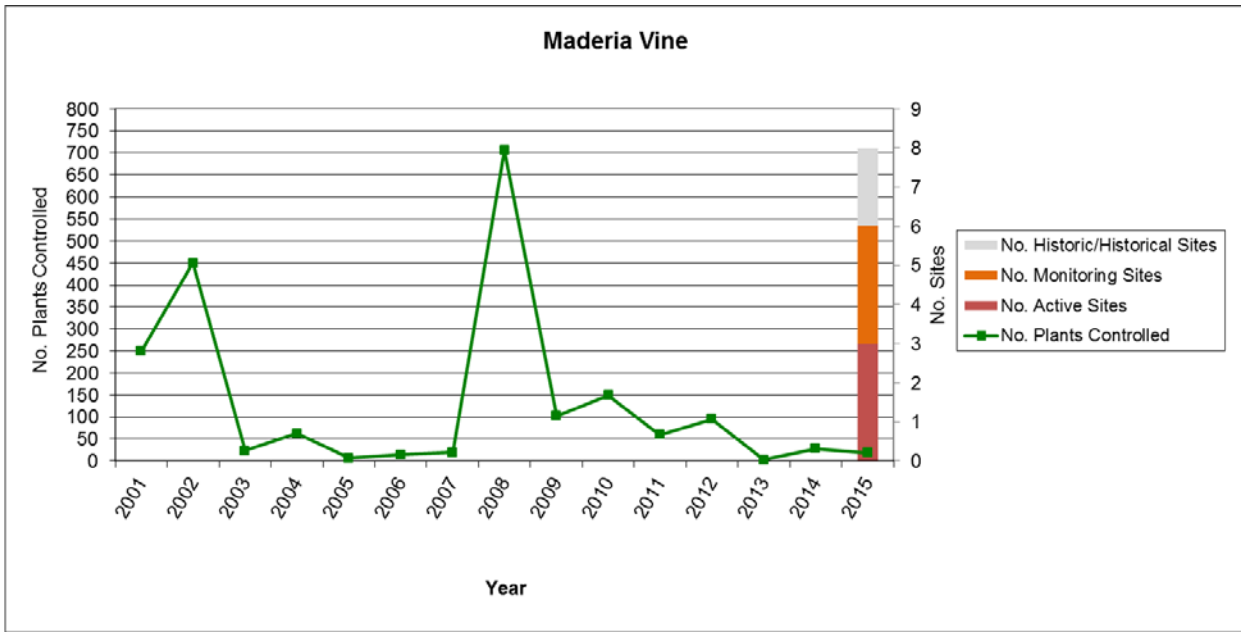

Chinese Pennisetum
No. Plants Controlled
No. Sites
Year
No. Historic/Historical Sites
No. Monitoring Sites
No. Active Sites
No. Plants Controlled
100
90
80
70
60
50
40
30
20
10
0
60
50
40
30
20
10
0
2008
2009
2010
2011
2012
2013
2014
2015

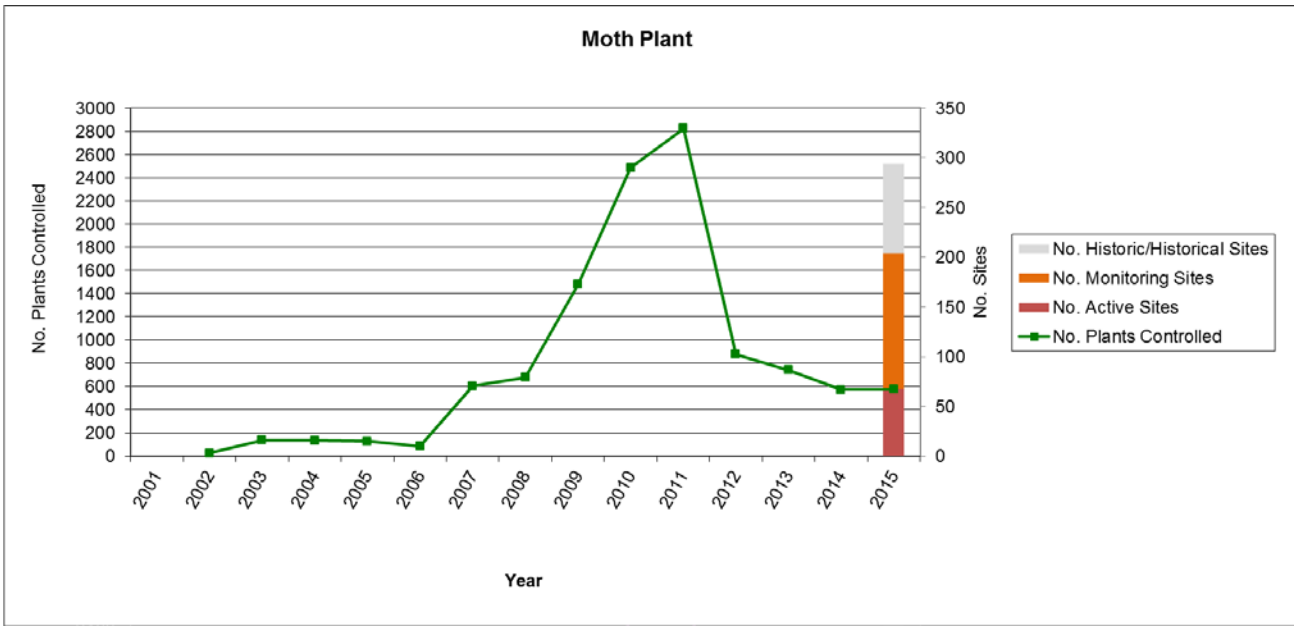

Eel Grass
Weight hand pulled (KG) log scale
No. Sites
Year
No. Historic/Historical Sites
No. Monitoring Sites
No. Active Sites
KG hand pulled
100000
10000
1000
100
10
1
4
3
2
1
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015

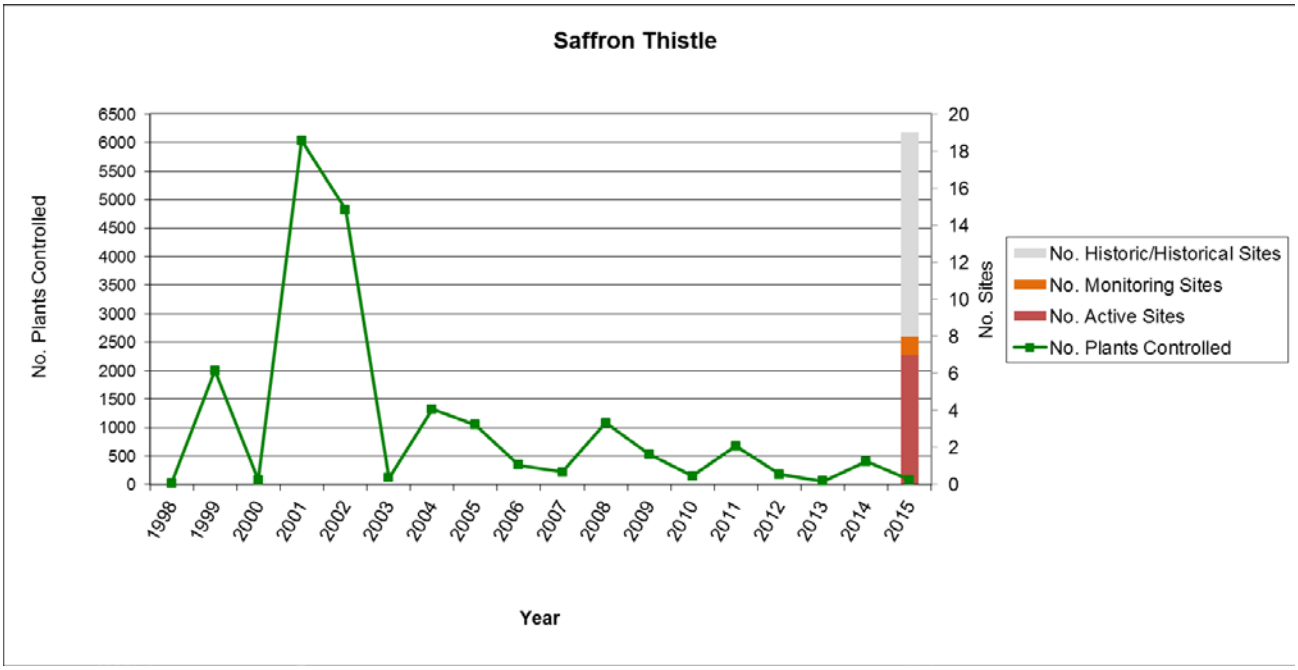

Evergreen Buckthorn
No. Plants Controlled
No. Sites
Year
2000
1800
1600
1400
1200
1000
800
600
400
200
0
7
6
5
4
3
2
1
0
2008
2009
2010
2011
2012
2013
2014
2015
No. Historic/Historical Sites
No. Monitoring Sites
No. Active Sites
No. Plants Controlled

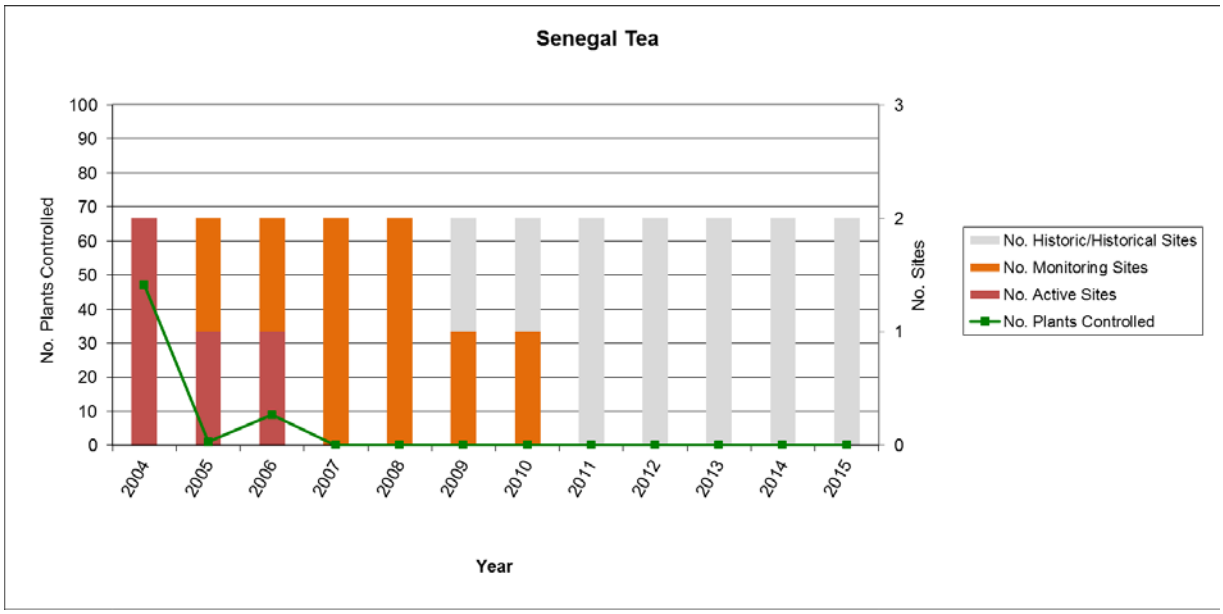

Giant Needle Grass
No. Plants Controlled
No. Sites
Year
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
9
8
7
6
5
4
3
2
1
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
No. Historic/Historical Sites
No. Monitoring Sites
No. Active Sites
No. Plants Controlled


Parrots Feather
L Herbicide Used
No. Sites
Year
No. Historic/Historical Sites
No. Monitoring Sites
No. Active Sites
Herbicide Conc. (L Combined)


Maderia Vine
No. Plants Controlled
No. Sites
Year
No. Historic/Historical Sites
No. Monitoring Sites
No. Active Sites
No. Plants Controlled


Moth Plant
No. Plants Controlled
No. Sites
Year
No. Historic/Historical Sites
No. Monitoring Sites
No. Active Sites
No. Plants Controlled


Saffron Thistle
No. Plants Controlled
No. Sites
Year
No. Historic/Historical Sites
No. Monitoring Sites
No. Active Sites
No. Plants Controlled


Senegal Tea
No. Plants Controlled
No. Sites
Year
100
90
80
70
60
50
40
30
20
10
0
3
2
1
0
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
No. Historic/Historical Sites
No. Monitoring Sites
No. Active Sites
No. Plants Controlled

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