





# Summary Report on the Results of the Significant Natural Areas Project 2011 – 2012

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Report Prepared by:

**Nicky Eade** 

Environmental Scientist - Land Resources Environmental Science & Monitoring Group

Marlborough District Council Seymour Square PO Box 443 Blenheim 7240

Phone: 520 7400

Website: www.marlborough.govt.nz

### Acknowledgements:

Members of the Significant Natural Areas Working Group
Project consultant team - Geoff Walls, Paul Millen, Dave Barker
Council staff - Peter Hamill, Jamie Sigmund, Hellen Munro

# **Executive Summary**

Through the Resource Management Act 1991 and its subsequent amendments, the Council has a role in maintaining and protecting indigenous biodiversity and significant natural areas in the Marlborough region. Since 2001 the Council has implemented the "Significant Natural Areas" (SNA) project, which has involved extensive field based ecological survey work and a subsequent protection and monitoring programme.

This report provides a summary of results of the Significant Natural Areas project (SNA) over the one year period from July 2011 to June 2012. It follows from three previous summary reports, one of which covered the early years of the project from 2001 to June 2008, the second of which covered the two year period 2008 – 2010 and the third of which covered the annual period from July 2010 to June 2011.

This report summarises the results of:-

- the ecological survey work carried out through the Council's Significant Natural Areas (SNA) project between July 2011 and June 2012 (two surveys);
- the related environmental protection work carried out through the SNA project Landowner Assistance Programme from July 2011 to June 2012 (six new projects and ten on going projects);
- the monitoring programme to assess the condition of sites protected through the Landowner Assistance Programme, which was established in 2006 and repeated in 2010; and 2012,
- several other projects associated with the Significant Natural Areas project including publicity and education activities, the native seed collection project and;
- the Tui to Town project from its establishment in 2008 until June 2012.



Members of the Significant Natural Areas working group which has been instrumental in helping to guide and manage the project since 2001.

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# Part A. Ecological Survey Work - Summary of Results - July 2011 – June 2012

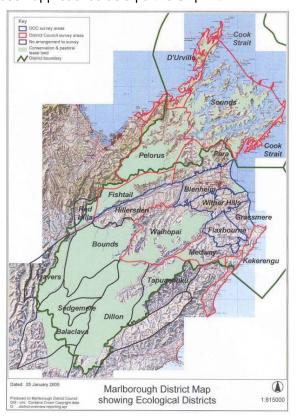
### Field Based Ecological Surveys - Overview

Since 2001, extensive field based ecological surveys have been carried out on private land throughout large parts of the Marlborough District. This work has been approached as a partnership with

landowners, who have participated voluntarily.

Through the results of the ecological survey work, it has been possible to analyse the extent and type of ecosystems remaining and the severity and types of pressures these remaining areas are subject to.

Ecological Districts have been used as the survey units. The Marlborough District Council has carried out the majority of the survey work overall (Kekerengu, Medway and Waihopai ecological districts in south Marlborough and Para, Fishtail, Pelorus, Durville, Sounds and Cook Straight ecological districts in north Marlborough). However, the Department of Conservation also carried out a substantial part of the survey work between the years 2002 – 2004, as part of the Protected Natural Areas (PNA) survey of the Wairau Ecological Region which included five ecological districts in south Marlborough - Grassmere, Flaxbourne, Wither Hills, Blenheim and Hillersden. Some ecological districts at the south of the region were not surveyed (Tapuaenuku, Bounds, Dillon, Sedgemere, Balaclava Travers and Red Hills), being mostly Department of Conservation land or pastoral leasehold land.



Map 1: Ecological Districts in Marlborough

The ecological survey work has resulted in a large amount of information being collected. This provides both a regional scale overview of the extent and state of biodiversity resources on private land, and a more detailed property scale assessment which is useful for implementing practical protection measures such as fencing and pest control. While the emphasis has been on terrestrial vegetation and habitat values, wetlands, and some waterways, have also been assessed.

The work was largely completed in the nine year period from 2001 to 2009 (inclusive). Further occasional field surveys have been carried out at the request of landowners. In the period from July 2011 to June 2012, two further properties have been surveyed, one in the Pelorus ecological district and one in the Sounds ecological district. The total cost of these surveys was \$3191.00.

#### Results

The tables below show the summary of ecological results from the Significant Natural Area surveys on private land for both south and north Marlborough in the 11 year period from July 2001 to June 2012.

Tables 1 and 2 show the total participation rates and overall results from 2001 to June 2012 in south and north Marlborough respectively. Using ecological district units, the tables show; the number of properties surveyed, the number of properties where permission to survey was sought but declined, the number of sites identified, the combined area and percentage of total land area of all of the identified significant

natural area sites, and in north Marlborough, the percentage of Department of Conservation land.

As of June 2012 a total of 281 landowners participated in the ecological survey in both south and north Marlborough (75% of those approached). A total of 94 landowners declined to participate (25% of those approached). A total of 705 significant natural areas have been identified, with a combined area of 44,956 hectares.

Table 1: South Marlborough Ecological Survey Participation and Results (July 01-June 12)

Ecological Districts	No. Properties Surveyed	No. Properties Declined	No. of Sites	Combined Area (ha)	% of total land area
Kekerengu	20	3	57	1,446	4.6%
Medway	14	3	79	4,961	15.5%
Waihopai	19	14	61	5,418	5%
Blenheim	15	1	13	292	1%
Wither Hills	21	7	23	5,127	16.7%
Grassmere	10	4	11	155	1%
Flaxbourne	26	14	62	2,027	7%
Hillersden	29	4	30	3,666	7.5%
Totals	154 (75%)	50 (25%)	336	23,092	7.2% av

Table 2: North Marlborough - Ecological Survey - Participation and Results (July 01 – June 12)

Ecological Districts	No. Properties Surveyed	No. Properties Declined	No. of Sites	Combined Area (ha)	SNA sites as a % of total private land area in ED	SNA sites as a % of total area of ED (DoC and private)	% of DoC Land
D'Urville	20	9	46	3,582	16.5%	12.0%	27%
Cook Strait	2	0	6	695	16.8%	12.5%	24%
Sounds	62	16	184	11,790	16.0%	9.5%	39%
Pelorus	19	10	45	1,472	3.8%	1.4%	63%
Para	18	7	55	2,975	8.7%	6.2%	24%
Fishtail	6	2	33	1,350	9.0%	3.0%	55%
Totals	127 (75%)	44 (26%)	369	21,864	(Av=12%)	(Av=7.4%)	(Av=38.5 %)

#### **Discussion**

The field based ecological surveys have produced a lot of information about the distribution and type of native habitat remaining on private land in both south and north Marlborough.

**South Marlborough** - This part of the region is characterised by a history of extensive native vegetation clearance and consequently very depleted ecological functioning in some respects. While there are some extensive areas of beech forest, kanuka forest, shrublands and tussock grasslands, these all occur in the extensive areas of hill country. Of the eight ecological districts that were surveyed in the south Marlborough area there is very little Department of Conservation land, apart from in the Waihopai ecological district, and in general, the percentage of total land area of significant natural sites is very low less then 10% in six of the eight ecological districts and less then 5% in the three of these lowland coastal ecological districts (Blenheim, Grassmere and Kekerengu).

This is clearly reflected when the ecological districts are compared to the Priority One area of the 2007 Statement of National Priorities for Protecting Rare and Threatened Biodiversity on Private Land which identifies land environments that have less then 20% remaining in indigenous cover (see yellow area on Map 2 below). The 20% threshold is based on a well established species-area relationship which shows that the rate of biodiversity loss increases dramatically when the amount of available habitat drops below 20% of its original extent.

Some ecosystem types in south Marlborough are very depleted and the little that does remain is not always well managed or formally protected in anyway (for instance wetlands, podocarp forest and broadleaved forests). However with a recent emphasis on protection of some of these areas some improvements are being made, with landowners introducing management such as fencing, weed control and restoration planting, that will ensure the long term sustainability of some of these sites.

**North Marlborough** - The north Marlborough part of the region has a different climate and history of land clearance to south Marlborough and also has a considerable amount of land in Department of Conservation management (ranging from 24% to 63% in different ecological districts). The percentage of total land area of significant natural sites is generally higher then in south Marlborough, ranging from 4% to 16.5% across the ecological districts.

While some ecosystem types are quite depleted, for instance lowland alluvial and swamp forests and kohekohe forest, a significant amount of native forest habitat remains – both beech and podocarp dominated. Additionally, large areas of regenerating forests consisting of kanuka, manuka, tauhinu and broadleaved species are present where land has been left to regenerate following earlier clearance.

While fencing is important for some lowland sites within a pastoral farming landscape, feral animal pest control is the main challenge in north Marlborough, especially as there are still populations of a range of native fauna present (forest birds, sea birds, weka, giant land snails, freshwater native fish species).

# Part B. Protection Work - Landowner Assistance Programme - Summary of Results 2011/12

### **Landowner Assistance Programme**

The Landowner Assistance Programme has been operating since 2003 in conjunction with the field ecological survey work, and has targeted assistance to high value sites with identified pressures and threats that can be practically managed. It was initially established as a pilot programme with a focus on the south Marlborough area, but has since been fully established as a permanent programme and extended to include north Marlborough.

A strong conservation effort on private land is needed if functioning ecosystems are to be maintained, especially in the lowland areas of south Marlborough which have been identified nationally as threatened environments with less then 20% of natural cover remaining. To be effective this would need to include continued protection of the last remaining remnants as well as active restoration planting to create new habitats and increase the overall area in natural cover (which is currently less then 1% on the Wairau and Awatere Plain areas). So far only about 10% of the 705 identified sites over the whole of Marlborough have received any restoration or protection (25 in north Marlborough and 49 in North Marlborough). Many sites are likely to be deteriorating in condition over time due to a range of threats and pressures. While the protection and restoration efforts have been heartening, continued effort is required.





A wetland restoration project on a Wairau Plain vineyard showing 4 year old plantings starting to look established. However, there are weed invasion issues on part of this site.

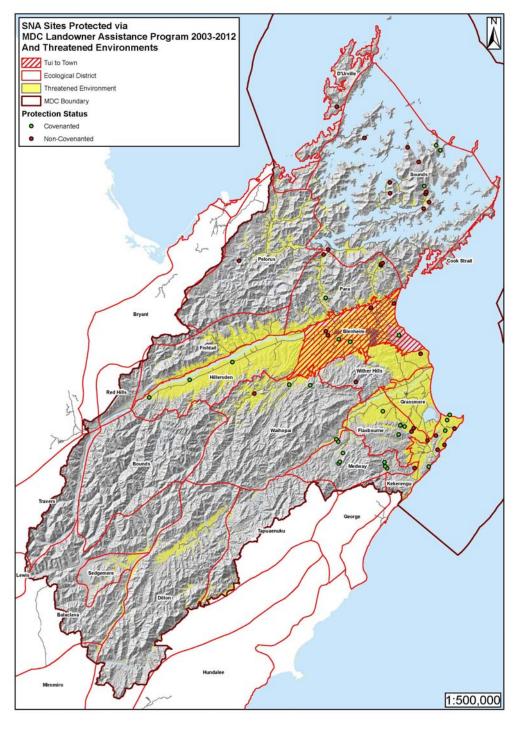
A newly fenced wetland (part of Lake Elterwater), showing willow infestation on the far left that are to be controlled and area to be planted within new fence centre front.

While the main focus of the programme has been on practical protection of individual high value significant natural area sites (including a mix of fencing, weed and animal pest control and restoration planting work), other broader methods to promote the protection of natural values in south Marlborough have also been incorporated. These have included:

- the pilot use of farm scale plans to balance the production and conservation values within properties (especially where fencing is not practical);
- three feasibility studies looking at pest and weed control issues (old mans beard and goat control in south Marlborough and wilding pine control on D'Urville Island);
- the collection of native plant seed material to ensure an ongoing supply of locally sourced plants for re-vegetation and restoration efforts,

- associated publicity and promotion work (newsletters, a series of newspaper articles and publication of the South Marlborough Native Planting Guide) and;
- The Tui to Town restoration project with a focus on the Wairau Plain area

The map below shows the location of the 74 sites that have been part of the ecological protection programme in relation to the ecological districts and the Priority One area which identifies threatened environments that have less then 20% of the land area remaining in indigenous cover. The sites shown in green have been covenanted.



Map 2: Marlborough District with Priority One Area (threatened environments), Ecological Districts, and Protected Significant Natural Area Sites

## **Protection Projects**

In the 12 month period from July 2011 to June 2012 year six new protection projects were undertaken, along with ten additional ongoing projects (which have already been counted and included in the total number of projects). This brings the total number of protection projects since 2003 to 74.

#### **New Protection Projects - July 2011 - June 2012**

Table 3: Summary of new protection projects (Including spending) July 2011 – June 2012

Ecosystem Type	Size (ha)	North/South Marlborough ED	Type of work	Total Funding	MDC cont	Biofund cont	Landowner cont QEII
Gully (MD)(QEII)	52	S Kekerengu ED	Fencing Pine control	\$51,919	\$8653	\$25960	\$8653 \$8653
Wetland /riparian (JH)	10	S Kekerengu ED	Fencing Planting Willow control	\$8823	\$2941	\$2941	\$2941
Wetland (DTe)	4	S Blenheim ED	Weed control Planting	\$13386	\$4400	\$5991	\$2995
Wetland (DFa)	8	S Blenheim ED	Weed control Planting	\$20142	\$6089	\$9369	\$4684
Hill Slopes (K7)	100	N Sounds ED	Pine control	\$2000	\$2000		
Hill slopes (CO)	100	N Durville ED	Pine control	\$15000	\$15000		
TOTAL				\$111,270	\$39,083	\$44,261	\$27,926

The six new protection projects involved several hundred hectares of land. Two sites were fenced (a total of 62 hectares), two sites are wetland restoration projects involving weed control and restoration planting (a total of 12 hectares) and two projects involve wilding pine control over approximately 200 hectares of land.

Four of the sites were also funded by the Biodiversity Fund and one site was covenanted through the QEII National Trust which also contributed financially to that site work. The other two wilding pine projects also have other funding sources and are administered by the Marlborough Sounds Restoration Trust.

Total spending on these seven projects was \$111,270, with the Biodiversity Fund share being \$44,261 and the MDC share being \$39,083. Landowner share was \$19,273 and the QEII Trust contributed an additional \$8653. (Note, because two projects are not run by MDC, the landowner and other contributions are not known but will be substantial).

## Additional Ongoing Protection Projects - July 2011 - June 2012

In addition the Council supported a number of other projects, including ten projects which are being staged over more then one year (which have already been counted as new projects in previous reports). All of these further ten projects involved animal and plant pest control with four also involving some native planting.

Table 4: Summary of other protection projects (including spending) July 2011 – June 2012

Ecosystem Type	Size (ha)	North/South Marlborough ED	Type of work	Total Funding	MDC cont	Biofund cont	Landowner cont
Gully forest (SB) (QEII)	30	S Flaxbourne ED	OMB control	\$4792	\$1198	\$2396	\$1198
Hill slopes (BA) (QEII)	40	S Wither Hills ED	Pine control	\$1510	\$1510		
Wetland (MA)	1	N Para ED	weed control and planting	\$3711	\$2088		\$1623
Wetland (MA)	1	N Para ED	Weed control and planting	\$3711	\$2088		\$1623
Wetland (MA)	1	N Para ED	Wed control and planting	\$3711	\$2088		\$1623
Riparian (W-OMB)	20	S Medway ED	OMB control	\$2500	\$2500		
Shrubland and forest (QEII) (P-OMB)	15	S Medway ED	OMB control	\$3500	\$3500		
Wetland (PR)	5	S Blenheim ED	Weed control planting	\$23649	\$5912	\$11824	\$5912
Coastal forest (PL) (QEII)	42	N Sounds ED	Animal pest control	\$6432	\$1608	\$3216	\$1608
Coastal forest (NA)	40	N Sounds ED	Animal pest control	\$10117	\$2529	\$5029	\$2529
Tui to Town x 5				\$3591	\$3591		
TOTAL				\$67,223	\$28,612	\$22,495	\$16,116

The funding for the July 2011 to June 2012 portion of the ten projects staged over several years is as follows. This includes an additional five Tui to Town planting projects which were funded by the Marlborough District Council in the 2011/12 financial year with a total value of \$3,591.

The total spending was \$67,225, the MDC Contribution \$28,612, the Biodiversity Fund contribution \$22,495 and landowner contribution \$16, 116. (Note because three projects are not run by MDC, contributions from the Biodiversity fund and landowner in these instances is not known but will be substantial).

Total spending on protection projects on private land for the 2011/12 year, when all of these protection projects are taken into account, is set out below showing the contribution of the various funding sources.

#### Total Funding Contributions for Biodiversity Protection Projects on Private Land 2011/12

Marlborough District Council Funding	\$67,695
Central Government Biodiversity Fund	\$66,726
QEII National Trust	\$ 8,653
Landowners	\$35,391
Total	\$178,465

# Summary of Total Funding Contributions for Biodiversity Protection Projects on Private Land 2003 - 2012

Marlborough District Council Funding	\$449,132.00
Central Government Biodiversity Fund	\$745,980.00
QEII National Trust	\$ 74,692.00
Landowners	\$388,538.00
Total	\$1,658,342.00

#### **Central Government Biodiversity Condition and Advice Funds**

The Council continues to make applications for funding to the central government Biodiversity Condition Fund on behalf of landowners with considerable success. Two new applications were made and granted in this latest 2011/12 year for six separate projects (CON 821 and CON 833).

Since 2003 the Council has made successful application to twelve rounds of the Biodiversity Fund, usually for multiple projects each time. Over the 2011/12 year, four Biodiversity Fund rounds were active but two of these have been completed in the year, bringing the total of completed funding rounds to ten.

One application for a further large project is currently in for consideration. Generally the Council applies to the Biodiversity Fund when the total value of projects is more then \$10,000.00.

The Biodiversity Fund has recently reduced the proportion of funding from 50% to 33% which has had the effect of increasing both the Council and landowner proportion to 33% accordingly.

#### Covenants

The Council promotes covenanting and has developed a strong relationship with the Department of Conservation and the Queen Elizabeth II National Trust (QEII), both of which provide a mechanism for landowners to independently covenant protected areas on their properties. A total of 32 of the 74 projects protected through the programme so far have been covenanted. Two of these are Protected Private Land (PPL) covenants administered by the Department of Conservation and the other thirty are QEII covenants. The QEII National Trust takes responsibility for ongoing monitoring of their ocveenanted sites, reducing the monitoring required to be carried out by the Council.

# **Part C: Monitoring Programme**

Monitoring is an important part of measuring and tracking the outputs and outcomes of any project. There are three potential monitoring scales relating to biodiversity that could be in place in Marlborough.

Firstly, at the broadest level, regional scale biodiversity monitoring is desirable so that an overall picture of biodiversity state and trends can be gained. At this stage we don't have this type of monitoring established in the Marlborough region. However, this type of monitoring is being developed at a national level through the Regional Biodiversity Forum in collaboration with the Department of Conservation. An Envirolink Tools project is underway with Landcare Research as the lead science provider, working closely with regional councils. These initiatives are attempting to align regional scale biodiversity monitoring with the Natural Heritage Management System (NHMS) being developed by the Department of Conservation. Several regional councils are trialling these methods and may provide some useful direction in regard to this type of monitoring that could be relevant to Marlborough in the future. Biodiversity sites identified and described through the Marlborough District Council's Significant Natural Areas project are likely to be utilised in this regional monitoring in the future. Staff will continue to maintain a watching brief over these developments.

Secondly and more specifically, in relation to the Significant Natural Areas project, some ongoing monitoring of the state of a selection of the more then 700 sites identified through the survey phase of the project would be desirable. This would give some indication of the continued presence of sites and the state or condition of these sites over time with or without any targeted conservation management. However, this is not easy to establish due to the variability in types of ecological site and the consequent difficulty in establishing reliable methodology with which to measure and assess these sites. At this time, the only sites that we have ongoing information on are those that have been managed for conservation purposes through the Landowner Assistance Programme to protect SNA sites (74 sites or about 10% of all sites identified).

Thirdly, systematic monitoring to assess the condition of the 74 sites protected through the Landowner Assistance Programme has been established.

The purpose of the monitoring is threefold:-

- Firstly, a check of the actual protection work carried out, ie, the condition of fencing, the success of previous weed control or planting programmes, and so on.
- Secondly, an ecological health check to assess the condition of the site and record changes.
- Thirdly, maintaining a relationship with the landowners and talking through any issues that have arisen in terms of ongoing management of the area.



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The first trial monitoring period was over the summer of 2006/7 with 12 sites visited. A second more comprehensive monitoring round was carried out in the summer of 2009/10 with 24 sites on 17 separate properties visited and assessed.

A further monitoring round was carried out over the summer of 2011/12. A total of nineteen sites were visited on thirteen properties. A further six sites were not visited for various reasons including change of ownership and difficulty in arrangements with landowners. It is anticipated that these sites can be visited again in the next monitoring round.

The QEII National Trust monitors the sites that have been covenanted through their organisation (22 sites), and several other sites are monitored at different intervals, depending on the type and scale of the project.

Contract ecologist Geoff Walls has carried out the monitoring to date with the assistance of staff. Assessment methodology is kept simple and includes photopoint observations and rapid ecological condition/trend assessment. Reports prepared for each site include commentary, site maps and photographs established at defined photopoints which, over time, will provide a visual record of changes. Any emerging issues (for instance weed invasion), are discussed with the landowner and management put in place to deal with these.

The recent monitoring results were generally positive although some weed invasion issues were evident.

- A number of forest remnant areas are showing early signs of healthy regeneration in both north and south Marlborough.
- Plantings to boost small fragmented sites in south Marlborough have been reasonably successful although some losses have inevitably occurred in some sites and better management is needed.
- Most fences are built to a high quality although in several cases stock had still managed to get through into sites and vigilance and maintenance is clearly needed.
- Emerging weeds were an issue in some sites usually associated with reduction of stock pressure (i.e. old mans beard), or opening a site up to light through willow removal (several wetlands). These weeds will need ongoing management and the Council programme provides for further assistance in relation to weed control. In most cases a day or two of expert contract labour will deal with weed problems and there is scope to arrange this through the Landowner Assistance fund relatively quickly and easily.
- Landowners are generally positive and pleased to show us around their sites. Some are keen to extend management to animal pest control which will assist with regeneration (especially in the case of possums in the sounds environment).

The monitoring programme will build over time as the number of protected sites increases through the programme. It is an important and integral part of the project, enabling the ongoing assessment of the effectiveness of the protection programme, the identification of any emerging management issues and an ongoing relationship and two way flow of information with participating landowners.



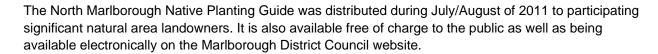
2012 monitored site in south Marlborough showing native vegetation recovery and growth of planted cabbage trees within fence.

# **Part D: Associated Projects**

# **Publicity and information**

Publicity and promotion have been integral to the Significant Natural Areas Project because it relies heavily on voluntary participation and proactive protection activity from landowners. Initially the emphasis was on increasing awareness about the unique and diverse biodiversity of the region and the opportunity for landowners to participate in collecting information and looking at options for protection where necessary. This occurred through personal contact, individual property reports, annual newsletters and newspaper articles.

- annual project newsletters 2003, 2005, 2006, 2007, 2008, 2009, 2010
- Guidelines for landowners to develop a management plan for the sustainable management of native vegetation - 2004
- Native Vegetation for South Marlborough a Planting Guide -December 2004
- South Marlborough Significant Natural Areas Project
   Summary Report July 2005
- Marlborough District Council web page Environment/Ecology and Biodiversity 2005
- Tui to Town brochure, web page and associated planting guides (Wairau Plains and South Marlborough low lying hill country) - June 2008
- North Marlborough Significant Natural Areas Project Summary Report June 2009
- North Marlborough Native vegetation planting and restoration guide June 2011



# Seed collection project

Through the Significant Natural Areas project it became apparent that boosting the supply of suitable locally sourced native plants would be necessary if there was to be an adequate volume of plant material available for restoration projects in Marlborough. The Tui to Town natural habitat restoration project is helping to stimulate this activity on the Wairau Plain area by providing information and for larger projects, funding assistance.

The Significant Natural Areas project has provided an opportunity to identify remaining pockets of indigenous plants on private land that provide valuable seed sources to generate future material for restoration planting.

A pilot seed collection project was initiated in 2006 focusing on totara seed collection and this has continued since then and broadened to include a range of suitable species for restoration planting such as kowhai, kanuka, flax, cabbage tree, mahoe, kohuhu, ngaio, broadleaf and lancewood.



Over the last four years since July 2008, the emphasis has been on collecting the podocarp species matai and kahikatea from sparsely distributed remnant populations to complement the original and ongoing focus on totara. Coordination with the Marlborough District Councils Reserves section has also taken place to try to create efficiencies in the area of seed collection.

The programme is flexible and can be shifted to meet the needs of specific projects. The current emphasis in terms of location has been to collect seed close to Blenheim to ensure that the Tui to Town and other lowland restoration projects have a supply of suitable plants, and also some collection in the Rai Valley area to enable an effective riparian restoration planting project in the area in the future.

A co-operative arrangement with local plant nurseries has been developed whereby Council collects and provides the seeds (courtesy of the access granted by private landowners to seed sources), and the nursery propagates, grows and sells the



Seed collection net under totara tree in south Marlborough

plants. This helps to ensure that appropriate locally sourced native plants are available in Marlborough nurseries to service the restoration of natural areas in the modified lowland environments.

The total cost of the seed collection project in the 2011/12 financial year was \$12,210.00.



Consultant Paul Millen with a purpose designed net set under totara trees in a remote south Marlborough location. Note the tail at the bottom of the net which collects seed for removal.

# Tui to Town Project - Natural Habitat Restoration for the Wairau Plain 2008 - 2011

#### Introduction

The Tui to Town project is a subset of the significant natural areas project which promotes the protection of natural areas of ecological value. The SNA surveys have confirmed that very little natural habitat remains on the Wairau Plain area of Marlborough and the Tui to Town project is designed to promote habitat restoration in this area.

The Tui to Town project was launched by the Council in June 2008. This report summarises the results over four years up to June 2012.

The aim is to involve the whole community in planting more trees and shrubs to create corridors and stepping stones of suitable natural habitat over the highly modified Wairau Plain area so that tui and other native birds can find places to feed and breed.

Tui live and breed in the native forests of the northbank hills and will travel 10-15 kilometres across the Wairau Plain to feed on nectar producing trees and vegetation. They are seen regularly on the Wairau Plain and in the Blenheim and Renwick township areas at certain times of the year and provide an ideal focus for habitat restoration efforts.

The Tui to Town programme includes:-



- information and publicity in the form of a brochure, web site information and various media articles and notices,
- the collection of reported tui sightings in Blenheim and the Wairau Plain area through a web based reporting system and;
- funding assistance to plant areas of a minimum of 1000 square metres or larger in the area.

The tui sighting and planting "seasons" are roughly the same, from May to December each year.

#### Tui sightings

Tui are sighted in and around Blenheim through winter and spring as they search out food sources (particularly nectar) outside their northbank forest habitats. By recording sightings a local picture can be built of where and when tui are seen, and the type of habitat they are utilising. The process also actively involves the public in the project and utilises their collective observational abilities.

- in 2008 between the months of June and December 80 tui sightings were reported.
- in 2009 over the same 7 month period 71 tui sightings were reported.
- in 2010 there were 218 sightings between the months of May to December.
- in 2011 there were 117 sightings mostly between the months of May to December.

#### **Discussion**

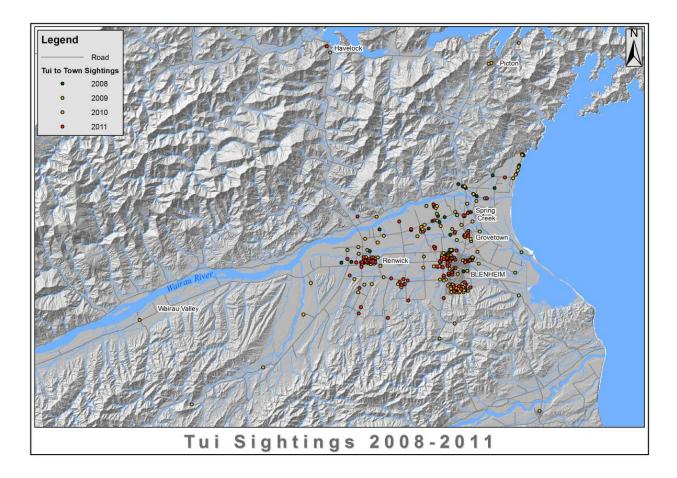
Nearly all of the sightings are in trees, generally feeding or occasionally just perched, with a few in flight.

Eucalytus trees account for 34% of the sightings where birds are observed feeding on the nectar producing flowers, particularly during the early season sightings from May to July. Kowhai is the next most popular species with 23% of sightings, mostly during the three months from August – October. Banksia species have 5% of the sightings and then they are widely distributed over a variety of species including various native plantings, camellia, beech, elderberry and various fruit trees. They are also commonly sighted perched but not feeding, on taller trees like oak, pine and walnut.



As is to be expected, the majority of sightings are from urban areas where people live. Sightings are also more common closer to the north bank hills and become very sparse south of the Blenheim township area where native vegetation areas and other trees are minimal providing little feed or habitat to attract tui.

While the recorded sightings are not a reliable measure of tui numbers, the 2010 year saw a particularly large number of sightings. Some of these were quite widespread and in areas that people did not recall seeing tui previously (the Taylor pass area and well up the Waihopai valley for instance). Perhaps the northbank tui population had managed a better then usual breeding season that year or the previous year for some reason with less predator pressure resulting in higher breeding success rates?



Map 3: Location of Tui Sightings 2008-2011

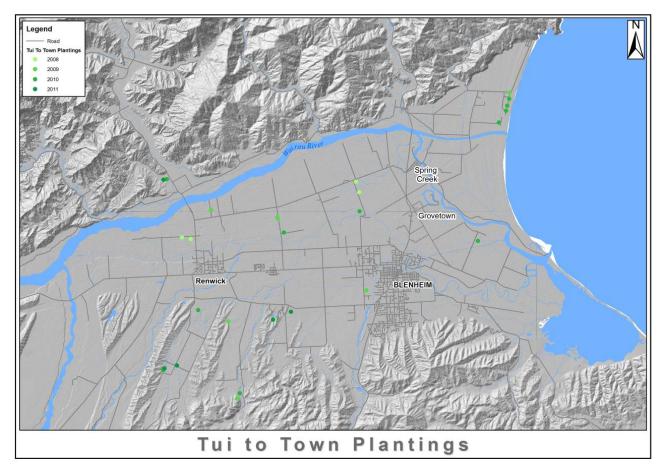
#### **Tui to Town Plantings**

New native plantings, along with the few existing areas and some favoured exotic trees and shrubs, will help to build stepping stones of habitat for tui and other native bird and insect species on the Wairau Plain.

There has been a steady interest in funded "Tui to Town" plantings. Four projects were funded in 2008, eight in 2009, 11 in 2010 and five in the 2011 planting season. This brings the total number of plantings to 28. As each project is a minimum of 1000 square metres this means a total area of new habitat of about 3 hectares. These plantings compliment other restoration projects on private land being undertaken through the SNA project, projects on Council land, and other smaller scale plantings of native vegetation on private land, school grounds and so on.

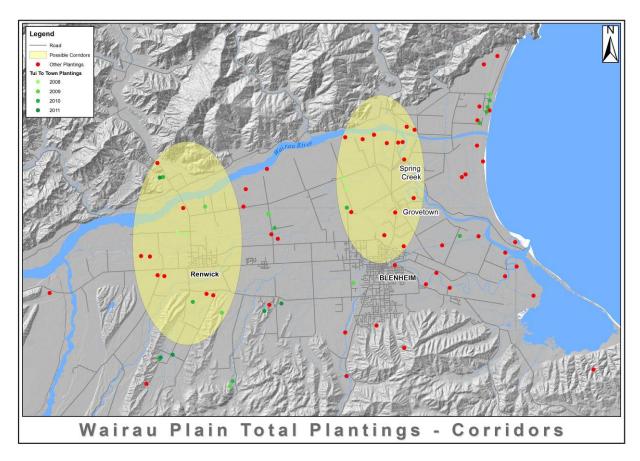
The Council contribution to the five Tui to Town planting projects in the 2011/12 financial year was \$3,591.00.

So far there are a number of confirmed applications for funding for the 2012 spring planting season and a number of other enquiries.



Map 4: Location of Tui to Town Planting Projects on the Wairau Plain 2008-2011

The second map shows the combined locations of recent tui to town plantings and other known 1000m plus sized natural areas and plantings on the Wairau Plain area. The yellow areas indicate possible "corridors" between the northbank to Blenheim and Renwick.



Map 5: Location of Tui to Town Plantings, Other Plantings and Possible Corridor Areas

#### **Discussion**

Tui live and breed in the native forests of the northbank hills and will travel 10 – 15 kilometres across the Wairau Plain to feed on nectar producing trees and vegetation. They are seen regularly on the Wairau Plain and in the Blenheim and Renwick township areas at certain times of the year and provide an ideal focus for habitat restoration efforts.

The Tui to Town project is proving to be an effective way to generate interest in biodiversity issues and to promote the restoration of habitat in some instances. The programme has an educational and public awareness aspect as well as providing practical assistance to promote habitat restoration through information and funding. It is an ongoing annual programme with the active phase being between about May to December when both tui presence and planting are happening.

While tui are not a threatened native species, they are typical of New Zealand forest birds in that they require reasonable areas of native forest habitat to thrive and their breeding success is highly dependent on the level of predation by ship rats, stoats and possums. Because tui are quite visible and charismatic birds that will travel long distances to feed, they are very suitable as a flagship species to encourage conservation efforts for habitat restoration (which is the main focus here in Marlborough) and pest control.

There are other projects around the country with a focus on tui including the re-introduction of tui to Banks Peninsula through the Banks Peninsula Conservation Trust and the "Hamilton Halo" project in the Waikato which with the help of Landcare Research is working to carry out effective pest control in many native forest areas within a certain distance of Hamilton city. Both of these projects are well supported by the public and also have significant scientific input in regard to the tracking and monitoring of birds and

the associated pest control efforts and may provide useful information on ways that the Marlborough Tui to Town project could be extended in the future.

Over time the project is providing a small but measurable increase in natural habitat on the Wairau Plain area (about three hectares of new plantings so far). This complements other new native planting carried out by the Marlborough District Council on public reserve and river land on the Wairau Plain over the last decade which totals about 7 hectares in area. These plantings include nearly 4 hectares at the Spring Creek /Kahikatea Reserve, plantings along the foot of the Wither Hills Farm Park and various riparian plantings along the Opawa and Taylor Rivers.

The programme has been integrated into the EnviroSchools "Living Landscapes" programme and a number of schools have carried out native plantings within the school grounds in the hope of attracting tui. Tui to Town" street banners were also introduced into the Blenheim township area in 2011, providing further promotion of the project.



In 2011 the Tui to Town programme was integrated into the Rugby World Cup programme in Marlborough as part of the associated local environmental programme. The visiting Russian rugby team participated in a special community planting on the banks of the Taylor River, where native plants, along with some Russian elms, were planted.





Marlborough residents, Councillors and members of the Marlborough Landscape Group join the Russian rugby team to plant tui to town trees on the Taylor River bank in September 2011

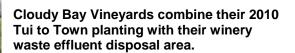
### A photograhic record of some Tui to Town plantings on the Wairau Plain

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An established four year old Tui to Town planting at Pernod Ricards' Stoneleigh vineyard on Jacksons Road 2012

Robyn Cuddon shows Margaret Peace her new Tui to Town planting on her property near the Marlborough Ridge 2011. This planting complements other wetland restoration work at this site which can be seen in the background.



Stage one of a new Tui to Town planting in 2011 at Villa Maria on New Renwick Road, due to be extended in spring 2012.

# **Appendix 1: Total Budget for Main Aspects of Significant Natural Areas Project July 2011 – June 2012**

Project name	Projected Budget	Actual Expenditure	Revenue
SNA survey and general	\$10,000	\$3,191	
SNA Biodiversity Fund protection projects	\$50,000	\$33,330	\$59,800 (CON 613x2, 754, 833)
SNA MDC protection projects (incl Tui to Town)	\$35,000	\$34,365	
SNA associated projects (seed collection)	\$10,000	\$12,210	
SNA monitoring programme	\$15000	\$15,655	
Total	\$120,000	\$98,751	\$59,800