





Summary Report on the Results of the Significant Natural Areas Project 2012-2013

MDC Report No: 13-008

E310-006-001 & E310-012-003/Record No: 13193569

ISSN 1179-819X (Online) ISBN 978-1-927159-41-5 (Online)

July 2013

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The Biodiversity Fund – Department of Conservation

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 2012 to June 2013. It follows from four 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 and fourth which covered the annual periods from July 2010 to June 2011 and July 2011 to June 2012.

This report summarises the results of:-

- the ecological survey work carried out through the Council's Significant Natural Areas (SNA) project between July 2012 and June 2013 (one survey);
- the related environmental protection work carried out through the SNA project Landowner Assistance Programme from July 2012 to June 2013 (six new projects and eight on-going projects);
- 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 2013

(NB: all financial amounts in this report are presented GST inclusive)



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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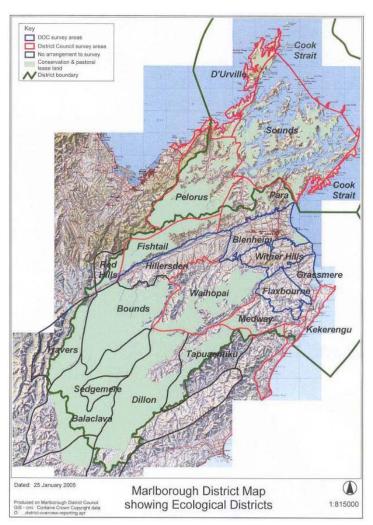
Part A. Ecological Survey Work - Summary of Results - July 2012 – June 2013

Field Based Ecological Surveys - Overview

Between 2001 and 2009, extensive field based ecological surveys were 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 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 since that period. In the period from July 2012 to June 2013, one further property was surveyed. This was quite an extensive survey on a privately owned island in the Sounds ecological district. The total cost of this survey was \$7,436.

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 12 year period from July 2001 to June 2013.

Tables 1 and 2 show the total participation rates and overall results from 2001 to June 2013 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 2013 a total of 282 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 706 significant natural areas have been identified, with a combined area of 45,016 hectares.

Table 1: South Marlborough Ecological Survey Participation and Results (July 01- June 13)

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 13)

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	3	0	7	755	17.1%	13.2%	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	128 (75%)	44 (25%)	369	21,924	(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 than 10% in six of the eight ecological districts and less than 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 than 20% remaining in indigenous cover. 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 than in south Marlborough, ranging from about 4% to 17 % 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 2012/13

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 706 identified sites over the whole of Marlborough have received any restoration or protection (28 in north Marlborough and 52 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.



Doug Avery with a new fence under construction around an SNA site on a farm property near Ward.



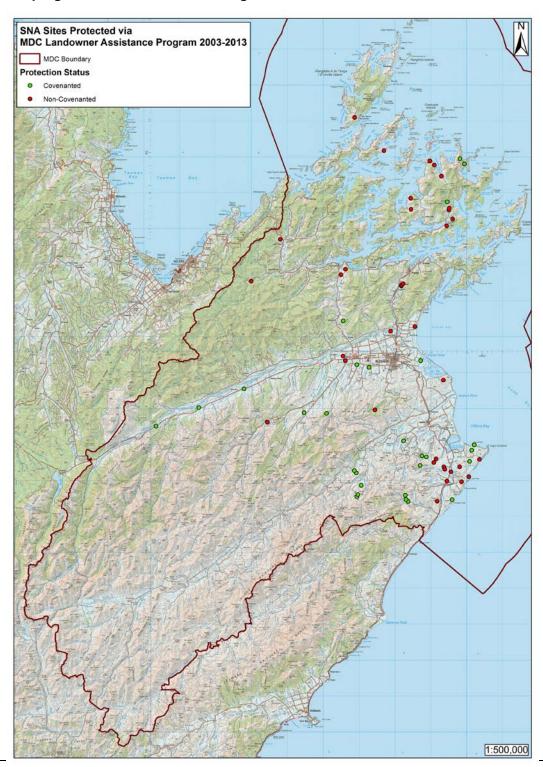
A newly fenced remnant coastal forest site on a farm in the Outer Sounds.

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 summary reports and native planting guides for both south and north Marlborough) and:
- The Tui to Town restoration project with a focus on the Wairau Plain area.

Map 2: The location of the majority of the 80 sites that have been protected through the programme. The sites shown in green have been covenanted.



Protection Projects

In the 12 month period from July 2012 to June 2013 year six new protection projects were undertaken, along with eight additional on-going 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 80.

New Protection Projects - July 2012 - June 2013

Table 3: Summary of new protection projects (GST inclusive) July 2012 – June 2013

Ecosystem Type	Size (ha)	North/South Marlborough ED	Type of work	Total Funding	MDC cont	Biofund cont	Landowner cont QEII
Gully (AV)	23	S Flaxbourne ED	Fencing	\$52,060	\$17,353	\$17,353	\$17,353
Gully (AV)	4	S Flaxbourne ED	Fencing	\$10,792	\$3,597	\$3,597	\$3,597
Hill slopes (RD)	2	N Sounds ED	Fencing	\$8,664	\$4,332		\$4,332
Wetland (Fr)	2	S Kekerengu ED	Fencing	\$3,787	\$1,893		\$1,893
Coastal forest (PL) (QEII)	42	N Sounds ED	Animal pest control	\$20,349	\$6,783	\$3,391	\$10,175
Coastal forest (NA)	40	N Sounds ED	Animal pest control	\$24,000	\$8,000	\$4,000	\$12,000
Total				\$119,652	\$41,58	\$28,341	\$49,350

Four of the new protection projects involved fencing areas to prevent stock access and allow regeneration and recovery of vegetation. Three were in south Marlborough and one was in north Marlborough. A total of 31 hectares was fenced.

Two further projects involved extending the animal pest control on two adjoining Sounds properties being managed for conservation purposes.

Four of the projects were also funded by the central government Biodiversity Fund, while two of the smaller fencing projects were funded through the councils own landowner assistance fund only.

Total spending on these four projects was \$119,652, with the Biodiversity Fund share being \$28,341 and the MDC share being \$41,958 and landowner share \$49,350.

Additional Ongoing Protection Projects - July 2012 - June 2013

In addition the Council supported a number of other projects, including eight 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 eight projects involved on-going plant pest control with three also involving some native planting. Through the QEII Trust a minor contribution was made to a further four existing covenants. Five small restoration planting projects on the Wairau Plain were also funded through the Tui to Town programme.

Table 4: Summary of other protection projects (GST inclusive) July 2012 – June 2013

Ecosystem Type	Size (ha)	North/South Marlborough ED	Type of work	Total Funding	MDC cont	Biofund cont	Landowner cont
Wetland- riparian (JH)	10	S Kekerengu ED	Fencing Planting Willow control	\$33,576	\$11,192	\$11,192	\$11,192
Wetland (DTe)	4	S Blenheim ED	Weed control Planting	\$10,500	\$2,625	\$5,250	\$2,625
Wetland (DFa)	8	S Blenheim ED	Weed control Planting	\$19,241	\$4,810	\$9,620	\$4,810
Shrubland and forest (QEII) (P-OMB)	15	S Medway ED	OMB control	\$2,875	\$2,875		
Gully forest (SB) (QEII)	30	S Flaxbourne ED	OMB control	\$4,600	\$2,300		\$2,300
Wetland (Ba)		S Flaxbourne ED	Weed control	\$2,052	\$1,026		\$1,026
Wetland (Sp)		S Blenheim ED	Weed control	\$2,955	\$1,477		\$1,477
Gully (St)		S Kekerengu ED	Weed control	\$538	\$269		\$269
Tui to Town x 5			Planting	\$3,591	\$3,591		
QEII 4 covenants		various	Weed Control	\$4,000	\$4,000		
TOTAL				\$83,928	\$34,165	\$26,062	\$23,697

The funding for the July 2012 to June 2013 portion of these eight projects along with the additional five Tui to Town planting projects and contribution to four small QEII Trust weed control projects on covenanted sites is as follows.

The total spending was \$83,928, the MDC Contribution \$34,165, the Biodiversity Fund contribution \$26,062 and landowner contribution \$23,697.

Total combined spending on protection projects on private land for the 2012/13 financial 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 2012/13

Marlborough District Council Funding	\$76,123
Central Government Biodiversity Fund	\$54,403
Landowners	\$73,047
Total	\$203,573

Summary of Total Funding Contributions for Biodiversity Protection Projects on Private Land 2003 – 2013

Marlborough District Council Funding	\$525,255.00
Central Government Biodiversity Fund	\$800,383.00
QEII National Trust	\$ 74,692.00
Landowners	\$461,585.00
Total	\$1.861.915.00

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 in this latest 2012/13 year for three separate projects (CON 930 and CON 970). One of these was granted and is active and another is pending approval.

Since 2003 the Council has made successful application to thirteen rounds of the Biodiversity Fund, usually for multiple projects each time. Ten of these rounds have been completed with a further three Fund rounds being active over the 2012/13 year. 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 than \$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 34 of the 80 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 32 are QEII covenants. The QEII National Trust takes responsibility for on-going monitoring of their covenanted 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 but we are involved in a national Envirolink Tools project which is being carried out in conjunction with Landcare Research. This project is developing some standardised biodiversity indicators and methodology to measure these indicators. Staff continue to maintain a watching brief over this project.

Secondly and more specifically, in relation to the Significant Natural Areas project, some ongoing monitoring of the state of a selection of representative sites from the more than 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. To date this has not been implemented, however, it is worth considering for the future.

Thirdly, systematic monitoring to assess the condition of the 80 protected through the Landowner Assistance Programme sites (about 10% of all sites identified), 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.



So far three monitoring rounds have been undertaken. 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 and a further monitoring round was carried out over the summer of 2011/12 with 19 sites visited on 13 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 which is planned for the summer of 2013/14.

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.

So far the monitoring results have generally been positive although some weed invasion issues have been evident. These have been followed up with further minor assistance programmes as appropriate. Landowners are generally positive and pleased to show us around their sites.

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.



Photo point image of Sounds lowland forest in 2010 soon after the site was fenced



The same forest beginning to recover two years later in 2012. A further monitoring round in 2014 will be carried out to track on-going progress.

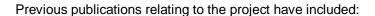
Part D: Associated Projects

Publicity and information

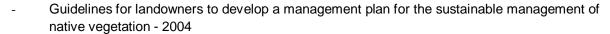
Publicity and promotion have been integral to the Significant Natural Areas Project because it relies heavily on voluntary participation and proactive protection activity from landowners. Initially the emphasis was on increasing awareness about the unique and diverse biodiversity of the region and the 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.

More recently publicity about the SNA project is integrated into other media releases and publicity, for instance links with entrants in the Marlborough Environment Awards, farming articles and so on.

The only scheduled publicity in the 2012-13 financial year was the production of an annual newsletter which was distributed in October 2012.







- 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.

Native Vegetation for North Mariborough
A PLANTING & RESTORATION GUIDE

Over the last five 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 2012/13 financial year was \$8,987.



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 – 2013

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 and 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.

Over 600 sightings have been reported providing useful information about tui movement and feeding patterns on the Wairau Plain.



Thirty two plantings have been funded through the project. These have resulted in about 3 hectares of new habitat created. Along with other larger restoration and protection projects on the Wairau Plain, these are contributing to a slight increase in area of habitat available to tui and other native fauna.

The Council contribution to the five Tui to Town planting projects in the 2012/13 financial year was \$3,536.

A separate report has been prepared summarising the full results of the Tui to Town project over the five year period to from June 2008 to June 2013.

Tui to Town and the wider restoration of the Wairau Plain/Blenheim Ecological District

By mapping all of the new Tui to Town plantings, along with all other known native vegetation sites on the Wairau Plain area/Blenheim Ecological District, a picture of the extent and distribution of the habitat areas, and their relationship to each other, can be built up.

Using ecological reserve design theory "reserves" of native vegetation are divided by size into three categories and a distance of influence is then put around these areas. Distances of 200m are placed around small planted sites of less than .5 of a hectare (5000 square metres – this includes all of the smaller 1000 square metre tui to town plantings), and larger distances of 1.5km and 2 km over larger "reserves" of 0.5 - 5 hectares and 5 - 10 hectares.

Map 3 shows that while we have made some gains, there are still large areas with virtually no natural habitat areas present on the Wairau Plain/Blenheim Ecological District.

The total area of all of the mapped habitat areas within the Blenheim ecological district is 188 hectares (this includes Marlborough District Council reserve areas, significant natural area restoration projects on private land and the Tui to Town plantings). Much of this habitat is still very new and has not yet reached its full potential in terms of forest structure and food production and habitat value.

This current habitat area is about 0.5% of the total land area of the Wairau Plain, a slight improvement on previous but still obviously a very low proportion overall. Because of this very small percentage of land area in indigenous cover, the Wairau Plain area (Blenheim Ecological district) along with the coastal and lowland areas around Seddon (the Grasmere ecological district), have been identified by nationally developed guidelines, as a priority for protection (along with any land area with less than 20% or less remaining in indigenous vegetation cover (Ministry for the Environment, 2007).

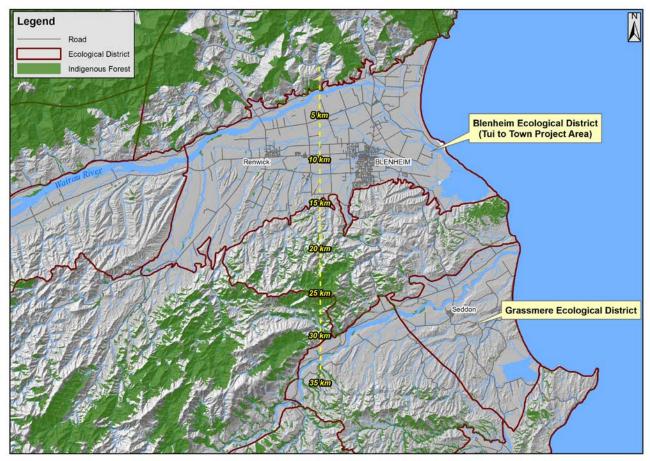
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Map 3: Location of all known native habitat areas in the Blenheim Ecological District, showing linkages and gaps between areas (Tui to Town plantings – yellow dots)

The principles driving the Tui to Town project on the Wairau Plain are equally applicable to other ecological districts, particularly Grassmere, which is similarly very highly modified and has less than 1% of land area in indigenous vegetation cover. Map 4 shows the Grassmere Ecological District in relation to the Blenheim Ecological District. The green areas are indigenous vegetation cover in the surrounding ecological districts. Both ecological district areas have very few small remnant areas of indigenous habitat areas remaining and there is scope for many more plantings on both private and public land in both areas to further increase the area of habitat available for native bird species. In the future it may be that a similar project incentivising protection and restoration projects in the Grassmere Ecological District could be implemented.



Map 4: Location of Grassmere Ecological District and Blenheim Ecological District.

Appendix 1: Total Budget for Main Aspects of Significant Natural Areas Project July 2012 – June 2013 (GST inclusive)

Project name	Projected Budget	Actual Expenditure	Revenue
SNA survey and general	\$5,000	\$7,436	
SNA Biodiversity Fund protection projects	\$50,000	\$41,958	\$55,000 (CON 821, CON 883, CON 930)
SNA MDC protection projects (incl Tui to Town)	\$40,000	\$34,165	
SNA associated projects (seed collection)	\$10,000	\$8,987	
SNA miscellaneous	\$0	\$4,067.00	
Total	\$105,000	\$96,613	\$55,000