

Summary Report on the Results of the Significant Natural Areas Project 2010-2011

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Executive Summary

Introduction and Background

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 2010 to June 2011. It follows from two previous summary reports, one of which covered the early years of the project from 2001 to June 2008 and the second of which covered the two year period 2008 - 2010.

This report summarises the results of:-

- the ecological survey work carried out through the Council's Significant Natural Areas (SNA) project between July 2010 and June 2011;
- the related environmental protection work carried out through the SNA project Landowner Assistance Programme from July 2010 to June 2011;
- 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,
- several other projects associated with the Significant Natural Areas project including the Tui to Town project, a seed collection project and the publicity and education activities.

Ecological Survey Work

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.

Since the previous summary report was written summarising results to June 2010, a further two properties have been surveyed, both in south Marlborough. Seven new sites were identified through these surveys. The active phase of the ecological survey work is now complete, although there is scope for further surveys at the request of landowners.

This brings the total number of properties surveyed since 2001 to 279, (75% of those approached). A total of 96 landowners declined to participate (25% of those approached). A total of 701 significant natural areas have been identified, with a combined area of 44, 640 hectares.

In the area surveyed in south Marlborough, a large area of lowland ecosystem types are severely depleted and functionally limited, while some hill country secondary ecosystem types are possibly increasing. There is very little land managed by the Department of Conservation.

In north Marlborough while there are extensive areas of both regenerating and original forest, and significant areas of land under the management of the Department of Conservation, some lowland ecosystem types are under represented. Impacts from animal and plant pests are widespread and severe in some places.

Protection Programme

A pilot Landowner Assistance Programme to implement protection of areas identified as ecologically significant was established in 2003 and extended into a full programme in 2005.

In the one year period from July 2010 to June 2011 a total of seven new protection projects on private land have been funded through the programme with three of these in south Marlborough and four in north Marlborough. Two of the projects had additional funding from the central government Biodiversity Fund.

In addition the Council supported a number of other projects, including seven projects which are being staged over more than one year (which have already been counted as new projects in previous reports), and four additional contributions to ongoing minor protection work (such as weed control or planting), on sites previously protected.

Funding Contributions for Biodiversity Protection Projects on Private Land 2010/11

Council Funding	\$58,526.00
Central Government Biodiversity Fund	\$53,214.00
QEII National Trust	\$ 5,982.00
Landowners	\$44,556.00
Total	\$162,278.00

These new projects bring the total of protected sites to 67.

A summary of all the new projects is provided, along with details on types of protection work, ecosystem types protected and funding.

Monitoring

Monitoring of the sites that have been the subject of protection work was initiated in 2006 and repeated in the summer of 2009/10. This will be an ongoing programme with sites to be monitored at 2-3 year intervals. The purpose of the monitoring is to track the changes in the sites over time and to provide follow up assistance where necessary, particularly in regard to weed control.

A total of 24 sites were monitored through the Councils programme in 2009/10, with a further 22 covenanted sites monitored by the QEII National Trust. The monitoring showed that most sites are being well managed and are showing positive responses to the protection work.

Conclusions

Overall the project has entered a new phase with ecological survey work largely completed and the focus shifting to ongoing protection work and also monitoring.

The Biodiversity Fund continues to support Marlborough projects, and, along with the Marlborough District Council funding, allows an active protection programme to be implemented.

Ongoing support and promotion of the protection of these areas through associated projects such as the native seed collection project and the Tui to Town project is proving effective, along with an ongoing emphasis on awareness raising and information sharing through various events, publications and forums.

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Part A. Ecological Survey Work - Summary of Results - July 2010 - June 2011

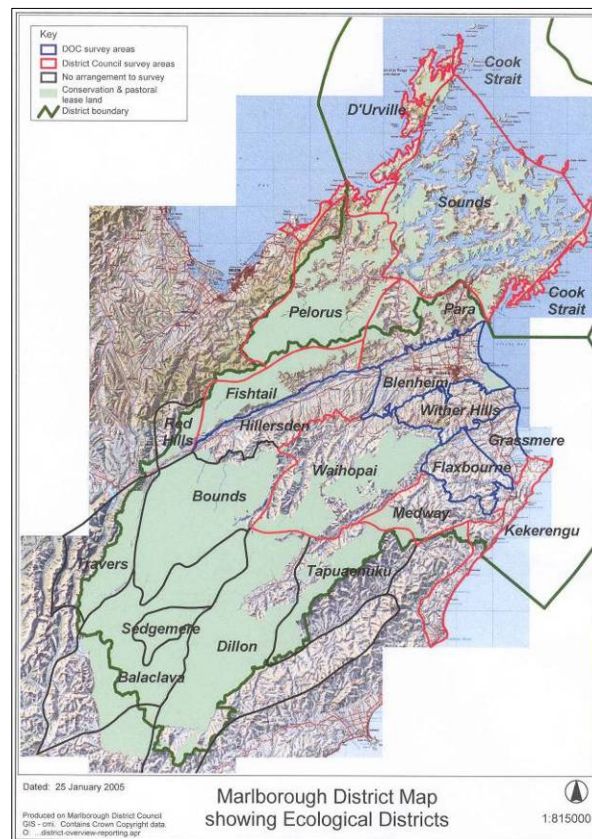
Field Based Ecological Surveys - Overview

Since 2001 extensive field based ecological surveys have been carried out on private land throughout the Marlborough District. These were completed in 2009 although further occasional surveys are carried out on request from landowners.

Two property surveys were carried out in the 2010/11 year identifying seven new sites in south Marlborough.

Ecological Districts have been used as the survey units. While 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 Strait ecological districts in north Marlborough), the Department of Conservation also carried out a substantial part of the survey work in 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, being mostly Department of Conservation land or pastoral leasehold land.

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, 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.



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 from July 2001 to June 2011.

While the active phase of the ecological survey work is now complete, a further two properties have been assessed on request of the landowners in the year from June 2010 - June 2011. Seven new sites were identified on these two properties.

Tables 1 and 2 show the total participation rates and overall results from 2001 to June 2011 in both south and north Marlborough. 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 land area of all of the identified significant natural area sites, the percentage of Department of Conservation land in the ecological district.

As of June 2011 a total of 279 landowners participated in the ecological survey in both south and north Marlborough (75% of those approached). A total of 96 landowners declined to participate (25% of those approached). A total of 701 significant natural areas have been identified, with a combined area of 44,640 hectares.

It is obvious that in south Marlborough there is very little Department of Conservation land, apart from in the Waihopai ecological district, and that 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. In north Marlborough there is a considerable amount of Department of Conservation land (ranging from 24 to 63%), and the percentage of total land area of significant natural sites is generally higher than in south Marlborough, ranging from 4 to 16.5 %.

Table 1 - South Marlborough Ecological Survey Participation and Results (July 01-June 11)

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	6%
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%)	52 (25%)	336	23,092	7.2% av

Table 2 - North Marlborough - Ecological Survey - Participation and Results (July 01 - June 11)

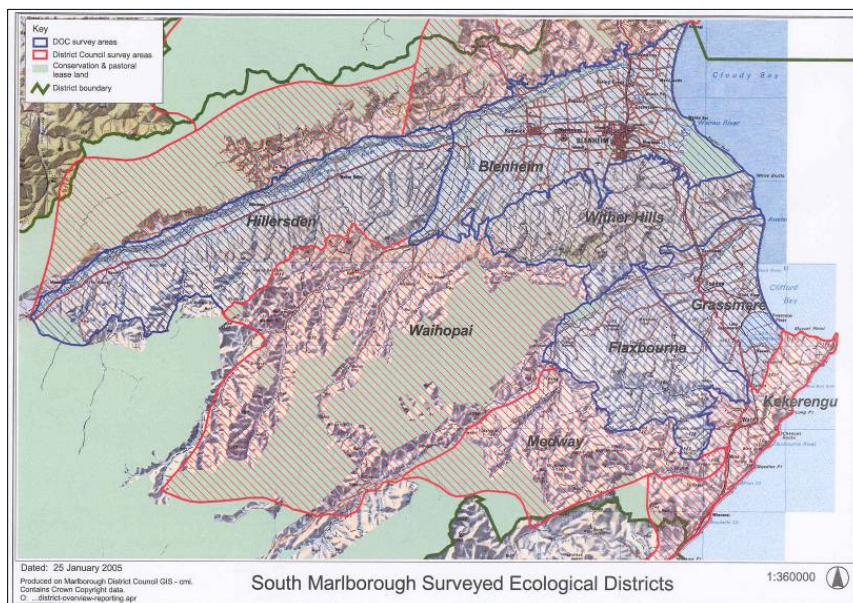
Ecological Districts	No. Properties Surveyed	No. Properties Declined	No. of Sites	Combined Area (ha)	SNA sites as a % of total private land area in ED	% of DoC Land	% of total land area
D'Urville	20	9	46	3,582.0	16.5%	27%	12.0%
Cook Strait	2	0	6	695.0	16.8%	24%	12.5%
Sounds	61	16	182	11,479.0	16.0%	39%	9.5%
Pelorus	18	10	43	1,467.5	3.8%	63%	1.4%
Para	18	7	55	2,975.0	8.7%	24%	6.2%
Fishtail	6	2	33	1,350.5	9.0%	55%	3.0%
Totals	125 (74%)	44 (26%)	365	21,549.0	(Av=12%)	(Av=38.5%)	(Av=7.4%)

Discussion of Ecological Survey Results - South Marlborough

For the purposes of reporting on the Council's work through the Significant Natural Areas project, South Marlborough is defined as consisting of that area included within eight ecological district areas - Hillersden, Blenheim, Wither Hills, Grassmere, Flaxbourne, Waihopai, Medway and Kekerengu (see map).

There is very little Department of Conservation managed land in seven of the eight ecological districts, with the Waihopai ecological district being the only one with a significant amount (18%). Also, the percentage of total land area of significant natural sites is very low - less than 1% in two of the eight ecological districts, and between 1 and 10% in a further four.

In south Marlborough some ecosystem types are very depleted and the little that remains is often in poor condition and not formally protected in any way, in particular wetlands, podocarp forests and broadleaved forests. The dry harsh climate of parts of south Marlborough makes it difficult for natural regeneration of some species to occur.



Also, because of the extreme depletion and fragmentation of the few remaining natural areas in the lowland parts of the south Marlborough area, fully functioning ecosystems are not common, as many native bush birds and insects are in low numbers (for instance there are few tui in south Marlborough). Because of the lack of habitat and therefore fauna, functions like seed dispersal and pollination do not take place, meaning that some sites are, or will become, un-viable in the long term without active intervention by humans.

Other ecosystem types like kanuka forest, shrublands and silver tussock have possibly increased in area, as these ecosystem types regenerate readily following fire-induced land clearance, often replacing the original forest where pasture is no longer maintained.

The main land uses in south Marlborough are extensive pastoral farming, some forestry, and viticulture and horticulture in some localities.

Current pressures identified by the field surveys include:

- small size and fragmentation of sites making them functionally extinct in the long term without active intervention;
- damage by stock (much of the survey work was carried out on pastoral farms);
- ongoing damage and depletion caused by feral animals (browsing of vegetation, ground disturbance and predation on native birds, insects and lizards);
- invasion and competition from weeds including marram grass in coastal areas, wilding pines and other tree species (widespread), old mans beard in some localities, broom, buddleia, cotoneaster, willows and others;
- water abstraction in lowland areas which can put pressure on remnant areas in gullies and limit

downstream flows; and

- land development and subdivision - can have a negative effect if increased intensification and indigenous vegetation clearance is the result.

Threatened species - A number of threatened plant and animal species occur in south Marlborough (for instance native broom species and fierce lancewood, black fronted tern and falcon). Some of these are endemic to South Marlborough (occurring only in this area). It is difficult for the Council to focus particular effort on these species while there is so much basic habitat protection and restoration to do. However, the presence of threatened plant or animal species increases the ranked significance of a site and therefore it becomes high priority for investment in protection and restoration.

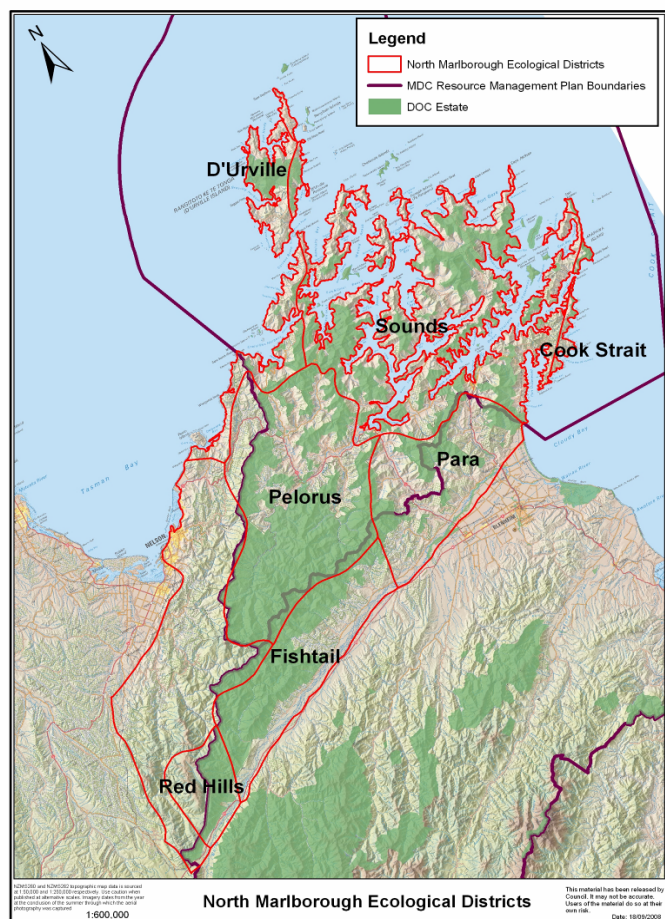
Fauna - because of a lack of habitat, parts of south Marlborough have very little native fauna remaining (birds, insects and lizards). Most common bush bird species would have been common (tui, bellbird, grey warblers, south island robin, rifleman, etc,) but in many areas are now absent. In areas where forest remnants remain these birds are found, although tui distribution is quite limited. A number of lizard species are present in parts of south Marlborough. The waterways of south Marlborough vary in size and type with some of the larger permanently flowing waterways supporting good numbers of native fish and invertebrate species while other ephemeral waterways are not so valuable for freshwater fauna.

In addition to the significant natural areas field surveys where basic habitat types and fauna species observed are recorded, the Council has also carried out a small amount of targeted monitoring of fauna in south Marlborough. This included using refuges, pitfall trapping and general observations to detect invertebrate species, lizard species and bird species at a total of 21 significant natural area sites during the 2007 and 2008 summer seasons. Results are very preliminary but help to expand knowledge about the functioning of these ecosystems.

Discussion of Ecological Survey Results - North Marlborough

For the purposes of reporting on the Councils work through the Significant Natural Areas project, North Marlborough is defined as consisting of that area included within six ecological district areas - Fishtail, Para, Pelorus, Sounds, Durville and Cook Strait (see map). In north Marlborough there is a considerable amount of Department of Conservation land (ranging from 24 to 63%), and the percentage of total land area of significant natural sites is generally higher than in south Marlborough, ranging from 4 to 16.5 %. The combination of these two types of land in indigenous vegetation cover of some description, sets quite a different scene to that in South Marlborough.

While some ecosystem types are quite depleted (for instance lowland alluvial and swamp forests and kohekohe forest), a significant amount of native forest - both podocarp and beech dominated - remains (generally in the higher altitude areas). Additionally large areas of regenerating forest consisting of kanuka, manuka, tauhinu and broadleaved species are present where land has been left to regenerate following earlier clearance by fire for pastoral farming. A significant part of the area is administered by the



Department of Conservation and is formally protected (45% overall). The moister climate and sheltered areas, allow for rapid regeneration in many cases.

North Marlborough supports a mix of land uses including conservation (Department of Conservation and some private land), pastoral farming and forestry. A number of the pressures and threats are similar to those identified for south Marlborough, although the issue of extreme depletion and fragmentation is not so relevant, nor is the water abstraction issue so pressing. Feral animal pests and some plant pests (in particular wilding pines), are the main threats in many instances.

While fencing is important on pastoral farms, in many cases in the north Marlborough area animal pest control is likely to be the biggest challenge. Because of the extensive areas of suitable habitat and favourable climate, many feral animal species do very well in north Marlborough. Pigs and possums are very widespread and often in high numbers, goats and deer are present in high numbers in some places. The usual mix of smaller predators are all present in varying numbers, depending on the season and specific locality (rats, mice, stoats, ferrets and weasels, cats), and dogs can be a problem for the ground dwelling weka.

Some feral animal control is carried out on most properties, but this is highly variable. The extensive hinterland and the wide roving habits of several of the pest species (especially if regularly hunted), means that continual re-invasion is an issue and will require collaborative control programmes in targeted high value areas within the region. Deliberate introduction of some recreational species (for instance pigs) is another problem. The pest-free status of many of the islands in the Sounds is vital to their value as sanctuaries for native flora and fauna. The lack of possums on Arapawa Island, and the lack of both possums and goats on D'Urville Island also contribute to the sanctuary quality of north Marlborough.

Plant pests are also an issue in north Marlborough with wilding trees being the most obvious. Wildings are primarily *pinus radiata* species which have spread from old homestead plantings and newer commercial forestry blocks throughout the Sounds. Many individuals are working to remove wilding pines. The Council held a well attended public workshop on controlling wilding trees in 2006. In 2007 an independent Trust was established to raise funds and carry out wilding pine removal work in Queen Charlotte Sound.

Threatened Species - a number of threatened plant and animal species occur on private land in north Marlborough (for instance large-leaved milk tree, cook strait kowhai, weka, falcon and giant land snails). It is difficult for the Council to focus particular effort on these species while there is so much basic habitat protection and restoration to do. However, the presence of threatened plant or animal species increases the ranked significance of a site and therefore it becomes high priority for investment in protection and restoration.

Fauna - because north Marlborough has relatively large and intact areas of most types of habitat, fauna generally fare better than in South Marlborough. Forest birds are relatively abundant in many areas and the waterways provide good habitat for native fish and invertebrate species. Seals and seabirds are present in good numbers. Several species of the giant land snail are present, however these are severely threatened due to pressure from predators (rats, possums, pigs). The Department of Conservation manages a number of other threatened species on reserve land and islands including the Maud Island frog, tuatara and giant land snails.

The Council has not carried out any further specific monitoring of fauna in north Marlborough over and above the significant natural areas field surveys where basic habitat types and fauna species observed are recorded.

Part B. Protection Work - Landowner Assistance Programme - Summary of Results 2010/11

Landowner Assistance Programme

The Landowner Assistance Programme has been operating since 2003 in conjunction with the field 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 than 10% of natural cover remaining. 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 than 1% on the Wairau and Awatere Plain areas).



A wetland restoration project showing 2 year old plantings



An area of coastal forest that has been fenced to protect it from stock access

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 help landowners make management decisions which balance the production and conservation values within their properties (especially where fencing is not practical);
- two feasibility studies looking at pest and weed control issues (old mans beard and goat control in south Marlborough);
- the collection of native plant seed material to ensure an ongoing supply of locally sourced plants for re-vegetation and restoration efforts and;
- associated publicity and promotion work (newsletters, a series of newspaper articles and publication of the South Marlborough Native Planting Guide).

Protection Projects

As of June 2010 a total of 60 protection projects had been undertaken. Seven new protection projects over the last year period to June 2011 brings this total to 67.

Protection Projects - July 2010 - June 2011

In the period July 2010 to June 2011 seven new protection projects were carried out, along with seven additional ongoing projects, and four small weed control projects in existing protected sites.

The seven new protection projects involved approximately 50 hectares of land. Of these, two were also funded by the Biodiversity Fund and the QEII National Trust. Four of the others were smaller scale projects funded solely through the Marlborough District Council funding programme and one was a contribution to wilding tree control within an existing QEII covenant, led by the QEII National Trust. Fencing was carried out on six of the sites, including four small wetland sites, one small and one larger gully site. Four of the sites were located in south Marlborough and three in north Marlborough. Two of the sites were QEII covenanted as part of the protection process and one of the sites was already covenanted.

Total spending on these seven projects was \$72,899.00, with the Biodiversity Fund share being \$20,535.00 and the MDC share being \$23,201.00. Landowner share was \$23,231.00 and the QEII Trust contributed an additional \$5982.00.

Ecosystem Type	Size (ha)	North/South Marlborough ED	Type of work	Total Funding	MDC cont	Biofund cont	Landowner cont
Gully and bluffs (SB)(QEII cov)	30	S Flaxbourne ED	Fencing OMB control	\$41,142.00	\$8,970.00	\$17,940.00 (QEII) \$5,232.00	\$9000.00
Gully/riparian (HV)(QEII cov)	3	S Medway ED	Fencing	\$4558.00	\$2279.00		\$2279.00
Wetland (PA)(QEII cov)	1	S Hillersden ED	Fencing and weed control	\$4464.00	\$2232.00		\$2232.00
Wetland (MA)	1	N Para ED	Fencing	\$5,980.00	\$2990.00		\$2990.00
Wetland (MA)	1	N Para ED	Fencing	\$5980.00	\$2990.00		\$2990.00
Wetland (MA)	1	N Para ED	Fencing	\$5980.00	\$2990.00		\$2990.00
Kanuka forest (BF)(QEII cov)	40	S Wither Hills ED	Wilding tree control	\$4795.00	\$750.00	\$2595.00 (QEII \$750)	\$750.00

In addition the Council supported a number of other projects, including seven projects which are being staged over more than one year (which have already been counted as new projects in previous reports), and four additional contributions to ongoing minor protection work (such as weed control or planting), on sites previously protected.

The funding for the seven projects staged over several years is as follows with the total spending being \$69,927, the MDC Contribution \$33,331, the Biodiversity Fund contribution \$32,679 and landowner contribution \$19,331. (Note because two projects are not run by MDC contributions from the Biodiversity fund and landowner in these instances is not known).

Ecosystem Type	Size (ha)	North/South Marlborough ED	Type of work	Total Funding	MDC cont	Biofund cont	Landowner cont
Coastal forest (PL)	42	N Sounds ED	Animal pest control	\$20,296.00	\$5069.00	\$10138.00	\$5069.00
Coastal forest (NA)	40	N Sounds ED	Animal pest control	\$4558.00	\$2996.00		\$2996.00
Wetland (WH)	50	S Blenheim ED	weed control and planting	\$27460.00	\$6865.00	\$13730.00	\$6865.00
Wetland (PR)	5	S Blenheim ED	Weed control and planting	\$13121.00	\$3278.00	\$6565.00	\$3278.00
Wetland (BA) (Carry Over)	7	S Grassmere ED	Planting	\$4492.00	\$1123.00	\$2246.00	\$1123
Riparian (W-OMB)	20	S Medway ED	OMB control		\$10,000.00		
Shrubland and forest (P-OMB)	15	S Medway ED	OMB control		\$4000.00		

Total spending on the four minor weed control contributions on sites previously protected came to a total of \$1994 with the landowners matching these costs with another \$1994.

Total spending on protection projects on private land for the 2010/11 year, when all of these protection projects are taken into account, is set out below showing the contribution of the various funding sources.

Funding Contributions for Biodiversity Protection Projects on Private Land 2010/11

Council Funding	\$58,526.00
Central Government Biodiversity Fund	\$53,214.00
QEII National Trust	\$ 5,982.00
Landowners	\$44,556.00
Total	\$162,278.00

Other Budget Items 2010/11

Consultancy costs for the two significant natural area surveys carried out were \$7,548.

Twelve Tui to Town plantings were funded in the 200/11 financial year totalling \$10,782.

The North Marlborough Planting and Restoration Guide was also completed and printed in this financial year costing Council \$7653.00 along with an equal Biodiversity Fund contribution of \$7,653.

Council also carries some consultancy costs relating to managing and supporting the range of protection projects which are not included in the above figures. These come to approximately \$3,600.

Council also runs a native seed collection programme using an external consultant. The total cost for this project in 2010/11 was \$7,200.

2010/11 MDC Budget for Significant Natural Areas Project

Project name	Projected Budget	Actual Expenditure	Revenue
SNA survey and general	\$13,000	\$13,679	
SNA Biodiversity Fund protection projects	\$60,000	\$38,542	\$62,533
SNA MDC protection projects	\$40,000	\$31,924	
SNA associated projects (seed collection)	\$10,000	\$7,200	
Total	\$123,000	\$92,345	\$62,533

Total Funding Contributions for Biodiversity Protection Projects on Private Land 2003 - 2011

Council Funding	\$381,437.00
Central government Biodiversity Fund	\$679,254.00
QEII National Trust	\$ 66,039.00
Landowners	\$353,147.00
Total	\$1,479,877.00

Funding Guidelines

The funding guidelines developed early in the project are still generally working well with a contribution of between 50% to 83% available to landowners. This contribution depends on the mix of funding provided, contributors include the Council, the central government Biodiversity Condition Fund, the QEII National Trust and landowners.

However, some aspects of the guidelines need reviewing. The guidelines suggest a limit of \$10,000 per site and \$20,000 per property. The intention of this was to spread the availability of the fund as much as possible. In hindsight, they are probably pitched a little low and could possibly be amended to \$15,000 per site and \$30,000 per property in the light of actual spending occurring and the fact that the funding available has not been over-subscribed to date.

Both of these amounts have been exceeded with some larger projects requiring a contribution of more than \$10,000 to develop a viable protection project. There have been about ten instances that this has been the case, either because the project was large scale and costly (for instance several farm fencing jobs with the total value of the fence being around \$50,000 requiring an MDC 25% contribution of more than \$10,000), or because the project is an intensive restoration effort requiring several years of effort to be worthwhile (these are generally large scale wetland restoration projects).

Some landowners with a number of SNA sites identified on their properties have carried out from between 3-5 protection projects, thereby exceeding or getting close to, the \$20,000 limit per property.

It may be more useful to look at relating the expenditure to area protected or the relative ranking of the sites protected. However, both of these suggestions are difficult to "calibrate", as a large area does not necessarily have a high ecological ranking and conversely some small areas (for instance degraded wetlands) may nonetheless be worthwhile restoration projects.

Hence the suggestion above, to raise the limits and continue with the case by case approach used so far. A sub-committee (Alan Johnson, Peter Jerram and Ross Beech), has been used only once so far but could be used to consider cases that are close to or likely to exceed this limit.

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. Since 2003 the Council has made application to ten rounds of the Biodiversity Fund, usually for multiple projects each time. As at the date of writing three of these Biodiversity Fund rounds are active and seven have been completed. One application for three separate projects 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 signalled that it intends to reduce the proportion of funding from 50% to 33% in the future. This will have the effect of increasing both the Council and landowner proportion 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 31 of the 67 projects protected through the programme so far have been covenanted. The vast majority of these are QEII covenants and QEII then takes responsibility for ongoing monitoring of these sites, reducing the monitoring required to be carried out by the Council.

Monitoring



Protected Site Monitoring

Systematic monitoring to assess the condition of the sites protected through the Landowner Assistance Programme has been established. 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. 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.

A further monitoring round is planned for the summer of 2011/12 and will include repeat visits to the 24 sites visited in the previous 2009/10 round, along with several further new sites.

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.

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 previous monitoring results were generally positive.

- 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.
- 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).

Obviously 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.

Regional Scale State of Environment Monitoring

Broader regional scale biodiversity monitoring is being developed at a national level and Council staff are keeping a watching brief. 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.

However, to meet our own annual plan reporting requirements, we do need to start some State of Environment monitoring to check the condition of sites that were identified through the original SNA surveys and which have not been subject to any active protection work through the Councils Landowner Biodiversity Assistance Programme. The intention is to approach selected landowners to arrange to re-visit some sites in the Keekerengu and Medway ecological districts this summer season, to trial a simple SOE monitoring programme.

Contact and consultation with landowners over the next year will need to be considered in the light of other consultation work being carried out around the inclusion of wetlands and landscape areas in the proposed new resource management plans.

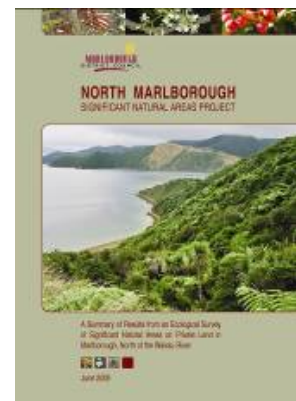
Associated Projects

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.

As time has gone on the emphasis has shifted to include showcasing many of the positive examples of landowner biodiversity protection work in the region and providing practical support and information. There has been a steady media focus through the 2010/11 year with quite a focus on the Tui to Town project which is promoting habitat restoration in the Blenheim ecological district and also a number of articles in the Marlborough Express highlighting entrants and winners of the Marlborough Environment Awards, several of which are focussed around SNA related restoration projects. Along with a working relationship with local media (newspaper, radio, industry magazines and newsletters and so on), publications relating to the project include:

- 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

The North Marlborough Native Planting Guide has just been printed and is being distributed July/August to participating significant natural area landowners. It is also available free of charge to the public as well as being available electronically on the Marlborough District Council website.

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 lowland south Marlborough. Demand for plants is increasing, with many private restoration projects either protecting and restoring small remnant areas like wetlands, or starting from scratch to generate new areas from bare ground. 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 three 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 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 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.

This current season (2011) is the first time some of the more notable forest tree species collected through this programme (such as matai, kahikatea and also beech species), are publicly available for sale and there has been some media attention given to this to promote interest.



Seed collection net under totara tree in south Marlborough

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

The Tui to Town project was launched by the Council three years ago in June 2008. This spring is the fourth planting season. 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. Recent government guidelines have identified the Wairau Plain area, along with other lowland areas throughout New Zealand, as high priority for protection and restoration of native biodiversity.

The project also provides some useful information about where and when native birds are seen in the highly modified Blenheim Ecological District and allows a picture to be built about movements, feeding habits and so on.

The Tui to Town project aims to increase the percentage of natural cover over time, by encouraging restoration planting efforts on both private and public land. Plantings can be in home gardens, schools, vineyards, farms and on public land administered by the Council. Several existing landcare groups are continuing with their restoration projects around the Wairau Plain (for instance Rarangi beach, Grovetown Lagoon, Blind Creek and Mill Stream), and the Council is focusing its own planting efforts on river reserve areas and in the new Spring Creek Kahikatea Reserve on SH 1 between Grovetown and Tuamarina.

The Council has produced a brochure which lists plants, both native and non-native, which can provide tui and other native birds with a nearly year round supply of suitable food from nectar, fruit and insects. The Council and local plant nurseries have been working together to collect local seed from native plants suitable for planting in the Wairau Plain area. Brochures and posters are available at the Council.

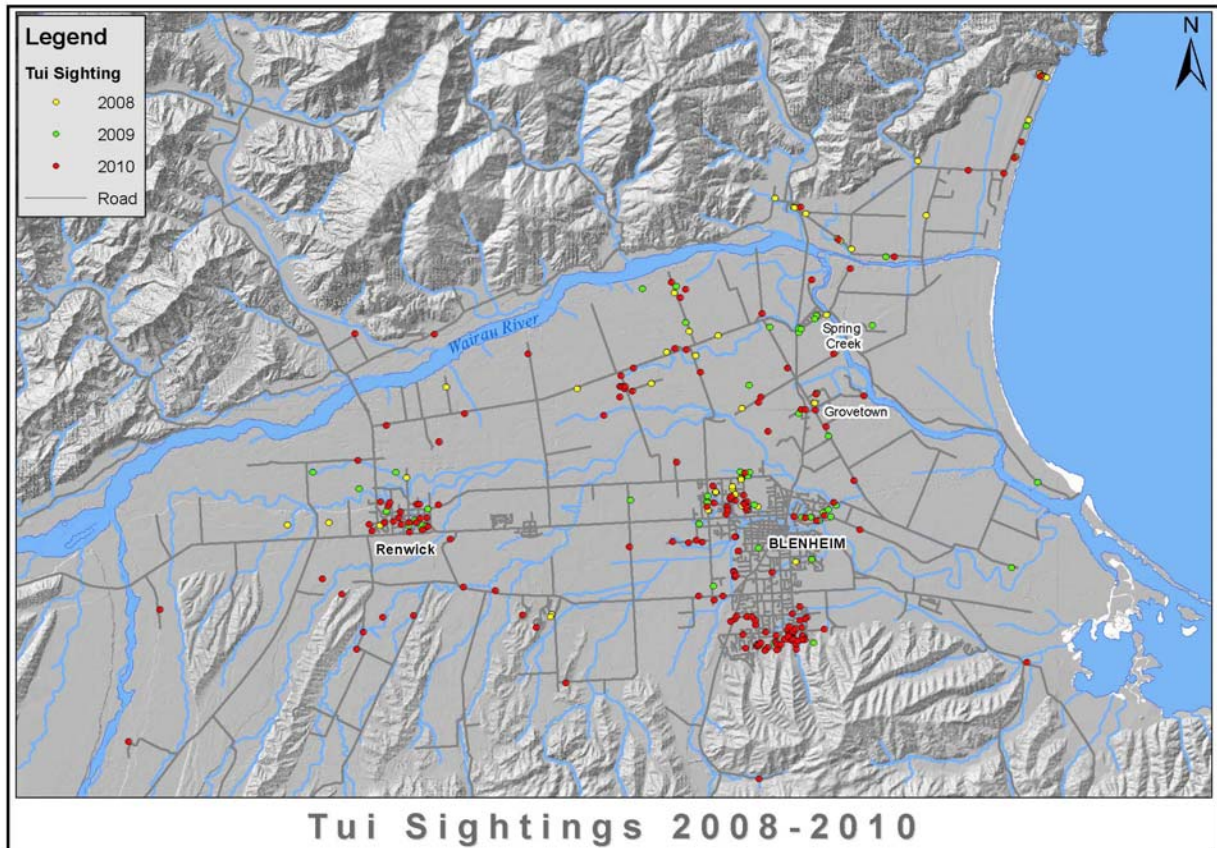
The Council also has some funding available for larger native planting projects on the Wairau Plain (1000 square metres minimum size), and several Wairau Plain landowners have applied for this funding. Initially the funding was set at \$2 per plant up to a maximum of \$1500.00 per project but in 2010 was reduced to the equivalent of \$1 per plant with a maximum of \$1000,00 per project to allow the budget to be spread over a larger number of projects.

The link created on the Marlborough District Council website so that the public can report sightings of tui on the Wairau Plain has been working well, allowing a picture to be built up about where and when tui are seen.

Sightings

- 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.

The map below shows the distribution of sightings over the three year period.

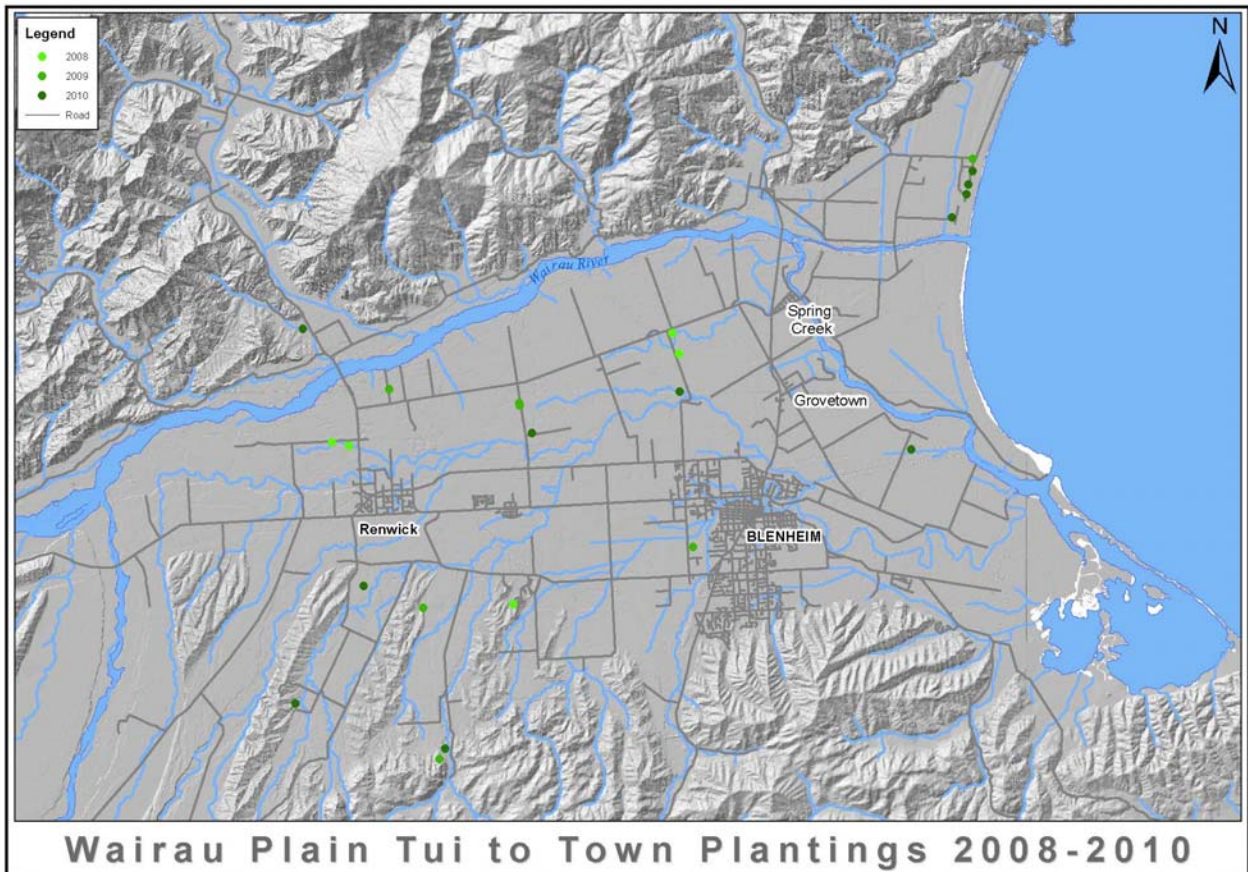


Plantings

There has been a growing interest in funded "Tui to Town" plantings. Four projects were funded in 2008, eight in 2009 and 11 in the 2010 planting season. As each project is a minimum of 1000 square metres this means a total area of new habitat of about 2.5 hectares. In addition there have been many smaller plantings with interest from schools, home gardeners and so on.

So far there have been about 12 enquiries about plantings for the 2011 season with four already approved and in progress.

The map below shows the location of Tui to Town planting projects over the 2008 - 2010 period.



A 2 year old Tui to Town planting on a Jackons Road vineyard



A 3 year old Tui to Town planting on a small rural property

A report summarising the full results of the Tui to Town project over the three year period from 2008 - 2010 inclusive is available.