

Summary Report on the Results of the Significant Natural Areas Project 2022 - 2023





**MARLBOROUGH
DISTRICT COUNCIL**

Summary Report on the Results of the Significant Natural Areas Project 2022 - 2023

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Executive Summary

Introduction and Background

Through the Resource Management Act 1991 and provisions in the Marlborough Environment Plan (MEP), the Marlborough District Council has a role in identifying, 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 2022 to June 2023. It summarises the results of:

- Ecological survey;
- Environmental protection work carried out through the SNA Landowner Assistance Programme;
- Significant Natural Area monitoring programmes;
- Community outreach; and
- The Native Seed Collection Project in 2023.

Strategic Direction

Central government has released the Aotearoa New Zealand Biodiversity Strategy (ANZBS) and National Policy Statement on Indigenous Biodiversity (NPSIB) which were developed through a process being led nationally by MfE and DOC with input from Local Government. These documents are still being assessed but Marlborough District Council. They, along with the likes of the Kotahitanga mō te Taiao Alliance Strategy, will guide the Marlborough Biodiversity Strategy, another project that needs to be completed within the next 10 years.

Ecological Survey Work

Since 2001, extensive field based ecological surveys have been carried out on private land through large parts of the Marlborough region. The majority of the work was carried out from 2001 to 2009 and since that time properties have been visited opportunistically.

There are a total number of 778 Significant Natural Areas and 142 Recommended Areas for Protection currently mapped and identified in our database, an increase of 6 SNAs and 51 RAPs in 2022/23.

Managed Site Protection Programme

Established in 2003, the landowner assistance has contributed funding and expertise to protect and improve biodiversity in 156 SNAs.

There were 34 projects funded in 2022/2023 financial year. Of these, 16 new projects were initiated during the year.

This programme to assist landowners to improve the condition of their SNAs resulted in the investment of \$532,198 into indigenous biodiversity on private land in 2022/23, of which Council paid about 40%. Around a 20% of this went into planting native trees and the remaining 80% was spend evenly on fencing stock out of sites and undertaking animal pest control. A large percentage of the planting budget went to the dune restoration on the East Coast.

Total Funding Contributions for Biodiversity Protection Projects on Private Land 2022 – 2023 (GST Inclusive)

| | 2021/22 | 2022/23 |
|--------------------------------------|---------------------|------------------|
| Marlborough District Council Funding | \$188,244 | \$200,072 |
| Central Government | \$18,590 | \$90,602 |
| QEII National Trust | \$24,991 | \$14,896 |
| Landowners | \$183,937 | \$341,361 |
| Total | \$415,762.00 | \$646,931 |

Monitoring

Monitoring of site tells us if we are achieving gains and gives direction to the Protection Programme. Monitoring in 2022/23 resulted in visits to 16 Managed sites and 10 Unmanaged sites. This made for a total of 26 sites monitored on 17 properties for the year, in seven Ecological Districts.

Results from this monitoring were encouraging as all Managed sites were in Good condition with a trend over time of Stable or Improving. The Unmanaged site results were also welcome with all but two in Fair or Good condition and trending either Stable or Improving other than two that were Stable-Deteriorating. One of these sites was protected by a covenant.

Seed Collection

Contract seed collection was carried out between February and June 2023 with the usual focus on collecting kahikatea, tōtara and matai seed for local planting projects, as well as other species suitable for the Flaxbourne Catchment Care projects.

Discussion and Conclusions

There has been a continued involvement with landowners on the east coast, south of Lake Grassmere/Kapara Te Hau. A high percentage of this coast is Significant Natural Area, Outstanding Natural Landscape, Nationally Important wildlife corridor and habitat for threatened and Highly Mobile species. Work began in earnest after the November 2016 Kaikōura Earthquake as the SNAs that were likely to have been affected were assessed. Many of the sites are coastal dune areas that have been uplifted during the quake. While they had not been hugely damaged by the quake, there was considerable evidence of damage caused by vehicles being able to access the area in a way they had not been able to previously.

The Council is now implementing the East Coast Vehicle Bylaw after an extended period of consultation with iwi and the community. This has seen most of the coastal area from the Awatere River mouth to the Waima/Ure River designated vehicle free. A 9km section, between Marfells Beach and the Airstrip south of Cape Campbell, is open to ATVs and UTVs, with a number of conditions. South of the Waima/Ure River mouth to the Boundary at Willawa Point is open to all vehicles.

The uplift has also created a window of opportunity to restore a natural dune ecosystem less overwhelmed by exotic weeds such as marram grass and wilding pines. Increased interest in the coastal dunes has resulted in an improved knowledge of what is found there, including nationally important populations of endemic animals, such as Marlborough spotted skink, katipo spider and kiwaia, the mat daisy jumper, which is a critically endangered flightless moth unique to this coast. Planting pockets of native sand binding plants, to introduce valuable seed sources into the Significant Natural Areas on the coast, and gradually reducing the weed load in those same areas will increase the resilience of the area and enhance populations of indigenous biodiversity.

Restoration of large wetland ecosystems at Para Swamp and Lake Elterwater continues. Both sites are the focus of planting native species and controlling willow.

Landowners are also showing their commitment to their SNAs by covenanting through the QEII Trust and Department of Conservation, with 41 new covenants recorded over SNAs during 2022/23.

The Introduction of the ANZBS and NPSIB documents signals the start of a new period of planning for the future of Biodiversity Management in Marlborough. Council staff are currently undertaking an analysis of the NPSIB to determine the implications that it will have on policies of the MEP and existing workloads.

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1. Introduction

The Significant Natural Area project was established in 2001 to enable the Marlborough District Council to meet its obligations under section 6(c) of the Resource Management Act which requires that, in relation to managing the use, development and protection of natural and physical resources, the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna, shall be recognised and provided for as a matter of national importance.

The Council of the time decided to meet these obligations through a proactive but non-regulatory programme to identify significant natural areas and offer landowners support to protect and enhance these areas. Integral to this approach was a commitment to hold the property specific information confidentially rather than scheduling it for regulatory purposes.

A working group was established to assist the Council to manage the programme. The group included Councillors and staff, Department of Conservation staff, three landowner representatives and the local QEII representative. The working group has played an important role in guiding the direction of the project over the years.

Methods under the Marlborough Environment Plan require the identification of Significant Natural Areas based on set criteria that must be met in order for a site to be considered Significant.

Information collected through the significant natural areas surveys is held in a database and is only reported publicly in a general sense. The two main ways the information is used are, firstly, to provide a regional overview of significant natural areas and biodiversity on private land in the Marlborough region, and secondly, to provide a basis for developing protection programmes with landowners interested in proactively managing and protecting these areas.

Central Government released the National Policy Statement on Indigenous Biodiversity on 7 July 2023. It came into effect on 4 August 2023. Amongst many other things it provides direction to councils on how to identify significant natural areas and manage the adverse effects of new activities on them. The implications of the NPSIB on the existing SNA programme are currently being investigated.



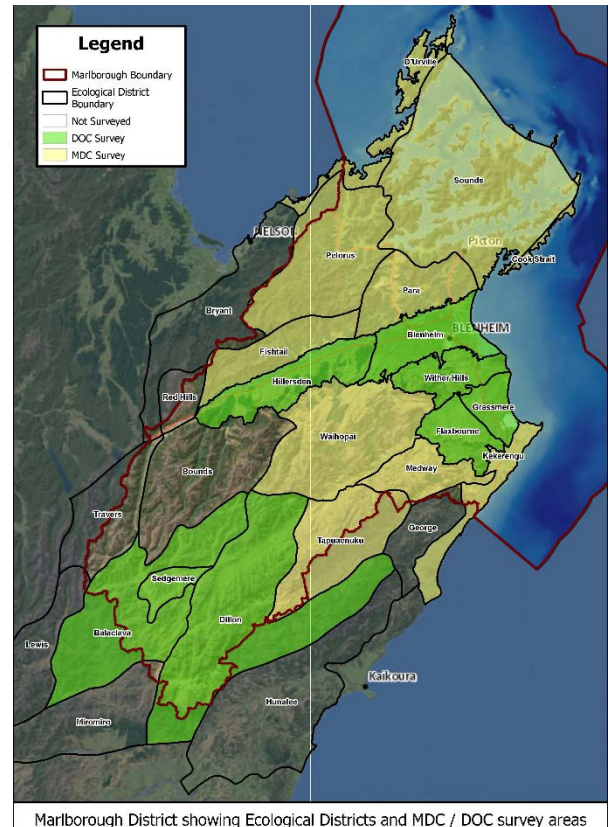
Figure 1: Geoff Walls looking for rare plants on limestone in South Marlborough.

Part A: Ecological Survey Work

2. Field Based Ecological Surveys – Background and Overview

Between 2001 and 2009, extensive field based ecological surveys were carried out on private land throughout large parts of 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, Te Hoiere/Pelorus, Rangitoto ki te Tonga/D'Urville, Sounds and Cook Strait ecological districts in North Marlborough – (see yellow shaded areas on map). 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 (see green shaded areas on map).



Some ecological districts at the south of the region (Tapuaenuku, Bounds, Dillon, Sedgemere, Balaclava, Travers and Red Hills), were not surveyed in the 2000's being mostly Public Conservation Land or pastoral leasehold land. In 2018, surveys of pastoral lease properties in the Upper Awatere Valley were initiated to fill gaps in coverage in Tapuaenuku, Dillon and Waihopai ecological districts. Other data from other sources is added as it becomes available.

There are still some gaps in coverage in parts of Marlborough previously surveyed, especially in the Te Hoiere/Pelorus, Waihopai, and Flaxbourne, which are being addressed as opportunity allows.

As each SNA is visited for monitoring, the opportunity is taken to reassess the boundary to ensure it still reflects the extent of significant habitat. The inaccuracies mainly stem from the quality of mapping that was available during the early 2000's compared to what is used today, however they also show where changes in land use have allowed some sites to expand.

This ecological survey work has resulted in a large amount of information being collected. It 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 NPSIB requires Councils to record all SNAs and so another era of mapping is about to begin.

2.1. Summary of Results – July 2022 to June 2023

2.1.1 Property Surveys

Six new sites measuring 207.5ha were added to the database this year. They were on six properties in Hillersden, Para and Sounds Ecological Districts.

A small Marlborough Sounds Island was surveyed for SNA status and assessed for QEII covenant at the same time. This is only the second island which is an SNA in its entirety, as very few islands are in private ownership. Weed control is the most urgent action for this site, otherwise it was in good condition.



Figure 2: Ouokaha Island in Hopai Bay.

Another important area in the Pukaka Valley holding huge matai and kahikatea trees was also added to the database. Along with other existing SNA and adjacent Public Conservation Land, Pukaka Valley holds the largest area of intact alluvial podocarp forest left in the Wairau Plains. This area will now be enhanced with the addition of valuable alluvial river terraces which still hold scattered old totara trees. The land will be retired from production and allowed to revert naturally to indigenous forest now that the radiata pines have been harvested from around them.

In a separate process, Molesworth Station was added to the database using data from surveys completed by DOC. This has added 57 new sites and has filled a large hole in our coverage of Balaclava, Dillon and Sedgemere Ecological Districts. Our previous coverage of Molesworth Station was restricted to Significant Wetlands which were mapped by Council in 2013.

The cost to Council of the surveys and reports was \$13,895.00.

2.1.2 Wetland Survey 2010 – 2013

From 2010 – 2013 Council carried out a further project to identify regionally significant wetlands in Marlborough. These have been scheduled in the proposed Marlborough Environment Plan, which is currently notified, and submissions are being analysed. Wetlands are identified on the Planning Zone maps and landowners will then have another opportunity to consider them. This project involved desktop identification followed by notification to all affected landowners and follow up field visits on request. There was some overlap with wetland areas already identified through the earlier Significant Natural Area surveys.

Most wetlands were not visited or described in a survey as part of the identification process. This is an information gap which will need to be filled as opportunity allows with some ecological assessments.

There were 1,300 wetlands identified in the Marlborough Environment Plan.

Additional wetlands identified opportunistically since then have been added to a separate database to be processed during the next plan change.

2.1.3 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 22-year period from July 2001 to June 2023. These do not include the additional wetland sites that have been identified more recently through the 2010-13 survey described above, unless they have had a full SNA assessment report completed and been assigned a number.

Table 1 and Table 2 show the total participation rates and overall results from 2001 to June 2023 in South and North Marlborough respectively. Using ecological district units, the tables show; the number of sites identified, the number of sites legally protected, the combined area and percentage of total land area of all of the identified Significant Natural Area sites, and the percentage of Department of Conservation land in each Ecological District.

As of June 2023, a total of 778 Significant Natural Areas have been identified. In addition to this, there are another 142 sites identified by DOC during the PNA surveys of Wairau and Molesworth Ecological Regions, and 1300 Significant Wetlands listed in the MEP. Together they cover 137,455ha of land in the Marlborough Region. Therefore, 46,320ha of additional land was added to the database of significant sites this financial year.

Table 1: South Marlborough Ecological Survey Participation and Results (July 01 – June 23).

| Ecological Districts | No. of Sites | No. Sites Legally Protected | Combined Area (ha) | SNA sites as a % of Total Private Land Area in ED | SNA sites as a % of Total Land Area | % of ED in DoC land |
|----------------------|--------------|-----------------------------|--------------------|---|-------------------------------------|---------------------|
| Kekerengu | 60 | 7 | 1,647 | 9.9% | 5.4% | 3.8% |
| Flaxbourne | 76 | 10 | 2,332 | 6.4% | 8.3% | 0.3% |
| Grassmere | 19 | 0 | 1,742 | 6.2% | 9.4% | 0.4% |
| Blenheim | 20 | 13 | 3,085 | 2.4% | 7.4% | 3.4% |
| Medway | 70 | 15 | 3,833 | 12% | 11.9% | 1.0% |
| Hillersden | 48 | 9 | 9,460 | 10% | 18.4% | 3.6% |
| Wither Hills | 25 | 4 | 5,039 | 16.7% | 16.6% | 0% |
| Waihopai | 77 | 29 | 17264 | 20.5% | 15.8% | 24.5% |
| Tapuaenuku | 20 | 2 | 3,775 | 4.4% | 5.1% | 40.2% |
| Dillon | 58 | 30 | 13,876 | 37% | 18.8% | 69.8% |
| Balacava | 30 | 20 | 24,250 | 54% | 19.8% | 91.3% |
| Bounds | 4 | 0 | 2,884 | 11.6% | 3.0% | 88.9% |
| Sedgemere | 6 | 6 | 1,826 | N/A | 12.8% | 100% |
| Totals | 513 | 145 (28%) | 91013 | Av=15.9% | Av=11.8% | Av=27.3% |

Table 2: North Marlborough – Ecological Survey – Participation and Results (July 01 – June 23).

| Ecological Districts | No. of Sites | No. sites legally protected | Combined Area (ha) | SNA sites as a % of Total Private Land Area in ED | SNA sites as a % of Total Land Area | % of ED in DoC Land |
|---------------------------------|--------------|-----------------------------|--------------------|---|-------------------------------------|---------------------|
| Rangitoto ki te Tonga/D'Urville | 49 | 2 | 5180 | 32.7% | 17.9% | 31% |
| Cook Strait | 6 | 2 | 478 | 12.9% | 9.3% | 28% |
| Sounds | 228 | 37 | 12,649 | 17.9% | 10.9% | 41% |
| Te Hoiere/Pelorus | 43 | 12 | 2,131 | 8.3% | 2.1% | 68% |
| Para | 65 | 8 | 3,660 | 10.7% | 7.7% | 28% |
| Fishtail | 27 | 4 | 1,088 | 8.0% | 2.5% | 68% |
| Totals | 418 | 65 (15%) | 25186 | (Av=15.1%) | (Av=8.4%) | (Av=44%) |

2.2. Discussion

Our 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. Despite a high level of buy-in from Marlborough landowners when the programme was initiated, there are still large areas that have not been assessed for SNAs, however this is constantly changing as new landowners invite MDC onto their land. Sites are being added to the database on a regular basis and new relationships being developed with landowners all the time, usually leading to improvements being made to many of the sites.

2.3. South Marlborough

This part of the region is characterised by a long history of extensive native vegetation clearance and is consequently much depleted in ecological functioning in some respects. While there are some extensive areas of beech forest, kānuka forest, shrublands and tussock grasslands, these all occur in the extensive areas of hill country.

Of the 10 ecological districts that were surveyed in the South Marlborough area there is very little Department of Conservation land in seven of them. The percentage of total land area of significant natural sites is also very low for some of these - less than 10% in the three lowland coastal ecological districts (Flaxbourne, Grassmere and Kekerengu) and less than 12% for two others (Blenheim and Medway), and less than 17% for Wither Hills. Any district with less than 20% indigenous vegetation cover is at high risk for high loss of indigenous biodiversity.

These 6 Districts are therefore Priority One in the 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. They are therefore also Priority One for our SNA programme.

2.4. 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 Public Conservation Land (ranging from 24% to 68% in different ecological districts). The percentage of total land area of significant natural sites is generally higher than in South Marlborough, ranging from about 7% to 30% across the ecological districts.

While some ecosystem types are quite depleted, for instance lowland alluvial, 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 kānuka, mānuka, 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, and native freshwater fish species).



Figure 3: Tall tawa forest at Linkwater, North Marlborough.



Figure 4: Part of the largest area of lowland podocarp forest remaining on the Wairau Plains, in the Pukaka Valley.

Part B: Site Improvement – Landowner Assistance Programme – Summary of Results 2022-2023

3. Landowner Assistance Programme – Background and Overview

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. The main focus of the programme has been on management of threats within individual high value significant natural area sites (including a mix of fencing, weed and animal pest control and restoration planting work)

A concerted 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 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 than 1% on the Wairau and Awatere Plain areas). So far about 20% of the 778 identified sites over the whole of Marlborough have received funding assistance for restoration or management (51 in North Marlborough and 105 in South Marlborough). While a number of sites are likely to be deteriorating in condition over time due to a range of threats and pressures, it is pleasing to note that the condition of seven of the ten unmanaged sites monitored in 2022/23 was Fair, and the trend in eight of the ten was either Improving or Stable.

Expenditure to manage SNAs averaged about \$120 thousand dollars per annum from 2007 until 2012. Council has since increased its commitment and in 2022/2023 the SNA Landowner Assistance Fund distributed \$200,072 to landowners. A lot of restoration and good-will has also been achieved by the programme over time. There is also unrecorded effort over and above this where Council is not involved financially through the SNA programme.

3.1. SNA Habitat Improvement Projects 2022-2023

In the 12-month period from July 2022 to June 2023, the Council contributed to 34 projects in total. Sixteen of these were new projects, with a mix of weed control, pest control, fencing, planting, planning and threatened species management. Eighteen of the projects are ongoing; mostly weed control but also including a fencing project and threatened native broom management.

Highlights of the year in the Management Projects include:

- Planting 10,000 trees and dune plants along the east coast between Mussel Point and Needles Point, in community and landowner planting days.
- Control of over 1,000 feral goats, deer and pigs between Endeavour Inlet and Cape Jackson in the Outer Queen Charlotte Sound/Tōtaranui, in a collaboration with landowners, DOC, Endeavour Inlet Restoration Trust and Marlborough Sounds Restoration Trust.
- Fencing stock out of the coastal dunes and limestone on two properties near Ward Beach.
- Fencing ungulates out of pink brooms and control of animals inside the fence.
- Predator and weed control in Boons Valley.
- Wilding pine control on three coastal limestone properties near Needles Point

Since 2003, 156 separate sites have received funding assistance from Marlborough District Council. Council contributed \$200,072 this financial year which leveraged another \$345,000 from landowners and others. Marlborough District Council has contributed \$1.6 million dollars towards SNA management over 20 years, which has resulted in a total of \$4.6 million dollars being spent in that time improving the condition of these sites.

Recently, restoration of the East Coast south of Lake Grassmere/Kapara Te Hau has been a focus. Marlborough Boys College pupils helped other locals to plant another 2,500 seedlings this year at Mussel Point near Marfell's Beach. This was funded by Ministry of Primary Industries (MPI) through their 1 Billion Trees Matariki Tu Rakau community planting programme, to help restore forest. Another 4,000 trees have now also been planted further south along that coast at Canterbury Gully and 3000 dune plants at Ward Beach. In recent years 2.6km of coast has been planted with over 20,000 plants provided mostly by the SNA project. The closing of the beach to vehicles over much of this coast, via Council's East Coast Beach Vehicle Bylaw, will help these plants to establish and for the ecology to recover. Barriers have been erected to direct vehicles away from planted areas however this should hopefully no longer be necessary if the Bylaw is successful.

A number of wetland owners have expressed an interest in wetland restoration and approached the Council for assistance. The most significant of these this year is an 18.5ha property adjacent to Para swamp which is currently dominated by crack willow. It will be restored to a lowland podocarp forest. 10 Significant Wetlands restoration projects were funded, with Council contributing \$51,092. Five of these are in the outer Sounds benefitting from landscape wide ungulate control. Three are in the Acheron River benefitting from willow control.

Following harvesting of pines in the Pukaka Valley, Marlborough Regional Forestry has taken the opportunity to reassess their forestry there and have retired sections of the flood plain and where there are scattered old podocarp trees remaining, mostly totara. These areas will be allowed to restore themselves to native forest while MRF will control weeds such as willows and old mans beard.

A summary of all Significant Natural Area project expenditure is included in Appendix 1.



Figure 5: Mussel Point 1BT planting with Marlborough Boys College students.

3.2. Protection Projects Summary – July 2022 – June 2023

Table 3: Summary of new protection projects July 2022 – June 2023 (GST inclusive).

| Ecosystem Type | Size (ha) | North/South Marlborough ED | Type of Work | Total Funding | Council | Other | Landowner |
|-----------------------|-------------|----------------------------|-----------------|-----------------|----------------|---------------------|----------------|
| Wetland (Don) | 1 | S Kekerengu | Plants | \$1086 | \$543 | \$0 | \$543 |
| Hillslopes (Mal) | 50 | N Sounds | Plants | \$1276 | \$638 | \$0 | \$638 |
| Hill slopes (With) | 280 | N Para | Pines | \$9646 | \$4823 | \$0 | \$4823 |
| Hillslopes (Ger) | 618 | N Sounds | Weeds | \$3254 | \$1627 | \$0 | \$1627 |
| Hillslopes (Sur) | 243 | N Sounds | Ungulates | \$4600 | \$4600 | \$0 | 0 |
| Hillslopes (Upc) | 1750 | S Waihopai | Weeds | \$29692 | \$14846 | \$0 | \$14846 |
| Hillslopes (Ham) | 305 | S Waihopai | Weeds | \$13310 | \$6655 | \$0 | \$6655 |
| Riparian (Mul) | 6 | S Dillon | Weeds | \$11500 | \$5750 | \$0 | \$5750 |
| Wetland & Hills (End) | 3690 | N Sounds | Ungulates | \$108100 | \$5750 | \$65000 | \$37350 |
| Hillslope (Mar) | 82 | N Sounds | Ungulates | \$8372 | \$4186 | \$0 | \$4186 |
| Dune (Tho) | 4 | S Kekerengu | Plant | \$11452 | \$11452 | \$0 | 0 |
| Wetland (Cha) | 20 | N Para | Plants | \$1570 | \$1570 | \$0 | 0 |
| Hillslopes (Web) | 12 | s Kekerengu | Fence and weeds | \$12838 | \$6419 | \$0 | \$6419 |
| Hillslopes (McL) | 643 | N Sounds/Cook | Ungulates | \$25840 | \$12920 | \$0 | \$12920 |
| Wetland (Mul) | 6 | S Dillon | Plants | \$3000 | \$1500 | \$0 | \$1500 |
| Wetland (Whi) | 2 | S Flaxbourne | Plants | 4120 | 2060 | \$0 | 2060 |
| Total | 7712 | | | \$249656 | \$85339 | \$\$65000.00 | \$99317 |

Table 4: Summary of ongoing protection projects July 2022-June 2023 (GST inclusive).

| Ecosystem Type | Size (ha) | North/South Marlborough ED | Type of Work | Total Funding | Council | Other | Landowner |
|-------------------|-------------|----------------------------|---------------------|-----------------|-----------------|--------------------------|-----------------|
| Wetland (Gree) | 3 | S Kekerengu | Fence | \$3302 | \$1651 | \$0 | \$1651 |
| Wetland (Hunt) | 1 | S Blenheim | Weeds, plant | \$6546 | \$3273 | \$0 | \$3273 |
| Wetland (Lind) | 1 | S Blenheim | Planting | \$23460 | \$11730 | \$0 | \$11730 |
| Wetland (Macd) | 10 | S Tapuaenuku | Planting | \$1484 | \$742 | \$0 | \$742 |
| Hillslopes (Harv) | 344 | N Sounds | Ungulates | \$14088 | \$7044 | \$0 | \$7044 |
| Hillslopes (Spei) | 129 | S Kekerengu | Pines | \$5440 | \$2720 | \$0 | \$2720 |
| Wetland (F&G) | 127 | N Para | Weeds | \$19417 | \$5750 | \$0 | \$13667 |
| Forest (Bala) | 73 | S Waihopai | Ungulates and Fence | \$22845 | \$22845 | \$0 | 0 |
| Hillslopes (Dil) | 28 | S Waihopai | Fence | \$3059 | \$3059 | \$0 | 0 |
| Coastal (Pete) | 3 | S Kekerengu | Marram & plant | \$30344 | \$4742 | \$25602 | \$0 |
| Coastal (Wilt) | 2.0 | S Kekerengu | Planting | \$39000 | \$9000 | \$0 | \$30000 |
| Hillslopes (Muir) | 190 | N Sounds | Weeds & pests | \$39307 | \$13218 | \$0 | \$29525 |
| Hillslopes (Sti) | 149 | S Flaxbourne | Weeds | \$8492 | \$4246 | \$0 | \$4246 |
| Hillslopes (Harv) | 54 | S Medway | OMB | \$3450 | \$1725 | \$0 | \$1725 |
| Wetland (Patr) | 5 | S Hillersden | Weeds, plants | \$516 | \$258 | \$0 | \$258 |
| Hillslopes (Ren) | 26 | S Hillersden | Plant | \$4104 | \$2052 | \$0 | \$2052 |
| Hillslopes (Dil) | 12 | S Waihopai | Weeds | \$7564 | \$3782 | \$0 | \$3782 |
| Coastal (Sto) | 92 | S Kekerengu | Fence and weeds | \$46688 | \$16896 | \$14896 | \$14896 |
| Total | 1249 | | | \$279106 | \$114733 | \$404984 0498 | \$127311 |

Total Funding Contributions for Biodiversity Protection Projects on Private Land 2022-2023

| | |
|--------------------------------------|------------------|
| Marlborough District Council Funding | \$200,072 |
| Central Government Funds | \$90,602 |
| QEII National Trust | \$14,896 |
| Landowners | \$341,361 |
| Total | \$646,931 |

Summary of Total Funding Contributions for Biodiversity Protection Projects on Private Land 2003 – 2023

| | |
|--------------------------------------|--------------------|
| Marlborough District Council Funding | \$1,621,938 |
| Central Government Funds | \$957,836 |
| QEII National Trust | \$255,149 |
| Landowners | \$1,879,205 |
| Total | \$4,714,128 |

3.3. Relationships

Council promotes covenanting and maintains strong relationships with the Queen Elizabeth II National Trust (QEII) and Department of Conservation, both of which provide a mechanism for landowners to independently protect areas on their properties.

A total of 59 of the 158 projects protected through the programme so far have been on covenanted sites. Three of these are Protected Private Land (PPL) covenants administered by the Department of Conservation and the other 54 are QEII covenants. The QEII Trust takes responsibility for on-going monitoring of their covenanted sites, reducing the monitoring required to be carried out by Council.

The table below shows the number of SNAs that have been protected by either the QEII Trust or DOC. The boundaries of both do not often align, so the area is only where they overlap. The data comes from QEII and DOC and is only updated once the covenant has been formalised, fenced and then surveyed, which allows it to be mapped and added to the GIS layer. This creates a lag time from the time the agreement is signed to when it is mapped.

Table 5: SNAs in Marlborough which have legal protection.

| | Sites |
|--|-------|
| SNAs in Marlborough which had some legal protection at August 2022 | 114 |
| SNAs in Marlborough which have some legal protection at July 2023 | 155 |

Council also works collaboratively with the Marlborough Sounds Restoration Trust and has contributed to several projects on private properties led by the Trust. In 2022/2023, Council contributed \$27,456 toward control of ungulates in SNAs in the Outer Sounds, collaborating with DOC and the Endeavour Inlet Restoration Trust to clear 1100 wild animals from over 5000ha between Endeavour Inlet and Cape Jackson.

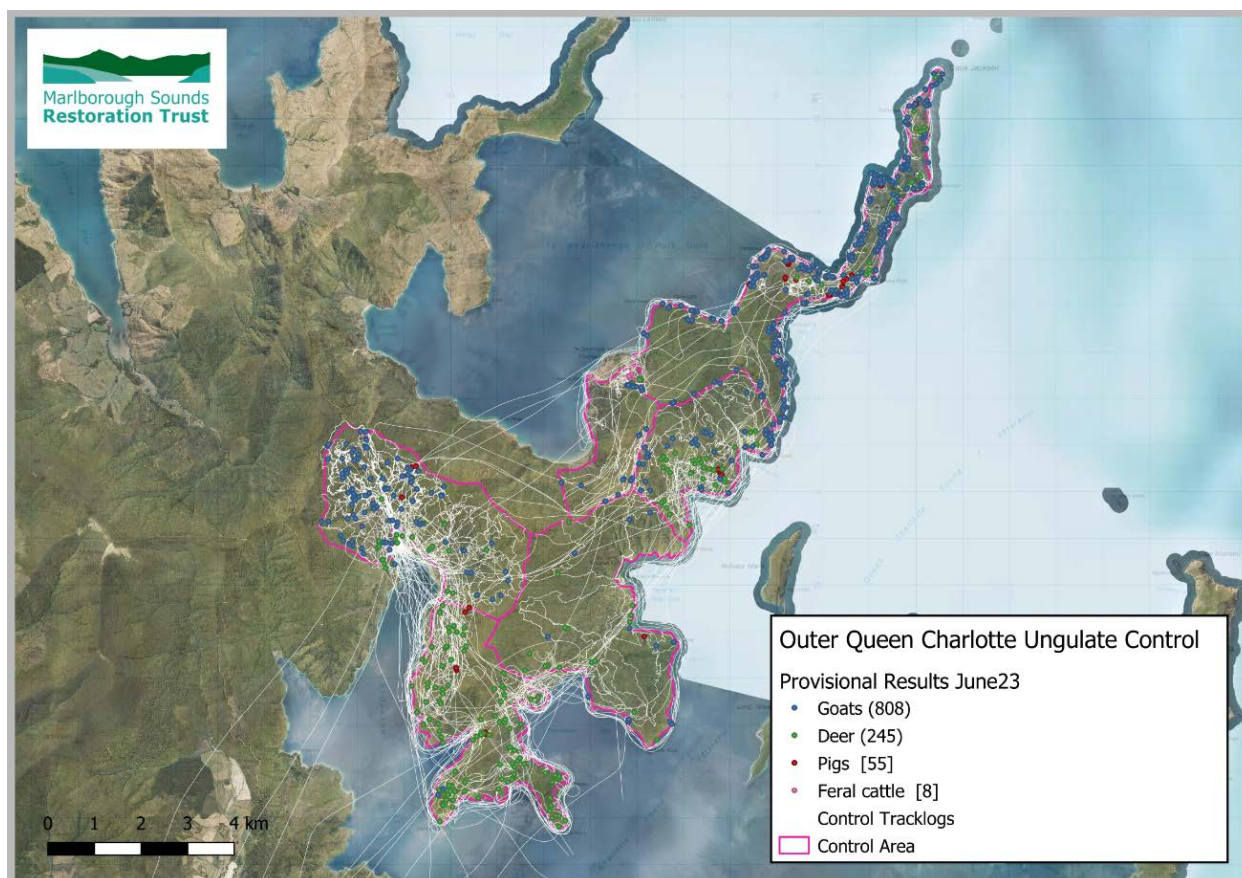


Figure 6: GIS map of kills during the ungulate control operation in Outer Queen Charlotte Sound.

Community-based conservation groups currently operating in the Marlborough region include:

- Endeavour Inlet Restoration Trust.
- Grovetown Lagoon Restoration Project.
- Kaipupu Mainland Island Sanctuary.
- Para Swamp Restoration project (Fish and Game and The Gamebird Habitat Trust).
- Picton and Rarangi Dawn Chorus Groups.
- Te Hoiere/Pelorus Long-Tailed Bat Project (Forest and Bird).
- East Coast Protection Group.
- Te Tau Wairehu o Marokura (Ngati Kuri).
- Arapaoa Kiwi Trust.

All of these groups are independent of the Council and compete in a tight market for funding from a small number of other sources, such as Lotteries Commission, Canterbury Community Fund, the DOC Community Fund, Council and landowners. Council has set up its own Working for Nature Grant Scheme and has worked with DOC to set up a Biodiversity Forum to promote easy communication between all groups in the sector. These meetings have been well attended and have been seen as positive by the various community groups.

Part C: Monitoring Programme – Summary of Results

4. Background and Overview

Monitoring is an important part of measuring and tracking the outputs and outcomes of any project. There are three types of biodiversity monitoring that are relevant to the Significant Natural Areas project.

In relation to the Significant Natural Areas project, Council is undertaking a programme of ongoing monitoring of the state and condition of a selection of representative sites from the more than 622 Unmanaged SNAs identified. This type of monitoring was started in the 2014/15 in two ecological districts and repeated annually ever since.

Systematic monitoring was established to assess the condition of the 156 sites that have been actively managed through the Landowner Assistance Programme since 2006 (about 13% of all sites identified). In 2023, sixteen managed sites were monitored and found to be in fair or good condition with an ongoing trend of stable or improving. Not unsurprisingly, managed sites are in better condition than unmanaged sites.



Figure 7: Recovery of kohekohe after stock were removed from a coastal forest remnant.

The QEII National Trust monitors the sites that it has covenanted (currently 96 sites in Marlborough, which help to protect 94 SNAs and 16 wetlands), so Council does not generally monitor the SNAs that QEII monitors, even though Council contributes to funding management at some of them.

4.1 2022 - 2023 Monitoring of Un-Managed SNA Sites

Monitoring to assess the state and condition of a selection of representative sites that have not had any specific conservation management applied, was carried out in 2022/2023.

They were located in the Kekerengu, Hillersden and Flaxbourne ecological districts (EDs).

4.2 Site Monitoring Results

- A total of 10 unmanaged sites were monitored on six properties. The results are encouraging.
- Overall results show that most unmanaged sites visited were generally in reasonable condition (seven were in fair condition) and had a trend of stable or improving. This partly reflects the inherent resilience of most of the sites, which have persisted within a productive landscape over many years prior to the SNA programme identifying them. In many cases it also reflects the commitment of landowners to manage their land in a manner sympathetic with the natural environment.
- 1BT and the Emissions Trading Scheme are fast becoming buzz words in Marlborough in the native tree space. Properties which have no “managed sites” are doing it themselves when they have engaged in growing native trees for the ETS. SNAs have also been fenced out of the farm with funding from 1BT and with assistance from Council. This is incentivising landowners to set aside their marginal land for growing carbon. We are actively assisting landowners to connect with experts able to assist in this field.
- While very few sites are legally protected, and rely on the benevolence of the owners, the Marlborough Environment Plan’s (MEP) indigenous vegetation clearance rules protect many of them from damage or destruction. Fifteen SNAs and two Significant Wetlands are protected by Conservation Covenants (PPL) through DOC.
- SNA monitoring reports recommend that owners contact the QEII Trust to discuss legal protection of sites. This has been successful in prompting a number of SNA sites to be processed for covenanting by the QEII Trust. The Trust monitors their sites on a biennial basis and visited 23 SNAs in the year that they protect. Another four covenants are Significant Wetlands.

Table 6: Summary of condition results of SNA Un-managed site revisits to Kekerengu, Hillersden, and Flaxbourne ecological districts- 2022/2023.

| <u>Site Condition</u> | Good | Good/Fair | Fair | Fair/Poor | Poor |
|-----------------------|-----------|------------------|--------|----------------------|---------------|
| | | | 7 | 1 | 2 |
| <u>Site Trend</u> | Improving | Improving/Stable | Stable | Stable/Deteriorating | Deteriorating |
| | 3 | | 5 | | 2 |

Damage has been reported in the dunes, beaches and coastal biodiversity within and beside the SNAs along the East Coast, post the Kaikōura Earthquake of 2016. The damage to these vulnerable natural ecosystems has continued in the absence of any control or reduction of vehicle access to the coast. An effort has been made to understand the biodiversity of these ecosystems better. New populations of threatened species, such as katipo spider and the mat daisy jumper, have been recorded recently, including katipo in one of the newly planted areas of beach. The SNA programme is managing a planting and weed control programme along the coast in an effort to come up with the best approach for restoring

the indigenous biodiversity to the area. Results are being measured by Canterbury University to help quantify the best approach to restoring the coast.



Figure 8: Multiple vehicle tracks on the beach and in the dunes at Kapara Te Hau, Lake Grassmere near Marfells Beach.

4.3 2022 - 2023 Monitoring of Managed SNA Sites

In the 2022/2023 monitoring round, a total of 16 Managed sites were visited on 15 properties. This is a moderate increase after a number of disrupted years.

Assessment methodology is qualitative and simple and includes rapid ecological condition and trend assessment along with photo points. Reports prepared for each site visited and provided to the landowners include commentary, site maps and photographs established at defined photo points to provide a visual record of changes over time. Any emerging issues (for instance weed invasion) are discussed with the landowner and further management is often put in place to deal with these. The monitoring allows the Council to maintain links with landowners and assist them in relation to these sites. Further quantitative monitoring could be added in time to allow a more rigorous analysis of change in site condition over time or to target particular points of interest within sites.

All managed sites were found to be in fair or good condition and with a trend of improving or stable (only one of the 16 sites was stable/deteriorating). The condition and trend of managed sites is better than unmanaged sites, as you would expect, however many of these sites are not under current management but are benefiting from previous efforts in fencing and weed control. This is a good outcome.

The table below provides a summary of the condition and trend of the sites monitored.

Table 7: Summary of Monitoring results for SNA Managed sites 2022/2023

| Site Condition | Good | Good/Fair | Fair | Fair/Poor | Poor |
|----------------|-----------|------------------|--------|----------------------|---------------|
| | 5 | | 11 | | |
| Site Trend | Improving | Improving/Stable | Stable | Stable/Deteriorating | Deteriorating |
| | 11 | | 4 | 1 | |

4.4 Summary and Discussion

Some observations from the 2022/2023 monitoring round:

- Landowners continue to be co-operative and allow access for monitoring purposes and all landowners were very interested in their sites and tracking their progress over time.
- More landowners are increasingly becoming aware of the benefits of setting aside marginal land from their operations and allowing it to restore itself, often just to reduce their operating costs but also to be good custodians of the land or to generate an income by sequestering carbon.
- Most SNA sites visited are improving in condition generally due to management interventions, or, in some cases, natural resilience and re-generation processes.
- Threats are most often either feral ungulates (mostly goats and deer) or weeds (especially old man's beard and wilding pines). These are old issues that seem to have gained traction in recent years.
- Post the 2016 earthquake, natural regeneration on the coast south of the Awatere mouth has largely been hindered by the impacts of much higher use of the coast by people. Indigenous dune ecosystems and species have been damaged by vehicle traffic. Implementation of the East Coast Vehicle Bylaw this year should result in an improvement for biodiversity.
- Baseline monitoring of the east coast to monitor the effectiveness of the Coastal Vehicle Bylaw has been established in part with drone aerial photography.

Part D: Associated Projects

5.0 Publicity and Information

5.1 Background

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.

5.2 The 2022-2023 Year

During 2022/2023, the Biodiversity Co-ordinator spoke at the Biodiversity Forum Field Day at Boons Valley and gave a guided biodiversity walk on the property. He also spoke at the QEII Trust Conference field day at Cape Campbell and attended a community drop-in session at French Pass. Regular reports are given to East Coast Protection Group and Ruakanakana/Lake Elterwater Restoration Group. Articles were placed in local papers about SNAs and tree planting opportunities.

Five community planting days were held on the East Coast south of Marfells Beach in association with SNAs. The seedlings were paid for either by Marlborough District Council or by the Ministry of Primary Industry's One Billion Trees Fund. They were well attended by Marlborough residents, landowners and local school students. 5500 indigenous seedlings were planted including a mixture of sand grasses and coastal forest trees. The Marlborough Express attended one day and published an article about the days.

All existing information brochures and website versions were updated.



Figure 9: Volunteers planting near Chancet Rocks.

6.0 Seed Collection Project

6.1 Background

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 appropriate plants available for restoration projects in Marlborough. Seed has been collected by MDC since 2006 and is now used for the myriad of Council projects which promote tree planting: The Working for Nature Environmental Grants Scheme, Erosion Prone Land project, Catchment Care programmes as well as the SNA programme.

The Significant Natural Areas project 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.



Figure 10: Nets set to collect matai seed in the Wairau Valley.

6.2 The 2022-2023 Seed Collection Season

In the 2022/2023 seed collection season, seed was collected from a number of sites in both North and South Marlborough. The cost of this was \$16,104 incl GST. This is an increase on previous seasons which reflects the increased focus from MDC on additional planting programmes in Te Hoiere and Flaxbourne catchments through our Catchment Care Programmes.

Good quantities of kahikatea and tōtara seed were collected from the Wairau Plains, Valley and tributaries. Ngaio, akiraho, sand *Coprosma*, spinifex, pingao and sand tussock seed was collected from the coast and propagated for our dune restoration projects.



Figure 11: Spinifex planted south of Cape Campbell in 2021.



Figure 12: Same picture 2023.

7.0 General Discussion and Conclusions

The Significant Natural Areas programme has been run by the Marlborough District Council since 2001. It is the main mechanism used to identify and promote protection of terrestrial indigenous biodiversity on private land. While it is entirely voluntary for landowners to participate, it sits alongside some rules preventing certain types and scale of indigenous vegetation clearance and wetland drainage. The sites are not scheduled in the Marlborough Environment Plan (apart from significant wetlands).

The project is heavily focussed on identifying and protecting habitat areas on private land as a mechanism to protect larger suites of indigenous biodiversity (plants, insects, reptiles and birds). Ecological assessments are relatively broad scale, relying on experienced ecologists and rapid qualitative methods. While it is a voluntary programme, the information collected through the significant natural areas ecological surveys is used internally by the Council when assessing the effects of resource consents.

Of the 778 sites identified through the SNA surveys, 158 have been managed in some way to enhance biodiversity and a number (59) of these sites are also covenanted to provide permanent legal protection (primarily through the QEII Trust but also Conservation Covenants).

Monitoring to track the condition of a random selection of these managed sites is undertaken annually. In 2022/23, managed sites were in Good condition. In terms of the trend in condition, all but one were Stable or Improving.

There are, however, still over 600 Significant Natural Areas which have not received any assistance from Council to proactively manage the ecological values and ensure they are sustained in the long term. Of the 10 sites monitored in this season, most were in Fair condition with a trend of Stable apart from two which were deteriorating to some extent. While this is encouraging overall, the impacts of weeds, especially wilding pines and old man's beard, in addition to feral ungulates and possums, were important issues in 2022/2023.

Council will in future be required to identify ecological corridors and target potential SNAs and restoration areas within them. The East Coast is a vital 50km long corridor/flyway for migratory and resident breeding shore birds, with Cape Campbell being an important roosting area for shore birds, haulout for New Zealand fur seals and rookery for elephant seals. As already reported, a considerable effort is being invested into these coastal SNAs towards restoring the vegetation sequences on the connected dunes and foreshore that have been damaged by a history of fires, agriculture, weed invasion and, more recently, vehicle use.

Included in this corridor is a series of wetlands: the Waima/Ure lagoon, Lake Elterwater and Lake Grassmere/Kapara Te Hau, which form an important flyway for waterfowl, especially in this otherwise dry landscape. Tree planting with SNA assistance has occurred at Waima River Mouth and Lake Elterwater.

Building and maintaining goodwill and awareness amongst landowners is at the heart of the SNA programme, and the work carried out in relation to the site re-visits goes a long way to keeping contact with many landowners in the ecological districts involved.

An external review of the SNA programme has helped to set the future direction and priorities. Also, the current review of the resource management framework in Marlborough through the proposed Marlborough Environment Plan provides some further direction. The submission process will also result in a final confirmation of wetland sites, which are already eligible for financial and technical assistance through the SNA Landowner Assistance Programme.

Central Government released a National Policy Statement for Indigenous Biodiversity in July 2023. The process was consultative and also led to the Aotearoa New Zealand Biodiversity Strategy, which gives Council direction for a Marlborough Biodiversity Strategy.

Information management in relation to the SNA programme is undergoing some changes. Improvements to the Council's internal information storage systems are being implemented, now allowing more information to be collected, stored and retrieved in a more streamlined manner. The electronic capture of all the Department of Conservation Significant Sites in Molesworth Station is another step toward Council collecting all the data needed to satisfy the requirements of the newly released NPSIB. The Conservation Covenant data that was added to our database last year has also been amalgamated into our reporting, so our database is growing constantly.

In addition, new technologies (for instance improved aerial photography and LiDAR for large parts of Marlborough) and tools (such as development of a new tablet-based field collection tool) are improving accuracy and efficiency.

The Significant Natural Areas programme is an important element of indigenous biodiversity management and protection in Marlborough, with a particular focus on privately owned land. It is complemented by the work of the QEII National Trust which works independently with private landowners to covenant and protect areas. Council's relationship with QEII is close and productive and we help each other to engage with new clients on a regular basis. We also pool our funds to make projects more affordable for all parties.

The "Kotahitanga mo te Taiao" alliance continues to develop, with Te Tau Ihu Iwi, DOC and the Top of the South Councils working closely to develop a strategy for improving indigenous biodiversity in Te Taihū.

There has also been an increase in the number of larger scale community conservation and restoration projects in Marlborough in recent years and the Significant Natural Area programme continues to work closely with some of these, particularly where private land is involved.

In summary, the Significant Natural Areas Project continues to be the main avenue for Council to protect land based indigenous biodiversity in the Marlborough region. Marlborough has less than 5% of its rarer ecosystem types remaining on the plains, which is not enough to sustain biodiversity on the plains over time. With Primary Industry being such an important part of the Marlborough economy, Council has a critical role in working with the community to help ensure that the natural environment is not degraded, and hopefully is improved.

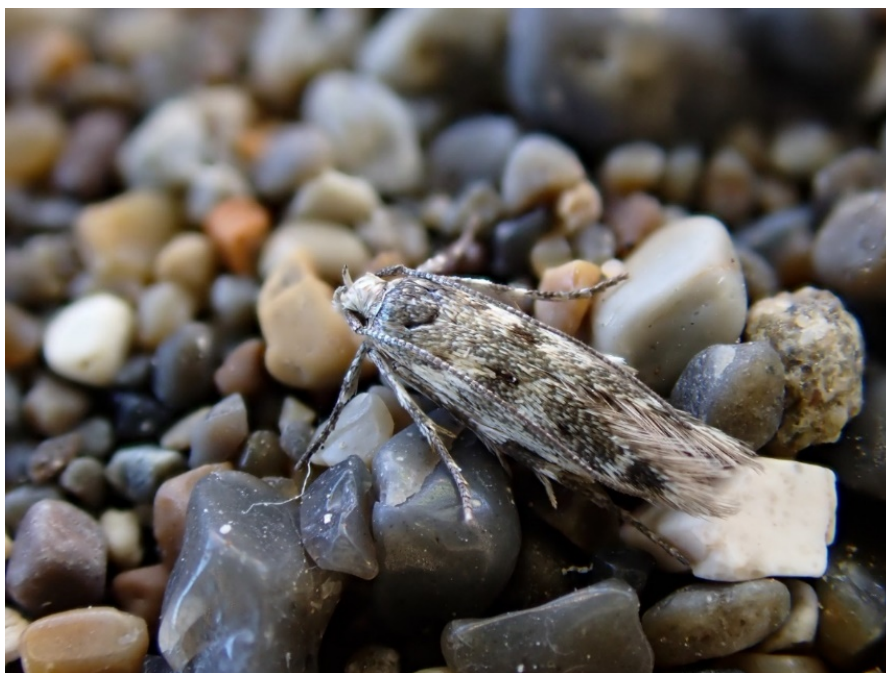


Figure 13: Kiwaia, mat daisy jumper flightless moth, endemic to our coast and critically endangered.

8.0 Appendices

Appendix 1: Total Budget for Main Aspects of Significant Natural Areas Project – Marlborough District Council Expenditure and Revenue – July 2022 – June 2023 (GST inclusive)

Table 8: Significant Natural Areas Project – Total budget July 2022 to June 2023.

| Project Name | Projected Budget | Actual Expenditure |
|----------------------------------|------------------|--------------------|
| SNA survey and general | \$25,000 | \$13,895 |
| SNA protection projects | \$195,500 | \$230,072 |
| Seed collection | \$5,750 | \$7,504 |
| SNA monitoring – Managed sites | \$30,000 | \$11,075 |
| SNA monitoring – Unmanaged sites | \$30,000 | \$4790 |
| Total | \$286250 | \$267336 |