

New Zealand Centre for Wine Research



Looking to the Future

**36 years and growing.
New Zealand Wine Centre
- connecting Marlborough
& New Zealand to
research, business
and education**

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overview

36 Years and Growing

In each year of reporting there are pivotal events that reflect the purpose of the MRC. In 1984, the original Research Station was established and jointly funded by local government, local primary sector and national science organisations. Back then Marlborough lacked a dedicated team of scientists who were closely aligned with the productive primary sector. There was plenty of grassroots innovation in farming and horticulture, but this needed to be underpinned by advice from specialist scientists and technicians based in Marlborough.

This shortcoming was resolved with the establishment of a research base at the SH1 Grovetown Park location. From a Research Station with a handful of staff led by 'Officer in Charge', Dr Mike Trought, the MRC established itself in the region.

In 2003, the Marlborough Wine Research Centre was constructed at Budge Street with investment by Central Government under the Major Regional Initiative (MRI) regional development programme. The wine sector was a significant financial contributor at that time.

We are now approaching another generational lift with the creation of the NZ Wine Centre - Te Pokapū Wāina o Aotearoa.

Much of the past year has focused on securing regional development Provincial Growth Funding (PGF) to commence the next major development on the NMIT Budge Street campus. During this period, the MRC has been undertaking progressive architectural design work with Jerram Tocker Barron Architects and planning to transition its activities into the NZ Wine Centre - Te Pokapū Wāina o Aotearoa in collaboration with research providers Plant and Food Research and Bragato Research Institute.

Not planned for nor anticipated was the international Covid-19 pandemic and its impact on the New Zealand economy, however, MRC is well placed to work with partners in leading the regional economic recovery in the months and years ahead.

Below: The architect's rendering of the proposed NZ Wine Centre

The MRC is looking to the future and preparing for the next major evolution as New Zealand's grape and wine research hub, providing science, technology development and extension through education specifically tailored for the viticulture and wine sector.

To cap off the financial year, confirmation of \$3.8 million Provincial Growth Funding was announced by the Under Secretary of Regional Development, Fletcher Tabuteau. With certainty of Crown funds, MRC matched the Government's suspensory loan and commenced the final detailed design with architects Jerram Tocker Barron.

This objective has been in the planning stages since early 2019. The end goal is to unite and integrate the various scientific, industry and education activities based at the Budge Street campus while retaining autonomy and excellence of delivery from each entity.

The NZ Wine Centre construction is due to commence in November 2020, with the first phase completed by mid-2021.

Stage 1 will provide a new common main entrance through the existing NMIT reception area. This will lead toward BRI's brilliantly designed research winery that will be flanked by a new building extension, providing a reception area for the NZ Wine Centre, customised meeting rooms, staff room and extendable multi use spaces for larger audiences to cater for industry workshops and briefings. To capture Marlborough's great outdoor lifestyle, there will be extensive landscaping to connect the new buildings harmoniously.

Future stages will include new research and teaching laboratories, with modern facilities to match researchers' and students' expectations. Within the next 18 months, accommodation will also be added to encourage national and international research and student visitors on sabbatical or research exchange.

This is a long-awaited future focused development that the MRC Trust Board and associated groups look forward to.

Gerald Hope, Chief Executive, MRC



PFR highlights

A big highlight for the year was the completion of Plant & Food's six-year contribution to the New Zealand Lighter Wines programme, an exciting space for wine research and New Zealand producers. "That has been a very big effort amongst the PFR team who managed to complete the experimental work before the Covid-19 lockdown," says Damian Martin, Science Group Leader, Viticulture & Oenology, Plant & Food Research.

While 'lighter' principally relates to the alcohol and calorific content of the wines, there is an opportunity to extend that notion to a lighter environmental impact also. A programme called A Lighter Touch is about reducing agrochemical input in agriculture and horticulture.

The reduction in footprint and the impact of viticulture is an area that Damian's team is really excited about. "And closely linked to that is regenerative management, making things even better. Rather than mitigating, actually restoring eco systems," Damian adds. Plant & Food are currently completing a small waste stream pilot project for the MRC which is anticipated to grow further.

The Covid impact

"Essentially we lost a season's work because we could not close out some of our research over harvest," says Damian. "A lot has to be redone but we will catch up next year."

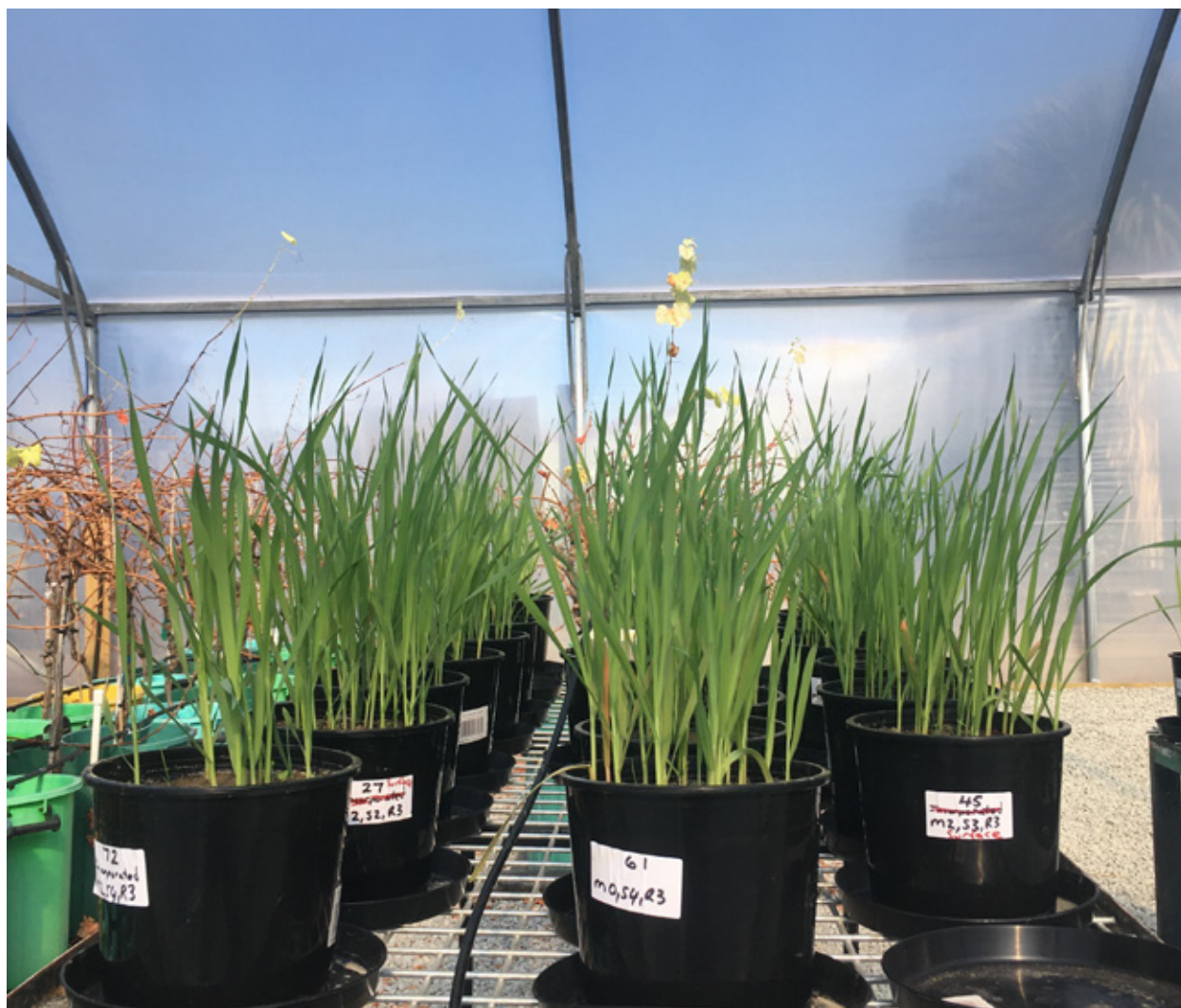
The lockdown certainly was a challenge, but unexpected positives have come from working from home. Reduction in travel and in carbon footprint has been substantial.

"Technology has provided ways to become more connected within our own organisation and community," says Damian. Covid was tough and emotionally draining on people but there was a silver lining.

Plant & Food will connect its people through more webinars, and Damian says they will be able to react more quickly to opportunities and proposals "because we can connect with more people more easily across the organisation". Being better connected helps us to be more aware of our colleagues' work and to capitalise on synergies.

Damian says another key highlight is our ongoing involvement with the Vinefacts NZ Winegrowers' industry publication. The MRC still funds the monitoring and reporting of data from the Blenheim weather station, to the Marlborough community. "We always get extremely good feedback from industry members and growers about the value of that service," says Damian.

"Plant & Food Research and our earlier incarnations (in terms of Crown Research Institutes) have had a long involvement with MRC that we value greatly and look forward to a bright future in terms of research and innovation for the Marlborough region."



BRI highlights

JYE2020 was a significant year for the Bragato Research Institute with a clear highlight being the opening of our Research Winery in February. This was the culmination of two years' work and planning from a large team drawn from BRI, Plant & Food Research, numerous wine companies and equipment suppliers, not to mention architects and building partners.

Despite the long lead in, construction of the winery, and the manufacture of a large array of bespoke equipment, happened on an ambitious timeframe. Once final approvals were received, the team worked in multiple parallel streams so that approximately seven months after breaking ground we opened the winery on 27 February 2020. The opening event itself was a fitting celebration and we were honoured to have Mayor John Leggett officially open the winery with Kiley Nepia of Hawaiki Kura and students of Te Pā Wānanga.

Though far from being a highlight, Covid-19 was certainly a feature of the year. While the wine industry was deemed an essential service enabling vintage to proceed, grapes for research were not permitted to be harvested resulting in significant impacts for viticultural trials. In many cases it meant the loss of the year's data.

While BRI was not deemed an essential service, we managed to undertake our first vintage, albeit on a reduced scale, with permission from MBIE and successfully completed commercial trials for a number of winery clients and dry-good suppliers.

Covid-19 also impacted on other aspects of our research programme – with researchers and a PhD student unable to enter NZ to undertake planned research, and lost access to supercomputer capacity which was needed for Covid-related data processing.

The research work we undertook and funded with partners is too diverse to list here but another highlight of the year was the New Zealand Institute for Economic Research (NZIER) report demonstrating the significant regional, industry-wide and national economic impact resulting from wine industry R&D activities. NZIER found that total wine R&D translates to a \$41m boost in exports each year and a \$64.5m lift in the size of the national economy, driven by enhanced productivity. Overall, wine R&D is also responsible for a \$37.2m boost in household consumption, and 258 new jobs, including 121 in regional economies. This is the value delivered by all researchers working in viticulture and wine research and presents a strong case for ongoing investment in wine industry R&D.

With the winery opened and BRI's team doubling in size over the year, including some new positions being filled after year end, we have successfully completed our establishment phase. The year ahead is focused on delivery of excellent science and undertaking and communicating trials to benefit winegrowers, the environment and the industry. Much of this work will be done in partnership with other research organisations.

BRI's decision to be located at the Marlborough Research Centre was driven by the desire to work closely with research and industry partners based on site, and alongside NMIT. MRC's successful application to the PGF will result in new facilities under the NZ Wine Centre which will enable collaboration to develop further. We are looking forward to being a part of future research and innovation happening on site across our various organisations.

MJ Loza, CEO, Bragato Research Institute

Below: The opening of the BRI's Research Winery, February '20



MRC social media snapshot

The Marlborough Research Centre uses social media to grow the visibility of its activities and to share relevant information from tenants, partners and the primary industries with its audience. Social media also assists the MRC to promote events and seminars.

Over the 12 months ending June 2020, followers for the MRC Facebook page increased by 45%.

On average, 700 people per month received content from the MRC Facebook Page through organic (unpaid) distribution. However, popular post reach can be much higher.

Most viewed posts

The most popular content was an extremely shareable post that reached 14,390 people organically.

It told the story of The Pyramid, Supreme Winner of the Cawthron Marlborough Environment Awards 2019 and featured on Rural Delivery, TVNZ1.

Together with Plant & Food Research, MRC co-sponsors the Cawthron Marlborough Environment Supreme Award.

A post about Plant & Food Research scientist Dion Mundy based at Marlborough Research Centre leading the charge on how grape growers can control trunk disease reached 1448 unique viewers.

Post Details
ID: 2745508372352602

Post Preview Actions

Marlborough Research Centre - MRC
June 16 · 🌐

The Pyramid, Supreme Winner of the Cawthron Marlborough Environment Awards 2019 will feature on Rural Delivery, TVNZ1 this Saturday. 📺 We invite you to join us to tune in at 7 am on 20 June 2020. We have more information on this extraordinary farm for you here: <https://bit.ly/30U9bsQ>

Performance for Your Post
Reported stats may be delayed from what appears on posts.

14390
People Reached

52
Reactions, Comments & Shares

37 Like	0 Wow	2 Love
0 Haha	0 Sad	0 Angry
4 Comments	9 Shares	

330
Post Clicks

0 Photo Views	197 Link Clicks	133 Other Clicks
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Negative Feedback

3 Hide Post	0 Hide All Posts	0 Report as Spam
0 Unlike Page		

MRC.ORG.NZ
TVNZ's RURAL DELIVERY to feature The Pyramid — The Marlborough Research Centre Trust

14,390 People Reached **381** Engagements **Boost Post**

👍👍 Emma Hunter, Kerry Hamilton and 3 others 9 Shares

👍 Like 💬 Comment ➦ Share ⋮

personnel

as at 30 June 2020

MRC TRUSTEES

Bernie Rowe	LL.B	Chairman
Edwin Pitts		Trustee
Ivan Sutherland	VFM, ANZIV	Trustee

MRC BOARD

Edwin Pitts	MRC Trust	Chairman
Brian Jordan	BSc(Hons), PhD, MRSNZ	Lincoln University (Retired)
Roland Harrison	BSc (Hons), PhD	Lincoln University
Warwick Lissaman	BCom, PG Dip Com	Pastoral Representative
Andrew Naylor	MApplSc (Vit)	Pernod Ricard Winemakers
Mark Peters	FCA	Marlborough District Councillor
Roger Robson-Williams	BSc (Hons), PhD, PG Dip Leadership	Plant & Food Research
James Jones	BAGSci (Hons)	Wine Industry Representative

MRC

Gerald Hope		Chief Executive
Susan Foster		Office and Accounts Manager
John Patterson	BCA	Associate MRC

ROWLEY VINEYARD

Contracted to Giesen Group Ltd

BUDGE STREET CAMPUS

Plant & Food Research

Damian Martin	BSc, DEA, PhD	Science Group Leader
Rob Agnew	BAgrSc	Scientist
Dion Mundy	BSc, MSc (Hons)	Scientist
Claire Grose	BSc Viticulture & Oenology	Research Winemaker
Sue Neal	DipHort, DipFieldTech	Research Associate
Victoria Raw	BSc (Hons Agri), GDip(Vit)	Research Associate
Bex Woolley	BBMedSc (Hons)	Research Associate
Junqi Zhu	BSc, PhD, MSc	Scientist
Lily Stuart	Bag, PG Dip in Oenology	Research Associate
Jennifer Beullens		Site Services Administrator
Richard Hunter	Dip Ag, JP	Maori Relationship Advisor
Rafidah Horner	MSc (Immunology)	Permanent Seasonal Worker
Lorna Deppe	PhD	Permanent Seasonal Worker
Franzi Grab	MSc, GDip (Vit&Oen)	Permanent Seasonal
LinLin Yang	BSc Viticulture & Oenology	Technician
Muriel Yvon	MSc (Food Technology & Oenology)	Research Associate/Laboratory Manager

Bragato Research Institute

MJ Loza	BCom, LLB	CEO
Will Kerner	MSc (First Hons)	Research Programme Manager
Fang Gou	PhD	Data Co-ordinator
Tanya Rutan	MSc (Hons), PhD Chemistry, BSc (Hons) Biology	Research Winery Manager
Len Ibbotson	BSc	Viticulture Extension & Research Manager
Darrell Lizamore	PhD	Principal Research Scientist – Grapevine Improvement (Christchurch)
Michelle Barry	MSc	Technical Communications Specialist
Matias Kinzurik	PhD	Research Programme Manager (Auckland)
Janette McKibbin	BFA	Research Administrator (Auckland)
Stephanie Flores	BBus, MJ	Communication Manger
Augusta van Wijk	BPRM, Dip Bus	Business Development Manager (Nelson)
Fraser Broom	PhD	Science Strategy Manager (Christchurch)

Marlborough Winegrowers Assn Inc (Wine Marlborough Limited)

Marcus Pickens	BCom, Dip.Com	General Manager
Sarah Linklater	BCom	Marketing and Communications Manager
Joanna May		Financial Administration
Vance Kerslake	BA, MA (applied)	Advocacy Manager
Loren Coffey		Events Manager

New Zealand Winegrowers

Edwin Massey	PhD	General Manager Sustainability
Sophie Badland	BBmedSc, BA	Biosecurity and Emergency Response Manager
Bridget Ennals	BSc (Hons) Horticulture	Sustainability Guardians Programme Co-ordinator
Hazel Thomson	Dip Eenvt & Sustainability	Sustainability Lead – Pest and Disease Management
Jim Herdman		Biosecurity Advisor
Teresa Smith		SWNZ Membership Support
Sandy McArthur		SWNZ Membership Support
Louise Vickery	Dip Vit & Wine Production	SWNZ Membership Support
Meagan Littlejohn	M.A.	SWNZ Team Leader

GROVETOWN PARK CAMPUS**AsureQuality Limited**

Duncan Beattie

Hill Laboratories

Vanessa Burrows

Karen Nichol

Laura Croad

Laura Mitchell

Raj Goswami

Nelson/Marlborough Fish and Game Council

Vaughan Lynn

Marlborough Tour Company

Abbe Hutchins

GCH Aviation Limited

Colin Aitchison

Jared Buckley

Ministry for Primary Industries

Compliance and Resources (Fisheries) –

Chris Beal/Liz Murray/Ramon Smith

Maori Primary Sector Partnerships -

Judith MacDonald

Verification Services -

Graeme Ellis / Shirley Morrison

Ngati Toa Wairau

Johnny Joseph

new faces

CAROLE CRAWFORD Director of Marlborough - NMIT



Carole became the strategic lead for NMIT's Marlborough campuses at Budge Street and Woodbourne in November 2019.

It is the first time in more than 18 years that a Director has been based in Marlborough to provide a focused opportunity to strengthen industry, stakeholder, community needs and relationships.

Being NMIT's strategic lead for Marlborough means Carole's role is charged with ensuring NMIT delivers its vision and strategy in Marlborough as a significant region.

In previous positions, as Executive Director – Learning Innovation & Delivery and Director - Learning, Teaching and Quality, Carole was based in Nelson. However, Marlborough has been Carole's home for two decades. She has lived in Picton since 1999, but over the last ten years her roles within NMIT have been based in Nelson.

Carole is looking forward to building strong and mutually beneficial relationships in Marlborough, combining education, research and industry.

She has been involved in the Marlborough campus of NMIT since 2003 and is excited about the developments for Marlborough, especially for everyone based at the Budge Street campus. Carole feels privileged to be in a position to lead and influence change.

SUSAN FOSTER Office and Accounts Manager – MRC



Susan took on her role with the MRC in the middle of Covid-19 Level 2 Lockdown in May 2020. Prior to that she spent seven years in the aquaculture industry. The many facets of the job, the various organisations that are part of the campus, and interesting projects attracted her to her new role.

She welcomes the environment that actively builds and

values relationships to connect business and research on campus and is looking forward to learning and interacting with the Marlborough District Council and MRC's tenants.

ROLAND HARRISON PhD – MRC Board



Dr Roland Harrison heads the Faculty of Agriculture and Life Sciences, Lincoln University, New Zealand. He is part of the team that developed the Post-Graduate Diploma in Viticulture and Oenology at Lincoln University in 1991.

Roland's current research interests include:

- Production and stabilisation of white wines, including protein composition, use of bentonite for protein stabilisation, and the use of yeast lees to modify mouthfeel
- Volatile and phenolic composition of Pinot Noir wines and relationships with quality
- Characterisation of the composition of grape and yeast lees resulting from production of red and white wines
- Relationships between wine composition and sensory attributes

His research explores the relationship between the objective composition of wine and specific sensory attributes. Working at this interface, he established a leading research programme that assists the development of the NZ industry and contributes to international understanding of wine quality.

Roland's recent focus has been on Pinot Noir, a variety which is recognised as being critical to the future expansion of the NZ wine industry.

Roland has authored over 150 scientific publications, including 50 journal articles and three book chapters.

Roland teaches Oenology both at undergraduate and postgraduate levels. In 2014 he received an Erasmus Mundus scholarship to teach in the 2-year M.Sc. Vintage programme at Corvinus University, Budapest (Hungary), and at Groupe Ecole Supérieure d'Agriculture (ESA), Angers (France).

TANYA RUTAN
PhD - Research Winery Manager BRI



Originally from the USA, Tanya's eagerness to study wine started while helping a friend with casual vineyard assistance on Waiheke Island. She enrolled in the Wine Science programme at the University of Auckland where she received a MSc in Wine Chemistry after completing a research project which investigated the chemical composition and sensory attributes of Pinot Noir wines produced across NZ.

Building on the success of this project she completed a PhD in Wine Science, once again working in collaboration with industry on identifying the primary aromatic compounds and phenolic composition of Central Otago Pinot Noir wines.

Tanya is no stranger at the Budge street campus. She spent three years as a Post-doctoral Scientist with Plant & Food Research working on projects in the Pinot Noir programme. Now she looks forward to working with industry to bring wine science research and innovation together to forge an exciting future for the New Zealand wine industry.

FRASER BROOM
PhD – Science Strategy Manager – BRI



Dr Fraser Broom is excited to be working with BRI as Science Strategy Manager. "I am passionate about science that delivers outcomes to New Zealand's primary industries, and it is exciting to be a part of building a new organisation to benefit New Zealand's winegrowers."

After completing a horticultural science degree at Massey University, several years as a consultant with NZ's Ministry of Agriculture and Fisheries, gaining a PhD and working as a plant breeder and physiologist, Fraser had a succession of investment management and strategy roles with the Foundation for Research, Science and Technology.

He then moved into the private sector, managing ANZCO Foods' Primary Growth Partnership programme. This role brought together the Crown and one of NZ's largest exporters in a commercial programme focused on added-value meat products. The programme, known as FoodPlus was successfully concluded in late 2019.

Following this Fraser started a contracting and consulting business, focusing on the interface between science and commerce in the primary sectors.

AUGUSTA VAN WIJK
– Business Development BRI



Augusta joined BRI in March 2020. After working at the Cawthron Institute in a similar role she brings 15 years of experience in client relationship and stakeholder management in the science and research sector to BRI.

Augusta will be putting her extensive commercial business development and strategic partnering skills to use to build a portfolio of commercial research, services and industry partnerships to ensure the ongoing growth of capability and success of the New Zealand Wine Industry through world class research.

"I am delighted to have the opportunity to work in the wine sector again, combining my passion for the industry with my experience of working at an independent research organisation that has a strong focus on delivering pragmatic science and commercial services to industry" said Augusta.

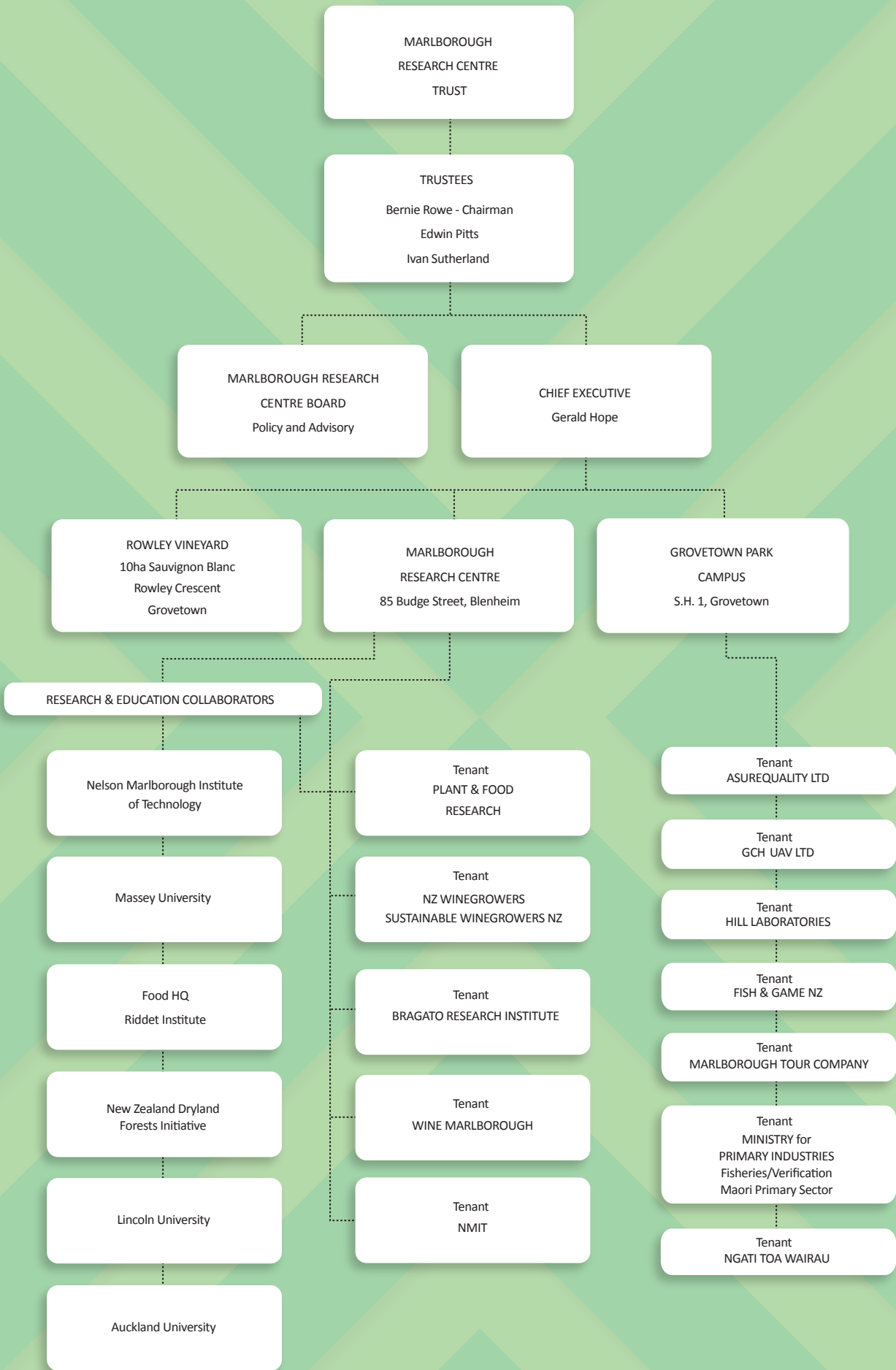
SARAH LINKLATER
Marketing Communications Manager
Wine Marlborough



Sarah joined the team at Wine Marlborough in February, just a week out from the Marlborough Wine and Food Festival.

She had been in her role for just seven weeks when Covid-19 Alert Level 4 saw her pack up and work from home with her two young children in tow, ensuring Wine Marlborough members had the information they needed to work their way through this complicated period.

Living amongst the vines of her family's organic vineyard, Sarah has been involved in the wine industry from many perspectives – as a grower, a brand owner, a marketing representative for small and large wineries which gives her a panoramic view, from harvest to communications. She enjoys working with a passionate and dedicated team, to be able to deliver more for the Wine Marlborough members in the future.



organisational Structure

our year at a glance

july 2019

Blessing the BRI Research Winery Project

After two years of planning and design, construction of Marlborough's first Research Winery began in July 2019 with a site blessing from Archdeacon Kevin Thomson at the Bragato Research Institute winery building site. Bringing together the wairua of stones and gravels from the Wairau and Awatere rivers, interred together in the rich soils of the Opawa - a blessing for a successful future.

Photo: From left to right MJ Loza, CEO, BRI, Dr Damian Martin, the Science Group Leader, Plant & Food Research, Glenn Kirkwood, Viticulture Tutor, NMIT, Plant and Food Research iwi liaison and soil scientist Richard Hunter, and Koro Kevin



PGF Application Submitted in conjunction with advice from the Provincial Growth Unit Nelson

aug 2019

Marc Greven (pictured right) off to Bordeaux

After almost 20 years at the Marlborough Research Centre, new viticulture challenges called Marc Greven to France.

A definite highlight for Marc was when the (then HortResearch) team moved from MRC's Grovetown Campus into the new purpose-built Marlborough Research Centre in Budge Street in 2004.

At the time the research focused on olives, apples, cherries and some grapes, with only five in the team. Of these, Rob Agnew, Dion Mundy and Sue Neal are still with Plant & Food Research today. The Marlborough olive industry was then the biggest in the country and the apple industry was still important.



Growers interested in Grapevine Trunk Disease

Dion Mundy, Senior Scientist with Plant & Food Research presented his talk from the 11th International Workshop on Grapevine Trunk Diseases in Penticton, Canada in July 2019. He also talked about advancements in detection methods of the disease, which results in an overall decline and eventual death of the grapevine.

Dion's colleague Rob Agnew, Scientist, Plant & Food Research, describes it as the "best attended science seminar that we have run for quite a few years", with a full house, which indicates that trunk diseases are of particular interest to a lot of growers.



our year at a glance cont.

sept 2019

Dr Ed Massey promoted to General Manager Sustainability role

NZ Winegrowers (NZWG) led the way by establishing a dedicated GM Sustainability role.

In his new role based at the MRC campus, Dr Ed Massey will ensure that sustainability is embedded in all NZWG activities to protect and enhance the reputation of New Zealand wine.



nov 2019

The MRC supports wine excellence in Marlborough by sponsoring two Chardonnay trophies at the Marlborough Wine Show.

We are thrilled that Giesen won the Champion Chardonnay 2016 & Older, as we work with the Giesen Wine Group through our Rowley Crescent vineyard.



jan 2020

Grovetown Park Tunnel House moves

The MRC relocated the tunnel house from the Grovetown Park to the Budge Street campus where it received an upgrade with future proofed technology and control systems ready for innovative year-round research by the Plant & Food Research science team.



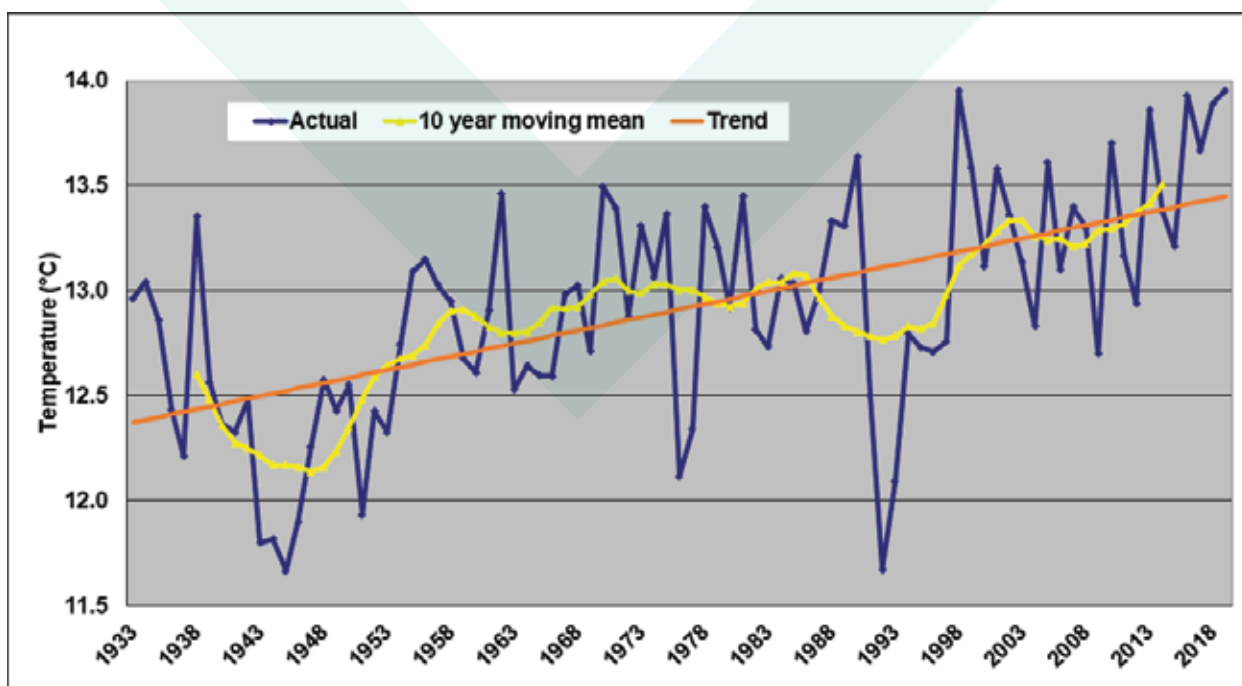
our year at a glance cont.

jan 2020

Hottest year on record

Plant & Food Research's Rob Agnew gathers monthly meteorological data published on the Marlborough Research Centre website.

Looking back, 2019, with a mean temperature of 13.954°C, was technically the hottest year on record for Blenheim for the 87 years from 1933 to 2019. However, 2019 was only 0.004°C warmer than 1998. So, for all intents and purposes, 2019 and 1998 are in first equal place.



february 2020

BRI Research Winery Opening

We congratulate the Bragato Research Institute (BRI) team on the establishment of the BRI Research Winery, located on the MRC Budge Street campus.

At the opening, Mayor John Leggett noted that this is a Marlborough-based facility but of course the research will have a national focus; its reach will be global, providing world-leading research for commercial grape and wine production and positioning our hugely successful wine industry for further growth.

The world class facility will enable industry to trial new technology and innovation, ensuring the New Zealand wine industry is at the cutting edge of forward focused modern grape growing and wine making.



our year at a glance cont.

march / april / may 2020

Rowley Vineyard produces an excellent crop of Sauvignon Blanc grapes for the Giesen Wine Group.

V20 was exceptional for quality and flavour with slightly lower tonnages produced per hectare.



Mandy Mitchell (right) – Executive Administrator resigns.

Susan Foster (far right) is appointed Office and Account Manager.

Recruitment for this position commenced pre-National Level 4 Lockdown and concluded at Level 2. Susan commenced 27 May 2020.



our year at a glance cont.

June 2020

NZDFI secures a grant of \$539,000 from Te Uru Rākau's One Billion Trees Partnership Fund.

This is another exciting step forward for the NZDFI which has been building the foundations of a hardwood industry based on genetically improved durable eucalypts for over ten years.



Durable Eucalyptus Clonal Trials a first for New Zealand

The New Zealand Drylands Forest Initiative (NZDFI) is making exciting progress. Its commercially oriented research and development project focuses on plant improvement through tree breeding, with the evaluation of clonal trials being a “most significant step” and a first for New Zealand, according to Paul Millen, NZDFI Project Manager, because it means that consistent genetic material can be deployed.

The breeding programme is complemented by research on site and species matching, and the development of growth and yield models and plant health, largely being carried out by post graduate students at the University of Canterbury.



Pyramid Farm featured on Rural Delivery, TVNZ1 in June 2020.

Pyramid Farm is the winner of the 2019 Cawthron Marlborough Environment Supreme Award, jointly sponsored by the Marlborough Research Centre and Plant & Food Research.

We think it is terrific to see the Awards and the Dawkins family being recognised in this way.



our year at a glance cont.

july 2020

BRI secures COVID investment – grape marc into hand sanitiser

The Ministry of Business, Innovation and Employment (MBIE) awarded funding to Bragato Research Institute (BRI) for a pilot study that explores transforming grape marc – the skins and seeds remaining after pressing – into hand sanitiser. The hand sanitiser from the study will be donated to Marlborough health workers and first responders.

Using winery waste to produce ethanol for hand sanitiser is untested in New Zealand with our varieties. The new research winery will be used to conduct the research.



NZ Wine Centre MOU

Wine industry, researchers and educators mark a milestone by signing a Memorandum of Understanding between the Eastern Institute of Technology, Otago Polytechnic, Nelson Marlborough Institute of Technology, Bragato Research Institute and MRC that will see them collaborate on research and student learning.

The MOU is another milestone towards the development of the campus as the national centre for winemaking and viticulture, following on from the opening of the Bragato Research Winery in February.

Left to right: MJ Loza, Gerald Hope, Carole Crawford, Pam Wood and Tracy Johnson.



Government support seals future of New Zealand wine research

Under-Secretary for Regional Economic Development Fletcher Tabuteau (pictured right, with Gerald Hope, left) announced \$3.79m from the Provincial Growth Fund towards creating Te Pokapū Wāina o Aotearoa – the NZ Wine Centre. It will be built on the existing shared campus with NMIT.

The funding cements Marlborough's place as the epicentre of New Zealand wine industry research and innovation and is the culmination of more than a third of a century's work.



The background of the slide is a repeating pattern of teal chevrons pointing downwards, creating a textured, geometric effect. The chevrons are in two shades of teal, with a darker shade forming the outer edges and a lighter shade in the center of each chevron.

research & development highlights

meteorological services highlights

Funding provided for meteorological services facilitates a large range of activities.

- The weather data supports many research projects conducted by The New Zealand Institute for Plant & Food Research, Lincoln University, University of Auckland and Nelson Marlborough Institute of Technology.
- The data is also used by organisations associated with the wine industry, for example Bragato Research Institute, Sustainable Winegrowing New Zealand, Nelson Marlborough Institute of Technology Viticulture & Wine programme, Wine Marlborough and many wine companies.
- The wider agricultural and horticultural sector, for example Fruitfed Supplies, Farmlands Co-Operative Society Ltd, Fruition Horticulture (SI) Ltd, also use the data.

For the 2019/20 year Plant & Food Research provided monthly meteorological summaries and press releases for use by local media and the Marlborough District Council.

Many of the press releases were used by the Marlborough Express, the Blenheim Sun and the Marlborough App to form the basis of articles in the media each month. The weather data and press releases are also posted monthly to the MRC website for community use.

Monthly Met Report articles were also published in Winepress, which is Marlborough Winegrowers' monthly publication. These articles summarise the previous month's weather statistics and occasionally, during the season, relate the weather to grapevine phenology.

Met report author Plant & Food Research Scientist, Rob Agnew, receives and responds to many enquiries from the local media relating to the weather. Additionally, Sophie Preece, the editor of Winepress and NZ Winegrower, has also written articles for these magazines based on information supplied by Rob.

Based on the data collected, Rob gave a presentation to the Marlborough District Council's Environment Committee in March 2020 titled "Blenheim climate 2019, trends and possible climate change effects".

Detailed summaries of data from the Blenheim and Awatere weather stations can be accessed on the MRC website www.mrc.org.nz.

seminars and workshops

In the 12 months from July 2019 to June 2020, Plant & Food Research held seven seminars, at the MRC theatre, three of these were open to the general public.

August 2019. Grapevine Trunk Diseases.

Dion presented the talk that he gave at the 11th International Workshop on Grapevine Trunk Diseases in Penticton, Canada in July 2019. He also presented advancements in detection methods for grapevine trunk diseases.

November 2019. Wine chemistry seminar.

Evolution of aroma in mouth during wine consumption. Maria Perez Jimenez - Institute of Food Science Research (CIAL), Madrid, Spain.

February 2020. Integration of remote scanning data and crop models for the development of computer-aided vineyard design and management tools.

Dr Brian Bailey – University of California, Davis and Dr Junqi Zhu – Plant & Food Research, Marlborough Research Centre.



soil remediation

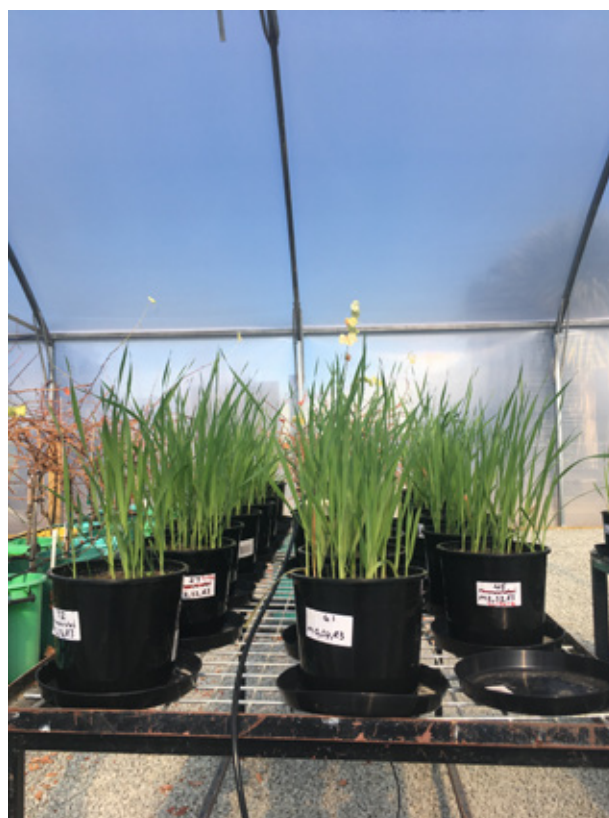
- use of grape marc

The use of grape marc for soil remediation in the Marlborough region shows promise as it is known that similar products can be used to improve soil quality. The challenge is that in order to use grape marc as part of a long-term strategy for the improvement of soil quality in the region, we need to have a greater understanding of the rate at which nutrients and in particular nitrogen, are released when marc is incorporated into the soil.

Therefore, the first step intends to determine how to manage nutrient release from grape marc. This information would then allow marc incorporation rates and application frequencies to be determined that would have a negligible effect on the environment by matching nutrient supply to nutrient demand. Field trials will help us to understand the effect of grape marc incorporation on soil compaction, soil organic matter, water infiltration, retention and run-off. This approach would allow grape marc disposal to land to become a long-term solution for the Marlborough wine industry.

The Covid-19 lockdown delayed the start of the experiment until June 2020, with grape marc collected from a local winery in April and held in cool store. The experiment was set up in the tunnel house.

This experiment is using fresh Sauvignon Blanc grape marc. Pots are packed with soil at a calculated density, and have marc either applied to the surface or incorporated into the top 5cm of soil. Two rates of total nitrogen from the grape marc have been applied. Black oats are planted in the pots and will be allowed to grow for 4, 8, 12 or 16 weeks at which times the oats will be harvested and plant and soil samples analysed. From these data, nitrogen release rates from the grape marc will be calculated. The experiment will be concluded by end of 2020.



supporting rapid diagnostic capability for grapevine trunk diseases

University of Bordeaux researcher visit

Dion Mundy, Scientist, Plant & Food Research, travelled to France to meet with a range of staff based in Bordeaux and to discuss opportunities to advance molecular detection of grapevine trunk diseases in New Zealand based on the past research conducted in Bordeaux. Dion presented a summary of the current research on trunk diseases in New Zealand, and the support for past and present research provided by the Marlborough Research Centre Trust.



Tunnel house relocation

We relocated and refurbished the 15m x 9m steel framed plastic tunnel house from the Grovetown Park Campus to the Budge Street site to make it available for Plant & Food Research needs. The house was fitted with automated control vents, wet wall and irrigation allowing the growth of plants for experiments without the need for weekend visits. Currently, one physiology and two pathology experiments are underway as well as the grape marc pot trial.

Bordeaux Science Agro PhD Project

A formal joint collaborative project with Bordeaux Science Agro (BSA) has successfully been initiated for a digital viticulture project that will benefit from experimentation and data collection in both Northern (Bordeaux) and Southern (Marlborough) hemispheres.

All going well with a relaxation of Covid-19 restrictions in France, the research project is intended to start in September 2020.

student stipend

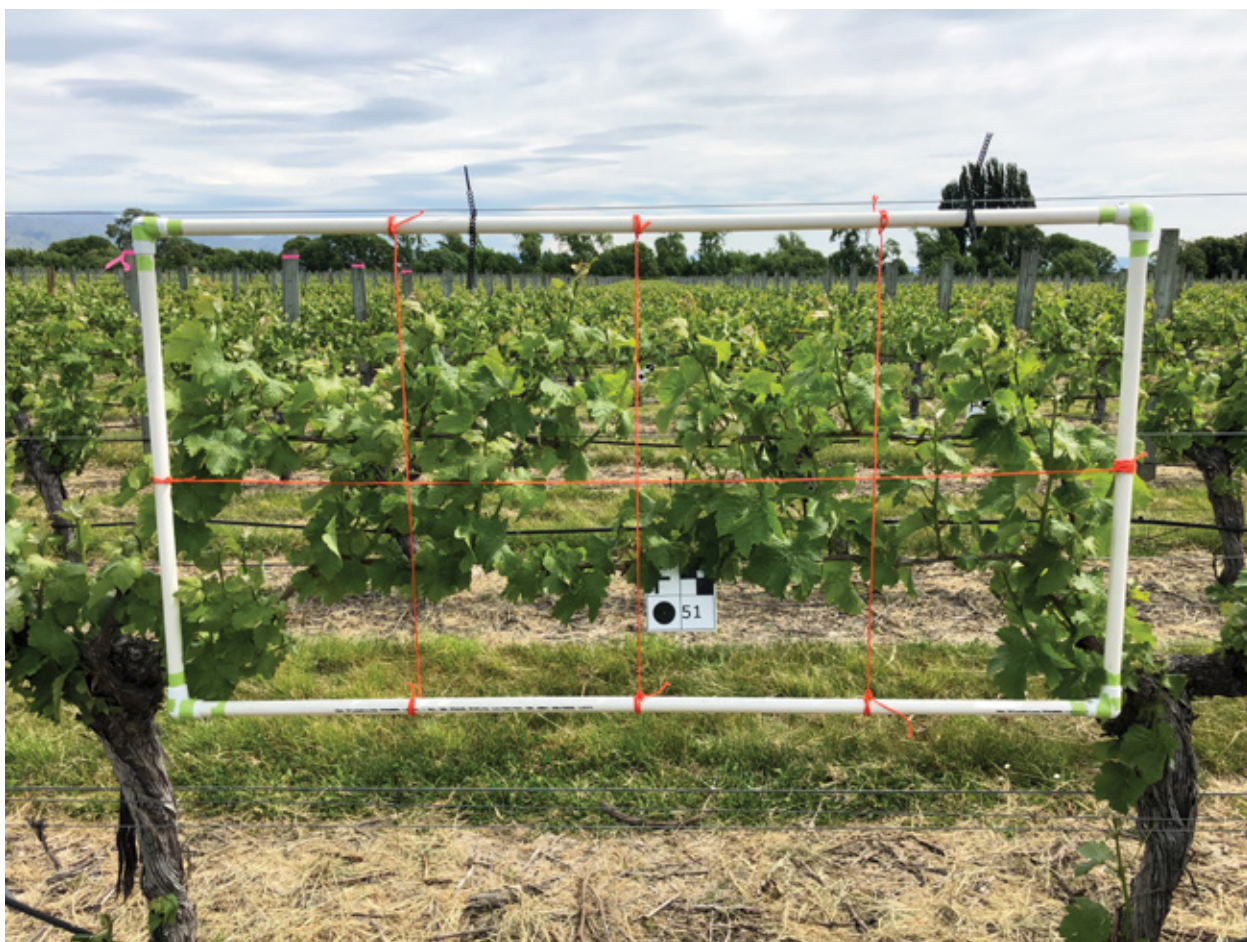
- potential allergens

Marlborough-based winemaker, Sophie Parker-Thompson, is in the process of completing her International Master of Wine qualification with a survey of biogenic amines (potential allergens) in New Zealand Sauvignon Blanc wines.

trials at mrc's rowley crescent vineyard

Plant & Food Research are using the MRC Rowley Crescent Vineyard for a variety of grape vine trials.

1. Grapevine virus evaluation.
2. Grape powdery mildew evaluation. This spray trial has completed its second and final year. The trial was superimposed on the eight short rows used also for the virus evaluation.
3. Grapevine rootstocks.
4. Lincoln Agritech Grape Yield Analyser projects. The harvest plans were interrupted due to the Covid-19 lock down.
5. Within vine variability study.
6. Sap flow measurement for crop modelling.



Above: Grape vine trials from the Rowley Vineyard

wasp biocontrol

Beech forests at the top of the South Island have the highest densities of wasps in the world. *Vespula* wasps are generalist predators that attack a wide variety of arthropods including honeybees, butterflies, flies and spiders, but they will also scavenge for protein from animal carcasses and dustbins. They have detrimental effects on normal ecosystem functioning, food webs and the behaviour of native birds.

EPA application

An application has been submitted to the Environmental Protection Agency (EPA) for releasing two promising biological control agents, *Volucella inanis* and *Metoecus paradoxus*, from containment to combat the invasive German and common wasps.

Volucella inanis is a species of hoverfly that lays its eggs inside the nests of *Vespula* wasps and the larvae feed on wasp grubs. *Metoecus paradoxus* is a beetle whose larvae parasitise wasp grubs.

German and common wasps are a major threat to the native biodiversity of New Zealand, and we expect these proposed biocontrol agents to negatively impact wasp numbers.

The application was formally acknowledged by EPA mid September and these two agents could be released this coming summer.

Agent rearing

In related news, with no international travel due to Covid, the team will still be able to receive consignments of agents collected by colleagues in the UK. This will be important this year since rearing them in containment has been challenging.

The wasp nest beetle, *M. paradoxus*, gave false hope this past season. They mated and laid eggs in captivity, but the eggs did not survive the simulated overwintering. Hopefully the new incubators will help with future attempts.

This has been by far the best year for rearing *Volucella* for Bob Brown, Manaaki Whenua – Landcare Research and his team. Compared with previous years, all three species had a very high emergence rate. *Volucella pellucens* was the first to emerge in mid-March (72 adults). There was some overlap with *V. zonaria*, which emerged from late-March through mid-April (93 adults). And finally, the *V. inanis* began emerging in early April and a few are still just beginning to pupate (30 adults, so far).

“So, this means we have been successful at simulating *Volucella*’s overwintering. However, creating the conditions to trigger mating is work in progress, says Bob. This family of flies (*Syrphidae*) are rather notorious for their difficulty to rear in laboratory conditions. After speaking with several researchers who have tried rearing hoverflies, the key will be to get them into natural sunlight. Unfortunately, this is challenging to achieve in containment, Bob reports.

The current thinking regarding future mass production of these hoverflies will be to trial semi-natural releases in shade houses and glass houses to encourage mating. In the UK, females placed in vented vials located near a wasp nest as it was being excavated laid eggs, assuming the sight, sounds and smell of the workers triggered the females to oviposit. Since there seems to be no shortage of wasp nests, finding enough food to rear the larvae on is expected to be straightforward.

On the one hand, there could be an argument to release all the adults that emerge in the hope to get at least some establishment. However, once released the males may have difficulty finding the females at such low numbers, particularly since these flies can cover very large distances as witnessed by migrations across the English Channel.

In the first year of release a balance of both approaches will be applied, by releasing roughly half of the emerged adults to the wild and keeping the other half to attempt mass production.



nz dryland forests initiative



Work by the NZ Dryland Forests Initiative (NZDFI) continues apace towards our long-term vision of developing sustainable regional hardwood industries based on durable eucalypt forests.

In late April 2020 we received the exciting news of a \$539,000 grant from Te Uru Rākau's One Billion Trees Partnership Fund. The funding will go towards work to accelerate the availability of our first generation of elite, genetically improved planting stock.

We aim to produce 300,000 elite plants for the 2021 planting season and scale up in following years. The plants will be a combination of seedlings and clones and will be sold under the 'Xylogene' brand.

Demand from landowners in our target regions (initially Marlborough, Wairarapa and Hawke's Bay) already looks like it will exceed supply. Work on modelling growing regimes which will both meet landowners' needs and produce quality products for target markets has begun in earnest.

In 2019-2020 NZDFI also:

- added to the clonal *E. bosistoana* seed orchard at Proseed Ltd in Amberley and continued to work on the challenges of producing clonal plants
- completed the first-ever models of NZ-grown *E. globoidea* stem properties – heartwood volume and stem taper
- completed genetic correlation of key *E. globoidea* wood quality traits – providing information to feed back into the breeding programme
- produced reviews of wood posts and the NZ post market – a key target market for durable eucalypts
- identified families of selected NZDFI species that are tolerant to insect browsing
- worked with regional councils and landowners in our target regions as we continue to lay the foundations for planting forests that underpin investment in regional industries
- supported five PhD students at the School of Forestry, with a sixth joining us early in 2020.



Above left: NZDFI project manager Paul Millen inspects a breeding trial of 10-year-old *Eucalyptus globoidea* on a radiata pine cut-over site in the Wairarapa.



Above centre: Clonal eucalypts being grown in a hydroponics system at Proseed Ltd.



Above right: PhD student Leslie Mann assessing insect browsing damage on young eucalypt shoots.

Right: An aerial view of PhD student Daniel Bocniewicz's field work. Daniel has successfully developed models of the stem properties of *E. globoidea*.



final update

Chilean needle grass and biosecurity risks

This is the final year of a three-year project led by NZ Landcare Trust to support EQ affected farmers.

The programme aims to control plant biosecurity risks that have been exacerbated by the bare land exposed by the November 2016 earthquake. The project focuses on reducing spread of biosecurity risk and adapting management options for earthquake-affected properties in the Marlborough, Kaikoura and Hurunui districts.

One of the plants is the extremely invasive and problematic Chilean Needle Grass (CNG), which is a serious threat to the economic viability of a number of primary industries in Marlborough.

The following initiatives involving the Biodiversity Earthquake Recovery Project and Chilean Needle Grass Action Group have taken place.

- The project combined with Beef+Lamb NZ to deliver biosecurity plans and biosecurity planning workshops in July 2019 at Waiau and Blenheim. These workshops were supported by MPI and 17 attendees.
- A newly developed biosecurity workshop for AgriBusiness was trialled with 13 AgriBusinesses in Blenheim in February 2020.
- Seona Casonato, Senior Lecturer, Lincoln University, is investigating biocontrol agents for nassella tussock. Part of this involves surveying farms for nassella tussock biocontrol agents. If the farm has both nassella tussock and Chilean needle grass she will look for biocontrol pathogens on Chilean Needle grass at the same time. Farmers were informed of this opportunity. Seona presented a summary of her work and how it could relate to CNG at the Governance meeting in April 2020.

We have now established 15 on-farm demonstrations, some with sub-trials, bringing the total up to 24 and we continue to share all the resources and workshops that we have developed with Beef+Lamb NZ and DairyNZ. They are being integrated into a national programme to increase biosecurity planning on farms. However, against healthy waters legislation, greenhouse gas reforms, biodiversity requirements are seen as low priority by farmers.

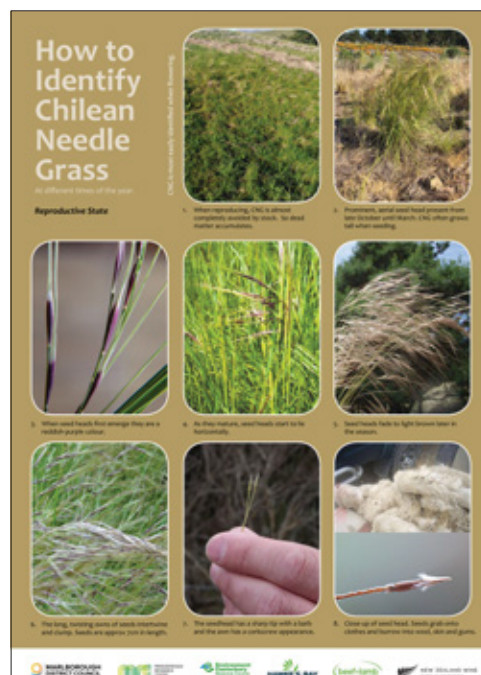
Extension service has been low during Covid-19. Instead, an online biosecurity planning workshop was developed that can be completed by farmers at home in approximately 20 minutes.

The online workshop focuses on learning material from the resources we have developed and links with existing resources such as YouTube clips provided by Beef+Lamb NZ and DairyNZ while at the same time the farmer is developing their own biosecurity plan using the template and exemplars.

The farm biosecurity template was adapted to include human biosecurity and health information due to the COVID outbreak and has been shared via Alan McDermott to the Beef+Lamb NZ Red Meat for Profit Partnership.

Conversations have been held with Catherine Wilson from MPI regarding the biosecurity planning survey MPI are currently conducting which finished mid-June 2020. Once the results are known we will progress a plan for focus groups to be held in Canterbury and Marlborough to examine how to get uptake of biosecurity plans.

For further information on this project go to:
www.landcare.org.nz/current-project-item/chilean-needle-grass



Chilean Needle Grass Action Group poster

Financial Reports

**Marlborough
Research Centre
Financial Overview
& Highlight's
2019 - 2020**

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Marlborough Research Centre Trust Annual Report for the year Ended 30 June 2020

- The Marlborough Research Centre Trust Annual Report received an unqualified audit opinion for the financial year ended 30 June 2020. The Annual Report has been circulated separately and is available online at www.mrc.org.nz

Financial Overview and Highlights

- The following provide the key financial highlights for the year.

Description	Notes	Actual 2018/19	Actual 2019/20
Operating Surpluses	a	\$355,910	\$391,240
Other Revenue	b	\$612,523	\$502,541
Total Grants	b	\$481,442	\$357,719
Net Surplus		\$193,165	\$251,129

- Of particular note is the improved surplus from operation of the two campuses and vineyard and in particular the increased demand for tenancy at Budge Street campus.
- Reduction in other revenue and total grants is associated with Central Government funded initiatives for NZ Dryland Forests and Flaxbourne Earthquake studies and the reduced level of activity in these programmes.
- Overall, the Trust maintained a good net surplus and provided a similar level of support to the region through its contributions to research programmes.

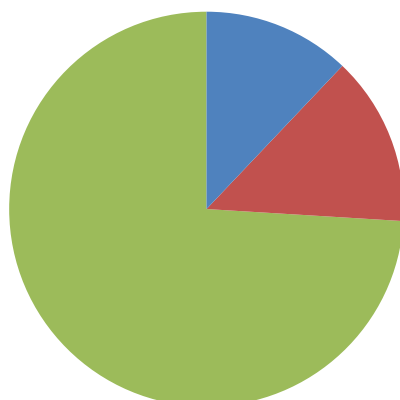
- The following highlights the Trust Equity and Assets Employed:

Description	Notes	30 June 2019	30 June 2020
Total Fixed Assets Employed		\$3.590 million	\$3.749 million
Total Trustee's Equity		\$4.814 million	\$5.065 million
Building Fund Reserves	a	\$1 million	\$1 million

- Building Fund Reserves - Planned Development - Te Pokapū Wāina o Aotearoa
The planned NZ Wine Research Centre development on the Budge Street campus is proceeding following the announcement of support from the Provincial Growth Fund. The total development budget is \$7.6 million to be funded from building reserves (\$1 million), bank finance (\$2.8 million) and Provincial Growth Fund Suspensory Loan (\$3.8 million). The development will complement the Bragato Research Winery opened in February 2020 and enable an integrated campus to be developed for industry, research and education.

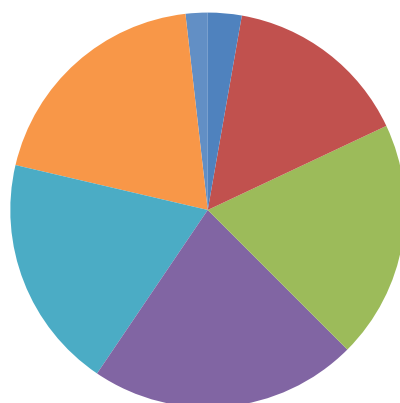
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Equity Represented by:



Net Current Assets	\$612,023
Investments	\$703,452
Fixed Assets	\$3,749,287
	\$5,064,762

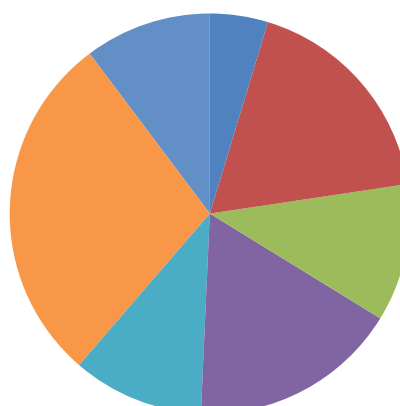
Income



Diversified Income from Economic Initiatives

Flaxbourne Earthquake Study	\$37,000
Dryland's Initiative	\$203,915
Rowley Vineyard	\$261,062
Budge Street Campus	\$294,162
Grovetown Park Campus	\$256,788
Operational Support	\$261,626
Interest	\$24,132
	\$1,338,685

Expenditure



Economic Initiatives and Assets Driving Expenditure

Flaxbourne Earthquake Study	\$51,016
Dryland's Initiative	\$195,203
Rowley Vineyard	\$121,017
Budge Street Campus	\$184,258
Grovetown Park Campus	\$115,497
Operational Support	\$309,065
Other Initiatives	\$111,500
	\$1,087,556
Surplus	\$251,129

Entity Information

Marlborough Research Centre Trust (MRC) For the year ended 30 June 2020

Entity Purpose or Mission

The intent of the Trust is to provide a research centre based in Marlborough and to promote and fund research in all forms. The Deed specifies that MRC undertakes innovative research, encourages and promotes production in all forms from pastoral, horticultural, agricultural and arable sectors. With the establishment of Bragato Research Institute an expanding working relationship has formed that includes Plant & Food Research and NMIT, bringing research and education closer together. A close alignment with Marlborough District Council on regional economic development exists to ensure maximum district wide benefit is achieved.

Vision

Our vision is to be an integrated centre for research and education based around the primary production sectors in Marlborough. As such we will:

- Find research, development and education opportunities that will result in opportunities for economic development
- Facilitate and connect research, education and innovative business to each other
- Connect research, education and business to the resources they require to succeed

Our focus is on maximising the region's potential through science, research and technology to benefit the health and wellbeing of all people in the Marlborough regional economy.

Values

To support our vision we will be:

Connected - We will be proactive and persistent in connecting people and opportunities in Marlborough to each other, to New Zealand, and to the world.

Achievers - We will focus on the achievement of real, measurable success in all areas of our participation.

Knowledgeable - We will be open to new ideas, proactive about exploring opportunity and diligent about communicating new ideas.

Energetic - We will apply ourselves energetically to our vision we will not wait for opportunities to come to us, we will seek them out.

Unique - We will offer a unique value proposition to Marlborough and to New Zealand as the only independent Multidisciplinary Research Centre in the Marlborough Region

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NOTE: These statements are to be read in conjunction with the Notes to the Financial Statements and are subject to the Auditors Report

Entity Information cont.

Main Sources of Cash and Resources

MRC Trust receives its primary income from rental received from two campuses which it owns and administers. An annual grant from Marlborough District Council of \$262,000; plus sale of grapes from the Rowley Vineyard to a NZ owned Marlborough based wine company. Other income and expenditure is based on fixed term research contracts that do not eventuate every year but are administered by MRC as an "in kind" contribution toward those programmes.

Main Methods Used by Entity to Raise Funds

Grants, rental income and sale of grapes.

Reliance on Volunteers and Donated Services

MRC Trust would not exist without the help and support of many local companies and individual supporters in the primary production sector. Since establishment in 1984 board members and Trustees volunteer time as governors and donate resources in support of research programmes. MRC has a vineyard that sets aside areas for research to be undertaken by Plant and Food Research or other organisations as required. The value of this in-kind support is assessed at \$73,000. Private landowners also allow use of areas of vineyard for grape and wine research or East Coast hill country for durable hardwood trials. This goodwill supports the delivery of district wide research and technology transfer and development.

Operational Structure

The Marlborough Research Centre Trust organisation is managed by a contracted Chief Executive supported by an Office and Accounts Manager. Both positions are responsible for the general management and smooth running of the Budge Street Campus and Grovetown Park Campus with 15 tenant groups housing around eighty people. Rowley Vineyard is contract managed. All positions report through the Chief Executive to the MRCT Board.

Trustees

The number of Trustees is three that forms the Board. The power of appointment of new Trustees is vested in the Trustees. The key to success over more than three decades of the MRC has primarily been due to the long service and commitment of individual Board members to the objectives of the MRC. A committee of MRCT is the MRC Board that provides science and policy advice to the Trust on matters relating to areas of research that are funded annually.

Entity Information cont.

Marlborough Research Centre Trust (MRC) For the year ended 30 June 2020

Trustees include:

Bernie Rowe (Chair MRC Trust)
Edwin Pitts (Chair MRC Board)
Ivan Sutherland

Location:

85 Budge Street
Blenheim

Charities Register Number:

CC10533

Date of Registration:

2/07/2007

Chief Executive:

Gerald Hope

IRD Number:

031-535-289

GST Status:

Payments Basis, Two Monthly,
Coinciding with Balance Date

Chartered Accountants:

Sidekick Tasman Limited
PO Box 11-11
Blenheim 7240
Contact - Megan Cameron

Auditors:

NMA Nelson Marlborough Audit Ltd
PO Box 732
Nelson 7040

Barrister and Solicitors:

Gascoigne Wicks
PO Box 2
Blenheim 7240

Bankers:

Bank of New Zealand
92-94 Market Street
Blenheim 7201

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Statement of Service Performance

Marlborough Research Centre Trust (MRC) For the year ended 30 June 2020

Description of the Entity's Outputs

MRC Trust provides an annual allocation of funds to support local research, facilitate research to business connection, support technology transfer and education in support of the primary production sector.

In the past few years MRC has established and financially supported the Marlborough Food & Beverage cluster of twenty five companies, continued to invest in the very successful NZ Dryland Forests eucalypt programme; that during the year sourced \$539,500 from the 1 Billion Trees programme with matching funding from industry partners. The Durable Eucalyptus hardwood programme has been progressively building a farmer base throughout Marlborough and New Zealand. After twelve years it is entering the pre commercialisation phase aiming to propagate 300,000 genetically improved seedlings to be launched under the XyloGene brand.

The Bragato Research Institute opened a new purpose-built world leading research winery in January 2020.

Further major campus development is planned in three stages after MRC secured Provincial Growth Funds (PGF) of \$3.79 million with a similar amount to be funded by MRC. Fostering greater collaboration between organisations under one banner Te Pokapū Wāina o Aotearoa – the NZ Wine Centre builds on what has been established over eighteen years since the opening of the Marlborough Research Centre on the NMIT campus.

There are a number of ongoing collaborations in the wine and aquaculture sectors, as well as connections being maintained with national and international organisations and networks. MRC continues to support small rural townships and communities tackling adversity through the water resilience initiative and studies in Flaxbourne following earthquakes which affected the region.

Research Grants Approved 2019-2020

Description	Actual 2018/19	Budget 2019/20	Notes
Metrological Services	\$25,000	\$25,000	
Student Stipend	\$3,000		Ongoing funding which is not drawn down every year
Tunnel House relocated for Rapid Diagnostic Disease Capability Initiative	\$100,276	\$105,000	Capital grant funded over three years (\$35,000 per annum)
UC Davis, University of Bordeaux support of Rapid Diagnostic Initiative	\$18,500	\$12,500	
Seminars & Workshops		\$2,000	
Soil Remediation - Use of Grape marc	\$25,000	\$25,000	
Subtotal (attributable to activity at Budget Street)	\$171,776	\$169,500	
NZ Dryland's Forest (NZDFI)	\$10,000	\$10,000	
Chilean Needle Grass: (MPI Measuring Biosecurity risk post-earthquake effected properties)	\$25,000	\$25,000	
Flaxbourne Earthquake Study	\$49,646	\$102,000	Programme funded from MPI earthquake recovery programme
SSF Landcare Vespula Wasp control	\$5,000	\$5,000	
Wine Sector demand survey		\$10,000	Deferred to 2021
Marlborough Food and Beverage Innovation Cluster		\$10,000	Contingency to respond to industry demands
Sub Total	\$89,646	\$162,000	
Total	\$261,422	\$331,500	

NOTE: These statements are to be read in conjunction with the Notes to the Financial Statements and are subject to the Auditors Report

TRADING ACCOUNT

Marlborough Research Centre Trust (MRC) For the year ended 30 June 2020
Rowley Vineyard Operations

	2020	2019
Trading Income		
RV - Grape Sales	(261,062)	(277,096)
Total Trading Income	(261,062)	(277,096)
Cost of Sales		
Purchases		
RV - Cost of Goods Sold - Grapes	121,017	130,099
Total Purchases	121,017	130,099
Total Cost of Sales	121,017	130,099
Direct Costs		
Vineyard Operating Costs	114,138	115,273
Vineyard Rent, Rates & Insurance	6,879	6,638
RV - Transfer of Vineyard WIP	(121,017)	(121,912)
Total Direct Costs	-	-
Net Profit from Trading	(140,045)	(146,997)

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TRADING ACCOUNT

Marlborough Research Centre Trust (MRC) For the year ended 30 June 2020
Budge Street Property

	2020	2019
Trading Income		
Group Charges	(129,995)	(119,907)
BS - Tenant Rentals	(161,076)	(149,911)
BS - Theatre Charges	(3,090)	(4,090)
Total Trading Income	(294,162)	(273,908)
Direct Costs		
Depreciation and Amortisation	64,094	65,046
Group Costs	111,762	108,774
BS - Repairs & Maintenance	8,401	22,606
Total Direct Costs	184,258	196,425
Net Profit from Trading	(109,904)	(77,483)

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TRADING ACCOUNT

Marlborough Research Centre Trust (MRC) For the year ended 30 June 2020
Grovetown Park Property

	2020	2019
Trading Income		
Group Charges	(102,572)	(104,543)
GP - Tenant Rentals	(154,215)	(162,587)
Total Trading Income	(256,788)	(267,130)
Direct Costs		
Depreciation & Amortisation	24,544	24,785
Group Costs	77,929	90,619
GP - Repairs & Maintenance	13,023	20,296
Total Direct Costs	115,497	135,700
Net Profit from Trading	(141,291)	(131,430)

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STATEMENT OF FINANCIAL PERFORMANCE

Marlborough Research Centre Trust (MRC) as at 30 June 2020

Notes	2020	2019
Operating Surpluses Transferred		
Rowley Vineyard Operations	140,045	146,997
Budge Street Property Account	109,904	77,483
Grovetown Park Property Account	141,291	131,430
Total Operating Surpluses Transferred	391,240	355,910
Other Revenue		
NZ Dryland Forests Initiative Projects Grants	203,915	258,011
MRC - Marlborough District Council	261,626	257,000
Grant - Flaxbourne Earthquake Study	37,000	97,512
Total Other Revenue	502,541	612,523
Expenses		
Operating Expenses		
MRC - Audit Fees	4,765	5,120
MRC - Insurances	7,933	8,091
MRC - Associate	25,920	48,533
Office Expenses	17,009	15,172
Operating Expenses	54,194	29,414
Personnel	176,256	182,406
Trust Share of Operating Costs	12,859	16,704
Total Operating Expenses	298,936	305,440
Grants		
Grant NZ Dryland Forests Initiative - Expense	195,203	242,937
Grant - PhD Student Scholarship	3,000	6,000
Grant - Meteorological Service	25,000	25,000
Grant - Cawthron Environment Awards	-	2,500
Grant - Chilean Needlegrass	25,000	25,000
Grant - Flaxbourne Earthquake Study	51,016	108,271
Grant - Rapid Diagnostic Capability for Grape Vines	-	9,235
Grant - SFF Wasp Control	5,000	5,000
Grant - Soil Remediation - Grape Marc	25,000	25,000
Grant - UC Davis - Bordeaux Uni	18,500	32,500
MRC Grant to NZDFI	10,000	-
Total Grants	357,719	481,442
Total Expenses	656,655	786,883
EBITDA	237,126	181,550

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NOTE: These statements are to be read in conjunction with the Notes to the Financial Statements and are subject to the Auditors Report

STATEMENT OF FINANCIAL PERFORMANCE cont.

Marlborough Research Centre Trust (MRC) as at 30 June 2020

Notes	2020	2019
Depreciation and Amortisation		
MRC - Depreciation Expense	10,129	11,751
MRC - Depreciation - Gain On Sale	-	(1,295)
Total Depreciation and Amortisation	10,129	10,456
Investment Income		
MRC - Interest Received	(24,132)	(22,071)
Total Investment Income	(24,132)	(22,071)
Net Surplus (Deficit) for the Year	251,129	193,165

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NOTE: These statements are to be read in conjunction with the Notes to the Financial Statements and are subject to the Auditors Report

STATEMENT OF FINANCIAL POSITION

Marlborough Research Centre Trust (MRC) as at 30 June 2020

	Notes	2020	2019
Assets			
Current Assets			
Bank accounts and cash		720,442	1,107,450
Debtors and prepayments		85,098	199,989
Income Accruals		1,696	-
Total Current Assets		807,236	1,307,439
Non-Current Assets			
Property, Plant and Equipment	3	3,749,287	3,590,406
Investments			
Term deposits	2	703,452	-
NZ Wine Centre Development Costs		-	87,803
Total Investments		703,452	87,803
Total Non-Current Assets		4,452,739	3,678,209
Total Assets		5,259,975	4,985,648
Liabilities			
Current Liabilities			
Creditors and accrued expenses			
Trade and other payables		160,517	119,321
Goods and services tax		19,703	34,557
Total Creditors and accrued expenses		180,219	153,878
Accrued Expenses		5,741	8,885
Donation - PFR from MGGT		9,252	9,252
Total Current Liabilities		195,213	172,015
Total Liabilities		195,213	172,015
Total Assets less Total Liabilities (Net Assets)		5,064,762	4,813,633
Accumulated Funds			
Capital Reserves		159	159
Accumulated surpluses or (deficits)		4,895,792	4,644,663
Reserves		168,812	168,812
Total Accumulated Funds		5,064,762	4,813,633

Signed by:



Date: 3 November 2020

NOTE 3: NZ Wine Centre concept development, architectural design

NOTE: These statements are to be read in conjunction with the Notes to the Financial Statements and are subject to the Auditors Report

**NMA Nelson
Marlborough Audit
Limited**

STATEMENT OF CASH FLOWS

Marlborough Research Centre Trust (MRC) as at 30 June 2020

	2020	2019
Cash Flows from Operating Activities		
Receipts from providing goods and services	926,904	802,175
Interest, dividends and other investment receipts	22,436	25,390
Grants, sponsorship and other revenue	502,541	612,523
Payments to suppliers and employees	(567,097)	(714,358)
Grants paid	(383,639)	(529,976)
GST paid	(14,856)	(21,781)
Interest paid	0	0
Net cash flow from operating activities	486,289	173,973
Cash Flows from Investing Activities		
Proceeds from sale of fixed assets	0	1,500
Proceeds from sale of investments	(703,452)	750,000
Payments to purchase investments	0	0
Payments to purchase fixed assets	(169,845)	(18,030)
Net cash flow from investing & financing activities	(873,297)	733,470
Net(decrease) / increase in cash and cash equivalents	(387,008)	907,443
Cash and cash equivalents at the beginning of the year	1,107,450	200,008
Cash and cash equivalents at the end of the year	720,442	1,107,451

**NMA Nelson
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NOTE: These statements are to be read in conjunction with the Notes to the Financial Statements and are subject to the Auditors Report

STATEMENT OF ACCOUNTING POLICIES

Marlborough Research Centre Trust (MRC) as at 30 June 2020

Basis of Preparation

Marlborough Research Centre Trust (MRC) is eligible to apply Tier 3 PBE Accounting Standards: PBE SFR-A (NFP) Public Benefit Entity Simple Format Reporting - Annual (Not-For-Profit), on the basis that it does not have public accountability and has total annual expenses equal to or less than \$2,000,000. All transactions in the financial statements are reported using the accrual basis of accounting.

The accounting principles recognised as appropriate for the measurement and reporting of earnings and financial position on an historical cost basis have been used, with the exception of certain items for which specific accounting policies have been identified.

The financial statements are presented in New Zealand dollars (NZ\$) and all values are rounded to the nearest NZ\$, except when otherwise indicated.

The financial statements are prepared under the assumption that the entity will continue to operate in the foreseeable future.

Changes in Accounting Policies

There have been no changes in accounting policies. All policies have been applied on a consistent basis with those of the previous reporting period.

Income Tax

The Trust is not subject to income tax and it is a charity registered with the Charities Commission.

Accounts Receivable

Receivables are stated at their estimated realisable value. Bad debts are written off in the year in which they are identified.

Revenue Recognition

Revenue comprises the fair value of the sale of goods and services, excluding Goods and Services Tax, rebates and discounts.

Revenue is recognised as follows:

Sales of Goods

Sales of goods are recognised in the accounting period in which they are rendered.

Rental Income

Rental income is recognised on an accruals basis in accordance with the substance of the relevant agreements.

Interest Income

Interest income is recognised using the effective interest method.

Grant Income

Grant income is recognised when receivable

Fixed Assets

Fixed Assets have been included at cost less accumulated depreciation, with the exception of land, which has been revalued at June 2014. Details of fixed assets are outlined in the Schedule of Fixed Assets and Depreciation.

STATEMENT OF ACCOUNTING POLICIES cont.

Marlborough Research Centre Trust (MRC) as at 30 June 2020

Depreciation

Depreciation has been charged on either a diminishing value (DV) or cost price (CP) basis, at rates approved by the Inland Revenue Department, with the exception of buildings, which have been depreciated at 2% CP. Details of rates and depreciation claims are set out in Note 3.

Work In Progress

Work in progress is recorded at cost.

Goods and Services Tax

The Statement of Financial Performance and Statement of Cashflows (where included) have been prepared so that all components are stated exclusive of GST. All items in the Statement of Financial Position are stated net of GST, with the exception of accounts payable and accounts receivable which are stated inclusive of GST.

Basis of Consolidation

Marlborough Research Centre Trust holds 100% of the shares in New Zealand Dryland Forests Limited and the results of this entity have been fully consolidated into the performance report.

Controlled entities are all those entities over which the controlling entity has the power to govern the financial and operating policies so as to benefit from its activities. The controlled entities are consolidated from the date on which control is transferred and are de-consolidated from the date that control ceases. In preparing the consolidated financial statements, all inter entity balances and transactions, and unrealised gains and losses arising within the consolidated entity are eliminated in full. The accounting policies of the controlled entity are consistent with the policies adopted by the Group.

The reporting date of both entities is 30 June. There are no significant restrictions on the ability of the subsidiaries to transfer funds to the Parent in the form of cash distributions or to repay loans or advances.

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NOTE: These statements are to be read in conjunction with the Notes to the Financial Statements and are subject to the Auditors Report

NOTES TO THE PERFORMANCE REPORT

Marlborough Research Centre Trust (MRC) as at 30 June 2020

1. Audit

These financial statements have been subject to audit, please refer to Auditor's Report.

2. Investments

	2020	2019
BNZ Term Deposit 03143		
BNZ Term Deposit	703,452	-
Maturing 15 August 2020, interest rate 2.00%	-	-

3. Property, Plant and Equipment
Buildings

Buildings at cost	4,772,944	4,479,611
Accumulated depreciation - buildings	(1,203,647)	(1,081,374)
Total Buildings	3,569,298	3,398,237

Furniture and Fittings

Furniture and fittings owned	182,627	167,731
Accumulated depreciation - furniture and fittings owned	(128,801)	(111,135)
Total Furniture and Fittings	53,826	56,597

Plant and Equipment

Plant and machinery owned	202,825	194,053
Accumulated depreciation - plant and machinery owned	(165,457)	(156,095)
Total Plant and Equipment	37,368	37,958

Other Fixed Assets

Other Fixed Assets	301,334	302,964
Accumulated depreciation - Other Fixed Assets	(212,539)	(205,350)
Total Other Fixed Assets	88,795	97,614

Total Property, Plant and Equipment	3,749,287	3,590,406
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**NMA Nelson
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Limited**

NOTES TO THE PERFORMANCE REPORT cont.

Marlborough Research Centre Trust (MRC) as at 30 June 2020

The Land and Improvements were revalued by Alexander Hayward, independent registered valuer (F.N.Z.I.V, F.P.I.N.Z) in June 2014. The methodology employed reflects fair value incorporating the lease conditions and remaining term in respect of land at Budge Street.

Depreciation rates used are:

Buildings 2% CP

Grovetown Park building fitout and amenities 2-3% CP, or 4-25% DV

Budge Street building fitout and amenities 14.4-20% DV

Plant and Equipment 10-50% DV

Motor Vehicles 12-30% DV

Furniture and fittings 8-40% DV

Vineyard 6-40% DV

4. Events After the Balance Date

There have been no events subsequent to balance date which impact on the results disclosed in these financial statements sufficiently to warrant inclusion in these notes (2019: Nil).

5. Contingent Liabilities

At balance date there are no known contingent liabilities. Marlborough Research Centre Trust has not granted any securities in respect of liabilities payable by any other party whatsoever (2019: Nil).

6. Capital Commitments

As at balance date there are no known capital commitments (2019: Nil).

7. Related Parties

Gerald Hope is a director of New Zealand Dryland Forests Limited.

Transactions occurring in relation to NZ Dryland Forests Limited for the year are outlined below (grants received and spent).

Income - \$203,915 (2019: \$258,011)

Expenses - \$195,203 (2019: \$242,937)

Accounts Receivable and Payable at year end in relation to New Zealand Dryland Forests Limited were:

Accounts Receivable - \$Nil (2019: \$Nil)

Accounts Payable - \$11,500 (2019: \$Nil)

8. Going Concern & Impact of Covid-19

The Trust has not been unduly affected by the Covid-19 pandemic. The Trustees continue to apply the going concern concept.

**NMA Nelson
Marlborough Audit
Limited**

NOTE: These statements are to be read in conjunction with the Notes to the Financial Statements and are subject to the Auditors Report

INDEPENDENT AUDITOR'S REPORT**To the Beneficiaries of Marlborough Research Centre Trust****Report on the Performance report**

NMA Nelson Marlborough Audit Ltd

Opinion

We have audited the performance report of Marlborough Research Centre Trust, which comprise the entity information, the statement of financial position as at 30 June 2020, the statement of service performance, the trading accounts, the statement of financial performance, and statement of cash flows for the year then ended, and notes to the performance report, including a summary of significant accounting policies.

In our opinion, the performance report on pages 30 to 44 presents fairly, in all material respects;

- the entity information for the year then ended
- the service performance for the year then ended
- the financial position of Marlborough Research Centre Trust as at 30 June 2020 and its financial performance, and cash flows for the year then ended

in accordance with Public Benefit Entity Simple Format Reporting – Accrual (Not-For-Profit).

Basis for Opinion

We conducted our audit of the statement of financial performance, trading accounts, statement of financial position, statement of cash flows, statement of accounting policies and notes to the performance report in accordance with International Standards on Auditing (New Zealand) (ISAs (NZ)), and the audit of the entity information and statement of service performance in accordance with the International Standard on Assurance Engagements (New Zealand) ISAE (NZ) 3000 (Revised).

Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Performance Report* section of our report.

We are independent of the Trust in accordance with Professional and Ethical Standard 1 (Revised) *Code of Ethics for Assurance Practitioners* issued by the New Zealand Auditing and Assurance Standards Board and the International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants (IESBA Code)*, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other than in our capacity as auditor we have no relationship with, or interests in, the Trust.

The Responsibility of the Trustees for the Performance Report

The Trustees are responsible on behalf of the entity for:

- (a) Identifying outcomes and outputs, and quantifying the outputs to the extent practicable, that are relevant, reliable, comparable and understandable, to report in the statement of service performance;
- (b) the preparation and fair presentation of the performance report which comprises:
 - the entity information
 - the statement of service performance
 - the statement of financial performance, statement of financial position, statement of cash flows, statement of accounting policies and notes to the performance report

in accordance with Public Benefit Entity Simple Format Reporting – Accrual (Not-For-Profit) issued in New Zealand by the New Zealand Accounting Standards Board.

- (c) for such internal control as the Trustees determine is necessary to enable the preparation of the performance report that is free from material misstatement, whether due to fraud or error.

In preparing the performance report, the Trustees are responsible on behalf of the Trust for assessing the Trust's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Trustees either intend to liquidate the Trust or to cease operations, or have no realistic alternative but to do so.



NMA Nelson Marlborough Audit Ltd

Auditor's Responsibility for the Audit of the Performance Report

Our objectives are to obtain reasonable assurance about whether the performance report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (NZ) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could be reasonably expected to influence the decisions of users taken on the basis of the performance report.

As part of an audit in accordance with ISAs (NZ), we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the performance report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Trust's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the use of the going concern basis of accounting by the Trustees and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Trust's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the performance report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Trust to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the performance report, including the disclosures, and whether the performance report represents the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

NMA Nelson Marlborough Audit Ltd

NMA Nelson Marlborough Audit Limited
PO Box 732
Nelson 7040

3 November 2020



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Only Marlborough

