

**OTIS
OAT
M!LK**



**THE
ONE** **PERCENT
FUND**

REPORT NOVEMBER 23

EXECUTIVE SUMMARY



In 2021 we committed as a business to donate 1% of our annual revenue to help fund projects and initiatives that make oats a viable and exciting alternative for New Zealand farmers. This report outlines the steps we have taken to engage with our industry and the decisions we have made on where to allocate the fund.

After speaking with 9 individuals from 8 organisations, all of who are connected to the New Zealand agricultural sector (see Who We Spoke To for more details), with the support of our sustainability consultancy, Go Well Consulting, we analysed their feedback and landed on the policy for our 1% Fund.

We have decided to allocate this year's funding to [Plant Research NZ Limited \(PRNZ\)](#).

PRNZ is a plant breeding, research and development company based at Innovation Park, Templeton in Canterbury, New Zealand. PRNZ was a founding member of the New Zealand Oat Industry Group (OIG) and is supporting the group by developing new milling oats for New Zealand's main processor Harraway's Ltd. These are the oats used by Otis Oat Milk and other New Zealand oat based brands.

This is the beginning of what we intend to be a significant level of support to our industry. We recognise that for us to achieve our goals as a business we must collaborate closely with our industry. It's our job to produce world-class oat milk and sell that to the world, but we can not do any of that if we do not have a thriving ecosystem. We believe that by allocating 1% of our annual revenue to organisations such as PRNZ we can make a meaningful difference to some of the challenges our industry faces and in time make a demonstrable impact on the New Zealand agriculture sector, our economy, our land use, and ultimately our social and environmental well being.

We value any feedback, questions or ideas relating to our 1% Fund or business more broadly. Please do get in touch.

Thank you for your continued support.

Tim Ryan

Chris Wilkie

MISSION STATEMENT

**LEAD A PLANT
BASED REVOLUTION
THAT CREATES
POSITIVE CHANGE
FOR PEOPLE &
THE PLANET.**



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INTRODUCTION

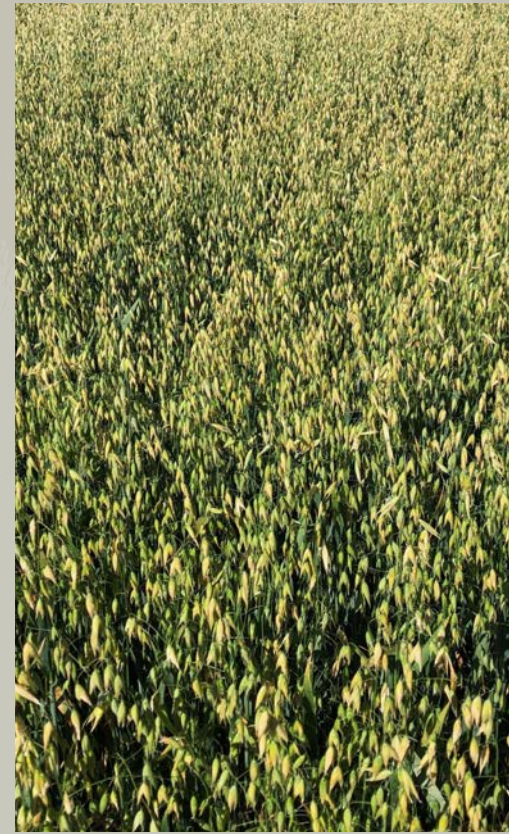
In June of 2021 our Co-Founders, Tim and Chris attended the Te Hono primary industry Bootcamp hosted in Waitangi. At this event the attendees, which included key stakeholders from the New Zealand agricultural sector and many of its largest players, were presented to by academic and scientific experts on the state of our changing climate and biodiversity. The magnitude of the environmental crises we are facing as a global community were laid bare and the impacts this will have on the New Zealand economy's agricultural sector was explained.

Despite founding an oat milk company with the express purpose of providing New Zealand farmers and land owners with alternatives to industrial dairying, this experience resulted in Chris and Tim believing that they could and should be doing more. It was then that they committed to donating 1% of our total annual sales to funding projects and initiatives that make oats a viable and exciting alternative for New Zealand farmers.

But before we just donated the money to any old cause we needed to better understand how this money could achieve the best impact for the industry. Among other things we wanted to know what are the barriers farmers face to growing oats? Where do they feel like they need the most support? And, what promising scientific work could make the most difference to them?

Being highly aware that Otis specialises in producing and marketing oat milk, not growing oats or managing crops Otis engaged our sustainability consultants, Go Well Consulting, to help us engage our stakeholders, design the funding mechanism, and produce this report.





We acknowledge that there is already a lot of great work happening across our motu to ensure our agri-sector is both resilient for a rapidly changing climate and changing global macroeconomic forces - while also repairing the environmental damage that has been done. We also acknowledge that although 1% of our revenues is a considerable amount of money for us to part with, and money that we aren't using to invest in our business, it is going to be, at least in the early years, a relatively small sum of money.

So, although we endeavoured to remain open-minded throughout this process to all the opportunities, we were very conscious that we would likely have the most positive impact by working with and supporting existing programmes or initiatives. We were adamant that this had to be about long-term thinking and that it created genuine support for New Zealand farmers' biggest challenges.

We were also mindful of what other oat milk brands are doing in New Zealand. Although we are supportive of a competitive market and all the positive outcomes that provides the oat milk customer, we want to see the industry work collaboratively to solve our shared challenges. We were very mindful of not "wasting" our funding on projects that were already being done by others. We want this to be a significant value add to the New Zealand oat ecosystem.

Across the conversations we had, we asked everyone directly how they think the money would be best spent. We received a range of ideas from calculating the carbon footprint of growing oats, to supporting the mental health of farmers, or helping finance farmers out of their debt traps with the banks.

On top of helping us decide on where to allocate the funding these conversations were hugely valuable for us to better understand the steps we can take as an oat milk brand to support our New Zealand growers. We understand that our role in the big picture of evolving our food system and agric-sector to one that restores the health and well-being of people and our ecosystems, is to produce world-class oat based products that compete on the global stage.



WHAT WE DID

To ensure we made a well-informed decision that would have the most “bang for buck” on our industry we undertook in-depth interviews with key stakeholders. Guided by Go Well Consulting we interviewed 9 individuals spanning a broad range of knowledge and experience.

All the interviews were hosted virtually and while the conversations were all of a relaxed and open nature they were based around three key questions.

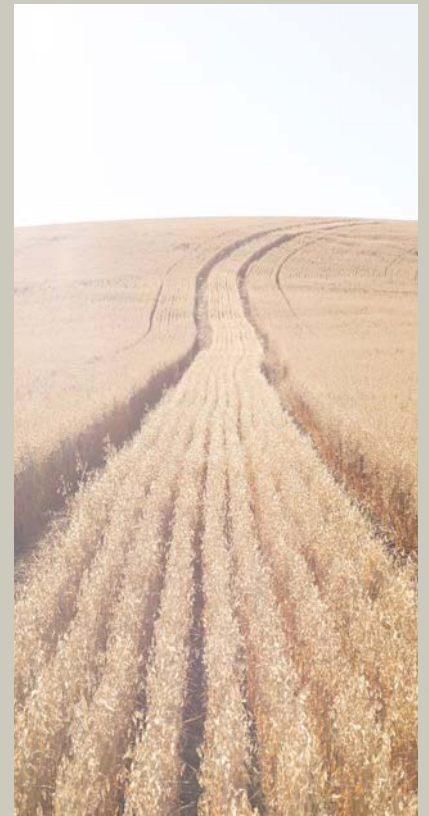
What do you think are the biggest challenges for arable farmers in New Zealand at the moment?

What do you think are the biggest opportunities for arable farmers in New Zealand at the moment?

Where or to whom do you think we should allocate the funding and why?

For an overview of the key comments made and themes we uncovered see page 8.

Following the interviews Go Well then facilitated a virtual whiteboard session to help us review the key findings and make a final decision on how the 1% funding would be spent.



WHO WE SPOKE TO

To ensure we captured as many different viewpoints, experiences, and knowledge of the oat-growing industry and its impacts on local and global planetary systems and local communities we reached out to a wide range of individuals and professions. No one was paid for their time and we would like to take this opportunity to say a HUGE thank you to all of them for making the time to help us. Kia ora!

DR MIKE JOY

Senior Researcher at Victoria
University of Wellington

IVAN LAWRIE

General Manager Business
Operations at Foundation for
Arable Research (FAR)

TURI MCFARLANE

Foundation for
Arable Research (FAR)

GWEN GRELET

Senior Researcher at Manaaki
Whenua - Landcare Research

HENRY HAWKINS

Chief Executive Officer at
Harraway and Sons Ltd

ADRIAN RUSSEL

Managing Director,
Plant Research (NZ) Limited

GRAEME GARDYNE

Chair of Oat Industry Group (OIG)
/ Oat Grower

MICHAEL GARDYNE

Oat Grower

REAGAN BAYLY

Soil Consultant / Technical
Specialist (Pastoral and Arable)
at Soil Matters



OUR KEY FINDINGS

Across the 9 individuals we spoke with we covered a huge range of topics, challenges, and opportunities. From climate change and water quality to farming debt and the impact of the dairy industry on grain prices. It's fair to say we learnt a lot and gained even more respect for the oat growers we work with.

Despite the variety of our conversations, there were also some common themes. These are outlined below.

PROFITABILITY AND INCREASED COSTS

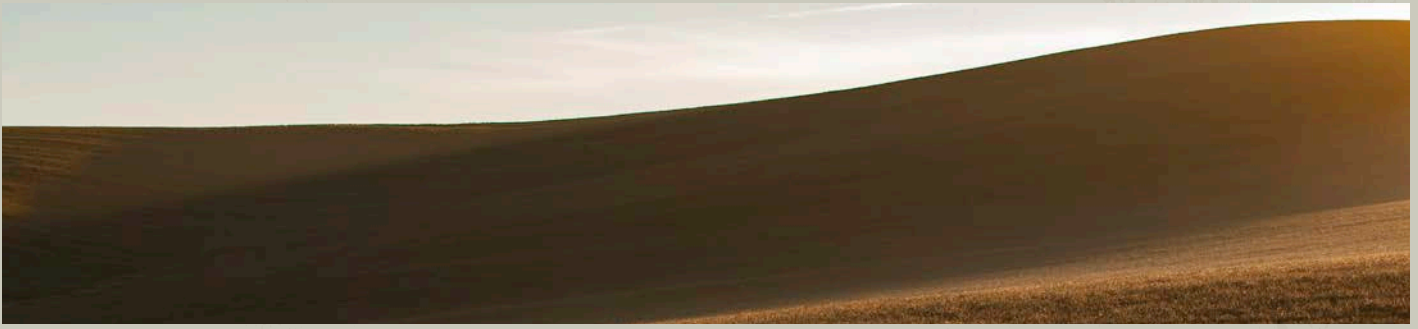
It will come as no surprise that the rising cost of farm inputs such as diesel and fertiliser was a major theme of our discussions. We heard about the impact this is having on the profit margins of the oat growers (and the agricultural industry as a whole), but also how it is driving farmers to rethink their use of such inputs.

A key concept of multiple farming philosophies (e.g. regenerative agriculture, biodynamics, organics) is to minimise inputs by maximising the use of the resources the land provides. This was a philosophy adhered to by Soil Consultant Reagan Bayly who believes New Zealand farms as a whole need to become more resilient to global commodity shocks, through increased self-sufficiency. A philosophy that doesn't just impact on-farm costs but also the reliance on long international supply chains and far-away developing economies.

"We've had it too easy for too long by transferring nutrients from poor nations to rich nations through synthetic fertilizers." - Reagan Bayly.

On top of the increase in the cost of inputs, landowners are feeling the financial squeeze of increasing interest rates. As a result, mortgages and other debt payments are increasing.

"I'd spend that 1% on finding ways to finance farms to give them the ability to look at alternative systems. It all comes back to how the farms are financed. That's what dictates the systems." - Reagan Bayly.



EDUCATION AND CHANGING MINDSETS

The need and challenge of engaging and educating New Zealand farmers on farming practices and principles that are different to what they are used to is not a local or industry-specific challenge. Changing mindsets is a huge challenge globally in the fight against environmental breakdown, rampant overconsumption, and increasing wealth disparity. Our challenges are complex and connected, they take time to understand, and there are loud opposing voices from those who benefit from the status quo or who simply don't want to change (especially at the speed of change that is required to stay within our planetary boundaries).

This was a key point of Dr Mike Joy, stating ***“The disinformation that farmers are given by their industry partners is similar to what we see from the tobacco industry. Some farmers are not aware of their impacts due to this misinformation.”***

The highly resourced agri-chemical companies operating in New Zealand whose business models are directly threatened by any move to decrease input use, but yet who often play vital social roles within our rural communities, are one such example of these competing voices. This is a huge challenge to navigate as a start-up brand who is new to market and trying to provide farmers with a viable alternative to the agrichemical method of managing land while the health of our waterways have been in decline for decades.

We discussed a range of ideas with our interviewees on how this could be done and the best ways to engage and inform farmers, but it became apparent that these are mostly outside of our capabilities and capacity at this time, and we don't believe we are the right messenger for such educational content.

There was also discussion around the fact that many of New Zealand's farmers are close to retirement and learning and applying new farming practices, which in some instances are radically different to how they have been farming for their lifetime, can be overwhelming and simply too arduous.

Or as Reagan put it ***“Knowledge is holding us back. Mindsets need to change. They change generationally.”***

Counter to this we also heard of the innovation, curiosity, and optimism many of the younger farmers are bringing to the industry.



NO-TILL V HERBICIDE USE

We found many of our conversations went into detail around the challenge between not tilling the soil and the use of herbicides. In particular Glyphosate (commonly retailed as RoundUp).

Tilling (also known as ploughing) is a practice that has been a staple of farming land across the planet for generations, but it has been proven to disrupt soil ecology, release carbon, increase erosion, and increase sediment in waterways. By not tilling the soil these negative impacts are avoided or diminished.

The current alternative to no-till farming is the use of direct drilling seeds. A practice that requires the use of specialised machinery to plant the seeds directly into the soil, amongst the remaining vegetation from the previous crop.

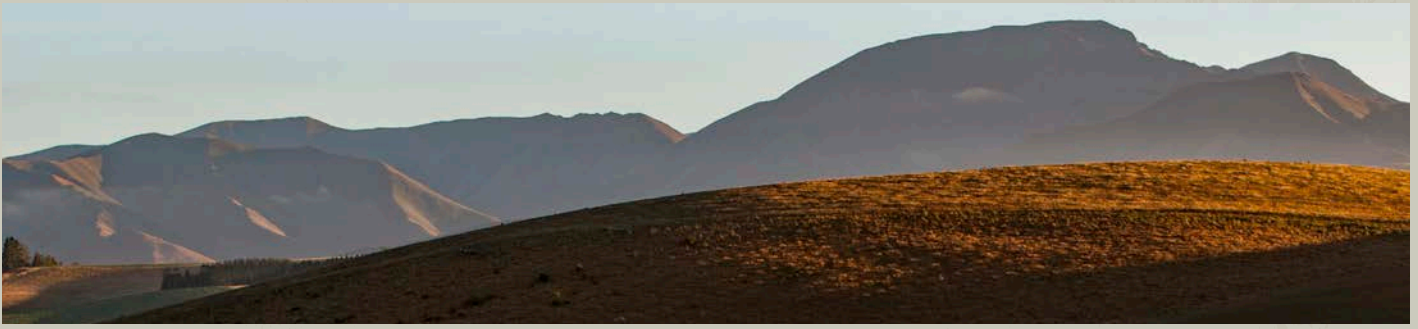
However, untilled soil provides favourable conditions for unwanted plants (aka weeds) to establish themselves, disrupt crops, and effect yields. An issue that can be devastating to farms and the thin profit margins they operate with.

This is where the use of glyphosate is the preferred solution for many. It is a relatively cheap and easy solution with undeniably effective results. However, it is a chemical with hugely questionable impacts on the health of those spraying it, their local communities, and the local ecosystems. Further to this, it is a chemical that has largely been rejected by consumers in most advanced global markets.

Our oats are supplied by growers who practice both methods. It is worth noting that Harraways (who supply Otis with their raw oats) have a no glyphosate policy and a rigorous testing regime of the harvested grain.

This challenge of no-tilling and glyphosate use remains a key challenge for the oat industry (and arable farmers in general).

As Gwen Grelet put it - ***“Herbicides are a massive problem. (Due to new EU legislation) Europe is unlikely to purchase our products post-2025 (if they continue to contain herbicides).”***



DAIRY PRICES

We heard a lot about the impacts the current high prices of dairy milk solids is having on our industry. The current high prices are seeing increased demand from dairy farmers for cow feed. Predominantly in the form wheat and barley grain.

This increased demand for dairy feed has resulted in an increase in price for these grains.

“Our prices are pegged to wheat and barley feed prices for the dairy industry. Farmers are currently getting record prices for their grain, due to the push by dairy feed.” - Henry Hawkins

It has resulted in a complex web of economics whereby the buyers of oats are having to increase their prices to encourage arable farmers to supply them oats while managing the increase of prices passed on to customer of oat-based products.

Compounding this challenge is the fact that
“feed grains require less oversight and inputs so are easier for farmers (than growing oats).” - Henry Hawkins

PROVENANCE AND A BRAND MARK

An idea we discussed with all our interviewees was that of producing an oat brand mark that was linked to transparency, the provenance of those oats, and achieving a set criteria of particular agricultural practices and impacts. Similar to the ZQRX brand mark produced for New Zealand Merino Wool.

It was a concept that was seen by all as a great opportunity for the industry. The two primary benefits are 1) - growing the reputation and demand for New Zealand-grown oats internationally and the brands using them, and 2) - supporting and rewarding those growers through a price premium who could demonstrate positive social and environmental impacts.

The major obstacle identified to implementing this was the cooperation and collaboration required across multiple stakeholders. A project that will likely require the formation of an industry body or central governance organisation to deliver it.

ON FARM DATA

Considering the role data plays in our modern world, it should also be no surprise that this was also a discussion point in our interviews. Specifically, we discussed the value of providing quality data to brands and customers and the challenges in obtaining that quality data.

It links directly with the concept of a provenance-based brand mark discussed above. For any such scheme to be implemented successfully and achieve a high level of trust and integrity it must be able to substantiate its impacts with high-quality data.



The challenges most commonly raised relating to recording on-farm data were: the added cost and time it would require, and the lack of scientific consensus on some environmental measures (e.g. soil carbon sequestration, or biodiversity). Considering the speed of change relating to data technology and the demand for robust data on farming impacts we expect these challenges to be overcome relatively soon. But considering the scale involved and expertise required it is not a project we felt we should take on ourselves.

We did however give a lot of consideration to using the 1% Fund to support the research of on-farm emissions relating to the growing of oats. Although we have mapped our operational emissions these do not include the emissions associated with growing and harvesting the oats. There are currently no New Zealand-specific, publicly available, data sets on this.

Despite the value, this would provide us and our industry we ultimately felt our fund could have a bigger impact elsewhere and we are aware of others in our industry undertaking this work.

OAT BREEDING

The breeding of plant and animal species to improve their nutritional value, resilience, flavour, yield and a myriad of other qualities has been fundamental to the modernisation of the agricultural industry globally.

It is a specialised science that requires a high level of skill and knowledge, as well as a lot of patience and persistence! We are incredibly lucky in the New Zealand oat industry to have a highly professional organisation in the form of Plant Research (NZ) Limited who have been doing this very work for over 20 years.

It is his work that has helped place New Zealand as one of the leading developers of oats varieties internationally. However, there is more work to be done. Reflecting on the issue of feed grain, these grains typically yield approximately 9-10 tonnes per hectare. In comparison, oats are currently in the order of 7 tonnes per hectare. Although we acknowledge yield should not be the 'be-all-and-end-all' of an arable crop it does weigh heavily on the decision-making when farmers are choosing their annual crops.

Outside the impact on oat yields, additional properties from a continued breeding program could be enhanced protein solubility, increased Beta-glucan or thiamin, and / or an increased amino acid profile, and increased resilience to future proof for our rapidly changing climate. Further to this, the development of an oat variety specifically for producing oat milk would allow oat growers to stay ahead of the commodity markets.

In essence, the oat breeding program is integral to the success of our industry and one we feel should be supported by our industry.

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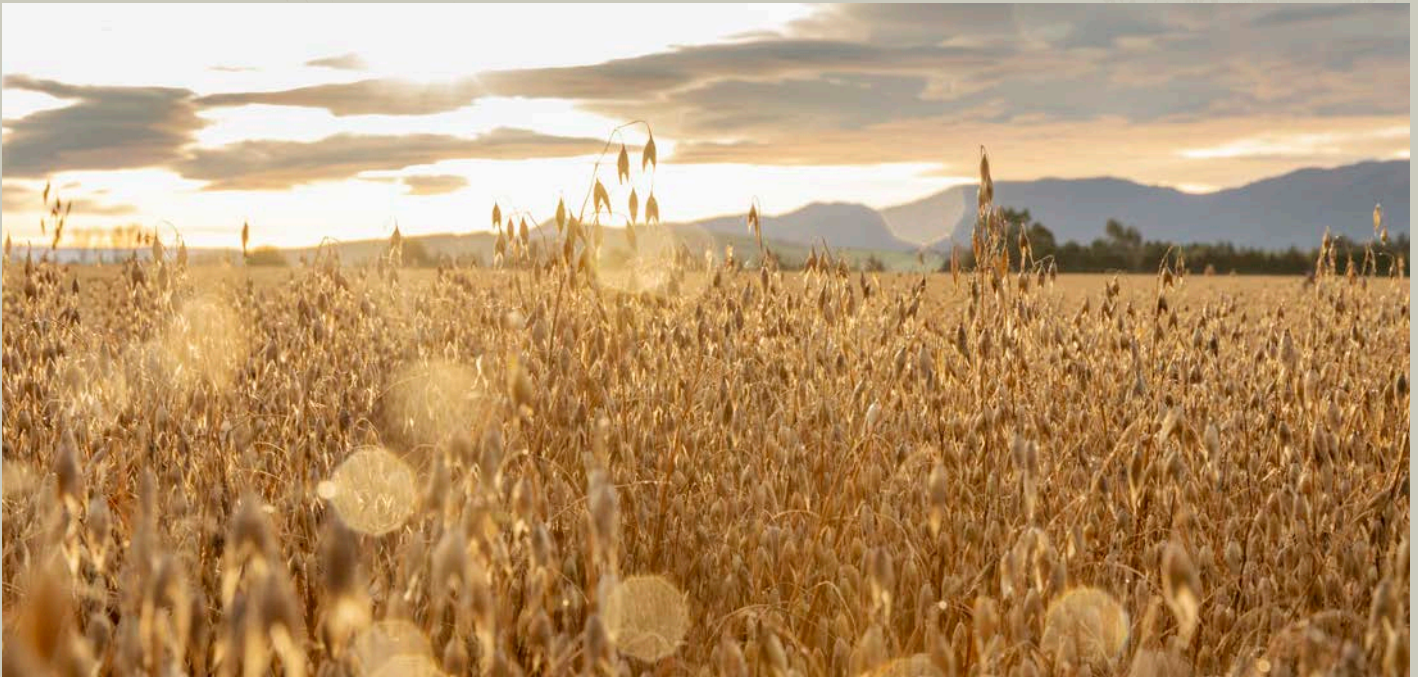
WHAT WE DECIDED

After speaking with our interviewees, reviewing their feedback and ideas, and reflecting on the purpose of why we committed to launching this fund, and our values as a business, we have decided to allocate this year's funding to Plant Research (NZ) Limited.

HOW IT WILL WORK

We will donate 1% of our revenue from 1st October 2021 - 31st September 2022 directly to Plant Research (NZ) Limited. We will provide a signed statement from our accountant as a form of assurance. We will not be asking for any patent or intellectual property rights from PRNZ and intend its benefits to be used by all in the oat industry. The money we grant them is with no strings attached. We will simply ask them to continue doing their work and keep us updated on their progress.

In turn, we will share their progress and the impacts of our funding with our stakeholders.



WHO ARE PRNZ



PRNZ is a plant breeding, research and development company based at Innovation Park, Templeton in Canterbury, New Zealand. Their principal shareholder is Cates Grain & Seed, a grain and seed production specialist company established in 1973 and based in Ashburton, New Zealand.

Plant Research (NZ) Ltd. was formed in 2000 when Managing Director Adrian Russell left the Crown Research Institute Crop & Food Research after a 24-year career as a Plant Breeder with the Institute to form Plant Research Ltd.

PRL was a founding member of the New Zealand Oat Industry Group (OIG) and is supporting the group by developing new milling oats for New Zealand's main processor Harraway's Ltd. These are the oats used by Otis and other New Zealand based oat milk brands, as well as many other oat-based food products.

OUR MISSION

To deliver value and a competitive advantage to our clients across the value chain, through the development and commercialisation of new and innovative genetics.

OUR VISION

To breed and develop the best plant genetics possible through the use of cutting-edge technology and breeding strategies. To deliver new varieties rapidly and cost-effectively using our global network.



ACKNOWLEDGEMENTS

In conclusion we would like to say a huge thank you to all those involved in this project. To the Otis team, thank you for your patience and perseverance with this. To our interviewees, thank you for your time and sharing your knowledge and insights so openly with us. Thank you those who we didn't speak to directly for this project but who have influenced and informed us over the last 2 years. It's incredibly encouraging to know there are so many within our industry who share our values and vision for a plant-based revolution. Thank you to Go Well Consulting for your guidance and support throughout. Thank you to our customers and supporters, we quite simply wouldn't be here without you and your ongoing support and belief in our mission. And lastly, a huge thank you to you for reading this report we hope you enjoyed it.

In Oats we Trust

Tim Ryan & Chris Wilkie