



**Kapiro Open Farm Day**  
**Wednesday 25 February 2025**



## Your safety is important to us

Please note the following hazards:

- ⚠️ Mobile plant + vehicles
- ⚠️ Road crossing
- ⚠️ Electric fences
- ⚠️ Stock
- ⚠️ Trip and slip hazards
- ⚠️ Zoonotic diseases (Personal hygiene)

⚠️ Help us keep our farms free of pests, weeds, and disease, with clean footwear and vehicles.

Time	Topic	People
11:00	Welcome and introduction	Mark Leslie, special guests
11.10	About Kapiro farm	Andy Drysdale, Ian Leaf
11:20	Climate adaptation	Sam Bridgman
11:30	Sheep of the Future	Dr Natalie Pickering
11:50	Coffee break	All
12:10	Break into two groups	
(45 mins)	Dairy beef paddock: Halter, Farmax, dairy beef	Ian Leaf, Will Burrett, Andrew Fraser, Russell Mackay
(45 mins)	Sustainability spot: Integrated forestry, environment, mad rag	Penny Baker, Alison Worth, Graham Norton
1:40	BBQ and farm wrap-up	All
2:15	Drive to orchard for integrated horticulture	Andrew Sliper, Kim Leemeyer, Matt Hayward
3:00	Close	

**With many thanks to  
Silver Fern Farms and  
Farmlands for lunch.**

## Our teams today



**Mark Leslie**  
Pāmu CE



**Shaun Neeley**  
UNI GM



**Andy Drysdale**  
BM



**Ian Leaf**  
Farm Manager



**Horticulture managers**



**Will Burrett**  
Pāmu COO

Name	Position
Shaun Neeley	General Manager Upper North Island
<b>Andy Drysdale</b>	<b>Business Manager Northland</b>
<b>Ian Leaf</b>	<b>Farm Manager</b>
Robbie Maxted	Senior Shepherd
Les Bruce	Senior Shepherd
Billy Witehira-Harris	Shepherd General
Zoe Harrison	Farm Technician
Mike Hardie	Stock Manager

Name	Position
<b>Matt Hayward</b>	Horticulture Business Manager
<b>Kim Leemeyer</b>	Horticulture Operations Manager
Paul Hayward	Orchard Development Supervisor
Bill Mahood	Berry Manager
Paul Chamberlain	Berry Orchard Supervisor
Ruud van Spreeuwel	Berry Orchard Supervisor
Rob Bradley	Berry Orchard Assistant
Vinni Bhula	Avocado Orchard Supervisor
Saan Tuoro	Avocado Orchard Assistant
Tickles Rudolph	Avocado Orchard Assistant
Justine De Kock	Horticulture Support Administrator
Eva Adamcova	Applied Research Orchard Assistant



**Andrew Sliper**  
Pāmu CIO



**Sam Bridgman**  
Head of Sustainability



**Dr Natalie Pickering**  
Head Scientist Focus Genetics



**Alison Worth**  
Sustainability Advisor



**Penny Baker**  
Forestry Business Manager



**Russell Mackay**  
Farmax / FarmIQ

## Our Strategy to 2040

OUR VISION

OUR WHAKATAUKI

OUR PURPOSE

OUR STRATEGIC CHOICES

OUR VALUES

OUR OUTCOMES

# Cultivating a Bold Tomorrow, Together.

He mauri tō te wai, He mauri tō te whenua, He mauri tō te tangata

We acknowledge the life force and essence of the *water*, the *land* and the *people*.

To lead the delivery of commercial and sustainable agriculture solutions for future generations.

**DELIVER**  
OPERATIONAL  
EXCELLENCE

**GROW**  
PEOPLE IN A SAFE  
ENVIRONMENT

**CHANGE**  
LAND USE WITH  
INTEGRATED  
FARMING SYSTEMS

**PARTNER**  
TO MEET MARKET  
OPPORTUNITIES

**ENRICH**  
THE NATURAL  
WORLD



Shoulder-to-shoulder



Bold



Genuine



Grounded

Culture of  
excellence

Sustainable commercial performance

Trusted partner

Thriving natural world

# Who we are and what we do

- State Owned Enterprise established out of Lands & Survey in **1987**.
- Core focus on **managing existing land and farming portfolio as efficiently as comparable non-Crown entities**, ensuring the **highest value and best use** through **integrated** dairy, livestock, horticulture, and forestry systems.



**More than 100 farms** in New Zealand are managed by Pāmu



**148,776 ha Pāmu-owned farms**  
**207,272 ha are leased farms**  
(includes Molesworth Station which is a recreational reserve administer by DOC)

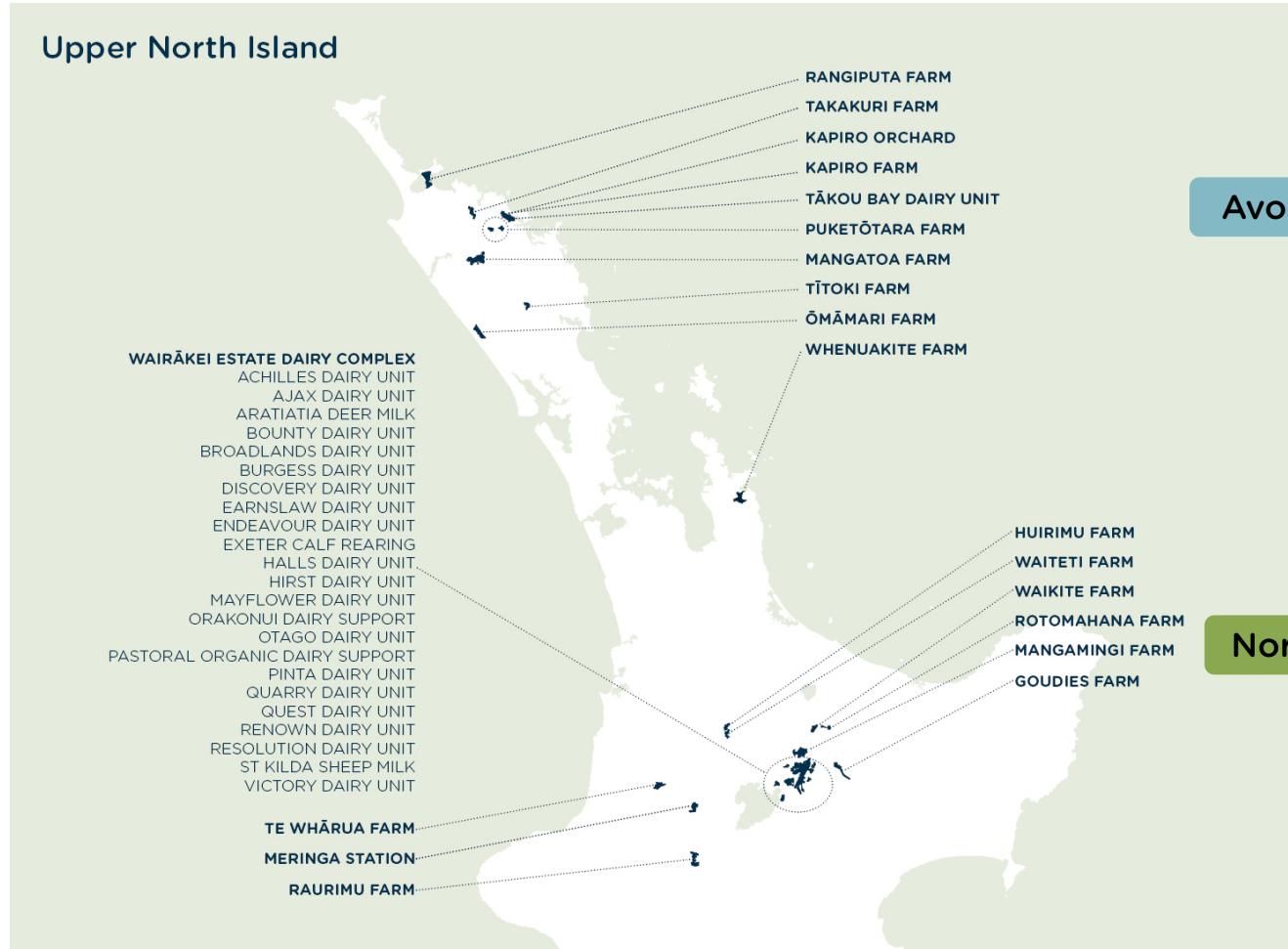


Care for more than 1.3 million stock units comprising deer, sheep and cattle annually

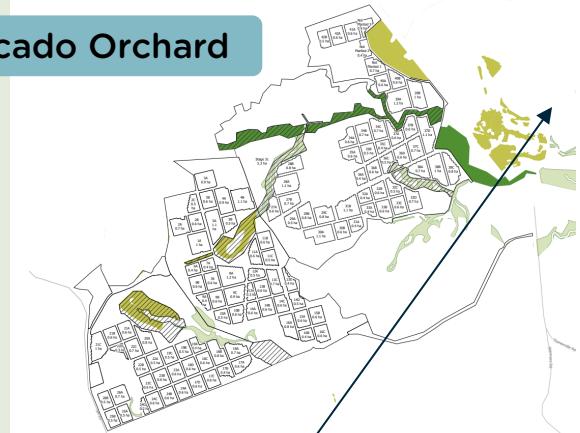


**623 FTE employees**

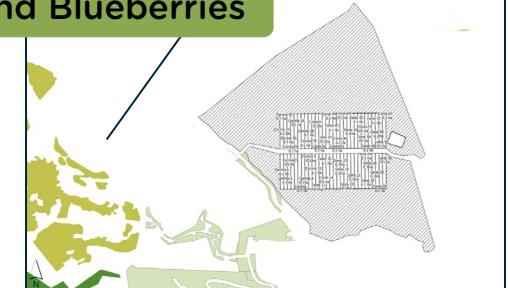
## Upper North Island farms



**Avocado Orchard**



**Northland Blueberries**



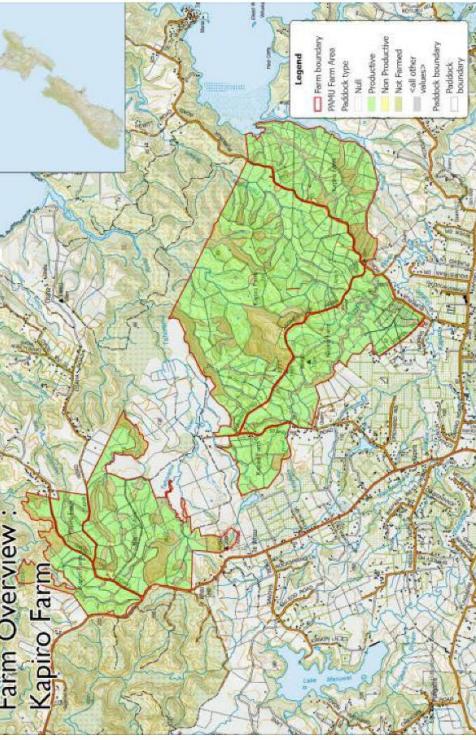
# Kapiro, Northland

## Climate Risks, Vulnerabilities and Impacts

### FARM OVERVIEW

- On rolling hills at 150m elevation north of Kerikeri
- 1,800 productive ha
- Impeded soils on basalt, mainly LUC class 4 and 6
- 3000 sheep, 1800+ cattle
- Beef breeding
- Forestry, berries and avocados.

### Farm Overview :



### 2050 CLIMATE OUTLOOK

- Estimated 2-3 fold increase in frequency of soil moisture droughts by 2050
- Potential for 2-3 fold increase in frequency of extreme rainfall events by 2050
- Heat-related risks in Northland should be interpreted as chronic
- Wind-related risks most likely associated with ex-tropical cyclones and thus occur as a compound wind-flooding hazard



### VULNERABILITY

- Limited economic impact of heavy rain events to date, some flood risk
- Some economic impacts of major droughts noted
  - Farms diversifying with new avocado orchard & dairy unit
  - Some hill areas are low producing and erosion susceptible
    - Increasing vulnerability to drought, extreme heat & erosion
    - High rainfall volatility and rainfall intensity than most Northland Pāmu farms.



DROUGHT



EXTREME  
HEAT

HEAVY  
RAINFALL  
FLOOD



PESTS &  
DISEASE



EROSION



PASTURE  
PRODUCTION



EXTREME  
WIND



EXTREME  
COLD

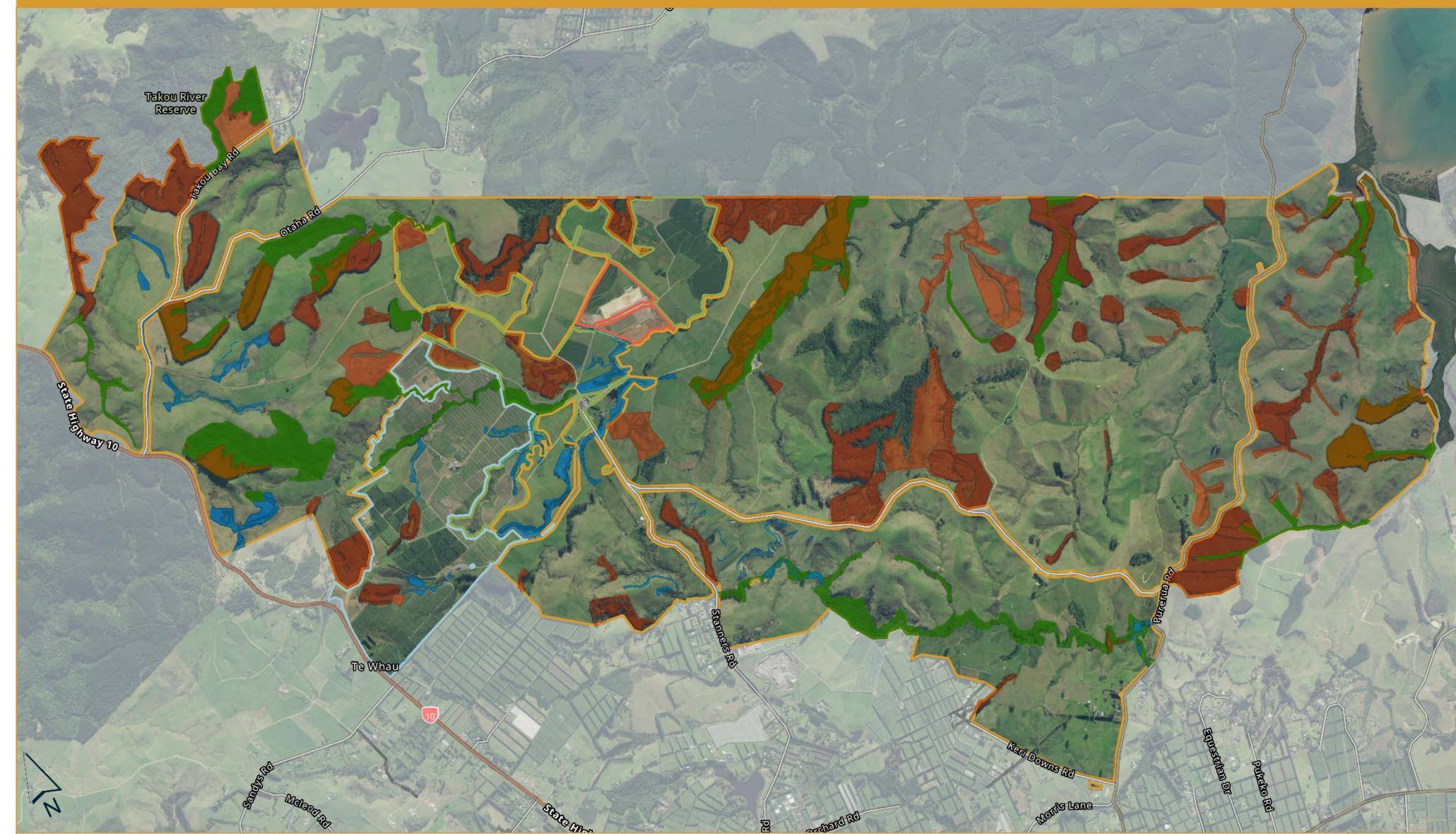


HIGH



LOW

# Kapiro Farm Complex



# Kapiro Farm Overview

Breeding and Finishing Farm: Breeding Ewes, Breeding Cows and Dairy Beef Finishing



## Total area 1,800 eff ha

- Predominately land class 3, 4, 5
- Soils a mixture of mature volcanic loam & mature Greywacke loam
- Rainfall averages 1400mm / annum

## Two blocks of land

- Genetics Breeding Block:
  - 791 eff ha
  - Supports breeding cows, sheep
- Trading Block:
  - Supports dairy beef trading stock
- FY26/27 Forecast of 21,000 SU in total

Sheep	Open	Incoming						Outgoing					Close
		Buy	Transfer	Born	Wean	Find	Age	Sell	Transfer	Die	Lose	Age	
Ewe	1308							498		103			1319
Ewe Hogget	1050							489		77			
Ewe Lamb					813			16	1	1			795
Ram	30									2			49
► Ram Hogget	688							649		10			8
Ram Lamb					806			9	795	2			
Pre-Wean Lambs				1738							119		
Total Sheep	3076			1738	1619			1661	796	314			2171

Beef	Open	Incoming						Outgoing					Close
		Buy	Transfer	Born	Wean	Find	Age	Sell	Transfer	Die	Lose	Age	
► Cow	357							112	40	2			287
► 2-Year Heifer	154							72		5			
► 1-Year Heifer	481		593							9			1086
► Heifer Calf		973			174					4			1122
Bull	18							6		1			11
2-Year Bull	146							143		3			
► 1-Year Bull	467	40						410		6			91
► Bull Calf		165			169								169
Steer	81							69		1			11
► 1-Year Steer	105							9					112
► Steer Calf		18			16								183
► Pre-Wean Calves			386					359	27				
Total Beef	1809	1789		386	359			821	399	58			3072

# Kapiro Farm System

## Breeding Ewes (Sheep of the Future)

- Supporting approximately 1100 breeding ewes and 2ths
- All lambs retained on farm due to trail conditions
- Option to offload male progeny internally within Pāmu if feed conditions get tight.

## Stud Angus Breeding Cows

- Self-replacing Angus stud supporting 350 MA cows – collared with Halter
- Male progeny retained for internal Pāmu use within dairy herds
- Non-replacement heifer progeny shifted into beef finishing programme
- Weaning planned for April.

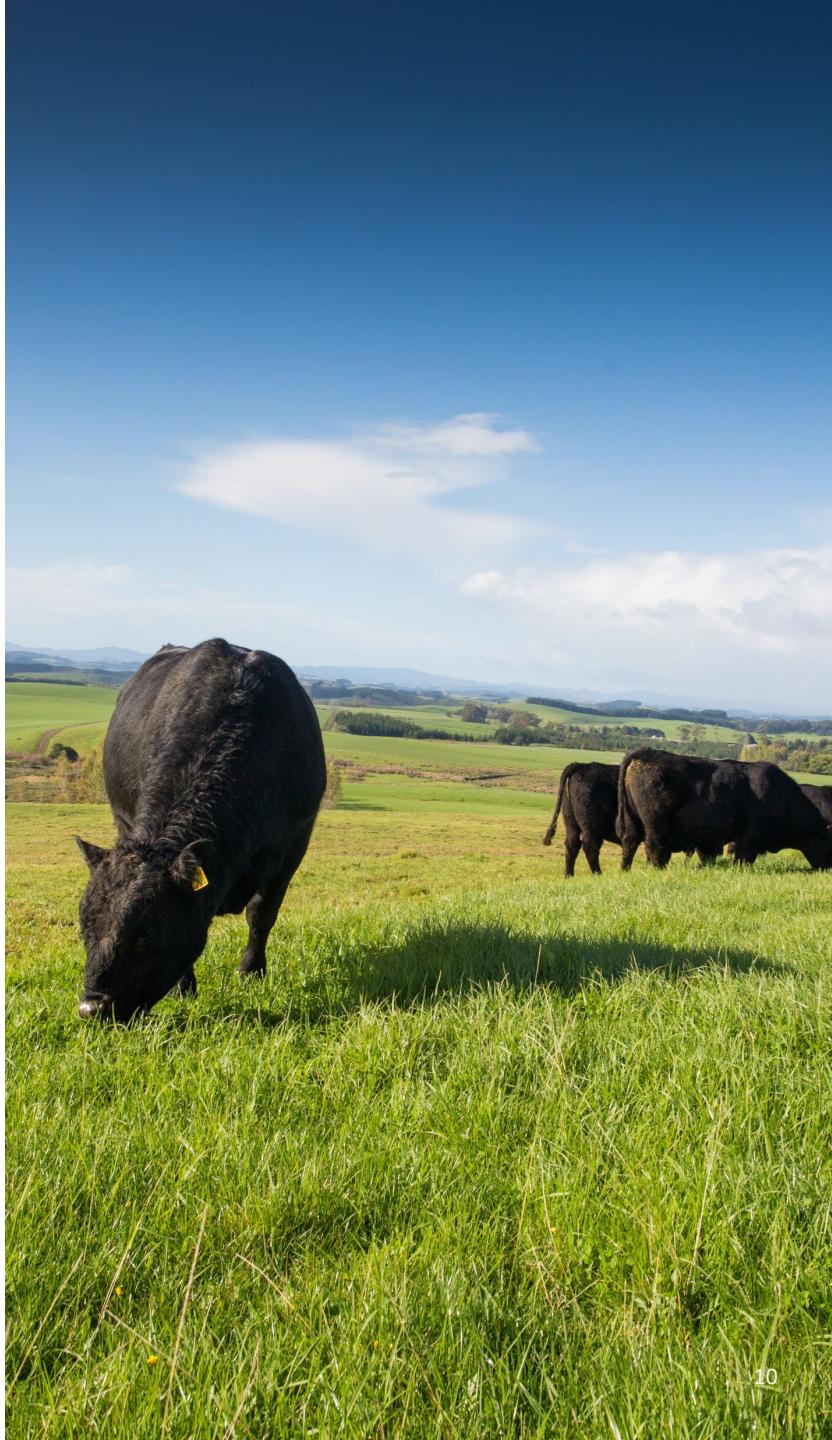
## Dairy Beef

- Sourced internally from Pāmu farms. (Approx 1200 spring born 100kg weaner calves and 800 autumn born weaner calves)

- Arrive on farm from November to Jan, and April to June
- Majority heifers with an element of steers and bulls
- Aim to finish from 18 months to 24 months.

## Pasture, Feed & Production

- Pasture eaten is forecast at 7.5 tDM/ha on an all pasture-based system, with some baleage cut to manage surplus and mitigate summer dry on volcanic areas of the farm
- Approximately 60ha of maize area leased out while rebuilding stock numbers. Provides cashflow and re-grassing opportunities.
- Aiming to winter 800kgLW/ha
- Forecast production is on track for 200 kgMF/ha.



# Farm System Review

In 2025 Kapiro undertook a farm system to review to challenge the following focus areas:

## Focus areas:

- Challenges with current system and infrastructure
- Stock mixes and flows and pressure relief valves
- Feed conversion efficiency and rotational grazing opportunities
- Improve financial return and investment strategy.

The following changes have been implementing following this review:

- A reduction in breeding cows from 750 to 350.
- Implementation of a dairy beef programme to reduce non-replacement dairy calves within Pamu and enhance profitability.
- Increased subdivision and the addition of Halter to utilise more of the feed we grow.



## Breeding resilient, fit-for-purpose animals that can thrive in evolving farming conditions.



### OUR AIM

Our aim is to help New Zealand farmers adapt to changing environmental conditions, consumer expectations, and compliance demands—without sacrificing performance or profitability.

#### BREEDING OBJECTIVES:

- Growth, meat yield, and reproduction
- Methane emissions and feed efficiency (RFI)
- Immune competency and internal parasite tolerance
- Shedding, tail length, and fleece traits
- Heat and humidity tolerance

We're redefining what resilience and productivity look like for New Zealand sheep farmers facing climate, market, and regulatory pressure.

The base of the programme was 2,000 Romney ewes bred from Focus Genetics' Goodies Romney Sires, known for high fertility, productivity and proven facial eczema tolerance.

We've introduced rams from a wide range of breeds - both domestic and international - including shedding and hair types with traits that may hold promise for New Zealand conditions, including:

• Wiltshire	• MeatMaster	• UltraWhite
• Exmoor	• Damara	• AussieWhite
• Dorper	• SheepMaster	• Shire



Sheep of the Future is a Sustainable Food and Fibre Futures funded project between the Ministry for Primary Industries (MPI), Pāmu, and Focus Genetics.

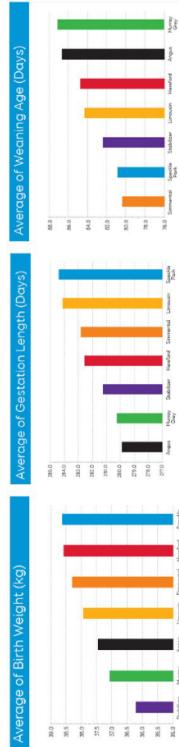


# Dairy Beef Integration

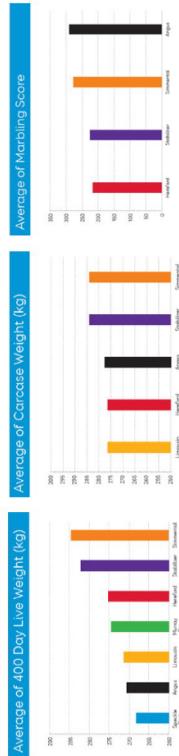
## Genetics and systems expertise combined

Beef sires for dairy are selected for traits including growth, feed efficiency, and meat quality, coupled with short gestation and calving ease.

### Traits important to dairy farmers



### Traits important to beef farmers



### What best suits both needs?

BNZ Genetics Dairy Beef Pregnancy Test:

## What is the impact of dairy beef on GHG emissions?

The Pāmu dairy programme is expected to improve emissions intensity. Reinforcing this approach, a recent AgResearch lifecycle assessment of dairy-beef systems found that:

- Dairy-beef is 22% more efficient for GHG intensity than traditional beef systems.
- Fast-finishing prime dairy-beef systems can achieve 38% to 42% reductions in GHG intensity, thanks to a statistically significant relationship between GHG intensity, cattle age, and growth rate (efficient systems are a significant driver - managing feed efficiency and finishing time in tandem).



## Why move to dairy beef?

- A stock class with the best attributes of different breeds

• Improvement in GHG emission intensity on livestock farms

- Dairy beef heifers provide a lighter weight stock class and earlier finishing
  - Transparent, traceable grass-fed beef
  - Jobs in the regions, calf rearing, grower, finisher enterprises.



## Further Opportunities

- Less than 100 days to weaning
- Accepting later calves as we get closer to 85% reared
- Reducing rearing costs through automation efficiency

# Wearables

## Halter on Kapiro Angus Genetic Programme Cattle

Pāmu has invested in wearable technology over several years, guided by our strategy to apply the right technology, for the right purpose, at the right time.

Wearables are now a core part of our precision farming toolkit. We see particular value in virtual fencing and geofencing capabilities, which enable smarter pasture utilisation, improved feed conversion, and enhanced environmental compliance. These technologies also support better animal welfare, health and safety outcomes, and timely decision-making through real-time data and alerts.

We currently operate four wearable systems across our farms: Halter, eShepherd (Gallagher), CowManager, and SenseHub.

Each has been selected for its unique strengths. Halter, in particular, has been scaled across nine dairy farms and three livestock farms, including Kapiro, with over

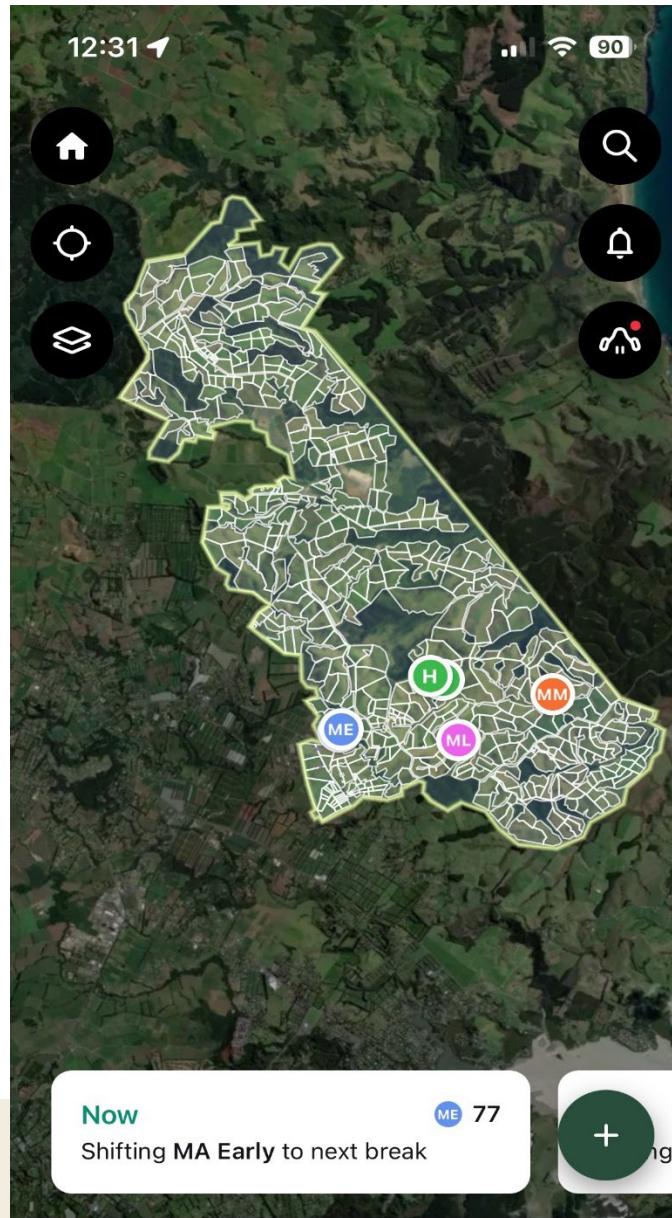
16,000 collars deployed. Its comprehensive functionality — including pasture and environmental management, animal health monitoring, human safety features, multi-farm dashboards, and a successful adoption support model that aligns well with our operational needs.

Pāmu continues to play an active role in the development of wearable technologies, especially in virtual fencing for beef cattle. Our feedback has contributed to product improvements, including increased accuracy and reliability. These advances are enabling greater intensification and more efficient grazing management.

We remain committed to evaluating wearable technologies and adopting them where there is a clear business case and capability to support implementation. Our focus is on solutions that deliver measurable value, uphold animal welfare, and support our broader sustainability goals.



**Halter** is the New Zealand-founded and headquartered agri-tech company leading virtual fencing and grazing technology for dairy and beef operations globally.



# About FarmIQ Systems

The FarmIQ Systems suite of farming tools includes FarmIQ and FARMAX, which help farmers keep track of the past, monitor the present and plan for the future.

Together, the two tools provide a holistic view of the whole farm system, not just profit, production and sustainability, but people, land and processes as well.



## FARMAX®

FARMAX is a modelling and decision support tool, developed for pastoral farmers in New Zealand. The tool allows you to build a model of your whole farm system and use this model to record actual farm performance data, forecast future expectations and create unlimited scenarios for your farm system.

FARMAX accurately predicts the impacts of business decisions before you make them.

- Forecast your production and profit
- Create unlimited 'what if' scenarios
- Set up a plan and test changes to your farm system
- Check biological and financial feasibility of your plan
- Forecast over 200 KPIs including: financial, production, efficiency and environmental indicators
- Track performance against your plan
- Reforecast your plan based on your updates throughout the season
- Compare the physical and financial performance of farmlets within the farm

## FARMIQ®

FarmIQ is a map-based farm management platform that keeps farmers' everyday information in one place.

Thousands of New Zealand farms use the system to get a bird's-eye view of their operation, improve performance, and get all their ducks in a row when it comes to compliance.

- Accurately plan and record straight from the map
- Manage compliance and assurance in one simple and practical place
- Use a range of pasture and animal management tools to help you optimise the growth and use of your grass
- Increase production and profitability with better stock and grazing management, including individual EID recording
- Record and report on incidents and near misses, and identify hazards
- Manage all your staff needs to ensure they are safe, trained, paid and retained

[farmax.co.nz](http://farmax.co.nz)  
0800 327 629

[farmiq.co.nz](http://farmiq.co.nz)  
0800 327 647

# KIWI COAST

## The heart of kiwi country

Kiwi Coast is a collaborative network of 272 conservation groups and projects that covers over 285,000 hectares of Northland.

With iconic kiwi often providing the ultimate inspiration, grassroots pest control groups are connected into a regional network, amplifying ecological gains.

Kiwi Coast links farmers, community-led conservation groups, hapu led projects, schools, organisations and government agencies into an effective and efficient network of stewardship and kaitiakitanga.

Collaborative pest control and dedicated dog control across the landscape creates corridors for wildlife to move safely, linking isolated populations.

Kiwi Coast's collation of Northland trap catch data shows that 966,739 animal pests have been trapped by groups and projects linked into the network over the past 12 years. We are currently collating the data for 2025. **In 2024 alone, 120,520 animal pests were trapped**, helping to keep wildlife safe and enable native habitat regrowth and recovery. On average, over 2,300 animal pests are removed from the Kiwi Coast network every week.

Results are tangible. **Northland brown kiwi are no longer a threatened species**. In eastern Whangarei, where Kiwi Coast coordinates a 15,000 hectare collaborative kiwi corridor ("Kiwi Link"), wild kiwi are free roaming. In 2024, two transmitter-monitored kiwi were tracked safely travelling over 10km in two weeks as they sought new territories and life-long mates.

The Pest Free Purerua-Mataroa project, led by Kiwi Coast and Ngati Torehina has eliminated possums from the tip of the Purerua-Mataroa Peninsula in the Bay of Islands.

Together the Kiwi Coast network is helping the native forests, wetlands and wildlife of Te Tai Tokerau to flourish into the future.

*Kiwi Coast is proud to be working with Pāmu in Northland to protect our kiwi as well as other special species such as Australasian bittern, fernbird, spotless crake, kukupa and dotterel.*



*Zane releasing a kiwi from Kiwi Coast Mid-North Kiwi Rehabilitation Centre*

Our Tai Tokerau Northland farms contribute a collective 17,547 hectares of project area to Kiwi Coast's total of 281,510 hectares.

The key focus of Kiwi Coast is animal pest control — supporting the removal of introduced pests that defoliate forests, compete with native wildlife, destroy nests, wetlands and forest floors and prey on vulnerable native species.

For the past 11 years that Kiwi Coast has been operating, it has enabled the removal of 708,536 animal pests.

# Kapiro QEII covenants

13

245.7 ha  
9% of farm

Covenants range in size from 1 to 45 hectares

Registered between 2006 and 2018.

## Habitats protected on Kapiro

- Riparian margins, waterways & wetlands
- Lowland forest & scrub
- Coastal & semi-coastal lowland and wetlands

## QEII obligations include:

- Plant & animal pest control
- Stock exclusion
- Monitoring
- Biosecurity (Kauri die-back, Mad rag etc).

Pāmu has over 10,000 hectares in QEII covenants and another 1,600 hectares under covenants with the Department of Conservation and other bodies.

These areas protect rare and endangered biodiversity, ecosystem services and valuable landscapes. They include waterways, wetlands, forests and bush, lowland and high-country ecosystems and landscape and coastal environments.



# Madagascar ragwort

## A serious threat to pastoral farming

Madagascar ragwort is an invasive weed that is highly toxic to cattle and horses and rapidly dominates pastures. **Northland beef and dairy farmers are reporting significant production losses with up to 35% reductions in carcass weights and 65% losses in milk solids produced per hectare.** At Rangiputa, Pāmu found that Madagascar ragwort is costing the business more than \$500 per hectare a year.

It is more invasive and harder to manage than other pasture weeds; a single adult can produce 10,000 seeds within 6 weeks of germination; it has multiple germinations throughout the year; there is no single agrichemical control method that controls seedlings and adult plants without damaging beneficial pasture species; seed is spread by wind and as a fodder contaminant or as a 'hitchhiker'.

Madagascar ragwort is widespread in the far north and spreading rapidly in the mid north. If it continues to spread at this pace, it represents a major economic threat to New Zealand.

Northland Regional Council, DairyNZ, Beef + Lamb New Zealand, and Pāmu signed a Memorandum of Understanding (MoU) in September 2025 to develop a business case and an Economic Impact Assessment for Madagascar ragwort. These will help support the continuing push for national-level intervention and funding.



## Protecting your farm

On-farm weed and disease prevention measures, and early detection and control are the best ways to protect your place.



**Graham Norton**  
NRC Biosecurity Officer

**Keeping it out:** Source fodder products from unaffected areas and ensure equipment and vehicles coming on to your property are clean or use your washdown area. Use a 'quarantine paddock' for new stock. Maintain good pasture cover to suppress germination.

**Be vigilant:** Ensure everyone on farm knows what to look for. Confirm the ID of any yellow-flowering plant in pasture (NRC or your local Technical Advisor can assist – ensure any plants transported for ID are in sealed bags).

**Act early:** Once detected, early and regular control are required to prevent plants seeding, or the infestation and seedbank can quickly become unmanageable.

**Controlling established infestations:** There are effective herbicides but no single approach that controls all life stages without damaging beneficial pasture species. Carefully timed, repeated herbicide controls targeting germination peaks just prior to flowering are usually required to bring well-established infestations under control. Pasture management and improvement are also key to reducing germination rates.

For more info scan the QR code or visit  
[nrc.govt.nz/MadagascarRagwort](http://nrc.govt.nz/MadagascarRagwort)



# The right tree in the right place

This is a region that already experiences climate pressure — warmer temperatures, more intense rainfall events, dry periods, and erosion risk.

Trees provide:

- Shelter for stock in hotter, drier conditions
- Stability on erosion-prone land
- Another income stream that isn't tied to the same seasonal pressures as farming

Forestry is integrated into the farming platform. That means:

- Livestock still graze around and between planted areas
- Forestry is planned alongside stock policies, not separately
- Farm managers and forestry teams work together, not in silos
- We plant commercial species where timber and carbon returns make sense, and we plant natives where the main value is environmental.



Forestry is a **core part of Pāmu farming systems** to build a balanced, resilient business

- We focus forestry on **steep, erosion-prone or lower-productivity land**
- Most farms integrate trees into their systems for **commercial return, shelter, erosion control and biodiversity**.
- Over time, we are moving toward **around 15% of Pāmu-owned land in production forestry**, planting roughly **1,000–2,000 hectares a year**.
- While radiata pine remains important, we are **diversifying species** (including redwoods, eucalypts, cypress and natives) to improve resilience and future value.
- All forests are **production forests planted to be harvested**, with carbon benefits sitting alongside, not instead of, commercial outcomes.
- Land-use decisions are made through **whole-of-farm planning** and worked through with farm teams first.

## Diversification

While land use change has been part of Pāmu operations since its inception, diversification into forestry and horticulture was accelerated in 2017 and 2019 as a way to mitigate risk and enhance revenue streams beyond traditional dairy and livestock.

The company's strategic move into horticulture aims to leverage its land and water assets to create higher-value production systems and increase the value of the land.

This diversification provides some protection to market volatility in the dairy and meat sectors but also an opportunity to tap into growing consumer demand.

The orchard has been designed for flexible use. While we are currently growing avocados and blueberries, the orchard and tunnels provide flexibility to change in the future.



*“Given the land we have been allocated – much of which is not inherently high-value – our decisions centre on gaining appropriate value from the land within our capital constraints. We must operate within our debt ceilings, knowing we also share the demand on capital with the rest of the business.”*  
*~ Chief Investment Officer Andrew Sliper.*

# A model of adaptive land use

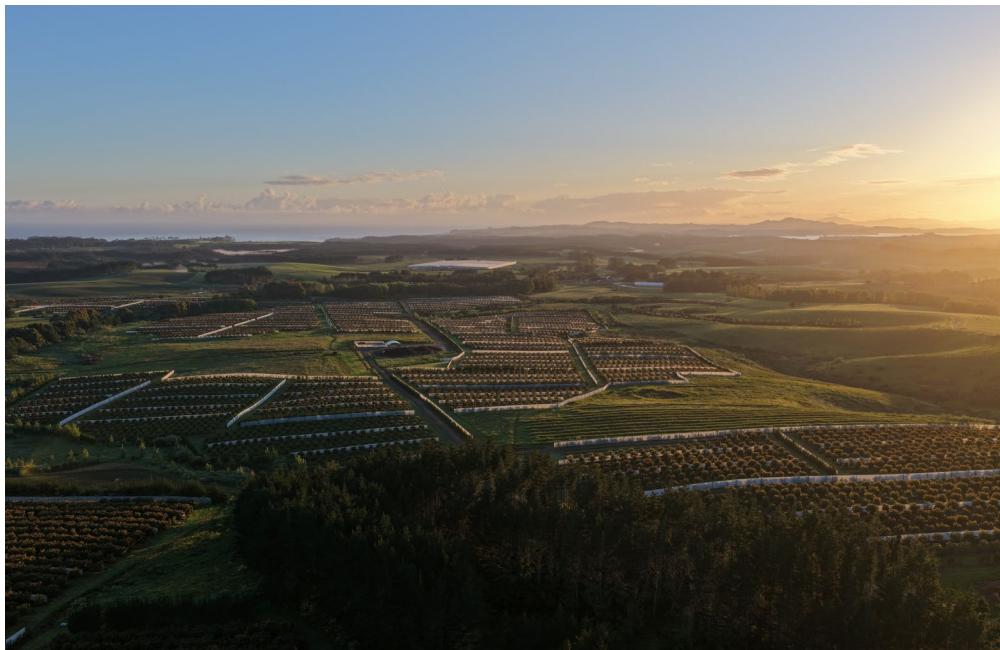
## Avocados & Blueberries

Formerly a dairy and livestock operation, parts of the farm have been developed into horticulture, with avocado and berry orchards now producing commercial quantities.

The site benefits from reliable water access and versatile infrastructure, enabling year-round production and responsiveness to consumer demand.

A climate risk assessment for Kapiro highlighted increasing drought and extreme rainfall risks, reinforcing the value of tunnel-based growing systems and additional investment in drainage.

The horticultural development is also creating new employment opportunities, with plans to grow to a team of >20 permanent and >60 seasonal staff.



# Orchard Structure

## Avocado Orchard

- **1ha Trial Block (planted in 2019):**
- **2020 Stage 1 (17 ha)** In fourth year of production
- **2021 Stage 2 (22 ha):** In third year of production
- **2022 Stage 3 (30 ha):** In second year of production.

### Production Overview:

- **Yield:** >20 tonne per ha on most Stage 1 blocks in 2025
- **Harvest:** starts in early June into the local market followed by the export market.



## Blueberry Orchard

- **2024 Stage 1 (6ha) Corrina (2Ha) Ceres (4 Ha)** in first year of production
- **2026 Stage 2 (6ha) Development underway.**

### Production Overview:

- **Yield:** >20 tonne per ha on our first pick of 'Corrina'
- **Harvest:** Varieties selected will be harvested on the shoulders of the season selling both domestically and export.



## Labour and a culture of safety

**The orchard team is led by Matt Hayward (Horticulture Business Manager) and Kim Leemeyer (Horticulture Operations Manager).**

Both have been on the orchard since its inception and have overseen the planting of the trial block and all trees since. Paul Hayward supervises land preparation and irrigation installation.

Bill Mahood (Berry Manager, Blueberries) leads our berry operation into commercial production.

Full-time operational staff numbers have grown as the orchard has matured. The team hire casual labour for development, planting and orchard operations throughout the year.

The development of berry tunnels has demonstrated the ability to share staff across the operations and take advantage of changing weather; i.e., pruning avocados on fine days and working in the tunnels when the weather dictates.



