Edenham Open Farm Day

Thursday 2 October 2025

Your safety is important to us

Please note the following hazards:

- Mobile plant + vehicles
- Heavy machinery
- Electricity
- Stock
- Trip hazards
- Zoonotic diseases (Personal hygiene)
- Driving and dust / mud

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

PĀMU™
LANDCORP FARMING LIMITED

Time	Topic
10:30 am	Guest arrival, biosecurity, check-in
11:00 am	Karakia, H&S, plan for day
11:10 am	About Pāmu and our strategies
11:35 am	LUNCH
12:15 pm	Split into 3 groups for rotation 1
1:00 pm	Rotation 2
1:45 pm	Rotation 3
2:30 pm	Return to base for wrap up
3:00 pm	Close

You are invited to download SafeVisit. This will allow you to access the map and farm information on your phone.

With thanks to LIC, Silver Fern Farms, and Atkins

Who we are and what we do

PĀMU™
LANDCORP FARMING LIMITED

- **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

620 employees

Edenham overview

Commercial farming operation managed by a team of four people

Manager - Bryn Henderson
Stock Manager – Brad Hartley
Senior Shepherd - Jaz Cook
Machinery Operator – Tim Gordon.

Simplifying farm stocking policy to match pasture curve

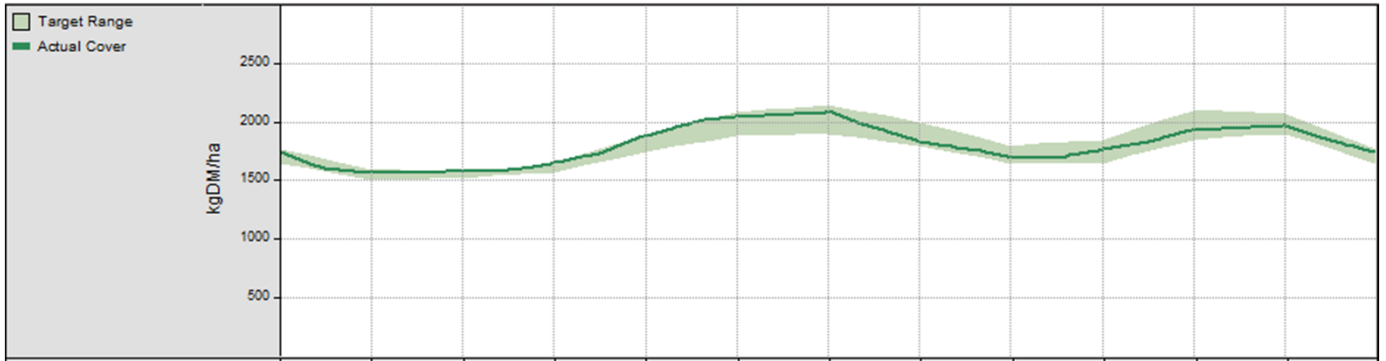
- Three stock classes
- 4000 MAE – lambs – bottom 10% transferred to Ahuriri, rest finished
- 1500 autumn-born calves – 1,200 into one winter kill programme, 300 transferred up into breeding farms to join the traditional cattle kill
- 15,000 trade lambs transferred in from breeding farms at 30kg+
- This season, 480 once-bred heifers will be taken to kill.

Strategic focus includes managing seasonal variation risk, wet winters/dry summers

- 100ha summer forage crop
- 100ha fescue
- Ewe number to match lambing and wintering on the hills
- 12-month-old winter cattle policy
- Hoggets grazed off farm for 12 months.

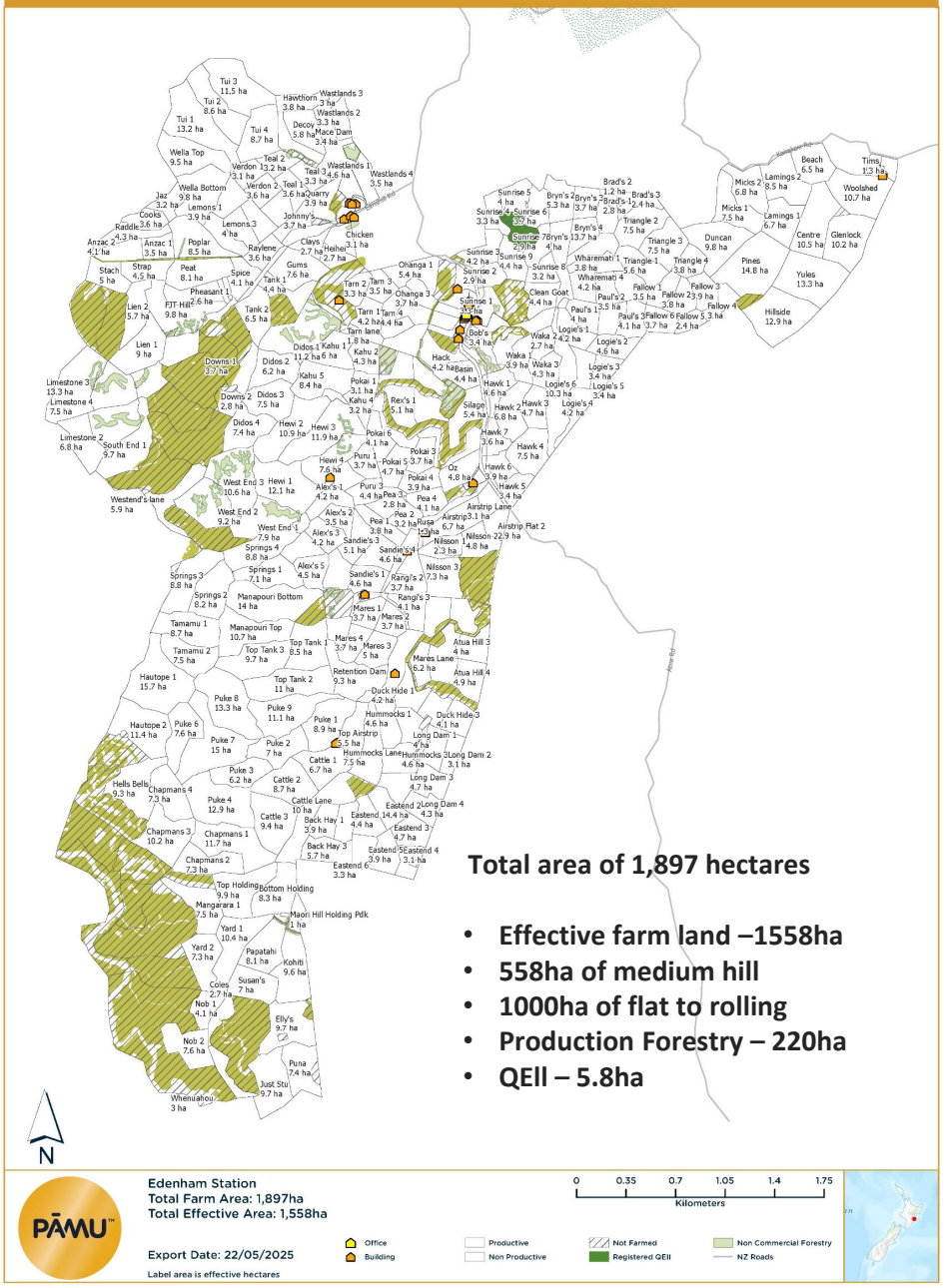
Key Targets for Edenham

- Farm systems built around simple stocking policy and grazing integration, and farming profitably in the face of worm resistance
- 65% exp/inc ratio
- +250kg production per ha
- Keep average cover between 1500kg/dm – 2100kg/dm
- No lambing ewes on finishing platform
- Reliable water system.



(kgDM/ha)	Start	J	A	S	O	N	D	J	F	M	A	M	J
Forecast/Actual	1,746	1,565	1,583	1,654	1,887	2,052	2,092	1,835	1,699	1,764	1,939	1,972	1,742
Minimum	1,326	1,292	1,652	1,635	1,733	1,528	1,422	1,204	1,057	1,196	1,333	1,308	1,435

Edenham Station



Budgeted NOP FY26

	Full Year Budget
	$k
Production KgCWT	**409,601**
Livestock Revenue	2,775
Forestry Revenue	0
Other Revenue	61
Total Revenue	2,836
Total Farm Working Expenses	838
Animal Health	105
Livestock Management	10
Feed	50
Cropping	200
Grazing & Run Off	68
Fertiliser	208
Other FWE	198
Total Personnel	405
Total Repairs and Maintenance	129
Total Services and Supplies	42
Total Communications and Travel	16
Total Standing Charges	93
Total Financial	0
Total Expenditure	1,523
EBITDA	**1,313**
Total Depreciation	105
Net Operating Profit (NOP)	**1,208**

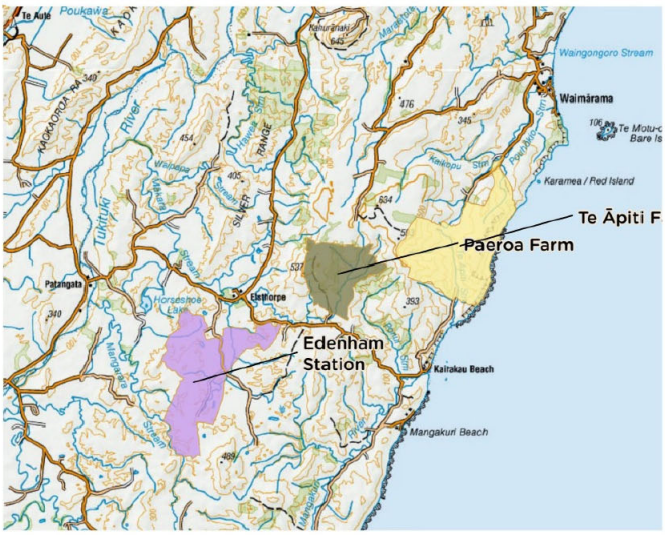
Edenham Station, Hawke's Bay

Climate Risks, Vulnerabilities and Impacts

PĀMU™
LANDCORP FARMING LIMITED

FARM OVERVIEW

- Edenham is a sheep & beef farm in gentle hill country at 200-300m elevation.
- The farm is about 30 Km northeast of Waipukurau.
- 1640 productive ha
- Brown earth, recent & gley soils,
- LUC classes 3,4 & 6
- 14,000 stock units



EXTREME COLD | FIRE | EXTREME WIND | PASTURE PRODUCTION | EROSION | PESTS & DISEASE | EXTREME HEAT | HEAVY RAINFALL FLOOD | DROUGHT

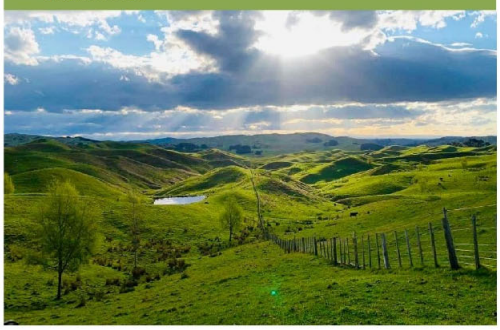
LOW ← LIKELIHOOD → HIGH

2050 CLIMATE OUTLOOK

- Extreme rainfall events will be 2-3 times more frequent
- Baseline risk of drought is already high in these regions
- Estimate doubling of risk of soil moisture drought events by 2050
- Risk of extreme heat stress for livestock is moderate and will likely worsen over time
- Cold-related risks are modest and reducing

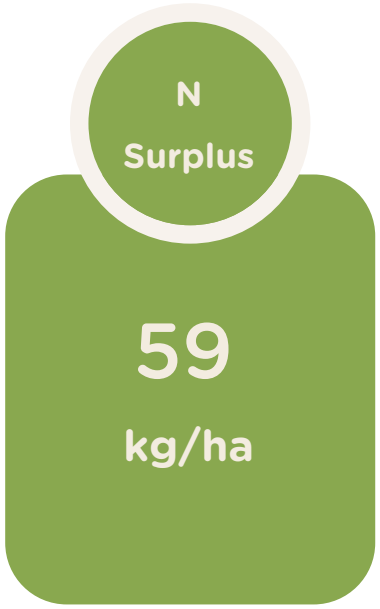
Vulnerability

- Soils are moderately erodible in part, but extensive protection plantings in place.
- High drought risk, frequent high values of meteorological drought.
- Values for extreme high rainfalls also very high, up to 280mm in 24 hours with high volatility.
- Good stock shade from scattered trees, also providing erosion protection.
- Generally high soil fertility on flats, low fertility in hill country.
- Some moderate flood risk to flat areas.
- Probable impacts of droughts visible in EBIT records
- Fairly gentle slopes and extensive flats reduce erosion risk



FY2024 Nutrient Management

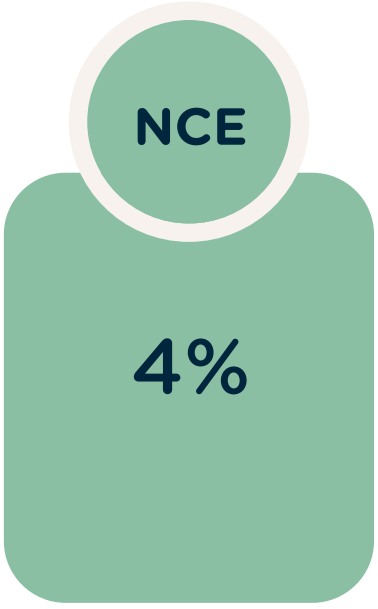
(from Overseer)



What is N surplus?

N surplus = N inputs (fert, clover fixation, effluent etc) less outputs (meat & fibre). Surplus not used has the potential to be lost via leaching.

What does good look like?
< 60 kg livestock



What is NCE?

Nitrogen Conversion Efficiency is a measure of how much N is converted into feed > meat, milk & fibre. This number is directly linked to N surplus and affects N loss.

What should average look like?
17% livestock

What is N loss?

N loss is nitrogen lost via leaching and to the atmosphere. This number is directly linked to N surplus, NCE and the GHG N_2O.

What's the regional average?
< 13 livestock

7

Lower North Island stocked for success

Overview

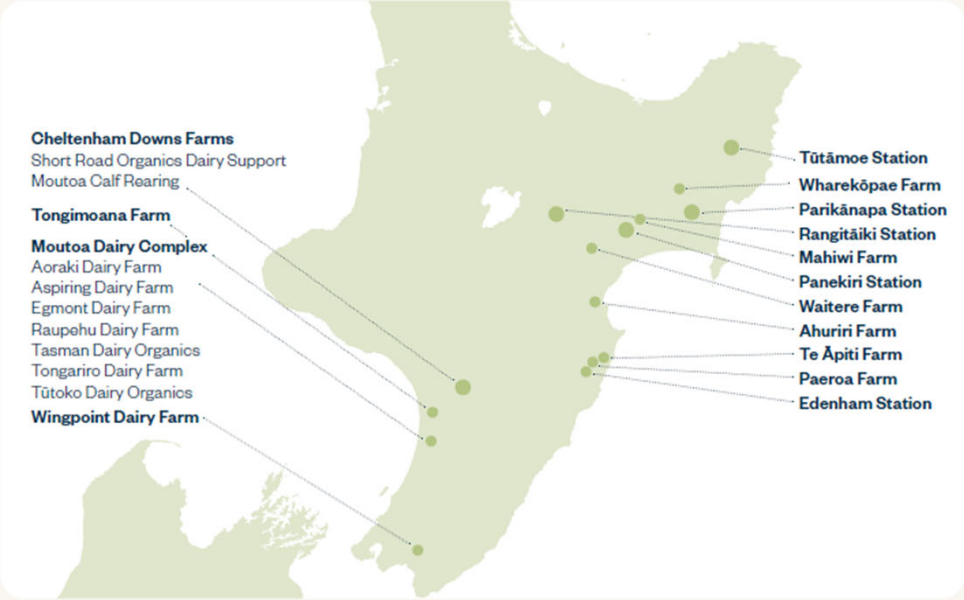
In the lower North Island, smarter systems, regional planning, and integrated farm strategies are driving a step-change in performance. Under the leadership of General Manager Sam Bunny, Pāmu has implemented a transformative integrated approach focused on simplifying operations, enhancing pasture use, and aligning stock policies with feed curves to optimise productivity across the region.

Using FARMAX modelling, individual farms were tailored to match stock policies with seasonal feed availability, improving both feed efficiency and operational execution.

"Simplifying farm systems, such as removing stock classes, has enabled more consistent management and better pasture use, particularly during spring, helping to avoid early-season overgrazing and boosting overall performance," Sam Bunny says.

Strategic livestock transfers, including forward store lambs and lower-performing weaned lambs, have been redirected to specialist internal finishing systems, enhancing growth rates and throughput. The acquisition of more than 10,000 dairy beef calves has further-strengthened cattle production, supported by early-stage feeding protocols using lucerne and other specialist feeds that have improved animal health and feed conversion efficiency.

Structured stock flows between farms have reduced reliance on external purchases and maximised internal resources, aligning with the company's broader goals for sustainable, high-performance livestock management.



Key achievements

Record lamb kill & finishing success

Nearly 80,000 lambs were processed from the lower North Island at an average weight of 19.5kg. Strategic transfers of +30kg forward store lambs from breeding to finishing farms contributed to 78,469 lambs finished, exceeding previous finishing records by 26,912.

East Coast breeding & crop performance

High-quality lambs bred on East Coast farms were moved to finishing farms and placed on summer brassica, lucerne, and chicory crops, ensuring optimal growth. Autumn rains in Hawke's Bay and Gisborne enabled crops to rebound, allowing the lamb plan to be executed at scale.

Lambing lift & bottom 5% strategy

Expanded agronomy programmes on finishing farms drove a 3% uplift in lambing percentage, resulting in 6,500 more lambs over budget. Weaned lambs in the bottom 5% were redirected to specialist summer crops for late-season finishing, retaining them in-region.

Pasture use & system simplification

A regional focus on lifting on-farm demand and using spring pasture led to pasture use rising from 75.6% in FY24 to 82.4% in FY25. Simplifying farm systems by removing stock classes enabled more consistent execution and improved pasture management.

Dairy beef strategy & specialist feeding

More than 10,000 dairy beef calves were introduced into the region. Early-stage feeding protocols using lucerne and targeted feeds for the 100kg to 200kg liveweight bracket improved animal health and feed conversion efficiency.

Integrated planning & stock flows

Each farm system was modelled and aggregated into a regional model through FARMAX to align stock policies with feed curves, increasing feed use and operational efficiency. Structured inter-farm stock flows reduced reliance on external purchases and optimised the use of Pāmu livestock.

Lower North Island regional performance

Lambing uplift

+3%

6,500 lambs over budget

Calf rearing

81%

of calves reared internally at $390/head, <5% death rate

Livestock throughput

78,469 lambs

processed at 19.5kg (26,912 more than FY24)

11,000 cattle

processed up from 8,300 in FY24.

Premiums

>$3M

in premiums delivered – GAPP and FAP+ audits

Production forestry

18%

of Lower North Island farmland is in production forestry. This generated an additional 1.6% return on assets in FY25 demonstrating how the integration of forestry is supporting farm profitability and the benefits of "right tree, right place".

Overall production uplift of

783,810 kg

to 6.2m kg with a 15% increase in kg per hectare from 201 in FY24 to 231 in FY25.

Regional Net Operating Profit

$22.7M

NOP compared with $5.6 million in FY24

Integrated forestry and QEII covenants

The Pāmu forestry strategy is built around the principle of "the right tree, in the right place, for the right reason". It is aligned with government expectations for commercial viability and environmental responsibility. Forestry is treated as a complementary land use alongside livestock, dairy, and horticulture, and is integrated into broader farm systems.

The aim is to plant up to 15% of Pāmu-owned land in rotational production forestry over time, equating to approximately 23,000 hectares across the motu (we are currently at 17,751 hectares, which equates to 11.5%). Carbon sequestration is treated as a co-benefit, not the primary driver. Pāmu also has 11,296 hectares under biodiversity protection in covenants with the QEII Trust.

Our approach is guided by farm environment plans, which identify marginal land—typically Land Use Capability classes 6 and 7—as suitable for forestry due to erosion risks and lower productivity. More recently, there has been a shift away from traditional Pinus radiata toward higher-value and more resilient species such as tōtara, redwoods, eucalypts and cypress. Additionally, native trees are being planted in riparian zones to enhance biodiversity, water quality, and provide permanent carbon sinks. Integrated forestry contributes to climate resilience, greenhouse gas (GHG) emissions reduction, optimised land use, and improved farm profitability.

Mahiwi Station, Wairoa

LNI KPIs and focus areas

PHYSICAL

1. **Pasture** – Maintain covers within target range
2. **Production** > 420kg/MS Cow
   > 200kg/CW Breeding
   > 300kg/CW Finishing

FINANCIAL

1. **Budget Management** – Manage expenditure within budget
2. **Income expenditure ratio** < 65% Livestock
   < $6.25 COP Dairy

People	Animals	Pasture	Wastage	Value Stream Optimisation
✓ Safe People, Safe Farms ✓ Engaged team cultures ✓ Development and Training	✓ Reproduction ✓ Death Rates ✓ Young Stock Performance	✓ Maintain Pasture covers within Target Range ✓ Utilise Spring Pasture ✓ Demands/ha	✓ High Farm Presentation ✓ Improve Farm Asset ✓ Efficient Work Plans	✓ LNI regional optimisation of Stock ✓ Internalisation of external spends – feed, seed, labour ✓ Compliance of Assurance programmes

Regional objectives

1. Manage seasonal variation risk effectively
2. Simplify individual farm systems to enable sustainable execution of performance year on year
3. Structured farm production policies
4. Utilising a higher % of Pāmu-owned stock in line with farm production objectives
5. Use of external markets where required to maximise pasture and production targets
6. Structure breeding programs to ensure replacement rates, and the use of terminal sires is being maximised
7. Maximise the production out the gate of our finishing farms

OBJECTIVES

1. Optimising regional production and profitability
2. Optimise pasture management and utilisation
3. Have the right animal on the right land class more often

Forestry at Edenham

Production Forestry

202ha

135 ha of radiata planted

This year harvested

6.81ha

$96,148 return

1,077 NZUs

In 2025 @$52.75 = $56,811

Non-Production Native Plantings

12ha

around riparian zones and retired areas

Book value

$1.5m

Mixed species plantings

38ha

eucalyptus, redwoods, cedars, cypresses

Poplar Plantings

Commercial ETS and environmental

Environmental & Operational Benefits

- Erosion control
- Waterway protection
- Shade/shelter for stock
- Biodiversity uplift
- Longevity of rotation
- Reduced erosion (coppicing)

Key achievements for lower North Island dairy beef

Dairy breeding strategy

Targeted mating to high-genetic-merit dairy cows to maximise dairy production. High-genetic-merit beef sires are used on remaining cows to maximise the genetics of dairy beef progeny.

Dairy beef strategy

The Moutoa facility reared 1,800 spring calves and 480 autumn calves, supporting the region's autumn calf strategy.

High rearing efficiency

Achieved 81% calf rearing across the dairy team at an average cost of $390/head and a death rate under 5%, showcasing both cost control and animal welfare.

Cross-team collaboration

The success was driven by seamless teamwork between the Cheltenham and Moutoa teams.

Infrastructure use

The facility's integration with three external rearers maximised capacity and reduced external reliance.

Performance uplift

The initiative contributed to a broader uplift in dairy beef supply, with the lower North Island securing more than 10,000 dairy beef calves, supporting the processing of 11,000 head of cattle.

Reduction in emissions

Dairy beef animals have 22%-43% lower emissions per kilogram live weight compared to traditional beef animals (percentage reduction related to type of dairy beef animal i.e. veal, fast prime or average 28-month steer).

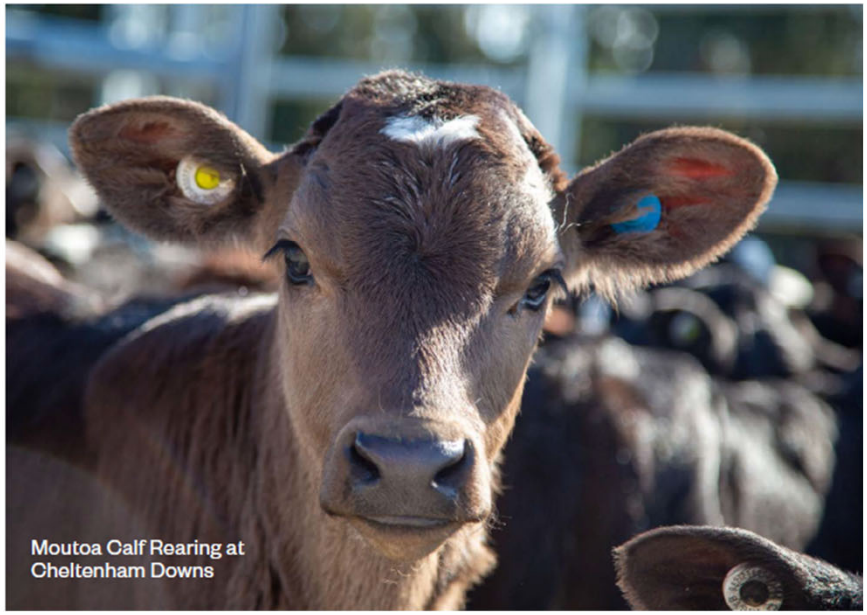
Impact

- Operational excellence: Delivered measurable improvements in calf survival, cost efficiency, and genetic merit.
- Strategic enablement: Supported broader goals of pasture use, reduced wastage, and improved replacement rates.
- Cultural shift: Reinforced the "shoulder-to-shoulder" ethos, with shared ownership and pride in outcomes.

What is dairy beef?

Pāmu is aiming to rear all calves born on its dairy farms by 2030. Beef sires over dairy means non-replacement calves can be raised for meat production. Pāmu is currently raising 65.5% of the calves produced.

New Zealand's dairy products are globally valued for their grass-fed origins. Unlike indoor systems used elsewhere, our cows graze outdoors – bringing seasonal challenges. Most calves are born in spring, requiring simultaneous rearing at scale. Significant changes to farm systems, capabilities in calf care, forage management, finishing, and processing are required to make dairy beef at scale attainable.



Moutoa Calf Rearing at Cheltenham Downs

Managing drench resistance at Pāmu

Drench resistance is a critical issue for Aotearoa New Zealand, posing significant challenges to effective parasite control, animal health and farm productivity.

Pāmu uses very sensitive testing to detect drench resistance. We have continued to test single active drenches (Benzimidazoles, Levamisole and Mectin drenches), as well as combinations. By doing this, we have an early warning system in place to detect underlying resistance that may be masked by combination use.

Resistance to triple combination drench products is now common across the industry, with recent laboratory data suggesting 35% to as many as 50% of farms may be affected.

Some Pāmu farms have worms that are resistant to triple combinations.

Our data for resistance to single actives single actives (where the drug tested achieves less than 95% egg count reduction in any worm genus) shows:

- Of the 49 sheep, beef and dairy support Pāmu farms, the national average is 29% of farms showing resistance in the three single actives in one or more worm genera across both sheep and cattle properties.
- 15 out of 26 North Island sheep farms (58%) showing resistance in the three single actives in one or more worm genera.
- Just two of our 20 farms (10%) in the South Island are in the same category. This is substantially better than the industry average.
- Pāmu has four Efficient Beef System (EBS) farms and one calf-rearing facility with diagnosed resistance to more than one drug.

Parasitic worms repeatedly exposed to drenching over generations are developing the ability to tolerate it, and this is passed on to their offspring.

The past three years have seen a rapid decline in drench efficacy in both sheep and cattle across New Zealand farms. According to a recent study, triple drench resistance is a problem faced by more than one- third of New Zealand farms.

Good farm systems' practices that improve nutrition to all animals and reduce larval intake by young stock, can reduce our dependence on drench making resistance less of a threat.

Principles for living with combination drench resistance

Ginny Dodunski, Wormwise Programme Manager

Once we are farming with combination drench resistance, we have to set up systems that reduce our reliance of drench. Simply changing to regular use of the newer drench actives (Zolvix® and Startect®), without system change, will quickly result in development of resistance in these.

Well-fed stock can cope better with worms. This applies across all stock classes but typically requires most attention in the ewe flock. A really well-fed ewe flock also weans much heavier lambs - reducing the number of lamb days on-farm and amount of drench used. 'Backgrounding' of lambs on poor feed with lots of regular drench to keep them healthy is also a no-no. Re-thinking how to hold lambs on a moderate growth plane with lower drench inputs is required.

Young stock perform much better when offered 'low worm' feed. High daily worm larval intake reduces the appetite and growth of young stock. Regular drenching does not fix this. Young stock can build their own immunity to worms, whilst growing very well, with substantially lower drench inputs, when offered high quality grazing or forages with reduced worm larval contamination. Options include forage crops, new grasses and grazing swaps with other species. Even long grazing rotations, where lambs pick the best components of perennial pastures and are moved off before they hit the 'worm zone' can work, when other stock classes follow to maintain quality and act as vacuum cleaners.

Adult stock can be used as both 'worm vacuum cleaners' and refugia. Refugia is a source of non-drench-resistant worms to 'dilute out' resistant worms being passed by young stock. Adult stock must share grazing areas with young stock for this to be effective. Where ewes are used in this role, a regular programme of body condition monitoring and drafting should be in place to minimise the formation of a costly tail end.

Drench use should be based on demonstrated need, and constant checking of drench performance is a must. A well-fed mixed age ewe flock should require no or few drench inputs. Faecal egg counting of light MA and 2 tooth ewes can be used to determine when or if drench is required in these. Young stock on clean forage systems can and should have their drench inputs reduced. The FEC 10/FEC 28 approach is a useful system to both check efficacy of drenches throughout the year (FEC10 – a faecal egg count 10 days after treatment) and monitor worm build-up in the animals to determine the timing of the next drench treatment (FEC 28 – a faecal egg count 28 days after the last treatment).

The good news is: farms that have successfully implemented these principles have been able to return to limited and careful use of previously-failing older drenches, once they have cleaned up the resistant worm population that had developed and put in place strategies to prevent it building up again.

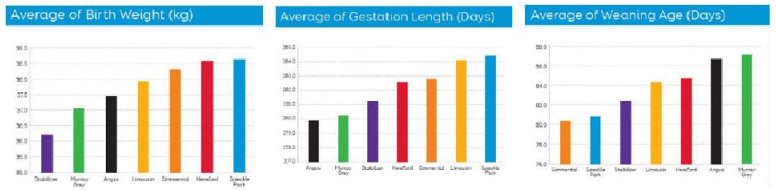
Dairy Beef Integration

PĀMU™
LANDCORP FARMING LIMITED

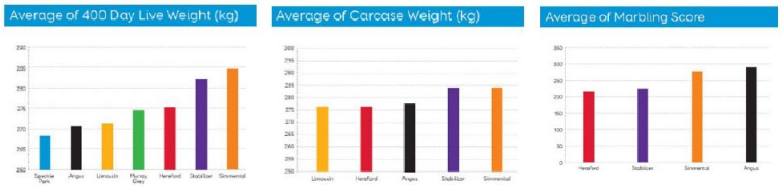
Genetics and systems expertise combined

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?

B&LNZ Genetics Dairy Beef Progeny Test

Pāmu aims to rear all calves born on our dairy farms by 2030, reducing waste and improving beef emissions intensity.
Currently, 63% of our dairy calves are raised for beef, with a target of 75% by the end of FY26.
This initiative requires changes to farm systems and the development of new skills, including calf rearing, forage management, right through to processing and markets.

Year	% of calves reared
2022	48%
2023	49%
2024	56%
2025	63%

What is the impact of dairy beef on GHG emissions?

The Pāmu dairy beef 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 75% reared
- Reducing rearing costs to less than $400/calf

Genetics

Dr Natalie Pickering (PhD, BAppSc (Hons1), Animal Breeding Scientist at Focus Genetics, with our research community and commercial farmers; implements research into our sheep and deer breeding programmes, directing genetic plans, and focusing on continual improvements for the sector.

With a background in farming, Natalie has worked on numerous traits including – meat eating quality, climate adaptation traits, low-methane sheep, flystrike and dags, and host resistance to internal parasites.

Paul Charteris, Beef Genetics Product Lead, LIC, began his career in beef cattle genetics in the mid 90s – working at Massey University, Colorado State University and for a biotech company in California. Following a 180-degree career shift for where he founded some of New Zealand's best know-known ultra-distance running events, he's back on track and looking to create new dairy-beef genetic opportunities for New Zealand farmers.

sheep of the future

sheepofthefuture.co.nz

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 breed from Focus Genetics Goudies Romney Sires, known for high fertility, productivity and 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
- Exlana
- Dorper
- MeatMaster
- Damara
- SheepMaster
- UltraWhite
- AussieWhite
- 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.

sheep of the future

FOCUS GENETICS

PĀMU™ FARMS OF NEW ZEALAND

Ministry for Primary Industries
Manatū Ahu Matua

LIC & Dairy-Beef

The use of beef straws over dairy cows continues to grow, reshaping mating strategies across New Zealand herds.

Technology, genetics, and efficiency gains are driving more beef straws into dairy cows.

LIC is investing heavily in beef breeding programmes, including genomics and data-driven selection, to deliver sires that combine calving ease, growth and carcass quality.

LIC selects superior sires known for easier calving, yet good growth and carcass traits, ensuring calves that perform for both dairy farmers and finishers.

Coming soon:

Synergizer® and KiwiPrime®, two new beef brands that will further strengthen LIC's dairy-beef offering.

LIC® PĀMU FOCUS GENETICS

PĀMU™
LANDCORP FARMING LIMITED

Our Strategy to 2040

OUR VISION

Cultivating a Bold Tomorrow, Together.

OUR WHAKATAUKĪ

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*.

OUR PURPOSE

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

OUR STRATEGIC CHOICES

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

OUR VALUES

Shoulder-to-shoulder **Bold** **Genuine** **Grounded**

OUR OUTCOMES

Culture of excellence | Sustainable commercial performance | Trusted partner | Thriving natural world