

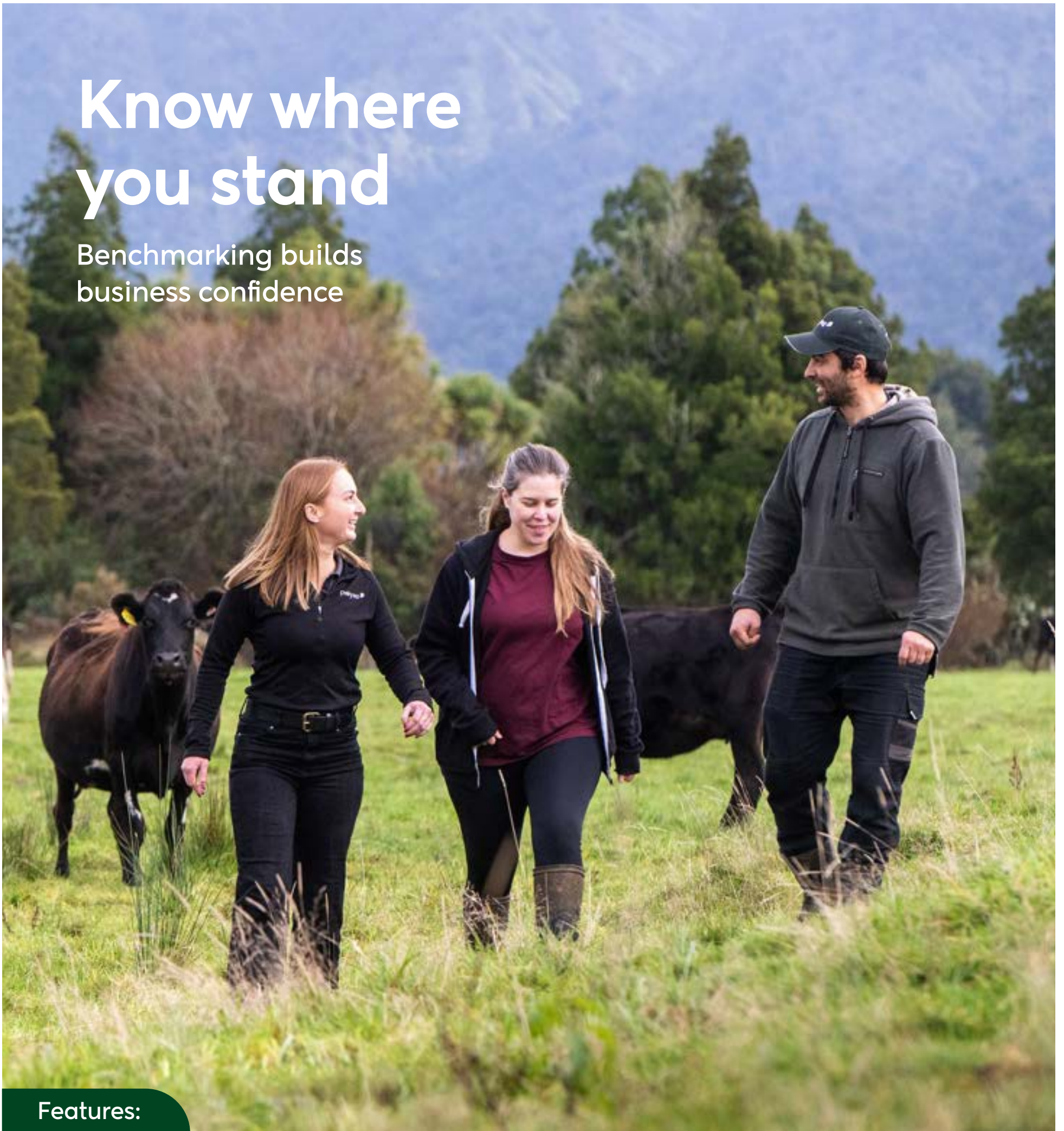
Inside Dairy

NOV-JAN 2027

By DairyNZ[®]

Know where you stand

Benchmarking builds
business confidence



Features:

12 High-performance farmers
What makes them tick

16 Extended lactation research
One farm's trial experience

24 Heat stress mitigations
What works best and where



Over the fence...

As this edition of *Inside Dairy* arrives in mailboxes, New Zealanders will be heading to the polls.

Ahead of the election, DairyNZ identified six sector priorities for the government: practical resource management and freshwater policy, strong biosecurity, strengthening the workforce, investment in science and technology, support for low-emissions technology and rural infrastructure, and animal welfare standards. Developed with farmers and informed by science, these priorities focus on where practical, evidence-based policy can provide greater certainty, encourage investment, and support the long-term success of the sector.

As I talk to colleagues across the sector, biosecurity is a top priority for many, and it's something I take very seriously as chair of the Foot and Mouth Disease (FMD) Council. An FMD outbreak would have significant consequences for farmers, rural communities and New Zealand's economy, making strong preparedness and response planning critical. In this edition, we provide an update on the council's recent work and focus areas.

With summer almost here, the possible impacts of El Niño are front of mind for many. These vary between seasons and regions, so early planning, regular monitoring and flexibility can help reduce pressure and keep options open. Building resilient businesses that can adapt with changing conditions is a central theme of this edition, and we highlight practical tools and resources to help.

Our cover story features the inspiring story of Alvaro Luzardo and Ximena Puig, who arrived in New Zealand as backpackers more than a decade ago. Today, they are 50:50 sharemilkers, equity partners and lower-order sharemilkers across two farms in Eketāhuna. They share how DairyBase has helped with business decisions and growth and why they're encouraging others to join too.

In the research and science space, we cover plantain progress, where heat-stress mitigation tools are most effective, one farm's experience adopting extended lactation, and more.

As always, your feedback is welcome at Campbell.Parker@ceo.dairynz.co.nz

Ngā mihi,
Campbell Parker
DairyNZ chief executive

Contents

Updates

- 3 Just quickly
- 4 Chair update on Responsible Dairy
- 15 Foot and mouth disease readiness

Policy and advocacy

- 5 Keeping dairy strong – election priorities

Your stories

- 5 Q&A with Fonterra's Dairy Woman of the Year
- 6 DairyBase benchmarking builds business confidence
- 16 Success for this farm's extended lactation trial

Seasonal toolbox

- 8 Summer smarts
- 9 Build resilience before it's needed
- 10 Summer feed plans and knowing when to pivot
- 11 Practical tips for building great farm teams
- 12 What high-performance farmers do differently

Economic insights

- 14 What farms are getting from their assets

Research and science

- 15 What's next for the Forage Value Index?
- 18 Priority research updates – what's new?
- 20 Plantain delivers on reducing N losses
- 21 Measuring N-loss tools on-farm in Southland
- 22 The link between BW and lower emissions intensity
- 24 Heat stress mitigation tools – what works best and where?



On the cover:

Sharemilkers Alvaro Luzardo and Ximena Puig with Shayla McGrory, DairyNZ area manager – Wairarapa and Tararua, in Eketāhuna. Read their story on page 6.

Get connected

Stay up to date with advice, the latest research, tools and resources.

Read, browse, scroll, listen, or be there in person dairynz.co.nz/get-connected



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12



16



24

We appreciate your feedback

Email us at insidedairy@dairynz.co.nz

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Partner
Event

DairyNZ



Pasture Summit on-farm events

Pasture Summit is coming to Bay of Plenty and North Canterbury in November 2026.

North Island:

Date: Tuesday, 24th November

Hosted by: Todd and Renee Halliday in Reporoa, Bay of Plenty

South Island:

Date: Thursday, 26th November

Hosted by: James and Laura Bawden in Hinds, Canterbury

Find event information and register at pasturesummit.co.nz

Missed the autumn 2026 events in Southland or South Waikato? Presentations, resources and videos from those events are available on the website.



Photo credit: Numat Agri

New Composting Barn guide

Thinking about whether a composting barn could work on your farm? Our new practical guide brings together research insights and farmer experience to help you work through key considerations, including design, management, costs, animal health and environmental requirements.

Download and order your copy from dairynz.co.nz/composting-barn

Biosecurity levy changes support preparedness

Following consultation with dairy farmers last year, the Minister for Biosecurity has approved changes to the Biosecurity Response Levy to allow it to be used for biosecurity readiness activities. Regulations are now being drafted and are expected to come into effect in early 2027.

This means existing funds held in reserve from the *M. bovis* response can be invested in preparedness for future biosecurity threats, such as foot and mouth disease, while freeing up commodity levy funding for other priorities.

Investment in biosecurity readiness will be capped at 82% of the *M. bovis* response reserve, reflecting the level supported by farmers during consultation. The new Biosecurity Readiness and Response levy rate will remain at 0 cents per kilogram of milksolids.

Get more from every milking

DairyTraining
DairyNZ

Milking is a big part of your day, so even small improvements can make a real difference. MilkSmart has tips and tools to help improve milking efficiency, milk quality and overall farm performance. You can put them to use straight away and start saving both time and money in the shed.

MilkSmart workshops are running this summer. Find one and register at dairynz.co.nz/events

New Progressing Dairy Events

Join local farmers and DairyNZ experts to explore practical ideas that can help improve your farm's performance.

Hear what's working on local farms, learn from other farmers' experiences, and take away tools and insights you can apply on your own farm. These events are an opportunity to ask questions, share ideas and connect with farmers in your region facing similar opportunities and challenges.

Find an event near you at dairynz.co.nz/events

DAiSY recognised for delivering value to farmers

Our AI-powered website assistant, DAiSY™, was named a finalist in the New Zealand CIO Innovation Awards' Excellence in Customer Value category earlier this year, alongside NZME and Suncorp NZ.

The award recognises organisations using digital technology to make a real difference for people. For farmers, that means having trusted information and answers at your fingertips, so you can quickly find what you need and get back to your farm business.

DAiSY is available 24/7 on the DairyNZ website.

Try DAiSY at dairynz.co.nz/daisy



Refreshed Mastitis Technotes available for RPs

The updated, industry-reviewed Mastitis Technotes are now available.

Designed to support consistent, evidence-based advice on-farm, the technotes provide technical information to help inform conversations and decision-making across a range of farm situations.

Download them at dairynz.co.nz/mastitis-technotes

Backing farmers to lead the next chapter



Tracy Brown
DairyNZ chair

Responsible Dairy is a seven-year, multimillion-dollar programme that aims to deliver new solutions, opportunities and impact to keep our dairy sector globally competitive.

New Zealand farmers have built one of the world’s most efficient pasture-based dairy sectors, and continue to improve through investment in genetics, infrastructure, environmental management and more resilient farm systems.

This gives us a strong foundation, but the next chapter will ask even more of farmers and the sector.

Productivity growth has slowed, environmental expectations are rising, and our global competitors are investing heavily. To remain competitive, New Zealand dairy needs to keep lifting performance while reducing its environmental footprint.

That’s where Responsible Dairy comes in. It is a seven-year, \$45.85 million investment in the future of New Zealand dairy. Led by DairyNZ on behalf of the sector, it brings together funding from DairyNZ, the Ministry for Primary Industries and dairy sector partners.

What makes it different is the scale of collaboration behind it. Farmers, researchers, dairy companies and commercial partners are working together to test, demonstrate and scale practical solutions faster.

For farmers, the real benefit will be access to practical options that have been tested in real-world conditions. Some farmers will be directly involved through partner farms, catchment projects and technology trials. Others will see the results through practical tools, field days, discussion groups, regional events, case studies, milk supply and fertiliser companies, and advisor networks.

A key part of the programme is a national network of partner farms located across different regions and farming systems. These farms will help show what is possible in practice, giving farmers the chance to see new productivity and environmental



approaches working in conditions similar to their own.

One area of the programme I am particularly excited about is the work on new technologies and next-generation farm systems.

As a farmer, I know how difficult decisions can be when production, profitability, environmental outcomes and workload all need to be considered. Responsible Dairy will help make those decisions easier by testing options before farmers invest time and money on-farm.

Another area the programme will investigate is the potential for digital twin technology. In simple terms, this would create a virtual representation of a farm system, allowing different scenarios to be explored using real farm data.

While still at an early stage, this type of technology could eventually help

farmers better understand the likely production, profit and environmental impacts of management decisions before making changes on-farm.

Farmers will rightly ask when they can expect to see results.

While Responsible Dairy has ambitious long-term goals, farmers will start to see activity from the outset. Early work includes establishing partner farms and catchments, testing technologies and developing new tools and resources.

A new way of working with co-funding partners will help drive greater results for farmers by sharing outputs and practical insights through the commercial relationships, products, services and advice they already access.

By 2050, Responsible Dairy aims to support 20% growth in milksolids production and a 13% increase in

sector profitability, alongside a lower environmental footprint, 60% more riparian planting and 50% more protected wetland areas.

These are ambitious goals, and progress will take time. What gives me confidence, both as DairyNZ chair and as a farmer, is that the programme is grounded in partnership and practicality.

Farmers are more likely to adopt change when they can see it working on farms like their own, understand the trade-offs and opportunities, and access trusted advice.

Ultimately, Responsible Dairy is about backing farmers with the tools, evidence and support they need to keep New Zealand dairy leading.

Read more at dairynz.co.nz/responsible-dairy

Six election priorities to keep dairy strong

Creating the right conditions for farmers to invest, innovate and grow is critical to the dairy sector and New Zealand's future.

As New Zealand's largest export sector, contributing more than \$28.6 billion in export earnings in the past year, dairy plays a vital role in the country's economy and rural communities.

As we enter a new term of government, decisions on issues such as freshwater management, biosecurity, workforce capability, innovation and infrastructure will help shape the future of the dairy sector.

That's why DairyNZ has identified six priorities for the government, aimed at creating the conditions for farmers to continue investing in productivity, environmental outcomes and animal welfare.

Six priorities for a stronger sector

1. Resource management and freshwater systems that are practical and science-based
2. A strong, well-funded biosecurity system
3. A capable and skilled dairy workforce
4. Increased investment in science, innovation and technology uptake
5. Support for low-emissions technology and rural infrastructure
6. Strong, workable animal welfare rules

Why advocacy matters

Good policy is informed by evidence, practical experience, and an understanding of how decisions affect farm businesses.

Through its advocacy work, DairyNZ brings farmers' perspectives, science, and farm systems expertise into discussions with the government, helping ensure the impacts on farm businesses are understood.

This helps inform policy on issues ranging from freshwater and biosecurity to workforce capability, infrastructure and animal welfare. By representing farmers' interests and providing trusted sector expertise, DairyNZ helps ensure farmers' perspectives are reflected in decisions that shape the future of the sector.

Learn more

Visit dairynz.co.nz/election-priorities for more information and to listen to the Talking Dairy episode on this topic.

Dairy's contribution to New Zealand

Export value

\$28.6b

Dairy is NZ's largest export earner, generating \$28.6b in the year to June 2026

Dairy products were exported to
149
markets in 2025

Employment

51,800

people are employed in dairy

Milk production

2.03b

kilograms of milksolids produced in 2025/26

Q&A: 'Leadership isn't having all the answers'

Hinehou Timutimu, general manager of Te Tawa Kaiti Lands Trust, is the 2026 Fonterra Dairy Woman of the Year. For her, leadership is about staying grounded in your values, being open to change and backing yourself to contribute – on the farm, in your community or around a board table. *This Q&A has been adapted from Hinehou's Talking Dairy podcast episode.*

Who's had the biggest influence on your leadership?

My mum. As a midwife for 70 years, she taught me leadership starts with kindness, service, giving back and never expecting anything in return. Everything mum did came from the heart and that's shaped who I am. She and my grandfather instilled values of hard work and humility.

Personally, my measure of success is going to be seen in my grand-daughters and how well I have nurtured and empowered them to do better and greater things – like my mum did for me.

How do you approach trying new things on the farm?

I'm always looking for opportunities, like regenerative pasture trials, that

could help reduce emissions.

We've got Halter, and we're integrating different technologies on the farm. If you aren't prepared to change, then nothing's going to change. Change is about growth. That's how I see it.



Have the courage and curiosity to look at what's possible.

What's one leadership lesson that has stayed with you?

Through the Kellogg Rural Leadership Programme I completed behavioural personality tests. It was quite challenging because I realised I can

come across as pushy or rude, but that's not my intention. I had to take a step back and think, "How can I do this differently but still achieve the same result?"

I learnt I've got all these wonderful things in my head but I have to be mindful about how people perceive me. It was a big wake-up call.

What's your advice for women who may not yet see themselves as leaders?

Be kind, be humble, and trust yourself. You know who you are and what your purpose is.

Have the courage and curiosity to look at what's possible and try to shape yourself to reach that goal. Don't put yourself in a position where you think you're not good enough.



Hinehou Timutimu

Your voice and your opinion matter. As someone once told me, don't wait to be invited to the table. Take your own chair.



Listen to Take your own chair: Hinehou Timutimu on leadership and possibility at dairynz.co.nz/podcast-128



Setting a compass for farm direction

As Alvaro Luzardo and Ximena Puig have grown their career in dairy, they’ve used DairyBase to sense check their progress and support business decisions.

When Alvaro Luzardo and Ximena Puig moved into a new dairy farming region, they had plenty of confidence in their own ability, but what they didn’t have was a clear understanding of how their farm business compared with others in the area.

They soon realised they needed a compass to chart their financial and operational direction in what was effectively a new business setting.

The couple, originally from Uruguay, arrived in New Zealand as backpackers a decade ago. Since then, they have progressed from entry-level dairy work to 50:50 sharemilking and, more recently, equity partnership.

Their progress has earned industry recognition and accolades. They were

named Hawke’s Bay/Wairarapa Share Farmers of the Year in 2024 and this year were ASB Alumni of the Year at the New Zealand Dairy Industry Awards.

They share traits common among migrants coming to New Zealand to go dairying, namely hard work, commitment and a recognition that the industry offers opportunities to succeed, regardless of background.

For Alvaro and Ximena, progress is not simply about getting bigger. It is about knowing whether they are getting better and having some basis for comparison.

That is where DairyBase has been useful, proving to be the compass they

Farm facts:

Location: Eketāhuna, Taranua

	Farm 1	Farm 2
Structure	50:50 sharemilkers	Equity partners, plus lower-order sharemilker
Herd size	480 cows	640 cows
Effective area	164ha	240ha
System	3	3
Production	175,000kg MS	220,000kg MS (first season target)

needed when establishing themselves in their latest dairying district of Taranua.

Before they moved, they were unfamiliar with the region and wanted some context around the numbers.

“We were a little lost in the area. We didn’t know how farms perform, what the costs are,” Ximena says.

“We thought, let’s sign up to DairyBase and see what we can learn from the area, that way we can have



some benchmarking to compare ourselves with."

Four years later, the couple have built up their own history of data, giving them another point of comparison – their own performance.

That has become increasingly important as their business evolves.

They are now 50:50 sharemilkers on a 480-cow, 164ha (effective) property, and have recently become equity partners and lower-order sharemilkers on the farm across the road. That property is milking 640 cows across 230ha (effective) this season.

Between the two businesses they have five full-time staff, along with themselves.

With a bigger operation and a different business structure comes the need to make sure the gains in scale are translating into efficient use of labour and other resources.

"Once you've been collecting information for a few years, it's also good to look back and see how your own farm is tracking over time," Alvaro says.

"For example, now that we have changed our structure, we can see if we are still efficient in terms of labour and production."

Making decisions from the numbers

For the couple, benchmarking is not about trying to outperform the farmer down the road. It is about working out what the numbers are telling them about their business.

They expect some costs, such as fuel, to increase this season. Benchmarking provides a useful reality check.

"When we compare ourselves to other people, we know if we're all doing okay. We know it's not us, it's because of the circumstances," Alvaro says.

"It also helps us understand if rising costs, like fuel, are due to our management or broader circumstances."

They have also used the information to make practical business decisions.

In their first year on the property as 50:50 sharemilkers, they employed one full-time person and one part-time relief worker. After reviewing the numbers, they realised their labour costs per milksolids were well below the benchmark. This was useful to get through the first season as 50:50 but wasn't sustainable in the long run. They replaced the part-time relief role with a second full-time position. Ximena says the change has made the team easier to manage and given the business more stability. Their labour costs relative to milksolids are now sitting around the benchmark average.

For Alvaro, that move illustrates a basic principle of business

management: "It's hard to manage what you don't measure."

Benchmarking is not necessarily about finding problems. Often it helps confirm what is already working well, while highlighting areas where there may be opportunities to improve.

The real value is having a starting point for asking why.

DairyBase combines both financial and physical benchmarking, helping farmers understand business profitability and the physical drivers behind it.

More farmers, better benchmarks

For Alvaro and Ximena, there is another reason they would like to see more farmers using DairyBase – to provide a larger population in the database for stronger benchmark groups and comparisons.

They say their particular benchmark, sharemilkers in their area, is relatively small and more participating farms would provide a stronger picture of local performance.

The larger and more representative the database, the more useful the benchmark.

DairyBase currently draws on data from more than 20% of New Zealand dairy farms. Benchmark groups need a minimum of 20 farms before statistics are made available. This protects farmer confidentiality and ensures the results are meaningful.

“

It's hard to manage what you don't measure.

It is not only the farmer entering the numbers who finds the information useful. The data contributes to the wider industry's understanding of dairy farm performance and is used by DairyNZ to support its work with farmers, research, policy and advocacy.

For farmers, though, the most immediate benefit is understanding where their farm sits among others operating in similar conditions and business structures.

DairyBase can help identify strengths, highlight where costs may be out of line, and uncover opportunities to improve profitability. It can also provide a way of tracking progress towards long-term goals.

Less time entering, more time understanding

One challenge with any benchmarking system is the time required to enter information. DairyNZ is working to make that easier.

DairyBase now integrates with Farm Focus accounting software and LIC's



Alvaro Luzardo and Ximena Puig are 50:50 sharemilkers, equity partners and lower-order sharemilkers across two farms in Eketāhuna, Taranaki.

MINDA®, and integration with other sector partners is being developed. The aim is to reduce double handling and make it easier for farmers to get value from information they are already recording.

For Alvaro and Ximena, Farm Focus is already part of their system and connects with DairyBase.

The benefit is simple: less time entering data and more time understanding what it means.

For the couple, this aligns with their business approach. They are ambitious, but they also rely on good information to drive their progress.

To continue to build equity, improve their business, and ultimately achieve their goal of farm ownership, DairyBase provides an important reference point.

Ximena believes the more farmers who contribute data, the more valuable the benchmarking becomes.

"It's not about competition, but about improving collectively," she says.

Alvaro says, for them, information is power.

"The more information you have to make decisions, the more power you have to make better decisions."

DairyBase and MINDA® collaboration saves farmers time

Dairy farmers who use DairyBase and MINDA can now connect their accounts, allowing selected MINDA data to flow directly into DairyBase. This can pre-fill around 30% of the physical information required, including stock and herd records and health data, reducing duplication and saving time.

To connect your LIC account to DairyBase:

- Log into MINDA and click on the settings icon at the top right of the screen.
- From the drop-down menu, click "Partners".
- Click "DairyBase".
- Follow the prompt to log in to DairyBase and link the two accounts.



Summer smarts

Research-driven tools and advice
to support the decisions you're
making now.



dairynz.co.nz/
summer-smarts



Setting heifers up for future performance

Heifers that meet liveweight targets at first mating and calving have improved reproductive performance and future milk production potential.

Regular weighing of young stock provides a clear picture of how individual animals and mobs are performing against liveweight targets. Tracking growth helps you identify problems early and understand whether the animals are meeting key milestones, and provides the opportunity to act early if growth is off track.

Find heifer liveweight targets at dairynz.co.nz/lw-targets

Reducing heat stress

Heat stress can impact milk production, health and wellbeing before visible signs of discomfort appear. Understanding the risk on your farm and knowing what to look for can help you act early and reduce the impact on your herd.

There is already a risk of summer heat stress across New Zealand, and in certain regions, summer is likely to be even hotter and drier under the influence of a strong El Niño.

Watch for early signs, including faster breathing, crowding at troughs, and slower walking. More than 10 breaths in 10 seconds means a cow is not comfortable and the herd needs cooling.



To reduce heat stress, ensure adequate shade is available, check that stock water systems can meet peak demand, consider adjusting milking frequency and timing, minimise standing time on hot surfaces, and use cooling strategies such as sprinklers where practical.

Learn the signs of heat stress and how to prevent it at dairynz.co.nz/heat-stress

Managing pasture over summer

Managing pasture over summer is about making timely decisions that keep cows fed today without borrowing too much feed from tomorrow. Getting more from quality homegrown feed can improve profitability, support feed supply and help farms stay resilient through variable summer conditions.

Regular farm walks, monitoring pre- and post-grazing residuals and use of feed planning using a feed wedge all support you to understand whether feed demand and supply are staying in balance. This information gives you more options, whether that's introducing supplements, adjusting grazing rotation speed, reviewing milking frequency or making early decisions around culling or drying off.

- Pasture management principles are still key to getting the most from homegrown feed and using supplement efficiently:
1. Grazing at two-and-half to three-leaf stage to maximise growth and quality.
 2. Achieving grazing residuals of 1500-1600 kgDM to avoid overgrazing and maintain pasture quality and persistence.



Visit our summer management page for a step-by-step guide to help you through summer: dairynz.co.nz/summer-management

Protecting the herd from facial eczema

A good facial eczema prevention plan helps protect herd health and production. Facial eczema can cause liver damage, production losses, and, in severe cases, death.

Regular monitoring of regional and on-farm spore counts helps you understand your farm's risk and supports making preventative decisions based on actual conditions rather than waiting for visible signs to appear. Whether you're using zinc, pasture spraying or a combination of prevention measures, check with your veterinarian that the programme is providing effective protection.

Good pasture management can also help reduce risk. Avoid topping in November and December and maintain pasture quality to limit spore build-up before elevated risk periods.

Learn more about putting an effective facial eczema prevention plan in place at dairynz.co.nz/facial-eczema

Building capability within your team

A capable, confident team with clear accountabilities supports farm performance, and allows people to grow their dairy career. Building that capability starts with regular development conversations.

Taking time to understand each team member's strengths, goals and development areas can help identify opportunities to build skills and progress over time. Keeping these conversations focused on one or two practical steps can help turn career aspirations into action.

Whether it's learning a new task, completing training or taking on new responsibilities, investing in your people can support a more motivated farm team, improved staff retention, and clearer career pathways.

Explore the Dairy Farm Career Pathways Guide to support your development conversations at dairynz.co.nz/career-pathways





Plan now for better recovery later

Adverse events can put pressure on your people, animals, farm systems, finances and community. Taking time to prepare now can help your farm business respond more effectively and recover more quickly when challenges arise.

The South Island wind event in October 2025 highlighted the value of being prepared. Farms with backup electricity generation, such as generators or solar power systems, were better placed to keep essential operations running during extended outages.

Weather-related disruptions are a reminder that practical planning can reduce impact on your farm and support a faster recovery.

Having contingency plans and clear decision-making processes in place helps reduce pressure and get the farm back to normal sooner.

Build resilience before you need it
Adverse events can disrupt farm operations with little warning. Sudden events like earthquakes, severe wind, flooding and storms can have immediate effects on people, animals and farm infrastructure.

Other events, such as drought, develop more slowly. While that can provide more time to prepare, the impact can be significant if plans are not already in place.

With forecasts indicating El Niño conditions may influence weather patterns this season, now is a good time to consider how that could affect your farm, and what steps you can take to reduce risk.

Biosecurity risks and disease outbreaks should also be part of your

planning. Disease incursions can affect both individual farm businesses and the wider dairy sector.

Identifying key risks, developing contingency plans and preparing resources before they are needed can help you make better decisions, reduce disruption and recover more quickly when unexpected events occur.

“ Every farm faces different risks, and those risks can change through the season. ”

Take the opportunity to review your current plans and identify where your farm business could be better prepared.

Know your critical risk areas
Every farm faces different risks, and those risks can change through the season. Start by identifying the events most likely to affect your business and consider when they are most likely to occur.

Consider factors such as the wellbeing and safety of people working on the farm, animal welfare, feed availability, water supply for stock and farm operations, electricity reliability, vulnerable infrastructure, environmental mitigations, and possible supply chain disruptions. Knowing how to contact your local authorities is also important.

Focus on what keeps the farm running

A resilient farm business has plans for the essential areas that keep the farm operating.

People and communication

Make sure everyone understands their roles during an emergency. Have clear communication steps in place and include resilience and emergency response plans when new staff are inducted, so everyone knows how to respond.

Animal welfare

Prioritise animal health and wellbeing, including access to feed, water, shelter and veterinary support.

Stock water

Know how long your water supplies can last during an adverse event. Identify alternative sources and any infrastructure you may need if normal supplies are disrupted.

Feed

Consider how feed supply could be affected. Identify alternative feed sources or feeding strategies if supply chains are interrupted.

Electricity

Identify the farm systems that rely on power, including the dairy shed, water pumps and feeding systems. Have a backup power plan, such as a generator, and make sure it is regularly maintained and tested. Solar power may also be worth considering, as it can reduce reliance on the grid and provide an alternative power source during outages.

Support network

Strong relationships with neighbours, contractors, veterinarians, rural professionals, dairy companies and community support organisations can make a real difference during difficult periods. Knowing who to contact before an event happens can save valuable time when support is needed.

Recovery starts with preparation

Good records, up-to-date insurance information and clear business processes can reduce disruption and support faster decision-making when it matters most.

Take the next step

Use DairyNZ's Farm Business Continuity Plan to record your key risks, contacts, actions and recovery steps.

Visit dairynz.co.nz and search Farm Business Continuity Plan.

Meet the expert:



Steve Veix
DairyNZ farm systems team manager

Key reminders

- Plans don't work unless they are written down, shared and practised.
- Risks change throughout the year, so review and update plans regularly.
- Ensure key contact details are accessible for everyone in the business.
- Maintain equipment and back systems up regularly so they are ready when you need them.
- Look after your team, your family and yourself. Support is available.
- Keep good records – they help with decision-making and recovery.

Summer pasture plans and knowing when to pivot

Managing summer pasture means making early, disciplined decisions that keep cows fed while protecting future feed supply. Getting more from homegrown feed can improve profit and build resilience through variable summer conditions.

Pasture remains one of New Zealand dairy farming's greatest advantages, but summer can quickly put it under pressure.

As conditions dry and temperatures rise, growth slows and feed quality can fall. The best-performing farms plan ahead, monitor regularly and act early before feed pressure affects cows or pasture.

The key is to start with the feed position, not habit.

Summer management is less about reacting when dry conditions arrive and more about early setup: planning ahead, monitoring the feed budget and acting when key trigger levels show a larger-than-planned feed gap is emerging.



Tracking pasture cover, growth and demand shows when to act: slow the round, protect residuals with supplement or reduce demand before covers collapse.

A simple question can guide many summer decisions: does supply meet demand over the next four to 10 weeks?

Tracking pasture cover, growth and demand shows when to act: slow the round, protect residuals with supplement or reduce demand before

pasture covers collapse.

As soils dry, pasture growth slows, and rotation length needs to match plant recovery rather than continue at spring rotations.

Grazing at 2.5 to 3 leaves and holding residuals around 1500-1600kg DM/ha helps maximise harvest, protect plant reserves and support regrowth after rain.

The same applies under irrigation. Leaf appearance still slows in summer, and research shows longer grazing intervals can lift pasture production.

Supplements and crops help most when they support the grazing plan.

Use extra feed to fill real deficits, maintain intake, protect residuals or slow the round – don't replace pasture that cows could harvest themselves.

Setting up for summer success

For Bay of Plenty contract milker Thomas Lundman, summer management starts well before summer arrives.

Thomas milks 1170 cows on 295ha at Otakiri, operating a System 5 farm that regularly faces summer dry conditions. Even with 60ha under pivot irrigation and the remainder supported by lateral sprinklers, the farm is managed to make the most of pasture before peak summer pressure arrives.

"It starts with what happens in early spring. That sets me up," says Thomas.

The farm calves in June to align feed demand with available pasture, and focuses on harvesting as much



DairyNZ senior farm systems specialist Mark Williams on contract milker Thomas Lundman's farm at Otakiri.

homegrown feed as possible before January.

Rather than chasing surplus conservation, Thomas aims to harvest pasture directly through cows, maintain high pasture ME, and then the business purchases feed for the in-shed feed system to achieve the best supplement utilisation.

Through spring and early summer, Thomas uses tactical nitrogen applications, pasture monitoring, and planned adjustments to rotation length to build and maintain pasture cover heading into the drier months. Weekly pre-grazing assessments have become a routine part of the farm's management system. Building cover ahead of going into summer is key.

"For the past five years our pre-grazing checklist has been simple: check the back fence, check the trough, and check if the grass is ready to graze."

For Thomas, having clear decision points before summer arrives creates more flexibility when conditions become challenging. He believes the

biggest gains come from observing, measuring and acting early.

"Having those decisions mapped out early creates more options later in the season and reduces pressure when conditions become challenging."

Ultimately, keeping summer pasture performing for longer is about making the best use of available feed while protecting pasture recovery and future growth. Farmers who measure consistently, monitor feed supply and demand, and act before options disappear, are often the ones best positioned for a successful autumn.

For more tools and advice ahead of summer, visit dairynz.co.nz/summer-prep

Meet the expert:



Mark Williams
DairyNZ senior farm systems specialist

When the summer plan no longer fits

A good summer plan starts early, but it also needs trigger points for when "normal dry" becomes more extreme. Re-plan before covers collapse or cows lose condition.

Key triggers include growth and average pasture cover tracking below budget, a flattening wedge, grazing before 2.5 leaves, residuals dropping below target, milk production falling despite apparent feed, widespread BCS risk, or a feed budget showing the deficit will outlast feed on hand.

At that point, you need to protect next season, not just today's milk. Rework supply and demand, test the value of extra feed, and use the **Milk on/dry off**

and **Supplement Price Calculator** tools. Consider early culling of known empty cows, selective dry-off, once-a-day or altered milking intervals, priority feeding, and feeding supplements on stand-off areas or feedpads to lengthen the round and protect regrowth. The aim is to protect pasture survival, cow condition and autumn recovery.

Respond to changing conditions

Visit the El Niño webpage for the latest outlook, regional information and advice to help you manage the conditions affecting your farm this summer at dairynz.co.nz/el-nino

Building strong farm teams

Summer is a good time to take stock of what your team members enjoy about their roles, and find opportunities to help them develop their skills.

DairyNZ's annual employee survey consistently shows people come into dairy because they want to work with animals and spend time outdoors, and they enjoy the lifestyle farming can offer.

The survey shows these remain important reasons for staying, alongside having a supportive manager and colleagues, feeling valued, and seeing a future for themselves.

People also want to keep learning and have opportunities to progress. That doesn't always mean a promotion. It could be as simple as setting one clear development goal each season, giving someone responsibility for a task, or showing them how their role connects to the farm's bigger goals.

Good people management comes down to clarity, care and consistency. Make rosters and hours fair, plan time off early, have regular and open communication, support development and recognise good work.

People are far more likely to stay when they enjoy the work and trust their boss and team.

These were some of the themes explored at *On the Front Foot*, a

“

People also want to keep learning and have opportunities to progress. That doesn't always mean a promotion. It could be as simple as setting one clear development goal each season, giving someone responsibility for a task, or showing them how their role connects to the farm's bigger goals.

workshop delivered by DairyNZ, Beef + Lamb New Zealand and Wairarapa Economic Development Strategy, in Masterton in July.

More than 100 farmers and rural professionals turned out to hear from the presenters, Nick Coster from No8HR and Farmstrong farmer James Bruce.

For more resources, including DairyNZ's Workplace 360 work environment and leadership assessment tool, visit dairynz.co.nz/great-teams

Meet the expert:



Jane Muir
DairyNZ senior people specialist



From left: Lesley Coppell from Beef + Lamb New Zealand, farmers Ben Bosch and Micah Wratt, and Shayla McGrory from DairyNZ at the *On the Front Foot* workshop in July.

Key takeaways from *On the Front Foot* workshop

- **Understand what motivates people.**
Knowing what matters to each person helps you support them and make the most of their strengths.
- **Make the most of different working styles.**
Simple personality-type tools can help team members understand each other and work better together.
- **Give feedback early and often.**
Short, regular conversations are easier than waiting until small issues become bigger ones.
- **Check in through the busy periods.**
Clear expectations and regular reviews help people know how they're going and where they can improve.
- **Look after yourself too.**
Good leadership starts with staying well yourself, especially when summer pressure builds.

DairyTraining

DairyNZ

Your next step on farm starts here.

Whether you're starting out or stepping up, there's a Dairy Training course to help you build practical skills and confidence.

Free NZQA-accredited dairy training.
Find out more and apply at dairytraining.co.nz



THERE'S A COURSE
FOR
That.



New Courses coming in 2027

- Milking Process Fundamentals
- BizGrow
- Managing Your Dairy Farm Footprint
- Improving Dairy Farm Workplace Efficiency

What do high-performing farms do differently?

High-performing farms do not all run the same system. Some achieve strong returns through lower-input systems and others through more intensive approaches. So what consistently separates them from the rest?

A clear plan, solid decision rules and detailed knowledge of the business are common features of high-performing dairy farms.

DairyNZ's Farm Systems Review looks beyond the financial results to understand how farmers achieve strong performance. The review draws on interviews with farmers from a range of regions, farm systems and business structures.

DairyNZ farm system specialist Mark Speight says there is no single "best" farm system.

"High-performing farms can be found across low-, medium- and high-

input systems, each taking a slightly different path to success."

1. Know where profit comes from

The standout feature among farmers interviewed is the depth of business, financial and farming knowledge they have. They build this knowledge through education, professional experience or years on the farm. Farming couples often have strong combined abilities that cover most parts of the farm system. They use farm consultants or other rural professional advisors to fill knowledge gaps.

Farmers track key measures such as Dairy Operating Profit/ha, Return on Dairy Assets, Farm Working Expenses/kg MS and Pasture and Crop Harvested/ha. They use benchmarking to compare performance and identify opportunities to lift profitability.

Regular review of budgets and cashflows, typically monthly, help them identify issues early. They

develop feed and financial budgets together to support better decisions.

They assess investments against return on investment and consider business resilience, and long-term sustainability in the decision making process. A strong focus on purposeful spending and avoiding unnecessary costs is reinforced by clear management principles and decision rules across pasture management, reproduction, labour and capital expenditure.

As one farmer notes, **"Focus is very much on profitability, specifically on cost control."**

Another says: **"Everyone can farm in a high payout year, but not everyone can farm through the troughs."**

2. Build a system that fits your farm

Successful farmers design and operate their farm system around their own circumstances rather than trying to copy someone else's model.

Climate, soils, labour, infrastructure, debt and family goals all shape their choices. The direction of the business also needs to match the farmer's personal goals and stage of life.

"High-performing farmers are highly intentional about trade-offs. They know what their system is designed to achieve and are comfortable saying no to opportunities that don't fit," says Mark.

They spend less time searching for a perfect system and more time running their chosen system well. When long-term results show that the system no longer fits, they are prepared to make a deliberate change.

As one farmer notes: **"Don't change your farm system every time the payout changes."**

3. Keep pasture as the foundation

Pasture is the engine room of every successful business in the review.

Farmers measure pasture regularly, control round length and residuals, and use feed wedges and pasture data to guide decisions. Technology supports this work but does not replace observation.

The best operators act early when a feed deficit is looming. They adjust the system promptly and maintain feed buffers to protect pasture performance. Across all systems, growing and harvesting more pasture remains one of the main drivers of production and profit.

Farmers use supplements for a clear purpose: to protect residuals, maintain round length, fill a feed deficit or support cow condition. They stay focused on pasture utilisation, system efficiency and profit rather than feeding simply to chase more milk production.

As one interviewee puts it: **"Supplements should complement the system, not compromise pasture utilisation."**

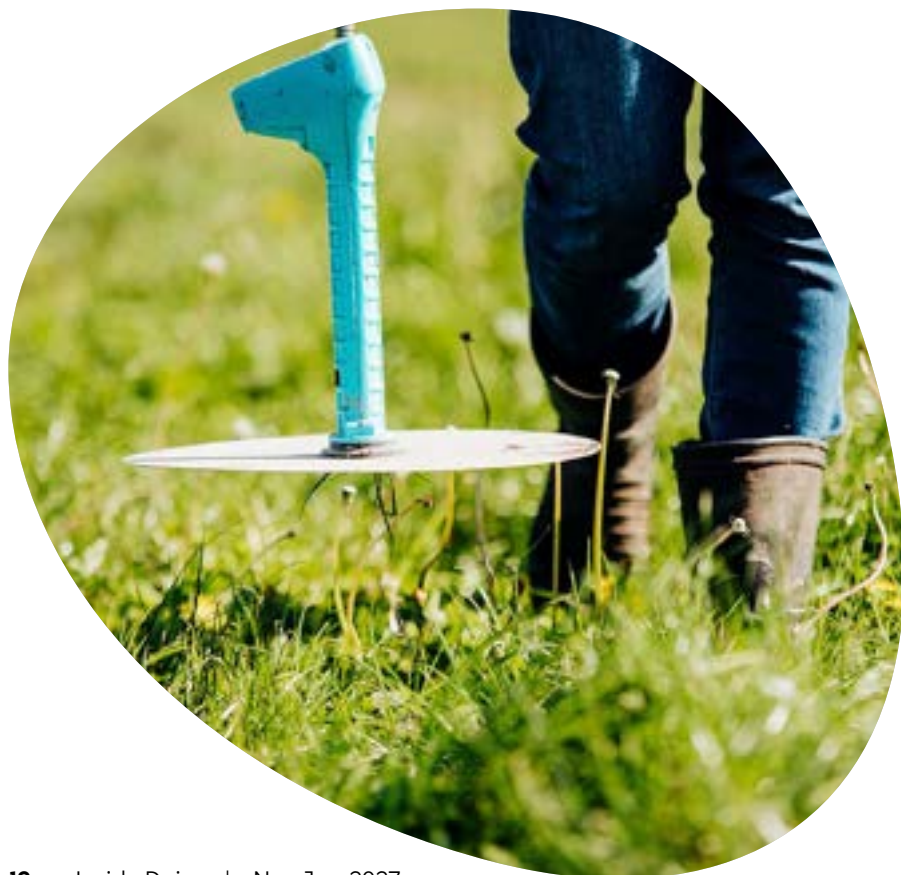
4. Make clear, timely decisions

Successful farmers combine clear knowledge of their system with disciplined, timely decisions.

They have a strong focus on aligning feed demand with pasture supply, achieving body condition score targets and placing strong emphasis on reproduction. Fertility, compact calving and cow condition are treated as important drivers of profit.

Young stock also receive close attention, starting with calf rearing. Farmers actively manage grazing arrangements, so heifers reach their mating and calving targets.

For one business, the guiding principle is: **"Farm for cow condition and milk will follow"**. An independent body condition score assessor is contracted quarterly to individually assess the milking herd. That information plays





an important part in feeding and management decisions.

Often, the difference comes down to detail, including the small “one percent” decisions made through the season. The farmers have enough clarity and experience to make the necessary calls without hesitation. Their decisions can often protect next season’s performance rather than chasing short-term production.

5. Build resilience into the business

High-performing farmers build buffers into feed supply, cashflow, and debt levels. This gives them more room to make decisions from a position of strength rather than react under pressure.

Feed reserves, conservative financial management, infrastructure investment and careful cost control all help farms cope with seasonal and economic change.

One farmer describes the goal as: **“A system that can handle a dry year, a wet spring or changing economic conditions.”**

Another says: **“The goal is consistent performance season after season, not chasing the biggest result in a single year.”**

The strongest businesses are not the

ones that avoid challenges. They are the ones best prepared to respond when conditions change.

6. Get the right people on board

Capable people are central to strong farm performance. The farmers interviewed set clear expectations, develop people’s skills and create workplaces where people are engaged, understand the farm plan and processes, and can take ownership and accountability.

“Good staff are one of the most important assets in the business,” says one farmer. Another notes: **“Being flexible and creating the right environment for people pays off in the long run.”**

Many recognise that strong performance depends on a team that understands expectations, takes ownership and contributes to continuous improvement.



The strongest businesses were not the ones that avoided challenges. They were the ones best prepared to respond when conditions changed.

Reflecting on your own business

Mark says improving performance may not require a new system. It may mean taking a closer look at the fundamentals and checking that your current system still fits your goals, resources and environment.

Sustained profitability comes down to experienced farmers knowing their business in detail and having the confidence to act on that knowledge. They understand where profit is made, recognise the trade-offs within their system and use clear decision rules to make timely calls on feed, costs, cows and people.

Ask yourself

Does my farm system:

- Support my business and personal goals?
- Make the best use of pasture and other resources?
- Track financial and physical measures that drive performance?
- Give the business, and the people running it, options when conditions change?

What high-performing farms have in common

High-performing farms use different systems, but the strongest operators share six practical approaches.

1

Know where profit comes from

Track key financial and physical measures to understand what drives returns.

2

Build a system that fits your farm

Match the system to your land, resources, business goals and stage of life.

3

Keep pasture as the foundation

Measure pasture regularly, control round length and residuals, and use feed wedges and pasture data to drive decisions.

4

Make clear, timely decisions

Don’t hesitate when conditions change. Have clear plans in place, make informed decisions early, and adapt quickly when unexpected challenges arise.

5

Build resilience into the business

Have some buffers in place for feed supply, cashflow and debt levels to cope with seasonal challenges.

6

Get the right people on board

Recruit for attitude and fit first. Set clear expectations, priorities and standards, creating a more consistent and productive team.

Meet the experts:



Mark Speight
DairyNZ farm systems specialist



Steve Veix
DairyNZ farm systems team manager



What is your farm getting from its assets?

DairyBase data shows how better use of farm assets can translate into substantially more operating profit.

In the previous story, we looked at what high-performing farms do to support profitability and financial resilience. Now, we're using data from DairyBase, DairyNZ's free benchmarking tool, to put a value on stronger financial performance.

This analysis looks at farm performance through 'return on dairy assets', or RoDA, which shows how effectively a farm turns the capital invested in the business into operating profit.

Put simply, it helps answer an important question: how effectively is your farm using what it has?

Operating profit per hectare is a useful and widely understood measure, but it does not tell the whole story. Every hectare counts equally in the calculation, even though farms differ in land quality, contour, soil type, irrigation, infrastructure and the amount of capital invested.

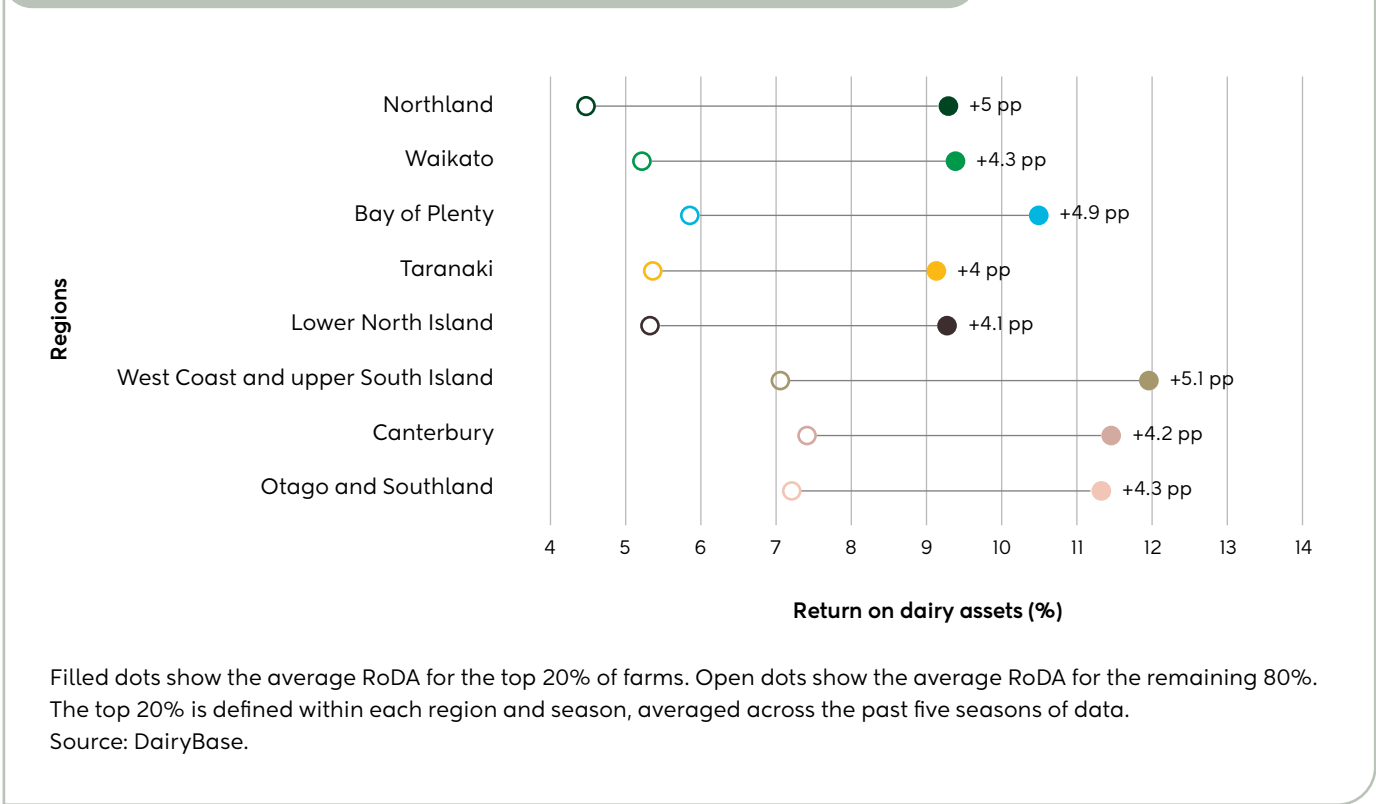
They may post the same operating profit per hectare while using very different asset bases to achieve it.

What is high performance worth?

Consider two farms that each generate \$4,000 of operating profit per hectare.

The first has \$40,000 of dairy assets per hectare. It generates \$100 of operating profit for every \$1,000 invested, giving it a RoDA of 10%.

Top-performing dairy farms get a higher return on assets



The second has \$80,000 of dairy assets per hectare. It generates \$50 of operating profit for every \$1,000 invested, giving it a RoDA of 5%.

Both farms have the same operating profit per hectare, but the first generates that profit from half the asset base. RoDA makes this difference visible.

The graph compares RoDA of the top 20% of farms with the remaining 80% within each region.

Across every region, top-performing farms generate substantially higher returns from their assets.



Top-performing farms are generating hundreds of thousands of dollars more operating profit from their assets.

The gap ranges from 4 to 5.1 percentage points. On farm businesses worth millions of dollars, that difference can translate into hundreds of thousands of dollars of additional operating profit.

In Bay of Plenty, the RoDA gap between the top 20% and remaining 80% of farms is equivalent to about \$367,000 of additional operating profit on a typical farm with \$7.5 million of assets.

In Otago-Southland, it is about \$434,000 for a business with typical farm assets of \$10.1 million.

RoDA and your farm business

RoDA helps show whether a farm's dairy assets are generating the level of operating profit you would expect.

RoDA is a key performance indicator within DairyBase, which groups farms by region and farming system.

By comparing financial and physical performance measures with similar farms, DairyBase can help you to:

- Understand your farm's performance
- Identify opportunities to improve profit
- Make confident, data-based decisions
- Track progress towards long- and short-term goals
- Keep a close eye on farm working expenses.

Explore DairyBase at dairynz.co.nz/dairybase

RoDA is listed as K15 Operating Return on Dairy Assets on the Key Performance Indicators page of a DairyBase report.

Meet the experts:



Dr Koohyar Khatami
DairyNZ economist



Ryan Mills
DairyNZ economist





Exercise Farm Gate was an MPI-run biosecurity simulation to test New Zealand's readiness for an outbreak of foot and mouth disease.

FMD readiness starts at the farm gate

While New Zealand is free of foot and mouth disease, strong biosecurity and early detection remain our best defence.

Foot and mouth disease (FMD) remains one of the biggest biosecurity threats to New Zealand's agriculture and trade.

The infectious viral disease spreads quickly among cloven-hoofed animals including cows, sheep, deer, goats and pigs. It is not considered a risk to human health.

While the risk of an outbreak remains low, it's not zero. If FMD was detected in New Zealand, there would be significant disruption to animal product exports. Plans are in place to support milk collection and processing from unaffected farms under controlled conditions, although this would depend on the circumstances of the outbreak.

To help protect farmers and the wider sector, DairyNZ and other industry partners are working closely with the government through the Foot and Mouth Disease Council on national readiness. Recent work has focused on strengthening operational response plans, running response exercises to test how plans would work in practice, improving laboratory diagnostic capability, maintaining vaccine readiness, and compensation.

The aim is to identify gaps now, rather than during an outbreak.

If an outbreak did occur, the Ministry for Primary Industries (MPI) would lead the response by activating New Zealand's foot and

mouth disease response plan. MPI would work with industry partners to contain and eradicate the disease.

Simple steps you can take on-farm:

- Have a visitor policy: anyone returning from a country where FMD is present should avoid visiting the farm for seven days. When they do visit, make sure footwear and clothing are clean.
- Include vehicles, equipment and feed in your farm biosecurity plan.
- Keep NAIT records up to date.
- Report any suspected FMD symptoms immediately to your vet or the MPI pest and disease hotline, 0800 80 99 66.

Need help getting started?

Find practical tools, templates and resources to strengthen on-farm biosecurity at dairynz.co.nz/biosecurity

Meet the experts:



Fi Roberts
DairyNZ head of biosecurity



Mitch Cooper
DairyNZ senior technical and policy advisor

New research under way in the Forage Value Index project

Trials are commencing to help build a new, better Forage Value Index for farmers.

Research has begun to update the Forage Value Index (FVI), a science-based tool that helps farmers evaluate which ryegrass cultivars are best suited to their farms.

FVI research project manager Janet Montgomery says new trials are in the ground at the Lincoln University research dairy farm in Canterbury and will continue until May, 2029.

"Farmers have told us they want a trusted way to compare ryegrass cultivars.

"That's why we're investing in new research and working with the Plant Breeding and Research Association to better understand how cultivar performance translates from research plots to real farm systems, with the goal of relaunching the FVI cultivar selection tool."

DairyNZ's previous FVI was available between 2012 and 2023. However, after a four-year validation farmlet trial in Waikato did not confirm the predicted economic differences between cultivars, the FVI was withdrawn.

Janet says this latest trial will focus on the physiology of ryegrass and how it reacts differently, from mowing to grazing. Researchers will also investigate how yield is impacted when ryegrass cultivars are mown at different covers.

A grazing trial will investigate the relationship between pasture production and increased milk production. It is currently being designed and is expected to begin in

2028 using information discovered in the current trial.

Researchers are keen to hear farmers' views on the FVI and the planned grazing trials through an online workshop and feedback form.

"We've heard farmers value total annual dry matter production, the seasonal spread of that total production, the quality of the ryegrass when grazed or in silage, palatability, and cow performance, among other factors," says Janet.



That's why we're investing in new research and working with the Plant Breeding and Research Association to better understand how cultivar performance translates from research plots to real farm systems.

"The goal is to relaunch the FVI based on a deeper understanding of how cultivar performance in plot trials translates to farm systems performance."

For research updates and online workshop registrations, visit dairynz.co.nz/fvi

Meet the expert:



Janet Montgomery
Forage Value Index research project manager



This latest trial will focus on the physiology of ryegrass and how it reacts differently, from mowing to grazing.



Extended lactation: one farm's experience so far

Emma Gardiner and Ben Fisher are sharemilking business partners alongside Caleb Higham. With support from farm owner Hukanui Charitable Trust, they transitioned their 240-cow crossbred herd by leaving 40% of the herd unmated in 2024/25.

Sandowne is the first commercial farm piloting a 24-month calving interval, with half the herd calving each spring. Early results suggest the system is reducing spring pressure while maintaining herd performance.

Early positive results

- 74% fewer non-replacement calves.
- More beef-sired calves, increasing from 6% to 26% calves born.
- Milk production slightly higher, additional 200kg DM/cow of supplement used.
- Higher conception rates in cows on extended lactation.
- Less pressure during spring, with reduced workload for the farm manager.

It's been "so far, so good" for sharemilker Ben Fisher after completing the first full cycle under an extended lactation system.

The 66ha Sandowne sharemilking operation in Gordonton, Waikato, is the first commercial farm to pilot a system developed through DairyNZ's Extended Lactation Project. As part of the Dairy Beef Opportunities programme, the project is investigating whether a 24-month calving interval can reduce the number of non-replacement calves, support more calves entering the dairy-beef system and provide another option for pasture-based

dairy farms.

Under the system, most cows are milked for longer and calve every two years instead of annually. The extended-lactation cows are split into two groups, with half calving each spring.

"At this early stage it's looking promising," Ben says.

Together with his sharemilking business partners, Emma Gardiner and Caleb Higham, and with support from farm owners Hukanui Charitable Trust, particularly trustee and consultant Mark Robinson, Ben transitioned their 240-cow crossbred

Farm facts:

Location: Gordonton, Waikato
Farm size (effective): 66ha
Herd size: 240 cows
Breed: Crossbred
Stocking rate: 3.6 cows/ha
Farm system: 5

herd by leaving 40% of the herd unmated in 2024/25.

Why they made the change
Sandowne previously operated a traditional spring-calving system. After seeing extended lactation in action at DairyNZ's Scott Farm, the team decided to explore whether it could work on their farm.

Farm manager Matias Campello runs the day-to-day farm operations, supported by part-time help from Ben and a relief milker. Ben says reducing the number of non-replacement calves and easing spring workload during calving and mating were the main drivers for making the change.

"For one person managing that number of cows calving and rearing the calves, it's a lot, especially if something goes wrong," Ben says.

"With fewer cows calving and fewer calves to feed, Matias has more time to deal with any issues that arise. It's also easier to train heifers because you have cows already milking."



Sandowne's production during transition			
	2023/24	2024/25	2025/26
Description	First season sharemilking	Normal year, except 40% not mated. Extra ~4,000 kg MS in May from EL cows	First season operating under a 24-month calving interval
kg MS	104,515	111,922	113,124
kg MS/ha	1,584	1,696	1,714
kg MS/cow	435	466	473
Milksolids %	9.36%	9.65%	10.36%
SCC	205	163	200
Imported supplementary feed t DM/cow	1.9	1.9	2.1
N fertiliser kg/ha	199	155	128

Matias says the changes have been positive, and he was amazed at how fast the first calving occurred.

"It's less pressure in the peak of the seasons."

As part of the project, DairyNZ monitors Matias's workload and heart rate using a Garmin watch. During the first calving under the new system, his average heart rate was 6% lower, step count 12% lower and he worked 13% fewer hours in spring (July-November).

Winter milking increased his hours in June by 20%. The results suggest the workload has shifted rather than disappeared, but for Sandowne the benefit has been reducing pressure at the busiest time of the season.

Healthy cows, strong reproduction

Maintaining herd performance and milk production was one of Ben's biggest priorities during the transition. So far, production has held up well, although the project is continuing to build evidence on how extended lactation performs across different seasons and farm systems.

There have been no significant calving or metabolic issues, and the team is pleased with reproduction results.

In spring 2024, 60% of the herd was mated over six weeks. More beef semen was used alongside frozen sexed semen, while the remaining cows continued milking through an extended lactation.

By spring 2025, calf numbers had reduced from 242 to 137. At the same time, a greater proportion of beef-sired calves increased from 6% to 26%

of calves born.

Together, these changes reduced the number of non-replacement calves by 74%.

During spring 2025 mating, cows in extended lactation were also in a better body condition than they would typically be in an annual-calving system. Their conception rate was 64%, compared with 49% for a subset of 49 annually calving cows, lifting the overall in-calf rate.

Ben says sexed semen worked well because the cows suited the recommended criteria.

"The cows were cycling well, had good condition scores and they hadn't calved in 12 months."

Managing the transition

Ben says one of his biggest concerns was feed supply through winter, but "the transition was pretty smooth". He puts that down to Sandowne being a System 5 farm with a covered barn, so supplementary feeding was already happening.

"We continued that on through the winter, which meant we could manage the pastures better."

He says only minor changes were needed for feed budgeting. Winter grazing rounds were shortened slightly while supplementary feed filled any gaps.

The farm's production curve has also changed, with the traditional spring peak becoming noticeably flatter.

Ben was also concerned that cows milked through winter might

experience teat damage, but that's not been the case.

"So far we've had none. In fact it's been the opposite. The cows that milked through winter have teats in better condition than the cows that calved in spring."

Managing cows at different stages of the cycle has also proved simpler than expected, with calving and non-calving cows run together in one mob.

Choosing cows that suit the system

The move to extended lactation has changed the farm's culling policy. Cows that dry themselves off well before the end of lactation are less suited to the system and are removed from the herd.

"If they can make it until Christmas and they are pregnant by then, we will keep them. If they have dried themselves off by Christmas, they are not suitable for this system."

Six cows dried themselves off, but Ben says there were no obvious markers to identify them earlier.

"We're not doing it on a large enough scale to recognise trends. I did look at the ones we culled last year to see if there was a common sire, but there wasn't."

Costs and practical lessons

Ben says the financial impact has been smaller than expected. Extra feed costs have been largely offset by winter milk payments, while mating costs have reduced because not every cow is mated each year.

"The additional expenses of running the cowshed have been minimal and have probably been saved because we have fewer mating costs because we're not having to buy semen for every cow.

"We have better in-calf rates because we don't have as many returns, and the costs have largely evened out. We haven't seen any major differences."

Ben believes an extended lactation system could work on less intensive farms too, but says planning is essential.

"You don't have to have a herd home for it, but you do have to have very good winter management and a plan for how you are going to keep that winter feed up to keep the cows milking through – and be prepared to milk every day."

So far, Ben says, extended lactation has delivered what the team hoped for: reduced spring workload, maintained herd performance

The Dairy Beef Opportunities (DBO) Programme is an initiative funded by DairyNZ, Beef + Lamb New Zealand, the Meat Industry Association, Dairy Companies of New Zealand and the Ministry for Primary Industries under the Primary Sector Growth Fund.

and production, and fewer non-replacement calves without fundamentally changing how the farm operates.

"We saw it in action at DairyNZ, so we knew what we were expecting. The positive outcomes we have achieved, like good mating performance, we expected to happen. There haven't been any surprises and that's a good thing."

Want to follow the project or get involved?

We're continuing to learn how extended lactation performs across different farm systems. If you'd like to follow the trial, hear about new results, receive updates or register your interest in being involved, visit dairynz.co.nz/extended-lactation

Sandowne's transition to extended lactation

2023/24: Starting point

- Sandowne Ltd began 50:50 sharemilking on the Gordonton farm.
- The farm operated under a 12-month calving interval, with all 240 calving and mated over 12 weeks in spring.

2024/25: Beginning the transition

- The full herd calved.
- Spring mating was shortened to six weeks, with only 60% of the herd mated.
- The remaining 40% continued milking through an extended lactation.

2025/26: First year in the new system

- Cows in extended lactation were milked through winter.
- 137 cows calved in spring.
- Cows that had completed an extended lactation were mated, while the newly calved cows entered their own extended lactation.

Research in action: project updates

DairyNZ research is helping to deliver practical, science-backed solutions for farmers. These are some of the projects under way looking to find ways to support informed decisions and stronger, sustainable dairy businesses.

GenAI for Farmers

How AI can help on-farm.

Generative AI tools such as ChatGPT, Claude, Gemini and DairyNZ’s DAiSY are becoming part of the toolkit for some dairy farmers, helping to save time, summarise information, and reduce the mental load of managing a farm.

The GenAI for Farmers project aims to help farmers and the wider sector understand where generative AI can add value in farm operations and how it can be

used effectively and safely. Insights from participating farmers, along with practical guidance on AI use, will be shared throughout the two-year project, helping farmers understand both the opportunities and limitations of these technologies.

Get involved by joining the GenAI Community of Interest or register for updates at dairynz.co.nz/using-ai

Lead experts:



Brian Dela Rue
DairyNZ research engineer



Dr Callum Eastwood
DairyNZ principal scientist



Teresa Anderson
DairyNZ project manager



Understanding and Managing *E. coli* in Pastoral Catchments

Enhancing biodiversity and water quality.

Understanding, managing and reducing *E. coli* in waterways is a challenge for farmers. This five-year research programme, led by DairyNZ and the Bioeconomy Science Institute (formerly AgResearch), aims to better understand where *E. coli* comes from and what can be done to reduce it.

Researchers have worked alongside the Nguturoa Catchment Group near Palmerston North, which identified elevated *E. coli* as an issue for dairy, sheep and beef farmers, and lifestyle block owners in the catchment.

The project has involved fortnightly monitoring of stream water quality and flow across 18 sites,

including sampling during wet weather and other events, different upstream land uses, and potential animal and stream-bed sources of *E. coli*.

As monitoring wraps up, researchers are analysing the data to assess the level of *E. coli* reduction that could be achieved through practical on-farm actions. The findings will strengthen the science behind DairyNZ’s advocacy for pragmatic and effective approaches to managing *E. coli* in productive farming catchments.

Find out more at dairynz.co.nz/understanding-ecoli



Stream monitoring data is showing the water quality benefits of excluding stock from small streams.



Drystock and dairy farmers are working together to better understand the sources of *E. coli* and how to reduce losses to local waterways.

Lead scientists:



Dr Craig Depree
DairyNZ principal scientist



Richard Muirhead
Bioeconomy Science Institute senior scientist

Emissions and Profitability

Identifying what drives profitable, lower-emissions dairy systems.

Farms with higher profit and lower emissions intensity had:



Proportion of homegrown feed



Purchased N surplus



Purchased feed with high-embedded emissions

Relative to farms with higher profit and higher emissions intensity.

What do highly profitable, lower-emissions dairy systems have in common?

That is the question behind a major collaboration between DairyNZ, Fonterra and LIC. The research is investigating the relationship between profitability and emissions on New Zealand dairy farms, with the goal to identify what separates highly profitable, lower-emissions farm systems from the rest, and where there are opportunities to improve.

Phase one found there are many farms achieving high profits with low emissions intensity. These farms often rely more on low-footprint homegrown feed,

resulting in a lower emissions footprint while supporting strong (but not exceptional) production per kilogram of liveweight.

Phase two is refining these findings to provide more tailored insights for different regions and land types.

One area already generating interest is Pasture Potential, an approach that estimates the achievable production of homegrown feed for a specific parcel of dairy farmland. As the research progresses, it is building a clearer picture of the management choices and opportunities that could support both profitability and lower emissions intensity.

Find out more at dairynz.co.nz/emissions-profit

Lead scientists:



Dr Josiah Cleland
DairyNZ data scientist



Dr Paul Edwards
DairyNZ principal scientist



Mark Neal
DairyNZ head of data science and modelling



Plantain partner farmers, DairyNZ, Agricom, Environment Canterbury and Morven Glenavy Ikawai Irrigation are collaborating to reduce N leaching in Waikāhiki, Canterbury.

Plantain Potency and Practice

Building knowledge with partner farmers.

Over the past four years, 37 partner farms in nitrogen-sensitive catchments have participated in the Plantain Potency and Practice programme, helping DairyNZ develop practical management strategies and understand how plantain can affect farm profit and nitrogen leaching.

Monitoring across up to 1500 paddocks shows that plantain can make up 25-35% of total dry matter when established in new mixed swards with ryegrass and clover, declining to around 10% after three years.

Plantain levels of 10-15% can be maintained by broadcasting seed with fertiliser annually. Farmers in the programme maintained these levels across their farms at a cost of around \$46/ha/year.

The programme has produced a comprehensive set of resources for farmers, including region-specific establishment and management guidelines, research and partner-farm monitoring and modelling results, case studies and farmer videos.

Find out more at dairynz.co.nz/plantain

Lead experts:



Kate Fransen
DairyNZ senior project manager



Jess Dunbar
Agricom agronomy project coordinator

Dairy Beef Opportunities

Developing a tailored mating planner.

Choosing the right mating strategy has become more complex as breeding options continue to expand. As part of the Dairy Beef Opportunities programme, DairyNZ is developing a research model to help farmers understand the trade-offs associated with different mating strategies. These strategies include dairy or beef genetics, liquid or frozen semen, sexed or conventional semen, and different gestation-length traits.

The model will estimate the likely impacts of different decisions, including the number and type of calves produced, calving patterns, genetic gain, herd reproductive performance and the economic impacts of different choices.

A group that includes farmers is helping shape and test the model. The outputs will be used to develop example mating plans aligned with different goals, such as maximising genetic gain or increasing the value of non-replacement calves. If there is sufficient industry demand, the model could eventually become a decision-support tool for wider use.

Find out more at dairynz.co.nz/dbo



High-value non-replacement calves. Photo credit: Dr Chris Burke.

Lead scientists:



Dr Mahya Tavan
DairyNZ scientist



Dr Paul Edwards
DairyNZ principal scientist



Plantain delivers on reducing N losses

Plantain is proving a key tool for farmers to reduce nitrogen leaching without compromising milk production.

A four-year farmlet trial at Lincoln University Research Dairy Farm has delivered the strongest evidence yet that pastures containing plantain can help reduce nitrogen leaching without reducing milk production.

The completed trial, part of the ongoing Plantain Potency and Practice programme, reinforces the value of plantain as an effective option within the nitrogen mitigation toolbox.

The Lincoln trial compared nitrogen leaching and milk production between perennial ryegrass and white clover pastures sown with and without Ecotain® plantain.

Pastures containing an average of 17% plantain dry matter reduced annual nitrate leaching by an average of 33%, from 18kg/ha/year to 12kg/ha/year.

The pastures were sown with 3kg/ha plantain and were maintained with oversowing or undersowing plantain over the four years. Nitrate leaching was measured using ceramic suction cups.

This reduction in nitrate leaching was achieved without reduction in milk production. DairyNZ senior project manager Kate Fransen says average milk production was unaffected by the inclusion of plantain over the four years. Herbage production and silage use were also similar between treatments.

“The findings show that plantain can deliver environmental benefits without compromising farm performance.”

Kate says the nitrate leaching reductions achieved at Lincoln are

What the Lincoln trial found			
Measure	Without plantain	With plantain	Result
Annual average nitrate leaching	18kg/ha/year	12kg/ha/year	33% lower
Milk production	Similar	Similar	Maintained

more than double those predicted by current models, which account only for plantain’s effect on reducing urinary nitrogen.

“The Lincoln results give us strong evidence that plantain can reduce nitrogen losses while maintaining farm performance. This gives farmers another option to support environmental progress while maintaining productive and profitable farm businesses.”

The Lincoln farmlet trial builds on other research under the Plantain Potency and Practice programme, including a grazing trial at Massey University and the aligned Low N Farmlet Trial at Lincoln. Ecotain plantain has been used in all programme trials where leaching has been measured.

Plantain’s high water content helps dilute cow urine, while its feed qualities shift more nitrogen into faeces and milk, and less into urine.

Researchers are also learning more about how plantain reduces drainage and affects nitrogen cycling in soil, further reducing leaching.

Plantain is a short-lived perennial, so mixed swards need ongoing maintenance through oversowing or undersowing.

In the final years of the Lincoln trial, the plantain content plateaued at 10-15% while leaching reductions remained consistent, showing

relatively low levels of plantain can still deliver substantial reductions in nitrate leaching.

The Plantain Potency and Practice programme is also working with partner farmers to develop regionally relevant management practices and help inform the science programme.

Partner farmers in Canterbury are achieving 10-15% plantain across their farms by including plantain in their pasture renewal mix on 10% of the farm and broadcasting seed with fertiliser across the rest of the farm annually. At approximately \$46/ha/year, plantain is one of the most cost-effective options for reducing nitrogen leaching.

DairyNZ modelling shows other mitigations like reducing nitrogen fertiliser and feed inputs, changing wintering practices, or investing in infrastructure, come at a much greater cost.

The Plantain Potency and Practice programme is working towards improving how plantain’s full effects

are reflected in models such as Overseer by 2028.

The seven-year collaborative research initiative is led by DairyNZ and funded by the Ministry for Primary Industries through the Sustainable Food and Fibre Futures fund (now Primary Sector Growth Fund), DairyNZ, PGG Wrightson Seeds and Fonterra. Research is delivered in partnership with Lincoln University, Massey University, Lincoln Agritech and the Bioeconomy Science Institute.

Want to know whether plantain could work on your farm? Read more about the research and talk with your farm advisor about how plantain could fit into your farm system at dairynz.co.nz/plantain

Meet the expert:



Kate Fransen
DairyNZ senior project manager

How plantain helps reduce nitrogen losses

- Plantain’s high water content helps dilute cow urine.
- Its nutritional makeup means more nitrogen goes into faeces and milk, and less goes into urine.
- Further reductions in nitrogen leaching occur through reduced drainage and changes to nitrogen cycling in soil. Researchers are working to quantify these effects for inclusion into models such as Overseer.

Measuring nitrogen-loss tools on a Southland dairy farm

The Balfour Catchment Group and DairyNZ are monitoring constructed wetlands and a woodchip bioreactor to better understand how effectively these tools reduce nitrogen in water. The project is also capturing practical lessons – from construction to costs – to help others learn from them.

Turning an unproductive part of the farm into something that supports water quality and helps other farmers learn to do the same was a no-brainer for Southland dairy farmer Brendon Stevens.

His 500ha dairy farm borders the Waimea stream for almost 5km on the southern side of the Balfour catchment. Groundwater comes back to the surface on the farm before entering the stream, making it a useful site to test nitrogen-loss mitigations on a working farm.

As a member of the Balfour Catchment Group, Brendon has been involved in work to better understand how nitrogen moves through the catchment. The group partnered with DairyNZ’s Jobs for Nature project in 2024 to design, build and monitor two constructed wetlands, one planted seepage wetland and a woodchip bioreactor on Brendon’s farm.

The aim is to build confidence in these tools and understand how much nitrogen they can remove before water reaches local streams.

“The wetlands fit well into our business. We didn’t have any reservations about creating them because they’re in areas we didn’t use, so it’s a great bang for buck,” Brendon says.

“What I’m most proud of is that we’ve turned an ineffective area into something that can help the community and improve freshwater quality in the local stream.”

One wetland is located in a terrace gully fed by a tile drain and between

three and five seeps, depending on how wet the conditions are. The site was steep, with a defined channel and shallow soil over rotten rock. A serpentine (winding) channel was created to slow water and increase the time it spends in the wetland, giving the soil, and plants like carex and juncus, more opportunity to remove nitrate.

Initial site readings give a monitoring baseline of nitrate-nitrogen at 8mg/L, and these levels will continue to be monitored to understand how effective these mitigations are in Southland conditions.

The woodchip bioreactor provides another option where a wetland may not be suitable. Buried underground, this one is 30m long by 10m wide and up to 1.5m deep. Water flows in from a terrace, with part of the flow going through the bioreactor and the rest diverted so results can be compared. Bacteria living within the woodchip convert nitrate into nitrogen gas through a process called denitrification.

“The biggest advantage of the woodchip bioreactor is it doesn’t take up any productive land,” Brendon says. “You can graze the paddock and still have a useful tool for reducing nitrogen in water on your property.”

Early monitoring shows the woodchip bioreactor is reducing nitrate concentrations by an average of 78%. Data from the winter period is currently being processed to work out load reductions.



As a member of the Balfour Catchment Group, Brendon has been involved in work to better understand how nitrogen moves through the catchment.

DairyNZ environmental manager Justin Kitto says the project provides practical information for farmers interested in these tools, including where they fit, what they cost and what needs to be considered during construction.

“The project is helping us understand how these mitigations perform in practice, while also capturing practical lessons that can help other farmers make informed decisions,” Justin says.

Lessons so far include choosing mitigations that suit the site, ensuring design plans can be clearly translated for contractors, and using locally suited plants. Monitoring will continue to build a clearer picture of what these tools can achieve.

Watch this wetland case study video and others at dairynz.co.nz/wetland-videos

Key considerations

- Match the mitigation to the site and water flow.
- Make sure design plans are clear for contractors to follow.
- Use locally suited wetland plants.
- Allow for monitoring to understand performance over time.

The work was co-funded through DairyNZ levy investment alongside the Balfour Catchment Group and the Ministry for the Environment’s Jobs for Nature programme.

Meet the expert:



Justin Kitto
DairyNZ
environmental
manager



An aerial view showing the wetland serpentine design.

Project costs involved

Seepage wetland	Planting	\$5069
Constructed wetland 1	Earthworks	\$9546
	Plants and labour	\$20,042
	Total	\$29,588
Constructed wetland 2	Earthworks and two fish passes	\$19,207
	Plants and labour	\$21,489
	Total	\$40,696
Woodchip bioreactor, including polyethylene liner and cap, plus woodchip		\$32,067
Total supplied project cost		\$107,420

Brendon provided in-kind time to the project including helping with planting, sourcing and transporting material.

Breeding Worth linked to lower emissions intensity

New modelling suggests breeding for improved productivity and profitability through Breeding Worth may also reduce emissions intensity.

Research suggests the genetic gain achieved through Breeding Worth (BW) is helping reduce methane emissions intensity across the national herd.

The modelling looked at genetic improvement through BW and its impact on methane emissions intensity. The findings suggest that breeding for traits farmers already value can help improve methane emissions efficiency alongside productivity and profitability.

The research focused on methane emissions intensity, rather than the total amount of methane a cow emits. Emissions intensity measures the amount of methane produced per kilogram of milksolids, reflecting how efficiently feed is converted into milk.

International customers use emissions intensity to compare the environmental footprint of dairy products, and New Zealand dairy companies include it within their Scope 3 emissions targets.

Traits linked to lower methane emissions intensity

Researchers modelled how improving key economic traits within BW could affect the amount of feed required per unit of output and the methane emissions from milking cows and replacements. They focused on six traits: milk fat, milk protein, milk volume, fertility, functional survival and liveweight. Using these traits, they modelled the impact of the national herd's genetic trends between 2019 and 2024 on methane emissions intensity.

Four traits appeared to account for most of the reduction in methane emissions intensity. Milk fat and milk protein lifted production, while fertility and functional survival kept productive cows in the herd longer and reduced the number of replacements needed.

Across the five-year period, methane emissions intensity was estimated to have fallen by 3.26% per kilogram of milksolids. At the same time, methane emissions per cow rose by 1.22%, reflecting higher feed demand as milk production increased.

The results suggest what many already know: genetic improvement helps make cows more efficient producers of milk. When more milksolids are produced for the same amount of feed energy, methane emissions intensity falls because each kilogram of methane is spread across more milk production.

The findings indicate that traits already selected to improve herd performance may also help lower methane emissions intensity, alongside the productivity gains they deliver.

Owl Farm puts research into practice

The modelling was applied at Owl Farm, near Cambridge. Over the same five years, the demonstration farm lifted its herd BW by around 24 points a year, while reducing methane emissions intensity by roughly 4%. Owl Farm's herd BW now sits at 204, placing it in the top 4% nationally.

The cows with the lowest methane

emissions intensity had the highest BW. The top 20% of cows in the herd produced 62kg more fat, 44kg more protein and 1,068 litres more milk than the bottom 20%.

“We have the resources to breed cows that have the best possible opportunity to convert that feed most effectively into milk.”

These results are consistent with research findings at a herd level, suggesting that the same traits that contribute to higher BW and improved herd performance could also be associated with lower methane emissions intensity.

Owl Farm demonstration manager and National Breeding Objective (NBO) committee member Jo Sheridan says farmers have been breeding for efficiency for a long time, and it's encouraging to see those decisions also appear to improve methane emissions intensity.

“We have the resources to breed cows that have the best possible opportunity to convert that feed most effectively into milk.”

“We just need to make sure we have more of these top performers in the herd.”

A long-term tool

The findings reinforce the value of using BW to guide breeding decisions, and of selecting replacements from high-BW cows. The research suggests that breeding better cows can help improve efficiency, productivity, profitability and methane emissions intensity.

The research was commissioned by NZ Animal Evaluation following a recommendation from the NBO



Owl Farm demonstration manager and National Breeding Objective committee member Jo Sheridan.

committee. These findings are based on modelling rather than direct methane measurements, so further research is needed to confirm the results in practice. Farm management will also influence outcomes, including how higher-BW cows are fed and where additional feed comes from.

Find out more:

- Breeding Worth: dairynz.co.nz/bw
- NZ Animal Evaluation: dairynz.co.nz/nzael
- Reducing GHG emissions research: dairynz.co.nz/reduce-emissions

Meet the experts:



Becky Curry
NZ Animal Evaluation geneticist



Dr Jo Newton
NZ Animal Evaluation genetics science lead

Four economic traits associated with lower methane emissions intensity

Milk protein

Functional survival

Milk fat

Fertility

Based on modelling of genetic trends at the national herd level from 2019 to 2024.

Snapped around the regions



A look at the people, research and on-farm activity driving progress across the dairy sector. Want to be featured? Tag our Instagram or Facebook @DairyNZ.



Dr Elena Minnee using a rhizotron during a Scott Farm trial in the Resilient Pastures Programme. The rhizotron is like an underground window that lets scientists watch roots grow and respond to grazing and climate stresses in real time.



Cows graze for the first time on the newly established Forage Value Index trials on the Lincoln University Research Dairy Farm. Photo: Janet Montgomery.



Pounamu Anaru, Hinehou Timutimu and Brooke Sinclair at Te Tawa Kaiti for a wetland restoration planting day.



Brooke Sinclair, Bill Akuhata (Fonterra Māori Agribusiness), Tim Eves (field advisor for Kaipara Moana Remediation) and Julian Reti Kaukau at the Te Taitokerau Fonterra Agribusiness Trustee hui.



Breakfast time at Oxford Pastoral, near Tirau. Photo: Sophie Johnson.



A new kikuyu cultivar at NARF, established in autumn and being assessed as a potential step up from wild kikuyu. Photo: Dr Paul Edwards.



Regional team members joined the Institute of Rural Professionals tour of Gavins Limited in Gordonton. Photo: Willie McKnight.

Managing heat stress: trial shows what works best and where

A DairyNZ trial is providing further evidence on how cooling options such as shade, sprinklers and misters can help reduce heat stress for cows.

Trial's key findings:

- Shade in the paddock reduced signs of heat stress.
- Sprinklers and misters helped cows maintain a lower breathing rate as heat load increased.
- Sprinklers were more effective at very high heat loads, while misters also provided effective cooling and used less water.
- Once-a-day milking was linked with lower rumen temperature and increased lying time, but also lower milk production.

Q: How does this trial build on what we already know about heat stress?

A: Farmers know hot conditions can affect cow comfort and performance, but there's less evidence about which cooling options work best and where. Should you focus on shade in the paddock, or sprinklers or misters on the yard?

Farmers want more information about when and where cows experience heat stress during the day, and which management options are most effective, so they can make the best decisions for their herd.

A trial at DairyNZ's Scott Farm compared four approaches over seven weeks last summer: once-a-day milking, yard sprinklers, yard misters and daytime shade.

The responses of those cows were compared with cows that had no cooling options as heat load increased.

Q: What did the trial find?

A: Cows without cooling options showed stronger signs of heat stress as air temperatures increased. Their rumen temperature rose, breathing rate increased, and drooling became more frequent.

The results showed that different cooling options can help at different times of the day.

Sprinklers and misters were most beneficial on the yard. The period before afternoon milking was identified as a short but high-risk time for cows, particularly when they're standing in the yard. Both cooling options helped cows maintain a lower breathing rate as heat load increased. Sprinklers were more effective at very high heat loads, while

misters also provided effective cooling and used less water. In the trial set-up, sprinklers used 1.6 times as much water as misters.

Shade was effective when provided to cows in the paddock during the day. Cows with access to shade had a smaller increase in breathing rate in the paddock and a smaller rise in rumen temperature as heat load increased. There was also some carry-over benefit when cows moved to the yard, although this was smaller than the benefit seen from water-cooling on the yard.

Cows milked once a day also had a flatter rise in rumen temperature as heat load increased, and they spent more time lying, which suggests better comfort. However, they produced less milk than cows milked twice a day.

That means once-a-day milking may reduce heat stress for cows but it needs to be considered as a whole-farm business decision.

Q: How can farmers apply these findings?

A: The results provide a useful starting point for thinking about where cooling could have the greatest benefit.

For many farms, that means looking at heat stress in two places:

In the paddock: consider how cows can access shade while grazing, particularly during hotter parts of the day (trees, shade structures, covered feed areas, herd shelters or other options).

On the yard: consider whether sprinklers or misters could help cows cool down during the period before afternoon milking.

Start by identifying where cows show signs of heat stress, then consider

which options fit your farm system, infrastructure and budget.

Q: What are the next steps for this research?

A: The findings are being peer-reviewed and will be published on DairyNZ's website. This research will help develop future tools and resources to support on-farm decision-making.

Farmers told us they want to better understand how heat load affects milk production under commercial farm conditions. The next stage of

the research will use data from farms across the country to investigate this relationship and provide insights.

If you'd like to get involved in research around keeping cows cool, speak to your local DairyNZ area manager.

Meet the scientist:

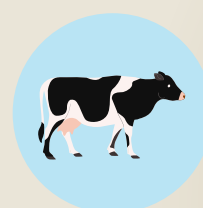


Dr Charlotte Reed
DairyNZ senior scientist

Identifying signs of heat stress

Keep a close eye on cows on hot days, especially in the paddock and before afternoon milking. Common signs of heat stress include faster breathing, drooling and reduced lying time.

Breathing rate is one of the simplest checks:



1. Get your eye in – watch nostrils or flank



2. Count breaths for 10 seconds



3. If more than 10 breaths, cow is experiencing heat stress

Practical tips to minimise heat stress:

- On hot days, supply extra water troughs, such as on parlour exit.
- Ensure water in troughs keeps up with extra demand.
- Wet the concrete pad before the cows arrive for milking.
- Shift feeding and milking to later in the day.
- Change diet to higher energy, less fibrous feed.
- Plan grazing so cows have access to shade or shelter during hot weather.
- Identify paddocks, laneways and holding areas most prone to heat stress, and plan mitigation options before summer.

For more information on managing heat stress, visit dairynz.co.nz/heat-stress



Research cows under misters in the yard of DairyNZ's Scott Farm.