

Inside Dairy

AUG-OCT 2025

By DairyNZ

Mentors make all the difference

Support powers optimisation



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Uncovering different drivers



Over the fence...

While many of you are in the thick of calving, this is also a good time to reflect on what we've achieved as a sector over the past season. It's been a positive year with strong market returns, progress on regulatory reform, and a promising outlook for dairy.

We recognise the importance of productivity and staff retention, so this edition of Inside Dairy focuses on efficient farm practices – from both farm management and research perspectives.

I am excited to share our cover story, which profiles dairy farmers Jesse and Sharon Bagley near Kaitaia. They have created a thriving farm business through a combination of hard work and surrounding themselves with like-minded advisors and mentors.

We also highlight a workplace productivity study by Dr Lucy Hall that explores 10 farms, tracking hours worked and time spent on key tasks. Her case studies highlight practical changes that save time, improve productivity, and support staff retention.

We also highlight the outcomes from the emissions and profit project we've undertaken with Fonterra and LIC, which shows that farms can be highly profitable with either low or high emissions intensity, but feed choices (especially the use of homegrown feed) are linked to both lower emissions intensity and purchased nitrogen surplus.

Finally, we celebrate milestones for our sector, such as the launch of the collaborative seven-year \$17 million Resilient Pastures programme and the signing of the Foot and Mouth Disease Operational Agreement.

I believe the future for dairy is bright, and DairyNZ's science and research, along with our farm system expertise, will continue to progress a positive future for our farmers and our country.

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

Ngā mihi,
Campbell Parker
DairyNZ chief executive

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On the cover:
Kaitaia farmers Jessie and Sharon Bagley with their children Layla, Daniella and Claire. Read their story on page 6.

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Practical catchment solutions



Landing the dream



On-farm productivity

Access DairyNZ regional support

DairyNZ's regional teams have local area managers throughout the country and are here to support you in finding farm systems solutions for a thriving and sustainable farm business.

Scan the QR code to find contact details for your regional team or visit dairynz.co.nz/regional-teams



New \$17m research programme targets pasture decline

DairyNZ is leading a \$17 million, seven-year Resilient Pastures programme, supported by the government's Primary Sector Growth Fund, to address the issue of declining pasture persistence.

The challenge is clear: farmers are reporting shorter pasture lifespans, and DairyNZ analysis shows that pasture renewal rates are increasing while pasture harvest is declining, by 0.5 to 1 tonne of dry matter per hectare per decade in regions such as Waikato and Northland.

Pasture-based farming is central to New Zealand's food production system and underpins our global reputation for premium products. It provides a low-cost, sustainable feed source for both dairy (our top export) and red meat production, forming a key part of our competitive advantage.

This farmer-led, regionally focused initiative brings together farmers and sector partners across the Upper North Island to identify pasture species and management practices that are more resilient to climate variability and extreme weather events, both now and into the future.

The goal is to develop solutions that are practical, profitable and environmentally sustainable.

The programme is led by DairyNZ, with support from Beef + Lamb New Zealand, the T.R. Ellett Agricultural Research Trust, Hine Rangi Trust, Northland Dairy Development Trust, Barenbrug and Fonterra.

Read the full story at dairynz.co.nz/resilient-pastures-news

Find out more about the Resilient Pastures Programme at dairynz.co.nz/resilientpastures



The solutions uncovered in the Resilient Pastures programme will ultimately benefit all regions across the country.



New agreement strengthens FMD preparedness

New Zealand's livestock sector and the government have signed a landmark agreement to strengthen foot and mouth disease (FMD) readiness and response. The deal brings together Beef + Lamb New Zealand, DairyNZ, the Dairy Companies Association of NZ, Deer Industry NZ, NZ Pork, the Meat Industry Association, and the Ministry for Primary Industries. It ensures sector involvement in key decisions and cost-sharing.

DairyNZ CEO Campbell Parker stressed the importance of farmer input to protect against potential billions in losses. The partnership commits to sharing 40% of readiness costs and 15% of response costs, reinforcing the country's biosecurity.

Read the full story here dairynz.co.nz/fmd-agreement

Practical training for dairy farmers – with a new look

DairyNZ subsidiary Dairy Training now delivers all practical training for dairy farmers. Their NZQA micro-credentials are short, focused courses, and they're free.

Plus, popular DairyNZ workshops like CalvingSmart and MilkSmart are back and now delivered by Dairy Training.

Find out more and apply online at dairytraining.co.nz



DairyNZ project wins national award

DairyNZ's Reducing Sprains and Strains project won the Innovation category in the New Zealand Workplace Health and Safety Awards 2025. Find out more about the project at dairynz.co.nz/sprains-strains

Animal Evaluation Governance Group focused on the future

Chaired by fifth-generation dairy farmer Rebecca Keoghan (pictured), this governance group brings together DairyNZ/NZAEL, LIC and CRV to drive stronger genetic gains through collaboration. Prompted by findings that New Zealand is falling behind in genomic technologies, the programme is focusing on three key areas in 2025:

- **Developing a National Breeding Objective (NBO):** A newly formed NBO Committee – made up of farmers and sector representatives – is helping define the traits needed for a future-proofed herd, including lactose and traits linked to environmental and climate outcomes.
- **Creating a trusted, industry-wide Breeding Worth (BW):** The goal is to establish an industry-wide, consistent BW assessment against the NBO that farmers, breeders and sector players can rely on.
- **Improving data quality:** Collecting better phenotypic data is essential to support accurate and reliable genetic evaluations across the sector.

Get the full update at dairynz.co.nz/ae-future-focus



NZ's grass-fed advantage key to global clout, farmer panel says

Forward-thinking farmers and sector experts shared their insights at Farmers Forum events, offering a glimpse into the future of dairying.

We need to keep innovating around our grass-fed advantage to stay sustainable and globally competitive. That was the clear message from the farmer panel at DairyNZ's Farmers Forum in Hamilton.

The three panellists shared how they're shifting their thinking to set up their farms for the future, and where they see fresh opportunities emerging for the sector.

Te Awamutu dairy farmer Brad Hancock said the day's forum speakers had highlighted many of the opportunities he sees ahead.

"It's all grass, grass and more cheap grass," he said.

"Grass is our sector's competitive advantage, and is why New Zealand is the most efficient dairy producer in the world, even with Ireland knocking on our door."

He said Ireland's dairy sector is rapidly improving and closing the gap, making it essential for New Zealand to protect and build on its grass-fed edge to stay ahead.

Echoing this, Cambridge farmer and fellow panellist Markus Woutersen pointed to pasture as the biggest opportunity, sharing some DairyBase stats.

"The average Waikato sharemilker is harvesting about 12.5 tonnes of dry matter, while the top 25% are hitting around 14 tonnes," he said.

"When it comes to profitability, the median farmer earns less than \$900 a hectare, compared to the top farmers, who make more than \$3000 a hectare. There's real potential there for farmers."

Markus has adopted wearable technology on his farm to support pasture management.

"Managing pasture and hitting residuals is the key driver of profitability, irrespective of what system you are running. That's a massive opportunity for us as farmers."

While innovation is everywhere, Markus questioned whether the real challenge is farmers' willingness, or ability, to make the most of it.

"There are lots of exciting innovations out there. Is there a willingness to improve? Or is it a lack of management expertise that's holding things back?"

If it's the latter, he wondered whether Artificial Intelligence could help lift the performance of farmers who are falling behind.

Donna Smit, who farms near Edgecumbe and previously sat on the Fonterra board, was the third panellist at the Hamilton forum. She said harnessing data holds the key to future progress.

"We already have extensive data on genetics, and now we are getting a lot of data from wearables, so my challenge to the sector is to uncover learnings from that data that keep us ahead," Donna says.

To prepare her farm for the future, Donna is focused on directing capital where it counts most.



Markus Woutersen, Donna Smit and Brad Hancock shared how they're building on New Zealand's grass-fed edge to stay competitive and sustainable during a panel at the Hamilton Farmers Forum.

"When I look at investments, they've got to tick the big boxes of what the world wants: we need to address methane, nitrogen leaching and bobby calves.

"And of course, it has to be profitable."

The theme for the 2025 Farmers Forum centred on dairying's future. Three events were held, in Hamilton, Ashburton and Invercargill, covering topics such as innovation, global markets and the shifting economy, and exploring DairyNZ's science research and policy work.

Trade and tariffs were a hot topic. At the Hamilton forum, Vangelis Vitalis, Deputy Secretary, Trade and Economic, from the Ministry of Foreign Affairs and Trade, unpacked the quota situation with the United States. He said it will be an ongoing discussion for dairy and beef.

"The US dairy market is highly protected, and the existing access was negotiated in 1995 via the World Trade Organisation and was a series of small quotas for high value dairy products," he said.

Rather than being open for negotiations, the US has recently launched an investigation looking into Canada and New Zealand's access and whether it should be reduced, which Vitalis is watching closely.

"We're on the back foot with the US because the local industry

there is very defensive and very protectionist. In the dairy space, that's very challenging."

But as Brad Olsen from Infometrics highlighted, focus on what you can control.

“This is why New Zealand is the most efficient dairy producer in the world, even with Ireland knocking on our door.

Speaking ahead of the Ashburton event, he said: "You can't necessarily influence the big uncertainties directly yourself and in your business and your farm. But look at the stuff you can control and focus on that, because those are the levers in your power.

"Uncertain environments make things tougher but if you're feeling more in control of that stuff you do have power over, that sets you up to respond better to the stuff outside of your control."

Farmers Forum is one of DairyNZ's flagship events, offering fresh insights and connections. Details for the 2026 series will be shared early next year.



Attendees at the Farmers Forum looked ahead to where the next big gains could come from, both on and off farm.

Farmers urged to step up for the DairyNZ Board

With nominations for the DairyNZ Board of Directors opening on 11 August, two sitting farmer directors talk about why they got involved in governance and give tips for those keen to put their names forward and shape the dairy sector.

Canterbury farmer Cameron Henderson and Levin-based Richard McIntyre both say strong, diverse leadership is essential to ensuring DairyNZ delivers value for levy payers in an increasingly complex and fast-moving industry.

Cameron and his wife Sarah have two young children and milk 750 cows on 240 hectares near Oxford, North Canterbury.

Cameron's path to the board began with a desire to protect his farm – and his neighbours – from the impact of “misguided” government policies that he says didn't reflect on-farm realities.

“It grew to try and protect the wider sector, and find options to give dairy farming a future, and present future-focused ideas.”

Before full-time farming, Cameron worked in supply chain strategy at Fonterra and later as a farm systems developer at DairyNZ. He began his governance journey as provincial president for Federated Farmers and advised on regional policy with Environment Canterbury.

For Cameron, good governance is about aligning pragmatic thinking with long-term strategy and making sure levy money is well spent.

“The board is really where the buck stops in terms of strategy and efficient spending and making sure that we're getting good value,” he says.

“That's why it's critical to have the right voices, and a variety of voices around the board table to make good decisions.”

He believes farmers often underestimate their readiness to contribute at a board level.

“

I've got so much respect for anyone that says, 'I think I've got something to add' and puts their name forward.

“When they first get into governance, everyone in the farming space is hesitant and unsure whether they're prepared. But at some stage, you just have to show a bit of courage and give it a go.”

He describes DairyNZ as a supportive environment for directors, particularly those new to governance, and says the organisation plays a critical role in both advocacy and science for the sector.



Current DairyNZ directors say putting your hand up for the board is a rewarding way to help shape the future of dairy.

“We need great leadership to continue that legacy. The greater the diversity, the stronger the board is.”

Richard is a newcomer to the DairyNZ Board, bringing governance experience from Federated Farmers, the New Zealand Dairy Industry Awards Trust, and the Fish & Game Council.

He and his wife Emma have two teenage children and are herd-owning sharemilkers in Horowhenua. They milk 820 cows across two farms, rear 700 calves, and lease a 180ha drystock farm as they work their way towards farm ownership.

Richard shares Cameron's views on the value of getting involved. He's passionate about helping farmers understand the importance of the board's role in overseeing their industry body.

“As farmers, we commit a significant amount of money each season to our sector body through our levy, and it is there for our benefit,” Richard says.

“Really good governance is vital. But to have that, we need good, keen people to stand for the DairyNZ Board, and competition for positions.

“The dairy sector has a lot of opportunities and challenges ahead, and to best navigate through these, we need a really well-functioning levy body.”

He sees the board role as a rewarding opportunity for those who enjoy governance and are driven to make a positive impact. His motivation to stand came from a desire to give back to a sector that had already given him so much.

“I want to add value, which I find fulfilling, and one of my measures is asking myself if I've said something valuable that wouldn't have been said by someone else.”

He also emphasises the importance of farmers voting.

DairyNZ directors

Tracy Brown (chair)
027 291 1716

Cameron Henderson
(deputy chair) 021 113 8895

Jacqueline Rowarth
027 694 4334

Chris Lewis 027 289 8942

Richard McIntyre 021 143 1588

Mary-Anne Macleod
021 923 332

Mark Todd 021 271 1328

David Hunt 021 906 027

“I encourage all levy payers to vote for the people they believe would be best to govern DairyNZ on their behalf,” he says.

Richard and Cameron encourage anyone interested in standing for the board to reach out to them or any of the current or previous board members to learn more, even if they don't feel ready.

“While putting your name forward can feel daunting,” Richard says, “it's an admirable act.”

“I've got so much respect for anyone that says, 'I think I've got something to add' and puts their name forward. You'll be supported, and your contribution will matter.”

Nominations close at noon on August 27, 2025. To learn more about the DairyNZ Board and the nomination process, head to dairynz.co.nz/governance



North Canterbury farmer Cameron Henderson says practical thinking, long-term strategy and diverse voices are key to good governance.

Mentors make all the difference

With the guidance of some dairy heavyweights, Jesse and Sharon Bagley devote themselves to fine-tuning their 1,150-cow sharemilking operation, incorporating the latest research from experts and growing their equity partnership.

Leaving school at 15, Jesse and Sharon Bagley were told they'd never own a farm. But they're well on their way – the couple now owns 44% of a 1,150-cow sharemilking equity partnership on Tupehau, a 336-hectare farm near Kaitaia. The farm itself is owned by Te Waka Pupuri Pūtea Trust, the asset-holding company of local iwi, Te Rarawa.

"Everything we have done was from experience and learning from our mistakes, listening to mentors and their advice," Jesse says.

They have relished the support at Tupehau, with monthly online meetings with their advisers, including farm consultant Greg Mills and DairyNZ's Board chair, Tracy Brown, who also chairs the Te Rarawa Farming board. During busy times of the season, they connect fortnightly.

"We have this awesome team behind us," Jesse says.

"Everything we do we do as a collective, and with all that knowledge we are producing milk as efficiently and as environmentally friendly as possible."

“

We just put the hard yards in, and we always treat farms like they're our own.

Tupehau is two-thirds flat, with the rest rolling sandy hills. It has two pivot irrigators covering 140ha and a 600-cow concrete feed pad. During wet periods, the sandhill areas of the farm are used, to prevent pugging on the flats.

The farm runs a split calving system, with 70% of the herd calving in autumn and the rest in spring.

The picturesque scenery of Ninety Mile Beach forms part of the boundary

of the 400ha support block, which is within walking distance of the farm that the Bagleys also manage.

The youngstock are on the support block, which is also used for winter grazing, growing maize and producing grass silage. Their summer feed crops – maize for silage and sorghum – are planted in October.

Jesse explains that even though they are a system 4, they are strict on pasture management, with a key focus on targeting residuals of 1,600 kilograms of dry matter (kgDM) after grazing (or 2,700kgDM pre-grazing depending on the time of the year).

"We are grass-based, and the supplement is a top-up. The first thing we always teach our team is to know the residuals we are chasing," he says.

"The cows are always behind break fences, and we shift them any time of the day or night – if they leave grass when they come in for milking, we send them back and move them once they've hit that residual.

"Our friends think we're mad because we're shifting cows all the time during spring. It might be an hour before they come to the shed or an hour after they are milked."

They're applying the principles behind DairyNZ's Supplement Price Calculator, which shows shifting cows based on residuals, not the clock, helps get the best return from supplements.

The spring-calving cows are farmed solely under the irrigated area, which is used to keep pasture growth optimal



Jesse and Sharon Bagley with their daughters Layla, Claire and Daniella, on-farm near Kaitaia, where they're proving what's possible with grit, teamwork and vision.

Farm facts:

Location: Kaitaia, Northland

Structure: Herd-owning sharemilkers

Effective area: 336ha

Herd size: 1,120 cows

System: 4

Production: 1,381kgMS/ha

Operating expenses: \$3.31/kgMS

GHG emissions: 10.3kgCO₂e/kgMS

over summer. They have also been improving the pasture base in these irrigated paddocks.

"We've been planting ryegrass and fescue in the irrigated areas. We don't want to be watering kikuyu.

"For the rest of the farm, kikuyu is the only grass that can survive the summers."

They use mixer wagons to feed silage, dried distillers' grain (DDG) and soy hull onto the pad, with each cow getting around 1,200kgDM of supplements per year. They use the feedpad from March until spring pasture growth takes off.

The farm team consists of three full-time staff members, one casual on the dairy platform, a full-time staff member on the support block, and Jesse and Sharon.

The couple met when they were 17 and have been farming together ever since. They both come from dairying families in Northland.

They began their journey in Hikurangi, Northland, initially working as farm assistants before taking on management roles. In 2012, they spent some time in King Country and then relocated to Wellsford, where they worked as contract milkers on a farm owned by equity partners Neville Porteous and Ken Hames. They stayed there for six years.

Over that time, they lifted the three-year production average from 150,000 kilograms of milksolids (kgMS) to 175,000 by tweaking how the farm was managed.

"We just put the hard yards in, and we always treat farms like they're our own because at the end of the day, we're the ones doing it, making our life easier," Sharon explains.



In farming, you're always learning. Every year, we want to get better.

They also built equity through savings and reared young stock to progress towards herd-owning sharemilking.

As Neville and Ken weren't looking to employ a sharemilker, the couple moved on in 2019 to a Kaitaia farm that offered a potential pathway into sharemilking.

After two seasons, they discovered that Te Rarawa Farming Ltd was seeking sharemilkers. But with the larger herd beyond their budget at the time, they contacted their former employers with a proposal.

"We suggested to Neville and Ken that we form a sharemilking equity partnership together, and Jesse and I would contract milk to it," Sharon says.

"The contract milking business would pay for normal contract milking things like fuel, staff, power, and the sharemilking company would own all the tractors, gear and livestock."

They put together some budgets, and Neville and Ken agreed, knowing the Bagleys' reputation as hard-working and savings-oriented dairy farmers.

Their agreement requires them to buy equity partnership shares every year. They now have a 44% stake, up from 33% in 2021.

The Bagleys achieved record production for the farm in their first season and have maintained it since – lifting output from a previous high of 393,000kgMS to over 400,000 every season, and reaching 460,000 last season.

Sharon puts the result down to a lot of fine tuning.

"We have made a lot of mistakes in the past."

Jesse adds, "In farming, you're always learning. Every year, we want to get better."

The Bagleys have overseen upgrades to Tupehau's effluent and feed systems, aiming to reduce waste, retain nutrients, and cut costs. Solids are separated and spread on maize paddocks, reducing fertiliser needs.

Soil testing every paddock every three years also reduces fertiliser as it can be targeted, not blanket-applied and often less is needed. Pest control also protects rare bittens in the nearly 20ha of fenced-off native habitat, now free of possums and stoats.

Their hard work also led to their success in the New Zealand Dairy Industry Awards, where they won Northland's 2025 Share Farmer of the Year title – a programme proudly supported by DairyNZ to celebrate and grow future dairy leaders.

"We're proud of ourselves, what we have done and where we have come from. We wanted to showcase that and show young farmers they can do it too," Jesse says.

With their three children (9, 13 and 16) settled in school, they're planning to stay at Tupehau for a few more seasons. Their ultimate goal is to own two farms – one that they run themselves and the other as an equity partnership.

The Bagleys, who have come a long way since they left school at 15, will then use that partnership to help other young farmers gain ownership.

View the Bagley's farm

Scan to check out Tupehau, where Jesse and Sharon farm.



bit.ly/bagley-farm

Set near Ninety Mile Beach, the support block helps power the Bagleys' system, providing space for youngstock, wintering and homegrown feed.

Practical solutions for catchments

Some of our key dairying catchments are under pressure, and farmers are stepping up. The Sustainable Catchments programme is about working together to speed up environmental improvements and protect the health of local waterways.



Farmers across New Zealand have been working hard to improve waterway health, but in some catchments the challenges are greater, or progress needs to move faster. That's where the Sustainable Catchments programme comes in.

We've moved beyond seeing water quality as simply about reducing contaminants. A more holistic approach looks at how the whole environment is connected – how land use, soil, plants, animals and people all influence the health of waterways.

By taking this bigger-picture view, we can find practical actions that support long-term improvements and deliver real benefits for both the environment and farming communities.

Launched in 2018, the Sustainable Catchments programme entered a new three-year phase in 2023, trialling a range of on-farm tools and approaches to build understanding and show what works to improve water quality, while supporting farms to remain profitable.

The work is funded through DairyNZ's levy investment alongside the Ministry for the Environment's Jobs for Nature programme, with a total investment of \$4.7 million. Of this, \$3.4 million comes from Jobs for Nature.

The programme focuses on three priority catchments: Pōkaiwhenua (South Waikato), Waimea (Southland), and South Canterbury. They were chosen because these catchments have higher nitrogen levels and lower



The focus is on identifying core principles that work no matter where your farm is – real tools you can adapt to your own system.



Through the Sustainable Catchments programme, farmers and communities are trialling real-world solutions to protect waterways and support productive, resilient farms, as seen with Hadleigh Putt planting at the Whakauru stream.

ecosystem health scores compared to others.

The goal is to give the communities the knowledge and tools for long-term success and empower farmers to know they're heading in the right direction. Improvement is a journey.

A whole community approach



Tuna (eels) and kōura (freshwater crayfish) are signs of a healthy waterway, and their presence brings real value to the communities connected to it.

In the Pōkaiwhenua catchment in South Waikato, eDNA sampling has revealed a range of species, including tuna, kōura and cran's bully. With this knowledge in hand, the local

community is working to enhance and protect the habitats these species rely on.

Many farms have smaller streams, and shading them can make a real difference to water quality downstream. Streams are classified by size. A first-order stream is the smallest. When two streams join, they form a second-order stream, and so on as they grow.

These lower-order streams are also the cheapest and easiest to plant. When exposed to direct sunlight, these small streams can reach temperatures over 30°C. Planting just one kilometre of stream can reduce water temperature by up to 5°C.

Science tells us that when 60–70% of a stream is shaded by riparian planting, it helps reduce bank erosion, cools the water, suppresses weed growth, improves oxygen levels, and reduces

sediment, all of which creates a better habitat for aquatic life to thrive.

DairyNZ partnered with the Raukawa Charitable Trust and the Pōkaiwhenua Catchment Group. The project was grounded in learning and knowledge sharing, with Raukawa's input helping farmers and project partners understand the historical and cultural context of their land and take a more holistic view of how farm management affects waterways.

It's also strengthened relationships with hapū (Māori sub-tribes) and supported planting in less productive areas, giving those spaces purpose for native biodiversity and community connection.

As part of the Sustainable Catchments programme, DairyNZ is developing shade values to help you understand what's needed in your area. We also encourage you to assess the types of streams on your farms – it's a valuable step towards healthier waterways.

A great place to start is by taking an eDNA sample to find out what's living in your streams, and working with your local community to help protect it.

Visit dairynz.co.nz/riparian-planting for more about riparian planting.

Edge-of-field mitigations



Edge-of-field mitigations (for example, wetlands or bio-reactors) are being piloted in the Waimea catchment in Southland to complement farm-level changes and further reduce catchment losses to help meet community aspirations.

While this work is focused on Waimea, the insights and solutions tested here are designed to be practical and adaptable for farms across New Zealand.

Due to its characteristics, the Waimea catchment is prone to accumulating nitrogen (N), and groundwater and surface N levels exceed the standards required in the Southland Water and Land Plan. The overall water quality isn't where the community wants it to be.

There are also growing concerns about whether current flood infrastructure can keep up, with projections indicating increased risks for flood management downstream.

DairyNZ collaborated with Thriving Southland and the local catchment group to identify appropriate



Mihiwaatara Hohepa, Andrew Lennox and Hadleigh Putt working together in the Pōkaiwhenua catchment to create healthier waterways and stronger communities.



Southland farmers discuss wetland design and construction in the Waimea catchment with DairyNZ environment team manager Justin Kitto.

areas to trial edge-of-field mitigations.

Research shows that wetlands can typically reduce N by 20-80%, depending on factors like temperature, retention time and incoming N levels. The research also shows that wetlands are effective at trapping sediment and phosphorus.

On farm, farmers are seeing the wetlands at work during rainfall events, noting the flow is calmer and less forceful. The wetland fills up, and over the following three to four days, water levels gradually recede. It's a clear, practical example of how wetlands help slow peak flows and reduce pressure downstream.

A key aim of the project is to demonstrate that these tools are practical and effective, and won't interfere with farm operations, including drainage, which is especially important in regions such as Southland.

Edge-of-field mitigations can often be installed in less productive areas

of the farm, making good use of land that's not currently providing a significant return.

As well as helping to reduce N loss, these tools can slow water flow, support biodiversity, and enhance the look and feel of the farm environment.

Find out more about the Waimea catchment project at dairynz.co.nz/waimea

Raising farm system efficiency



Working with more than 30 farms in South Canterbury and Waimea, this project is exploring practical system changes that could be applied on farms nationwide.

The goal is to support farmers in maintaining profitability while further reducing nitrogen (N)

losses and greenhouse gas emissions (GHG).

The project's focus in South Canterbury is to help farmers understand opportunities to meet Environment Canterbury's Plan Change 7, 2028 N-loss reduction targets. In Waimea, it's about exploring options ahead of possible farm-level N-loss reductions.

The system changes being explored include updating irrigation infrastructure. One farm, for example, is shifting from long return interval systems to low application, short return interval options like pivots, which help reduce water use, improve pasture growth, and lower the risk of nutrient leaching.

Another farm had an underutilised feed pad, so by optimising it, they're utilising supplements better and reducing losses. They've been able to stop growing fodder beet, reducing cultivation and input costs and lessening the risk of nutrient loss over winter.

Stocking rate is an important aspect to review, ensuring it's optimised for the farm system and the available feed. In some cases, there are clear opportunities to better match stocking rate to feed supply, reducing N losses and GHG emissions while maintaining profitability.

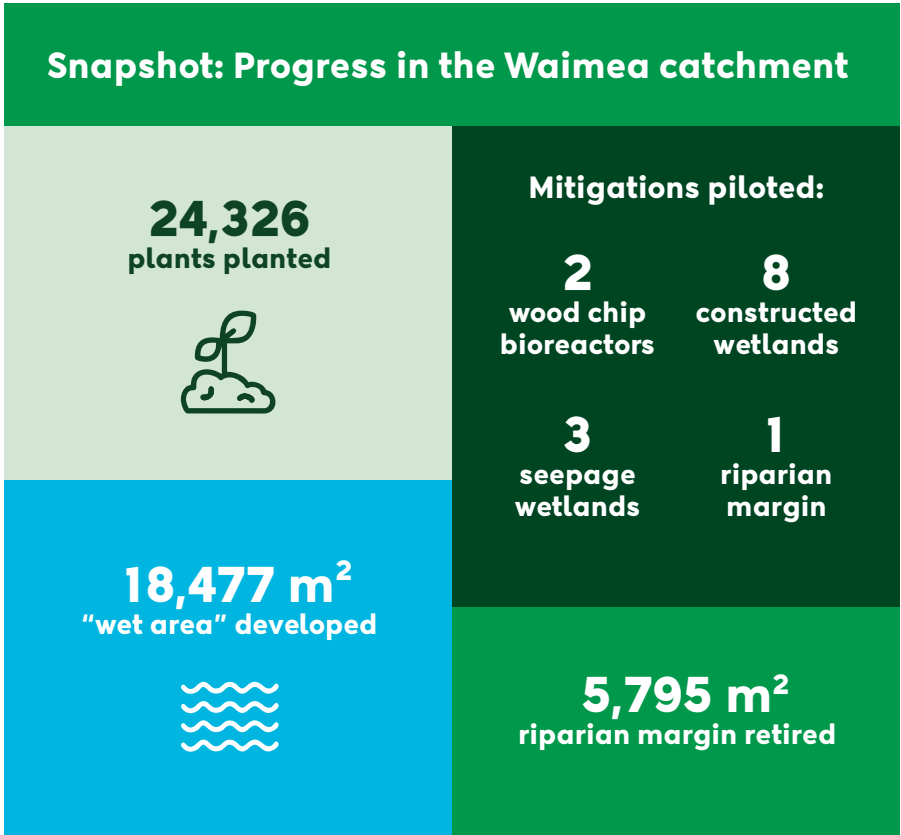
The project typically uses Farmax and Overseer to understand the current farm system and its environmental footprint. Potential system changes are then modelled to assess their feasibility, financial impact, and likely effects on nutrient losses and GHG emissions.

Working intensively within specific catchments allows us to develop credible, practical solutions that can be applied across New Zealand. The focus is on identifying core principles that work no matter where your farm is – real options and approaches you can take away and adapt to your own system.

Learn more about reducing N loss at dairynz.co.nz/reduce-n-loss



Amanda Johnston and Lynn Stratford (Riverton Dairies) talk farm system changes and water quality with DairyNZ's Ron Pellow at the Ōpiti River.



Kōwai or Kōura (freshwater crayfish) in the Pōkaiwhenua – showing what's at stake, and what's possible.

A catchment group is made up of people who care about the land and water within a specific geographic area, usually defined by the natural boundaries of a river, stream, or lake catchment. Together, they work towards a shared vision for a healthy environment and thriving community, taking practical steps to improve water quality, biodiversity and more.

Explore tools and support for farmer-led catchment groups at dairynz.co.nz/catchment-support

Helping to shape policy from the ground up

DairyNZ’s policy team covers 14 regional councils, working to ensure regulations impacting dairy farmers are practical and evidence-based.

Even well-informed policy makers can’t always predict what a rule will mean for a specific farm system, in a particular catchment, at a certain time of year. The practical impacts – cost, time, trade-offs, workability – often only become clear when policy meets the paddock.

This is why DairyNZ gets involved in policy and advocacy. We make sure decisions are based on science and real-world farming practice by helping develop plans, submitting on draft policies, working with council staff, and building shared understanding of what works.

The government sets the overall direction through laws and policies like the Resource Management Act (RMA), the National Policy Statement for Freshwater Management (NPS-FM) and emissions targets. These set the rules of the game – improving water quality, cutting greenhouse gases, or protecting biodiversity.

Regional councils put national policies into action locally. They develop regional plans, issue consents and monitor compliance.

An example is Waikato Plan Change 1 (PC1), which aims to improve water quality in the Waikato and Waipā catchments through new rules. First notified in 2016, it followed early input from communities, iwi and farmers. DairyNZ has been involved from the start, providing expertise in science, economics and farm systems, as well as policy support.

We appealed the 2020 decision because we saw more practical, cost-effective ways to achieve the same outcomes. After mediation, we joined Fonterra in a case highlighting farmers’ ongoing efforts to improve

water quality. The Environment Court process delivered its interim decision in late May, which marks an important step forward, and we expect a final decision towards the end of 2025.

The Southland Water and Land Plan has followed a similarly long and complex path since 2016. DairyNZ submitted on the plan and jointly appealed key parts of the council’s decision to ensure dairy farmers’ interests were represented in the Environment Court. The court considered our expert evidence and issued several interim decisions before mostly finalising the plan in 2024.

A major focus was keeping standard farming as a permitted activity. DairyNZ worked with Fonterra and others to provide a united voice, showing how farmers are managing risks and highlighting the unnecessary costs of requiring consents for everyday farming. Our regional policy team led this work to help shape practical rules.

In cases like these, our regional policy team collaborates with stakeholders, coordinates with experts and gathers key information. These processes take time, and DairyNZ stays involved throughout.

Our team covers 14 regional councils. While the work can take years, we focus on making sure our efforts benefit farmers where it matters.

There are a few ways to get involved in regional policy. One of the most powerful is simply joining a catchment group, which connects you with local farmers, helps you stay informed, and gives you a say in how water and land are managed. These groups often have strong farmer leaders



Policy decisions affect farms differently. That’s why DairyNZ works with farmers, councils and government to shape practical, science-based rules that work on the ground.

“
Being part of the conversation strengthens farmers’ voices, especially when many join together.

who bring farming views to broader forums. And good farming practice is still the strongest response to criticism of the sector.

Another way to get involved is by turning up to consultation events. Even if you’re just there to listen, it makes a difference. You don’t need to know all the details – being in the room

helps make sure farming voices are heard, especially when more farmers take part.

And when it’s time to make formal submissions, explaining how the rules would impact you and sharing the good work you’re doing on-farm can influence better policies.

Local body elections are coming in September, too. Farmers can have a big impact by voting – and by standing, or encouraging others to stand, for election – to ensure decision makers understand farming and environmental challenges.

Making sense of the policy system

A quick guide to the people and terms behind the rules shaping your farm and environment.

Policy is about the rules and plans set by central government or councils that guide how things should be done – like how we manage water, land or emissions.

Advocacy is about speaking up to make sure farmers’ voices, science and practical knowledge are part of shaping those rules.

District councils look after local services and infrastructure like roads, rubbish collection and building consents. They focus on what’s happening in towns and communities.

Regional councils manage natural resources like water, land and air. They set environmental rules based on national policy and what’s happening in their region.

Central government sets the big-picture laws and policies for the whole country, such as freshwater goals, climate targets, or the Resource Management Act. Regional and district councils then work within that framework.

The Environment Court is a special court that deals with disputes about environmental rules and decisions, such as regional plans or resource consents. People can appeal to the court if they disagree with a council decision or how a rule has been made.

DairyNZ regional policy advisers



Freshwater rules under review

Consultation on new freshwater regulations has now closed, but not before DairyNZ strongly advocated for more workable rules to meet both environmental needs and the realities of farming.



Dr David Burger
DairyNZ general manager
farm solutions and policy

The government has reviewed national freshwater regulations, giving the dairy sector a chance to push for more practical, workable rules.

Consultation on proposed changes to the Resource Management Act – including freshwater rules that

affect all dairy farms – closed on 27 July.

DairyNZ has consistently said the current national rules are confusing and impractical as they don't reflect how farms actually operate, and the economic impact on rural communities hasn't been fully considered. A strong focus on numbers, such as contaminant limits, has also been disconnected from achieving environmental outcomes.

Farmers have been clear: they want freshwater rules that reflect the realities of farming, support practical on-farm improvements, and give certainty for long-term investment.

The government's consultation was an opportunity for DairyNZ to point out what wasn't working and suggest

better, more workable alternatives. It covered a wide range of issues, including how wetlands and fish passage are managed, whether to enable more water storage, and if the 190 kilogram cap on nitrogen fertiliser is still needed.

The government also asked how Te Mana o te Wai should be applied in future, and how the economic impacts of freshwater rules could be better taken into account.

DairyNZ has been preparing for this review since the change in government, working to ensure farmers' voices are heard. We've put forward a practical, science-based alternative to the current national direction – one that focuses on ecosystem and human health outcomes, rather than relying too heavily on numbers and blanket limits.

What's needed is a catchment-specific approach that gives farmers certainty and supports both productive farming and healthy environments.

Dairy sector input has been critical throughout the review. Ahead of the consultation closing, DairyNZ engaged with levy payers to help shape our response. Thanks to those who shared their perspectives, we were able to ensure it reflected what matters most on-farm.

We'll continue keeping farmers updated as the process moves forward. For more information, visit dairynz.co.nz/freshwater-policy

You can also view the proposals on the Ministry for the Environment website dairynz.co.nz/mfe-freshwater

Speaking up for dairy

DairyNZ makes formal submissions on proposed laws and policies to represent dairy farmers and ensure their voices are heard.

These submissions are a way to influence decisions before they're finalised, using science, farmer experience and practical knowledge to advocate for workable, evidence-based solutions that support sustainable, productive farming and protect the future of our sector.

Resource Management Amendment Bills

We supported the Bill's aim to streamline consenting and improve efficiency for farmers. We backed changes to exclude the NPS-FM hierarchy from consent decisions, pause new significant natural area requirements, and remove impractical stock exclusion rules. We also recommended targeted improvements to winter grazing rules and clearer discharge provisions. Work continues with officials to improve the Freshwater Farm Plan regulations.

Gene Technology Bill

We support the Bill's direction but called for key improvements: clearer trade and market access protections, better definitions to support co-existence, stronger recognition of Māori interests, a primary sector voice in advice, and a transition period of two to five years to build confidence in the new system.

Immigration Accredited Employer Work Visa Review: Phase 2

We advocated for practical immigration settings that reflect the realities of dairy farming. Our submission contributed to key AEWV policy changes, including shifting to a minimum wage +10% threshold, which delivers real benefits for farmers. We also highlighted the need for a fair, streamlined and responsive immigration system.

Vocational Education and Training Reform

We advocated for strong industry leadership in training decisions, funding that reflects dairy's diverse needs, and stable, long-term arrangements to support investment. A sector-tailored approach is crucial to develop the skills needed for dairy's growth and its future export ambitions.

Recent submissions

Biosecurity Act

We supported a more integrated, sustainably funded biosecurity system with stronger investment in readiness. We also provided feedback on proposed changes to the Government Industry Agreement (GIA) and to compensation settings and eligibility, ensuring the system is fair, effective and fit for the future.

To find the latest updates of our advocacy work, check out



dairynz.co.nz/policy-and-advocacy

Spring smarts

Essential tools and resources for success on the farm over spring

Proactive management during spring sets the stage for a successful year on your farm. By concentrating your efforts on key aspects of feed and animal management, you can reduce costs and boost profit. Prioritise activities like grazing management, mating preparation and cow care to ensure your farm thrives throughout spring and beyond.



dairynz.co.nz/
spring-smarts

Reducing lameness on farm

Lameness can have a major impact on cow performance and reproductive success, particularly around calving and pre-mating. Pain from lameness reduces grazing time, leading to lower feed intake, poorer body condition and reduced milk production.

Preventing and managing lameness starts with the three E's: identify **early**, lift **early**, and trim **effectively**. Train your team to recognise early signs and treat promptly.

Addressing problem areas like races and yards, and ensuring good stock-handling practices, can significantly reduce lameness risk. A well-aligned farm system – with infrastructure that suits your herd and supports good cow flow – gives you and your team the time and tools to proactively prevent and manage lameness.

Learn more and download our lameness scoring poster for the shed at dairynz.co.nz/identifying-lameness



Preventing down cows and recovery tips

Good preparation can improve animal care heading into spring. With the right mineral management, feeding and proactive care, most down cows can be prevented.

Preventative measures include:

- Feeding the correct rates of magnesium and calcium at the right times, particularly pre- and post-calving.
- If down cows are a recurring issue, review your system with your vet – blood testing may help identify underlying problems.
- Have immediate treatments such as metabolic bags on hand and ensure your team is trained in best-practice down cow care and handling. Developing a clear policy for managing down cows, including proper lifting and recovery procedures, helps ensure consistent care on farm.

Learn more at dairynz.co.nz/down-cows



Get the most from your pasture this spring

Effective pasture management in early spring helps you grow more feed, boost profits, and reduce your environmental footprint. Grass growth can fluctuate in August and September, so it's useful to measure pasture regularly. This helps you adjust your spring rotation plan and feed budget and maximise pasture quantity and quality going into peak growth and mating. That means better use of supplements and stronger milksolid returns.

After balance date, focus on maintaining good pasture quality by using key grazing rules: aim for the right pre-grazing cover and post-grazing residuals to keep cows eating well and producing efficiently.

Use our Spring Rotation Planner and learn more at dairynz.co.nz/spring-feeding

Spring grazing tip

Did you know that timing your spring grazing based on ryegrass leaf stage, along with the right rotation length and residual, can influence how much pasture you grow, and its quality, for the rest of the season?



Grazing before the 3-leaf stage will reduce overall pasture growth, potentially increasing the requirements for supplements before balance date. Planning your grazing around feed supply and demand helps pasture reach the 2.5–3 leaf stage, reducing the need for supplements and keeping costs down.

Find out how to use the leaf stage in grazing management at dairynz.co.nz/leaf-stage

Sharpen your heat-detection skills

Effective heat detection supports good conception rates and helps maximise the 6-week in-calf rate. Each detected heat and successful insemination adds, on average, 25kg of milksolids and gives cows more time to recover between calving and mating – improving their chances of getting back in calf next season.

Our InCalf reproduction gap calculator dairynz.co.nz/incalf-tools can help you work out whether heat detection is a challenge, and costing your business.

Before mating season starts, review your heat-detection strategy and make sure your team is prepared. Providing training is a great way to help less experienced staff learn from others, improving accuracy and setting up for a successful mating season.

Learn more at dairynz.co.nz/heat-detection



Step ahead of lameness



Getting on top of lameness starts with spotting it early and acting fast. Record cases to understand what's happening, benchmark against others, and bring in external eyes to support your team and keep cows on track.



Mitch Cooper
DairyNZ senior technical
and policy adviser
(veterinary)

Lameness takes a toll on cows and farm performance. A lame cow produces less milk, loses condition and takes longer to cycle. The good news? Catching it early and treating it promptly gives her the best shot at a quick, full recovery – and helps keep your herd's productivity on track.

Despite this, lameness remains one of the hardest issues to get on top of.

More than 80% of lameness in New Zealand dairy cows is caused by claw horn lesions (white line and sole disease). These injuries are hard to spot early and slow to heal. The longer a cow stays lame, the greater the inflammation in the hoof, which can lead to permanent damage. This increases her risk of further lameness down the track. A previous case is one of the biggest risk factors.

Around calving, changes in the hoof make cows more vulnerable to lameness. The fat pad thins and the ligaments relax, leaving the corium (the soft tissue inside the hoof) more

exposed to damage. This is known as the calving effect.

When combined with other cow, management and environmental risk factors, it can significantly raise the risk of lameness. If left untreated, inflammation in the corium can lead to permanent changes in hoof structure, increasing the chance of ongoing or future issues.

Know your risks

Reducing lameness starts with understanding how often it's happening, and what's causing it. Benchmarking your lameness levels against similar farms can help show whether there's more going on than you realise.

Recording cases helps build that picture, so you can spot patterns and identify risk factors like cow condition, calving timing or track quality.

With that insight, it's easier to move from reacting to problems to preventing them. That saves time and money, and most importantly, spares your cows unnecessary pain and disruption. It also helps you have better conversations with your vet or hoof trimmer when you need a second opinion or extra support.

Simple recording tools, even just a notebook or spreadsheet, can make a big difference. Some use apps or a shed whiteboard to keep track.

Staff training is just as important. Making sure everyone knows how to spot early signs of lameness and respond quickly helps keep the whole herd in better shape, and lifts animal care across the board.

The 3 E's to success:



Identify Early.
Lift it Early.
Trim it Effectively.

Get in early

Spotting lame cows is just the first step – acting quickly is what makes the difference. Ideally, cows should be examined and treated within 48 hours of being identified, or within 24 hours if they're severely lame.

If the numbers feel overwhelming, bring in support. Your vet or hoof trimmer can help get things back on track, so you can stay focused on the rest of the herd.

Pick it up and trim it

Effective treatment starts with getting the hoof off the ground. Trimming helps identify the cause and relieve pressure. Use a wooden or rubber block, or a Cowslip, to take weight off the affected claw and help it heal, unless it's not suitable in the situation.

Manage the pain

Lameness is painful, and managing that pain is an important part of treatment. Anti-inflammatory pain relief, like NSAIDs, has been shown to support healing and recovery.

A recent New Zealand study found that using anti-inflammatories (NSAIDs) during hoof trimming significantly improved reproductive outcomes. International research also showed that cows given NSAIDs at treatment were 45% less likely to be culled.

Support recovery

Treatment is just the start – recovery needs managing too. A cow can lose up to 61kg of liveweight during a bout of lameness, and thinner cows are more likely to go lame again.

That's why it pays to reduce walking distances for lame animals and offer them high-quality feed while they recover. Giving them the best chance to bounce back helps prevent a cycle of repeated lameness.

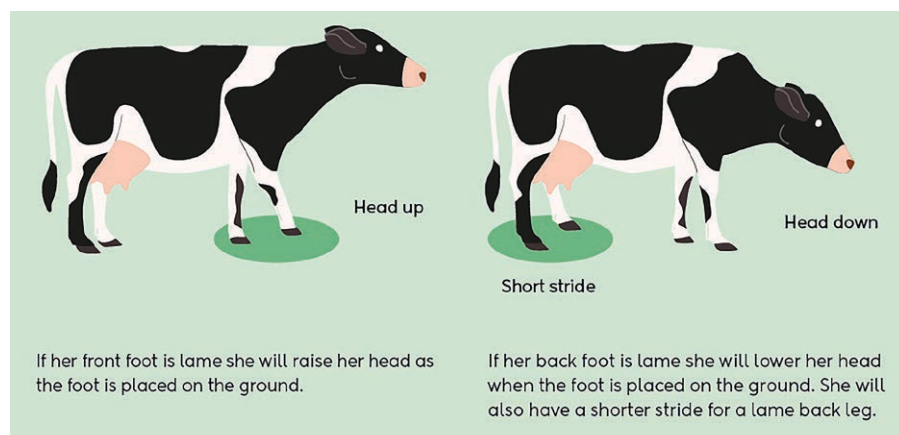
Lameness scoring – an easy way to spot problems early

DairyNZ's lameness scoring system rates cows from 0 (no lameness) to 3 (very lame), with recommended actions for each score. For best results, score cows on a flat surface where they can walk freely and without any pressure.

Regular scoring helps catch lameness early, allowing timely treatment. Make it part of your on-farm routine – just like stripping quarters to check for subclinical mastitis. Your local vets can also include scoring during routine herd health visits to help keep lameness in check.

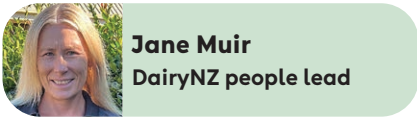
Want to learn more?

Head to dairynz.co.nz/lameness for guides and resources.



Set your team up for success

Communication and planning are key, as DairyNZ's annual Employee Survey underlines – particularly during the season's pressure points.



Over 55% of 2025 DairyNZ Employee Survey respondents said better communication would improve farm efficiency. When people feel informed, involved and respected, they're more likely to stay and perform at their best.

The Employee Survey has run annually since 2019 to better understand life on dairy farms from the employees' perspective. It gives farm teams a voice and helps build a clearer picture of what supports great workplaces – and where there's room to improve. The insights shape tools and resources that help farmers create positive, productive teams.

Clear communication is especially important when planning seasonal pressure points like calving and mating. During calving, 52% of respondents said they work 55 hours or more each week, with a quarter clocking over 60 hours.

While over 60% of employees say they're happy with their hours during calving, checking in regularly supports wellbeing. Long hours shouldn't become normal.

When people feel their time and effort are recognised and respected, it supports job satisfaction and performance – a win-win for everyone.

Have early conversations about what people can realistically commit to, and adjust rosters or workloads if needed. If salaried employees regularly work extra hours, recognise this through

time off in lieu or extra pay. Always ensure minimum wage rules are met.

Effective communication

Team meetings help keep communication open and everyone informed and motivated. They are a practical way to strengthen the team and enable feedback. Having open, honest conversations and listening to employees' ideas and frustrations can help solve problems before they escalate – often, your team already has the solution.

It's also one of the simplest ways to build trust and show your team that their voices matter, a key factor in keeping good people on-farm.

Meeting types can vary, but having an agenda and clear expectations around attendance helps keep things on track. Some teams prefer daily stand-up meetings, held at the same time each day, to run through tasks and flag any immediate challenges. Daily meetings also help spot challenges early.

Weekly meetings are a great way to involve the team in decision-making and problem-solving. Making the meeting a little longer can create space for training opportunities too.

Setting clear expectations for meetings, such as having a reliable start and finish time, can make it easier for everyone to plan their day.

One way to keep communication flowing between meetings is to use simple tools like WhatsApp to assign and track tasks. Even small tools like this can lift productivity by reducing confusion, saving time and helping people feel more in control of their day.

Leading the way

The business leader has the biggest influence on building great teams and culture, and the survey insights back this up (see infographic).



Clear communication, regular check-ins, and shared goals help teams thrive, especially during the busy times.

Employees are more likely to stay and perform at their best when they feel supported, appreciated and have good working conditions.

Leaders motivate others to work toward shared goals and affect farm outcomes, from culture, staff retention and teamwork to production and financial performance. Being a good leader means many things, but a great place to start is inspiring a shared vision and setting a strong example by living the values you encourage.

Communicate goals so people understand why those targets have been set and what they can do to help achieve them.

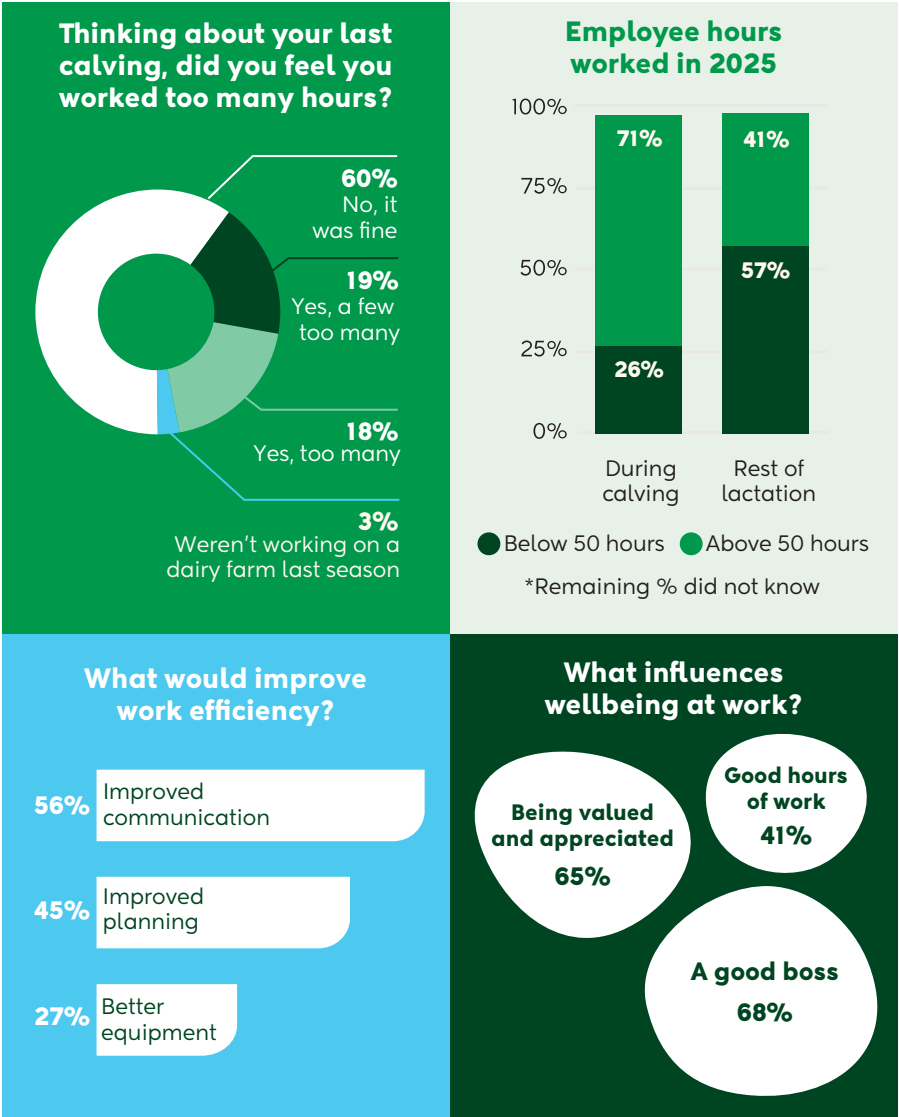
Prioritising and respecting people helps them perform at their best, whether it's managing animal health, taking initiative, solving problems, or being a supportive team member.

Looking ahead

Supporting people to perform at their best isn't about checking boxes – it's about creating a workplace where communication flows, expectations are clear, and the team's effort is valued.

While the Employee Survey highlights trends in dairy farm workplaces and culture, tools like the Workplace 360 assessment give farm owners and managers a practical way to check how their team and systems are tracking and identify opportunities for improvement.

Whether improving rosters, getting farm rules in place, or building management skills, the focus is on simple changes that make a real difference, helping good people stay in dairy and attracting new talent.



Quick Tips: Improve farm communication & wellbeing

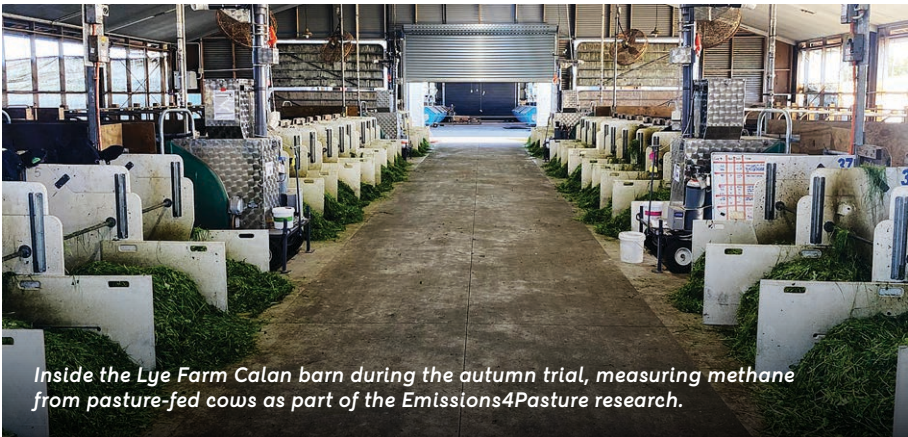
- ✔ **Plan early:** Set hours and roles before busy periods.
- ✔ **Check in:** Support wellbeing with regular catch-ups.
- ✔ **Be flexible:** Adjust rosters to prevent burnout.
- ✔ **Say thanks:** Recognise extra effort.
- ✔ **Keep meetings clear:** Use agendas, start and end on time.
- ✔ **Use tech:** WhatsApp for quick task updates.
- ✔ **Lead well:** Set clear goals and values.
- ✔ **Focus on people:** Wellbeing boosts performance.

Find more ideas at dairynz.co.nz/team-insights

Snapped on and off farm



A snapshot of DairyNZ at work in the regions with and for farmers.



Inside the Lye Farm Calan barn during the autumn trial, measuring methane from pasture-fed cows as part of the Emissions4Pasture research.



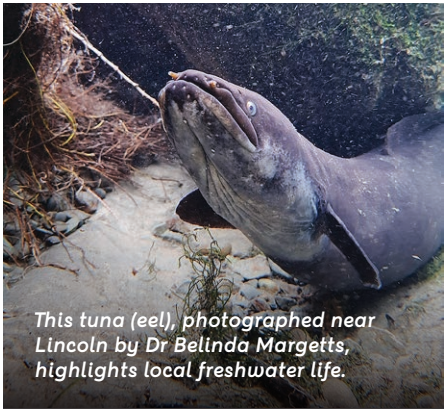
Working in partnership with the Pōkaiwhenua Catchment on restoring wetlands and biodiversity to create healthier waterways and community connections.



Research technician Dagmar Elliott is counting tillers in a new ryegrass pasture in Northland as part of the Resilient Pastures research programme.



Scientist Dr Stacey Hendriks spoke about DairyNZ's research and solutions for heat stress in cows at the New Zealand Veterinary Association Conference in Wellington.



This tuna (eel), photographed near Lincoln by Dr Belinda Margetts, highlights local freshwater life.



Senior people specialist Jane Muir spoke about powering productive dairy workplaces at the People Expos, held in partnership with the Dairy Women's Network.



Fiona Langford tried the Pōkaiwhenua VR set at Fielddays with DairyNZ environment specialist Johan van Ras.



Chris Lewis and Tracy Brown from DairyNZ's Board, with Social Development and Employment Minister Louise Upston, DairyNZ CEO Campbell Parker, and the DairyNZ View from the Cowshed report, released at Fielddays.



Farmers and technical experts discussing Low N Systems wintering research at the Lincoln University Dairy Farm.



Students attended Dairy Training's NextGen Taster Day, a Canterbury pilot programme launching careers in dairy farming.



DairyNZ and Lincoln University staff deep soil coring paddocks to estimate inorganic nitrogen content on the Low N Farmlet Trial.



Northland Dairy Development Trust members visited Scott and Lye farms to learn about DairyNZ research, including the Extended Lactation study, now in its third year.



Gareth and Hayley Lewis, with their children Mack, Neve and Harry, credit strong support and good advice for helping them through the ups and downs of their path to farm ownership.

Lessons along the way to landing the dream

Gareth and Hayley Lewis are among 49 farmers Dairy Holdings has helped to own a farm of their own. They share the lessons learnt along the way.

Strong relationships, perseverance and a lot of determination have helped Gareth and Hayley Lewis achieve farm ownership.

The Mid-Canterbury dairy farmers have just bought their first dairy farm, a 280 hectare property near Methven.

It wasn't an easy journey. With no family farm to step into, the pair relied on disciplined saving and building strong relationships with people and organisations whose advice helped them along the way.

Gareth always wanted to go farming. Although he didn't grow up on a farm, he spent much of his early years living in Dunsandel, where dairy farming was integral to the rural community.

"Mum and Dad instilled the value of hard work into me, and I saw dairy farming as a place where that work

ethic was valued and rewarded," Gareth says.

After doing work experience on a local dairy farm, he got a full-time job as a dairy assistant with Kieran and Karen Stone, and left school at 15.

It was the start of a long relationship, and the Stones have been key mentors for the Lewises over the years.

After two years of farming, Gareth kept a promise to his dad to get a trade, and took an apprenticeship as a diesel mechanic with Claas Harvest, where he worked for five years and became qualified.

He kept in touch with the Stones, working every second weekend and on holidays as a relief milker on their farm to retain and grow his farming skills and further his relationship with them.

Soon after qualifying as a mechanic, Gareth resigned and returned to farming as a variable order sharemilker for the Stones in 2008.

He had met Hayley the year before. She grew up in Otago on a sheep and beef farm and has a background in graphic design.

They pooled their wages, lived on a fraction of one and used the rest to

grow their equity and business. They stayed disciplined with spending, and focused on cash flow throughout their farm ownership journey.

Gareth did a season alone, milking 500 cows before Hayley joined him.

“I saw dairy farming as a place where that work ethic was valued and rewarded.

"I convinced Hayley to come and milk cows. We had an opportunity to run a neighbouring farm, so I ran one and she ran the other," Gareth says.

They continued to save their cash and work for the Stones, but after five years, the Stones' son was keen to sharemilk the family farm.

Kieran was a supervisor for Dairy Holdings and helped the Lewises secure a contract milking role with the company in 2013. After two seasons, they moved into variable order sharemilking on Somerton – a 1,400-cow farm at Seafeld near Ashburton.

Unfortunately, this coincided with the payout crash, which hit them hard.



A new herd on their own land – the result of years of grit, good people and a clear goal.

Farm facts:

Location: Ashburton Forks, Canterbury

Structure: Owner-operators

Effective area: 280ha

Herd size: 960 cows

They had no other investments at the time, just saved cash and livestock they'd purchased.

"We'd based our budgeting on the five-year average to make the step from contract milking to variable order sharemilking, so when the payout crashed, so did our income," says Gareth.

Dairy Holdings provided significant support, enabling them to step back into contract milking to weather the storm. By then, the couple had built up a number of their own cows, which Dairy Holdings leased while they were contract milking.

"Dairy Holdings effectively underwrote our business. They put a safety net under us," Gareth says.

"If they hadn't done that, we would've been out of business."

They also leaned on senior staff within Dairy Holdings for advice and support.

Kieran, their supervisor and mentor, helped them stay focused on the bigger picture: farm ownership. As a farm owner himself, he'd walked the same path and reinforced the importance of budgeting and financial planning.

Navigating those tough times taught them a lot about business and making the most of the support around them.

"That had a real positive impact on our business. Feeling pain over the long term was really good for the business," Gareth says.

"It made us stronger," Hayley adds.

"He had travelled the path we were trying to – he ingrained that into us," says Gareth.

As they recovered financially, they returned to variable order sharemilking, gradually building their herd and achieving full ownership in 2020.

They stuck to their plan and focused on debt reduction for another five years, boosted by strong on-farm performance and favourable payouts.

“

I had to learn pretty quickly how to prioritise my time. I had to empower my guys to step up.

Their first attempt at buying a farm fell through when the vendor's own deal didn't go ahead. It was disappointing, but they took away valuable lessons from the experience.

"It took a bit to suck up, but after going through that process, we knew exactly what to do and how to operate in a farm-purchase situation," Gareth says.

The next attempt was successful and secured their Methven farm, though the process was daunting due to its size and scale.

"It was too big and too expensive, and everything about it wasn't in our favour," Gareth says.

"But we still signed it – we had the confidence to make it work."

They admit to having doubts about closing the sale, but using lessons from the previous deal, they leaned on their network to get it done.



The Lewises' key advice is to stay patient, lean on your support network, and stay focused on your goals.

Because of the relationship they'd built, the bank backed them, with conditions. To help with cash flow, they've kept contract milking at Somerton.

They also sold their herd back to Dairy Holdings to help fund the deposit. To stock the new farm, they built a herd from a mix of lower-value cows from several herds.

And they've benefited from good timing, with interest rates falling and a strong payout continuing into the new season.

Gareth has also taken on a supervisory role with Dairy Holdings, alongside contract milking and running their new farm.

With the added workload and three young children, the couple have stepped back from the day-to-day and taken on a more advisory role to avoid burnout.

They've built a strong team of 10 across both farms and say they are fortunate to have great staff, including three who have been with them for seven years.

"I had to learn pretty quickly how to prioritise my time. I had to empower my guys to step up," Gareth says.

He credits their loyalty to the fact that he treats people how he'd want to be treated, and prioritises their time off for important family moments.

He also says having a strong partnership with Hayley has been key to their progress.

"Having stability – both in our team and at home – has made a big difference. A solid marriage and a solid crew have helped us keep moving forward."

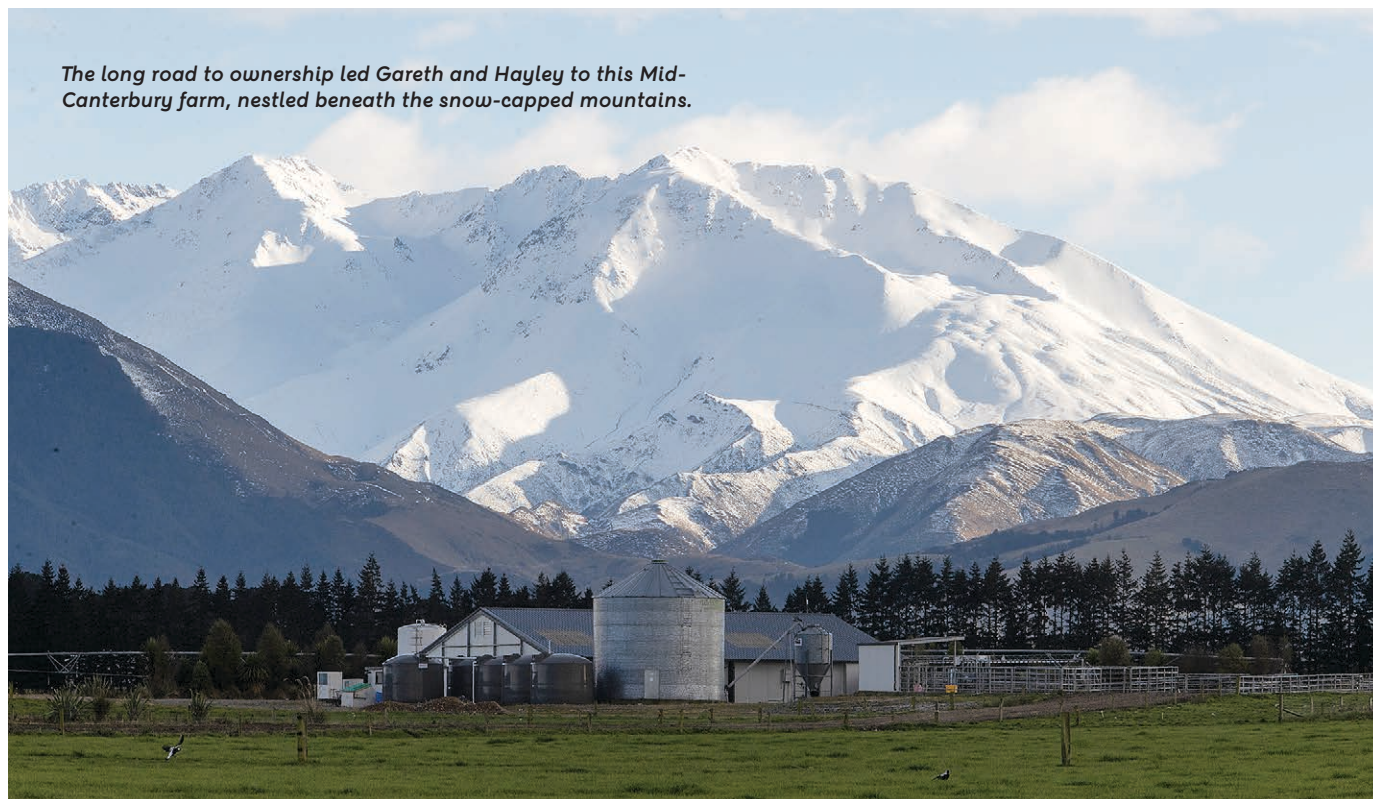
Looking back, they learnt one big lesson: not to get too hung up on expectations when looking for that first farm.

"Our advice is to hang in there and surround yourself with the right people who will support you and want you to succeed," Hayley says.

Both also credit the Stones and Dairy Holdings for their assistance over the years.

"They have been there the whole way for us. They are part of our success."

The long road to ownership led Gareth and Hayley to this Mid-Canterbury farm, nestled beneath the snow-capped mountains.



Flo, Janak, Giri and Suvakar from Highveld Pastures are among the farmers working with DairyNZ to explore different strategies to boost productivity, reduce hours and build a better workplace.



Understanding on-farm productivity drivers

A study of 150+ dairy farms found big differences in productivity. DairyNZ is now working with 10 case study farms to explore what drives those differences – and how to improve.



Dr Lucy Hall
DairyNZ postdoctoral scientist



Brian Dela Rue
DairyNZ research engineer

Every year, around 5000 people leave the dairy sector, according to DairyNZ research. While turnover rates are similar across the primary industries, dairy sits higher than some of New Zealand's top-performing sectors.

Staff turnover comes at a cost, not just in dollars but also in time, productivity and team culture. Once recruitment, training, lost time and reduced productivity are considered, replacing a team member can cost anywhere from 30% to more than 100% of their salary.

Improving working hours can support retention. However, adjusting those hours by reducing weekend work or overall load can be challenging without affecting productivity.

That's why it's essential to understand how time is actually spent on-farm – and how different strategies can unlock both time and productivity gains.

DairyNZ's Workplace Productivity Study was launched to better understand how time is used on dairy farms, and what drives differences in productivity. Previous surveys have provided useful benchmarks, showing a close link between hours worked and herd size (see *Figure 1*). But they haven't explained the drivers behind those hours – such as farm systems, business goals, or what happens when hours are reduced.

One key finding was the wide variation in hours worked on similar-sized farms, and no clear link between hours worked per cow and production per cow. The data also doesn't reveal how time is spent on core tasks like milking and calf collection versus more discretionary work like repairs and maintenance.

Different farms, different strategies

To better understand workplace productivity on-farm, we developed case studies to explore what work is being done, how long it takes, and why, so we can see how farmers make the most of their time.

We're working with 10 farms that take different approaches to optimising workplace productivity. They represent

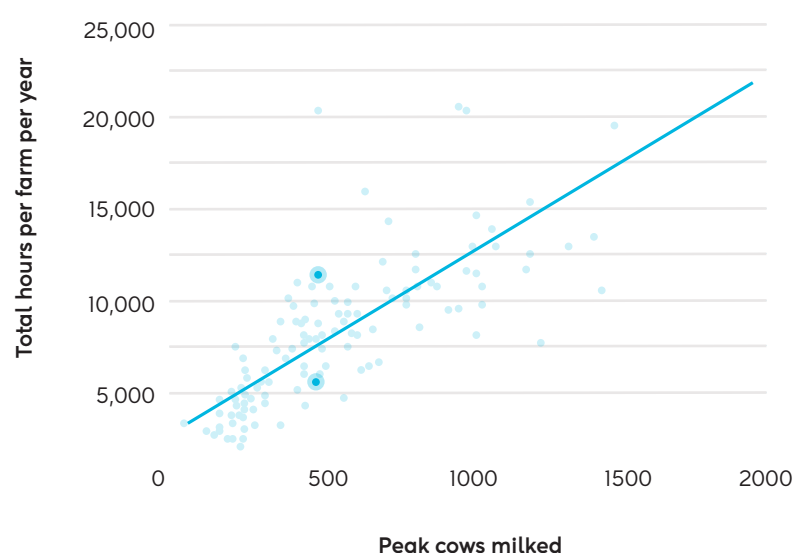
a mix of business structures, herd sizes and farm systems. We're visiting them at key points through the season to gather insights into how much they work and how long different tasks take.

Different strategies are being used across the case study farms. Milking frequency varies, with one farm moving to once-a-day (OAD) milking to help reduce hours. They focus on doing the essentials well, cutting

back or removing tasks where possible – for example, using only bulls to avoid artificial breeding and rearing calves for sale while buying replacements. This approach lets them manage 500 cows with two full-time people, with productivity boosted by the owner being hands-on and making quick decisions.

Another farm uses OAD milking and animal movement technology to

Figure 1. Total hours worked per farm per year for the 2021/2022 milking season by peak cows milked



Data from the Workplace Productivity Survey 2023 showed that the number of hours worked is closely related to herd size. However, a key insight was the significant variation in hours worked on similar-sized farms. For example, one 500-cow farm reported around 5,000 hours worked a year, while another 500-cow farm spent more than double that time on farm tasks, at roughly 12,000 hours a year (see highlighted points in *Figure 1*).

graze smaller mobs, maximise pasture growth and harvest, and reduce labour.

A third farm, with a strong team culture, is focused on being a great place to work. They run a five-on, two-off roster, hold regular team breakfasts, and employ extra help who live locally and work four days a week. They recently completed the Coast to Coast as a team.

Some farms have areas where they could improve efficiency, but are limited by infrastructure, such as small or ageing sheds, so they have focused on improving their hours by other means or in different areas.

What's becoming clear is that there's no one-size-fits-all answer. Workplace productivity optimisation means different things to different farmers. Their reasons vary, from reducing debt and improving cash flow to creating more time for rest, family and personal interests, or growing their farm team.

For those highly productive case study farms, a key theme is hours and team engagement. Are teams focused on doing their best work efficiently in the time available? And how adaptable are they when changes, such as new technology, are introduced?

Time savings bring new opportunities

When farms save time, it can benefit both the business and the team – whether that means more time off or tackling tasks that add value. It all comes down to the farm's goals and the team's priorities.

Some case study farms focused on reducing task time to change hours

worked. For example, one farm set a policy of no work outside 7am to 5pm.

On another farm, during mid-late lactation the team found that while core tasks took less time, the team sometimes lacked the skills to fill the extra hours productively.

Reducing milking frequency or adding technology isn't a silver bullet. It's important to think about how these changes fit within the wider farm system, and take the time to work out how to get the best value from them.

This also opens discussions with the team. Do they prefer more hours in one part of the year and fewer in another, or would they prefer more consistent hours?

If there is less work to do, offering more time off can be a win-win, but there still needs to be a balance to ensure that key tasks are completed to a high standard and not rushed.

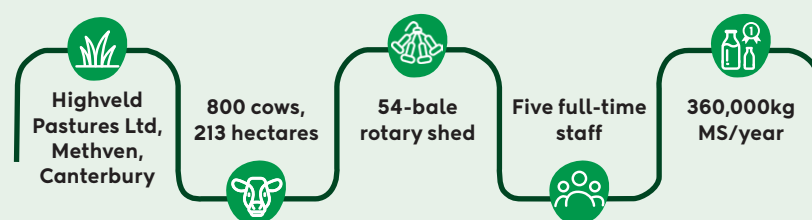
Productivity is key to success on dairy farms, but there are multiple levers you can pull to get the best out of your time and team. Whether it's adjusting milking frequency, incorporating technology, or refining your farm's organisation, the goal is to maximise efficiency without compromising results.

As part of this project, we're developing a suite of metrics to measure productivity. Next season, we'll use this data to design examples of highly productive farms, showcasing the tools and strategies that could work for different farm systems and goals.

Find out more about the workplace productivity study at dairynz.co.nz/productivity-study



At Highveld Pastures, smart time use and a flexible roster help the team work efficiently and balance their days, without compromising care, performance or learning opportunities.



Keeping the day on track

At Highveld Pastures, the team sometimes wonder if they're doing enough – especially when neighbouring sheds are lit up earlier or later. But equity manager Flo Coetzee is confident in their approach: "We get the job done – that's what matters."

The team typically work 40-45 hours a week during busy periods and around 40 hours the rest of the year. They're on a six-on, two-off roster with a sleep-in built into their days on. Using a flexible milking system, milking three times in two days (3-in-2), means they start before 7am only twice a week.

management his top priority. Tasks are shared across the team, with just enough people on each job to avoid overload and standing around.

Using time effectively is a constant focus, including overlapping tasks where it makes sense, like starting to hose the yard while milking is still finishing.

"I had a guy confused why I was suggesting overlapping tasks once because he said it would only take a few minutes at the end, but a few minutes here and there really adds up," Flo explains.

Flexible milking was adopted after the farm was purchased four years ago to manage a mixed herd and spread calving. It worked so well they stuck with it, and now value the adaptability it brings, particularly for learning support.

"It's amazing how quickly they move up. Even after 12 months, farm assistants are treating lame cows and picking up mastitis, for example.

"Because we're not rushing to afternoon milking, we can use those moments for training, instead of just sending the most skilled person."

A capable team means that if something unexpected crops up, they can share the workload and keep the day on track.

“

Tasks are shared across the team, with just enough people on each job to avoid overload and standing around.

There may be the odd 7:30pm check during calving, but Flo emphasises the importance of family time and aims to have everyone home by 5pm.

Days begin with a 15-20-minute coffee meeting to set the plan, with everyone having input – something Flo really values. He describes himself as a hybrid between a typical farm manager and an overseer, with time



There are a wide range of options to help optimise productivity – it's about finding the ones that work best for your team, goals and system.

Find resources and tools to help you create a productive workplace at dairynz.co.nz/workplaces

Low-footprint feed holds the key

Real-farm data shows how feed choices – especially using more homegrown feed – are linked to lower emissions intensity, better nitrogen efficiency and high profit.



Dr Paul Edwards
DairyNZ senior scientist



Mark Neal
DairyNZ head of data science & modelling



Louise Cook
Fonterra programme manager (environment), on-farm excellence

New Zealand’s pasture-based dairy systems are complex and dynamic, with many interacting parts. Focusing too much on one aspect can create risks if it compromises others.

Milk processor incentives have increased interest in emissions intensity – the emissions per unit of product, such as per kilogram of milksolids, or fat and protein corrected milk.

This has raised questions about how farmers can reduce their emissions intensity and whether doing so might have unintended impacts elsewhere in a farm business.

Emissions intensity is an important metric used internationally to compare different sources of milk. Customers who buy milk from our processors to produce consumer goods are looking to reduce their greenhouse gas (GHG) footprints, so they’re paying closer attention to the emissions associated with the milk they source.

As 95% of New Zealand’s milk is exported, the dairy sector needs to respond to customer expectations. However, we also have other goals, including the government’s targets

to reduce total emissions, along with profitability and broader sustainability outcomes like water quality.

The challenge is finding the balance – reducing emissions intensity while still achieving good overall farm performance, especially profitability and nitrogen efficiency.

Not all feed is equal

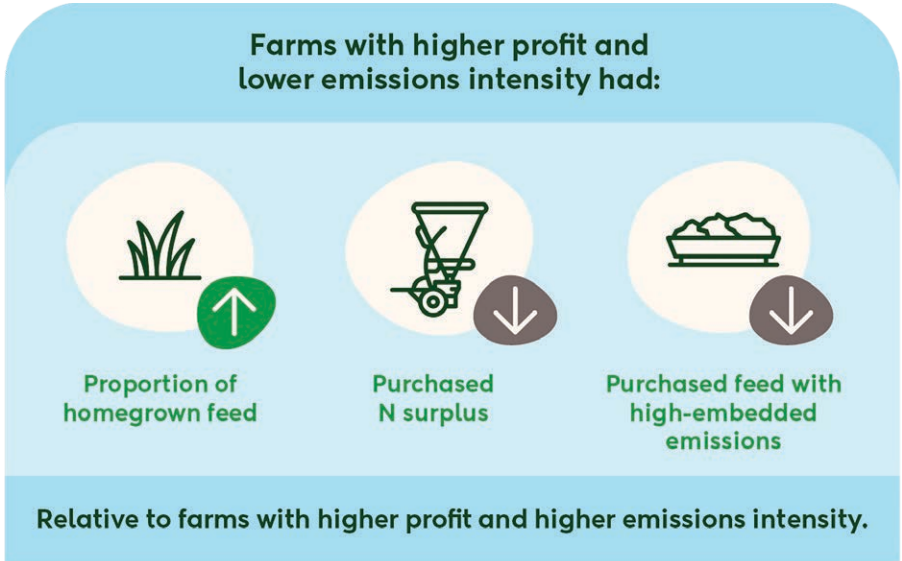
Different types of supplementary feed come with varying levels of embedded emissions, depending on how they’re produced and transported. For example, palm kernel extract (PKE) typically has higher lifecycle emissions than the same amount of silage.

So, if one farm is using PKE at a similar level to another farm using maize silage, the PKE farm is likely to have higher overall emissions due to the feed’s embedded footprint.

Imported feeds can also bring additional nitrogen into the farm system, which may contribute to a higher nitrogen surplus and increase the risk of nitrogen losses to the environment.

To gain a deeper understanding of the relationships between physical and financial outputs on-farm, DairyNZ partnered with Fonterra and LIC. The aim was to provide clearer insights and to support consistent messaging across the sector.

The analysis draws on a new and uniquely comprehensive dataset – farm financials from DairyBase, herd-level data from LIC (like breeding worth and 6-week in-calf rate), and a range of production and emissions metrics from Fonterra. Together, these give a much clearer picture of what’s happening on-farm.



A project in collaboration with:



Data from each organisation was joined and anonymised before being analysed by DairyNZ data scientists, supported by technical input from Fonterra.

While this isn’t a controlled experiment, the analysis of real-world farm data allows us to spot patterns and associations. It doesn’t prove cause and effect, but it does provide valuable insights.

So, what did we find?

There was no direct relationship between profit and emissions intensity – a farm can be highly profitable with either low or high emissions intensity.

However, when compared with high-profit farms that had higher emissions intensity, those with both high profit and lower emissions intensity had some key differences (see *Table 1*).

They relied more on homegrown feed (both per hectare and as a proportion of total feed), used fewer high-emission supplements like PKE and had a lower nitrogen surplus.

Although cow performance was good on the high-profit, low-emissions farms, it wasn’t extreme – cows were producing an average of 89% of their liveweight in milksolids (kgMS/kgLWT) in the Waikato and 96% in Canterbury (see *Table 1*). That means cows produced close to their liveweight in milksolids, but there didn’t seem to be any advantage in going beyond that.

As expected, more feed eaten per cow (and a relative increase in production) can help reduce emissions intensity, but the source of that feed matters. Higher total feed (irrespective of source) was linked to higher total emissions and purchased nitrogen surplus (PNS), while farms using more homegrown feed had lower PNS and less risk of increasing total emissions.

Aiming for lower emissions intensity through more production per cow can work, but if it relies on high-footprint feeds, it may increase total emissions

and nitrogen surplus, or reduce profitability. That’s why the type, cost and source of feed matters, not just the production outcome.

These findings are consistent with previous DairyNZ research, which has long highlighted the value of homegrown feed. Now there’s another incentive – it can help reduce emissions intensity.

Importantly, the analysis showed that there are opportunities for all farmers, no matter where they are. Within each region, there was no specific concentration of high-profit, low-emissions farms – they were spread around (see *Figure 1*).

That means any farm, anywhere, has the potential to improve emissions intensity without compromising other key outcomes. Some farmers are already making good progress – maybe even you – and there’s a real chance to share what’s working and learn from each other.

Learn more at dairynz.co.nz/emissions-profit



Concentrating on this essential metric – how much feed is homegrown – is rewarded with high profits and low emissions intensity.

What is DairyNZ doing?

DairyNZ is undertaking a range of research to assist farmers in reducing their emissions.

The Less-Methane team at DairyNZ are working on several viable solutions to reduce methane emissions on New Zealand farms. Find out more at dairynz.co.nz/less-methane

A four-year programme, Emissions4Pasture, in collaboration with researchers in Ireland, aims to better understand methane emissions from dairy cows in pasture-based systems. Learn more at dairynz.co.nz/pasture-emissions

Table 1: Comparison of high-profit farm systems with lower emissions intensity vs those with higher emissions intensity

	Canterbury Farms		Waikato Farms	
	Higher profit, lower emissions intensity	Higher profit, higher emissions intensity	Higher profit, lower emissions intensity	Higher profit, higher emissions intensity
Emissions Intensity (kgCO ₂ e/kgMS)	9.31	10.58	11.05	12.81
Absolute Biological Emissions (kgCO ₂ e/ha)	15,628	15,233	12,472	13,310
Purchased Nitrogen Surplus - PNS (kgN/ha)	112	130	73	120
Operating Profit (\$/ha)	5,960	6,369	4,829	4,774
Total Feed Eaten (tDM/ha)	19.9	19.6	15.8	16.3
Homegrown Feed Eaten* (tDM/ha)	16.3	15.7	13.8	13.6
Stocking Rate (cows/ha)	3.6	3.6	2.9	3.1
Production (kgMS/cow)	448	441	414	402
Production (kgMS/ha)	1,614	1,574	1,215	1,242
Production Efficiency (kgMS/kgLW)	0.96	0.95	0.89	0.87

Notes: Higher profit is defined as the top 50% of farms for operating profit (\$/ha) in each region.
Those marked in bold are statistically significant within the region.
*Wintering is not included in homegrown feed.

Figure 1: Map showing spread of high-profit, low-emissions farms across Waikato and Canterbury



Emissions terms to know



LCA emissions (Life Cycle Analysis emissions)

Greenhouse gas emissions measured across the whole dairy production chain – from on-farm sources and off-farm inputs like feed, fertiliser and fuel, through to milk processing.

Emissions intensity

The amount of greenhouse gases produced for each unit of product, such as per kilogram of milksolids, or fat and protein corrected milk.

Homegrown feed

Feed that is grown and harvested on the farm, such as pasture and crops, rather than imported supplements.

Embedded emissions

Greenhouse gases released during the production and transport of inputs like feed and fertiliser. These emissions are “built into” the product before it reaches the farm.

Purchased nitrogen surplus (PNS)

The difference between nitrogen inputs (fertiliser and imported feed) and nitrogen outputs (milk, meat, crops and exported feeds). A lower PNS means nitrogen is used more efficiently, while a higher PNS indicates more nitrogen could be lost to the environment.

Total emissions

The total greenhouse gases produced by an entity (e.g. a farm, a business, or nationally as a country) without considering the amount of product produced.

Fat and Protein Corrected Milk (FPCM)

A way to adjust milk volume to a standard fat (4%) and protein (3.3%) level. This makes it easier to fairly compare milk production between farms or herds that produce milk with different fat and protein contents.

How New Zealand became – and remains – the world’s lowest-cost milk producer

We explore the science, smarts and systems that will continue to give New Zealand dairy farmers their edge over the global competition.



Bruce Thorrold
DairyNZ chief science advisor

What gives New Zealand its global edge in dairy? The short answer is grass – and how well we use it.

Our advantage has always been built on homegrown feed, supported by decades of farmer know-how and science. That foundation still holds. In fact, the fundamentals of good pasture management remain central to profitability and competitiveness today.

But the job is getting more complex. Farmers are producing more milk per cow and per hectare while facing increasing pressure to reduce environmental impact. That calls for smarter systems and science that keeps pace.

Science behind the system

New Zealand’s low-cost, pasture-based model is no accident. It’s the result of decades of targeted, levy-funded research by DairyNZ and its partners. DairyNZ, for example,

invests 80% of the levy into research & science, policy & advocacy and extension activities.

In the 1970s and ‘80s, research helped farmers better match pasture growth with herd demand, laying the groundwork for rotational grazing and improved soil fertility. These practices still underpin strong farm performance today.

As herd sizes grew through the 1990s and 2000s, science shifted focus to feed efficiency and strategic supplementation. Regional sites like the Northland Agricultural Research Farm (NARF), Dairy Trust Taranaki (DTT) and the Southern Dairy Hub (SDH) led the way in testing supplement strategies under real-world conditions.

Insights from this work are now helping farmers fine-tune their feed use. The Supplement Price Calculator, for example, draws on these trials to show how smarter decisions can deliver gains of \$300–\$1000 per hectare.

Smarter cows, stronger herds

Genetics and fertility research has also delivered long-term gains. DairyNZ’s InCalf Fertility Focus Report and tools are helping farmers track and improve reproductive performance – with sector-wide results steadily increasing.

Since 2008/09, the average 6-week in-calf rate has lifted from 63.4%



New Zealand’s global edge in dairy comes from efficient pasture use, backed by decades of farmer know-how and science.

“
With farmers, scientists and levy investment working together, we’re well placed to keep adapting and improving.

to 69.3%, showing clear progress over time.

Modelling shows that a 10% lift in in-calf rates on a 400-cow farm, for example, can boost profits by around \$5,600 annually. And with new breeding values in Breeding Worth for traits like fertility and resilience, today’s cows are more productive and better suited to changing conditions.

Systems for today’s challenges

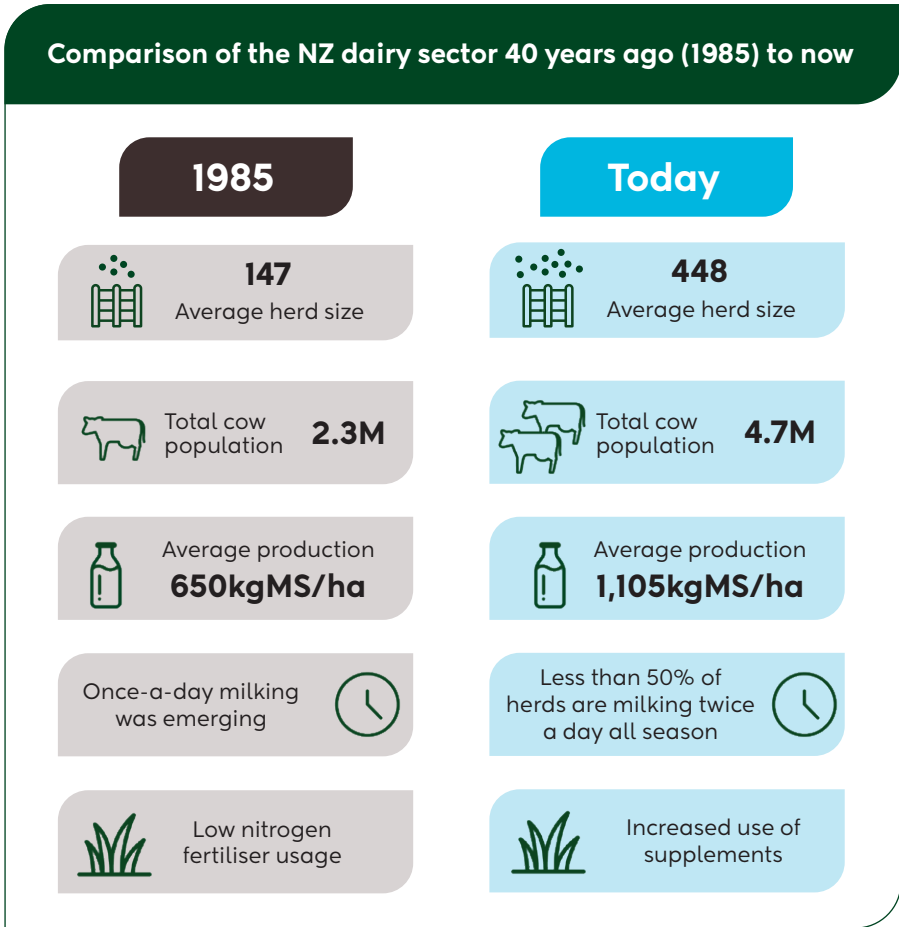
More recently, research into milking frequency has supported farmers to rethink how work gets done. Flexible milking approaches, like once-a-day and 10-in-7, are helping improve workplace conditions and labour efficiency – while in many

cases maintaining or even improving profitability.

Environmental expectations have added another layer. With methane and nitrogen loss under scrutiny, the ability to convert pasture into milk efficiently has become not just an economic strength, but an environmental one too. High use of homegrown feed plays a key role in reducing the environmental footprint of our milk production.

To help farmers maintain this advantage, DairyNZ is also leading the \$17 million Resilient Pastures programme – a regionally focused initiative aiming to improve pasture persistence and performance in the face of climate variability.

The challenges are real, but so is our track record of progress. With farmers, scientists and levy investment working together, we’re well placed to keep adapting and improving. Our real advantage isn’t just the grass – it’s how we use it, and how we keep building on what works.



Science you can use

Tools and insights, backed by research, to help lift efficiency on your farm.

- Take the guesswork out of grazing with the **Spring Rotation Planner**.
- Use the **Pasture and Crop Eaten Calculator** to check if you’re making the most of homegrown feed.
- Make informed feed decisions with the **Supplement Price Calculator**.
- Explore milking options with the **Milking Time Planner**.
- Understand your herd’s reproductive potential with the InCalf Reproduction **Gap Calculator**.

Find these and more at dairynz.co.nz/tools

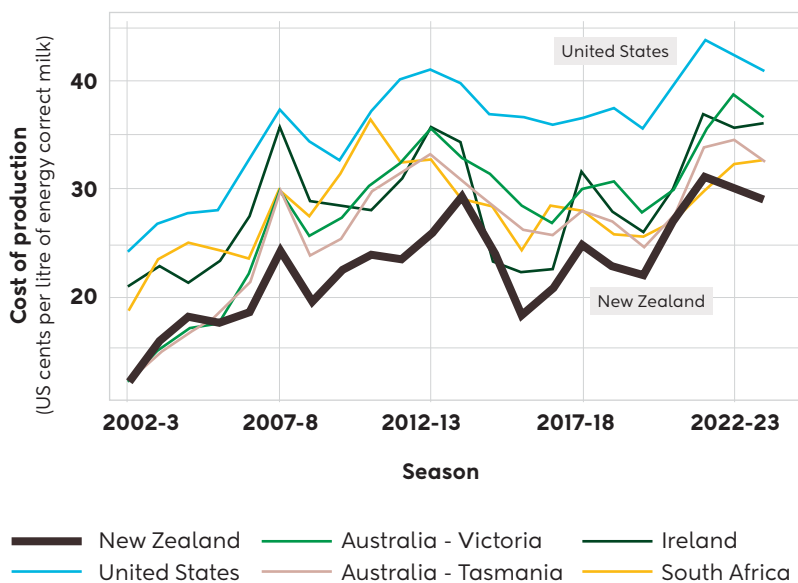
New Zealand sets the standard for efficient milk production

DairyNZ data, looking at the last 25 years, confirms New Zealand's status as the world's most efficient milk producer. While production costs have risen across all major dairy-exporting regions, our pasture-based system and strong on-farm performance continue to set us apart. It's a timely reminder of the value of smart science, practical systems and farmer know-how in keeping costs low and our sector globally competitive.

What's driving cost increases around the world?

All major dairy-producing countries have faced cost pressures from inflation over the past 25 years. These pressures have flowed through to higher feed, labour and interest costs, driven in part by external factors like geopolitical events and changing climate conditions. Feed costs have increased steadily, while labour costs have jumped significantly – doubling in Australia over the past decade. High interest rates have also added pressure, particularly in New Zealand and Australia.

Graph 1: On-farm cost of milk production in various dairying countries



Source: RedSky Agriculture.

Cost of production is measured in US cents per litre of milk and is energy corrected to allow for differences in milksolids % between countries.

How can you get involved?

Science works best when it's grounded in real on-farm experience. By getting involved, you can help shape research that's more useful and relevant to farmers.

Keep an eye out for local events where you can connect directly with scientists, or talk to your DairyNZ area manager to learn about current projects and how you might be able to contribute.



Built different: Why NZ farmers keep winning at dairy

Podcast | Ep. 100

Hear how NZ dairy farmers grew from milking 147 cows in the '80s to becoming the world's most efficient producers – and what's next.

dairynz.co.nz/podcast-100



Campbell Parker says science is central to NZ's dairy success – and it is farmer collaboration that makes it work.



“

Farmer-to-farmer learning is also central to what sets New Zealand dairy farmers apart.

Campbell's view: the NZ difference

Science is key to New Zealand's world-leading, low-cost milk production. Built on decades of farmer-funded research, our year-round pastoral system gives us a competitive edge, but science unlocks new opportunities.

Science takes on the risks and provides insights, so farmers don't have to. Farmers are innovators, and DairyNZ amplifies this by testing ideas and scaling solutions.

A great example is the Spring Rotation Planner, developed from research by renowned dairy researchers including Kevin Macdonald, Arnold Bryant and Norm Thomson. It's now a common tool in dairy sheds, which started with science.

Equally important is the focus on harvesting homegrown feed – the foundation of New Zealand's low-cost advantage and farmer profitability. Through sector-wide data, we see a strong link between pasture harvested on-farm and profitability. This insight keeps maximising homegrown feed front and centre in farming decisions.

And science isn't standing still. With more than 20% of the national herd using wearables, big data is opening new doors. Research tapping into this data is helping identify opportunities that boost productivity and profit, from spotting pre-mating heats to supporting genomic selection.

We're just scratching the surface of this data, but the challenge is turning it into practical tools that farmers trust. History shows

that when science delivers clear solutions, farmers adopt them, keeping New Zealand ahead.

Ultimately, collaboration is central to the success of our science. Many of DairyNZ's best innovations have sprung from farmers' ideas, but their input is equally vital in shaping how projects are designed and in staying involved throughout. Flexible milking is a great example of farmers trialling ideas and working closely with DairyNZ to refine them.

We recently counted around 1000 farmers working with us at all stages in our research programmes. That input is key.

Another key strength is the adaptability of our farmers – their innovative mindset, willingness to engage, and focus on finding solutions that science can unlock.

Farmer-to-farmer learning is also central to what sets New Zealand dairy farmers apart – the ability to come together, openly share knowledge, and continually improve their systems.

We've been exporting globally for 150 years, so staying in tune with market signals remains vital. At the same time, farmers are deeply intergenerational, driven by a strong desire to leave their farms in better shape for the next generation. That commitment is ingrained in the New Zealand farming psyche.

International visitors often remark that the collective investment farmers make in science here is envied worldwide.

Six decades of change:

What 60 years of economic surveys reveal about our evolving dairy sector

A deep dive into the data from six decades of DairyNZ Economic Surveys uncovers key trends, shifts and lessons that have shaped the business of dairying over this time.



Mark Storey
DairyNZ head of economics

What can 60 years of farm data tell us about how dairy farming in New Zealand has changed? Quite a lot. A deep dive into the long-running economic survey – first started by the New Zealand Dairy Board in the 1960s and later managed by LIC and Dexcel before DairyNZ took over in 2005 – reveals how farm systems, costs and business decisions have evolved, as well as the key trends that have shaped the dairy sector over this time.

One of the most apparent shifts has been towards higher-input systems, resulting in greater production per-cow. This is evident in the sharp rise in spending on pasture and supplements, particularly from the early 2000s (see *Graph 1*).

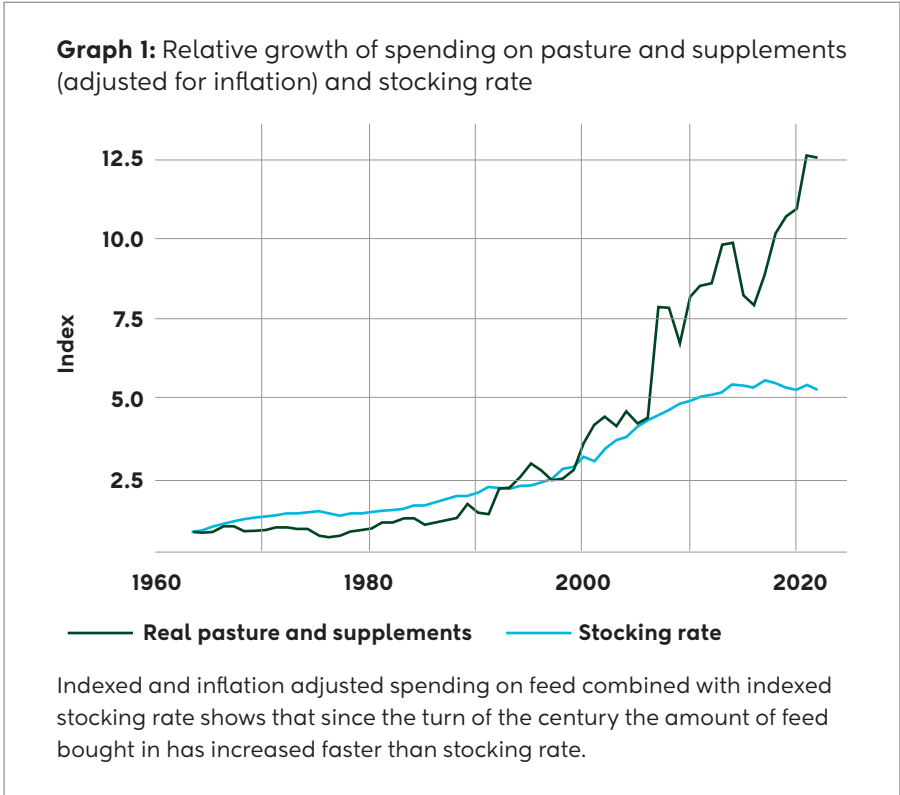
When adjusted for inflation and compared to the starting year (1963/64), spending on feed has steadily increased, driven by greater use of purchased feed. Meanwhile, stocking rates have remained mostly

steady since about 2010, suggesting that the rise in feed costs is explained by the increased use of supplementary feed, leading to higher production per cow, rather than simply more cows.

Feed costs show rising expenses, but the Economic Survey also tracks broader financial changes. Since 2000, farmers have seen both income and expenses grow, with costs rising faster than income, putting pressure on profitability.

“**One of the most apparent shifts has been towards higher-input systems, resulting in greater production per-cow.**”

From the 1980s, most input costs have moved in tandem – except for interest, which spiked during periods of high rates. But since the early 2000s, spending patterns have varied across input categories, reflecting changes in farm systems, new technologies, and increased input intensity. This growing



complexity highlights how dairy farming has evolved and specialised over time.

Beyond day-to-day income and expenses, farm wealth is reflected in the growth of equity. Over the past six decades, equity has generally risen, peaking in the late 1990s and early 2000s, mainly due to increasing

land values. Since 2000, growth has been more volatile but remains positive overall.

Over the past six decades, New Zealand dairy farms have grown in both size and intensity. In the 1960s, the average farm milked 92 cows on 59 hectares; by the 2010s, this had risen to 410 cows on 144 hectares (see *Table 1*).

Advances such as rotary milking platforms, improved genetics, and pasture management helped boost production per cow, allowing farms to produce more milk even as herd sizes levelled off. This evolution shows how the sector has transformed into larger, more efficient and technology-driven businesses.

Table 1: Physical changes on the average New Zealand dairy farm over six decades

Metric	1960s	1970s	1980s	1990s	2000s	2010s	2020s
Maximum cows milked	92	117	136	190	309	410	411
Effective area (ha)	59	69	65	79	114	144	143
Production (kg milksolids)	21,086	27,870	36,169	55,201	103,530	155,399	171,514
Milksolids per cow (kg)	237	238	266	290	335	379	417

Pasture Summit events

Join us this spring, where farmers lead the conversation on profitable, pasture-first dairy farming.

As the headline partner of Pasture Summit, DairyNZ is proud to support events that bring farmers together to connect and learn. This is your chance to hear from host farmers who are turning grass into milk and milk into profit. You'll get real numbers, real strategies and real stories from farmers focused on financial strength and sustainable growth.

Save the date: Spring 2025
Taranaki and North Canterbury – October/November
(final dates and locations announced soon)

Learn more at pasturesummit.co.nz

