Inside Dairy

FEB-APRIL 2026

By DairyNZ

The why, what and whether or not of wearables

Farmers sharing their experiences

Features:

Over the fence...

Progress isn't always obvious in the moment, but when we look back, we can see how far we've come together. This edition of Inside Dairy highlights progress - the kind built through generations of shared knowledge, hard work and a united commitment to a stronger dairy future.

Across these pages you'll find on-farm stories, policy progress, and the latest research and science – along with how this work is shaping updated DairyNZ resources.

The cover story features Waikato farmer Matthew Macdonald, whose family's investment in wearable technology has reduced physical workload and enabled smarter, data-driven decisions, which is progress made possible through embracing new tools and ideas.

You can also read about how, in light of the increasing interest and technological advancement of wearables, DairyNZ has launched a new project being shaped by farmers, asking what they want to know about the technology, the data it generates, and how it can help change farming for the better.

Together, these stories emphasise the range of improvements farmers have experienced off the back of supporting one another's success.

That's why DairyNZ's upcoming Milksolids Levy vote matters. It has always been our work together that has enabled progress, advancement and success in the sector – so we can help deliver a positive future for New Zealand dairy farming.

The collective levy investment has supported you on-farm and in your community, while our sector's economic success has helped support the entire nation. These outcomes are what you share, and what keeps us all moving forward.

Levy voting packs will start to land in letterboxes from 14 February, and through an email from electionz.com on 16 February, and we encourage you to have your say on whether the milksolids levy continues.

To keep ahead, we need to have our say and vote – together. It is when we come together that we can continue to build a stronger future, because we know that there is more to achieve, and your support is what will help shape that progress.

Find out more about the levy vote on the back page of Inside Dairy or at **dairynz.co.nz/levy**

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

Ngā mihi,

Campbell Parker
DairyNZ chief executive

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Matthew, Jenny and David Macdonald, read their story on page 10.

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We appreciate your feedback

Email us at insidedairy@dairynz.co.nz

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This publication was accurate at the time of printing on 19 January 2026.

Couldn't make it? We've got you covered.

There were over 400 people from 22 countries, including 80 NZ dairy farmers, at the 4th International Precision Dairy Farming Conference hosted by DairyNZ in December, with support from sponsors and exhibitors. Head to the DairyNZ website for podcasts and articles from the conference featuring leading international and local researchers and dairy farmers. Science, adoption, implementation, and real-world applications – the work being done in precision dairy farming, both in New Zealand and globally, is all there. Proceedings and abstracts are also online.

4th International Precision Dairy Farming Conference
3-5 Dec 2025 | Christchurch

Visit **dairynz.co.nz/conference** to find all the coverage.

Thank you for having your say on the Biosecurity Response Levy

Thanks to everyone who took the time to share your views on the recent Biosecurity Response Levy consultation, which closed on 4 November. We had strong engagement on the proposal to expand the levy's scope to include biosecurity readiness activities. Around 77% of milksolids-weighted responses supported the change, 20% were opposed, and 3% were invalid or blank. Farmers highlighted the importance of transparency, retaining funds for response, and recognising the value of readiness. We're now preparing an application to the Minister for Biosecurity to change the levy.

The Rural Professional Hub

Tailored – just for you.

The Rural Professional Hub is designed for you – whether you're an environmental advisor, farm consultant, banker, or other service provider working with New Zealand's dairy sector. The hub is your go-to destination for up-to-date tools and resources, all curated to help you deliver even greater value.

With an easy-to-navigate layout, you'll quickly find what you need.

There's always something new to explore...

- Articles
- Research
- Guides
- Insights
- Events, and more

Find out more at **dairynz.co.nz/rp-hub**

DairyBase and Farm Focus partner to reduce farmer admin

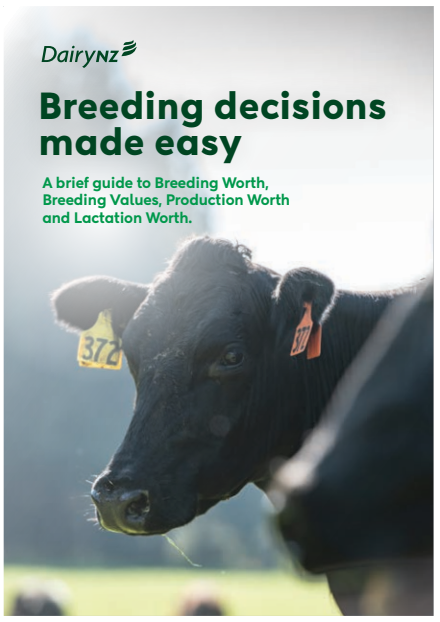
DairyBase, our farm benchmarking tool, now connects with Farm Focus – and soon with tools like MINDA and Fonterra – so your financial and herd data flows in with just a few clicks. That means quicker cashflow reports, timely insights, and less time at your desk.

Find out more in our podcast with DairyBase manager Jodie Goudswaard, and South Waikato and Lower Waipa area manager Steph Gudgeon, who is also a dairy farmer and long-time DairyBase user, about how these integrations are making a difference at **dairynz.co.nz/podcast-111**

TALKING DAIRY
DairyNZ

Get the freshest DairyNZ tools and resources

These tools and resources have been refreshed with the latest science and practical advice – get them at **dairynz.co.nz/resources**



- **Lameness guides** – two new guides to prevent, manage and treat lameness effectively.
- **Biosecurity package** – protect your herd and business from disease risks with correct signage and visitor protocols.
- **Effluent pond seepage testing – code of practice** – good practice guidelines for professionals involved in testing and measuring seepage.
- **Breeding decisions made easy** – plan genetics that fit your goals.
- **Perennial ryegrass guide** – an in-paddock guide to assessing post-grazing residuals, yields and leaf stage.

M. bovis eradication nears completion

In December, a huge milestone was reached on the road to eradicating Mycoplasma bovis.

New Zealand had seen no sign of the disease after two spring calving seasons and entered a new phase called 'confidence of absence'.

Read more about the announcement at **dairynz.co.nz/mbovis-eradication**

Insights from a global dairy showcase

With New Zealand getting ready to host the International Dairy Federation World Dairy Summit this year, DairyNZ chair Tracy Brown attended the 2025 event in Chile.

The International Dairy Federation (IDF) is a global organisation connecting dairy experts, farmers and scientists to share knowledge, set standards and explore trends shaping the dairy sector. DairyNZ Board chair Tracy Brown shares her key takeaways from its 2025 World Dairy Summit.

What stood out to you about the global dairy community and how New Zealand is perceived?

Attending the summit was a real privilege. It's one of the most important gatherings for the global dairy community bringing together farmers, processors, scientists and sector leaders.

Being in South America highlighted both the similarities and differences with our farms – they have similar pasture-based systems and climates, but often more labour and more specialised roles on-farm. It reminded me to appreciate things we sometimes take for granted, like easy access to vets and machinery services.

What were some of the biggest challenges or topics farmers from other countries were talking about? Did any resonate with New Zealand farmers?

We had a farmer round table with around 60 farmers from across the world. While every country has unique challenges, some common themes came through – mainly water management, climate change and succession planning.

In some countries, succession is highly regulated, which is a stark contrast to NZ's sharemilking system and the freedom farmers have to choose their own pathway.

It was encouraging to see that many others are working on similar water and climate issues, which shows the sector globally is moving in the same direction.

You were also involved in the IDF Dairy Innovation Awards. What trends or innovations caught your eye?

That was a real highlight. The awards had over 130 entries from 23 countries, showing the growing momentum across the global dairy community. Innovation is clearly a global priority – whether it's improving efficiency, sustainability, or animal welfare, there's a strong commitment to progress. It was inspiring to see so many practical ideas being developed and shared internationally.

Tracy Brown served as a judge and presented awards at the 2025 IDF Dairy Innovation Awards during the World Dairy Summit in Chile.

Looking ahead, New Zealand is hosting the 2026 World Dairy Summit. What opportunities will this give local farmers?

Hosting the summit is a huge chance to showcase New Zealand's systems, innovation and people to the world. There will be field visits, networking opportunities, and sessions where international delegates can learn directly from Kiwi farmers.

It's also a great way for our farmers to see global trends, bring ideas back home, and build connections that could benefit their businesses. I'd encourage farmers to be curious, get involved where they can, and take pride in the spotlight we'll have next year.

Find out more about the 2026 IDF World Dairy Summit taking place in New Zealand 15-20 November at **idfwds2026.com**

Meet DAiSY:
A smart new way to get trusted info fast

DairyNZ has recently launched DAiSY, an exciting new AI-powered website assistant designed to transform the way you access information from across our website. With DAiSY, you can now get credible answers to your questions faster, and make the most of all the farming knowledge, tools and resources we have available on our website – any way you need.

Smarter access, faster answers

DAiSY takes the hassle out of searching for information by giving you summarised answers to your queries, quickly. Whether it's best practice guides, animal health resources, environmental insights, or business management advice, DAiSY helps you find the right information from across our website in seconds.

Easy to use, easy to trust

Using DAiSY is simple and intuitive. You don't need to be a tech expert – just ask a question and DAiSY does the rest. By streamlining access to information across our website and summarising info so it's easier to digest, DAiSY ensures you spend less time searching and more time focusing on what matters most – running your business.

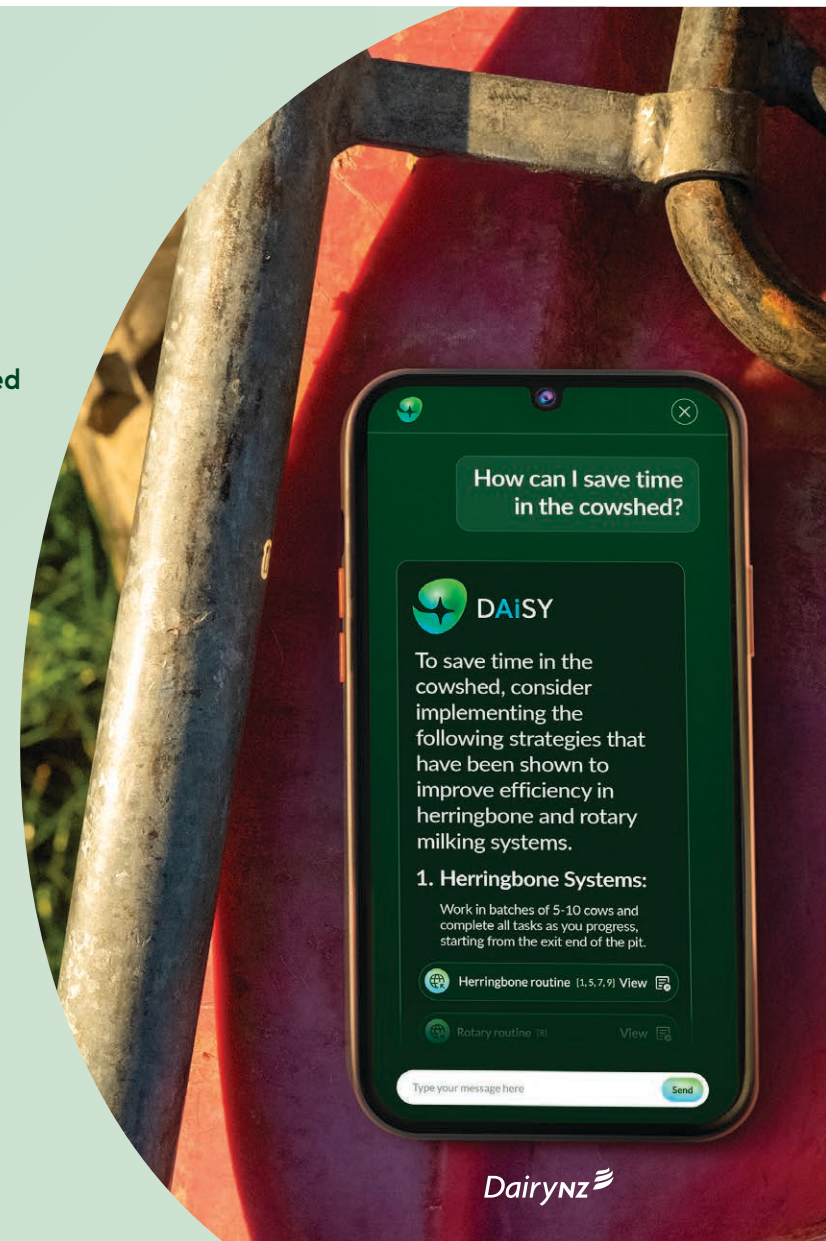
Designed for your needs

Built with you in mind, DAiSY makes it easier than ever to stay informed and supported – delivering answers to your questions in a way that works for you. It's part of our ongoing commitment to innovation and ensuring you have even easier access to the information you need to succeed.

DAiSY™
Knows dairy

Ready to see how DAiSY can make a difference on your farm? Head to the DairyNZ website today and try out this powerful new tool for yourself.

dairynz.co.nz



Production records make 2024/25 a season to beat

Milksolids production rose last season, largely due to strong milk price incentives, increased imported feed and consistent herd performance across many farms.

Average milksolids per cow reached a new record of 414kg in the 2024/25 season, up from a five-year average of 400kg. This includes 234kg of milkfat and 181kg of protein. Total cow numbers fell slightly, by 0.5% to 4.68 million, yet farmers still produced more – reflecting ongoing gains in herd efficiency and performance.

And it's the first time the average milksolids production per herd has surpassed 180,000kg – a notable milestone for the sector, DairyNZ's head of economics, Mark Storey, explains.

"Amid a year of rising costs, New Zealand dairy farmers demonstrated resilience, maintaining their focus on innovation, investment and sound management," Mark says.

Milksolids production per hectare also rose, reaching 1,136 kg/ha – 1.4% above the five-year average of 1,121 kg – demonstrating productivity gains at both cow and farm level.

"Seasonal production is often influenced by climate, and we've seen that in past drought years such as 2007/08 and 2012/13, when national milk output fell," Mark says.

"But this season's lift is more strongly linked to farmer decisions in response to higher milk prices."

The average dairy co-operative payout (including dividends) rose to $10.75/kg MS, up from $8.90 the previous season. When adjusted for inflation, the 2024/25 payout was $0.90 above the five-year inflation-adjusted average of $9.25/kg MS.

"Incentives like that typically support more supplementary feed use and encourage farmers to maximise production where it makes sense for their system."

> ***"Farmers are still improving production performance, getting more milk from a slightly smaller herd, which is a key efficiency indicator.***

Milksolids per cow increased by 3.5% – well above the five-year average growth rate of 1.5%. This lift was supported by herd improvement, better genetics, and improvements in reproduction performance, including stronger six-week in-calf rates reported by many regions. Herd testing also increased, now covering 82.1% of the national herd.

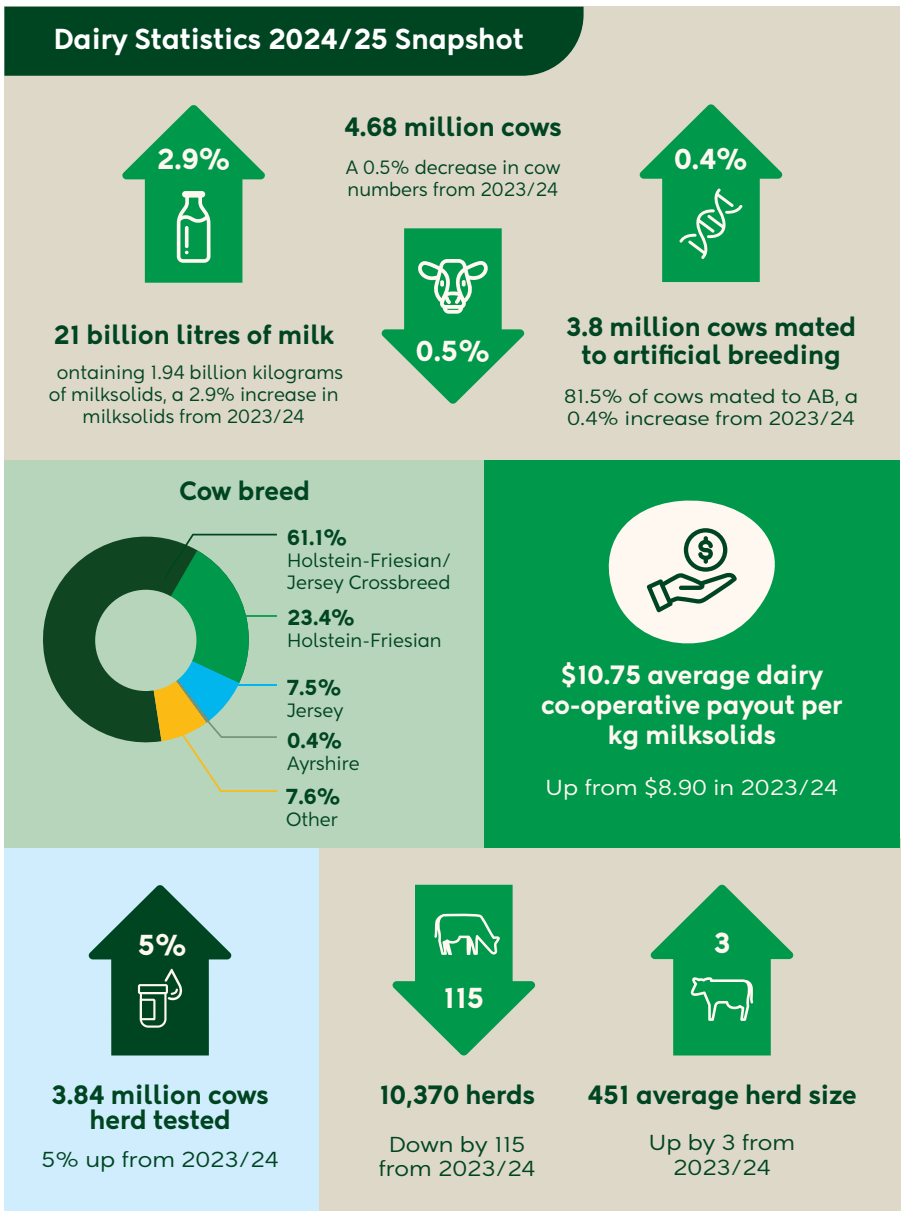
"Farmers are clearly not only focused on increased production, but also on herd performance and excellent milk quality - as the lowest ever somatic cell count was recorded, at 157,000 cells/mL."

"This is important for animal performance and milk quality, and it's encouraging to see farmers investing time and resources in it," Mark says.

"After last year's dip in herd testing – likely linked to economic pressures – it's good to see numbers lift again this season."

Efforts to improve herd productivity are also evident in the rise of artificial insemination and the continued increase in Holstein-Friesian/Jersey crossbred cows, now 61.1% of the herd.

"These trends show that farmers are continually improving production performance, getting more milk from a slightly smaller national herd, which is a key efficiency indicator," Mark says.



"It's an impressive result for New Zealand dairy."

New Zealand Dairy Statistics is jointly published annually by DairyNZ and LIC and is available in both an online interactive and a printable PDF format.

Find the latest edition at **dairynz.co.nz/dairy-stats**

DairyNZ economics team

Mark Storey – Head of economics

Ben Marmont – Economist

Dr David Silva-Villacorta – Senior economist

Dr Koohyar Khatami – Economist

Dr Mario Fernandez – Principal economist

Dr Mubashir Qasim – Senior economist

Ryan Mills – Senior economist

Dairy Training makes all the difference

Emma's applying what she learned through Dairy Training – using new leadership and planning skills to keep things running smoothly.

Free courses – developed in collaboration with farmers and the dairy sector – help farmers like Emma Blom build practical skills on-farm.

The best advice up-and-coming Southland dairy farmer Emma Blom ever got was to treat the years from 18 to 25 as an apprenticeship – having the rest of her life to make money.

That advice, from the Bloms' family accountant, Pita Alexander, is something Emma, now 23 years old, seems to be living to a tee.

Emma is working full steam, not only on her family's northern Southland farm in Balfour, but also to make as much as she can of those 'apprenticeship' years.

She was the runner-up Trainee of the Year at the 2025 National NZ Dairy Industry Awards and recently completed Dairy Training's Emerging Leadership course.

Emma says she was prompted to take part by the realisation that she needed to build specific skills – and by the encouragement of her brother Nick, who had also completed the Emerging Leadership course.

"To grow, you need help from people," Emma says.

"To get help from people, you need to be good with people. I noticed that I lack some leadership skills.

"Dairy Training's Emerging Leadership course is a real hands-on, specific course for dairy farmers to improve those skills."

She found the personality and leadership profiling in the course especially beneficial as it helped her determine her leadership style.

"It showed me my natural leadership style – the one I tend to fall back on – but also gave examples of when I might need to use a different style and what I could work on," she says.

As a natural leader, Emma takes great pleasure in sharing her knowledge and seeing others succeed. The peer-to-peer learning aspect of the course was also particularly appealing, and she found that the people she took the course with were valuable resources for growth.

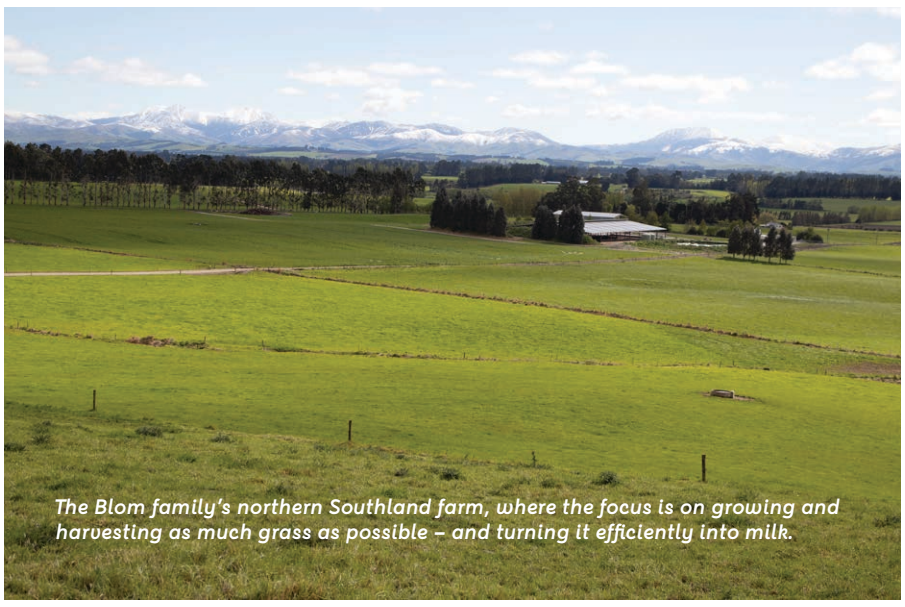
Classes are spread out, and she found having weeks between classes allowed her to apply her learning on-farm. She would often ask fellow course participants how they would approach a problem she had faced.

She also values her wider network, seeking ideas for further learning and training opportunities from other farmers and rural professionals, as well as aspirations and advice.

She likes connecting with others and hearing their vision for the sector.

"I get so much energy from it".

Emma says her family farm values – "do what's right, make it happen, push the boundaries and team effort" – were reinforced by her learnings from the course. The structured nature of the course made her realise how valuable it is to have time set aside specifically for learning, and she learnt the importance of setting time aside to plan, too.



The Blom family's northern Southland farm, where the focus is on growing and harvesting as much grass as possible – and turning it efficiently into milk.

> ***"There's two layers to farming – a practical side and a financial side. To be successful, you really need to understand both, inside and out.***

Originally hailing from the Netherlands, Emma's parents, Helen and Art Blom, migrated to New Zealand in 1996 for an overseas internship. They planned to spend 12 months in NZ before returning to take over the family farm back home, but they fell in love with New Zealand and stayed.

Emma attended Lincoln University and gained a bachelor's degree in environment and society. She took part in an exchange programme while at university, spending a semester at Wageningen University in the Netherlands.

After graduating, Emma returned to her family farming business, Blom Ventures, in northern Southland. She completed an artificial insemination

Farm facts:

McDonald Road, Blom Ventures
Location: Balfour, Southland
Structure: Manager
Effective area: 200ha
Herd size: 250 cows
System: 3
Production: 128,000kgMS*

*2024/25 season, 475 youngstock also run on the 200ha

(AI) course with CRV and now does an AI run each mating season.

There are four farms in Blom Ventures – McDonald Road, where Emma is currently managing; Progressive Dairies, where she also rears calves; White Gold; and Blom Family Farms, where Nick is contract milking. There are 2000 cows across the four farms and they all operate a System 3.

The family focus is on growing and harvesting as much grass as possible and having a good workplace to maintain their team in the long term.

At McDonald Road, the milking herd consists of late calvers and carry-over cows that are winter milked on one of their other farms. In April each year, cows are sorted across the farms and settled into the herds they will calve in based on predicted calving dates. They are wintered either in a barn or on crops.

Calving starts on all of the farms except McDonald Road in early August, and finishes mid-September. McDonald Road starts later, once those earlier farms are finished. The rolling calving set-up allows them to retain cows, condense calving and maximise the number of days in milk.

The system also streamlines the overall Blom farming system for better time, skill and resource utilisation.

As Emma puts it, dairy farmers are essentially grass farmers – their job is to turn grass into milk as efficiently as possible.

All of the youngstock are grazed at McDonald Road. There are hilly paddocks that aren't suitable for the milking herd so are well suited to the youngstock. They have a strong focus on youngstock health and growth rates, and having them at home allows them to manage them in a similar way to a milking herd, with daily shifts. They're weighed monthly.

In the short term, Emma plans to boost production on McDonald Road, complete another season of AI with a target of 5000 inseminations, and visit farms and family in the Netherlands this winter with her partner, Jake Van Adrichem, who is also Dutch and a local contractor.

Eventually, she wants to be more financially invested in the farm and in farming in general. She is already exploring governance and says that having governance roles as a future goal makes her "think bigger-picture than just boots-on-the-ground farming".

The Blom Ventures team pride themselves on their shared values: do what's right, make it happen, push the boundaries, and work together as a team. L-R: Art, Helen, Emma Blom, Jake Van Adrichem and Sjors Van De Helm

She hopes to own her own farm one day and perhaps have a role in national governance, and believes Dairy Training courses will be instrumental in achieving her goals. She's hoping to complete Feed for Profit in autumn and would also like to tackle Business by the Numbers soon, to understand "what the figures are behind the practical".

"There's two layers to farming – a practical side and a financial side. To be successful, you really need to understand both, inside and out."

Grow your skills with Dairy Training

Dairy Training is a registered NZQA provider and subsidiary of DairyNZ. With funding from the Tertiary Education Commission and support from DairyNZ, it delivers free, government-funded training to help farmers build capability.

Courses are expertly designed, giving farmers practical skills they can use immediately. Dairy Training also delivers popular DairyNZ-designed workshops such as MilkSmart and CalvingSmart.

Check out **dairytraining.co.nz** to find courses and workshops available near you.

Find the right training for your dairy career

Dairy**Training**
DairyNZ

"Because there are weeks between classes, you can take what you've learned and apply it on the farm"

Emma Blom, Southland dairy farmer

Level 2 NextGen Dairy Farmers
Level 4 **Emerging Leadership**
Level 5 **Feed for Profit**
Level 5 Contract Milking
Level 5 Business by the Numbers
Level 5 Farm Environmental Planning
Workshop CalvingSmart
Workshop MilkSmart

Equipped Emma with practical management templates, leadership resources, and structured learning time. Peer feedback and networking fuelled her growth toward farm ownership goals.

Emma's next course will deepen her farm management expertise – teaching her to analyse pasture systems, optimise feed budgets, and use industry tools to drive profitability and sustainability.

Free courses, delivered to you

Start with the basics or grow your leadership and business management skills. Whatever your role on-farm, there's something for you.

Visit dairytraining.co.nz

New in 2026

- Animal Health & Stockmanship
- Pasture Management & Feeding cows
- Improving Workplace Efficiency
- Managing Farm Footprint
- BizStart
- BizGrow

Dairy policy makes progress

With key national rules set to change, the sector readies itself for a new national direction.

The dairy sector has made strong progress in recent years, strengthening its record of managing environmental and animal welfare impacts. As these gains bed in, the sector is reinforcing its licence to operate – and its ability to grow responsibly, within environmental limits.

These improvements sit alongside a suite of new planning regulations which could set the scene for a new phase: sustainable growth that benefits farmers and New Zealand, and aligns with the government's broader growth agenda.

By combining DairyNZ investment in practical mitigations with science-backed solutions, the sector is building resilience and preparing for carefully managed growth.

Looking ahead

These updates show the sector building on its strengths and adapting to new regulations in practical, science-backed ways.

To keep up to date with the latest policy developments, research and guidance to support sustainable and productive farm systems, and for more information on DairyNZ's policy and advocacy work, visit **dairynz.co.nz/policy-and-advocacy**

Gene technology

The Health Select Committee has reported back on the Gene Technology Bill, recommending some changes to improve transparency, engagement and technical expertise. While this is positive, several of DairyNZ's key concerns remain unresolved.

DairyNZ supports the gene technology reform and the Bill's goal of making it easier to safely use and test gene tech in New Zealand. The organisation will continue working with government and industry partners to ensure the framework protects farmers, markets and trade while enabling responsible innovation.

With a four-year review ahead, further opportunities will ensure farmers and the primary sector can safely benefit from gene technology.

Methane targets

In October, the government confirmed a revised 2050 biogenic methane reduction target of 14-24 % below 2017 levels, down from 24-47 %. This reflects the independent methane review and the "no additional warming" approach. DairyNZ welcomed the announcement, noting the target is now better aligned with science and practical farm realities.

Farmers also have certainty that a farm-level tax on methane emissions will not be introduced. While emissions are already down about 4 % since 2017, reaching the upper end of the target will require continued innovation.

Research and on-farm tools, including Emissions4Pasture trials and improved pasture and feeding systems, are helping farmers reduce emissions while maintaining productivity. The revised target gives farmers clearer guidance to plan and implement practical solutions with DairyNZ support.

Resource Management Act Reform

DairyNZ worked closely with farmers and sector partners to provide feedback on two Bills proposed to replace the Resource Management Act (RMA).

The RMA impacts nearly every aspect of farm operations, so farmers need a system that provides certainty to invest in future solutions.

We welcome plans to reduce complexity and costs, with greater emphasis on using permitted activities and farm plans to manage farming operations. We know farmers would rather invest in riparian planting and other on-farm mitigations than on unnecessary consents. We also support moves to recognise the important non-regulatory work done by catchment groups and communities.

However, we have concerns about proposals for hard environmental limits, particularly for water quality. We prefer an outcomes-based approach over a fixed numerical limit, and we are closely reviewing the potential introduction of market tools and user charges as the legislation progresses.

Read more about the proposed changes and Dairy NZ views at **dairynz.co.nz/rm-reform**

Growth in a world of limits

Looking forward with DairyNZ chief executive **Campbell Parker**

New Zealand's dairy sector cannot grow in the way it has in the past. So what is the plan to increase the value of exports while improving dairy's environmental footprint?

Following several decades of growth, pasture and milksolids productivity in the dairy sector have plateaued in the last decade.

The big question facing our dairy sector is how farmers can contribute to the government's plan of doubling the value of primary sector exports in the next decade, while also improving sector sustainability.

According to some forecasts, the global dairy sector will need to produce almost 70% more to meet demand by 2050. As the leading producer of sustainable dairy products, New Zealand has a big part to play in meeting this increased demand.

But that growth will be judged against a set of expectations that previous generations never had to face.

The past few decades have seen NZ's dairy sector develop in three phases.

The 1990s saw the rapid expansion of dairy's footprint, as sheep and beef land, and some forestry, were converted to dairy, especially in Waikato, Central Plateau, and lower North Island. It was a time of affordable land, affable bankers and increasing irrigation and supplementary feeding.

The turn of the century saw that intensification continued with greater inputs, nitrification inhibitors and early nutrient management practices. But that intensification was met with regulation in the form of changes to resource management rules and counter initiatives such as the Clean Streams Accord.

The early 2000's saw the South Island increase its dairy platform as other regions levelled off. Labour shortages, the commodity crash of 2015, and a banking sector less willing to lend led to a stabilisation of the national herd.

At the same time, public concern over dairy's environmental footprint intensified, leading to nutrient management rules, new banking restrictions, and the Sustainable Dairying: Water Accord, marking the transition towards regulated environmental management and the end of unrestrained growth.

The New Zealand economy relies heavily on dairy, with the sector contributing significantly to exports, employment and regional development.

In the year ending June 2025, NZ dairy exports generated approximately $27 billion, accounting for one in every four export dollars earned by New Zealand. Dairy farming and processing contribute around $20 billion a year to GDP, representing 3-4% of total GDP, and the sector employs over 55,000 people, including 40,000 on farms and 15,000 in processing.

But the sector has reached a productivity and environmental plateau. The national dairy herd peaked in 2015 and has declined by about 12% since then, while total effective hectares peaked in 2017 and have gradually reduced.

Total milksolids processed have remained relatively stable, and the average herd size has settled, since 2022, around a midpoint of 445 cows.

The next chapter for dairy will be built on responsible growth and resilient, low-impact systems.

> ***The opportunity lies in a responsible growth strategy, with sustainability at its core.***

Although milksolids per cow have increased to an average of 400kg – 6kg above the five-year average – pasture productivity has stagnated since the early 2000s.

Gains in production per hectare are increasingly reliant on higher inputs, such as nitrogen fertiliser, irrigation and supplements, rather than improved on-farm efficiency or land expansion.

But environmental constraints, and a sector increasingly focused on sustainability gains to meet market demand, mean any future growth will need to follow a different model.

Freshwater regulations and nutrient caps will restrict the ability to convert or intensify.

Global markets are increasingly demanding that dairy producers show improvements in sustainability, animal welfare and emissions.

So what does the future hold for NZ's dairy industry?

The opportunity lies in a responsible growth strategy, with sustainability at its core.

Previous generations have set us up to deliver milksolids growth and a reduced environmental footprint. By using the tools and technology now available, encouraging their uptake and understanding of emerging technology, the dairy sector can identify the regions or catchments where growth can occur to support sector profitability and resilience.

But, crucially, that growth will be predicated on next-gen farm systems that value a low footprint as much as high productivity.

Dairy's social licence is conditional, and upholding that contract with people here at home, and the millions we produce food for globally, is vital.

The scene is set for dairy's next chapter.

Pasture growth and milksolids production have levelled off in recent years, prompting fresh thinking about future farm systems.

Use of cow wearables is rising quickly, with farmers tapping into data that supports earlier, more informed decisions.

The why, what and whether or not of wearables

At a Progressing Dairy Event on 'Wearable data for decision-making' in Waikato last November, farmers shared their experience of the technology.

Matthew Macdonald believes investing in wearable technology has made a massive difference in managing his parents' 74 hectare, 247-cow farm near Gordonton, Waikato.

"Wearables have reduced my physical workload, and the data collected has allowed me to be a more efficient farmer," Matthew told the field day audience.

"Once I come through calving, I'm tired, and I want to be in a good mental game come mating. But doing it mostly by myself, with help from Dad, makes it a long process."

He is a one-man band on the farm, with his father, David, filling in the gaps.

"It's a big job for one person and not enough to employ someone full-time. That's where Dad fits into the situation.

"The technology has helped me make better mating decisions and accurately monitor cow rumination, which has helped fine-tune decisions around feed allocation."

The wearables were installed on the cows in June 2024. Matthew chose the Datamars Tru Test tag collars, whose data monitoring is linked to a software box in the milking shed. This has a 1km range, which covers the whole farm, and no other infrastructure is needed.

While heat detection wasn't an issue, the technology has reduced that workload, and Matthew has also found that he can identify and treat non-cyclers more effectively.

His conception rates have improved; he uses fewer straws and has more accurately timed artificial insemination. He had very few returns last year and achieved a 69% conception rate confirmed through pregnancy scanning. As a result, his 6-week in-calf rate has improved.

On a day-to-day basis, he can check the cows' rumination length, which helps him make decisions such as drafting and feeding supplements, including maize and palm kernel extract, to the herd at key times.

Huge opportunity with technologies

DairyNZ senior scientist Dr Susanne Meier shared data from DairyNZ's monitoring of wearable uptake, noting approximately a million cows are being farmed using wearable technology, which generates around 20 million data points per day.

"There's a huge opportunity to create real value on-farm and drive farm key performance indicators through these technologies," Susanne said.

She backed Matthew's point about the technology's non-tangible benefits in on-farm decision-making.

She said the key to making decisions about wearables is identifying the problem they would solve and evaluating the options available for that technology. Having DairyNZ scientists like Susanne at Progressing Dairy Events means farmers can hear the science behind the numbers first-hand, grounding their own practical know-how with independent expertise.

"They are tools that provide data to help you, and they may not fit everybody.

"But in the end, talk to farmers about their real experiences on-farm using the technologies. That will give you the best advice in your decision-making."

Host farmer Matthew Macdonald talks through the practical gains he's seen since introducing wearables to his 247-cow herd.

On-farm examples

Wearable technology is becoming more common, so farmers are keen to understand how the data from these tools can support smarter decisions on their own farms. At this event, a farmer panel shared their experiences and the practical benefits they've seen.

Martin Lemke installed Cow Manager on his 700-cow farm that he runs as two herds, split into spring and autumn calving. Five years ago, as he looked for ways to improve his herd's reproductive performance and health, he opted for the technology.

It was a significant learning curve for Martin, who spent the first two years figuring out how to use the vast amount of data the technology provided.

"I had the data, and I wanted to use it properly, so I went to a few seminars that Cow Manager hosted and I learnt a lot," he said.

After some fine-tuning, his average 6-week in-calf rate increased from 68% to almost 80% on the autumn-calving herd and has held steady since. Martin believes seeing the data trends, particularly around rumination, has been the biggest contributor.

"We saw immediate effects by being able to look at the data and do something about it. The longer you have the data, the more attuned you are as well."

He believes the technology has helped him develop a "sixth sense" around spotting herd health problems.

Sharemilkers Rob and Cassandra Western introduced smaXtec boluses to their 200-cow herd in May last year. By opting for boluses, they didn't have to invest in any other integrated technology, which was important for their sharemilking business.

Cassandra has been able to use the cow water intake data to lift production, as they were alerted to which cows were not drinking enough. They cleaned all of the farm's troughs to ensure the water was clean, and those alerts stopped.

"They went from drinking 50 litres a day to nearly 100, per cow, and milk production went up. Our top-producing cow drinks around 130L a day," she said.

Another farmer on the panel, variable-order sharemilker Nick Taylor, is into his fourth mating using Allflex collars and said there has been a considerable lift in performance, particularly his 6-week in-calf, as well as production, achieving a record last season and already tracking ahead this season.

DairyNZ senior scientist Dr Susanne Meier outlines the rapid growth in wearable use and the opportunities the data can unlock on-farm.

> ***We saw immediate effects by being able to look at the data and do something about it.***

The improved mating performance enables him to make more informed decisions and gives him options for culling cows.

"Our somatic cell count is super low now compared to what it used to be, as I've been able to cull problematic cows," Nick said.

"We're more efficient at converting feed into milk as we're focusing on the more productive cows. It's all going together in the right direction."

Glen van Huven has a highly intensive, high-stocking-rate farm and uses Halter as a time-saver. It means he can virtual-fence the farm, whereas in the past, one of his team would spend a whole day reeling off paddock breaks to prepare for the weekend.

"Now we can use our team more efficiently, which was the biggest benefit we were after," he said.

"It also allows us to be more strategic with feed on the feedpad because we know how much pasture is in the paddock."

At the end of the event, DairyNZ's local area manager, Willie McKnight, urged farmers to "do your homework and talk to your neighbours, take your time and think about it".

"You have to be prepared to monitor the results," he said. "You'll all do it for different reasons."

Find out about wearables research on **page 20.**

Progressing Dairy Events brings farmers and DairyNZ experts, and scientists together to share what's working – and why – so we can all get a little better every season. Find upcoming events at **dairynz.co.nz/events**

Are wearables right for your farm?

Here's what farmers learnt and took away from the Progressing Dairy Event on wearable data.

Know your 'why'

Be clear on what you want to achieve before you invest. Talk to other farmers regarding their real-life experiences. Work through what the impact could be on your farm business. Set goals, make sure the technology is the right fit, and track whether it's delivering the results you need.

Tool in the toolbox

Wearables give you timely, objective data to support faster, more consistent decisions. They work best when combined with good stockmanship, solid pasture management, and clear on-farm processes.

Stay ahead of the herd

Real-time insights help you act early. They're most useful when combined with your own experience and a solid understanding of your farm and herd.

Keep the human in the loop

People make the difference. Clear processes and staff training help turn wearable data into practical actions. Make it easy for everyone to know what to look for, when to act, and who to tell.

Autumn smarts

Essential autumn tools for farm success

dairynz.co.nz/
autumn-smarts

Browse through our autumn tips, tools and resources – developed with the latest research and technology.

Preparation and strategic decision making in autumn sets the stage for a successful year on your farm. Use our research-backed tools and resources to enhance sustainability ahead of winter and build overall farm resilience.

Setting up for a successful winter

Prepare for a successful winter by having a clear plan for managing cow lying time during wet weather and grazing. Share this plan with your team so you're all prepared.

Gradually transition cows onto crop to help their gut bacteria adjust to new feed, and make sure they have access to fresh water, plenty of space to rest, and shelter. To reduce soil damage, use strategies like directional grazing, back fencing, and portable troughs to limit cow movement.

Visit our website for options that will help allow cows to lie down in wet weather and use our Winter Grazing Plan Template to get started: **dairynz.co.nz/winter-plan**

Reducing N loss

Autumn is the time to lock in good nitrogen (N) habits before winter rain arrives. With soil temperature reducing and rainfall increasing, the risk of N leaching ramps up – but a few practical tweaks now can keep more N working for your farm. Skip late-season N fertiliser or reduce application rate (where practical). Reduce stocking rate (drying off lighter condition cows, early calvers and/or low producers) or use stand-off areas when it's wet to protect soil and reduce losses. Choosing lower-N supplements, like maize silage, or forages such as plantain or fodder beet, also helps.

If you're regrassing, direct drilling can reduce soil disturbance, and riparian planting adds another layer of water-quality protection. Small changes now can mean more N is retained and less potential for leaching in winter.

For more information on how to reduce N loss, visit **dairynz.co.nz/reduce-n-loss**

Effective effluent management

Autumn is a great time to get on top of effluent management and set your farm up for the season ahead. Ensuring pond levels are low before winter means you have the storage you need in spring when soils get too wet to irrigate. Now's the time to run maintenance checks, make sure irrigators are performing well, and use this autumn window to lower storage pond levels. Good decisions now mean better growth, lower costs, smoother compliance, and peace of mind heading into spring next season.

For more info visit **dairynz.co.nz/effluent-management**

Achieving BCS targets at dry off

Achieving Body Condition Score (BCS) targets heading into autumn will make it easier to manage cow condition before and after calving, positively impacting next season's reproduction, production, and your bottom line. While herd averages are helpful, it's crucial to identify individual cows that are above, below, or on target. Ensure cows are dried off early enough to achieve their BCS target before calving. Waiting until the month before calving won't be effective, as during this time cows gain very little condition (even when fed generously) due to the high energy demands of pregnancy.

Use our new and improved BCS app to check the condition of your cows is on track ahead of calving at **dairynz.co.nz/BCS-app**

BCS at calving targets

First and second calvers

Mixed-aged cows

Attracting good staff

When planning to recruit new staff, balancing your needs as an employer with employees' needs is key to attracting top talent and building a productive workplace. While it's no surprise that higher pay attracts more applicants, clearly stating hourly rates can also make your role stand out. Reliable, fair, rostered days off are also important, and fostering a positive team culture is just as important as the hours worked.

Once you've found the right people, setting them up well from day one will help keep things running smoothly. Use our job competitiveness calculator at **dairynz.co.nz/job-calc** to see how your offer stacks up, and our onboarding resources to help you prepare and support new staff at **dairynz.co.nz/onboarding**

Setting your business up for the long term

How you manage farm profit can set your family and business up for long-term resilience, say DairyNZ business specialists Sarah Brown and Paul Bird.

With farmers enjoying a strong run of payouts over the past few years, cashflow is still looking good on many farms – and that makes it an ideal time to take a closer look at the numbers.

"Historically, when income rises, so does the tendency to spend – often on things that don't improve efficiency or generate a return," Sarah says.

"Every spending decision should align with a clear business strategy."

Regularly reviewing your numbers can help protect margins when conditions change.

Match your strategy to your stage

Different life stages call for different strategies. A farmer with low debt and a focus on succession planning, for example, might prioritise investing in infrastructure that will benefit the next generation. On the other hand, someone earlier in their journey, perhaps having recently bought a farm or herd, will be focused on managing higher debt levels.

Sarah says strong cashflow years can make borrowing more accessible, as banks become more active in the market.

"You might have the capacity to take on new debt, but that also pushes up your loan-to-value ratio. When payout drops, the business can quickly come under pressure," she says.

"That's why it's important to think beyond the current season and take a long-term view."

Tools such as the annual cash budget or 10-year equity forecast tool can help farmers see how today's decisions affect their long-term position – and model what happens if milk price or interest rates change.

Stress test every decision

Before committing to new spending, Sarah recommends farmers stress test all major decisions. Ask: What happens to this investment if the payout falls by two or three dollars? Could we still service the debt and maintain positive cashflow?

On her own family's farm, Sarah and her husband Jake are upgrading staff housing – a long-term investment in people and infrastructure.

"We're loyal to certain companies, but it pays to ask around. We found a $15,000 difference between quotes for the same job. Having that information helps us budget capital expenditure properly and see the real impact on the bottom line."

Even seemingly small differences can add up to significant sums over time.

"A $15,000 saving today compounded over 30 years is equivalent to more than $260,000."

Building long-term resilience

Paul says, "It's rare to have two consecutive years of strong payouts. Using the good years to reduce debt improves resilience and builds options for the future.

For younger families or those who've recently bought cows or land, debt reduction is usually the best investment.

"Maintaining a healthy margin between income and expenses is important to ensure room to move when payout volatility hits. Even in a strong year, rising costs can be easy to miss, so staying on top of expenses and efficiency helps protect – and grow – your profitability."

The Mark and Measure course (**dairynz.co.nz/mark-and-measure**) is one way to take a structured look at your business.

The three-day programme, run annually, helps farmers analyse their performance, identify opportunities, and create a strategic plan tailored to their goals.

Keep balance in the mix

While financial discipline is vital, Sarah also says that life is about more than spreadsheets and debt repayment.

"Sometimes the best investment is in experiences or people – taking a family holiday, upgrading staff facilities, or paying for extra relief labour so you can get more time with the kids."

Paul says balance matters.

"You have to enjoy the journey along the way."

Good cashflow offers a rare opportunity to strengthen both your balance sheet and your wellbeing. The key, Sarah says, is making those choices deliberately.

"That new boat or trip away doesn't have to wait forever – just make sure it fits your overall business goals and your family's future."

Check out **dairynz.co.nz/business** for a range of information and tools to support your business.

Tools for success

Several DairyNZ tools can help guide your farm's financial decisions:

Annual cash budget template

Outlines all cash coming in and going out to show whether your business is sustainable. It also estimates any cash surplus or deficit for the season.
dairynz.co.nz/annual-budget

Partial budget

Helps you assess new ideas or changes by estimating their financial impact. Once completed, use it alongside annual budgets and cashflows for a fuller picture.
dairynz.co.nz/partial-budget

10-year equity forecast tool

Ideal if you have an equity goal or want to see how changes to income and expenses affect your long-term position.
dairynz.co.nz/10-year-tool

Monthly cashflow budget for Fonterra suppliers

Builds on your annual budget by spreading income and expenses across the year, giving a clear month-by-month view of expected cashflow.
dairynz.co.nz/fonterra-budget

Meet the experts

As business specialists at DairyNZ, Sarah Brown and Paul Bird help farmers understand the numbers behind their farm business. They translate data, research and real-world insights into practical guidance farmers can use to lift performance and make confident decisions.

New dry cow advice supports selective use

Matching the right treatment to the right cow at dry-off protects herd health and the long-term effectiveness of antibiotics.

New Zealand dairy farmers already rank among the lowest users of antibiotics worldwide. But with growing concern around antimicrobial resistance, it's important to keep improving. Responsible antibiotic use supports sustainable, competitive dairying and protects herd health now and in the long term.

Farmers and vets have been working together to reduce antibiotic use, helping to ensure these important tools remain effective for the future. It's a proactive move to protect animal health and avoid the kind of worm resistance issues seen in the sheep sector with triple drenches.

Blanket (or whole herd) antibiotic dry cow therapy (DCT) is no longer common practice, with many farms already shifting to selective DCT, and recent New Zealand research backs this shift. Extensive data found that only herds with a bulk milk somatic cell count (BMSCC) above 250,000 – and rising by more than 50,000 in the final three months of the season – benefited from using blanket DCT. This is likely to be fewer than 5% of herds.

"For herds that aren't experiencing those numbers, their best option is selective DCT for qualifying cows, combined with internal teat sealants for all cows to reduce the risk of new infections," says Mitch Cooper, veterinarian and DairyNZ senior technical and policy advisor.

"Clinical mastitis records, herd test results, and rapid mastitis testing (RMT) at dry-off provide the main data for selective DCT. Other diagnostics from testing the milk of infected cows to find out which pathogen ("bug") is involved can support these decisions, but are best used as supplementary tools."

Expectations for vets are changing too, with tighter prescribing guidelines reflecting the evidence. Working closely with your vet ensures the right cows receive the right treatment at the right time.

For further information, talk to your vet or check out **dairynz.co.nz/dry-off**

Blanket antibiotic dry cow therapy is no longer common practice, with many farms already shifting to selective DCT.

Smart dry-off strategies

Podcast | Ep. 96

Hear how selective dry cow therapy has improved herd health and performance on a Southland farm – and why responsible antibiotic use matters for our future.

dairynz.co.nz/podcast-96

Meet the expert:

Mitch Cooper
Veterinarian and DairyNZ senior technical and policy advisor

Planning for pasture renewal

Autumn is the key season for renewing pastures and setting up next season's feed supply. You'll get the best results by following these three core principles.

Healthy, productive pastures are the backbone of a successful farm. When growth slows or the preferred species composition declines, renewal helps paddocks thrive again. Renewal can be achieved in several ways – from grass-to-grass to introducing a crop in between, or undersowing – depending on your farm's goals and timing.

To get the most of your investment, follow three core principles from DairyNZ's updated Pasture Renewal Guide 2025:

1. Plan your pasture renewal programme six to 18 months before sowing.
2. Choose the appropriate method of renewal.
3. Manage new pastures carefully in their first year.

Ryegrass pastures persist through the growth of tillers – small shoots with a growing point at the base that produce new leaves.

Each tiller lives for about a year, so for a pasture to remain productive, new tillers must replace old ones.

> ***"Good management includes avoiding grazing too early or allocating too much area too quickly.***

How pastures respond depends on grazing management: frequency, intensity and timing all influence tiller size and number.

Frequent, intense grazing produces many small tillers, while longer rotations result in fewer, larger tillers. Both can deliver similar growth, but grazing decisions also affect pasture quality.

Grazing between the two- and three-leaf stage, and maintaining a consistent post-grazing height of 3.5-4cm, helps maximise growth, persistence and quality for future rotations.

This autumn, pasture management can make a big difference to how well new and existing paddocks recover. With moisture stress lifted, ryegrass starts rebuilding tiller density. Giving plants time to grow before grazing improves persistence.

Good management includes holding a longer rotation after a dry period, similar to or longer than summer, and avoiding grazing too early or allocating too much area too quickly.

Recommended rotation lengths are around 30-40 days in March and April, extending to 50-60 days in May.

If post-grazing residuals fall below 1500kg DM/ha, consider adjusting rotation length, supplementing feed, or reducing herd demand to protect pasture recovery.

Conversely, if residuals are consistently higher than 1750kg DM/ha, feed can be pushed forward into winter or supplementary feeding can be reduced.

Want more detail?

Download the updated Pasture Renewal Guide 2025 or order a hard copy at **dairynz.co.nz/renewal-guide**

Stronger together: Building a resilient dairy future

Partnerships with trusted organisations serve to multiply levy gains and boost efficiencies when it comes to providing dairy farmers with the support they need.

Check out **dairynz.co.nz/partnerships** to find out more about our partnerships.

Every farm is unique but the challenges we face on-farm are shared. That's why DairyNZ partners with trusted organisations to stretch your levy further. Together we develop and promote better farming practices, support farmers, and reduce replication – all helping to deliver real value to dairy farmers across New Zealand. By collaborating with key partners like Rural Support Trust, SMASH and the Institute of Rural Professionals, we leverage our sector's expertise, connections and strengths to help shape the work that matters most to you, now and into the future.

Standing with farmers through tough times

> *We are extremely grateful for the collaborative partnership Rural Support has with DairyNZ. This relationship helps our regional trusts support their rural communities through tough times.*
> *– Michelle Ruddell, national rural support chair, Rural Support Trust*

We're proud to partner with Rural Support Trust. Whether it's financial pressure, a weather event, or personal struggles, they're here to help. And so are we.

Rural Support Trust provides essential support during adverse weather events to help farmers respond and recover. Their team of local rural people understand firsthand the pressures that can mount up. Their network and training can help with a wide range of situations.

Our partnership helps ensure farmers, their teams, and their families get the support they need, when they need it most.

Together, supporting farmers through every challenge.

rural-support.org.nz

Supporting dairy farmers and building stronger communities

> *The SMASH partnership with DairyNZ is vital and ongoing. Together, we strive to provide technical information, practical tips, and collegiality to all farmers, helping us to remain at the top of the world dairy industry rankings.*
> *– Noldy Rust, chair, SMASH NZ*

SMASH NZ is led by a group of passionate New Zealand dairy farmers who work collectively with volunteers to build a supportive farming community and a strong, sustainable future for dairy farming.

DairyNZ is proud to stand alongside SMASH, backing their farmer-led initiatives to help dairy farmers thrive. Through practical hands-on events and resources, SMASH delivers knowledge and ideas that farmers can apply directly on-farm. As a key partner, DairyNZ contributes funding, expert input, and a shared commitment to building a connected, confident farming community.

When dairy farmers succeed, the whole sector grows stronger.

smallerherds.co.nz

Empowering New Zealand's dairy sector

> *We're proud to partner with DairyNZ to deliver real, lasting benefits for New Zealand's dairy farmers. By working together, we'll build practical skills, share knowledge, and strengthen connections across rural professions – supporting farmers to succeed.*
> *– Jo Finer, chief executive, Institute of Rural Professionals*

The Institute of Rural Professionals is a member-based organisation of rural professionals that is growing skills, sharing knowledge, and building connections across the rural professional sector.

Whether you're a nutrient advisor, accountant, banker, farm consultant, or vet, the institute helps you make informed decisions to support farm businesses.

DairyNZ is proud to partner with the Institute of Rural Professionals to ensure that farmers have access to a network of capable, certified professionals.

Together, we are strengthening collective knowledge, collaborating on events and supporting the institute's annual conference to continue growing sector capability.

Empowering rural professionals. Strengthening farm businesses.

irpnz.co.nz

DairyNZ's latest contract milking insights were shared with farmers at recent joint events with Federated Farmers and FMG, providing useful context for the research.

What makes a contract milking agreement work?

New DairyNZ research, shared at recent joint events with Federated Farmers and FMG, highlights the key factors behind successful contract milking partnerships - and why getting them right matters.

Nine years of DairyNZ data show how contract milkers' income and costs have changed over time. As farm owners lifted contract rates to match rising costs and inflation, both revenue and expenses increased. Even so, operating profit has remained steady, showing contract milkers have largely held their ground over the past decade (*see graph 1*).

Equity growth is strong too. After tax, farm costs and drawing a salary, the 100 contract milkers who enter their accounts into DairyBase grew their equity by an average of $42,900 during 2023/24.

"Contract milking is a simple structure, easy to understand and to budget for, and is a good introduction to business," says DairyNZ business specialist Sarah Brown.

Keys to success

A DairyNZ study found five key factors determine whether a contract milker will be successful.

Firstly, a contract-milking agreement must be financially viable for both the contract milker and the farm owner.

"Contract milking is a business partnership – not an employment arrangement. Both the farm owner and the contract milker need to benefit from the agreement for it to be successful," explains DairyNZ senior business specialist Paul Bird.

"And because of the extra pressure, responsibility and risk they take on, the contract must also be profitable for the contract milker."

It's also crucial that the contract's requirements are fully understood, with each party completing their due diligence and seeking independent legal advice.

"Every clause in the contract needs to be carefully reviewed to ensure it's practical and achievable," says Paul.

It's also vital for the contract milker and farm owner to share and understand each other's goals and farm philosophies. For example, if the farm owner follows a low-input philosophy, but the contract milker is passionate about supplementing feed to boost production, the two philosophies are likely to clash.

Paul says a successful contract milker needs a well-rounded skill set combining strong grazing and feed management with solid financial and people management skills.

Sarah Brown
DairyNZ Business Specialist

"Building equity matters, focussing on profit, managing drawings, and steadily improving the business are important factors that contribute to a successful contract milking business."

Assets - **Liabilities** = **Equity**

And ultimately, both parties must want the other one to succeed; they must have a win-win mindset.

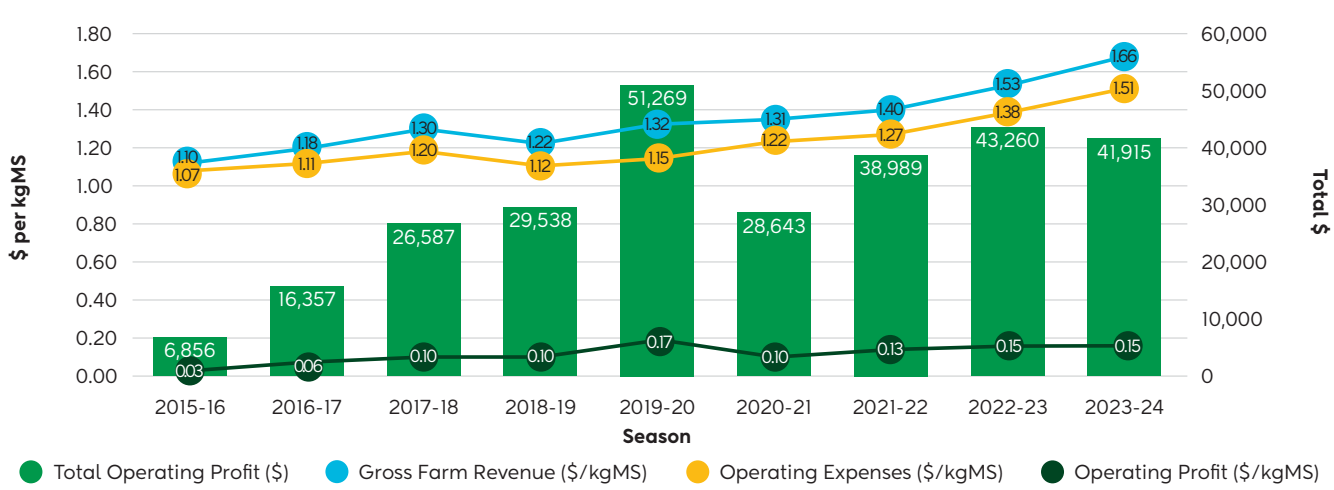
Farms performing in the top 25% for equity growth have a combination of higher profit per kg milksolid and lower drawings from the business. Limiting drawings supports equity growth by allowing consistent reinvestment of profits, alongside careful management of farm working expenses.

Contract milking remains a valuable pathway for farmers, particularly when paired with the right skills, a robust contract, and strong financial management.

Even smaller herds – under 300 cows – can deliver strong equity growth

Graph 1: How contract milkers' income and costs have changed

Contract milkers have maintained stable profits over nine seasons, as farm owners increased rates in line with rising costs and inflation.



"The contract milking calculator allows both farm owner and contract milker to sit down together to discuss actual cash and non-cash costs and ensure our contract milkers are earning a premium over and above what a manager should earn for the same job."

Scott Armer – Armer Farms

when contracts are well structured and expenses are carefully managed, Sarah points out.

"There are tools, courses and support available to make contract milking a viable pathway to advance and build wealth in New Zealand," says Sarah.

Tools and training

DairyNZ and Dairy Training offer practical tools and training to help set up successful contract milking agreements, including:

- **Annual cash budgets** – Detail cash received and expenses to assess if the business is sustainable and estimate cash surplus or deficit.
- **Contract Milker Premium Calculator** – A monthly cashflow budget takes your annual cash budget and spreads your income and expenses across the year, giving you a month-by-month picture.
- **DairyBase benchmarking** – Compare your business's performance against industry averages and identify opportunities for improvement.
- **Contract Milking course by Dairy Training** – Understand contract milking agreements, including structure, obligations and best practices for successful partnerships. Learn how to use the DairyNZ Contract Milker Premium Calculator. **dairytraining.co.nz/cm**

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

Principles for successful contract milking

1. **Financially viable** for the contract milker and farm owner
2. Contract milker and farm owner **understand and accept each other's goals and farm philosophies**
3. Contract milker and farm owner **have clarity of what is expected of each other**
4. Contract milker has the **skill set to run the farm**
5. Contract milker and farm owner have a **win-win attitude**

Meet the experts:

Paul Bird
DairyNZ senior business specialist

Sarah Brown
DairyNZ business specialist

Disclaimer
This story draws on DairyBase records from approximately 100 contract milkers, representing about 6% of New Zealand's estimated 1,500 contract milkers. All "average" figures refer to this sample and may not represent the true sector-wide average.

More milk in the early weeks helps calves grow stronger, stay healthy and set up for a productive first lactation.

More milk, healthier calves, stronger heifers

Science shows that giving calves more milk early boosts growth, resilience and first-lactation performance. Autumn calvers can act now, and updated calf-rearing resources are coming soon.

Increasing early milk intake for replacement calves is a proven way to support healthier, more content calves – and set them up for stronger performance later.

Feeding calves 20% or more of their birthweight in milk supports higher daily growth. For a crossbred calf averaging 32 kg at birth, this is about 6.4L per day. DairyNZ data shows around 25% of farmers feed less than this and could adjust their systems for better calf wellbeing and growth, while over a quarter of farmers feed 8L or more, supporting high growth rates.

> ***In the first weeks of life, calves rely entirely on milk for energy, immune function, and activity.***

In the first weeks of life, calves rely entirely on milk for energy, immune function, and activity. While meal and roughage help them get used to nibbling, they can't absorb energy from solids until their rumen begins to develop. Restricted milk feeding can leave calves hungry, leading to more unrewarded feeder visits, cross-sucking and vocalisations, as well as less play. Offering more milk early supports growth, immunity and positive welfare, with calves showing more play behaviour and settling more readily after feeding.

Better early nutrition also boosts future productivity. A New Zealand study led by Bioeconomy Science Institute ruminant nutritionist Dr Ajmal Khan found that heifers fed 8L/day pre-weaning had more functional mammary tissue and less fat in the udder at seven months, compared with those fed 4L/day. Post-weaning growth was not compromised, and international studies show higher pre-weaning growth translates to increased first-lactation milk yield.

New Zealand farmers are well placed to lead in calf wellbeing. Group housing gives calves space to socialise and play, helping support positive welfare. To stay internationally competitive, however, calf-rearing practices need to keep pace with the latest science.

Updated DairyNZ calf-rearing resources will be available this winter, reflecting the latest research and offering independent guidance on housing, health, colostrum, feeding and weaning – making it easier to put science into practice to give your calves the best start possible.

Visit **dairynz.co.nz/feeding-calves** and keep an eye out for new resources this winter.

Meet the expert:

Penny Timmer-Arends
DairyNZ senior animal care specialist

Towards more profitable and ethical dairy beef

The Dairy Beef Profit Partnership pilot, delivered by DairyNZ and Beef + Lamb New Zealand, is connecting dairy farmers, calf rearers and beef finishers with a view to building a partnership to give non-replacement dairy calves more productive pathways.

DairyNZ and Beef + Lamb New Zealand have joined forces on the Dairy Beef Profit Partnership pilot. The pilot was facilitated by Bob Thomson, a farm systems and beef specialist with decades of experience in dairy-beef integration, while DairyNZ senior developer Jac McGowan has been working alongside participating farmers to understand what underpins a successful dairy-beef relationship.

As part of the pilot, Owl Farm was invited to host a field day – giving farmers a practical look at how dairy-beef breeding can help lift the value of non-replacement calves. This work aligned closely with one of Owl Farm's key performance indicators: 100% purposeful life for calves.

"We'd started thinking about how we could give maximum value for our calves," Owl Farm demonstration manager Jo Sheridan says.

"We were already selling excess heifers, but the national herd stopped growing and export stopped, so value dropped, and it was costing us to rear them through to weaning."

They initially dabbled in Wagyu, but the slightly longer gestation length started affecting their days in milk, and calves were spending longer on-farm than they could manage. Around the same time, major breeding companies were advancing beef genetics, offering more options.

"We explored a range of different performance beef breeds and embarked on mating before we had a plan for the calves," Jo says.

"That included using sexed semen over high-BW cows for replacements and beef semen over our low-BW cows with traits suited for dairy-beef – good growth, calving ease and shorter gestation."

Hosting the B+LNZ field day became a natural next step in the pilot.

"We had a heap of calf rearers and beef farmers attend," Jo says.

"It gave us a great starting point, giving us contacts who could be interested in purchasing our excess calves."

One of those farmers was beef finisher Guy Melville. He and his wife Jenny operate a large bull beef unit, Puketotara Station, west of Huntly. They run 1900 mostly Friesian bulls, on 950 effective hectares, and have been developing the farm into an intensive cell grazing system.

At the B+LNZ field day, Guy's ears pricked up when he learnt of the results that had been seen in carcass weights of some of the innovative dairy-beef breeding.

Dairy-beef breeding is opening up new options for managing non-replacement calves, and building stronger links between dairy, calf rearing and beef finishers.

Beef farmer Guy Melville is trialling Owl Farm's dairy-beef calves alongside his Friesians, comparing growth and temperament to guide future breeding decisions.

"They talked of results as good as Friesians, which got me interested," Guy says.

He connected with Jo about Owl Farm's beef calves as his ultimate goal is to work with a dairy farmer and calf rearer.

"It would be good to work closely with a dairy farmer to have a say on the beef genetics they're using and line up the dots – removing some of the uncertainty for everyone," Guy says.

He collected 10 of Owl Farm's dairy-beef calves of mixed breeding and has been running them with 10 Friesians for a bit of a comparative trial.

"We weigh roughly every six weeks and they're pretty on par. The Friesians have been slightly heavier but I'm hoping the dairy beef ones will yield more.

"The real results will be in the carcass weights when they go to the works at 18 months."

Importantly, Guy has been impressed with their temperament.

"I was a bit worried about using beef breeds. The Friesians are pretty quiet, which is important as we're handling them so much in our intensive system, but they've all been fine, which is really reassuring."

> ***"It would be good to work closely with a dairy farmer to have a say on the beef genetics they're using and line up the dots – removing some of the uncertainty for everyone.***

If the trial keeps tracking well, it'll give Guy more flexibility. He can also run the dairy-beef animals as steers without losing much production – a big advantage when you're managing a large group of bulls in one place.

The pilot is already showing what helps these partnerships work. Farmers involved highlighted the value of seeing each other's systems firsthand, having open conversations about pricing and quality, and building trust over time. Many said connecting with others across the supply chain – from breeding through to processing – gave them a clearer sense of what each part of the chain needs.

To find out if dairy beef is an option for your farm, check out **dairynz.co.nz/dairy-beef**

Dairy-beef fast facts

- Around 70% of New Zealand's beef comes from dairy cattle.
- Bull genetics have a major influence on carcass weight – more than the dam.
- Top-performing bulls in dairy-beef progeny tests deliver up to 34kg more carcass weight than the lowest performers.
- Using proven beef bulls gives dairy farmers confidence in calving ease, while delivering stronger carcass value for beef farmers.
- When selecting sires, look for high 400-day or 600-day weight EBVs, alongside calving ease and gestation length.

Farmers using artificial intelligence to save time

As farmers take their first steps into the world of artificial intelligence, they are finding that the tech won't replace experience, but can support decision-making, and accelerate tasks.

Artificial insemination isn't the only AI on-farm anymore – farmers are now exploring artificial intelligence (AI) to speed up tasks and support decisions. More New Zealand farmers are giving these tools a go, but trust and accuracy remain key.

Perrin Ag senior consultant Rachel Durie authored a DairyNZ-commissioned report in response to farmer interest in the potential of generative AI (GenAI).

"The number of farmers that are using GenAI is still pretty small, but we found farmers using it for decision support, task enhancement and communication support," Rachel said.

She spoke with farmers, DairyNZ, rural professionals and AI experts like Agritech NZ, AI Forum and Lincoln Agritech. It was found that some farmers are using GenAI daily and building custom GenAI-driven tools to solve their farm-specific challenges.

Large language models (LLMs), such as ChatGPT, are the most commonly used GenAI tools among dairy farmers and are trained on vast amounts of text. They generate responses by predicting word patterns. This can produce information that sounds confident but isn't always correct, and the technology sometimes even "hallucinates" inaccurate answers.

GenAI is being used to build farm chatbots and custom breeding tools. One farmer created a chatbot tailored to his own grazing and supplement procedures, linking to trusted resources like DairyNZ animal health and calf-rearing guides, Federated Farmers contract guidance, and the Fonterra supplier handbook, Rachel said.

"He built this chatbot and customised it around how he likes to run the farm with information that he trusts." Farm staff can then use the chatbot to answer questions they have about the farm's management.

DairyNZ senior scientist Callum Eastwood, who leads the workplace productivity programme, has been following AI developments and its adoption by farmers with interest.

"We're working with farmers to understand how GenAI can help on-farm, and what the risks, limitations and ethical issues are that we need to consider."

Rachel said the farmer with the chatbot still explains the tool's limits to staff, because it can sometimes provide incorrect information.

"His message to his team is that if it doesn't sound right, it probably isn't, but he is also quite mindful that when he is using it, he's using it as a support tool – not a decision-maker."

> ***He is also quite mindful that when he is using it, he's using it as a support tool – not a decision-maker.***

As with all GenAI systems, the quality of the outputs depends on the quality of the data they're trained on. Over time, as tools are used more and fed better farm-specific information, their accuracy and usefulness are likely to improve.

GenAI could eventually make autonomous decisions in repetitive, low-risk areas. However, that will require better data, further development of the technology, and increased trust.

"Moving to the next stage of AI use on farms is a big jump. Trust depends on what that tool is used for."

Currently, most farmers use GenAI directly such as ChatGPT, but GenAI is starting to appear in other platforms, too. DairyNZ has DAiSY (**dairynz.co.nz/about-daisy**), and Beef + Lamb NZ, FAR and Xero have also added the technology, she said.

Callum said the technology is advancing rapidly and he expects adoption to increase as it improves and offers more time-saving opportunities.

"A priority in dairy is making sure we have got our digital data in order, at both a farm and sector level, so when farmers are ready to jump into AI, they can access the right information."

A big opportunity is the ability to have a conversation with GenAI tools, instead of having to type in instructions.

For farmers working outdoors, that is a huge bonus, as is the technology's ability to speak different languages – an advantage for farmers with staff whose first language isn't English, he said.

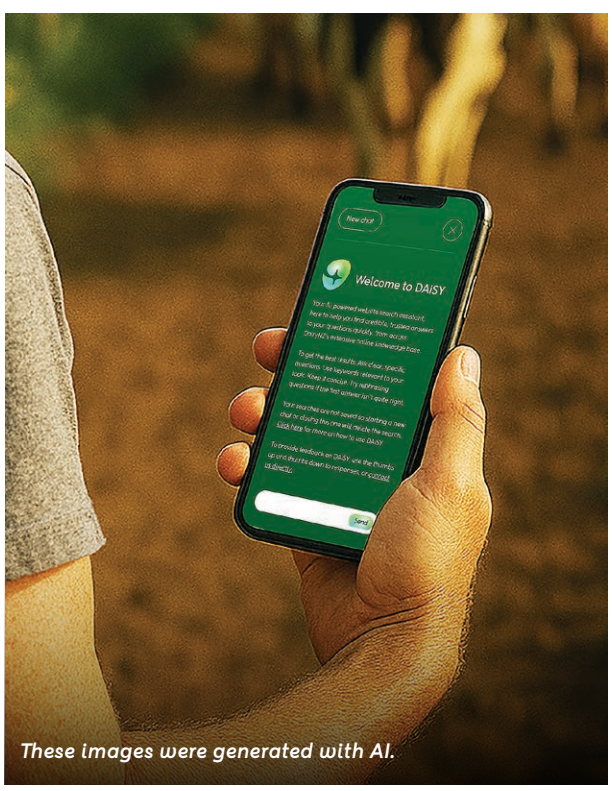
Find a summary of the report's findings at **dairynz.co.nz/ai-report**

Generative AI is a branch of artificial intelligence that focuses on creating new content, such as text or imagery. Popular tools farmers are using include large language models like ChatGPT, Copilot, Gemini and Claude.

Meet the scientist and expert:

Dr Callum Eastwood
DairyNZ senior scientist

Rachel Durie
Perrin Ag senior consultant



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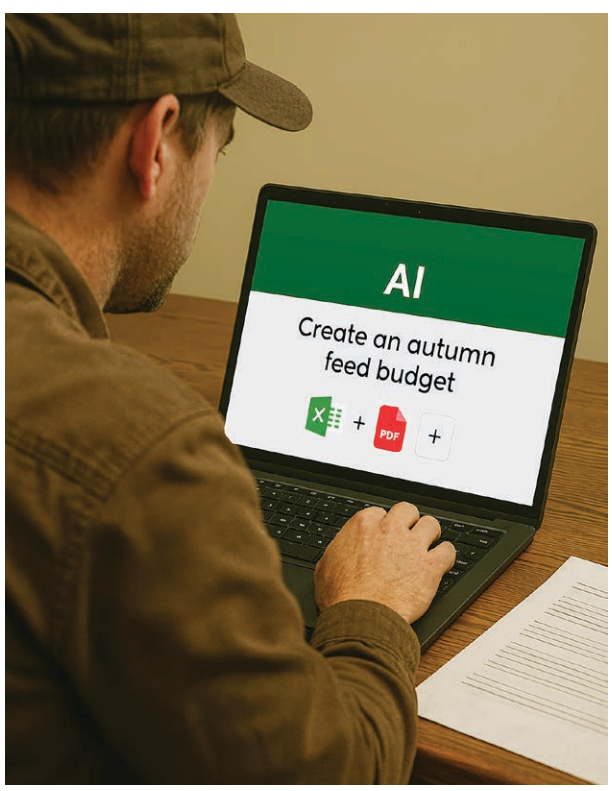


Farmers help shape new research into wearable tech

Cow wearables are becoming increasingly common, potentially offering farmers greater efficiency and decision-making opportunities.

DairyNZ is working with farmers to shape a three-year research project on wearable technology, focusing on how data can drive better decisions, improve performance, and lift profitability.

A growing range of cow-wearable technologies have become available to New Zealand farmers in recent years, and more are adopting it to pursue potential gains in efficiency and productivity.

DairyNZ senior scientist Dr Callum Eastwood says the technology is a hot topic among farmers, and there are many questions about how to get the most out of their investment.

He and senior scientist Dr Susanne Meier set out to capture these unanswered questions by directly asking farmers and rural professionals.

"This gap needed to be filled, so we've worked with farmers using a range of tech to find out how to support them best to get more out of their data, " Susanne said.

"We ran a workshop with farmers experienced with wearables, particularly those with ideas about what the technology could do for them in the future."

Rural professionals were also involved, sharing what they saw as knowledge gaps that DairyNZ research could help address.

"We wanted farmer-endorsed research questions that are practical and credible, and would deliver real value on-farm."

The outcome was exciting, Susanne said, with 12 potential research questions narrowed down to five priorities (see breakout box) for a three-year project.

"Benchmarking was a key area of interest – farmers wanted to be able to compare animal health and reproduction metrics for their farm system and also in their region, to see what high performance really looks like and find opportunities for improvement."

Farmers also wanted to understand new key performance indicators (KPIs) from wearable data and how they link to the established KPIs that already drive farm performance. For example, exploring how rumination and activity levels might relate to in-calf rates and profitability.

The next step for DairyNZ researchers is turning the priorities into research workstreams.

"We are developing a three-year plan based on farmers' priorities," Susanne says.

"We will start with benchmarking, then build a dataset linked to farm KPIs. Farmers and rural professionals will stay involved with annual feedback sessions."

Farmers' top five questions about wearables

1. **Data access for benchmarking**
   How can we share data safely so farmers benefit from industry-wide insight?
2. **Understanding behaviours**
   What does 'normal' look like for cows across different farms and regions?
3. **Maximising the value of data**
   What are wearable data-based KPIs at different times of the season?
4. **Better decisions**
   How can wearable data at key times of the season guide feeding, transition and reproductive decisions that lift productivity and profitability?
5. **Selecting resilient animals**
   Can behaviour data help us identify cows with high performance and longevity?

Using cow wearables or planning to soon?
Take this short survey to help shape research.

dairynz.co.nz/wearables-survey

Meet the scientists:

Dr Susanne Meier
DairyNZ senior scientist

Dr Callum Eastwood
DairyNZ senior scientist

Farmer input helps shape priorities for a new three-year wearable technology research project.

People-first leadership lifts performance

With around 41,000 people working on New Zealand dairy farms, understanding what drives workplace productivity is key to improving individual farm and overall sector performance.

With continued challenges in attracting and retaining good people, and labour being the second-biggest cost on New Zealand dairy farms, it's vital to understand what makes teams productive. How effectively teams use their time, skills and effort has a direct impact on farm performance, team wellbeing and retention.

DairyNZ research into workplace productivity has confirmed what many farmers instinctively know: leadership of the business and its people is the key. Leaders who enable their teams to use the resources they have most effectively will deliver the best results. How work is organised, technology is adopted, and people are supported all make a big difference.

Research, led by senior scientist Dr Callum Eastwood and senior people specialist Jane Muir, involved farmers, farm employees, and sector partners to develop practical measures for farmers and the sector to measure and track their performance.

Workplace productivity measures how efficiently people convert inputs (like time, effort, land, feed, cows) into outputs, like milksolids.

The research found that workplace productivity is so complex that there is no single measure that tells the whole story. Instead, a small suite of measures has been developed that will help farmers track and improve performance.

The suite of on-farm measures includes:

- Proportion of employees who would recommend their current job to a friend
- Total labour costs (paid plus imputed) $/kg milksolids
- People hours spent milking/day at peak
- Team engagement
- Hours/person/week and hours/person/year
- Kg milksolids produced per hour worked/year

Tracking these measures will help to identify bottlenecks, improve workflow, and support more engaged and motivated teams. For example, adjusting team rosters or clearer task allocation can lift milksolids per hour worked and reduce hours spent on repetitive tasks.

Research also found that comparing workplace productivity between farms isn't always practical because the inputs of physical assets (such as farm size, contour, infrastructure and technology), as well as the people resources, vary so much. Instead, the research encourages farmers to focus on their own benchmarking and improvements.

Work is underway to make it easier for farmers to measure workplace performance, including integrating these metrics into tools like DairyBase. For now, farmers can get started by recording hours worked, total labour spend, cow numbers and milksolids production – and by keeping an eye on team job satisfaction, which is central to a productive workplace.

Research has found that leadership is the primary driver of workplace productivity.

Leadership matters most

We're sharing this update to highlight the many levers farmers can pull to lift workplace productivity – and to reinforce that leadership is the one that makes the biggest difference. With that in mind, here are a few ideas for employers and managers to consider:

Clarity – teams perform best when priorities are clear and routine tasks are standardised. Explaining the "why" behind tasks builds confidence and reduces wasted effort.

Rosters and workload – rostered days off and recovery time after peak periods are critical.

Communication – use regular check-ins to keep the team aligned and address issues early.

Technology – automation and digital systems can reduce manual work, but training and support are vital to ensure benefits are realised.

Employment conditions – competitive pay, safe work, good hours, and growth opportunities are non-negotiables. Team satisfaction directly supports productivity gains.

Continuous improvement – small, steady changes are often more effective than big overhauls. And more sustainable.

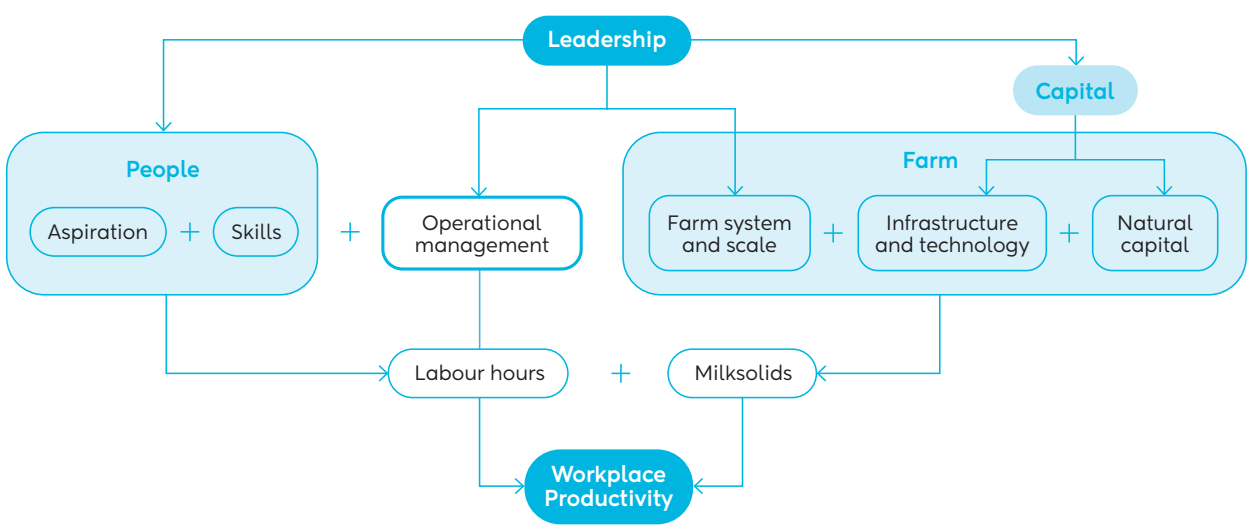
For more insights from DairyNZ's workplace productivity study, visit **dairynz.co.nz/productivity-study**

Quick tips: boost your farm's workplace productivity

- **Measure what matters:** Track milking hours, kg milksolids per hour, labour costs, and team engagement.
- **Listen to your team:** Check how many would recommend their job – happy staff are more productive staff.
- **Lead well:** Clear planning, communication, and task allocation make a big difference.
- **Review regularly:** Track changes over time to see what's working and where to tweak systems or workflow.

Looking to grow your leadership skills and lead a high-performing team? Enrol in Dairy Training's Emerging Leadership short course – find out more at **dairytraining.co.nz**

Conceptual model of factors influencing workplace productivity on New Zealand dairy farms



Meet the scientist and expert:

Dr Callum Eastwood
DairyNZ senior scientist

Jane Muir
DairyNZ senior people specialist

Methane emissions lower than expected during spring

Early results show methane emissions from grazing cows may be lower than predicted, especially on good-quality spring pasture.

New results from the Emissions4-Pasture programme are giving farmers and scientists a clearer picture of methane emissions from grazing cows – and early results suggest they're lower than current predictions, particularly during spring.

Emissions4Pasture is a New Zealand–Ireland partnership funded by DairyNZ, MPI, the Ag Emissions Centre and Ireland's Department of Agriculture (DAFM), with research delivered by DairyNZ, Teagasc, University College Cork and the Irish Cattle Breeding Federation. A key focus is to understand methane emissions from grazing cows throughout the year.

See how methane changes through the year

Farmers see seasonal changes on their farms. In spring, pasture is leafy and highly digestible; summer feed is often drier and more fibrous; and cooler months affect pasture growth and cows' energy requirements. These differences influence how much cows eat, how they digest feed and how much methane they produce.

Emissions4Pasture is asking two key questions:

- Do methane emissions change across the seasons?
- Are these changes driven by cow factors, pasture factors, or both?

Building a complete seasonal picture helps identify when methane emissions are naturally lower or higher, and why.

Spring surprises: methane lower than predicted

The first dataset – spring 2024 – shows methane emissions were about 20% lower than the default value currently used in national and milk processor inventories.

PhD student Jessica Dalton, who is working with DairyNZ scientists Dr Jane Kay and Dr Konagh Garrett on the seasonal analysis, says the lower methane yield was strongly linked to good-quality spring pasture, which is leafy, digestible and low in fibre.

"What we're seeing in New Zealand mirrors Irish and Dutch findings," Jess says.

"It suggests grazing cows may produce less methane than predicted throughout the year, and particularly during spring."

The Moorepark research site, with Kilworth Castle in the background, is part of the New Zealand–Ireland partnership investigating seasonal methane patterns.

What this means for your farm

If methane yields are lower than predicted, the current national inventory and processor calculators may be overestimating emissions. Any updated methane factor would apply to past and present calculations, lowering both current and baseline emissions. That means it wouldn't count as a reduction but would give a more accurate picture of how efficient our systems really are – helping keep NZ recognised as one of the world's leading low-emission dairy producers.

Knowing how much methane is produced and when means mitigation strategies can be used where they will deliver the greatest impact.

If methane emissions are naturally lowest on high-quality spring pasture, mitigation strategies – such as feed additives, low-emissions forages, or grazing approaches – could be more effective in other periods, like summer or autumn, rather than applied year-round. This could improve both value for money and overall impact.

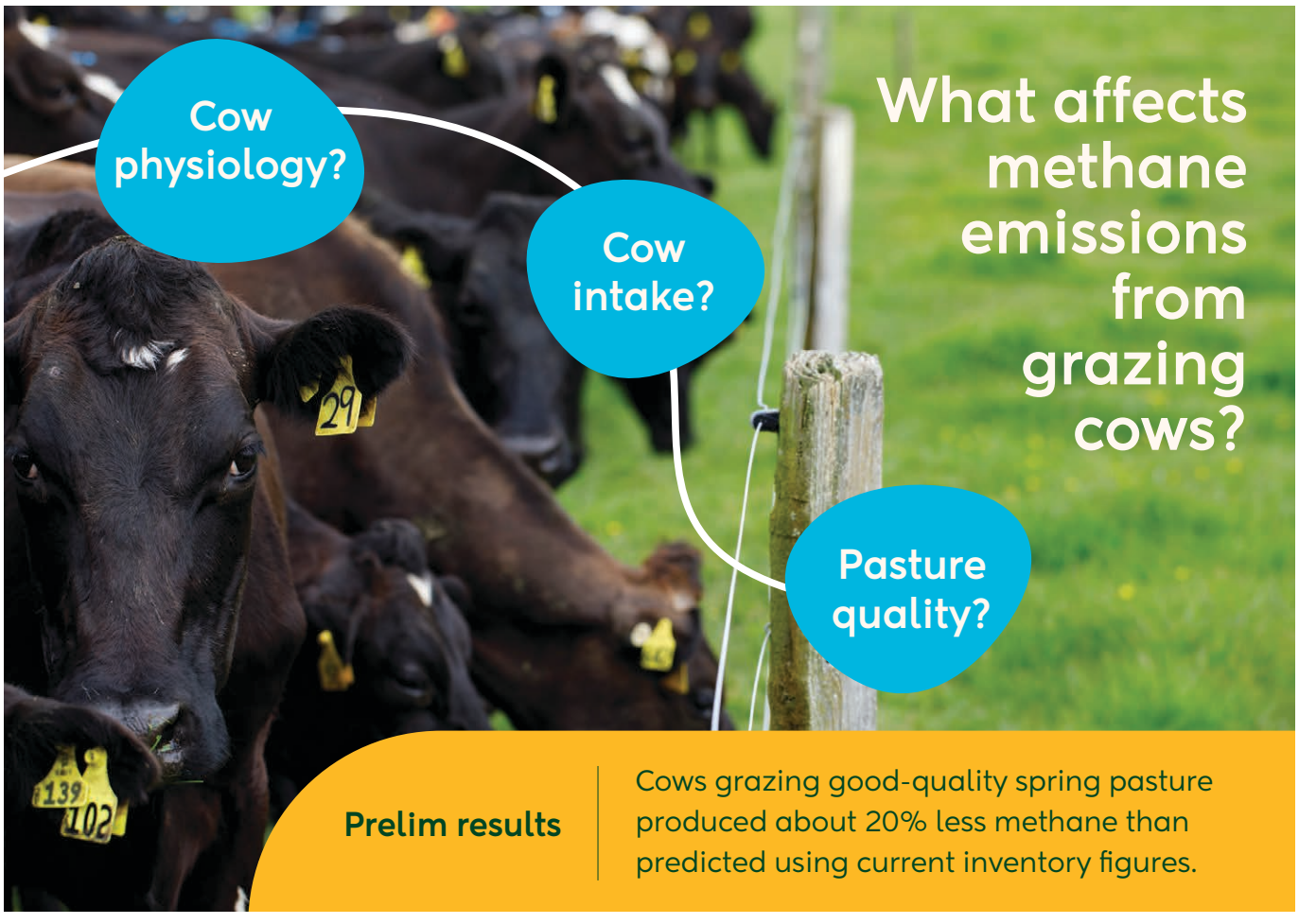
Next steps in seasonal research

Jess is in Ireland collecting more seasonal data, effectively getting two springs in one year, to strengthen the seasonal information and assess pasture management effects. The wider programme is also researching the impact of clover, plantain and mitigation technologies across seasons.

Meanwhile, analysis of NZ's full dataset (spring, summer, autumn and winter) is underway. This will produce the first complete pasture-based seasonal methane profile for NZ dairy systems.

The full dataset will help refine national methane values, identify seasonal 'hot spots', and support practical, targeted mitigation strategies, strengthening the accuracy and credibility of NZ's low-emissions dairy story.

To keep up to date with the latest research, visit **dairynz.co.nz/pasture-emissions**



Meet the scientists:

Jessica Dalton
PhD student

Dr Jane Kay
DairyNZ principal scientist

Dr Konagh Garrett
DairyNZ scientist

Snapped on and off farm

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

DairyNZ farm system scientists, Dr Roshean Woods and Dr Nicole Wheadon, with NZ and international staff from CRV, at the Lincoln University Research Dairy Farm.

DairyNZ and QCONZ scientists test cluster designs for vacuum performance on a Bay of Plenty farm.

Jane Muir, senior people specialist, spoke at the International Dairy Federation 2025 World Dairy Summit in Chile on empowering people through inclusion and diversity.

During the NZ Agronomy Society Field trip, as part of the NZ Grasslands Conference, scientists visited three research sites to understand cutting-edge maize and environmental research.

Farmers heard first-hand about some of the research taking place at DairyNZ's purpose-built research farms during a farm tour before the annual meeting in November.

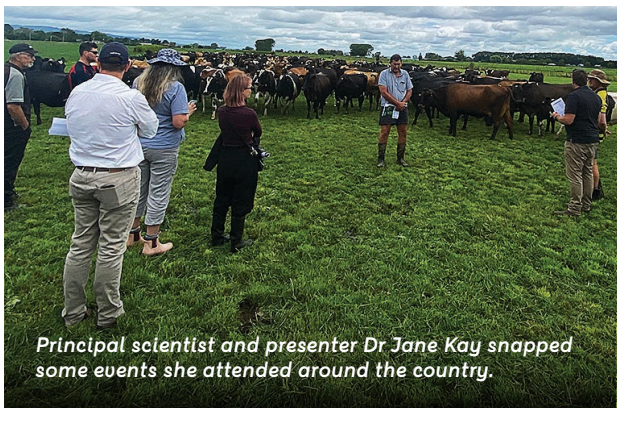
Senior environment specialist, Adam Duker, sampling waterway health at a Manawatu dairy farm, who has undertaken significant waterway and wetland restoration.

Snapped at

DairyNZ
Progressing Dairy Events

Find one near you at
dairynz.co.nz/events

Farmers, Fonterra, and DairyNZ at Todd and Renee Halliday's Reporoa farm for a Progressing Dairy event, with experts sharing knowledge and a few curious cows looking on.



Principal scientist and presenter Dr Jane Kay snapped some events she attended around the country.

An event about wearables data for decision-making was held on the MacDonald family farm in Gordonton. Check out the story on page 10.

Together. Let's vote.

16 February - 13 March

It's time to vote.

The upcoming Milksolids Levy vote is a moment to do what you've always done for the sector – to come together to continue building a stronger future for NZ dairy farming.

For generations, you've been part of each other's success. You've shared knowledge. You've shared the cost of future-focused research, and its on-farm benefits. You've established the clear, united voice of dairy that has generated more government support and practical policy.

That's what your levy is for – a collective investment that has supported you on farm and in your community, and what keeps us all moving forward.

So, let's vote – together.

DairyNZ

Together. Let's vote.

MILKSOLIDS LEVY VOTE 16 FEB — 13 MAR

The Milksolids Levy Vote 2026

Between 16 February and 13 March 2026 all dairy farmers who pay a levy on milksolids will have the opportunity to vote on whether a levy on milksolids is continued. Under the Commodity Levies Act 1990, dairy farmers must vote every six years.

Why Vote?

Ultimately, you're voting on the value of doing together what none of us can achieve on our own.

You're voting on whether the Milksolids Levy you currently pay to fund DairyNZ continues. This vote is about continuing collective investment in:

- Research and development to create practical on-farm tools and future-focused solutions
- Advocating for farmers with central and regional government
- Helping farmers respond to change and seize opportunities

Who is eligible to vote?

Any business that produces milksolids from bovine animals for supply to a dairy processor at the time of the vote is eligible to participate. This includes all dairy farm owners, sharemilkers and some dairy farm leaseholders.

Ways to vote

You can vote in one of two ways: Online or Post. Voting packs will arrive in the mail from 14 February and an email will be sent when voting opens on 16 February. Both will contain information on how to vote including your unique password and PIN.

For more information go to
dairynz.co.nz/levy-vote