

Inside Dairy

NOV-JAN 2025

By DairyNZ

Fostering the next generation

Sharing their love of dairying



Features:

8 Putting theory into practice
Family farming in Wairarapa

13 Shouldering the N load
Using nitrogen fertiliser effectively

16 The future of farm tech
NZBIDA programme insights



Over the fence...

I am excited to see this refreshed Inside Dairy come to life, as we have kept the essence of what makes Inside Dairy unique, while bringing important information every quarter to a wider dairy audience.

Inside Dairy has a strong past that we are proud of, with 140 issues developed in its 15-year history. This new chapter strengthens our ability to share DairyNZ's research and policy progress, and keeps you close to the important work of our world-class scientists.

This isn't our only refreshed approach recently, with DairyNZ's new events rolling out nationwide. Our events have been designed to deliver greater value for farmers, focusing on bringing DairyNZ scientists, experts and host farmers together to discuss topics that address immediate needs in your region and the longer-term challenges of the sector.

It includes involving farmers like our cover story farmers Julie and Brian Pirie (page 6-7), who demonstrate an excellent adaptable and resilient farm system. Not only have they mastered the art of pasture management, but they are committed to environmental sustainability and giving back to their community. Julie was deservedly a Inews Good Sort in September, an achievement they should be proud of.

We welcomed Tracy Brown as our new chair at DairyNZ's AGM in October. On page 4 read about her governance history, her decades of environmental leadership, and her vision for a positive dairy future.

On behalf of DairyNZ we thank Jim van der Poel for his dedication to not only DairyNZ, but the wider dairy sector during his time as chair. His legacy is enormous.

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

Ngā mihi,

Campbell Parker
DairyNZ chief executive

Contents

- 3** Just quickly
- 4** Giving back and looking forward
- 4** Farmer confidence returning despite sector challenges
- 5** Policy that stands the test of time
- 6** Youngsters help youngsters to thrive
- 8** Putting theory into practice
- 10** Seasonal toolbox
- 11** Giving youngstock the best start
- 12** Portal will help plot FE risk
- 13** Shouldering the N load
- 13** Match your supplement to your circumstances
- 14** Context builds confidence
- 15** Genetic progress findings hailed
- 16** The future of farm tech
- 19** Grazing cows the focus of Irish-NZ study
- 20** Using wood to filter water
- 20** Mythbuster
- 21** Snapped on and off farm
- 22** Local insights and evidence-based offerings
- 24** Timing's everything when it comes to interest rate cuts

Features



Access DairyNZ regional support

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



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

Inside Dairy is the official publication of DairyNZ Ltd. It is circulated to all rural New Zealand dairy letterboxes and available to view online at dairynz.co.nz. This publication was accurate at time of printing on 21 October 2024.

ISSN 1179-4909



On the cover:

Hauraki Plains farmers Julie and Brian Pirie. Read their story on page 6.



We appreciate your feedback

Email us at insidedairy@dairynz.co.nz, scan the QR code or visit bit.ly/inside-dairy-survey

0800 4 DAIRYNZ | info@dairynz.co.nz



A key time to score

A key time to BCS your herd is during summer and autumn to assess management and determine if you need to revisit your strategy. Body condition score heavily influences production and reproduction and ultimately the profitability of your herd. Check out our refreshed BCS resources for more information.



BCS Scoring Guide:
dairynz.co.nz/scoring-guide



BCS Field Guide:
dairynz.co.nz/bcs-field-guide

Prepare for summer with La Niña insights

La Niña-like atmospheric patterns continued during June and July and a La Niña watch was in place during spring. At the time of writing, it was too early to predict how much warmer or dryer than usual summer might be, but you can keep an eye on the NIWA drought forecasting dashboard to inform your summer feed planning. Whatever the summer conditions, the first management rule is to fully and efficiently use spring pasture before dry and hot conditions reduce growth and pasture quality over the summer period.

Checkout dairynz.co.nz/summer for more summer planning tips.



Take your career to the next level in 2025



If you or any of your team are looking to upskill next year, Dairy Training's free short courses offer the perfect opportunity to grow. Designed to equip you with the knowledge and skills to advance your dairy farming career, the courses' next intake starts in February 2025 across New Zealand. Enrolments open in December 2024 and space is limited.



Learn more at dairytraining.co.nz

Latest updates to Breeding Worth

Annual Economic Values update

The Economic Values (EV's) that feed into Breeding Worth (BW) will be updated in December to reflect the latest farm economic factors such as milk prices and farm operating expenses.

The Breeding Worth (BW) Index helps farmers achieve a genetically improved herd and benefit from greater animal performance faster, which means you can increase your farm profit each year.

For more on BW and how it impacts your herd value and profit, visit dairynz.co.nz/breeding-worth



Updates to gestation length

The gestation length breeding value will be enhanced to give an estimate of whether a cow will calve earlier or later than normal.

Early calving translates to more days of milk and a longer rest period for the cow between calving and mating, giving her a greater chance of getting in-calf.

Improvements to calving difficulty

The calving difficulty breeding value will be improved. This will support breeding decisions that lead to easier calving and improved animal health, both of which enhance productivity and overall wellbeing.

For more on breeding value traits and how they are calculated, visit dairynz.co.nz/breeding-values



NZ Animal Evaluation

Powered by DairyNZ

NZAEL, a subsidiary of DairyNZ, operates independently to optimise the national dairy herd through ongoing improvement in genetic gain.

In the news

People love our science and statistics, and that's where we put a lot of our storytelling energy.

It's no easy feat being the voice of truth in the media landscape but DairyNZ as an independent, credible, science-first organisation representing all dairy farmers has a job to do here.

Stories by numbers

Our DairyNZ Econ Tracker has particularly good pick-up whenever we publish quarterly updates. While many make predictions for the sector, thanks to you we hold the dairy farming data and insights that give our forecasts credibility, and other media look to us to give that objective outlook.

The buzz from the Beehive

We also embarked on a journey of information as the Government moved to update outdated gene technology laws. Our chief science adviser, Dr Bruce Thorrold, provided factual commentary around what's possible for dairy farming and where concerns need to be addressed.

DairyNZ has advocated on and provided comment on a range of changes stemming from a busy Government agenda across climate, RMA and water quality.

Gold standards

It's always great to stop and recognise

the amazing work across the sector, too.

Doug Dibley, a fifth-generation Rotorua farmer and DairyNZ Environment Leader, was profiled in Stuff, as he reflected on his family's farming legacy dating back to 1887.

While balancing profitability with sustainability, Doug emphasises the long-term vision of ensuring the farm thrives for future generations.

Ultimately where we can help farmers plan for their futures and provide choices, we hit publish.

Fifth generation farmer makes the most of the farm



Jul 31, 2024 - 03:44pm

Share



Doug Dibley's family have farmed near Lake Rotorua since 1887. His young son Sam Dibley is sixth generation on the farm. BETHWYN LITTLER / STUFF



Giving back and looking forward

Tracy Brown, chair of DairyNZ, brings a depth of governance experience across a wide range of sectoral interests.

With her extensive governance background, new DairyNZ chair Tracy Brown brings a broad skillset to the role. She has been on the DairyNZ Board of Directors for almost five years and was selected as the chair-elect when Jim van der Poel announced earlier this year that he was retiring from the role.

Tracy, a Matamata dairy farmer, brings a wealth of experience, with previous roles including chair of the Dairy Environment Leaders network, chair of the Ballance Farm Environment Awards and as a Dairy Women's Network trustee.

She is also a director of the NZ Greenhouse Gas Research Centre and chair of Te Rarawa Farming Ltd.

"I believe governance is about judgement, and experience in many roles equips you with a range of perspectives that you can bring to the table, which is so important," Tracy says.

A Nuffield scholar and an AWDT Escalator alumna, Tracy is passionate about supporting others and driving positive change. Her vision is for DairyNZ to be at the forefront of a productive and resilient dairy sector that offers a financially sustainable future for farmers, ensuring they see value in their levy contributions.

Tracy grew up in urban Northland and moved to a lifestyle block with her family when she was 11. Becoming a

farmer was her dream from a young age and her passion led to studying Agricultural Science at Massey University, where she met her husband, Wynn.



Experience in many roles equips you with a range of perspectives that you can bring to the table, which is so important.

In the mid-1990s, Tracy moved to Waikato, where Wynn was converting the family farm to dairy, and they have been there ever since, milking 680 cows on a 240 hectare milking platform, operating a System 2-3. Tracy and Wynn had four children and

Tracy Brown has a vision for a resilient, sustainable dairy sector as DairyNZ's new chair.

that was when she began giving back in other ways.

"I got involved in some community governance roles which were really valuable," she says.

"I was able to contribute to my community and I learnt a lot of transferable skills that help me in the roles I've got now."

When she was elected to the DairyNZ Board she and Wynn added a third full-time team member on the farm to free her time.

"My life has been so enriched by being involved in the primary sector. I enjoy giving back and looking forward to a positive future we can be proud of."

Farmers more upbeat despite testing times

The broader ag economy might still be cause for concern, but there's growing positivity among dairy farmers when it comes to their own operations, DairyNZ's latest Farmer Perceptions survey shows.

Most farmers feel confident in the financial sustainability of their business, according to DairyNZ's latest Farmer Perceptions survey – 60% feel very confident and only 10% feel less confident (see Figure 1).

Farmers are showing greater optimism about their business plans, with 66% now planning to invest in improvements or expansion, up from 51% in 2023 (see Figure 2). While fewer farmers are looking to expand their operations compared to last year (down from 16% to 10%), a growing number are focusing on maintaining their current scale and investing in farm improvements (up from 35% to 56%).

However, while farmers are feeling more confident in their own farm businesses, their confidence in the broader agricultural economy has declined. This is largely due to higher input costs, rising interest rates and regulation.

This aligns with other sector surveys we monitor, such as the Rabobank Rural Confidence survey, where regulation consistently ranks among the top three factors contributing to a negative outlook among farmers.

Issues on the radar

According to DairyNZ's Farmer Perception survey and Quarterly Insights report, dairy farmers' top three concerns are:

- The state of the dairy sector
- Regulation
- Inflation and interest rates

Rising commodity prices, government policies and increased demand for agri-sector products are seen as key factors that could lead to improved conditions.

The Farmer Perception survey is part of our insights programme here at DairyNZ. We research to understand how farmers feel about their farm business, the dairy sector and DairyNZ. And we use this research to guide our strategy, set priorities and shape our work with, and for, farmers.

Our research shows that farmers want DairyNZ to focus on science and research to address future challenges. Farmers also want DairyNZ to provide accessible tools and knowledge to improve farm practices, as well as advocacy for fair and practical policies and regulations.

We have used the insight collected in our latest Farmer Perception surveys to shape our support for farmers at the start of the season.

We have prioritised events focused on boosting herd performance for

Figure 1

Financial confidence

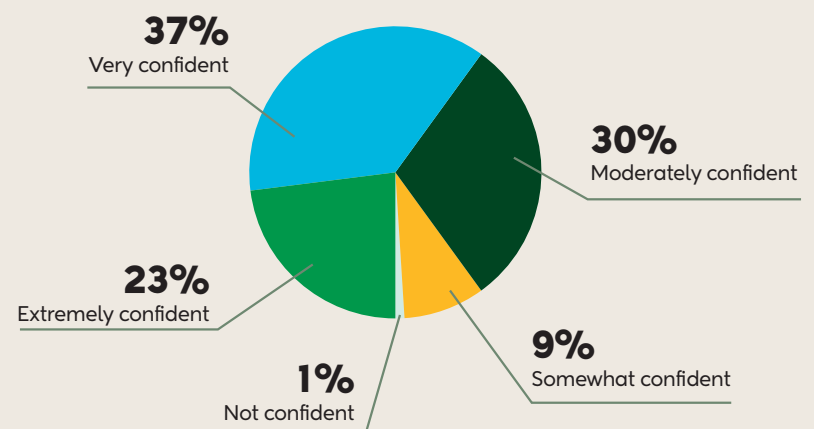


Figure 2

Future intentions

Farmers planning to invest in business through improvement or expansion.



Source: DairyNZ Quarterly Farmer Perception results (August 2024)

greater profitability to help farmers with their reproductive results. And we have made a range of seasonally relevant tools and resources available for farmers to access on our website, to help with planning and decision-making.

DairyNZ remains committed to listening to farmers and incorporating

their insights into everything we do to help shape a positive future for New Zealand dairy farming.

Thank you to all the farmers who take the time to provide valuable feedback for DairyNZ surveys throughout the year. Your insights help guide important research and decisions.

Policy that stands the test of time

At DairyNZ we work tirelessly to make sure the voice of the dairy farmer is heard when it comes to legislation that affects the sector.

With the change in government, there have been significant changes to the legislation and regulations affecting farmers. The Government has embarked on an effort to repeal, review, re-work and reset regulations across several fronts, including water, climate and gene technology.

The Government aims to reshape these regulations over time to give more clarity and certainty.

At DairyNZ, we engage with decision-makers to ensure farmers' voices are heard and considered in policy processes. We view success as establishing sensible, practical and affordable frameworks for farmers that stand the test of time.

For the latest updates head along to dairynz.co.nz/policy-and-advocacy

Improving freshwater policy

DairyNZ is committed to helping to improve freshwater outcomes across all dairy catchments, building off the great work farmers have already done.

One of the challenges we face as a sector is the frequent amendments to the National Policy Statement for Freshwater Management (NPS-FM). Developing regional frameworks to deliver on the NPS-FM takes years and it takes time for farmers and other stakeholders to adjust to the new requirements. Frequent changes at the national level disrupt the certainty needed for effective long-term decision-making on farms.

The 2020 NPS-FM overlooks the economic importance of sustainable land and freshwater use, setting targets that are unrealistic. We are calling for a robust, enduring policy statement that reflects the priorities and outcomes valued by each community.

We have welcomed the Government's move to pause Freshwater Farm Plans (FWFPs) while the system is improved. We will continue to work with the Government to progress a workable and enduring solution.

Our goal is to ensure FWFPs are practical but robust solutions to the specific issues within each catchment and on each farm.

While this change is underway, we advocate for regional councils to engage in conversations with their communities about their desired outcomes and with farmers to understand the support they need to achieve them.

Find out more about our efforts dairynz.co.nz/freshwater-policy

Gene technology reform

The Government has announced that it will introduce a bill to parliament by the end of 2024 to modernise New Zealand's gene technology laws. This includes establishing a new regulatory agency to enable greater use of gene technologies, while still ensuring strong protections for human health and the environment.

DairyNZ's current view is that it is time to revisit the regulations governing gene technologies in NZ. Science has advanced rapidly in recent years. As farmers and growers look for solutions to sector-wide issues, we should explore all promising avenues that could help with the challenges we face.

However, we need to tread carefully and ensure a regulated approach to genetic technologies that considers the wide range of views, opportunities and risks. Decision-making should incorporate mātauranga Māori to create lasting solutions.

Our goal is to ensure that new regulations allow farmers choice and flexibility. This way, people can continue farming in their preferred way while coexisting with farms that may choose to adopt different technologies.

Climate policy



DairyNZ is committed to dairy farming playing its part in transitioning to a low-emissions economy alongside the rest of New Zealand. We are advocating for fair and scientifically robust emissions reduction targets that account for the warming impact of methane.

Next year, the Government is making decisions about whether to revise NZ's greenhouse gas (GHG) targets, particularly around methane. It has an independent scientific review underway of NZ's methane targets, which will sit alongside the Climate Change Commission's review.

An amendment bill to remove agricultural obligations from the Emissions Trading Scheme (ETS) has also been introduced. Without this change, agricultural emissions could have been priced in the ETS at the processor level from 2025. Instead, the Government has committed to pricing them at the farm level by 2030.

The Government has also released an outline for its second emissions reduction plan, covering 2026 to 2030. For agriculture, the focus is on speeding up the development of new technologies, such as methane inhibitors and vaccines, to give farmers practical, cost-effective tools for reducing emissions.

The Government is also establishing a Pastoral Sector Group to look more specifically into how farmers can tackle methane.

These recent changes in climate policy are positive for farmers. However, it is still important to continue identifying ways to enhance the efficiency of farming operations as this can lead to emission reductions and strengthen profitability.

In addition to Government efforts, several NZ dairy companies and banks are now setting their own targets to reduce emissions on farms.

Fonterra, Synlait, Rabobank, BNZ and Westpac have confirmed on-farm Scope 3 targets, and other dairy companies and banks are also starting to consider targets.

Find up-to-date information at dairynz.co.nz/climate-change

Public feedback on the draft legislation will be sought as part of the select committee process in late 2024 or early 2025. The Government aims to have the legislation passed and the new regulator in place by the end of 2025.

We will continue engaging with farmers and the Government ahead of supplying a formal submission when the public select committee process opens.

Find out more dairynz.co.nz/gene-tech

Gene tech and dairy farming | Ep. 85

Chief science advisor Dr Bruce Thorrold discusses opportunities, risks and how gene technologies could shape the future of dairy farming in New Zealand.

Listen on your preferred podcast platform or at dairynz.co.nz/podcast



Julie and Brian Pirie are committed to innovative pasture management and community involvement.

Youngsters help youngsters to thrive

On their Hauraki Plains farm, Brian and Julie Pirie are passing on their love of dairy farming to a whole new generation, calf by calf.

At a local school board meeting about some troubled students, Julie Pirie came up with an idea to keep them engaged while sharing her love for dairy farming. The students often said their bad behaviour was because they had “nothing to do”, so Julie thought of a way to keep them busy and productive.

“I invited them to come to our farm and help prepare some calves for Calf Club,” Julie says.

“We ended up with about seven calves that season – five from those kids, along with a couple from our daughters.”

Julie and her husband Brian’s farm is located near Ngatea township in the Hauraki Plains and was perfectly situated to create the opportunity.

“I quickly realised these kids hadn’t had opportunities like this before, and they absolutely thrived –some even won trophies.

“I learnt a lot from them too, it was incredibly rewarding.”

Fifteen calving seasons later, Julie’s programme remains strong. Each year, around 20 children participate, with many returning year after year. Most of the kids are from Ngatea Primary School but there have been a range of schools involved in the programme.

Julie makes sure that everyone is fully equipped with halters, leads, covers and feed. She ensures everyone is treated equally, so no one misses out, regardless of their background.

Around 400 calves are reared on the farm annually and Julie selects the ones she deems suitable for Calf Club and puts them in a dedicated shed. The children come out one weekend to

choose their calves, then care for them after school each week in the lead-up to their Calf Club events.

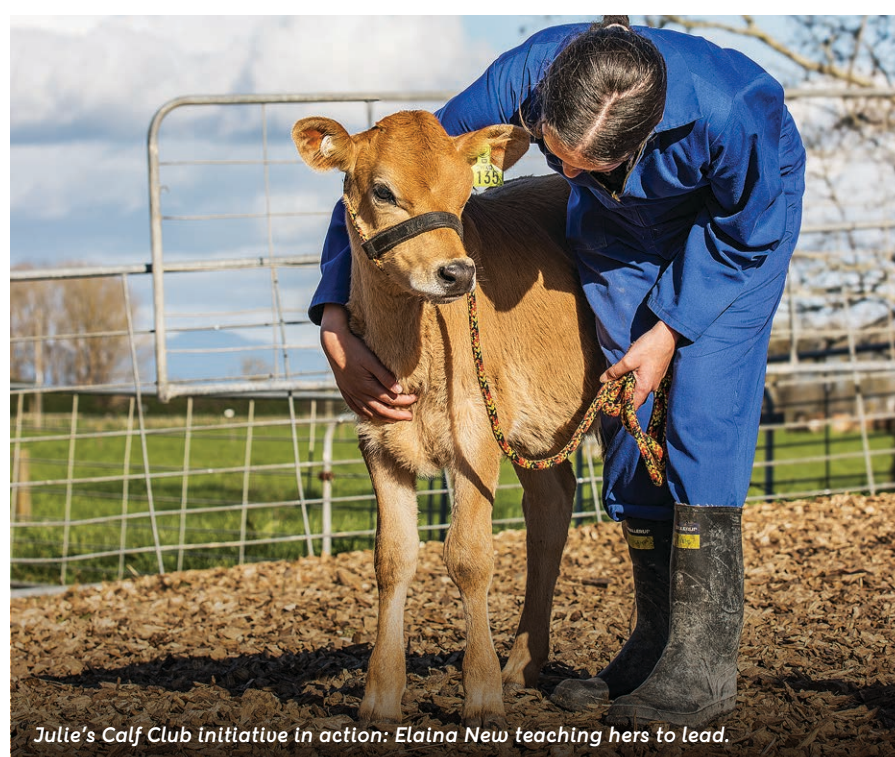
While Julie continues to feed them milk, the children do their hay and meal and groom and train the calves each afternoon until their parents collect them. The calves are also weighed regularly so the children can monitor and see their growth.

“It’s been really neat to be involved and give the kids the opportunity to connect with farming. I’ve had a couple decide to go farming as a result of having their calves at Calf Clubs.”

Julie and Brian purchased their first farm in 1993, initially 50 hectares, and gradually expanded by acquiring neighbouring farms. They own 234ha and lease a further 40ha, milking

Farm facts:

Location: Hauraki Plains
Structure: Contract milker
Effective area: 275ha
Herd size: 850 cows
System: 3
Production: 1,420kgMS/ha
Operating profit: \$3,822/ha*
Operating expenses: \$9,743/kgMS*
GHG emissions: 11kgCO₂e/kgMS
(*for the 2022/23 season)



Julie’s Calf Club initiative in action: Elaina New teaching hers to lead.

900 cows. They also have a 160ha support block where they graze their youngstock.

The farm has a unique soil mix, with 30-50cm of kahikatea peat on top of marine clay. It can get very hot, so a lot of effort is needed to keep the soil moist.

The Hauraki Plains drainage system is designed to prevent too much water draining away. And on the farm, they have weirs in the drains to control water flow and maintain soil moisture levels by retaining water.



It's been really neat ... I've had a couple decide to go farming as a result of having their calves at Calf Clubs.

"Our farm is really flat, so we use the weirs to hold water and keep the drain levels high so when it rains it is good to go," Brian says.

During some extra dry summers, couch grass became prominent. It took a comprehensive spray and planting programme to gain control, using oats, chicory and maize to keep the paddocks productive.

After the spray and planting programme, they planted permanent pastures again.

"When we first bought the farm, it had a good amount of tall fescue and once we got used to managing it we found it good as it was durable and resilient to our conditions," Brian says.

"But after a few really dry years, it stopped persisting, so we began experimenting with other types of pasture. It took some trial and error, but now we're using Legion Ryegrass from Agricom, and it's working well for us."



The Piries are deeply committed to protecting the environment, opting for more Jersey content in their herd of smaller cows and looking at water usage.

There is a focus on reducing pests and weeds. And in dry seasons, they'll use a paddock that will be getting cropped soon to feed supplement and preserve pasture paddocks by minimising grazing and damage.

"Pasture is king, it is what makes our business profitable, so making sure our soils and pastures are the best possible through fertiliser, grazing management and the right cropping regime is paramount."

Supplements are used strategically to manage the grazing rotation, prevent overgrazing, and protect the sensitive soil. The 70-bail rotary also has an in-shed feeding system.

Their manager for the past two seasons, Lucky Singh, has moved into contract milking this season with Brian supporting him through the transition.

"I'm acting as a farm adviser guiding Lucky, asking questions and challenging him to help him learn," Brian says.

Three years ago, in response to changing climate and seasonal patterns, they moved their calving start forward by about two weeks. Since then, they've focused on condensing the calving period through gradual adjustments.

They run the herd in three, with the heifers and lighter cows in one herd that go on to once-a-day (OAD) milking around Christmas, while the others remain on twice-a-day.

And when it comes to drying off the herd, they base it on seasonal conditions, feed availability and conserving cow condition.

"Our focus is cow condition and we prioritise matching pasture growth and demand," Julie says.

"I'm body condition score accredited so I'm always keeping an eye on the herd, and if anything is light it'll move to the OAD herd."

The herd started as a Friesian-cross base but they have been transitioning towards more Jersey content, aiming for a 75% Jersey cow.

"Jerseys are a better fit for our soil conditions because they're lighter, which helps minimise pasture damage in wet weather, and they handle heat better, making them more suited to the higher temperatures," Julie explains.

"Around 50% of our herd are at least J12 now and we have some registered Jerseys too. We aim for good fertility, high milk components and an easy-care cow."

Shifting to Jersey has also made their calf-rearing easier.

"As I've got older I'm finding it easier with the Jerseys as I'm not handling a big animal. It's easier for the staff picking up calves in the paddock too."



The Piries are active supporters of Ngatea Primary School. They help students learn about farming by involving them in rearing calves and fostering the next generation of farmers.



Extensive planting has been carried out on their support block, under ancient kahikatea stands, and around the streams that feed Ngatea town's water supply.

Julie and Brian are focusing on stepping back from the physical aspects of farming. They have hired an overseer who reports to Brian and will manage operations when they are away, and there is a manager on the support block.

"We're trying to be less involved in the day-to-day operations, but it is hard to step away completely, we still enjoy the farm and want to support our team and set them up for success" Julie says.

They are both active in off-farm roles as well. Julie serves as the president of Jersey NZ, chairs Donald Pearson Farm Limited (owned by NZ Young Farmers), and chairs Jerseyland Farms in Southland. Meanwhile, Brian is the chair of the Western Plains Drainage District Committee.

Their two daughters live nearby. Celine is teaching agriculture at St Peter's School in Cambridge and Ella has a cattle photography business and is pursuing a dairy farming career.

The Piries' commitment to sustainable farming practices and soil management reflects their adaptability and deep connection to the land. Their ongoing efforts to balance hands-on farming with strategic management ensure the long-term success of their operation.

As they gradually step back from day-to-day tasks and support the next generation of farmers, Julie and Brian's legacy of innovation, community engagement and sustainable farming practices will undoubtedly inspire many for years to come.

Putting theory into practice



Hamish and Rachel Hammond transitioned from university to contract milking right after graduation, quickly developing a passion for farming that led to their current role as 50:50 sharemilkers on Hamish's family farm in Wairarapa.

Fresh out of university, Hamish and Rachel Hammond were given the chance to apply their newly learnt theory as contract milkers on the family farm.

Hamish and Rachel Hammond jumped at the chance to put their university learning into practice by taking up a contract milking offer right after graduation. What started as a five-year plan quickly became a passion, and they are now in their second season as 50:50 sharemilkers on Hamish's family farm in Wairarapa.

"The farm manager was leaving so Dad proposed we come home to try contract milking," Hamish explains.

"He was offering the opportunity to run our own business and apply the theory we'd been learning."

The farm borders Greytown, where Hamish's great-grandfather started farming in the late 1920s, making Hamish a fourth-generation farmer.

The couple met at Massey University. Hamish had taken a break between his undergraduate studies and master's degree in Agribusiness and

Farm Management to compete as an international triathlete. Rachel was chipping away at her master's in Animal Science.

It was 2017 when Hamish's father, Stephen Hammond, made the proposal.

Until then, Rachel's minimal experience of dairy farming amounted to a summer placement and some relief milking during her studies. She had grown up on an apple orchard in Nelson. But the couple were confident enough to give it a go.

"We've enjoyed the challenge and opportunities that farming provides versus other post-study job options we were considering," Rachel says.

"A farm is a great place to bring up a family, with our children spending time outdoors and with animals every day."

The couple have two sons, three-year-old George and Lou, who is approaching one. Hamish is full-time on the farm, with Stephen and another team member keeping the ship running. Rachel helps part-time during busy periods.

The farm is 175 hectares, and they have 200ha worth of support blocks within walking distance of the platform. Some of the platform and support is leased.

Operations run on both owned and leased land. The main farm is 175ha, and there are 200ha of support blocks nearby, all within walking distance.

They are milking 600 spring-calving cows once a day (OAD) for the full season.

"OAD milking gives us flexibility. We still have a good workload, but we're not tied to the shed in the afternoons, and we feel more efficient," Hamish explains.



OAD milking gives us flexibility. We still have a good workload, but we're not tied to the shed in the afternoons, and we feel more efficient.

"The cows have adapted well and are producing just as much milk as they did on twice-a-day milking, which has helped us chase that efficiency," Rachel adds.



Raising their children on the farm means George and Lou get to enjoy the outdoors and experience farm life every day, while Hamish and Rachel balance running a successful sharemilking business and family time.

Farm facts:

- Location:** Greytown, Wairarapa
- Structure:** 50:50 sharemilking
- Effective area:** 175ha
- Herd size:** 600 cows
- System:** 3
- Production:** 1,500kgMS/ha
- GHG emissions:** 10.3kgCO₂e/kgMS

Hamish and Rachel are particular about breeding. They aim for a highly productive, efficient, robust animal with a strong udder and high milk solids but low volume. The herd averages about 470kg in liveweight.

The top 60% of the herd, based on breeding worth, are mated to nominated sires and the remainder go to Angus semen.

“Using Angus, as well as a heifer synchronisation programme, has allowed us to improve our selection intensity and make significant herd improvements,” Rachel says.

They keep all of the Angus calves and finish them on one of their support blocks, a venture they started in 2019 to earn some extra money while they were contract milking.

They operate a System 3, with pasture making up the majority of the herd’s diet. Grass silage is made on the support blocks and fed in the shoulders of the season.

They use in-shed feeding to provide a small amount of barley grain and minerals, which helps encourage the cows to enter the shed. The barley quantity is adjusted as needed, based on the season.

“It’s a typical Wairarapa climate: we are wet in winter and dry in summer, with 1000 to 1100mm of rainfall mostly in autumn, winter and spring,” Hamish says.

They use turnips and chicory to keep the cows fully fed and the farm is 70% irrigated with two centre pivots and some long lateral irrigation. The irrigation has allowed them to trial growing two crops of turnips from one paddock over summer. Last season they grew close to 20t, 13t from the first crop and 7t from the second.



The couple value the flexibility of once-a-day milking, which allows them to maintain efficiency while providing more time for other farm duties and for family.



We are committed to best practice in everything we do, including breeding the best cows and being efficient with feed and fertiliser use.

“The irrigation enables us to have better crops and we’re making good use of the water.

“Otherwise, we would finish the crop in mid-January when it’s hard to

establish pasture, so we are basically irrigating weeds.”

There are several environmental initiatives on the farm, and they try to be as efficient as possible with any inputs they use.

“We’ve got soil moisture meters, which are great to prevent over-using the irrigation,” Rachel explains. “Especially in the wetter periods like autumn and the start of the irrigation season.

“It helps with applying fertiliser too; if we know it’s too wet or the soil temperature is too low, we won’t apply any.”

Their effluent storage has a weeping wall that removes the solids, which are used on the crop paddocks. It recycles the greenwater and they use that to wash the yard, which reduces their water usage in the shed significantly.

Hamish chairs the Wairarapa Water Users Society, which advocates for fair and science-based decision-making on regulations and compliance. The society promotes best-practice irrigation methods and organises training and field days.

On the farm, the Hammonds have been planting alongside the stream and boundaries, providing shade and shelter for animals.

The couple enjoy collaborating with fellow community members to protect and improve the Pāpāwai stream and the nearby bush block.

As part of the small Pāpāwai Stream Care group, they have been actively involved in yearly planting efforts and managing the established plantings.

Rachel says the group started many years ago and Hamish’s grandad, Malcolm Hammond, and father Stephen were involved in some of the first plantings.

“We are committed to best practice in everything we do, including breeding the best cows and being efficient with feed and fertiliser use. We want a really sustainable farming business that’s resilient to change,” Hamish says.

“We don’t think we’re doing anything flash, we’re just focused on getting the basics right while balancing our work and family life.”



Environmental sustainability is a priority on the Hammonds’ farm, with initiatives like soil moisture monitoring, efficient irrigation, effluent recycling and active involvement in community conservation efforts.

Summer smarts



Essential tools and resources for success on farm over summer.

dairynz.co.nz/summer-smarts

Summer months on farm require careful planning and proactive management to ensure the wellbeing of your animals and people, the efficiency of your operations and a positive impact on your bottom line.

By focusing on these key areas, you can maintain a healthy, productive farm throughout the season.



Track and manage lameness

Lameness in cows is a complex issue and if not managed well, it can affect reproduction and increase the risk of culling. If you're experiencing lameness problems seek help from an expert and use the Healthy Hoof programme which considers the whole system including races, walking distances, yard design, cow flow, etc. The best way to minimise the impact of lameness is to identify and treat it early. Our lameness scoring system can help you track and manage lameness in your herd, allowing for efficient treatment and faster recovery.

dairynz.co.nz/lameness-scoring

Choose the best milking interval

Flexible milking refers to varied milking schedules beyond the usual once or twice a day. It can help extend the grazing rotation in mid-lactation, reduce stress on cows, decrease work hours and provide more flexibility for your farm team. Research shows that, depending on how flexible milking is used, it can have minimal impact on production. Use our Milking Time Planner tool to see how different flexible milking times might affect your weekly schedules and production.

dairynz.co.nz/milking-time-planner



See our article on milking frequency trends on page 18

Integrate supplementary feed profitably

Supplements can play different roles in your farm system over the summer. Ensure your planned supplements align with your farm pasture growth curve to maximise pasture harvest, crop yield and profit while meeting cows' needs. When unexpected deficits occur during droughts or irrigation restrictions, using DairyNZ decision rules and tools will help maximise profit by increasing milk income per kilogram of supplements fed. Our supplementary feed calculator can help compare feed types and costs.

dairynz.co.nz/supplement-calc

See our article on summer feed on page 13



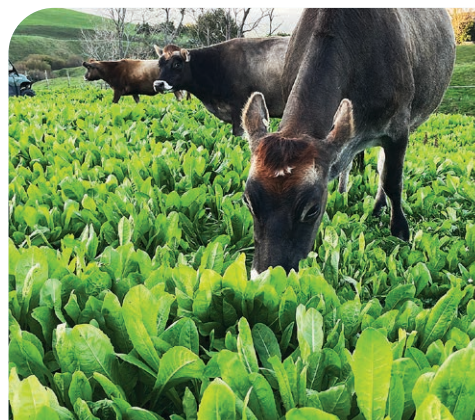
Adjust N use in summer plans

Optimising your use of nitrogen (N) fertiliser can improve efficiency, reduce greenhouse gas emissions, enhance water quality, meet regulatory requirements and strengthen your bottom line. When using N fertiliser in summer, there's often a much lower response in pasture growth than seen in spring or autumn. Getting the timing and application of nitrogen fertiliser right will help increase efficiency and minimise nitrogen loss from your farm. Consider a gradual approach to adjusting N in your summer plans to optimise its use. Gain assurance by trying:

- Reduced application rates
- Skipping paddocks
- Working with half paddocks

dairynz.co.nz/nitrogen-use

See our article on N use over summer on page 13



Practise good youngstock management

Growing heifers well, so they meet their liveweight targets, can improve your farm productivity and profitability. Your youngstock have the best genetics in your herd, so giving them the best start will unlock their potential – having a positive effect on their future lactation and maximising your investment. Focus on meeting weight-for-age targets and create a plan to ensure they grow at the right rate to meet them. Use our Heifer Development Plan tool to set expectations for weight, feeding levels and animal health requirements.

dairynz.co.nz/hdp

Reduce heat stress

Heat stress in cows happens when they can't get rid of excess heat, leading to discomfort and lower milk production. Heat-stressed cows eat less to reduce heat from rumination – and you'll feel that in your vat and your pocket. All areas of New Zealand get hot enough to cause heat stress over the summer. To reduce heat stress, focus on:

- Providing shade
- Ensuring a good water supply for drinking and cooling
- Adjusting milking times and routine
- Managing what you feed your cows and when

Work with your farm team to ensure they recognise the signs of heat stress in your herd this summer and take steps to prevent it.

dairynz.co.nz/heat-stress





Giving youngstock the best start

Youngstock represent a significant investment. Monitoring their growth and health will help keep your heifers and herd in fine fettle.

More dairy farmers are now regularly weighing their youngstock to keep track of their growth and keep them on the right path to becoming healthy and productive cows. As a result, the number of heifers being identified as below target weight has reduced over the past 10 years.

Along with regular weighing, having a preventative health plan for youngstock can support their wellbeing, growth and long-term productivity, including reproductive performance (see Figures 1&2).

For example, research has shown that when rearing practices are improved for lighter heifers, they have more

Biosecurity and managing youngstock

Heifers at grazing are the highest risk pathway for introducing disease to the milking herd.

Keeping NAIT records up to date helps make sure your youngstock's location is accurately recorded. Regular monitoring, and testing if needed, can help catch any signs of disease, viruses or infections early. It's also important to fully wean youngstock before sending them off farm for grazing.

Visit dairynz.co.nz/biosecurity and dairynz.co.nz/animal-health for more information on what needs to be considered, and talk to your veterinarian.

chance of remaining in the herd longer and having better reproductive performance.

Keep an eye out for disease, parasites, drench resistance and issues such as facial eczema, which can adversely affect youngstock growth. Climate change and dry summers may also create problems.

Weighing the benefits

Selecting the right youngstock from the start is key. Calves with low breeding worth (BW) or those identified as BVD PI (persistently infected) are unlikely to perform well as adults or contribute to herd efficiency.

A key part of your health plan is regularly weighing your youngstock and keeping accurate records of their progress. A mob of heifers that is 10% behind in target weight will have a 5% lower 6-week in-calf rate and a 2% higher not-in-calf rate in their first lactation.

Heifers that are heavier:

- at first mating become pregnant more quickly as yearlings
- at pre-calving have higher 6-week in-calf rates
- at any age have higher production in their first lactation

Find out more about liveweight targets at: dairynz.co.nz/liveweight

“**Keep an eye out for disease, parasites, drench resistance and issues such as facial eczema.**

Keep an eye on heifer weights during their second summer – this can be when growth slows, and there's little time to catch them up before they calve.

Raising youngstock is a significant investment, costing around \$2000 per animal from birth to calving as a two-year-old. For a 400-cow herd with a 20% replacement rate, that's a \$160,000 investment annually. Ensuring heifers with the best genetics are grown well and thrive will help you maximise the value of that investment and improve your herd's long-term performance.

Talk to your vet, and your grazier if you have one, to help you create an effective plan. It's a good idea to clearly outline your expectations for your animals' health and welfare in your grazier contracts.

Figure 1
Heifers that reach target liveweights are more likely to get back in calf

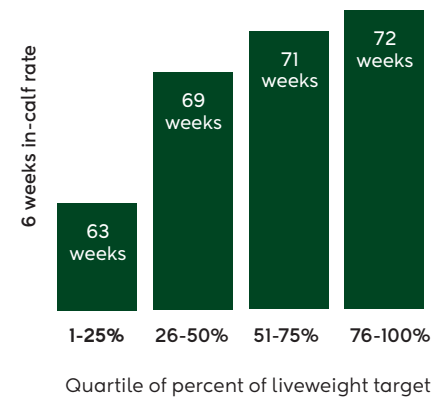
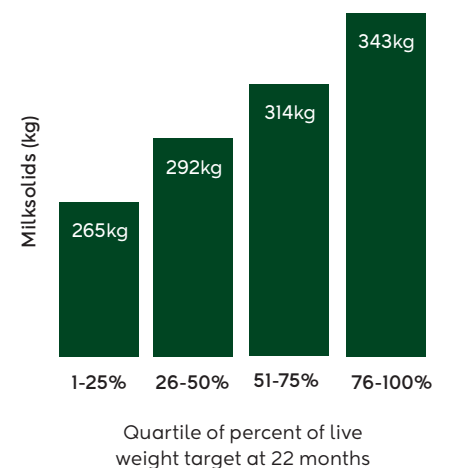


Figure 2
Heifers that reach target liveweights produce more



Source: National Herd Fertility Study 2013

Visit dairynz.co.nz/hdp – the Heifer Development Plan tool can help you create a targeted growth plan for your heifers.



Portal will help plot FE risk

New tools to manage facial eczema are on the way, but until then there are strategies farmers can adopt to limit the impact of the damaging liver condition.

To respond to the growing challenge of facial eczema (FE), DairyNZ is supporting the \$20 million Eliminating Facial Eczema Impact (EFEI) project, led by Beef+Lamb NZ, with co-funding from the Ministry for Primary Industries (MPI) and other sector partners. This cross-sector project is working on new tools and solutions, intending to eliminate FE from New Zealand livestock altogether. If successful, it will achieve a world first.

“
This liver damage can occur without cows showing any visible signs.

FE is caused by the ingestion of sporidesmin, a toxin produced by strains of the fungus *Pseudopithomyces chartarum*, which sits in the litter at the base of pasture. While it's named for the clinical signs often seen on the face of affected sheep and cattle, the real damage is being done to the liver. This liver damage can occur without cows showing any visible signs. Research indicates that for every clinical case, there will be 10 cows with subclinical FE.

FE risks increase with warmer temperatures as spore counts increase, typically between January and May.

Managing FE isn't new to North Island farmers, however, the fungus that causes FE is also being found further south than it used to, and climate change predictions show this is likely to continue.

Breeding companies are also developing genetic solutions for dairy farmers. FE-tolerant sires are now available from all major breeding companies. Genetic tolerance has the advantage of being permanent and cumulative. If you're in a high-FE challenge area, ask your breeding company for more information.

Starting monitoring early to manage the risk

While new solutions are being developed, there are existing FE prevention strategies and actions you can take now, such as spore count monitoring in pasture, zinc-dosing cows, and spraying pasture with fungicides.

To help farmers with the first step to managing FE, DairyNZ has sponsored the Awanui Facial Eczema Portal. From January to May, hundreds of spore counts are provided from vet clinics to Awanui, allowing it to report on regional spore count trends. You can use this as an early indicator to start monitoring your own paddocks, and to keep an eye on spore trends for your youngstock if they're grazed off farm.

It is not only high spore counts that pose a threat; consistent exposure to low spore counts may also result in liver damage.

You can check your management programme is working by blood-testing 10 cows for zinc and GGT levels (which indicates liver damage) three



Facial eczema risks increase in warm, humid conditions.



FE risks increase with warmer temperatures as spore counts increase.

weeks after zinc dosing starts. Since 2022, Fonterra suppliers have had the additional option of using ZincCheck, a bulk milk test to indicate whether the majority of the herd have reached the zinc serum level needed to protect from FE.

If you suspect you have cows affected by FE, provide access to shade and remove pasture from their diet.

To reduce your risk of being impacted by FE this summer, discuss your prevention plan for your herd and youngstock with your veterinarian.

Visit dairynz.co.nz/facial-eczema for more information.



Steps to managing facial eczema using zinc

1. Monitor regional spore counts – when they start to exceed 20,000 spores/g pasture begin testing your own paddocks
2. Monitor farm spore counts – choose four paddocks representative of the farm. Begin treating with zinc at around 30,000 spores/g
3. Know your herd liveweight – weigh a sample of 20 cows to work out the average and calculate the zinc dose required
4. Begin zinc dosing – talk to your vet about the best product for your farm and herd

Check regional FE spore count data in the Awanui Veterinary Lab Portal (starting January), sponsored by DairyNZ and Beef+Lamb NZ.



labportal.gribbles.co.nz

Photo credit: B Weir, Manaaki Whenua

Spores from the *Pithomyces chartarum* fungus produce a toxin that damages livers, leading to photosensitivity and skin reactions when ingested from pasture.

Match your supplement to your circumstances



Adding a feed supplement is only one of the options available when an unplanned food shortage arises.

If you face an unexpected feed shortage this summer, you may need to respond quickly. However, the key is uncovering the most cost-effective feed supplement for your circumstances.

Firstly, evaluate the current feed situation, including pasture growth rates, available pasture cover, supplements and crops already on hand and any feed you may have planned to come in. Calculate the deficit by comparing the herd's feed requirements with available feed resources.

There are two main levers when managing a deficit: reducing demand and purchasing supplements. The available options will depend on timing; consider how long you may be planning for and what lies ahead. If it's early December, for example, your response will differ from a dry spell occurring from late January onwards.

Demand can be reduced by removing animals or reducing energy requirements, such as changing to milking once a day. If it is earlier in the season, there will be less information

to determine which animals could be culled.

After pregnancy testing is a good opportunity to consider which cows are less productive due to age, health status, or whether they are empty, and remove them sooner to ensure valuable feed is going to the right animals.

After evaluating demand reduction, assess the cost-effectiveness of different supplements by considering the cost per unit of dry matter, the nutrient value provided and the expected marginal milk.

The DairyNZ Supplement Price Calculator is a valuable tool for exploring different options. It is based on milk price and milk company, post-grazing residuals, supplement composition and your profit requirements from using a supplement.

The FeedChecker calculator is another useful tool as it estimates the energy and nutrient demands for a selected mob of cows and compares this to what is supplied in the diet. You can enter what you are expecting from the available pasture and create different options to determine the most appropriate supplement.

During dry periods, continue with your usual decision-making processes

Identifying the right supplement can make a big difference in maintaining herd productivity during summer dry spells.

for pasture management. This will help ensure you're on the right rotation to prevent under- or over-grazing of paddocks, and that you use supplements only to address any deficits. The key is to be prepared, have a plan and use the tools available to determine the best course of action to use supplementary feed effectively this summer.

Find helpful tools at:
dairynz.co.nz/feed-checker



dairynz.co.nz/supplement-calc

Supplement Price Calculator

Marginal milk

Marginal milk is the extra milk a dairy cow produces when she receives nutrients or supplements beyond what she needs for basic maintenance.

For example, a cow needs a certain amount of feed to maintain her body weight and basic functions (maintenance requirements). If you provide her with more feed or higher-quality feed, the additional nutrients can lead to increased milk production – this extra production is the 'marginal milk'.

The profitability of producing marginal milk depends on whether the extra milk brings in more money than the cost of the additional feed. If the income from the extra milk is higher than the cost of the feed, the feeding strategy is worth it financially.

When a feed shortage arises, it's important to consider the full cost of the marginal milk when choosing the best supplement. The response to extra feed depends on your situation, so the amount of milk produced and the expected financial return may vary.



Maximise clover's natural nitrogen supply this summer: before applying N fertiliser, check if it's truly needed and let clover do the heavy lifting for pasture growth.

Nitrogen fertiliser works best when applied in the shoulder seasons of spring and autumn.

Using nitrogen (N) fertiliser in summer will normally yield a much lower response in ryegrass pasture growth than in spring or autumn. Increasing soil temperature, decreasing soil

moisture and nitrogen fixation from clover contribute to this lower response. If you're experiencing these conditions, applying N fertiliser probably won't be cost effective.

In our grazed pasture systems, ryegrass and clover work together to provide feed for dairy cows. Clover is there for two reasons: firstly, it provides



In the summer, most farms have an opportunity to maximise the use of the clover nutrient supply.

atmospheric nitrogen for ryegrass and secondly, it is a highly digestible source of energy and protein for our cows.

In spring, and to some degree in autumn, we don't always have enough nitrogen from the clover, which is why we use N fertiliser. But in the summer, most farms have an opportunity to maximise the use of nitrogen supply by clover and keep the N fertiliser for those shoulder seasons.

For additional N to be effective in the summer, it must be the limiting factor. Farms with reliable irrigation or regular summer rainfall and that experience high growth rates will likely benefit from using N fertiliser if no other factors restrict pasture growth.

If N is applied, it is important to ensure there are at least 20 days in summer, and longer in autumn, before the subsequent grazing to allow sufficient time for the yield response. In most cases, apply at a rate of 20-25 kilograms of N per hectare.

If you're planning to use N fertiliser in summer, especially from mid-December onwards or when soil temperatures are above 16°C, check the conditions first to ensure N is the limiting factor. For a more gradual adjustment, try lowering application rates, skipping certain paddocks, or treating half-paddocks to build confidence.

Most importantly, manage and respond to changes in pasture supply and feed demand by regularly monitoring average pasture cover and pre- and post-grazing residuals. This enables the tactical use of rotation length, milking times, supplements and N fertiliser through the summertime.

Find out more
dairynz.co.nz/nitrogen-use

Waikato Sharemilkers Emily and Brett Bradshaw feel empowered to make confident and informed decisions with DairyBase.

Context builds confidence

Insights from DairyBase data helped this sharemilking couple make an informed decision when it came to expanding their operation.

While taking on a second sharemilking job might seem daunting to some, Emily and Brett Bradshaw felt confident, supported by the insights from DairyBase data. They are in their sixth season of 50:50 sharemilking in Waikato and took on a second farm last season.

"When we were considering other jobs, we were using our data from DairyBase and plotting the new farm scenarios," Emily explains.

"We were able to generate accurate projections, which helped us assess whether the farms we were considering would be financially viable for our business."

Their first sharemilking role is a 250-cow farm in Wardville near Matamata, and they have since employed a contract milker to run it. They live on the second farm, milking 450 cows in Te Aroha.

They have a keen interest in tracking their financial performance, and their accountant recommended they use DairyBase when they first started sharemilking.

DairyBase is a free online tool that helps dairy farmers track and

compare their farm's physical and financial performance using simple benchmarks and key indicators.

"We find it useful to see trends in our data and how we sit compared with other sharemilkers in the area on a similar low-input system," Emily says.

"It's another tool in our kit to make some really informed business decisions as well as being able to reflect on how well we have been doing."

One season, they noticed their animal health spending was higher than that of other farms, leading to discussions with their veterinarian. This prompted them to plan more carefully and pay closer attention to their decisions,

“

We find it useful to see how we sit compared with other sharemilkers in the area on a similar low-input system.

especially regarding preventative animal health.

"The data helps us put control measures in place to help with any uncertainties or changes that inevitably occur in farming. We feel like we haven't been caught out by anything."

Emily also found the information useful when she was studying for her agribusiness diploma with Primary ITO. She could easily pull the figures she needed, and observe trends and calculate operating profits with little effort.

"As farmers, we are isolated when we're making things like purchasing decisions. We only know what we are being charged, so we don't know if it is a good deal or not.

"But with DairyBase, we get more context and it gives us a lot of confidence in how we're operating. I think all farmers should consider using it."

Find out more and join DairyBase here: dairynz.co.nz/dairybase

“

It's another tool in our kit to make some really informed business decisions as well as being able to reflect on how well we have been doing.

Emily Bradshaw, 50:50 Sharemilker

- ✓ Better understand your farm's performance
- ✓ Identify opportunities to drive profit
- ✓ Make confident and effective decisions

DairyBase
By DairyNZ

Find out more and join today at dairynz.co.nz/dairybase



Findings on genetic progress hailed

DairyNZ, LIC and CRV welcome 'ground-breaking' overview of breeding technology and genetic gain.

DairyNZ, LIC and CRV welcomed the Industry Working Group's (IWG) final report supporting improvements in New Zealand's genetic gain system for the national dairy herd earlier this year.

The IWG was charged with evaluating the dairy sector's genetic improvement progress. It has put forward recommendations that reflect the complex commercial interests, investments and relationships that are fundamental to the current animal evaluation system.

In the report, the IWG highlighted its belief that the current system for genetic gain in NZ is not fit for purpose and that the genetic progress of the NZ dairy herd has lagged relative to other advanced dairy industries. This is because, for multiple and complex reasons, over the past decade we have not been as successful in adopting genomic technologies to speed up rates of genetic gain.

But it has confidence that NZ will catch up and fully harness the benefits of genomics for faster genetic gain.

When the report was released, DairyNZ's chair at the time, Jim van der Poel, classified the report as ground-breaking. He noted it captured in one place the reasons NZ has fallen behind international competitors, while clearly outlining some objectives that NZ needs to achieve to remain a world-leading dairy producer.

"It also shows a potential pathway for New Zealand to catch up quickly by taking key actions, and underscores the immense benefits to dairy farmers – including efficiency and productivity gains through animals that are more resilient, profitable and easier to farm," Jim said.

"Overcoming sector challenges to provide New Zealand farmers with world-leading genetic gain will require significant contributions from all parties."

The group set out to ensure that genetic progress helps NZ dairy farmers remain internationally competitive and to improve the

Kiwi dairy herd through better rates of genetic gain, by considering the agricultural sector's genetic improvement work.

Maintaining international competitiveness in genetics is crucial for the NZ dairy industry as it drives improved herd performance, higher milk production and cost efficiency. This helps the sector stay attractive to global buyers, supports sustainability and ensures adaptability to market changes and environmental conditions.

The report's recommendations focus on investigating the benefits of a more future-focused National Breeding Objective, improving the quality of data used in animal evaluation, enhancing the significance of the National Breeding Objective, improving the quality of phenotypic data from commercial herds, and

fostering an environment where breeding companies and other stakeholders can leverage genomic technologies for rapid genetic advancement.

The IWG was an independent group established following DairyNZ's consultation on a proposed operating model to develop a single independent Breeding Worth (BW) with genomics, delivered by New Zealand Animal Evaluation Ltd (NZAEL).

Respected agricultural leaders were invited on behalf of the dairy sector to be part of the IWG to help New Zealand remain internationally competitive in genetic gain. DairyNZ, LIC and CRV are committed to making changes for the sector's benefit and are now working to create a process that will achieve the IWG's stated objectives.

Report of the Industry Working Group (IWG)

Find the IWG's final report supporting improvements in New Zealand's genetic gain system for the national dairy herd here: dairynz.co.nz/iwg-report



NEXT GENERATION IMPROVEMENTS.

Genetically informed breeding decisions for profitable, world-leading animal genetic gain.



Improve your herd

dairynz.co.nz/nzael



NZ Animal Evaluation

Powered by DairyNZ



Dr Jenny Jago
DairyNZ principal scientist, programme lead



Dr Paul Edwards
DairyNZ senior scientist



Dr Kirsty Verhoek
DairyNZ senior scientist



Dr Charlotte Reed
DairyNZ scientist



The future of farm tech

The DairyNZ team is continuing to explore the potential of digital technology to support animal wellbeing and the overall health of farm systems.

As farms generate more data than ever before, the challenge is figuring out how to use it effectively and unlock its potential. Meanwhile, interest from customers and consumers worldwide is growing, particularly in how their food is produced and the quality of life of the animals involved.

Between 2020 and 2024, DairyNZ worked alongside AgResearch and Fonterra on the New Zealand Bioeconomy in a Digital Age (NZBIDA) programme. This initiative explored how farmers could leverage digital technologies and data to improve farm management and enhance animal care.

The programme aimed to understand how technology could offer insights into a cow's daily experience to support positive animal wellbeing outcomes. We were also aware of the

abundance of data available from different technologies, so we wanted to explore how it could help reduce the complexity of decision-making on farms.

There were several elements, including some initial background work led by Fonterra, to uncover what customers were seeking from a cow wellbeing perspective. Further work explored the range of available technologies and their wellbeing-related measurements, with a strong emphasis on wearable devices.

The three main projects focused on understanding cow wellbeing via digital technology, measuring and predicting heat stress in NZ dairy cows, and the potential for wearable data to aid in pasture management.

Check out the webinar series sharing learnings from the NZBIDA Programme.



Proof of concept: Using wearable data for pasture management

Farmers in New Zealand are increasingly investing in wearable technology, with nearly one million cows now equipped with various devices. The data is typically used for monitoring individual animals to identify heat or health events, but we wanted to investigate what other insights could be generated from the data.

Initially we collaborated with a group of farmers and sector stakeholders to determine the focus of the research, which highlighted a

desire to aid grazing management. Specifically, could animal sensor data give an indication of feed availability?

We carried out a controlled grazing experiment, dividing cows wearing five sensors across four herds (see Figure 1). These herds were given different amounts of pasture, from 80% to 120% of their estimated requirements, to see if these differences could be reflected in changes in the sensor data. The data from the sensors

was compared to measures such as pre-grazing pasture mass and post-grazing residual, which showed correlations, particularly with rumination time.

Novel 'cow' behaviours calculated from animal location data, like how far the cows travelled and how close they were to their herd mates, were also good at explaining pasture mass.

Overall, the study demonstrated the potential of using animal sensors for grazing management,

which could save time, reduce costs and alleviate the mental load on farmers. However, it's still in the early stages and more research is needed to see how useful it is and how it can be applied in different farming situations.

We've shared the initial findings with the companies whose technologies were used in the experiment. The next step would be for commercial companies to invest in further research and development in this area.

Measuring and predicting heat stress in New Zealand dairy cows

Heat stress occurs when cows have more heat load than they can release it leads to discomfort and lower milk production. All dairy regions in New Zealand get hot enough to cause heat stress during summer.

The most common global measure for heat stress is the temperature humidity index (THI), which is relevant for situations where cows are housed indoors. But it is less applicable to our NZ pastoral systems since our cows are outdoors, exposed to the elements. A specific grazing heat load index (GHLI) had been developed to assess heat stress in pasture-based cows, incorporating factors like air temperature, solar radiation and wind speed.

Within the NZBIDA programme, we sought to strengthen the GHLI, which was initially developed using a Waikato dataset. Data was collected from 600 cows across seven farms, measuring weather variables such as temperature, humidity, solar radiation and wind speed, alongside animal-based indicators like respiration rate, panting and rumen temperature.

By including data from many locations, we have strengthened the GHLI.

However, it is still challenging to predict heat stress in conditions such as high wind speed. As part of our future research focus, we hope to explore alternative modelling techniques that could help enhance the GHLI, providing farmers with a more accurate forecasting tool.

We know that animals vary in their susceptibility to heat stress, and sensor or wearable technology is helping us gain a deeper understanding of these differences.

In addition, if we can forecast specific days and times when animals are most at risk, it will enable farmers to take a more strategic approach to reducing heat load. For example, if we discovered that only 20% of the herd need shade under certain conditions, we wouldn't have to provide shade for the entire

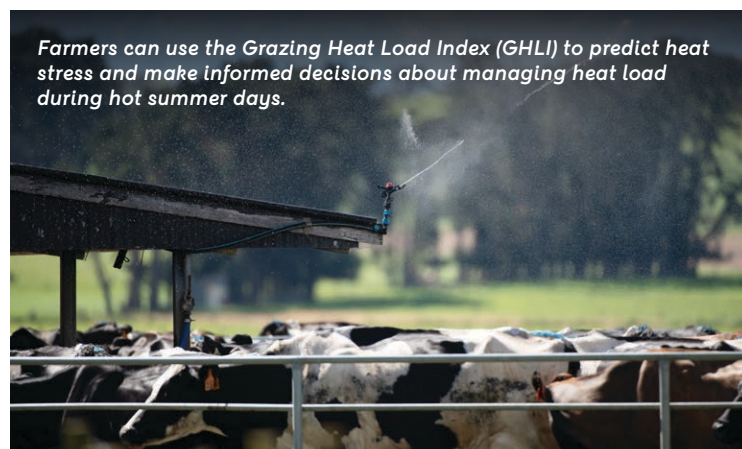


All dairy regions in New Zealand get hot enough to cause heat stress during summer.

herd in those situations.

We found that the GHLI is a valuable tool for assessing heat stress risks in outdoor animals, helping farmers make informed decisions on managing heat stress effectively. The next round of research will delve deeper into opportunities for mitigating heat and becoming more strategic with mitigations.

Find out more about this research and heat stress at dairynz.co.nz/heatstress



The next steps: building a 'connected' farm

The Connected Farm project is exploring how integrating various data sources could support farm management. As part of this, we've developed a proof-of-concept dashboard that consolidates information about both the cow and her environment.

Our two partner farms in Waikato and Canterbury are currently testing the dashboard and collaborating with us to refine the concept.

The dashboard brings together learnings from across the programme. It was developed alongside farmers to determine the necessary data inputs,

frequency and resolution needed to support on-farm decisions.

For example, it displays forecasted heat stress risk alongside details on water systems and paddock conditions, such as cover and shade availability, helping farmers better manage heat stress events. Actual weather data is shown alongside cow behaviour, allowing farmers to see how their herd responds to environmental conditions.

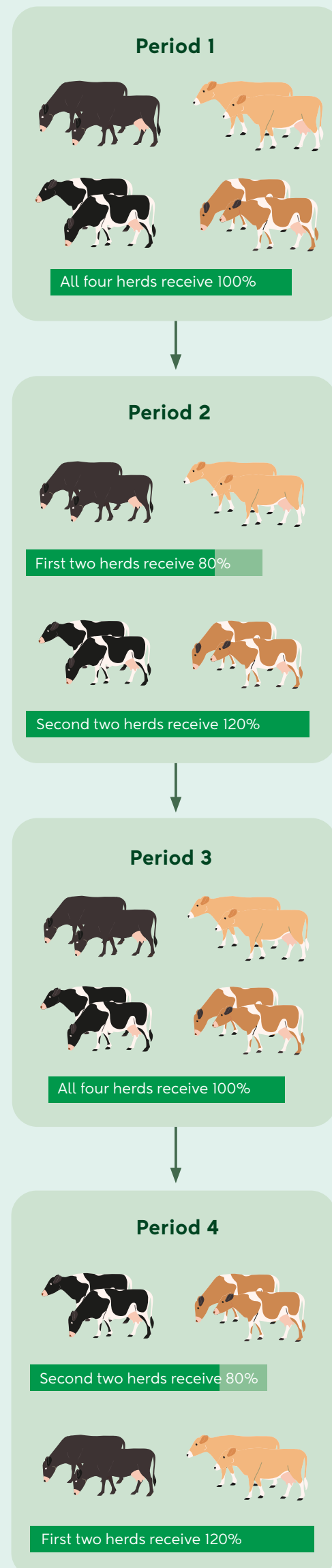
A key focus is also understanding cows' daily experiences. To achieve this, data from various sources is

compiled into a "time budget", providing insight into how cows spend their time and what factors influence their behaviour.

So far, the project has shown there is value in combining different data streams. However, building trust and confidence in the data is essential for effective use, and this takes time. As the Connected Farm project moves into the new season, our team and partner farms will continue exploring how to fully harness the potential of digital technology to support on-farm decisions.

Figure 1

Experimental design (4x 5-day allocation periods)





Dr Paul Edwards
DairyNZ senior scientist

There's strength in flexibility

Adjusting milking frequency according to changing conditions and your team's needs can make for greater workplace fulfilment and better staff retention.

Attracting and retaining staff is a widespread challenge in the dairy sector. The next generation of people entering the sector value flexibility, but traditional milking timing and frequencies can be a barrier.

Milking often requires early starts, which most people prefer to avoid if possible or expect fair compensation for. A survey conducted last year showed that 55% of prospective dairy employees would expect an additional \$5,000 to \$10,000 in pay to start at 5am instead of 6am.

Milking can account for over half of the labour hours used on New Zealand dairy farms. Reducing the number of

milking is one approach to decrease work hours or allocate more time for other tasks.

It also can change the structure of the work day, providing the opportunity for more flexible working hours and increasing the labour pool available through part-time staff.

Over the past decade, there have been considerable changes in the use of different milking frequencies on farms. Fewer farms are milking twice-a-day (TAD) for the full season, about 40% (see Figure 1) down from 65%, replaced by combinations of TAD with once-a-day (OAD) or flexible milking approaches.

The flexible milking frequencies that farmers adopt vary in the number of times cows are milked each day and the hours between milkings. For example, if cows are milked three times over two days (3-in-2), the intervals might be 12 hours between milkings, then 18 hours and another 18



The most productive regions are embracing a range of milking practices.

hours, or they might be 10, 19 and 19 hours, or 8, 20 and 20.

Another popular option is 10 milkings in seven days (10-in-7), which has many lifestyle benefits, particularly for weekend schedules.

Since Fonterra's rollout of milk vat monitoring in 2020, we have gained a deeper understanding of the timing and use of milking frequencies. For the past three seasons, the breakdown of milking frequencies used has been relatively consistent (see Figure 1), and for most farms, the changes occur when they are approaching the season midpoint.

However, there are significant variations across different regions.

Northland has the highest adoption of full-season OAD milking, with about 40% of spring calving farms using this approach (see Figure 2). This may also explain their lower use of flexible milking.

Across the Bay of Plenty, Waikato and Taranaki milking frequency breakdown is relatively similar compared with other regions. But Taranaki uses TAD milking for the full season more than any other region. This raises the question of whether there are further opportunities to introduce more workplace flexibility.

The most even split of flexible milking frequencies can be seen in Tasman-Marlborough and farmers in this region have the lowest use of full-season TAD.

A common hurdle in considering a reduction in milking frequency is the perception that "my cows produce too much to handle being milked less often". Yet it's interesting that the most productive regions are embracing a range of milking practices.

In areas like Canterbury and Otago-Southland, for instance, more than 40% of farms are using flexible milking for at least four weeks. And 20-30% of farms are using early-season OAD. This contributes to a national average of 15% of spring-calving herds using early-season OAD.

Research has shown that flexible milking frequencies often have limited impact on production. Studies also highlight improvements in body condition score, particularly before dry-off.

There can also be significant workforce benefits. For example, in a pilot study, farm workers using 3-in-2 milking during spring slept 27 minutes more per night starting from the third week of calving, compared to their teammates on two nearby farms that used TAD.

There are many options for farms to consider. What is attractive to some people won't be to others. The key is to sit down and work out what you and your team want and design a milking schedule around that.

Have you thought about what milking frequency you plan to use after Christmas?

Find out more about milking frequencies at dairynz.co.nz/milking-intervals



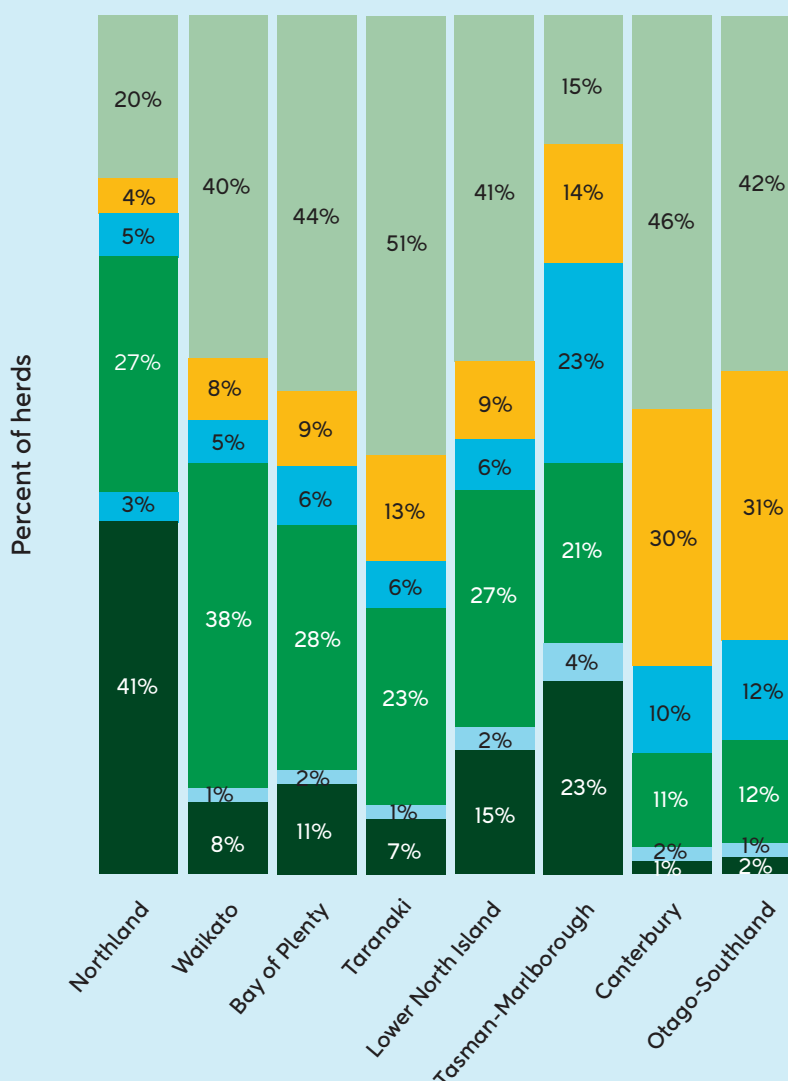
Figure 1

Milking frequencies used over the past 3 seasons – National



Figure 2

Milking frequencies used by region 2023/24 season



Legend: Full Season TAD (light green), TAD & Flex (yellow), TAD & Flex & OAD (blue), TAD & OAD (dark green), Full Season Flex & Flex & OAD (light blue), Full Season OAD (dark green)

Includes milking frequencies that were used for at least 4 weeks
Excludes split-calving that supply year-round
Flex = 3-in-2 and 10-in-7

Source: Fonterra vat monitoring



Dr Jane Kay
DairyNZ principal scientist

Grazing cows the focus of Irish-NZ study

Scientists are delving into the complexities of methane emissions from grazing cows, aiming to develop more precise emission factors and mitigation strategies for our unique pasture-based systems.

To support farmers in reducing greenhouse gas (GHG) emissions, DairyNZ has teamed up with Irish researchers to quantify methane emissions from dairy cows in pasture-based systems. The four-year programme, Emissions4Pasture, sees research happening across both countries to share knowledge and gain a deeper understanding.

Researchers, students, professors and database technology experts from DairyNZ and Ireland's Agriculture and Food Development Authority (Teagasc), University College Cork and the Irish Cattle Breeding Federation will be working together to quantify methane emissions from grazing dairy cows.

Currently in GHG inventories, a standard methane emissions factor is used for all feed eaten by the dairy cow. In New Zealand, this factor predicts that for every kilogram of dry matter that a cow eats, it produces 21.6g of methane. A similar approach is used in Ireland.

Although feed is a major factor driving methane emissions, not all feeds are created equal – different types, qualities and amounts of feed lead to

varying levels of methane production. We are interested in exploring how this plays out within our pasture-based system.

Recent research from Ireland supports this variation, showing that cows grazing in spring produce less methane than expected based on inventory calculations, and less than they do in summer and autumn. We aim to see if we can replicate these results in NZ and determine whether the variation in methane is due to the pasture itself or connected to cows being in early lactation.

This will involve using two herds at one of the DairyNZ research farms in Hamilton, an autumn-calving herd and a spring-calving herd. Starting in August 2024, we are measuring methane emissions from these herds for 12 months while they are outdoors grazing pasture. At four times, spring, summer, autumn and winter, a subset of each herd will be brought into our indoor facilities to measure methane and feed intake while still consuming fresh pasture.

Using these two herds of cows lets us see how both the cow and the pasture affect methane emissions. For example, in September/October, we will have cows in early lactation and late lactation all eating spring pasture, and in March/April we will have cows in early lactation and late lactation eating autumn pasture.

Grazing cow trials are also planned for Ireland. Beginning in spring 2026 (February), these trials will explore

how different pasture species affect methane emissions and whether pasture management practices have an impact.

Through the Emissions4Pasture programme, we hope to gain a better understanding of baseline methane emissions from a pasture-based diet. We're also aiming to understand how cows in these systems respond to mitigation strategies such as feed additives. Early data indicates that responses can vary depending on the season, the amount of feed or the type of diet the cows are on.



Using two herds of cows lets us see how both the cow and the pasture affect methane emissions.

If this collaborative research programme helps us identify the reasons behind the variation in grazing cows' responses, we can develop technology tailored to pasture-based systems and optimise its use throughout the season.

For example, if we find that feed additives aren't as effective in spring, when farmers typically use fewer supplements and it's harder to administer additives to the animals, those additives could be reserved for another time of the season when they would be more effective and easier to use.

The ultimate output of the programme is to develop a methane database for pasture-based systems, aimed at accurately accounting for emissions and mitigation efforts at both the farm and national levels in NZ and Ireland. While we can't guarantee this outcome, the data should still guide inventory planning and management.

Most of the research on methane mitigation technologies is completed at Lye Farm, one of DairyNZ's two Waikato research farms. Lye and Scott farms are an important sector resource, enabling scientists to carry out pasture, animal, farm systems and environmental trials under relevant conditions. This ensures the technologies and tools developed are practical and can be widely adopted into different farm systems.

Finding solutions to help farmers reduce emissions while maintaining on-farm profit remains a research priority for DairyNZ.

DairyNZ was awarded funding by the Ministry for Primary Industries (MPI) and the New Zealand Agricultural Greenhouse Gas Research Centre (NZAGRC) under the Pilot Joint Research Initiative between New Zealand and Ireland.

Farmers are actively involved in all the projects, to provide their thoughts and advice on opportunities or barriers for adoption of these solutions into NZ farm systems. We are excited about our continued work alongside farmers and other sector and research organisations to understand emissions from grazing cows and to develop mitigation solutions for our unique pasture-based farm systems – and to get ahead of the environmental challenges farmers face.

For more information visit dairynz.co.nz/pasture-emissions



The Emissions4Pasture programme is exploring how different types, quality, and seasonality of pasture can impact methane emissions within pasture-based systems.



Scientists hope to understand how pasture quality, species and management affect on-farm emissions, and to optimise the cow response to methane mitigations.

Using wood to filter water

Waste produced by forestry is being used in an ingeniously circular system to mitigate the runoff from dairy farms.

DairyNZ and the Institute of Environmental Science and Research (ESR) won the research and science category at the 2024 Primary Industries NZ Summit Awards.

The win recognised the work DairyNZ senior scientist Dr Lee Burbery has done in partnership with ESR over the past 10 years. Together, they researched and developed woodchip denitrifying bioreactors as an edge-of-field practice for mitigating nitrogen loads to New Zealand waterways.

“I was inspired by the forestry conversions that were happening in Canterbury around 2014,” Lee says.

“I noticed an opportunity where we were disposing of a significant amount of wood in Canterbury and intensively farming on porous soils that were susceptible to nitrate leaching.

“By adopting a circular economy approach, we could use some of the

deforestation waste to create a water treatment facility for nitrate filtration.”

The bioreactors are pits filled with woodchips that work like a water filter. The carbon in the wood helps bacteria turn harmful nitrate in the water into harmless nitrogen gas during their natural respiration process.

Lee has a PhD from the school of environmental science at Lancaster University in the UK. He applied his hydrological knowledge to tackle the challenge of setting up woodchip filters in that environment.

“Water follows the path of least resistance, so the woodchip bioreactor had to be as permeable as the gravel found in Canterbury,” Lee explains.

“We mixed gravel with the woodchips to strengthen the bioreactor and extend its performance. This involved testing various woodchip and gravel combinations.”

He knew that in Canterbury, and much of the South and some of the North Island, there are deposits of very coarse gravel material. It was crucial to design something that would be



Lee Burbery led the field trial of a woodchip bioreactor on a dairy farm in Geraldine.

fit for purpose in these environments, which hadn't been done before.

Working with ESR, Lee oversaw the construction of two trial woodchip denitrification sites. One was a wall designed to treat shallow groundwater nitrate at a site near Kaiapoi and the other was a bed to treat farm drainage on a dairy farm near Geraldine.

DairyNZ and ESR worked together to monitor the woodchip bioreactor near Geraldine for two years, conducting some innovative experiments during the process. The concept has been successful, but Lee notes there is a caveat.

“We've demonstrated that woodchip bioreactors are highly effective at removing nitrate. However, they are a niche solution with limited

applicability due to hydrological challenges, construction costs and compliance issues.”

He explains that there is currently no design standard in NZ so if a farmer was interested in installing their own they would need to do a bit of homework to piece it together.

“What we do on land – to reduce nitrogen inputs and better manage losses of nitrogen from the soil – is where we get the biggest return for reducing our nitrate footprint.”

Spending most of his 25-year science career working on New Zealand groundwater resource management issues, Lee has enjoyed learning about dairy farm systems and engaging with farming communities since joining DairyNZ in 2021.

Mythbuster

Are bull calves infertile until they're 12 months old?

Bull calves are fertile once they have gone through puberty, and that can depend on more than just the calendar. Senior technical & policy adviser (veterinary) Mitch Cooper explains.

When calves are born, they are typically run and managed together regardless of sex. While this is okay when they are very young, there is a time when it becomes a risk – and it can be sooner than expected.

For a bull to become fertile he must go through puberty (like any mammalian species) but timing depends on a few

factors, such as breed, nutrition and overall health. Research shows there is a deeper connection with genetics, too.

Bulls generally reach puberty when they are at 43-50% of their mature liveweight, sometimes as early as eight months old. For heifers, puberty can begin as early as six months. Research shows that a heifer's genetics and liveweight, rather than her age, dictate when she reaches puberty.

There have been instances where heifers and bulls are left together a little too long and the bulls have mated with the heifers and gotten them pregnant. Rub marks can indicate that bulls are becoming active because when young heifers

ride each other they do not typically create rub marks.

There can be negative consequences on the growth and future production potential of heifers that fall pregnant early, as well as potential calving difficulty. It is also challenging for management when animals calve out of sync with the rest of the herd.

Cows who fall pregnant accidentally can also create challenges. For example, if they are carry-overs going to a support block, they may calve while they are away and at an unusual time of the season.

Split-calving herds are generally at greater risk than spring-calving herds

because they manage females of various ages and pregnancy stages at different times.

If you are intending to keep bull calves as teaser bulls, it's recommended to have them vasectomised at six months. And keep in mind when determining grazing arrangements that bulls are agile and adventurous.

If you have any suspicions that your bull calves have been sexually active, discuss your concerns with your veterinarian.

Myth

Bull calves are not fertile until 12 months old.



Busted

Bulls can reach puberty as early as eight months old and become capable of impregnating heifers and cows.



Snapped on and off farm



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



Chris Burke, DairyNZ senior scientist, sharing advice at an event hosted by cover story farmers Julie and Brian Pirie.



DairyNZ senior freshwater ecologist Dr Belinda Margetts is on farm in Methuen with Cate McIntosh, filming an instructional video on eDNA sampling.



Research technician Sarah Ansbro installs a weather station for the Shade-Use Study, gathering crucial data on cow heat stress and shade-seeking behaviour as part of the Frontier Farms project.



Cows from the control farmlet enjoy silage while on kale this winter, as part of the Low N programme farmlet trial at Lincoln University Research Dairy Farm.



The Pōkaiwhenua Catchment Group puts in the mahi at a Community Planting Day at the Whakauru Stream in Tokoroa.



DairyNZ scientist Stacey Hendricks presented research at the Welfare of Assessment of Animals at Farm Level in Italy.



DairyNZ researchers Chris Burke, Jane Kay, Brian Dela Rue and Chris Glassey on a farm walk for the Extended Lactation project at Scott Farm.



Lincoln University research technician Lucas Tey collecting deep soil cores from kale paddocks for the Low N farmlet trial.



Reporoa farmers Meri Brown and Roydon Ruebe, winners of DairyNZ Healthy Waterways Fieldays competition, eDNA sampling their waterways.



The Dairy Women's Network team call in for a visit at the DairyNZ site at Fieldays 2024.



A break from the computer for Lincoln University PhD student Holly Williamson collecting deep soil samples for the Low N programme.



New Zealand Dairy Industry Awards winners of the National Share Farmer Award, Will Hinton and Kali Rangiawha, chat with Campbell Parker, DairyNZ CE, at Fieldays 2024.



Rachel Numan, dairy farmer, vet, busy mum and author, reads one of her Tractor Dave books to young ones at the DairyNZ site at Fieldays 2024.

Local insights and evidence-based offerings



DairyNZ's regional teams have a new leader supporting them as they work to meet the specific needs of dairy farmers in the different regions.

In a decisive shift after a decade in her previous company working pan-sector, Claire Bekhuis is excited to be at the helm of the regional teams at DairyNZ. In a newly created role, she is responsible for leading and supporting the regional teams to deliver value for the levy.

"It's an exciting time to be part of DairyNZ," Claire says.

"The new strategy highlights the 'DairyNZ difference' by emphasising the key role of science and research in tackling complex, long-term challenges, while also taking a 'whole farm systems' approach."

Growing up in Southland, Claire was familiar with local dairy farms through her friends, but it was the opportunity to work as an artificial insemination technician assist that truly sparked her interest in the sector.

"That's when I realised I really enjoyed working with farmers, especially dairy farmers," Claire says.

"I decided to shift my focus, blending my studies with my passion for the sector and the people in it."

Claire had completed a Bachelor of Science and a Graduate Diploma in Commerce at Victoria University.

A stint in herd testing fuelled her passion as she met more farming families and worked across multiple farm systems. For the past decade, she has held leadership roles at Ballance Agri-Nutrients, eventually based in Mount Maunganui.

Her husband, Jared, also works in the dairy sector, and their daughter, Addison, is absolutely obsessed with cows – she imagines her mum spending all day surrounded by them.

Claire explains that DairyNZ's regional teams are the farm systems experts within their communities. While their extension work supports farmers with current challenges, it must also remain focused on the future of farming.

"Our teams gather local insights from farmers to create strong, evidence-based event offerings that are tailored to regional needs.

"The regional teams highlight regional differences, identify leading farmers and farmers that are pushing boundaries, helping us to help others to learn from them."

While interconnections are important, so is recognising it isn't possible to do everything.

"To clearly demonstrate the value we provide through the levy, we've needed to sharpen our focus. That means taking care not to duplicate the work of others – and to concentrate our efforts where we can make the biggest difference," Claire explains.

Claire Bekhuis, head of regional teams at DairyNZ, leads the charge in ensuring farmers see value from their levy.

She gives the example of other organisations and individuals, such as rural professionals, providing individual on-farm services (often with DairyNZ intel). So DairyNZ can refer farmers to others – like a really good GPS.



Our teams gather local insights from farmers to create strong, evidence-based event offerings tailored to regional needs.

"This extensive referral system will reduce duplication of effort and allow us to give greater focus to longer-term issues affecting farmers and the sector.

"Our approach to events has evolved. We want to get our scientists and experts closer to farmers. We are hosting larger events and collaborating with partners to make these events the kind you don't want to miss. It also proves more cost effective.

"There is a breadth of experts throughout DairyNZ that the team will be bringing to the regions to share the knowledge further.

"We are working with leading farmers and our subject matter experts to deliver more impactful events that discuss the biggest challenges and opportunities for New Zealand dairy farmers.

"Farmers will have the chance to learn from those who've made a real impact and hear from experts in the field, gaining ideas they can apply to their own farm system.

"Our strategy is to support farmers into the future. We are trying to keep ahead of challenges and build a resilient dairy sector."

For an overview of the strategy and Frequently Asked Questions visit dairynz.co.nz/strategy

Visit the events page to see what's happening in your region dairynz.co.nz/events

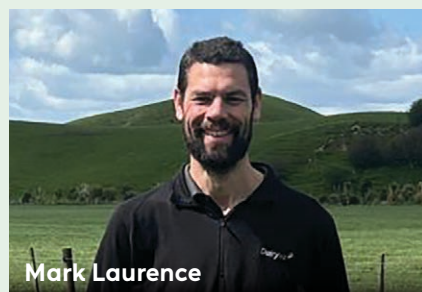
Regional managers



Brigitte Meier

**Upper North Island
Regional manager:**

Dairy farming with her husband Pete in Waerenga, Brigitte tries to stay as connected to the land as possible. She has been at DairyNZ for three years and enjoys her experienced, capable team who strive to put farmers at the forefront of everything they do.



Mark Laurence

**Lower North Island
Regional manager:**

Mark joined DairyNZ five years ago as the regional leader in Taranaki. He shifted home to lead the Manawatū region two years later. Nearly 20 years ago, he was a consulting officer for Dexcel in Northland. He appreciates the diversity across the lower North Island and Taranaki and enjoys sharing the extensive knowledge from the broader DairyNZ team.



Anna Hall

**Upper South Island
Regional manager:**

Covering from north of the Waitaki River to the top of the South Island and the West Coast, Anna has been at DairyNZ for four years and loves being alongside farmers. Before joining the team she was low-order sharemilking and contract milking and has worked on the Mycoplasma bovis response and at Primary ITO.



Guy Michaels

**Lower South Island
Regional manager:**

With a background in dairying, including sharemilking and farm ownership, Guy has loved working at DairyNZ for over seven years. His biggest passion is farmer-to-farmer information flow across the dairy sector, which he believes is unique and uniting.

DairyNZ regional teams

Regional manager:

Brigitte Meier, 027 448 3050
brigitte.meier@dairynz.co.nz



North-West Waikato

Kent Weston-Arnold, 027 288 1244
kent.weston-arnold@dairynz.co.nz

Central Waikato

Willie McKnight, 022 850 1207
willie.mcknight@dairynz.co.nz

Cambridge and Te Awamutu

Fran Bennett, 027 702 3760
francesca.bennett@dairynz.co.nz

South Waikato and Lower Waipa

Steph Gudgeon, 027 808 0170
stephanie.gudgeon@dairynz.co.nz

Eastern Waikato

Chris de Wet, 027 180 04410
chris.dewet@dairynz.co.nz

King Country

Frank Portegys, 027 807 9685
frank.portegys@dairynz.co.nz

Western Bay of Plenty

Kevin McKinley, 027 288 8238
kevin.mckinley@dairynz.co.nz

Reporoa and Central Plateau

Moana Puha, 027 593 4122
moana.puha@dairynz.co.nz

North Whangarei and Far North
Currently recruiting

Kaipara and South Whangarei
Hamish Matthews, 021 242 5719
hamish.matthews@dairynz.co.nz

North and South Auckland
Mike Bramley, 027 486 4344
mike.bramley@dairynz.co.nz

North East Waikato
Stephen Canton, 027 475 0918
stephen.canton@dairynz.co.nz

Eastern Bay of Plenty
Graeme McKenzie, 027 808 1067
graeme.mckenzie@dairynz.co.nz

Regional manager:

Mark Laurence, 027 704 5562
mark.laurence@dairynz.co.nz



North Taranaki
Leah Pranker, 027 328 7019
leah.pranker@dairynz.co.nz

Hawkes Bay and North Taranaki
Janine Swansson, 027 381 2025
janine.swansson@dairynz.co.nz

Central Taranaki
Currently recruiting

Coastal Taranaki
Charlotte Lawrence
charlotte.lawrence@dairynz.co.nz

Manawatu
Tegan Pope, 027 808 3411
tegan.pope@dairynz.co.nz

South Taranaki
Talissa Squire, 027 180 03499
talissa.squire@dairynz.co.nz

Wairarapa and Taranaki
Shayla McGrory (cover), 022 853 6906
shayla.mcgrory@dairynz.co.nz

Regional manager:

Anna Hall, 027 411 5663
anna.hall@dairynz.co.nz



Top of South Island
Currently recruiting

Hurunui and Kaikoura
Ross Bishop, 027 563 1785
ross.bishop@dairynz.co.nz

North Canterbury
Mattes Groenendijk, 027 257 9605
Mattes.Groenendijk@dairynz.co.nz

Central Canterbury
Alex Perrott, 027 379 8069
alex.perrott@dairynz.co.nz

West Coast
Dan O'Keefe, 027 808 0133
dan.o'keefe@dairynz.co.nz

Mid Canterbury
Heather Donaldson, 027 593 4124
heather.donaldson@dairynz.co.nz

South Canterbury
Alice Grave, 022 853 6839
alice.grave@dairynz.co.nz

Regional manager:

Guy Michaels, 021 302 034
guy.michaels@dairynz.co.nz



North Otago
Kirsty Peake, 027 808 3098
kirsty.peake@dairynz.co.nz

Central Southland
Currently recruiting

Eastern and Northern Southland
Keely Buckingham, 027 524 5890
keely.buckingham@dairynz.co.nz

South Otago
Veronica Oostveen, 022 854 1452
veronica.oostveen@dairynz.co.nz

Western Southland
Nathan Nelson, 021 225 6931
nathan.nelson@dairynz.co.nz

Timing's everything when it comes to interest rate cuts



Mark Storey
DairyNZ head
of economics

DairyNZ's Econ Tracker takes a deep dive into the impacts of reductions in the interest rate on farm finances.

The fluctuations in dairy sector payouts, interest rates and operating costs create significant challenges for farm businesses. Creating robust budgets, cash flow forecasts and contingency plans helps farms stay prepared for variable income and rising costs.

A tool designed to support farm business financial planning is the Econ Tracker, which uses the most recent DairyBase and other sector data to form the forecasts, which are updated quarterly.

In the June 2024 quarterly update of the Econ Tracker, we predicted a challenging season for farmers, largely due to steep operating and non-operating costs, especially high interest payments driven by elevated interest rates.

Across August and early September, however, the combination of signalled declining interest rates and improved farmgate milk prices created a more favourable outlook for New Zealand dairy farmers.

With a lot of attention on interest rates, the September 2024 quarterly update of the Econ Tracker provided a deeper analysis of what interest rate changes and timings could mean for dairy farmers this season.

The alternative scenarios we explored showed how the timing of interest rate reductions will influence the discretionary cash position of farmers. We could see that earlier rate cuts would result in greater cost savings and a stronger cash position, compared to reductions made later in the season.



This is pointing towards a stronger financial footing for farmers, with more flexibility to address future operational needs or reduce debt.

For example, if the interest rate dropped from 8.25% to 7.50% by December 2024, compared to dropping to 7.50% by March 2025, it would improve the cash position of the average farmer by \$5,675 for the current season, relative to the alternative (three months later) scenario.

The improved forecast payout price led to an increase in Net Dairy Cash Income and other key revenue measures. This equates to an improvement of \$91,897 in Net Dairy Cash Income for an average owner-operated dairy farm compared to the June 2024 forecast.

Farm working expenses, however, are forecast to increase slightly driven by inflation in key operational areas such as electricity, irrigation, wages and repair and maintenance costs. A portion of this increase is attributed to deferred costs from previous seasons, as farmers catch up on repairs and maintenance.

Despite rising expenses, the combination of higher income and reduced interest costs is expected to result in an improvement in farmers' end-of-season cash position. This in turn is pointing towards a stronger financial footing for farmers, with more flexibility to address future operational needs or reduce debt.

These insights underscore the impacts of the timing of future interest rate adjustments on the financial performance of dairy operations.



Dairy farmers could see improved cash flow this season as rising milk prices and potential interest rate cuts offset increasing costs.

The DairyNZ Econ Tracker is a robust tool used to support farmers and the sector to progress a positive future, including supporting DairyNZ's science, research and development work alongside farmers.

Farmers and rural professionals can use this tool to help with financial planning, forecasting and budgeting.

The new forecasts are published on the DairyNZ Econ Tracker and expressed as national or regional averages, which do not necessarily reflect individual farm situations.

The Econ Tracker can be accessed at dairynz.co.nz/econtracker



Economic data at your fingertips

Keep your farm business planning on track using the new DairyNZ Econ Tracker, giving farmers and sector professionals some of the latest economic data in one place.

- ✔ Explore trends in farm budget items over time
- ✔ See a snapshot of our dairy sector's current economic position
- ✔ Understand how major farm expenses are likely to change in the coming years

Try it today at dairynz.co.nz/econtracker

