# HE BULLETIONS SPRING 2024

# Today, our commitment remains to breed better cows, faster

Over the last year, we invested \$21.2 The successful programmes we have million into our R&D efforts, which includes both our methane and heat tolerance programmes. We are committed to these investments and are continually innovating to create a sustainable future for New Zealand's dairy sector and the farmers within it.

The dairy sector needs to continue to evolve - for climate change and because of it, and therefore the production efficiency of our national herd has never been more important.

Efficient cows produce more milksolids per kg of feed eaten, have a fertility advantage and have a lower emissions footprint per kg of milksolids.

Farmers consistently using our genetics are breeding genetically superior animals, and at a faster rate.

In fact, long-term users of LIC genetics have continued to double the rate of genetic gain in their herds over the last 10 years - these gains are cumulative and permanent, delivering long-term benefits into the future.

# Partnering to breed a low methane cow

We are always looking at how we can innovate to provide our farmers with a range of products to help them solve climate change challenges.

built with our partners are enabling us to make significant progress towards achieving our commitment to help farmers reduce emissions on farm.

Our methane research programme, in collaboration with CRV and Pāmu and with funding from the NZ Agricultural Greenhouse Gas Research Centre (NZAGRC), is progressing well.

We continue to investigate the link between methane emissions from bulls and their offspring with the intention of breeding more climate-friendly cows that produce less methane.

The programme is now in its fourth year. We initially found that a bull's genetics do play a role in how much methane they emit: the lowest bulls in the trial emitted around 15-20% less methane than the average after accounting for food eaten.

In 2022, these bulls were mated with heifers from Pāmu farms, and the offspring that were born in 2023 were this year tested for their methane emissions to ensure the genetic variation was representative of their fathers.

A total of 398 animals were tested and LIC will report on the results in the coming year.

We hope to produce a methane breeding value and give dairy

farmers the opportunity to access low methane elite genetics by 2026.

Corriaan Sowman

IC chair

This has the potential to make a real difference to farmers by helping to ensure emissions reductions don't come at the cost of reducing milk production.

# Developing a genetic solution for heat tolerance

Another long-term commitment we have made is to our heat tolerance research programme.

The aim of the programme is to provide New Zealand farmers with high genetic merit dairy cows with improved heat tolerance.

Heat stress has significant welfare implications for animals. For dairy cows it can also impact feed intake, milk production, fertility and calf birth weight.

Introducing the 'slick' gene into the country's dairy herd could allow for a significant improvement in dairy cow performance in hotter temperatures over the long term.

We have completed a climatecontrolled study on calves, which was a follow-on from a pilot trial conducted last year to test the response to cold stress.

This trial had positive results, showing no significant difference in response to colder conditions between slick calves and non-slick calves.



David Chin C chief executive

Among the most significant impacts we can make as a business is through helping to reduce the environmental footprint of the national dairy herd.

While making meaningful contributions to New Zealand's emissions targets is a long-term game, now is the time to help our farmer shareholders breed more efficient and climate-friendly cows.

Throughout the last year we have worked hard to support both our organisation and farmers through managing cost pressures and other challenges.

We would like to thank our employees and farmer shareholders for their ongoing support and hard work.

We continue to believe that the co-op is in a strong position to navigate the unique challenges facing the dairy sector, both now and into the future.

'Intro article is an extract from LIC's recently released Sustainability Report 2024: lic.co.nz/ news/lics-2024-sustainability-report

Corrigan Sowman LIC chair

David Chin LIC chief executive

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# South Taranaki Herd Leaps Ahead on BW/PW

Sexed semen & high heifer eplacement numbers provide options

- Imagine generating enough replacements for your 380-cow herd by the end of the first round of mating (three weeks).
- Imagine a mating plan that results in up to 80% of your replacements coming from the top-half of your herd, based on breeding worth (BW) rankings.
- Imagine producing 40 excess replacements, which you have the option of either selling or sending to an alternative farm to help bolster another herd's genetic journey.

That's what Okaiawa farm owners Steven and Gwyneth MacDonald are doing.

And a glance at their herd data over the past 10 years is impressive.

During the past decade, the herd at their home farm, Inaha, has averaged a genetic gain of nearly 19BW per year.

During the past five years alone, the Inaha herd has averaged genetic gains of 41BW per year.

Unsurprisingly, production worth is following suit: Annual production worth gains during the past five years, at 58PW, puts them at the top of the pile across the Taranaki region.

# Change has clearly been happening: What are the MacDonalds doing?

"We've been doing the Sexed Semen thing, so in the first three weeks we're essentially getting all our replacements," Steven says.

"This is our fourth year... although we did it back-in-the day, using frozen semen, when it was more of a Friesian herd - back then it was merely to get the heifer numbers up to sell them for export."

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But the motive today was different, Steven said.

The fresh sexed semen of today offered near-normal conception rates - which is within 5% of fresh conventional semen. This compares to the frozen alternative, which typically has conception rates that are 13% below that of conventional semen.

Steven said utilising 9 fresh straws a day for the first 21 days of AB had allowed his son Danny (who sharemilks on the farm) to target the top cows each day for insemination.

"Any other good cows that are showing a heat go to Forward Pack," Steven said.

"And we know who the bottom 20% of the herd is so they all go to beef. In the near future we could look at hitting the bottom 30-40% with beef.

"Our heifers are getting better every year, and we're getting less passengers probably because we're breeding from the top-half of the herd, and we're culling hard on the heifers that don't suit us or the system... they're identified pretty quickly."

# The OAD factor:

Another significant change on the system 3 farm was a decision in the past decade to transition to a once-aday herd (OAD), Steven said.

"About 10 years ago our herd was mostly-Friesian, F12-plus. Our objective was to continuously improve in terms of milksolids, efficiency, and repro. About 7-8 years ago we started

putting some of the herd to OAD for parts of the season, and then we went to OAD for our first- and secondcalvers, all year.

"Then for three years about 70% of the herd was OAD all season, and for the past three seasons we've been totally OAD.

"We're now doing 380kgMS per cow, but the goal is to soon get to 400kaMS.

"We believe Friesians aren't ideal for OAD, so we've gradually gone more crossbred and Jersey over that time."

Steven said the decision to go OAD was a pragmatic and practical one. Beside Danny sharemilking on the farm, he also looked after the 270ha run-off down the road where replacements were reared, together with about 40 beef animals and 600odd sheep (about 50ha on the run-off was planted in pine).

Danny was also a young father-ofthree, and OAD milking made for a better work-life balance.

# The mating plan:

The farm's mating plan included colour codes for each cow, with colours representing what BW-quartile in the herd she fell in ('green' for high-BW cows, 'yellow' for mid-to-high BW, 'red' for lower-BW cows, and 'grey' for cows to avoid breeding replacements from, which go to beef).

The herd used GeneMark Genomics, so parentage was DNA verified and the robust data made for solid selection decisions at both mating and calf-selection time.

"It's working well, we needed 85 replacements and we got 126 this year, so that meant I had 40 surplus to send to the South Island," Steve said

(Steven and Gwyneth own two herds in Southland, one is on a leased block, and the other herd is on a Wyndham farm they own).

Last season, with natural mate bulls involved at the tail-end of the 10-week mating plan, the empty rate was about 7%.

Collar technology, introduced that season, had made heat detection easier, and the wider repro results had given the farm the confidence it needed to go all-AB this year, Steve said.

"This year we'll mate for a total of 9 weeks. The last three weeks the cows will go to SGL crossbred, bringing them forward (calving date) 10 days so we have more days in milk. So in essence we're bringing things forward 17 days."

# Farm Facts:

Farm Owners: Steve & Gwyneth MacDonald

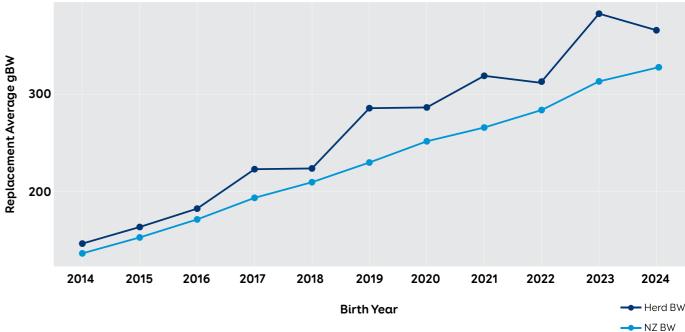
Three dairy operations: Inaha Farm (home farm), Okaiawa, South Taranaki, 125ha, milking 380 crossbred cows. Run and managed by sharemilkers, Danny & Chloe MacDonald.

Dacre Farm, Wyndham, Southland, 246ha, milking 550 cows.

Far South Farm (leased), Southland, 155ha, milking 560 cows.

One run-off: Located near Hawera. 270ha (120ha owned by Steve & Gwyneth; 150ha owned by Dannay and Chloe MacDonald); sheep &

# **Genetic Gain Trends**





beef block, including grazing for Inaha's dairy replacements.

All dairy farms herd test four times a season.

# Inaha (home farm):

Once-a-day milking all season.

Mating: Sexed Semen x 9 straws/ day for 21 days; Forward Pack KiwiCross 28 days; SGL Hereford & Charolais Beef; SGL Dairy for final 3 weeks of 9 week mating programme.

Collar Technology.

GeneMark Genomics.

# BEEF WRAP A New Ingredient on the Horizon?

LIC's research and development team is working together with Focus Genetics and Pāmu on a project that's geared toward producing a new high quality dairy-beef sire.

LIC

The goal is to get a consistently saleable, fast-growing, quality calf that will give a high return and hit carcass and meat quality targets before their second winter.

LIC is looking forward to sharing more with its farmer shareholders who are set to benefit from this collaborative project, especially as interest in beef offerings ramps up.

Paul Charteris, LIC beef genetics expert, said it was no surprise that beef straws into dairy herds were significantly increasing, with many dairy farmers today focusing on achieving an ideal balance on their farms - increasing the value of calves born, and diversifying revenue streams.

"It's therefore well-recognised that beef straws are no longer just a matter of mating dairy cows for the first six weeks and then inseminating with beef later," Paul said.

"We're seeing a lot more farmers adopting a 'beef-up-front' strategy, with beef straws being used in the bottom 50% of the cow herd on day one of matina.

"It's increasingly becoming part of a tactical mating plan that adds as much value to increasing numbers of earlyborn calves in the current season, while maximising the opportunity for each cow to get back in calf."

LIC's livestock selection and genetics teams continue to identify and develop sires with traits that are likely to be genetically superior in a multitude of ways: calving ease, reliability. growth, feed conversion efficiency, hitting carcass weight at the right time of year, and hitting the bullseye on meat-quality traits.

The beef sire selection process had become increasingly targeted and more sophisticated in recent years, Paul said.

Individually superior bulls continued to be targeted by LIC, sourced from breeding programmes that specifically met dairy-beef outcomes.

The modern breeding scene had seen the development of new beef breeds such as Stabilizer®, Profit Maker® and Speckle Park - breeds which had a high level of performance bred into them from the get-go.

Added to that were bulls that had been genetically selected for generations that exceeded those bulls from decades ago in every aspect imaginable, Paul said.

The combination of calving ease, growth to weaning, carcass and meat quality carried with them estimated breeding values (EBVs).

High EBVs were being observed in some of the very best beef cattle, which were part of specific breeding programmes. "These genetics are extraordinary, and simply did not exist anywhere in the world as little as a couple of decades ago," Paul said.

"We're proud to work with bull breeders from Northland to Southland who are making such great strides in this area."

LIC was keen to push the boundaries of what could be achieved by investing in dairy beef breeding programmes, he said.



Beef straws into dairy herds are significantly increasing and Kakahu Milestone has proved hugely popular in 2024



Individually superior bulls continue to be targetted by LIC - Maungahina Stud provides LIC with Speckle Park

# The GeneGenie: **Diversifying Our Jersey Gene Pool**

A collaboration between LIC and VikingGenetics to unlock the genetic potential of the Jersey breed in New Zealand & Nordic Countries.

This spring marks the start of a collaborative effort between LIC and European cooperative VikingGenetics to trial one another's Jersey-bull genetics - with the goal of identifying new bloodlines that perform well in the respective dairy farm environments.

VikingGenetics is a cattle breeding cooperative owned by more than 16,000 dairy and beef farmers in Denmark. Sweden, and Finland.

Initially, the pilot's purpose in New Zealand is to utilise sexed semen to generate yearling daughters to be born next spring; these daughters will be DNA-tested for their parentage and genomic traits, but will ultimately go on to be proven in New Zealand conditions (i.e. after they begin milking in spring 2027).

At least 35 herds from throughout New Zealand are taking on an average of 30 straws per herd, and participating trial farmers have agreed to utilise the straws on their high breeding worth (BW) cows.

Bull calves, born from this collection of proven daughters, will be targeted for purchase by LIC in 2027 (as well as in any subsequent years, depending on the length of the pilot).

About 25 bull calves will enter LIC's annual Sire Proving Scheme, with about a further 10 bull calves earmarked for the Jersey Future programme.

By Spring 2028, at the earliest, the best 5-10 bull calves among the group above (35) are forecast to become commercially available to New Zealand farmers.

Creating outcross heifers, thereby expanding the gene pool in Jersey herds throughout New Zealand, is highly appealing to Jersey farmers, says Danie Swart, LIC bull acquisition manager.

Inbreeding was a recognised challenge within the industry, he said.

LIC chief scientist Richard Spelman

added that New Zealand Jersey bulls were renowned for siring highly fertile, efficient, medium-sized cows that consistently produced high percentages of milk solids.

Their ability to convert feed into milk with exceptional efficiency had cemented their role as a valuable asset in New Zealand's dairy industry, he said. "We're deeply committed to safeguarding the future of the Jersey breed in New Zealand, and worldwide."

"This forward-thinking solution will create stronger genetic connections between the Nordic and New Zealand Jersey populations and reduce the risk of inbreeding. We look forward to being able to offer more genetic diversity to our New Zealand Jersey herds in the coming years."

Meanwhile, Peter Larson, of VikingJersey said its bulls were renowned for siring profitable, medium-sized cows with exceptional health and fertility: their cows were breed leaders in fat and protein percentages, purebred, free of monogenetic disorders, and offered A2A2 and BB caseins, he said.

"This collaboration is a step forward in the overall genetic landscape of the Jersey breed, offering breeders a sustainable way to enhance herd health and profitability."

The collaboration is designed to help address concerns over inbreeding within the two populations in New Zealand and across the Nordic countries.

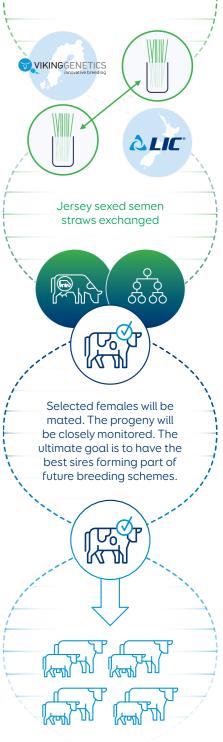
All progeny will undergo comprehensive testina, verifying their parentage, data from milk recording, health registration and classification, and more.

It is expected between 10 and 20 bulls from both LIC and VikingGenetics will be enrolled in the project annually, with the ultimate goal having the best sires forming part of future breeding schemes.

The project is a breeding collaboration, and only extends to the exchange of genotypes for breeding purposes (i.e. not the market distribution of doses); semen from VikinaGenetics is not available to New Zealand dairy farmers via LIC.

# LIC and VikingGenetics collaboration

Exchanging Jersey sexed semen to bridge the genetic strengths of the two regions' dairy industries by identifying new bloodlines



Sires form part of future breeding schemes and introduce new bloodlines to the Jersey populations in NZ and Nordic Countries.

# Wise Words from the Wise Guy: Summer Management.



Ways to manage through summer varies from one region to the next, but tried and true principles remain the same for most

From the fully-irrigated farms of the south, to the heat and humidity of the dryland typically seen in the north, plans and techniques to manage through summer will vary from regionto-region.

However there remain some general principles and methods that are common to nearly all dairy farmers, and below are some key points to consider as the sun and wind take over from the rain and cold.

# Plan & Review:

The goal is to keep as many cows in milk for as long as possible into autumn, and then reassess the changing situation regularly.

This must be done so long as it does not impact on the performance of the business next season (such as risking low average pasture cover, APC, and low body condition score, BCS).

Have a plan in place early and revise it every two weeks as dry conditions, and other variables, change.

Think about how you will adjust during these changes and write your ideas down.

# Push feed forward:

Planning in spring to grow some summer crops can be a way of pushing quality summer feed from the springtime (of surplus grass) to a time when it's needed more, and letting the cows do the harvesting.

Otherwise less crop area sprayed out should mean more grass silage harvested on farm.

Meanwhile, targeting poor-performing paddocks for summer crops can also improve the overall performance of the pastures.

Tactical use of nitrogen in December - to build APC higher and allow for rounds to be lengthened - is a proven method to push feed into a time of higher need.

# Stocking rate:

Stocking rates need to be reduced where possible from February onward.

This can be done by culling cows that you won't be keeping for next season.

You can also cull or dry off any cows that are drying themselves off and now gaining excessive condition.

by Darren Sutton, FarmWise manager

Anything producing fewer than 0.5MS per day (5 litres) must be questioned (i.e. she's likely to be consuming valuable supplements that she's not providing a good return on - those supplements are better-directed to cows doing 1.5-2MS per day).

When you have done your final pregnancy test you will know which cows are empty.

It may be best to drop these first to save feed for the in-calf cows.

Space at the works can jam up, so slowly dropping cows every two weeks can alleviate that.

# **Rotation length:**

Most non-irrigated farms in summer will be on at least a 30-day round length through summer (irrigated may be able to hold at 21-25 days).

The maxim, 'the drier the drought, the longer the round length' holds true.

A slower round length allows for higher average pasture covers, which reduces the amount of evapotranspiration.

It also helps when drought-breaking rains arrive to maximise re-growth rates.

When it finally rains (50mm-plus) after a dry period on non-irrigated farms, a lot of the pasture will rot quickly and will reduce cow intakes further; this can be expected for 3-4 weeks while the pastures get growing again.

To help reduce the fall in milk production at this time, try to save some grass silage that you can feed to replace the 'melting' pasture.

# Variable milking frequencies:

Milking once-a-day (OAD), three times in two days, or seven-in-ten are all options that will help keep as many cows as possible milking for longer into the summer and autumn (before drying off decisions have to be made).

Most cows will naturally partition energy away from milk production and will hold or gain some BCS.

Every eight weeks on OAD will provide an additional 0.25 BCS on cows, compared to continuing to milk twicea-day.

Feeding levels should not be dropped when going onto OAD, but should actually be lifted for the first week to reduce the production drop.

# Supplements:

Ring-fence any supplements that you know you will need for winter first, then think about what you have on-hand and how this will be best fed out.

The cheapest and most readily available feed is currently palm kernel (PK), and the economics of this in a feed deficit stacks up (with PK costing about 45 cents landed and fed per kg of DM).

When cows are grazing to a 1500 residual or less, expect a 70-100a milksolid response per ka of drv matter (DM) eaten. Therefore, there is a strong-enough margin that should allow for marginal feeding costs to be covered (when working on a \$9 milk price).

Usually energy is all that is needed when considering cost-effective supplements, but on dryland farms the crude protein (CP) levels in the pasture can drop in very dry conditions, maybe to less than 16% CP.

At this level there will be some milk response to feeding a supplement that has higher CP, which may also help reduce fat evapotranspiration index (FEI) grading issues.

Palm kernel is about 16% CP, so it only holds its own.

Maize silage is 8-9% CP, so this drops the total CP in the diet, but is still worth feeding when cows are at risk of being underfed.

You can look to add protein feeds to your PKE mixes, but these products quickly lift the cost.

# Sacrifice paddock:

If the dry does turn into a drought, reducing overgrazing of pastures will become imperative.

A great way to avoid overgrazing is to milk the cows into their allocation of 12 or 24 hours of pasture, and when a 1500-1600 kgs DM/ha residual has been achieved, move the cows onto a sacrificial paddock where supplements can be fed to them.

Cows can remain in the paddock until the next milking (or you can do this in reverse, when the cows can get all their pasture at night).



Perhaps the best paddock to sacrifice will be a poorer performing one that needs renovating, but good water and shade are also very important.

# **Replacements:**

Remember to keep an eye on your replacements out at grazing.

If your farm is drying out there is a good chance that so too is your grazier's farm (out of sight should not mean out of mind!).

The summer and autumn months are often when good calves turn into below-target R1s.

Don't assume. Go and check, and work out a plan if needed to protect them through the dry. Keep the communication lines open with your grazier.

Take the time to write your plan of what actions you will take and by when. And seek help if you need help planning these out.



A slower round length allows for higher pasture covers, which reduces



# Foxhall Fundamentals FOX HALL Repro Done Well

# **Farm Facts**

Business Type: Owner-operator with contract milker Location: Waianiwa, near Invercargill Farm Size: 224ha effective milking platform Peak cows: 717 **PSC:** 1 August MA cows, 23 July Heifers Stocking Rate: 3.2 cows per ha Farm System: System 3 Herd BW average: 211/46 Herd PW average: 239/66 Breed average: F13J3 Liveweight BV average: 25.02 Production: 349,240 kg MS/year 2023/2024 season, 1,545 kg MS/ ha, 487 kg MS/cow Production (3-year average): 337,109kg MS; 1500kg MS/ha

Southland couple Michael and Fiona O'Hare own seven farms throughout the region, but when it comes to reproduction it's their 224ha Foxhall dairy block near Invercargill that's the stand-out from which other farms can model themselves on.

Foxhall was converted to a dairy operation in 2015, and herd numbers have gradually increased since that time.

Now that Michael is comfortable with cow numbers (717 peak cow numbers), today the focus is squarely on improving herd quality and efficiency.

And rather than relying on large-scale investment in technology, the couple's strategy for improvement rests on a conveyor belt of well-grown quality replacement heifers, the continued dedication of key staff, and superior repro results.

Foxhall is a classic example of a farm that focuses on the fundamentals of balancing production with reproduction.

While maintaining annual production at 337,000 kg milksolids (468 kg MS/cow/

year) during the past several years, the farm's six week in-calf rate has ranged between 75% and 82%, with a not-in-calf rate of between 9% and 11% (significantly better that the regional averages of 70% and 14% respectively).

# How do they do it?

There are eight major focus areas for reproductive improvement, and although Foxhall pays attention to all areas (to some degree), it's a focus on 3-4 disciplines in particular that appears to set up the herd for continued success.

- 1. Accurate heat detection and highlyengaged staff;
- 2. Nutrition and Body Condition Score (BCS);
- 3. Young stock/heifer management, and;
- 4. Bull power.

# Accurate heat detection involving highly-engaged staff

Michael says the farm has a simple mating plan: Artificial breeding (AB) takes place in the first six weeks of mating using Premier Sires Forward Pack, ensuring a mix of young genomically-selected bulls and daughter proven sires are mated to all on-heat cows.

After the AB period, natural-mate Jersey bulls are introduced to the herd for four weeks, and once mating is finished, cows identified as still not-incalf leave the farm as soon as practical.

More recently, scratchies for the first and second round have been used in conjunction with tailpaint, but that wasn't necessarily the key to great submission and conception rates, Michael says.



Michael O'Hare

"You need the right people on the ground that are capable and have a desire to succeed."

In the first six years of Foxhall's operation, Ven, (a Filipino farm manager/contract milker) took it upon himself to be the main observer and 'picker of heats', says Michael.

"He stood on the stand himself, and he did that every day for the first six weeks (the AB period). He wanted to learn, he was driven, and he got to know the herd, and every year he just got better and better. He had great attention to detail.

"We've since employed another Filipino guy, little Mike, and he's taken over on Foxhall but they continue to learn and challenge one another. They make a real effort to get the cows in-calf, and they've proved themselves."

In the lead-up to planned start-ofmating, cows are given every chance to start their cycling (the farm does not use CIDRs).

The entire herd is metri-checked. Blood samples are also taken from the herd to check for mineral deficiencies, with shortfalls addressed through Dosatron.

What also makes a difference is that Mark Bennett, LIC agri manager, turns up prior to AB with several MINDA reports from which learnings are taken from the previous season.

Mark briefs the staff on where improvements can be made, and provides material that helps staff in what to look for when identifying cows on-heat.

# Feed is King: Nutrition, Weight Monitoring, and Body **Condition Score**

Repro begins from the day a replacement calf is born.

"The farm policy is that the calves aren't allowed to leave the dairy farm until they're 100kg, so it's up to the contract milker to get them there."

As the calves are given a good start at Foxhall, the body condition score of the milking herd post-calving is carefully monitored by Michael and 'Little Mike' (contract milker Mike Pelesco).

"Before mating if light and not cycling, we put them on once-a-day (milking) " says Michael. "And to me that's a game-changer. You might sacrifice a little bit of production, but you get them back-in-calf."

Cows are also well-fed to bring them back to condition in time for mating (4.5 for heifers, 4.0 for cows).

A mixture of palm kernel, distillers dried grains (DDG), silage, and pasture is provided to ensure cows are on a rising plane of nutrition heading into mating.

"If there's a shortage, I like to know there's plenty of surplus silage and feed lying around the place to fall back on," Michael says.

"I'd rather have it sitting there than go looking for it when it's needed. We try not to have a hungry animal or a feed shortage before we act. We like to act well before we run out."

# Young stock/heifer management

Once they reach their target 100kg weight at Foxhall, replacement calves head off the main dairy farm.

In 2018, Michael and Fiona purchased an 1162ha run-off at Wyndham to serve their multiple dairy farms.

When they arrive at Wyndham, replacement calves from farms across the wider business are graded according to their weight classes, "so the competition for feed is kept as even as possible," Michael says.

The calves are weighed at least 3-4 times in their first year, then 2-3 times as rising two-year-olds. At 15 months of age, the calves are naturally mated to Jersey bulls to ensure the first calving is relatively easy.

When they're ready for the milking platform, the replacements arrive back at Foxhall at their mature weight, averaging 530kg, "so they hit the ground running from there."

Michael describes getting the heifers to proper condition as "a game changer" for the herd in that it secures a good future in terms of both production and reproduction.

# **Bull Power**

Before being purchased, selected vouna Jersev (natural-mate) bulls are tested for BVD and EBL, and arrive at Wyndham one year ahead of mating where they are left to graze and mature.

"We buy them as R2s at the end of mating," Michael says.

"When it comes to mating the heifers at Wyndham, the bulls will have been



Little Mike' with part of the herd at Foxhall

there nearly a year. We put the bigger bulls out (with the R2s) for the first three weeks. Then we pull those bigger bulls out and they get rested before they go off to the dairy farm, and they're replaced by the smaller bulls."

At the main dairy farm, the bull ratio is 1 to every 20 cows yet to conceive. "They'll arrive at the end of the first round of AB, about 20 November, so they get a few weeks rest."

Once their work begins, the bulls are rotated regularly to ensure they are fresh, keen, and healthy.

# The 8 Areas of Focus for **Better Repro Results:**

Calving pattern: Aim for 88% or more of your cows to be calved by week six of calving.

- More days-in-milk
- A break between calving & mating
- More time for cow recovery to reach peak fertility as mating starts.

Heifer management: Heifers that meet target liveweights at 15 and 22 months are more likely to get in-calf quickly at 15 months old and get back in-calf early as a first calver.

Nutrition and body condition: Nutrition and body condition influence many of the other key management areas.

Heat detection: Cows must be submitted for AB at the right time to achieve good conception rates.

Service bulls: Make bull selection and management is right.

**Cow health:** Healthy cows are more productive and perform better in the long term for your herd.

Artificial breeding: Artificial breeding insemination technique and semen handling practices can impact conception rates.

Genetics: Appropriate bull selection which are mated to the right cows for quality replacements. Keep the right calves to rear as replacements.

# **From the Breeding Desk**

As the graduation season unfolds, a wave of enthusiasm is sweeping through the livestock selection team as we celebrate the arrival of 20 new 'Spring bulls' who have secured their positions within various Premier Sire teams.

As I write, and go to review the latest Ranking of Active Sires (RAS) list, your cooperative boasts pole-position across the Holstein Friesian, Crossbred, and Jersey categories – all these are new graduates.

Additionally, LIC's name is against:

- the 38 highest-ranked Holstein Friesians (including occupation of 43 of the top-50 spots);
- the top 8 Jerseys (including 43 of the top-50 spots);
- the top 13 crossbreds (including occupation of 46 of the top-50 spots); and
- the top 28 on the 'all breeds' list (including 47 of the top-50 spots).

And get this: Of the top 50 on the 'all breeds list', 29 (58%) are new LIC graduates.

These new (graduate) bulls are already averaging more than 80 herd-tested daughters, with nearly half the bulls having undergone liveweight and conformation evaluations; this serves to underline LIC's dedication to quality and showcases the efficiency and accuracy of the cooperative's Sire Proving Scheme (SPS).

A key factor in the above success story is LIC's Embryo Transfer (ET) programme, which contributes nine of the 20 Spring bulls within this year's Premier Sires teams.

ET technology is revolutionising LIC's breeding programmes, and clearly has the power to significantly enhance genetic gain.

To add to the excitement for the livestock selection team, and contributing breeders, we're now on the cusp of selecting the next cohort of young bulls born this spring.

The selection process for this crucial task will be completed in November, with all purchased bulls due to arrive at LIC by February 2025.

We expect this next cohort of bulls to be yet another step up across the board.

Focus will be given to improvements across gBW, production, fertility, conformation and udders – along with a staunch consideration to diversity and polled.

With polled in mind, we're listening to the evolving preferences in the industry.



by Simon Worth, \_IC livestock selection manager

Polled genetics are gaining traction as farmers increasingly value the benefits of not having to dehorn calves.

Over recent years LIC has intensified efforts to boost the frequency of the polled gene in the national population.

This journey continues to be rewarding, as evidenced by our growing roster of impactful polled bulls, including Whittenham MJ APEX and Dicksons AR MONOPOLL within the Premier Sires teams.

As always, a heartfelt thanks to the farmers who have partnered with LIC's livestock selection staff in developing these exceptional sire teams.

Enjoy the next few pages as the team take you through some of this Spring's highlights!

where production and good TOP's are prominent in both the maternal and sire lines.

His pedigree is stacked with cows having high production and PWs greater than 500, and the fat and protein gBVs are especially impressive.

He's sired by Lynbrook King Quadrant, who was an udder overall specialist.

Takahe himself excels in production, with his excellent combined milk solids gBV close to 90kg. He is breeding goodsized cows and his good udder overall gBV makes him an excellent all-rounder.

Takahe is available in the spring Forward Pack.

# 321022 ELLISON DEXTER ASH S3J:

From the stable of Roger and Glenys Ellison, Ash is from a well-known family in the Ellison herd, with the great cow Ellison Lauren S2J featuring in his pedigree with 10 outstanding lactations.

The sire of Ash is Riverview And Dexter S2J, who was renowned for breeding high-producing big capacious cows with good udders.

Ash is following the trend with excellent fat and protein gBVs, fertility, good capacity, and great liveweight. Ash is available in the spring Forward Pack.

### 321203 NORLANDS PKC ROXTON: The

Norlands stud of Euan Reeve bred this exciting Jersey Future bull, Roxton.

Sired by the influential bull Carrick, Roxton's dam is a great Speedway cow still going strong with exceptional production after eight lactations. She's a standout cow with a great udder even after those eight big lactations.

Roxton is a 'go to bull' in many herds that have inbreeding challenges, with bulls like Carrick, Speedway, Maumau and Warlock featuring in his pedigree.

Roxton is available in the spring Forward Pack.

## 321008 GLANTON FLYNN BRISBANE:

Rob & Alison Thwaites from the Glanton stud are the breeders of Glanton Flynn Brisbane.

The B-family in the Glanton stud is one of the most well-known families in the industry, having produced bulls like Banff and Bastille.

The maternal line behind Brisbane excels in production with PWs and LWs exceeding 600 on a regular basis.

321203 Norlands PKC Roxton

821008 Glanton Flynn Brisbane

The combination of his sire Flynn, who was an udder specialist, and his famous dam Glanton Index Brisbane, produced this bull with an exceptional fertility gBV and great capacity.

Unfortunately Brisbane has died, but there are still good numbers of frozen straws available.

# 321005 GLENUI ZAMBEZI LINCOLN ET:

Another exciting Taranaki-bred bull by Tony and Leslie Landers, Lincoln is a production machine with a combined fat and protein gBV of over 90kg.

# **'21 Jersey Jump:** LATEST 21-CODES READY TO ROLL

Spring has brought with it some great farming conditions in many areas, but for those in the deep south the persistent wet conditions have been challenging, and on behalf of LIC's sire selection team our thoughts are with you.

Spring represents new-bull graduation time, and for the past two months farmers have been phoning LIC's sire selection team with feedback about the performance of their milking daughters sired by 21-code graduating sires. It's always exciting to monitor spring bull movements from one Animal Evaluation (AE) run to the next, and to check that your favourite bulls are performing well.

With every AE run more herd test results and traits-other-than-production (TOP) figures are added, increasing the reliability of the bulls; re-ranking continues to happen along the way as more information flows in.

From an international and Jersey perspective, we're excited about the LIC/Viking Genetics three-year collaboration (see p5), in which Jersey sexed semen from some of the best



bull acquisition manager

genomic sires available in New Zealand and the Nordic countries is swapped.

But right here, right now, it gives me great pleasure to profile the next crop of exciting spring graduates.

# 321053 GREENMILE LG TAKAHE: From

the Greenmile stud of Bruce & Bronwyn Jensen, Takahe is from a pedigree





321053 Greenmile LG Takahe





Adding to his big volume and good liveweight are his impressive capacity and dairy conformation gBVs.

He's out of the successful L-family in the Glenui stud, with bulls like Lamar and Liberation originating from the same family.

His dam Glenui Baltic Laconia ET scored 8/8 for udder overall and dairy conformation. She's a big capacious cow with excellent production.

Lincoln is available in Alpha frozen.



# lt's a Black & White Decision

### In a world full of choice, why choose the black and whites as your breed of choice?

The answer is simple: Production!

The Friesian breed in New Zealand has evolved significantly since its introduction in the late 1800's.

With its roots primarily in Europe, the breed was at the time already recognised for its dominance in milk production, which remains to this day the cornerstone of the breed's endurance and popularity among traditional New Zealand dairy farmers.

The black and whites continue to go from strength to strength as the benefits of selective breeding take hold and the genetic improvements are expressed.

When thinking Friesians, we do however nowadays think beyond production

as a stand alone benefit: Attributes like efficiency, durability and resilience spring to mind. Friesians have longproved their ability to adapt and thrive in New Zealand's pastoral systems.

The breed today coverts feed into milk efficiently, in-turn minimising costs and maximising returns - this is no longer the sole domain of their golden-coated cousins!

Need a little more convincing?

Check out the latest group of Friesian graduates joining Premier Sires teams or available through Alpha this spring; their outstanding production capabilities are obvious and evident.

# 121035 BALANTIS TR TRICK-ET S1F:

Bred by the Singh family in Southland, Trick headlines the efficiency team. With commendable fat and protein percentages of 5.3 and 4.2 respectively, Trick ensures

senior sire analyst

by Michele van der Aa,

profitability within his 605 litres of volume, with minimal waste.

His family's proven track record includes 119074 Balantis MG Tiger-ET S2F, and the formidable dam, Tigerlily, continues to deliver success. This season, she boasts not one, but two full brothers graduating so be sure to keep an eye on 121036 Balantis TR Tonto-ET S1F as he too steadily ascends the ranks.

### 121005 PEMBERTON GG PROPANE

**S1F:** Currently holding the prestigious title of the top Friesian bull for gBW, Propane boasts an impressive 678 gBW.

He offers a remarkable combined yield of 143 kg of fat and protein, supported by a moderate liveweight of 54kg.

Propane hails from a maternal lineage renowned for its longevity.

His dam, Pippa, a seven-year-old Kelsbells daughter, consistently averages more than 500kg milksolids per lactation.

Given both her dam and granddam each completed 10 successful lactations, it's evident Pippa has much to offer.

Bred out of Matamata by Sandra and Steve Pemberton, Propane was included as a Forward Pack bull earlier in the year and has well and truly cemented his spot as a Premier Sires bull.

# 121053 BUSYBROOK BE IMPLY-ET

**S2F:** For those seeking a bull to nominate as a late addition this spring, look no further than Imply.

This impressive powerhouse is producing remarkable production figures, with 81kg of fat and 66kg of protein.

Hailing from the esteemed Ivy family within the Busybrook stud, bred by Nathan and Amanda Bayne of Oamaru, Imply boasts an exciting pediaree featuring a sire-stack of Equator and Gauntlet.

With well-formed udders and commendable dairy conformation to enhance his production, Imply is sure to sire daughters that will make a lasting impression on their owners.

Choosing the Friesian breed is a decision rooted in proven production.

Friesians have consistently demonstrated their ability to thrive in diverse environments while maximising milk output efficiently.

As we look to the future, the latest generation of Friesian bulls including outstanding individuals like Trick, Propane, and Imply, exemplify the breed's enduring legacy of performance and reliability.

With advancements in selective breeding leading to enhanced efficiency, durability, and resilience, the black and whites continue to stand out as a top choice for dairy farmers seeking to optimise their herds.

Embrace the benefits of this remarkable breed and watch your production soar.

21035 Balantis TR Trick-ET S1F



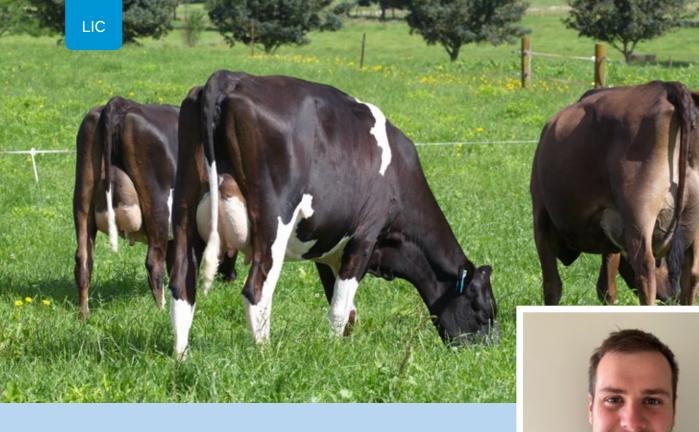
21005 Pemberton GG Propane S1F











# **KiwiCross<sup>®</sup> Countdown Continues**

Even as calving wraps up and mating is underway for all parts of the country, the genetic gain clock keeps on ticking!

That's the great thing about genetic gain - it just keeps going and going! Over time, the small year-onyear gains (which are permanent) accumulate - giving rise to those 'I'd milk a whole herd of these' type cows. In the LIC KiwiCross stable this dream is fast becoming a reality: Your cooperative's bulls are siring efficient, fertile, strong-uddered cows.

With a huge 75% of KiwiCross bulls in the table below now boasting udder overall above 0.80, this demonstrates LIC's commitment to continuously push hard on this trait.

Most farmers will take heart that 10 of the 12 bulls below have been in Premier Sires Forward Pack and Sexed Semen teams already.

Taylor Connell,

senior sire analyst

Some farmers may well have young stock from these boys on the ground now, and that's the beauty of genomics - we haven't had to wait long at all to feel confident in using them.

AB code	Bull Name	gBW	Fat gBV	Protein gBV	Liveweight gBV	Fertility gBV	Udder Overall gBV	Dairy Conformation gBV	Team
521072	BALDRICKS SPECTACULAR	595	65	39	5	4.9	1.20	0.53	Forward Pack
521050	KASBA KRACKEN ET	576	61	35	-17	2.2	0.32	0.29	Alpha Nominated
521015	PAYNES STAMINA-ET	567	66	30	39	4.1	0.85	0.46	Sexed Semen
521057	LAING KNIGHTHAWK	557	52	36	37	6.9	0.88	1.01	Forward Pack
521005	PAYNES SUBLIME-ET	555	58	44	46	5.6	1.09	0.31	Forward Pack
521060	STONY CREEK NEPTUNE-ET	550	75	23	27	4.7	1.27	0.55	Forward Pack
521011	PAYNES SCHOLAR-ET	549	61	29	-13	8.1	0.99	0.54	Forward Pack
521002	PAYNES MANOEUVRE-ET	545	47	39	-16	3.8	0.47	0.16	Daughter Proven
521046	HORSFORDS KENNINGTON	544	59	36	2	2.8	1.06	0.14	Daughter Proven
521059	HACKER ADVANTAGE-ET	510	53	27	21	4.2	0.62	0.41	Sexed Semen
521035	WIFFENS CENTURION	500	44	30	6	8.1	0.71	0.80	Sexed Semen
521039	PUKERIMU START-UP-ET	494	63	41	94	3.9	0.92	0.64	Alpha Nominated

While all the bulls above are exceptional, there are a few notable mentions:

Firstly, to Hamish and Charlotte O'Donnell from the Rai Valley: SPECTACULAR; leading the pack at 594 BW and 1.07 udder overall - he's certainly living up to his name.

Having made his mark already in both LIC's 2022 and 2023 Sexed teams, farmers with Spectacular progeny will have something to get excited about!

And there's more to come - of course we're not forgetting those who will soon be receiving Spectacular in Premier Sires Forward Pack.

Secondly, to the Watson family from Walton: At 1.27 udder overall it's hard to go past a mention for **NEPTUNE!** 

This, combined with being extremely well liked, and a huge fat gBV of 75kg, will make this lad a popular choice for those lucky enough to get their hands on some Alpha Nominated, or receive him as part of Premier Sires Forward Pack.

And finally, to Brad and Clare Payne from Cambridge: Four bulls leading with the Paynes prefix appear in the list above.

Three of these are the first to graduate from the high indexing 'S' family - including two full brothers, SUBLIME and STAMINA. No doubt the first of many from this exciting cow family!

I could fill this book with the wins we have from our KiwiCross bulls - so for now I'll leave it there!

To sign off I'll say one thing genomics is working!

Nothing beats conversations with farmers excited about the bulls mentioned in this write-up, simply because they already have daughters on the ground.

All the best with the remaining mating period! May the grass continue to grow, the sun continue to shine, and the milk continue to flow.



521072 Baldricks Spectacular





521005 Paynes Sublime-ET



521015 Paynes Stamina-ET



521060 Stony Creek Neptune-ET





# **PREMIER SIRES**°

# 2024 Holstein Friesian Sexed Team (A2) 16

	WAIMERO SAQUOON LISBON S2F	MEANDER BROKER ALLEGRO-ET S1F	TRONNOCO SG SEVERYN-ET	DICKSONS AR MONOPOLL-ET-P S2F	DICKSONS RS MARLIN-ET S1F	WAITARIA JACKPOT ZULU-ET S2F	MATTAJUDE SAQ ASSURE-ET S2F	PADDOCK WOOD BROKER MESSI S1F	
	123103 WA	123066 ME	123100 TRO	122013 DIC	122009 DIC	123017 WA	123025 MA	123101 PAI	
	WELLS RIDGE J ODYSSEY-ET S2F	BUSYBROOK S SMOKIN GUN-ET S1F	PAVNES MJ PROTECTIVE-ET S2F	BELLAMYS MOJO GOLD CHIP S2F	PAYNES SAQUOON PATRON S2F	DICKSONS FINN MINDSET-ET S1F	MAHAREE FINN N TONIC-ET S1F	MATTAJUDE MJ BRAZEN-ET S2F	
Sire	123093	123087	123005	123012	123008	122008	122029	123029	

\$501/97%

GHTED AVERAGES OF PREMIER SIRI

Management	-0.5	0	0.5	-	gBW/Rel%	\$501/97
Adapts to Milking	0.28			quickly	Milkfat	58 kgs
Shed Temperament	0.28			placid	Protein	46 kgs
Milking Speed	0.22			fast	Milk	789 Litres
Overall Opinion	0.43			desirable	Liveweight	57 kgs
Conformation	-0.5	С	0.5	~	Functional Survival	3.8%
Ctatito	0 40	,		- Tort	Milkfat %	5.1%
Stature	60.0				Protein %	4.1%
Capacity	0.42			capacious	Heifer Calving Dif	2.5%
Rump Angle	0.06			sloping	Cow Calving Dif	0.6%
Rump Width	0.49			wide		200
Legs	-0.06			curved	reruuty	0.0%
Udder Support	0.61			strong	scc	-0.04
Front Udder	0.71			strong	BCS	0.10
Rear Udder	0.45			high	NB: the reliability of a team of bulls is	m of bulls is
Front Teat Placement	0.26			close	aways nigner than using just one bull	lust one pull
Rear Teat Placement	0.31			close	Date 11/10/2024	
Teat Length	-0.33			long		
Udder Overall	0.66			desirable	(	(
Dairy Conformation	0.50			desirable	HOOFPRINT®	5

B Nitrogen
 Efficiency
 Methane
 Efficiency

# **PREMIER SIRES**<sup>®</sup>

# 2024 Holstein Friesian Daughter Proven Team

101						=	
Sire				Sire			
121029	MEANDE	R GG WII	MEANDER GG WIPEOUT-ET S1F	120065	CAVALIER 5	CAVALIER SS RIVAL-ET S2F	
121040	SPRING F	RIVER GG	SPRING RIVER GG SPYRO S1F	119035	TAFTS RHR	TAFTS RHR ORDAIN S3F	
120003	SCOTTS BV DARIUS-ET	<b>BV DARI</b>	US-ET	119025	WOODCOT	WOODCOTE MG MACHO MAN-ET	L
120085	CLOVERI	LEA MA F	CLOVERLEA MA ROMULUS S2F				
119002	BELLAM	YS DM G	BELLAMYS DM GALANT-ET S1F				
120030	BELLAM	YS GG GE	BELLAMYS GG GEYSER-ET S1F				
119079	BUSY BR	OOK DE/	BUSY BROOK DEALER-ET S2F				
120021	MCKAY E	8M BAKEI	MCKAY BM BAKERBOY-ET S2F				
119034	TAFTS R <sup>I</sup>	HD OFFIC	TAFTS RHD OFFICER-ET S2F				
		WEIGH	WEIGHTED AVERAGES OF PREMIER SIRES	MIER SIR	ES	\$454/99%	% <b>66</b>
Manag	Management	-0.5	0	0.5	-	gBW/Rel%	\$454/99
Adapts to Milking	Milking	0.36			quickly	Milkfat	56 kgs

# 2024 Holstein Friesian Forward Pack Team

Sire		Sire		
120003	SCOTTS BV DARIUS-ET	122015	TANGLEWOOD MF STORM S1F	<sup>=</sup> STORM S1F
120085	CLOVERLEA MA ROMULUS S2F	123067	MEANDER MANU ALLEGIANCE S1F	ALLEGIANCE S1F
119002	BELLAMYS DM GALANT-ET S1F	122049	LIGHTBURN SAQ GASOLINE-ET	3ASOLINE-ET
120030	BELLAMYS GG GEYSER-ET S1F	123059	WITTENHAM MJAPEX-ET P S2F	APEX-ET P S2F
119079	BUSY BROOK DEALER-ET S2F	121038	TELESIS WA HONOURABLE S2F	<b>DURABLE S2F</b>
120021	MCKAY BM BAKERBOY-ET S2F	123057	WITTENHAM JACI	WITTENHAM JACKPOT ARGOS-ET S2F
121005	PEMBERTON GG PROPANE S1F	121035	BALANTIS TR TRICK-ET S1F	CK-ET S1F
121010	DICKSONS PV MAINACT S2F	121065	LANGEVELDS POPSTAR-ET S2F	PSTAR-ET S2F
123058	WITTENHAM JACKPOT AEGON-ET S2F	123084	BUSYBROOK MJ MUDSLINGER S1F	AUDSLINGER S1F
	WEIGHTED AVERAGES OF PREMIER SIRES	MIER SIR	ES	<b>\$545/98</b> %

\$545/98	67 kgs	47 kgs	917 Litres	60 kgs	3.9%	5.2%	4.0%	2.6%		%c.0	3.5%	-0.10	0.17		of bulls is				(		
gBW/Rel%	Milkfat	Protein	Milk	Liveweight	Functional Survival	Milkfat %	Protein %	Heifer Calvina Dif			Fertility	scc	BCS		NB: the reliability of a team of bulls is		Date 11/10/2024		(	HOOFPRINT®	6 Britrogen Dethane
-	quickly	placid	forst	desirable	~		tall	capacious	sloping	wide	pervice	5	strong	strong	high	close	close	long	desirable	desirable	
0.5					ч	0.0															
0					c																
-0.5	0.35	0.35	0.19	0.45	12 C	2.2	0.64	0.50	0.12	0.59	-0.09		0.40	0.45	0.34	0.09	0.14	-0.25	0.45	0.55	
Management	Adapts to Milking	Shed Temperament	Milking Speed	Overall Opinion	Conformation		Stature	Capacity	Rump Angle	Rump Width	SUC		udder support	Front Udder	Rear Udder	Front Teat Placement	Rear Teat Placement	Teat Length	Udder Overall	Dairy Conformation	

**PREMIER SIRES**°

2024	2024 Holstein Friesian <b>A2A2</b> Team	E	
Sire		Sire	
123003	PAYNES MJ PROVISION-ET S2F	123002	PAYNES GADSBY ELEMENT S1F
122072	WAITARIA FINN TAINE-ET S1F	123030	MATTAJUDE SPYRO HOUSTON-ET SIF
122056	MAH FINN SAGE-ET S1F	123071	AUAHI SPYRO LAVISH S1F
122058	TELESIS FLEX THEODORE S1F	121017	MCERLEAN LF WISEMAN S3F
122065	PRATTLEYS LUCID FREE-STYLE S1F	123011	RIVER HEIGHTS CB VALERO-ET S1F
123004	PAYNES GADSBY ENTOURAGE S1F		
123037	MATTAJUDE SPYRO THORN-ET S1F		
123065	MEANDER SAQ LANDMARK-ET S3F		
122044	MEANDER FINN ALASKA-ET S1F		
	WEIGHTED AVERAGES OF PREMIER SIRES	MIER SIR	<b>\$511/97%</b>

0 0.5	1	gBW/Rel%	\$454/99	Management	-0.5 0	0.5	-	gBW/Rel%	\$511/97
	quickly	Milkfat	56 kgs	Adapts to Milking	0.31		quickly	Milkfat	58 kgs
	placid	Protein	45 kgs	Shed Temperament	0.31		placid	Protein	44 kgs
	fast	Milk	936 Litres	Milking Speed	0.20		fast	Milk	752 Litres
	desirable	Liveweight	62 kgs	Overall Opinion	0.44		desirable	Liveweight	50 kgs
		Functional Survival	3.3%	Conformation		ц С	~	Functional Survival	3.5%
		Milkfat %	5.0%		0			Milkfat %	5.2%
	tall	Protein %	4.0%	Stature	0.65		tall	Protein %	4.1%
	capacions		2 1%	Capacity	0.42		capacious	Haifar Calving Dif	7 8%
	sloping	Court Calvina Dif	2.1.2 C	Rump Angle	-0.05		sloping		× • •
	wide		%c.D	Rump Width	0.45		wide		0.0%
	curved	Fertility	2.3%	Leds	0.00		curved	Fertility	4.0%
	strond	SCC	-0.11	Lidder Support	0.58		strond	scc	-0.07
	strong	BCS	0.10	Front I Indian	0.50		strong	BCS	0.13
		ND: the solution of a team	of build in		10.0			ND: the velicitation of a team	م: دالين الم م
	high	NB: the reliability of a team of buils is — always higher than using just one buil	n or pulls is ist one bull	Rear Udder	0.35		high	NB: the reliability of a team of bulls is always higher than using just one bull	or bulls is st one bull
	close			Front Teat Placement	0.22		close		
	close	Date 11/10/2024		Rear Teat Placement	0.35		close	Date 11/10/2024	
	long			Teat Length	-0.28		Long		
	desirable			Udder Overall	0.55		desirable		
	desirable		(	Dairy Conformation	0.46		desirable	HOOFPRINT®	
		<ul> <li>C Efficiency</li> <li>C Efficiency</li> <li>C Efficiency</li> </ul>						<ul> <li>A Nitrogen</li> <li>E finciency</li> <li>C Matchane</li> </ul>	

0.36 0.36 0.19 0.47

Overall Opinion Milking Speed

onformo

Rump Angle Rump Width

apacity Stature

Adapts to Milking Shed Temperament

Front Teat Placement Rear Teat Placement Teat Length Udder Overall Dairy Conformation

-0.1 0.73 0.46 0.46 -0.05 0.55 0.55 0.54 0.54 0.54 0.53 0.23 0.55 0.55

Udder Suppor Front Udder

Legs

ear Udder

17

# a 2024 KiwiCross **Sexed** Team (A2) (F9J7)

Sire		Sire		
523007	PAYNES PRESIDE-ET	523046	523046 STONY CREEK NGAWI	
522077	TATAWAI WRESTLER-ET	523078	RHANTANA ZEPPELIN	
523001	PAYNES SALVATION-ET	523079	RHANTANA ZACHARY	
523024	KAIPER TOMAK	521059	HACKER ADVANTAGE-ET	
523092	PLATEAU DEMBE	521035	WIFFENS CENTURION	
522050	JULIAN TU-MEKE	523040	TANIWHATACOMA	
521015	PAYNES STAMINA-ET			
522040	ARKANS CAREER-ET			
523015	STONY CREEK NONCHALAUNT-ET			
523095	WAIMATA TRUMPCARD-ET			
	WEIGHTED AVERAGES OF PREMIER SIRES	IIER SIRES		\$550/97%

Management	-0.5	C	0.5	-	gBW/Rel%	\$550/97
Adapts to Milking	0.26			ouickly.	Milkfat	54 kgs
Shed Temperament	0.26			placid	Protein	36 kgs
Milking Speed	0.07			fast	Milk	354 Litres
Overall Opinion	0.30			desirable	Liveweight	18 kgs
Conformation	- O.5	C	0.5	~	Functional Survival	3.9%
		,	2		Milkfat %	5.5%
Stature	-0.02			tall	Protein %	4.3%
Capacity	0.60			capacious	Holfor Calvina Dif	70102
Rump Angle	0.09			sloping		2.0
Rump Width	0.17			wide	Cow Calving Dir	~7.0-
leas	0.07			curved	Fertility	6.4%
	OF O	ļ			scc	-0.07
Udder Support	0./0			strong	BCS	0.15
Front Udder	0.64			strong		2
Rear Udder	0.76			high	NB: the reliability of a team of bulls is	n of bulls is
Front Teat Placement	0.24			close	aiways migner man using just one bui	
Rear Teat Placement	0.52			close	Date 11/10/2024	
Teat Length	-0.54			long		
Udder Overall	0.77			desirable	(	(
Dairy Conformation	0.59			desirable	HOOFPRINT®	8
					6 Nitrogen Efficiency	

# **PREMIER SIRES**<sup>®</sup>

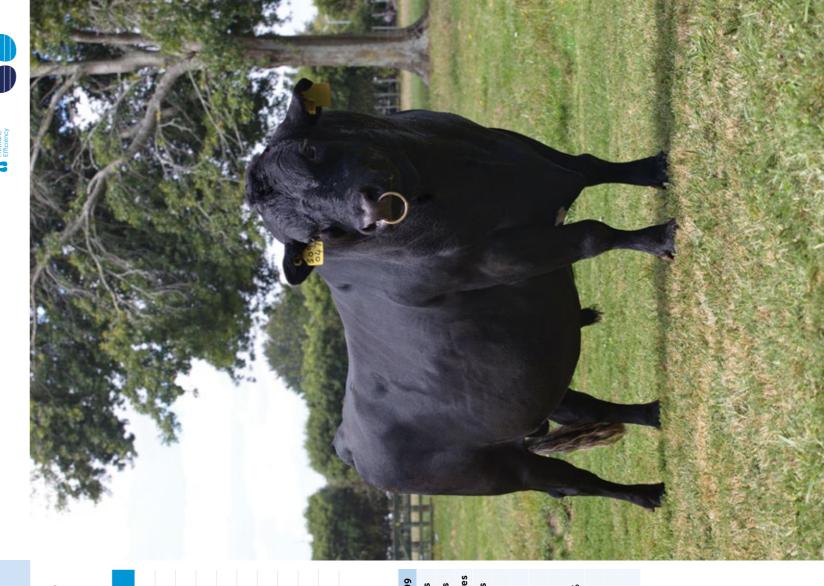
# Ε TeC Proven 2024 KiwiCross Daughter

4044	TOTA NIMICIONS CANGINE LIONEI LEMIN		Ξ		
Sire		Sire			
519034	GORDONS FLASH-GORDON	518053	PAYNES PROMINENCE-ET	11NENCE-ET	
521002	PAYNES MANOEUVRE-ET	520088	WEIRBURNS COMMOTION	OMMOTION	
521046	HORSFORDS KENNINGTON				
520054	PAYNES PALATINE-ET				
518038	WERDERS PREMONITION				
520033	DOWSON HONENUI-ET				
520068	MORGANS MALAWI				
520048	<b>BALDRICKS TOUCHDOWN</b>				
520091	MARSHALL PAPAMOA				
520063	SANSONS EMERALD-ET				
	WEIGHTED AVERAGES OF PREMIER SIRES	MIER SIRES		\$473/99%	<b>%6</b>
Manag	Management -0.5 0	0.5	¢	gBW/Rel%	\$473/99

# 2024 KiwiCross Forward Pack Team (A2) (F9J7)

Sire		Sire		
520054	520054 PAYNES PALATINE-ET	521011	PAYNES SCHOLAR-ET	⊱ET
520068	MORGANS MALAWI	523004	PAYNES SORCERER-ET	R-ET
520033	DOWSON HONENUI-ET	523002	PAYNES SATELLITE-ET	E-ET
520063	SANSONS EMERALD-ET	523075	ARKANS GAMBLER	œ
518038	WERDERS PREMONITION	522038	ARKANS COMMANDO-ET	VDO-ET
520088	WEIRBURNS COMMOTION	523088	LYNBROOK ZEELONG	NG
521072	BALDRICKS SPECTACULAR	523022	<b>BUELIN ORAN</b>	
521057	LAING KNIGHTHAWK	522064	<b>BROWNS RANDY</b>	
521005	PAYNES SUBLIME-ET	523072	JOHNSONS ACOUSTIC-ET	ISTIC-ET
521060	STONY CREEK NEPTUNE-ET	523056	WITTENHAM SPARTAN	8TAN
	WEIGHTED AVERAGES OF PREMIER SIRES	ER SIRES		<b>\$526/98%</b>

Management	-0.5	0	0.5	~	gBW/Rel%	\$526/98
Adapts to Milking	0.30			auickly	Milkfat	55 kgs
Shed Temperament	0.30			placid	Protein	35 kgs
Milking Speed	0.20			fast	Milk	385 Litres
Overall Opinion	0.39			desirable	Liveweight	20 kgs
Conformation	- O 5	c	20	~	Functional Survival	4.2%
	2.0	, I	2	-	Milkfat %	5.5%
Stature	0.09			tall	Drotein %	1 2%
Capacity	0.48			capacious		N 4 C
Rump Angle	0.01			sloping	Comparison Dif	%0.0
Rump Width	0.21			wide		-0.4%
Leas	0.00			curved	Fertility	9.1%
	0.76				scc	0.03
nadel support	6/.0			strong	BCS	0.08
Front Udder	0.64			strong		
Rear Udder	0.77			high	NB: the reliability of a team of bulls is	n of bulls is
Front Teat Placement	0.21			close	aways nigner tnan using just one buit	
Rear Teat Placement	0.52			close	Date 11/10/2024	
Teat Length	-0.25			long		
Udder Overall	0.79			desirable		(
Dairy Conformation	0.52			desirable	HOOFPRINT®	
					<ul> <li>B Ritrogen</li> <li>Methane</li> <li>Efficiency</li> </ul>	



мападешень	0.0-	D	0.0			
Adapts to Milking	0.26			quickly	Milkfat	49 kgs
Shed Temperament	0.26			placid	Protein	34 kgs
Milkina Speed	0.12			fast	Milk	391 Litres
Overall Opinion	0.36			desirable	Liveweight	23 kgs
Conformation		6	0.6	~	Functional Survival	3.6%
	0.0	5 -	0.0	-	Milkfat %	5.4%
Stature	0.01			tall	Protein %	4.2%
Capacity	0.47			capacious	Heifer Calvina Dif	0.2%
Rump Angle	0.11			sloping	Conco caning on	200
Rump Width	0.06			wide		%7·0-
Legs	0.02			curved	Fertuity	3.3%
Udder Support	0.68			strong	scc	0.0
Front Udder	0.52			strong	BCS	0.12
Rear Udder	0.78			high	NB: the reliability of a team of bulls is	of bulls is
Front Teat Placement	0.12			close	aways nigner man using just one buli	ist one pull
Rear Teat Placement	0.43			close	Date 11/10/2024	
Teat Length	-0.06			long		
Udder Overall	0.70			desirable		
Dairy Conformation	0.50			desirable		(
19					A Nitrogen     Erficiency     Ferianne	

# **PREMIER SIRES**<sup>®</sup>

# 2024 Jersey **Sexed** Team (A2)

Sire		Sire	
323033	GLENHAVEN BRISBANE LONIC	323046	323046 LYNBROOK TITUS SANTANA
322002	PAYNES RB GENERATION-ET	323207	GLANTON CMM BURTON
323023	PAYNES TITUS ECLAIRE		
323024	PAYNES FIRST MECHANIC		
323020	ANJOLOTTO EDMONTON-ET		
323025	MOKAI FIRST CLASS AUBREY		
323004	RIVERINA BAS ACHILLIES-ET S2J		
323050	PHILSAN ROXTON DATSUN		
323012	GLANTON LAMAR BISMARCK		
321045	CARATACUS TB DUKE		

\$503/97%

WEIGHTED AVERAGES OF PREMIER SIRE:

Management	-0.5	0	0.5	-	gBW/Rel%	\$503/97
Adapts to Milking	0.34	ľ		quickly	Milkfat	42 kgs
Shed Temperament	0.34			placid	Protein	17 kgs
Milking Speed	0.26			fast	Milk	-361 Litres
Overall Opinion	0.41			desirable	Liveweight	-27 kgs
Conformation	202	c	ч С	•	Functional Survival	3.1%
	0.01		0.0	-	Milkfat %	6.1%
Stature	-0.72			tall	Protein %	4.5%
Capacity	0.56			capacious	Heifer Calvina Dif	-2 1%
Rump Angle	-0.27			sloping		2/1·7-
Rump Width	-0.01			wide		-0.9%
Legs	0.12			curved	Fertility	7.4%
Udder Support	0.39			strona	SCC	-0.22
Front I Iddar	0.51			etropo	BCS	0.14
	2.2			2110119		
Rear Udder	0.68			high	NB: the reliability of a team of bulls is	m of bulls is
Front Teat Placement	0.04	-		close		
Rear Teat Placement	-0.13			close	Date 11/10/2024	
Teat Length	-0.03	-		long		
Udder Overall	0.56			desirable		8
Dairy Conformation	0.55			desirable	HOOFPRINT®	
					C Ritrogen E Friciency E Friciency	



J2002ORENVIEL GENALTICJ2002ELEDON DATE RATION32308HAWTHORN GROVE LZOLTIN-ET323208CRESCENT LRT KASSIDY-ET323008WILLIAMS BRISBANE FRENZY322036GLANTON KFP BREMEN-ET323008TIRONUI BUZZ ZAZU321203NORLANDS PKC ROXTON ET322001PAVNES TITUS EXCELSIOR-ETMORLANDS PKC ROXTON ET
323016 GRALYN BRISBANE DODGE
323048 GREENMILE BUZZ VERSTAPPEN

	-0.5 0	0.5	-	gBW/Rel%	\$516/98
	0.30		quickly	Milkfat	48 kgs
	0.29		placid	Protein	22 kgs
	0.24		fast	Milk	-126 Litres
	0.40		desirable	Liveweight	-25 kgs
	0 2 0	05	~	Functional Survival	2.8%
		2	-	Milkfat %	6.0%
	-0.65		tall	Protein %	4.4%
	0.54		capacious	Heifer Calving Dif	-2.1%
N	-0.27		sloping		200 C
ä	0.04		wide		% A.D
	0.11		curved	reruity	%7.0
<u> </u>	0.46		strong		81:0- 0 0
	0.53		strong	BCS	00
	0.72		high	NB: the reliability of a team of bulls is	m of bulls is
	0.13		close	always nigner than using just one pull	Just one pull
	-0.05		close	Date 11/10/2024	
ċ.	0.21		long		
	0.64		desirable		(
	0.51		desirable	HOOFPRINT®	
				A Nitrogen     Efficiency     Efficiency     Efficiency	





# SPRING BULLS AVAILABLE IN ALPHA

# 321005 Glenui Zambezi Lincoln-ET



Three-year-old dam. Owner: A & L Landers, Hawera

Breedin	g Details		
Breeder	A & L Landers	Dam	Glenui Baltic Laconia Et
Sire	Arkan BT Zambezi S3J	MGS	Glanton SS Baltic Et S3J

Productio	n gBVs			
Protein	Milkfat	Milk	Liveweight	Fertility
39 kg	60 kg	467	-17 kg	1.4 %
4.2 %	5.5 %			
Functional Survival	Somatic Cell Count	Heifer Calvir Difficulty	g Cow Calving Difficulty	Body Condition
-0.8 %	0.5	-0.8 / 77 %	-1.5 / 88 %	0.10
INDIVIDUAL	PRICE \$3	5 <sup>.65</sup> S	PRING PACK	/

\*If 10% InvestaMate discount applies

# gBW/Rel \$585/83%

<b>TOP Traits</b>			1	104 Daug	ghters 54 H	lerds
Management	gBV	-0.5	0		0.5	1.0
Adapts to Milking	-0.09					
Shed Temperament	-0.09					
Milking Speed	0.00					
Overall Opinion	0.02					
Stature	-0.43					
Capacity	0.76					
Rump Angle	-0.48					
Rump Width	0.41					
Legs	0.30					
Udder Support	0.34					
Front Udder	0.36					
Rear Udder	0.50					
Front Teat Placemen	t <b>0.29</b>					
Rear Teat Placement	0.38					
Teat Length	-0.07					
Udder Overall	0.49					
Dairy Conformation	0.78					
A2 Protein	A1/A2		TOP Dauc	abtors	31	
			VMSI	JILLEIS		
Gestation Length	-6.2 day	S	VIVISI		1564	•
Jersey J16 Registered Pedigree					luation Date: 0/2024	(h)





Breedin	g Details		
Breeder	B & B Jensen	Dam	Greenmile B Breeze ET S3J
Sire	Lynbrook King Quadrant	MGS	Glanton SS Baltic Et S3J

Productio	Production gBVs								
Protein	Milkfat	Milk	Liveweight	Fertility					
29 kg	61 kg	60	-11 kg	4.2 %					
4.4 %	6.0 %								
Functional Survival	Somatic Cell Count	Heifer Calving Difficulty	Cow Calving Difficulty	Body Condition					
2.4 %	0.1	-2.4/58%	-1.0 / 71 %	0.02					
2.170									
2.170									

\*If 10% InvestaMate discount applies

# gBW/Rel \$557/82%

TOP Traits			103	Daug	hters 47 H	lerds
Management	gBV	-0.5	0		0.5	1.0
Adapts to Milking	0.12					
Shed Temperament	t 0.12					
Milking Speed	-0.02					
Overall Opinion	0.16					
Stature	-0.64					
Capacity	0.51					
Rump Angle	-0.20					
Rump Width	-0.08					
Legs	0.07					
Udder Support	0.41					
Front Udder	0.55					
Rear Udder	0.85					
Front Teat Placeme	ent -0.01					
Rear Teat Placeme	nt -0.08					
Teat Length	0.36					
Udder Overall	0.61					
Dairy Conformation	0.58					
A2 Protein	A2/A2		TOD Daughte		25	
			TOP Daughte	:15		
Gestation Length	0.0 days	5	VMSI		1550	)

# SPRING BULLS AVAILABLE IN ALPHA 121053 Busybrook BE Imply-ET S2F 121005 Pemberton GG Propane S1F



reeder	Busybrook		Dam	Busybrook M	G Ivy-Et S2F
ire	Buelin BM Equator	S2F	MGS	Maire IG Gau	ntlet-Et
roduc	tion aBVs				
Product	tion gBVs				
Product Protein		Milk		Liveweight	Fertility
		<b>Milk</b> 1721		Liveweight 76 kg	Fertility

Functional	Somatic	Heifer Calving	Cow Calving	Body
Survival	Cell Count	Difficulty	Difficulty	Condition
0.8 %	-0.3	3.2 / 62 %	1.3 / 95 %	0.08

\$**35**.65

SPRING PACK \$29.60\*

FROM

\*If 10% InvestaMate discount applies

INDIVIDUAL PRICE

# gBW/Rel \$592/82%

Management	gBV	-0.5	(	)	0.5	1.0
Adapts to Milking	0.60					
Shed Temperament	0.60					
Milking Speed	0.36					
Overall Opinion	0.73					
Stature	1.05					
Capacity	0.30					
Rump Angle	0.04					
Rump Width	0.93					
Legs	0.00					
Udder Support	0.64					
Front Udder	0.19					
Rear Udder	0.54					
Front Teat Placeme	nt 0.03					
Rear Teat Placemer	t 0.26					
Teat Length	-0.12					
Udder Overall	0.52					
Dairy Conformation	0.47					
A2 Protein	A1/A2		TODD	aughters		29
Gestation Length	-6.2 day		VMSI	logniers		1694
Gestation Length	-0.2 day	5	161413			1094



breedin	gDetails					
Breeder	S & S Pembe	rton		Dam	Pemberton K	B Pippa S1F
Sire	Greenwell G	R Govern	or S1F	MGS	Ashdale FM K	elsbells S1F
Produc	tion gBVs					
Protein	Milkf	at	Milk	:	Liveweight	Fertility
57 kg	87 kg	9	1116		54 kg	1.5 %
4.0 %	5.3 %	6				
Function Surviva			eifer Co Difficu		Cow Calving Difficulty	Body Condition
3.6 %	0.0		2.3/40	) %	0.7 / 91 %	0.14
INDIVIDU	JAL PRICE	35	65 95T	SPI	RING PACK	\$29 <sup>.60*</sup> +GST

\*If 10% InvestaMate discount applies

# gBW/Rel \$678/82%

TOP Traits				85 Dau	ghters 39 H	lerds
Management	gBV	-0.5	(	)	0.5	1.0
Adapts to Milking	0.18					
Shed Temperament	0.19					
Milking Speed	-0.03					
Overall Opinion	0.23					
Stature	0.80					
Capacity	0.21					
Rump Angle	-0.31					
Rump Width	0.52					
Legs	-0.35					
Udder Support	0.37					
Front Udder	0.44					
Rear Udder	0.34					
Front Teat Placemen	t 0.11					
Rear Teat Placement	t 0.03					
Teat Length	0.49					
Udder Overall	0.42					
Dairy Conformation	0.36					
A2 Protein	A1/A2		TODD	aughtors	44	
				aughters	41	
Gestation Length	-5.4 day	S	VMSI		1708	
Friesian F16				Ev	aluation Date:	

Registered Pedigree (supplementary)



# SPRING BULLS AVAILABLE IN ALPHA

# 521039 Pukerimu Start-Up-ET



Breeding Details						
Breeder	Sulana Enterprises	Dam	Pukerimu Lt Suri-ET			
Sire	Meander TD Azure-ET S1F	MGS	Lynbrook Terrific ET S3J			

Production gBVs								
Protein	Milkfat	м	ilk	Liveweight	Fertility			
41 kg	63 kg	4	73	94 kg	3.9 %			
4.2 %	5.5 %							
Functional Survival	Somatic Cell Count		Calving culty	Cow Calving Difficulty	Body Condition			
5.0 %	0.4	0.9/	85 %	-0.8 / 88 %	0.33			
				RING PACK	\$ <b>70</b> .60*			

\*If 10% InvestaMate discount applies

# gBW/Rel\$494/83%

TOP Traits			10	5 Daug	hters 49 H	lerds
Management	gBV	-0.5	0		0.5	1.0
Adapts to Milking	0.28					
Shed Temperament	0.30					
Milking Speed	-0.11					
Overall Opinion	0.28					
Stature	0.46					
Capacity	0.64					
Rump Angle	0.16					
Rump Width	0.50					
Legs	0.03					
Udder Support	1.03					
Front Udder	1.04					
Rear Udder	0.71					
Front Teat Placemer	nt 0.13					
Rear Teat Placemen	t 0.64					
Teat Length	-0.96					
Udder Overall	0.92					
Dairy Conformation	0.64					
A2 Protein	A2/A2		TOP Daught	ers	37	
Gestation Length	-7.9 days	S	VMSI		1568	
Gestation Length KiwiCross F12J4	-7.9 days	S	VMSI	Eval	1568 uation Date:	(

11/10/2024

# 521072 Baldricks Spectacular



Breeding	g Details		
Breeder	H & C O'Donnell	Dam	KGQL-15-89
Sire	Gordons Flash-Gordon	MGS	San Ray FM Bea

Production	Production gBVs									
Protein	Milkfat	Milk	Liveweight	Fertility						
39 kg	65 kg	596	5 kg	0.0 %						
4.1 %	5.5 %									
Functional Survival	Somatic Cell Count	Heifer Calving Difficulty	Cow Calving Difficulty	Body Condition						
0.1%	-0.1	2.0 / 90 %	0.1/88%	0.03						
INDIVIDUAL	PRICE \$3	5.65 SP	RING PACK FROM	\$29 <sup>.60*</sup> +GST						

\*If 10% InvestaMate discount applies

# gBW/Rel \$594/82%

			9	7 Daught	ters 46 H	erds
Management	gBV	-0.5	0	0	.5	1.0
Adapts to Milking	0.30					
Shed Temperament	0.28					
Milking Speed	0.53					
Overall Opinion	0.39					
Stature	0.13					
Capacity	0.36					
Rump Angle	0.03					
Rump Width	0.61					
Legs	-0.07					
Udder Support	1.08					
Front Udder	1.03					
Rear Udder	1.27					
Front Teat Placement	t 0.26					
Rear Teat Placement	0.68					
Teat Length	-0.40					
Udder Overall	1.20					
Dairy Conformation	0.53					
A2 Protein	A2/A2		TOP Daught	tors	28	
AZFIOLEUT	0.7 days		VMSI		1676	

# **Out of the Pits** New AB Facility Makes AB a Breeze

Jorg at his tailor-made AB facility; a safe, sound, and sustainable piece of farm infrastructure that has multiple uses, and eliminates the need for non-milking tasks in the pit. "It's absolutely brilliant; we can do multiple jobs at one time - vaccinations, multi-min jabbing, and drafting the springers."

## At first glance it looked as if it was just another set of rules that would suck up more time and money.

But Outram contract milker Jorg Sahin says LIC's initiative to prevent its AB Technicians from working in herringbone pits on makeshift platforms and out-dated trolleys has ongoing benefits.

Beside risk reduction and seriousinjury prevention, the new, dedicated, AB Facility on Jorg's farm is expected to result in better repro results, because animals are calmer and the AB Technician more comfortable in executing his/her job.

The process of handling stock in the yards had also been made easier, Jorg said.

"I love the new facilities, I'm over the moon with how it's worked out. We use the facilities for multiple jobs, not just the inseminating at AB time, but for tail-painting, metri-checking, vaccinations, and other vet work.

"We put a lot of thought into it at the beginning. We had a vet race and extended it, and we've got a removable back bar which offers us a lot of flexibility, so if we want to tag the heifers we can use the back bar, and we simply remove it when it comes to AB."

After an hour's consult with a local engineer, the facility took just two days to construct at an initial cost of about \$7000 to the owners, Jorg said.

"We used it for the first time last spring. I wouldn't say it was absolutely perfect straight away, but it was pretty close. We've made small adjustments since, like reinforcing the gate latch, but the total finalised cost would be less than \$10k." Jorg and his wife Louisa are contract milkers who calve down about 580 crossbred cows each season.

"We have absentee owners and they like to ensure everything on this farm is compliant, and they would've been keen on the upgrade because it's a requirement, but also because they see the value in having good facilities... it makes life easier for both on-farm staff and the AB Techs.

"What they'll appreciate is the returnon-investment they'll get from this; this type of facility will last a long time, and it'll attract good sharemilkers or other contract milkers. People will far rather work on a farm where things are safer, the infrastructure is better, and they're not having to deal with non-milking tasks in the pit.

"The trolleys and platforms are just dangerous; I hear of vets on other farms tripping or losing their balance on trollies during their work; they hate it."

Jorg is looking ahead to this mating season with plenty of optimism for a smooth mating process.

"The new facility rows up to 22 cows. Generally we do about 25 a day during the peak of the AB season. Last year on our busiest day we did have 35 on-heat, but that was an exception and didn't put us off our stride.

"We've future-proofed it too, by putting on a roof... we're here in South Otago so it's going to rain, and if we want our AB Tech to do the best job possible, we have to provide the best facilities possible."





# **From the Pits**

From May 2025, LIC AB Technicians will be prevented from doing work on farms that require inseminations to be carried out from trolleys, or platforms, within herringbone pits/sheds.

A number of safety standards must be adhered to, designed to protect the safety of the AB Technician, and to safeguard the hosting farm's own health and safety standards (and potential business liability).

# Main standards include, for example:

- AB facilities must have suitable standing room behind the animal for the AB Technician to work freely without any wall, pipework, or other animal that creates obstruction, or inhibits free access, to all cows presented for AB.
- All AB facilities, whether dedicated, rotary cowsheds, or single presentation facilities must have an animal friendly non-slip floor under all environmental conditions that stop an animal from falling down during the AI process. For example, an animal's back legs slipping off the rotary platform, causing the animal to fall down creates potential for the AB Tech's arm to get caught against the horizontal backing bar.

# Johne's Disease: The hidden threat in rdairy here



Testing, culling, improving biosecurity, and preventing transmission are keys to protecting herd health

Kara Dawson is a veterinary epidemiologist at LIC. She previously worked in bovine TB management for OSPRI, and for MPI on developing movement tracing tools for M.bovis. Kara is passionate about using data to provide insights for better animal health management, and is currently working on her PhD in Johne's disease in the NZ dairy industry.

As a dairy farmer, you know the importance of keeping your herd healthy, productive, and profitable. But there's a silent threat that might be undermining your efforts - Johne's disease.

It's a disease that is already present on most farms and often stays hidden for years, impacting not just the sick cows you see, but the productivity and profitability of the entire herd. While Johne's disease is more prevalent than many farmers realise, the good news is that the tools and knowledge to fight back are available.

Testing and culling is a good step in taking control, but a range of strategies will be required to effectively manage the disease. The DairyNZ toolbox<sup>1</sup> offers a comprehensive set of resources. From best practices in biosecurity to herd management strategies, these tools are designed to help you stay ahead of the disease.

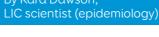
# The cost of control vs. the cost of disease

In 2014, the cost of Johne's disease to the dairy industry was estimated at \$40-88 million per year. Today, that figure is likely to be much higher. It is easy to underestimate the true cost of Johne's, when thinking only of the obvious losses from a few clinical cases. However, the hidden costs can be even more devastating.

The Johne's "iceberg" model is a fitting analogy. The clinical cases you see are just the tip of the iceberg. Below the surface, there's a much larger problem-subclinical infections that impact milk yield, fertility, and overall herd health.

Research both in New Zealand and internationally shows that cows testing positive for Johne's antibodies, even without clinical signs, produce significantly less milk and have reduced fertility and higher somatic cell counts<sup>2</sup>.

These cows are eating more but not converting that feed into milk or future calves because their bodies are fighting an infection. This energy drain can silently eat away at your farm's efficiency.



# The long-term impact of today's decisions

Calves may be infected by ingesting the Johne's bacteria (Mycobacterium avium subspecies paratuberculosis, or MAP) from the faeces of adult animals, from colostrum containing the bacteria, or in calf-rearing sheds from transient shedding by other infected calves<sup>3</sup>. One of the most challenging aspects of managing Johne's disease is its long incubation period after exposure of calves to the bacteria. Because of this feature of the disease, and the long survival of the bacteria in soil and effluent, it's important to realise that the decisions you make today will impact your herd's Johne's prevalence for the next five to six years.

# What puts your herd at greater risk?

Johne's disease doesn't affect all herds equally. Stress is a major factor; cows under stress have weakened immune systems, making them more susceptible to infections like Johne's. Environmental factors such as higher rainfall, lower temperatures, and lower sunshine hours also play a role, as they create conditions where MAP can survive longer in the soil and effluent.

Effluent spreading is a common (and in some areas, required) practice, but it can contribute to the spread of Johne's if not managed carefully. Pre-weaned calves are particularly vulnerable to infection, and their exposure to pasture contaminated by adult faeces or effluent should be minimised to protect the future of your herd.

There is a genetic component to Johne's risk, with some cows and breeds being more at risk than others<sup>4</sup>. Bringing in animals from untested sources can introduce infection to your herd that could take years to control, so ask for a Johne's testing history when purchasing replacements.

# The silent transmission: dam to daughter

Johne's disease has a unique and insidious way of spreading within herds- a daughter can be infected by her dam years before the dam shows any signs of the disease<sup>5</sup>. This makes breaking the Johne's cycle by preventing calf exposure a top priority.

# Testing: the first step toward control

Testing for Johne's disease is an important part of a control programme, yet it's still not widely practiced. Across regions, only up to 27% of LIC registered dairy herds have ever participated in wholeherd Johne's herd test milk antibody testing through LIC. Without regular testing, it's impossible to know the true extent of Johne's in your herd, and MAP-shedding cows can't be identified until they have already put young stock at risk.

To reduce the level of Johne's disease in your herd, it's necessary to remove the source of infection (shedding cows) and prevent further transmission. If shedding cows are not removed, they may become ' supershedders'<sup>6</sup>, releasing large amounts of bacteria onto pasture and effluent.

Risky cows can be identified either by antibody testing on herd test milk or serum, or by faecal testing for MAP; once identified, it's strongly recommended that shedding cows be removed from the herd to prevent environmental contamination. Talk to your vet about testing options.

Testing should be a commitment, not a one-off event, and should be seen as part of a control programme, not as a solution in itself. An annual test over a minimum of five to six vears, combined with best practice in biosecurity, and protection of replacement calves and heifers from exposure to contaminated pasture or colostrum, is the best approach to controlling the disease.

An additional pre-mating test for high-risk animals can also be a valuable tool. Identifying and managing these animals before breeding high-value replacements from them, or using them as embryo transfer recipients, can help break the cycle of transmission.

# The challenges of early detection

One of the most frustrating aspects of Johne's disease is the difficulty in detecting it early. No accurate test exists for animals under two years old due to the disease's long latent period. Infected animals only show up on tests as rising two-year-olds if they've had an extremely high infecting dose earlier in life, or are under significant stress.



LIC is exploring all options for early detection, with ongoing research both in New Zealand and overseas. Any advancements in early detection will be quickly adopted to improve our ability to manage Johne's disease more effectively.

# **Taking action**

Johne's disease is not a problem that will solve itself. The decisions you make today will shape the future of your herd for years to come. By taking proactive steps - testing, culling, improving biosecurity, and preventing transmission – you can protect your herd's health, productivity, and profitability. Remember, it's a marathon, not a sprint.

Don't wait until the problem is too big to manage. Talk with your veterinarian, use the tools available, such as the DairyNZ toolbox, and take control of Johne's disease before it takes control of your herd.

NB: This article first appeared in Dairy Exporter's October 2024 issue.

- <sup>[1]</sup> https://www.dairynz.co.nz/media/gyibqbzc/ animal-johnes-disease-management.pdf
- <sup>[2]</sup> https://actionjohnesuk.org/the-disease/ <sup>[3]</sup> https://www.cafre.ac.uk/business-support/ agriculture/dairy/dairying-technical-support/
- iohnes-disease-in-calves/ [4] https://www.frontiersin.org/journals/veterinaryscience/articles/10.3389/fvets.2021.718987/full
- <sup>[5]</sup> https://www.sciencedirect.com/science/article/ abs/pii/S0167587718300394
- [6] https://bovine-ojs-tamu.tdl.org/AABP/article/ view/4857

Falk to your vet about Johne's Disease testing options - once identified, it's strongly recommended that shedding cows are removed from the farm.



# One Pl Animal: One Monster Nightmare

It's critical a BVD infection doesn't strike at mating time or during early pregnancy. And if a PI animal lurks anywhere near your herd, the ramifications can be widespread, says Mitch Johnson, Southland farmer. Here's his story.

A single persistently infected BVD animal that came into contact with cows at mating time forced Southland farmer Mitch Johnston to cull a total of 75 dairy replacements and beef calves this year.

The winter of 2024 had been a nightmare due to dozens of calves being born PI-infected, which in-turn forced multiple involuntary culls, Mitch said.

Beside the stock culled to date, costing tens-of-thousands in lost genetics and related opportunities, the expense is ongoing: Thousands have been spent this year on bovine viral diarrhoea (BVD) testing, and future production and reproduction costs, although significant, are perhaps incalculable.

Mitch is tightly crossing his fingers that no more PI calves are born this spring.

He and wife Kate own a 1000-cow herd which is completely A2/A2 and milks all year round, with the aim to have 30-40% of the herd autumn calving.

Currently the herd returns about 780,000kg of milksolids per annum.

The problem began in the autumn of 2023, when Mitch and Kate were looking to purchase stock to enable them to cull a higher percentage of the bottom end of their herd.

"The ability to buy cows that fit our system is very difficult, with the requirement for all stock on farm to be A2/A2 to meet supply agreements with our milk processor," Mitch said.

"Through two dispersal sales, the opportunity presented itself to buy some genuine pedigree Holstein Friesians, animals we thought would fit our high input system."

The marketing and sales material associated with the auction stated all animals were tested and cleared of BVD, Mitch said. However, Mitch claimed he had also put too much of his trust in what he thought was a reputable breeder and stock agent.

"Our BVD policy is to bulk milk test three times a year, twice in spring and once in autumn. The herd itself usually rocks a moderate exposure level, but the first (spring '23) test came back and it had gone through the roof."

Although the test revealed a high exposure level, the PI animal did not show up on the bulk milk test, so to cover his tracks Mitch elected to blood test the cows he'd recently purchased.

By that time, the PI animal had been onfarm for up to five months.

Following advice from their vet the decision was made to test both 2023 and 2024 calves due to their dams being exposed to the PI animal during gestation.

When results came back for the 2023 spring calves Mitch was hugely relieved: "100% were clear. We thought we'd dodged a bullet."

But they hadn't.

In early winter 2024, at two-months-old, the first batch of autumn-born calves were tested

Of the 48 tested, 25 came back as highpositives and one was positive (i.e. as persistently infected BVD animals).

"Because it was such a high percentage, we held them for another month and re-tested with a blood test ... we didn't want to waste the animals if the dry punch test wasn't accurate," Mitch said.

"Unfortunately, it was 100% accurate. Every animal that came back positive on the punch was positive on the blood."

Everything that's hit the ground since that time has been batch tested. In the second batch, 17 calves were tested, and 12 of them were PI-positive. The third batch consisted of 97 calves, of which four were positive. The last two batches have shown negative results.

On his farm this spring, Mitch will batch test all newborn calves at 4-10 days old.

"The cost of the test is nothing at four days old, especially if you're unwittingly exposing a PI to other calves or the herd.

"Using those (LIC) dry punches to test has been great for us; we can test ourselves rather than get the vet in We can batch test - as soon as we get 20-30 on the ground we can get them away."

Mitch is optimistic he's through the worst of his nightmare.

"Our advice was that the autumnborn ones were most likely to give us the biggest headache because the Pl animal turned up in middle of our



autumn mating, and virus was going through the herd in early to midpregnancy, which is the key time for when those PI animals are going to be created.

"Hopefully the infections had already gone through the herd enough that these spring (24) ones are going to come back with a lot lower percentage."

Mitch will also now close his farm system, going all-AB (apart from natural mate Jerseys over the yearlings/ heifers), and breeding all replacements within rather than buying any stock.

He will continue with his LIC bulk milk test regime, and says any sudden spikes are a flag to take immediate action.

Mitch is seeking more information on LIC's BVD Status Pack, which will label every animal in his herd with a lifetime BVD status.

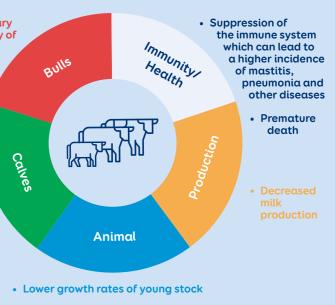
"The speed of the infection is incredible, and that's what we're really amazed by. I would say most farmers wouldn't have an appreciation for the damage a PI can cause until it happens to them."

# Potential effects of Bovine Viral Diarrhoea and a Persistently Infected animal

- Temporary infertility of bulls
- Higher abortion rate
- Stillborn calves
- Small weak calves

# Why is a persistently infected animal so dangerous to herd health?

- Pl animals are the main source of BVD infection within dairy herds and should be immediately culled.
- A PI animal is created when its mother is exposed to the BVD virus within the first 4 months of pregnancy. The PI animal is a born carrier of the BVD virus and will shed large amounts of virus for its entire life.
- PI animals are often slow growing and poor producing, and rarely live past five years of age. However, they can also have the potential to appear to be some of the best-looking calves or cows in the herd.
- A PI cow will always give birth to a PI calf.
- **BVD and PIs from destroying** herd health?
- Test the herd for any BVD infection prior to mating.



- Decreased reproductive performance including
- Longer calving to conception period
- Increased empty rate

# What can be done to prevent

- Test individual animals (including those that don't supply the vat) for their PI-status using herd test, tissue, and/or blood samples.
- Monitor ongoing BVD exposure levels of the herd throughout the season with LIC's Bulk Milk Monitor Pack.
- LIC's (BVD) Status Pack helps monitor the BVD status of your herd throughout the season and helps identify persistently infected animals. The Status Pack is a cost-effective solution that both incorporates all Bulk Milk Monitor Pack tests and:
- identifies both positive and negative animals at the herd test;
- includes individual BVD testing; and,
- provides α lifetime BVD Status for tested animals which is uploaded to MINDA® (all bulk tank milk monitor pack tests are included).

# Revolutionising airy Farming

GeneMark Genomics' Affordable Path to a More Efficient and Sustainable Dairy Industry



LIC Diagnostics business manager

The New Zealand dairy sector plays a pivotal role in the country's economy, contributing more than \$25 billion annually in export revenue and employing tens of thousands of people.

However, as global pressures to combat climate change intensify, the industry finds itself at a critical juncture. Sustainability and efficiency are no longer optional goals but essential components for the future success of New Zealand's dairy sector.

Over the past three decades, LIC has invested around \$80 million into genomic science and genome sequencing technology, having the foresight to develop technologies that not only deliver the highest genetic merit semen on farm, but also robust data to identify the most profitable and efficient cows for better breeding and culling decisions.

Genomics is the study of an organism's DNA, and in the context of the dairy herd, this technology is used to better understand traits that impact milk production, health, fertility, and overall performance within individual animals.

The application of genomics in New Zealand dairy herds will revolutionise breeding, improve milk production, enhance animal welfare, and ensure sustainability.

In June this year, LIC released the new GeneMark Genomics service, a simple, convenient and cost effective solution that delivers both parentage and genomic evaluation results for all eligible female animals.

The genomic evaluation component of this service includes the animal's own genotype (DNA information) within the genomic evaluation model to deliver more reliable breeding values. The model is able to determine which genes the animal received from its parents and if they are associated with good or

30

poor performance or desirable or nondesirable traits.

Previously the cost to generate a DNA profile suitable for genomic evaluation was significantly higher, but the development of the GeneMark Genomic technology has enabled all NZ dairy farmers affordable access to reap the on-farm benefits of genomic science.

The benefits of this technology include:

# 1. Enhanced Breeding Efficiency

Traditionally, the estimate of an animal's genetic merit has been based on their own performance (phenotype) for traits like milk production or liveweight, as well as the performance of their relatives. The best estimate of a calf's merit was the average of the parents' genetic merit, which had limited accuracy. Genomics enables farmers to predict the genetic potential of animals earlier and significantly more accurately.

### 2. Increased Productivity

Breeding cows that produce more milk per unit of feed, can lower feed costs and reduce the environmental impact of dairy farming. This is especially important as the sector faces increasing pressure to adopt more sustainable practices.

### 3. Improved Fertility and Animal Welfare

Genomics can help address fertility challenges within the dairy sector by identifying genetic markers related to reproductive traits, enabling the selection of cows with better fertility breeding values.

Genomics is also an animal welfare enhancer, enabling the identification of carriers of genetics disorders such as BLAD and CVM. Ongoing research projects are working to identify genomic predictors for mastitis

and facial eczema resistence. LIC is also working hard to deliver trait information for both heat tolerance and polled helping to reduce stress within the animals.

### 4. Improved economic gains

The economic value of genomics is clear. Genomics reduces the time and resources spent on breeding by allowing farmers to make faster, more accurate decisions. This can lead to a more productive herd with improved milk production, better health, and reduced environmental impact.

Farmers also benefit from a more predictable and stable operation, as genomics reduces the variability in animal performance. By knowing which animals are genetically predisposed to thrive, farmers can avoid costly surprises related to poor fertility, disease, or suboptimal milk production. In an industry where margins can be thin, these improvements in efficiency and productivity are invaluable.

Genomics is a game-changer for the New Zealand dairy sector, offering benefits across breeding, milk production, animal welfare. and sustainability.

As the global dairy market becomes more competitive and consumers demand higher standards, the integration of genomics into dairy farming practices will be crucial for maintaining New Zealand's leadership in the industry.

By leveraging the power of genomics, New Zealand farmers can breed healthier, more productive cows while reducing their environmental footprint and improving profitability.

The future of the dairy sector in New Zealand is not just in the pastures but also in the lab.

# **Doubling Down on Data** in the New DNA Age

# THREE KEY FACTS:

- New Zealand's dairy sector contributes billions of dollars to the economy.
- · Challenges in the dairy sector have led Kiwi farmers to breed better herds that produce more for less.
- On-farm data can help breed better dairy cows and create a more efficient national herd.

Recently, I was asked how DNA data can impact farming.

Genomics, or DNA data, is central to building and managing a successful herd. It takes the quesswork out of matching calves to their parents while also confidently selecting the most productive animals with the best genetics to join milking herds.

## It's not the only thing, but it's an important thing.

Just imagine what we can do if farmers nationwide use this level of data to identify high-performing cows and select them to breed from, rather than from low-performing ones.

More on-farm data means better decisions. Better decisions across every farm in New Zealand means a higherperforming national herd.

I'm a scientist by trade, and for 25 years I've been researching how we use information to refine our approach to farming, specifically how we use this information to breed the very best dairy cows and create a more efficient national herd.

### The herd improvement movement

New Zealand's agriculture sector is a cornerstone of the country's economy. It's also part of our culture and identity.

We've done a good job at innovating to ensure we stay at the cutting edge of the global industry - and data has played a key role in that. Since the early 1900s, data has revolutionised traditional agricultural practices.

Farmers have been able to harness data to gain insights on everything from soil quality to animal health to optimise operations.

Throughout the last century, the key goal for farmers was to maximise the profitability of animal production, with data informing every step of the way.

By the 1980s, almost half the country's cows were tested under the national Herd Improvement Plan - recognised as the best scheme of its kind in the world.

As we moved into the 21st century, the pressures on farmers mounted.

National cow numbers peaked and farmers no longer wanted bigger herds - they wanted better herds that produced more for less.

This was largely driven by external factors such as finite land, a warming climate, varying milk prices, high onfarm costs and inflationary pressures.

Farmers across New Zealand - and internationally - had to show huge resilience and adaptability to navigate these mounting challenges.

Today, farmers still face these issues and more. Herd improvement, and using data to produce better and more efficient cows, are critical to overcoming significant challenges.

Farmers need to make informed decisions, at the right time, and to do that they need good data - and lots of it.

# A new age of data at scale

We are at the precipice of our data revolution. Observing traits, health testing, and assuming parentage can only take us so far.

Genomic evaluation drills down into the cellular level to map lineage and determine the value or 'genetic merit' of an animal's physical traits. Think fertility scores, protein and fat production, and udder characteristics.

Earlier this year LIC announced the next generation of DNA testing: GeneMark Genomics, which gives farmers cellularlevel data on their herds.

The product combines DNA parentage testing with genomic evaluation to help farmers identify their animals with the best genetics to breed from, in order to improve their herd faster.

GeneMark Genomics utilises the extensive pedigree of over 30 million animals, current and historical bulls and cows, combining that with the millions of animals that have had their parentage



Richard Spelman. IC chief scientist (this article first appeared in the New Zealand Herald).

DNA verified and the hundreds of thousands of animals that have had detailed DNA profiling.

It is the culmination of 30 years of research, and an investment of nearly \$100 million.

So, what we're dealing with is data at scale. Investing in data and providing solutions to farmers is also critical to our emission reduction efforts.

Last year. Fonterra announced its Scope 3 target of a 30% intensity reduction in on-farm emissions by 2030.Herd improvement and cow efficiency play a pivotal role in achieving that taraet.

LIC's genetic research is leading to cows that are more efficient, produce less methane, are more heat-resilient and produce more milk solids per kilogram of liveweight.

For example, today's cows produce twice as much milk as those in 1950, thanks largely to advances in genetics.

Many farmers are investing in these improved genetics, which will put them in good stead to reduce their emissions intensity.

So back to that question I was recently asked. DNA data has a huge on-farm impact - you could even say it's the key to unlocking an efficient national herd.

Natural selection has been evolving DNA and genetics since the beginning of time.

Decoding DNA and putting it in the hands of farmers allows us to drastically speed up this process to produce the best-performing animals in the shortest amount of time.

Achieving this requires both high-quality and vast amounts of data. This is why we're doubling down on our data capabilities and making significant leaps forward to harness it for good.

By collaborating with farmers on this front, we can help New Zealand's agriculture sector keep innovating to stay ahead of the curve.

# **Good TOPs in Two-Year-Olds**

# = Good Omen for Future on the Milking Platform

Extensive fieldwork appears to confirm that traits-other-thanproduction (TOP) in dairy cattle at 2 years of age are effective predictors of cow conformation later on in life.

The findings, based on data from more than 7850 dairy animals, reinforces the value of incorporating early TOP assessments into breeding programmes.

The research\* was led by LIC's Research and Development team with support from DairyNZ and breed societies.

The catalyst for the research came during one of LIC's breeding operations group (BOG) meetings.

BOG consists of bull acquisition managers, genetics managers,

scientists, and sire proving representatives, with the group collectively responsible for selecting LIC Premier Sires teams and spring bulls.

BOG's stated aim was to investigate whether TOP scores at 2 years of age was a reliable indicator of determining a cow's future physical attributes, with a specific focus on udders.

Between February and April animals aged 3 to 6 years were TOP scored by 18 inspectors from Holstein Friesian New Zealand, Jersey New Zealand, and Ayrshire New Zealand.

Herds with more than 180 animals were inspected by two TOP inspectors at a time, or by one inspector over a two-day period.



All TOP traits were measured in later parities (except for 'farmer traits') to estimate the genetic correlations between early- and later-traits, and to assess the traits' consistency over time.

The genetic correlations between traits measured at 2 years and those measured at 3-6 years were consistently high.

The correlations ranged from 0.92 for Front Teats to 0.97 for Stature. The Udder Overall correlation was 0.94.

These results indicate that genes causing an animal to rank well for TOP traits as a 2-year-old are almost the same as the genes that will cause the animal to rank well for TOP traits later in life (with minimal genetic-byage interaction).



Amelia Griffin from Holstein-Friesian NZ undertaking TOP scoring

Genetic correlations between 2-year-old traits and 3-6 yearold traits.

Trait	Genetic correlation		
Stature	0.97		
Capacity	0.95		
Rump Angle	0.97		
Rump Width	0.94		
Udder Support	0.93		
Fore Udder	0.94		
Rear Udder	0.94		
Front Teats	0.92		
Rear Teats	0.97		
Udder Overall	0.94		
Dairy Confirmation	0.94		

In a secondary analysis, second lactation records were removed to create a larger age gap between the first and later lactations.

The secondary analysis provided similar results, reinforcing the reliability of early TOP scores as predictors of future assesments.

Genetic correlations between 2-year-old traits and 4-6 yearold traits.

Trait	Genetic correlation
Stature	0.98
Capacity	0.91
Rump Angle	0.96
Rump Width	0.95
Udder Support	0.92
Fore Udder	0.94
Rear Udder	0.94
Front Teats	0.92
Rear Teats	0.97
Udder Overall	0.90
Dairy Confirmation	0.94

# **The Last Word:**

We asked Charlotte Gray, senior agri manager and former LIC beef genetics specialist, a series of quick-fire questions which reveal some of her hot tips for farmers as they look to finish up another mating season.

## Is there anything farmers can do now to make process improvements for their busiest time of the year, calving?

"Definitely... I'd recommend farmers set up some rules-based groups in MINDA using 'expected calf semen product type' after pregnancy testing is finished. That way you can have, say, SGL Dairy pregnancies easily grouped for the staff to manage when calving time comes around."

## What's your best advice to farmers seeking a strong finish to their mating season?

"I'd go for 12 days of SGL Dairy after the natural-mate bulls come out. This gives farmers the chance of reducing their empty rate by up to 2-3% (on average) without having to calve any longer."

"And a good way of banking the extra 12 days-in-milk from SGL Dairy,

without accidentally tagging calves as replacements, is to calve down, with the heifers, all animals that are going to produce a nonreplacement calf.

# What if I have wearables?

"If you're in that position, do what many other farmers in that position are doing - go all-AB! Let SGL Dairy partly reimburse you for your investment; going with SGL Dairy in weeks 5 to 10 on a 500-cow farm can provide up to an additional 3000kg of production.

It's crucial that the herd is cycling well and in good health during mating - what would be your key recommendation in terms of protecting the herd at this time?

"Farmers should always monitor their herd for BVD - it's the herd's best insurance policy, especially at mating time. Vaccinating for BVD doesn't cure it, and it doesn't make infection impossible. Regular BVD testing is a fundamental."

Queries are building up and I'm sick of them; is there anything I can do to get rid of them? "Yes. I'd utilise LIC's on-farm support



Simon Worth, LIC livestock selection manager, said LIC's focus on enhancing traits, which were weighted in its Livestock Selection Index (LSI), aligned well with the results.

LIC's systems currently in place to evaluate genetic merit for TOP were therefore fit-for-purpose, he said.

### \*Methodology:

Funding for the project came from LIC and DairyNZ. 108 herds were approached based on their high percentage of animals that had been TOP scored at 2 years of age

Out of these, 40 agreed to participate in the study. Among these, 21 were Sire Proving Scheme herds and 19 were breed society herds, which were on farming systems that ranged from 3 to 5. Two herds operated a once-a-day milking system

Data was collected from a total of 7,853 animals, 1,952 Jersey (J14 and above), 2,275 Friesian (F14 and above), 3,046 KiwiCross, and 580 Ayrshire (A14

Between February and April 2024 animals aged 3 to 6 years were TOP scored by 18 inspectors from Holstein Friesian Association New Zealand, Jersey New Zealand and Avrshire New Zealand

NB: Rear Leg Set run did not converge in 40 iterations

crew - they can set the records straight for calving, mating, and herd tests. That way you'll have more confidence in your data and can extract more value from MINDA's insights. So do it - get the calvings in, the EIDs updated, the audits dealt to, and the DNA done."



\_IC senior agri manager

