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BULLETIN

SET TO SERVE

SPRING 2023





by Malcolm Ellis,
LIC general manager NZ markets

Securing a positive future

As my time at LIC draws to an end I look back and review the last 12 years as a period of great change within dairy, some for the good, other parts very challenging. As I look forward, I wish to share that I see an opportunity to really secure the future of a sector I continue to be extremely passionate about.

I have always believed in dairy and in recent years it has caused me pain to see farmers increasingly anxious as to what the future might hold. Much of that anxiety has related to the level of regulation that has either come down the line or sits on the immediate horizon.

Greenhouse gas (GHG) emissions and the approach that might be taken to manage such has been the centre of this unease. Cow peak came and went and as we started to see cows disappearing out of the national herd in the main to alternative land use, there has also been a level of unease as to what affect emissions-related regulation might have on cow numbers.

There is plenty of talk about tomorrow's tankers being electric and

the future of milk processing being powered in a more sustainable way. We then tally up the numbers and find that Scope 1 & 2 emissions only account for 10% of the dairy profile, the rest belongs to the cows.

There we are, "slash the numbers" is a voice I hear, and what - leave the production to come from elsewhere around the globe, from a corner that is noticeably less efficient than us?

That is daft if you take a global view.

So the focus goes on the approach that will be taken to manage Scope 3 emissions, leave it to others and you can bet we will have an 'Absolute Reduction' type approach coming down the line. That I say will be the beginning of the end for a sector in a part of the world that does it better than anyone else.

What I see instead (and I am both relieved and excited about it) is the milk processors stepping up and taking leadership positions and focusing intently on 'Emission's Intensity' targets.

All the talk is about what the big customers like Nestle, Mars & Starbucks want: I tell you what they want, they want to know about the emission's intensity profile of a unit of product, that is what matters to them. This, I give you the tip, is the moment we secure the future of our sector. When you focus on intensity you switch the focus from a regulatory target/hurdle to a narrative that is powered by step change in cow efficiency.

Dairying in New Zealand has a great future if we can control the narrative. We must go after the efficiency gains that are on the table. Let's focus on Kgs MS/Kg of Liveweight (LWT), and output per unit of feed relative to LWT, drive positive change, and tell our story better.

I don't see the grey of regulatory burden; I see the bright light of regulatory driven opportunity.

All the best and thank you for your support during my time at LIC.

Malcolm.

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A note from David Chin, LIC chief executive:

Since joining LIC back in 2011, Malcolm has created a legendary LIC career and contributed not only to the success of our organisation but to the success of the dairy sector overall. His incredible work ethic, powerful knowledge and genuine farmer affinity will be truly missed.

Malcolm's LIC career has had many highlights. When he started as the Jersey & SGL bull acquisition manager, LIC had three Jersey bulls in the top-10 on the Jersey Ranking of Active Sires list and when he left the role LIC, had all 10 in the top-10.

He was also pivotal in developing and championing the 'Herd Improvement' story which has seen the continued uptake of LIC's premium genetics products to a point that now over 80% of LIC's Premier Sires dairy genetics sales are 'premium', products with the growth in Forward Pack particularly significant.

However, it is the passion and engagement with our farmers which stands out for me. Having done a number of Shareholder Engagement events with Malcolm, he is truly a superb ambassador for not only LIC, but also agricultural co-operatives and the wider dairy industry.

I'd like to personally thank Malcolm for his considerable contribution to the leadership of LIC and the support that he has shown me.



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Stick to the Course, Smooth the Ebbs & Flows: It's Plain Sailing

Similar to many dairy farmers in the lower-south, Duncan and Anne-Marie Wells finished up calving in September, relieved to see the season on-the-turn as they set their sights toward this spring's mating.

Based on the couple's calving results, there's early confidence the latest cohort of cows, heifers, and replacements are on-track.

"The first thing I look at as we emerge from the calving chaos is the frequency of prompt, unassisted, calvings we've had," Duncan says. "And we did – we had very, very, few assisted calvings – so that's always a good indication things should turn out well."

Such calving success is perhaps partly due to the couple's continued investment in Premier Sires semen, a product they choose year-after-year because of its consistently reliable, and proven, results.

The Bulletin first visited the Wells' Taieri farm in 2015, at a time when the couple exclusively used Premier Sires Daughter Proven semen across their entire herd for the first six weeks

of mating (followed by natural mating bulls, before finishing off with one week of LIC short-gestation beef semen).

At the time the philosophy for investing in the team concept was straightforward: "We don't really understand the intricacies of breeding, and we don't try to," Duncan said. "I leave the bulls up to LIC – and as long as I'm getting good genetics, and I'm getting a fair spread of the team, that's the best way to go for me...I want LIC to make the decision; they're the experts as far as I'm concerned. I trust Premier Sires to deliver."

"...I want LIC to make the decision; they're the experts as far as I'm concerned. I trust Premier Sires to deliver."

Eight years on, the Wells' breeding philosophy remains largely the same, although some differences are now at play.

"(More recently) we were happy to go with the suggestion from our Agri Manager (Tim Johnson) that we utilise Forward Pack; he recommended we get some exposure to the latest

genomically-tested bulls," Duncan says.

The advantage of utilising Forward Pack was to tap into the latest genetics, earlier. This cut down on the generation interval, and therefore made for faster strides in genetic gain across the herd, Duncan and Anne-Marie said.

The farm also used Sexed Semen for the first time last year, and will continue with it this season. Duncan and Anne-Marie were happy with the outcome from last spring, and were able to obtain an increased

proportion of their replacements from their higher ranked cows.

While the practice of breeding from the latest genetics is acknowledged as an ideal way to ratchet up the rate of genetic gain, setting the young stock up for their first calving success was also a top priority.



Anne-Marie and Duncan Wells, Taieri

"We choose not to AI (artificially inseminate) our heifers," Duncan said. "We just want ease-of-calving for them, so they go to a natural-mate Jersey; it's also not desirable to have to monitor their calvings (a necessary requirement if breeding from the heifers was to occur)," Duncan said.

"Use of Forward Pack and Sexed Semen operate as a kind of counter-balance to that (i.e. not seeking progeny from heifers)."

In addition, the couple said that because their heifers were grazed at another farm it simply wasn't practical to do artificial breeding on them.

Confidence in accurately selecting replacement stock for the milking platform came from GeneMark Whole Herd testing, which confirmed parentage of the progeny, and provided for accurate gBW data on which to base further key decisions.

The Wells continue to use Daughter Proven semen, but nowadays its use comes during the second round of mating – although this in no way diminished its value and importance.

The Daughter Proven product provided for consistency and peace of mind, because it enabled the herd to maintain a genetic profile that boasted a higher degree of average reliability.

The mix of Premier Sires Forward Pack, Daughter Proven, and Sexed Semen, along with a SGL beef semen, appears to be a good formula for the Taieri farm.

In terms of breeding worth, the 630-strong crossbred herd is knocking on the door of the top-10% nationally, while production worth data shows the cows are well inside the nation's top-10%.

The budgeted annual milksolids was 310,000kgs, Anne-Marie said, and this was generally achieved most seasons.

In terms of BW, the 630-strong crossbred herd is knocking on the door of the top-10% nationally, while production worth data shows the cows are well inside the nation's top-10%.

Duncan said he wanted the cows producing 100% of their liveweight (the liveweight herd average was estimated at 490kg), and with the cows currently sitting about 90% of liveweight, it was believed more could be gained from the cows without adding significant cost inputs.

"Genetics isn't the limiting factor on our farm," Duncan said.

The Wells said a good part of their success could be put down to a good governance structure. The couple were 75% equity partners (another couple had a 25% stake in the farm), and key decisions and farm strategy relied on formal conversations at a board level.

"You can drive past the farm and look at it and see the cows, but what people don't really see is the strategic-oversight aspect of our business," Duncan said.

"There's only about six of us that truly get a look into governance of the farm,

and it's a crucial strength for us. We have regular meetings, and it's quite structured."

Meetings focused on big-picture decisions such as lowering the stocking rate and how to go about addressing the future environmental footprint on farm. Lowering the number of required cows and replacement stock was a

good focus for the farm, because, for example, grazing and rearing expenses could also be reduced over time.

"We have agendas, and we have a plant maintenance and replacement programme, for example, because we've found in the past that deferring plant replacement is not necessarily a very good idea," Duncan said.

"So now we're heading into a lower payout year not being overly concerned – because some of that's come about from having a past discipline with investment and plant replacement.

"It's not about reacting when it goes bad. It's about having everything in place as part of the norm, and when it does go bad, you're not panicking, you can just cope. It's just business as usual, and we're not ending up in big troughs and peaks. We want to kind of sail through the middle somewhere."



David Chin,
LIC chief executive

Long-term users of LIC bulls

achieving faster rates of genetic gain

Latest LIC research reaffirms users of LIC genetics are achieving faster rates of genetic gain - almost doubling the speed of improvement in their herds.

Through increased uptake of genomic bulls and having a sharper focus on herd improvement, farmers using LIC genetics are achieving an average rate of genetic gain of 18gBW in their herds per annum, well above the balance of the industry (averaging 10gBW).

Between 2017 - 2022, long-term users of LIC genetics had achieved almost double the rate of genetic gain per year compared to herds with less than 20% progeny sired by an LIC bull.

LIC Chief Executive, David Chin, said the data shows the size of the prize for New Zealand's dairy sector by only breeding from the best cows.

"It's incredibly pleasing to see that farmers who predominately use our bulls are achieving significantly higher rates of genetic gain in their herds.

"They are attaining greater milk production from fewer cows, while

also breeding animals that are more emissions efficient. This is positive news not only for the profitability of our farmers, but also the long-term environmental efficiency of New Zealand's dairy sector."

"The widespread use of genomics in our breeding programme, alongside farmers' commitment to herd improvement, has been instrumental to the faster rates of genetic improvement we're seeing."

All cows aren't created equal

As part of LIC's commitment to helping their farmers breed the best cows faster, we examined the full spectrum of herds recorded in the co-op's herd management software MINDA, which reaffirmed high BW cows were more efficient milk producers than low BW cows.

Close to 1 million cows, from current MINDA and herd tested herds aged between 4 -8 years-old, were grouped by breed and split into quartiles based on BW. The average (per cow) milk production, liveweight, and fertility breeding value (BV) from each quartile was calculated.

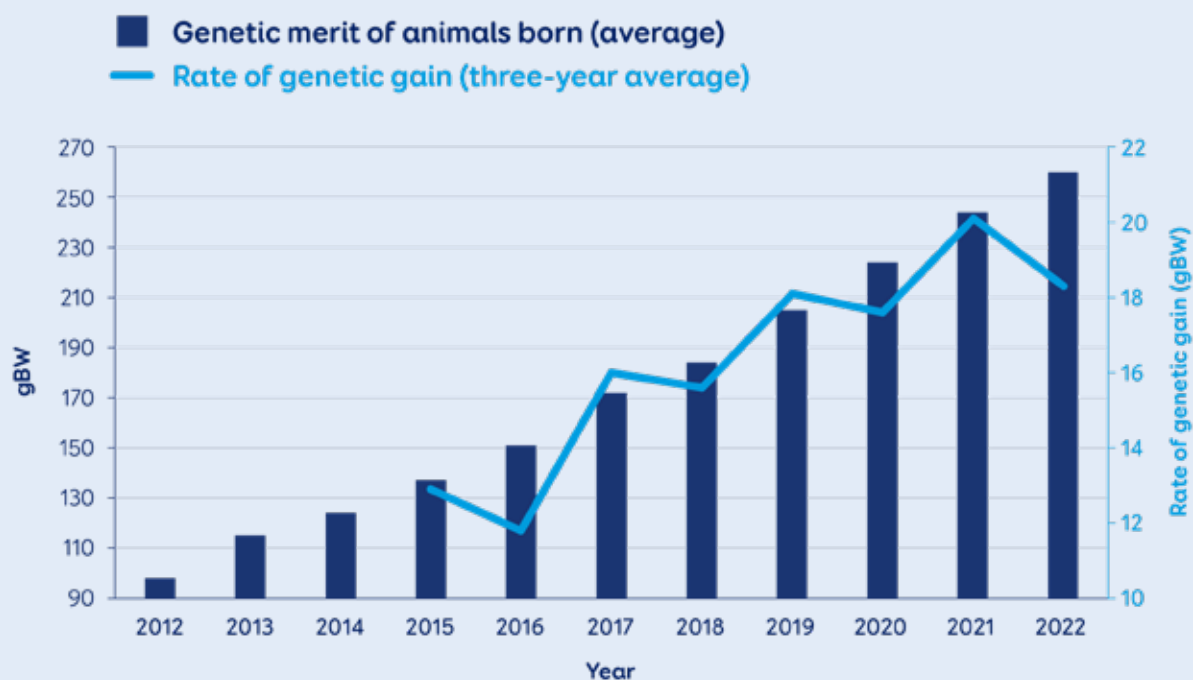
Results showed a significant opportunity in milk production and efficiency between the top and bottom quartile of cows. Not only are these cows in the top quartile more efficient at turning feed into milk, but they also weigh less and have a lower emissions footprint.

Future-focused lens

Chin said the co-op also has their eyes on the future, with continued investment into research and development to keep New Zealand farmers at the forefront of the global dairy industry.

"We continue be one of the largest investors in R&D for the primary sector, and this investment is contributing to solutions that will help our farmers remain profitable and sustainable for years to come.

"This, combined with our world-leading genetics and technology, is helping farmers to breed the best cows, faster today, while also ensuring that they have the tools they need for the future."



Long-term users of LIC bulls for artificial breeding are achieving 18gBW per annum, well above the balance of the industry (averaging 10gBW).

Holstein Friesian Cows

	Average gBW	Average kgMS	Average Liveweight	Average Fertility
Quartile 1 - The Top 25%	221	493	33.9	0.3
Quartile 2	157	457	34.7	-0.3
Quartile 3	111	441	35.9	-0.9
Quartile 4 - The Bottom 25%	36	425	41.1	-2.0

Source: Dairy herds recorded in MINDA with herd test results in 2022-2023 season: 186,808 cows (2014-2018-born), ranked by gBW.

+68 kgMS (16%)
-7.2kg liveweight

Crossbred Cows (HFxJ)

	Average gBW	Average kgMS	Average Liveweight	Average Fertility
Quartile 1 - The Top 25%	259	485	1.9	0.4
Quartile 2	197	456	4.6	-0.1
Quartile 3	154	440	7.3	-0.5
Quartile 4 - The Bottom 25%	86	419	11.5	-1.2

Source: Dairy herds recorded in MINDA with herd test results in 2022-2023 season: 582,000 cows (2014-2018-born), ranked by gBW.

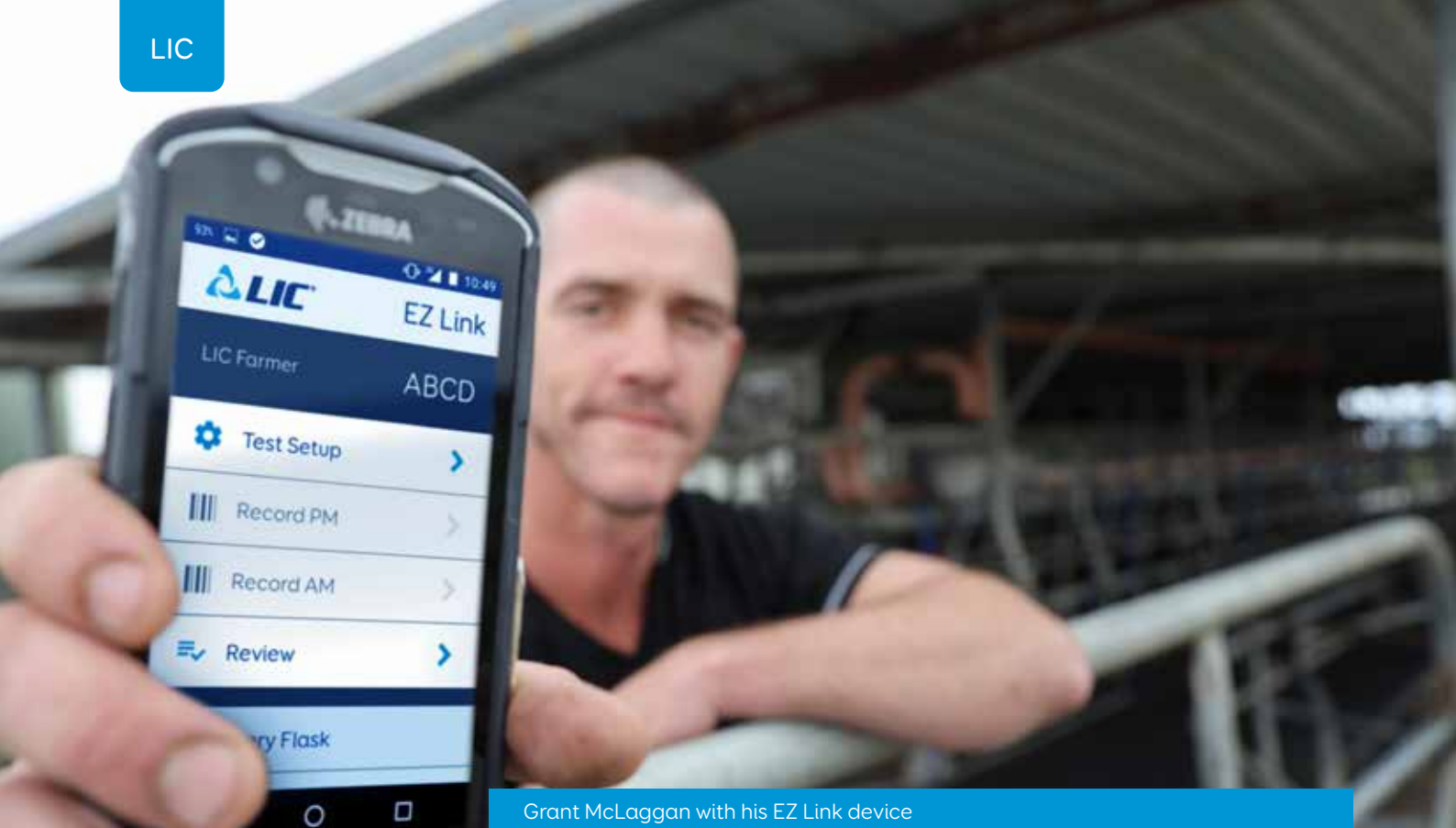
+66 kgMS (16%)
-9.6kg liveweight

Jersey Cows

	Average gBW	Average kgMS	Average Liveweight	Average Fertility
Quartile 1 - The Top 25%	308	418	-42.8	1.6
Quartile 2	248	386	-42.6	1.3
Quartile 3	205	370	-42.6	0.9
Quartile 4 - The Bottom 25%	119	359	-45.4	-0.2

Source: Dairy herds recorded in MINDA with herd test results in 2022-2023 season: 71,800 cows (2014-2018-born), ranked by gBW.

+59 kgMS (16%)
2.6kg liveweight



Grant McLaggan with his EZ Link device

Embrace Technology and its Benefits

Use EZ Link at Your Next Herd Test



More than 75% of LIC's herd tests are done using EZ Link.

Taupiri farmer Grant McLaggan, having used EZ Link recently for the first time, says it "definitely speeds the process up... give it a go because you've got nothing to lose - once you get the hang of it it's quicker and easier".

For the past seven years Grant has been managing the family farm, which milks 420 cows.

The family has herd tested for as long as Grant can remember, at least 30 years, completing 3 or 4 tests each season.

Until their herd test last March, the farm has stuck to the conventional method, in which the animal management tag number is written on the flask and placed into the associated numbered tray.

However, that's traditionally had its challenges inside the herringbone shed, Grant says.

"After reading 400 numbers, the reader is bound to call the odd one out wrong or the writer will write it wrong.

"You don't know about the duplicates until you take the flasks out to put them in the trays".

Another challenge was damp conditions and wet spray that came from hosing out the shed during milking:

"The flasks often get wet and you can't write on them with the (posca) pen."

Grant was recently convinced by his LIC Agri Manager to utilise EZ Link as a swift and accurate solution to what he describes as a laborious conventional herd test process.

"In the end it was simple; if there was a mistake it would tell you straight away and you could change it then and there.

"When putting the flasks away you don't have to put them in their individual numbers - normally the office is set up with all the trays laid out."

The new process and system meant the farm was even able to drop a labour unit in the shed at herd test time, because separate people weren't needed for reading and writing.

For more information on EZ Link go to LIC's Herd Test page on its website, or to trial at an upcoming herd test contact your local LIC Agri Manager.

TOP SPS FARMERS 2023



Catherine & David Smith
at the 2023 Breeders Day evening.

Hawera couple David and Catherine Smith, who farm 180 Jerseys, are LIC's National Sire Proving Scheme (SPS) Farmers of the Year for 2023.

David and Catherine were applauded for their efforts earlier this year at the cooperative's annual Breeders' Day – an event that sees more than 100 elite breeders from around New Zealand gather at LIC's Newstead headquarters (which includes a tour of the bull farm followed by a formal dinner and award presentation in Hamilton).

David said attending Breeders' Day was enjoyable and he wasn't unfamiliar with the event:

"It was good to see behind the scenes – the process of collections and how the farm goes about its business, but we've seen some of it before... we had a bull in one of the Premier Sires teams back in about 2009 (Smiths Dusky)."

The Smith's herd records and attention to detail were impeccable, according to Ann Scott, LIC's SPS Manager.

"Congratulations to David and Catherine. They are one farm of 200 Sire Proving farms across the country," she said.

"A critical part of being involved in the scheme is timeliness and communication of data, along with accurate recording of TOP (traits-other-

than-production) of all SPS daughters; this couple are meticulous with both.

"Their 10-year commitment to the scheme demonstrates their allegiance to Sire Proving. This dedication allows fellow farmers to have confidence in the accuracy of the bull proofs generated by our member's herds."

Since joining the scheme, David and Catherine have reared 359 SPS daughters, of which 259 have gone through successive lactational seasons in their dairy shed.

David said he focused on improving the genetic worth of his herd by using records as the basis of his culling decisions.

His decisions, along with early-use of LIC's genomic bulls has paid dividends: In terms of genomic Breeding Worth (BW), the Smith's herd is within the top-5% nationally.

When the Smiths joined SPS in 2014 their BW was 136/47, but today this index sits at 287/47, backed by a current production worth of 306/66. Recorded ancestry is 100%.

David credited the record-keeping of the farm to his son Darrell, who was adept at utilising MINDA, analysing information, and remotely transferring data.

The biggest drawback of being an SPS member was the relatively low cost of semen, David said, but the associated farm disciplines (such as record keeping, herd testing, and parentage testing) were an underlying advantage.

It was a case of keeping things simple, David said. "I'll do six weeks AB this season, and 4-5 weeks of natural-mate bulls."

ABOUT THE LIC SPS

LIC's bull acquisition team works to create approximately 1700 male calves from highly productive cow families with the potential to join the Sire Proving Scheme.

DNA tests are used to determine 200 of these 1700 calves that possess the most-desirable genetic traits for dairying. Some of the most important traits include:

- fertility
- fat production
- protein production
- udder support.

These 200 genomically selected calves formally join the Sire Proving Scheme, and their semen is collected for use on the daughters of SPS herds, with the performance of the progeny closely monitored in subsequent years.

There are a number of financial incentives available to farmers who are part of SPS. LIC has a small number of places available each year for top farmers wanting to join the scheme.

To join the scheme farmers must:

- have a stable herd of at least 200 cows
- sign up for four years
- mate 90% of your herd to SPS bulls
- commit to spring calving
- have four herd tests a year
- draft two-year-olds for TOP inspections and weighing
- keep full and accurate records.

SPS Farmers of the Year: Winners - 2023

Name	Years on the scheme	National/regional winners
David and Catherine Smith	10	National winners
Peter and Sandi Thompson	9	Upper North Island
Peter and Chrissy Moffitt	13	Lower North Island
Adam and Siobhan Williamson 50% partnership with parents Norm & Sandra	6	Upper South Island
Stephen and Andrea Dobson	19	Lower South Island

Farmer Support of Upgraded AB Facilities Leads to Key Milestone

During the last five years LIC's artificial breeding (AB) operational staff have worked with more than 1000 individual farmers to improve AB facility standards on-farm.

Primarily, this has helped secure the safety of more than 800 seasonal AB technicians, but the upgraded AB infrastructure also positions farmers to provide a better chance of cows getting in-calf (when first presented to the technician for mating).

Dave Hale, LIC's national AB manager, says the industry was well on its way to providing all AB technicians with a safe and secure place to work, meaning "the inseminator" can focus solely on their primary role of getting on-heat cows in-calf.

"Health and safety standards have come a long way since AB services were first offered, and we are certainly evolving with the times too. By introducing this standard, we've already seen mutual benefit for our AB technicians, farmers, and veterinarians across the country; these dedicated facilities provide multiple benefits for other uses."

A series of AB facility standards were first introduced by LIC in 2018. In June this year, the standards reached a first key milestone; if the

AB technician was asked to work from the pit of a herringbone shed on a trolley, LIC's service would no longer be offered to the farm.

The June deadline meant more than 1000 farmers responded by upgrading their existing AB facilities (in some cases, new facilities were specifically developed), providing an environment that was safe and fit-for-purpose.

Hale said the partnership with farmers and their commitment toward creating facilities that were compliant to LIC's national standard had been "a big mind shift" for some, but he felt sure of improved health and safety outcomes on farm.

"Getting cows in-calf when first presented is hugely important to all dairy farming operations," he said. "The AB technician plays one of the most critical roles during this process, so providing a work environment that can help them achieve this is a win-win for both our technicians and farmers."

"Our team have appreciated the opportunity to visit many of our farmers this year to check facilities, discuss on-farm biosecurity, and support the work going into AB facility standards to improve safety."



Dave Hale,
LIC national artificial breeding manager

A number of criteria must be met by all on-farm AB facilities by 1 June 2025 - this includes (but is not limited to):

- ✓ Areas being completely free of vertical poles and overhead hazards;
- ✓ Suitable standing room behind the animal;
- ✓ An animal-friendly, non-slip floor that prevents the animal from falling down;
- ✓ A working area (e.g. loading bench) that is protected from environmental effects;
- ✓ Capacity to hold a minimum 5% of the farm's milking herd;
- ✓ The AB technician must operate from behind a solid, safe, barrier;
- ✓ The AB technician must not operate in the same space as any unrestrained animals.

Check out the LIC website and have a chat with your Regional AB Manager who will help you plan a new AB facility and schedule a visit to review and sign-off any upgrades that have taken place.

Roll With It:

Dairy Farmers Adding Value to the Beef Supply Chain



by Nicola Hemming,
LIC beef genetics product support

According to LIC sales, increasing numbers of farmers are now investing in artificially-inseminated (AI) beef semen rather than using natural mating bulls, and for good reason!

First, this can significantly reduce mating costs (which can be as much as 20% of the cost of a naturally-mated bull).

The AI-beef option also offers more confidence in calving ease and progeny performance.

LIC helps provide better certainty by putting all its beef bulls through a rigorous evaluation process, utilising data from a wide range of sources¹, including the Beef + Lamb New Zealand (B+LNZ) DairyBeef Progeny test.

By partnering in the progeny test, LIC gets early access to beef bulls that have robust progeny data behind them, allowing the cooperative to essentially select 'the beef equivalent' of Premier Sires Daughter Proven bulls.

The aim of LIC's beef offering is to provide elite beef sires that add value at all stages of the dairy beef supply chain.

To do this, strong emphasis is placed on bulls with good growth and carcase potential, as well as desirable calving ease and gestation length data; the motive is to ensure all those in the dairy beef pipeline get a profitable animal.

LIC's beef genetics team is also working closely with beef breeders to create a beef offering that is 100% homozygous polled – this means that all dairy beef offspring will be polled; no de-budding required!

Just as dairy farmers prefer to breed cows that will milk efficiently for their specific farm conditions, LIC recognises that one size does not fit all in the beef space.

Every farm has its own goals in terms of what it uses beef semen for, and LIC offers a range of breeds to help farmers fulfil various needs.

For example, Hereford and Charolais are typically good colour-marking options, while Angus and Wagyu provide for easier calving options. On the other hand, SGL Hereford and SGL Angus will help farmers gain days-in-milk, while the Murray Grey offers an attractive 100% polled option, and Simmental and Profit Maker/Stabilizer offer good growth options.

Farmers selecting Charolais, Belgian Blue, and Simmental sires should keep in-mind that these breeds will produce bigger animals, and while LIC does its best to ensure its sires are as easy-calving as possible, some sense checking should be carried out before deciding which cows can be safely inseminated with these breeds.

Some farmers prefer to use several beef breeds to ensure appropriate use of sires for the different cow breeds or size of cows within the herd.

It's interesting to note the increased popularity of Charolais, with LIC sales tripling over the last three years.

The upswing in sales is largely driven by the popularity of Kakahu Gerry and the attractive colour marking of Charolais, along with good muscle growth and carcase traits. LIC's Charolais offering also boasts a 100% homozygous polled status.

Hereford and Angus continue to have a strong presence in terms of sales numbers, with both breeds seeing a gradual shift toward SGL options.

If farmers need further advice about beef breed options, it's recommended they contact their local LIC Agri Manager who can work through the breed pack and individual bulls that best-suit farm's goals.

¹ Data sources include: Breedplan EBVs (estimated breeding values), MINDA calving and gestation length records, dairy farmer feedback, B+LNZ Dairy Beef Progeny Test, bull breeder's recommendations, and other genetic evaluations as well as genomic data.



Kakahu Milestone, an up and coming Charolais star.

From the Breeding Desk

There's certainly been plenty going on from a Livestock Selection perspective!

Firstly, although selections were carried out four years earlier, we are now witnessing the emergence of some exciting new graduates (20-codes). The sire selection team discusses some of the highlights in the following pages.

The Embryo Transfer (ET) programmes we facilitate are mostly complete and results to date are pleasing.

The reliance the LIC breeding programme has on this technology is increasing and is a key strategy in the drive to increase rates of genetic

gain. The benefits are substantial given, on average, a new two-year-old that had ET undertaken as a heifer could potentially have a lifetime's reproductive performance on the ground in one year.

In the winter version of *the Bulletin* I indicated the business would be embarking on an extensive series of farmer facing workshops to understand what the farming systems of the future are, and, as a result, and what the cow of the future is.

The workshops held across the country (see pp 28, 29) were a great opportunity to connect with our farmer shareholders and lead to some excellent discussions. We now move to phase two, which will be a wide survey



by Simon Worth,
LIC livestock selection manager

to help build on the 'farmer voice'.

From a team perspective we have farewelled Adrian Young who is now enjoying time with family on their 50/50 sharemilking operation near Culverden. Adrian's replacement is Taylor Connell, who has previously worked within the Bull Acquisition team, and he starts back with us in late-November.

All the very best and enjoy the next few pages!

STRIKING GOLD

2023 will surely go down as among the wettest-ever for dairy farming, and I take my hat off to farmers for being resilient and still making a success of their farms.

With the focus on quality and efficiency of cows in your herd, it will be even more important in the future to breed replacements from your best cows.

As usual, the quality of LIC bulls is a hot topic in spring, with the new crop of sires getting their proofs and changes from one Animal Evaluation (AE) run to the next.

This makes it a very exciting time for LIC's breeding team.

Normally the team's main focus is on the new graduates, but I'd also like to focus on a very popular bull making his mark in the industry, profiled immediately below.

318001 OKURA PEPPER LUCCA: The Okura stud of Luke and Lyna Beehre has made a phenomenal contribution to the industry over the years.

Indeed thousands of cows in New Zealand have Okura bulls in their pedigree, including Lucca himself, as well

as Kaino and Index, and the famous *Hall of Fame* bull, Integrity.

Lucca has both Degree and Integrity in his pedigree, arguably two of the most influential Jersey sires of the past 20 years.

His dam Okura Oli Lilac is from the L family, and she is a super production cow with Production Worth and Lactation Worth recordings of more than 500.



by Danie Swart,
bull acquisition manager



Okura Oli Lilac, dam of Lucca

Good production, longevity, and good classification scores are prominent in the maternal line.

Lucca himself is one of the top-ranked proven bulls in the industry with excellent production and a combined fat and protein genomic breeding value (gBV) of greater than 70.

Combined with positive fertility and good conformation traits, it's no surprise that Lucca is a very popular sire. Okura Pepper Lucca is available in the Premier Sires Daughter Proven team, and can be nominated via Alpha.

Three of the most exciting 20-code graduates:

320027: CHARLTONS MISTY MAGNIFY:

Magnify was heavily used as a sire of sons in contract mating and the embryo transfer (ET) programme, and we are lucky to have a good number of his sons already in the LIC stable.

From the Charltons stud near Cambridge, Magnify is out of a high-production Speedway dam with a PW of 561 and LW of more than 600. Longevity is also a standout in this pedigree.

Magnify is a nice all-rounder with good milksolids, positive fertility, good size, and sound udders.

Charltons Misty Magnify is available in the Premier Sires Forward Pack team.

320036 CHARTERIS COJACK

MAKA: From the Charteris family in Taranaki, Maka excels in efficiency with his liveweight relative to milksolids production.

His fat gBV, along with tidy udders, are also features of this boy.

Maka's dam, a Glenhaven TGM Genius S3J cow, was a high-production machine with nine great lactations and a PW of greater than 500. Charteris Cojack Maka is available in the Premier Sires Daughter Proven team.

320014 EVLEEN GL LIGHTHOUSE:

Evan and Shirleen Smeath highly-rated the Excellent classified Goldie dam of Lighthouse. Every time I saw this cow I shared this opinion, as she was capacious with a stunning udder.

Her dam, sired by Degree, was also a magnificent high-production cow.

Lighthouse is a good all-rounder, ticking most boxes with good components, size, fertility, and capacity, along with great udders. Evleen GL Lighthouse is available in the Premier Sires Sexed team.



Charltons Speedy Marlowe, dam of Magnify



320036 Charteris Cojack Maka



320014 Evleen GL Lighthouse



The Whole is Greater than the Sum of its Parts

I'm often quizzed by farmers and breeders about what makes for a quality bull dam.

There is no single attribute which can answer this – rather it's a collective of factors.

In saying this, I'd argue that one of the most essential attributes the dam must possess is depth in the pedigree.

That is exactly what we're seeing from the maternal lines of the sires profiled on these pages.

These dams are each the result of a contract themselves, coming from families with a proven history of producing both sires and daughters which have played pivotal roles within the contract mating process, and, in turn, have positively impacted the New Zealand dairy population.

This season there are eight Holstein-Friesian graduates for the 2020-cohort, entering various Premier Sires teams, and I'm considerably excited by the lineup showcased here.

120073 MEANDER TS ALLOY-ET S1F: Taking out the top spot at 565 genomic breeding worth (gBW) is none other than Alloy. Sired by

Supervisor, Alloy's strengths include his production, boasting 130kg of combined fat and protein through modest volume of 835 litres and 68kg of liveweight.

Nestled in good company, Alloy hails from the illustrious dam that is Meander FMI April S2F. Meander has a long history of providing LIC with impressive sons, having graduated nine to date including Arrow, Azure, Asset and Wingman. Classified at 87, this superstar has a plethora of daughters we continue to utilise within the contract mating space.

A daughter of worthy note is Meander HH April-ET S2F. This Hothouse dam has two full sons graduating as part of the 2020 cohort, 120070 Meander TD Aero-ET S1F and 120071 Meander TD Astute-ET S1F. These Darkstar sons are the complete package, each boasting solid production including positive fertility, A2A2 status, and udder genomic breeding values (gBVs) of 0.59 and 0.57 respectively.

Credit must be given to Robert and Annemarie Bruin for their continuous and remarkable contribution to the Holstein Friesian breed and industry.



by Michele van der Aa,
LIC senior sire analyst



Meander FMI April S2F, dam to Alloy



120045 Woodcote VHR Lucid-ET S1F



Lucid's maternal half-sister.

120045 WOODCOTE VHR LUCID-ET

S1F: The inclusion of Lucid in a Premier Sires team is an absolute no-brainer.

Excelling across many areas, Lucid graduates with the highest solids of all Friesian graduates named in a team at 140 kg combined fat and protein via a moderate 60 kg liveweight gBV..

Ensuring that Lucid daughters will survive for many lactations, this production is supported by an udder gBV of 0.93. With a focus on udders, the Livestock Selection team stepped back and used Remedy as an older sire of sons, and this is clearly paying dividends.

Lucid is the result of embryo work through the Discovery Project, a joint venture between Holstein Friesian NZ and LIC.

Andy and Angela Fullerton should feel extremely proud of what they've delivered here - on behalf of all Holstein-Friesian commercial dairy farmers, thank-you!!

120003 SCOTTS BV DARIUS-ET:

Having climbed 169 gBW points since the September Animal Evaluation run to 425 gBW, Darius is a bull that continues to excite.

The result of LIC's investment in embryo transfer work, Darius is a sire who brings plenty to the table including 110kg of combined fat and protein, positive fertility, and exceptional farmer traits - as well as 0.75 gBV for dairy conformation.



120003 Scotts BV Darius-ET

A Vector son, out of a Freedom dam, Darius is born into the same cow family as LIC Hall of Fame bull, 101140 Macfarlanes Dauntless, showcasing the strength within both this family and Darius as a sire.

While no longer actively farming, it is delightful to see the fruits of Mark and Patricia Scott's labour still being celebrated today; congratulations on another brilliant contribution!

A full list of the 2020 Friesian graduates named in Premier Sires teams:

AB code	Name	gBW	Rel	Fat gBV	Protein gBV	Volume gBV	LWT gBV	Fert gBV	UO gBV	DC gBV	A2 Status	Team
120073	MEANDER TS ALLOY-ET S1F	565	84	84.4	45.6	835.6	68.0	0.0	0.25	0.06	A1/A2	Forward Pack
120045	WOODCOTE VHR LUCID-ET S1F	454	81	69.0	70.7	1953.7	59.5	-1.8	0.93	0.42	A2/A2	Forward Pack
120015	ASHDALE GE HIGHRISE S2F	445	78	70.1	45.0	1084.8	74.4	-1.1	0.26	0.69	A2/A2	Sexed
120003	SCOTTS BV DARIUS-ET	425	80	66.6	44.3	1023.1	92.9	1.0	0.54	0.75	A1/A2	Daughter Proven
120046	FERNGLADE ST TOTEM-ET S1F	408	77	59.0	33.3	721.0	38.1	0.8	0.46	0.33	A1/A2	Daughter Proven
120070	MEANDER TD AERO-ET S1F	379	80	51.3	39.4	674.7	62.9	2.1	0.59	0.23	A2/A2	A2A2
120063	MATTAJUDE VR BRUTE-ET S1F	349	78	52.4	52.2	1181.8	93.9	-0.4	0.57	0.57	A2/A2	A2A2
120071	MEANDER TD ASTUTE-ET S1F	346	78	46.0	40.4	903.0	64.9	2.0	0.57	0.22	A2/A2	A2A2

Defining Efficiency in NZ's Dairy Herd



By Kelli Buckley,
bull acquisition manager

Earlier this year I had the opportunity to travel the country hosting several Breeding your Future Herd workshops (see pp28, 29).

A key discussion from these sessions was the importance of maintaining a robust and adaptable national herd that is not only highly profitable, but also supremely efficient.

With our national herd now made up of nearly 60% Holstein Friesian/ Jersey crossbreed (and this figure set to continue to increase), it's clear the historically-strong parent breeds in New Zealand's dairy cows have laid a sound foundation for the KiwiCross sire.

These sires' strength, together with their unparalleled attributes, contribute to unrivalled efficiency and productivity across New Zealand commercial dairy farms.

It's therefore exciting to highlight a few spring bull graduates below; all are

sure to fit-the-bill in terms of strength, all-round desirable traits, efficiency, and flexibility. Why not get a jump on the field and get them in your team this spring?

520037 GLENMEAD MARVELLOUS-ET: Ranking at the top with 507 gBW, bred by Kevin and Felicity Clark, Marvellous is an absolute workhorse.

Production is huge with 66kg fat and 38kg protein carried through 726 litres of volume. This is clearly being passed down by his sire Beckon and Perspective dam. Marvellous holds his place in the KiwiCross Sexed team.

520068 MORGANS MALAWI: Sitting at 480 gBW and bringing to the table exceptional production with 66kg fat and 39kg protein, Malawi has daughters that are clearly showing efficiency and strength – they are milking machines!

Bred from the Friesian sire Triumphant, and out of an exceptional Bullion dam (she has excellent production, entering her sixth lactation while maintaining an admirable 7 for udder overall).

It is thanks to Daniel and Julie Morgan that we have Malawi entering the Forward Pack team.

520091 MARSHALL PAPAMOA: An outstanding bull that is dear to his breeders' hearts, Robert and Marjorie Smith, it's a delight to see Papamoa enter the Daughter Proven team.

This A1A2 Floyd son is the epitome of what this breed offers at 470 gBW, bringing a combined fat and protein genomic breeding value (gBV) of 80kg, 53kg of which is fat. Used as a sire-of-sons in LIC's contract mating scheme, Papamoa has two sons in the pipeline.

His daughters are real lookers, with Papamoa having the highest udder gBV of the graduating 20-code KiwiCross



520037 Glenmead Marvellous-ET



520068 Morgans Malawi



520091 Marshall Papamoa
as a yearling

sires to enter teams, sitting at a phenomenal 1.10.

With a dairy conformation gBV of 0.5, Papamoa is the entire package and will offer exceptional type daughters that will efficiently convert pasture to milk and remain in your herd.

520090 CAWDOR POUNAMU:

High-ranking at 486 genomic breeding worth (gBW), Pounamu is a sire that offers strength within the breed.

Bred by Fraser and Christine Macbeth, Pounamu is available through Alpha (nominated) only.

A Proclaimer son and half-brother to Pinnacle, the Macbeth's Integrity dam is in her sixth lactation producing 500kg milksolids in a OAD system. She scored a massive 9 for capacity as a two-year-old, and this has clearly been passed down to her son with his capacity gBV of 0.93.

The depth and strength Pounamu offers will no doubt be matched with milky daughters; his 63kg fat and 40kg protein gBV combined with 530 milk volume at -3 Liveweight is up for grabs!



520090 Cawdor Pounamu

520011 AUAHI BUSTLE:

Another bull entering the KiwiCross efficiency arena. Boasting a combined fat and protein gBV of 87kg and 578 milk volume, there's unlikely to be any shortfalls.

A Beckon son from a Tuxedo dam (with the dam entering her sixth lactation after ending last season with production over 600kg milksolids), breeders Perry and Kathlen Henderson have much to be proud of.

Type is an absolute, and Bustle's dam has consistently scored well for udder overall and dairy conformation. At 0.74

gBV for capacity, Bustle will surely be delivering production and strength as part of the Forward Pack team.

520033 DOWSON HONENUI-ET:

Already taking a place in the Sexed team before his proof came though, Honenui is a sire that has been well-utilised for contract mating, with 10 sons entering Sire Proving last season.

An efficient producer, this Blackhawk son offers 48kg fat at a 6.3% fat test, together with 0.68 capacity and a massive udder overall gBV of 0.91.

With his Trumpet dam still scoring admirably as an 8-year-old, I'm sure Honenui will be regarded by many as an all-rounder.

A true credit to his breeders Nicolas and Mary Dowson who bred this fine sire.

It's fair to say the KiwiCross sire represents a great advancement in New Zealand's dairy industry, harnessing the remarkable qualities of the country's exceptional dairy cows. As the industry continues to emphasise sustainable farming practices, the KiwiCross breed offers an unparalleled opportunity for our dairy farmers to enhance profitability, reduce environmental impact, and contribute to a sustainable and prosperous future.



Dam of 520011 Auahi Bustle

A full list of the 2020 KiwiCross graduates named in Premier Sires teams:

AB code	Name	gBW	Rel	Fat gBV	Protein gBV	Volume gBV	LWT gBV	Fert gBV	UO gBV	DC gBV	A2 Status	Team
520037	GLENMEAD MARVELLOUS-ET	507	80	61.1	38.1	726.5	3.2	4.2	0.45	0.27	A2/A2	Sexed
520090	CAWDOR POUNAMU	486	81	63.4	39.6	530.0	-3.3	-4.5	0.36	0.71	A2/A2	Alpha
520068	MORGANS MALAWI	480	76	66.3	38.9	964.7	29.0	3.1	0.37	0.26	A2/A2	Forward Pack
520091	MARSHALL PAPAMOA	470	81	52.9	27.2	170.1	1.2	0.0	1.10	0.50	A1/A2	Daughter
520011	AUAHI BUSTLE	439	78	49.9	36.9	578.5	1.1	2.1	0.35	0.50	A2/A2	Forward Pack
520033	DOWSON HONENUI-ET	402	85	47.7	21.7	-369.4	41.4	5.2	0.91	0.61	A2/A2	Sexed

2023 Holstein-Friesian A2A2 Team

Sire	Sire	
122029	MAHAREE FINN TONIC-ET S1F	121043 MAHAREE TO NIRVANA S2F
122082	MILL-RIDGE MF GENTLEMAN-ET S1F	122092 TRONNOCO EQ SHEIK-ET S3F
122044	MEANDER FINN ALASKA-ET S1F	121069 TAFTS TRADESMAN S2F
122008	DICKSONS FINN MINDSET-ET S1F	120063 MATTAJUDE VR BRUTE-ET S1F
122065	PRATTLEYS LUCID FREE-STYLE S1F	120071 MEANDER TD ASTUTE-ET S1F
121001	MILL-RIDGE RC FORD-ET S3F	
121040	SPRING RIVER GG SPYRO S1F	
122083	HAGLEA LUCID SHEFFIELD-ET S2F	
120070	MEANDER TD AERO-ET S1F	

WEIGHTED AVERAGES OF PREMIER SIRES

\$413/97%

Management	-0.5	0	0.5	1
Adapts to Milking	0.29			quickly
Shed Temperament	0.29			placid
Milking Speed	0.13			fast
Overall Opinion	0.39			desirable
Conformation	-0.5	0	0.5	1
Stature	0.65			tall
Capacity	0.30			capacious
Rump Angle	-0.14			sloping
Rump Width	0.34			wide
Legs	-0.06			curved
Udder Support	0.55			strong
Front Udder	0.50			strong
Rear Udder	0.34			high
Front Teat Placement	0.24			close
Rear Teat Placement	0.41			close
Teat Length	-0.13			Long
Udder Overall	0.53			desirable
Dairy Conformation	0.36			desirable
gBW/Rel%				
Milkfat				
Protein				
Milk				
Liveweight				
Functional Survival				
Milkfat %				
Protein %				
Heifer Calving Dif				
Cow Calving Dif				
Fertility				
SCC				
BCS				
NB: the reliability of a team of bulls is always higher than using just one bull				
Date 14/10/2023				
Shaded bulls include daughter information				
HOOFPRINT®				
Nitrogen Efficiency				
Methane Efficiency				



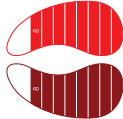
2023 Holstein-Friesian Forward Pack Team

Sire	Sire	
119002	BELLAMYS DM GALANT-ET S1F	122058 TELESIS FLEX THEODORE S1F
119041	ROYSON MG CURRENCY S3F	122049 LIGHTBURN SAQ GASOLINE-ET
119079	BUSY BROOK DEALER-ET S2F	122080 WITTENHAM CP POLLMAN-P S1F
115107	LIGHTBURN BLADE GUSTO	122013 DICKSONS AR MONOPOLL-ET-P S2F
119034	TAFTS RHD OFFICER-ET S2F	122016 TANGLEWOOD MS WAVE S1F
119035	TAFTS RHR ORDAIN S3F	122054 MEANDER SCOUT ATTORNEY-ET S2F
120073	MEANDER TS ALLOY-ET S1F	121011 LOMBARDI MAVERICK S3F
120045	WOODCOTE VHR LUCID-ET S1F	122034 BUELIN MB BLAST-OFF S1F
122072	WAITARIA FINN TAINE-ET S1F	122051 MEANDER SAMBA ASTIR-ET S3F

WEIGHTED AVERAGES OF PREMIER SIRES

\$427/98%

Management	-0.5	0	0.5	1
Adapts to Milking	0.37			quickly
Shed Temperament	0.37			placid
Milking Speed	0.21			fast
Overall Opinion	0.48			desirable
Conformation	-0.5	0	0.5	1
Stature	0.82			tall
Capacity	0.42			capacious
Rump Angle	-0.19			sloping
Rump Width	0.62			wide
Legs	-0.05			curved
Udder Support	0.62			strong
Front Udder	0.64			strong
Rear Udder	0.50			high
Front Teat Placement	0.27			close
Rear Teat Placement	0.30			close
Teat Length	-0.33			long
Udder Overall	0.68			desirable
Dairy Conformation	0.52			desirable
gBW/Rel%				
Milkfat				
Protein				
Milk				
Liveweight				
Functional Survival				
Milkfat %				
Protein %				
Heifer Calving Dif				
Cow Calving Dif				
Fertility				
SCC				
BCS				
NB: the reliability of a team of bulls is always higher than using just one bull.				
Date 14/10/2023				
Shaded bulls include daughter information				
HOOFPRINT®				
Nitrogen Efficiency				
Methane Efficiency				



2023 Holstein-Friesian Daughter Proven Team

Sire	Sire			
120003	SCOTTS BV DARIUS-ET	119015	BUELIN MG GLACIER	
120046	FERNGLADE ST TOTEM-ET S1F			
119002	BELLAMYS DM GALANT-ET S1F			
119041	ROYSON MG CURRENCY S3F			
119079	BUSY BROOK DEALER-ET S2F			
119034	TAFTS RHD OFFICER-ET S2F			
119033	LIGHTBURN FREE RANGE-ET			
119035	TAFTS RHR ORDAIN S3F			
115107	LIGHTBURN BLADE GUSTO			

\$371/99%

WEIGHTED AVERAGES OF PREMIER SIRE

Management	-0.5	0	0.5	1
Adapts to Milking	0.46			quickly
Shed Temperament	0.47			placid
Milking Speed	0.08			fast
Overall Opinion	0.55			desirable
Conformation	-0.5	0	0.5	1
Stature	0.84			tall
Capacity	0.63			capacious
Rump Angle	-0.14			sloping
Rump Width	0.63			wide
Legs	0.01			curved
Udder Support	0.64			strong
Front Udder	0.70			strong
Rear Udder	0.43			high
Front Teat Placement	0.26			close
Rear Teat Placement	0.27			close
Teat Length	-0.42			long
Udder Overall	0.67			desirable
Dairy Conformation	0.63			desirable

gBW/Rel%

Milkfat

Protein

Milk

Liveweight

Functional Survival

Milkfat %

Protein %

Heifer Calving Dif

Cow Calving Dif

Fertility

SCC

BCS

\$371/99

53 kgs

46 kgs

1033 Litres

76 kgs

2.0%

4.9%

3.9%

2.4%

0.8%

0.0%

-0.04

0.20

NB: the reliability of a team of bulls is always higher than using just one bull

Date 14/10/2022

HOOFPRINT[®]

Nitrogen Efficiency

Methane Efficiency



2023 Holstein-Friesian Sexed Team (A2A2)

Sire	Sire			
122046	ARON-AMY FINN ORACLE-ET S1F	122050	MEANDER MB ADVENTURE S2F	
122012	DICKSONS FINN MOHAWK-ET S1F	122091	TRONNOCO EQ SPIER S2F	
122056	MAH FINN SAGE-ET S1F	122047	LIGHTBURN BUD MACH-ET S2F	
122018	SHARPE BE SHOOTER-ET S2F	121046	BELLAMYS RS GADSBY-ET S1F	
122031	RITSON FINN NORTHSTAR S1F	121082	LIGHTBURN FREER GROOVE	
120015	ASHDALE GE HIGHRISE S2F	122094	TRONNOCO GT SHIPTON S1F	
122009	DICKSONS RS MARLIN-ET S1F			
122053	MEANDER GALANT AVENGER-ET S1F			
122078	OAKLINE PW KRAKA S1F			

WEIGHTED AVERAGES OF PREMIER SIRE

\$404/97%

Management	-0.5	0	0.5	1
Adapts to Milking	0.34			quickly
Shed Temperament	0.34			placid
Milking Speed	0.15			fast
Overall Opinion	0.44			desirable
Conformation	-0.5	0	0.5	1
Stature	0.60			tall
Capacity	0.45			capacious
Rump Angle	0.02			sloping
Rump Width	0.39			wide
Legs	-0.01			curved
Udder Support	0.49			strong
Front Udder	0.43			strong
Rear Udder	0.29			high
Front Teat Placement	0.18			close
Rear Teat Placement	0.30			close
Teat Length	-0.18			long
Udder Overall	0.47			desirable
Dairy Conformation	0.46			desirable

gBW/Rel%

Milkfat

Protein

Milk

Liveweight

Functional Survival

Milkfat %

Protein %

Heifer Calving Dif

Cow Calving Dif

Fertility

SCC

BCS

\$404/97

54 kgs

38 kgs

622 Litres

55 kgs

2.6%

5.2%

4.1%

2.1%

0.2%

3.0%

0.00

0.10

NB: the reliability of a team of bulls is always higher than using just one bull

Date 14/10/2023

HOOFPRINT[®]

Nitrogen Efficiency

Methane Efficiency



2023 KiwiCross® Forward Pack Team (F9J7) (A2A2)

Sire	Sire				
518019	DIGGS HARDCOPY	522077	TATAWAI WRESTLER-ET		
519068	VAN STRAALENS ELITE-ET	522082	HENRYS AMBITION		
519042	WERDERS SWEEPSTAKE	521005	PAYNES SUBLIME-ET		
519020	PAYNES PROFESSOR-ET	522002	PAYNES PURSUIT		
519001	GREENMILE TOMAHAWK	521011	PAYNES SCHOLAR-ET		
518016	HORIZON ASCOTT	522017	BURGESS PLATO-ET		
520068	MORGANS MALAWI	522059	JUFFERMANS MR-EXCLUSIVE		
520011	AUAHI BUSTLE	522023	CLOVALLEY SCORPION		
522006	PAYNES SPECIALIST	522034	BURMEISTERS BRUISER-ET		
522050	JULIAN TU-MEKE	521035	WIFFENS CENTURION		

\$432/99%

WEIGHTED AVERAGES OF PREMIER SIRES

Management	-0.5	0	0.5	1	gBW/Rel%	\$432/99
Adapts to Milking	0.26			quickly	Milkfat	49 kgs
Shed Temperament	0.26			placid	Protein	32 kgs
Milking Speed	0.12			fast	Milk	328 Litres
Overall Opinion	0.33			desirable	Liveweight	14 kgs
Conformation	-0.5	0	0.5	1	Functional Survival	3.0%
Stature	-0.12			tall	Milkfat %	5.4%
Capacity	0.62			capacious	Protein %	4.2%
Rump Angle	0.07			sloping	Heifer Calving Dif	0.1%
Rump Width	0.12			wide	Cow Calving Dif	-0.5%
Legs	0.04			curved	Fertility	2.7%
Udder Support	0.55			strong	SCC	0.01
Front Udder	0.54			strong	BCS	0.13
Rear Udder	0.57			high		
Front Teat Placement	0.14			close		
Rear Teat Placement	0.33			close		
Teat Length	-0.17			long		
Udder Overall	0.59			desirable		
Dairy Conformation	0.54			desirable		

NB: the reliability of a team of bulls is always higher than using just one bull.

Date 14/10/2023

Shaded bulls include daughter information



2023 KiwiCross® Daughter Proven Team (F9J7)

Sire	Sire
519034	GORDONS FLASH-GORDON
520091	MARSHALL PAPAMOA
518019	DIGGS HARDCOPY
520003	GREENMILE RURU
519068	VAN STRAALENS ELITE-ET
519042	WERDERS SWEEPSTAKE
519001	GREENMILE TOMAHAWK
519020	PAYNES PROFESSOR-ET
519012	KOKOAMO K2
518016	HORIZON ASCOTT

WEIGHTED AVERAGES OF PREMIER SIRES

\$405/99%

Management	-0.5	0	0.5	1
Adapts to Milking	0.22			quickly
Shed Temperament	0.22			placid
Milking Speed	0.15			fast
Overall Opinion	0.31			desirable
Conformation	-0.5	0	0.5	1
Stature	-0.17			tall
Capacity	0.60			capacious
Rump Angle	-0.07			sloping
Rump Width	0.21			wide
Legs	0.03			curved
Udder Support	0.48			strong
Front Udder	0.47			strong
Rear Udder	0.61			high
Front Teat Placement	0.11			close
Rear Teat Placement	0.19			close
Teat Length	-0.13			long
Udder Overall	0.56			desirable
Dairy Conformation	0.54			desirable

gBW/Rel%

Milkfat

Protein

Milk

Liveweight

Functional Survival

Milkfat %

Protein %

Heifer Calving Dif

Cow Calving Dif

Fertility

SCC

BCS

\$405/99

46 kgs

33 kgs

431 Litres

14 kgs

3.1%

5.3%

4.1%

0.1%

-0.3%

0.2%

-0.13

0.14

NB: the reliability of a team of bulls is always higher than using just one bull.

Date 14/10/2023

Shaded bulls include daughter information

HOOFPRINT®

Nitrogen Efficiency

Methane Efficiency

2023 KiwiCross® Sexed Team (F9J8) (A2A2)

Sire	Sire
522013	PAYNES PHYSICIST-ET
522012	PAYNES GAMEBOY-ET
521072	BALDRICKS SPECTACULAR
521015	PAYNES STAMINA-ET
520037	GLENMEAD MARVELLOUS-ET
522038	ARKANS COMMANDO-ET
522025	FOXTON CONDUCTOR
521059	HACKER ADVANTAGE-ET
522060	KAIPER TEMPTATION-ET
520033	DOWSON HONENUI-ET

WEIGHTED AVERAGES OF PREMIER SIRES

\$455/97%

Management	-0.5	0	0.5	1
Adapts to Milking	0.28			quickly
Shed Temperament	0.28			placid
Milking Speed	0.12			fast
Overall Opinion	0.34			desirable
Conformation	-0.5	0	0.5	1
Stature	0.03			tall
Capacity	0.61			capacious
Rump Angle	0.02			sloping
Rump Width	0.14			wide
Legs	0.04			curved
Udder Support	0.67			strong
Front Udder	0.69			strong
Rear Udder	0.69			high
Front Teat Placement	0.14			close
Rear Teat Placement	0.30			close
Teat Length	-0.14			long
Udder Overall	0.72			desirable
Dairy Conformation	0.56			desirable

gBW/Rel%

Milkfat

Protein

Milk

Liveweight

Functional Survival

Milkfat %

Protein %

Heifer Calving Dif

Cow Calving Dif

Fertility

SCC

BCS

\$455/97

49 kgs

30 kgs

137 Litres

18 kgs

3.7%

5.7%

4.3%

0.3%

-0.2%

4.1%

-0.07

0.14

NB: the reliability of a team of bulls is always higher than using just one bull.

Date 14/10/2023

Shaded bulls include daughter information

HOOFPRINT®

Nitrogen Efficiency

Methane Efficiency

2023 Jersey Forward Pack Team (A2A2)

Sire	Sire
319030 GRANTZ BC HENDRIX ET S3J	322012 CAWDOR SAMBUCA
318035 SHELBY BC LOTTO ET S3J	321045 CARATACUS TB DUKE
319037 OKURA TIRONUI BT MARCO ET	321012 DOUGHBOY DISTINCTION
318063 GLENUJ PEPPER SHAKER	321026 ACACIA HOSS TUI
320027 CHARLTONS MISTY MAGNIFY	321053 GREENMILE LQ TAKAHE
322002 PAYNES RB GENERATION-ET	322007 CARATACUS FAVOUR DEFINITION-ET
322037 GLANTON KFP BURNLEY	
322022 JONES BB PHANTOM	
321008 GLANTON FLYNN BRISBANE	
322205 LYNBROOK TRIGG BRAVADO	

WEIGHTED AVERAGES OF PREMIER SIRES					\$424/98	
Management	-0.5	0	0.5	1	gBW/Rel%	\$424/98
Adapts to Milking	0.22			quickly	Milkfat	41 kgs
Shed Temperament	0.22			placid	Protein	17 kgs
Milking Speed	0.13			fast	Milk	-228 Litres
Overall Opinion	0.30			desirable	Liveweight	-22 kgs
Conformation	-0.5	0	0.5	1	Functional Survival	2.7%
Stature	-0.58			tall	Milkfat %	5.9%
Capacity	0.52			capacious	Protein %	4.4%
Rump Angle	-0.21			sloping	Heifer Calving Dif	-1.9%
Rump Width	0.00			wide	Cow Calving Dif	-0.9%
Legs	0.09			curved	Fertility	3.4%
Udder Support	0.29			strong	SCC	-0.10
Front Udder	0.41			strong	BCS	0.14
Rear Udder	0.48			high		
Front Teat Placement	0.14			close		
Rear Teat Placement	-0.07			close		
Teat Length	0.08			long		
Udder Overall	0.46			desirable		
Dairy Conformation	0.47			desirable		

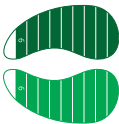
NB: the reliability of a team of bulls is always higher than using just one bull.

Date 14/10/2023

Shaded bulls include daughter information

HOOFPRINT®

Nitrogen Efficiency
Methane Efficiency



2023 Jersey **Daughter Proven** Team

Sire	Sire
318001	OKURA PEPPER LUCCA
320036	CHARTERIS COJACK MAKA
319030	GRANTZ BC HENDRIX ET S3J
318035	SHELBY BC LOTTO ET S3J
319037	OKURA TIRONUI BT MARCO ET
316039	ULMARRA TT GALLIVANT
317049	SHELBY SS LORENZO S3J
318063	GLENUJ PEPPER SHAKER

\$407/99%

WEIGHTED AVERAGES OF PREMIER SIRE[®]

Management	-0.5	0	0.5	1
Adapts to Milking	0.29			quickly
Shed Temperament	0.29			placid
Milking Speed	0.18			fast
Overall Opinion	0.36			desirable
Conformation	-0.5	0	0.5	1
Stature	-0.61			tall
Capacity	0.47			capacious
Rump Angle	-0.23			sloping
Rump Width	0.10			wide
Legs	0.11			curved
Udder Support	0.27			strong
Front Udder	0.47			strong
Rear Udder	0.47			high
Front Teat Placement	0.19			close
Rear Teat Placement	-0.10			close
Teat Length	0.26			long
Udder Overall	0.48			desirable
Dairy Conformation	0.43			desirable

gBW/Rel%

Milkfat

Protein

Milk

Liveweight

Functional Survival

Milkfat %

Protein %

Heifer Calving Dif

Cow Calving Dif

Fertility

SCC

BCS

\$407/99

41 kgs

17 kgs

-159 Litres

-24 kgs

2.3%

5.8%

4.3%

-2.1%

-0.8%

3.7%

0.03

0.11

NB: the reliability of a team of bulls is always higher than using just one bull.

Date

Date 14/10/2023

HOOFPRINT[®]

Nitrogen Efficiency

Methane Efficiency

2023 Jersey **Sexed** Team (A2A2)

Sire	Sire
322001	PAYNES TITUS EXCELSIOR-ET
322047	WILLIAMS BANFF JULIAN
321018	BELLS PC FELLOW
322024	MONKS HOSS TANK
322200	LYNBROOK POPEYE TAILORMADE
321017	MONKS MISTY STRIKER
321204	HAWTHORN GROVE GH OGANEV
322034	SCOTTSDALE KP CALVARY-ET
322014	HAWTHORN GROVE GLODYSSEUS
320020	THORNWOOD BANFF TITUS

\$403/97%

WEIGHTED AVERAGES OF PREMIER SIRE[®]

Management	-0.5	0	0.5	1
Adapts to Milking	0.25			quickly
Shed Temperament	0.25			placid
Milking Speed	0.11			fast
Overall Opinion	0.32			desirable
Conformation	-0.5	0	0.5	1
Stature	-0.65			tall
Capacity	0.65			capacious
Rump Angle	-0.01			sloping
Rump Width	0.06			wide
Legs	0.08			curved
Udder Support	0.53			strong
Front Udder	0.57			strong
Rear Udder	0.75			high
Front Teat Placement	0.16			close
Rear Teat Placement	0.08			close
Teat Length	0.08			long
Udder Overall	0.69			desirable
Dairy Conformation	0.59			desirable

gBW/Rel%

Milkfat

Protein

Milk

Liveweight

Functional Survival

Milkfat %

Protein %

Heifer Calving Dif

Cow Calving Dif

Fertility

SCC

BCS

\$403/97

35 kgs

12 kgs

-396 Litres

-26 kgs

2.9%

6.0%

4.4%

-1.8%

-1.1%

4.0%

-0.28

0.15

NB: the reliability of a team of bulls is always higher than using just one bull.

Date

Date 14/10/2023

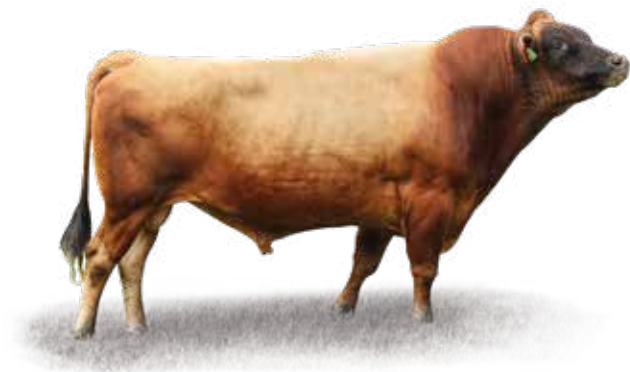
HOOFPRINT[®]

Nitrogen Efficiency

Methane Efficiency

SPRING BULLS AVAILABLE IN ALPHA

320029 Rockland LQ Berkly



Breeding Details

Breeder	M & E Darke	Dam	Rockland Larson Billie
Sire	Lynbrook King Quadrant	MGS	Evleen Integrity Larson

Production gBVs

Protein	Milkfat	Milk	Liveweight	Fertility
30 kg	67 kg	106	-20 kg	-2.9 %
3.4 %	6.1 %			
Functional Survival	Somatic Cell Count	Heifer Calving Difficulty	Cow Calving Difficulty	Body Condition
3.4 %	0.05	-2.0 / 87%	-0.8 / 90%	0.00

INDIVIDUAL PRICE

\$33.55
+GST

SPRING PACK
FROM

\$25.07*
+GST

*If 10% InvestaMate discount applies

gBW/Rel **\$541/83%**

TOP Traits 148 Daughters 53 Herds

Management	gBV	-0.5	0	0.5	1.0
Adapts to Milking	0.34				
Shed Temperament	0.33				
Milking Speed	0.35				
Overall Opinion	0.54				
Stature	-0.14				
Capacity	0.32				
Rump Angle	-0.29				
Rump Width	-0.26				
Legs	-0.09				
Udder Support	0.58				
Front Udder	0.51				
Rear Udder	1.03				
Front Teat Placement	0.11				
Rear Teat Placement	-0.01				
Teat Length	0.26				
Udder Overall	0.79				
Dairy Conformation	0.36				

A2 Protein	A2/A2	TOP Daughters	66
Gestation Length	0.4 days	VMSI	1462

Jersey J16
Registered Pedigree

Evaluation Date:
14/10/2023



320014 Evleen GL Lighthouse



Breeding Details

Breeder	E & S Smeath	Dam	Evleen Goldie Lollie
Sire	Glenui BC Laredo ET S3J	MGS	Puhupuhi Caps Goldie S3J

Production gBVs

Protein	Milkfat	Milk	Liveweight	Fertility
16 kg	43 kg	75 l	-26 kg	4.2 %
4.1 %	5.6 %			
Functional Survival	Somatic Cell Count	Heifer Calving Difficulty	Cow Calving Difficulty	Body Condition
3.6 %	-0.11	-2.6 / 67%	-1.7 / 77%	0.18

INDIVIDUAL PRICE

\$33.55
+GST

SPRING PACK
FROM

\$25.07*
+GST

*If 10% InvestaMate discount applies

gBW/Rel **\$423/81%**

TOP Traits 109 Daughters 45 Herds

Management	gBV	-0.5	0	0.5	1.0
Adapts to Milking	0.18				
Shed Temperament	0.18				
Milking Speed	0.09				
Overall Opinion	0.29				
Stature	-0.79				
Capacity	0.87				
Rump Angle	-0.11				
Rump Width	0.07				
Legs	0.10				
Udder Support	0.60				
Front Udder	0.59				
Rear Udder	0.95				
Front Teat Placement	0.17				
Rear Teat Placement	0.31				
Teat Length	-0.04				
Udder Overall	0.77				
Dairy Conformation	0.76				

A2 Protein	A2/A2	TOP Daughters	41
Gestation Length	3.2 days	VMSI	1361

Jersey J16
Registered Pedigree

Evaluation Date:
14/10/2023



SPRING BULLS AVAILABLE IN ALPHA

120045 Woodcote VHR Lucid-ET S1F

120073 Meander TS Alloy-ET S1F



Seven-year-old Dam

Breeding Details

Breeder	Woodcote Farms	Dam	Woodcote FU Laura-ET S3F
Sire	Van Heuven VA Remedy S1F	MGS	Maire Mint Fire-up

Production gBVs

Protein	Milkfat	Milk	Liveweight	Fertility
71 kg	69 kg	1954 l	59 kg	-1.8 %
3.7 %	4.4 %			
Functional Survival	Somatic Cell Count	Heifer Calving Difficulty	Cow Calving Difficulty	Body Condition
3.1 %	0.27	2.7 / 54%	0.3 / 84%	-0.22

INDIVIDUAL PRICE

\$33.55
+GST

SPRING PACK
FROM

\$25.07*
+GST

*If 10% InvestaMate discount applies

gBW/Rel \$454/81%

TOP Traits

96 Daughters 40 Herds

Management	gBV	-0.5	0	0.5	1.0
Adapts to Milking	0.34				
Shed Temperament	0.32				
Milking Speed	0.50				
Overall Opinion	0.52				
Stature	1.18				
Capacity	0.31				
Rump Angle	-0.42				
Rump Width	0.74				
Legs	-0.02				
Udder Support	0.90				
Front Udder	0.66				
Rear Udder	0.57				
Front Teat Placement	0.73				
Rear Teat Placement	1.21				
Teat Length	-0.23				
Udder Overall	0.93				
Dairy Conformation	0.42				

A2 Protein	A2/A2
Gestation Length	-6.5 days

TOP Daughters	52
VMSI	1527

 Holstein-Friesian F16
Registered Pedigree (supplementary)

 Evaluation Date:
14/10/2023


Breeding Details

Breeder	R & A Bruin	Dam	Meander FMI April S2F
Sire	Tafts GR Supervisor S1F	MGS	Farside M Illustrious S3F

Production gBVs

Protein	Milkfat	Milk	Liveweight	Fertility
46 kg	85 kg	836 l	68 kg	0.0 %
4.0 %	5.6 %			
Functional Survival	Somatic Cell Count	Heifer Calving Difficulty	Cow Calving Difficulty	Body Condition
3.8 %	-0.36	1.6 / 63%	-0.2 / 86%	0.18

INDIVIDUAL PRICE

\$33.05
+GST

SPRING PACK
FROM

\$25.07*
+GST

*If 10% InvestaMate discount applies

gBW/Rel \$565/84%

TOP Traits

154 Daughters 62 Herds

Management	gBV	-0.5	0	0.5	1.0
Adapts to Milking	0.37				
Shed Temperament	0.35				
Milking Speed	0.52				
Overall Opinion	0.58				
Stature	0.60				
Capacity	0.04				
Rump Angle	-0.30				
Rump Width	0.60				
Legs	-0.15				
Udder Support	0.24				
Front Udder	0.02				
Rear Udder	0.41				
Front Teat Placement	-0.16				
Rear Teat Placement	-0.44				
Teat Length	-0.17				
Udder Overall	0.25				
Dairy Conformation	0.06				

A2 Protein	A1/A2
Gestation Length	-7.5 days

TOP Daughters	35
VMSI	1487

 Holstein-Friesian F16
Registered Pedigree (supplementary)

 Evaluation Date:
14/10/2023


SPRING BULLS AVAILABLE IN ALPHA

520091 Marshall Papamoa



Breeding Details

Breeder	R & M Smith	Dam	CHNQ-17-338
Sire	Bells OI Floyd S3J	MGS	Carsons Mecca Pulse S1F

Production gBVs

Protein	Milkfat	Milk	Liveweight	Fertility
27 kg	53 kg	170 l	1 kg	0.0 %
4.2 %	5.7 %			
Functional Survival	Somatic Cell Count	Heifer Calving Difficulty	Cow Calving Difficulty	Body Condition
4.6 %	-0.17	-0.5 / 78%	-1.2 / 81%	0.16

INDIVIDUAL PRICE

\$33.55
+GST

SPRING PACK FROM

\$25.07*
+GST

*If 10% InvestaMate discount applies

gBW/Rel **\$470/81%**

TOP Traits

113 Daughters 44 Herds

Management	gBV	-0.5	0	0.5	1.0
Adapts to Milking	0.38				
Shed Temperament	0.38				
Milking Speed	0.24				
Overall Opinion	0.46				
Stature	-0.37				
Capacity	0.55				
Rump Angle	0.20				
Rump Width	0.43				
Legs	0.12				
Udder Support	0.98				
Front Udder	0.81				
Rear Udder	1.26				
Front Teat Placement	0.19				
Rear Teat Placement	0.45				
Teat Length	-0.55				
Udder Overall	1.10				
Dairy Conformation	0.50				

A2 Protein	A1/A2	TOP Daughters	34
Gestation Length	-1.5 days	VMSI	1437

KiwiCross® J10F6

Evaluation Date:
14/10/2023



520068 Morgans Malawi



Breeding Details

Breeder	D E & J D Morgan No 1 Family Trust	Dam	DJHF-14-25
Sire	Stoupes BG Triumphant S1F	MGS	Braemark Bullion

Production gBVs

Protein	Milkfat	Milk	Liveweight	Fertility
39 kg	66 kg	965 l	29 kg	3.1 %
3.8 %	5.1 %			
Functional Survival	Somatic Cell Count	Heifer Calving Difficulty	Cow Calving Difficulty	Body Condition
3.9 %	0.01	0.4 / 50%	-0.4 / 87%	0.14

INDIVIDUAL PRICE

\$33.55
+GST

SPRING PACK FROM

\$25.07*
+GST

*If 10% InvestaMate discount applies

gBW/Rel **\$480/76%**

TOP Traits

68 Daughters 37 Herds

Management	gBV	-0.5	0	0.5	1.0
Adapts to Milking	-0.03				
Shed Temperament	-0.05				
Milking Speed	0.17				
Overall Opinion	0.16				
Stature	0.27				
Capacity	0.18				
Rump Angle	0.15				
Rump Width	-0.01				
Legs	-0.01				
Udder Support	0.37				
Front Udder	-0.07				
Rear Udder	0.45				
Front Teat Placement	0.26				
Rear Teat Placement	0.59				
Teat Length	0.16				
Udder Overall	0.37				
Dairy Conformation	0.26				

A2 Protein	A2/A2	TOP Daughters	17
Gestation Length	-3.4 days	VMSI	1427

KiwiCross® F12J4

Evaluation Date:
14/10/2023



Drawing the Short Straw Has Never Been So Rewarding

by James Mills,
LIC genetics product specialist

The popularity of LIC's short gestation length semen has never been so high, with the most recent season (2022-2023) delivering nearly 2 million extra days in milk across the industry.*

This is significantly up on the four previous seasons, when an average of 1 million extra days-in-milk was delivered per annum.

It's the big picture that makes for the impressive reading, however.

Since being actively marketed and sold by LIC in 2014 (when fresh SGL Dairy semen hit the market), the cumulative effect of short gestation use by LIC farmers means that 10.4 million extra days-in-milk has been achieved across the industry.*

Factor in today's Fonterra mid point payout forecast (\$7.25), and the value-add revenue across the industry is nearly \$141 million (i.e. 10.4 million days in milk results in an additional 15.7 million kilograms of milksolids (@ 1.87kg milksolids per cow per day).*

The biggest gains in days-in-milk can be achieved through the use of LIC's SGL Dairy® (Crossbred) semen.

SGL Dairy is the result of a specifically-bred bull team that today reduces average gestation length by up to 12 days on farm (the team itself therefore has a breeding value of negative-24 days!).

At an individual farm level, this equates to potentially thousands of dollars in additional farm revenue through extra days-in-milk, but there are additional benefits.

With the benefit of having cows calve earlier in the season, there is significantly more time to recover before mating begins.

Research indicates that with more time to recover, cows are more likely to cycle,



Mating/Conception

Day 0



Calving



The use of SGL semen tightens the calving period, resulting in more days-in-milk and increasing the chances of pregnancy when mating arrives

and get back in calf, within the first six weeks of mating. Farmers that utilise MINDA reproduction reports will note it's the herd's later-calving cows that are typically the hardest group to get back in-calf.

The value of getting the cow in-calf cannot be under-estimated; a pregnant cow is one fewer that needs replacing (which will increase the opportunity for discretionary culling).

In addition, a more-condensed calving spread can make for easier management, and a more even spread of feed allocation for the herd.

SGL Dairy is also a solid supplement to, or an outright replacement for, the natural mate bull.

Going all-AB is an increasingly attractive option for any farmer concerned about biosecurity, and the traditional benefits of lowering, or eliminating, the need for the natural mate bull remain.

The significant risk factors of introducing bulls to the farm is widely acknowledged: Staff safety is paramount, and additional costs can be incurred through broken fences, bull holes, and territorial behaviour.

Many farmers observe that bull management is also a fine art, and if there is not enough bull- power, the ramifications of bull fatigue can mean higher-than-normal empty rates.

Ensuring the right number of healthy bulls are delivered to the herd, and stay healthy for the duration, involves a good amount of homework and careful attention.

Bulls must be rotated and rested properly to avoid bull fatigue.

SGL Beef products also available. To find out more about our SGL offering visit lic.co.nz/sgl

The rise & rise of SGL semen:

	LIC straws sold 2017	LIC straws sold 2022	% growth '17-'22
SGL Dairy	129,342	260,451	101%

*Includes all LIC SGL products.



by Matt Cassineri, FarmWise consultant
South Canterbury/North Otago

Know Your Numbers

to Improve Farm Profitability

The challenges faced by farmers in today's dairy sector are perhaps like nothing faced before: despite relatively high milk payouts of recent years, profits are ironically shrinking due to skyrocketing costs related to the production of milksolids.

The last few years have seen climbing costs of fertilizer and labour as well as fuel, feed, freight, and interest rates.

With many costs outside farmers' control, it's becoming harder for some farmers to find places to manage the

cost of production on farm.

Meanwhile, regulations are also having a large impact: the reduction in nitrogen use to 190 KgN/ha has led to an inevitable squeeze on the potential of dry matter per hectare produced on farm. This prompts a reduction in the number of cows milked, and in many cases total milk production.

Additional compliance costs for environmental plans, wintering consents, and so on, also continue to increase.

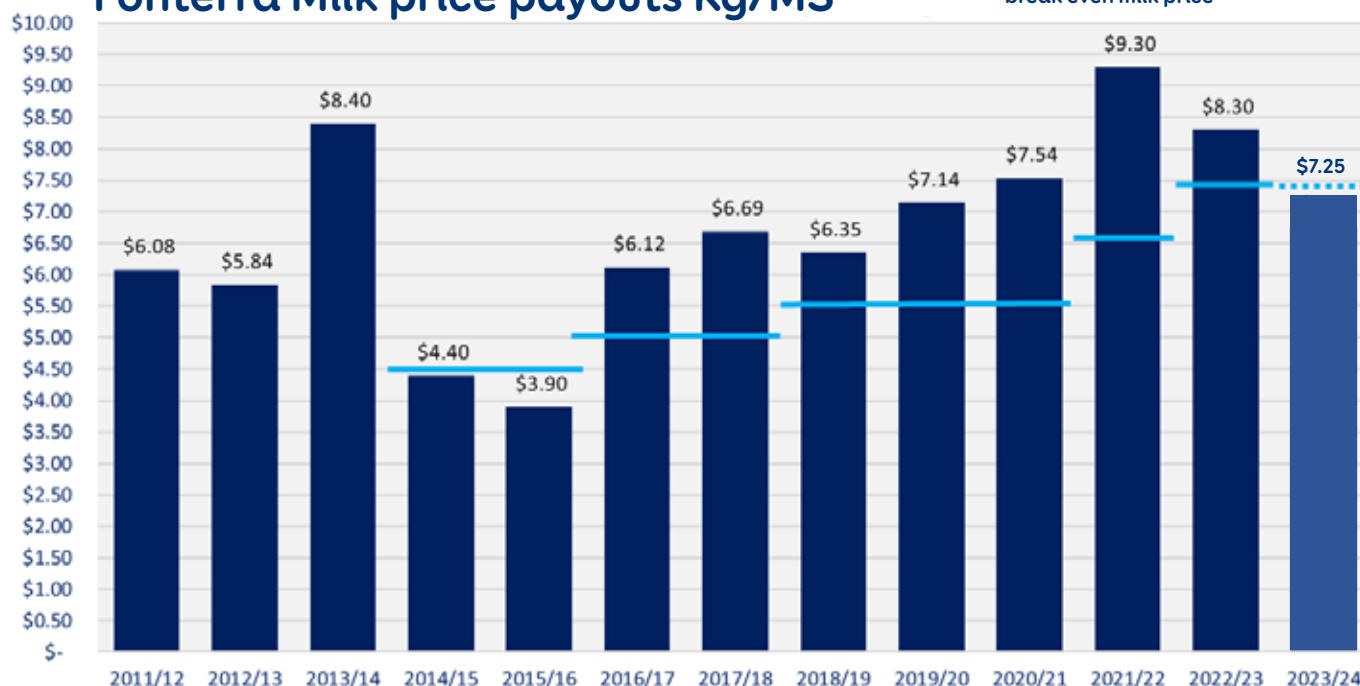
In the 2014-2015 milk payout drop, much of the industry learned a valuable lesson in how to reduce or maintain low cost of production on farm. The potential to further reduce costs is not as great as it once was.

How do we get back to a profitable scenario?

For many, the key is to be more efficient in the way milk is produced.

Efficiency could be summarised as reaching the peak level of performance through use of the

Fonterra Milk price payouts Kg/MS



fewest inputs, while achieving the highest possible output.

In simple terms, more milk from less.

Overall farm efficiency can be improved by incorporating technology such as wearables, automatic drafting gates, and automatic cup removers (ACRs).

This helps improve milking efficiency, and generally means fewer mastitis treatments, for example. In addition, this kind of technology means cow sheds can often be run by one labour unit. Other advantages include accurate and reliable heat detection and fewer health issues.

Of course, affordability within a financial budget is key, with debt increasing significantly over recent years across some dairy farms.

Whether your farm operates in a system 1 or a system 5, increasing Feed Conversion Efficiency (FCE) will make the whole dairy farm system more efficient.

By seriously measuring, monitoring, and taking action on all factors directly affecting FCE, the same, or more, milk using less feed is the fundamental outcome.

FCE can be increased by measuring and acting on a day-to-day basis on existing data available on farm already. This data enables informed decisions designed to improve profitability.

FCE is determined by animal, diet, and management components.

Animal component

Body Condition Score (BCS) is a key driver for FCE. If the animal reaches, or maintains, ideal BCS along the lactation and dry periods, cows are likely to perform at their full potential. In addition, high genomic breeding worth (gBW) and production worth (PW) cows will have a better chance of producing more milk than low gBW/PW cows.

Dietary component

A balanced diet with quality feed positively impacts FCE, as the cows will have higher intakes and fewer wasted nutrients. Higher intakes result in higher FCE, which equates to better profit margins.

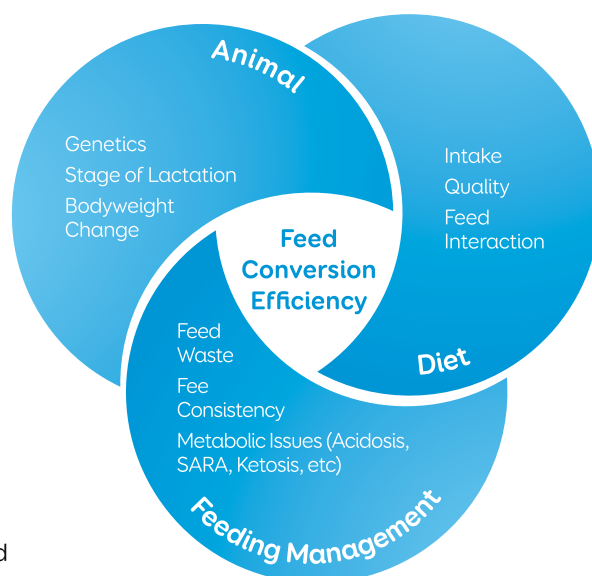
Be accurate. Use average MjME values for the feed, or test your own feed. Total MjME intake will be different in either scenario. Is the measure 'feed offered' or 'feed consumed'?

All these will have an impact on feed intake, consequently affecting FCE.

Feeding Management component

Feed waste is the most common factor that negatively affects feed conversion efficiency. Feed waste can reach as high as 30-40% in extreme cases.

It's well-known that the most profitable farmers not only grow more grass, but utilise a high percentage of that grass they grow.



Waste not only occurs in the paddock, but also on feed-pads, in-shed feeding systems, through estimations of how much the feed wagon load weighs, or through 'guessing' the silage DM percent rather than testing.

Feed allocation has a positive correlation with FCE too. Consistency of feeding in a pasture-based system is hard to achieve but by no means impossible, and farmers should aim for it.

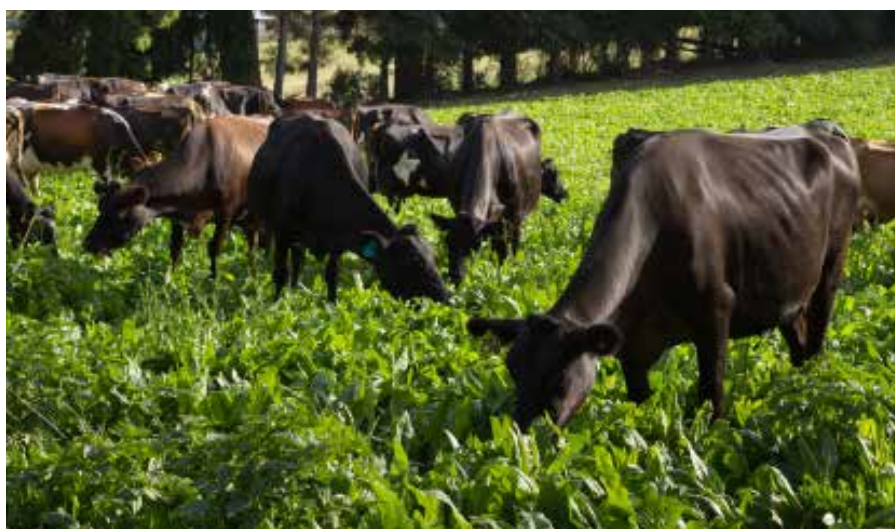
Metabolic issues also have a negative impact on FCE. As some of these metabolic issues (ketosis, sub-acute rumen acidosis) are hard to measure on farms that aren't using collars, more attention must be paid on prevention strategies.

On many farms, information already exists, and is ready to be used.

Farmers should understand what's important to measure, and why. Having accurate, realistic, data enables informed decisions.

Measuring, monitoring, and responding can help result in a resilient, sustainable, and profitable dairy business.

Not all farms will share the same room for improvements in terms of feed management, but good can only come from taking a look at your own farm's scenario. Take time to investigate this season!



Breeding The Future Herd

LIC's bull acquisition team has this year worked with part of the cooperative's marketing and product team to capture farmer ideas on what farm systems and operations will look like in the future, together with the cow/herd required over the next 10-15 years.

The purpose is to incorporate farmer feedback in to LIC's breeding scheme.

Over recent months, a total of 14 farmer workshops have been conducted across New Zealand, with 135 farmers sharing their insights..

Owner-operators made up the majority of participants, followed by sharemilkers, and together these farmers represented 80% of all participants.

All herd sizes (180 to over 1000 cows) were well represented, with a good range of input and milking regimes represented.

Feedback:

What will your farming operation look like in 10 -15 years?

Having a herd of strong, healthy, efficient cows that all earn their place in the herd was the key to success, according to participants.

There was general agreement that better quality cows would allow for lower stocking rates. There was also a desire among many farmers to respond to public scrutiny of farming practices, and to respond to calls for tighter environmental regulations.

Farmers highlighted the likelihood that non-replacement calves would potentially be required to be on farm longer.

Farm profitability was also a common theme. Healthy profits would allow for continued investment into farming operations. New technology/automation were popular investments being considered, driven largely by challenges in recruitment and retention of staff.

Time savings was a common thread, as was provision for a better farm/ work life balance. How to replace skills/ knowledge was a key consideration for succession planning.

Variable milking regimes, including once-a-day milking, were seen as a valid option in future. Extending lactations was also a consideration among many.

The change in milking regimes was driving the need for the desired cow attributes mentioned above.

How do you see performance being measured on farm in the next 10-15 years?

Profitability was the priority in terms of performance measurement, but there was a range of views in how profitability was best-measured, with multiple per cow targets available to farmers.

Key goals for the cow/herd included empty rate, 6-week in calf rates, production targets, per cow efficiency, and cow survival/longevity within the herd.

Animal health targets included factors such as facial eczema, somatic cell count, BVD, and Johne's Disease occurrences.

It was clear cow efficiency was becoming more critical. Farmers were seeking to better utilise farm-grown feed.

Animal wellbeing across the farming sector was a priority.

At a farm level, staff retention and attracting more workers to the industry was identified as a performance measure. Most farmers believe that to help with retention of good staff, it was key that traditional farming pathways remained accessible throughout the industry.

There was a feeling that mandatory reporting was set to increase, and in this context participants emphasised that data quality would be pivotal in measuring how an operation was performing. Integration of data, and herd insights provided by tools like the MINDA platform needed to better-accommodate ease of data sharing.

How do you see compliance and regulatory measures altering your farming operation?

Less of an environmental footprint but at no cost to production was a common message.

Cow turnover within a herd was likely to change, due to the rising cost of bringing a replacement into the herd, combined with the requirement for non-replacements to enter a value stream.

There was a strong sense that the public would have more influence on farming. Positive public perception of farming was seen as key to the industry's long-term success, with a spotlight expected on all aspects of farm operations (a 'social licence' to operate was a genuine expectation).

Farmers were starting to purchase, or considering purchasing, new infrastructure such as new sheds, barns, feedpads, or herd homes. The prospect of non replacement calves staying on the farm longer, and the likelihood winter practices changing, are also impacting farmers' thinking.

This was driving an increased number of self-contained operations in the industry.

A common view was that there would be larger farm sizes/more corporate operations in the future due to the pressure on the industry for compliance and profitability, which would potentially force out some of the smaller farms.

What traits will a cow need to succeed in your farming system of the future?

Across all workshops, below were the top-10 traits farmers ranked 'most-critical'.

Rank	Trait
1	Fertility
2	Udder Overall
3	Udder Conformation
4	Production Worth
5	Kg Milksolids produced
6	Capacity
7	Udder Support
8	Longevity
9	Somatic Cell Count
10	Breeding Worth

Other 'hot' topics:

Breed make up

The majority of farmers intend to stick to their current breed of choice.

Almost 50% of participants want a cross bred animal. An ideal breed makeup for a cross favoured more-Friesian type, F10 and above was preferred.

Average number of lactations

It was clear farmers were looking to increase the average number of lactations cows complete in their system. The majority of participants, who provided a target, expected cows to do six or more lactations.

Days in milk

Participants clearly indicated they were looking for an increase in days-in-milk in future lactations; 44% of farmers wanted an increase of about 10 days.

Gestation Length

75% of farmers wanted to see change in this space, with the majority wanting gestation length shortened. 48% of farmers wanted gestation length shortened by between 6- and 10-days.

Kilograms of milksolids per cow

76% of participants indicated they wanted their per-cow target for kilograms of milksolids to increase.

Almost 70% of participants indicated they would target more than 450 kg/MS per cow in the future, with almost 24% targeting at least 550kg/MS per cow.

On average farmers said they would target a 17% increase in production per cow.

Kilograms of milksolids per kilograms of liveweight

More than 50% of participants indicated they wanted an increase in kilograms of milksolids per kilograms of liveweight.

58% of participants who provided a future target were aiming for more than 100% (kgMS/kg liveweight) per cow in future years. Almost 10% of farmers would aim for at least 120% (kgMS/kg liveweight).

Liveweight

33% of participants were looking to maintain their current liveweight (i.e. typically the amount of change being targeted was 20kgs and below).

At the Core of Rural Communities: LIC's Calf Club Support

Pictured here is a selection of photographs from some of the more than 200 schools that have been supported by LIC in the running of their Calf Club or Pet Day event across New Zealand this spring.

Each year the cooperative distributes a 'merchandise pack' to schools that register their event on the LIC website.

The pack features the 'LIC Winner' ribbon, a striking dark-blue silk ribbon awarded to the child/calf of the judge's choice. Also included in the pack can be a range of other prizes such as rugby/soccer balls, drink bottles, hats, and pens.

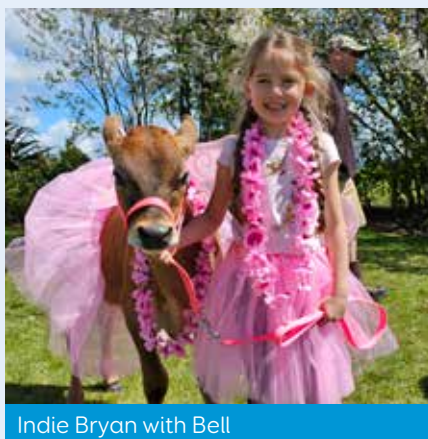
For decades, LIC has supported Calf Club because of the community good the events generate, including the fact they bring rural neighbours, staff, friends, parents, and children together.

"And these events foster life-long values in children," says Malcolm Ellis, LIC GM NZ Markets. "Well before the big day itself, the kids are learning about how to feed, protect, train, and nurture their chosen animal. The foundations of good animal husbandry skills are laid right here."

More Calf Club pictures on the back cover.



Mitchell Hansen and Slick Steve at Orini School



Indie Bryan with Bell



Jayden Bryan with Millie



By Jair Mandriaza,
senior reproduction advisor

Is There a Second Year Slump?

The challenge around reaching liveweight targets for rising 2-year-olds.

Well grown young stock has long been linked with better productive and reproductive performance of dairy cows.

When LIC first-launched MINDA Weights – after the release of a large heifer study by Lorna McNaughton and Thomas Lopdell (LIC R&D staff) in 2012 – the cooperative got its first peek at how well farmers reared their young stock compared to liveweight targets.

The data showed, as a whole, the industry wasn't meeting targets at 15- and 22-months-of-age.

At that time, it was estimated that 70% of heifers in NZ were undergrown at 22 months by 5% or more – and the average was 11% below.

More-recent data shows the industry has improved its practices, and many more farmers have been hitting, or

slightly exceeding Planned Start of Mating (PSM) liveweight targets at around 15 months, although, understandably due to climatic conditions in many regions, the last two seasons have proved more-challenging.

But in terms of meeting targets at 22-months-of-age, the industry has never quite hit the mark; on average, data shows the industry is still typically 3% to 5% behind target – Still much better than it used to be before the spotlight was placed on growing heifers post the heifer study.

Despite still being a bit behind target at 22-months-of-age, first calvers are still the better-performing age group when it comes to reproductive performance in the milking herd.

This is a significant positive, because younger cows are the highest genetic-merit animals in the herd; as an

industry, we want to keep these young cows in the herd, preferably calving early so they can reach their high milk-producing years, and therefore express their genetic potential for as many days in milk as possible.

There are still real gains to be made due to the liveweight target gap (i.e. 3% to 5% short of liveweight targets at 22-months). Research shows that, in heifers, there is approximately a 2kgMS production loss per year, for every 1% behind their target liveweight (McNaughton and Lopdell 2012).

Latest figures for 2019-, 2020-, and 2021-borns show that heifers got to approximately 5-6% behind-target liveweight around calving time. This equates to a potential 10kgMS loss per 2-year-old in the herd. When replacements are high, potential production losses quickly add up (this is usually the largest age group in the milking herd).



% Deviation from the MINDA-Weights guideline by age in months for Average of 2019, 2020 and 2021 spring born heifers compared to national 2020 median



Also of note is a more recent study showed a clear negative impact on lifetime production the bigger the difference liveweights are at 12 months compared to 21 months. That first winter dip.

"Heifers that were a greater proportion of their 21-month LWT at 12 months of age produced more first lactation and cumulative 3-year milk yields than heifers that were a lesser proportion of their 21-month LWT at 12 months of age. These results indicate that increased growth in early life of New Zealand dairy heifers is beneficial to future milk production." (Rhiannon Handcock 2019)

In the graph you can clearly see the seasonal impact on the 2020 and 2021 born at 2% and 4% below PSM target respectively after five years of consistently hitting or slightly exceeding it.

What can be done to address this issue?

Based on the trends observed in heifer rearing, the better an animal is reared in the early part of their life (before being sent to the graziers), the more likely it is that they will meet liveweight targets both at 15- and 22-months-of-age.

The current trend is that farmers do a good job getting calves to target, or well ahead of it, by 4-months-of-age. As an industry, targets break-even at 15-months-of-age, only to see a gap appear again by the time animals get to 22-months.

It seems that increasing daily weight gain in the second winter period for heifers is not easily achieved.

Perhaps the most practical course of action then, is to ensure heifers are reared well in their first few months of life and to not let the first winter dip get below the normal MINDA-Weights average of 8-10%

Regular weighing and preferentially-managing the 'poor doers' in the mob goes a long way towards reaching liveweight targets.

Having a plan in place with your grazier to help minimise the drops in daily weight gain will also be of benefit to farmers and would go a long way towards helping bridge the gap that we currently see in the young stock.

Profiling LIC Field Staff

Your LIC Reps

Along with AB Technicians and Herd Testers, LIC Agri Managers are the face of LIC.

On these pages, we profile two of LIC's 80-strong Agri Manager team, one based in the South Island, and one in the North Island.

Who are you?

I'm a 40- something wife and mum to two teenagers and step-mum to an adult.

I was born in Patea in the Taranaki, but brought up in small town Bay of Plenty (the real Bay!).

I achieved a Bachelor of Science Tech in Biotech and a Post Graduate diploma in secondary teaching (chemistry and biology) at Waikato University.

I've had a variety of careers including secondary teaching, logistics for a kiwifruit co-op, LIC as a district manager, Fonterra area manager, and a rural bank Manager at ANZ.

I lived and worked in the Bay of Plenty for most of those roles.

Together with my family, we moved south nearly six years ago and have never looked back. We live next to a man-made lake (Lake Hood), and now enjoy summers waterskiing from the back lawn, and winters

skiing down the mountain. Great for some work-life balance!

Last weekend I was skiing up Mt Hutt, in between playing mum taxi for my kids and catching up with my treasured friends.

Favourite band/tune/show?

A close tie between Bush and Live (classic grunge from the 90's), but we have an eclectic vinyl collection with a real mix from all genres and eras.

Ideal holiday?

Anywhere with my family and an adventure! My favourite recent holiday was taking our boat to the Marlborough Sounds for a week and finding a spot to put the anchor down for the night and seeing what sea creatures we could see. A real highlight was the octopus that came swimming up to the boat to check us out! And you can't go past fresh fish for breakfast.

Best local bar/restaurant?

Zodiac in Christchurch, great service with amazing food and the vibe is pretty special too!

Greatest sporting/cultural/artistic achievement?

The last time I took the football field I scored a classic midfield goal from half-way... a great way to head into retirement!

What gets you up in the morning?

He tangata, he tangata, he tangata... it is people for me, and connection.

Is there anything about you that might surprise your colleagues/clients?

I'm quiz master at our local restaurant/bar every second Thursday in Winter.

Also whilst I love the mountain and skiing I'm terrified of heights, and have to push myself to get up there and do it anyway!

Describe your region and the kind of farms/farmers you look after - in particular, what's different or unique about your patch?

I think I look after some of the most knowledgeable and progressive farmers in the country; they push me to make sure I know what I'm talking about and to back it up with data. They do everything at scale and with accuracy and the data they use on farm is phenomenal.

What's so good about being an Agri Manager?

Getting the opportunity to work with passionate farmers, who I consider to be the backbone of our country.

Tell us about a work highlight, where you've seen a farmer improve the herd or a group of cows, and how this happened?

Probably one of my biggest highlights is seeing former BOP farmers now have bulls in the Premier Sires team and thinking that in a very small way I had a part to play in that. More recently it's seeing the results of some complex breeding plans deliver the herd improvement goals they were put in place to meet.

In your view, what's the one LIC product/service (or mating practice!) that is under-utilised by farmers, and why should more farmers use it?

I think the future for Genomic Evaluation is bright. Being able to undertake the expensive exercise of rearing young stock with confidence; it will be quality that will become very important as environmental challenges continue.



Amie Griffiths, South Canterbury

Who are you?

I've just celebrated my 25 years working at LIC, 19 in my current role.

I live on a small lifestyle block on Mystery Creek Road in the heart of the Waikato. I grew up in a dairy farming family in Pukeatua, about 40 minutes from where I live now, so I've lived most of my life in this area.

I attended Massey University for four years earning a B Agr Sc Degree.

Following this I returned to the Waikato and began my 11-year dairy farming career, six years 50/50 sharemilking. I travelled overseas for six months, then started with LIC in August 1998.

What did you do last weekend?

Went walking, gardened (weeded and planted veggies), mowed the lawns, visited, and cooked a meal for my elderly parents, and of course a little relaxation in front of the TV.

Favourite TV show/tune?

Showing my age here but I sure enjoy a great laugh when watching Lucille Ball in any of her reruns. She was such a clever comedian. I enjoy singing along to Abba songs ie: Dancing Queen.

Ideal holiday?

That would have to be on a cruise ship, preferably somewhere warm (say Mediterranean) by a pool, sipping a Mocktail and making sure I leave my phone back in NZ.

Best local cafe?

I enjoy lunching at Frescas in Hamilton as they have the best Cajun Chicken Salad. This is beside the Plant Barn so a stroll around there usually follows lunch.

Greatest sporting/cultural/artistic achievement?

For me this would be the opportunity I took five years ago to jump on a cruise ship and travel from Auckland to London over a period of almost four months. At this time, I needed a rest and time to rejuvenate myself. Not only did that achieve this but I have memories and friendships that will be with me for the rest of my life. Don't be scared to do something completely different in your life (for a while anyway!).

What gets you up in the morning?

Exercise gets me up most week mornings, leaving home at 5.30am to walk the streets in Hamilton (between 4- 5 kms) with a fellow friend/work colleague... we walk, talk then get a coffee which sets us up for the day ahead.

Describe your region and the kind of farms/farmers you look after - in particular, what's different or unique about your patch?

My area sits between Hamilton, Cambridge and Te Awamutu. There's a mix of farms/ farmers, which include inter-generational farmers, so these are well established farms. I have a number of 50/50 sharemilkers who are extremely good operators and are striving for the best. There are also a group of well established farmer owners with contract milkers/ managers running these. It is hard to say what is unique to my area, but I do know the farmers are eager to share their ideas/goals with me and listen to my ideas/ information that may help them progress in their business.

What's so good about being an Agri Manager?

The ability to work autonomously, while still being part of a team (which we all need for support). I have a passion for dairy farming, so being in contact with farmers everyday (having a general chat, etc) helping them breed better cows and providing solutions for their businesses ticks the boxes for me. No two days are the same, so it is never boring. Having the ability to be out driving to farms while viewing the countryside is also a big plus.

Tell us about a work highlight, where you've seen a farmer improve the herd or a group of cows, and how this happened?

Working with one of my farmers on his breeding goals, culminating in an on-farm sale of his cows (planned well in advance). We had worked together for the past 10 years, implementing the Customate Plus program. I was trusted to select the bulls and we matched (through the program) each cow to a preferred bull to achieve an overall even line of cows. It was wonderful to attend the sale and see the line of cows and young stock presented on sale day. Prices reflected the quality of the cows, and the farmer was so proud of what we (he gave me a big hug in thanks) had achieved.

In your view, what's the one LIC product/service (or mating practice!) that is under-utilised by farmers, and why should more farmers use it?

There's still enormous potential to use more Short Gestation Dairy at the end of mating across farms. There are so many benefits including shortening the calving period, which can give a break between calving and mating (this can mean possibility of a short break for staff to recharge before mating starts). This also allows more cows to have a cycle before AB starts which increases their chance to get back in calf. The cows calve approximately 12 days earlier which increases days in milk, more days equals more dollars.



Jane Brodie, Waipa North

For the Good of the Community: LIC Continues to Support Calf Club

See p29



Indie Bryan with Bell and Brittany Singer with Marty



Austin Levings with Mocha at Newstead School



Matias Guest and Spekle



Poppy Gardner with Buddy at Mimi School



Zak O'Hearn with Amber and Jayden Bryan with Millie



Peyton Reith & Ghost



Sahara Roskam with Ruby



Reese White and Gizmo



Charlie McGill and Sugar



Mack Masters with Mocha



Luka Dyson & Snowy



Jessica Lee & Pixie



Cash Roskam Mack Masters and Austin Levings with their calves