THE BULLETIN A FRESH START WINTER 2024





Hi, I'm Kellie Burbidge, and I'm thrilled to be the GM of NZ Markets here at LIC.

Throughout my career, I've had the privilege of engaging closely with farmers, immersing myself in the complexities of farming business and gaining invaluable insights into the challenges and opportunities the dairy sector faces.

This experience has given me a huge respect for the dedication and expertise that define the farming community and I am committed to always finding room for improvement.

It's an honour to now be part of LIC, a robust co-op steadfastly focused on delivering for our farmer shareholders.

For those of you who I'm yet to meet - I was born-and-bred in the Waikato and grew up on the farm.

My partner and I have four children, a dog, three cats, and more recently I have found a new passion breeding kune kune pigs. In my spare time I enjoy fishing and diving, especially out at Great Barrier Island, as well as skiing and other outdoor activities (I describe myself as an 'active relaxer'!).

Early in my career, I found a passion for supporting the NZ dairy sector working for New Zealand Dairy Foods. Over the last 25 years I have worked across a broad spectrum of roles, industries and geographies, including 15 years at ANZ where I spent some time as Head of Dairy Strategy and

General Manager for Commercial and Agri (Waikato and Bay of Plenty).

Giving back to the community is important to me, I offer mentoring to women who are victims of domestic violence, and who therefore carry mental health or confidence issues in entering or re-entering the workplace.

I'm very mindful that mental health is an issue that cuts right across our communities, and farmers are no different!

Farmers frequently bear the brunt of a number of complex personal and business issues.

One of my first great impressions of LIC was seeing last Christmas that its staff and the business itself, generously donate to the Rural Support Trust. What a fantastic job that organisation does.

Since joining LIC in October 2023, I have had the privilege of leading a team of dedicated individuals, including Agri Managers, who have genuine relationships with farmers and are committed to offering products and services that contribute to genetic gain on farm.

It's heartening to witness an attitude that together we make one another stronger, which is surely the philosophy behind all great cooperatives.

Recently, I enjoyed meeting breeders at our Breeders' Day, held by LIC. All those who attended had many

optimistic ideas to share as we head toward a more efficient era, with emissions and breeding better cows top-of mind.

It was an excellent event where key people in our industry were acknowledged for their part in keeping New Zealand's national dairy herd among the top in the world (the image on this issue's cover page was taken during Breeders' Day).

Looking ahead, I want to acknowledge the incredible resilience of dairy farmers who are constantly adapting to world pressures and regulation.

Through these times LIC is committed to the strategy - doing what we are good at and playing to our strengths to drive value for our farmer shareholders.

All the very best for the new season ahead, and I look forward to an opportunity to meet more of LIC's dedicated farmers as I get out and about.

Kellie Burbidge **GM NZ Markets**



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YEAR-BY-YEAR: **BREEDING A BETTER GENERATION**

This article focuses on a family dairy farm that has a focus on improving profitability.

Herd improvement and genetic gain are keys to many successful, sustainable, and profitable farms. and the Jones family farm is no different.

Farm owner Malcolm Jones' latest line of genetics, which consist of 134 rising one-year-old crossbred calves, are 25gBW points better than the previous year's line of replacements, the rising two-year-olds.

That's impressive, given the traditional dairy farm expectation of past decade dictates that replacement-calves average an annual 10gBW-point gain on the previous year.

It's not like the farm is coming from a low base. Malcolm's 550-cow crossbred herd is already punching well above its weight, with gBW and PW respectively in the top-8% and top-7% nationally.

Production during the past few years has topped more than 500kgMS per cow, up significantly from the 2019/2020 and 2020/2021 seasons.

Key farm facts:	2019/2020	2020/2021	2021/2022	2022/2023
Total milksolids	238,809	252,028	294,491	293,406
Milksolids per cow	476	467	535	515
Milksolids per hectare	1305	1377	1609	1603
Pasture/crop consumption/ha	13	13.7	14.2	14.2
Feed conversion efficiency	12.1	12.2	11.6	11.8
Nitrogen surplus	151	147	111	Not available

How does Malcolm do it?

The farm steadfastly sticks to a few basic fundamentals of herd improvement:

- Malcolm mates his yearlings, and, along with his nephew and niece Fin Hoeata and Chloe Hoeata, the team regularly weighs young stock.
- Malcolm uses GeneMark DNA Parentage Verification, backed by genomic evaluations, on all his dairy animals.
- The farm herd tests five times a year. Malcolm knows who his bottom performers are, and he knows who his top performers are.
- With the farm system consisting of year-round milking, collar technology enables artificial breeding to occur over a long period of time, mitigating staff fatigue.

• Before artificial breeding (AB) takes place Malcolm and Fin carefully select a team of bulls they want to use, utilising LIC's Customate Plus program to find the optimal cow to mate with any given bull within the team. Genomically-selected bulls play a leading role, backed up by a number of hand-picked Daughter Proven bulls.

Malcolm and Fin scan LIC's Genetics Catalogue each year, and Fin says doing the homework on what cows will go to what bulls is worth the interest and effort:

"Before start of mating we nominate the good cows we want to mate," Fin says.

"We choose the traits we want, and a print-out is given to us about which bulls are best. We're after udder traits... we want strong, well-shaped udders with good teat placement; we seek bulls that are down on

somatic cell count; we're also looking for rump width - because ease-ofcalving is important."

Fertility, capacity, dairy conformation, and BW make up the mix, says Chloe.

"We've always found that staff find genetics and choosing bulls interesting. Before Chloe and Fin, Andrew Kennedy took a lot of interest in improving the herd genetics and it helped us that he did the AB (technician work) as well."

- Malcolm Jones

Continued next page ...



Ilcolm's niece Chloe Hoeata, left, along with her brother Fin Hoeata, and Fin's toddler boy

Mating Yearlings:

The 183 ha (effective) dairy platform has the luxury of having a 45ha drive away.

"We do all-year-round milking," Chloes says, "generally twice-a-day all year around, dropping from 550 cows at our peak down to 250 milking cows at one point. We dry off the stock individually, according to 56 days-to-calving."

Because it's a year-round milking system, mating is staggered and this enables AB to occur over a long period of time, with several young, quality, bulls reared on farm to take care of any slack (following the artificial breeding season).

The rising one-year-olds, who have been fed, weighed, and drenched on the main farm every eight weeks since birth, go up to the run-off in autumn, just after being mated.

"We're very pleased with the way they've progressed," Chloe says,

"in the last eight weeks they've put on 50kgs."

The youngest genetics trade places with the rising two-year-olds who return to the main farm for calving, mating, and finishing off before entering the main herd.

"The yearlings (R2s) get mated in August for one month," Chloe says, with the replacement stock all having gone to LIC's KiwiCross Forward Pack semen.

Breeding from the top; using beef at the bottom

Meanwhile, the Customate Plus program allows the pre-selected team of bulls to go to the best 80-90% of cows in the herd, and this happens between September and December.

"We'll rank the lowest end of the cows based on BW, PW, LW, and somatic cells," Fin says.

Fin and Malcolm combine that information with what they've seen in the shed: which cows have needed

extra treatment; who has poor feet,

deemed the bottom-end of the herd, and they therefore go to beef and short gestation length semen.

The farm seeks at least 120 replacements a year from the 550 cows, Chloe says.

The goal is to be in the position of being able to select the best replacements and sell the surplus, although we're keeping hold of all of those that have been raised on farm this year."

The focus on raising the latest genetics is clearly evident: "A good start in life is hugely important," Chloe says.

"And the benefits don't just come from proper feeding, monitoring, and weighing - it pays off in terms of temperament, moving them, and familiarisation with staff."



Since 1990:

- The New Zealand dairy cow has gone from producing an average of 259kgMS per year in 1992/1993 to producing an average of 393kgMS per year in 2022/2023.
- Across the industry, and over the past 30 years, that represents an annual improvement of about 4.5kgMS per COW.
- When liveweight is considered, efficiency gains are further accentuated. In 1990 the average liveweight of the New Zealand cow was 468kg, and by 2020 the average liveweight sat at 472kg. This means the cow of the early 1990s was producing about 55% of its own liveweight, compared to the cow of recent years, which produces about 83% of its own liveweight.

Industry commentators say continued growth and profit can no longer rely on growing cow numbers, with the industry now at 'peak cow', and with factors such as methane and nitrate production coming into sharp focus, the spotlight is now firmly on cow quality and cow efficiency to drive continued growth and profit.

LIC analysts highlighted that, among the national dairy cow population of 4- to 8-year olds, the top-quartile produces 160kg more milksolids per year than the bottom-quartile.

What is herd improvement about?

- Breeding a line of replacements that are able to moreefficiently produce milksolids/profit from New Zealand's key feeding source, pasture.
- To do this farmers need to breed and select animals that are genetically better than the previous year's line of replacements.
- Identify the cows that perform well under the farm's management system, and breed more of them. Farmers should understand and focus on their key breeding goals.

LIC

Herd improvement has four main components:

Improving herd performance is easiest when there are choices available on which calves will be retained and which cows can be culled from the herd.

Choices result in control.

MINDA reports to help determine who to breed from:

Herd Breeding Values Averages Report: This is a high level snapshot of where the herd is sitting and what it may look like in five years' time. Shows gBW and gBV of cows; R2s; R1s.

Culling Guide: A tool within MINDA that will display, for example, what cows sit in the bottom-10% on gBW. With extra attributes added, such as Calf Birth ID and Fate, this will show, for example, how many heifers were reared out of the bottom 10% of cows on gBW, and for example, how many heifer calves were reared out of the top-25% of cows on gBW.

The levers to pull to drive herd improvement

Reproduction practices: Cow condition, sound heat detection, appropriate recovery between calving and mating.

Genomically-selected and spring bulls: Either nominated or via Forward Pack: The younger generation contain the best genetics, and enable farmers to cut down on the generation interval.

Culling Guide: Use culling to selectively cull, for example, the bottom 5% on PW... this usually results in an average lift in gBW.

Cow selection at mating: For example, breed only from the top-80 to top-90% of the herd. Put the rest to beef. This eliminates the risk of breeding from the bottom part of the herd.

Yearling matings: The younger generation is the best source of genetics. Mate and breed replacements from them to increase the rate of genetic gain. Should replacement stock result from yearlings, the bottom-end replacement calves (from cows), based on gBW, can be sold. Limitations on this practice frequently come down to location of the young grazing stock.

Sexed Semen: An average 90% chance of getting a heifer, as opposed to the average chance, from non-sexed semen sitting at 50%. Sexed semen allows farmers to target more of their top cows for breeding replacements.

Selection in the calf pen: Depends on having a surplus of calves, and this comes back to reproduction. GeneMark Genomics (which includes parentage information combined with genomic evaluations) will help identify the best calves to rear. Limitations are calf age, and the amount of time farmers are prepared to rear. Early heifers are the desired position.

Accurate record keeping: Farmers must know who calves are, which means knowing their parentage. Herd Test to determine the top producers and breeders. Record liveweights to gain an accurate indication of feed- and production-efficiency.

Sexing Up the Mating **Plan:**

Use of LIC's Fresh Sexed Semen product has surged over recent years, and for some leading farmers it's become an integral part of their mating toolbox.

Fresh Sexed Semen delivers near-normal conception rates, with a nonreturn rate that is, on average, within 5% of conventional fresh semen (i.e. significantly better than frozen alternatives).

Here, we chat to three farmers that have used the product on their dairy platform for the past five consecutive years.



Chris Amon,



Year-round milking; 38-cup herringbone; farm 1 size = 90ha (400 cows, 38 sets of cups herringbone); farm 2 size = 80ha (300 cows, 36 sets of cups herringbone); plus 140ha run-off.

'We use Sexed Semen to basically increase the number of heifers - so we don't have to undertake so many inseminations to get the heifer calves we require.

"I was using Sexed straws alot more when the China market was going, so back then we would have a much wider selection. It's true it (live

Spring calving; 70-bail

1300 cows.

that respect.

rotary; farm size = 390ha;

"We've been progressively

growing the herd for the last

3-4 years, and we have quite

a high empty rate, so Sexed

Semen has really helped in

"It gets those heifer calves on-

the-ground early too, so we're

not waiting until the end of

exports) could start-up again, so there could yet be some future in it.

"Before mating, we go through our herd and select the top-third of the cows; if they come up in the first round they'll get a Sexed straw.

"We use Forward Pack as the back-up, but most replacements come from the Sexed straws.

"In the last couple of matings I've had a cut-off point in the herd, and the lower-end cows go to a beef product. Hereford or Charolais.

calving to still be getting our

replacements - we get them

all squared away within the

first three weeks of calving.

"We also use Premier Sires

and we use SGL crossbred

which helps keep the calving

"Sexed semen has definitely

were wanting to achieve over

been achieving what we

semen after 4-5 weeks,

pattern condensed.

"But because we're an all-Friesian herd, we can get (frozen) Sexed Semen in beef, which we put to the lowerranked dairy cows ... (we're seeking bull calves in this instance) because they're worth, say \$680, as opposed to about \$500, so your \$30 or \$40 straw you're getting back pretty quickly."

"We have a 140ha run off, where we raise all the young stock.

"We don't put any calves on the bobby truck, and we haven't done so for about five years. We rear every calf."

the last few years. Growing heifer replacement numbers has been the main motive. and we're getting top quality genetic calves.

"The bonus is that instead of getting a lot of Friesian bull calves, we're getting mainly heifers, so the calvings are a lot easier on the cows... that's been a big part of it too."

Craig Wing,

Central

Otago

Puhipuhi, Northland



Spring calving; 36-cup herringbone; farm size = 212ha; 335 cows.

"We had a fairly average herd when we started sharemilking, so it (Fresh Sexed) allowed us to get the necessary genetic gain in our herd quicker, by simply breeding heifers out of our better cows.

"Lately it's continued to suit us quite well because we've started using a lot of beef straws over our lower-end cows. We've now got a beef block in which we can rear all our beef calves, so it's all paying for itself quite well.

"So initially it was about heifer replacements, but now, as our system has changed and the herd has got better, it's more about the advantage we can get in rearing beef. It's a Friesian Cross herd, with the odd Jersey thrown in.

"We use Fresh Sexed in weeks 1, 2, 3, 4, and 5... and we'll order 7 straws a day for three weeks and 4 straws a day for a week or two.

"If we have a Jersey come up we'll put Sexed Semen in her so we're not going to get a bobby. We also use Forward Pack as a back-up, and we use Friesian for that so if we get a bull calf it's still saleable."

From the **Breeding Desk**

LIC's bull acquisition team has completed its inspections of potential bull dams around the country.

It's always an enjoyable and valuable few months' viewing impressive cows and connecting with breeders.

We've also recently had the privilege of hosting Breeders' Day; this was for the breeders of the 2023 Premier Sires bull teams.

The day is significant for the business as it allows LIC to recognise the breeders' huge contribution in driving genetic gain across the industry.

The icing on the cake at this event (and not an announcement that necessarily takes place every year) was the celebration of the 59th bull to be inducted into LIC's Hall of Fame.

Personally, it is an absolute honour to induct these bulls, and in 2024 we've recognised Graeme and Jacki Barr on behalf of the standout Holstein Friesian bull, Farside M Illustrious S3F.

On another front, LIC's Sire Selection team thanks its colleagues in the genetics team for pulling together another excellent Genetics Catalogue.

As a business we are most certainly focused on the national breeding objective, namely 'to breed dairy cows that efficiently convert feed into profit' through Breeding Worth (BW).

However, we take a very balanced

approach to ensure these bulls are also strong across many traits. Of note is the level of udder conformation we have available this year. On review, the average udder overall aBV of bulls available in this year's main catalogue is impressive:

Udder Overall, LIC Genetics Catalogue 2024:

	HF	Jer	кх
Genomic	0.79	0.74	0.87
Daughter Proven	0.64	0.57	0.84

The gains made by LIC over time are a result of a deliberate focus on the traits that farmers want.

And there's more to come. The 'pipeline' is the description we give to bulls that are yet to receive a daughter proof: Below are those young bulls, together with average udder overall gBV by breed, and







by Simon Worth, IC livestock selection manager

Over the next few pages the Sire Selection team takes readers through just a few of the highlights in this year's offerings.

There are plenty of options across the breeds, with many of these bulls seemingly set to make a significant impact on the national herd.

Once again, I'd like to acknowledge the excellent relationships LIC's Sire Selection team has with the breed associations. Through the various programmes, Jersey Future (Jersey New Zealand) and the Discovery Project (Holstein Friesian New Zealand), the cooperative continues to see bulls populating its offerings.

All the very best for winter and we look forward to again updating in the spring of 2024.

WHEN Searty REALLY DOES Matter



by Michele van der Aa, IC senior sire analyst

It's clear New Zealand dairy farmers are increasingly prioritising animals with robust udders, capable of enduring the demands of modern production systems.

As with all traits that are influenced by genetics, breeding to enhance udder traits is best viewed as a longterm goal, but within LIC's breeding scheme it's hugely encouraging to see our focus and efforts on udder traits now coming to fruition.

Farmers in New Zealand predominately continue to operate a pasture-first system, and LIC's livestock selection team cannot lose sight of that.

The genetic makeup of our dairy breeds must be tailored to thrive in such environments. Incorporating traits related to udder strength and longevity aligns nicely with the increasing drive to breed longer lasting and more efficient animals.

Reflecting on my time at LIC in the Agri Manager capacity, I distinctly recall bulls with an udder overall genomic breeding value (gBV) of more than 1 as a rarity.

Back in 2016, the Genetics Catalogue featured just five Friesian bulls with udder overall (UO) gBVs of greater than 0.90. Fast-forward eight years and there's been excellent progress (see table below).

Let's take a closer look at a few:



123066 MEANDER BROKER

Sired by 121062 Chisholm Broker S1F, this A2A2 all-rounder boasts efficient production of 86kg of fat and protein combined, with a moderate liveweight gBV of 26kg (not to mention the positive fertility and negative somatics). Complementing Allegro's



AB code	Name	gBW	Fat gBV	Protein gBV	Volume gBV	LWTgBV	Fert gBV	Capacity gBV	UO gBV	DC gBV	A2 Status
123011	RIVER HEIGHTS CB VALERO-ET S1F	481	54.7	39.7	750	36.3	2.2	0.22	0.92	0.30	A2/A2
123066	MEANDER BROKER ALLEGRO-ET S1F	463	48.4	37.4	541	25.6	4.0	0.21	1.09	0.38	A2/A2
120045	WOODCOTE VHR LUCID-ET S1F	456	64.6	63.7	1565	64.7	-6.5	0.27	0.96	0.46	A2/A2
119041	ROYSON MG CURRENCY S3F	437	46.4	65.2	1738	95.0	-0.1	0.44	1.08	0.63	A2/A2
120043	JONES MA REVELATION S2F	424	48.6	45.5	795	58.3	-2.7	0.04	0.94	0.18	A1/A2
123025	MATTAJUDE SAQ ASSURE-ET S2F	418	51.2	40.2	620	68.3	0.1	0.75	1.24	0.76	A2/A2
118076	MEANDER TT FEATURE-ET S2F	401	38.9	42.7	920	31.2	1.4	0.32	0.97	0.40	A1/A2
119034	TAFTS RHD OFFICER-ET S2F	397	49.1	56.8	1344	125.4	1.8	0.68	1.02	0.81	A2/A2
120080	TRONNOCO M SAQUOON-ET S3F	393	54.3	60.9	1567	86.4	-4.5	0.62	1.04	0.67	A2/A2
123102	CHISLEHURST RC GENESIS S1F	378	41.5	51.3	1432	59.2	1.7	0.11	1.21	0.42	A1/A2
123070	MEANDER GRIF ALLROUNDER-ET S2F	375	59.2	32.9	639	91.7	0.6	0.74	1.02	0.85	A2/A2
119077	BUSY BROOK CASHPOINT S1F	357	46.3	30.5	658	17.9	-2.2	0.36	1.05	0.62	A1/A2
123088	TRONNOCO MAHI SEXTON S2F	311	32.7	44.6	789	74.5	-3.0	0.73	1.18	0.84	A2/A2

A full list of Friesian Bulls with an udder overall gBV greater than 0.90 (2024 Genetics Catalogue)



463gBW are his positive conformation traits, including an udder overall gBV of 1.09!

With a stud prefix being none other than Meander, you can rest-assured this bull has come from a strong maternal line, evident with all three maternal generations scoring 7 udder overall when inspected.

Allegro is the result of the Discovery Project and hails from the deep south, bred under the astute eye of Robert and Annemarie Bruin.

123070 MEANDER GRIF

ALLROUNDER-ET S2F: Never to do things by halves, Robert and Annemarie have also bestowed upon us 123070 Meander Grif Allrounder-ET S2F. The result of embryo work through our GeneRate programme, Allrounder comes from yet another excellent maternal line, with udders scoring 7s and 8s.

This comes as little surprise, considering both he and Allegro hail from the formidable April family.

With a gBW of 375, Allrounder brings to the table 92kg of fat and protein, 92kg of liveweight, positive fertility and is A2A2.

He's a heavyweight for capacity, boasting a gBV of 0.74, rounded out with an udder overall gBV of 1.02.

Sired by overseas sire 117908 Welcome Silver Griff-ET, out of a Galant dam, Allrounder is sure to be an outcross option with plenty of appeal.

123025 MATTAJUDE SAQ ASSURE-

ET S2F: Bred in Hawera by Matthew and Judy Brady, the inclusion of their first yearling in the GeneRate programme some years ago has seen the Brady's breeding go from strength to strength and Assure is an outstanding representation of this.



Sired by recent graduate 120080 Tronnoco M Saguoon-ET S3F, Assure comes from a maternal line that is an absolute powerhouse for production.

The result of GeneRate himself. Assure is the highest among udder specialists and demands our attention with a 1.24 udder overall gBV and 0.76 dairy conformation gBV.

Ensuring he isn't typecast, this A2A2 sire sits at 418 gBW and carries with him 51kg of fat and 40kg of protein through 620 litres and 68kg of liveweight.

With an overall opinion gBV of 0.73 I am sure farmers will be eager to have some Assure daughters of their own on the ground!

123102 CHISLEHURST RC GENESIS

S1F: Bred out of a Sire Proving herd by Anthony and Susan Reynolds in Christchurch. Genesis is sired by the King of udders himself, 119041 Royson MG Currency S3F, and out of a magnificent 'Official' dam classifying 7/7 as a 5-year-old.

Given this solid base it is no surprise that Genesis should sport an udder overall gBV of 1.21.

Here to ensure those udders are put







to work, Genesis brings to the table 378 gBW comprised of 42kg of fat and 51kg of protein through 1,432 litres and a modest 59kg liveweight gBV.

And fertility certainly hasn't been compromised for production, with 1.7 as the gBV.

123088 TRONNOCO MAHI SEXTON

S2F: The S family strikes again with the remarkable Sexton.

Half brother to 120080 Tronnoco M Saquoon-ET S3F and from the same family as 123100 Tronnoco SG Severyn ET, who both feature in the Genetics Catalogue, Sexton comes from a long line of proven bulls, including the likes of Samba and Speros.

Bred by Tony and Keri O'Connor in Timaru, Sexton originates from an extraordinary Fire Up dam who, in her 5th lactation, has scored an 8 udder and is excelling as she approaches 4000 milksolids to date.

Sired by 121074 Dicksons RS Mahi-ET S1F, this A2A2 sire provides 33kg of fat, 45kg of protein, great somatics and a liveweight gBV of 75kg.

But what we are all here for is the 1.18 udder overall gBV and 0.84 dairy conformation gBV.



SOLID GOLD IN 2024:



In LIC's breeding team, the first four months of the year are a highlight as we inspect potential bull dams across New Zealand and visit many breeders.

I've mentioned before that I'm constantly impressed with the Jersey cow quality, and this year my opinion is more solid than ever.

In days gone by, the occasional small, frail Jersey cow was heralded, unfairly, as a reflection of the entire breed. That criticism of the past is simply no longer the case on the New Zealand landscape.

Overall conformation of Jersey cows has come a long way,

and udder overall has improved considerably.

Protein and fat breeding values have increased significantly over the past few years, exemplified by the young Jersey bulls that LIC has purchased in 2023, and that will enter the Sire Proving Scheme in 2024: These young bulls average 43kgs of fat and 20kg of protein. With these kind of production figures relative to liveweight, the Jersey cow is to my way of thinking the ultimate efficiency champion.

It's a privilege to highlight a handful of the outstanding genomic bulls featured in the Alpha (nominated) section of LIC's 2024 Genetics Catalogue (incidentally, they're all

Danie Swart, IC bull acquisition manager

available in Premier Sires teams as well). Here's five genomic bulls to keep an eye on:

323008 TIRONUI BUZZ ZAZU: This

exciting bull from Murray and Janet Gibb excels in production and type.

With more than 73kg of combined protein and fat, and with an udder overall gBV of 0.92 and capacity of 0.69, Zazu is bound to produce high-production daughters with great udders.

His dam is a tremendous highproduction Banff daughter with good size and a good udder.

Zazu is available in both Alpha and the Premier Sires Forward Pack team.

AB Code	Name	gBW	Fat gBV	Protein gBV	Liveweight gBV	Fert gBV	UddOverall gBV
323201	WILLIAMS BRISBANE FRENZY	585	47	30	-4	10	0.43
323033	GLENHAVEN BRISBANE LONIC	569	44	16	-14	12	0.59
323028	HAWTHORN GROVE L ZOLTIN-ET	560	52	22	-43	8	0.80
323008	TIRONUI BUZZ ZAZU	548	49	24	-39	4	0.92
323014	GLANTON BERKLY PARKES	539	49	21	8	11	1.08
Average		560	48	22	-19	9	0.76



323033 GLENHAVEN BRISBANE

Lonic is a good all-rounder with

and dairy conformation.

of more than 600.

LONIC: From the Glenhaven Stud,

excellent fertility, backed by solid

gBVs for liveweight, udder overall,

His dam is a capacious Misty cow

with excellent production, achieving

a PW of more than 500, and an LW

backed by an impressive PW of 705 and an LW of 722.

Zoltin is available in both Alpha and the Premier Sires Forward Pack team.

Parkes is one of the most exciting young bulls in the LIC stable and was bred by the great Glanton stud of Rob and Alison Thwaites.

Sired by Glanton Flynn Brisbane, Lonic is available in Alpha and the Premier Sires Sexed team.

323201 WILLIAMS BRISBANE

FRENZY: From the well-known Williams stud of Mary Williams, Frenzy is a production champion with a combined protein and fat gBV of above 76kg.

Adding to that is his good size and capacity, together with a great fertility gBV; this will certainly make him among the most sought-after of bulls.

He is, after-all, one of the highest gBW young bulls, and is part of Jersey Future (LIC's joint breeding programme with Jersey NZ).

His dam excels in capacity, and size and longevity are prominent in this cow family.

Frenzy is available in both Alpha and the Premier Sires Forward Pack team.

323028 HAWTHORN GROVE

ZOLTIN: Ron and Jackie Monk bred this great production Lotto son, who possesses good fertility and an excellent udder overall gBV of 0.8.

Zoltin has a tremendous cow family behind him with longevity, high production, and good udders all featuring.

His dam's gBW is currently 596,



10





He's a super all-rounder with



AM OF 323201 WILLIAMS BRISBANE FRENZY

excellent production, size, and fertility gBVs, and an udder overall gBV of 1.08.

His sire Berkly is one of the highestranked proven bulls at LIC.

Meanwhile, Parkes' dam is a high producing Conrad with an EXclassification score.

Parkes is available in both Alpha and the Premier Sires Forward Pack team.





Being on the road for the last couple of months is always one of the best times of year.

LIC

Traits-other-than-Production (TOP) scoring upcoming contract mating cows, as well as connecting with farmers, highlights the importance of the farmer voice.

Farming is constantly evolving and changing - and for LIC's Bull Acquisition team, we need to make sure we're breeding bulls to suit!

The message from farmers is clear: Longevity and cow efficiency are more important now than ever.

And LIC is responding.

Forward Pack:

Functional Survival

Heifer Calving Dif BV

Date 18/05/2024

Cow Calving Dif BV

Milk

Milkfat %

Protein %

Fertility

SCC

BCS

The drive to continue to improve on the non-negotiable traits, such as the ones above, are a big focus for the bull acquisition team.

Another message that constantly comes up is the importance of udders, and why shouldn't it?

No matter the indices, fertility or production - if the udder falls off, she's not going to be much use!

That's why it's such a pleasure to profile crossbreeds - they offer such balance and versatility: Below are some 'udderly' impressive teams and individual bulls.

Daughter Proven

It's hugely pleasing to see genomics at work, with 50% of this team consisting of 20-code graduates, many of which were previously utilised as genomic sires through Premier Sires Forward Pack and Sexed.

Many farmers are therefore already reaping the genetic benefits of these boys.

The 'strong black cow' is at play with this team delivering a +21kg liveweight gBV, 2.7% fertility gBV, a huge udder overall gBV of 0.63, before wrapping it all together with a tidy 471gBW.

Forward Pack

A team that 'steps it up' in all areas!

The best A2A2 Daughter Proven bulls are combined with some of LIC's top young sires, with a further boost provided by the best spring graduates as they become available in October.



IC senior sire analyst

With +18kg liveweight gBV, 4.8% fertility gBV, 0.70 udder overall gBV, and 526 gBW, this is the team to grab if you're wanting to give genetic gain an extra nudge.

Gone are the days of rolling the dice.

With a 90% chance of a heifer calf, sexed semen allows for some serious gains and ensures you'll be breeding from the best.

This is LIC's highest gBW team on offer (535 gBW), and includes a massive 6.0% fertility gBV, +15kg liveweight gBV, and 0.66 gBV for udder overall.

Getting heifers from your top animals has never been easier!

\$534/97%

gBW/Rel % Milkfat Protein Liveweight

	Daughter Proven:	
526/98%	gBW/Rel%	\$471/99%
54 kgs	Milkfat	49 kgs
35 kgs	Protein	34 kgs
05 Litres	Milk	434 Litres
18 kgs	Liveweight	21 kgs
4.1%	Functional Survival	3.6%
5.5%	Milkfat %	5.3%
4.2%	Protein %	4.1%
0.0%	Heifer Calving Dif	-0.4%
-0.2%	Cow Calving Dif	-0.5%
4.8%	Fertility	2.7%
-0.09	SCC	0.06
0.12	BCS	0.17

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



gBW/Rel %

Sexed Semen Team:

Milkfat	50 kgs
Protein	35 kgs
Milk	274 Litres
Liveweight	15 kgs
Functional Survival	4.1%
Milkfat %	5.5%
Protein %	4.3%
Heifer Calving Dif	-0.0%
Cow Calving Dif	-0.0%
Fertility	6.0%
SCC	-0.07
BCS	0.14

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







23004 PAYNES SORCERER



523013 MATTAJUDE OASIS

The list of picks for KiwiCross Alpha sires runs long - there are so many high calibre sires on offer. Below are four of LIC's very best KiwiCross genomic sires:

Bred

by Brad Payne and Clare Brodie, Sorcerer comes from the emerging 'S' family at the Paynes stud just outside of Cambridge. Given he is from the highest gBW cow in the country, it's no surprise that we see this boy as one of our top gBW bulls on offer at a massive 674!

Production and TOP traits combine to make this bull the 'all-in-one' package and LIC's sire selection and genetics teams expect him to be popular this season.

Bred

by Anthony and Rhonda Vogals, and from the same cow family as 519074 Rhantana Outbound and 521049 Rhantana Vision we have Zeppelin.

Out of a stunning Accolade cow, the bull excels in the udder department with a massive 1.05 gBV of udder overall.

Combined with high production and fertility - this bull is sure to make a big impact, and it's expected he'll appear in plenty of packs this mating season.

the paradise of South Taranaki comes Oasis!

Bred by Matthew and Judy Brady, this 320029 Rockland LQ Berkly son sees three strong capacity and udder dams in the back of this bull's pediaree. With an udder overall gBV of 0.87, it's fantastic to see these generations coming through to this exceptional bull.

A strong fertility gBV and moderate liveweight will see this sire a popular



523078 RHANTANA ZEPPELIN



523031 KAINUI EXPONENTIAL

pick for the upcoming mating season.

Bred by Chris and Dianna Rogers, Exponential is a fitting name for this bull. With 1.14gBV udder overall, he rounds this guartet of bulls out perfectly.

You don't have to look far to see where these exceptional breeding values come from: Sire 520008 Julians Multiplier is one of the highest gBV udder bulls on record! And relative 522032 Kainui Dreamer also displays an impressive 0.88gBV udder overall.

The numbers show some serious gains in udders have been made by LIC, and its bull acquisition team isn't stopping anytime soon! The goal is to continue moving the bar higher to ensure the future cow is fitfor-purpose.

If you're mainly spring calving, all the best for the dry period - I trust you'll find some time to relax before the busy time hits.

PREMIER SIRES[®]

Potential 2024 Spring Holstein-Friesian Sexed Team (A2A2)

Sire		Sire	
23093	WELLS RIDGE J ODYSSEY-ET S2F	123012	BELLAMYS MOJO GOLD CHIP S2F
23005	PAYNES MJ PROTECTIVE-ET S2F	123040	WELLS RIDGE SAQ NELSON-ET S2F
22072	WAITARIA FINN TAINE-ET S1F	123100	TRONNOCO SG SEVERVN-ET
22029	MAHAREE FINN TONIC-ET S1F	123101	PADDOCK WOOD BROKER MESSI S1F
23011	RIVER HEIGHTS CB VALERO-ET S1F	123082	BUSYBROOK DGG TOPDOLLAR-ET
23008	PAYNES SAQUOON PATRON S2F	121001	MILL-RIDGE RC FORD-ET S3F
23103	WAIMERO SAQUOON LISBON S2F	123028	MATTAJUDE SRS WHITTAKER-ET S1F
22008	DICKSONS FINN MINDSET-ET S1F		
23066	MEANDER BROKER ALLEGRO-ET S1F		

\$468/97%

WEIGHTED AVERAGES OF PREMIER SIRES

Management	-0.5	0	0.5		gBW/Rel%	\$468/97
Adapts to Milking	0.32			quickly	Milkfat	54 kgs
Shed Temperament	0.32			placid	Protein	45 kgs
Milking Speed	0.18			fast	Milk	864 Litres
Overall Opinion	0.45			desirable	Liveweight	64 kgs
Conformation	50.	C	ц С	-	Functional Survival	3.4%
	0.0		2.2		Milkfat %	5.0%
Stature	0.6/			tall	Protein %	4.0%
Capacity	0.45			capacious		707 6
Rump Angle	-0.10			sloping		2.4% 0.4%
Rump Width	0.41			wide		%
Legs	-0.06			curved	rertility	3.8%
Udder Support	0.53			strona	SCC	-0.05
	0 10			0 0	BCS	0.15
rront udder	0.00			strong		
Rear Udder	0.39			high	NB: the reliability of a team	of bulls is
Front Teat Placement	0.25			close	ഖയയുടമ്പുവല് പാമ്പാംപ്രു വ	
Rear Teat Placement	0.23			close	O Date 18/05/2024	
Teat Length	-0.26			Long		
Udder Overall	0.58			desirable		(
Dairy Conformation	0.51			desirable	HOOFPRINT®	
					6 Rifrogen	

0.00	-0.09	0.54	0.59	0.37	0.13	0.12	-0.28	0.55	;
KUIIID WIGHT	Legs	Udder Support	Front Udder	Rear Udder	Front Teat Placement	Rear Teat Placement	Teat Length	Udder Overall	

Potential 2024 Spring Holstein-Friesian **Forward Pack** Team

ire		Sire		
20003	SCOTTS BV DARIUS-ET	122015	TANGLEWOOD MF	STORM S1F
19002	BELLAMYS DM GALANT-ET S1F	122049	LIGHTBURN SAQ (3ASOLINE-ET
20085	CLOVERLEA MA ROMULUS S2F	123029	MATTAJUDE MJ B	RAZEN-ET S2F
19079	BUSY BROOK DEALER-ET S2F	123069	MEANDER ROYALE	E ATTLEY S1F
19034	TAFTS RHD OFFICER-ET S2F	122013	DICKSONS AR MOI	NOPOLL-ET-P S2F
15107	LIGHTBURN BLADE GUSTO	123084	BUSYBROOK MJ N	IUDSLINGER S2F
23058	WITTENHAM JACKPOT AEGON-ET S2F	123042	MATTHEWS RC MI	LLIONAIRE S3F
23067	MEANDER MANU ALLEGIANCE S1F	121005	PEMBERTON GG P	ROPANE S1F
23059	WITTENHAM MJ APEX-ET P S2F	122051	MEANDER SAMBA	ASTIR-ET S3F
	WEIGHTED AVERAGES OF PRE	MIER SIR	ES	\$472/98%

0.5
0.5
5
-

Sire			Sire				Sire
120003	SCOTTS	BV DARIUS-ET	120056	GARDNER	BM GUARDIAN S2F		123003
119002	BELLAM	IYS DM GALANT-ET S1F	120069	MELROSE [3M VISTA-ET S2F		122058
120085	CLOVER	LEA MA ROMULUS S2F	120021	МСКАУ ВМ	BAKERBOY-ET S2F		123087
120030	BELLAM	IYS GG GEYSER-ET SIF					122065
119079	BUSY BR	OOK DEALER-ET S2F					122056
120065	CAVALIE	ER SS RIVAL-ET S2F					123004
119035	TAFTS R	HR ORDAIN S3F					122044
119034	TAFTS R	HD OFFICER-ET S2F					123035
115107	LIGHTBL	JRN BLADE GUSTO					123065
		WEIGHTED AVERAGES OF PR	REMIER SIR	ES	\$417/9	%66	
Manag	gement	-0.5 0	0.5	-	gBW/Rel%	\$417/99	Mana
Adonts to	Milking	0.39		anickly	Milkfat	52 kgs	Adants t

PREMIER SIRES

Potential 2024 Spring Holstein-Friesian A2A2 Team

MILL-RIDGE MF GENTLEMAN-ET S1F

122082

BUSYBROOK S SMOKIN GUN-ET S1F PRATTLEYS LUCID FREE-STYLE S1F

123079

MEANDER SPYRO ACCORD-ET S1F

PAYNES GADSBY ELEMENT S1F

123002

PAYNES GADSBY ENTOURAGE S1F

MAH FINN SAGE-ET S1F

MEANDER FINN ALASKA-ET S1F

MATTAJUDE SPYRO THORN-ET S1F

123037

PAYNES MJ PROVISION-ET S2F

Potential 2024 Spring Holstein-Friesian Daughter Proven Team

PREMIER SIRES[®]

2

TELESIS FLEX THEODORE S1F

Sire

123017

WAITARIA JACKPOT ZULU-ET S2F



						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
sgx zc	Adapts to Milking	0.25			quickly	MIIKrat	54 kgs
42 kgs	Shed Temperament	0.25			placid	Protein	40 kgs
389 Litres	Milking Speed	0.17			fast	Milk	663 Litres
60 kgs	Overall Opinion	0.38			desirable	Liveweight	46 kgs
3.1%	Conformation	C	C L	ц С	~	Functional Survival	3.3%
4.9%		, ,	2	0.0		Milkfat %	5.2%
3.9%	Stature	0.56			tall	Protein %	4.1%
2.2%	Capacity	0.32			capacious	Heifer Calvina Dif	2.9%
101	Rump Angle	0.04			sloping		702 0
0.4%	Rump Width	0.42			wide		%
1.9%	leas	0.01			curved	Fertility	5.2%
-0.01	רנעע	2			5	scc	-0.11
5	Udder Support	0.54			strong	S C R	800
	Front Udder	0.51			strong	2	0.0
f bulls is	Rear Udder	0.35			high	NB: the reliability of a team	n of bulls is
one pull	Front Teat Placement	0.19			close	ຜເພດງຣາກເຢຼກອາ ເກເຕການຣາກເຢງມ	
	Rear Teat Placement	0.29			close	Oute 18/05/2024	
	Teat Length	-0.10			long		
	Udder Overall	0.53			desirable		
Ć	Dairy Conformation	0.36			desirable	HOOFPRINT®	
						C Nitrogen Efficiency Mathone	

\$480/97

gBW/Rel% Milkfat

0

gement

\$480/97%

WEIGHTED AVERAGES OF PREMIER SIRES

MEANDER SAQ LANDMARK-ET S3F

CAVAN ROYALE FIESTA-ET S1F

	 Anitrogen Efficiency Efficiency 				15
$\left(\right)$	HOOFPRINT®	desirable		0.52	Dairy Conformation
		desirable		0.55	Udder Overall
		long		0.40	Teat Length
	🚫 Date 18/05/2024	close		0.18	Rear Teat Placement
Just offe	aways nigner man using	close		0.19	Front Teat Placement
in of bul	NB: the reliability of a tec	high		0.35	Rear Udder
>	000	strong		0.56	Front Udder
2	200	strong		0.54	Udder Support
<u>-</u> (Fer tility	curved		0.05	- Feds
5	cow calving uir	wide		0.53	Rump Width
v	Heller Laiving Ul	sloping		-0.11	Rump Angle
ກໍ ເ	Protein %	capacious		0.52	Capacity
4 (Milikrat %	tall		0.63	Stature
m' •	Functional Survival	←	0.5	-0.5 0	Conformation
60	Liveweight	desirable		0.48	Overall Opinion
889	Milk	fαst		0.14	Milking Speed
42	Protein	placid		0.40	Shed Temperament
52	Milkfat	quickly		0.39	Adapts to Milking

PREMIER SIRES[®]

Potential 2024 Spring KiwiCross[®] Sexed Team (F9J7) (A2A2)

Sire		Sire	
523001	PAYNES SALVATION-ET	523072	JOHNSONS ACOUSTIC-ET
522050	JULIAN TU-MEKE	522040	ARKANS CAREER-ET
523007	PAYNES PRESIDE-ET	523062	GASKELLS EMERGENT
521015	PAYNES STAMINA-ET	522032	KAINUI DREAMER-ET
523015	STONY CREEK NONCHALAUNT-ET	523095	WAIMATA TRUMPCARD-ET
522077	TATAWAI WRESTLER-ET	523013	MATTAJUDE OASIS
522064	BROWNS RANDY	523024	KAIPERTOMAK
523035	GASKELLS VANCOUVER-ET		
523079	RHANTANA ZACHARY		
	WEIGHTED AVERAGES OF PRE	MIER SIR	ES \$534/97%

\$534/97	50 kgs	35 kgs	274 Litres	15 kgs	4.1%	5.5%	4.3%	-0.1%	%0 0		6.0%	-0.07	0.14		am of bulls is	luct one pull			(
gBW/Rel%	Milkfat	Protein	Milk	Liveweight	Functional Survival	Milkfat %	Protein %	Heifer Calving Dif	Cow Calvina Dif		Fertility	SCC	BCS		NB: the reliability of a tec	always nigner tnan using	Oate 18/05/2024			HOOFPRINT®	 A Nitrogen Efficiency Methane
~	quickly	placid	fast	desirable	~	-	rall	capacious	sloping	wide	curved	strong	2020	strong	high	close	close	Long	desirable	desirable	
0.5					0.5	2															
0					c																
- 0.5	0.28	0.28	0.12	0.33	20 - -		-0.U5	0.57	0.05	0.19	0.04	0.61	5	0.58	0.61	0.22	0.48	-0.39	0.65	0.54	
Management	Adapts to Milking	Shed Temperament	Milking Speed	Overall Opinion	Conformation		Stature	Capacity	Rump Angle	Rump Width	Leas	Indder Support		Front Udder	Rear Udder	Front Teat Placement	Rear Teat Placement	Teat Length	Udder Overall	Dairy Conformation	

PREMIER SIRES[®]

0 C a Kiw Potential 2024 Sprin

			5057			
Sire			Sire			
519034	GORDONS	FLASH-GORDON	520025	ARKANS BRC	ADCASTER-ET	
520091	MARSHALI	L PAPAMOA	520088	WEIRBURNS	COMMOTION	
520063	SANSONS	EMERALD-ET	519082	ΗΕΑΛΥΝLΥ Η	EIGHTS JOSHUA	
520055	PAYNES PY	/ RAMID				
520054	PAYNES P₄	ALATINE-ET				
519042	WERDERS	SWEEPSTAKE				
518053	PAYNES PF	ROMINENCE-ET				
520068	MORGANS	S MALAWI				
518038	WERDERS	PREMONITION				
		WEIGHTED AVERAGES OF PRE	EMIER SIR	ĒS	\$470/	66 %
	hement	050-	с С	,	gBW/Rel%	\$470/99

49 kgs

Potential 2024 Spring KiwiCross[®] Forward Pack Team (F9J7) (A2A2)

Sire		Sire		
520063	SANSONS EMERALD-ET	523078	RHANTANA ZEPPI	ELIN
520055	PAYNES PYRAMID	523075	ARKANS GAMBLE	٣
520054	PAYNES PALATINE-ET	523012	MCCLENNANS AL	MIGHTY
519042	WERDERS SWEEPSTAKE	522038	ARKANS COMMA	NDO-ET
520068	MORGANS MALAWI	523056	WITTENHAM SPA	RTAN
518038	WERDERS PREMONITION	522069	BENTONS SECON	D-CHANCE
523004	PAYNES SORCERER-ET	522008	PAYNES NEUTRAI	ISE-ET
523002	PAYNES SATELLITE-ET	522013	PAYNES PHYSICIS	T-ET
523022	BUELIN ORAN	521072	BALDRICKS SPEC	TACULAR
523092	PLATEAU DEMBE	523085	THE SEARCH VIC,	AR-ET
	WEIGHTED AVERAGES OF PRE	MIER SIR	ES	\$526/98 %

Management	-0.5	0	0.5	-	gBW/Rel%	\$526/98
Adapts to Milking	0.32			quickly	Milkfat	54 kgs
Shed Temperament	0.32			placid	Protein	35 kgs
Milking Speed	0.21			fast	Milk	405 Litres
Overall Opinion	0.44			desirable	Liveweight	18 kgs
Conformation		c	20	•	Functional Survival	4.1%
		b	0.0		Milkfat %	5.5%
Stature	0.01			tall	Protein %	4 2%
Capacity	0.53			capacious	Hoter Cabria Dif	
Rump Angle	-0.04			sloping		%0.0
Rump Width	0.22			wide		%7·0-
Leas	0.02			curved	Fertility	4.8%
				-	scc	-0.09
uader support	0.0			strong	BCS	0.12
Front Udder	0.57			strong		
Rear Udder	0.71			high	Shaded bulls include daughter information	
Front Teat Placement	0.12			close	NB: the relicibility of a tea	m of bulls is
Rear Teat Placement	0.27			close	always higher than using.	just one bull.
Teat Length	-0.11			long	O Date 18/05/2024	
Udder Overall	0.70			desirable)	(
Dairy Conformation	0.53			desirable	HOOFPRINT®	
					G Efficiency	





d Temperament0.270.170.100.100.10ing Speed0,17ing Speed0,17ing Speed0,11214gsreal Opinion0.390.300.51Milk214gsreal Opinion0.360.51Milk214gsreal Opinion0.360.51Milk214gsreal Opinion0.50.500.51real Opinion0.650.650.651Milk2.7%victed0.090.040.090.040.060.05victed0.090.040.090.040.05victed0.090.040.090.040.05strong0.040.090.040.09strong0.040.090.060.06strong0.050.040.050.05strong0.050.060.060.06strong0.050.060.06strong0.050.060.06strong0.060.060.05strong0.050.050.05strong0.050.06strong0.050.05strong0.050.06strong0.050.06strong0.050.06strong0.050.06strong0.050.06strong0.050.06strong0.050.06strong0.060.06s					finanah	Drotoin	24 1446
Index Speed 0.1 Instant Instant <t< td=""><td>ed Temperament</td><th>0.27</th><td></td><td></td><td>placid</td><td>LIOIGII</td><td>chy tro</td></t<>	ed Temperament	0.27			placid	LIOIGII	chy tro
rule Information0.390.300.51 $1 \cdot e \cdot $	king Speed	0.17			fast	Milk	434 Litre
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PREMIER SIRES[®]

Potential 2024 Spring Jersey Sexed Team (A2A2)

Sire		Sire		
323033	GLENHAVEN BRISBANE LONIC	323031	LANG BRAE TGN RAGNOR-F	ETS3J
323020	ANJO LOTTO EDMONTON-ET	322047	WILLIAMS BANFF JULIAN	
323023	PAYNES TITUS ECLAIRE	323012	GLANTON LAMAR BISMARC	X
323007	TIRONUI ROXTON CORTEZ			
323009	TIRONUI BOISTEROUS MUSTANG			
323004	RIVERINA BAS ACHILLIES-ET S2J			
323207	GLANTON CMM BURTON			
323050	PHILSAN ROXTON DATSUN			
321045	CARATACUS TB DUKE			
	WEIGHTED AVERAGES OF PRE	MIER SIR	ES \$5	18/96%

Management	-0.5	0	0.5	-	gBW/Rel%	\$518/96
Adapts to Milking	0.30			auickly	Milkfat	41 kgs
Shed Temperament	0:30			placid	Protein	18 kgs
Milking Speed	0.24			fast	Milk	-299 Litres
Overall Opinion	0.38			desirable	Liveweight	-30 kgs
Conformation	- O 5	C	0.5	-	Functional Survival	3.0%
	0.0	,	5		Milkfat %	6.0%
stature	-0.81			tall	Protein %	4.5%
Capacity	0.60			capacious	Heifer Calvina Dif	2.2%
Rump Angle	-0.32			sloping		20°
Rump Width	-0.04			wide		% 7
Leas	0.16			curved	Fertility	7.8%
I Iddar Sunnort	0.38			ctrond	SCC	-0.28
	2			51010	BCS	0.14
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Rear Udder	0.62			high	NB: the reliability of a team	of bulls is
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Rear Teat Placement	-0.03	-		close	O Dαte 18/05/2024	
Teat Length	0.00			long		
Udder Overall	0.57			desirable		
Dairy Conformation	0.53			desirable	HOOFPRINT®	

Potential 2024 Spring Jersey Forward Pack Team (A2A2)

Sire		Sire	
319066	TIRONUI GB MONTAGE-ET	323048	GREENMILE BUZZ VERSTAPPEN
320029	ROCKLAND LQ BERKLY	323014	GLANTON BERKLY PARKES
318021	GLANTON DESI BANFF	322002	PAYNES RB GENERATION-ET
319019	GLENUI BT LIBERATION-ET	323206	LYNBROOK TN TE ANAU
323201	WILLIAMS BRISBANE FRENZY	323200	WILLIAMS BANFF SUBSTANCE
323028	HAWTHORN GROVE L ZOLTIN-ET	322036	GLANTON KFP BREMEN-ET
323008	TIRONUI BUZZ ZAZU	323047	LYNBROOK BERKLY ORY X
322001	PAYNES TITUS EXCELSIOR-ET		
321008	GLANTON FLYNN BRISBANE		
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Shed Temperament	0.38			placid	Protein	22 kgs
Milkina Speed	0.24			fast	Milk	-183 Litres
Overall Opinion	0.48			desirable	Liveweight	-20 kgs
Conformation	-0 E	c	2	•	Functional Survival	3.0%
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Capacity	0.56			capacious		
Rump Angle	-0.25			sloping	Heller Calving Ul	- 2.3%
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Dairy Conformation	0.54			desirable	HOOFPRINT®	
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Virus fools even the Best & Most-Experienced

Dave Loveridge on his Southland farm

"Whammo!" It was like a king hit from behind. No one saw it coming.

Dave Loveridge freely admits that in 2022 procrastination and temptation got the better of him: Testing had identified a bovine viral disease (BVD) persistently infected (PI) calf shortly before the critical mating period.

But Dave couldn't believe it - a dairy farmer for 28 years, BVD had never been a problem on his farm.

"To look at the calf, you would never know. She was one of the best I had, calf 23, and she was 140kg. You certainly couldn't pick it by looking at her. She was a beautiful little black calf.

"That's why I stalled... I was in disbelief that she had it, so I wanted a second test and then there was a 10-day turn-around on that. But one thing led to another, and she was here for one week, two weeks, three weeks, and then I decided I needed to get rid of that calf.

"I never thought any more about it, and got rid of her."

But by then the damage had been done.

Until that time the calf had been on a stand-off pad behind the shed; next to the area was a race that on-heat cows were passing through after the AB Technician had inseminated them.

"And this year we've had 13 PI calves," Dave says.

"I've had to eradicate them immediately. It's a hard, hard lesson to learn and it just shows how contagious the virus is... that's what blows me away, all this just from one animal being a PI. That's another daunting thing - we've never had a PI in the milking herd (the farm does Bulk Milk Monitoring for BVD)."

Two years on and the farm is still recovering.

Dave says his production was down 13,000kgMS, mostly due to late calvers from August to September. At an \$8 payout that equates to \$104,000 in revenue.

Reproduction has taken a big hit: The empty rate was normally between 8-12%, but last season that shot up to 17%. There were 150 more late-calvers than normal.

And out of the 77 empties, 38 were 2-

and 3-year-olds (usually the latest and best-BW genetics in a herd).

Dave says the BVD experience had taken away his ability to cull on Johne's Disease, production, somatic cell count, and late cows. He also had to graze carry-overs for the first time, a practice never previously employed on the farm.

"I've had to keep old cows and three-titters. Instead of having 120 replacements we got 84. There was a gut infection that went through them, so we lost 22 calves out of that (BVD makes affected animals susceptible to other illnesses).

"Then we dealt with the phone call to say we had 13 PIs on top of that. So we were down to 58 replacements for the season, half of what it should be. Now I've got to buy in 50 replacements next season at \$1700, times 50. The cost has been astronomical."

Results of pregnancy testing from the latest mating season are promising however, with the empty rate returning to normal.

This calving season nothing is being left to chance.

Dave's LIC Agri Manager, Morghan Dawson, says the farm will this year double-punch the calves, meaning a dry punch tissue sample will be taken from the calves shortly after birth to detect the BVD virus as soon as possible, followed by a wet tissue sample for DNA testing at a later date. The dry punch test should ensure any PIs are immediately identified and eradicated, and will therefore help prevent the chances of infected calves being grown to 140kg.

Morghan also believes Dave should upgrade his BVD Monitoring Pack to

Key for PCR results:

BVD virus detected in bulk milk

> No BVD virus detected in milk

Note PIs (or persistently infected calf, cow or bull) are BVD carriers that shed virus and spred disease throughout life. Pls should be culled

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the BVD Status Pack, which identifies BVD in individuals at every herd test.

Dave also intends to vaccinate the herd ahead of calving and mating, and consideration is being given to double-fencing the boundaries of the farm: "While it's no guarantee against BVD this will reduce future risk," Dave says.

"It's about being proactive. Just because you have a negative bulk milk BVD test doesn't prevent the calves from being PI when they're born.



the BVD PCR test is negative.

DairyNZ website:

Doing anything to help control BVD is cost effective. Doing something is better than doing nothing.

To control BVD effectively you need to:

Identify and remove all persistently infected cattle on your farm. Seek vet help for this.

Virus-test all new stock coming onto farm before mixing with others.

Remove all virus-positive PI cattle immediately, and either:

- vaccinate all breeding stock annually, or;
- virus-test all keeper calves annually.

"There's no way of testing until the calves hit the ground, but that would be the ultimate solution - getting a test done before they're born."

However, the BVD antibodies in the herd have significantly increased indicating there was an infection in the young stock.

Cows were exposed to a 2022 PI calf during mating, and this has in-turn led to 13 PI calves this season.

Dave's BVD BTM monitoring pack results indicate a BVD infection not in the milking herd, as

LIC has several tests to help with BVD Monitoring and to identify PI animals:

BVD Status Pack: A cost-effective way to obtain individual BVD Status in MINDA for all animals in the milking herd. Bulk Tank Milk Monitor Pack tests are included, and the Status Pack identifies both positive and negative animals using herd test milk samples.

Bulk Milk BVD Monitor Pack & PI Hunt tool: Three bulk milk samples over a six-month period are taken. The first two samples are tested for both the BVD virus (PCR test) and BVD Antibody test and the third sample tests for BVD antibodies only. If the BVD virus is detected in either the first or second tests a PI Hunt test is recommended; this allows for culling of PI animals before mating, reducing the risk of cows being exposed to the BVD virus during early pregnancy.

Blood and tissue samples to identify Pl animals: These tests are used to screen new additions to the herd; screen calves and yearlings, and; screen natural mating bulls before their introduction to the herd.



Genomics enables the genetic merit of a calf to be predicted with greater accuracy at a younger age.

The goal of a genetic evaluation system is to accurately estimate the genetic merit of an animal.

LIC

In the absence of genomic information, pedigree relationships and phenotypes (i.e., herd test records) are used to predict which animals have the highest genetic merit for breeding the next generation.

The challenge for dairy cattle breeding is that phenotypes are only collected on cows, meaning that it is approximately five years from the birth of a bull's daughters through to the end of their first lactation.

Without genomics, it's approximately five years before a bull can be confidently marketed based on the performance information of his daughters.

Genomics uses actual DNA information to provide a greater insight into how good or poor an animal's genetic merit is.

In the case of a newborn calf, the only information initially used to estimate its genetic merit is its sire and dam information.

At this point, the genetic merit (Breeding Worth) of the calf is assumed to be the average of its parents.

In reality, the genetic merit of the calf could be better or worse than 'parent

average', depending on what genes the calf inherited from its parents (in the same way that multiple children from the same Mum and Dad may all look different).

IC herd improvement analyst

by Jayden Calder,

With genomics, the genetic merit of a calf can be predicted with far more accuracy at an early age.

This significantly reduces the aeneration interval of bulls. shortening the cycle by about 3 years. The earlier, more accurate, estimate of genetic merit using genomics helps the industry achieve faster rates of genetic gain.



For farmers, the value of genomics stems from the increased accuracy as well as the timina of information. Farmers will now have a better estimate of genetic merit for their animals, which is crucial for understanding which cows to breed a replacement from.

Yearlings and two-year-old animals typically have little to no phenotypic information at the time of mating, so having genomics for these animals will help to make more informed breeding decisions.

Phenotypes are king for genomic evaluation.

Relating the DNA information back to the performance of individual cows requires quality phenotype information on cows that are also genotyped.

In essence, cows that have both phenotype (i.e., herd test records) and genotype information create what is called a 'reference population'.

The bigger and more representative the reference population is of the national herd, the higher the accuracy of genomic evaluation.

This is particularly important for New Zealand's crossbred population and understanding the gene interaction between different parent breeds (Holstein, Friesian and Jersey). In comparison, most overseas reference populations are specific to only one breed.

The launch of GeneMark[®] Genomics in 2024 signals the start of a new era of genomics for the industry.

The New Zealand genomic journey started in 1994 when the gene discovery programme commenced.

By 2008, approximately 5000 sires were genotyped, and young bulls were first marketed based on their genomic information.

During the last 16 years, significant advancements in research and technology have led to the launch of Genemark Genomics, a cost-effective and highly accurate genotyping platform for female animals.

As at April 2024, approximately 380.000 animals have been genotyped on the LIC platform. By late 2024 it is expected this number will approach 1 million, shown below.

Number of animals with genotypes



*2026 & 2028 bars are estimates

Figure 1: Genetic gain equation

The new technology allows LIC to add a significant amount of aenomic data into the LIC aenomic evaluation model. All animals will be impacted by this update to a varied extent, as the information flows up and down the pedigree to all known relationships.

For genotyped animals with missing or inaccurate pedigree, genomics will help to correct the information and improve the accuracy of genetic merit estimates for the individual.

Going forward, more genotypes will continue to be added to the LIC genomic evaluation model at each successive update, further building on the stability and accuracy of the existing dataset.

This next chapter of the genomic journey shapes up to be a pivotal moment for the industry, at a time when the spotlight is firmly focused on herd improvement and cow efficiency.

Number of animals with genotypes and phenotypes

Peter Thompson: Mating preparation begins in autumn when minerals are started, and decisions are made about dry off so that the feed situation, and body condition scores, are not too compromised.

LIC visits the farm of Peter & Sandi Thompson to discuss how they improved

their repro:

In 2009, when Peter and Sandi Thompson purchased their herd, their mating period was about 15 weeks.

Now, the mating period is fewer than 10 weeks, with cows calving in eight-anda-half weeks, Sandi says.

"We've been in a good position for several years now, but it doesn't happen overnight. It takes time to improve your repro performance and you've got to be realistic."

Peter believes that a good calving season goes back to having a good mating period. "To get a good mating, you've got to have good feeding," he says. "To get good feeding, you've got to have good monitoring, and it kind of works back.

"Mating really becomes a focus from autumn when we start our minerals.

"On top of that, decisions are made at drying off.

"Cows are dried off on body condition score and pasture cover is monitored to ensure that we're going to meet our targets for calving. We aim for BCS 5.0 for cows and 5.5 for heifers. We try to minimise weight loss between calving and mating.

"We aim for a minimum average pasture cover on 1 June of 2100 kg DM/ha.

"Normally we have good growth over the winter so by calving we're achieving a minimum of 2300 kg DM/ha.

Repro overview

	2023/24 season	Range from last four seasons
6 week in-calf rate	80%	76-81%
Not in-calf rate	13%	9-17%
Mating length (weeks)	9.5	9.5-10.5
Intervention	CIDR usage (6% of the herd)	-
Empty cow policy	Cull all empties	-

"After calving, we review our calving spread and how the feed situation went."

Watch the cows, know their behaviours

Instead of using tail paint for premating heats, Peter relies on what he observes.

"Probably two or three weeks out from mating, I watch to see if there's a reasonable number cycling as I'm locking them away or bringing them in. If there's activity there, it's not a concern.

"When you're looking at tail paint after about three to four weeks, you have a flat spot where you're not as focused as you have been. So by not tail painting earlier, then I'm focused from the point of tail paint onwards, which is just under 10 weeks."

During mating Peter believes he needs to look at more than the heat detection aids.

"Anybody can pick something that's rubbed raw. The paint's gone. Heat

Farm Facts

Hauraki Plains, 140ha effective milking platform, system 3.

Peak Cows: 370 Friesian-Jersey Crossbred herd; F9J7 average. PSC: 18 July (cows), 10 July (yearlings)

> **Production 3-year** average: 140,696 kg MS

detection is totally gone. It's the ones that are a little bit harder; you need to look for more. See whether they've got any marks on their back, look at the cow's saliva and even put your hand on their back and you can feel the temperature of the cow on heat is hotter than when it's not."

Peter says it's important to observe surrounding cows, because an on-heat cow tends to hang out in bulling groups. "If you've got a cow bulling, look around that cow to see which ones are coming on soon."

Peter believes that getting the cows used to farm staff and keeping things as quiet as possible helps in picking up what cows are on heat.

"If the cows are comfortable around you, they'll walk through the cow shed at their own pace, in their own time. That allows you to see if something's not right. So, if the one that stands in the back of the yard has come in first, you think, 'what's wrong here?' and look closer."

Metricheck[™] test the whole herd a month out from mating

Sandi says treatment isn't just needed by at-risk cows:

"Some of the ones that have been treated... weren't ones that had a hard calving, they weren't ones that had multiple births, they weren't ones with retained placentas. So, if we didn't do them all, we wouldn't be picking them up.

"So we don't want to drop it (Metricheck testing the whole herd)."

Double up on heat detection aids if you're doing all AB

"The day we decided to go all AB was the day we decided that we needed to have a heat detection aid," Sandi says.

Eight key areas of better reproduction management

A focus on any one or more of these areas will help lift the reproductive performance of herds.

been key.



LIC

During AB the couple today use a combination of tail paint and heat

patches/scratchies.

is great for all AB."

"This year we swapped to heat patches. This was a good decision as they were easier to read and more durable which

Use short gestation length semen to condense calving

A big focus each season is getting replacements early and having a condensed calving spread, Peter says.

"When we bought this herd, the mean calving date used to be closer to 20 days, then it got to 14 days, and I think now it's about seven days."

Sandi believes the use of short gestation length (SGL) semen has

"I believe that's why our repro is as good as it is, years of using SGL. Because you're consistently getting those gains. They're calving earlier, they cycle earlier. It's kind of a win-win."

Peter and Sandi used to mate for six weeks using LIC's Sire Proving Scheme KiwiCross® team to get their replacements, then they would finish off with short gestation. That's since been refined, so today the bottom-15% of the herd goes to SGL from day one.

"Then everything else goes to SGL Dairy[®] from week four," Sandi says. "We want to get the most genetic gain, so we inseminate our yearlings which enables us to put a higher percent of our bottom cows to SGL. We want our empty rate to be as low as possible to give us opportunity to sell replacements too."

Use CIDR inserts sparingly

Sandi says a 'no CIDR policy' for the whole herd has in recent years been softened:

"We choose not to keep replacements from CIDR cows. Whether that's something we should or shouldn't be doing, I don't know. In saying that we're also in a position with our repro, that we can make that decision. We're fortunate that our repro results are such that we get plenty of replacements from the first 4 weeks which enables us to do that."

Record everything and put time aside to review

"We record everything," Sandi says.

"All calving assistance codes and calving comments, for all calvings. So if we have any concerns, we can pull up the information and see who they are.

"We look at our submission rate in MINDA to keep an eye on how we're tracking. As well as six week in-calf rate and not in-calf rate. We want our sixweek in-calf rate to be 78% + and ideally under 10% not in-calf."





Bite the Bullet on Johne's Disease:



top 1% in breeding worth, and top 3% in production worth, in New Zealand. And it's been that way for many years.

But health-related disease can attack any herd, and seven years ago this occurred when a wave of clinical Johne's Disease shot through the herd. That's when a long fight-back began, and today the herd is back to its healthy, productive, self.

It's a source of pride: Steve and Wendy Skelton's herd has always possessed excellent genetics, and their top cows are regularly singled out for contract matings by breeding companies such as LIC.

But in 2017, in the back of his mind, Steve knew the odd cow just wasn't right.

Steve says.

"We'd had a BVD scare with a PI calf the year before. I also thought it could have been Theileria again (the tickrelated problem had also been an issue in the previous season), so we got the vet out to look at these six cows in particular, and he said 'Theileria hasn't been an issue in this area this year'."

Steve was certain those previous health issues led to some stress among certain animals in the herd, which he believed to be a trigger for what stood before him in those six cows.

"Then we thought 'Johne's Disease' because that's what it looked like," Steve said. "You know, they were losing weight, had no-good production, scours... they just looked (unhealthy).

The vet immediately recommended a Johne's Disease (JD) milk test on the entire herd, made possible through LIC's herd testing service.

Verified testing showed the combination of 'high-positives' and 'positives' totalled 16% of the Skelton's herd.

Culling the severely JD-affected cows began, initially with the six JD-cows, Steve said.

Within the space of the following four years, he and Wendy were forced to cull a further 75 JD cows.

At the beginning, the vet explained to Steve the complexity of the noncurable disease, and how other farmers had fought against the bacteria to at least manage and

control its spread on-farm, but it was explained it would be a long haul.

"Because we had a two-year-old heifer test positive for the disease, the vet said if that happens you've got a major problem.

"I remember, at the time, that LIC and the vet put on a seminar about Johne's up at the golf course. I was surprised how many farmers were there - that golf club room was full of people that's how many people are being affected by Johne's."

The vet's message - that a long term, disciplined, management plan was essential - was reinforced at the meeting.

Back on the Skelton's farm, the plan kicked in to gear. Aside from the JD milk test, further tests on blood and faecal matter were carried out to confirm high-positive cows, clearly distinguishing this group from the positive cows.

Because Steve could not afford the short-term hit of culling all his JDaffected cows, he began by culling only the high-positive cows in the first season.

"It was way too many cows to do in one hit, so the ones we kept, we put a leg-band on... when they came in the shed we made sure we didn't take any colostrum or milk off those cows (for calf-feeding purposes)."

In addition to the February JD milk testing across all milkers in 2017, Steve

Skelton Farm – JD information	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
Total animals milk tested	187	184	195	175	203	398*
% JD positive or high-positive	15.5	9.8	12.8	4.6	1.5	2
JD culls (MINDA info)	6	25	14	26	10	4

*a neighbouring herd was purchased, with part of the same neighbouring block leased for grazing.



and Wendy decided to do a further JD milk test in September as reassurance that JD-affected milk wasn't getting

fed to the calves.

since that time."

effluent either."

disease anyway."

back.

year-olds.

"We did that for the first two seasons," Steve says. "We simply had to have careful attention to detail.

"We also had to keep all young stock off the effluent (irrigated paddocks). We've stuck to that plan for all seasons

Anything that was suspect had their calves immediately separated following birth, Steve said: "We want to avoid them suckling from their Mums, or ingesting (faeces) during or after birth - we can't see them falling over in

The emotional toll of culling such a high number of top cows had been hard to take, Steve said. "I love my cows. And our BW took a hit too. But I had to think of the young stock, and I thought she was eventually going to die from the

Steve added that he couldn't risk doing embryo transfer work on any cow that might be affected by JD, which he felt sure also held his herd

Today, JD-affected cows in the herd can be immediately dealt with, Steve said, thanks to continuous monitoring and management. "The last few we culled, well, to look at them you wouldn't know; two were beautiful cows and were unfortunately four"And one of those was out of a Johne's cow; we kept it because she was a damn good cow, so we just thought we'd take a chance, but no."

Even if fellow farmers didn't think they were affected. Steve's advice was that they learn about Johne's Disease as a matter of prevention: "A calf is vulnerable from day one, right through until they're two-years-old. If they aren't exposed to the bacteria in those initial two years, they're alright."

Any sign of a JD animal should be addressed, Steve said. "They won't milk as well, production will fall, and the herd will slowly lose out. All discretionary choices will vanish, and all investments in genetics will get cancelled out.

"The trouble is people don't want to know, they bury their heads in the sand, but eventually it'll bite you because it'll only get worse, it won't get better. Don't let it get to that point. Accept there is a problem and address it by getting a vet in, getting the JD test, and drawing up a management plan and sticking to it."

Today, Steve's herd quality, and herd health, remains among the top echelon in the country, and he and Wendy are pleased to have their herd looking a picture of health, with the cows cranking out production the way they ought to.

In November 2023, Fonterra stated it would target a 30% intensity reduction in on-farm emissions by 2030 (from a 2018 baseline).

Fonterra said 86% of its emissions came from on-farm, and the new target was seeking to reduce emissions intensity by tonne of FPCM (fat and protein corrected milk) collected by Fonterra.

Fonterra expected this new target would be achieved by:

- A 7% reduction through farming best practice such as feed quality and improving herd performance;
- A 7% reduction through novel technologies developed through partnerships; for example, the joint venture AgriZeroNZ, in which agribusiness and Government are working to find potential solutions to methane:
- An 8% reduction through carbon removals from existing and new vegetation;
- An 8% reduction from historical land-use change conversions to dairy.





y Leo Pekar. armWise consultant

Why should farmers be excited about Fonterra's stated emissions target?

- The announcement provides clarity of what it means for those onfarm: farmers, their staff, and farm consultants:
- It provides an ability to influence emission intensity with tools that make sense;
- Most of these tools have the potential to improve profit.

How can farmers begin aligning themselves with Fonterra's environmental goals?

First, it's vital that we gain a sound understanding of the source of on-farm emissions, its drivers, and levers (refer to flow chart).

On-farm emission reductions can therefore be split by its sources:

Reducing Greenhouse **Gases On-Farm**

Methane, Nitrous Oxide, and Carbon Dioxide.

For the sake of brevity, and because it represents the 'lowest-hanging fruit', this discussion focuses on methane-reduction.

Methane

Methane production is the result of feed fermentation, and since every kg of feed accounts for a set number of emissions, reducing the amount of feed that it takes to produce milk is key (for every 1kg of dry matter, 21.6g of methane is produced).

According to DairyBase, it currently takes 12.3 kgDM eaten to produce a KgMS.

Therefore, reducing the amount of feed it takes to produce 1 kgMS by, for example 9%, will drop methane emissions by a similar amount. This is a measure of feed conversion efficiency.

How to improve on feed conversion efficiency (kgDM/kgMS)?

One focus must be milk production per cow.

Take a crossbred cow producing 400kgMS/year: This cow is going to require a similar amount of feed for body-maintenance, walking, and pregnancy as a crossbred cow of the same size that produces 500kgMS/year.

While it is true the higher producing cow will require more feed (5.6 tonnes of dry matter, as opposed to the lowerproducing cow that requires 4.9 tonnes of dry matter*), the higher-producing cow is more efficient because it uses a lower proportion of feed for body maintenance and exertion.

In the example above, the higher producing cows achieve a reduction of 9% in enteric methane intensity.

At an individual cow level (example adapted from DairyNZ's Facts & Figures booklet):

	Lower producing cows	Higher producing cows
Milk production per cow	400 kgMS/cow	500 kgMS/cow
Annual maintenance requirements	1900 kgDM/cow	1900 kgDM/cow
Annual production requirements	3000 kgDM/cow	3700 kgDM/cow
Total feed demand per cow	4900 kgDM/cow	5600 kgDM/cow
Feed conversion efficiency	12.25 kgDM / kgMS	11.2 kgDM / kgMS
Enteric Methane, Emission Intensity Difference		(12.25-11.2)/11.2 * 100 =9%
Improving milk production per cow requires:	Replacement rate is also important as young animals are consumers without producing anything for two years, but	understand their farm system, and model changes with a clear understanding of the financial

- Quality cow genetics;
- better feeding;
- days in milk (mating performance);
- good animal health;
- BCS management;
- · sound stockmanship, and;
- · in some cases, more brought-in feed (NB: may lead to increases in other warming gases).

The role of repro:

Repro is important as it drives replacement rate, culling choices, and maximises the 4-8 year old cows which are at maximum milk production. continue to produce methane.

- So what's the upshot?
- Being a short-lived gas, methane reductions have the potential to have a cooling effect on the planet, as lowering emissions would result in lowering atmospheric concentrations (unlike other gases). We should be excited with this opportunity and embrace it.

Every farm has different opportunities that need scoping.

Use your farm consultants who are able to apply their experience and expertise with tools such as Optimiser[®]. This will help farmers

milk per cow).



		Non-biological emissions	12
de (15%) and fertiliser		CO2 (10%) Imbeded in the transport and production of farm inputs	
iver: ogen surplus		Main Driver: Brought in food	
en use content of	でいたかな	Levers: • Maximise homegrown feed • Buy locally grown feeds	
			ないため

implications. It's not about boosting production per cow by throwing different feed mixes at the herd - farmers should get the basics right first, and build productivity

on top for the benefit of both the farm business and the environment. The task need not be daunting.

Farmers frequently overestimate what can be done in one year, but underestimate what can done in 10 years!

For more information go to: https://view.publitas.com/fonterracomms/our-approach-to-on-farmemissions/page/20-21

Beef Finisher with a Point of Difference

Callum Thomsen is a beef finisher who's challenging the conventional approach.

Two seasons ago Callum was so impressed by a trial run of 60 heifers that he's since stepped-up his purchase plan to grow more dairybeef heifers in lieu of Friesian bulls.

The former Young Farmer of the Year (2007), along with his wife Kelly, run an 1100ha sheep and beef operation with Callum's parents (Roger & Michelle) in Patoka, Hawke's Bay.

This year Callum is finishing 232 Profit Maker cross dairy heifers, as he brings through a further cohort of 138 rising one-year-old dairy-beef cross heifers.

The 232 rising three-year-old heifers were purchased from the Te Hopai dairy operation in Wairarapa, with an additional 138 younger heifers purchased from a Southern Pastures dairy farm in Canterbury (both sets of heifers were bred from Profit Maker semen, supplied by LIC, to these two dairy operations).

This spring Callum's farm will send nearly 650 beef animals to the works, one-third of which will be the heifers.

However, sheep are 50% of the operation, and until three years ago the rest of the farm grazed dairy heifers, but a tuberculosis incursion forced a sudden re-think and the farm operation had to change tack.

A beef-finishing operation took the place of dairy grazing, Callum says.

"Initially our new model was to kill 650 bulls each year, ideally at 340kg carcass weight, with about 500 younger bulls as well," Callum says.

Callum Thomsen, sheep and beef finit

"But we do quite a bit of re-grassing and fencing, I've got about 450ha in little 2ha paddocks, with an 8-wire, one hot, no-baton type fence, and it's a good multi-purpose fence for lambs and for cattle.

"The bulls were making good money, but they're also pretty good at destroying things. When I was doing my re-grassing, I just didn't like the damage the bulls were doing. They also like fighting and injuring themselves and each other, hips, legs, you name it.

"So we started looking around at what other options we had. And I started talking with the Absoloms (from Rissington cattle Company) because they're close-by, and there's a common connection with our children at the same school.

Rissington Cattle Company supplies Profit Maker, Angus, and Simmental semen and are available through LIC's (beef) *Genetics Catalogue*.

"A couple of times I went to their feedlot system they had there, looked at their animals, and was more than interested," Callum said.

"So Daniel Absolom sowed the seed, suggesting I try the dairy-cross heifers, and he was the connection with Te Hopai (Te Hopai utilised Profit Maker genetics over cows it didn't wish to breed replacements from).

"It was a good fit," Callum says.

"They were selling animals in the spring when I needed them, when I was killing my bulls. So I purchased the heifers and then we wintered them, and killed them the following spring. it was pretty much 11 months of finishing. "They did really well, the weight gains were good, I had no deaths. For the first season I only bought 60 heifers from Te Hopai, probably at 330kgs liveweight, and I killed them at 278kg carcass (liveweight equates to 560kg)."

"I kept them in the same system. I ran them at 2.6 to the hectare, and I finished lambs ahead of them. The grass in that system was highpowered with a lot of plantain clover, and I didn't want the heifers to blow up with bloat in the spring. So I grazed the lambs in front of the heifers in that period to take away the clover."

Callum said he was happy with the dairy-cross margins: "If you look at FARMAX (a modelling and decision support tool, developed for pastoral farmers), on paper, my cents/kg dry matter for the heifers won't quite keep up with what the bull does, but to me that's not the whole story.

"We need to make our margins, but you've also got to enjoy what you're doing, and I've got a couple of young kids, 10 and 12, and they've got their own little motorbikes and stuff, and if I'm going out to shift bulls they won't come because they don't want to be knocked over by a 650kg bull... they get a bit dangerous.

"Whereas the heifers are an absolute joy, such a joy to shift, you open the gate, and they walk through quietly."

"I'm happy with their growth rates. This year I'm going to work hard to get the best kill rates possible, and kill them on the peak schedule and make the maths on them stack up, get the cents/kg DM up, and I'd quite like to expand it as much as we can."

Illustrious Legacy

RSIDE M ILLUSTRIOUS

At last month's Breeders' Day, Farside M Illustrious S3F, was recognised for his contribution to the dairy industry, and rightfully takes his place in the LIC *Hall of Fame*. His story is a little different, as he hasn't taken the conventional path to *Hall of Fame* status.

As a yearling, Farside M Illustrious S3F initially entered LIC's Premier Sires DNA team (as it was known in 2011) as the number-one Holstein-Friesian bull in the stable.

But by 2015 he was retired from Premier Sires because higher-merit Mint Edition sons were entering the LIC teams.

As time went on, however, his legacy grew, said Simon Worth, LIC livestock selection manager.

Announced at LIC's recent Breeders' Day was the cooperative's National Sire Proving Scheme Farmer of the Year award, presented to Louise & Alastair Holmes of Fairlea.

Ann Scott, LIC Sire Proving Scheme (SPS) manager, said Louise and Alastair's SPS herd largely of 600 Friesians and Crossbreds on a 208ha farm.

The couple initially joined the scheme in 2005 for three seasons, before re-joining it in 2014 and have remained with it since that time.

The herd was mated with SPS KiwiCross bulls each season, Ann said, complemented by SGL & beef options.

When the herd first joined the scheme in 2005 its average breeding worth (BW) sat at 134, but this had now reached 294 (within the top 10% of all dairy herds nationally).

Following his three seasons in Premier Sires (2011 to 2014), Illustrious sired 17,313 daughters and more than 90,000 granddaughters across New Zealand

"His ability to help farmers breed outstanding cows that became efficient milk producers with quality udders made him a standout," Simon said.

But he also sired 33 sons that were used for artificial breeding, with nine of these bulls following in their father's footsteps by joining a Premier Sires team.

Worth says Illustrious was predicted to be a star performer as a young bull.

"Fast forward to today, that prediction was spot-on, as Illustrious

Similarly, 19 years ago the herd's average production worth was 170, but today it had reached 344.

All cows were DNA and genomically profiled, with a recorded ancestry of 100%, Ann said.

"The Holmes' achievements show the huge genetic gains that are possible in the scheme through use of LIC's genomic bulls. Since 2005, they've reared 1865 SPS daughters and in lactational seasons they've milked a total 1332 of these daughters through to their dairy shed."

During the course of its 63 year history, LIC's Sire Proving Scheme has seen more than 11,550 bulls go on to provide proofs to the industry.

There are about 150 farmers who belong to LIC's SPS each season.





Left: Illustrious breeders Graeme and Jacki Barr of Tokoroa are congratulated by Simon Worth (right).



ARSIDE MILLUSTRIOUS S3F

is recognised as the highest production bull used in the artificial breeding industry that year (2011)," Simon said.

The breeders of Illustrious were Tokoroa farmers Graeme and Jacki Barr.

"We knew he was a good bull," Graeme said. "Illustrious is from one of our best cow families, his mum, known as number eight cow, had fantastic longevity, a superb udder, and always produced well."

LIC *Hall of Fame* inductees are honours that are exclusively reserved for animals that have delivered a significant contribution to the dairy industry.



Alastair and Louse Holmes - SPS national farmers of the year 2023-2024

BREEDERS' DAY 2024 CLAUDELANDS ARENA, HAMILTON



L to R: Bruce Jensen, Tony Landers, Rob Thwaites, Matthew Darke



L to R: Larry Charteris, Caroline Charteris, Carina Weston-Charteris, Daniel Weston-Charteris



L to R: Pete Perrett, Ian Megaw, Paul



Allen





L to R: Helen McCallum, Sarah McCallum, Greg McCallum



L to R: Perry Henderson, Kate Henderson, Ann Scott



Param Singh





Luke Beehre







L to R: Tania Riddington, Christine MacBeth, Tim Murdoch



L to R: Cam Edgecombe, Anna Edgecombe, Philip Wilson, Heather Wilson





L to R: Lynette Taft, Geoff Taft, Neville Ritson, Michelle Ritson



L to R: Richard Tennant



L to R: Elise Moxey, Zac Grant, Sebastian Hacker, Liz Hacker



Sharpe, David Chin



L to R: Mary Williams, Stacey White



L to R: Kevin Clark, Cameron Carling



Wayne Taylor, Mark Julian, Michael



Pete Perrett









Stu Gordon











L to R: Kath Lambert, Simon Worth, Cameron Carling, Kevin Clark, Eddie Lambert



to R: Claire Newson, Leeanne Taylor



L to R: Sarah McCallum, Alison Thwaites, Helen McCallum

L to R: Andrew Sharpe, Paul Midgley, Kirsten Midgley, Kieren Harrison, Ella Sharpe







CLAUDELANDS ARENA, HAMILTON

Last month LIC hosted 160 leading dairy animal breeders from around New Zealand at the cooperative's annual Breeders' Day.

The day is a recognition and celebration of farmers who have bred a genetically-superior sire that has gone on to make a 2023 Premier Sires team (as a member of its Forward Pack, A2/A2, Sexed, or Daughter Proven stable).

The breeders attended LIC's Newstead Bull Barn for a parade of a number of sires, followed by the main event: A formal drinks, dinner, and presentation evening at the Claudelands Event Centre in Hamilton.

More pictures inside....

