FOCUS DAY

James Stewart Theatre
Lincoln University

Wednesday

25 June 2025

10.00am – 1.00pm

SIDDC
South Island Dairying Demonstration Centre

LOWDOWN at LUDF

Peter Hancox (LUDF)
Bernardita Saldias (Farmright)
Antoinette Archer (SIDDC)

Season's performance highlights and challenges

Where we have been, where we are going, and how we will continue to drive success on-farm

A CENTURY OF STORIES – 100 YEARS OF THE DAIRY EXPORTER

Anne Lee (Countrywide Media)

Expect fascinating stories from their archives, memorable moments, and a yarn or two to inspire and entertain

THE RACE AGAINST TIME:

A LOOK AT THIS SEASON'S REPRO RESULTS

Ryan Luckman (Veterinary Centre Waimate),
Aaron Henderson (LIC)

A review of LUDF mating results and youngstock performance to look for opportunities to improve our long-term results

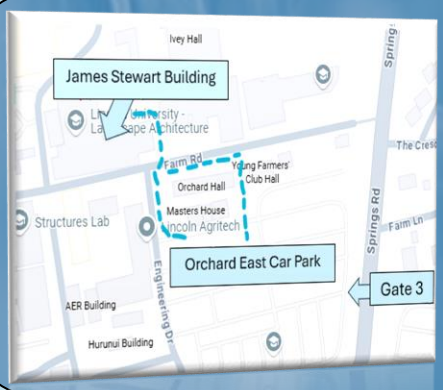
SETTING UP OUR PASTURES FOR THE FUTURE

Led by **Russell Hamilton** (Farm Source)

How LUDF identifies paddocks for renewal

Our preparation process, and how we implement to ensure we get a successful regrassing program that improves our future productivity

For those interested, there will be a short farm walk at LUDF following the light lunch (weather permitting)



Register on the day from 10.00am for 10.30am start
James Stewart Building, Lincoln University, Springs Road, Lincoln

Parking: Gate 3 - Orchard Car Park, entrance off Springs Road

Refreshments & Light Lunch provided
E. office@siddc.org.nz
T. 03 423-0022 or M. 0272 724 069

SIDDC FOCUS DAY

June 25th 2025

10:00am – 1:00pm

Lowdown on LUDF

End of Season Wrap Up: seasons performance, highlights and challenges.
Looking ahead: this season's plan and focus.
LUDF Financials: last season's actuals and this seasons budget.

The race against time

A look into last season's repro results with Ryan Luckman, Veterinary Centre – Waimate
A review of LUDF's mating results and youngstock performance to look for opportunities to improve long-term results.

A century of stories

100 years of the Dairy Exporter with Anne Lee, Countrywide Media

Setting up our pastures for the future

LUDF's pasture renewal strategy with Russell Hamilton, Farm Source
Our preparation process and implementation that improves our future productivity

Contact us: Ph: 03 423 0022 www.siddc.org.nz www.ludf.org.nz **With thanks to our sponsors:**

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SIDDC

Lincoln University Dairy Farm (LUDF) is a demonstration farm developed by the South Island Dairy Demonstration Centre (SIDDC). This industry-funded partnership of seven leading dairy sector organisations collaborate to promote the sustainable development of South Island dairying via demonstration activities, research, education and training of farmers. The current partners of SIDDC are:

Strategic Objective at LUDF

To maximise sustainable profit embracing the whole farm system through:

- Increasing productivity
- Without increasing the farm's total environmental footprint
- While operating within definable and acceptable animal welfare targets; and
- Remaining relevant to Canterbury (and South Island) dairy farmers by demonstrating practices achievable by leading and progressive farmers.

Focus for 2025/26 Season:

Nil-Infrastructure, low input, low N-loss, optimise profit.

Current farm system:

- 3.5 cows/ha (target 560 peak milked).
- Target up to 190kg N/ha synthetic fertiliser.
- 450kgDM/cow imported supplement with cows wintered off farm.
- Cost control - FWE budget of $5.50/kg MS or less.
- Target production 487 kg MS/cow on a hybrid milking system.

Current research projects on the farm

Plantain Grazing Project

- Aim for a minimum of 10% of the diet, with a target of 30% of the diet, in plantain via a mixed sward.
- To assess composition over time through direct drilling and broadcast with a spring and autumn sowing date.
- To result in decrease in N loss in OverseerFM from 26 kg N/ha/yr to 23 kg N/ha/yr for expected composition when direct drilled and 22 kg N/ha/yr for expected composition when broadcasted.

Mating Benchmarking Project

- Continued focus on our reproductive performance by focusing on:
- Transition cows – milk cows OAD cows for first 10 days of lactation, or until rumination criteria is met, with a focus on feeding and silage allocation during this period. This is aimed to improve BCS loss over this period.
- Body condition score (BCS) targets for dry off and targeted winter feeding to achieve planned start of calving BCS targets, aiding in planned start of mating BCS.
- Early scanning based on data via wearables to implement our phantom cow strategy, see reproduction project for more information.
- Use of short gestation semen to allow a longer mating period (12 weeks), whist achieving a shorter calving period.

Flexible Milking Project

- LUDF has applied 10 milkings in 7 days all season, for four seasons.
- Prediction was 6% drop in MS production.
- LUDF did observe a drop of 8.3% compared to our TAD average, however two of these seasons were below 'average'.
- LUDF was compared to a regional benchmark, that indicated LUDF's drop was in line with the regional drop. This was 5.2% over the first three seasons of 10 in 7, compared to the previous three seasons TAD.
- This resulted in a 6.2% drop for LUDF.
- Challenge is to achieve or maintain a 6% (or less) drop year on year.
- Profitability aim is to remain the same due to lower costs. This is through labour demand, less animal health and shed costs, better cow condition, targeted winter feeding levels on BCS and improved mating results.
- Profitability will be challenged during higher payout years due to drop 6% drop in production.
- LUDF will now adopt a hybrid flexible milking system for the 25/26 season.

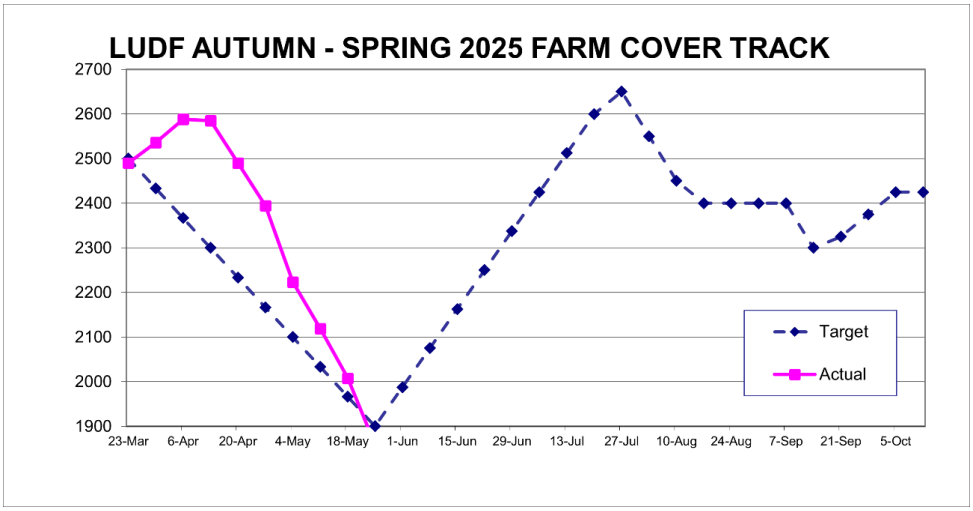
Lowdown on LUDF

Season to date:

- Farm Performance: Pasture and Feed
- Farm Performance: Milk Production
- Animal Care: Body Condition Score, Health & Youngstock
- Environment: Climate
- Business Health: Financials and Farm Plan

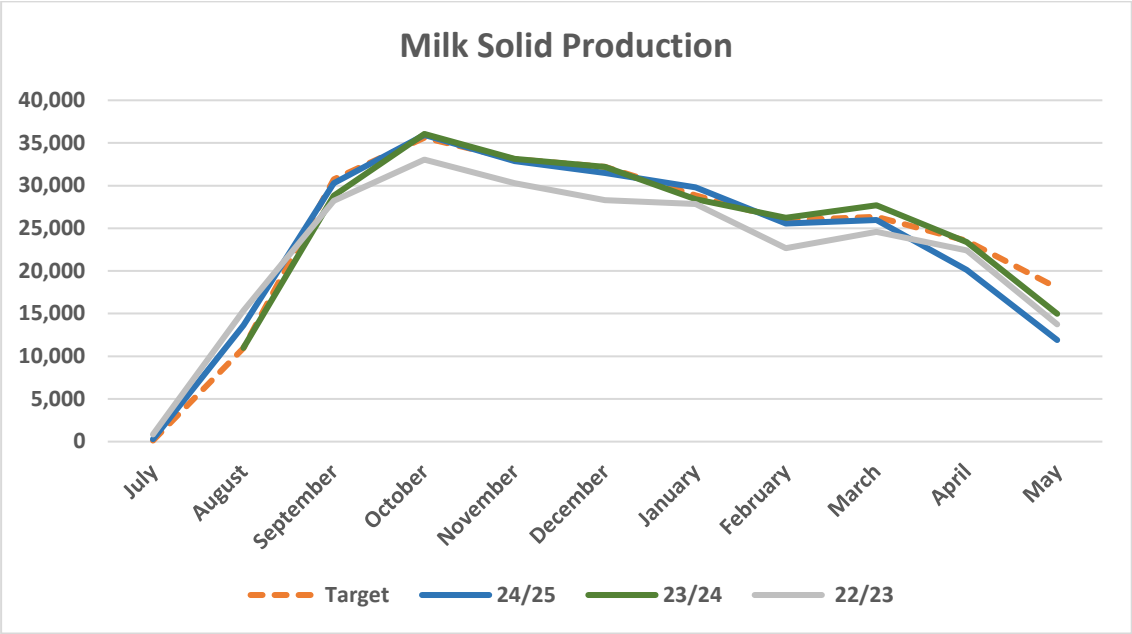
FARM PERFORMANCE – Pasture & Feed

- **May Pasture Growth**: 30 kg DM/ha
- **Demand**: 46.2 kg DM/ha
- **Silage Fed**: 499 kg DM/cow (budgeted 450 kg)
- **Closing APC**: 1858 kg DM/ha (target 1900)
- **Calving APC Target**: 2600 kg DM/ha

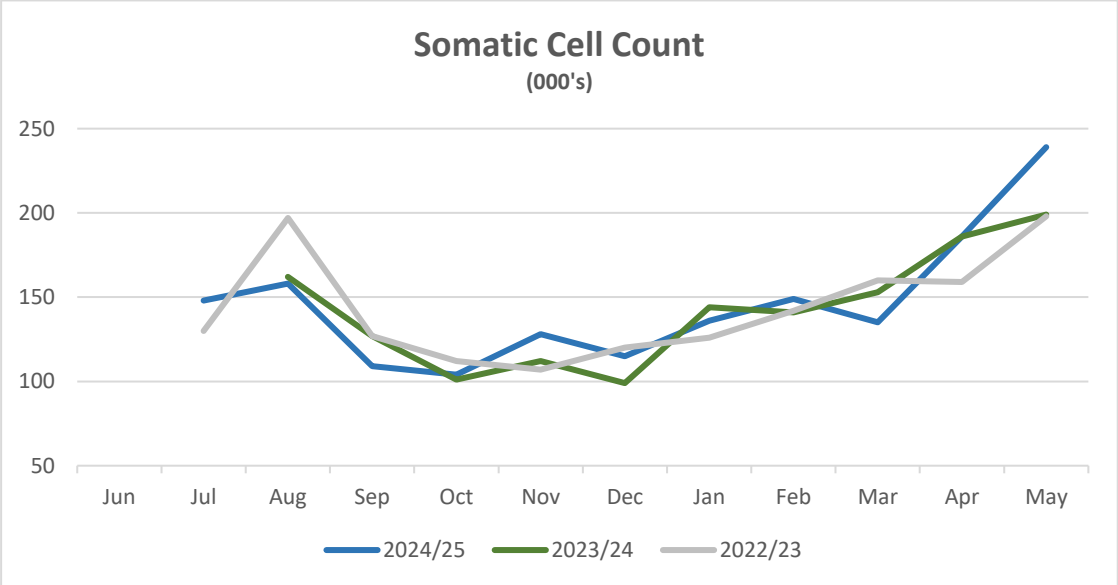


FARM PERFORMANCE – Herd & Milk Production

- **Total Milk Production**: 257,815 kg MS (2.84% down from forecast) or 1,611 kg MS/ha.
- **Milk production per cow:** 460 kg MS/cow (470 kg MS/cow budgeted). Peak of 2.13 kg MS/cow/day.
- **Dry-off dates**: Dried off 29 May
- **Seasonal Somatic Cell Count**: Increased to 244,000 in May, season average of 139,293

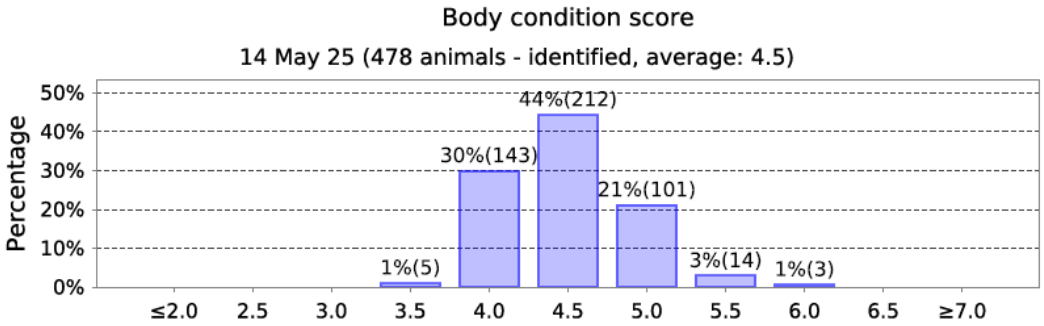


Date	Litres	2024/25 kg MS	Variance	2023/24 kg MS	2024/25 Total kg MS	kg MS (%)	Avg SCC
May	98,009	11,886.0	-20.6%	14,973.3	257,815	12.13	239
April	177,147	20,118.8	-14.0%	23,397.8	245,929	11.36	186
March	240,116	25,962.9	-6.2%	27,690.2	225,810	10.81	135
February	250,305	25,550.4	-2.5%	26,218.2	199,848	10.21	149
January	301,598	29,793.1	4.8%	28,419.5	174,297	9.88	136
December	331,439	31,502.9	-2.1%	32,187.1	144,504	9.50	115
November	351,186	32,887.6	-0.8%	33,143.1	113,001	9.36	128
October	387,953	35,938.3	-0.3%	36,057.7	80,114	9.26	104
September	330,893	30,282.0	5.0%	28,827.1	44,175	9.15	109
August	143,217	13,610.9	24.0%	10,979.9	13,893	9.50	158
July	2,875	282.3	-		282	9.82	148
Total	**2,614,738**	**257,815.2**	**1.6%**	**261,893.9**			**139**

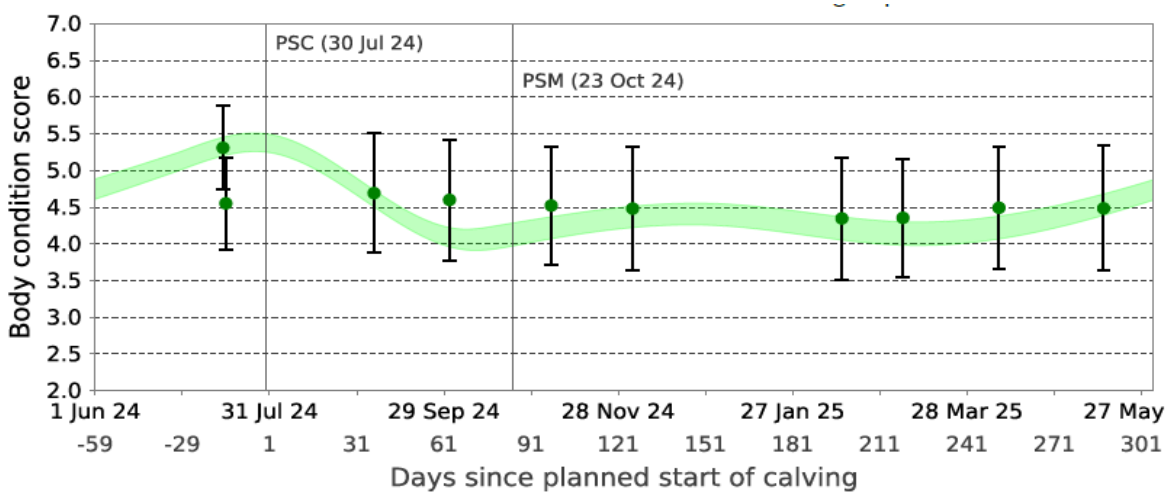


ANIMAL CARE

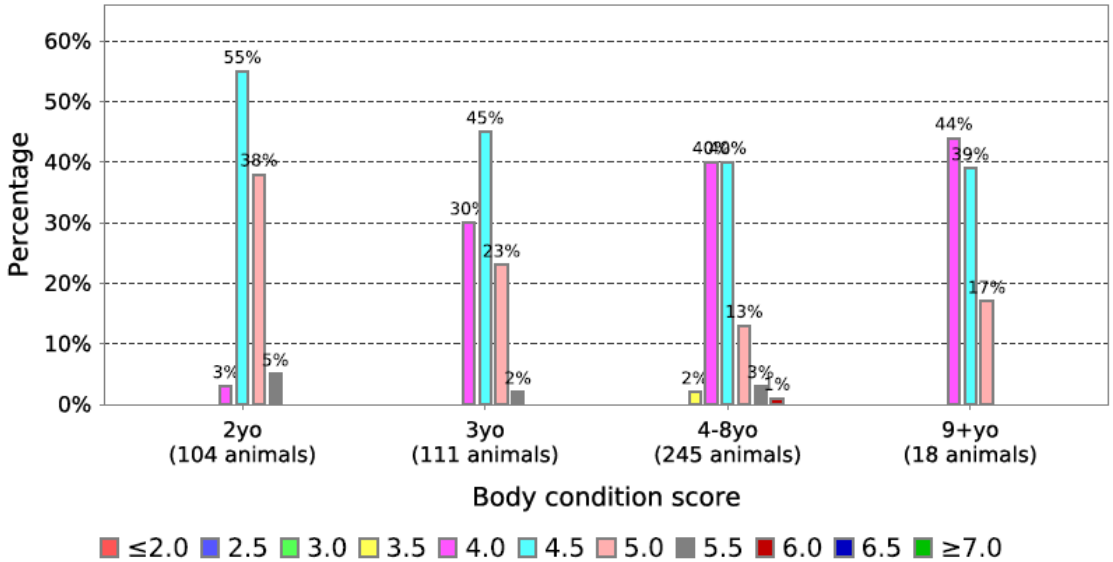
- Body Condition Score was 4.5 at dry off - 31% where under 4.5.



- Body Condition Score has tracked on average on target after a lighter start to last winter, however, there has been a range throughout the season. This continues to be a focus.



- We will monitor intakes over winter to ensure we get our bottoms up to target.
- A winter BCS will take place in July for our records and to re mob our later calving cows.
- At 14th May 95% of our herd were between 4.0 and 5.0, with a range of 3.5 – 6.0.
- R3 year-olds are a priority to ensure we achieve a 5.5 BCS at PSC.



- Mating – covered in next session
    - Not in calf rate for MA – 13.6%
    - Not in calf rate for heifers – 15.9%
- Mastitis: Increased post-wet period. LUDF did initiate a milk quality visit over the season with Fonterra which prompted adjustments to our vacuum levels and teat spray protocol.
- Lameness: Ongoing issue (white line disease predominant) compounded by a wet January and Autumn. Actions: lanes to be capped before calving, locomotion scoring and backing gate and herding standard operating procedures improvements.
- Dry Cow Strategy:
    - 255 cows teat sealed only
    - 167 received DCT + teat seal
    - 1 cow treated with antibiotic (Depocillin)

ANIMAL CARE – Stock Reconciliation 31 May 2025

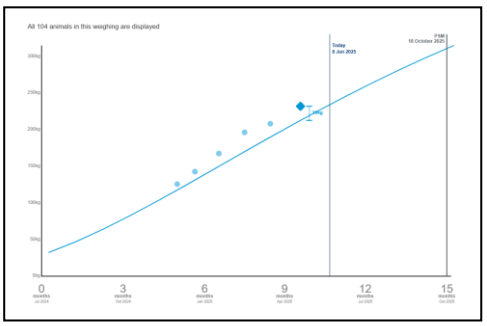
Peak Milk target	560
In calf MA cows	467
In calf heifers	94
Total available	**561**
R1's	101

- Target peak milk numbers is 560 cows for 2025/26 season – however this has been revised to 545 cows for budgeting purposes.

ANIMAL CARE – Youngstock

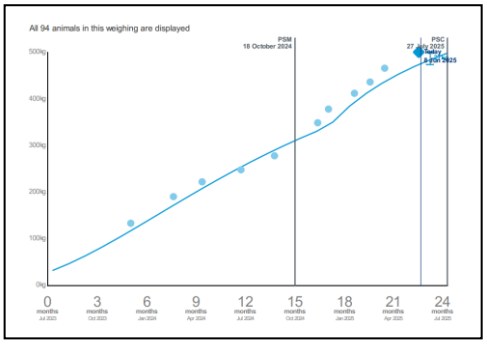
2024 Born (R1s):

- 104 heifer calves retained (18.6%)
- Average LWT: 232 kg, 19 kg above target
- 6 underweight



2023 Born (R2s):

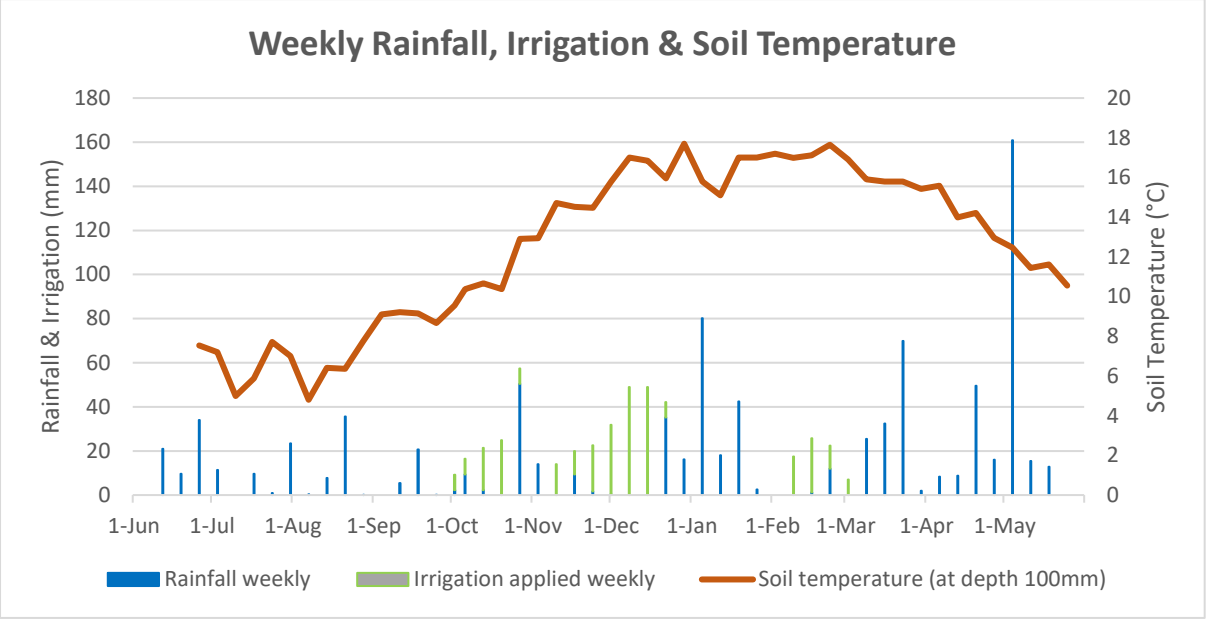
- 95 in-calf heifers (16.9%)
- 27 kg ahead of target
- Empty rate: 15.9%



Animal health winter plans completed: vaccinations, drenches, iodine and B12 administered to appropriate age groups.

ENVIRONMENT

- **Rainfall (Mar–May):** 401 mm - 62% of annual average. Total season: 879 mm - 137% of annual average.

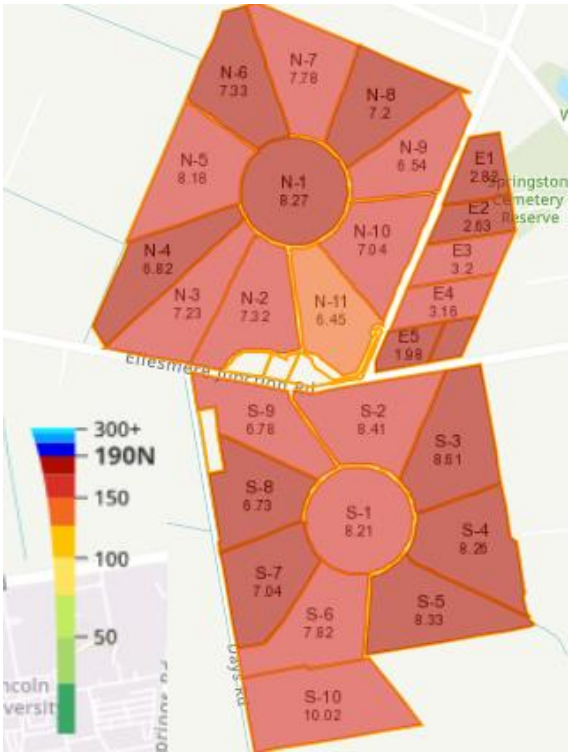


- **Soil Temperature (May Average): 11.52°C**

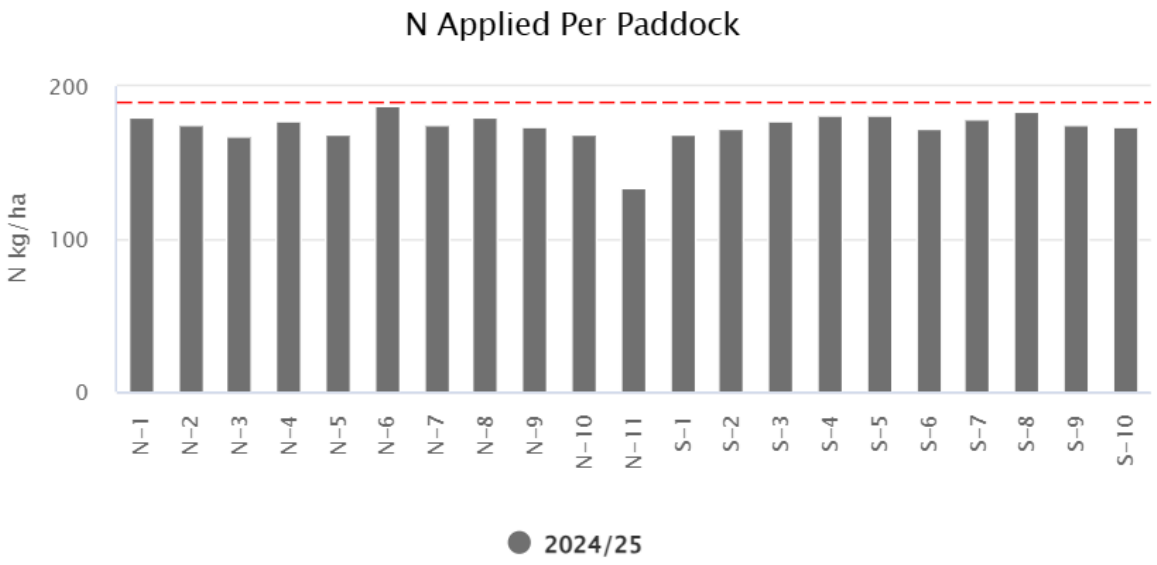
Note: High rainfall in March and April led to poor utilisation and an increase in supplement fed and breaking the usual grass-only May regime.

- **N Use**: 175 kg N/ha applied

Nitrogen Heat Map



- **Leaching Estimate**: 26 kg N/ha over milking platform



ANIMAL CARE – Winter Grazing

- **MA Cows**: Drafted by BCS and calving date; on kale and silage/straw depending on condition
- **R2's**: At local support block
- **Monitoring**: Twice-weekly visits, will redraft in mid-July

Mob	Number	BCS gain	Feed Allocation	Diet	Utilisation
Lights	222	1.0 +	16 kg DM/cow/day	Kale & Silage	70%
Mid	198	0.5 – 1.0	15 kg DM/cow/day	Kale & Silage	75%
Heavy	43	0-0.5	14 kg DM/cow/day	Kale & Straw	80%
Heifers	94	0-0.5	13 kg DM/cow/day	Kale, Oats, Annual Ryegrass & Silage	80%

PEOPLE, WORKPLACE COMMUNITY & CULTURE – Team Update

LUDF Staff: Peter, Eugene, Jack, Jeremy

- **Roster**: 5 on / 2 off
- **Milestone**: Celebrating Peter's 20-year anniversary at LUDF

A big thanks to the team for all their effort this season.

Peter Hancox celebrating 20 years service

BUSINESS HEALTH – Financials & Farm Plan

Overview

Measure	25/26 Budget	24/25 Actual	24/25 Budget
Peak Cows	545	560	560
Total Production	**265,633**	**257,815**	**266,000**
Per Cow	487	460	475
Per ha	**1,660**	**1,611**	**1662**
Milk Price	$10.00	$10.00	$9.00
Farm Op Exp	$5.36	$5.48	$5.43
Total Op Exp	**$5.36**	**$5.56**	**$5.50**
EBIT	$1,381,255	$1,355,755	$1,099,186
EBIT/ha	**$8,633**	**$8,473**	**$6,870**

Additional Notes to Budget: 2024/25 Actuals

Stock Sales	
Beef Calf Sales	Beef calves to be sold as early as possible. Budgeted to rear if no market.
Dairy Heifer Sales	All dairy heifers will be reared to 100kg. Retaining 125 and sell surplus.
Labour	Federated Farmers hourly rates used to normalise to a "standard" dairy operation.
	FM - $40.43/hour, 2IC - $31.35/hour, FA - $27.30/hour. This is to reflect actual hours worked given roster, flexible milking components and LU contracts.
Animal Health	Additional spend within LUDF due to Johnes Testing, BVD and BCS. Calf rearing has now been removed and put into Feed.
Breeding	100% AI - sexed semen used, beef semen used, heifer synch and additional pregnancy testing. Removed calf DNA and tags.
Grazing - Winter	All stock wintered off farm
Youngstock Grazing	Youngstock grazed on support blocks owned and leased by LU. Grazing fee now charged.
Lease - Support Block	This has been removed, along with associated costs. Grazing fee now charged and any feed imported charged.
Calf Rearing now located in Feed	$337/calf reared this includes milk powder, concentrates, bedding, dehorning, tags, animal health and DNA testing of all dairy heifers
Fertiliser	Milking platform only
Regrassing	16 ha being regrassed and 8 ha equivalent of repair (stitching)
Vehicle Expenses	Includes tractor, ute, 4 wheeler, side by side and two 2-wheelers
R&M	Ageing dairy - 24 year old plant
Administration	Insurance has now been included in the farm budget

2024/25 Actuals:

LUDF 2024/25 Budget				LUDF 2024/25 Actuals						
266,000 $/kg MS	160 $/ha	560 $/cow	2024/25 $	Description	2024/25 $	Act vs Bud Variance	257,815 $/kg MS	160 $/ha	545 $/cow	Notes
				Income						
$0.03	$49	$14	7,827	Sales - Bobby Calves	7,809	-18	$0.03	$49	$14	
$0.03	$44	$13	7,000	Sales - R2 Heifers	23,004	16,004	$0.09	$144	$42	15.9% MT
				Sales - Bulls						
$0.25	$410	$117	65,546	Sales - Cows	100,859	35,313	$0.39	$630	$185	13.6% MT - 95 vs 105
$0.25	$422	$121	67,568	Sales - Surplus heifer calves	48,908	-18,660	$0.19	$306	$90	Less sold - 40 vs 90
$0.08	$134	$38	21,500	Sales - Beef calf Sales	30,268	8,768	$0.12	$189	$56	60 vs 43
$0.64	**$1,059**	**$303**	**169,441**	**Total Stock Sales**	**210,848**	**41,407**	**$0.82**	**$1,318**	**$387**	
$9.00	$14,963	$4,275	2,394,000	Sales - Milk Solids Current Season	2,578,150	184,150	$10.00	$16,113	$4,731	Production & MP
				Sales - Co-operative Difference			$0.00	$0	$0	
				Sales - Feed, Silage, Other Crops			$0.00	$0	$0	
				Income - Other			$0.00	$0	$0	
$9.64	**$16,022**	**$4,578**	**2,563,441**	**TOTAL REVENUE**	**2,788,998**	**225,557**	**$10.82**	**$17,431**	**$5,117**	
				Expenses						
$1.13	$1,881	$538	301,000	Labour - Perm & Fixed Term	272,540	28,460	$1.06	$1,703	$500	Short term vacancy
$0.04	$63	$18	10,000	Other labour: ACC, Super, H&S, Clothing	9,179	821	$0.04	$57	$17	
$1.17	**$1,944**	**$555**	**311,000**	**Total Labour Expenses**	**281,719**	**29,281**	**$1.09**	**$1,761**	**$517**	
$0.31	$509	$146	81,498	Animal Health	94,099	-12,601	$0.36	$588	$173	Mastitis & Lameness
$0.28	$458	$131	73,297	Breeding	72,756	541	$0.28	$455	$133	
$0.04	$74	$21	11,767	Dairy Shed Operating Expenses	3,773	7,994	$0.01	$24	$7	Stock on hand
$0.08	$138	$39	22,000	Electricity - Other	31,251	-9,251	$0.12	$195	$57	Under budgeted
$0.25	$413	$118	66,000	Electricity - Irrigation	51,031	14,969	$0.20	$319	$94	Less days
$0.55	$920	$263	147,122	Feed Made/Purchased	132,080	15,042	$0.51	$826	$242	
$0.64	$1,068	$305	170,892	Grazing - Winter	179,926	-9,034	$0.70	$1,125	$330	
$0.07	$112	$32	17,998	Freight - Livestock	12,105	5,893	$0.05	$76	$22	
$0.33	$541	$155	86,589	Youngstock Grazing	77,329	9,260	$0.30	$483	$142	R1s?
$0.24	$395	$113	63,250	Calf Rearing	63,858	-608	$0.25	$399	$117	
$0.28	$457	$131	73,186	Fertiliser - Nitrogen	75,622	-2,436	$0.29	$473	$139	Product & Rate
$0.14	$230	$66	36,741	Fertiliser - Other	33,566	3,175	$0.13	$210	$62	
$0.07	$122	$35	19,547	Fertiliser - Spreading	19,052	495	$0.07	$119	$35	
$0.04	$68	$19	10,800	Seed	7,675	3,125	$0.03	$48	$14	Failed kale
$0.08	$138	$40	22,125	Contractors - Regrassing	38,228	-16,103	$0.15	$239	$70	Milking platform only
$0.01	$9	$3	1,500	Weed & Pest Control	1,200	300	$0.00	$8	$2	
$0.07	$114	$32	18,160	Vehicle Expenses	19,807	-1,647	$0.08	$124	$36	
$0.06	$94	$27	15,000	Vehicle - Fuel	13,808	1,192	$0.05	$86	$25	
$0.09	$147	$42	23,500	R&M - Land & Buildings	23,770	-270	$0.09	$149	$44	
$0.09	$156	$45	25,000	R & M - Irrigation	27,953	-2,953	$0.11	$175	$51	Additional R&M
$0.19	$313	$89	50,000	R & M - Plant, Machinery, Other	64,877	-14,877	$0.25	$405	$119	Dairy shed above BAU
$0.01	$9	$3	1,500	R & M - Farm Houses	3,502	-2,002	$0.01	$22	$6	
$0.00	$3	$1	500	Freight	399	101	$0.00	$2	$1	
$0.04	$63	$18	10,000	EcoPond	9,165	835	$0.04	$57	$17	
$0.05	$81	$23	13,000	Administration	8,017	4,983	$0.03	$50	$15	
$0.05	$75	$21	12,000	Consultant	9,000	3,000	$0.03	$56	$17	
$0.05	$80	$23	12,800	Fixed Charges - Rates	11,803	997	$0.05	$74	$22	
$0.04	$60	$17	9,600	Fixed Charges - Land Rent	9,093	507	$0.04	$57	$17	
$0.09	$156	$45	24,983	Lease - Technology (Collars)	24,288	695	$0.09	$152	$45	
$0.05	$83	$24	13,300	DairyNZ Levy	12,891	409	$0.05	$81	$24	
$5.43	**$9,029**	**$2,580**	**1,444,655**	**TOTAL FARM WORKING EXPENSES**	**1,413,643**	**31,012**	**$5.48**	**$8,835**	**$2,594**	
$4.21	**$6,992**	**$1,998**	**1,118,786**	**CONTRIBUTION PROFIT**	**1,375,355**	**256,569**	**$5.33**	**$8,596**	**$2,524**	
$0.07	$123	$35	19,600	*Less* East Block Adj - Support block	19,600	0	$0.08	$123	$36	
$5.50	**$9,152**	**$2,615**	**1,464,255**	**Total Operating Expenses inc East Block**	**1,433,243**	**31,012**	**$5.56**	**$8,958**	**$2,630**	
				Financial Ratios						
$9.00	$14,963	$4,275	$2,394,000	Milk Gross income	$2,578,150	$184,150	$10.00	$16,113	$4,731	
$0.64	$1,059	$303	$169,441	Stock Gross income	$210,848	$41,407	$0.82	$1,318	$387	
$9.64	$16,022	$4,578	$2,563,441	Total Gross income	$2,788,998	$225,557	$10.82	$17,431	$5,117	
$5.50	$9,152	$2,615	$1,464,255	*Less* Farm Operating Expenditure	$1,433,243	$31,012	$5.56	$8,958	$2,630	
$4.13	**$6,870**	**$1,963**	**$1,099,186**	**EBIT**	**$1,355,755**	**$256,569**	**$5.26**	**$8,473**	**$2,488**	

2025/26 Budget:

LUDF 2024/25 Actuals				LUDF 2025/26 Budget						
257,815 $/kg MS	160 $/ha	560 $/cow	2024/25 $	Description	2025/26 $	Bud vs 24/25 Variance	265,633 $/kg MS	160 $/ha	545 $/cow	Notes
				Income						
$0.03	$49	$14	7,809	Sales - Bobby Calves	6,969	-840	$0.03	$44	$13	
$0.09	$144	$41	23,004	Sales - R2 Heifers	5,000	-18,004	$0.02	$31	$9	6% MT rate
				Sales - Bulls						
$0.39	$630	$180	100,859	Sales - Cows	48,750	-52,109	$0.18	$305	$89	Minimal culls - 75
$0.19	$306	$87	48,908	Sales - Surplus heifer calves	26,400	-22,508	$0.10	$165	$48	Sell surplus - retain 125
$0.12	$189	$54	30,268	Sales - Beef calf Sales	62,500	32,232	$0.24	$391	$115	125 reared vs 60
$0.82	**$1,318**	**$377**	**210,848**	**Total Stock Sales**	**149,619**	**-61,229**	**$0.56**	**$935**	**$275**	
$10.00	$16,113	$4,604	2,578,150	Sales - Milk Solids Current Season	2,656,330	78,180	$10.00	$16,602	$4,874	Increased MS - hybrid
				Sales - Co-operative Difference			$0.00	$0	$0	
				Sales - Feed, Silage, Other Crops			$0.00	$0	$0	
				Income - Other			$0.00	$0	$0	
$10.82	**$17,431**	**$4,980**	**2,788,998**	**TOTAL REVENUE**	**2,805,949**	**16,951**	**$10.56**	**$17,537**	**$5,149**	
				Expenses						
$1.06	$1,703	$487	272,540	Labour - Perm & Fixed Term	279,838	-7,298	$1.05	$1,749	$513	Change in methodology
$0.04	$57	$16	9,179	Other labour: ACC, Super, H&S, Clothing	12,593	-3,414	$0.05	$79	$23	
$1.09	**$1,761**	**$503**	**281,719**	**Total Labour Expenses**	**292,430**	**-10,711**	**$1.10**	**$1,828**	**$537**	
$0.36	$588	$168	94,099	Animal Health	63,316	30,783	$0.24	$396	$116	Removed calf rearing exp
$0.28	$455	$130	72,756	Breeding	55,988	16,768	$0.21	$350	$103	Removed calf rearing exp
$0.01	$24	$7	3,773	Dairy Shed Operating Expenses	10,234	-6,461	$0.04	$64	$19	Had stock on hand
$0.12	$195	$56	31,251	Electricity - Other	35,000	-3,749	$0.13	$219	$64	
$0.20	$319	$91	51,031	Electricity - Irrigation	70,000	-18,969	$0.26	$438	$128	
$0.51	$826	$236	132,080	Feed Made/Purchased	115,800	16,280	$0.44	$724	$212	
$0.70	$1,125	$321	179,926	Grazing - Winter	193,644	-13,718	$0.73	$1,210	$355	
$0.05	$76	$22	12,105	Freight - Livestock	8,041	4,064	$0.03	$50	$15	
$0.30	$483	$138	77,329	Youngstock Grazing	91,296	-13,967	$0.34	$571	$168	Increase due to support block
$0.25	$399	$114	63,858	Calf Rearing	100,431	-36,573	$0.38	$628	$184	Now includes all rearing costs
$0.29	$473	$135	75,622	Fertiliser - Nitrogen	46,295	29,327	$0.17	$289	$85	Removed lease block
$0.13	$210	$60	33,566	Fertiliser - Other	28,685	4,881	$0.11	$179	$53	Removed lease block
$0.07	$119	$34	19,052	Fertiliser - Spreading	15,487	3,565	$0.06	$97	$28	Removed lease block
$0.03	$48	$14	7,675	Seed	11,800	-4,125	$0.04	$74	$22	16 ha regrassed 8 ha stitched
$0.15	$239	$68	38,228	Contractors - Regrassing	23,520	14,708	$0.09	$147	$43	16 ha regrassed 8 ha stitched
$0.00	$8	$2	1,200	Weed & Pest Control	2,000	-800	$0.01	$13	$4	
$0.08	$124	$35	19,807	Vehicle Expenses	18,160	1,647	$0.07	$114	$33	
$0.05	$86	$25	13,808	Vehicle - Fuel	20,040	-6,232	$0.08	$125	$37	
$0.09	$149	$42	23,770	R&M - Land & Buildings	40,500	-16,730	$0.15	$253	$74	
$0.11	$175	$50	27,953	R & M - Irrigation	25,000	2,953	$0.09	$156	$46	
$0.25	$405	$116	64,877	R & M - Plant, Machinery, Other	40,000	24,877	$0.15	$250	$73	Ageing plant - above BAU last
$0.01	$22	$6	3,502	R & M - Farm Houses	2,500	1,002	$0.01	$16	$5	
$0.00	$2	$1	399	Freight	500	-101	$0.00	$3	$1	
$0.04	$57	$16	9,165	EcoPond	10,000	-835	$0.04	$63	$18	
$0.03	$50	$14	8,017	Administration inc Insurance	40,938	-32,921	$0.15	$256	$75	Insurance equiv now included
$0.03	$56	$16	9,000	Consultant	12,000	-3,000	$0.05	$75	$22	
$0.05	$74	$21	11,803	Fixed Charges - Rates	12,800	-997	$0.05	$80	$23	
$0.04	$57	$16	9,093	Fixed Charges - Land Rent	0	9,093	$0.00	$0	$0	Grazing now charged
$0.09	$152	$43	24,288	Lease - Technology (Collars)	24,209	79	$0.09	$151	$44	
$0.05	$81	$23	12,891	DairyNZ Levy	14,079	-1,188	$0.05	$88	$26	
$5.48	**$8,835**	**$2,524**	**1,413,643**	**TOTAL FARM WORKING EXPENSES**	**1,424,693**	**-11,050**	**$5.36**	**$8,904**	**$2,614**	
$5.33	**$8,596**	**$2,456**	**1,375,355**	**CONTRIBUTION PROFIT**	**1,381,255**	**5,900**	**$5.20**	**$8,633**	**$2,534**	
$0.08	$123	$35	19,600	*Less* East Block Adj - Support block	0	-19,600	$0.00	$0	$0	Grazing now charged
$5.56	**$8,958**	**$2,559**	**1,433,243**	**Total Operating Expenses inc East Block**	**1,424,693**	**8,550**	**$5.36**	**$8,904**	**$2,614**	
				Financial Ratios						
$10.00	$16,113	$4,604	$2,578,150	Milk Gross income	$2,656,330	$78,180	$10.00	$16,602	$4,874	
$0.82	$1,318	$377	$210,848	Stock Gross income	$149,619	-$61,229	$0.56	$935	$275	
$10.82	$17,431	$4,980	$2,788,998	Total Gross income	$2,805,949	$16,951	$10.56	$17,537	$5,149	
$5.56	$8,958	$2,559	$1,433,243	*Less* Farm Operating Expenditure	$1,424,693	$8,550	$5.36	$8,904	$2,614	
$5.26	**$8,473**	**$2,421**	**$1,355,755**	**EBIT**	**$1,381,255**	**$25,500**	**$5.20**	**$8,633**	**$2,534**	

Additional Notes to Budget: 2025/26

Stock Sales	
R2 Heifers	Higher empty rate 16 vs 6
Cows	Higher empty rate
Heifer calves	Less sold, additional retained due to MT rates
Beef calves	Additional beef calves
Expenses:	
Labour	Short term vacancy, covered by casuals.
Animal Health	
R&M	Additional plant spend due to additional plant check
Lease - Support Block	Additional lease block obtained this season to support all young stock and supplement made.
	This has resulted in less youngstock grazing and freight

Feed Budget

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LUDF														
Start date	1-Jun-25	Period start	1-Jun	1-Jul	1-Aug	1-Sept	1-Oct	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May
Total days		365	30	31	31	30	31	30	31	31	28	31	30	31
Effective grazeable area (ha)		160.0	160.0	160.0	160.0	160.0	152.5	145.0	152.5	160.0	160.0	160.0	160.0	160.0
Remove or add area		157.5					-7.5	-15	-7.5					
Feed demand														
Total cows on farm			0	156	320	540	555	554	554	554	554	549	549	474
Cows Calving (No. in each period)				100	425	38								
Cows dried off /**culled** (last day of period)				2	2	4	1				5		75	*474*
Average milking cows				50	311	540	555	554	554	554	554	549	549	474
Intake dm/day		17,394		15.0	17.0	17.5	18.5	19.0	19.0	18.0	17.0	16.5	16.0	16.0
Total feed demand /ha		17,796	0	5	33	59	67	73	69	62	59	57	55	47
Stocking rate (cows equiv./ha)			0.0	1.0	2.0	3.4	3.6	3.8	3.6	3.5	3.5	3.4	3.4	3.0
			kgs dm/ha/day											
Pasture growth		16,835	15	12	16	42	67	70	73	68	63	53	43	33
Total milking cow supplement		348 kgDM/cow												
Total supplement		192,516 kgDM					Supplements fed per day in each period							
Milking cow supplement		Intake/cow/day		3.0	5.0	4.0						1.5	3.0	
Baleage	bales	642	0.0	0.5	5.2	7.2	0.0	0.0	0.0	0.0	0.0	2.7	5.5	0
	kgDM/day fed	192,516	0	150	1,553	2,160	0	0	0	0	0	824	1,647	0
Total feed supply kgDM/ha/day		18,038	15	13	26	56	67	70	73	68	63	58	53	33
Feed utilisation			100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Area removed for silage /baleage									10					
Total silage/baleage made (kgDM)		15,000	0	0	0	0	0	0	15,000	0	0	0	0	0
Silage/baleage made (kgDM/ha/month)			0	0	0	0	0	0	98	0	0	0	0	0
Total silage made/ha/day			0	0	0	0	0	0	3	0	0	0	0	0
Pasture cover														
Cover change kgDM/ha/day		143	15.0	8.3	-7.3	-3.6	-0.3	-2.6	0.8	5.7	3.7	1.5	-1.6	-14.4
Predicted closing pasture covers		1,850	2,300	2,556	2,330	2,223	2,213	2,135	2,160	2,336	2,441	2,488	2,440	1,993

Notes to feed budget:

- Assumption of 80% silage utilisation.
- Assumption of 90% pasture utilisation.

The race against time:
A look at this season's Repro Results

LUDF 2023/24 Report

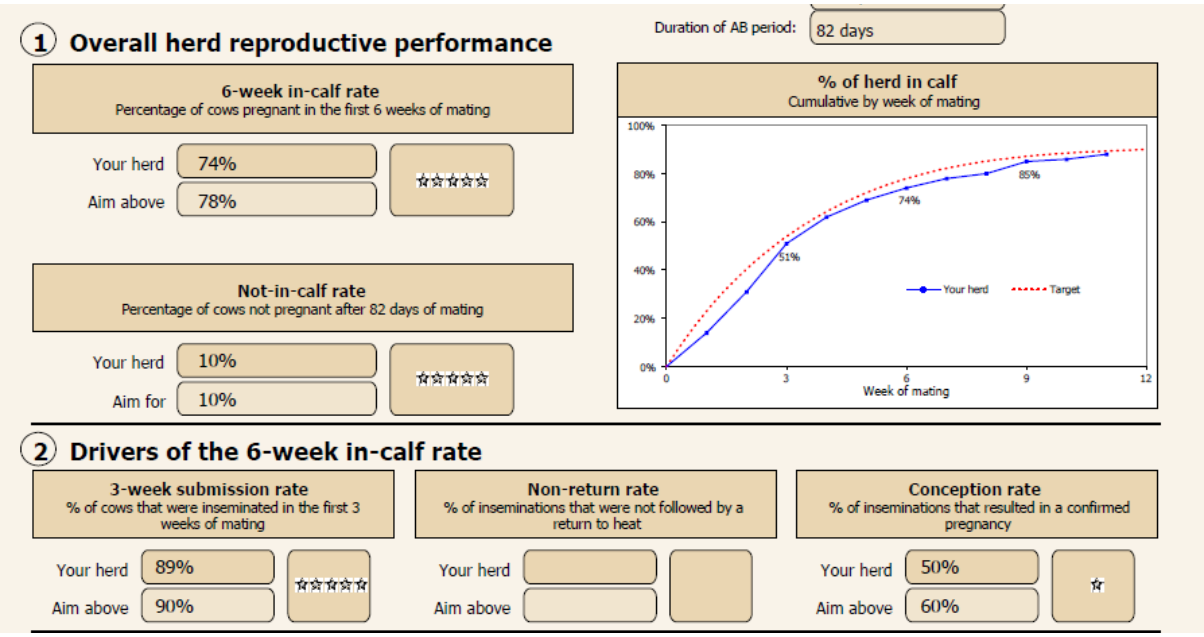
June 2025

LUDF. Peter Hancox. 560 cows, 160 Ha farm, Lincoln.

Overview

LUDF continues to produce acceptable reproductive results, however, after improving markedly in 2022/23 and 23/24 seasons the farm has now hit a plateau. In this discussion document we will focus on the "what next" for the 2025/26 season as LUDF targets making its next jump. This is all about grasping the 1% in the "race against time".

2025/26 Fertility Focus Report



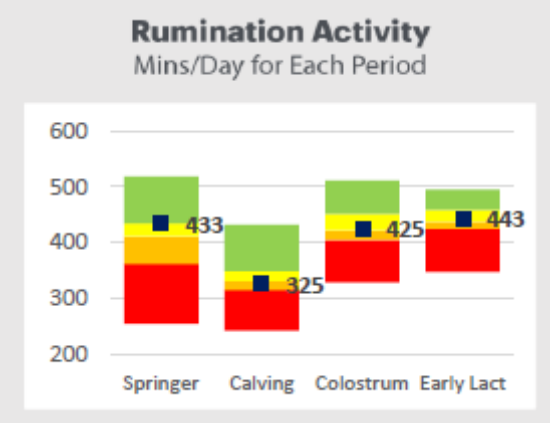
In-calf rate

	3 Weeks	6 Weeks	9 Weeks	9+ Weeks	Not In-Calf Rate	
Spring 2024	51%	74%	85%	90%	10%	LIC
Spring 2023	54%	75%	86%	93%	7%	LIC
Spring 2022	50%	74%	83%	91%	9%	LIC
Spring 2021	51%	68%	76%	79%	21%	LIC

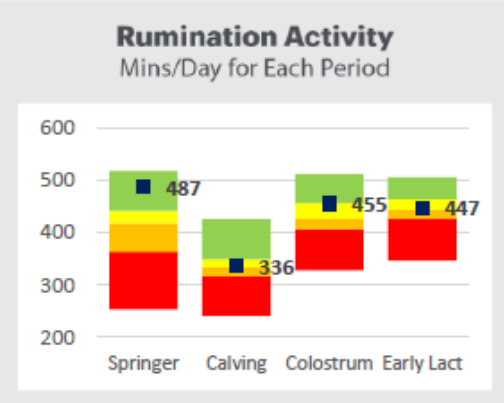
Transition (Springers to Early Lactation)

Transition continues to track well, with improved rumination activity around calving this season and overall better NEFA results (with the exception of later calvers which will be tracked closer this season).

2023/24



2024/25



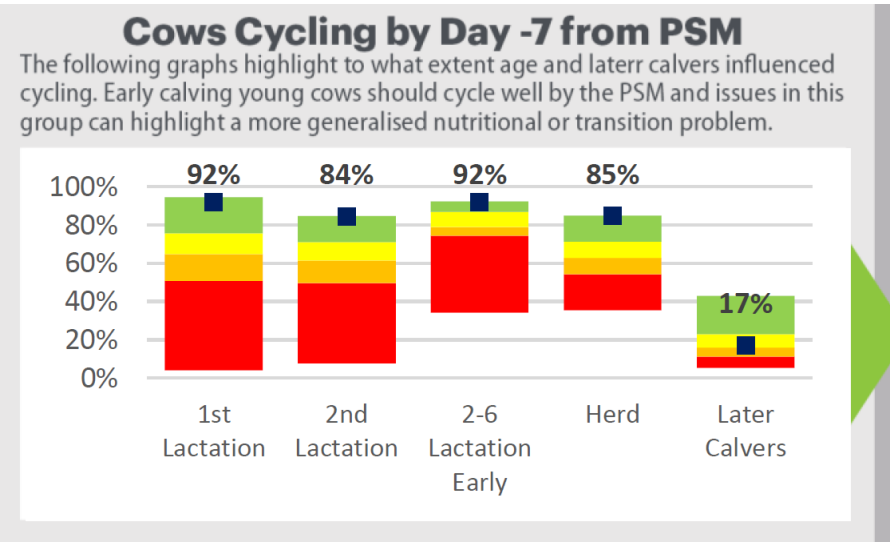
Getting the 1% Gains

This season, a key focus during the calving period will be to make better use of the health alerts from the collars. With better feeding during this period, alerts are now at manageable levels. Peter and team (with his vet team) will have a more structured plan around drafting and examining these cows, utilising a decision tree.

Pre-Mate Period (Cycling)

The pre-mate period continues to track well in terms of cycling rates, with all groups hitting top quartile results (with the exception of late calvers).

Pre-Mate Cycling Rates (Day -7 from PSM)

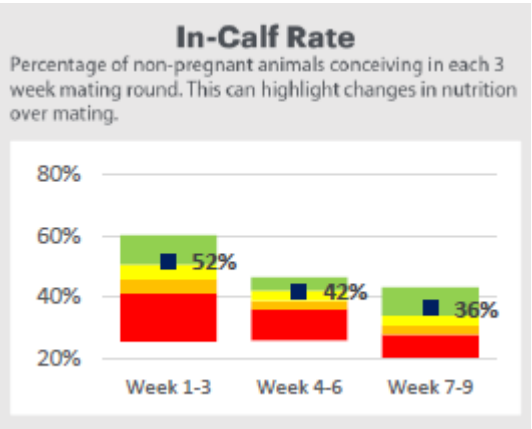


Mating Period

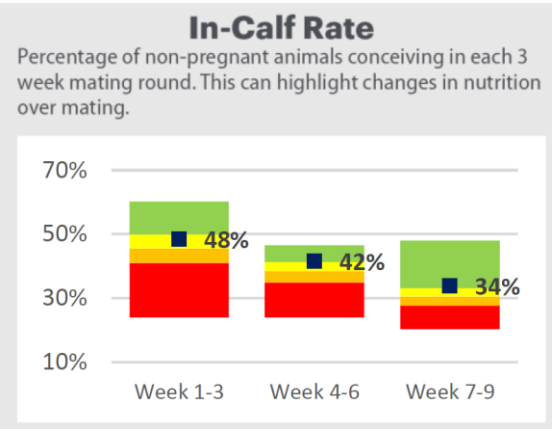
The mating period highlighted a similar performance to last year – however the 3WICR was lower, largely driven by a drop in conception rate (51% this season vs 54% last season). There continues to be a high phantom cow rate, with around 14% of not-in-calf cows failing to cycle (56 of these were identified and treated, dropping the NICR by ~ 4.6%). To put this in context the industry average is ~ 7-8%.

% of Non-Pregnant Cows Conceiving in each 3 Week Mating Round

2023/24



2024/25



Pregnancy Loss

For the 2nd year out of three there has been a high loss of pregnancies between the first and final scan, with 31 lost pregnancies. This has meant that, while the FFR reports a 10% NICR (Empty on the report below), the true NICR is 6% higher. This has significantly impacted Peter's ability to cull for disease etc, and has led to a rethink on the sustainability of lower replacement rates going forward.

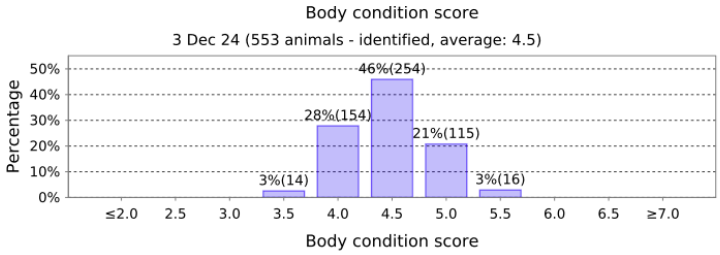
In-Calf Rates for Whole Herd Breakdown Print

	In-Calf Aged	In-Calf Non-Aged	Empty	Doubtful	Pregnancy Loss	Removed with no PD	No removal or PD	Total Analysed
Animal Count	472	0	54	1	31	5	0	563
Percent Analysed	84%	0%	10%	<1%	6%	<1%	0%	100%

Getting the 1% Gains

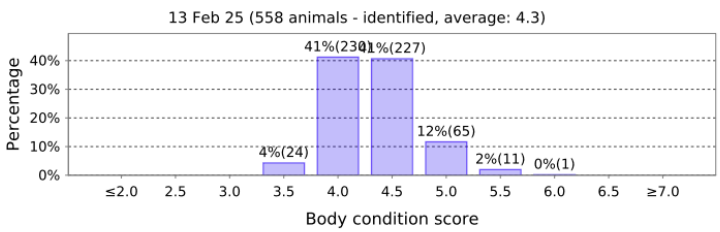
Energy Deficit Early November – There is a consistent crunch point with an energy deficit hole in early November at LUDF. The outcomes of this (high phantom rates, poor late submission rates, and +/- pregnancy loss) are currently being managed with a combination of phantom scanning and extended mating + SGL (currently at 12 weeks). This is further highlighted by the condition scores below, which show that the cows dropped 0.2 of a BCS score between December 3rd and 13th February.

To move to the next level, a solution is required to get more energy consistently into the cows at peak milk, this is at a time when grass tends to go reproductive. Options are being investigated by the farm team. It appears that the urea use examined last year wasn't repeatable between years.



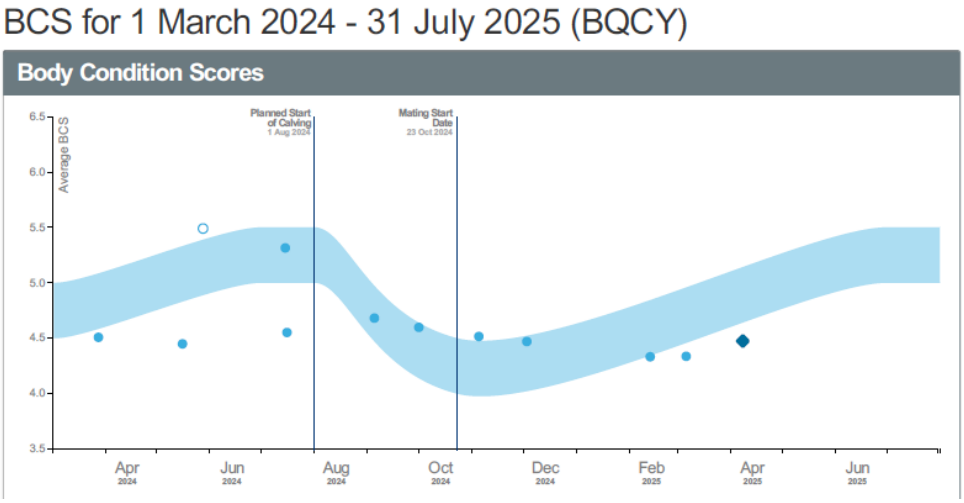
infovet Report Date: 13 Feb 25

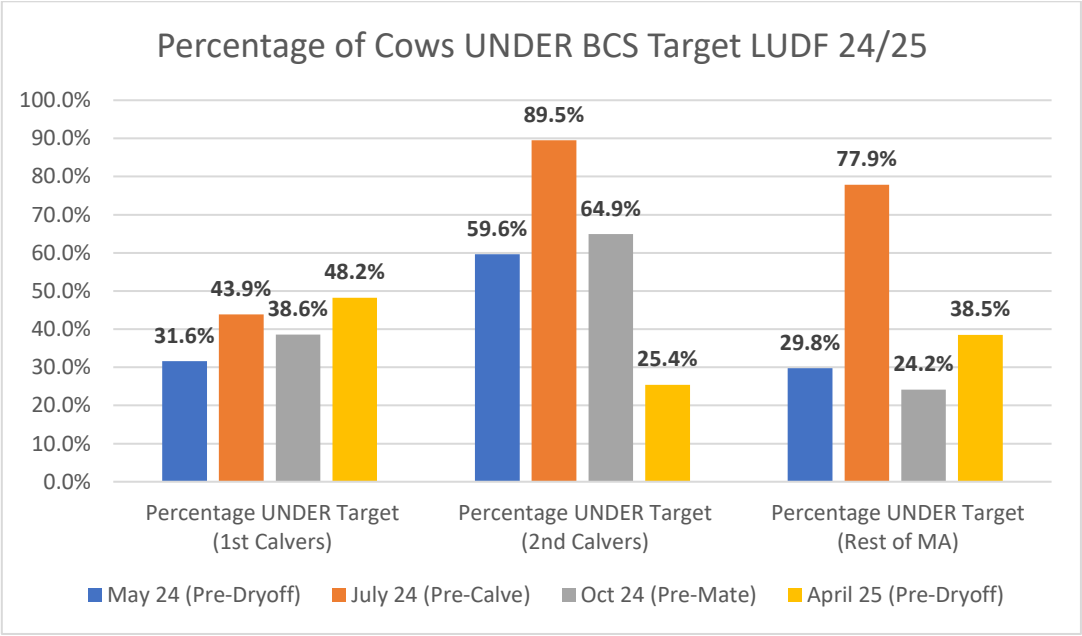
Body Condition Score

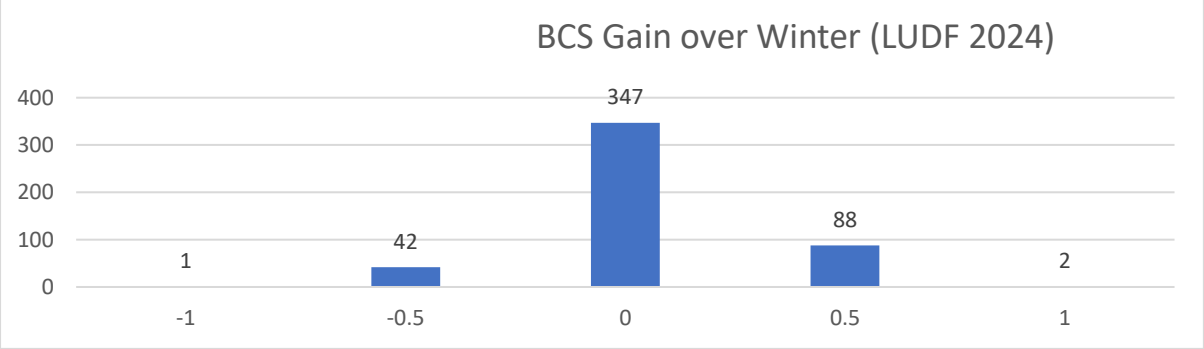


Body Condition Score

Impacting on all of these periods is the underlying issue of Body Condition Score, mainly driven by issues in Autumn and Winter. The calving BCS score (vs target) below shows that 78% of Mixed age cows, 89% of Second Calvers, and 44% of First Calvers were under their target BCS for calving 2024. Only 90 cows gained 0.5 or more of a BCS over Winter in 2024.







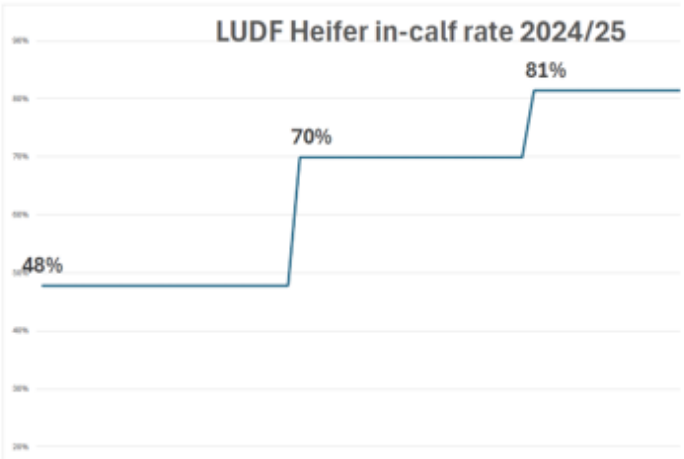
Getting the 1% Gains

This season (starting with Winter monitoring) the plan is to have a much more pro-active approach to BCS management at LUDF, with a target of having >85% of animals above target at each monitoring point. Frequent individual BCS visits will continue, with an emphasis on the following five trigger areas for decision-making:

1. **Late Autumn**
   To consider supplement requirements, use of milking frequency, and the need for early dry-off with light cows. Wintering mobs can be made from this score.
2. **Winter**
   Monitor gain and feeding levels over Winter (with farm consultant) to ensure cows will hit target condition. Note early calvers won't put on weight from ~ 3 weeks out from calving (for LUDF from the 10th July).
3. **Pre-Calving**
   Understand where you ended up at the end of Winter. Enables tracking of BCS loss post-calving.
4. **Pre-Mating**
   Quantify BCS drop post-calving. Options for differential feeding / OAD etc for animals likely to be under target at mating. LUDF to investigate the use of a split mob if feasible during this period.
5. **December/January**
   To monitor loss over the mating period (if negative energy balance not addressed) and make plans for Autumn. This can also be used as a trigger for milking frequency changes.

Young Stock

This year the synchrony programme in the heifers had a poor 1st service conception rate (only 48%), with an overall empty rate of 16%. It is likely that this result was a combination of; programme used (often has variable results), bulls, movement of heifers during the mating period.



Getting the 1% Gains

1. **Change heifers to a 5 day synchro plan**. There is increasing adoption of this protocol in New Zealand (first pilot trials in 2023). Internal data from the Veterinary Centre (which had 22 farms use the programme in 2024), showed an average conception rate of 67%.
2. **Continued monitoring of weights data**, and active feeding to ensure these animals are on target.
3. **Consider bull testing for chaser bulls** – this isn't widely practiced within the industry, but does reduce risk, and would be helpful to be able to rule out bull infertility in a situation like this.

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Heifers Reproductive Performance Review

Bernardita Saldias (DVM; PhD)
Farm Consultant

1

Key Points to Cover

- Heifers liveweight industry targets
- LUDF heifers reproductive performance problem solve

2

Heifers Liveweight

Industry Targets:

- 6 months — 30% of mature liveweight (e.g., 150kg)
- 15 months — 60% of mature liveweight (e.g., 300kg)
- 22 months — 90% of mature liveweight (e.g., 450kg)

3

Heifers Liveweight

Why is the liveweight of young stock important?

- **Liveweight determine puberty onset**, not age.
- Directly impacts reproductive performance and milk production

4

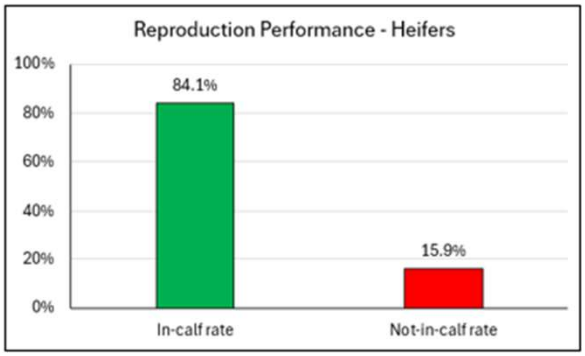
Step 1: Do I have a problem / performance GAP?

is this a repeat problem? N

What is actually happened?

Heifers not-in-calf rate is greater than the target

NIC rates 15.9% vs target <=6%



What should be happening?

Not in calf rate 6% or less

GAP 11 heifers @ $600 = $6,600 ($/hfr - culling income)

113 x 15.9% NICR 17 heifers (incl. 1 freemartin)

113 x 6% NICR 7 heifers

$ - lower replacement rate entering the herd (96vs.107)

$ - lower peak numbers

$ - lower total kgMS production (potentially $38,000+ lost income at $9/kgMS)

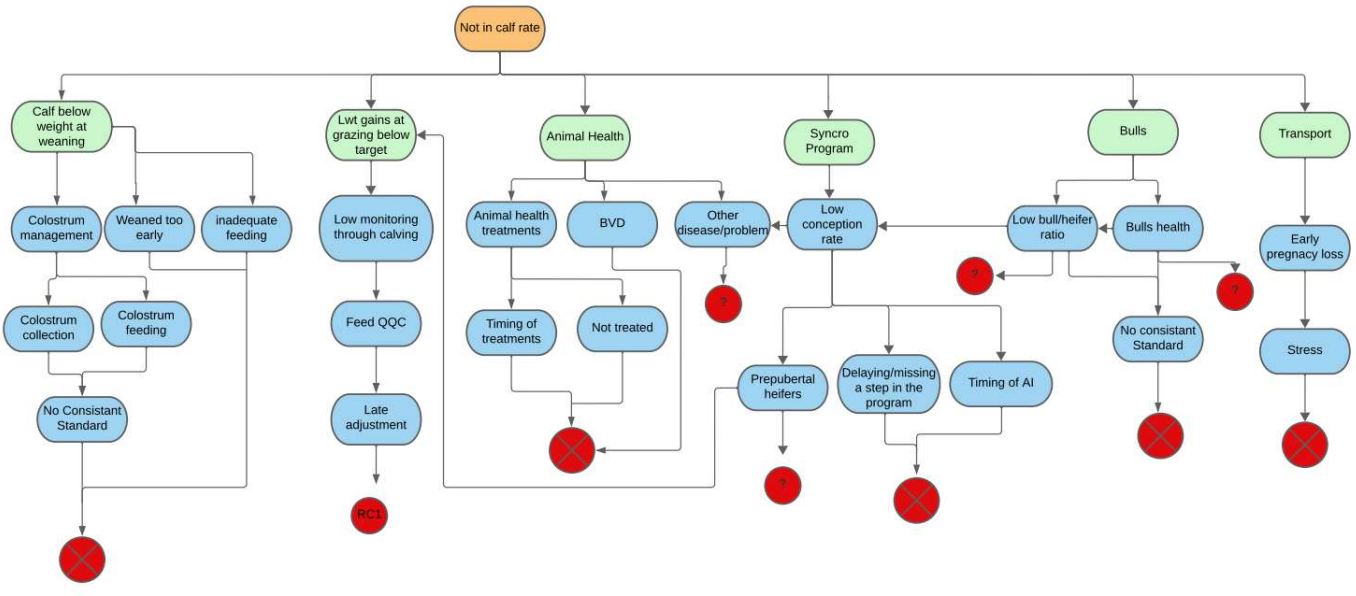
$ - lost on opportunity selective culling

5

Step 2: Do I Know the cause?

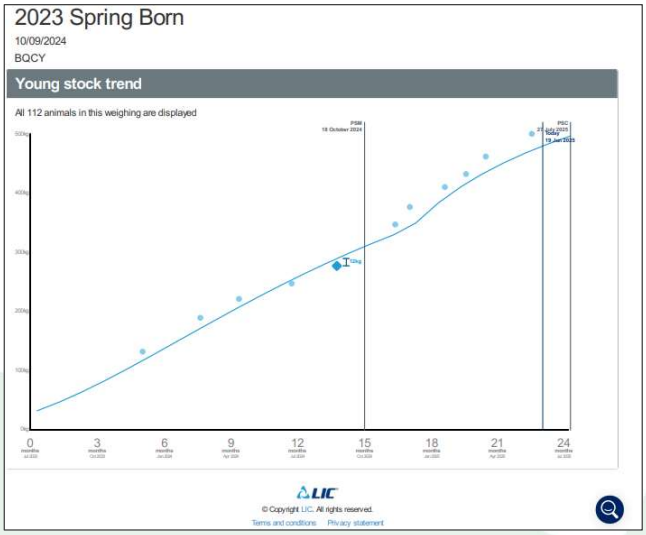
Point of cause: Pregnancy scanning in February

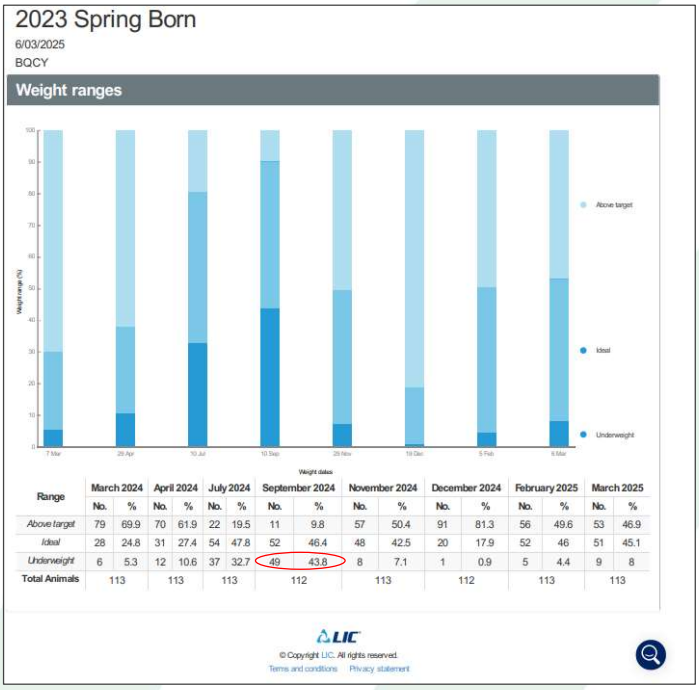
Direct cause: Heifers did not get pregnant



6

Liveweights





Range	March 2024		April 2024		July 2024		September 2024		November 2024		December 2024		February 2025		March 2025	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Above target	79	69.9	70	61.9	22	19.5	11	9.8	57	50.4	91	81.3	56	49.6	53	46.9
Ideal	28	24.8	31	27.4	54	47.8	52	46.4	48	42.5	20	17.9	52	46	51	45.1
Underweight	6	5.3	12	10.6	37	32.7	49	43.8	8	7.1	1	0.9	5	4.4	9	8
Total Animals	113		113		113		112		113		112		113		113	

7

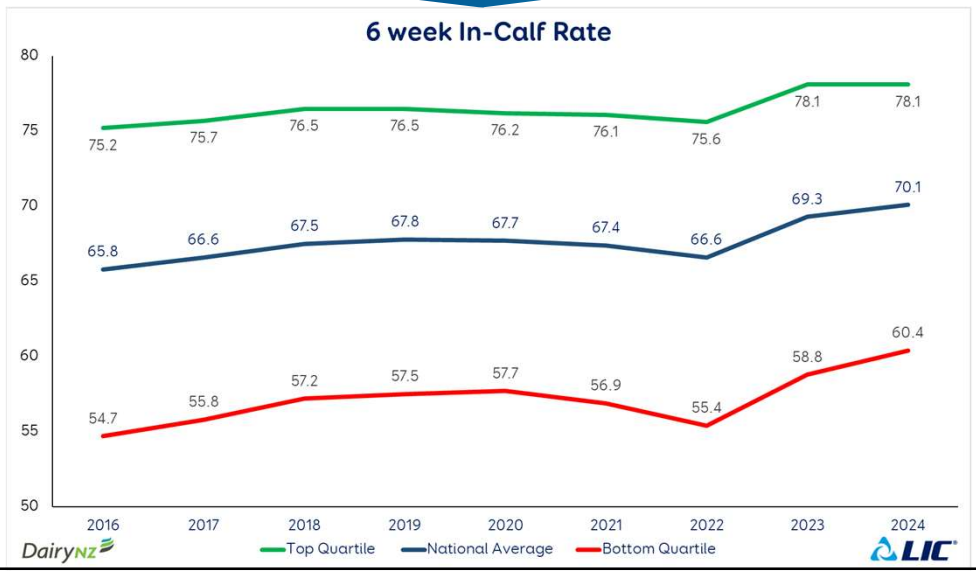
Conception Rate

	Pregnant cows	Conception rate	Bulls required	
AI	54	47.8%		
1st cycle	25	42.4%	6	1:10
2nd cycle	13	38.2%	3	1:15
3rd cycle	3	14.3%	2	1:15
Empty	18	15.9%		
TOTAL	113			

8

1

6 week In-Calf Rate - National



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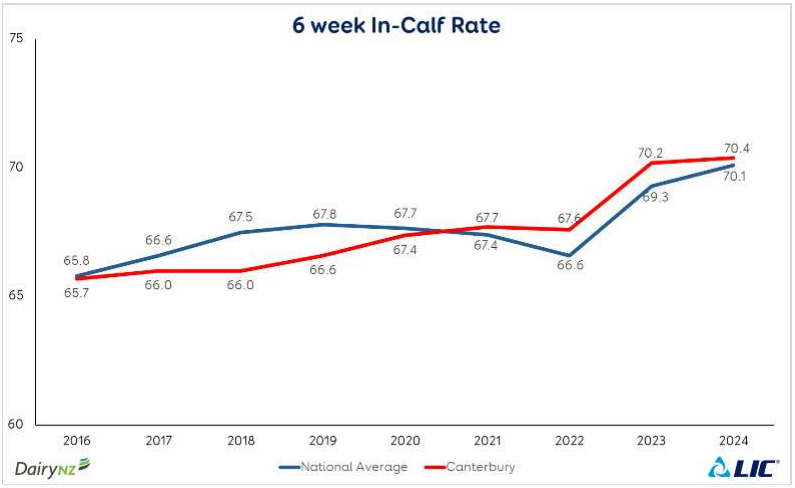
6 week In-Calf Rate – Canterbury



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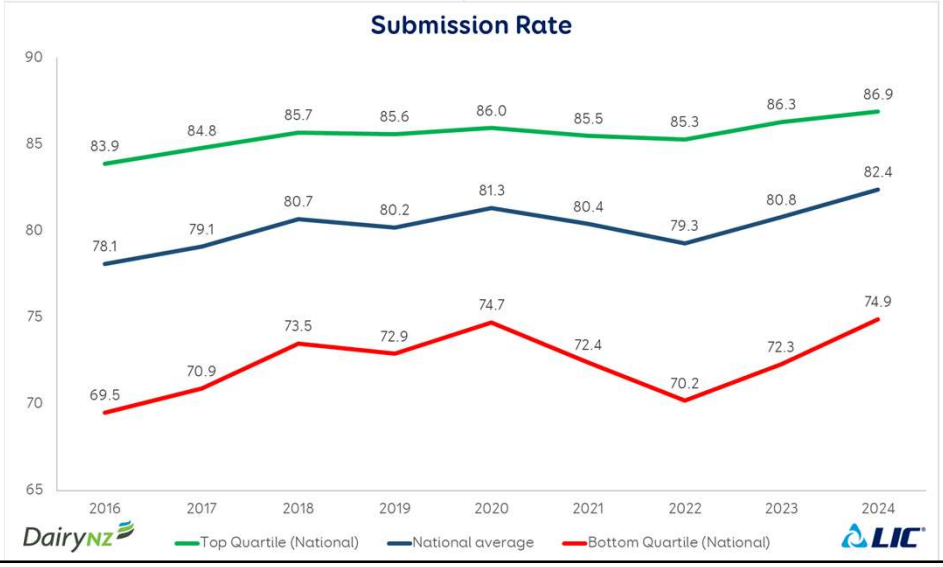
3 Week Submission Rate - National



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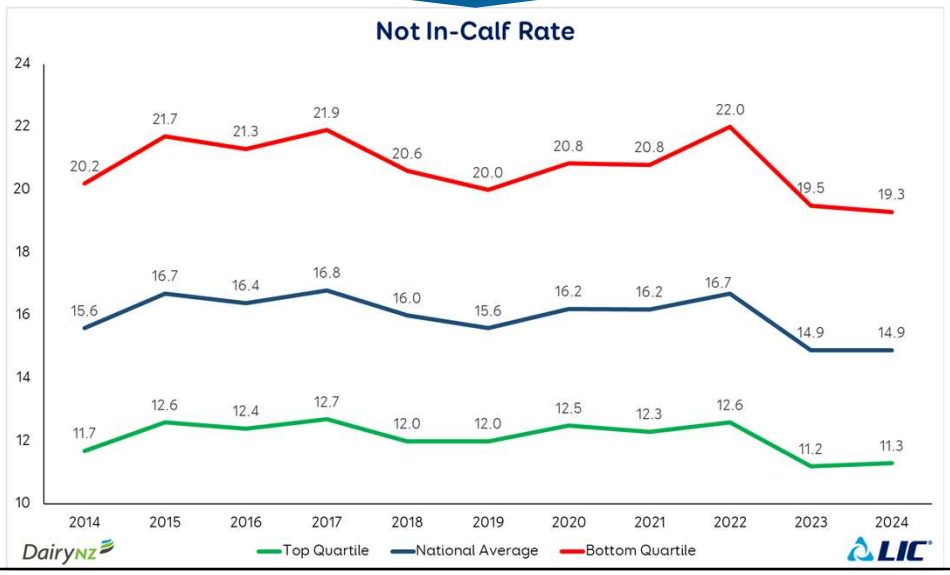
Not In-Calf Rate - National



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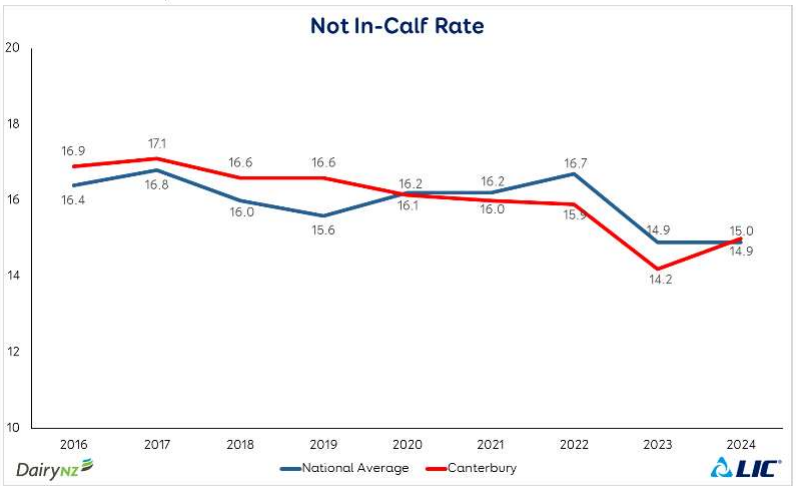
Not In-Calf Rate -Canterbury



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NZ Reproductive Performance - Seasonal

National Performance 2024	6 Week In-Calf Rate	3 Week Submission Rate	Conception Rate	Not In-Calf Rate	Mating Length (weeks)
Top Quartile Average	78.1	86.9	59.6	11.3	10.0
2nd Quartile Average	72.9	85.2	55.6	13.6	10.5
Average	70.1	82.4	53.7	14.9	10.6
3rd Quartile Average	68.9	82.3	52.6	15.4	10.7
Bottom Quartile Average	60.4	74.9	46.9	19.3	11.2
Targets	78.0	90.0	60.0		

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7

NZ Reproductive Performance – Canterbury

Canterbury Performance

Canterbury - Performance 2024	6 Week In-Calf Rate	3 Week Submission Rate	Conception Rate	Not In-Calf Rate	Mating Length (weeks)
Top Quartile Average	76.7	88.6	56.5	11.7	10.6
2nd Quartile Average	72.6	87.3	52.6	13.7	10.9
Average	70.4	85.2	51.6	15.0	10.9
3rd Quartile Average	69.7	85.1	50.9	15.3	10.9
Bottom Quartile Average	62.6	79.7	46.2	19.6	11.4
Targets	78.0	90.0	60.0		

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Calving pattern influence on reproduction

Calving Pattern Performance National 2024	Percentage of the herd	6 Week In-Calf Rate	3 Week Submission Rate	Conception Rate	Not In-Calf Rate (week 11)
Early Calvers	65%	74.1	85.1	57.2	13.3
Medium Calvers	22%	64.5	76.5	50.4	19.1
Late Calvers	11%	51.5	60.3	43.0	27.1
Very Late Calvers	3%	35.1	34.7	35.9	38.4

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9

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Covering the latest issues, science, research and technology applied inside the farm gate and developments that have a positive impact on profits.

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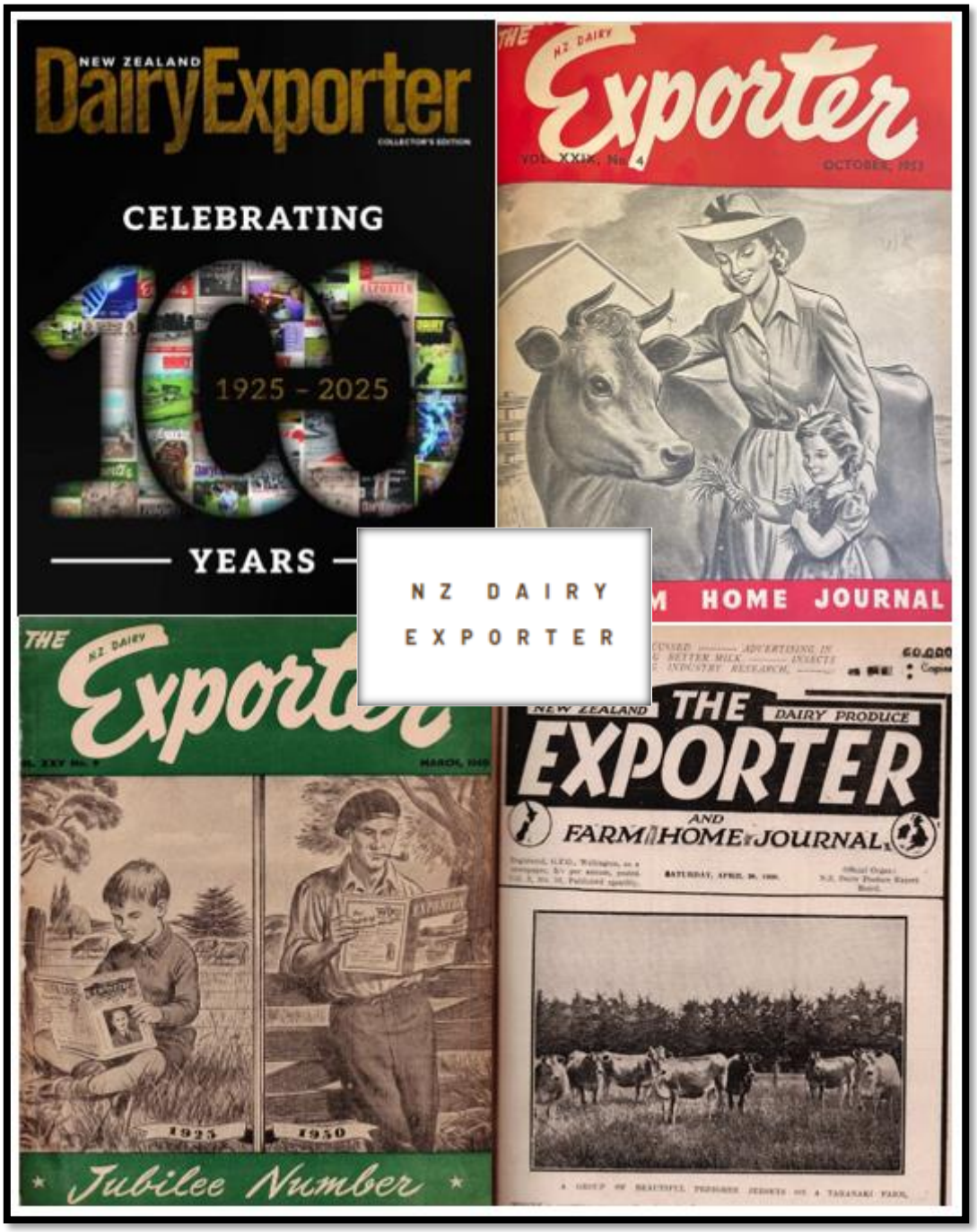

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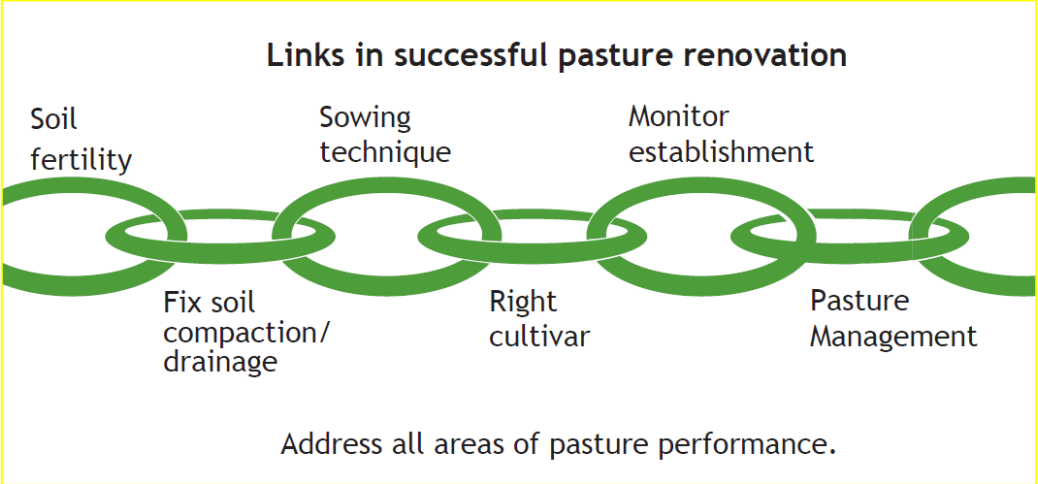
Setting up pastures for the future – lessons from LUDF

Summary

Renewing underperforming paddocks, or those with high weed content, can give high financial returns.

Many factors can cause these, and these must be identified and corrected for pasture renewal to succeed. This is not simple - the process is like a chain, and if one part is weak, you won't get the result you want.



What pasture does for you?

High BW cows require high ME pasture

- Around 80% of feed for lactating cows is pasture – our key low cost, low emissions feed.
- Continual grazing pressure on pasture throughout the year means they deteriorate.

It is the engine room that drives both sides of the equation: **Profit = Revenue - Costs**

- **Revenue:** A high performing production system, pasture to milk, increases output per hectare or animal. More output means more income.
- **Cost:** Efficient systems lower cost per unit. This could be due to better feed quality (ME) better pasture utilisation and/or reduced brought in feed.

How big is the prize:

The value of growing and eating 5% more high ME pasture on the 160ha LUDF is about an extra 16,000 kg MS or $160,000 income! Most of this is profit, given the farm system is already set up.

What is the right level of renewal?

The correct amount of renewal for your farm depends on how your pastures are performing, and how fast you want to improve this. Collecting data of your pasture performance across paddocks will allow you to set a pasture renewal budget that maximises your returns – and reduces your purchased feed.

How LUDF identifies renewal level & paddocks

Pasture eaten from each paddock is calculated at the end of each season from how many grazings each paddock has had. Top yielding paddocks are grazed more often and feed more cows. Similar paddock data can come from weekly farm walk data in tools such as *Agrinet, Pasture Coach* etc.

This data is analysed in combination with weed presence and treading damage, and candidate paddocks are put forward to renew.

Calculation to estimate pasture eaten from each paddock at LUDF

Pasture eaten (t DM/ha)	=	*grazing days × number of cows × feed eaten*
	+	*silage made from paddock*
	-	*supplement fed in paddock*

As farms vary in productivity, (e.g. better/poorer soils or irrigation) farms need divided into areas of similar productive capacity. On LUDF the soils are quite different.

From there, the top performing paddock for that area of the farm (on LUDF each soil type) is assumed to be the 'potential', then other paddocks are compared to this. Based on this, in the 2023/24 season, LUDF missed out a potential **364 t DM** of pasture as shown below.

On LUDF the Templeton and Wakanui soils are the most productive, with 16.3 t DM/ha eaten from paddock N8 and S4 in over the season.

Estimated pasture eaten per paddock on LUDF (2023-24) – based on calculation above

Soil	Paddock	Size (ha)	Grass eaten (t DM/ha)	Potential (t DM/ha)	Underperformance =difference (t DM/ha)
Templeton Soil	N8	7.2	16.3	16.3	0
	N4	7.2	15.7	16.3	0.6
	N9	6.9	15.5	16.3	0.8
	S2	8.4	15.2	16.3	1.1
	N1	8.3	15.0	16.3	1.3
	N5	8.1	14.5	16.3	1.8
	N3	7.2	13.8	16.3	2.5
	N7	7.8	13.5	16.3	2.8
	S3	8.6	13.5	16.3	2.8
	N10	7.2	13.1	16.3	3.2
	N6	7.6	12.9	16.3	3.4
	N11	6.4	12.6	Replaced during season	
	N2	7.3	10.2	Replaced during season	
Wakanui Soil	S4	8.3	16.3	16.3	0
	S8	7.4	14.1	16.3	2.2
	S9	7.1	12.6	16.3	3.7
	S1	8.2	11.7	Replaced during season	
Temuka Soil	S5	8.3	13.5	13.5	0
	S6	7.8	11.7	13.5	1.8
	S7	7.1	11.4	13.5	2.1
	S10	10	10.4	13.5	3.1

While paddock differences on LUDF may seem large, they are smaller than many farms we assess.

Paddocks with the biggest level of underperformance (e.g. N2) are discussed as to the underlying reasons, and whether pasture renewal is the correct option.

Preparing and sowing a paddock

Understanding the paddock condition decides what process is required.

In general, our industry has got faster and worse at renewal! Care is needed to get the best from the seed you sow! There are a number of things to consider – the links in the chain.

1. Break crop versus grass to grass

If the paddock has a high weed burden, a break crop (e.g. an annual or Italian ryegrass, chicory, brassica) is a great way to deal to this prior to sowing a new pasture. Planned well in the system they can also provide a lot of high ME feed and be profitable. They allow:

- Double-spray programme before/after break crop.
- Annual/Italian ryegrass – allow many options to spray broadleaf weeds.
- Chicory/brassica – allow many options to spray grass weeds.

2. To cultivate or not

In terms of cultivation versus direct drilling, minimum-till can be a good option for many situations to improve the seed bed the new pasture will start from.

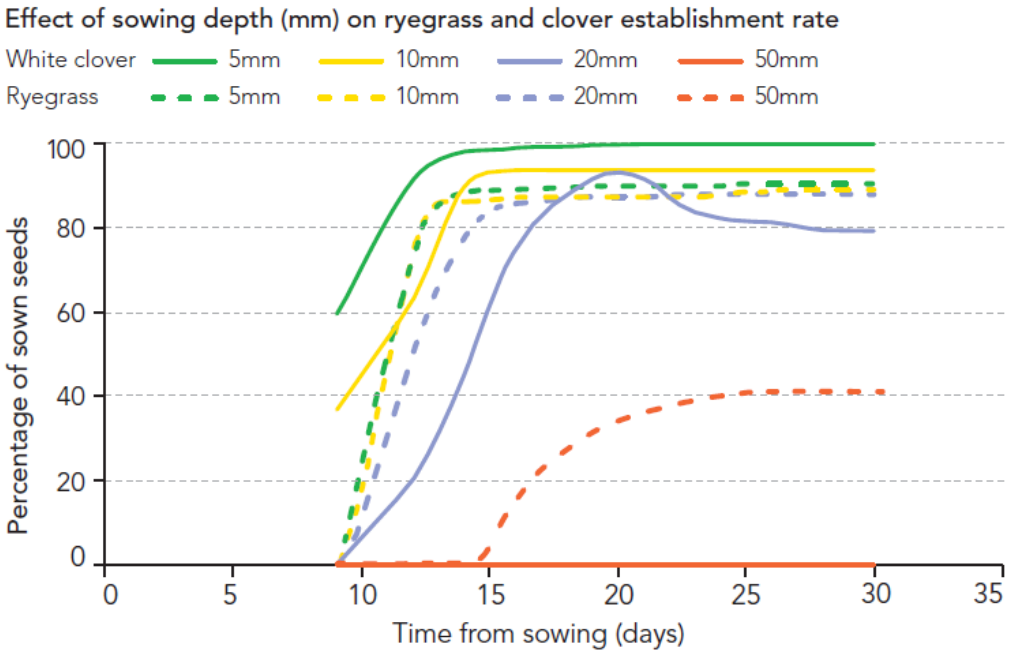
The methods have different pros and cons, and suit different paddock conditions.

	Positives	Negatives
Cultivation	■ Most consistent germination ■ Best weed control if appropriate herbicides are used ■ Can break up previous soil pans ■ Can level paddock, repair pugging ■ Can incorporate fertiliser/lime ■ Can break pest cycle	■ Most expensive ■ Buries fertile top soil, reduces organic matter in the short term, disrupts biological activity ■ Potential soil compaction, erosion ■ Releases soil N & carbon ■ Softer, more prone to treading during establishment
Spray & drill	■ Appropriate herbicide controls competition ■ Faster than cultivation ■ Quicker to first grazing ■ Protects soil structure ■ Fewer emissions ■ Reduced environmental impact	■ Less opportunity to correct pH ■ Won't break up previous soil pans or level paddock ■ May revert to old pasture faster than cultivation ■ Insects and slugs usually need control during establishment ■ Higher risk of uneven germination

3. Drilling seed

Ensure the drill is set up for the pasture mix you're sowing, and that the sowing depth is correct.

Grass generally establishes well. Success with clover is much more variable, and you really want its feed quality, and the free N it produces. Clover seed wants sowing at a depth of 10mm or less.



Choosing the right cultivar

Having the right cultivars is like using the right bull genetics. LUDF is constantly looking for proven cultivars, with independent data like the National Forage Variety Trials (NFVT), that will produce more feed with very high feed quality. Maximising homegrown feed is vital for the success of the LUDF pasture system.

Proprietary cultivars (i.e. those tested and proven by reputable companies) derisk your result, as this seed has proven genetics, safe endophytes, and is great quality seed.

LUDF has chosen to have a variety of cultivars of both perennial and hybrids ryegrasses. The perennial ryegrass sowings have been diploid/tetraploid mixes to capture the extra ME and palatability tetraploids, while the diploid adds density and persistence.

All pastures are sown with high performance white clovers, plus plantain.

N10 and S9 – so what is the plan?

Balancing the known pasture eaten estimates from each paddock, with underlying reasons, the best gains from renewal gains will come from these two paddocks.

The sowing mix is:

- Array NEA2 / 4front NEA2 perennial ryegrasses (diploid/tetraploid mix).
- + Kotuku / Ruru white clovers
- + Ecotain plantain

Managing the new pastures very well for the first year of their life is key to its persistence and its ability to have good percentages of clover and plantain. Ensuring no heavy silage cuts are taken is also a big part of this.

Thank you for coming along to our Focus Day.

We welcome your feedback and recommendations for future topics of interest, let us know by emailing office@siddc.org.nz, we would love to hear from you.

Our thanks to our partners: