LINCOLN UNIVERSITY DAIRY FARM

ISSUE NO. 17 | MON 15 DECEMBER 2023

WHAT'S BEEN HAPPENING?

Newsletter

Pasture Growth, Seedhead & Regrassing:

Pasture growth rate is currently 79 kg DM/ha, while our herd demand is 68 kg DM/ha. We are currently offering the herd 18.8 kg DM/cow as pasture. Our APC (Average Pasture Cover) is 2526, our pre grazing cover is 3190 and we are targeting 1550 residuals, note current area available for grazing is 152.4ha. Generally, our growth rates have been meeting demand, however as we have had one paddock out of the round for regrassing in late spring, it has resulted in a short-term deficit in December. We fed approx. 2-3 kg DM/cow of grass silage during this time.



Feed Wedge

Seedhead who has it?? We have had a very late season with pasture going to seed, this is much later than normal. We did have some seedhead in late November/early December and we have kept quality through pasture management and post grazing mowing as required. This week we have seen an emergence of more seedhead and will continue to monitor. We will be dropping one more paddock out for regrassing which will increase our grazing pressure (reducing round) until this paddock comes back in, which will further assist maintaining our quality. We have sprayed out our "new grass" paddock and cut for silage, this will be cultivated as it is on our heavier soils and requires levelling.



Regrowth post mowing



The seedhead challenge



New grass





This Week:

Pasture Growth & Seedhead & Regrassing

Milk Production

In Calf Rate

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Effluent & EcoPond

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Irrigation



Next Farm Walk

Wednesday 17th January 9 am

Text Peter on 027 440 9285

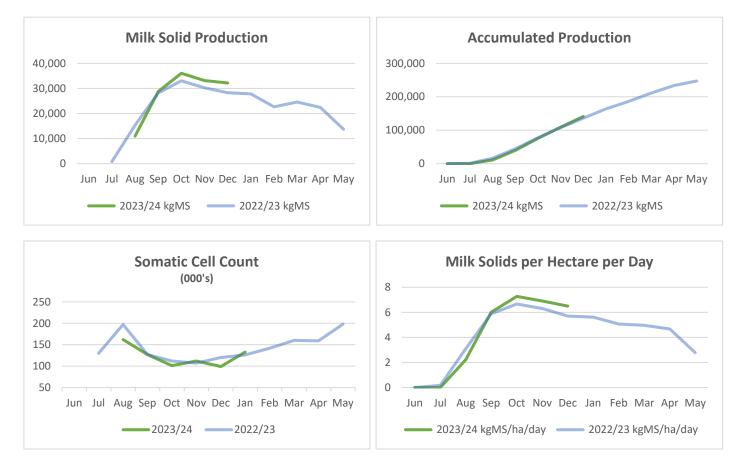
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New pasture will be sown at a rate of 22 kgs of Forge NEA (tetraploid hybrid ryegrass), 2 kgs Kotuku (white clover), 2 kgs Ruru (white clove) & 3 kgs Ecotain Superstrike (plantain with seed treatment) per hectare.

Milk Production:

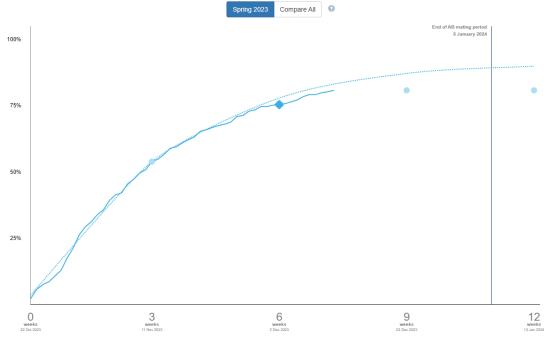
Cows are currently producing 1.75 kg MS/cow and tracking to forecast. For the month of December, we are up 14% from last season and for total production to end of December we are up 4%, from the previous year.





In Calf Rate to date:

We have completed a final phantom scan on 08/01/2024, where we have identified a further 7 phantoms. These cows will be PG'd to give them another chance to get in calf to AI. We have finished AI on 14 January 2024, and will confirm in calf rate in February. Current scanning has us at 75% in calf at 6 weeks, which is 2% behind industry target. This is slightly ahead of last season, but significantly up from previous seasons. This is primarily due to our <u>mating benchmark</u> <u>project</u>.



In Calf Rate – 23/24 season as at 08/01/2024 In-calf rate

		3 Weeks	6 Weeks	9 Weeks	9+ Weeks	Not In-Calf Rate		
	Spring 2023	54%	75%	81%	81%	19%		
	Spring 2022	50%	74%	83%	91%	9%	∆LIC	
	Spring 2021	51%	68%	76%	79%	21%	∆LI E	
	Spring 2020	52%	67%	75%	81%	19%	∆ LIC	

N.B: Please note current in calf rate is 81%, and not in calf rate of 19% which will change once we have pregnancy tested the entire herd in February.

Effluent Update:

We have recently upgraded our effluent system. This includes a screw press, to remove solids from effluent, and a new pond that can now hold 1,000,000L, the old pond could store 350,000L. We have increased the area that we can apply effluent to which is now 60.9ha, this is nearly double what we were applying to. With this upgrade we are now able to reduce our effluent application rate from 8mm per pass down to 1.5mm per pass.



Pivot effluent application

New pond

EcoPond:

An EcoPond unit has recently been installed as an addition to our effluent system. EcoPond is a new system for treating Farm Dairy Effluent (FDE) that has been shown to reduce methane emissions from effluent by 96%. This treatment system not only significantly reduces methane emissions, but also reduces E. coli in treated effluent, reduces ammonia emission, mitigates odour and also cuts phosphate leaching losses. Read more about EcoPond <u>here</u>.

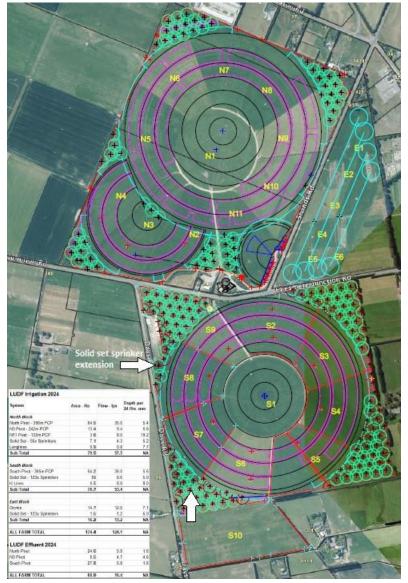
The unit will be used to measure the reductions in methane emissions for the remainder of this season and assess for a complete season, next season. <u>Watch how EcoPond works</u>.



EcoPond Installation

Irrigation Update:

We are currently upgrading our irrigation network by extending the solid set sprinklers on the south block from 5.8ha to 15ha. This further improves our irrigation efficiency which will have a positive impact on reducing our risk of nitrate leaching.



New Irrigation Map

LUDF | KEY WEEKLY INFORMATION

10 January 2024

		Last Week	This Week	1 Year Ago
	KEY WEEKLY INFO	3-Jan-24	10-Jan-24	10-Jan-23
Farm Area	Grazing area (Ha)	160	152.4	151.79
Farm Area	Re-grassing (Ha)	0	7.6	8.21
Stock Numbers	Cows currently milking to vat	556	554	537
	Cows currently milking NOT to vat	3	4	2
	Total cows milking	559	558	539
	Once-a-day milking cows	0	4	14
	Lame cows current	0	4	14
	Dry cows on farm	0	0	0
Milk Production	Current bulk milk SCC (tgt below 150) (SCC)	121	142	124
	Milk Solids per cow (kg MS/cow)	1.78	1.75	1.72
	Protein:Fat ratio (%)	0.8	0.83	0.84
Feed Budget	Average pasture cover (kg DM/Ha)	2357	2526	2256
	Current Pasture Fed - Milkers (kg DM/cow)	16.77	18.8	17.6
	Current Silage Fed - Milkers (kg DM/cow)	2.03	0	1.4
	Current Demand per cow (kg DM/cow)	18.8	18.8	19
	Stocking Rate - Milkers (Cows/Ha)	3.52	3.66	3.55
	Current Pasture Demand - Milkers (kg DM/Ha)	68	68	67
	Pasture Growth Rate (kg DM/Ha)	70	79	76
	Pre-grazing cover (avg for week) (kg DM/Ha)	3120	3190	3051
	Residual (avg for week) (kg DM/Ha)	1550	1550	1550
	Round Length (Days)	21	23	21
Farm Conditions	Soil temp average (Aquaflex) (degree C)	17.4	17.6	18.1
	Rainfall (mm)	15	1.2	20
	Irrigation days this week (days)	5	4	2
People	Current Roster	5+2	5+2	5+2
	Health & Safety Incidences	nil	nil	nil
	Milking Routine	10 in 7	10 in 7	10 in 7
	DF ng, today			IDDC Demonstration Centre



