

Weekly Farm Summary 22 November 2023

Farm-system impacts of: Bales vs Beet for winter AND Reducing N loss to water by 30%.

	Std Infrastructure Blue	LI Baleage Pink	Std FB Green	LI FB Yellow
Farmlet area including wintering	49.3	93.6	86.9	60.8
Peak cow numbers	138	208	233	136
Milking Area	43.5	82.0	69.5	52.1
Current Herd size (cows)	138	208	232	136
Pasture Stocking rate (current)	3.2	2.5	3.3	2.6
Winter Feed Milking supplement	Baleage	Baleage	Beet	Beet
	In-shed feed 500kg/cow + silage as required			
Average Cover (kgDM/ha)	2475	2601	2586	2687
Average Growth (kgDM/ha/d)	73	68	56	76
Target rotation length (d)	24	30	26	29
Last week actual rotation (d)	23	28	24	27
Last week supp (kgDM/c)	1.6	1.9	1.8	1.5
Latest Average BCS	4.8	4.5	4.7	4.8
% of herd on priority management	22.3%	24.8%	24.6%	19.1%
% in Milk	100%	100%	100%	100%
7-day Average Milk yield (L/cow)	24.4	23.5	24.9	24.6
7-day Average Milk yield (kgMS/c)	2.20	2.11	2.27	2.24
Nitrogen Cap kgN/ha/yr	180	50	180	50
% Nitrogen used (kgN/ha) YTD	26% (47kg)	44% (22kg)	24% (44kg)	48% (24kg)
Effluent N YTD	2	4	5	3
YTD Pasture growth TDM/ha	6.5	6.2	6.3	6.0
YTD supp (kg DM/c)	184	138	253	160
YTD MS/c	182	175	187	185
YTD MS/milk ha (YTD MS/farm ha)	566 (500)	452 (396)	634 (507)	472 (404)
Focus area	Current Status			
Milk Production	Production is now less than 400 kg MS lower than the same time last year. The SCC 7-average is marginally up from last week at 107 and 94 respectively. Herds producing an average of 2.2 kgMS/cow/day with LI Baleage herd showing signs of recovering to production levels of 10 days ago. It is nice to see the cows holding peak production well this year, especially after the disruption from the floods when they were heading into peak.			
Pasture & Feed	In a surplus again this week with ~24ha ready to be made into baleage over the next week when there is a weather window. New grass paddocks have been sown this week. Third round application of N fertiliser for the standard herds began this week while the LI will receive theirs in early December at this stage. We are at a point where topping paddocks post grazing to reset residuals is almost complete. Going forward we need to ensure we are heading into paddocks at the right pre-graze to maintain tidy residuals without the need for topping.			
Animals	21-day submission rate was 94% (range from 90 – 96%). We are continuing to get a few cases of lameness, with most being bruises or white line. Cows continue to recover well. Two new cases of mastitis found whilst due our routine of stripping the herd once a week. Latest 2023 born weights were and average of 96.7 kg with 17 animals still to wean.			
Environment	Effluent has been applied at every opportunity; pond level is currently at 46% full. Close attention is being paid to make sure the applications are spread evenly across all the farmlets			
Wintering	Results are back from the testing of external sources of pasture to see if it meets our quality requirements for wintering (see Feed Management below for details). Strike rate of fodder beet looks to be a bit variable, but it is possible there are still seed in the ground to germinate if they were planted a little deeper.			
People	We are a step closer to getting our new members on board, hopefully with an early December start date. We also have a Lincoln university student starting this week to help cover staff time over with annual leave over the festive season.			
Research	This week a few of the hub team visited Taranaki to meet researchers and governors from Dairy Trust Taranaki and the Northland Dairy Development Trust to investigate opportunities for collaboration.			

Milk production

Principles of Milk Production management this week

Milk production	Production continues to remain consistent with a positive divergence from the LI FB herd. Ensuring paddocks are entered at the right pre-graze cover continues to be a focus to maintaining pasture quality to ensure we hold peak production for as long as possible.
Key Influences of Milk Production	Paddocks with a higher pre-graze pasture mass will still be having some impact on milk production particularly for the LI herds. Residuals continue to suggest there is not an issue with quantity of feed, with the mower having to be used to tidy up a few remaining paddocks where residuals have not been met. Strong cycling activity will also be impacting milk production of the cows on heat each day.
Cow Management	We have been discussing our management policies for light BCS cows given the cost of inshed feed and our current surplus situation. It would be nice to reduce the amount of inshed feeding but because of the complexities of our farm with four herds we are limited in options to priority treat at risk cows. While we can utilize OAD milking using the auto ID & milking system it is not practical to run separate OAD herds for each farmlet. With OAD cows coming to the shed in the afternoon we can offer additional supplementary feed to manage BCS. Our Protein:Fat ratio would suggest energy is our main limiting nutrient and our inshed feed is the best and most consistent feed we have available to offer.

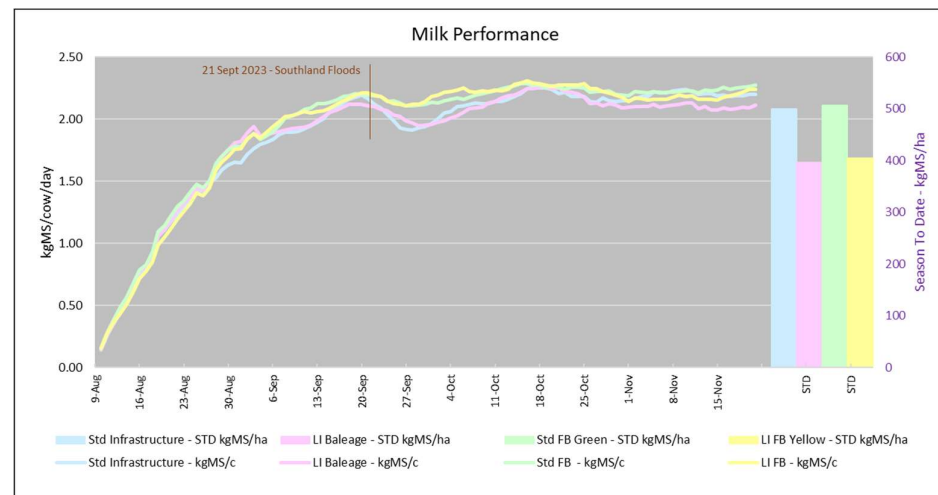


Figure 1. Milksolids per cow/day season to date and kgMS/ha season to date.

Feed Management

Principles of Feed management this week

<p>Feed Quality</p>	<p>Seed head is starting to emerge across the farm and will start impacting on pasture quality. The latest pasture quality results for the milking platform are in and the paddocks sampled averaged 20% dry matter (17 to 23%), 11.4 ME (10.6 to 12.5), 20.5% crude protein (16.2 to 23.6) and 46.7% NDF (38.1-51.3). The mower has been used across all farmlets this year to tidy up residuals in paddocks that have not been eaten out properly in the last 2 rotations. Also, with the baleage paddocks conserved we are expecting good quality pasture from these paddocks in the next rotation. We have tested pasture from 3 different farms for potential baleage purchase and have decided not to purchase one lot due to very low crude protein concentrations. In our baleage wintering systems we need to be offering baleage with at least 12% crude protein to meet cow requirements.</p>
<p>Growth Rate</p>	<p>Growth rate continues above demand despite the variable weather conditions. Good soil moisture, rising soil temperatures and nitrogen in the system are creating ideal conditions for pasture growth. We are expecting growth to slow slightly following all the topping and conservation that has happened in the last week. Soil temperature is currently lower than the same period last year but this is not a concern for pasture growth.</p>
<p>Nitrogen Strategy</p>	<p>The third round of N application has been begun for both the Std farmlets. The LI farmlets will begin their next round of applications in early December.</p>

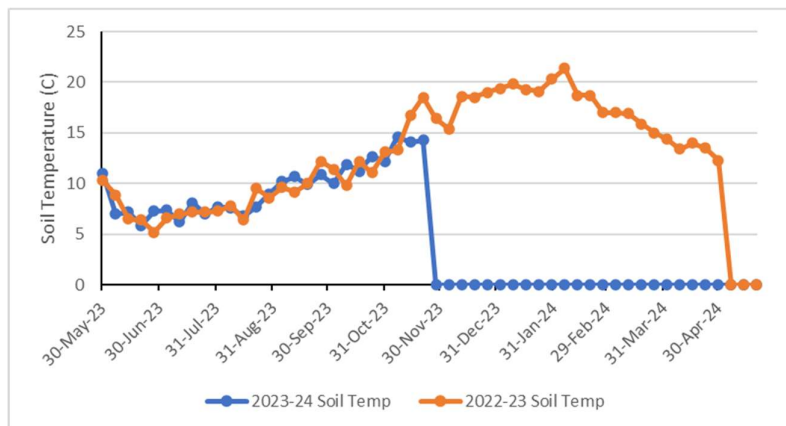


Figure 2. Soil temperatures 2023-24 vs 2022-23

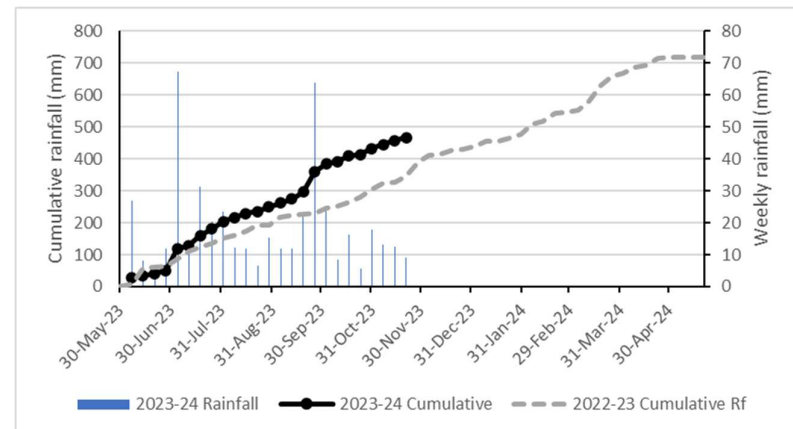


Figure 3. Season to date rainfall compared with cumulative rainfall 2022-23

Feed Management

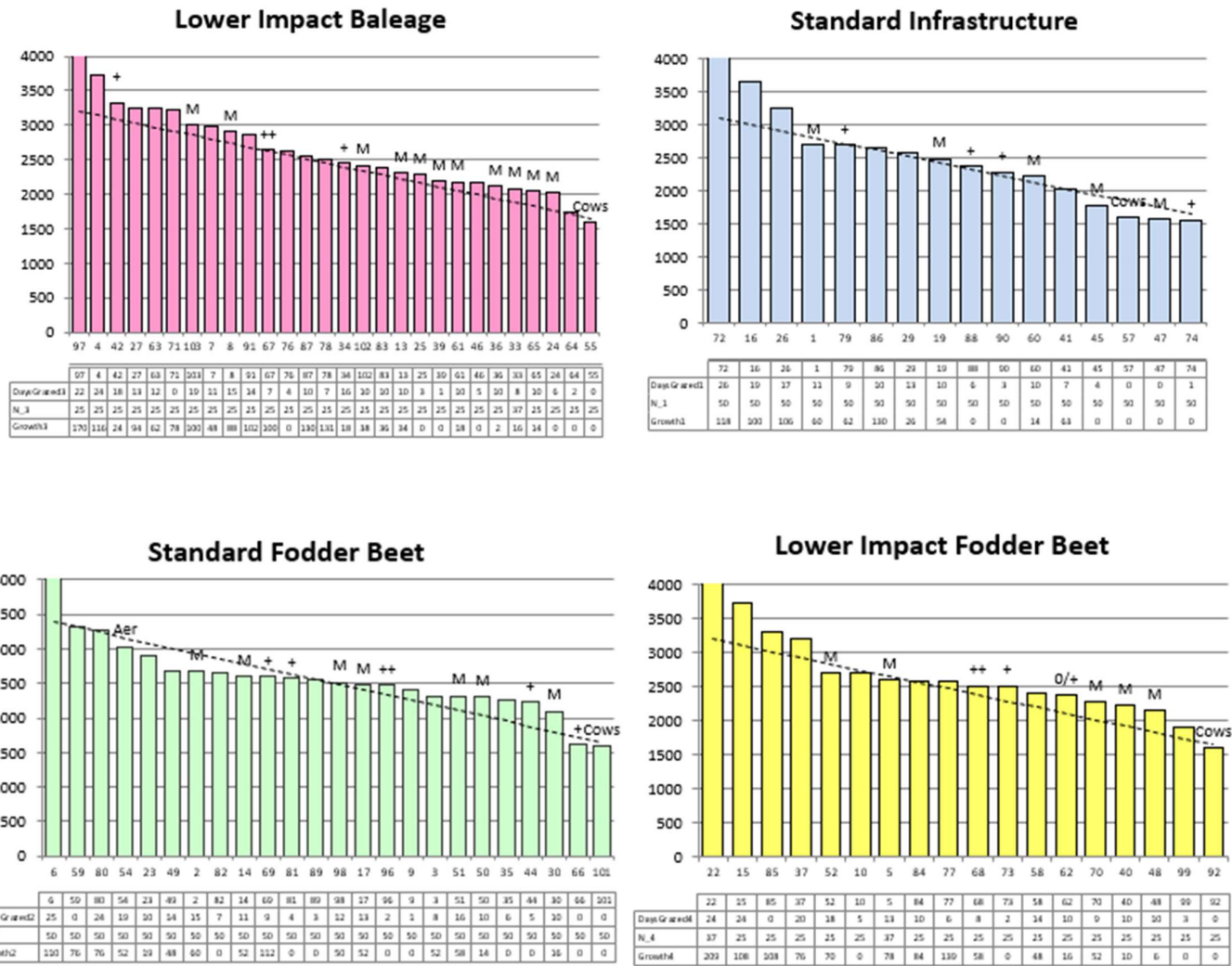


Figure 4. Plate meter feed wedges at 21 November 2023

The week in pictures



Calves at the support block;



Std FB herd relaxing in the sun;



New grass being planted in paddock 95



Post farmwalk pollen line!!



Sam cooling off under the sprinkler following farm walk in 21C;



Flood repairs to the culvert

The week in pictures



Cows enjoying the sunshine after a few cold wet days



Quite a range in pasture quality and botanical composition in paddocks across the farm