

Weekly Farm Summary 7 February 2024

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	52.2	93.6	86.9	60.8
Peak cow numbers	139	208	233	136
Milking Area	52.2	93.6	75.3	55.0
Current Herd size (cows)	139	208	231	135
Pasture Stocking rate (current)	2.7	2.2	3.1	2.5
Winter Feed Milking supplement	Baleage	Baleage	Beet	Beet
	In-shed feed 500kg/cow + silage as required			
Average Cover (kgDM/ha)	2491	2465	2564	2359
Average Growth (kgDM/ha/d)	58	43	66	48
Target rotation length (d)	27	32	26	29
Last week actual rotation (d)	26	34	26	30
Last week supp (kgDM/c)	1.3	1.4	1.1	1.4
Latest Average BCS	4.5	4.4	4.3	4.3
% of herd on priority management	20.1%	32.2%	30.7%	28.1%
% in Milk	100%	100%	100%	100%
7-day Average Milk yield (L/cow)	19.3	18.7	19.0	19.5
7-day Average Milk yield (kgMS/c)	1.84	1.78	1.80	1.85
Nitrogen Cap kgN/ha/yr	180	50	180	50
% Nitrogen used (kgN/ha) YTD	64% (116kg)	72% (36kg)	67% (120kg)	78% (39kg)
Effluent N YTD	8	12	12	12
YTD Pasture growth TDM/ha	10.3	9.4	9.2	8.9
YTD supp (kg DM/c)	410	363	509	399
YTD MS/c	323	313	332	342
YTD MS/milk ha (YTD MS/farm ha)	1040 (1101)	788 (788)	1120 (970)	866 (784)
Focus area	Current Status			
Milk Production	Milk production continues to remain stable across all herds. YTD production is 1.2% (2800 kg MS) ahead compared with same time last year. On average cows producing 1.82 kgMS/day. Milk urea this week has dropped for the FB herds from 30 to 22, but remained at 28, for the Baleage herds. SCC remains at 105. Decision to reduce in-shed feed last week has not impacted production.			
Pasture & Feed	Growth still above demand so continuing to be very proactive in stepping over paddocks that are over the pre-graze target or using the extend the rotation for the smaller herds. This coupled with a reduction in the in-shed feed is contributing to residuals being met and ensuring the current good quality pasture is maintained for future rounds. No change to rotation length.			
Animals	2023 borns have had their routine animal health treatments and weighed before going off to grazing. Weight averaged 155kg with a range of 124 to 194 kg. Average breeding worth of this replacement group is 359.			
Environment	Effluent pond level continues to allow for 2 runs per day. When the level drops below 35% full this will drop to one run per day. Continue to monitor applications to ensure they are evenly spread across farmlets.			
Wintering	Nitrogen application planned for the fodder beet crops. Wintering planning session has been scheduled to finalise paddock setup for baleage wintering.			
People	This week we farewell Callum, our summer student who is heading off to Lincoln University. Callum has been valuable member of the team for the last few months, being very eager and interested to learn the why we do things on the research farm. We have also welcomed back Billy our farm manager from paternity leave.			
Research	Planning continues for a workshop for early March with SDH, Dairy Trust Taranaki and Northland Dairy Development trust to plan how we can extract more value for research in the regions.			

Milk production

Principles of Milk Production management this week

Milk production	Continues to be stable, with the new pastures' quality contributing to this positive result. It was great to see that there has been no negative impact from last weeks decision to reduce the amount of in-shed and concentrate on utilizing as much pasture as possible for milk production.
Key Influences of Milk Production	Cows have been going into good quality pastures with lots of clover and have also had some cooler ambient temperatures.
Cow Management	No change. TAD milking frequency with continued monitoring cow BCS on the fortnightly basis and adjusting the priority feeding and OAD milking groups as required. With early scan results available, 2024 calving date will now be taken into consideration when identifying cows for priority feeding.

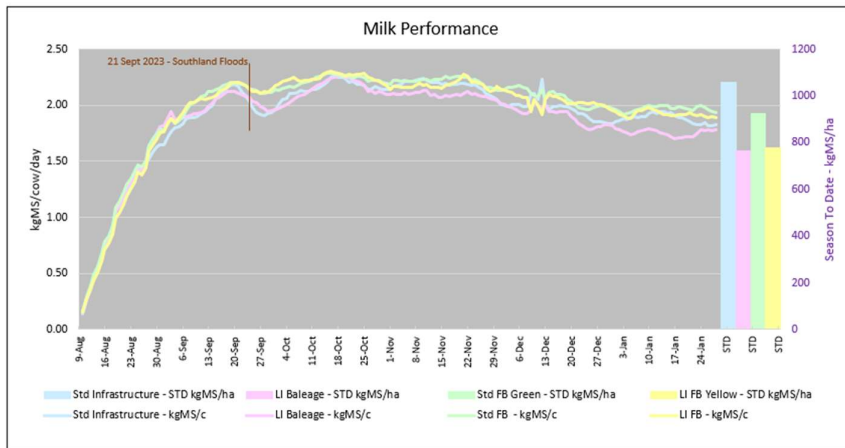


Figure 1. Milk solids per cow/day STD and kgMS/ha STD

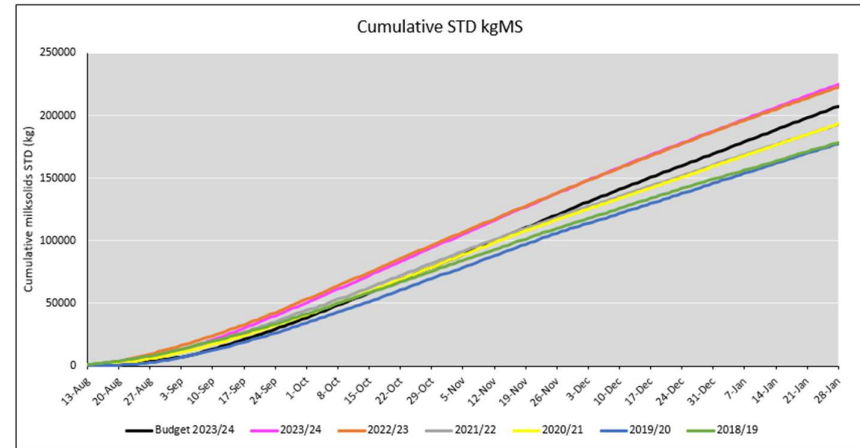


Figure 2. Cumulative kg Milk solids & Budget season to date

Feed Management

Principles of Feed management this week

<p>Feed Quality</p>	<p>A major focus to maintain good feed quality with such good growth rates is grazing paddocks at the right pre-grass mass for the individual farmlet stocking rate and rotation length. This involves assessing paddocks immediately prior to grazing for each herd to confirm they are at pre-graze target, and proactively stepping over the paddock if it has passed it. Have seen an improvement in achieving target residuals with this approach and the reduction of in-shed feed, with no negative impact on milk production</p>
<p>Growth Rate</p>	<p>Soil temperature continues to be slightly below same time last year and rainfall well above, so still achieving good growth rates. No change to round lengths at this stage as all the new grass paddocks are back in rotation. Soil temperature has dropped back this week following the cooler, wetter weather. Two low FVI paddocks are scheduled to be grazed, sprayed out and regrassed as part of our autumn regrassing program.</p>
<p>Nitrogen Strategy</p>	<p>Standard farmlets are currently completing their 5th application of N fertiliser for the season. While we continue to have good soil moisture and temperature, we will continue to apply N, with the last round for both LI and Stds expected to be applied early March, at this stage</p>

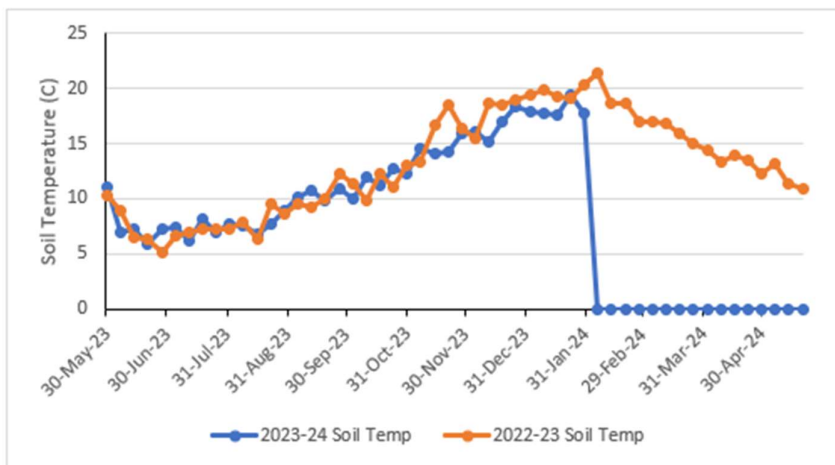


Figure 3. Soil temperatures 2023-24 vs 2022-23

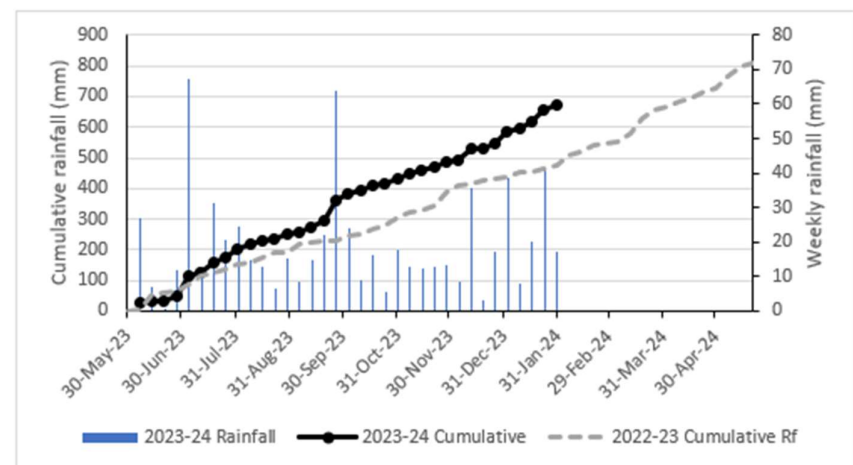


Figure 4. Season to date rainfall compared with cumulative rainfall 2022-23

Feed Wedges

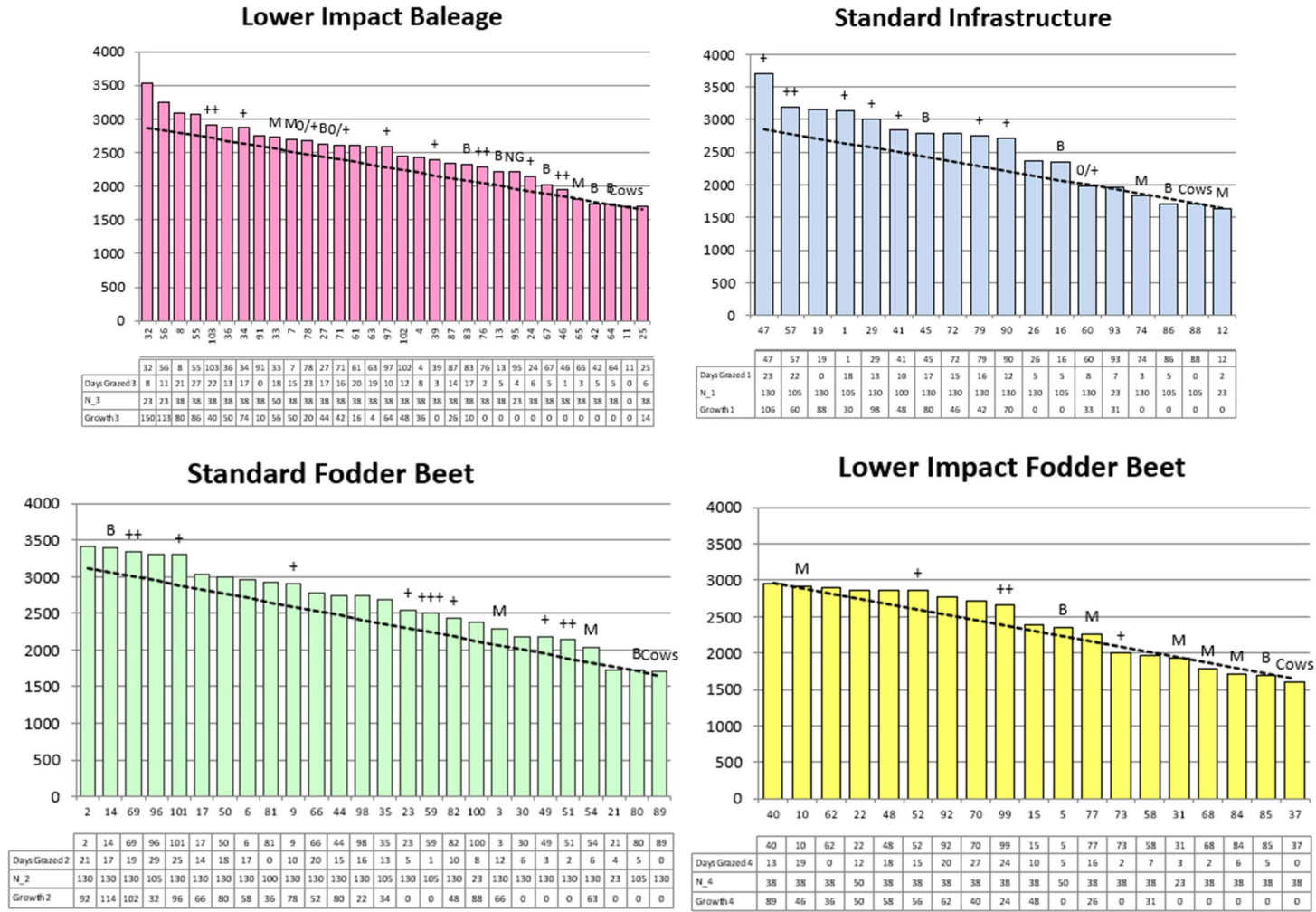


Figure 5. Plate meter feed wedges as at 5th February 2024

Pasture Quality Results

On the pasture quality front, the 7th round pastures in the Standard farmlets have increased in DM while the LI have decreased. ME has increased in the LI farmlets and remained stable in the Standard farmlets.

Crude protein in the Standard farmlets has dropped while the LI farmlets have increased, most likely due to the strong clover in these paddocks. There has been an increase in non-structural carbohydrates and soluble sugars across both systems.

Differences between paddocks with and without plantain are small for most nutrients, although those with plantain are higher in DM and non-structural carbohydrates in round 7 but lower in crude protein.

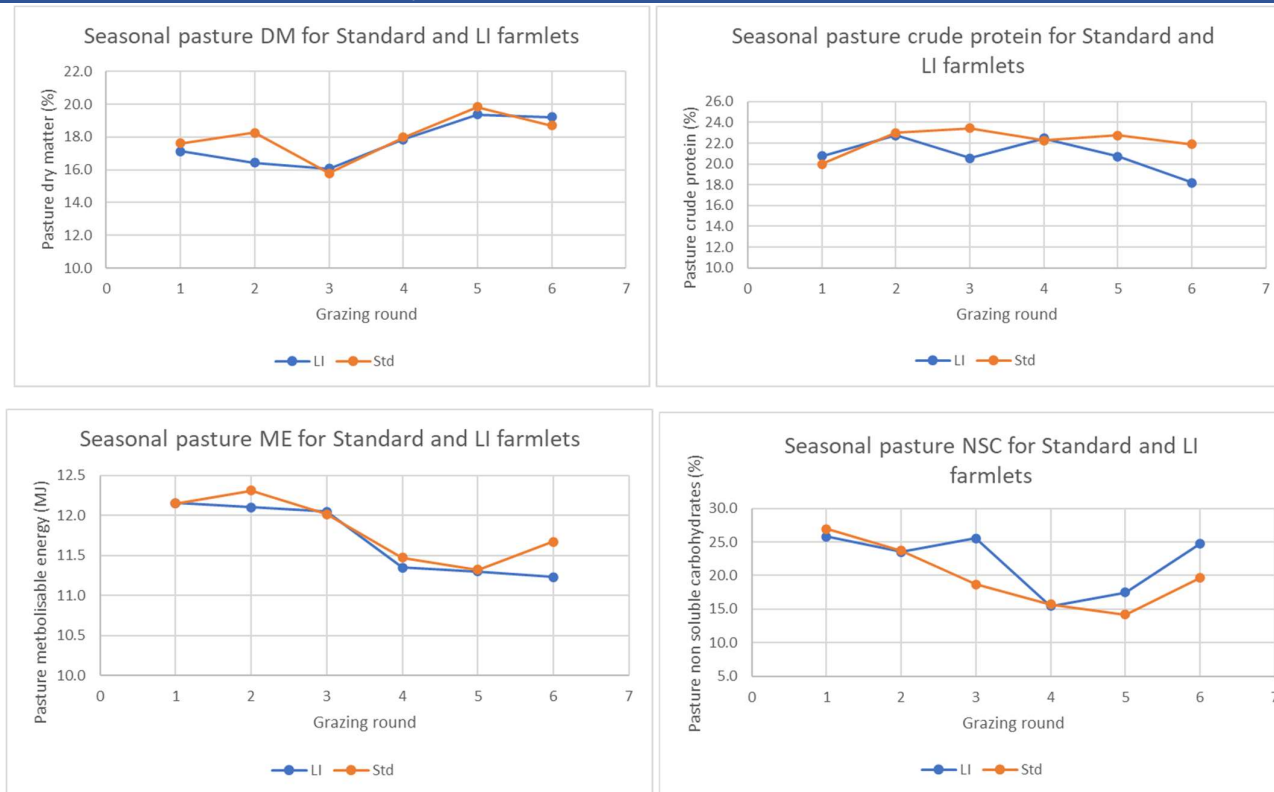


Figure 6. Pasture quality from standard and lower impact monitor paddocks for each grazing

Pasture Quality Results

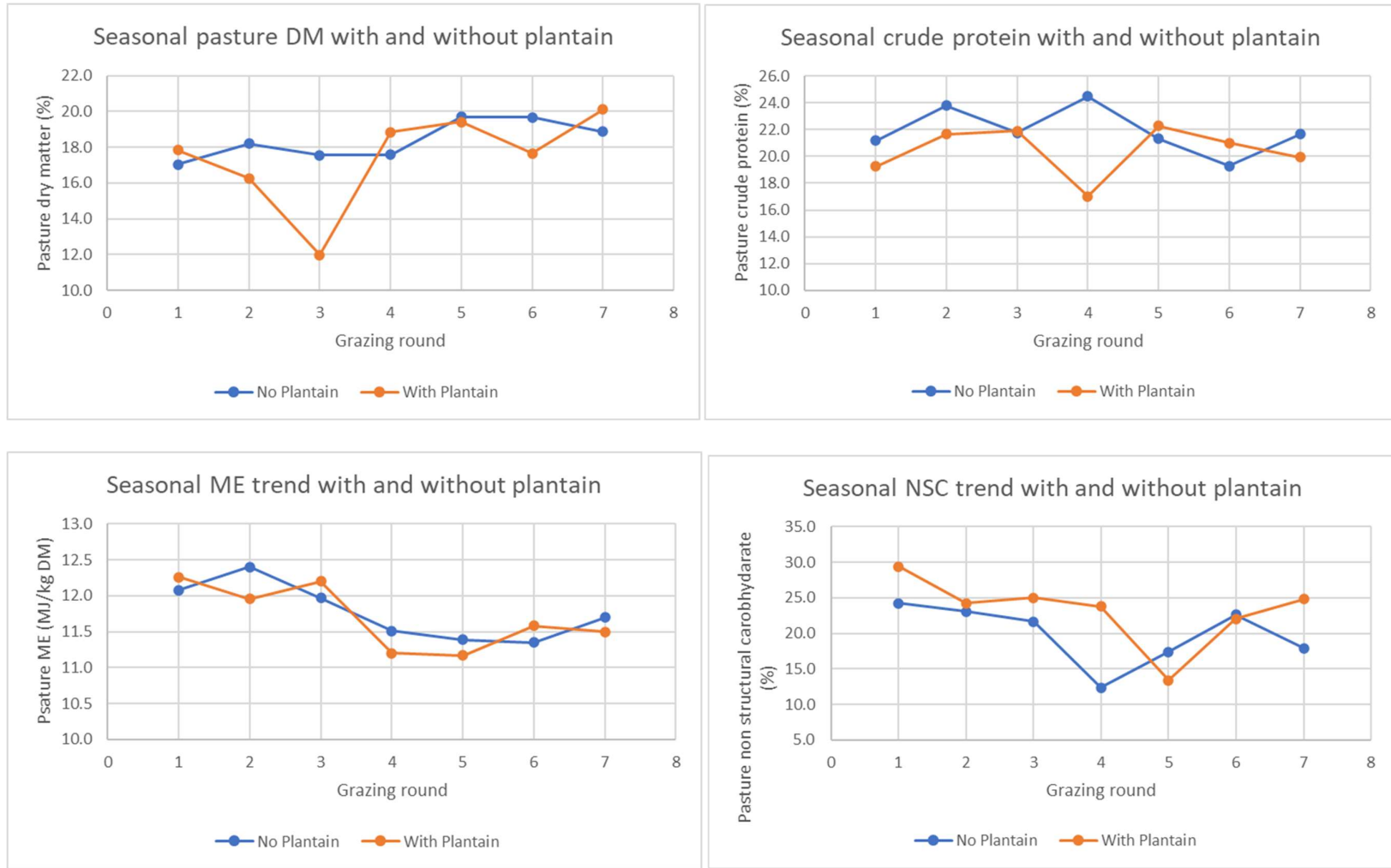


Figure 7. Pasture quality from monitor paddocks with and without plantain for each grazing