

Weekly Farm Summary 20 March 2024

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

	Std Baleage Blue	LI Baleage Pink	Std FB Green	LI FB Yellow
Farmlet area including wintering	52.2	93.6	86.9	62.2
Peak cow numbers	139	208	233	136
Milking Area	52.2	93.6	75.3	55.0
Current Herd size (cows)	139	208	230	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)	2546	2326	2355	2314
Average Growth (kgDM/ha/d)	47	38	36	38
Target rotation length (d)	27	32	26	28
Last week actual rotation (d)	30	34	26	28
Last week supp (kgDM/c)	2.2	2.5	1.8	1.8
Latest Average BCS	4.6	4.6	4.4	4.6
% of herd on priority management	8.6%	8.2%	22.2%	6.7%
% in Milk	100%	100%	100%	100%
7-day Average Milk yield (L/cow)	15.9	15.7	16.7	17.8
7-day Average Milk yield (kgMS/c)	1.67	1.65	1.75	1.87
Nitrogen Cap kgN/ha/yr	180	50	180	50
% Nitrogen used (kgN/ha) YTD	78% (140kg)	96% (48kg)	81% (145kg)	104% (52kg)
Effluent N YTD	15	12	13	13
YTD Pasture growth TDM/ha	13.3	11.7	13.1	11.6
YTD supp (kg DM/c)	475	434	545	431
YTD MS/c	390	385	411	439
YTD MS/milk ha (YTD MS/farm ha)	1132 (1132)	802 (802)	1285 (1113)	1040 (918)
Focus area	Current Status			
Milk Production	The cow's milk production is still holding well, we have passed the 10,000 milksolids ahead of last year mark.			
Pasture & Feed	Growth has dropped below demand this week. There is still plenty of pasture on hand, with one herd getting one bale of silage, and all herds receiving between 0.6 and 1.5 kg of in shed feed. This is being priority fed to cows depending on calving date and BCS gain required. A drop in pasture dry matter this week means pastures measured using the standard winter formula may have less pasture mass than estimated. The difference between 15% DM (formula) and 13% in most samples this week will mean about 13% less pasture than estimated.			
Animals	Lameness is a problem following the wet summer, with the lame mob up to 20 cows. The Biotin has not been in long enough to have a decisive effect on hoof health, mat and copper sulphate options are being investigated, the effectiveness of these being limited past 80 cows means some management/ logistical plans need to be made.			
Environment	Lower impact farmlets have had their final N fertiliser application on, standard farmlets are going to get as much of their final application as possible, leaving out effluent paddocks. Effluent pond is at 34%, so single applications are being applied as is feasible.			
Wintering	Culling of empties is under way, with low producing empties going first. Dates for the last grazing of baleage wintering paddocks to ensure the target cover of 2800 is reached at the right time are being worked out. Planning is under way to get the right bales from the right source in the right paddocks for the Baleage wintering farmlets.			
People	Bike training session for the farm and tech team went very well, with great team participation. The tech team were very appreciative of the farm team for their support on the day.			
Research	All the pasture botanical compositions are complete - a milestone for the science team. Differences between Std and LI farmlets in clover % were smaller this year than previous years 10.4 vs 14% (range 0.7 to 52%). Plantain proportion averaged 13.7% but ranged from 0.4 to 33%.			

Milk production

Principles of Milk Production management this week

Milk production	Milk production is holding well across the herds, this reflects the good quality pasture available.
Key Influences of Milk Production	Pasture quality is the main influencer of milk production at the moment, however weather events will start to have an impact on utilization and intake when we get several cold wet days together. The drop in pasture dry matter % this week may also influence intakes and therefore production. To minimise the impact the team are being vigilant in their assessment of post grazing residual and topping herds up with baleage if required.
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. Final scan results have been used for our autumn BCS management strategies centered around priority feeding, milking frequency and cow specific dry off considerations. Cows now on OAD and priority feeding are those required to gain more than 0.4 BCS units prior to 1 st June. There are about 50 animals that will likely be dried off mid April to achieve their pre-winter BCS target.

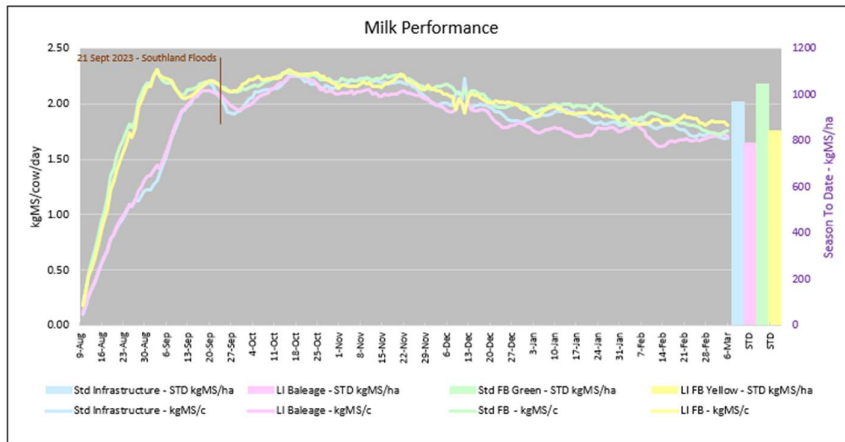


Figure 1. Milksolids per cow/day STD and kgMS/ha STD

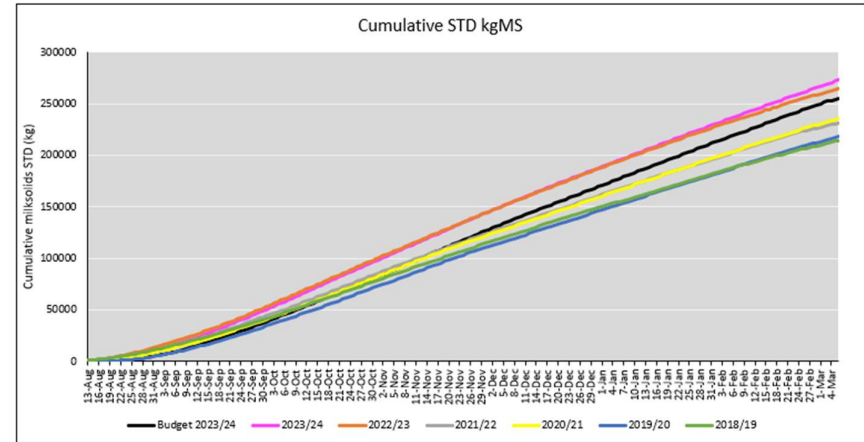


Figure 2. Cumulative kg Milksolids & Budget season to date

Pasture Management

Principles of Feed management this week

<p>Feed Quality</p>	<p>Due to different stocking rates the pre-graze targets between the herds vary slightly based on the current rotation length. Overall pastures are denser, lusher and have great amounts of clover and plantain than earlier in the season. Early decision making on paddocks where quality and quantity will allow for an extra feed is being implemented for the farmlets on the fastest rotation.</p> <p>The botanical composition results indicate a wide range in composition between paddocks and farmlets.</p>
<p>Growth Rate</p>	<p>Growth rates have dropped with cooler soil and air temperatures this week, with demand now above supply on all farmlets.</p>
<p>Nitrogen Strategy</p>	<p>Standard farmlets are still below the target application of 180/ha, there is still some time to put on some more N, but effluent areas will be left out of this last application. The Low Impact farmlets have completed their applications.</p>

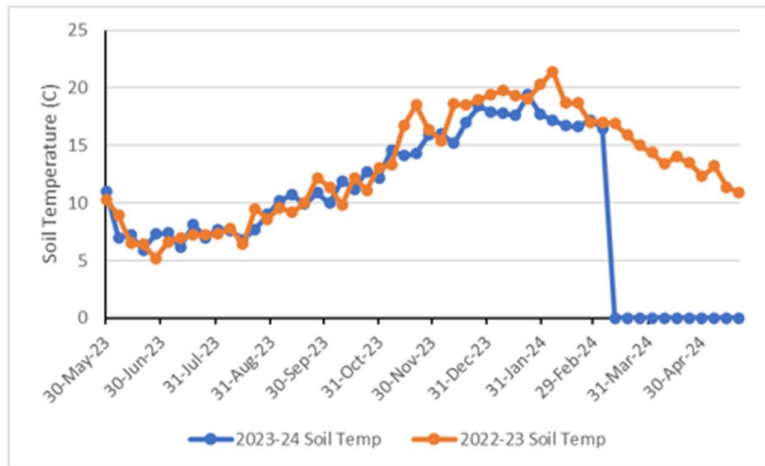


Figure 3. Soil temperatures 2023-24 vs 2022-23

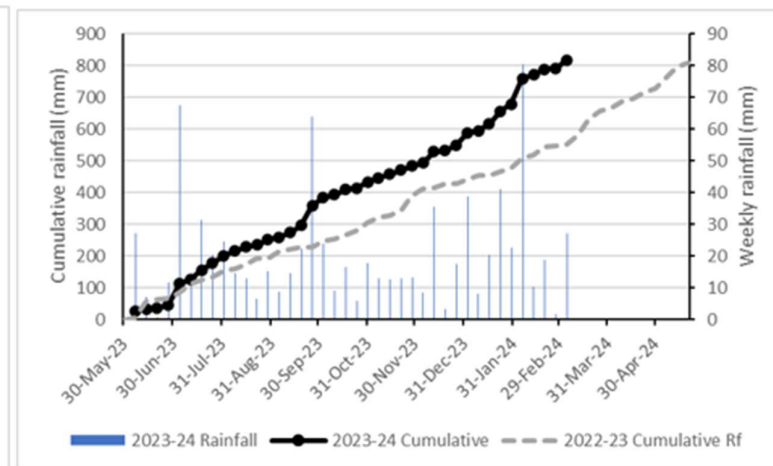


Figure 4. Season to date rainfall compared with cumulative rainfall 2022-23

Pasture Management

Botanical composition

In summer each year we have assessed the botanical composition of the pastures to identify any differences, particularly in the proportion of clover. In the previous study there was on average a 10% unit difference in clover content with paddocks receiving 50 kg N/ha having approximate 18% clover, compared with 8% in the farmlets receiving up to 180 kg N/ha. The LI farmlets had a higher proportion of dead material than the Std farmlets (Table 1).

At the end of the 2022-23 season all the paddocks were reallocated to farmlets for the start of the new farm system study. This has resulted in some paddocks staying in their existing N regime but others going from higher to lower or lower to higher applications. This season there as a smaller difference in clover content between Std and LI farmlets.

Interestingly paddocks differ in their composition based on year of establishment. Original paddocks established in 2017 have more other grasses than those established after this, with the exception of this seasons new grass which was high in other grasses. The white clover content is lower in the oldest (2017 & 2018) and youngest (2023) pastures. The plantain content is highest in paddocks established in 2022.

	Ryegrass	Other Grasses	White clover	Dead	Weeds	Plantain
Lower impact	53.9	8.9	13.9	17.2	1.5	13.9
Standard impact	58.3	11.0	10.4	14.1	1.7	13.5

Table 1: Effect of N fertiliser strategy on pasture botanical composition

	Ryegrass	Other Grasses	White clover	Dead	Weeds	Plantain
2017	54.2	16.5	9.2	18.4	1.6	
2018	73.8	3.2	4.1	15.6	3.3	
2019	61.5	7.0	12.1	18.6	0.7	
2020	62.0	5.8	17.1	13.5	1.6	
2021	52.5	8.1	17.1	19.1	1.7	8.4
2022	45.8	5.8	14.5	15.1	1.6	17.9
2023	77.2	12.9	3.1	2.9	1.8	2.7

Table 2: Effect of pasture age on pasture botanical composition

Feed wedges

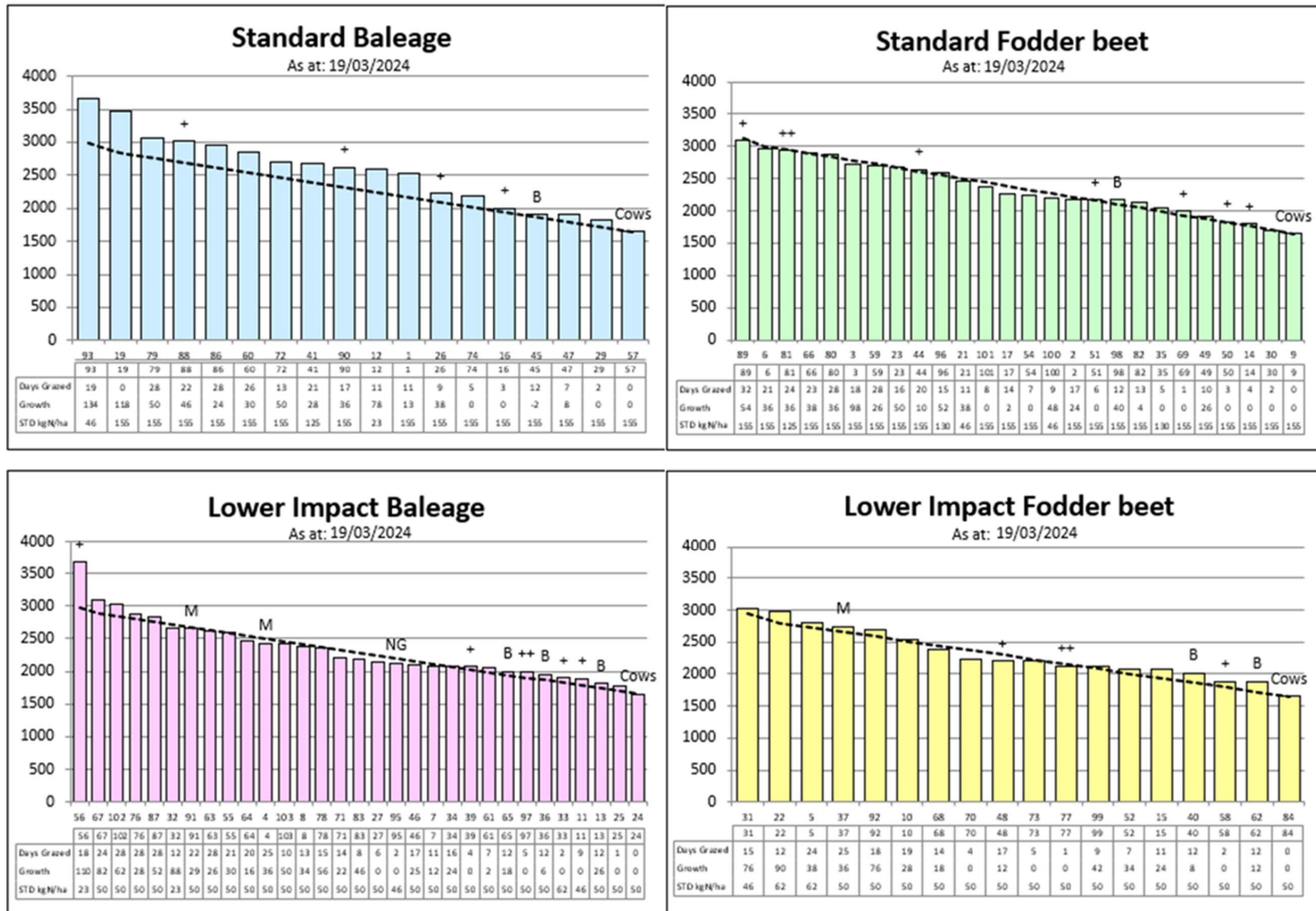


Figure 5. Plate meter feed wedges as at 19th March 2024