

Weekly Farm Summary 3 February 2023

Farm-system impacts of: Kale vs Fodder beet for winter AND Reducing N loss to water by 30%.

	Std Swede Pink	LI Bale Blue	Std FB Green	LI FB Yellow
Farmlet area including wintering	82.7	60.9	82.7	60.9
Peak cow numbers	222	137	221	135
Milking Area	73.8	55.1	73.8	55.1
Current Herd size (cows)	210	135	209	130
Pasture Stocking rate (current)	2.8	2.5	2.8	2.4
Winter Feed Milking supplement	Swede/Bale	Baleage	Beet 80 days	Beet 60 days
	In-shed feed 500kg/cow + silage as required			
Average Cover	2101	2142	2164	2184
Average Growth	26	19	24	17
Target rotation length	39	37	39	38
Last week act rotation (d)	32	39	38	39
Last week supp (kg DM/cow)	4.8	6.2	4.8	2.0
Average BCS	4.4	4.4	4.3	4.4
% of herd on priority feeding	18%	13%	15%	9%
Milk yield (L/cow)	18.5	20.5	18.4	18.4
Milk yield (kgMS/cow)	1.75	1.93	1.71	1.74
Nitrogen Cap kgN/ha/yr	180	50	180	50
% Nitrogen used (kgN/ha) YTD	49% (89kg)	60% (30kg)	47% (85kg)	58% (29kg)
Effluent N YTD	11	10	10	9
YTD supp (kg DM/cow)	\$0	\$0	\$0	\$0
YTD MS/cow	580	394	524	381
YTD MS/milk ha (YTD MS/farm ha)	308	327	303	323

Business Area	Current Status
Milk Production	Moving to 3n2 milking frequency Tue 7 th Feb with milking times of 5 am, 3 pm and 10am (10, 19, 19 intervals). Implementation delayed to allow heat stress measurements to be completed this week and to allow time to develop solid plans for implementation and recording
Pasture & Feed	Pre-graze mass range is 2500 to 2650 kg DM/ha requiring 9 kg DM supplement for Std herds and 6 kg supplement for LI herds. 2.5 kg DM as inshed feed with remainder as baleage; next harvest from support/external blocks will be silage not baleage for ease of feeding at high rates in late summer/autumn; Holding current rotation length; N applications to new grass paddocks last week
Animals	Taking all opportunities available to reduce feed demand by off-loading culls; Protecting BCS by reducing milking frequency & priority inshed feeding to early calving lighter BCS animals
Environment	Holding off next N fertiliser applications to Std paddocks until sufficient rain in the forecast for a good growth response
Wintering	Maintaining regular monitoring of fodder beet crops to maximise potential yield
People	Focus on ensuring everyone is on board with move to 3n2 milking and understands what this means for the grazing plan, supplementary feeding, milking times and information capture
Research	Great weather conditions for heat stress measurements this week (not so good for grass growth, people, or cows!).

Milk Production

Principles of Milk Production management this week

Milk Production	Season to date milk production is still tracking higher than last season, however the implications of the dry weather and the effect that's having on pasture quantity and quality, is causing some decline in milk production.
Key Influences on Milk Production	Pasture dry matter is increasing but higher temperatures are likely impacting quality. Miscommunication in the feed plan led to Std herds not receiving the required baleage allocations this week. The LI FB herd has struggled this week as they ate through higher mass paddocks and needed less supplementary feed than other herds. While pasture quantity was OK, energy intake was likely limiting milk production.
Cow Management	To manage BCS to the end of season, 3in2 milkings will start from Tuesday 7 th Feb. Milking times will be 5am, 3pm and 10am with the intervals being 10, 19, 19. Herd testing completed this week will provide a picture of SCC range and potential mastitis risk before the change. SCC will be monitored carefully with the change in milking frequency. For more information on alternative milking frequencies check out www.dairynz.co.nz/milking-intervals/flexible-milking

	Std brassica/baleage Pink	LI Baleage Blue	Std Fodder beet Green	LI Fodder beet Yellow
kg Milksolids per cow this week / (last week)	1.75 (1.74)	1.93 (1.96)	1.71 (1.71)	1.74 (1.88)
kg Milksolids per ha this year / (same time last year)	926 (826)	814 (737)	907 (810)	791 (715)
% Var kg Milksolids per ha Season per ha to date vs last season to date	9.4	8.6	14.4	12.0
No. of Cows needing preferential feeding (% herd)	37 (18)	17 (13)	31 (15)	12 (9)
Animal Health peculiarities	None	None	None	None

Milk Production

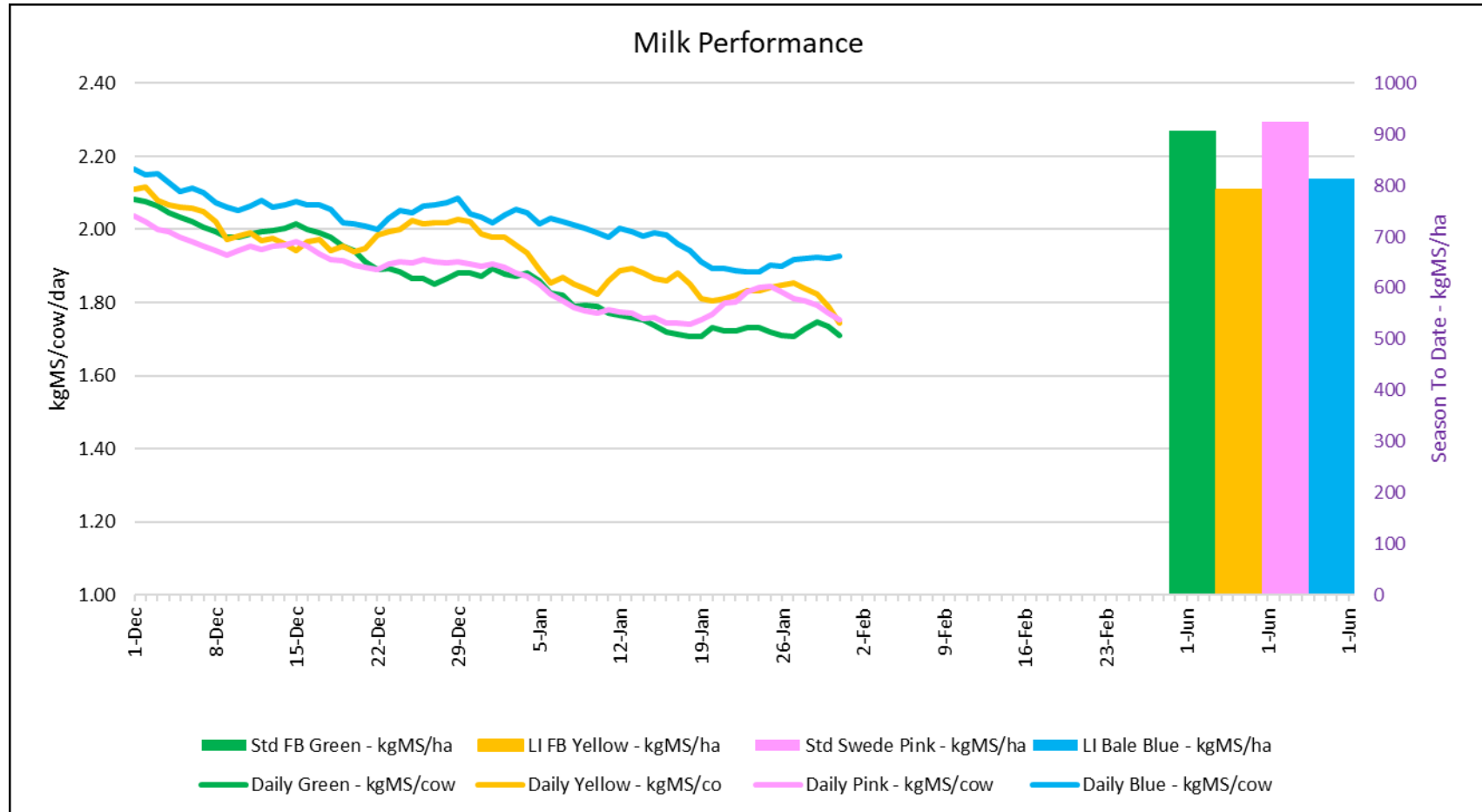


Figure 1: Milk solids production (/cow/day) plus cumulative season production (kg/ha)

Feed

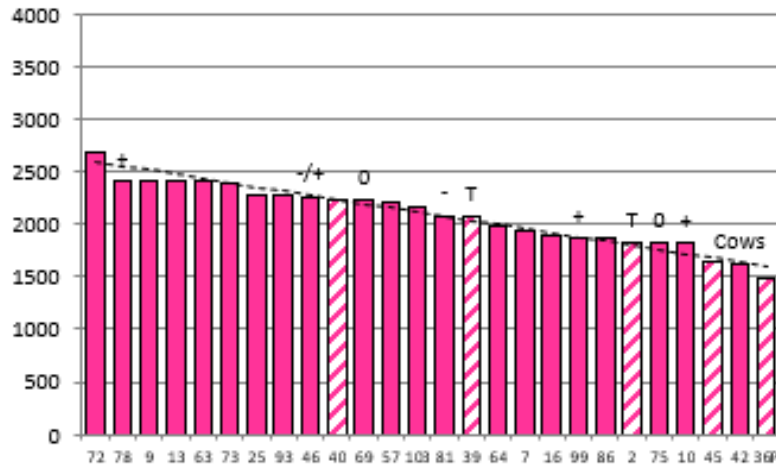
Principles of Feed management this week

Feed Quality	Quality continues to decline with the continuing lack of moisture. Still a large variation between paddocks but growing number of burnt off patches are present. Lots of urine patches in most paddocks. Pasture intake levels have reduced again this week with the decline in pre-graze pasture mass. Both standard herds are now being offered 9kg DM/cow/d pasture, the LI baleage 10.5kgDM/cow/d and the LI FB herd 12kgDM/cow/d based on the feed wedges. Will add DDG to the next batches of inshed feed to increase protein percent; aiming for a blend of 40% PKE, 30% barley & 30% DDG
Growth Rate Management	Current rotation length to be maintained. New grasses are now back in rotation and will be targeted for higher pre-graze covers as they will hold quality better. All will be topped post grazing to manage weeds and reduce the need for spraying. Looking to managing residuals but not over-graze paddocks to maximize growth heading into autumn. Soil temperature is tracking ahead of the same time last season (Figure 3) and season to date we have recorded 120 mm less rainfall than the 2021-22 season (Figure 4)
Nitrogen Strategy	Applications still suspended. Will require predicted rainfall event of at least 10 mm plus 30-50 mm follow-up to recommence application. With the cost of fertiliser we need to be getting the maximum response from all applications

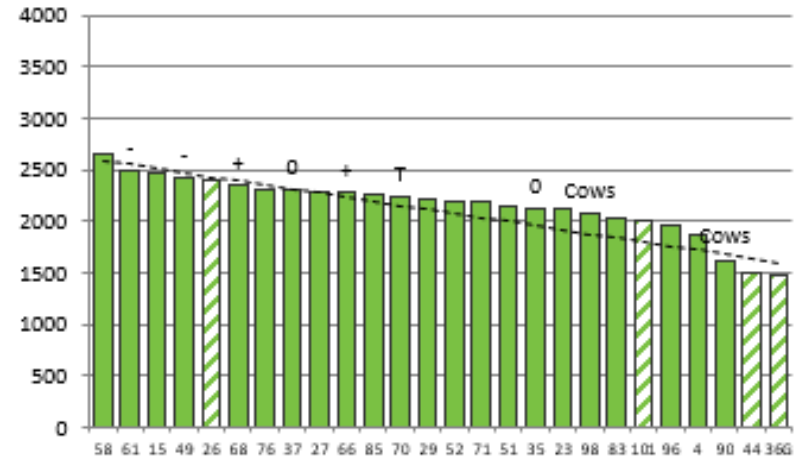
	Std brassica/baleage Pink	LI Baleage Blue	Std Fodder beet Green	LI Fodder beet Yellow
Quantity	Deficit	Deficit	Deficit	Deficit
Quality	Very dry in base, with variation across all paddocks	Very dry in base, with variation across all paddocks	Very dry in base, with variation across all paddocks	Very dry in base, with variation across all paddocks
Surplus Management	None	None	None	None
Deficit Management for coming week- kgDM (diff from last week)	8.8 (+4.0)	6 (-0.2)	8.8 (+4.0)	5.9 (+3.9)
Target Rotation Length (days)	39	37	39	38

Feed

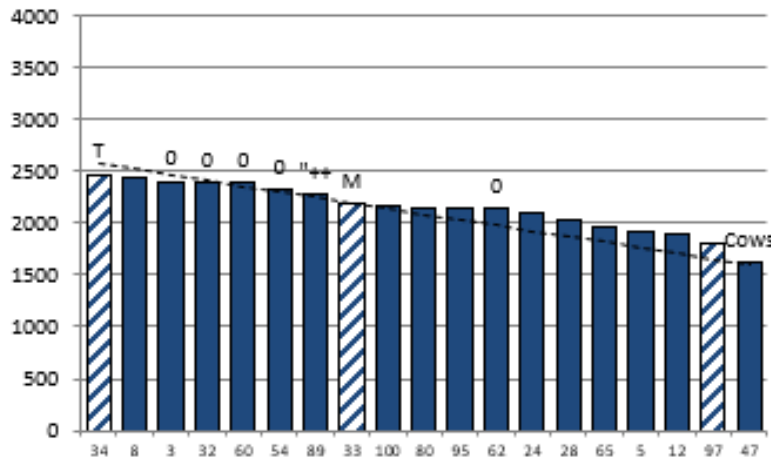
Standard Brassica/Baleage



Standard Fodder Beet



Lower Impact Baleage



Lower Impact Fodder Beet

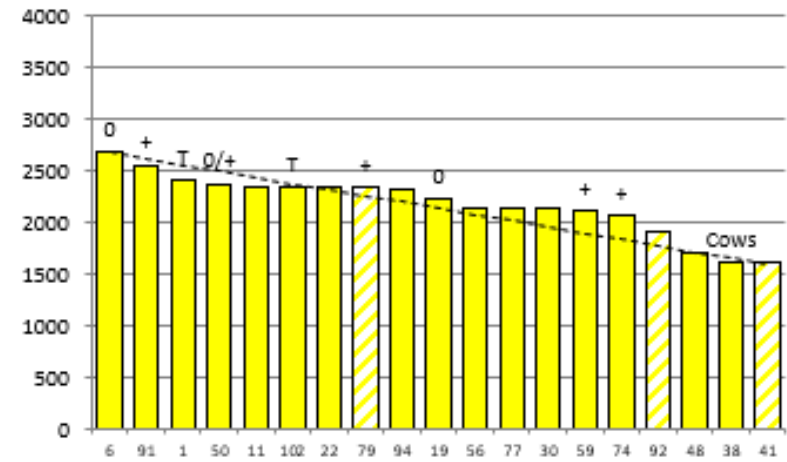


Figure 2: Feed Wedges as of 31st January

Feed

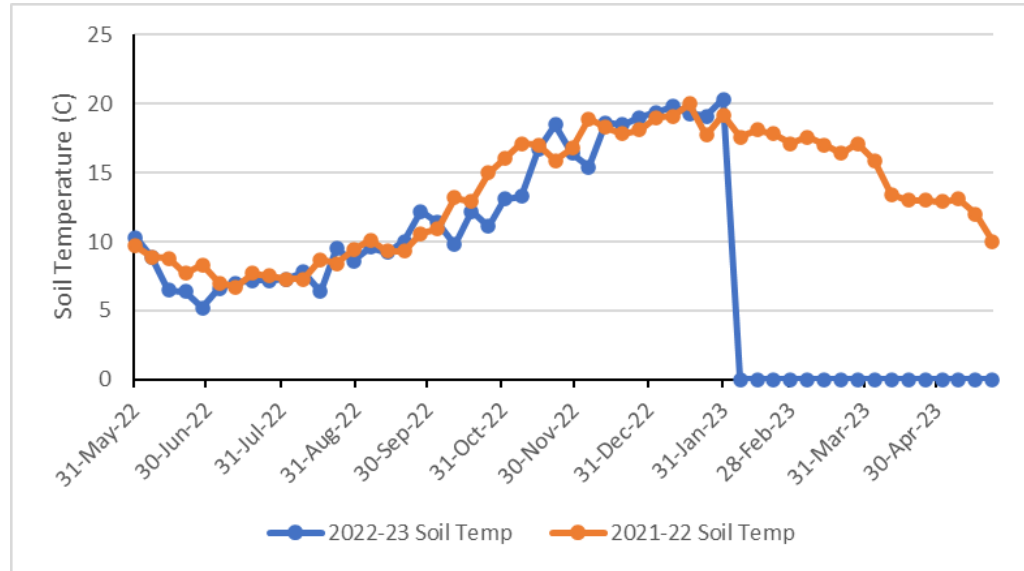


Figure 3: Average weekly soil temperature for 2022-23 compared to 2021-22

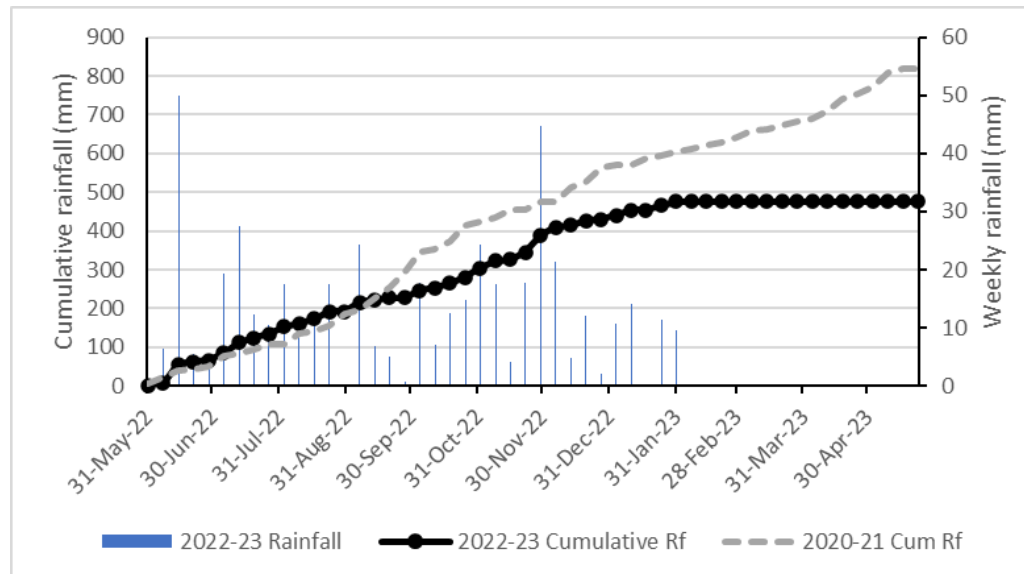


Figure 4: Cumulative rainfall for 2022-23 compared with 2021-22

Animals

Scanning Results

At a farm level (Figure 5) 6 week in calf rate has risen significantly compared to previous seasons, with significant increases for both standard herds. However, the LI Kale herd, while performing well on a milk production basis this season, have continued the downward trend in 6-week in calf rate since 2020. The reasons' for this reduction requires further investigation taking into consideration feeding levels, milk production, BCS trends etc before and during mating this season.

Final pregnancy numbers will be confirmed on the 25th of February.

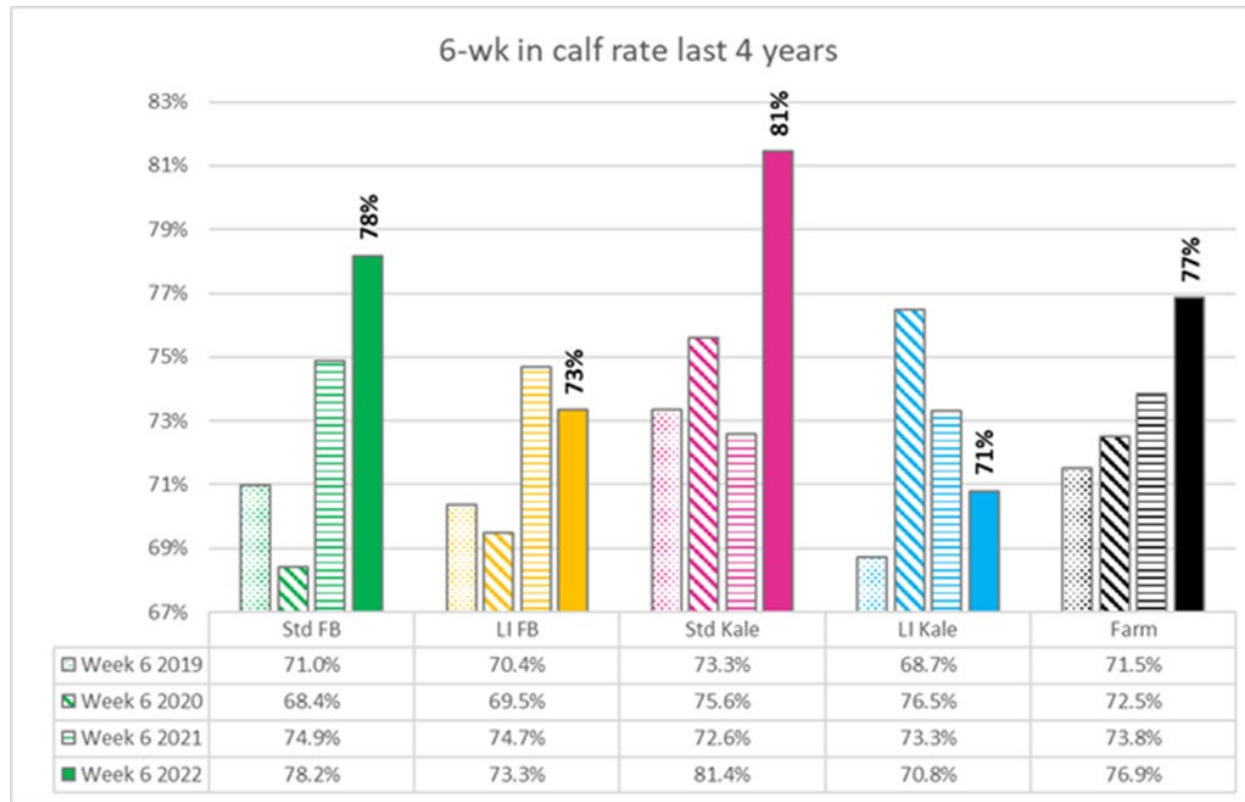


Figure 5: Predicted 6-wk in-calf rate comparison between herds since the 2019-20 season