

Weekly Farm Summary 25 January 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)	220	137	216	135
Pasture Stocking rate (current)	3.0	2.5	2.9	2.5
Winter Feed Milking supplement	Swede/Bale	Baleage	Beet 80 days	Beet 60 days
	In-shed feed 500kg/cow + silage as required			
Average Cover	2140	2229	2254	2345
Average Growth	23	26	25	26
Target rotation length	39	37	39	38
Last week act rotation (d)	33	29	29	32
Last week supp (kg DM/cow)	6.4	6.1	6.6	3.1
Average BCS	4.4	4.4	4.3	4.4
% of herd on priority feeding	6%	4%	3%	2%
Milk yield (L/cow)	20.2	20.5	18.7	20.1
Milk yield (kgMS/cow)	1.83	1.88	1.72	1.82
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)	552	368	495	369
YTD MS/cow	301	320	296	315
YTD MS/milk ha (YTD MS/farm ha)	904 (807)	795 (719)	886 (791)	773 (699)

Business Area	Current Status
Milk Production	Milk production remains stable this week even with the challenging feeding conditions. Volume has dropped but milksolids has increased. Protein % has held while fat% has increased. Increased dietary fibre from the increased amount of baleage and PKE being fed, or mobilisation of body reserves are possible reasons for the lift in fat%.
Pasture & Feed	Pasture quality & quantity continues to be hugely variable within and between paddocks across the farm making estimation of pasture mass challenging. Urine patches are prominent in all systems. Post grazing residuals are being managed on a paddock-by-paddock basis as we balance the risk of substitution versus overgrazing which could limit future regrowth.
Animals	Scanning this week will confirm which cows are to move to OAD to achieve dry off BCS targets. Cows have been identified for either preferential feeding in shed or for the ones already at target BCS restricted in-shed feeding to control weight gain heading towards dry off.
Environment	Effluent pond capacity has reached levels where effluent applications will cease until levels rise again.
Wintering	Purchased winter baleage is due to arrive on farm over the coming weeks.
People	Interviews are underway for a new research technician to replace Nicole who is leaving us to start a PhD in the DairyNZ led plantain potency and practice programme.
Research	Botanicals are being completed in every paddock to measure clover content. This is the 5 th season of tracking clover content within the systems.

Milk Production

Principles of Milk Production management this week

Milk Production	Although feed levels are being challenged with the dry period, milk production is still up 16% on last season, with daily production still sitting 150 kgMS/day higher than this time last season.
Key Influences on Milk Production	The volume of feed being offered to the cows is having the greatest impact on production, with underfeeding having an immediate impact on one the Std FB herd this week. Due to the difficulty assessing pasture quantity with the dry conditions, feeding levels are being assessed daily and adjusted when required to ensure intakes remain at target levels.
Cow Management	More cows move onto OAD as we look to gain or hold BCS heading towards the end of the season. 3 in 2 milking still not possible due to implications on the impending heat stress trial.

	Std brassica/baleage Pink	LI Baleage Blue	Std Fodder beet Green	LI Fodder beet Yellow
kg Milksolids per cow this week / (last week)	1.83 (1.74)	1.88 (1.95)	1.72 (1.71)	1.82 (1.88)
kg Milksolids per ha this year / (same time last year)	904 (807)	795 (719)	886 (791)	773 (699)
% Var kg Milksolids per ha Season per ha to date vs last season to date	9.6	8.3	14.4	12.2
No. of Cows needing preferential feeding (% herd)	13 (6)	5 (4)	6 (3)	3 (2)
Animal Health peculiarities	None	None	None	None

Milk Production

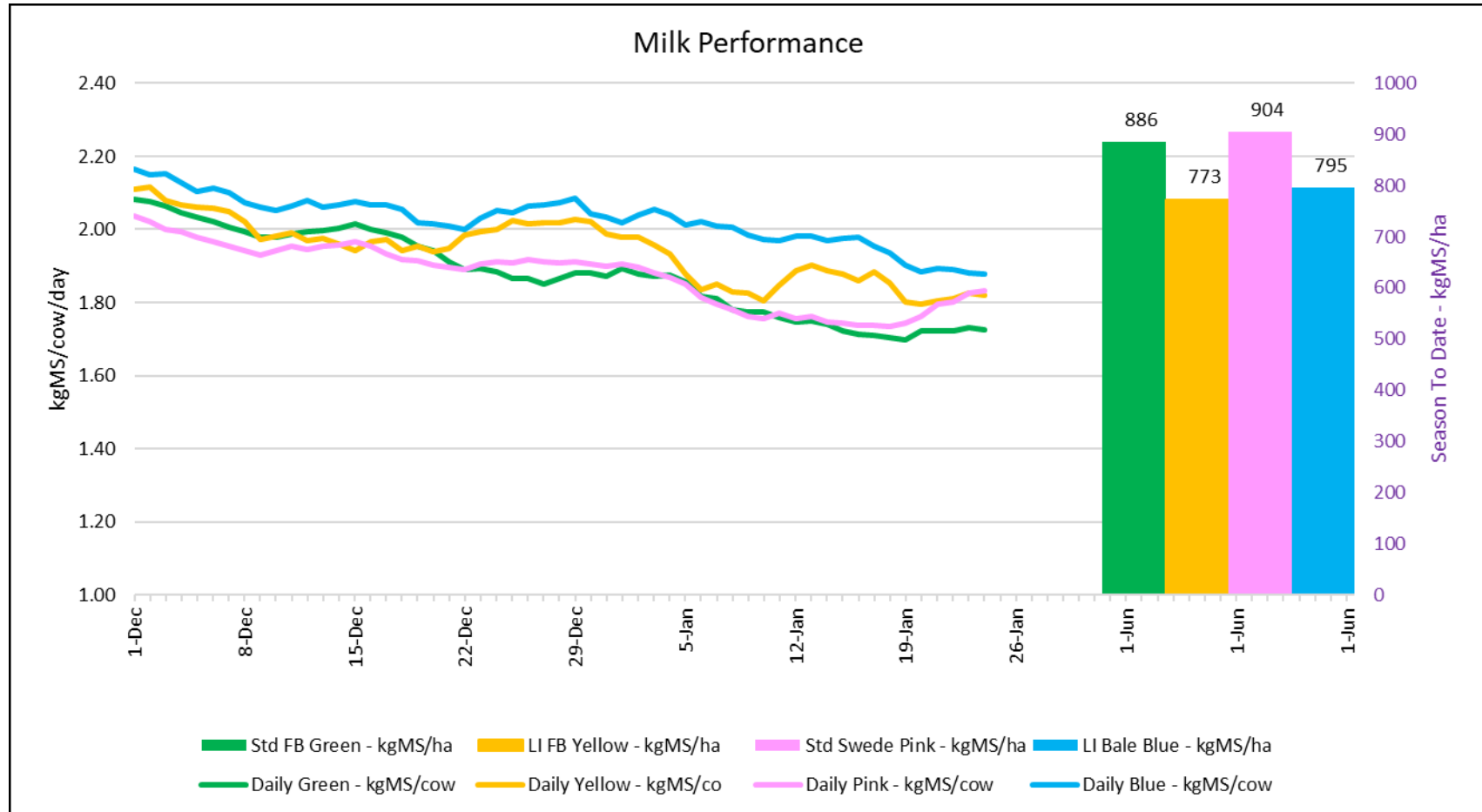


Figure 1: Milk solids production (/cow/day) plus cumulative season production (kg/ha)

Feed

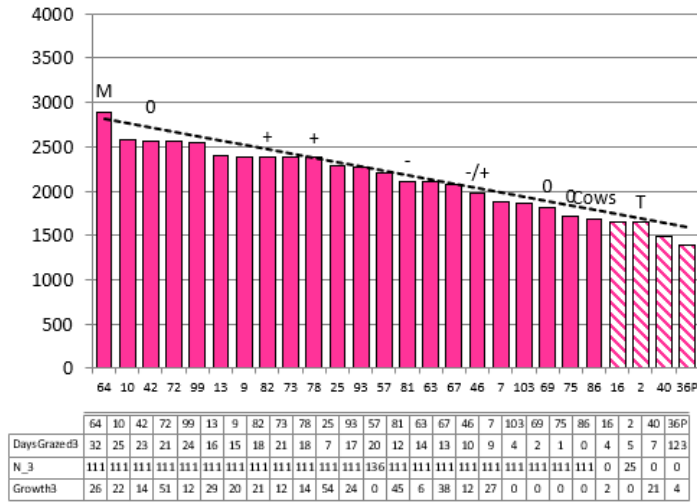
Principles of Feed management this week

Feed Quality	Most paddocks are quite uneven with an increase in the number of urine patches making it hard to get an accurate estimate with the plate meter of what feed is available. The new grasses remain vegetative and free from dead matter in the base while other paddocks have hardened off significantly. Measures have been put in place to ensure over-grazing doesn't occur and limit regrowth.
Growth Rate Management	The current rotation length will remain in play as any growth opportunity needs to be protected. In shed feeding levels to be capped at 2.5 kg/cow/day and silage/ baleage levels increased to make up the planned supplement intakes due to limited in-shed contracted feed availability and an abundance of baleage.
Nitrogen Strategy	No change due to dry conditions. Effluent applications to also cease as pond levels get too low.

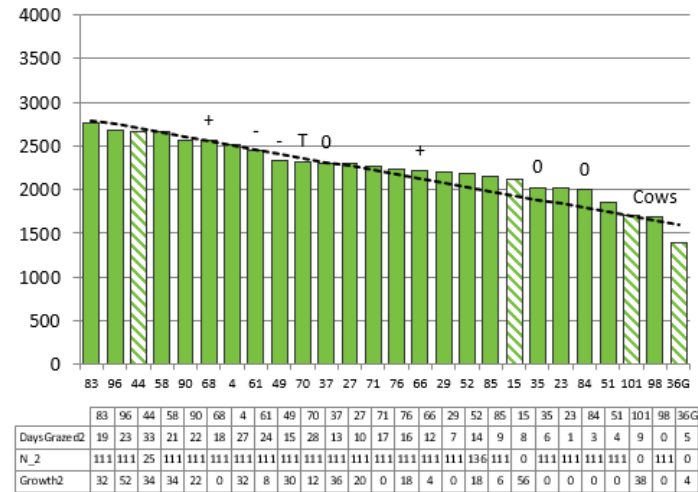
	Std brassica/baleage Pink	LI Baleage Blue	Std Fodder beet Green	LI Fodder beet Yellow
Quantity	Deficit	Deficit	Deficit	Deficit
Quality	Very dry in base, with variation across all paddocks	Very dry in base, with variation across all paddocks	Very dry in base, with variation across all paddocks	Very dry in base, with variation across all paddocks
Surplus Management	None	None	None	None
Deficit Management for coming week- kgDM (diff from last week)	8.3 (1.8)	6.4 (0.2)	7.6 (1)	3.5 (0.4)
Target Rotation Length (days)	39	37	39	38

Feed

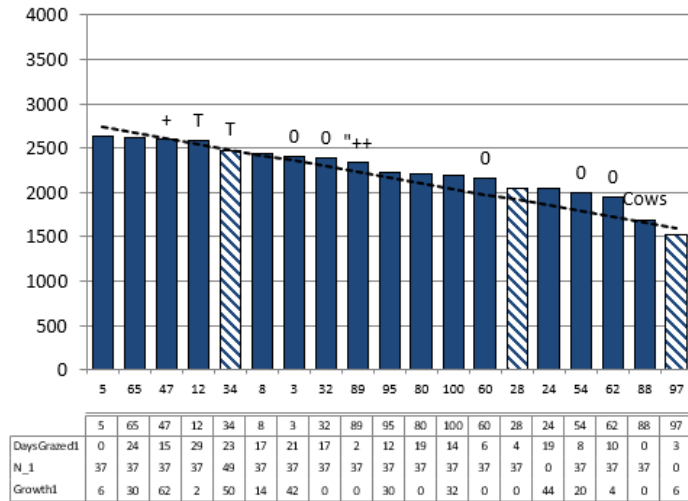
Standard Brassica/Baleage



Standard Fodder Beet



Lower Impact Baleage



Lower Impact Fodder Beet

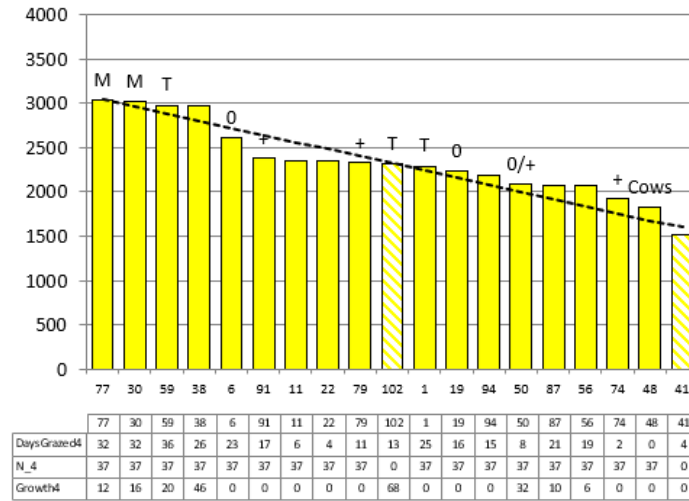


Figure 2: Feed Wedges as of 24th January 2023

Feed

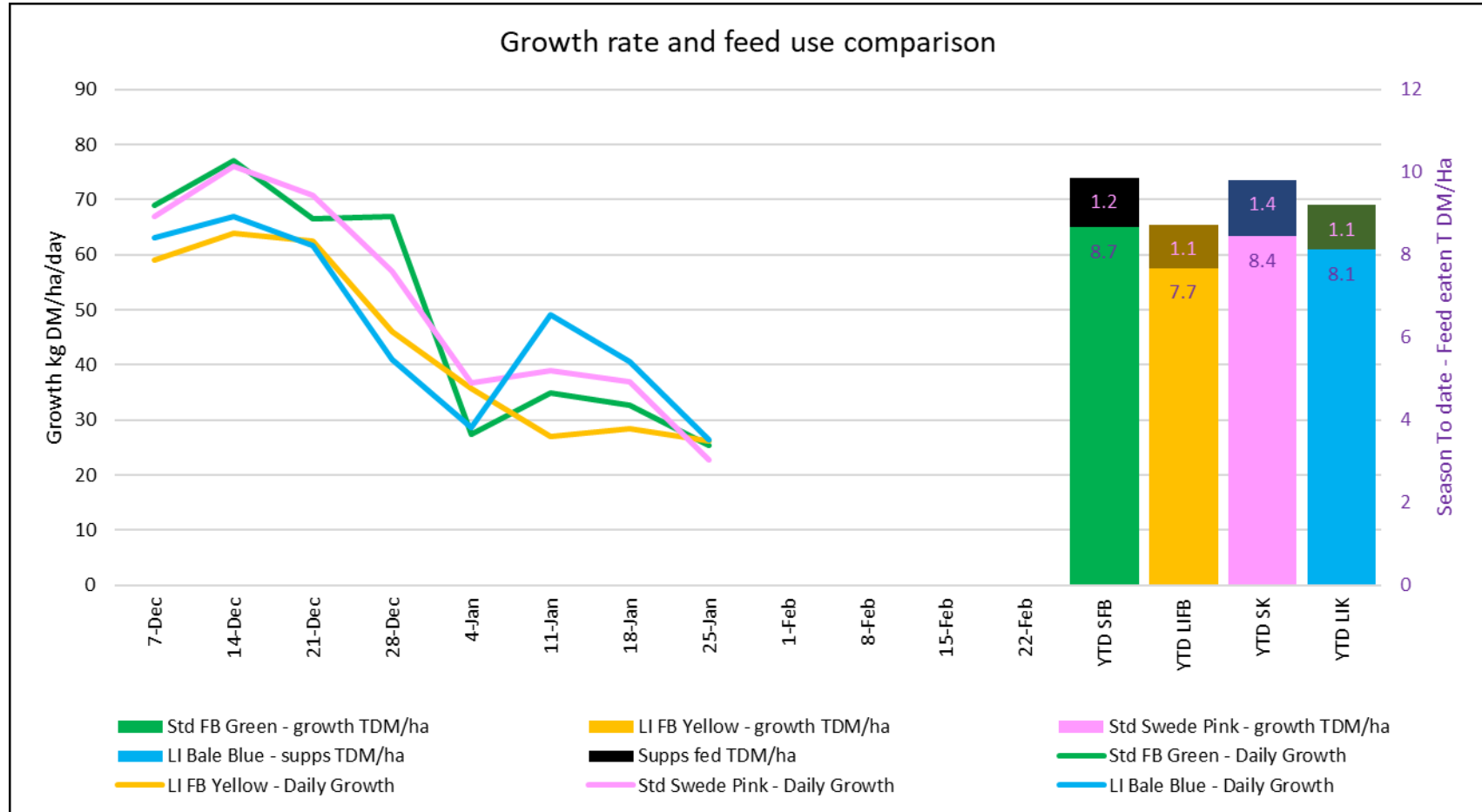


Figure 3: Weekly growth rate (kgDM/ha/d) & YTD feed use

Animals

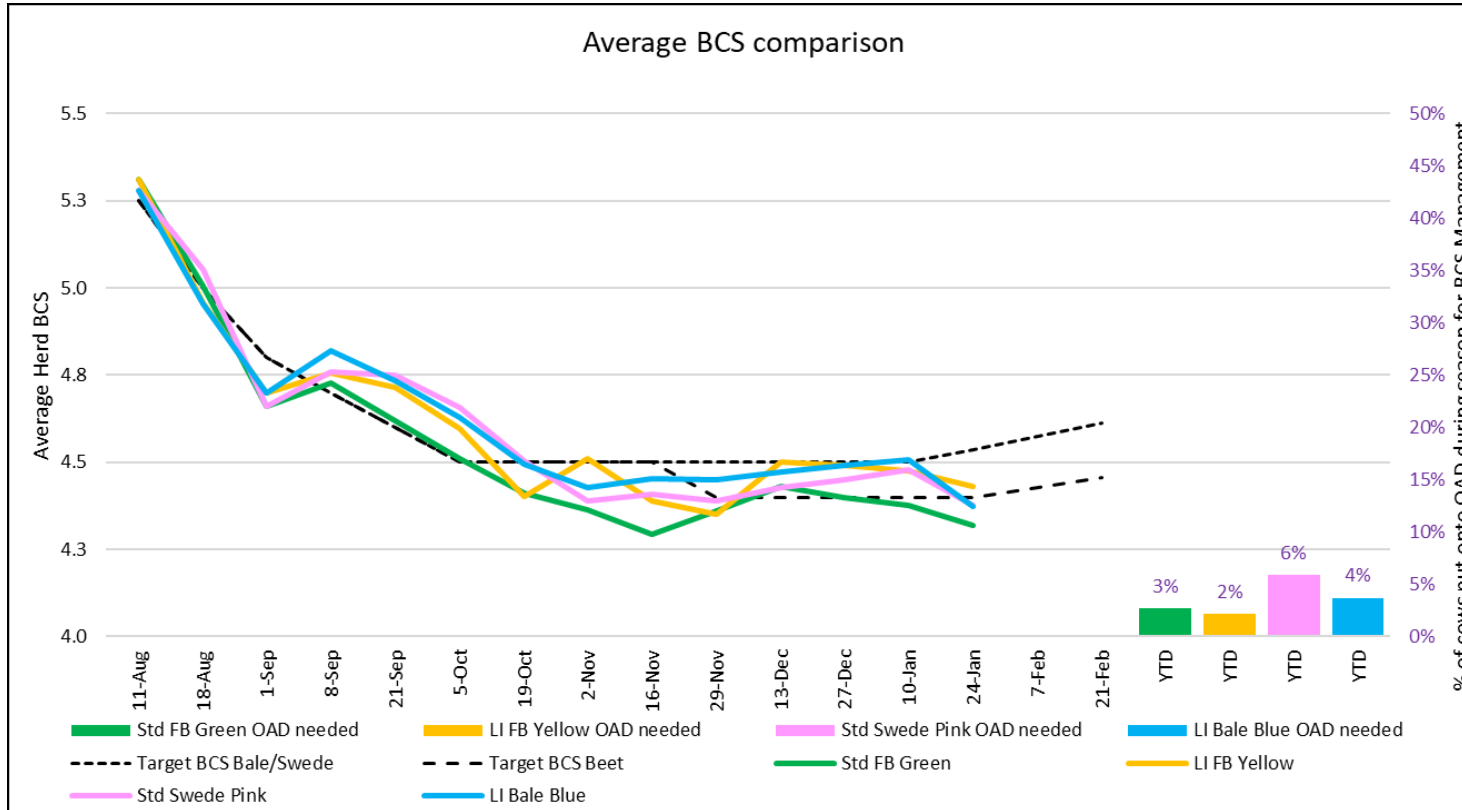


Figure 4: Fortnightly BCS trends for the season

Animals

Setting up for winter	With the first pregnancy scan completed and early calving dates confirmed BCS data has been used to identify 97 cows that will move to OAD with priority feeding to ensure pre-winter BCS targets are achieved.
Managing feed resources	Priority cows i.e., light conditioned and early calving will be offered 4.4 kg/cow/day in shed while cows already at or above dry off BCS will be offered 0.5kg/cow/day to ensure they are not over conditioned heading into winter.

	Std brassica/baleage	LI baleage	Std fodder beet	LI fodder beet	Total
Twice a day	181	121	179	123	604
OAD	37	15	33	12	97
Cows	21	9	20	5	55
First calvers	16	6	13	7	42

Table 1: Numbers in each herd on twice a day or once a day (OAD) milking for BCS management