

Weekly Farm Summary 9th December 2022

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

	Std Brassica/ Baleage Pink	LI Baleage Blue	Std Fodder beet Green	LI Fodder beet 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)	222	133	215	134
Pasture Stocking rate (current)	3.0	2.4	2.9	2.4
Winter Feed Milking supplement	Swede/Bale	Baleage	Beet 80 days	Beet 60 days
	In-shed feed 500kg/cow + baleage as required			
Average Cover	2370	2378	2463	2465
Average Growth	67	63	68	67
Target rotation length	22	26	22	26
Last week act rotation (d)	22	26	22	25
Last week supp (kg DM/cow)	2.0	2.5	1.9	1.8
Average BCS	4.4	4.5	4.4	4.4
% of herd on priority feeding	7%	6%	7%	2%
Milk yield (L/cow)	22.1	23.5	22.1	23.0
Milk yield (kgMS/cow)	1.97	2.12	2.02	2.06
Nitrogen Cap kgN/ha/yr	180	50	180	50
% Nitrogen used (kgN/ha) YTD	42% (76kg)	52% (26kg)	43% (77kg)	44% (22kg)
Effluent N YTD	8	8	8	5
Profit/ha comp to Control	\$0	\$0	\$0	\$0
YTD supp (kg DM/cow)	385	251	338	283
YTD MS/cow	211	222	209	222
YTD MS/milk ha (YTD MS/farm ha)	635 (567)	553 (500)	624 (558)	543 (491)

Business Area	Current Status
Milk Production	Production is relatively stable around 2 kg MS/cow/day for all herds. Operational issues with in-shed feed over weekend may have affected results. Milk solids percentages rising slightly.
Pasture & Feed	Still some seed head present but has mostly been managed over the last three weeks with strategic mowing. Overestimating pasture yield with the plate due to seedhead and hardened stems in the base of the pasture. Growth rates are still above demand, but more significantly for the Lower Impact herds. Differences emerging between farmlets in pasture supply with FB herds predicted to need less supplement in the next week and dropping paddocks for conservation.
Animals	No significant animal health issues to report. Latest blood sampling results show magnesium levels are at a good level and iodine & copper are improving with the increase in inline supplement levels. Mating continues to go well.
Environment	Started round 4 of fertiliser for the Std farmlets. Round 3 for LI farmlets is continuing.
Wintering	Post emergence pasture spray booked for 3 new grass paddocks. Contractor booked to redrill missing strips in new grass paddock. Weed and insecticide spray booked for all conventional fodder beet paddocks.
People	Reviewing some operational practises on farm. Looking at starting an hour later with cups on @ 6:00 am & 2:30 pm and combining that with some other potential time saving initiatives for e.g. 36hr grazing, use of back latches.
Research	Discussions occurring relating to potential research on heat stress this summer, monitoring respiration rates and comparison with monitoring devices.

Milk Production

Principles of Milk Production management this week

Milk Production	All herds have declined slightly but maintaining around 2 kg MS/cow/day. Continue to focus on quality to maintain production levels and minimize the decline.
Key Influences on Milk Production	Production changes continue to be most likely driven by pasture quality as it progresses through the reproductive phase and quality (energy & protein) declines. Operational issues with one silo resulted in cows not receiving all their supplement for a few milkings over the weekend. In-shed feeding continues to provide minerals and a high-quality feed option.
Cow Management	Milking TAD, continuing to manage lighter BCS cows below 4 on OAD milking with priority in-shed feeding, of which 1 cow remains for non-cycling reasons. Latest BCS is 4.4 for each herd

	Std brassica/baleage Pink	LI Baleage Blue	Std Fodder beet Green	LI Fodder beet Yellow
kg Milksolids per cow this week / (last week)	1.97 (2.04)	2.12 (2.15)	2.02 (2.08)	2.06 (2.11)
kg Milksolids per ha this year / (same time last year)	635 (567)	553 (500)	624 (558)	543 (491)
% Var kg Milksolids per ha Season per ha to date vs last season to date	11.7	8.4	16.6	12.7
No. of Cows needing preferential feeding (% herd)	15 (7)	8 (6)	15 (7)	3 (2)
Animal Health peculiarities	None	None	None	None

Milk Production

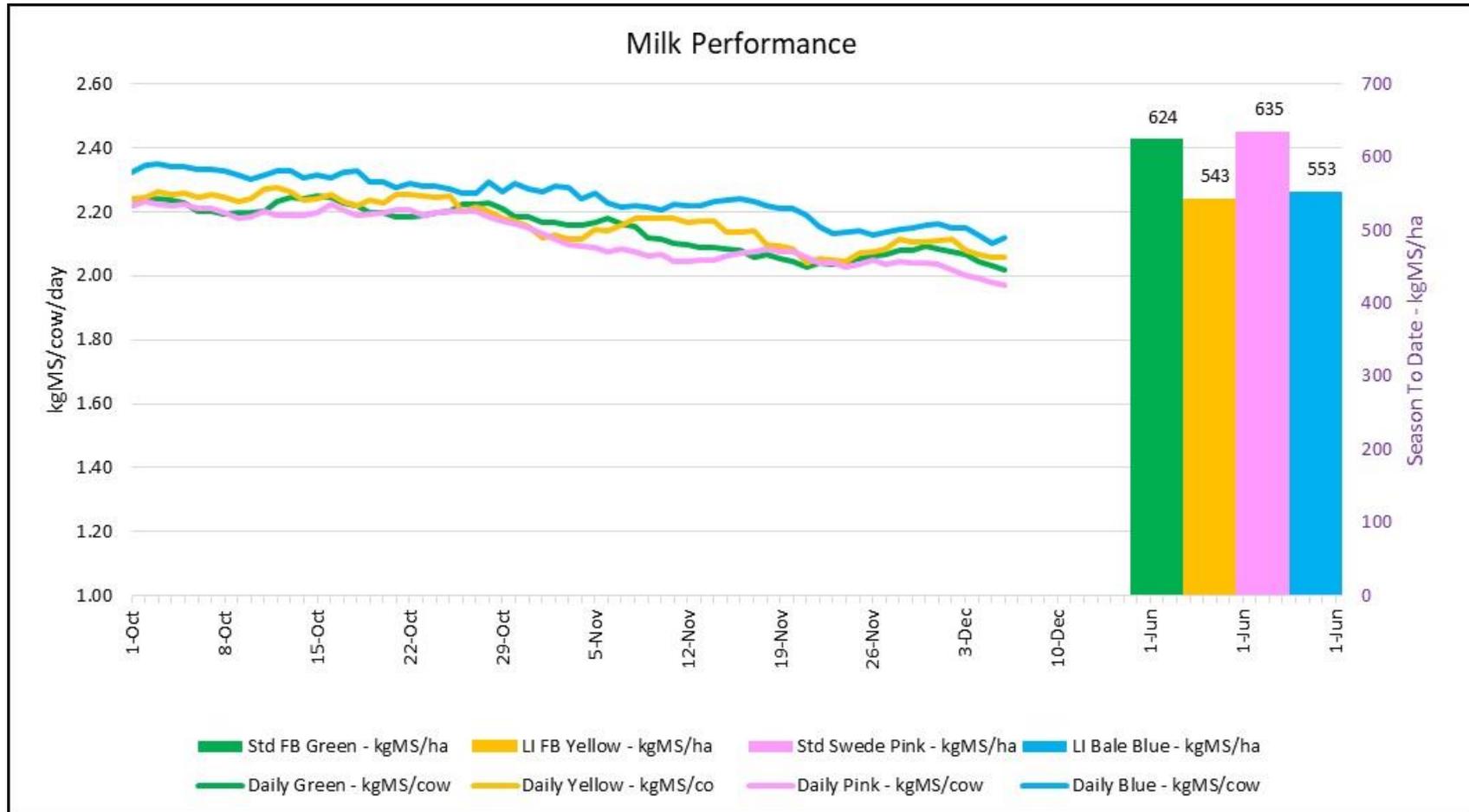


Figure 1: Milk solids production (/cow/day) plus cumulative season production (kg/ha)

Body condition score

As at 29th November 2022 – updated fortnightly

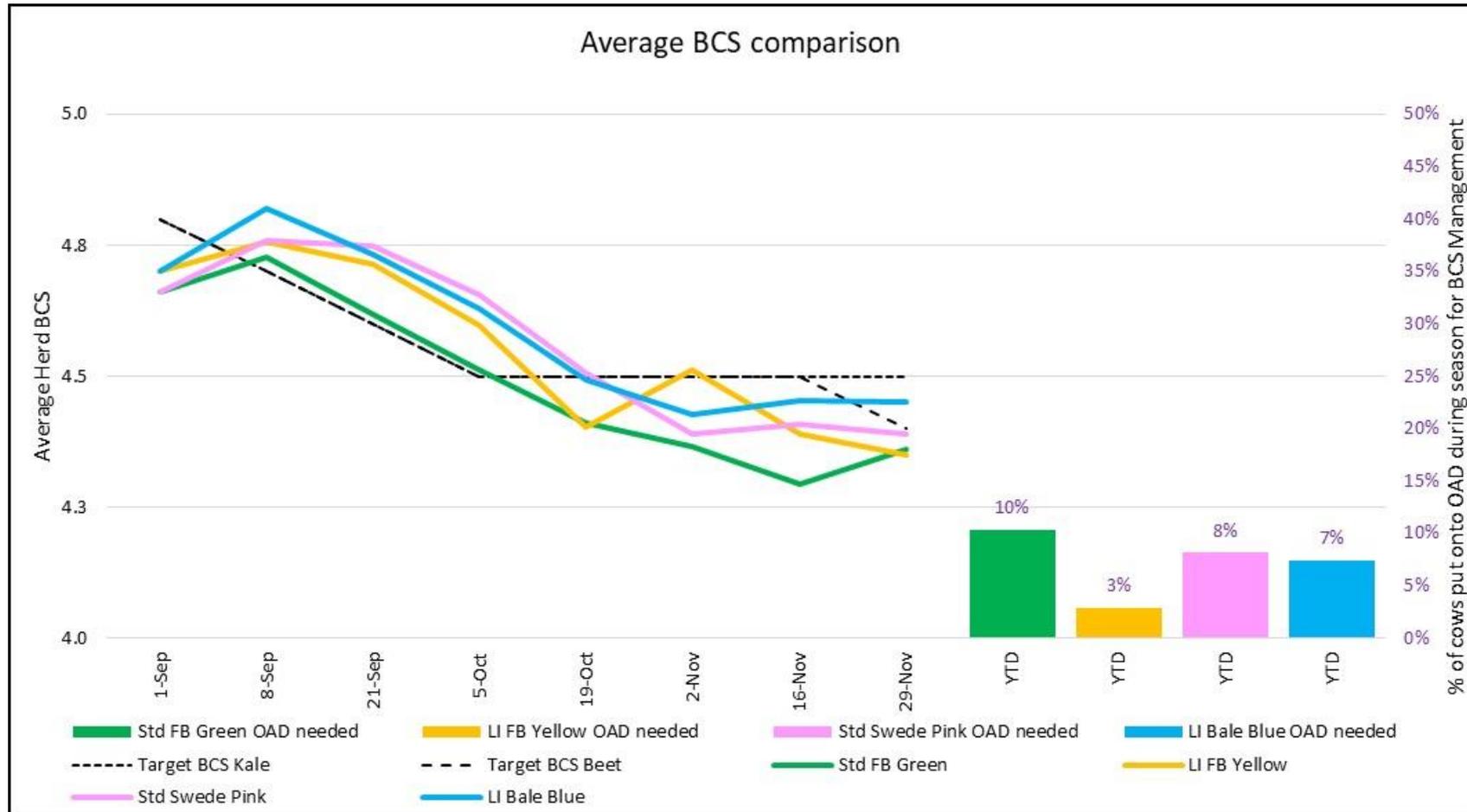


Figure 2: Fortnightly BCS trends and percentage of the herd requiring OAD milking season to date

Feed

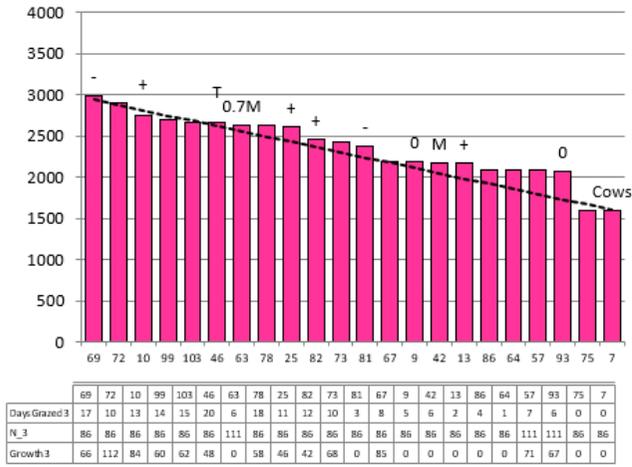
Principles of Feed management this week

Feed Quality	The presence of seed head is still evident, but not to the same degree as previous weeks. Pasture management strategy has worked well with the farm looking very tidy with lots of leafy pasture, however pasture quality is continuing to decline with average ME for the last samples only 10.7 MJ/kg DM, 23.5% crude protein and 51.4% NDF. Will strategically manage any bad seed head paddocks but take a slightly conservative approach to the amount of topping as we head into summer.
Growth Rate Management	Remaining on our pasture quality management strategy, stepping over any paddocks greater than pre-graze target for baleage and topping to meet residual. Have utilized up to 2.5 kg in-shed feed/cow/day to support this strategy. Have high quality silage or increasing in-shed feeding to fill gaps if we have been too aggressive and find ourselves in a pasture deficit.
Nitrogen Strategy	Std herds on 4 th round of Nitrogen applications (25 kg N/ha), Third round applications (12.5 kg N/ha) for LI have commenced

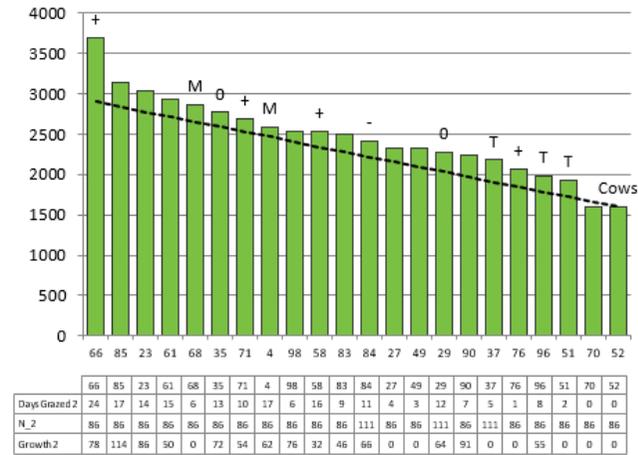
	Std brassica/baleage Pink	LI Baleage Blue	Std Fodder beet Green	LI Fodder beet Yellow
Quantity	Surplus	Surplus	Surplus	Surplus
Quality	Stem elongation & some stalky base	Stem elongation & some stalky base	Stem elongation & some stalky base	Stem elongation & some stalky base
Surplus Management	None	None	X1 pdk to conserve	X 1pdk to conserve
Deficit Management - kgDM (diff from last week)	3.9 (1.9)	2.6 (0.1)	1.9 (0)	2.3 (0.5)
Target Rotation Length (days)	22	26	22	26

Feed

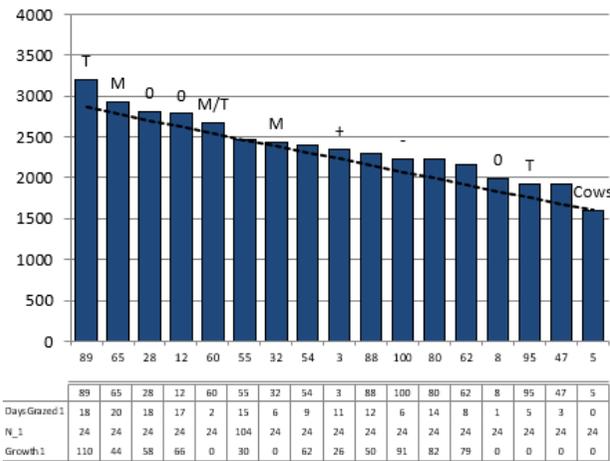
Standard Brassica/Baleage



Standard Fodder Beet



Lower Impact Baleage



Lower Impact Fodder Beet

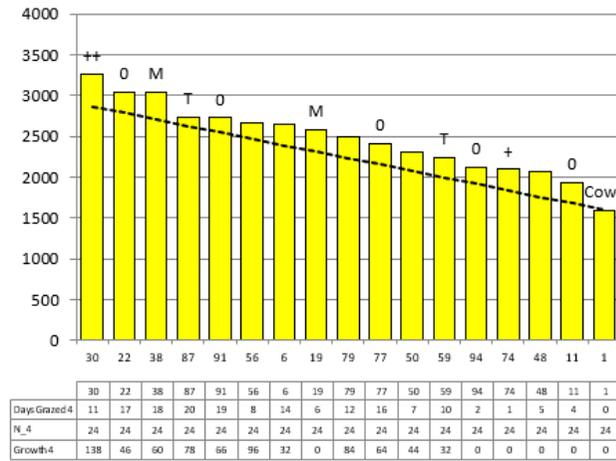


Figure 3: Feed Wedges as of 6th December 2022

Feed

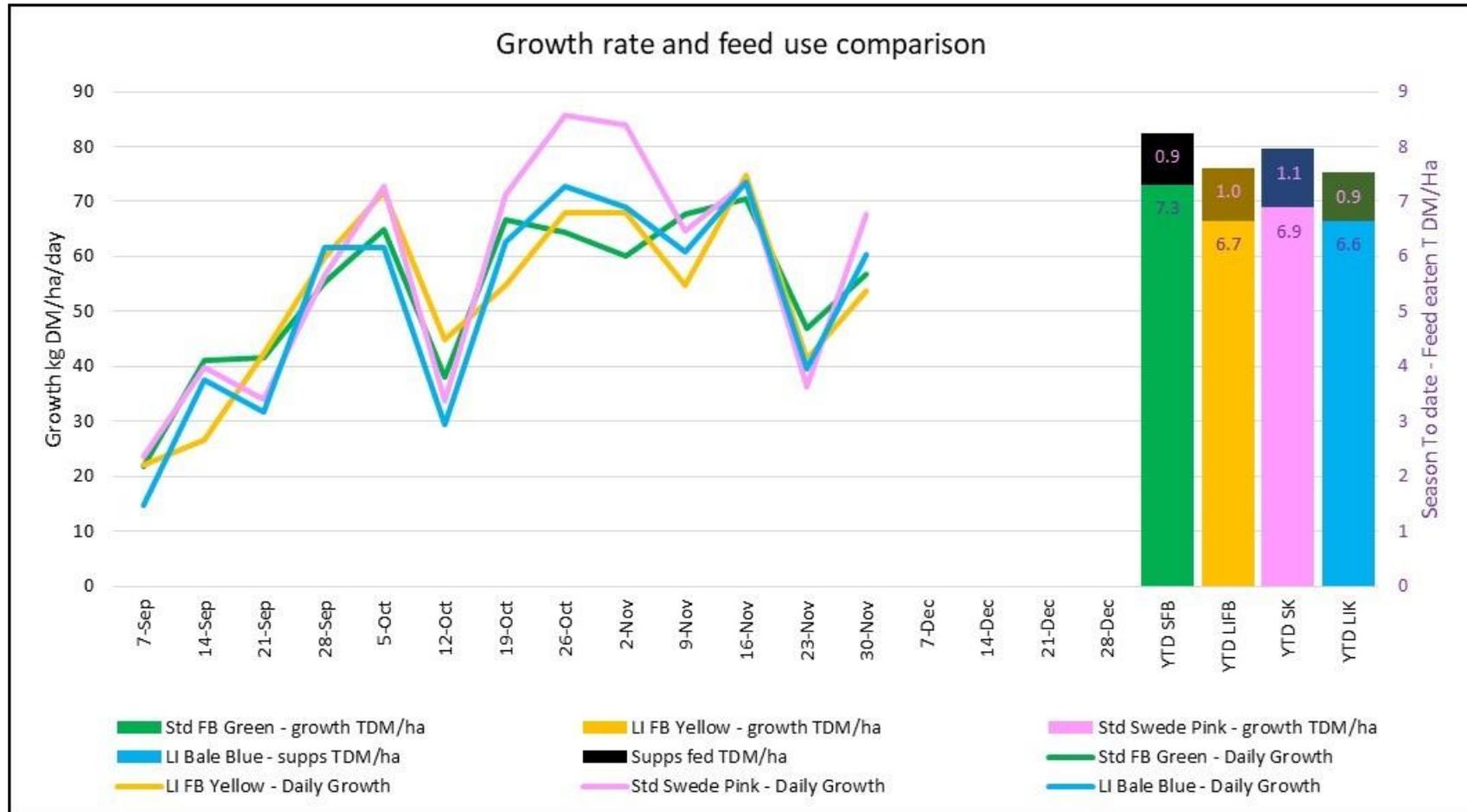


Figure 4: Weekly growth rate (kgDM/ha/d) & YTD feed use

Pasture Quality Trends

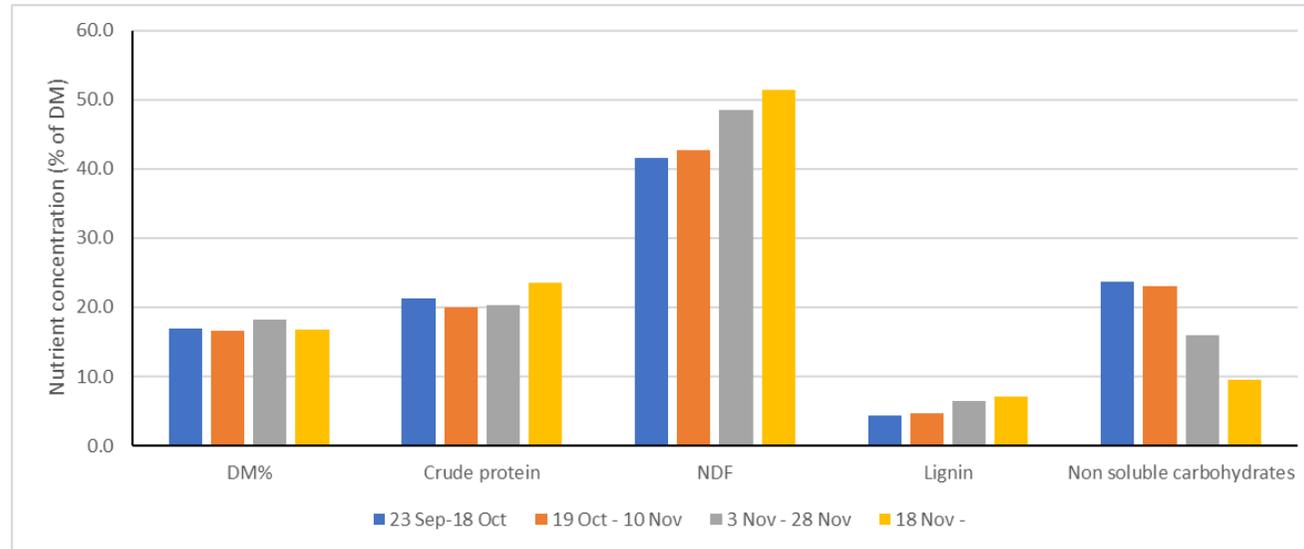


Figure 5: Pasture quality trends in monitor pastures at each grazing from the second round

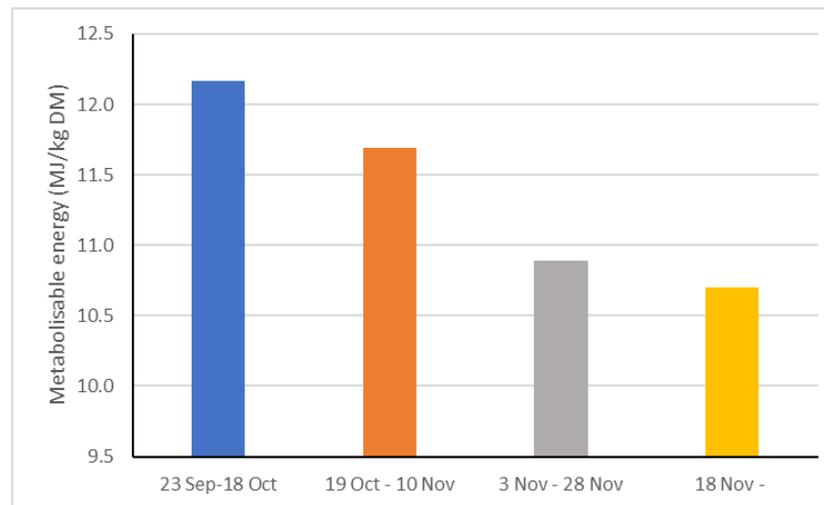


Figure 6: Pasture ME trends from monitor pastures at each grazing from the second round