Weekly Farm Summary 7th April

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

	Std Kale Pink	LI Kale Blue	Std FB Green	LI FB Yellow
Farmlet area including wintering	75.0	72.1	75.0	69.2
Peak cow numbers	195	162	194	162
Milking Area	64.1	61.1	63.5	61.2
Current Herd size (cows)	170	138	166	137
Pasture Stocking rate	2.7	2.3	2.6	2.3
Winter Feed Milking supplement	Kale In-Shed feed		Fodder beet Fodder beet/Baleage	
Average Cover	2157	2014	2158	2085
Average Growth	21	16	20	17
Target rotation length	44	42	44	42
Last week act rotation (d)	50	43	51	42
Last week supp (kg DM/cow)	9.5	7.8	9.3	7.0
Average BCS	4.67	4.48	4.42	4.46
% of herd on priority feeding	25%	22%	8%	12%
Milk yield (L/cow)	13.3	12.6	12.0	11.7
Milk yield (kgMS/cow)	1.38	1.26	1.31	1.24
Nitrogen Cap kgN/ha/yr	**193**	**50**	**193**	**50**
% Nitrogen used (kgN/ha) YTD	86% (166kg)	112% (56kg)	81% (156kg)	112% (56kg)
Effluent N YTD	12	11	18	19
Profit/ha comp to Control	$0	-$683	-$1,104	-$1,074
YTD supp (kg DM/cow)	725	560	595	539
YTD MS/cow	371	371	347	349
YTD MS/ha	1,140	993	1,062	936

Business Area	Current Status
Feed	Average pasture cover has held this week, however there are a lot of external factors driving this such as rotation length (40+ days) and level of supplement being fed. Pasture quality samples collected last week tested at 11-11.3MJME/kg DM.
Milk Production	Cows have settled well into OAD milking after 10 days. Volumes continue to be variable, but composition has increased. Milking cows out fully is critical on OAD as is minimising mastitis risk; we are now stripping one quarter every milking.
People	Performance reviews being completed for the management team this week. Focus being put on staff wellbeing through the dry. We are working hard on creating an environment where the team are comfortable sharing their concerns.
Animals	As a result of last week's BCS, there are 13 cows that will be dried off this week to ensure BCS targets can be hit before they go onto crop; high BCS, low producing cows from all herds have also had their in-shed feed removed.
Environment	Nitrogen has been applied to both the standard and LI farmlets this week following the 25 mm of rain earlier in the week. Effluent has not been applied due to low pond levels, however with more rainfall forecast this is likely to start again.
Wintering	Some clubroot has been observed in the first-year swedes at the support block, highlighting the importance around not double cropping swedes.
Research	Blood, urine, faeces, pasture & milk samples were collected by the technicians this week for N analysis. Dagmar Elliot a technician from Hamilton came down to help.

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Feed

Principles of Pasture Management this week

Feed Quality & Quantity	Pasture quality is holding but we are still short on quantity The FB herds are being offered 1.5kg FB/cow/day and this is now being grazed in the paddock rather than lifting and feeding on pasture. More lucerne baleage has arrived so this will replace some of the pasture baleage that was being fed In-shed feeding continues at the same rates as last week.
Growth Rate Management	Average pasture cover tracking against budget for 3 of the 4 farmlets, however the LI Kale herd has dropped below the target line. Growth is expected to improve over coming weeks following the N applications and some rain, however it will take a couple of weeks before we can start pulling back on supplement allocation.
Nitrogen Strategy	N applications restarted this week with the LI farmlets getting their normal rate of 15 units of N/ha. The application rate for the standard farmlets was reduced to 20 kg /ha based on time left in the season to capture the response and increased mineralised N in the soil following the dry. Results from this application are expected in 10/14 days, however this will depend on the amount of follow up rain.

	Standard Kale Pink	**Low Impact Kale Blue**	**Standard Fodder beet Green**	**Low Impact Fodder beet Yellow**
Quantity	Growth 77% of demand	Growth 69% of demand. APC slipped for this farmlet	Growth 63% of demand	Growth 77% of demand
Quality	New grasses holding quality, Samples have protein at 16%	New grasses holding quality, others very dry	New grasses holding quality, Samples have protein at 16%	New grasses holding quality, others very dry
Surplus Management	None	None	None	None
Deficit Management	3.0 kg inshed (same next wk) 3.3 kg DM baleage	3.0 kg inshed (same next wk) 2.4 kg DM baleage	2.2 kg inshed (same next wk) Baleage 3.1 kg/cow/day Fodder beet 1.2 kg/cow/day	2.2 kg inshed (same next wk) Baleage 3.8 kg/cow/day Fodder beet 1.2 kg/cow/day
Rotation Length	50 days	43 days	50 days	42 days

Milk Production

Principles of Milk production management this week

Milk Production	OAD continues and will for the remainder of the season. Cows are being milked out well with an additional person floating at milkings now to help with stripping out cows, reattaching cups etc. Milk solids fluctuated last week with the change to OAD however this has now stabilised. Milk solid% has increased this week.
Key influences on milk production	The cows are getting sensitive to any pasture underfeeding or bad quailty with the LI Kale herd dropping off noticeably after grazing a lower quailty paddock. Targetted pasture intake is now sitting at 9-10kg's so the high quality supplementary feed is helping hold production at the moment. As the pasture component of the diet decreasing we observed a lift in FEI, however both vats are now back in the "green" for FEI.
Cow Management	In-shed feed has been removed from cows across all herds that have a BCS 5.5 or higher and are producing less than 8 litres/day. Remaining cull cows will continue to get in-shed feed to boost milk supply and reduce grazing demand in the paddock until they leave the farm. Six culls will leave the farm this weekend

	Standard Kale Pink	**Low Impact Kale Blue**	**Standard Fodder beet Green**	**Low Impact Fodder beet Yellow**
kg Milksolids per cow this week / (last week)	1.38/(1.41)	1.26 /(1.27)	1.32/(1.32)	1.24/(1.23)
kg Milksolids per ha this year / (this time last year)	1140/(1169)	993/(963)	1062/(1132)	936/(928)
Season to date compared to last year	Down 2.5% total milk Half paddock extra in grass this year affects KPI.	Up 3% total milk One paddock less in grass this year affects KPI.	Down 6.2% total milk	Up 1% total milk One paddock less in grass this year affects KPI.
Cows needing preferential feeding (% herd)	42 cows (25%)	30 cows (22%)	13 cows (8%)	22 cows (16%)
Animal health peculiarities	None	None	None	None

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Kale, Winters on kale - in-shed feed available. Fodder beet, winters on Beet, Beet as lactation supp.

Low impact (LI) limited Max 50kg N/ha/year vs Std 193kg N/ha/year

BCS at this time of year

Based on previous information collected from the farm we have a good idea of how much BCS can be gained over the winter period for the different crops and feeding levels.

We consistently achieve better BCS gain in the fodder beet herds so this is factored into our autumn drying off decisions. For every cow a BCS gain requirement is calculated, then based on potential winter gain, age and calving date a 1 June BCS target is determined.

Each fortnight we reassess each cows current BCS relative to 1 June target and make the necessary drying off decisions to maximise the chance of **ALL** cows achieving their target calving BCS.

Feeding regime	Crop kg/cow/day	Baleage kg/cow/day	Total kg DM offered	BCS gain/month achieved
Kale low gain	10.8	4.5	15.3	0.15
Kale high gain	11.8	4.7	16.5	0.30
Beet low gain	9	4.2	13.2	0.30
Beet High Gain	10.8	3.6	14.4	0.45

An example of a cow getting dried off, BCS 4.0 in comfortable milking condition, but needs to be at BCS 5.5 and calving early August. With our high weight gain ration on Kale, she will only put on around 0.4 BCS over winter, meaning she needs to be at 5.1 by first of June.

So, in the next 7 weeks she needs to gain 1.1 BCS, and we know she isn't gaining at that rate in the milking mob. We will dry her off now, as we know as a dry cow fed like a milker we can get that weight on before winter, setting her up right for next season.

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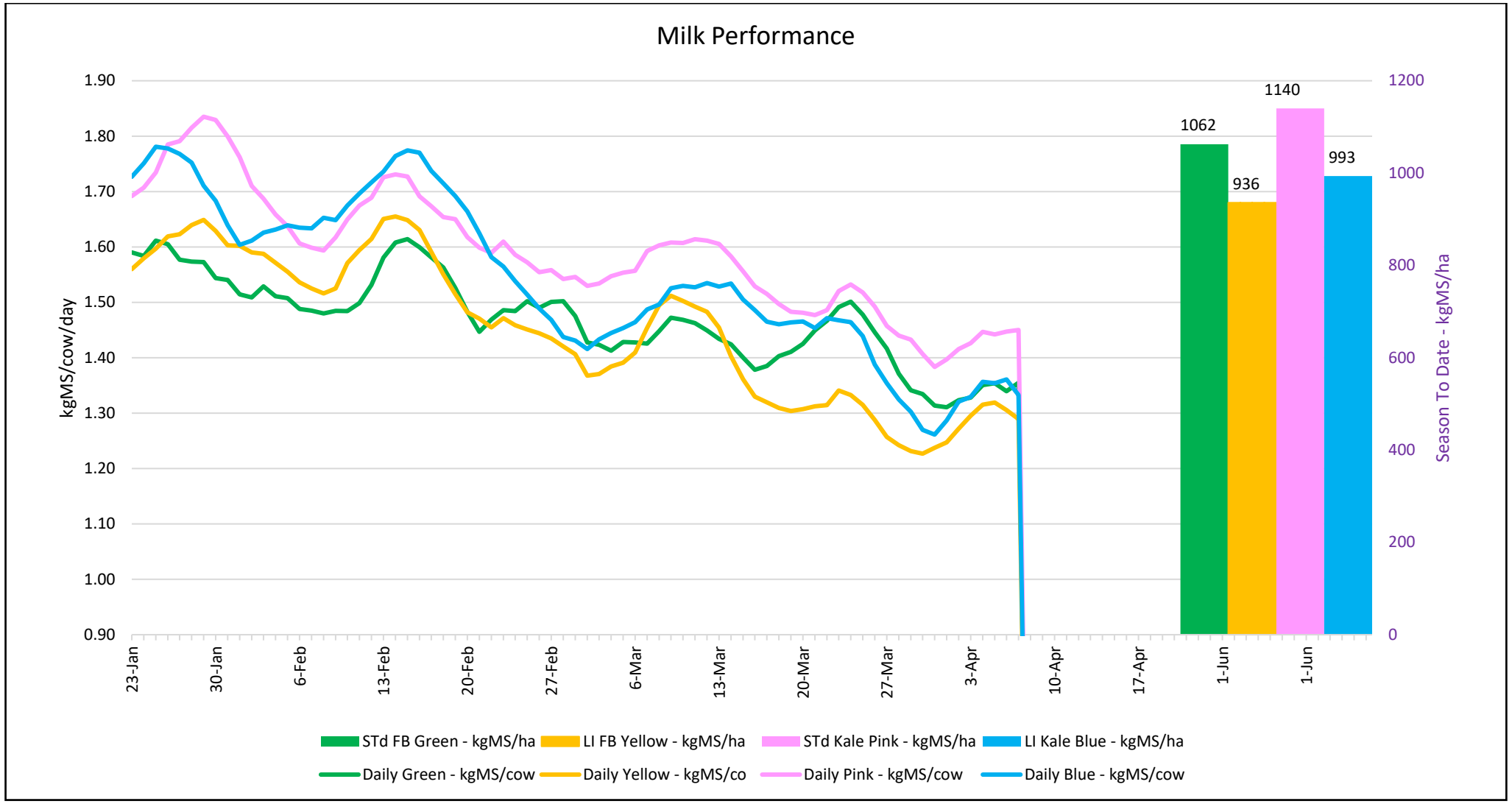

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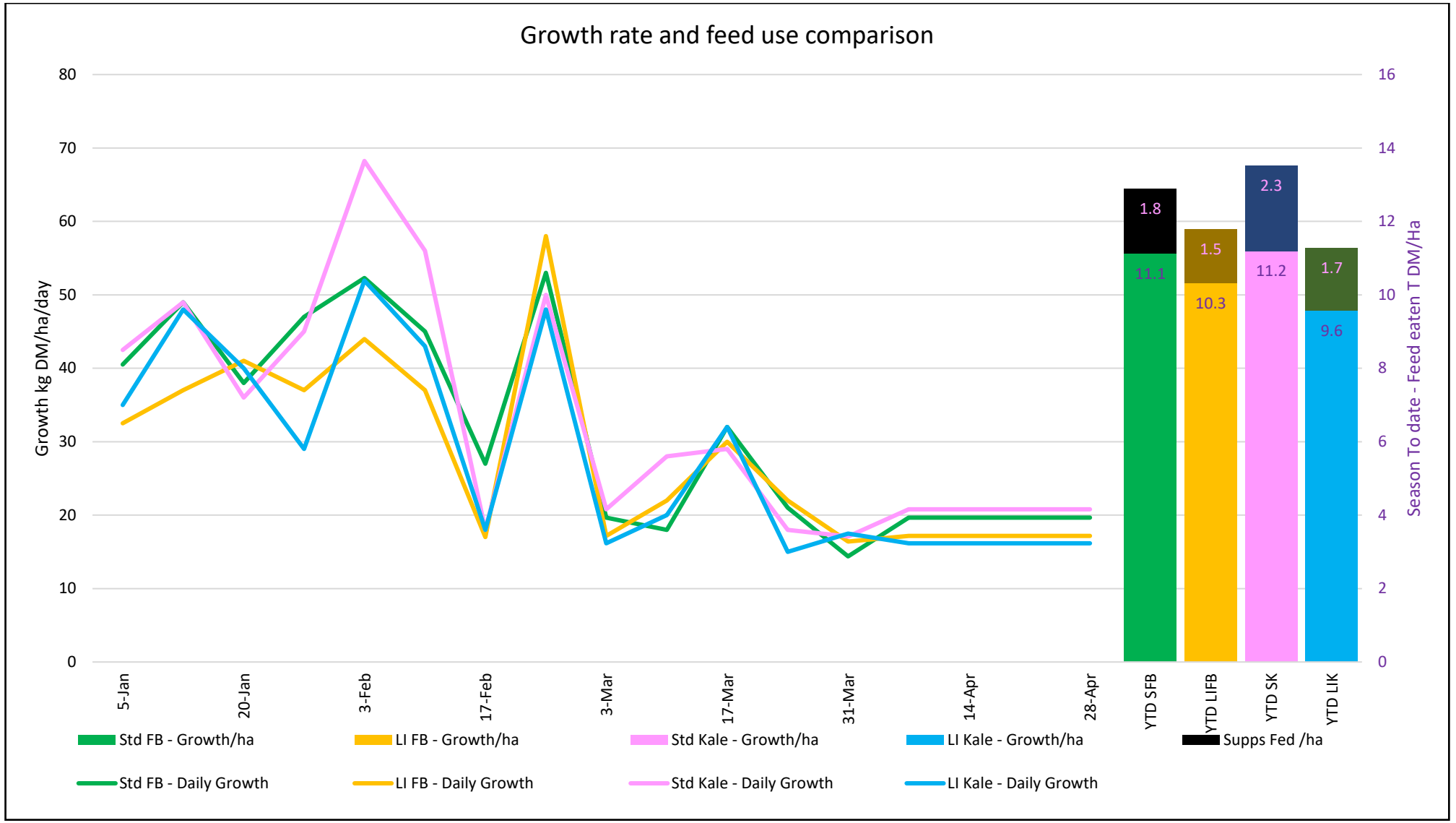

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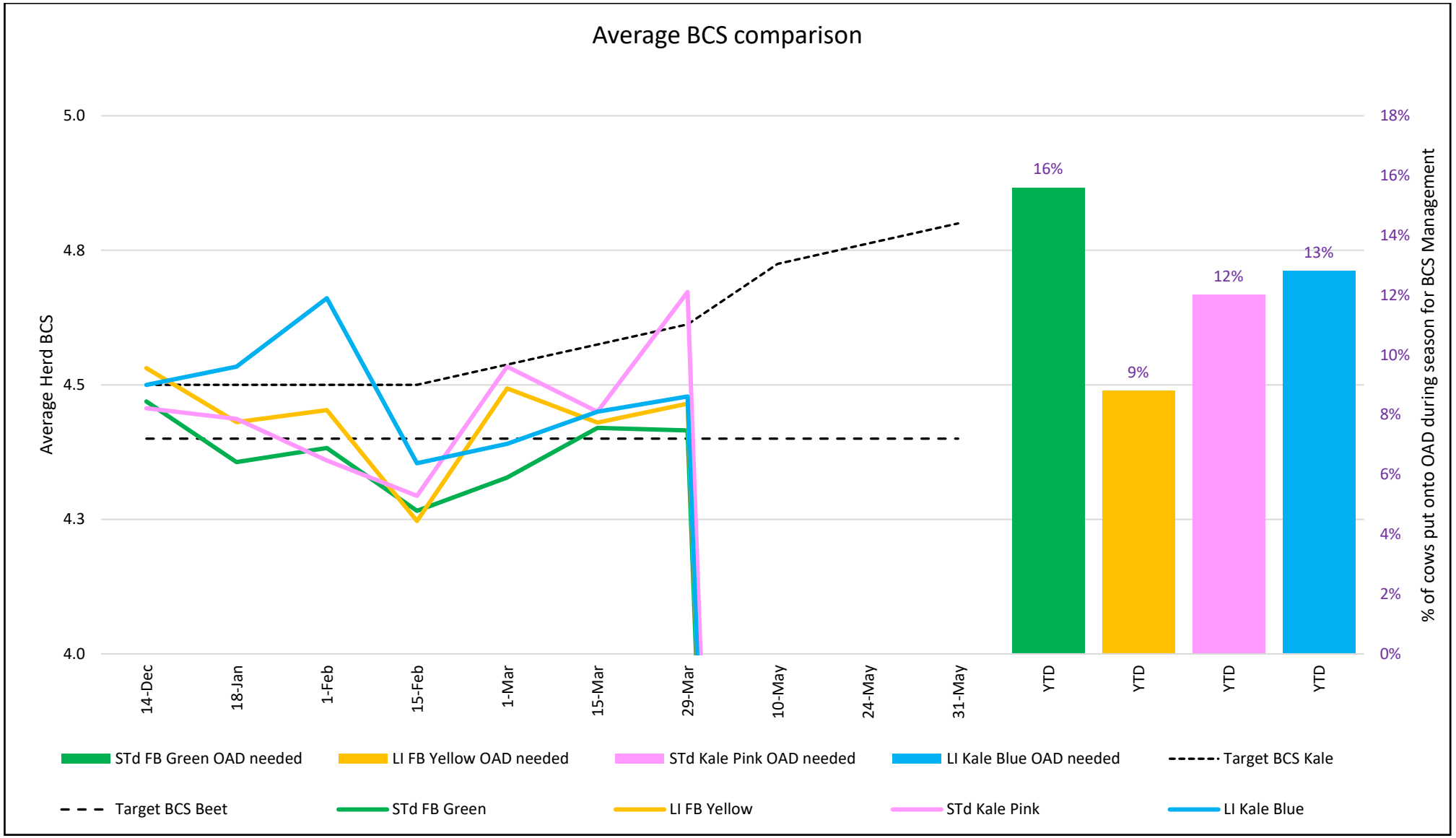

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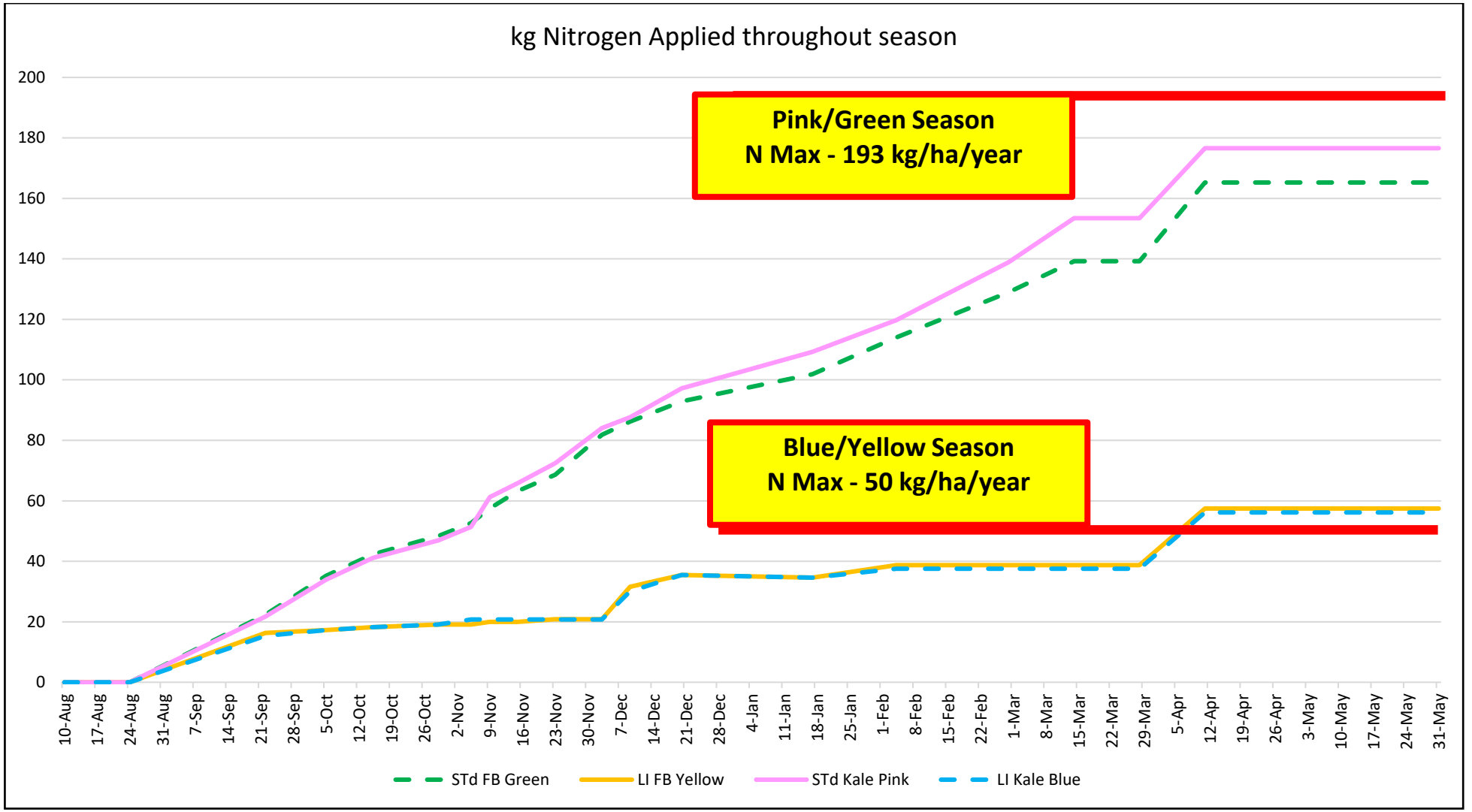

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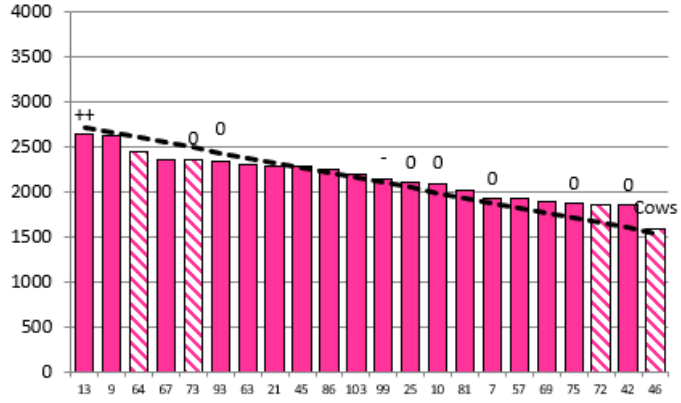
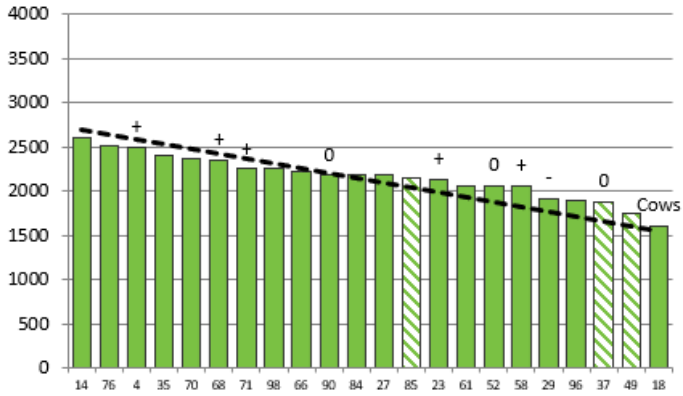
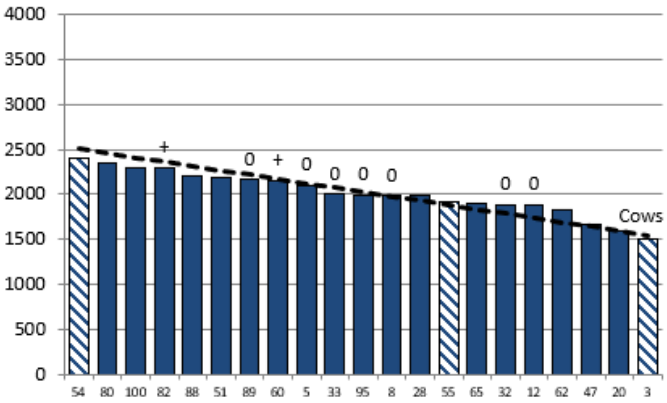
Standard Kale



Standard Fodder Beet



Low Impact Kale



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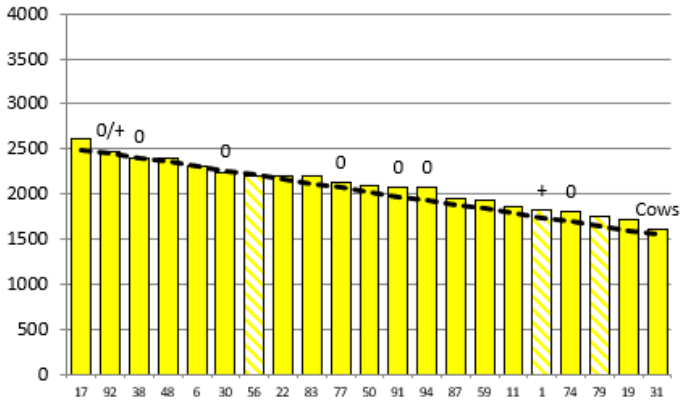

NB – Target line set for 10 kg DMI of pasture

NB: Hatched bars are new grass paddocks being grazed on a faster return interval to maintain quality

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