

Weekly Farm Summary

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

KPI	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	63.4	60.5	63.4	60.5
Current Herd size (cows)	180	149	183	153
Pasture Stocking rate	2.8	2.5	2.9	2.5
Winter Feed Milking supplement	Kale In-Shed feed		Fodder beet Fodder beet/Baleage	
Average Cover	2333	2262	2369	2294
Average Growth	51	48	53	59
Target rotation length	32	31	32	31
Last week act rotation (d)	31	28	31	28
Last week supp (kg DM/cow)	3.5	3.3	4.1	3.4
Average BCS	4.44	4.53	4.36	4.43
% of herd on OAD	17%	17%	19%	9%
Milk yield (L/cow)	15.6	15.4	14.4	15.9
Milk yield (kg MS/cow)	1.65	1.71	1.56	1.60
Rainfall mm this week/ month/ season	22.0 /24.0 /627			
Average Soil Temperature at 10cm	17.8 °C			
Nitrogen Cap kgN/ha/yr	193	50	193	50
% Nitrogen used (kg N/ha) YTD	73% (141kg)	76% (38kg)	68% (132kg)	78% (39kg)
Effluent N YTD	5	8	11	9
Profit/ha comp to Control	\$0	-\$210	-\$173	-\$166
YTD supp (kg DM/cow)	483	399	387	366
YTD MS/cow	316	321	297	304
YTD MS/ha	972	860	909	813
Business Area	Current Status			
Feed	Still a deficit in average pasture cover for a full pasture diet with at or above demand for all herds this week. Supplementary feeding will continue.			
Milk Production	Seeing a lift in production when herds are grazing new grass paddocks, suggesting there are still some protein and quality challenges in some paddocks.			
People	Covid-19 policy completed and operational to minimise the risk to all staff			
Animals	39 in milk culls went on Monday. With the recheck scan being completed today, more in milk culls and works culls will go over the weekend. Lameness in FB herds has decreased since in-shed feed started, probably due to better cow flow to and through the shed.			
Environment	Effluent still not being applied due to low pond levels			
Wintering	Buffer strips to have second cut of baleage taken off within the week. Some aphids observed on fodder beet crop at the support block.			
Research	Botanical dissections nearing completion; other activities business as usual			

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Feed

Principles of Pasture Management this week

Pasture Quality	Quality is increasing as paddocks mown in the last round come back with more leaf and less seedhead. The milk production response we are seeing when herds graze new grass paddocks and the urine patch clumping in many older paddocks suggests pasture protein levels are still low.
Growth rate Management	Rain over the last few weeks, combined with dewey mornings have aided growth, but a deficit still remains for all herds. Still aiming to push out to 33 days, some paddocks will need 2 and half grazings to achieve this. We expect to see growth continue to lift as a result of the N and moisture in the system.
Nitrogen Strategy	N applications resumed this week ahead of the rain that fell over the weekend. The dewey mornings will also help ensure N utilization continues as the 5th round is completed and 6th round starts for the standard farmlets. Last application for LI farmlets will start in early March. The standard farmlets remaining N applications will be closely monitored to stay under the 190kg cap.

	Standard Kale Pink	Low Impact Kale Blue	Standard Fodder beet Green	Low Impact Fodder beet Yellow
Quantity	Growth at demand	Growth 12% above demand	Growth 6% above demand	Growth 37% above demand
Quality	No long paddocks, hitting residuals well	No long paddocks, hitting residuals well	No long paddocks, hitting residuals well	No long paddocks, hitting residuals well
Surplus Management	None	None	None	None
Deficit Management	3.5 kg inshed (dropped 1kg from last week) Baleage only if required	4.0 kg inshed (same last week, may drop to 3.5)	3.0 kg inshed (down from last week) Baleage 1.2 kg/cow/day	1.0 kg inshed (down 3.0kg from last week) Baleage 1.5 kg/cow/day
Rotation Length	Extend rotation to 33 days	Extend rotation to 33 days	Extend rotation to 33 days	Extend rotation to 33 days

Milk Production

Principles of Milk production management this week

Milk Production	<p>Milk Production continues to fluctuate between 1.5 and 1.7 kg MS/cow this week for all 4 herds.</p> <p>We are still seeing improvements in milk production when the cows are moving through new grass paddocks.</p> <p>Have reduced the proportion of in shed feed in the diet as confidence in grass growth lifts. Will be assessing residuals daily to ensure the supplement amount is correct and milk production isn't compromised.</p>
Key influences on milk production	<p>Pasture quality and proportion of pasture in the diet has had a direct impact on milk production this week.</p> <p>The gap between fodder beet and kale herds has reduced as the proportion of pasture in the diet increases through reduced demand from culling 5-6% from all herds.</p>
Cow Management	<p>Cow Management Rules:</p> <ol style="list-style-type: none"> 1: Cows with BCS below 4.0 are on OAD but still in their herds 2: Based on age and calving date we are now managing BCS towards pre-calving targets. This will see cows at BCS 4.0 or even 4.5 needing OAD to ensure they hit 5.0 or 5.5 (Rising 3yr) at calving. 3: Any cull cows producing less than 5 litres per day will be identified and culled ASAP

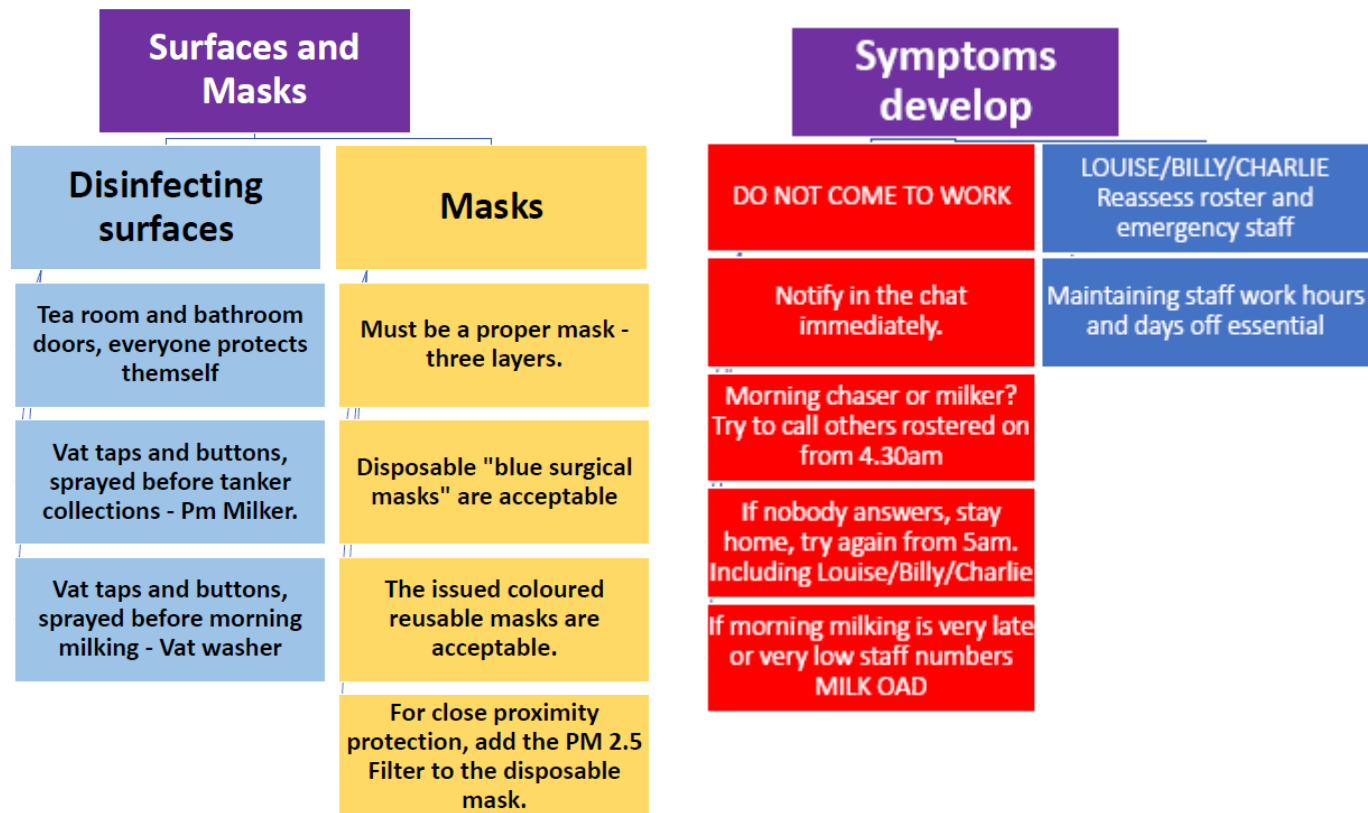
	Standard Kale Pink	Low Impact Kale Blue	Standard Fodder beet Green	Low Impact Fodder beet Yellow
kg Milksolids per cow this week / (last week)	1.65/ (1.65)	1.71/ (1.73)	1.56 / (1.58)	1.60 / (1.61)
kg Milksolids per ha this year / (this time last year)	972/ (992)	860 / (803)	909 / (949)	813 / (782)
Season to date compared to last year	Down 2.1% total milk Half paddock extra in grass this year affects KPI.	up 7.1% total milk One paddock less in grass this year affects KPI.	Down 4.2% total milk	Up 4.0% total milk One paddock less in grass this year affects KPI.
Cows needing OAD BCS<4 (% herd)	30 cows (16%)	25 cows (17%)	33 cows (18%)	13 cows (8%)
Animal health peculiarities	None	None	Less lameness	Less lameness

People

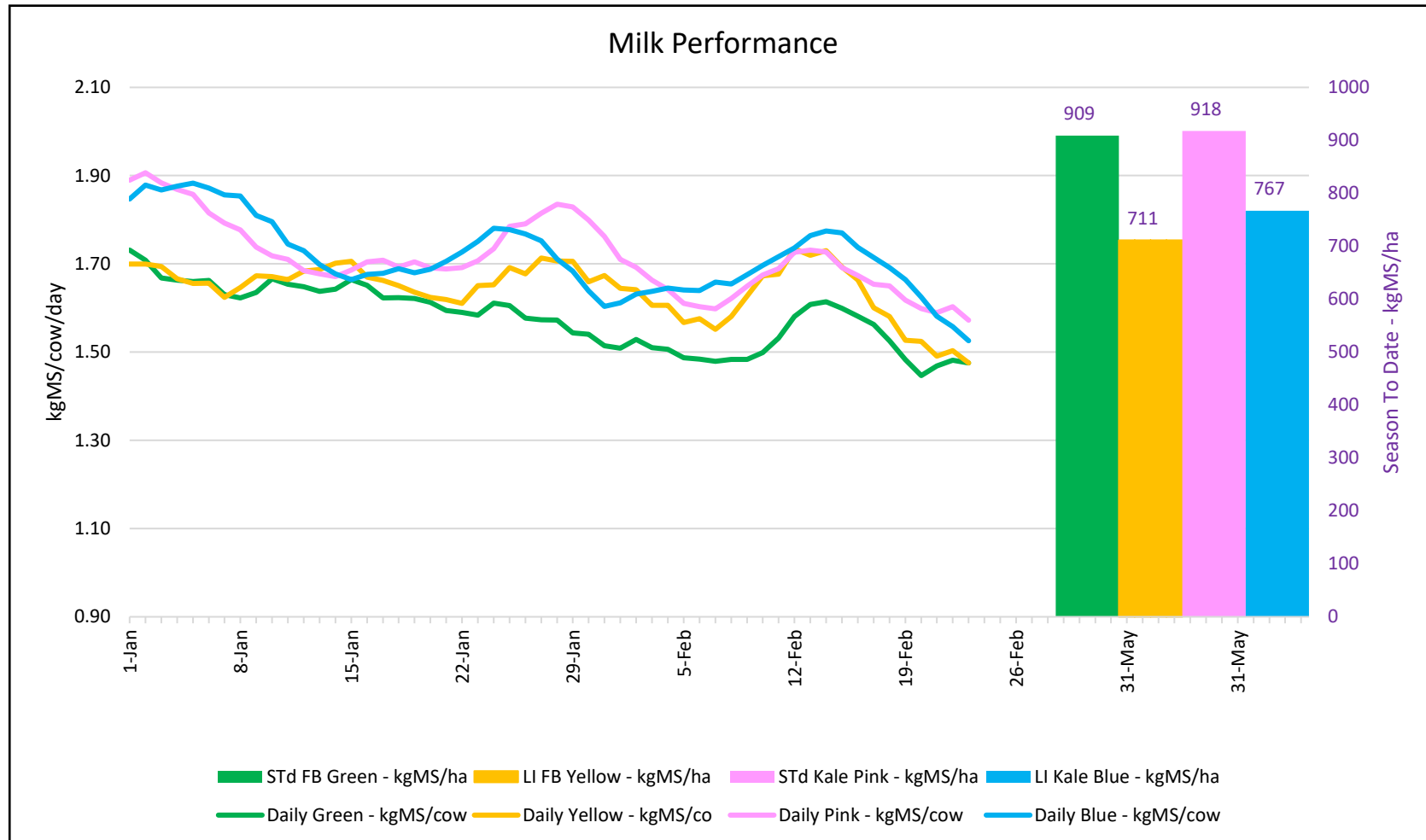
COVID-19

With Covid now being wide-spread throughout the community a Covid-19 response policy has been created to help minimize the risks to SDH staff, farmers, contractors, consultants and any other visitors associated with SDH. The policy outlines principle controls such as prevention measures like red zone areas where only vaccinated people may enter, getting the Covid-19 vaccine, testing requirements etc.

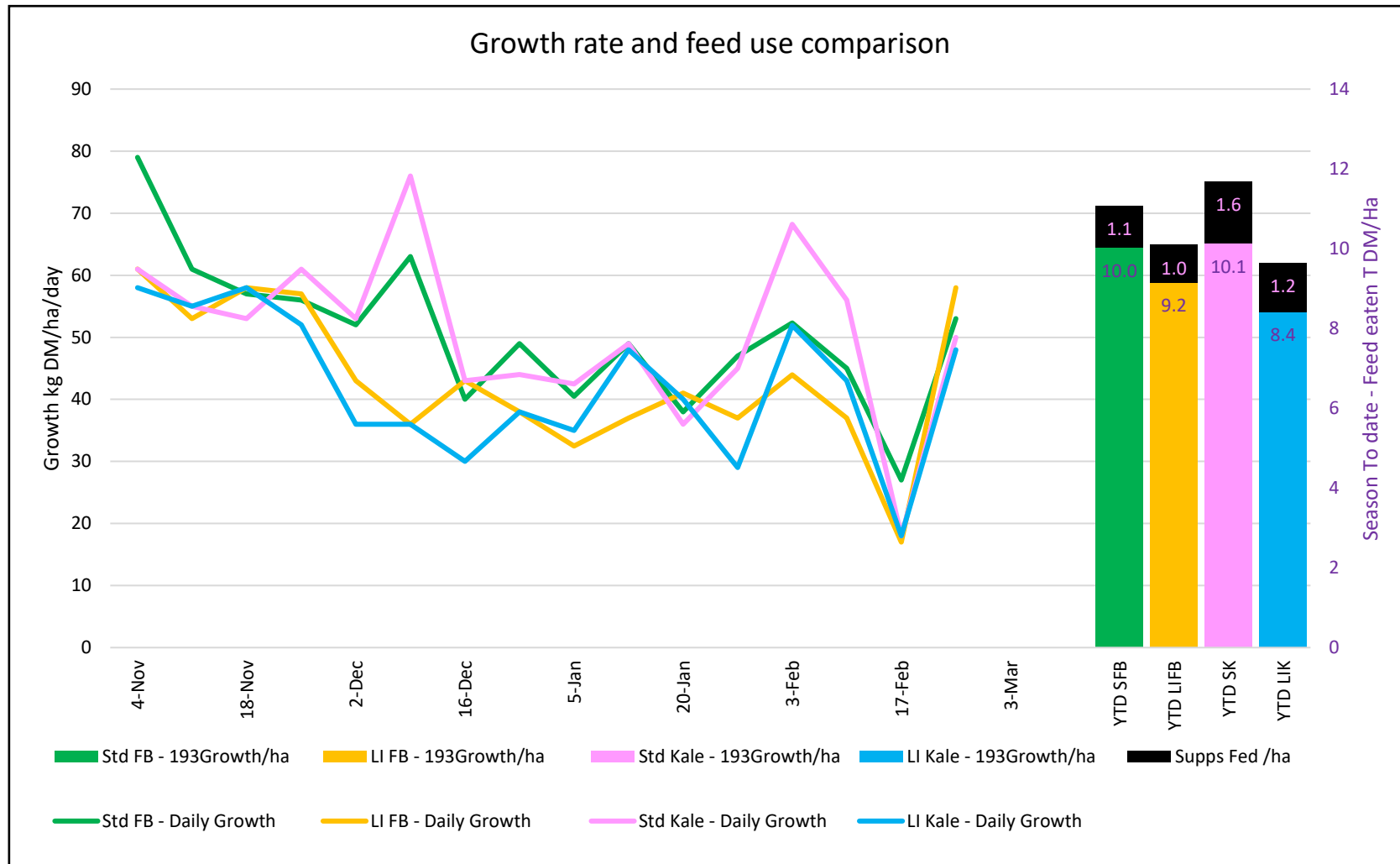
It also outlines the current obligations to suppliers such as Fonterra so the whole farm and support staff team are aware of the protocols and procedures required if Covid is present on farm.



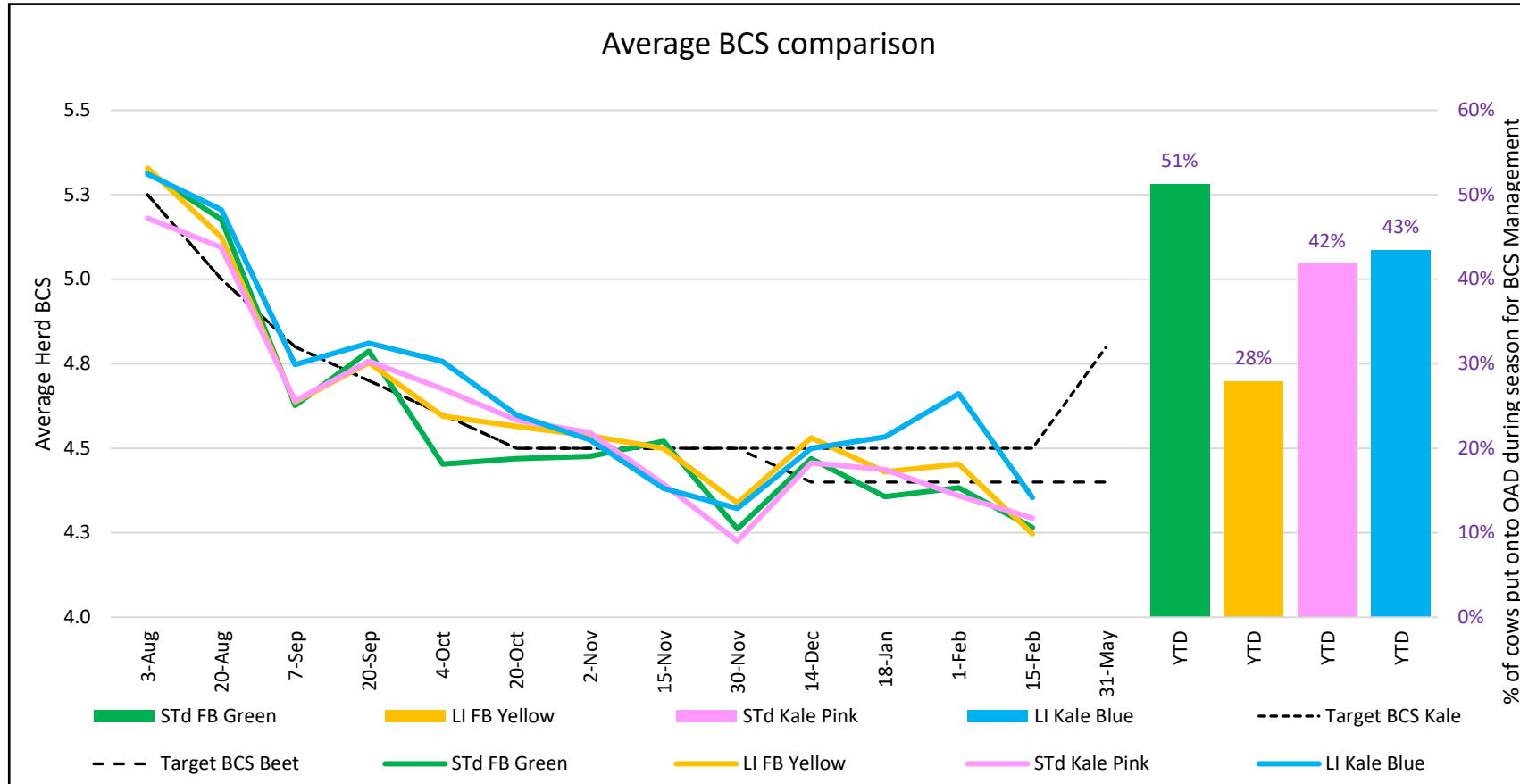
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 Kale, Winters on kale - in-shed feed available. Fodder beet, winters on Beet, Beet as lactation supp. Low impact (LI) limited Max 50kg N/ha/year vs Std 193kg N/ha/year**



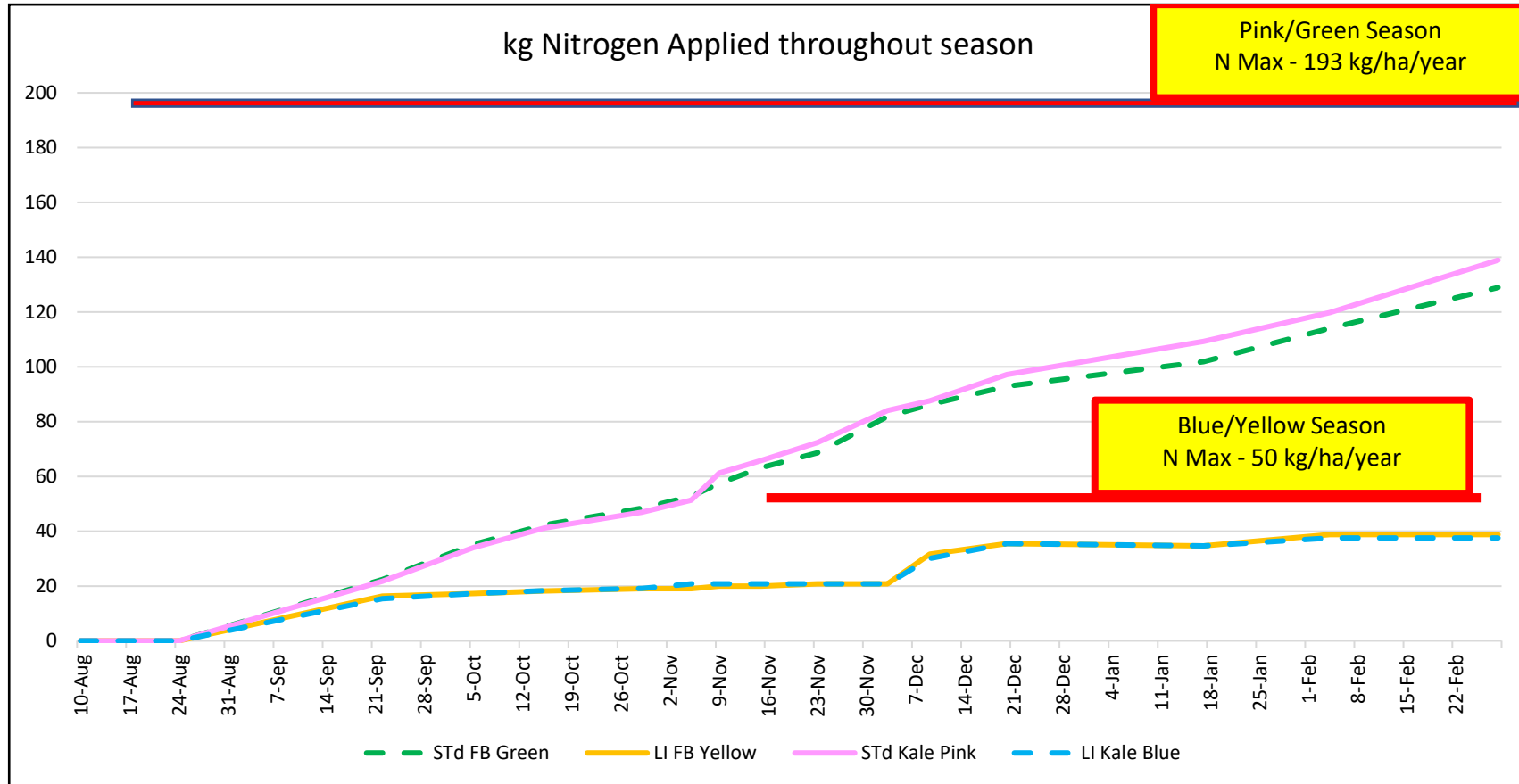
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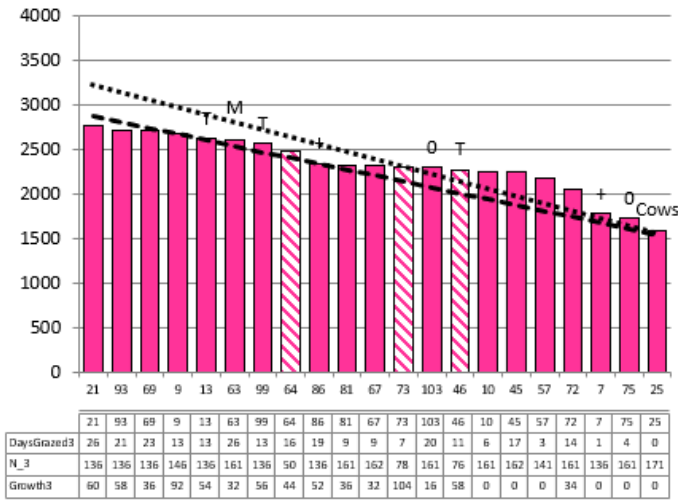


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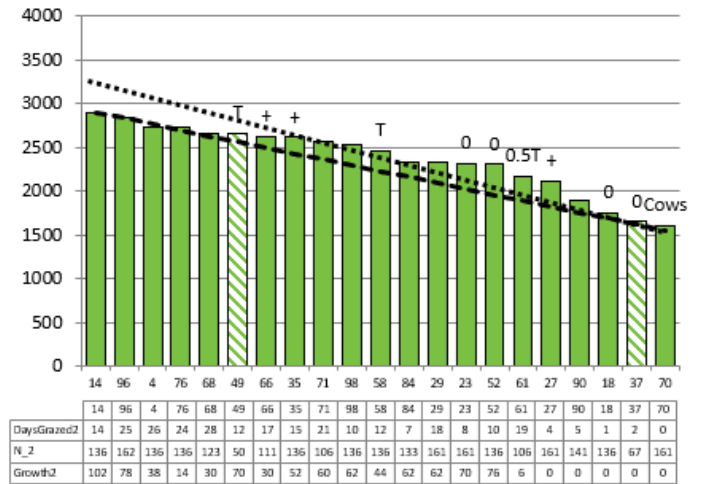


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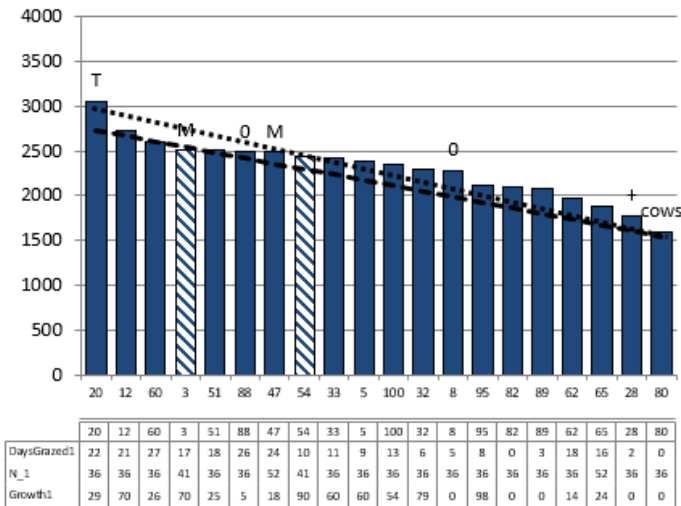
Standard Kale



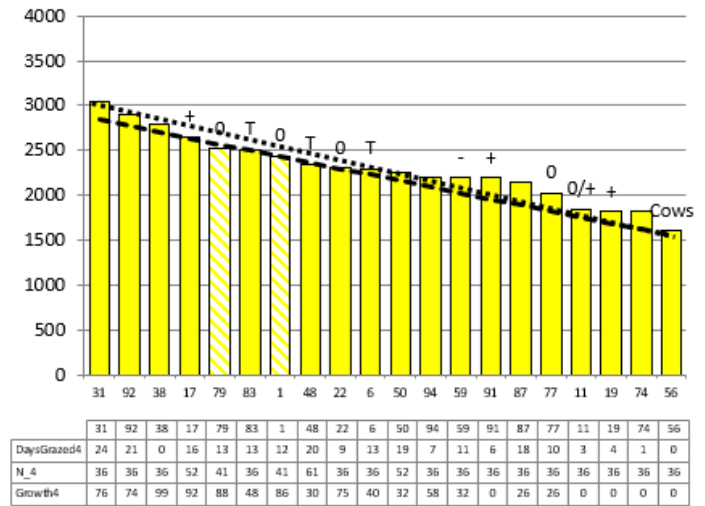
Standard Fodder Beet



Low Impact Kale



Low Impact Fodder Beet



NB: Hatched bars are 2021 new grass paddocks being managed on a faster rotation

NB: target line is for 17.5 kg DM pasture allocation at current rotation and stocking rate for each herd;

----- target line is for 13 kg DM pasture allocation for all except the LI FB which is 17 kg DM allocation

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Figure 1: Comparison of grazing residual colour between old (left) and new grass (right) paddocks