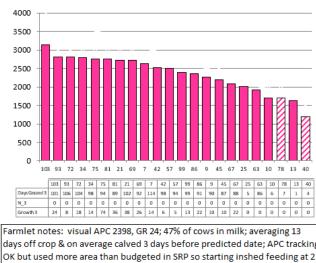


Date 18-08-21				
Herd size (cows)	153	Average Cover	2335	
Target residual (kg DM/ha)	1600	Average Growth	20	
Target pasture intake (kg DM/cow)	14	Farmlet area	62.3	
Target Area offered (ha/day)	0.9	Target rotation length	69	
Last week actual rotation (d)	#N/A	Target demand	34	
Last week supp (kg DM/cow)	#N/A	YTD supp (kg DM/cow)	#N/A	
Last week N (kg N/ha)	#N/A	Fert N YTD	#N/A	
Milk yield (L/cow)	13.6	Effluent N YTD	0	
Fat%	N	Last wk MS	w	
Prot%	E	YTD MS/cow	E	
SCC	Х	YTD MS/ha	E	
Average BCS	Т	% less than BCS 4	К	

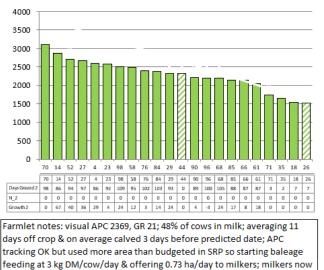
Standard Kale

	·	·	
Herd size (cows)	141	Average Cover	2289
Target residual (kg DM/ha)	1600	Average Growth	20
Target pasture intake (kg DM/cow)	14	Farmlet area	63.5
Target Area offered (ha/day)	0.9	Target rotation length	71
Last week actual rotation (d)	#N/A	Target demand	31
Last week supp (kg DM/cow)	#N/A	YTD supp (kg DM/cow)	#N/A
Last week N (kg N/ha)	#N/A	Fert N YTD	#N/A
Milk yield (L/cow)	13.4	Effluent N YTD	0
Fat%	N	Last wk MS	w
Prot%	E	YTD MS/cow	E
scc	Х	YTD MS/ha	E
Average BCS	Т	% less than BCS 4	К



days off crop & on average calved 3 days before predicted date; APC tracking OK but used more area than budgeted in SRP so starting inshed feeding at 2 kg DM/cow/day & offering 0.73 ha/day to milkers; baleage as required; milkers now in their own pdks; colostrums & springers still mixed mobs

Standard Fodder Beet



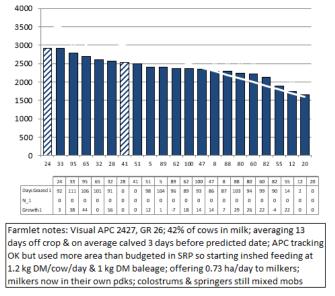
in their own pdks; colostrums & springers still mixed mobs



Herd size (cows)	127	Average Cover	2376
Target residual (kg DM/ha)	1600	Average Growth	19
Target pasture intake (kg DM/cow)	14	Farmlet area	61.0
Target Area offered (ha/day)	0.9	Target rotation length	68
Last week rotation avg	#N/A	Target demand	29
Last week supp (kg DM/cow)	#N/A	YTD supp (kg DM/cow)	#N/A
Last week N (kg N/ha)	#N/A	Fert N YTD	#N/A
Milk yield	13.1	Effluent N YTD	0
Fat%	N	Last wk MS	w
Prot%	E	YTD MS/cow	E
scc	Х	YTD MS/ha	E
Average BCS	Т	% less than BCS 4	K

Herd size (cows)	131	Average Cover	2463
Target residual (kg DM/ha)	1600	Average Growth	28
Target pasture intake (kg DM/cow)	14	Farmlet area	60.9
Target Area offered (ha/day)	0.9	Target rotation length	68
Last week rotation avg	#N/A	Target demand	30
Last week supp (kg DM/cow)	#N/A	YTD supp (kg DM/cow)	#N/A
Last week N (kg N/ha)	#N/A	Fert N YTD	#N/#
Milk yield	13.0	Effluent N YTD	(
Fat%	N	Last wk MS	W
Prot%	E	YTD MS/cow	
SCC	X	YTD MS/ha	
Average BCS	Т	% less than BCS 4	

Low Impact Kale



NB: Hatched paddocks are springer paddocks

Low Impact Fodder Beet

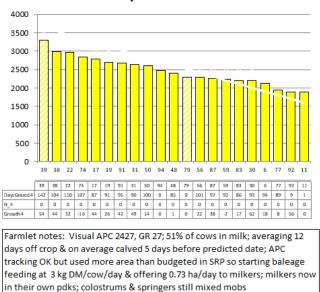


Table 1: Key Herd Numbers 19/08/2021 – number of cows in each mob					
DATE: 10 June 2021	Std Kale	LI Kale	Std FB	LI FB	Total
Cows on Farm	201	167	199	167	734
Current being milked	89	69	89	77	324
Springers	64	58	52	54	228
Dries on crop	47	40	58	36	181
Slips/empty/deaths	2	1	4	1	8

Table 1: Key Herd Numbers 19/08/2021 - number of cows in each mob

General Farm Information



Table 2: Key Weather and Feeding Numbers 19 th August 2021							
Soil Temp (°C)	8.7 deg						
(weekly average)							
Rainfall (mm)	24.2 mm						
Allocations	Std. Kale	LI Kale	Std FB	LI FB			
kg DM/cow/day							
Milkers	16.5-17kg DM (14kg DM pasture + 2kg inshed + 0.5kg DMbaleage)	16.5-17kg DM (15kg DM pasture + 1.5kg Inshed)	16.5-17kg DM (13kg DM pasture + 3.5 kg DM baleage)	16.5-17kg DM (12kg DM pasture + 4.5kg baleage)			
Colostrum	15-16 kg DM (15kg DM pasture + 1kg DM baleage)						
Springers	3-5 kg pasture & 5-7 kg baleage						
Dry cows	Kale 9.5		Beet 9.5				
	kg DM/cow		kg DM/cow				
	Baleage 5.5 kg DM	1/cow	Baleage 3.5 kg DM/cow				

Key Decisions: this week

- Once again we are stepping into lockdown but continue to run as an essential service alongside every other farmer in NZ. We draw back on our policies and procedures from last lockdown and have closed the farm to visitors that are not essential. The Scitech team will continue with farmwalks each week to ensure animal feeding requirements are met; Tash will also be providing on-farm assistance to the farm team. Strict hygiene and social distancing where possible has been actioned. Other research measurements have been scaled back and will be reassessed next week when we have a better idea of the length of the lockdown.
- Milkers have been split into their farmlet mobs as we are above our 50 cow threshold for each farmlet
- Twice a day milking will commence for the milkers from Friday 20th August; colostrums will remain on OAD.
- The first herd test of the season scheduled for next week will be cancelled if we are still in Covid-19 lockdown restrictions that mean our techs have to work from home.
- The wet weather continues to make grazing paddocks and minimising damage a challenge on farm. We had initially tried pushing out the grazed pasture area to minimise damage but to stick to our spring rotation planner (SRP), which currently sits at 0.9ha/day/farmlet grazing or 3.6ha across the whole farm, we will pull the pasture area back more in line with the SRP and start feeding supplement in the form of baleage to the FB farmlets and inshed feeding and baleage to the kale farmlets.
- The heifer springer mob is getting down in numbers so will be merged with the respective kale and springer mobs in the next couple of days.
- We are completing a stocktake on remaining fodder beet to determine if there will be any surplus to requirement and available for sale. With yields being higher that previous years,



especially at the support block it is looking like we may have a couple of hectares surplus to requirements

• The figure below shows how our actual area used compared to the SRP area recommended and we are using this as our guide to stay on track to balance date.

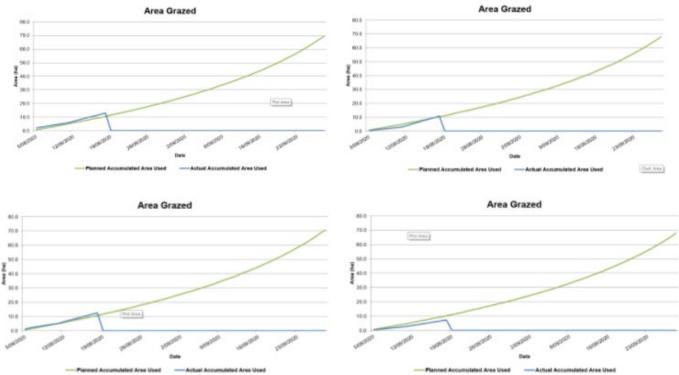


Figure 2: Area grazed compared to the SRP allocation (Std kale: top left, Std FB: bottom left, LI kale: top right, LI FB: bottom left)

- Although wet weather has meant using a bit more area for grazing, we are lucky that we do have a buffer with our average pasture cover still tracking above the predicted APC line. Soil temperatures continue to rise and are sitting at 8.7 degrees which is great for pasture growth sitting at approximately 20 kg DM/ha/day. The challenge has been offering just enough to deal with lower utilisation and allow to increase appetite but without over allocating.
 - Springers will remain on 20m² per cow with 1 bale baleage per 40 cows with a delegated area of 0.5ha/day.
 - Colostrums will be offered 100m² per cow, spend 4 days/pdk and have 0.7ha/day with 1 bale baleage per paddock (approx. 1 kg DM/cow/day).
 - Milkers will remain on 4 days/pdk with 0.6 ha/farmlet and approx. 120m²/cow. It was considered to push our LI farmlets out to 5 days/pdk but was decided this would require too much extra supplement to do so. The supplements offered for this week can be found in table 2.

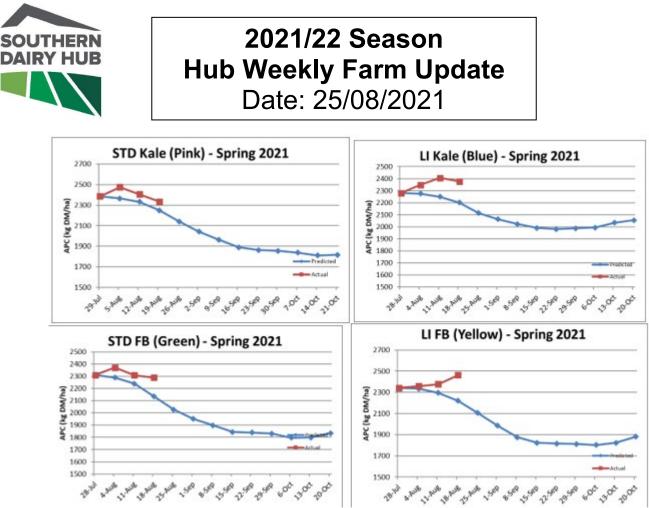


Figure 3: Actual vs. predicted average pasture cover for each farmlet

General Notes:

• The next 5 days do not look too wet on farm but with another front predicted for next Thursday we must continue to be proactive managing on farm conditions. To manage wet conditions the farm team continuously keep an eye on the weather forecast and match up paddocks accordingly i.e. wet pdks are left to drier days. Surface water in some grazed pdks are fenced off and alternative gate entrances are used in the pdk to prevent a large amount of damage in one concentrated area.





Figure 4: A few puddles for Scitech Tash to walk through this week

- The farm team have been taking the time to train heifers and encouraging them to walk on to the platform on their own accord. Being short staffed they can't afford go and push heifers in from the yard each time they need to go onto the platform so hopefully the time taken now will save a lot of time this season.
- We sent our kale yearlings (now officially known as R2s!) to grazing this week with the remainder to go at the end of the month.
- We had noticed some rotting when out doing cuts on one of the kale pdks. After speaking with our Agronomist it was concluded to be Black rot. Back rot can happen in second year crops due to crop residual remaining in the soil from the previous year.



Figure 5: Black rot in one of our second year Kale crops

• One of the cows got wind we were running a bit short staffed this week so offered to be on cups on; was very kind of her to lend a hoof.





Figure 6: Helper cow heading to help at cups on

Animal Health

- We had to put one cow down today due to a uterine infection that had not responded to a week of antibiotics
- Our new cow collars have been great for picking up on cows in the early stages of sickness or ones that have not recovered appropriately from treatment. It has been good to have this information to identify animals not coping so well at this busy time of the season.
- Mineral supplementation is key this time of year and our staff continue to be proactive with its daily use. We did a stock take on our minerals after the recent announcement that there is a MgO shortage. Springers and colostrums are currently getting 50 g DCP and 50 g MgO dusted onto pasture daily. MgCl is also going through the water system.

SDH Research & Demonstration

• Under the current Covid Level 4 lockdown all research measurements have been put on hold. Only activities that relate to the well-being of the animals on farm can be completed.

General Farm Systems information

The project farm systems comparison has been designed to better understand crop-based wintering in relation to consequences for environmental impact and profit

- The four herds are split evenly on age, BW / PW, calving date and breed to ensure the herds are as even as possible.
- Each herd allocated a farmlet corresponding to their herd tag colour Green, Blue, Yellow and Pink.



• Farmlets have paddocks allocated so each herd has equal walking distance from the shed and the same proportion of each soil type and equal proportions of pastures in the FVI trial (forage value trial – refer web site section on research).

Research Proposals

The SDH welcome research proposals for any sampling or research on the SDH, these are assessed by the Research Advisory Committee (RAC). Just send your request or ask for information via louise.cook@southerndairyhub.co.nz

For more information check out the DairyNZ link: <u>https://www.dairynz.co.nz/about-us/research/research-farms/southern-dairy-hub</u>