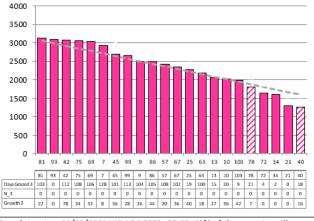


Date 01-09-21

Herd size (cows)	130	Average Cover	2363
Target residual (kg DM/ha)	1600	Average Growth	32
Target pasture intake (kg DM/cow)	13	Farmlet area	62.3
Target Area offered (ha/day)	1.2	Target rotation length	54
Last week actual rotation (d)	49	Target demand	27
Last week supp (kg DM/cow)	4.1	YTD supp (kg DM/cow)	46
Last week N (kg N/ha)	0	Fert N YTD	0
Milk yield (L/cow)	19.4	Effluent N YTD	0
Fat%	N	Last wk MS	w
Prot%	E	YTD MS/cow	E
SCC	Х	YTD MS/ha	E
Average BCS	5.7	% less than BCS 4.5	0%

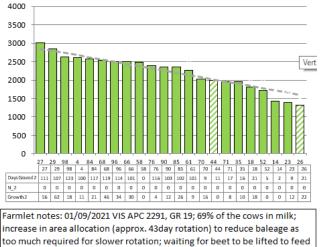
Herd size (cows)	130	Average Cover	2208
Target residual (kg DM/ha)	1600	Average Growth	23
Target pasture intake (kg DM/cow)	14	Farmlet area	63.5
Target Area offered (ha/day)	1.45	Target rotation length	44
Last week actual rotation (d)	66	Target demand	29
Last week supp (kg DM/cow)	2.3	YTD supp (kg DM/cow)	24
Last week N (kg N/ha)	0	Fert N YTD	0
Milk yield (L/cow)	18.6	Effluent N YTD	0
Fat%	N	Last wk MS	w
Prot%	E	YTD MS/cow	E
scc	х	YTD MS/ha	E
Average BCS	5.4	% less than BCS 4.5	0%

Standard Kale



Farmlet notes: 01/09/2021 VIS APC 2393, GR 25: 68% of the cows in milk; increase in area allocation (approx. 53 day rotation) & high pre-graze mass will reduce baleage; 30 kg N as Ammo31 to be applied to all paddocks below 2200 on the wedge; last few days of dries on kale crop then all onto pasture but still with lates separate; area allocation ahead of SRP but APC ok.

Standard Fodder Beet



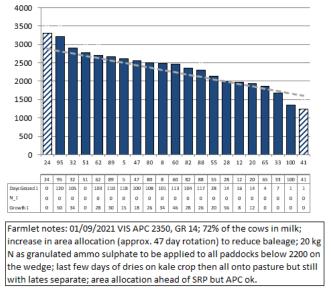
too much required for slower rotation; waiting for beet to be lifted to feed to milkers; 30 kg N as Ammo31 to be applied to all paddocks below 2200 on the wedge; area allocation ahead of SRP but APC ok; dries staying on beet



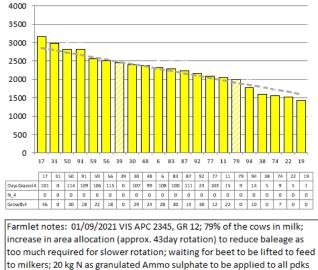
Herd size (cows)	115	Average Cover	2333
Target residual (kg DM/ha)	1600	Average Growth	29
Target pasture intake (kg DM/cow)	15	Farmlet area	61.0
Target Area offered (ha/day)	1.35	Target rotation length	45
Last week rotation avg	63	Target demand	28
Last week supp (kg DM/cow)	4.0	YTD supp (kg DM/cow)	38
Last week N (kg N/ha)	0	Fert N YTD	0
Milk yield	19.6	Effluent N YTD	0
Fat%	N	Last wk MS	W
Prot%	E	YTD MS/cow	E
SCC	Х	YTD MS/ha	E
Average BCS	5.6	% less than BCS 4.5	0%

Herd size (cows)	130	Average Cover	2242
Target residual (kg DM/ha)	1600	Average Growth	23
Target pasture intake (kg DM/cow)	14	Farmlet area	60.9
Target Area offered (ha/day)	1.45	Target rotation length	42
Last week rotation avg	49	Target demand	30
Last week supp (kg DM/cow)	2.5	YTD supp (kg DM/cow)	27
Last week N (kg N/ha)	0	Fert N YTD	C
Milk yield	18.3	Effluent N YTD	C
Fat%	N	Last wk MS	w
Prot%	E	YTD MS/cow	E
SCC	X	YTD MS/ha	E
Average BCS	5.6	% less than BCS 4.5	0%

Low Impact Kale



Low Impact Fodder Beet



below 2200kg DM/ha; dries staying on beet, calving has slowed this week

NB: Hatched paddocks are springer paddocks

Table 1: Key Herd	Numbers 2/	09/2021 –	number of	cows in ea	ch mob
DATE: 26 August 2021	Std Kale	LI Kale	Std FB	LI FB	Total
Cows on Farm	201	167	198	167	733
Current being milked	136	120	138	130	524
Springers	38	26	29	15	108
Dries on crop	26	21	31	22	100
Slips/empty/deaths	2	1	5	1	9

General Farm Information



Table 2: Key Weather and Feeding Numbers 2nd September 2021

Soil Temp (°C)	-	~	°C	
(weekly average)				
Rainfall (mm)		9.8	mm	
Allocations	Std. Kale	LI Kale	Std FB	LI FB
kg DM/cow/day				
Milkers	17-17.5 kg DM (14 kg DM pasture +3.7 kg inshed)	17-17.5 kg DM (14.7 kg DM pasture + 2.5 kg inshed + baleage as required)	17-17.5 kg DM (13 kg DM pasture + 4.5 kg baleage)	17-17.5 kg DM (14 kg DM pasture + 3 kg baleage)
Colostrum			kg DM + 1 kg DM baleage)	
Springers		3-5 kg pasture 8	& 5-7 kg baleage	
Dry cows	Kale 11 kg DM/cov	V	Fodder beet 9.0 kg	DM/cow
	Baleage 4 kg DM/c	cow	Baleage 4.0 kg DM	l/cow

Key Decisions: this week

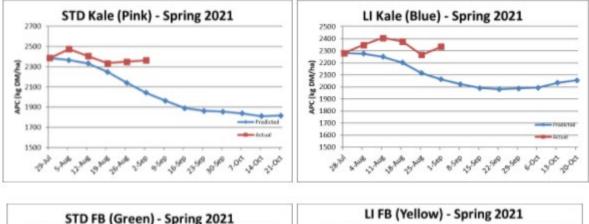
- It has been good to have some sunshine hours this week which has helped dry out paddock conditions and increase the soil temperature from 8.4 to 9.4° C. Based off these consistently warmer soil temperatures we will put on our first round of N fertiliser on. Paddocks under 2200kg DM/ha will receive fertiliser in the form of 100kg/ha Ammo31 (30kg N/ha) to Std. farmlets and 100kg Ammo Sulphur (20kg N/ha) to LI farmlets. Different products are being used to ensure the same amount of sulphur is being provided at the different N fertiliser rates. The LI application is one of only 3 they will receive to achieve the 50 kg/N limit in their system.
- We have increased the area allocation to the Std and LI FB milkers for this week to reduce the amount of baleage in their diet and increase their energy intake. The colostrums will not be grazing on either of these farmlets this week so we have more area available in the SRP for the milkers. We did consider grazing the milkers on FB as an alternative to speeding up the rotation or offering more baleage however this was quickly discounted primarily on the ability to easily get milking cows in and out of the paddocks and the risk of increased lameness early in the season.
- The contractor has been booked to lift the remaining FB. Some has been sold and the rest will be used as a high-quality supplement to milkers.
- The kale herds will stay on the SRP area allocation as we are able to supplement their pasture with higher quality grain inshed at milking so they require significantly less baleage than the FB herds.
- R2 (yearlings) were weighed this week and sent off to the grazier. This leaves us with x7 priority animals to graze at home on the support block.



- The next springer draft will occur on Tuesday which will most likely be the final draft into springers and lates. The kale crop will be finished by Tuesday so late dries from the Std and LI Kale herds will go onto one of the unfinished springer paddocks to clean it up.
- We have about x50 dry FB cows left on crop and once this mob gets below x30 they will be pulled off crop and either join the FB springers or the late kales on pasture.

General Notes:

- Calving has been progressing well with between 68 and 78% of individual herds having calved. The FB herds started strongly but have slowed down considerably this week.
- Growth rates continue to increase with the range this week from 23-32kg DM/ha/day on the plate. Our APC range is between 2291 – 2392kg DM/ha and continues to track above our predicted APC target for spring, however, we still rely on supplements to bridge the gap based on the SRP area available. Last week the kale farmlets ate 5.1-5.3kg DM/cow/day supplement and the FB farmlet ate 2.9-3.2kg DM/cow/day. The farm team continue to monitor in paddock residuals and feed additional baleage as required.



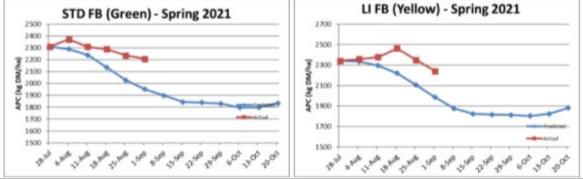


Figure 1: Actual vs. predicted average pasture cover for each farmlet

 Supplement intake in the fodder beet herds was 1-3kg DM/cow less than the kale cows this week and this is reflected in their milk production. In hindsight we should have lifted beet for feeding this early in the season but we haven't required it this early in previous seasons. The sooner FB can be lifted and fed to replace low ME baleage in the FB farmlets the better. If the pasture supply and demand offset continues to be an issue we may need to consider a higher ME supplement source to prevent the FB milk production being impacted long term.



2.20	D	aily	kgN	//S/c	COW	farr	nlet	con	npai	risoi	n					
2.00				R	2		~	~		1						/
1.80						S	2	20	9		E	×	S		\geq	1
1.60		0														
1.40	1	/														
1.20																
1.20	17- Aug	18- Aug	19- Aug	20- Aug	21- Aug	22- Aug	23- Aug	24- Aug	25- Aug	26- Aug	27- Aug	28- Aug	29- Aug	30- Aug	31- Aug	1-5e
		18- Aug	19- Aug	20- Aug		22- Aug	23- Aug	24- Aug Aug	25- Aug	26- Aug	27- Aug	28- Aug	29- Aug	30- Aug	31- Aug	1-Se Sep
								Aug								
1.00	Aug	Aug Aug	Aug	Aug	Aug	Aug	Aug	Aug	Aug	Sep						
1.00 Std FB Green - kgMS/cow/day	Aug 1.46	Aug 1.62	Aug 1.58	Aug 1.98	Aug 1.90	Aug 1.71	Aug 1.79	Aug Aug 1.86	Aug 1.83	Aug 1.85	Aug 1.91	Aug 1.85	Aug 1.73	Aug 1.79	Aug	Sep 1.88

Figure 2: Daily kg MS farmlet comparison

• Our catch crop of oats that was spread via helicopter for an external trial at the support block have germinated. We were starting to get a bit sceptical last week but turns out they were just waiting for an extra bit of sunshine.



Figure: Germinated oat and grass catch crop at the support block

• We have identified x33 cows to stay on or go to OAD milking. These cows are selected on a range of things i.e. below average BCS, not recovered well from calving, dull and lethargic,



health issues etc. Hopefully OAD milking will be just what they need to bounce back from the setback of calving.

• Calves were dehorned and vaccinated this week. It was great to get two jobs done at once but due to a national shortage in DNA punch kits we still need to do this once they become available.

Animal Health

- This week we a had X3 down FB cows. Interestingly the Std FB herd are having more metabolic challenges this year than other herds
- Mastitis incidences have been low with only one case this week.
- The vet was out to metricure x4 cow. We tail painted all the cows that had calved up to the 29th August and they will be metrichecked on 13th September.
- Springers and late dries received at top up short acting Se and B12 injection to cover them through calving as they are now outside the 6 week window of their mid winter injection.

SDH Research & Demonstration

• Under the current Covid Level 3 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>