Weekly Farm Summary 14 February 2024

Farm-system impacts of: Bales vs Beet for winter AND Reducing N loss to water by 30%.

		Std	LI	Std	LI	
		Infrastructure	Baleage	FB	FB	
		Blue	Pink	Green	Yellow	
Farmlet area including wintering		52.2	93.6	86.9	60.8	
Peak cow numbers		139	208	233	136	
Milking Area		52.2	93.6	75.3	55.0	
Current Herd size (cows)		139	208	231	135	
Pasture Stocking rate (current)		2.7	2.2	3.1	2.5	
Winter Feed		Baleage	Baleage	Beet	Beet	
Milking supplement		In-shed feed 500kg/cow + silage as required				
Average Cover (kgDM/ha)		2442	2445	2494	2320	
Average Growth (kgDM/ha/d)		66	52	75	47	
Target rotation length (d)		27	32	26	29	
Last week actual rotation (d)		26	33	25	32	
Last week supp (kgDM/c)		1.3	0.9	0.8	1.0	
Latest Average BCS		4.5	4.4	4.3	4.3	
% of herd on priority management		17.3%	29.8%	36.4%	31.1%	
% in Milk		100%	100%	100%	100%	
7-day Average Milk yield (L/cow)		18.3	16.7	19.5	18.9	
7-day Average Milk yield (L/COW)		1.77	1.62	1.91	1.86	
Nitrogen Cap kgN/ha/yr		180	50	180	50	
% Nitrogen used (kgN/ha) YTD		64% (116kg)	72% (36kg)	67% (120kg)	78% (39kg)	
Effluent N YTD		9	12	13	12	
YTD Pasture growth TDM/ha		10.4	9.4	9.4	8.8	
YTD supp (kg DM/c)		418	368	514	406	
YTD MS/c		350	320	357	347	
YTD MS/milk ha (YTD MS/farm ha)		1118 (1184)	812 (812)	1181 (1023)	905 (818)	
Focus area	Current Status	· · ·				
	Milk production continues to remain stable across most of the herds, however LI baleage herd					
Mills Due duetien	dropped after stabilizing. YTD production is 1.9% (4400 kg MS) ahead compared with same time					
Milk Production	last year. On average cows producing 1.8 kgMS/day. Milk urea's are sitting in the early 20's for					
	Baleage herds and mid 20's for the FB herds, this is a slight drop for both.					
Pasture & Feed	Average growth rate (60 kgDM/ha/day) remains greater than demand (48 kgDM/ha/day) and					
	continue to step over paddocks greater than individual farmlet pre-grazes for baleage. New					
	grasses are growing on average 100+/day. List of compacted paddocks, identified from farm walk notes over the season, has been collated to allow planning for aeration in the coming months.					
Animals	Only a couple of cases of mastitis and a few more cases of lameness. Have been holding back on					
	sending lame cows back to their respective herds to give them more time to rest post their					
	recovery. Johnes screening of the herd to be scheduled for the next herd test.					
Environment		Effluent pond level continues to allow for 2 runs per day.				
Wintering	Nitrogen application by helicopter booked for fodder beet crops. Wintering plans have been					
	finalised, with grass and baleage, wintering, pre-springer (applies only to FB herds) and springer					
People	paddocks selected. Paddock selection is driven from crop rotation and regrassing schedules.					
	The farm team completed Hazardous substance training with Ant Sutherland. They expressed how useful this training was and learnt new skills (even the most experienced members!). A key					
	learning was the importance of identifying the correct PPE required from a substances code on					
	the Safety Data sheet. This week we welcome DairyNZ Extension partner Ian Butler to the					
	management team. Ian is covering Keely Buckingham's extension duties whilst she is on leave.					
	The plan to build wintering infrastructure on the farm hasn't received funding support to progress					
Research	at this stage. Research undertaken to date has helped improve understanding of the performance					
	and practicality of different wintering surface options and these learnings will be shared to aid					
	farmers considering/upgrading infrastructure in the future.					

Milk production

Principles of Milk Production management this week

Milk production	Herds remain relatively stable mostly due to plenty of good quality pasture available for this time of year. LI Baleage herd has hit another unexplainable speed wobble. Milk urea concentrations that have hit mid to high 20's coincide with new grasses being grazed. Continuing with minimal in-shed feed input. At the same time last year we were on a 3n2 milking regime, feeding between 4.5 and 7.5 kg DM supplement across the herds and growth rates were 17-24 kg DM/ha/day!!
	Tierus anu growth rates were 17-24 kg Divi/ha/uay!!
Key Influences of Milk Production	Despite the current pasture quality being very good, we do still see a change in production when cows graze paddocks where there is a range of sown and non-sown pasture species. Some paddocks on the lower terrace are particularly bad for non-sown grass species in their swards.
Cow Management	No change. TAD milking frequency with continued monitoring cow BCS on the fortnightly basis and adjusting the priority feeding and OAD milking groups as required. With early scan results available, 2024 calving date will now be taken into consideration when identifying cows for priority feeding.



Figure 1. Milksolids per cow/day STD and kgMS/ha STD



Figure 2. Cumulative kg Milksolids & Budget season to date

Feed Management

Principles of Feed management this week

Feed Quality	Remain focused on maintaining pasture quality, while continuing to have high growth rates, by stepping over paddocks that are above each farmlets pre-graze target. Due to different stocking rates the pre-graze targets between the herds range from 2900 to 3100 based on the current rotation length. Overall pastures are denser, lusher and have great amounts of clover and plantain than earlier in the season. Early decision making on paddocks where quality and quantity will allow for an extra feed is being implemented for the farmlets on the fastest rotation.
Growth Rate	Good soil temperatures, adequate soil moistures and warmer ambient temperatures have produced some great growing days. Will remain on the same rotation length as having the fast-growing new grasses coupled with demand being under average growth rate, we don't want to go any slower. Continue to step over paddocks above farmlet pre- graze targets for baleage. Two low FVI paddocks are scheduled to be grazed, sprayed out and regrassed as part of our autumn regrassing program.
Nitrogen Strategy	Standard farmlets are currently completing their 5 th application of N fertiliser for the season. While we continue to have good soil moisture and temperature, we will continue to apply N, with the last round for both LI and Stds expected to be applied early March, at this stage



Figure 3. Soil temperatures 2023-24 vs 2022-23



Figure 4. Season to date rainfall compared with cumulative rainfall 2022-23

Feed Wedges







Lower Impact Fodder Beet

Figure 5. Plate meter feed wedges as at 13th February 2024 (hatched paddocks are closed for conservation)

Standard Fodder Beet

Standard Infrastructure