Weekly Farm Summary 30 April 2024

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

	Std Baleage Blue	LI Baleage Pink	Std FB Green	LI FB Yellow
Farmlet area including wintering	49.3	93.6	86.9	60.8
Peak cow numbers	139	208	233	136
Milking Area	46.4	79.1	69.5	49.2
Current Herd size (cows)	123	181	194	114
Pasture Stocking rate (current)	2.6	2.3	2.8	2.3
Winter Feed	Baleage	Baleage	Beet	Beet
Milking supplement	In-shed feed 500kg/cow + silage as required			
Average Cover (kgDM/ha)	2411	2323	2413	2235
Average Growth (kgDM/ha/d)	30	23	40	29
Target rotation length (d)	40	41	48	44
Last week actual rotation (d)	32	37	30	35
Last week supp (kgDM/c/d)	3.6	3.5	3.3	4.6
Latest Average BCS	4.8	4.8	4.7	4.9
% of herd on priority management	18.7%	23.2%	25.8%	29.8%
% in Milk (of Peak cow)	82%	78%	71%	80%
% dried off (of current cows)	7%	10%	15%	4%
7-day Average Milk yield (l/c/d)	11.5	11.6	11.5	15.2
7-day Average Milk yield (kgMS/c)	1.28	1.29	1.31	1.72
Nitrogen Cap kgN/ha/yr	**180**	**50**	**180**	**50**
% Nitrogen used	86% (155kg)	100% (50kg)	88% (158kg)	98% (49kg)
Effluent N YTD	17	19	17	17
YTD Pasture growth TDM/ha	14.9	12.8	14.5	12.9
YTD supp (kgDM/c)	572	524	671	534
YTD MS/c (of Peak cows)	451	443	469	475
YTD MS/milking ha (YTD MS/farm	1356 (1276)	1172 (990)	1579 (1263)	1322 (1070)

Focus area	Current Status
Milk Production	Milk production has dropped steadily this week. The cows are averaging 1.4 kgMS/cow overall, with a range from 1.7-1.3 kgMS/cow between farmlets. We are 11000 kg/MS ahead for the year, and the baleage herd's vat is at 95% excellence for the year, a good reflection on the teams' hard work.
Pasture & Feed	Growth rates were at or below demand this week, and the dry matter % of grass has lifted, ranging between 14.3 and 18.3%, up from the 10-14% we have been experiencing. Protein levels in the grass are obviously still high, as milk urea levels remain high at 36-37. We had hoped the addition of lower crude protein silage to the diet would dilute out the pasture protein but this has not occurred. Feed offered has been reduced to 17.5kg/dm/cow in line with reducing demand as milk production drops to maintain residuals at 1650.
Animals	40 cows were dried off this week to meet BCS goals, and all the remaining herds are switching to OAD milking this week. Lameness seems to have peaked, with the sick mob down to 19 cows. R2 heifers were weighed this week before returning to the support block on the 2nd May.
Environment	The shift to OAD should help to keep our pond low as opportunities to apply effluent this year begin to reduce as soil moisture rises.
Wintering	Plans for baleage placement are finalised, with bales being laid out accordingly. Crop yields will be done on the fodder beet later this week, and baleage placement plans will able to be made for the fodder beet paddocks once the results are in.
People	Everyone has recovered and back on board this week. Shout out to Ravee for his above and beyond efforts over the last couple of weeks covering when people were off and the great job he is doing with hoof trimming to manage the lameness.
Research	The research team has been busy doing all the usual grass and BCS measuring work, with measuring and tracking feed, dry off cows and wintering plans to keep them occupied.

Milk Production

Principles of Milk Production management this week

Milk production	At this stage of the season the focus is totally about next season, with the cow's body condition score (BCS) at calving being the most important and decision driving metric. The decision to change the herds on twice a day (TAD) milking to once a day (OAD) was driven by this - there is more risk to BCS with TAD milking, while the risk to the seasons milk production by going OAD with 4 weeks of lactation left is minimal in the overall picture.
Key Influences of Milk Production	The late stage of lactation, low quality silage, poorer utilization during wet weather and the quality of autumn grass has an impact on milk production. The low impact fodder beet herd have been bucking the downwards trend, still producing at 1.7 kg MS/cow. They have not yet been fed much silage, and the combination of adding the silage and going OAD could see them drop production a bit. Interestingly the second best per cow production is from the standard fodder beet herd, that has been on OAD for several weeks.
Cow Management	The move to OAD milking reduces BCS loss risk during bad weather events, as less energy is partitioned to milk and more is left over for BCS gain. Going OAD six weeks before dry off and making no other changes should result in a 0.2-0.3 BCS gain by itself, and we are planning to feed more for BCS gain at this time of year anyway. As a useful comparison the standard fodder beet herd has been on OAD for three weeks now, and 85% of this herd has gained BCS in the last two weeks, while the other herds have had 42 –52% gain in BCS over the same period with the same feeding regime and similar milk production. Herd average BCS is looking good, lighter animals still in milk are later calvers or culls.

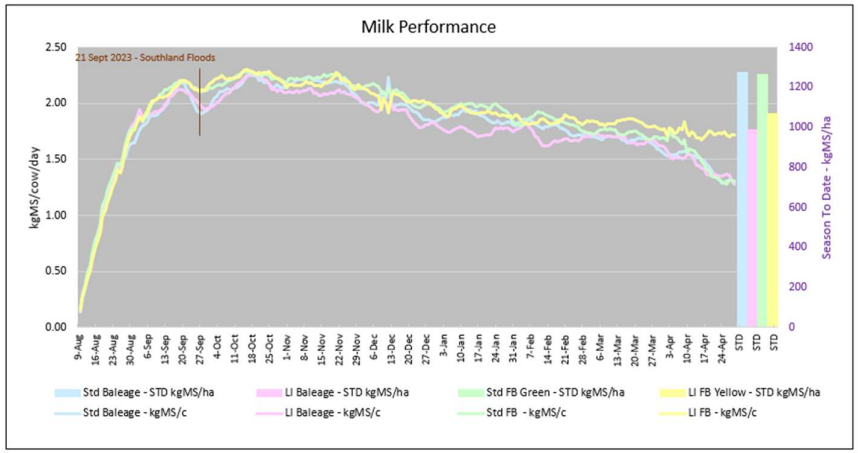


Figure 1. Milksolids per cow/day STD and kgMS/ha STD

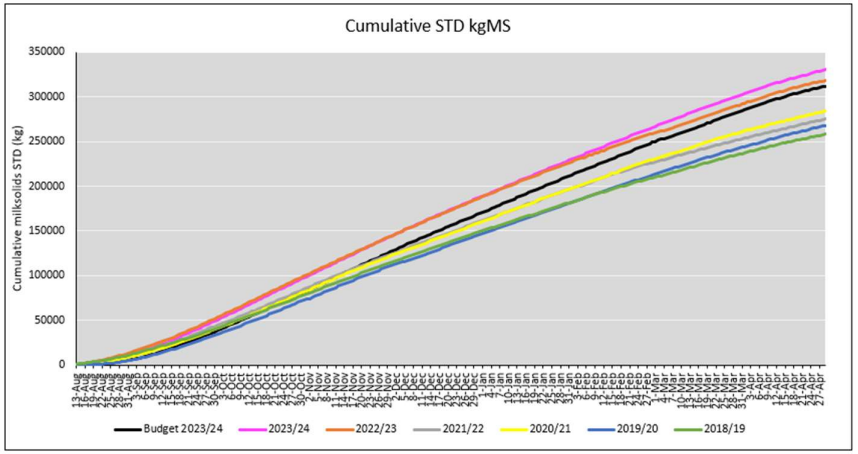


Figure 2. Cumulative kg Milksolids & Budget season to date

Feed Wedges

Principles of Feed management this week

Feed Quality	Our silage is a real lesson in the importance in getting everything right at harvest and ensiling time. A drymatter % of 25-30% is recommended to prevent losses and promote ensiling, with your target to produce “high quality” silage. Minimum quality to be considered high quality is 10MJME/kgDM and 16 % crude protein. Quality starts with the pasture to be harvested as silage, as you only lose quality through the ensiling process. As a rule of thumb, you can expect to lose 1 MJME through the ensiling (essentially pickling) process, so to be high quality you need 11MJME pasture as a minimum starting point. The silage we are feeding now was 50% DM and 8.4 MJME at the point of being ensiled, so was never going to promote good milk production. There is a place in farm systems for lower quality feed to assist dry down and act as a bulk gut fill to help keep cows calm and feeling full during poor weather.
Growth Rate	Growth rates have been consistently above the values used in our autumn feed budgets, as soil and air temperatures have remained mild for this time of year, with no frosts to speak of occurring yet. If we could put in an order, drier and colder with a lower growth rate would be preferable to milder and wetter with reduced utilisation - sadly we will just have to deal with the weather we get as per the best of farming tradition!
Nitrogen Strategy	All nitrogen has been applied, and at the current soil moisture levels N application has a risk of leaching if a heavy rain event happens soon after application. Even with soil temperatures remaining favorable for N application, farmers need to be very aware of ground conditions, when the N boosted pasture is required and the weather forecast if they intend further applications.

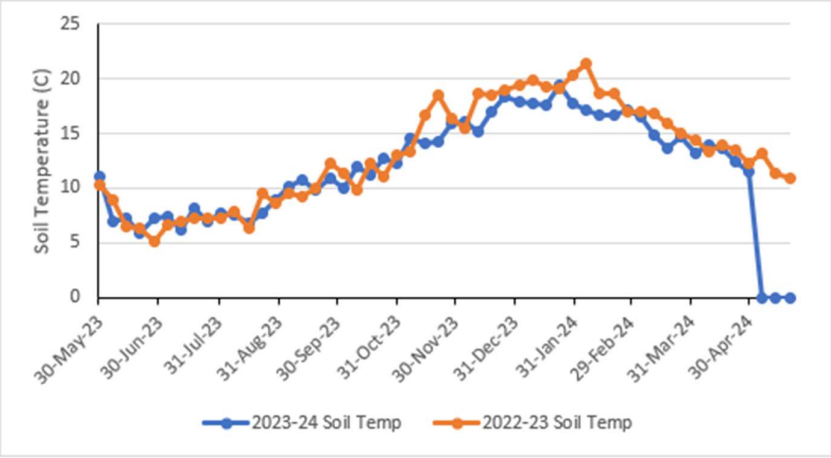


Figure 3. Soil temperatures 2023-24 vs 2022-23

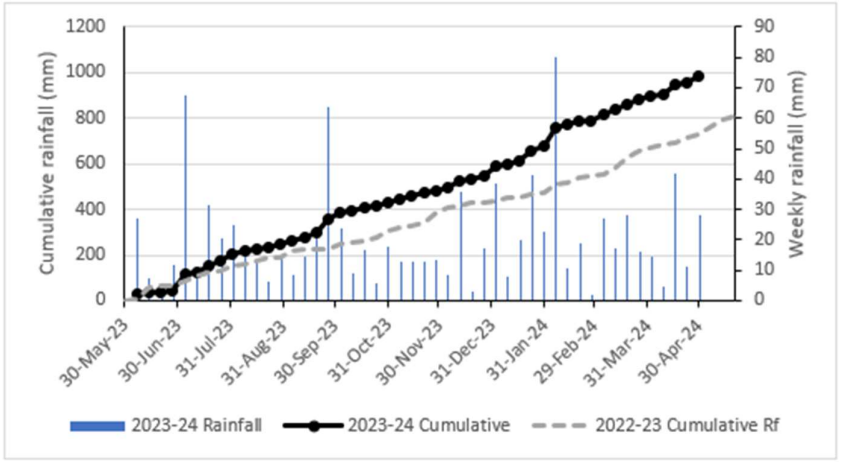
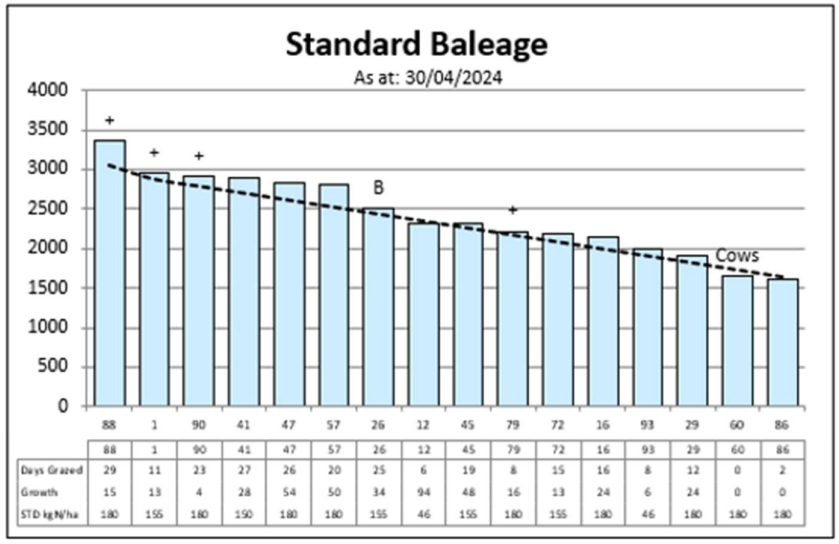
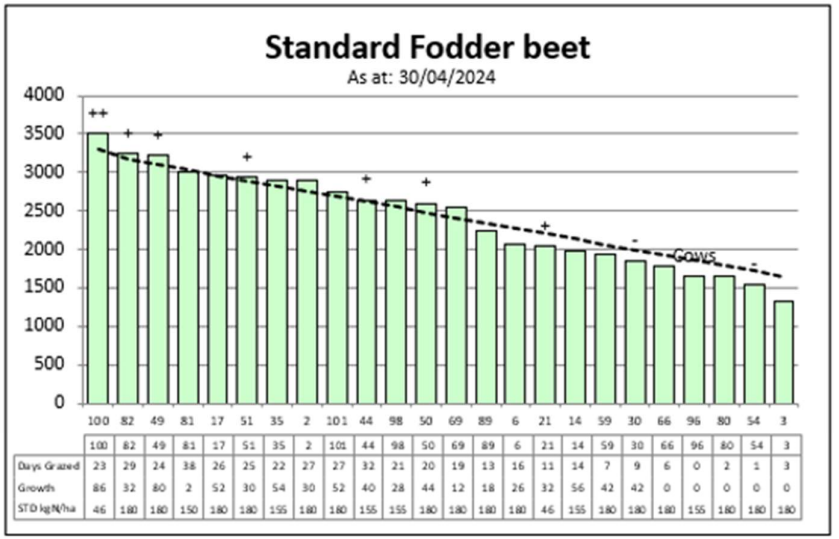
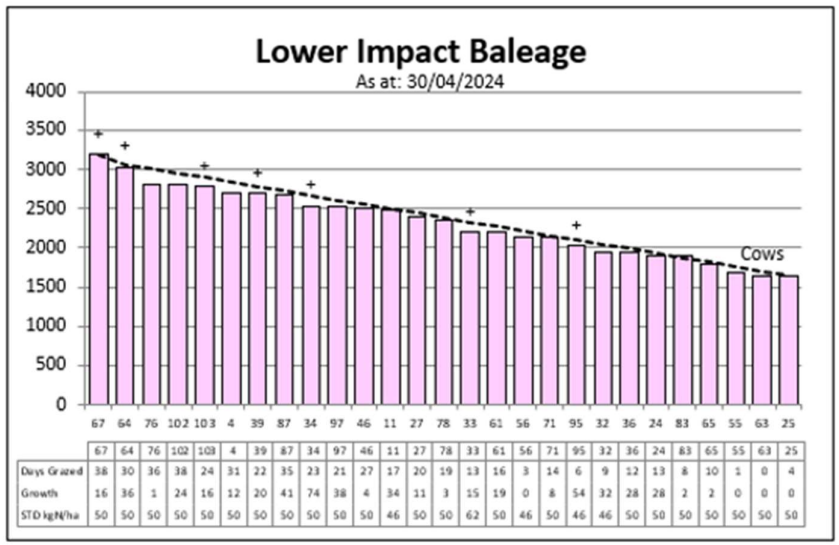


Figure 4. Season to date rainfall compared with cumulative rainfall 2022-23

Feed Wedges







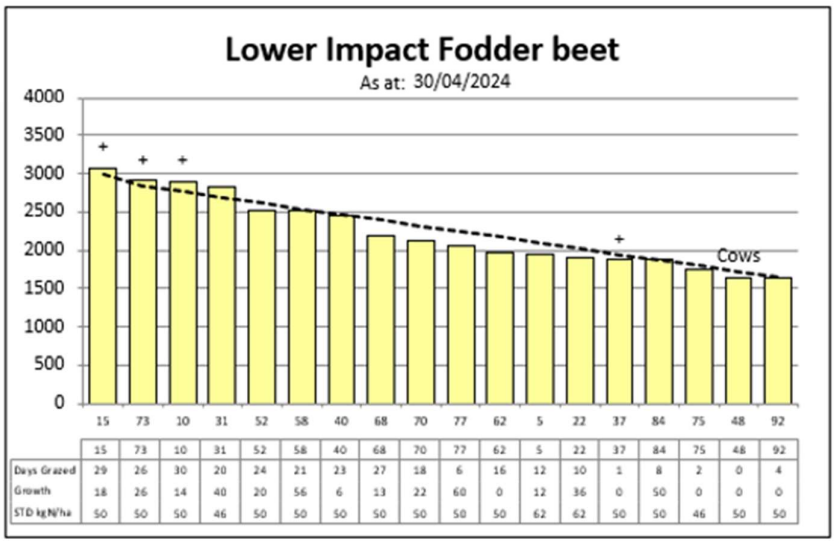
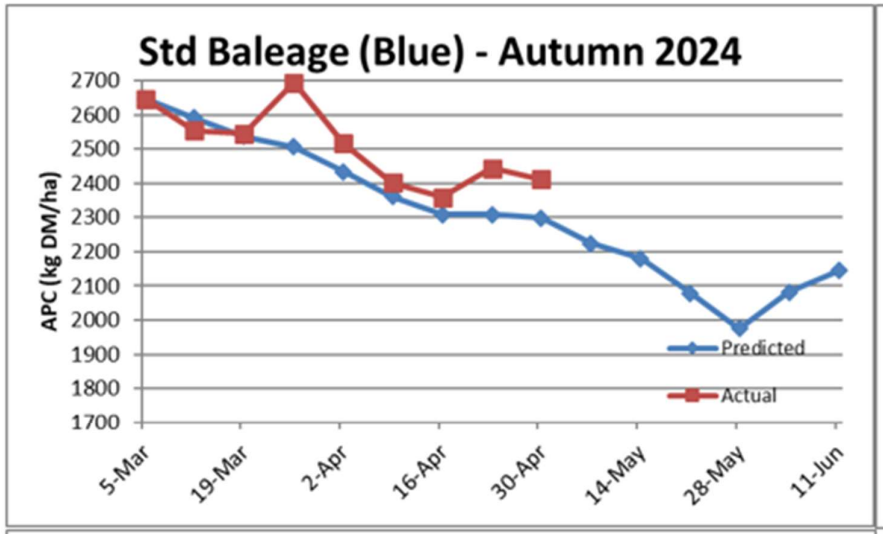
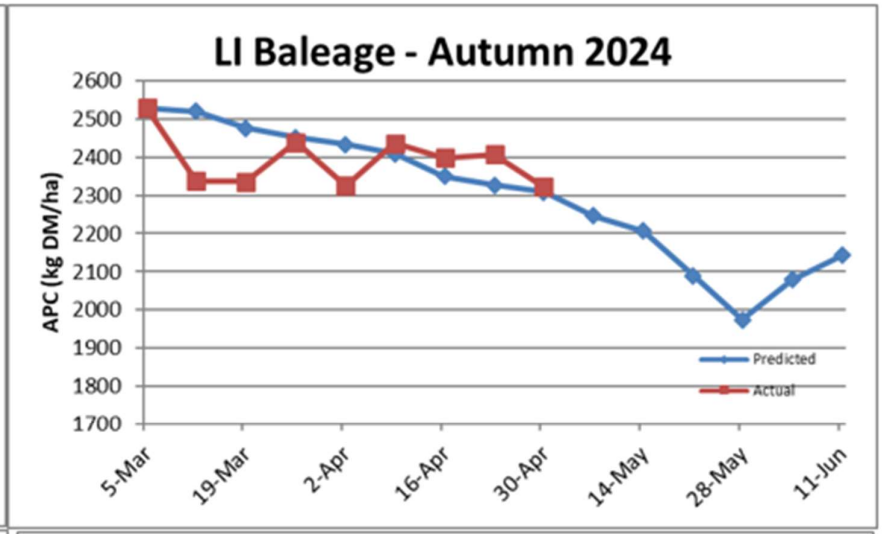
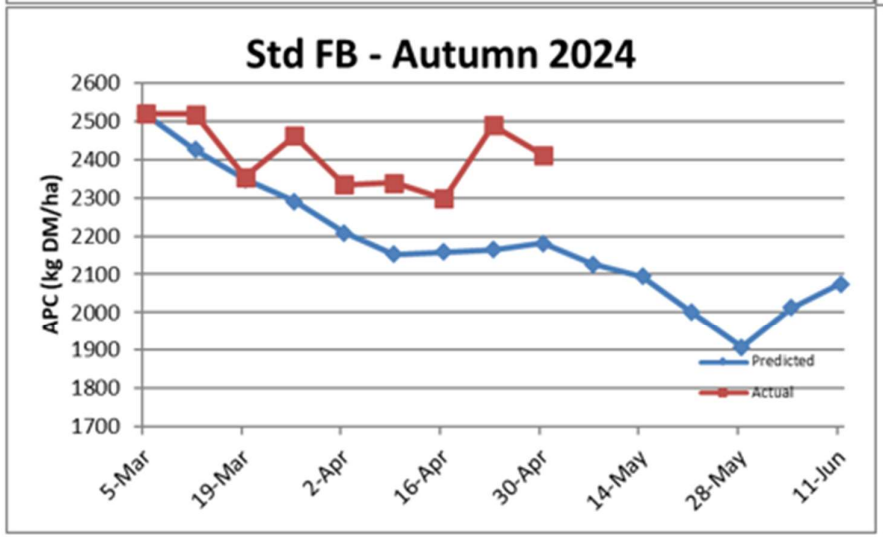


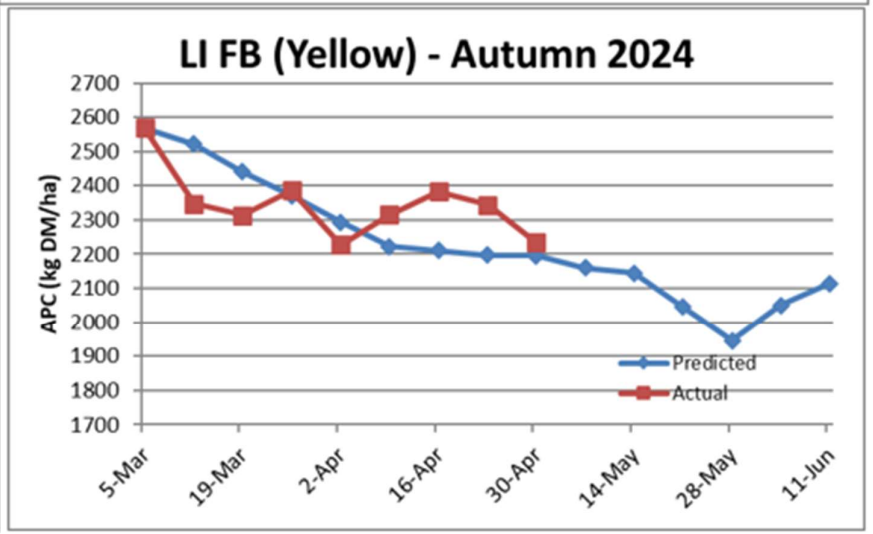
Figure 5. Plate meter feed wedges as at 30th April 2024

Feed budget APC tracking









Herd BCS Distribution