

Weekly Farm Summary 3 March 2023

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

	Std Swede Pink	LI Bale Blue	Std FB Green	LI FB Yellow
Farmlet area including wintering	82.7	60.9	82.7	60.9
Peak cow numbers	222	137	221	135
Milking Area	73.8	55.1	73.8	55.1
Current Herd size (cows)	200	125	200	124
Pasture Stocking rate (current)	2.7	2.3	2.7	2.3
Winter Feed Milking supplement	Swede/Bale	Baleage	Beet 80 days	Beet 60 days
	In-shed feed 500kg/cow + silage as required			
Average Cover	2223	2285	2279	2313
Average Growth	26	40	39	37
Target rotation length	39	37	39	38
Last week act rotation (d)	40	34	39	38
Last week supp (kg DM/cow)	5.9	4.2	6.5	4.8
Average BCS	4.4	4.4	4.4	4.5
% of herd on priority feeding	15%	10%	18%	13%
Milk yield (L/cow)	18.4	18.8	17.4	18.5
Milk yield (kgMS/cow)	1.73	1.77	1.68	1.78
Nitrogen Cap kgN/ha/yr	180	50	180	50
% Nitrogen used (kgN/ha) YTD	58% (104kg)	72% (36kg)	58% (104kg)	74% (37kg)
Effluent N YTD	11	10	10	8
YTD supp (kg DM/cow)	803	507	724	506
YTD MS/cow	357	378	351	373
YTD MS/milk ha (YTD MS/farm ha)	1074 (959)	941 (851)	1051 (938)	914 (827)
Business Area	Current Status			
Milk Production	Interesting drop in yield from the higher performing blue herd this week as they encountered old pastures in their wedge. Other herds reasonably static			
Pasture & Feed	Further lift in pre-graze, reducing supplement requirements on the back of 66mm of rain in Feb. Grass appears lusher and herds now eating the surplus spring pit silage. Summer stack starts 1 March!			
Animals	Final scan as expected, results range from 8% empty to 18% empty across the farmlets. We need to do a deep dive on the LI Baleage (Blue) herd to see what their problem is, and we'll get back to you with some details. Starting to see a few more cases on mastitis and lameness.			
Environment	Entering our nitrogen window as March arrives, but soil moisture forecast still too low for economic response. Applications will cease 10 April at the latest, hoping some rain arrives soon.			
Wintering	1/3rd of our winter feed purchases arrived in the last week, and our fodder beet is looking amazing and booked for a fungal spray to protect the crop.			
People	New research technician starting this week, which is very exciting. Farm team working through lots of annual leave and enjoying the sleep-in every second day on 3-in-2			
Research	Pasture botanical assessments have continued, along with Tash becoming a gold standard accredited Body Condition Scorer! Good progress on our infrastructure design and build planning.			

Milk Production

Principles of Milk Production management this week

Milk Production	Production continues to hold steady on a farm level, however the LI Baleage herd have dropped off because of poorer pastures in the grazing pattern this week. At a high-level production is significantly ahead of this time last year for all herds on a daily basis.
Key Influences on Milk Production	Better control of the feed quality this season has allowed production to remain steady through the drier conditions. Good quality baleage/silage in the system combined with all herds having access to in-shed feed has ensured cows have not been protein limited to date. Fluctuations in yield on a paddock basis are likely driven by energy being limited.
Cow Management	No change in cow management this week

	Std brassica/baleage Pink	LI Baleage Blue	Std Fodder beet Green	LI Fodder beet Yellow
kg Milksolids per cow this week / (last week)	1.75 (1.74)	1.75 (1.96)	1.68 (1.71)	1.78 (1.88)
kg Milksolids per ha this year / (same time last year)	1074 (959)	941 (851)	1051 (938)	914 (827)
% Var kg Milksolids per ha Season per ha to date vs last season to date	8.0	7.4	13.0	10.9
No. of Cows needing preferential feeding (% herd)	30 (15)	13 (10)	37 (18)	17 (13)
Animal Health peculiarities	None	None	None	None

Milk Production

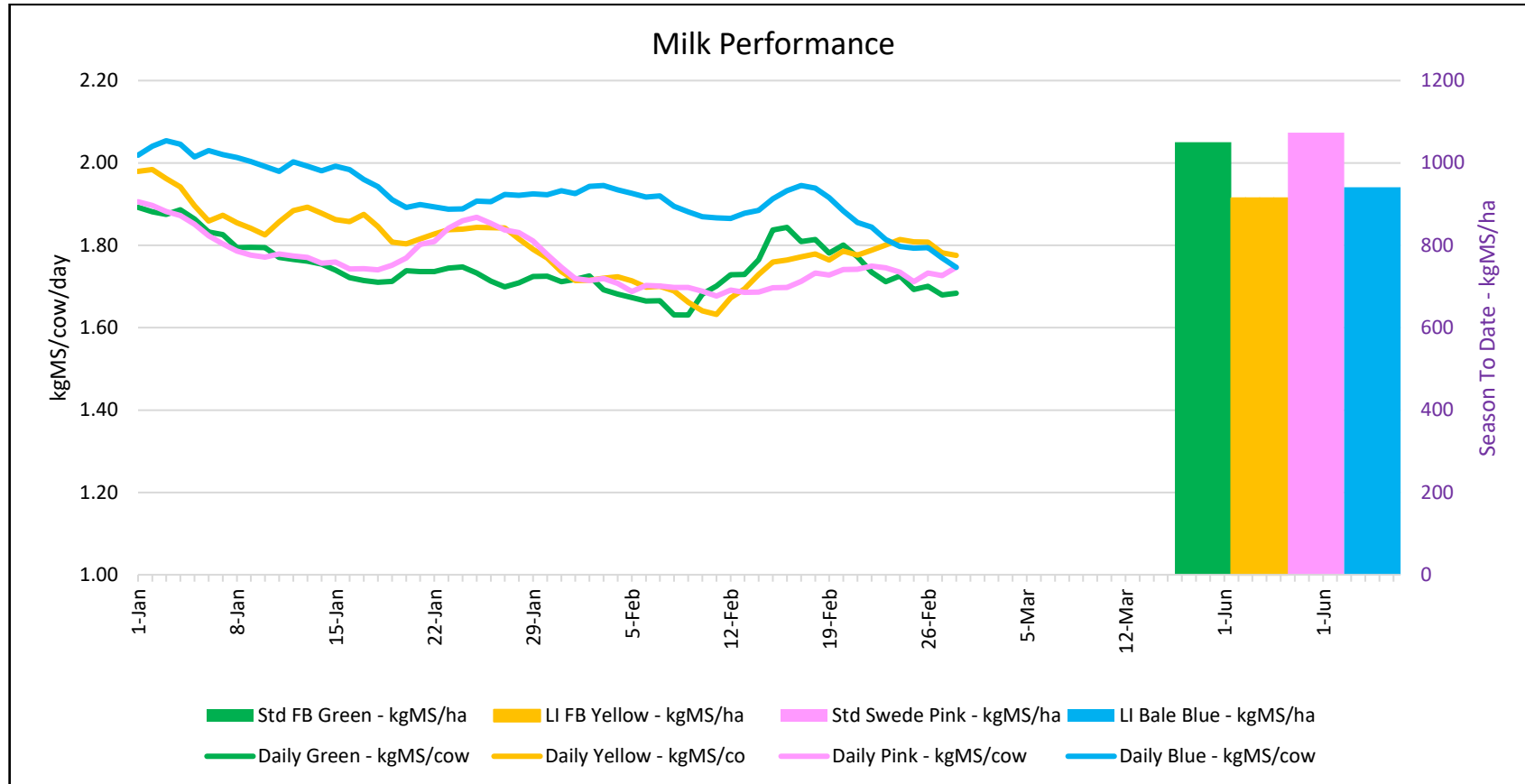


Figure 1: Milk solids production (/cow/day) plus cumulative season production (kg/ha) at 28th February 2023

Feed

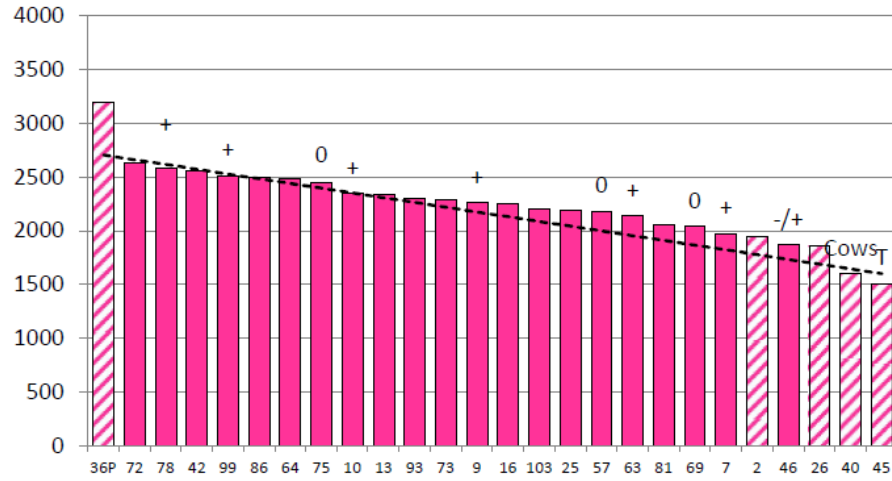
Principles of Feed management this week

Feed Quality	Still a huge variation across the farm in terms of quality. Autumn silage stack has now been opened with weekly DM samples to be taken to ensure feed intakes remain as planned. Several paddocks that missed topping prior to the dry may need topping when growing conditions allow to ensure good quality pasture heading into winter.
Growth Rate Management	Growth remains below demand this week.
Nitrogen Strategy	The farm is still moisture limited so N applications will go on as soon as conditions allow. Due to current round length, even if a weather window allows, for most paddocks we only have one application window before our last available N application date of 10 th April so considering a higher application rate of 40kg N/ha to the Std herds to get closer to the farmlet N targets for the season.

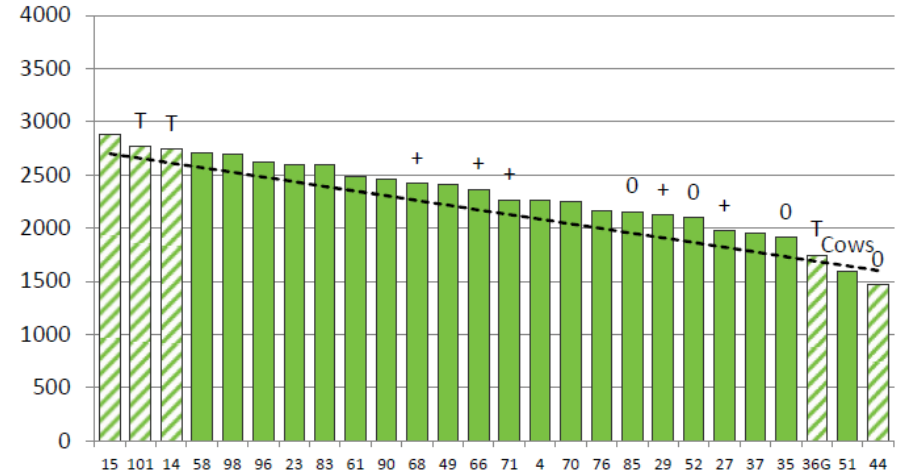
	Std brassica/baleage Pink	LI Baleage Blue	Std Fodder beet Green	LI Fodder beet Yellow
Quantity	Deficit	Deficit	Deficit	Deficit
Quality	Variable quality and DM%	Variable quality and DM%	Variable quality and DM%	Variable quality and DM%
Surplus Management	None	None	None	None
Deficit Management for coming week- kgDM (diff from last week)	6.4 (0.5)	3.1 (-1.1)	6.6 (0.1)	5.3 (0.5)
Target Rotation Length (days)	39	37	39	38

Feed

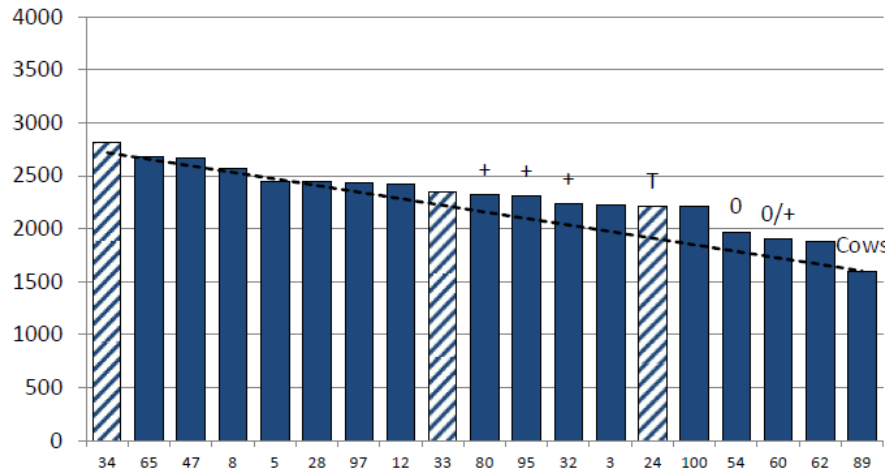
Standard Brassica/Baleage



Standard Fodder Beet



Lower Impact Baleage



Lower Impact Fodder Beet

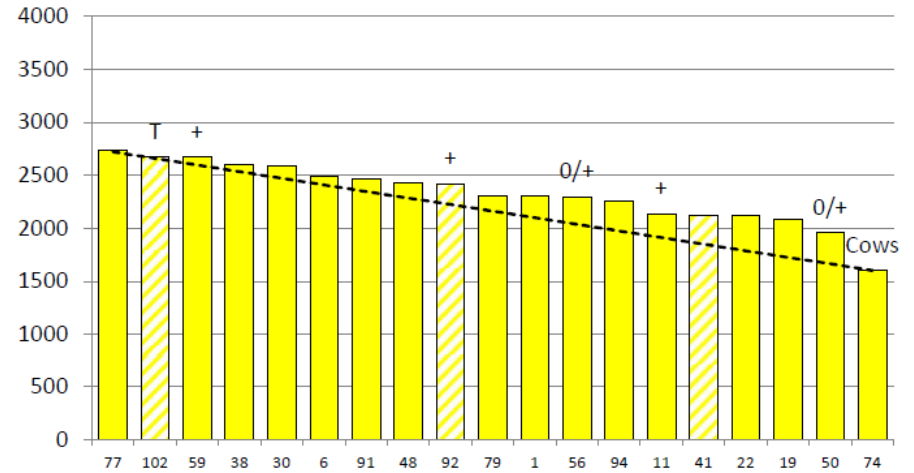


Figure 2: Feed Wedges as of 28th February

Feed

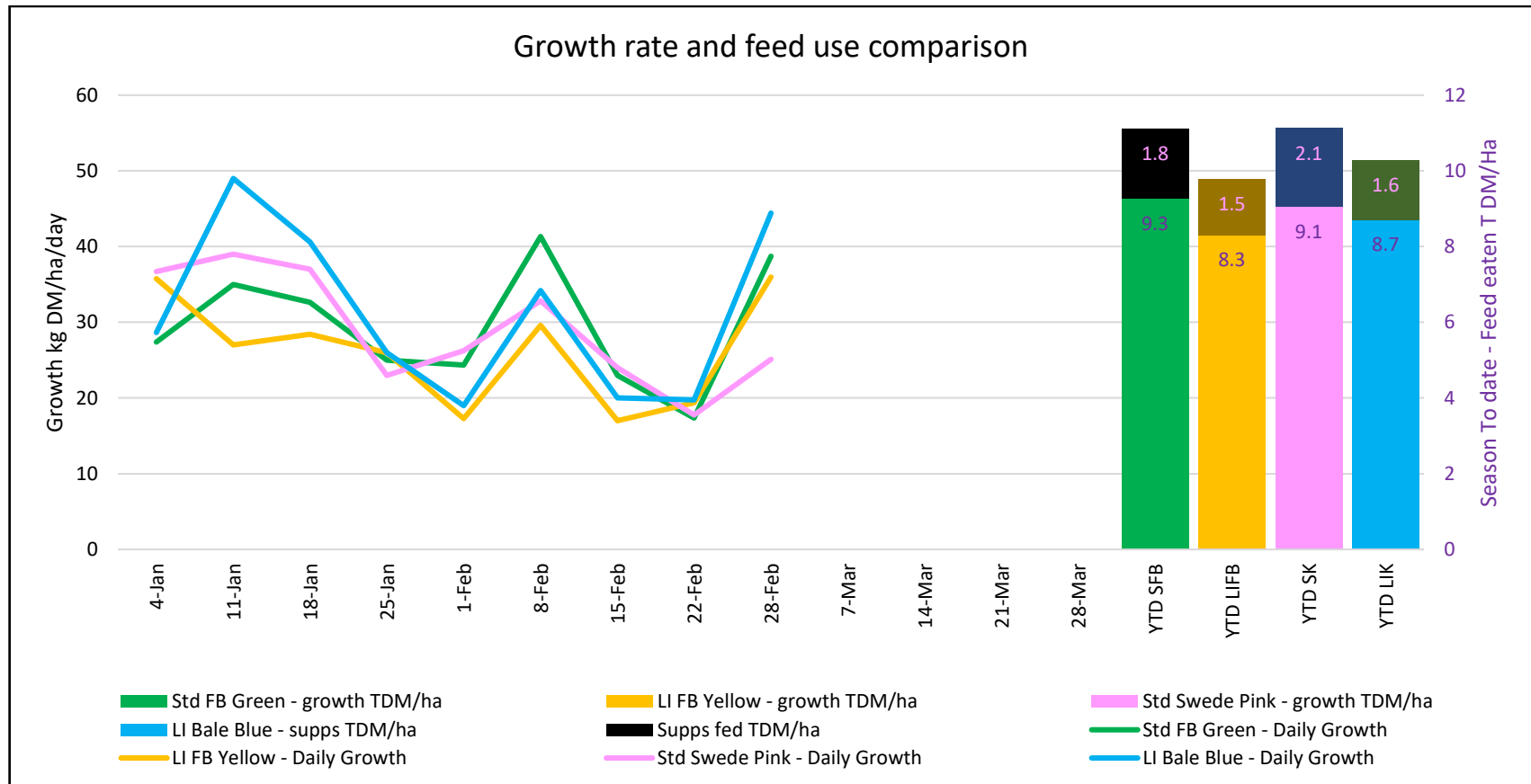


Figure 3: Weekly pasture growth rate and year to date total feed eaten

Animals

BCS Management to achieve calving BCS targets of 5.5 for rising 3 yr olds and 5 for mixed age cows

Proactive management of BCS is continuing for all herds based on fortnightly BCS assessments, BCS camera data and calving dates. We are confident that the year on year improvement in 6 week in-calf rate and early lactation performance we have seen are a result of proactive BCS management throughout the year but particularly in the autumn.

Strategy season to date

- Less than BCS 4 – priority inshed feeding
- BCS 3.5 – priority inshed feeding and OAD milking in herd
- Light BCS 3.5 – priority inshed feeding and OAD milking in the treatment mob

Current Strategy

- Priority inshed feeding for light conditioned early calving cows
- Restricted inshed feeding for cows already at drying off BCS target or good conditioned culls
- Watch group identified that will stay on current (2.5 kg DM/day) inshed feeding if whole herd amounts are reduced as pre-graze targets lift.

Future strategy

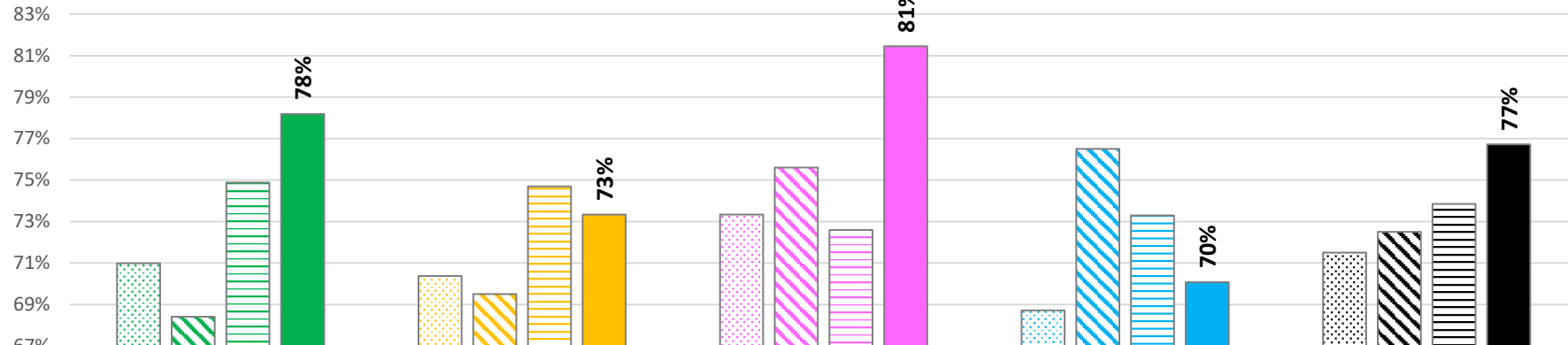
- Continue with priority feeding but if BCS gain targets are not being met and we have not moved to OAD milking for the whole herd then cows will be dried off.

Table 1: Percentage of each herd on normal, priority and limited inshed feeding

	Std Swede/Baleage	LI Baleage	Std FB	LI FB
Normal Inshed feed	56	55	55	61
Limited Inshed feed	22	24	16	22
<i>Already at dry off BCS</i>	82	59	56	63
<i>Not in Calf</i>	18	41	44	37
Priority Feed Now	13	13	17	11
On watch for priority feed	9	8	12	6

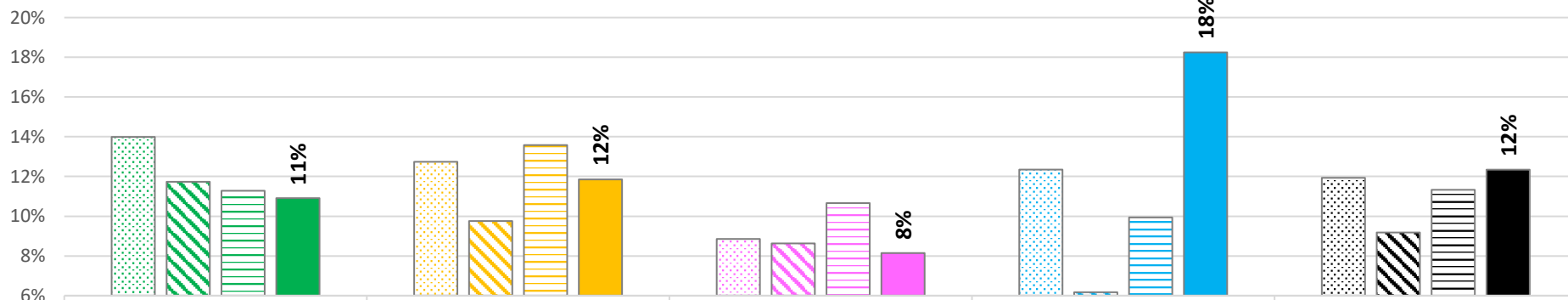
Animals

6-wk in calf rate last 4 years



	Std FB	LI FB	Std Swede	LI Baleage	Farm
Week 6 2019	71.0%	70.4%	73.3%	68.7%	71.5%
Week 6 2020	68.4%	69.5%	75.6%	76.5%	72.5%
Week 6 2021	74.9%	74.7%	72.6%	73.3%	73.8%
Week 6 2022	78.2%	73.3%	81.4%	70.1%	76.7%

not in calf rate last 4 years



	Std FB	LI FB	Std Swede	LI Baleage	Farm
2019	14.0%	12.7%	8.9%	12.3%	11.9%
2020	11.7%	9.8%	8.6%	6.2%	9.2%
2021	11.3%	13.6%	10.7%	9.9%	11.3%
2022	10.9%	11.9%	8.1%	18.2%	12.3%