

# Weekly Farm Summary 19<sup>th</sup> May 2022

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

|                                   | Std Kale Pink                                                                                                                                                                                                                                                                                                                                              | LI Kale Blue | Std FB Green                       | LI FB Yellow |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------------|--------------|
| Farmlet area including wintering  | 75.0                                                                                                                                                                                                                                                                                                                                                       | 72.1         | 75.0                               | 69.2         |
| Peak cow numbers                  | 195                                                                                                                                                                                                                                                                                                                                                        | 162          | 194                                | 162          |
| Milking Area                      | 63.4                                                                                                                                                                                                                                                                                                                                                       | 60.5         | 63.4                               | 60.5         |
| Current Herd size (cows)          | 125                                                                                                                                                                                                                                                                                                                                                        | 97           | 135                                | 115          |
| Pasture Stocking rate             | 2.0                                                                                                                                                                                                                                                                                                                                                        | 1.6          | 2.1                                | 1.9          |
| Winter Feed<br>Milking supplement | Kale<br>In-Shed feed                                                                                                                                                                                                                                                                                                                                       |              | Fodder beet<br>Fodder beet/Baleage |              |
| Average Cover                     | 2245                                                                                                                                                                                                                                                                                                                                                       | 2067         | 2260                               | 2122         |
| Average Growth                    | 33                                                                                                                                                                                                                                                                                                                                                         | 24           | 29                                 | 25           |
| Target rotation length            | 40                                                                                                                                                                                                                                                                                                                                                         | 38           | 40                                 | 38           |
| Last week act rotation (d)        | 35                                                                                                                                                                                                                                                                                                                                                         | 38           | 35                                 | 30           |
| Last week supp (kg DM/cow)        | 2.2                                                                                                                                                                                                                                                                                                                                                        | 1.4          | 3.2                                | 3.4          |
| Average BCS                       | 4.66                                                                                                                                                                                                                                                                                                                                                       | 4.50         | 4.49                               | 4.49         |
| % of herd on priority feeding     | 14%                                                                                                                                                                                                                                                                                                                                                        | 20%          | 8%                                 | 5%           |
| Milk yield (L/cow)                | 10.1                                                                                                                                                                                                                                                                                                                                                       | 10.2         | 9.2                                | 9.1          |
| Milk yield (kgMS/cow)             | 1.18                                                                                                                                                                                                                                                                                                                                                       | 1.14         | 1.14                               | 1.14         |
| <b>Nitrogen Cap kgN/ha/yr</b>     | <b>190</b>                                                                                                                                                                                                                                                                                                                                                 | <b>50</b>    | <b>190</b>                         | <b>50</b>    |
| % Nitrogen used<br>(kgN/ha) YTD   | 84% (162kg)                                                                                                                                                                                                                                                                                                                                                | 106% (53kg)  | 79% (152kg)                        | 108% (54kg)  |
| Effluent N YTD                    | 16                                                                                                                                                                                                                                                                                                                                                         | 12           | 19                                 | 19           |
| Profit/ha comp to Control         | \$0                                                                                                                                                                                                                                                                                                                                                        | -\$731       | -\$1,423                           | -\$1,238     |
| YTD supp (kg DM/cow)              | 898                                                                                                                                                                                                                                                                                                                                                        | 718          | 793                                | 750          |
| YTD MS/cow                        | 414                                                                                                                                                                                                                                                                                                                                                        | 409          | 389                                | 390          |
| YTD MS/ha                         | 1,275                                                                                                                                                                                                                                                                                                                                                      | 1,094        | 1,189                              | 1,044        |
| <b>Business Area</b>              | <b>Current Status</b>                                                                                                                                                                                                                                                                                                                                      |              |                                    |              |
| <b>Feed</b>                       | With growth rates higher than anticipated for this time of the year, from today milkers will spend 24 hours in approx. 70% of the paddock with dry mobs, heifers and culls grazing the remainder. Aim to get APC for all farmlets as close as possible to 1900 by mid next week.                                                                           |              |                                    |              |
| <b>Milk Production</b>            | The Kale herds currently have a higher volume than the fodder beet herds but milk solids production is similar across them all. SCC expected to drop from 200,000 average with the removal of several high SCC cows going as culls.                                                                                                                        |              |                                    |              |
| <b>People</b>                     | End of season celebrations for the team last week. Periods of annual leave booked for the team throughout June and July.                                                                                                                                                                                                                                   |              |                                    |              |
| <b>Animals</b>                    | All R2's were teat sealed this week and are now on the platform. R1's weighed, drenched, vaccinated etc this week. Average weight 227kg. Cow count for auditing purposes occurring on Friday. Milkers to be dried off 23 <sup>rd</sup> and 24 <sup>th</sup> May. Working through herd size changes and reallocating some animals to new herds for 2022-23. |              |                                    |              |
| <b>Environment</b>                | Soil temperatures continue to stay above 10 degrees (12.0), significantly higher than this time last year, although cold wet conditions are predicted for the next week.                                                                                                                                                                                   |              |                                    |              |
| <b>Wintering</b>                  | Pre-winter crop yields to be completed next week before cows are put on crop. The remaining grass and baleage paddocks are nearing completion of set up.                                                                                                                                                                                                   |              |                                    |              |
| <b>Research</b>                   | Calibration cuts completed this week. Nicole and Tash have been busy this week with research trials and projects based around the region i.e., plantain measurements in the Oteramika Catchment.                                                                                                                                                           |              |                                    |              |

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

# Feed

## Principles of Pasture Management this week

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Feed Quality</b>           | Cow grazing behaviour accompanied with APC and pre-grze masses would suggest that there is more grass than currently showing through measurements. Calibration cuts completed this week will confirm this.                                                                                                                                                                                                                               |
| <b>Growth Rate Management</b> | For the remainder of the milking season, the daily area allocation for the milkers will be increased. Residuals of 2100-2200 plus a break of new grass are being left for dry cows and heifers to clean up. Dry cow allocation is targeted at achieving BCS gain. If we are to hit our end of season APC of 1900 we currently need to remove 300-350kgDM/ha from the standard farmlets and 150-200 kgDM/ha from the low impact farmlets. |
| <b>Nitrogen Strategy</b>      | Effluent applications will continue until milking ceases for the season. Ground conditions are still allowing for efficient application of effluent.                                                                                                                                                                                                                                                                                     |

|                           | <b>Standard<br/>Kale<br/>Pink</b>                       | <b>Low Impact<br/>Kale<br/>Blue</b>                     | <b>Standard<br/>Fodder beet<br/>Green</b>               | <b>Low Impact<br/>Fodder beet<br/>Yellow</b>            |
|---------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|
| <b>Quantity</b>           | APC 2245                                                | APC 2067                                                | APC 2260                                                | APC 2122                                                |
| <b>Quality</b>            | DM % decreasing                                         | DM % decreasing                                         | DM % decreasing                                         | DM % decreasing                                         |
| <b>Surplus Management</b> | 24 hour grazing with residuals tidied up by non milkers | 24 hour grazing with residuals tidied up by non milkers | 24 hour grazing with residuals tidied up by non milkers | 24 hour grazing with residuals tidied up by non milkers |
| <b>Supplementary Feed</b> | 0.9 kg inshed                                           | 0.3 kg inshed                                           | 0.8 kg inshed<br>1.2 kg FB                              | 0.7 kg inshed<br>1.2kg FB                               |
| <b>Rotation Length</b>    | 39 days                                                 | 38 days                                                 | 44 days                                                 | 38 days                                                 |

# Milk Production

## Principles of Milk production management this week

|                                          |                                                                                                                                                                                                                                                                                                     |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Milk Production</b>                   | Milk production is now secondary to setting the farm up for next season. Pasture will comprise the majority of the diet for all herds. Season to date both LI herds have produced more on a MS/ha basis however this is due to an a reduction in milking platform area for these herds this season. |
| <b>Key influences on milk production</b> | Stage of lactation is having the biggest impact on milk production now. SCC sitting higher at this end of the season due to OAD milking.                                                                                                                                                            |
| <b>Cow Management</b>                    | One more full herd BCS to be completed next week at dry off to establish wintering mobs. Currently there are 8 mobs on the platform, 4 herds of milkers, 2 herds of dry cows, heifers and cull cows.                                                                                                |

|                                                               | Standard Kale Pink   | Low Impact Kale Blue | Standard Fodder beet Green | Low Impact Fodder beet Yellow |
|---------------------------------------------------------------|----------------------|----------------------|----------------------------|-------------------------------|
| <b>kg Milksolids per cow this week / (last week)</b>          | 1.18/(1.18)          | 1.14/(1.19)          | 1.14/(1.15)                | 1.14/(1.13)                   |
| <b>kg Milksolids per ha this year / (this time last year)</b> | 1275/(1308)          | 1094/(1073)          | 1189/(1259)                | 1044/(1038)                   |
| <b>Season to date compared to last year</b>                   | Down 0.1% total milk | Up 1.7 % total milk  | Down 5.9% total milk       | Up 0.4% total milk.           |
| <b>Culls so far</b>                                           | 24 cows              | 24 cows              | 31 cows                    | 20 cows                       |
| <b>Animal health peculiarities</b>                            | None                 | None                 | None                       | None                          |

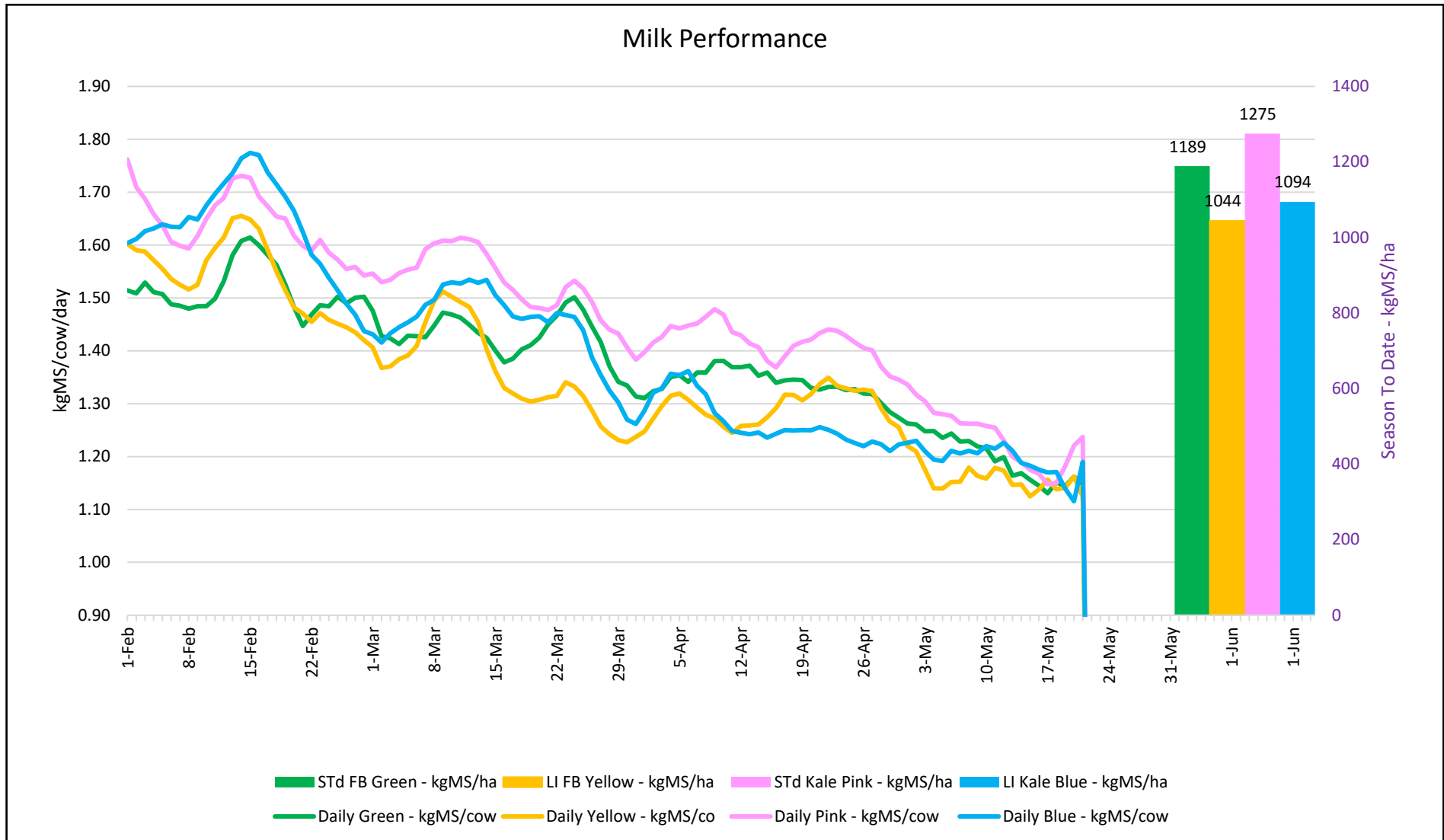
# Feeding

Below is the grazing plan for the next week. As we head towards dry off, and with higher-than-expected APC for this time of the season, the feeding situation becomes more complex with more herds to manage. Grazing plan decisions this week considered:

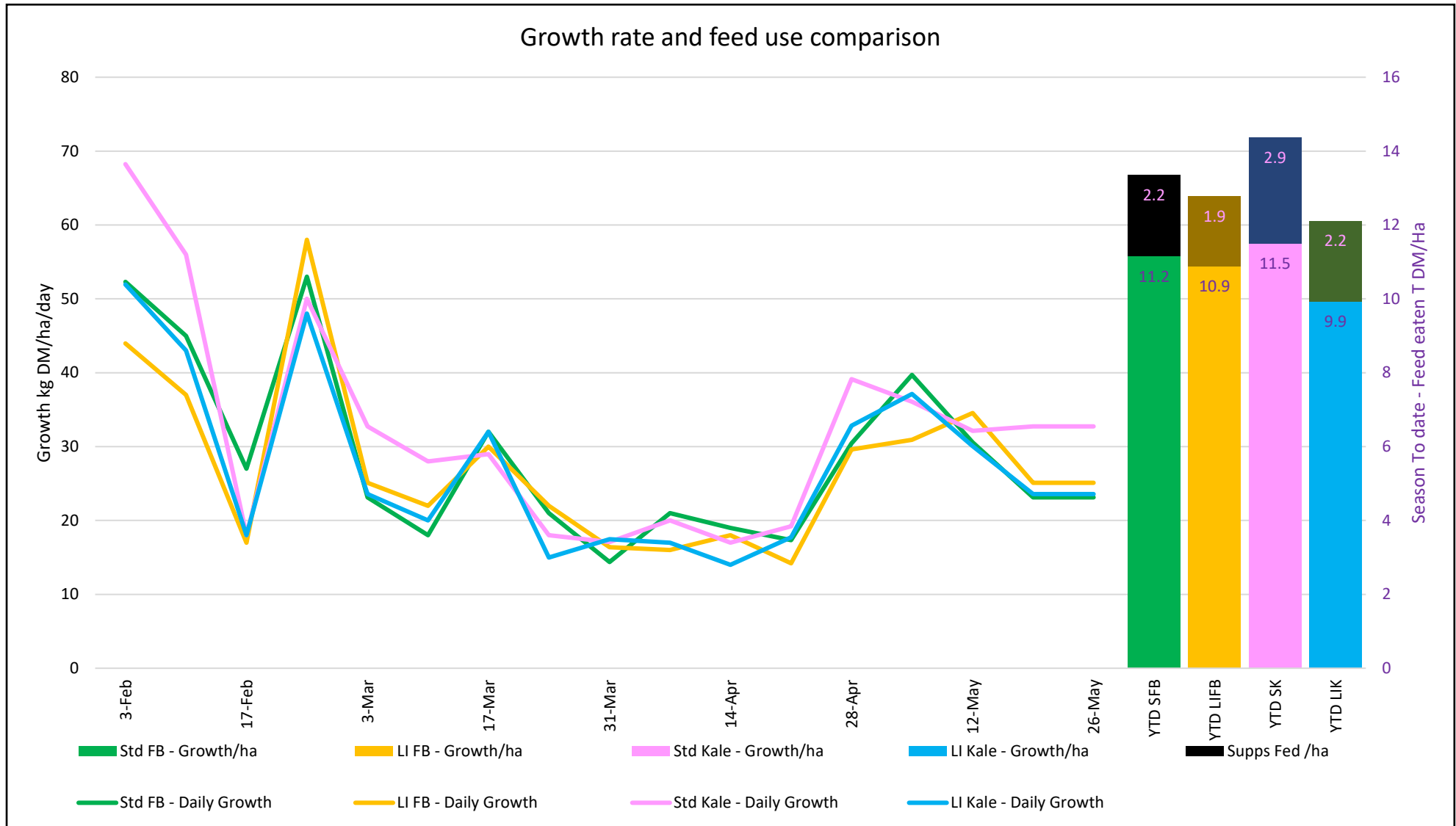
1. Current and target APC for each herd
2. Intake requirements for each class of livestock
3. Individual paddock conditions e.g. New grass, undersown, aerated, location on the farm
4. Mob sizes
5. Pre-graze mass
6. Dry off date

| 19-May      |                        | Pink         | Pink lates | Blue                 | Green         | Green lates   | Yellow                            | Reds        | Focus dries    | Other dries    |  | Heifers     |  | Culls |
|-------------|------------------------|--------------|------------|----------------------|---------------|---------------|-----------------------------------|-------------|----------------|----------------|--|-------------|--|-------|
| No. in herd |                        | 125          |            | 97                   | 135           |               | 115                               |             | 71             | 81             |  |             |  |       |
| 19-May      | Thu                    | 64           |            | 3                    | 4 (70%)       |               | 38 (2/3)                          | 53          | 20             | 18             |  | 84 (2/3)    |  |       |
|             | Fbeet (kg DM/cow)      |              |            |                      | 1.2           |               | 1.2                               |             |                |                |  |             |  |       |
|             | In-shed (kg DM/cow)    | 0.5          |            | 0.5                  | 0.8           |               | 0.8                               |             |                |                |  |             |  |       |
|             | Baleage (no. of bales) |              |            |                      |               |               |                                   |             |                |                |  |             |  |       |
| 20-May      | Fri                    | 9 (60%)      |            | 51                   | 37 (70%)      |               | 1 (60%)                           | 53          | 4              | 38             |  | 86          |  |       |
|             | Fbeet (kg DM/cow)      |              |            |                      | 1.2           |               | 1.2                               |             |                |                |  |             |  |       |
|             | In-shed (kg DM/cow)    | 0.5          |            | 0.5                  | 0.8           |               | 0.8                               |             |                |                |  |             |  |       |
|             | Baleage (no. of bales) |              |            |                      |               |               |                                   |             |                |                |  |             |  |       |
| 21-May      | Sat                    | 42 (80%)     |            | 89 (70%)             | 58 (70%)      |               | 48 (60%)                          | 53          | 3              | 37             |  | 9           |  |       |
|             | Fbeet (kg DM/cow)      |              |            |                      | 1.2           |               | 1.2                               |             |                |                |  |             |  |       |
|             | In-shed (kg DM/cow)    | 0.5          |            | 0.5                  | 0.8           |               | 0.8                               |             |                |                |  |             |  |       |
|             | Baleage (no. of bales) |              |            |                      |               |               |                                   |             |                |                |  |             |  |       |
| 22-May      | Sun                    | 13 (60%)     |            | 8 (60%)              | 27 (100%)     |               | 48 (40%) then 59                  | 53          | 84             | 58             |  | 1           |  | 43    |
|             | Fbeet (kg DM/cow)      |              |            |                      | 1.2           |               | 1.2                               |             |                |                |  |             |  |       |
|             | In-shed (kg DM/cow)    | 0.5          |            | 0.5                  | 0             |               | 0                                 |             |                |                |  |             |  |       |
|             | Baleage (no. of bales) |              |            |                      |               |               |                                   |             |                |                |  |             |  |       |
| 23-May      | Mon                    | 13 (100%)    |            | 8 (40%)              | Green earlies | Green lates   |                                   | with herds? | 89             | 53             |  | 42          |  | 43    |
|             | Fbeet (kg DM/cow)      |              |            |                      | Dry off day   |               | Dry off day                       |             |                |                |  |             |  |       |
|             | In-shed (kg DM/cow)    | 0            |            | 0                    | into 27       | into 61 (50%) | into 59                           |             |                |                |  |             |  |       |
|             | Baleage (no. of bales) |              |            |                      |               |               |                                   |             |                |                |  |             |  |       |
| 24-May      | Tue                    | Pink earlies | Pink lates |                      | 27            | 61 (50%)      | 48                                |             |                |                |  | 53?         |  | TBC   |
|             | Fodderbeet             | Dry off day  |            | Dry off day          |               |               |                                   |             | To winter mobs | To winter mobs |  |             |  |       |
|             | In-shed (kg DM/cow)    | 0            |            |                      |               |               |                                   |             |                |                |  |             |  |       |
|             | Baleage (no. of bales) | into 13      | into 9     | back into 8          |               |               |                                   |             |                |                |  |             |  |       |
| 25-May      | Wed                    | 13           | 9          | 8                    | TBC           | TBC           | TBC                               |             |                |                |  | Heifers day |  | TBC   |
|             | Fodderbeet             |              |            |                      |               |               |                                   |             |                |                |  |             |  |       |
|             | In-shed (kg DM/cow)    |              |            |                      |               |               |                                   |             |                |                |  |             |  |       |
|             | Baleage (no. of bales) |              |            |                      |               |               |                                   |             |                |                |  |             |  |       |
| 26-May      | Thu                    | On crop      | On crop    | On grass and baleage | On crop       | On to crop    | On crop                           |             |                |                |  |             |  | TBC   |
|             | Fbeet (kg DM/cow)      |              |            |                      |               |               |                                   |             |                |                |  |             |  |       |
|             | In-shed (kg DM/cow)    |              |            |                      |               |               |                                   |             |                |                |  |             |  |       |
|             | Baleage (no. of bales) |              |            |                      |               |               |                                   |             |                |                |  |             |  |       |
| 27-May      | Fri                    |              |            |                      |               |               |                                   |             |                |                |  |             |  | TBC   |
|             | Fbeet (kg DM/cow)      |              |            |                      |               |               |                                   |             |                |                |  |             |  |       |
|             | In-shed (kg DM/cow)    |              |            |                      |               |               |                                   |             |                |                |  |             |  |       |
|             | Baleage (no. of bales) |              |            |                      |               |               |                                   |             |                |                |  |             |  |       |
| Notes       |                        |              |            |                      |               |               |                                   |             |                |                |  |             |  |       |
|             | Pasture Baleage:       |              |            |                      |               |               | Baleage fed as needed to ALL mobs |             |                |                |  |             |  |       |

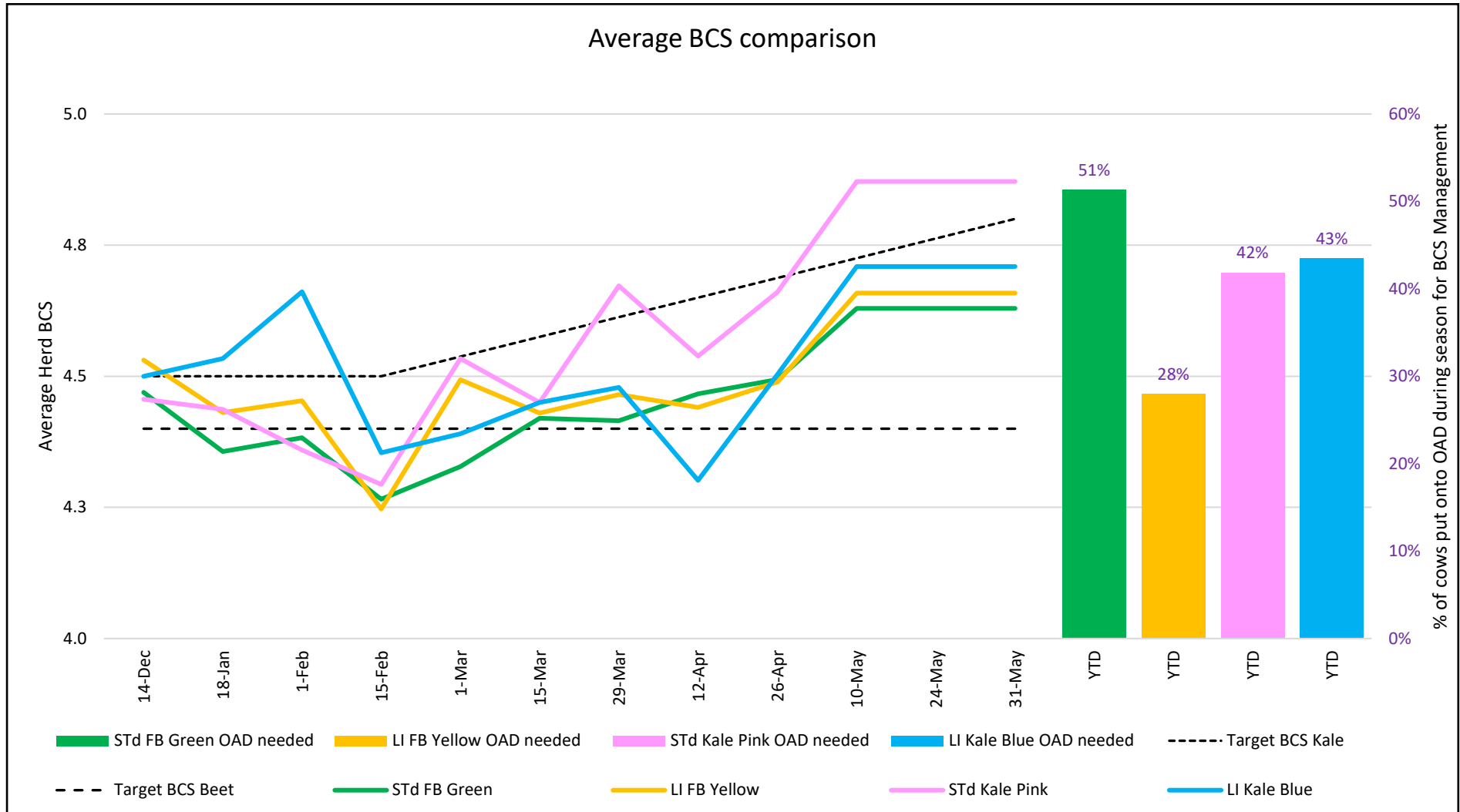
**Farm system impacts: of Kale vs Fodder beet for winter AND Reducing N loss to water by 30%.  
 Kale, Winters on kale - in-shed feed available. Fodder beet, winters on Beet, Beet as lactation supp. Low  
 impact (LI) limited Max 50kg N/ha/year vs Std 193kg N/ha/year**



**Farm system impacts: of Kale vs Fodder beet for winter AND Reducing N loss to water by 30%.**  
**Kale, Winters on kale - in-shed feed available. Fodder beet, winters on Beet, Beet as lactation supp. Low impact (LI) limited Max 50kg N/ha/year vs Std 193kg N/ha/year**



**Farm system impacts: of Kale vs Fodder beet for winter AND Reducing N loss to water by 30%.**  
**Kale, Winters on kale - in-shed feed available. Fodder beet, winters on Beet, Beet as lactation supp. Low impact (LI) limited Max 50kg N/ha/year vs Std 193kg N/ha/year**



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



Figure 1: Heifers getting their teat seal this week

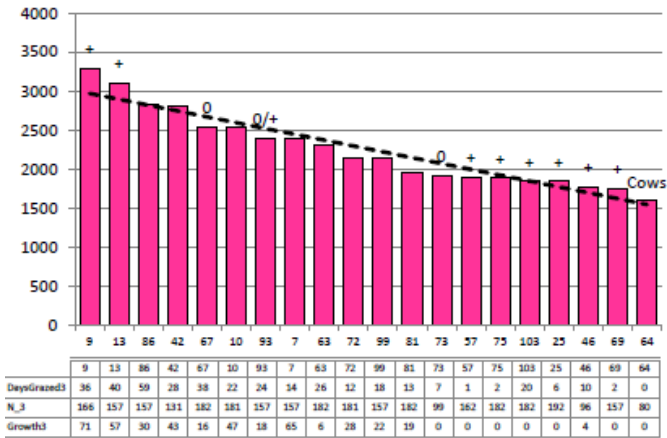


Figure 2: Team after the completion of an Escape Room at last weeks end of season celebration

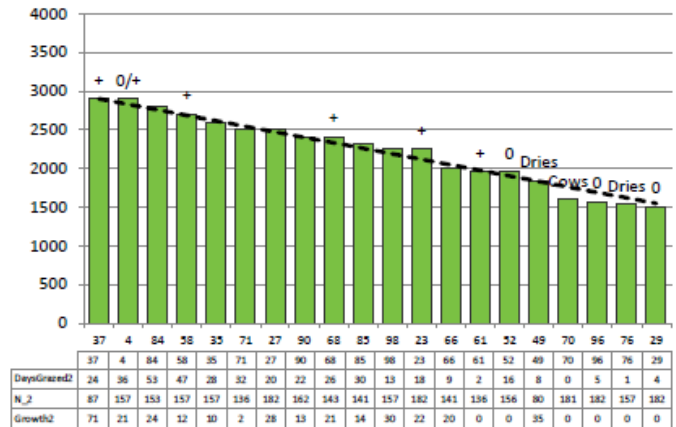


# Farm-system impacts of: Kale vs Fodder beet for winter AND Reducing N loss to water by 30%.

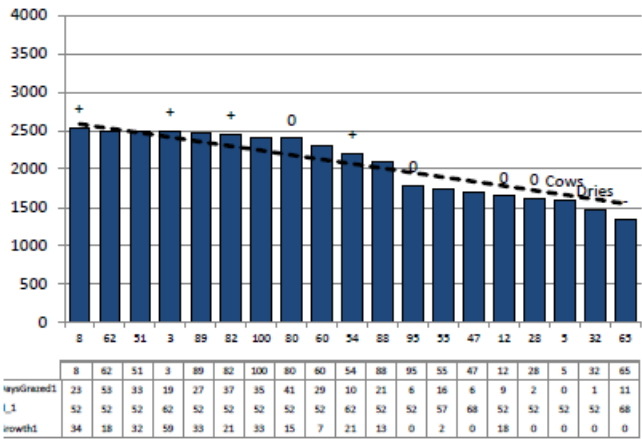
### Standard Kale



### Standard Fodder Beet



### Low Impact Kale



### Low Impact Fodder Beet

