#### Weekly Farm Summary 8 December 2023

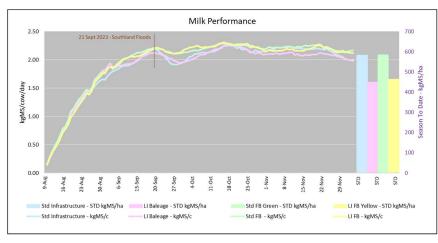
Farm-system impacts of: Bales vs Beet for winter AND Reducing N loss to water by 30%.

|   |  | Std  | LI               | Std        | LI         |
|---|--|--|------------------|------------|------------|
|   |  | Infrastructure   | Baleage          | FB         | FB         |
|   |  | Blue   | Pink             | Green      | Yellow     |
| Farmlet area inclu  | uding wintering  | 49.3   | 93.6             | 86.9       | 60.8       |
| Peak cow numbers  |  | 138  | 208              | 233        | 136        |
| Milking Area  |  | 43.5   | 82.0             | 69.5       | 52.1       |
| Current Herd size (cows)  |  | 138  | 208              | 232        | 136        |
| Pasture Stocking  |  | 3.2  | 2.5              | 3.3        | 2.6        |
|   | Winter Feed  | Baleage  | Baleage          | Beet       | Beet       |
| М   | ilking supplement  |  | ed feed 500kg/co |            |            |
| Average Cover (kgDM/ha)   |  | 2381   | 2445             | 2458       | 2407       |
| Average Growth (kgDM/ha/d)  |  | 67   | 46               | 55         | 50         |
| Target rotation length (d)  |  | 24   | 30               | 26         | 29         |
| Last week actual rotation (d)   |  | 26   | 30               | 26         | 26         |
| Last week supp (kgDM/c)   |  | 4.9  | 4.6              | 4.0        | 4.4        |
| Latest Average BCS  |  | 4.9  | 4.7              | 4.8        | 5.0        |
| v   |  | 29%  | 43%              | 42%        | 28%        |
| % of herd on priority management<br>% in Milk                         |  | 100%   | 100%             | 100%       | 100%       |
|   |  | 22.0   | 21.8             | 23.5       | 23.0       |
| 7-day Average Milk yield (L/cow)<br>7-day Average Milk yield (kgMS/c) |  | 2.00   | 1.98             | 2.16       | 2.12       |
| Nitrogen Cap kgN  |  | 180  | 50               | 180        | 50         |
|   |  | 35% (63kg)   | 44% (22kg)       | 32% (58kg) | 48% (24kg) |
| % Nitrogen used (kgN/ha) YTD<br>Effluent N YTD                        |  | 3  | 7                | 7          | 5          |
| YTD Pasture growth TDM/ha   |  | 8.1  | 7.6              | 7.8        | 7.4        |
| YTD supp (kg DM/c)  |  | 246  | 190              | 323        | 204        |
| YTD MS/c  |  | 206  | 203              | 216        | 211        |
| YTD MS/milk ha (YTD MS/farm ha)                                       |  | 661 (583)  | 514 (450)        | 730 (584)  | 541 (463)  |
| Focus area  | Current Status   |  |                  |            | · · ·      |
| Milk Production   | Season to date production has finally exceeded same time last year by a whooping 84kgMS (or 0.1%)!<br>Farm level production has only just remained stable with an average 2.1 kgMS/cow/day. Its the Std FB<br>farmlet that is creating the overall stability. The LI farmlets have continued to drop over last two<br>weeks. Next week vats will change from being Baleage and FB, to have the two Std herds in one vat<br>and the LI farmlets in the other so the milk composition can be analysed and potentially indicate what<br>is happening with the LI farmlets.                                |  |                  |            |            |
| Pasture & Feed  | Average pasture cover and growths are 2458 and 63 respectively. Growth rates have increased from<br>last week, and residuals are getting met with the continued focus of getting the pre-graze right. Again,<br>will limit lower quality silage to a maximum of 3kgDM/cow/day, with another quality sample taken this<br>week (awaiting results. Third round application of N fertiliser for the standard herds continues and the<br>LI will begin this next week and the support block. Have continued to make some more baleage off the<br>milking platform, where there has been a genuine surplus. |  |                  |            |            |
| Animals   | A few new cases of lameness across all the farmlets, still mainly interdigital damage and white line.<br>Oner new case of Mastitis with the 7-day SCC average declining for the FB vat and remaining stable for<br>the and Baleage vat of 106 and 80 respectively. Total intervention this season has been 53 CiDRs (7.4%<br>of herd over 3 rounds). Reviewing Non return rates, with one farmlet lower than expected and<br>therefore are looking into early phantom scanning as a precautionary measure.   |  |                  |            |            |
| Environment   | Pond level has dropped again to 39% full. Continue to apply effluent at every opportunity, whilst monitoring applications to make sure they are spread evenly across all the farmlets.   |  |                  |            |            |
| Wintering   | The new grass that was sown 21 November has germinated. Planning on baleage quantities and quality as well as which paddocks for Grass & Baleage wintering and Springers is well underway.   |  | ell underway.    |            |            |
| People  |  | me a new Herd Manager, Redson to SDH. Early January a new Farm assistant, DJ,<br>I rosters for the festive period are being finalised through to end of January. |                  |            |            |
| Research  | Have broadcast Plantain seed with lime in a selection of paddocks to see how well establishment with this method in Southland performs. Planning for some paired paddock comparisons of baleage wintering for 2024 continues.  |  |                  |            |            |

# Milk production

#### Principles of Milk Production management this week

| Milk production                      | We are struggling to maintain milk production in the two lower impact herds this week despite allocating feed<br>based on the same decision rules as the standard farmlets. This is disappointing given these herds have a lower stocking<br>rate and have had ample pasture available season to date. Residuals and cow behaviour are not suggesting the cows are<br>being underfed and the latest results are not showing any significant differences between the farmlets in pasture<br>quality. All herds have been grazing a lot of paddocks that were topped or conserved for silage in the last round but the<br>team are confident in their assessments of pre-grazing mass. |
|--------------------------------------|--|
| Key Influences of Milk<br>Production | We are seeing more seed head across the farm and there are still paddocks to be tidied up from poor grazing earlier<br>in the season, however the latest pasture quality results indicate good crude protein (21%) and average ME of 11.2 to<br>11.5 MJ/kg DM. As mentioned last week our silage is not the quality we had expected so we are limiting the proportion<br>of this offered to each herd. We are continuing with weekly DM assessment and have sent another sample off for<br>quality analysis.   |
| Cow Management                       | No change, continue to monitor cow BCS on the fortnightly basis and adjust the priority feeding and OAD milking groups<br>as required.   |



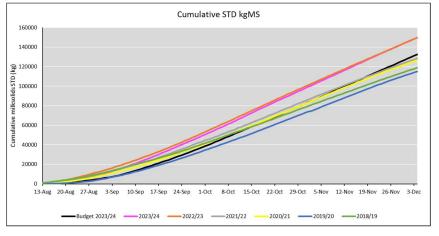


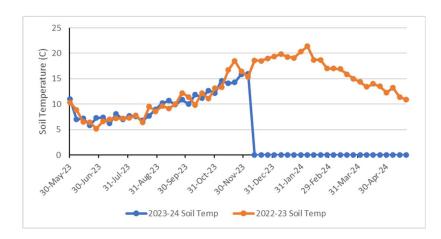
Figure 1. Milksolids per cow/day STD and kgMS/ha STD.

Figure 2. Cumulative kg Milksolids & Budget season to date

## Feed Management

#### Principles of Feed management this week

| Feed Quality      | Given the differences in per cow milk production between the standard and low impact farmlets we have relooked at the pasture quality results from the last round with this lens. The two LI paddocks tested have come back slightly higher in DM (17.1 vs 16.3%) and crude protein (21.3 vs 20.2%) and a little lower in energy (11.2 vs 11.5 ME) than the four Std farmlets. More samples were sent off this week so we are eagerly awaiting these results. There is more seed head across the farm now and still a few paddocks where residuals were left high last round and the base needs resetting with the mower.  |
|-------------------|--|
| Growth Rate       | Growth continues to be variable from week to week and between farmlets. The stem elongation with the ryegrass going to seed and the plantain in last year's new grass paddocks are resulting in the plate overestimating the covers in some paddocks and affecting average growth rates. Visual assessments are also being made during the farm walk and any discrepancies between the two estimates recorded so that the farm team can double check pre-graze covers before the cows go into the paddock to make sure we are hitting residual and not wasting supplement. This week the visual growth rates ranged between 47-49 kg DM/day compared to 46-67 kg/day with the plate estimates. |
| Nitrogen Strategy | The third round of N for the Std farmlets is almost complete and the third application of 12.5 kg N/ha for the LI farmlets will start this week with the aim to get it all applied before the end of December just in case it goes dry.  |



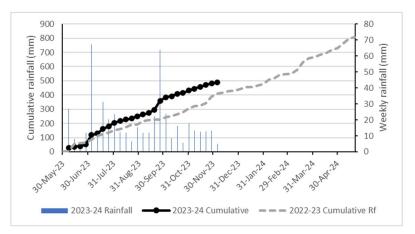
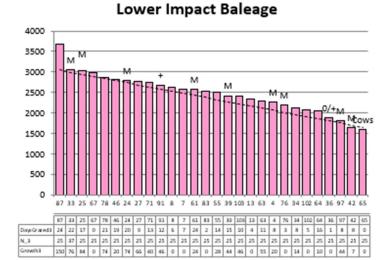
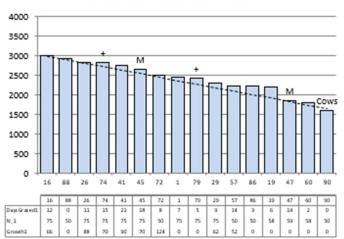


Figure 3. Soil temperatures 2023-24 vs 2022-23

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

#### Feed Management





Standard Infrastructure

**Standard Fodder Beet** 4000 4000 3500 3500 M ++ м 3000 3000 + М 2500 2500 2000 2000 Cows 1500 1500 1000 1000 500 500 0 0 81 44 96 9 89 23 59 66 30 54 6 69 49 80 17 2 14 101 82 51 98 50 3 35 40 73 77 68 70 10 84 85 99 22 15 58 52 92 5 81 44 96 9 87 23 59 66 30 54 6 60 87 87 2 14 50 82 51 98 50 3 35 40 73 77 68 70 10 84 85 5 99 22 15 58 52 92 37 48 62 
Op/Gramed2
11
10
16
17
15
14
0
15
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16

2
4
5
4
1
12
4
13
8
18
1
0
14
0
7
0

25
25
25
25
25
25
25
25
25
25
37
25
37
25
25
25
25
25
37
25
37
25
25
25
25
25
25
37
25
26
25
25
25
26
25
25
27
26
27
25
27
25
27
25
27
25
27
25
27
25
27
25
26
25
25
25
26
25
25
26
25
26
25
26
25
26
25
26
27
26
26
26
26
26
26
26
26
26
26
26
26
26
26
26
26
 Days Granecki N\_4 84 54 86 54 34 62 30 45 0 28 326 D 64 54 0 26 0 46 0 22 D a rowth2 Growth4

Lower Impact Fodder Beet

37

48 62

Figure 5. Plate meter feed wedges as at 5 Decemberber 2023

### Photos



Plantain (coated seed) being broadcast with lime



The faint green hue showing new grass has germinated.



'Tis the season..... farm team doing routine checks of vehicles.