

Weekly Farm Summary 2nd September 2022



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

| | Conserved | Conserved | | |
|----------------------------------|--|-----------|--------------|--------------|
| | pasture – | pasture – | Long FB - | Short FB – |
| | Std Pink | LI Blue | Std Green | LI Yellow |
| Farmlet area including wintering | 82.7 | 60.9 | 82.7 | 60.9 |
| Peak cow numbers | 223 | 137 | 223 | 137 |
| Milking Area | 69.9 | 55.1 | 69.5 | 55.1 |
| Current Herd size (cows) | 165 | 100 | 150 | 105 |
| Pasture Stocking rate (current) | 2.4 | 1.8 | 2.2 | 1.9 |
| Winter Feed | Swede/Bale | Baleage | Beet 80 days | Beet 60 days |
| Milking supplement | In-shed feed 500kg/cow + baleage as required | | | equired |
| Average Cover | 2369 | 2267 | 2257 | 2220 |
| Average Growth | 18 | 15 | 24 | 20 |
| Target rotation length | 48 | 57 | 48 | 57 |
| Last week act rotation (d) | 57 | 49 | 52 | 47 |
| Last week supp (kg DM/cow) | 5.0 | 5.4 | 4.1 | 4.6 |
| Average BCS | 5.1 | 5.0 | 5.0 | 5.0 |
| % of herd on priority feeding | | | | |
| Milk yield (L/cow) | 21.2 | 21.6 | 21.1 | 21.3 |
| Milk yield (kgMS/cow) | 2.02 | 2.04 | 2.03 | 2.01 |
| Nitrogen Cap kgN/ha/yr | 180 | 50 | 180 | 50 |
| % Nitrogen used (kgN/ha) YTD | 0% (0kg) | 0% (0kg) | 0% (0kg) | 0% (0kg) |
| Effluent (kgN/ha) YTD | 1 | 0 | 1 | 2 |
| Profit/ha comp to Control | \$0 | \$0 | \$0 | \$0 |
| YTD supp (kg DM/cow) | 52 | 37 | 41 | 37 |
| YTD MS/cow | 18 | 20 | 16 | 18 |
| YTD MS/milk ha (YTD MS/farm ha) | 56 (50) | 49 (44) | 50 (43) | 46 (42) |

| Business Area | Current Status | | |
|-----------------|---|--|--|
| Milk Production | Milk production similar across all herds and increasing steadily. | | |
| Pasture & Feed | APC are tracking close to target in our SRP. Approximately 6 kg DM supplement is required to fully feed milkers on current area allocation. | | |
| Animals | Several mastitis cases have been identified with samples taken. Monitoring of at- risk cows for BCS based on previous health issues this spring | | |
| Environment | Effluent applications have begun around the farmlets at low rate (~2.5mm), targeting post grazed paddocks. Nitrogen fertiliser to be applied this week, earlier than usual due to warmer soil temperatures and lower APC than previous years. | | |
| Wintering | Planning for surplus fodder beet to be lifted and sold | | |
| People | Team managing spring workload well and beginning to prep wintered areas for regrassing. | | |
| Research | Wrapping up wintering infrastructure surface testing study at Hardegger's. Specialthanks to Paul and Dani and the team for their support and input to this project.Participatory research project final reports submitted to MPI | | |

Milk Production

Principles of Milk Production Management this week

| Milk Production | Similar across the herds, and overall, very strong yield relative to last season from the faster calving rate |
|--------------------------------------|--|
| Key Influences on Milk Production | Despite holding all cows on OAD for the first 7 days after leaving the colostrum mob, herds are still producing the same or better daily per cow production compared to this time last year. |
| Cow Management | Assessment carried out this week on cows with spring calving issues, and or low current BCS records. Approximately 15 cows across the farm have been flagged to stay on OAD milking in their herds for further recovery. |

| | Conserved Pasture - Std Pink | Conserved Pasture - LI Blue | Fodder beet - Std Green | Fodder beet - Ll Yellow |
|---|---------------------------------|--------------------------------|----------------------------|----------------------------|
| kg Milksolids per cow this week/ (last week) | 2.02 / (1.99) | 2.04 / (2.01) | 2.03 / (2.01) | 2.01 / (2.02) |
| kg Milksolids per ha this year/ (same time last year) | 56 / (43) | 49 / (38) | 50 / (42) | 46 / (42) |
| Var kg Milksolids per ha Season per ha to date vs last season to date | +30.9% | +32.4% | +16.9% | +11.6% |
| Cows needing preferential feeding (% herd) | 3 cows (1%) | 3 cows (2%) | 7 cows (3%) | 4 cows (3%) |
| Animal health peculiarities | None | None | Increased mastitis | None |

Milk Production



Feed

Principles of Feed management this week

| Feed Quality | Strong wedge but still eating autumn/winter stored pasture. Herds have moved from baleage onto silage. Stack is 40%DM and pasture samples when made showed 12.1 MJME grass went into the stack. | | |
|------------------------|--|--|--|
| Growth Rate Management | Tightening right up on SRP area available and reducing square metres/cow accordingly. We will remain in a reasonably conservative outlook on pasture growth for the next 2 weeks. | | |
| Nitrogen Strategy | Nitrogen is being applied to all farmlets. This is 2 weeks earlier than usual, due to warmer soil temps and tightening pasture situation. Focusing on paddocks ungrazed this season, in bottom half of wedge, and paddocks grazed this spring up to last week. All farmlets receiving both nitrogen and sulphate in this application The average soil temperature for this week was 8.6 C, down from 9.4 C last week | | |
| | Conserved Pasture - Std Conserved Pasture - LI Fodder beet - Std Fodder beet - LI | | |

| | Conserved Pasture - Std Pink | Conserved Pasture - LI Blue | Fodder beet - Std Green | Fodder beet - Ll Yellow |
|------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Quantity | Currently OK | Currently OK | Currently OK | Currently OK |
| Quality | Variable depending on paddock history |
| Surplus Management | None | None | None | None |
| Deficit Management | 6.5 kg (up 2 kg from last week) | 7.1 kg (Up 2.4 kg from last week) | 6.5 kg (up 2 kg from last week) | 6.55 kg (up 1.5 kg from last week) |
| Target Rotation Length | 48 days | 57 days | 48 days | 57 days |

Feed

Growth 2



Lower Impact Conserved Pasture





Lower Impact Fodder Beet

14 46 34 4 36 44 10 6 54 42 22 24 10 4 16 10 34 40 51 0 13 0 20 0



Figure 2: Feed Wedges as of 30th August 2022

Standard Fodder Beet

Feed



Animals

Conversion evolution and animal performance

| Background | It's commonly said that new conversions take 5 years to really hit their straps, and we're seeing something quite interesting on farm this year as we start our 6 th supply season and 5 th season under the Research trials. | | | |
|-------------------------------------|---|--|--|--|
| | Over the past 6 years with a herd largely bought in from the North Island there have been changes in overall calving date between the years. From 20 th July in 17-18, 1 st August 18-19 to 10 th August for the last 4 seasons. The graph below tells a tale of how the cows, farm, team and management have improved performance consistently since the farm was converted when looking at total production to 31 August. Beside it, the rate of accumulation of production Total farm kgMS produced to 31 August | | | |
| Production Data in August | 14000 12000 10000 8000 6000 4000 2000 0 2017-18 2018-19 2019-20 2020-21 2021-22 2022-23 10,000 60000 60000 60000 6000 6000 6000 6000 6000 60000 60000 | | | |
| | This year we have produced 18 kg MS/cow wintered, the same volume/cow as year 1, but the herd started calving 3 weeks later this year. This is a combination of calving spread tightening up (from 26 days to midpoint down to 12 days), along with feeding and management of milkers to improve the daily performance per cow of all cows calved. | | | |
| What are we doing at the Hub? | Since 2019 we've focused a lot on three key weaknesses in the business: 1. Body condition of cows throughout lactation to improve reproductive performance 2. Growing of young stock to bring better quality animals into the herd from the start 3. Setting up spring pasture quality in autumn, and managing spring feed allocation and quality | | | |
| | We've seen improvements in all these areas, and more importantly have seen the team develop and grow the skills to keep managing these areas as part of the normal operations of the farm. | | | |