

# LINCOLN UNIVERSITY DAIRY FARM

## Newsletter



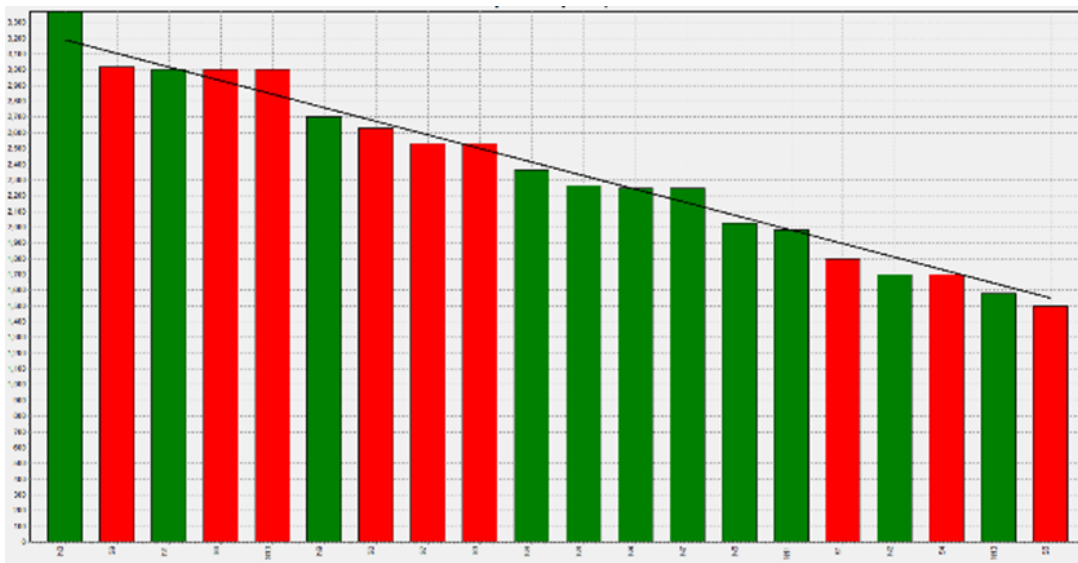
ISSUE NO. 16 | WED 6 DECEMBER 2023

### WHAT'S BEEN HAPPENING?

#### Pasture Growth & Regrassing:

Pasture growth rate is still sitting at 83 kg DM/ha which we have seen hold for the last 4 weeks, we are still growing ahead of demand and are offering the herd 20 kg DM/cow. Our APC (Average Pasture Cover) is 2359, our pre grazing cover is 3,300, we are targeting 1,600 residuals, and when we top this reduces to 1,500 so we are mindful to ensure we do not top too much, causing a hole in the wedge.

We have been able to maintain pasture quality by keeping sward from going reproductive, through pasture management, and managing residuals. Seed head has been kept at bay through strategic use of urea in the spring and topping if residuals were out of our range. Our pasture analysis, below, confirms we have kept quality above 12 MJME/kg DM and averaged 12.4 from late October to late November.



Feed Wedge

| Paddock | Date      | Protein % DM | Digestibility % (DMD) | MJ ME/kg DM | DM % |
|---------|-----------|--------------|-----------------------|-------------|------|
| N-1     | 24-Oct-23 | 18.3         | 83.5                  | 12.5        | 16.0 |
| S-2     | 24-Oct-23 | 21.6         | 83.6                  | 12.5        | 16.0 |
| N-6     | 01-Nov-23 | 22.9         | 84.3                  | 12.5        | 15.7 |
| S-7     | 01-Nov-23 | 17.5         | 82.0                  | 12.2        | 16.3 |
| N-5     | 09-Nov-23 | 19.2         | 84.6                  | 12.6        | 16.1 |
| S-4     | 09-Nov-23 | 18.5         | 81.7                  | 12.2        | 15.8 |
| N-3     | 15-Nov-23 | 20.3         | 84.0                  | 12.5        | 15.3 |
| S-10    | 15-Nov-23 | 17.2         | 84.1                  | 12.6        | 15.7 |
| N-8     | 23-Nov-23 | 21.9         | 83.2                  | 12.5        | 16.1 |
| N-9     | 23-Nov-23 | 23.0         | 80.7                  | 12.1        | 16.5 |
|         |           | 20.0         | 83.2                  | 12.4        | 16.0 |

Pasture Analysis

**LUDF**  
Tomorrow's farming, today

**SIDDC**  
South Island Dairying Demonstration Centre

#### This Week:

Pasture Growth & Regrassing



Milk Production



Milking Regime

10 in 7



Reproduction Project



R2 Update



#### Next Farm Walk

Wednesday

13<sup>th</sup> December

9 am

Text Peter on

027 440 9285

Our regressed paddock has had a great strike rate, with ryegrass, clover and plantain emerging. The spray out did not have the same success, but thankfully it has knocked out most of the weeds and we will follow up with a post emergence spray in the next two weeks.

The new pasture was sown at a rate of 22 kgs of Forge NEA (tetraploid hybrid ryegrass), 2 kgs Kotuku (white clover), 2 kgs Ruru (white clove) & 3 kgs Ecotain Superstrike (plantain with seed treatment) per hectare.



Strike at 21 days post sowing

### Milk Production & Milking Regime:

We are currently sitting at 1.92 kg MS/cow, which we have been holding well off our peak of 2.13 kg MS/cow.

This year we pushed calving out by 5 days which has resulted in less milk in August, however we have gained each month from there. This is primarily a seasonal variance effect; however, we are still on target for our forecasted seasonal production of 265,000 kg MS..



Milk Production & Somatic Cells



Ruminating cows

*So how is 10-in-7 milking going this year?*

Given our season has returned to a “normal” Canterbury season, or is forecasted to, it will be a great comparison to see how 10-in-7 performs to our forecast. Our team has remained stable over the last two seasons, hours worked are in line with what we expected (kept under 45 hours/week), the roster is 5 and 2 throughout the season and our staff are enjoying the balance of milking OAD (Once A Day) in the weekends.

We have also adjusted our milking times during mating to work with our AI technician. Our milking regimes are as follows:

**Standard milking times**

| Day       | Milking times |         | Milking interval |
|-----------|---------------|---------|------------------|
| Monday    | 4:30am        | 2:30pm  | 9.5 hours        |
| Tuesday   |               | 9:30am  | 18 hours         |
| Wednesday | 4:30am        | 2:30pm  | 21.5 hours       |
| Thursday  |               | 9:30am  | 18 hours         |
| Friday    | 4:30am        | 2:30pm  | 21.5 hours       |
| Saturday  |               | 11:00am | 18 hours         |
| Sunday    | 8:00am        |         | 21.5 hours       |

**Milking times during mating**

| Day       | Milking times |         | Milking interval |
|-----------|---------------|---------|------------------|
| Monday    | 3:30am        | 1:30pm  | 9.5 hours        |
| Tuesday   |               | 8:30am  | 18 hours         |
| Wednesday | 3:30am        | 1:30pm  | 21.5 hours       |
| Thursday  |               | 8:30am  | 18 hours         |
| Friday    | 3:30am        | 1:30pm  | 21.5 hours       |
| Saturday  |               | 10:00am | 18 hours         |
| Sunday    | 7:00am        |         | 21.5 hours       |

10-in-7 equates to 29% less milkings which reduces some direct (and indirect) costs, such as power, detergents, rubberwear, R & M and hours worked.

A concern has been what happens with the herds somatic cell count (SCC). This season is looking good compared to last season, although last season was wetter it is great to confirm that even with the 10-in-7 we can still achieve a low SCC. We do note we have had a few cows with mastitis recently. We do strip one quarter per milking to assist with identifying cows with mastitis.

## Reproduction Project:

Following on from our results from last season, we are continuing similar practices to see if we get the same, or hopefully even better results.

Last year we changed a few things. We put on collars, although we missed the cut off rumination data post calving, we did have the ability to use for heat detection.

For our dairy herd this season, we have monitored the rumination data post calving, milking cows once a day (OAD) until they hit the rumination level of 450 rumination per day. They were then put into the dairy herd, which we now milk 10 in 7 (10 milkings in 7 days). Feeding has been a focus and we have performed NEFA test (non-esterified fatty acids) to ensure cows energy balance is correct.

Our mating has gone well with our 3-week submission rate at 91%, we have just scanned our first 10 days of mating to get an early indication of who is currently in calf and more importantly to identify any phantom cows, this is a cow that has been inseminated but does not return within 35 days post insemination but is found to be not pregnant by ultrasound. This has identified 14 phantom cows which we will PG to give them the best chance to get back in calf as early as they can.

## R2 Update:

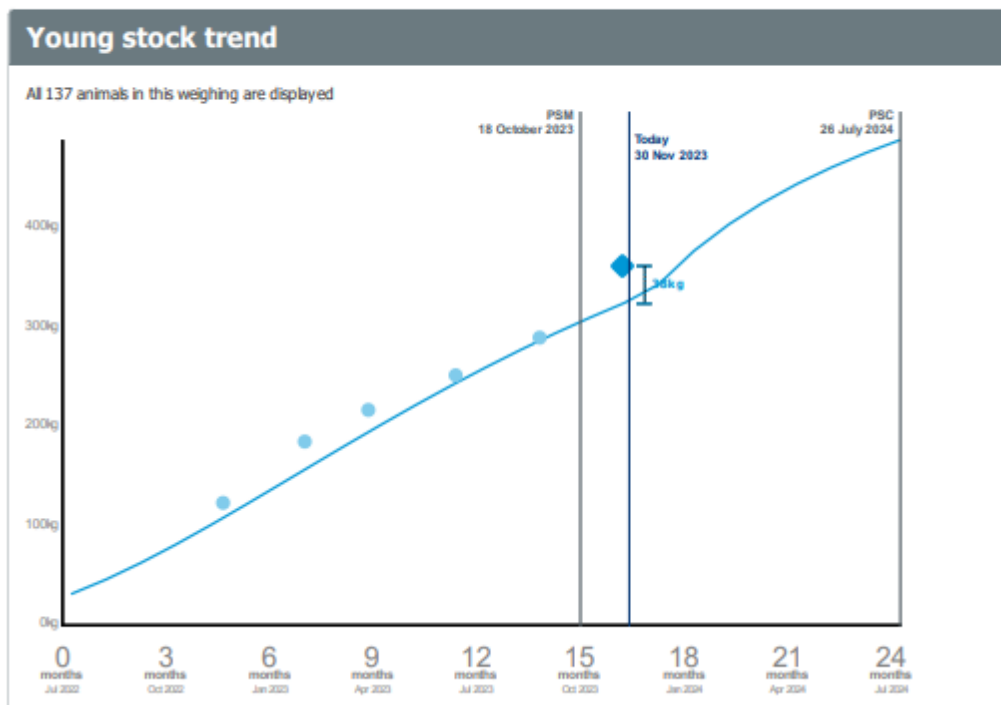
We started mating our R2's on 18 October using a CIDR program. We have weighed and scanned them on 24 November, and we are pleased to report the IC (in calf) rate to AI (artificial insemination) with this program is 57%. We put 50 to sexed semen, with a conception rate of 42%, and 87 to PS Forward Pack, with a 66% in calf rate. We have followed up with 8 jersey bulls and will know the group's performance when we do our final scan in February.

The group's average weight was 362kg, which is well above target for their genetics, and they have a 38kg spread from lightest to heaviest. We have been able to keep them above the line which assists with their mating performance, but it also helps in the preparation for calving to ensure they are grown well so that they meet their full potential.

## 2022 Spring Born

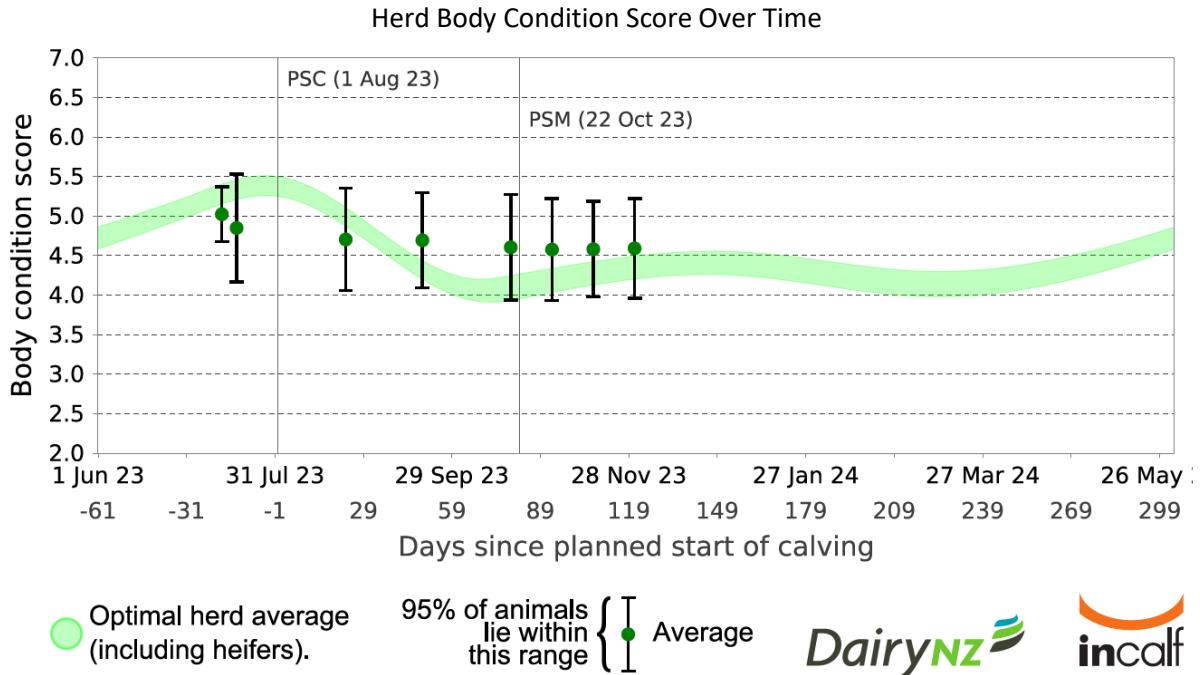
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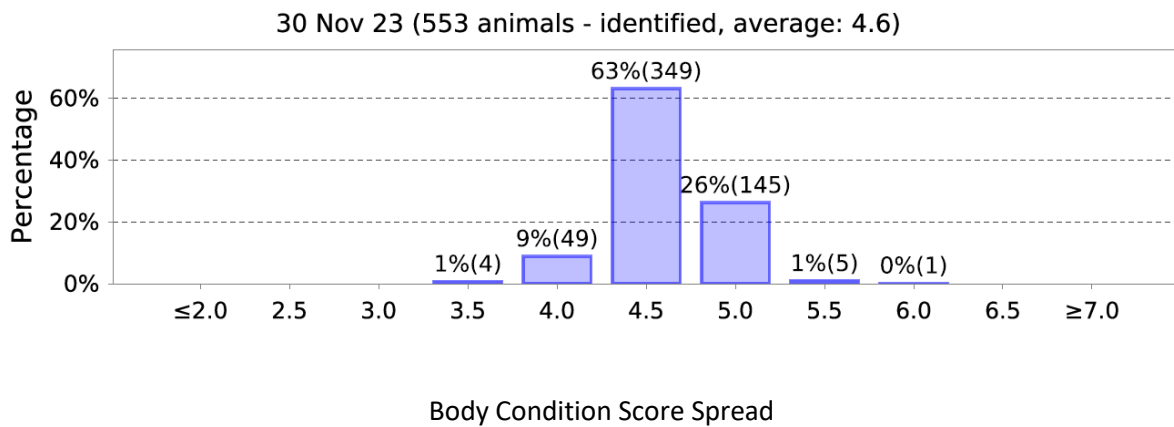


## Milking herd body condition score (BCS) - 30/11

With our reproduction project we are monitoring BCS closely to ensure that we are on target so that we remove as many variables as possible. As at 30 November our herds BCS was held at 4.6 which is on target. You may note that the herd average did dip below the optimum average through July and August, however with management we have been able to hold the herd well post calving and through mating.



We currently have 4 cows that are at 3.5 and our action plan is the cows are milked once a day only, kept close to the dairy shed and have unlimited access to quality pasture. We are monitoring the those with a BCS of 4 closely.



LUDF | KEY WEEKLY INFORMATION | 6 December 2023

|                 | KEY WEEKLY INFO                             | This Week | Last Week | 1 Year Ago |
|-----------------|---|-----------|-----------|------------|
|                 |   | 6-Dec-23  | 29-Nov-23 | 6-Dec-22   |
| Farm Area       | Grazing area (Ha)                           | 153.1     | 153.1     | 148.38     |
|                 | Re-grassing (Ha)                            | 6.9       | 6.9       | 11.62      |
| Stock Numbers   | Cows currently milking to vat               | 554       | 552       | 538        |
|                 | Cows currently milking NOT to vat           | 5         | 7         | 1          |
|                 | Total cows milking                          | 559       | 559       | 539        |
|                 | Once-a-day milking cows                     | 0         | 6         | 5          |
|                 | Lame cows current                           | 0         | 6         | 5          |
|                 | Dry cows on farm                            | 0         | 0         | 0          |
| Milk Production | Current bulk milk SCC (tgt below 150) (SCC) | 100       | 110       | 133        |
|                 | Milk Solids per cow (kg MS/cow)             | 1.92      | 1.96      | 1.78       |
|                 | Protein:Fat ratio (%)                       | 0.84      | 0.8       | 0.81       |
| Feed Budget     | Average pasture cover (kg DM/Ha)            | 2359      | 2411      | 2269       |
|                 | Current Pasture Fed - Milkers (kg DM/cow)   | 20        | 20        | 17.9       |
|                 | Current Silage Fed - Milkers (kg DM/cow)    | 0         | 0         | 2.1        |
|                 | Current Demand per cow (kg DM/cow)          | 18.8      | 19.2      | 20         |
|                 | Stocking Rate - Milkers (Cows/Ha)           | 3.65      | 3.65      | 3.63       |
|                 | Current Pasture Demand - Milkers (kg DM/Ha) | 72        | 72        | 73         |
|                 | Pasture Growth Rate (kg DM/Ha)              | 83        | 84        | 76         |
|                 | Pre-grazing cover (avg for week) (kg DM/Ha) | 3372      | 3265      | 2982       |
|                 | Residual (avg for week) (kg DM/Ha)          | 1550      | 1550      | 1500       |
|                 | Round Length (Days)                         | 22.45     | 23        | 19         |
| Farm Conditions | Soil temp average (Aquaflex) (degree C)     | 14.47     | 14.28     | 15.5       |
|                 | Rainfall (mm)                               | 10.6      | 8         | 10         |
|                 | Irrigation days this week (days)            | 4         | 3         | 2          |
| People          | Current Roster                              | 5+2       | 5+2       | 5+2        |
|                 | Health & Safety Incidences                  | nil       | nil       | nil        |
|                 | Milking Routine                             | 10 in 7   | 10 in 7   | 10 in 7    |