

# Step Change



Unlocking the value of  
Herd Improvement



Presented by: Malcolm Ellis GM NZ Markets



There's always room for improvement

# Shifting & sharpening the focus



- What does the future hold?
- What does the future cow for the region look like?
- What is the scale of the contribution Genetic gain can make to the future profitability and prosperity of the Otago region?

# A week is a long time when you are trying to track down the goal post



New research shows New Zealand dairy farmers have the world's lowest carbon footprint – at half the emissions of other international producers.

The AgResearch analysis confirms New Zealand retains its outstanding position in low-emission dairy milk production, with an on-farm carbon footprint 46 percent less than the average of 18 countries studied.

Commissioned by DairyNZ, the study was independently produced by AgResearch and peer-reviewed by an international specialist in Ireland.

The research analysed 55 percent of global milk production, including major milk producing countries.



And then.....



Calling for.....  
15% reduction in  
stock numbers  
over the next 9  
years.



# What is absolutely clear

We will need to be more efficient, we will need to look to produce at least as much from less and we will need to maintain profitability and competitiveness.



There's always room for improvement

# Guiding principles

- “Efficiency is efficiency irrespective of the farm system”
- Kg MS/Kg LWT needs to be the key driver while acknowledging the non-negotiable per cow costs
- “The ‘P’ word is profit not production”
- Don’t underestimate the value of Herd Improvement and ensuring we have the right cow for the job

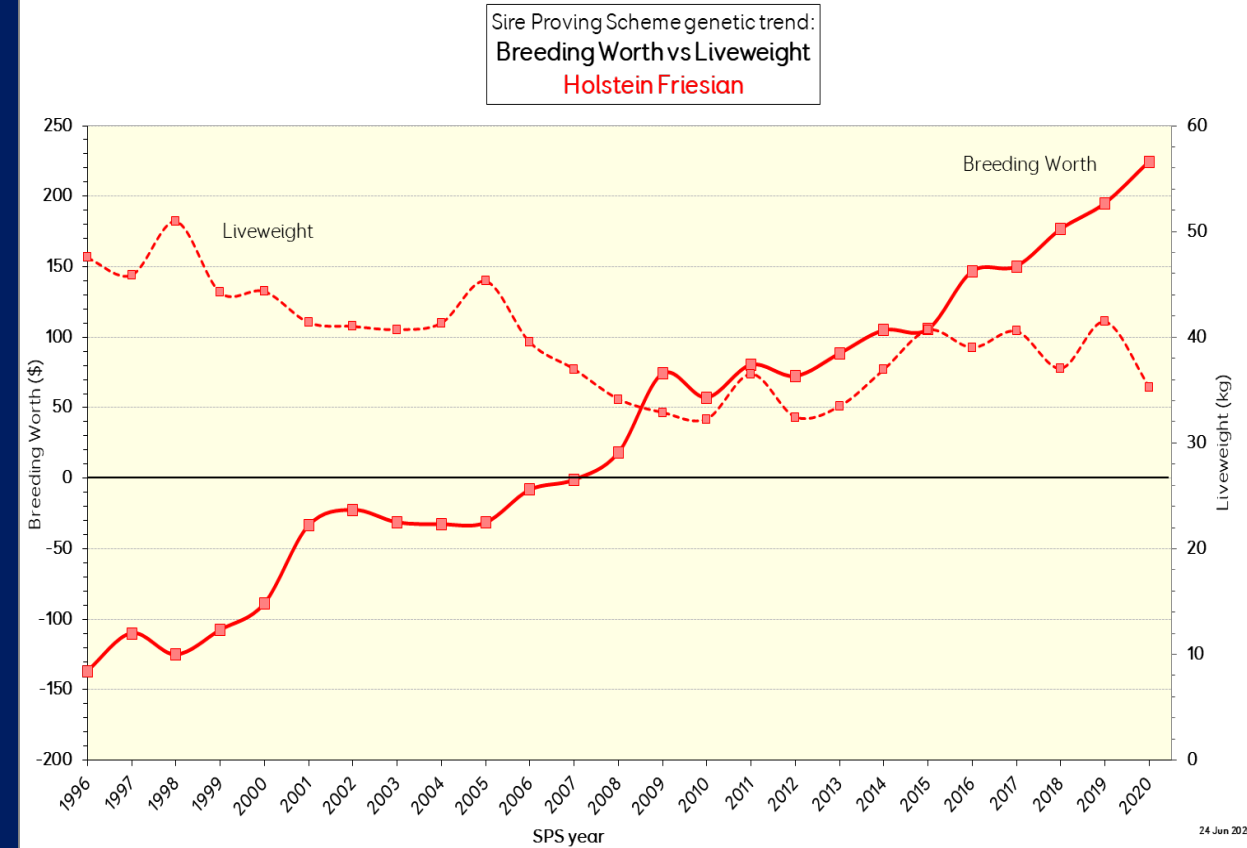
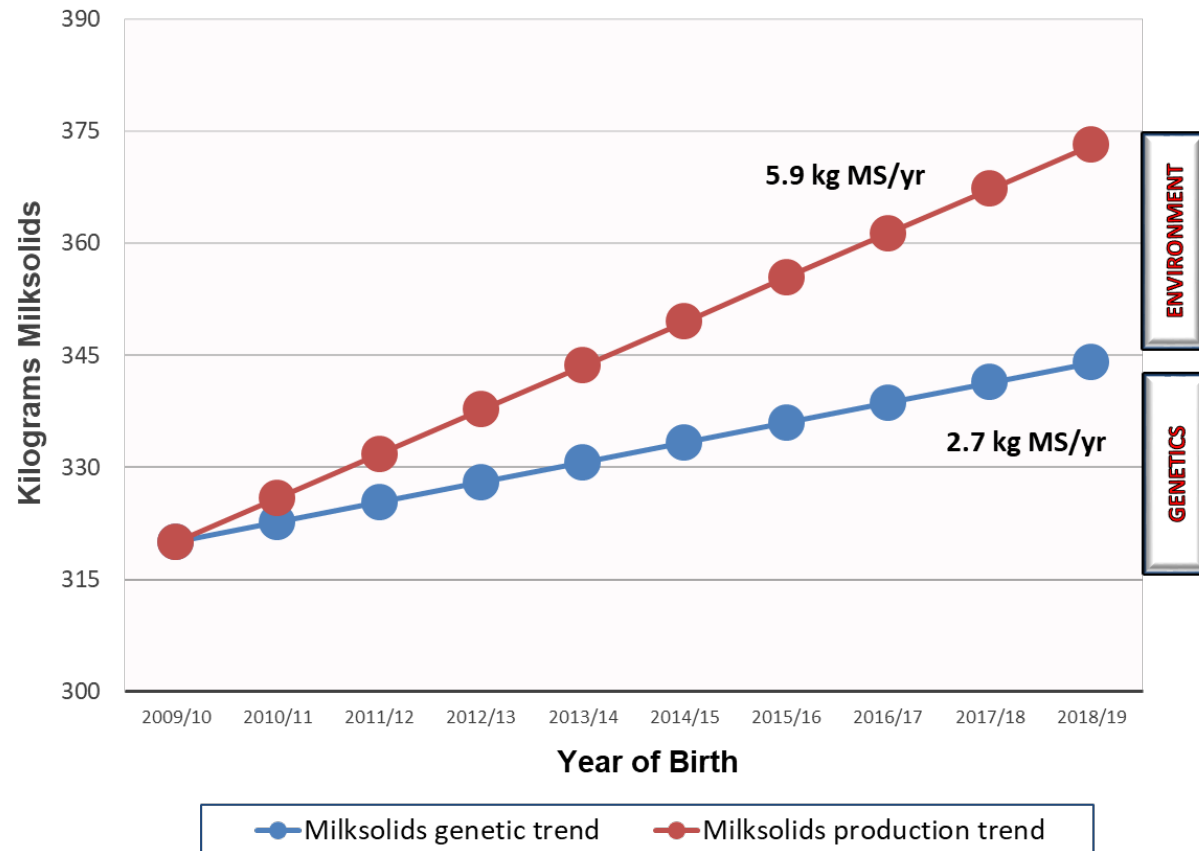


There's always room for improvement

# Factual considerations

What might the future look like?

## 10 year genetic and phenotypic trends



# Genetic gain and the call to make the boat go faster



**Striving to take the current 9BW/yr out to 15-20 and capturing the associated productivity gains.**

# Being crystal clear of the contribution from both sides of the equation

**Firstly**

The role of both Genomics and sexed semen from the mating sire perspective.

|               | Friesian     | Jersey | KiwiCross |
|---------------|--------------|--------|-----------|
| AE March 2021 | Differential |        |           |
| 2017 Team     | 19.8         | 32.2   | 34        |
| 2018 Team     | 16.2         | 15.4   | 50.6      |

There's always room for improvement

# Validation of Genomic prediction

## 16 Code HF example

### July 2019 gBW Ranking

|                          |                         |                      |                        |                      |                          |                          |                           |                           |                          |                           |                        |                           |                       |                           |                          |                          |                           |                          |                          |                          |                      |                         |                           |                         |                           |                           |                        |                           |                        |                          |                           |                        |                           |                          |                          |                         |                          |                           |                           |                        |                        |                         |                          |                           |                          |                           |                           |                           |                           |                           |                           |                           |                         |                           |                         |                         |                          |                           |                           |                          |                           |                        |                      |                        |                         |                        |                          |                          |                           |                         |                           |                           |                        |                          |                          |                           |                           |                          |                           |                           |                           |                         |                          |                           |                           |                           |                           |                           |                          |                         |                          |                          |                       |                           |                          |                         |                       |                     |                          |                           |                           |                           |                     |                          |                          |                          |                          |                      |
|--------------------------|-------------------------|----------------------|------------------------|----------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|---------------------------|------------------------|---------------------------|-----------------------|---------------------------|--------------------------|--------------------------|---------------------------|--------------------------|--------------------------|--------------------------|----------------------|-------------------------|---------------------------|-------------------------|---------------------------|---------------------------|------------------------|---------------------------|------------------------|--------------------------|---------------------------|------------------------|---------------------------|--------------------------|--------------------------|-------------------------|--------------------------|---------------------------|---------------------------|------------------------|------------------------|-------------------------|--------------------------|---------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|-------------------------|---------------------------|-------------------------|-------------------------|--------------------------|---------------------------|---------------------------|--------------------------|---------------------------|------------------------|----------------------|------------------------|-------------------------|------------------------|--------------------------|--------------------------|---------------------------|-------------------------|---------------------------|---------------------------|------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|---------------------------|-------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-----------------------|---------------------------|--------------------------|-------------------------|-----------------------|---------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------|
| ARKAN MGH BACKDOP-ET S2F | DICKSONS BG MANDATE S1F | AWAKAU BG MADDOX S1F | WEDERS DE OVERTIME S1F | PAYNES BG ARCHIE S1F | EDWARDS DE KICKSTART S1F | LIGHTBURN SB GIOVANI S3F | STOUPES BG TRIUMPHANT S1F | HILLSVIEW MH PACER-ET S2F | DICKSONS GI ESCALADE S3F | LIGHTBURN GB DYLAN-ET S3F | ARKAN HF FREELANCE S2F | SPRING TRALEE BEAT-ET S1F | AZREEL MGH JOVIAL S2F | BUSY BROOK MGH MORDOR S2F | ARKAN MGH BESTSELLER S2F | MCLACHLANS MGH TREAT S2F | SPRING TRALEE BASS-ET S2F | INAHIA GI UNDENIABLE S2F | TAFIS SD TRANSFORMER S1F | GALATEA MGH REGIMENT S1F | MEANDER SB ALAMO S2F | TELESIS BG BURGHLEY S1F | FOOTEHILLS BG LINCOLN S1F | ARKAN ML BABYLON-ET S1F | PEMBERTON GI PHASE-ET S2F | ON-DER-REY MA APPROVE S2F | IONIC RTD RENITION S2F | BLACKSTOCK WE EMBLAZE S2F | TELESIS ML HASHTAG S1F | LARENKO DE PROMINENT S1F | CAVALIER M CAPTAIN-ET S3F | MEANDER ML RAMPANT S1F | SPRING TRALEE BRAX-ET S1F | BUSY BROOK H REALMET S2F | CHARLTONS HF FAME-ET S2F | MCLACHLANS ML TRICK S1F | BUSY BROOK SB REPUTE S2F | BAGWORTH WE STEADFAST S2F | MEANDER BR ABRAXAS-ET S2F | BAGWORTH DE ZEPHYR S1F | OAKLINE SD TROOPER S1F | WESTEDGE OUT-A HERE S2F | ESTEE MGH FANATIC-ET S2F | HILLSVIEW WE ATTITUDE S2F | BLACKWELL GB GENUINE S2F | LIGHTBURN B MALBEC-ET S3F | CLOVERLEA MH GUTSY-ET S2F | BUSY BROOK H FABULOUS S2F | WOODCOTE MH MOJITO-ET S3F | LIGHTBURN SB MITEE-ET S3F | TRONNOCO GI SERGLE-ET S3F | WAITARIA ESTEEM MCCAW S2F | VALDEN ML DANIEL-ET S1F | TRONNOCO MGH SYRUS-ET S2F | KEASTS GI SURETHING S2F | AVONLEA GB MAGNETIC S2F | KAIMORE ML REBELLION S1F | GRANGE MGH REMARKABLE S1F | WOODCOTE MGH LEXUS-ET S2F | POWELLS WE GRANDIOSE S2F | WHITE CLIFFS ML BOWIE S1F | BAGWORTH GB DELUXE S3F | WESTEDGE ML LOMU S2F | LORNACE GB DEMO-ET S3F | BALLS MH HIGHLANDER S2F | WAITARIA DE HANSEN S1F | SCOTTS GF TORRENT-ET S2F | SPELDHURST MA OCTANE S3F | GLENMEAD WE MAYDAY-ET S2F | SCOTTS GF STAUNCHET S3F | WAITARIA MAXIMA JONAH S2F | ALLANS RTD ARISTOCRAT S2F | HOWARDS SB SABBATH S2F | TRONNOCO GI SPIKE-ET S3F | TELESIS MGH RANFURLY S2F | COSTERS MH POLLSTAR P S1F | LIGHTBURN GF SABRE-ET S3F | BERAKAH MGH SIMON-ET S2F | LIGHTBURN HOT GEAR-ET S3F | RIVER HEIGHTS DUDE-ET S2F | BUSY BROOK MH MATADOR S3F | WELLS GB IMPRESSION S3F | MITCHELLS RMS HIATUS S1F | ARON-AMY GI SYNTAX-ET S2F | MITCHELLS RMS FLUX-ET S1F | CLOVERLEA GF GAUGE-ET S2F | ARON-AMY MH SALUTE-ET S2F | WOODCOTE MGH VEGAS-ET S2F | SHEPPARD RTD ADAMANT S2F | GREEN-FIELDS GO-PRO S1F | TANGLEWOOD WE FOREST S3F | KAIMORE MA MEDALLION S3F | MARCHEL ML MARVEL S1F | GYDELAND ML FORTITUDE S1F | PASSMORE EMPIRE VISA S1F | HILLSVIEW WE PAYDAY S3F | LIGHTBURN HM BONO S3F | OTAHI GB TRITON S3F | CAVALIER M CLETUS-ET S3F | MEANDER ML AMPLIFY-ET S1F | SCOTTS GF TENACITY-ET S2F | GLENFALLOCH HOT MAGMA S2F | KAILEY ML ZIGGY S1F | LORNACE MH DELROY-ET S2F | CLOVERLEA WE OPULENT S2F | TOTARA VIEW QUEST-ET S2F | BROWNS WP FORMIDABLE S3F | SCOTTS AM TORQUE S3F |
|--------------------------|-------------------------|----------------------|------------------------|----------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|---------------------------|------------------------|---------------------------|-----------------------|---------------------------|--------------------------|--------------------------|---------------------------|--------------------------|--------------------------|--------------------------|----------------------|-------------------------|---------------------------|-------------------------|---------------------------|---------------------------|------------------------|---------------------------|------------------------|--------------------------|---------------------------|------------------------|---------------------------|--------------------------|--------------------------|-------------------------|--------------------------|---------------------------|---------------------------|------------------------|------------------------|-------------------------|--------------------------|---------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|-------------------------|---------------------------|-------------------------|-------------------------|--------------------------|---------------------------|---------------------------|--------------------------|---------------------------|------------------------|----------------------|------------------------|-------------------------|------------------------|--------------------------|--------------------------|---------------------------|-------------------------|---------------------------|---------------------------|------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|---------------------------|-------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-----------------------|---------------------------|--------------------------|-------------------------|-----------------------|---------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------|

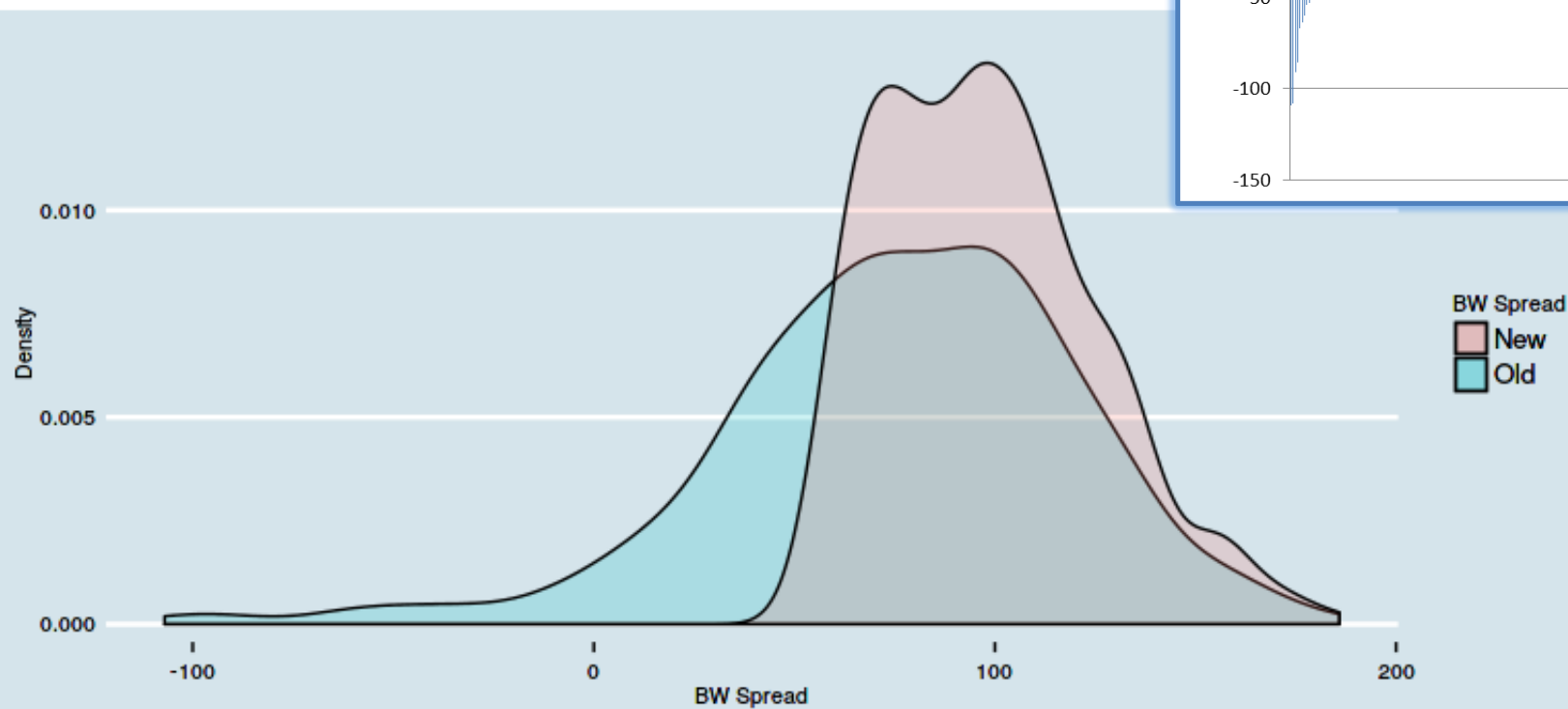
### May 2020 gBW Ranking

|                        |                          |                      |                          |                           |                          |                           |                           |                          |                      |                           |                        |                           |                          |                           |                          |                         |                      |                           |                           |                           |                        |                         |                          |                        |                           |                      |                          |                           |                          |                           |                        |                           |                          |                         |                           |                           |                          |                           |                           |                          |                         |                          |                     |                           |                         |                        |                           |                       |                           |                           |                          |                           |                          |                           |                          |                           |                          |                          |                           |                        |                           |                          |                           |                           |                     |                        |                           |                           |                         |                           |                          |                          |                         |                          |                         |                          |                          |
|------------------------|--------------------------|----------------------|--------------------------|---------------------------|--------------------------|---------------------------|---------------------------|--------------------------|----------------------|---------------------------|------------------------|---------------------------|--------------------------|---------------------------|--------------------------|-------------------------|----------------------|---------------------------|---------------------------|---------------------------|------------------------|-------------------------|--------------------------|------------------------|---------------------------|----------------------|--------------------------|---------------------------|--------------------------|---------------------------|------------------------|---------------------------|--------------------------|-------------------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|--------------------------|---------------------|---------------------------|-------------------------|------------------------|---------------------------|-----------------------|---------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|--------------------------|---------------------------|------------------------|---------------------------|--------------------------|---------------------------|---------------------------|---------------------|------------------------|---------------------------|---------------------------|-------------------------|---------------------------|--------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|--------------------------|
| WEDERS DE OVERTIME S1F | LIGHTBURN SB GIOVANI S3F | PAYNES BG ARCHIE S1F | EDWARDS DE KICKSTART S1F | STOUPES BG TRIUMPHANT S1F | ARKAN MGH BACKDOP-ET S2F | SPRING TRALEE BEAT-ET S1F | SPRING TRALEE BASS-ET S2F | TAFIS SD TRANSFORMER S1F | MEANDER SB ALAMO S2F | BLACKSTOCK WE EMBLAZE S2F | ARKAN HF FREELANCE S2F | LIGHTBURN GB DYLAN-ET S3F | BUSY BROOK H REALMET S2F | MEANDER BR ABRAXAS-ET S2F | GALATEA MGH REGIMENT S1F | ARKAN ML BABYLON-ET S1F | WESTEDGE ML LOMU S2F | FOOTEHILLS BG LINCOLN S1F | TRONNOCO MGH SYRUS-ET S2F | BUSY BROOK MGH MORDOR S2F | TELESIS ML HASHTAG S1F | DICKSONS BG MANDATE S1F | DICKSONS GI ESCALADE S3F | IONIC RTD RENITION S2F | LIGHTBURN B MALBEC-ET S3F | AWAKAU BG MADDOX S1F | ESTEE MGH FANATIC-ET S2F | HILLSVIEW WE ATTITUDE S2F | PASSMORE EMPIRE VISA S1F | CAVALIER M CAPTAIN-ET S3F | LORNACE GB DEMO-ET S3F | BUSY BROOK MH MATADOR S3F | BLACKWELL GB GENUINE S2F | KEASTS GI SURETHING S2F | WOODCOTE MGH LEXUS-ET S2F | ALLANS RTD ARISTOCRAT S2F | MITCHELLS RMS HIATUS S1F | ARON-AMY MH SALUTE-ET S2F | GYDELAND ML FORTITUDE S1F | INAHIA GI UNDENIABLE S2F | BALLS MH HIGHLANDER S2F | KAIMORE ML REBELLION S1F | KAILEY ML ZIGGY S1F | GRANGE MGH REMARKABLE S1F | GREEN-FIELDS GO-PRO S1F | HOWARDS SB SABBATH S2F | ARON-AMY GI SYNTAX-ET S2F | MARCHEL ML MARVEL S1F | BUSY BROOK H FABULOUS S2F | GLENMEAD WE MAYDAY-ET S2F | POWELLS WE GRANDIOSE S2F | LIGHTBURN HOT GEAR-ET S3F | BERAKAH MGH SIMON-ET S2F | COSTERS MH POLLSTAR P S1F | SCOTTS GF TORRENT-ET S2F | RIVER HEIGHTS DUDE-ET S2F | BROWNS WP FORMIDABLE S3F | SHEPPARD RTD ADAMANT S2F | MITCHELLS RMS FLUX-ET S1F | BAGWORTH GB DELUXE S3F | GLENFALLOCH HOT MAGMA S2F | KAIMORE MA MEDALLION S3F | CLOVERLEA GF GAUGE-ET S2F | WOODCOTE MGH VEGAS-ET S2F | OTAHI GB TRITON S3F | WAITARIA DE HANSEN S1F | MEANDER ML AMPLIFY-ET S1F | LIGHTBURN GF SABRE-ET S3F | SCOTTS GF STAUNCHET S3F | SCOTTS GF TENACITY-ET S2F | CAVALIER M CLETUS-ET S3F | LORNACE MH DELROY-ET S2F | HILLSVIEW WE PAYDAY S3F | TANGLEWOOD WE FOREST S3F | WELLS GB IMPRESSION S3F | CLOVERLEA WE OPULENT S2F | TOTARA VIEW QUEST-ET S2F |
|------------------------|--------------------------|----------------------|--------------------------|---------------------------|--------------------------|---------------------------|---------------------------|--------------------------|----------------------|---------------------------|------------------------|---------------------------|--------------------------|---------------------------|--------------------------|-------------------------|----------------------|---------------------------|---------------------------|---------------------------|------------------------|-------------------------|--------------------------|------------------------|---------------------------|----------------------|--------------------------|---------------------------|--------------------------|---------------------------|------------------------|---------------------------|--------------------------|-------------------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------|--------------------------|---------------------|---------------------------|-------------------------|------------------------|---------------------------|-----------------------|---------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|--------------------------|---------------------------|------------------------|---------------------------|--------------------------|---------------------------|---------------------------|---------------------|------------------------|---------------------------|---------------------------|-------------------------|---------------------------|--------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|--------------------------|

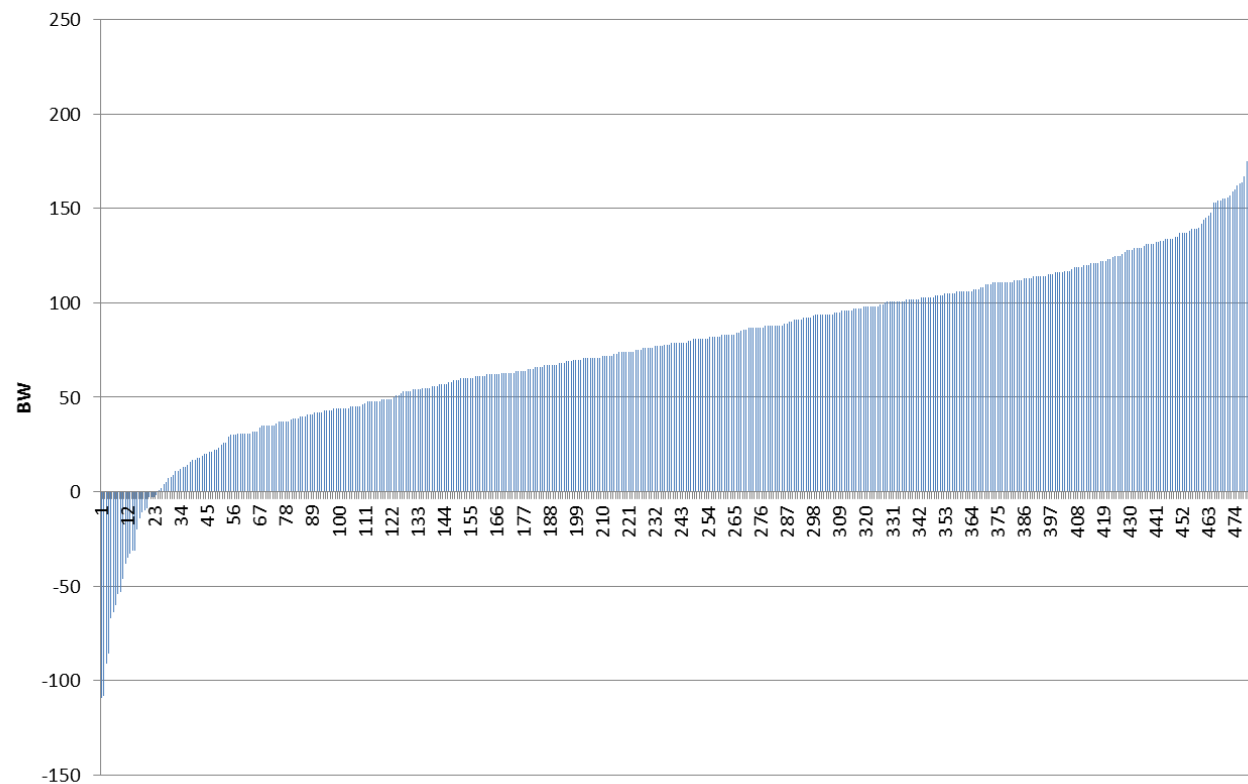
# Sharpening the focus on herd improvement within the herd

Secondly

Herd Improvement



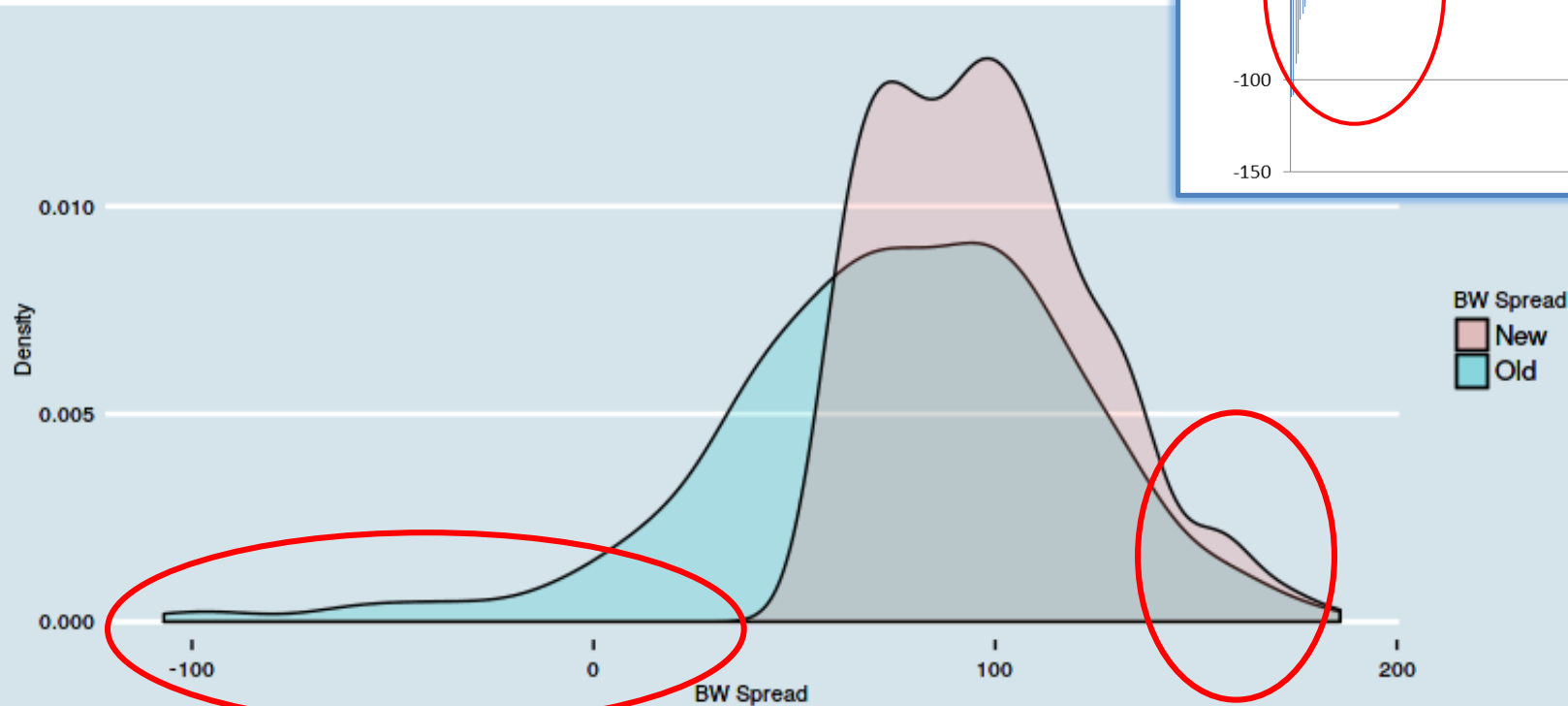
Herd BW Spread



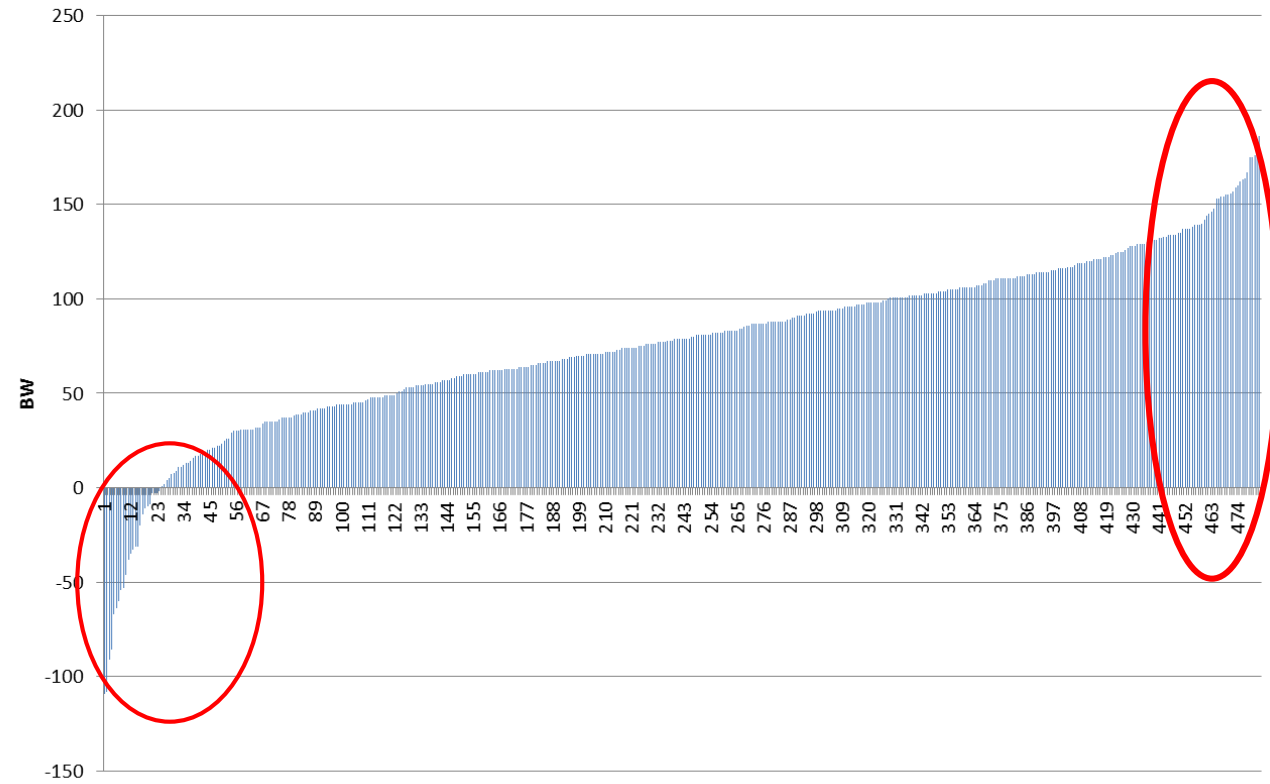
# Sharpening the focus on herd improvement within the herd

Secondly

Herd Improvement



Herd BW Spread



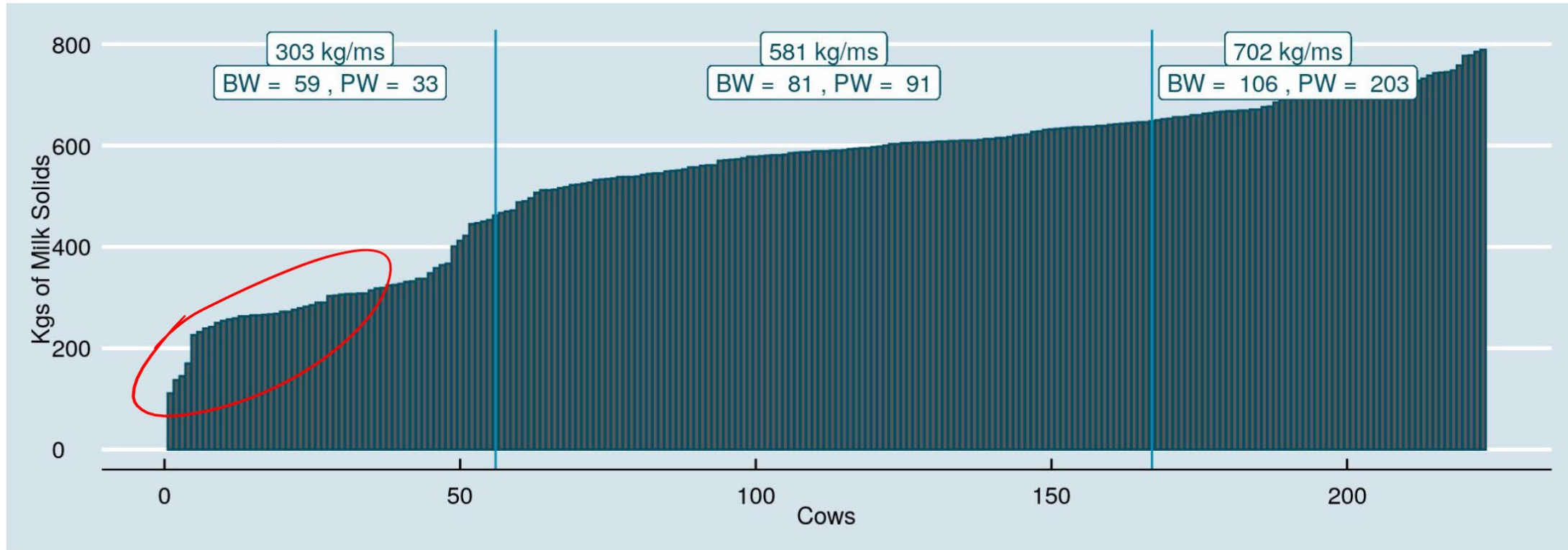
# The power of Selection pressure

| Tag Number | Birth ID | BW    | PW     | Dam Birth ID | Dam BW | Dam PW |
|------------|----------|-------|--------|--------------|--------|--------|
| 286        | 17-79    | -43.1 | -155.6 | 09-66        | 15.2   | 64.3   |
| 336        | 10-49    | -29.5 | -310.3 | 00-68        | -42.3  | -215.2 |
| 129        | 15-66    | -20.8 | -93.3  | 07-105       | -14.0  | -45.1  |
| 295        | 16-57    | -20.0 | -108.7 | 09-43        | -51.7  | -187.7 |
| 108        | 14-77    | -16.4 | -65.7  | 04-22        | 75.0   | 67.7   |
| 20         | 11-52    | -11.5 | -216.0 | 06-40        | -35.1  | 31.9   |
| 305        | 10-16    | 6.3   | 85.3   | 05-6         | -108.2 | -97.3  |
| 321        | 11-51    | 28.1  | 9.7    | 08-40        | -24.4  | 10.6   |
| 235        | 14-9     | 31.9  | -65.3  | 08-37        | -18.9  | -72.1  |
| 329        | 10-17    | 33.5  | 30.2   | 06-32        | -15.4  | -78.3  |
| 314        | 15-76    | 35.1  | -84.5  | 07-22        | -7.3   | 37.7   |
| 147        | 10-52    | 35.2  | 76.5   | 04-35        | 4.7    | 136.7  |
| 227        | 12-58    | 37.9  | 23.8   | 07-37        | 12.3   | 50.9   |
| 155        | 11-11    | 38.3  | -110.2 | 08-2         | 50.9   | -29.1  |
| 293        | 15-47    | 40.3  | -98.8  | 08-15        | -54.9  | -172.9 |
| 217        | 14-49    | 40.5  | -12.1  | 03-25        | -75.5  | -139.2 |
| 62         | 12-34    | 40.7  | -12.4  | 05-6         | -108.2 | -97.3  |
| 115        | 16-37    | 40.8  | -131.1 | 07-16        | -18.3  | 49.4   |
| 337        | 14-82    | 41.7  | 53.0   | 08-30        | 59.4   | 11.7   |
| 24         | 14-81    | 45.5  | 306.7  | 07-20        | 71.7   | 41.6   |
| 27         | 12-52    | 45.6  | 143.1  | 03-41        | -70.8  | -134.3 |
| 45         | 14-78    | 45.9  | 65.1   | 05-50        | -19.3  | -99.7  |
| 326        | 13-48    | 46.5  | -72.0  | 08-78        | -20.7  | -116.4 |
| 296        | 14-20    | 49.3  | -86.4  | 08-27        | 21.6   | -87.1  |
| 184        | 15-68    | 49.9  | 23.4   | 06-67        | -17.3  | 81.6   |
| 107        | 15-79    | 49.9  | -25.2  | 04-9         | -9.0   | 131.0  |
| 285        | 16-22    | 56.9  | -141.6 | 12-54        | 97.0   | 99.9   |

| Tag Number | Birth ID | BW    | PW    | Dam Birth ID | Dam BW | Dam PW |
|------------|----------|-------|-------|--------------|--------|--------|
| 157        | 13-5     | 185.9 | 223.6 | 09-11        | 131.4  | 174.2  |
| 59         | 15-58    | 186.4 | 399.7 | 10-18        | 147.2  | 331.2  |
| 256        | 17-45    | 187.7 | 255.2 | 14-43        | 184.6  | 293.1  |
| 327        | 17-53    | 187.8 | 308.5 | 12-21        | 165.6  | 135.3  |
| 89         | 17-26    | 188.1 | 186.6 | 14-68        | 141.9  | 88.7   |
| 317        | 17-16    | 189.2 | 350.3 | 13-59        | 148.6  | 235.2  |
| 360        | 15-34    | 190   | 270.5 | 12-33        | 117.9  | 193    |
| 67         | 16-53    | 190.6 | 345.4 | 11-27        | 161.4  | 268.6  |
| 271        | 13-33    | 191.6 | 323.2 | 09-12        | 98.8   | 191.1  |
| 287        | 15-10    | 194.3 | 268.7 | 11-44        | 135.0  | 192.3  |
| 32         | 16-58    | 198.4 | 435.9 | 10-29        | 120.4  | 86.5   |
| 169        | 17-22    | 200.4 | 190.7 | 12-69        | 167.6  | 203.0  |
| 244        | 15-41    | 204.3 | 225.8 | 12-60        | 156.8  | 299.1  |
| 31         | 13-69    | 206.1 | 304.3 | 10-5         | 116.8  | 93.4   |
| 96         | 14-21    | 207.4 | 447.3 | 11-20        | 121.8  | 204.4  |
| 328        | 17-70    | 208.9 | 192.1 | 11-5         | 128.0  | 207.4  |
| 224        | 17-46    | 212.3 | 279.7 | 13-87        | 119.1  | 159.6  |
| 318        | 17-48    | 217.4 | 320.0 | 12-73        | 114.4  | 262.9  |
| 195        | 17-76    | 220.7 | 288.1 | 11-44        | 135.0  | 192.3  |
| 323        | 17-18    | 244.9 | 524.4 | 14-62        | 122.9  | 169.6  |

In reality we all ready have the cows with the desired levels of productivity, we just need more of them!

Milk solid spread (4-8 years old)



This data is obtained from cummulative results of 4 herd test(s) for season year 2019/20.

400Kgs MS diff top to bottom. (Adjustment for milking days/short season in Q1 = +83KgsMS, taking us up to 385 resulting in **317 Kgs MS/cow** difference between Q1 & Q4.

Efficiency defined as;

$$A + B - C / LWT$$

And she certainly needs to get in calf

There's always room for improvement

# Liveweight BV and Production – All Herds

Breed > 14/16<sup>th</sup>'s HF

RA > 90%

Calving 1<sup>st</sup> June – 10<sup>th</sup> October

4 – 8 year olds

DIM > 200

# Otago

## Liveweight and Production

| rank<br>livewt bv | Herds | Age 4 to 8<br>years | AVG BW | AVG PW | AVG volume | Avg KgMS | AVG<br>livewt bv |
|-------------------|-------|---------------------|--------|--------|------------|----------|------------------|
| 1                 | 197   | 3,207               | 58     | 84.3   | 5,833      | 484      | 16.9             |
| 2                 | 208   | 3,322               | 53.2   | 73.1   | 5,914      | 486      | 27.7             |
| 3                 | 214   | 3,380               | 49.9   | 69.3   | 5,952      | 489      | 35.2             |
| 4                 | 201   | 3,263               | 40.2   | 54.5   | 6,026      | 492      | 46.8             |
|                   | 214   | 13,172              | 50.3   | 70.3   | 5,932      | 488      | 31.8             |



# Liveweight BV and Production – Herds > 550 kg MS

Breed > 14/16<sup>th</sup>'s HF

RA > 90%

Calving 1<sup>st</sup> June – 10<sup>th</sup> October

4 – 8 year olds

DIM > 200

# Otago

## Liveweight and Production

| rank<br>livewt bv | Herds | Age 4 to 8<br>years | AVG BW | AVG PW | AVG<br>volume | Avg KgMS | AVG<br>livewt bv |
|-------------------|-------|---------------------|--------|--------|---------------|----------|------------------|
| 1                 | 35    | 750                 | 59     | 84.5   | 7,154         | 590      | 22.1             |
| 2                 | 35    | 762                 | 46.9   | 66.5   | 7,318         | 594      | 35               |
| 3                 | 35    | 778                 | 38.5   | 65.5   | 7,431         | 599      | 43.9             |
| 4                 | 35    | 752                 | 14.9   | 30.9   | 7,534         | 595      | 57.2             |
|                   | 35    | 3,042               | 39.8   | 61.9   | 7,360         | 595      | 39.6             |

# Quartiles investigation – BW (Herd 1)

2020/21 Season YTD – Mature cows – min DIM = 150

| Ranked by<br>BW | #<br>Animals | Avg<br>KgMS | Avg<br>BW | Avg<br>PW | Avg<br>LW | Avg<br>DIM | Avg<br>livewt bv | Avg<br>fertility<br>bv | Ave<br>Friesian<br>16ths |
|-----------------|--------------|-------------|-----------|-----------|-----------|------------|------------------|------------------------|--------------------------|
| Q1              | 68           | 413         | 155       | 214       | 192       | 190        | -2.4             | 0.8                    | 9.4                      |
| Q2              | 69           | 414         | 107       | 147       | 132       | 191        | 14.0             | 0.2                    | 12.2                     |
| Q3              | 69           | 406         | 70        | 81        | 84        | 193        | 14.2             | 0.4                    | 12.6                     |
| Q4              | 68           | 385         | 19        | -27       | -9        | 190        | 18.4             | -0.4                   | 13.3                     |
|                 | 274          | 404         | 88        | 104       | 100       | 191        | 11.0             | 0.3                    | 11.9                     |

There's always room for improvement

# This is real! Quartiles investigation – BW (Herd 2)

2020/21 Season YTD – Mature cows – min DIM = 150

| Ranked by<br>BW | #<br>Animals | Avg<br>KgMS | Avg<br>BW | Avg<br>PW | Avg<br>LW | Avg<br>DIM | Avg<br>livewt bv | Avg<br>fertility bv | Ave<br>Friesian<br>16ths |
|-----------------|--------------|-------------|-----------|-----------|-----------|------------|------------------|---------------------|--------------------------|
| Q1              | 139          | 468         | 73        | 161       | 120       | 175        | 8.4              | -0.6                | 9.9                      |
| Q2              | 139          | 459         | 6         | 73        | 60        | 175        | 29.1             | -2.1                | 11.4                     |
| Q3              | 139          | 449         | -44       | -5        | 0         | 173        | 47.0             | -2.9                | 12.8                     |
| Q4              | 138          | 435         | -110      | -102      | -57       | 171        | 58.5             | -4.4                | 13.6                     |
|                 | 555          | 452         | -19       | 32        | 31        | 174        | 35.7             | -2.5                | 11.9                     |

There's always room for improvement

# This is real! Quartiles investigation – LWT (Herd 2)

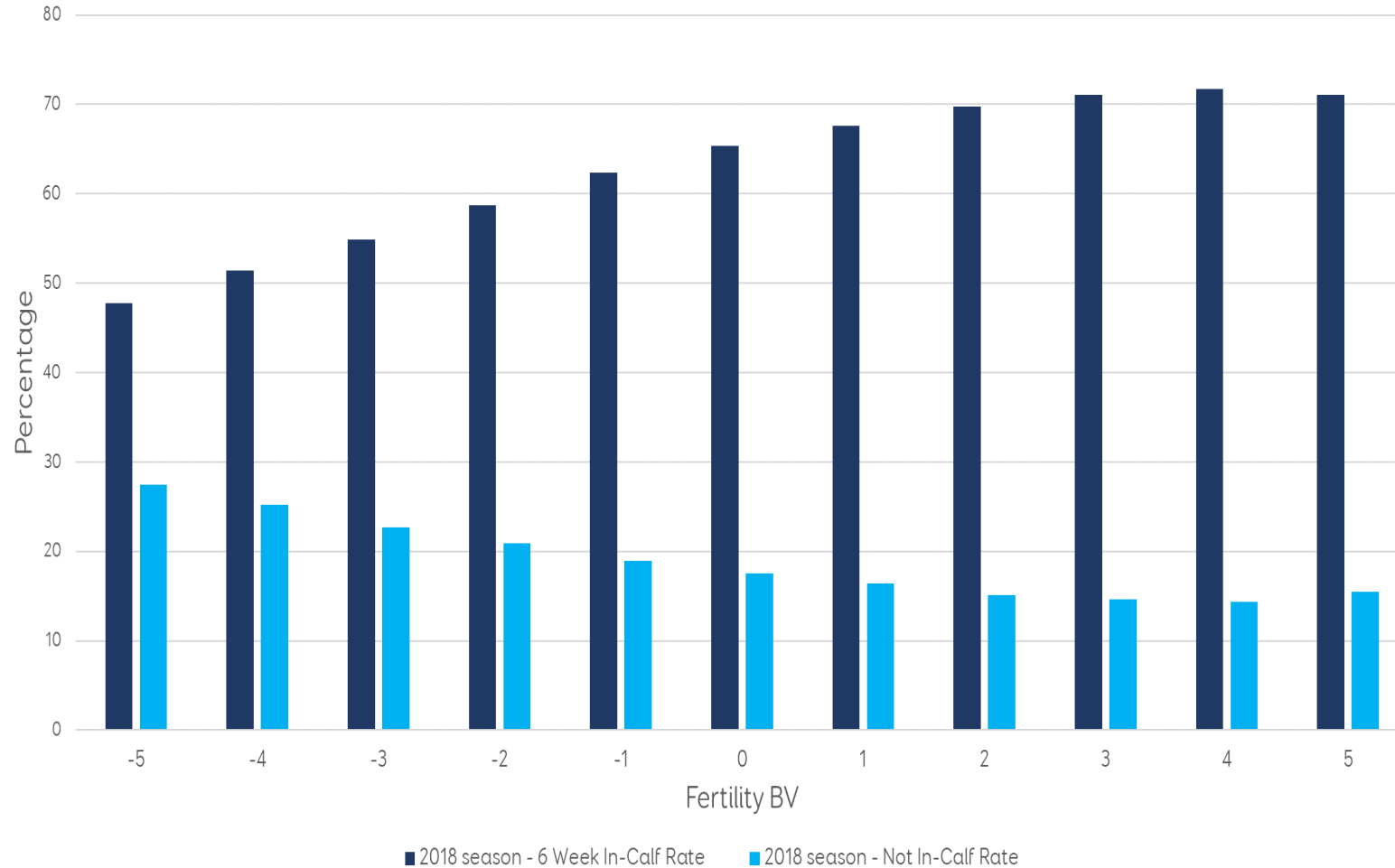
2020/21 Season YTD – Mature cows – min DIM = 150

| Ranked by<br>Liveweight<br>bv | #<br>Animals | Avg<br>KgMS | Avg<br>BW | Avg<br>PW | Avg<br>LW | Avg<br>DIM | Avg<br>livewt bv | Avg<br>fertility<br>bv | Ave<br>Friesian<br>16ths |
|-------------------------------|--------------|-------------|-----------|-----------|-----------|------------|------------------|------------------------|--------------------------|
| group 1                       | 111          | 447         | -84       | -42       | -40       | 171        | 73.4             | -4.2                   | 15.3                     |
| group 2                       | 111          | 465         | -49       | 12        | 5         | 173        | 60.0             | -2.7                   | 14.3                     |
| group 3                       | 111          | 453         | -7        | 21        | 16        | 174        | 40.1             | -1.8                   | 13.3                     |
| group 4                       | 111          | 450         | -1        | 45        | 56        | 174        | 14.9             | -2.3                   | 9.8                      |
| group 5                       | 111          | 448         | 47        | 124       | 119       | 175        | -9.9             | -1.4                   | 6.9                      |
|                               | 555          | 452         | -19       | 32        | 31        | 174        | 35.7             | -2.5                   | 11.9                     |

There's always room for improvement

# That Fertility BV will cost you on farm.

Impact of Fertility BV on Reproductive Performance



“There’s more money in a Milking cow than a Dry cow!”

There’s always room for improvement

# Dispelling the myth that good cows are harder to get in-calf

## Breeding Worth

| Otago 2019<br>Within herd ranking - BW | Number of<br>cows | 6 Week In-<br>Calf Rate | 3 Week<br>Submission<br>Rate | Conception<br>Rate | Not In-Calf<br>Rate |
|----------------------------------------|-------------------|-------------------------|------------------------------|--------------------|---------------------|
| Top Quartile                           | 47,050            | 68.2                    | 77.6                         | 53.4               | 14.2                |
| 2nd Quartile                           | 47,133            | 66.8                    | 75.8                         | 53.0               | 15.5                |
| 3rd Quartile                           | 47,100            | 65.0                    | 74.2                         | 52.0               | 17.0                |
| Bottom Quartile                        | 46,975            | 62.3                    | 71.2                         | 50.7               | 19.3                |



There's always room for improvement

# Focussed on the future



- 'If we are not milking more cows in this region we are going to have to be milking better cows'
- Profitability, fertility, efficiency and smart cow selection will define success

There's always room for improvement

# Focussed on the future - Genetics 2025

