# Meadowood Farms' Fall 2023 ram lambs and ewe lambs for sale

Each year we identify our top dairy ewes to breed to dairy rams (or dairy ram semen), to produce replacement dairy ewe lambs and dairy ram lambs, primarily for ourselves, and also some to sell to others. Our remaining dairy ewes [the majority, actually] are bred to terminal sires to produce meat lambs.

We use milk meters (pictured here) to measure each of our ewes' milk production over the course of the milking season – bimonthly for the first half of the lactation season, and then monthly through to the end of the lactation season. Monthly milk samples are taken on all individual ewes for component analysis through the production season. All milk samples are sent to Rocky Mountain DHI for component and SCC (somatic cell count) analysis; production and component data is then forwarded to GenOvis for data analysis and the generation of Estimated Breeding Values (EBVs) on yield and components.

We identify our top ewes by their most recent Estimated Breeding Values (EBVs), which take into account the milk and component production of <u>all</u> their female relations, close and distant, both at Meadowood and at any other sheep dairy in the Genovis/PIP system, as well as any influencing management factors, such as lambing date and litter size. We look at their udder conformation. And then as a last consideration, we look at their previous years' production.

All lambs are removed from their dams immediately after birth, fed colostrum for 18 hours, and then raised to 30 days on milk replacer before being weaned. As the season progresses, we weed out any seedstock lambs that show conformational flaws. All dairy lambs are checked for correct mouths, basic conformation, and proper testicles if they are male.

The Meadowood dairy flock is tested annually for OPP and Johne's, and is free of both. Additionally, we test each of our milking ewes for Staph Aureus shortly after parturition, to assure there are no SA-positive ewes in the flock. There is no foot rot on the farm. The flock is vaccinated annually for the control of CL. All seedstock lambs sold will have been vaccinated twice (initial at 30-d + booster) for CD/T and CL.

### Breeding and genetics.

Over the past three years, Meadowood has been transitioning from a winter/spring-lambing flock to a 100% fall-lambing flock. In 2021, we bred half of our flock for fall lambing; in 2022 we shifted to a summer-lambing season, to meet a market that wants fall and mid-winter milk. In 2023, after two years of "transitioning", we only bred ewes in March-April with a clean-up in July. We were largely successful: 95% of our mature ewes and 80% of our ewe lambs conceived and held pregnancies out of season.

Two years ago, we also transitioned the priorities of our breeding program. After our 2020 and 2021 seasons, we decided that we had achieved sufficient gain in average milk production: in our 2020 milking season, we averaged 1,290 lbs/ewe across all age groups, yearlings to 7-yr-olds, in an average of 217 days in milk. Thus in 2021 we began to place more breeding and selection emphasis on udder conformation.

We used DSANA's imported Lacaune semen in the 2017-2021 breeding seasons, as well as some Assaf semen from Ms J & Co in Wisconsin in the 2018-2021 breeding seasons. The Lacaune and the Assaf semen both originated from performance-recorded dairy sheep systems in France and Spain. Data on their first impact on milk production at Meadowood Farms is included at the end of this document. The use of semen and of semen-sired rams, in combination with regular measurement (metering) of milk production and the subsequent EBVs generated, have resulted in a consistent improvement in the average milk production of our flock.

In our 2022 breedings, in addition to Lacaune semen we used two rams of our own breeding – 2104 and 2105– who were sired by Lacaune semen from the 2020 importation and dammed by #1854, one of our top-EBV ewes with great udder conformation. The fallborn daughters of Rams 2104 and 2105 are being milked for the first time this fall, and we are very pleased with both their production and udder conformation (on the following pages you'll be able to track some of those daughters, many of whom are the dams of these seedstock ewe lambs and ram lambs available for sale).

Then in December 2022 we purchased three purebred East Friesian rams from Wooldrift Farm (Axel Meister and Chris Bushbeck) in Ontario; the rams' information is below. Axel and Chris are vanguards in the genetic progress of dairy sheep, and we purchased Wooldrift rams that excelled in EBVs and also had strong maternal udder conformation.

The Fall 2023 seedstock lambs listed for sale are primarily sired by Wooldrift East Friesian rams, and by MWD191, the son of one of our better ewes with one of the best udders we've seen. All of the lambs have Lacaune-cross dams, with some percentage East Friesian and/or Assaf in their lineage.

**Pricing.** As always, we require a 25% non-refundable deposit on all animals, and give buyers choice in the order of **deposits received.** In the case of death or disability of a particular animal prior to shipping, deposit will be returned.

Ram lambs: \$900 each Ewe lambs: \$400 each, sold in minimum groups of five

Meadowood will arrange and pay for vet checks (Health Certificates) on each animal within 30 days of pick-up by the buyer. All animals have a unique tag with scrapie ID. However, if the buyer's state requires additional testing before shipping, that cost will be borne by the buyer.

Buyers must arrange to pick up their selected animals at 90 days, maximum 120 days of age.

### In the pages below you will find the following information:

- 1. Ewe lambs and ram lambs available for choice. Includes their lineages, DOB, litter size.
- 2. EBVs, lineages, dams' udders of Wooldrift rams AXM 818, 831, and 838
- 3. EBVs, lineages, dams' udders of Meadowood rams MWD 2104 and 2105; and MWD 191
- 4. Information on how we generate EBVs, and notes on how to interpret the EBVs
- 5. EBVs of the dams and grand-dams, and the sires and grand-sires (sires & grand-sires are listed in lamb lineages)
- 6. Dams' and granddams' metered milk production for the Fall 2023 season [as of 27 December 2023], and 2022 and 2020 production seasons
- 7. Dams' and grand-dams' udders and production notes
- 8. Picture details of ram lambs teeth, testicles, side view. Includes weights as of Janueary 3, 2024
- 9. Information on semen sires seen in lineages
- 10. Information on other sires seen in lineages

11. Info from 2019: production impact of imported Lacaune semen on F1 yearlings' production at MWD at the end of the 2019 season

|         |       | Birth  |       |        |      |              | Mat G-dam<br>(mother of | Mat G-sire<br>(father of | Mat GG-sire<br>(father of |
|---------|-------|--------|-------|--------|------|--------------|-------------------------|--------------------------|---------------------------|
|         | Lamb# | Date   | L Sex | Litter | Dam# | Ram#         | dam)                    | dam)                     | Mat G-dam)                |
| sold JM | 2308  | 20-Aug | F     | TR     | 1818 | MWD 2105     | 1733                    | Kieffer                  | Harry                     |
| sold TP | 2311  | 23-Aug | F     | TR     | 2114 | AXM 2831     | 1714                    | L-329                    | RS                        |
| sold AV | 2336  | 11-Sep | F     | TW     | 2206 | MWD 191      | 1951                    | L-604                    | L-132C                    |
| sold AV | 2337  | 11-Sep | F     | TW     | 2206 | AXM 2818     | 1951                    | L-604                    | L-132C                    |
| sold JM | 2338  | 14-Sep | F     | TW     | 2236 | MWD 191      | 2104                    | 2122                     | Asf 502                   |
| sold JM | 2339  | 14-Sep | F     | TW     | 2236 | MWD 191      | 2104                    | 2122                     | Asf 502                   |
| sold TP | 2340  | 14-Sep | F     | TW     | 2222 | AXM 2818     | 1445                    | 2105                     | EFB2                      |
| sold TP | 2343  | 16-Sep | F     | TW     | 2208 | MWD 191      | 2010                    | L-271                    | L-202                     |
| sold TP | 2349  | 18-Sep | F     | S      | 2227 | MWD 191      | 1468                    | 2104                     | SPNR                      |
| sold TP | 2355  | 20-Sep | F     | S      | 2233 | MWD 191      | 2083                    | 2104                     | MWD2250                   |
| sold DM | R26   | 24-Nov | М     | TR     | 2240 | AXM 38 or 18 | 1919                    | 2104                     | L-208i                    |
| sold DM | R27   | 24-Nov | М     | TR     | 2240 | AXM 38 or 18 | 1919                    | 2104                     | L-208i                    |
|         | R28   | 26-Nov | М     | TW     | 2123 | AXM31        | 1811                    | 2070A                    | Kieffer                   |
| sold CW | R29   | 27-Nov | М     | S      | 2216 | AXM 38 or 18 | 1605                    | 2104                     | RS                        |
|         | R31   | 29-Nov | М     | S      | 2226 | AXM 38 or 18 | 2030                    | 2105                     | Asf 193                   |
| sold JM | R32   | 30-Nov | М     | TW     | 2215 | AXM 38 or 18 | 1605                    | 2104                     | RS                        |
| sold AM | R33   | 30-Nov | М     | TW     | 2241 | AXM 38 or 18 | 2051                    | 2104                     | MWD2250                   |
| sold AM | R34   | 30-Nov | М     | S      | 2219 | AXM 38 or 18 | 1856                    | L-604                    | 272L                      |
|         | R38   | 2-Dec  | М     | S      | 2245 | AXM 38 or 18 | 1847                    | 2104                     | L-208i                    |

### 1. Ewe lambs and ram lambs available for sale/choice

In April & July 2023, ewe lambs were group-bred with 3 rams (AXM 818, AXM 838, and MWD 191) to maximize the conception rate and fecundity (litter size) of the ewe lambs in out-of-season breeding.

Lambs born in September and November have had blood samples sent to NeoGen for DNA testing, to identify the sire for each lamb. Sire IDs for the remaining ram lambs are expected by late April 2024.

### 2. EBVs and dams' udders for Wooldrift Rams# AXM 818, AXM 831, AXM 838:

|    |     |       |         |     |           |         |     |       |           | Dam                 |                          |                         |                         | Ī                  |
|----|-----|-------|---------|-----|-----------|---------|-----|-------|-----------|---------------------|--------------------------|-------------------------|-------------------------|--------------------|
| #  |     | ID    | Lambtag | sex | Birthdate | born as | Dam |       | Sire      | Production<br>Index | %<br>production<br>Index | EBV<br>MilkYield<br>kg2 | Acc<br>MilkYield<br>kg2 | % MilkYield<br>kg2 |
| 1  | AXM | 801 K | 4594    | м   | 05-Mar    | 3       | AXM | 519 G | AXM719J   | 181                 | 99                       | 168.51                  | 72                      | 99 I               |
| 2  | АХМ | 806 K | 4599    | м   | 06-Mar    | 3       | AXM | 485G  | AXM719J   | 164                 | 98                       | 170.04                  | 74                      | 99                 |
| 3  | AXM | 807 K | 4600    | м   | 06-Mar    | 3       | AXM | 485G  | AXM719J   | 164                 | 98                       | 170.04                  | 74                      | 99                 |
| 4  | АХМ | 813 K | 4605    | м   | 07-Mar    | 4       | AXM | 560 H | AXM719J   | 168                 | 99                       | 179.56                  | 71                      | 99                 |
| 5  | AXM | 814 K | 4606    | Δ   | 08-Mar    | 3       | AXM | 232 D | AXM719J   | 149                 | 97                       | 130.88                  | 78                      | 98                 |
| 6  | AXM | 815 K | 4607    | м   | 08-Mar    | 3       | AXM | 232 D | AXM719J   | 149                 | 97                       | 130.88                  | 78                      | <mark>98</mark>    |
| 7  | AXM | 816 K | 4608    | м   | 08-Mar    | 3       | AXM | 232 D | AXM719J   | 149                 | 97                       | 130.88                  | 78                      | 98                 |
| 8  | AXM | 818 K | 4610    | м   | 09-Mar    | 2       | AXM | 587 H | AXM719J   | 153                 | 97                       | 172.12                  | 71                      | 99                 |
| 9  | AXM | 821 K | 4613    | м   | 09-Mar    | 2       | AXM | 537 G | AXM719J   | 155                 | 98                       | 150.92                  | 72                      | 99                 |
| 10 | АХМ | 829 K | 4621    | м   | 11-Mar    | 2       | AXM | 146 C | AXM719J   | 145                 | 96                       | 119.99                  | 79                      | 98                 |
| 11 | AXM | 831 K | 4623    | м   | 11-Mar    | 2       | AXM | 214 D | Traveller | 188                 | 99                       | 181.3                   | 77                      | 99                 |
| 12 | AXM | 833 K | 4625    | м   | 11-Mar    | 2       | AXM | 453 G | AXM719J   | 162                 | 98                       | 175.83                  | 73                      | 99                 |
| 13 | AXM | 838 K | 4630    | М   | 11-Mar    | 3       | AXM | 445 F | Twist     | 181                 | 99                       | 197.81                  | 75                      | 99                 |



587H, dam of AXM 818K

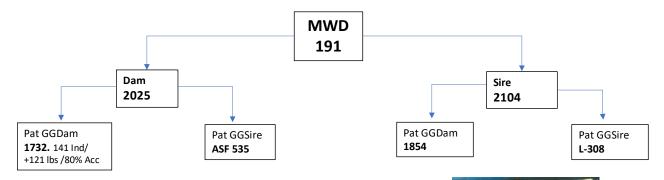


214D, dam of AXM 831K



445F, dam of AXM 838K

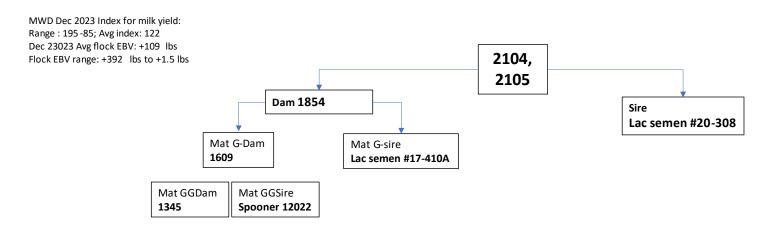
### 3. EBVs and dams' udders for sires MWD 191, 2104, 2105:

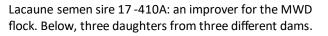




**2025 pic as 2-yr-old:** 2022 Index: 153 EBV Yield P1: +99 lbs Acc %: 40 MWD Dec 2023 Index for milk yield: Range : 195-85; Avg index: 122 Dec 2023 Avg flock EBV: +109 lbs Flock EBV range: +392 lbs to +1.5 lbs

> **1854 pic as 2-yr-old:** 2022 Index: 150 EBV Yield P2: +194 lbs Acc %: 77



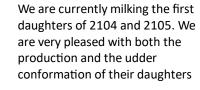




**Center pic: 1854 pic as 2-yr-old:** 2022 Index: 150 EBV Yield P2: +194 lbs Acc %: 77



Daughters of 2104: Yearlings 2215 & 2241 above Daughters of 2105: Yearlings 2222 & 2226 on right





### 4. How we get our Estimated Breeding Values (EBVs).

We have been metering our dairy flock since 1998. Since 2018, we have been enrolled in DSANA's Genetic Improvement Program, and have been sending our metering data and component sampling information to GenOvis in Quebec for genetic analysis and EBVs. For a complete description of the process, from metering and individual sampling, to utilizing EBVs in our breeding/culling/selection decision-making, we really recommend taking a look at our document: *"How we used EBVs in 2019"*, which we presented at the 2019 Dairy Sheep Symposium. We have also put together a document that explains EBVs: *"Understanding EBVs"*. You can find both documents at <u>www.meadowoodfarms.com</u>, under the "Dairy-Sheep" menu. *[If you are interested in joining the DSANA Production Improvement Program, and generating EBVs within your own dairy sheep flock, go to www.DSANA.org/Genetic Improvement, and then contact Matt Gelbwaks, the PIP Coordinator, at PIP@DSANA.org.]* 

### Notes on interpreting the EBVs:

- Production Index, Component Index: The index numbers give a single easy-to-compare number that accounts for the EBVs of Parity 1 (animals' 1<sup>st</sup> Production year) and the EBVs of Parity 2 (2<sup>nd</sup> year and onward). In the case of the Production Index, this is a weighted Milk Yield Index number for Parity 1 (P1) and Parity 2 (P2). In the case of the Component Index, this is a weighted number that takes EBVs of both kg of milk fat and kg of protein into account, as well as P1 & P2 EBVs. The index number is scaled relative to all ewes in the GenOvis system approximately 20 sheep dairy farms in North America. In the Production Index, the median index number over all the ewes in the GenOvis system is ~ 101; the median for the Component Index number is ~ 103. For all Meadowood ewes ever entered in the GenOvis, alive and dead, the highest and lowest Production Index numbers are 195 and 51; the highest and lowest Component Index numbers are 190 and 49.
- Milk yield: In kg or lb, this is the average difference (positive or negative) in milk yield between this ewe and the average of all other dairy sheep females in the GenOvis' North American dairy sheep database. GenOvis standardizes all milk yields, as well as Fat and Protein Yields, to a 220-day lactation. You will see that we have not offered any ram lambs from ewes with negative EBVs for Milk Yield Parity2. *Note: GenOvis gives us EBVs in Kg. We have derived the Lb. equivalents by multiplying the EBV for P2 yield (kg) by 2.2.*
- Acc: "Accuracy". This indicates the accuracy of the EBV the higher the better, with "0" being very little confidence whatsoever. Females with less production history and/or fewer female relations in production will have lower accuracy, and those with more years in production or more female relations in production will have higher accuracy. Thus you will notice that younger ewes (i.e., 21xx) might have slightly lower accuracies because they have fewer years in milk production, although the production of their female relatives helps greatly in their accuracy. Ewes born in 2015-2019 have higher accuracies, because we have more production information on them (we started uploading milk production data for EBVs in 2018), and/or because they have more recorded daughters in production.

Note on Accuracis < 50%: As a rule, we don't publish EBVs of animals with Yield Accuracies of < 50%, as they are less reliable for selection and breeding purposes. For those, we refer to the dams' EBVs, and the sires' if available; and metered production records.

**Fat yield and protein yield (kg or lb).** The EBV (i.e., "EBV Fat, Lb" or "EBV Protein, Lb") indicates the predicted amount of fat or protein this ewe produces over the average of all other dairy sheep females in the GenOvis' North American dairy sheep database. If you are interested in component production for cheese processing, selection on fat yield and protein yield is a better guide than Average Daily Fat % or Average Daily Protein %. This is because Fat Yield and Protein Yield indicate her total component production over the entire 220-day milking season, and takes into account both her milk yield and her component percentage. *Note: GenOvis gives us EBVs in Kg. We have derived the Lb. equivalents by multiplying the Fat and Protein Kg by 2.2.* 

### 5. EBVs for Dams and Granddams' and for Grand-sires or other sires in the pedigree:

**EBVs as of December 2023** – we haven't submitted lambing/milking data for the 2023-24 season as of this paper.

| Dam# | Grand-<br>dam # | Prod'n<br>Index | EBV milk<br>yield 2 (kg) | EBV milk<br>yield 2, lbs | Milk Yield<br>Acc. P2 | Comp'nt<br>Index | EBV Fat P2,<br>kg | EBV Fat<br>P2, lb | EBV Prot P2,<br>kg | EBV Prot<br>P2, lb | Acc. for Prot<br>yield, Fat<br>yield P2 |
|------|-----------------|-----------------|--------------------------|--------------------------|-----------------------|------------------|-------------------|-------------------|--------------------|--------------------|---|
| 1818 |                 | 111             | 52.4                     | 115                      | 78                    | 117              | 3.06              | 6.7               | 2.26               | 5.0                | 70                                      |
| 2114 |                 |                 | Low accurac              | ies, refer to 202        | 22 &2023 mil          | k production     | records           |                   |                    |                    |   |
| 2123 |                 |                 | Low accurac              | ies, refer to 202        | 22 &2023 mil          | k production     | records           |                   |                    |                    |   |
| 2206 |                 |                 |                          |                          |                       |                  |                   |                   |                    |                    |   |
| 2236 |                 |                 |                          |                          |                       |                  |                   |                   |                    |                    |   |
| 2222 |                 |                 |                          |                          |                       |                  |                   |                   |                    |                    |   |
| 2208 |                 |                 |                          |                          |                       |                  |                   |                   |                    |                    |   |
| 2227 |                 |                 |                          |                          |                       |                  |                   |                   |                    |                    |   |
| 2233 |                 |                 | Dams born i              | n 2022 are bein          | g milked for          | the first time   | now, and ha       | ve not had El     | BVs generated      | d on them ye       | t.                                      |
| 2240 |                 |                 | For the best             | estimate of the          | eir potential E       | BVs, one can     | n average the     | EBVs of thei      | r respective d     | ams (in this       | table) with                             |
| 2226 |                 |                 |                          | the EBVs of th           | eir respectiv         | e sires (EBVs    | on the next p     | oage).            |                    |                    |   |
| 2215 |                 |                 |                          |                          |                       |                  |                   |                   |                    |                    |   |
| 2216 |                 |                 |                          |                          |                       |                  |                   |                   |                    |                    |   |
| 2241 |                 |                 |                          |                          |                       |                  |                   |                   |                    |                    |   |
| 2219 |                 |                 |                          |                          |                       |                  |                   |                   |                    |                    |   |
| 2244 |                 |                 |                          |                          |                       |                  |                   |                   |                    |                    |   |

| Dam# | Grand-<br>dam # | Prod'n<br>Index | EBV milk yield<br>2 (kg) | EBV milk<br>yield 2, lbs | Milk Yield<br>Acc. P2 | Comp'nt<br>Index | EBV Fat P2,<br>kg | EBV Fat<br>P2, lb | EBV Prot P2,<br>kg | EBV Prot<br>P2, lb | Acc. for Prot<br>yield, Fat<br>yield P2 |
|------|-----------------|-----------------|--------------------------|--------------------------|-----------------------|------------------|-------------------|-------------------|--------------------|--------------------|---|
|      | 1445            | 104             | 15.65                    | 34                       | 78                    | 113              | -0.01             | 0.0               | 0.08               | 0.2                | 74                                      |
|      | 1468            | 114             | 21.74                    | 48                       | 79                    | 128              | 3.06              | 6.7               | 2.64               | 5.8                | 75                                      |
|      | 1605            | 140             | 42.34                    | 93                       | 80                    | 145              | 2.8               | 6.2               | 2.66               | 5.9                | 75                                      |
|      | 1714            | 102             | 10.3                     | 23                       | 79                    | 101              | -0.45             | -1.0              | 0.41               | 0.9                | 72                                      |
|      | 1716            | 104             | 15.65                    | 34                       | 78                    | 105              | 2.04              | 4.5               | 1.57               | 3.5                | 74                                      |
|      | 1733            |                 |                          |                          |                       |                  |                   |                   |                    |                    |   |
|      | 1811            | 114             | 42.4                     | 93                       | 77                    | 117              | 2.47              | 5.4               | 2.26               | 5.0                | 70                                      |
|      | 1847            | 147             | 68.51                    | 151                      | 78                    | 162              | 5.23              | 11.5              | 4.21               | 9.3                | 69                                      |
|      | 1854            | 150             | 88.45                    | 195                      | 77                    | 157              | 5.7               | 12.5              | 4.45               | 9.8                | 69                                      |
|      | 1856            | 164             | 119.97                   | 264                      | 76                    | 167              | 7.42              | 16.3              | 5.81               | 12.8               | 70                                      |
|      | 1919            | 161             | 92.9                     | 204                      | 77                    | 162              | 5.05              | 11.1              | 4.08               | 9.0                | 64                                      |
|      | 1951            | 85              | -7.34                    | -16                      | 77                    | 89               | -0.08             | -0.2              | -0.42              | -0.9               | 66                                      |
|      | 2010            | 145             | 91.56                    | 201                      | 73                    | 142              | 3.83              | 8.4               | 3.85               | 8.5                | 62                                      |
|      | 2030            | 106             | 33.26                    | 73                       | 40                    | 105              | 2.04              | 4.5               | 1.57               | 3.5                | 37                                      |
|      | 2051            | 141             | 63.75                    | 140                      | 75                    | 147              | 3.97              | 8.7               | 3.93               | 8.6                | 63                                      |
|      | 2072            | 144             | 82.68                    | 182                      | 73                    | 144              | 3.89              | 8.6               | 3.83               | 8.4                | 59                                      |
|      | 2083            | 129             | 67.3                     | 148                      | 74                    | 129              | 3.48              | 7.7               | 3.23               | 7.1                | 62                                      |
|      | 2104            |                 | Low accurac              | ies, refer to 20         | 22 &2023 mi           | lk production    | records           |                   |                    |                    |   |

### MWD Dec 2023 Index for milk yield:

Range : 195-85; Avg index: 122

Dec 23023 Avg flock EBV: +109 lbs

Flock EBV range: +392 lbs to +1.5 lbs

(These numbers include *all* ewes in the flock, both current and past, and also

the ewes bred to terminal sires, as well as those bred to dairy sires/semen.)

| Sires, Grand-<br>sires, etc | DOB or semen<br>importation dt | Prod'n<br>Index | EBV milk<br>yield (kg) | EBV milk<br>yield (lb) | Milk Yield<br>Acc. | Comp'nt<br>Index | EBV Fat (kg)    | EBV Fat,<br>Ib | EBV Prot (kg) | EBV<br>Prot, lb | Acc. for<br>Prot yield,<br>Fat yield | Notes   |
|-----------------------------|--------------------------------|-----------------|------------------------|------------------------|--------------------|------------------|-----------------|----------------|---------------|-----------------|--------------------------------------|---|
| AXM 818 K                   | Born Wooldrift 2022            |                 | Purchased fi           | rom Wooldrifi          | t Farm, Ontai      | rio. Daughtei    | rs born Fall 20 | 023. Ram EB    | Vs on page 4  |                 |                                      | Purchased from Wooldrift Farm, Ontario. EBVs above.             |
| AXM 831 K                   | Born Wooldrift 2022            |                 | Purchased fi           | rom Wooldrift          | t Farm, Ontai      | rio. Daughtei    | rs born Fall 20 | 023. Ram EB    | Vs on page 5  |                 |                                      | Purchased from Wooldrift Farm, Ontario. EBVs above.             |
| AXM 838 K                   | Born Wooldrift 2022            |                 | Purchased fi           | rom Wooldrift          | t Farm, Ontai      | rio. Daughtei    | rs born Fall 20 | )23. Ram EB    | Vs on page 6  |                 |                                      | Purchased from Wooldrift Farm, Ontario. EBVs above.             |
| MWD 2104                    | Born MWD 2021                  |                 | Milking first          | daughters no           | ow, no EBVs y      | et               |                 |                |               |                 |                                      | Used extensively in 2022 & 2023, daughters milking now          |
| MWD 2105                    | Born MWD 2021                  |                 | Milking first          | daughters no           | ow, no EBVs y      | et               |                 |                |               |                 |                                      | Used extensively in 2022, daughters milking now                 |
| MWD 2122                    | Born MWD 2021                  |                 | Milking first          | daughters no           | w, no EBVs y       | et               |                 |                |               |                 |                                      | Used for 1 yr as clean-up; very little daughter data            |
| Lac-17 208i                 | Lacaune semen 2017             | 156             | 88.43                  | 195                    | 66                 | 167              | 6.3             | 13.9           | 4.8           | 10.5            | 64                                   |   |
| Lac-17 272L                 | Lacaune semen 2017             | 142             | 78.39                  | 172                    | 53                 | 147              | 4.9             | 10.7           | 4.0           | 8.7             | 53                                   |   |
| Lac-17 132c                 | Lacaune semen 2017             | 118             | 6                      | 13                     | 50                 | 123              | 0.5             | 1.0            | 0.4           | 0.9             | 43                                   |   |
| Lac-20 308                  | Lacaune semen 2020             |                 | Insufficient           | daughter or g          | rand-daughte       | er data yet, El  | BV yield accu   | racy < 50%     |               |                 |                                      |   |
| Lac-20 329                  | Lacaune semen 2020             |                 | Insufficient           | daughter or g          | rand-daughte       | er data yet, El  | BV yield accu   | racy < 50%     |               |                 |                                      |   |
| Lac-20 604                  | Lacaune semen 2020             | 106             | 31.59                  | 69                     | 56                 | 124              | 3.4             | 7.6            | 3.0           | 6.6             | 56                                   |   |
| Lac-20 271                  | Lacaune semen 2020             | 100             | 9.79                   | 22                     | 50                 | 104              | 0.7             | 1.4            | 0.5           | 1.1             | 43                                   |   |
| Lac-18 202                  | Lacaune semen 2018             | 121             | 27.01                  | 59                     | 52                 | 128              | 1.3             | 2.9            | 1.1           | 2.4             | 52                                   |   |
| Asf 193                     | Assaf semen                    | 94              | 6.93                   | 15                     | 56                 | 89               | -0.7            | -1.5           | -0.4          | -1.0            | 52                                   | Semen purch: msjandco.com>Assaf genetics>Semen catalog          |
| Asf 502                     | Assaf semen                    | 103             | 30.18                  | 66                     | 56                 | 106              | 2.2             | 4.8            | 1.2           | 2.6             | 54                                   | Semen purch: msjandco.com>Assaf genetics>Semen catalog          |
| MWD2250                     | Born MWD 2019                  | 155             | 106.67                 | 235                    | 71                 | 160              | 5.9             | 13.1           | 5.9           | 13.0            | 66                                   | Used 1 yr as clean-up ram                                       |
| MWD 2070A                   | Born MWD 2018                  | 95              | -12.51                 | -28                    | 52                 | 98               | -0.3            | -0.6           | -0.6          | -1.4            | 51                                   | Used 1 yr as clean-up ram                                       |
| Harry                       | Born MWD 2016                  | 128             | 1.9                    | 4                      | 58                 | 124              | 2.6             | 5.7            | 2.3           | 5.0             | 58                                   | Used 1 yr as clean-up ram, son of our great Ron Swanson ("RS")  |
| RS: Spnr 13350              | Purch. Spooner WI              | 125             | 41.32                  | 91                     | 87                 | 125              | 1.7             | 3.7            | 2.3           | 5.0             | 87                                   | "Ron Swanson": Purch from Spooner, UW; used extensively for yrs |
| Kieffer                     | Born 2017 Kieffer WI           | 90              | 10.49                  | 23                     | 75                 | 93               | 0.6             | 1.3            | 0.8           | 1.8             | 74                                   | Used for 1 yr as clean-up                                       |

#### \* These EBVs are as of December 2023.

\* We use Parity2 EBVs, for predictive performance in the 2nd lactation and beyond. Unless noted, all EBVs are "Parity2", for the second lactation and beyond.

\* Some grand-dams are no longer in our milking flock. Their EBVs are current because of the continuing production information from their female progeny and relatives. In some cases their EBVs are quite low because they left the flock early in their productive life, and/or have had few female relations in production. If a low-EBV-ewe has a high-EBV daughter, it indicates the production improvement conferred by the sire.

\* Our 2022-born ewes don't have EBVs yet, as we have not yet submited our 2023-24 season data. We will have their EBVs by March 2024.

### 6. Dams' and granddams' milk production for 2023, 2022, and 2020 production season

| Eure# | Data   | Ewe Comm | 18 Sept  | <u>DIM</u><br>9/18 | <u>2 Oct</u>      | DIM         | <u>24 Oct</u><br>lb/ewe/d | DIM          | 28 Nov   | DIM          | 18 Dec<br>lb/ewe/d | <u>DIM</u><br>12/18 | 27 Dec<br>lb/ewe/d | DIM<br>12/27 |
|-------|--------|----------|----------|--------------------|-------------------|-------------|---------------------------|--------------|----------|--------------|--------------------|---------------------|--------------------|--------------|
| Ewe#  | Date   |          | lb/ewe/d |                    | lb/ewe/d          | <u>10/2</u> | ••••••                    | <u>10/24</u> | lb/ewe/d | <u>11/28</u> |                    |                     |                    |              |
| 1605  | 19-Aug |          | 7.5      | 30                 | 6.6               | 44          | 5.4                       | 66           | 7.0      | 101          | 7.9                | 115                 | 6.3                | 130          |
| 1811  | 17-Aug |          | 5.6      | 32                 | 5.2               | 46          | 3.3                       | 68           | 2.6      | 103          | 2.2                | 117                 | 1.6                | 132          |
| 1818  | 20-Aug |          | 7.3      | 29                 | 5.9               | 43          | 5.4                       | 65           | 5.6      | 100          | 5.1                | 114                 | 4.2                | 129          |
| 1847  | 23-Aug |          | 4.9      | 26                 | 5.4               | 40          | 4.6                       | 62           | 5.2      | 97           | 5.5                | 111                 | 5.0                | 126          |
| 1854  | 31-Aug |          | 9.2      | 18                 | 7.9               | 32          | 6.7                       | 54           | 7.5      | 89           | 7.2                | 103                 | 5.5                | 118          |
| 1856  | 29-Aug |          | 7.5      | 20                 | 5.4               | 34          | 4.9                       | 56           | 5.4      | 91           | 6.7                | 105                 | 6.8                | 120          |
| 1919  | 26-Aug |          | 9.4      | 23                 | 10.3              | 37          | 9.0                       | 59           | 6.6      | 94           | 8.2                | 108                 | 9.4                | 123          |
| 2010  | 19-Aug |          | 8.5      | 30                 | 7.6               | 44          | 6.7                       | 66           | 8.0      | 101          | 9.6                | 115                 | 6.3                | 130          |
| 2030  | 29-Aug |          | 8.5      | 20                 | 8.1               | 34          | 6.1                       | 56           | 6.1      | 91           | 6.7                | 105                 | 5.8                | 120          |
| 2051  | 6-Sep  |          | 9.2      | 12                 | 7.4               | 26          | 4.9                       | 48           | 6.1      | 83           | 6.3                | 97                  | 6.0                | 112          |
| 2072  | 5-Sep  |          | 9.2      | 13                 | 8.9               | 27          | 5.9                       | 49           | 5.4      | 84           | 7.5                | 98                  | 5.5                | 113          |
| 2104  | 1-Sep  | LSO      | 5.4      | 17                 | 2.7               | 31          | 3.1                       | 53           | 3.3      | 88           | 2.6                | 102                 | 3.4                | 117          |
| 2114  | 23-Aug |          | 8.5      | 26                 | <mark>8.</mark> 9 | 40          | 6.7                       | 62           | 6.8      | 97           | 6.5                | 111                 | 6.0                | 126          |
| 2123  | 26-Nov |          |          |                    |                   |             |                           |              | 4.5      | 2            | 8.9                | 16                  | 9.9                | 31           |
| 2206  | 11-Sep |          | 4.0      | 7                  | 4.4               | 21          | 4.9                       | 43           | 3.8      | 78           | 3.8                | 92                  | 3.7                | 107          |
| 2208  | 16-Sep |          | 7.5      | 2                  | 5.7               | 16          | 4.6                       | 38           | 4.9      | 73           | 4.8                | 87                  | 5.8                | 102          |
| 2215  | 30-Nov |          |          |                    |                   |             |                           |              |          |              | 5.8                | 12                  | 6.8                | 27           |
| 2216  | 27-Nov |          |          |                    |                   |             |                           |              |          |              | 4.1                | 15                  | 4.2                | 30           |
| 2219  | 30-Nov |          |          |                    |                   |             |                           |              |          |              | 7.0                | 12                  | 6.3                | 27           |
| 2222  | 14-Sep |          | 1.9      | 4                  | 2.5               | 18          | 3.3                       | 40           | 4.0      | 75           | 4.3                | 89                  | 4.2                | 104          |
| 2226  | 29-Nov |          |          |                    |                   |             |                           |              |          |              | 3.8                | 13                  | 4.2                | 28           |
| 2227  | 18-Sep |          |          |                    | 3.7               | 14          | 3.6                       | 36           | 4.0      | 71           | 3.8                | 85                  | 4.4                | 100          |
| 2233  | 20-Sep |          |          |                    | 2.7               | 12          | 3.1                       | 34           | 2.8      | 69           | 3.6                | 83                  | 3.7                | 98           |
| 2236  | 14-Sep |          | 3.1      | 4                  | 3.4               | 18          | 3.1                       | 40           | 4.2      | 75           | 4.6                | 89                  | 3.4                | 104          |
| 2240  | 24-Nov |          |          |                    |                   |             |                           |              | 5.2      | 4            | 2.9                | 18                  | 3.9                | 33           |
| 2241  | 30-Nov |          |          |                    |                   |             |                           |              |          |              | 6.7                | 12                  | 7.8                | 27           |
| 2244  | 1-Dec  |          |          |                    |                   |             |                           |              |          | ••••••       | 4.3                | 11                  | 5.5                | 26           |
| 2245  | 2-Dec  |          |          |                    |                   |             |                           |              |          |              | 4.6                | 10                  | 5.5                | 25           |

Fall 2023. Mature ewes' lambing started mid-August, most hoggets lambed in mid-September, with clean-up in early December

### 2022.

| Ewe# | <u>Lamb'g</u><br>Dt | <u>Meter</u><br>June 24 | <u>DIM</u><br><u>6/24</u> | <u>Meter</u><br>July 9 | <u>DIM</u><br>7/9 | <u>Meter</u><br>July 22 | <u>DIM</u><br><u>7/22</u> | <u>Meter</u><br>Aug 5 | <u>DIM</u><br><u>8/5</u> | <u>Meter</u><br>Aug 24 | <u>DIM</u><br><u>8/24</u> | Meter<br>sept 9 | <u>DIM</u><br><u>9/9</u> | Meter<br>Sept 23 | <u>DIM</u><br><u>9/23</u> | Meter<br>Oct 26 | <u>DIM</u><br>10/26 | Meter<br>Nov 12 | <u>DIM</u><br>11/12 | Meter<br>Dec 15 | <u>DIM</u><br>12/15 | <u>Meter</u><br>jan 6 | <u>DIM</u><br><u>1/6</u> | <u>Meter</u><br>Feb 3 | <u>DIM</u><br>2/3 | Actual<br>milk to<br>2/28 | <u>Lb</u><br><u>milk</u><br>/DIM |
|------|---------------------|-------------------------|---------------------------|------------------------|-------------------|-------------------------|---------------------------|-----------------------|--------------------------|------------------------|---------------------------|-----------------|--------------------------|------------------|---------------------------|-----------------|---------------------|-----------------|---------------------|-----------------|---------------------|-----------------------|--------------------------|-----------------------|-------------------|---------------------------|----------------------------------|
| 1445 | 6-Jun               | 3.9                     | 18                        | 4.0                    | 33                | 4.9                     | 46                        | 3.1                   | 60                       | 4.3                    | 79                        | 3.1             | 95                       | 4.2              | 109                       | 3.9             | 142                 | 3.6             | 159                 | 2.0             | 192                 | 2.6                   | 209                      | 1.3                   | 242               | 854                       | 3.2                              |
| 1468 | 10-Jun              | 7.1                     | 14                        | 7.3                    | 29                | 7.1                     | 42                        | 5.5                   | 56                       | 3.6                    | 75                        | 5.2             | 91                       | 5.3              | 105                       | 5.6             | 138                 | 3.6             | 155                 | 2.5             | 188                 | 2.6                   | 205                      | 2.6                   | 238               | 1,172                     | 4.5                              |
| 1605 | 4-Jun               | 9.9                     | 20                        | 8.0                    | 35                | 5.4                     | 48                        | 5.7                   | 62                       | 6.1                    | 81                        | 5.9             | 97                       | 5.3              | 111                       | 4.4             | 144                 | 2.2             | 161                 | 2.3             | 194                 | 2.1                   | 211                      | 3.3                   | 244               | 1,275                     | 4.7                              |
| 1811 | 1-Jun               | 6.4                     | 23                        | 5.8                    | 38                | 6.7                     | 51                        | 4.8                   | 65                       | 5.7                    | 84                        | 6.4             | 100                      | 4.5              | 114                       | 3.9             | 147                 | 3.0             | 164                 | 2.3             | 197                 | 2.3                   | 214                      | 1.8                   | 247               | 1,111                     | 4.1                              |
| 1818 | 1-Jun               | 7.4                     | 23                        | 8.4                    | 38                | 7.4                     | 51                        | 6.4                   | 65                       | 7.7                    | 84                        | 5.7             | 100                      | 6.3              | 114                       | 6.5             | 147                 | 3.6             | 164                 | 2.3             | 197                 | 2.1                   | 214                      | 1.8                   | 247               | 1,353                     | 5.0                              |
| 1847 | 21-Jun              | 6.2                     | 3                         | 7.1                    | 18                | 7.1                     | 31                        | 6.4                   | 45                       | 5.4                    | 64                        | 5.7             | 80                       | 5.5              | 94                        | 5.6             | 127                 | 4.4             | 144                 | 2.3             | 177                 | 2.3                   | 194                      | 2.3                   | 227               | 1,138                     | 4.5                              |
| 1854 | 5-Jun               | 9.1                     | 19                        | 8.7                    | 34                | 8.9                     | 47                        | 7.9                   | 61                       | 6.6                    | 80                        | 9.0             | 96                       | 5.8              | 110                       | 6.0             | 143                 | 5.8             | 160                 | 3.0             | 193                 | 3.9                   | 210                      | 3.3                   | 243               | 1,605                     | 6.0                              |
| 1856 | 5-Jun               | 9.9                     | 19                        | 9.1                    | 34                | 7.9                     | 47                        | 9.2                   | 61                       | 9.5                    | 80                        | 7.1             | 96                       | 6.6              | 110                       | 6.3             | 143                 | 4.1             | 160                 | 3.0             | 193                 | 3.6                   | 210                      | 3.8                   | 243               | 1,657                     | 6.2                              |
| 1919 | 19-Jun              | 6.7                     | 5                         | 7.3                    | 20                | 7.9                     | 33                        | 5.7                   | 47                       | 5.9                    | 66                        | 7.6             | 82                       | 5.8              | 96                        | 7.0             | 129                 | 6.4             | 146                 | 5.3             | 179                 | 5.4                   | 196                      | 5.1                   | 229               | 1,555                     | 6.1                              |
| 1951 | 2-Jun               | 6.2                     | 22                        | 4.9                    | 37                | 5.2                     | 50                        | 4.8                   | 64                       | 4.5                    | 83                        | 3.1             | 99                       | 2.6              | 113                       | 3.5             | 146                 | 1.9             | 163                 | 1.5             | 196                 | 2.1                   | 213                      | 2.3                   | 246               | 905                       | 3.3                              |
| 2010 | 2-Jun               | 8.9                     | 22                        | 9.3                    | 37                | 9.1                     | 50                        | 6.1                   | 64                       | 7.0                    | 83                        | 7.3             | 99                       | 6.9              | 113                       | 4.2             | 146                 | 3.6             | 163                 | 2.8             | 196                 | 3.1                   | 213                      | 3.1                   | 246               | 1,479                     | 5.5                              |
| 2030 | 9-Jun               | 4.4                     | 15                        | 4.0                    | 30                | 4.9                     | 43                        | 4.2                   | 57                       | 4.5                    | 76                        | 4.3             | 92                       | 3.4              | 106                       | 3.0             | 139                 | 3.0             | 156                 | 2.5             | 189                 | 3.1                   | 206                      | 4.1                   | 239               | 974                       | 3.7                              |
| 2051 | 20-Jun              | 8.9                     | 4                         | 7.6                    | 19                | 8.9                     | 32                        | 7.7                   | 46                       | 6.8                    | 65                        | 6.4             | 81                       | 4.5              | 95                        | 6.0             | 128                 | 3.3             | 145                 | 1.8             | 178                 | 2.8                   | 195                      | 2.3                   | 228               | 1,218                     | 4.8                              |
| 2072 | 21-Jun              | 6.2                     | з                         | 8.2                    | 18                | 9.6                     | 31                        | 8.1                   | 45                       | 7.5                    | 64                        | 7.1             | 80                       | 5.5              | 94                        | 5.1             | 127                 | 3.9             | 144                 | 2.8             | 177                 | 4.1                   | 194                      | 3.1                   | 227               | 1,338                     | 5.3                              |
| 2083 | 18-Jun              | 6.2                     | 6                         | 8.4                    | 21                | 8.1                     | 34                        | 7.0                   | 48                       | 6.4                    | 67                        | 6.6             | 83                       | 5.3              | 97                        | 6.0             | 130                 | 3.9             | 147                 | 2.3             | 180                 | 2.1                   | 197                      | 3.1                   | 230               | 1,245                     | 4.9                              |
| 2104 | 18-Jun              | 5.7                     | 6                         | 4.0                    | 21                | 5.9                     | 34                        | 4.4                   | 48                       | 4.1                    | 67                        | 4.5             | 83                       | 4.0              | 97                        | 3.2             | 130                 | 2.5             | 147                 | 3.3             | 180                 | 4.1                   | 197                      | 3.3                   | 230               | 984                       | 3.9                              |
| 2114 | 19-Jun              | 3.9                     | 5                         | 4.2                    | 20                | 5.4                     | 33                        | 5.3                   | 47                       | 5.7                    | 66                        | 5.2             | 82                       | 4.0              | 96                        | 4.9             | 129                 | 3.3             | 146                 | 3.0             | 179                 | 4.1                   | 196                      | 3.3                   | 229               | 1,061                     | 4.2                              |
| 2123 | 27-Jul              |                         |                           |                        |                   |                         |                           | 4.4                   | 9                        | 4.1                    | 28                        | 6.2             | 44                       | 7.7              | 58                        | 5.6             | 91                  | 5.8             | 108                 | 4.5             | 141                 | 5.2                   | 158                      | 4.9                   | 191               | 1,184                     | 5.5                              |

2021. [we do not have complete metering records for the 2021 season]

### 2020\*\*

| <u>Ewe#</u> | Lamb'g Dt | <u>2/18</u> | <u>DIM</u><br>2/18 | <u>3/4</u> | DIM<br>3/5 | <u>3/16</u> | <u>DIM</u><br>3/18 | <u>3/31</u> | <u>DIM</u><br><u>3/31</u> | <u>4/15</u> | <u>DIM</u><br><u>4/15</u> | <u>4/20</u> | <u>DIM</u><br><u>4/20</u> | <u>5/5</u> | <u>DIM</u><br>5/5 | <u>5/18</u> | <u>DIM</u><br>5/18 | <u>6/2</u> | <u>DIM</u><br><u>6/2</u> | <u>6/15</u> | <u>DIM</u><br>6/15 | <u>7/13</u> | <u>DIM</u><br><u>7/13</u> | <u>8/12</u> | <u>DIM</u><br>8/12 | <u>9/15</u> | <u>DIM</u><br>9/15 | <u>10/</u><br><u>12</u> | <u>DIM</u><br>10/12 | Avg | Total 2020<br>(from<br>lamb dt<br>to 29 Oct) | equiv<br>(265 DIM)<br>w age<br>factor |
|-------------|-----------|-------------|--------------------|------------|------------|-------------|--------------------|-------------|---------------------------|-------------|---------------------------|-------------|---------------------------|------------|-------------------|-------------|--------------------|------------|--------------------------|-------------|--------------------|-------------|---------------------------|-------------|--------------------|-------------|--------------------|-------------------------|---------------------|-----|--|---------------------------------------|
| 1445        | 15-Mar    |             |                    |            |            |             |                    | 8.4         | 15                        | 8.3         | 31                        | 7.9         | 36                        | 8.6        | 51                | 6.8         | 64                 | 7.9        | 79                       | 5.8         | 92                 | 4.3         | 120                       | 4.8         | 150                | 4.6         | 184                | 5.6                     | 211                 | 6.1 | 1,380  | 1,815                                 |
| 1468        | 27-Mar    |             |                    |            |            |             |                    | 9.9         | 3                         | 8.6         | 19                        |             | 24                        | 8.0        | 39                | 6.3         | 52                 | 7.6        | 67                       | 6.1         | 80                 | 4.3         | 108                       | 4.8         | 138                | 6.6         | 172                | 5.0                     | 199                 | 5.9 | 1,246  | 1,733                                 |
| 1605        | 24-Mar    |             |                    |            |            |             |                    | 10.6        | 6                         | 10.0        | 22                        | 10.3        | 27                        | 10.7       | 42                | 9.3         | 55                 | 10.0       | 70                       | 7.6         | 83                 | 5.5         | 111                       | 5.8         | 141                | 4.6         | 175                | 3.9                     | 202                 | 7.2 | 1,512  | 1,842                                 |
| 1714        | 12-Apr    |             |                    |            |            |             |                    |             |                           | 7.2         | 3                         | 7.7         | 8                         | 11.0       | 23                | 7.8         | 36                 | 8.1        | 51                       | 7.1         | 64                 | 5.2         | 92                        | 4.8         | 122                | 3.7         | 156                | 2.7                     | 183                 | 6.0 | 1,138  | 1,727                                 |
| 1811        | 17-Mar    |             |                    |            |            |             |                    | 8.6         | 13                        | 9.7         | 29                        | 8.2         | 34                        | 9.1        | 49                | 8.5         | 62                 | 8.6        | 77                       | 6.6         | 90                 | 5.0         | 118                       | 4.8         | 148                | 4.8         | 182                | 2.7                     | 209                 | 6.4 | 1,374  | 2,012                                 |
| 1818        | 12-Feb    | 5.5         | 6                  | 7.8        | 21         | 6.9         | 32                 | 7.3         | 47                        | 6.9         | 63                        | 6.3         | 68                        | 6.7        | 83                | 5.0         | 96                 | 6.9        | 111                      | 5.6         | 124                | 4.7         | 152                       | 4.4         | 182                | 3.7         | 216                | 2.7                     | 243                 | 5.5 | 1,380  | 1,746                                 |
| 1847        | 15-Feb    | 9.7         | 3                  | 8.7        | 18         | 9.6         | 29                 | 9.2         | 44                        | 8.3         | 60                        | 7.9         | 65                        | 8.8        | 80                | 8.3         | 93                 | 6.0        | 108                      | 6.9         | 121                | 4.3         | 149                       | 5.6         | 179                | 5.4         | 213                | 3.6                     | 240                 | 6.8 | 1,678  | 2,147                                 |
| 1854        | 29-Feb    |             |                    | 7.8        | 4          | 8.7         | 15                 | 10.6        | 30                        | 10.0        | 46                        | 10.0        | 51                        | 8.8        | 66                | 8.8         | 79                 | 8.1        | 94                       | 6.9         | 107                | 6.9         | 135                       | 5.6         | 165                | 4.3         | 199                | 3.6                     | 226                 | 7.5 | 1,739  | 2,360                                 |
| 1856        | 14-Feb    | 9.3         | 4                  | 9.6        | 19         | 9.6         | 30                 | 10.1        | 45                        | 10.5        | 61                        | 9.2         | 66                        | 12.3       | 81                | 10.0        | 94                 | 10.0       | 109                      | 7.4         | 122                | 5.9         | 150                       | 5.3         | 180                | 4.3         | 214                | 3.3                     | 241                 | 7.5 | 1,857  | 2,368                                 |
| 1919        | 22-Mar    |             |                    |            |            |             |                    | 5.5         | 8                         | 6.9         | 24                        | 6.6         | 29                        | 7.2        | 44                | 7.5         | 57                 | 7.4        | 72                       | 6.1         | 85                 | 5.0         | 113                       | 3.4         | 143                | 4.0         | 177                | 3.6                     | 204                 | 5.2 | 1,121  | 1,946                                 |
| 1951        | 4-Apr     |             |                    |            |            |             |                    |             |                           | 3.6         | 11                        | 2.9         | 16                        | 3.2        | 31                | 2.8         | 44                 | 3.1        | 59                       | 2.5         | 72                 | 2.6         | 100                       | 2.9         | 130                | 2.3         | 164                | 1.8                     | 191                 | 2.8 | 554  | 1,025                                 |

**\*\*** In 2020 and 2019, before EBVs were fully available through DSANA's Production Improvement Program, and before we had submitted enough production data to get comfortable accuracy, we continued to use Excel to fashion means of comparing apples to apples in our ewes' production records, see notes below.

DIM = "Days in Milk", the actual number of days a ewe was lactating at that point in the season.

"Age Factor" or "Equiv" = showed that we adjusted her actual production to indicate her production at maturity, see further explanation below.

<u>Notes for metering in 2020</u>: We metered every other week, until all of our April-lambing ewes were about 100 Days in Milk, after which we metered ~ 1x/mo. All ewes were dried off on October 31<sup>st</sup>. To give you some perspective on the dams and grand-dams shown above:

- Average milk harvested in 2020 over all age groups (i.e., yearlings to 7-yr-olds): 1,140#/ewe
- Average milk produced/DIM: 5.3#/DIM actual and 6.4#/DIM adjusted for age
- Average total production/ewe adjusted to 265 DIM and adjusted for age: 1,602#

### Notes on our use of an "age factor":

To help us compare apples to apples within a single season, we applied the "age factor" developed by Dave Thomas and Yves Berger at the U of Wisc. Spooner sheep research flock in 2002. This projects the production of the young animal (and the much-older animal) to put their production on par with a 4-yr-old ewe at mature production. We use the age factor on overall production and on the season's production per days-in-milk. Thus:

| Yearling's production | * 1.44 => 4-yr-old equivalent |
|-----------------------|-------------------------------|
| 2-yr-old's production | * 1.24 => 4-yr-old equivalent |
| 3-yr-old's production | * 1.13 => 4-yr-old equivalent |
| 4-yr-old's production | * 1.00 => 4-yr-old equivalent |
| 5-yr-old's production | * 1.00 => 4-yr-old equivalent |

#### Notes on making everyone "equivalent" for 265 Days in Milk in 2020 (column labeled "7 Feb equiv..."):

Some ewes lambed in the first week of February, and some in late April. With a hard dry-off date of Oct 29 2020, that meant the late-April-lambers were milking for 90 fewer days. Again, to be able put everyone on an apples-to-apples equivalent, to help us with our own comparisons and decision-making, we used each ewe's average production per DIM to estimate what their production might have been if they had milked the full 265 days.

Final note: Now with EBVs, when we select ewes to produce replacement Els and RLs, we no longer have to "predict" or "imagine" what a ewe's future production might be, nor whether her production is because she had triplets or better grass or a better sire or a better lambing date, nor do we have to scour records and go down rabbit holes to see if her sisters, or half-sisters, or third-cousins-twice-removed had strong production. The EBVs remove the environmental effects (such as litter size, forage quality, date of lambing) and indicate her genetic potential based on her own production and the production of all of her near and distant female relations on our farm or any other farm participating in GenOvis or DSANA's Production Improvement Program.

### 7. Dams' + grand-dams' udders and production notes

| Ewe# | Production notes  | Udder   | Ewe# | Production notes   | Udder              |
|------|---|---|------|--|--------------------|
| 1445 | Milked for 8 years.<br>Strong udder,<br>average producer<br>with average EBVs.<br>Peaked at 1,380 lbs<br>as a 5-yr-old, still<br>produced 850 lbs in<br>her 7th year. | 1445 as a 2-yr-old                                    | 1468 | Milked for 8 years.<br>Okay udder, average<br>producer with<br>average EBVs.<br>Milked 1,172 lbs as<br>a 7-yr-old!.  | 1468 as a 4-yr-old |
| 1605 | Above-avg EBVs:<br>milk yield EBV of<br>+93 lbs. Okay<br>udder, still holding<br>up well in her 7 <sup>th</sup><br>year of production.                                | 1605 as a 2-yr-old                                    | 1714 | Average producer<br>with a beautiful<br>udder. Below-avg<br>EBV.   | 1714 as a 3-yr-old |
| 1733 | This is the udder<br>we aim for. She<br>lost 1 side in her<br>2nd lactation; the<br>fuzz did not last<br>after her 1st<br>lactation. Grand-<br>dam of sire 2122.      | 1733 as a yearling.<br>Wish we had had her for longer |      |  |                    |
| 1811 | Average EBVs for<br>yield &<br>components.<br>Average producer.<br>Okay udder.  | I811 as a 2-yr-old                                    | 1818 | Average EBVs for<br>yield & components;<br>her production &<br>EBVs are being<br>eclipsed by those of<br>recent generations.<br>Good udder. Dam of<br>sire 2122.     | 1818 as a 2-yr-old |
| 1847 | Above-avg EBVs<br>(milk yield EBV:<br>+151 lbs.). Meh<br>udder. Steady<br>production.   | 1847 as a 2-yr-old                                    | 1854 | Was in our top 10<br>ewes for EBVs in<br>years, now in the<br>top 20. EBV for milk<br>yield this year: +195<br>lbs! Very good<br>udder. Dam of sires<br>2104 & 2105. | 1854 as a 2-yr-old |

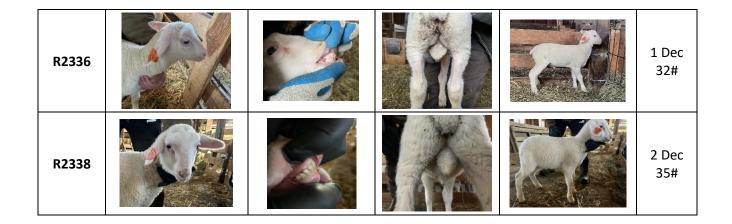
| 1856 | Very high EBVs for<br>yield (+264 lbs!).<br>Steady producer<br>with a weak udder.   | 1856 as a 2-yr-old | 1919 | Great producer with<br>a terrible udder.<br>Top EBVs for yield<br>and components.<br>You can see the<br>udder impact of<br>sire# MWD 2104 on<br>her daughter 2240.       | 1919 as a 3-yr-old |
|------|---|--------------------|------|--|--------------------|
| 1951 | Lost one side in her<br>1 <sup>st</sup> lactation, which<br>lowered her<br>production.<br>Daughter is an<br>average producer<br>as a yearling.                                  | 1951 as a 2-yr-old | 2010 | Very high EBVs for<br>yield (+201 lbs) and<br>strong EBVs for<br>yield. Meh udder.<br>Daughter 2208 is a<br>top yearling<br>producer.                                    | 2010 as a 2-yr-old |
| 2030 | The udder we're<br>looking for. A slow<br>bloomer: poor<br>EBVs currently,<br>because of low<br>data (only 40%<br>accuracy), but this<br>production season<br>will change that. | 2030 as a 2-yr-old | 2051 | High EBVs for both<br>milk yield and<br>components.<br>Strong milker, with<br>a so-so udder.   | 2051 as a 2-yr-old |
| 2072 | One of our best<br>producers (EBV for<br>milk yield: 182<br>lbs!!) with a weak<br>udder. Bred to<br>2104 improved<br>udder in daughter<br>2244                                  | 2072 as a 2-yr-old | 2083 | Above-average<br>producer with a<br>weak udder. Milk<br>yield EBV of 128 lbs.  | 2083 as a 2-yr-old |
| 2104 | Well-structured<br>udders with long<br>teats. Average<br>EBVs; production<br>limited because<br>milking on one side<br>only.  | 2104 as a yearling | 2114 | Very strong<br>production thus far<br>in 2023 and as a<br>yearling in 2022.<br>Below average EBVs<br>should be ignored,<br>as the accuracy is<br>only 27%. Meh<br>udder. | 2114 as a yearling |

| 2123 | Very strong<br>producer with an<br>okay udder. Below<br>average EBVs,<br>although not<br>dependable yet<br>because little data<br>and thus very low<br>accuracy (22%).         | 2123 as a 2-yr-old | 2206 | Okay udder, solid<br>production as a<br>yearling thus far.   | 2206 as a yearling |
|------|--|--------------------|------|--|--------------------|
| 2208 | One of the<br>strongest yearling<br>milkers this year.<br>Okay udder.  | 2208 as a yearling | 2215 | Showing promise as<br>a strong producer.<br>Good udder. Dam<br>1605 has one of our<br>higher EBVs for<br>yield.                            | 2215 as a yearling |
| 2216 | Excellent udder.<br>Slightly below-<br>average production<br>thus far as a<br>yearling. Dam<br>1605 is still with us<br>in her 8 <sup>th</sup> lactation,<br>and going strong. | 2216 as a yearling |      |  |                    |
| 2219 | Off to a very strong<br>start as a yearling<br>this fall. Good<br>udder. Dam is<br>1856, one of our<br>best.   | 2219 as a yearling | 2222 | Excellent udder.<br>Average production<br>thus far as a<br>yearling. Pedigree is<br>long-lived and 100%<br>MWD.                            | 2222 as a yearling |
| 2226 | Good udder.<br>Average<br>production, but<br>only 1 <sup>st</sup> month of<br>lactation. Dam<br>2030 has one of<br>our best udders.  | 2226 as a yearling | 2227 | Good udder.<br>Average production,<br>but only 1 <sup>st</sup> month<br>of lactation. Dam's<br>family line is one of<br>our longest-lived. | 2227 as a yearling |

| 2233 | Good udder.<br>Average<br>production for a<br>yearling.  | 2233 as a yearling | 2236 | Good udder.<br>Average production<br>for a yearling.   | 2236 as a yearling |
|------|--|--------------------|------|--|--------------------|
| 2240 | Nice udder.<br>Average<br>production for a<br>yearling.  | 2240 as a yearling | 2241 | Pretty udder.<br>Strong production in<br>first month of<br>lactation.  | 2241 as a yearling |
| 2244 | Good udder. The<br>wool on the udder<br>does not last after<br>the 1 <sup>st</sup> lactation.<br>Solid production<br>for a yearling. Dam<br>2072 has very high<br>EBV for yield. | 2244 as a yearling | 2245 | Good udder. The<br>wool on the udder<br>does not last after<br>the 1 <sup>st</sup> lactation.<br>Solid production for<br>a yearling. Dam<br>1847 has very high<br>EBV for yield. | 2245 as a yearling |

| Тад   | Head | Teeth | Testicles | Whole | DOB and<br>Wt Jan<br>3 <sup>rd</sup> (lbs) |
|-------|------|-------|-----------|-------|--|
| R2326 |      |       |           |       | 24 Nov<br>43#                              |
| R2327 |      |       |           |       | 24 Nov<br>31#                              |
| R2328 |      |       |           |       | 26 Nov<br>38#                              |
| R2329 |      |       |           |       | 32 Nov<br>33#                              |
| R2331 |      |       |           |       | 29 Nov<br>22#                              |
| R2332 |      |       |           |       | 30 Nov<br>33#                              |
| R2333 |      |       |           |       | 30 Nov<br>30#                              |
| R2334 |      |       |           |       | 30 Nov<br>40#                              |

### 8. <u>Picture details of the ram lambs for sale, and side view of ewe lambs</u>



### 9. Sire information on Lacaune semen sires and rams seen in 2022 RL + EL lineages

Yield, component, & conformation indices on Lacaune semen/rams imported by DSANA in 2017 (Ram#s 410 & 208), 2018 (Rams # 028 & 202), & 2020 (Ram #308)

|               | Animal      | Nombre doses | CD lait | index lait | index<br>production | ISOL | pere        |       |
|---------------|-------------|--------------|---------|------------|---------------------|------|-------------|-------|
| OVITEST       | 55173540241 | 50           | 89      | 260        | 350                 | 287  | 16176200632 | 5     |
| OVITEST       | 16240940256 | 50           | 97      | 162        | 92                  | 258  | 16031702529 | 1     |
|               | 16229330029 | 100          | 90      | 123        | 491                 | 246  | 1051436     | 1     |
|               | 16039840202 | 50           | 89      | 287        | 312                 | 276  | 04487       | 1     |
| OVITEST       | 16031740133 | 26           | 93      | 64         | 140                 | 209  | 16068010285 | 10    |
|               | 16340340535 | 120          | 89      | 210        | 180                 | 290  | 10104       | 16    |
| CONFEDERATION | 16236140300 | 50           | 91      | 507        | 447                 | 296  | 16038804313 | 16    |
| CONFEDERATION | 16166911510 | 50           | 92      | 448        | 354                 | 272  | 16134680005 | 16    |
|               | 16133950028 | 100          | 86      | 261        | 157                 | 246  | 10033310230 | 16    |
| CONFEDERATION | 16167640005 | 58           | 87      | 19         | 150                 | 207  | 16136501905 | 16    |
|               | 16337050248 | 100          | 81      | 391        | 260                 | 248  | 0379        | 16    |
| CONFEDERATION | 16337150269 | 50           | 96      | 28         | 272                 | 232  | 16262720332 | 16    |
|               | somme       | 804          |         | λ          | 20 - 11 - 25 -      |      |             | 8 - C |

| DSANA La         | caune sem      | en importa       | ation 2020 |                 |                | 2017 Lacaune | Semen | Tested | Ram  |
|------------------|----------------|------------------|------------|-----------------|----------------|--------------|-------|--------|------|
| Info on 1        | 3 UPRA L       | acaune ra        | ms locate  | Performance for | semen          | sent to [    | DSANA |        |      |
| SOLs, La         | caune fro      | m UPRA (         | France)    |                 |                | _            |       | Milk   |      |
|                  |                |                  |            |                 |                | Animal ID    | EBV   | Index  | ISOL |
|                  | Dam's a        | avg milk         | over #     | ISOL            | ISOL           | 16257830095  | 399   | 492    | 283  |
| Tag#             | Litres         | <u>Lbs</u>       | lact       | Dam             | Sire           | 16463040171  | 9     | -21    | 272  |
| <del>81273</del> | <del>367</del> | <del></del>      | 2          | <del>478</del>  | 722            |              | _     |        |      |
| 92308            | 325            | 715              | 1          | 566             | 671            | 16257740410  | 475   | 353    | 259  |
| 92329            | 265            | 583              | 1          | 632             | 671            | 55233120124  | 33    | 9      | 227  |
| 90101            | 447            | 983              | 5          | 615             | 640            | 16213930246  | 115   | 216    | 226  |
| 90604            | 360            | 792              | 2          | 697             | 658            | 16123120208  | 306   | 431    | 219  |
| 90584            | 315            | 693              | 2          | 510             | 821            | 16024710013  | 401   | 290    | 208  |
| 90353            | 331            | 728              | 1          | 608             | 734            | 16258530729  | 551   | 512    | 207  |
| 60271            | 384            | 845              | 1          | 405             | 817            | 16289040132  | 242   | 216    | 198  |
| <del>60074</del> | <del>291</del> | 640              | 2          | <del>565</del>  | <del>628</del> | 16340340524  | 414   | 290    | 192  |
| <del>61244</del> | <del>349</del> | <del>— 768</del> | 1          | <del>409</del>  | <del>516</del> | 55153210272  | 256   | 480    | 188  |
| 80400            | 365            | 803              | 1          | 673             | 648            | 16329840238  | 139   | 116    | 164  |
| <del>80266</del> | <del>296</del> | <del>651</del>   | 2          | <del>399</del>  | <del>491</del> | 10529640256  | 139   | 110    | 104  |
| 80021            | 552            | 1,214            | 2          | 490             | 722            |              |       |        |      |

• Index lait = Milk index => index of milk improvement which includes volume + components

- Index production = expected measure of production (yield) above flock average (average Lacaune flock in France).
- CD lait = accuracy of numbers in %

• ISOL = index the Lacaune society has created, melding milk volume & components with udder conformation. DSANA allocated semen to purchasing farms based on an even distribution of the ISOL index.

Note: MWD did not choose which rams to receive from DSANA. Rams were randomly allotted to the farms that purchased the Lacaune semen. The red marks in the 2018 group were the rams/semen sent to MWD.

Note: Straws of semen used was random for each ewe. Our 2022 selection of ram lambs for sale was based solely on dam's EBV, udder conformation, & prod'n.

### 10. Other rams seen in lineages

### "RS", known as "Ron Swanson" at the time

Tag # 13350 ("Ron Swanson, RS"). Purchased from the Spooner Research Station, U Wisconsin.

61% EF; 36% L

No dam production information

Grand-Dam #10324 produced

- 1<sup>st</sup> lactation: 320 L in 189 d (= 84 gal = 727 lbs = avg 3.85 lb/d over 6.3 months)
- 2<sup>nd</sup> lactation: 548 L in 238 d (= 145 gal = 1,247 lbs = avg 5.24 lb/d over 8.0 months)

In the 2015 milking season, we recognized that the 16 daughters of Ram #13350 (named "Ron Swanson") had almost uniformly the best udder conformations in our flock of 150+ ewes, and also held 8 of the top 10 places in terms of milk yield and end-of-season persistence. Because of this apparent genetic strength, we used RS on 80% of our replacement-producing ewes in both the 2015 and 2016 breeding seasons. The impact of this ram on our flock udder conformation was remarkable in only two short years, increasing milk production and radically improving the flock's udder conformation.

### SpoonerTag # 12022 (deceased) , DOB 2012

50% EF, 50% L, purchased from Spooner Research Station

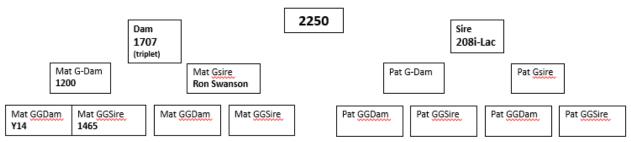
Dam production:

 $1^{st}$  lactation: 684 lbs in 236 d (avg 2.90 lb/d)

2<sup>nd</sup> lactation: 914 lbs in 236 d (avg 3.87 lb/d)

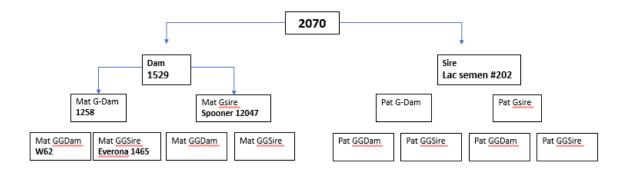
3<sup>rd</sup> lactation: 967 lbs in 185 d (avg 5.23 lb/d)

### MWD 2250, clean-up ram lamb used in 2019

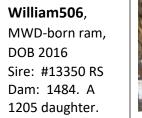


In the 2019 milking season, 1707 (dam of #2250) milked 1,400 lb milk as a two-year-old, in 267 days in milk, an average of ~ 5.25 lb/milk/d over the 267-d lactation. In 2020 she has averaged 9.9 lb milk/d in her  $1^{st}$  77 days in lactation as of June  $2^{nd}$ . Her EBV is +67 kg (+147 lb) with an accuracy of 77, which puts her in the 90<sup>th</sup> percentile over all milk-recorded ewes in North America.

### MWD 2070, clean-up ram lamb used in 2018



#### William 506 & Harry 563, clean-up RLs used in 2016





Harry563, MWD-born ram, DOB 2016 Sire: #12022 Dam: 1435. A RS 13350 daughter, and Y14 granddaughter.



**Keiiffer ram #X2920, used as clean-up in 2017.** Ram produced by Tom and Laurel Keiffer, Strum, Wisconsin. Production information for Keiffer ram #X2920 (labelled *"#1 RAM"*) is below. You can see that his dam milked 1,400 lbs as a 4-yr old, 1,350 lbs as a 3-yr-old, and 975 lbs as a 2-yr-old. (Easier to see in the second blown-up box.)

| Comments | Scrapie<br>Tag | Large<br>Scrapie | Sex |   | B W<br>G S | DOB       | EF% |     | Dam<br>Flock | Lamb<br>Sire | DAM DOB   | Dam<br>EF% | Dam LC<br>% | 2017<br>#<br>MILK | 2017 |      | 2016<br>DIM |      |     | Dam<br>Udde<br>r | Dam<br>Sire | Sire<br>East<br>Fresian<br>% | Sire La |
|----------|----------------|------------------|-----|---|------------|-----------|-----|-----|--------------|--------------|-----------|------------|-------------|-------------------|------|------|-------------|------|-----|------------------|-------------|------------------------------|---------|
|          | W3113          | Z095             | R   | 1 | W          | 1/31/2016 | 56% | 26% | U064         | S4408        | 1/15/2011 | 49%        | 18%         | 1039              | 195  | 1129 | 188         | 1150 | 193 | 3m               | S077        | 49%                          | 18%     |
| #2 RAM   | W3152          | Z094             | R   | 3 | B          | 2/18/2016 | 45% | 29% | W002         | Y055         | 3/13/2013 | 41%        | 27%         | 1188              | 184  | 1155 | 170         | 524  | 209 | 3M               | UX2507      | 33                           | 37      |
|          | W3155          | Z096             | R   | 3 | w          | 2/20/2016 | 44% | 50% | S1422        | HalBros      | 2/9/2015  | 38%        | 50%         | 679               | 131  | 679  | 166         |      |     | 3S               | K2907       | NA                           |         |
|          | W3262          | X2922            | R   | 3 | 8 W        | 1/13/2017 | 41% | 42% | XX017        | XX038        | 3/12/2014 | 37%        | 51%         | 695               | 175  | 1108 | 183         | 770  | 155 | 4M               | SO3374      | 23                           | 75      |
| #1 RAM   | W3274          | X2920            | R   | 2 | 2 W        | 1/17/2017 | 49% | 34% | W028         | XX038        | 2/13/2013 | 45%        | 34%         | 1398              | 221  | 1346 | 196         | 977  | 193 | 3M               | T2511E      | 63                           | 21      |
|          | W3324          | X2919            | R   | 2 | w          | 2/2/2017  | 45% | 49% | Y014         | Z096         | 1/22/2015 | 45%        | 48%         | 900               | 205  | 871  | 181         |      |     |                  | S10005      | 50                           | 50      |
|          | W3362          | X2921            | R   | 2 | w          | 3/5/2017  | 44% | 26% | YS2976       | Z097         | 1/21/2015 | 64%        | 34%         | 633               | 174  | 580  | 156         |      |     |                  | S14123      | 8                            |         |
|          | W3397          | X3015            | R   | 2 | 2 W        | 4/21/2017 | 70% | 26% | YS5236       | S4408        | 2/11/2015 | 77%        | 18%         | 631               | 127  | 732  | 151         |      |     |                  | PA25        |                              |         |
|          | W3256          | Y055             | R   | 2 | 2 B        | 1/24/2015 |     | 34% | W013         | S3386        | 2/8/2013  | 49%        | 31%         | 861               | 192  | 1288 |             | 947  | 196 | 2M               | T2511E      | 63                           | 21      |
|          | W3255          | Y080             | R   | 1 | B          | 5/14/2015 |     |     | XX029        | XX036        | 2014      |            |             | 756               | 128  | 707  | 118         |      |     | 4M               | UNK         |                              |         |

|          | Scrapie | Large   |     | Litte |    |           |     |     | Dam   | Lamb    |           |     | Dam LC |      | 2017 | 2016  | 2016 |      | 2015 |
|----------|---------|---------|-----|-------|----|-----------|-----|-----|-------|---------|-----------|-----|--------|------|------|-------|------|------|------|
| Comments | Тад     | Scrapie | Sex | r#    | GS | DOB       | EF% | LC% | Flock | Sire    | DAM DOB   | EF% | %      | MILK | DIM  | #Milk | DIM  | Milk | DIM  |
|          | W3113   | Z095    | R   | 1     | W  | 1/31/2016 | 56% | 26% | U064  | S4408   | 1/15/2011 | 49% | 18%    | 1039 | 195  | 1129  | 188  | 1150 | 193  |
| #2 RAM   | W3152   | Z094    | R   | 3     | В  | 2/18/2016 | 45% | 29% | W002  | Y055    | 3/13/2013 | 41% | 27%    | 1188 | 184  | 1155  | 170  | 524  | 209  |
|          | W3155   | Z096    | R   | 3     | W  | 2/20/2016 | 44% | 50% | S1422 | HalBros | 2/9/2015  | 38% | 50%    | 679  | 131  | 679   | 166  |      |      |
|          | W3262   | X2922   | R   | 3     | W  | 1/13/2017 | 41% | 42% | XX017 | XX038   | 3/12/2014 | 37% | 51%    | 695  | 175  | 1108  | 183  | 770  | 155  |
| #1 RAM   | W3274   | X2920   | R   | 2     | W  | 1/17/2017 | 49% | 34% | W028  | XX038   | 2/13/2013 | 45% | 34%    | 1398 | 221  | 1346  | 196  | 977  | 193  |

### 11.<u>The impact of imported Lacaune semen on 2019 F1 yearlings' production at</u> <u>Meadowood Farms</u>

### Written in 2019

As we continue to use the imported Lacaune semen, almost all of our young ewes now have between 25-75% Lacaune-semen breeding in them. It is getting harder to tease out direct comparisons between the production of ewes with and without the Lacaune semen genetics (this is where the EBVs come in!). Below are the comparative production levels of our first F1 yearlings in 2019, relative to their 0 % -semen contemporaries (yearlings sired by good US-bred dairy rams from performance-recorded flocks).

### The tables below show the production of:

- the daily production of all our 2019 yearlings as of May 30 2019, comparing the production of our 1st batch of Lacaune-semen-sired yearlings with their domestically-sired contemporaries, and
- 2. the production of the top 10 yearlings in each of the groups of Lacaune-semensired yearlings and the domestically-sired yearlings, as well as the top 10 2018 yearlings of all-MWD-breeding

# Production of Lacaune-semen-sired vs domestically-sired yearlings as of 30 May, 2019 season

| Lac | Dom               |
|-----|-------------------|
| 59  | 48                |
| 375 | 353               |
| 6.0 | 4.1               |
| 8.6 | 6.8               |
| 3.5 | 1.8               |
|     | 375<br>6.0<br>8.6 |

## <u>Prod'n of top 10 yearlings at ~ 45 DIM, comparing 2019 yrlgs (Lac</u>semen-sired & Domestically-sired) along with 2018 yearlings.

| Lb/d | avg DIM    |
|------|------------|
| 6.5  | 47         |
| 5.6  | 49         |
| 5.0  | 40         |
|      | 6.5<br>5.6 |

Top 10 2018 Yrlngs: Avg total prod'n for 2018 season: 900 lbs per yearling

### Final year-end production information from 2019 Lacaune-semen-sired yearlings at Meadowood Farms

At the end of our 2019 milking season, the average production of *all* our Lacaune-semen-sired yearlings was nearly 900 lbs of milk over an average of 211 days in lactation (we take lambs off ewes at birth, and start milking at Day1). Also, in 2019, our top Lacaune-semen-sired yearling produced over 1,200 lbs of milk in 220 days.