# 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 (mother of	Mat G-sire (father of	Mat GG-sire (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 Index	% production Index	EBV MilkYield kg2	Acc MilkYield kg2	% MilkYield 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

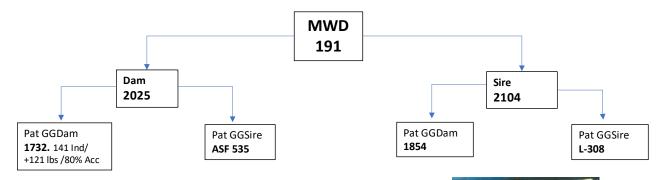


214D, dam of AXM 831K



445F, dam of AXM 838K

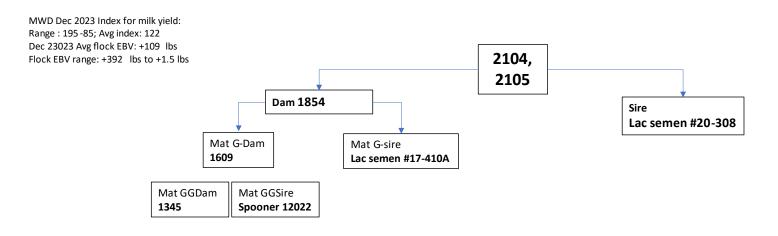
### 3. EBVs and dams' udders for sires MWD 191, 2104, 2105:

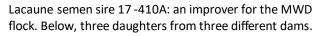




**2025 pic as 2-yr-old:** 2022 Index: 153 EBV Yield P1: +99 lbs Acc %: 40 MWD Dec 2023 Index for milk yield: Range : 195-85; Avg index: 122 Dec 2023 Avg flock EBV: +109 lbs Flock EBV range: +392 lbs to +1.5 lbs

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



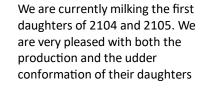




**Center pic: 1854 pic as 2-yr-old:** 2022 Index: 150 EBV Yield P2: +194 lbs Acc %: 77



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- dam #	Prod'n Index	EBV milk yield 2 (kg)	EBV milk yield 2, lbs	Milk Yield Acc. P2	Comp'nt Index	EBV Fat P2, kg	EBV Fat P2, lb	EBV Prot P2, kg	EBV Prot P2, lb	Acc. for Prot yield, Fat 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- dam #	Prod'n Index	EBV milk yield 2 (kg)	EBV milk yield 2, lbs	Milk Yield Acc. P2	Comp'nt Index	EBV Fat P2, kg	EBV Fat P2, lb	EBV Prot P2, kg	EBV Prot P2, lb	Acc. for Prot yield, Fat 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- sires, etc	DOB or semen importation dt	Prod'n Index	EBV milk yield (kg)	EBV milk yield (lb)	Milk Yield Acc.	Comp'nt Index	EBV Fat (kg)	EBV Fat, Ib	EBV Prot (kg)	EBV Prot, lb	Acc. for Prot yield, 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> 9/18	<u>2 Oct</u>	DIM	<u>24 Oct</u> lb/ewe/d	DIM	28 Nov	DIM	18 Dec lb/ewe/d	<u>DIM</u> 12/18	27 Dec lb/ewe/d	DIM 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> Dt	<u>Meter</u> June 24	<u>DIM</u> <u>6/24</u>	<u>Meter</u> July 9	<u>DIM</u> 7/9	<u>Meter</u> July 22	<u>DIM</u> <u>7/22</u>	<u>Meter</u> Aug 5	<u>DIM</u> <u>8/5</u>	<u>Meter</u> Aug 24	<u>DIM</u> <u>8/24</u>	Meter sept 9	<u>DIM</u> <u>9/9</u>	Meter Sept 23	<u>DIM</u> <u>9/23</u>	Meter Oct 26	<u>DIM</u> 10/26	Meter Nov 12	<u>DIM</u> 11/12	Meter Dec 15	<u>DIM</u> 12/15	<u>Meter</u> jan 6	<u>DIM</u> <u>1/6</u>	<u>Meter</u> Feb 3	<u>DIM</u> 2/3	Actual milk to 2/28	<u>Lb</u> <u>milk</u> /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> 2/18	<u>3/4</u>	DIM 3/5	<u>3/16</u>	<u>DIM</u> 3/18	<u>3/31</u>	<u>DIM</u> <u>3/31</u>	<u>4/15</u>	<u>DIM</u> <u>4/15</u>	<u>4/20</u>	<u>DIM</u> <u>4/20</u>	<u>5/5</u>	<u>DIM</u> 5/5	<u>5/18</u>	<u>DIM</u> 5/18	<u>6/2</u>	<u>DIM</u> <u>6/2</u>	<u>6/15</u>	<u>DIM</u> 6/15	<u>7/13</u>	<u>DIM</u> <u>7/13</u>	<u>8/12</u>	<u>DIM</u> 8/12	<u>9/15</u>	<u>DIM</u> 9/15	<u>10/</u> <u>12</u>	<u>DIM</u> 10/12	Avg	Total 2020 (from lamb dt to 29 Oct)	equiv (265 DIM) w age 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. Strong udder, average producer with average EBVs. Peaked at 1,380 lbs as a 5-yr-old, still produced 850 lbs in her 7th year.	1445 as a 2-yr-old	1468	Milked for 8 years. Okay udder, average producer with average EBVs. Milked 1,172 lbs as a 7-yr-old!.	1468 as a 4-yr-old
1605	Above-avg EBVs: milk yield EBV of +93 lbs. Okay udder, still holding up well in her 7 <sup>th</sup> year of production.	1605 as a 2-yr-old	1714	Average producer with a beautiful udder. Below-avg EBV.	1714 as a 3-yr-old
1733	This is the udder we aim for. She lost 1 side in her 2nd lactation; the fuzz did not last after her 1st lactation. Grand- dam of sire 2122.	1733 as a yearling. Wish we had had her for longer			
1811	Average EBVs for yield & components. Average producer. Okay udder.	I811 as a 2-yr-old	1818	Average EBVs for yield & components; her production & EBVs are being eclipsed by those of recent generations. Good udder. Dam of sire 2122.	1818 as a 2-yr-old
1847	Above-avg EBVs (milk yield EBV: +151 lbs.). Meh udder. Steady production.	1847 as a 2-yr-old	1854	Was in our top 10 ewes for EBVs in years, now in the top 20. EBV for milk yield this year: +195 lbs! Very good udder. Dam of sires 2104 & 2105.	1854 as a 2-yr-old

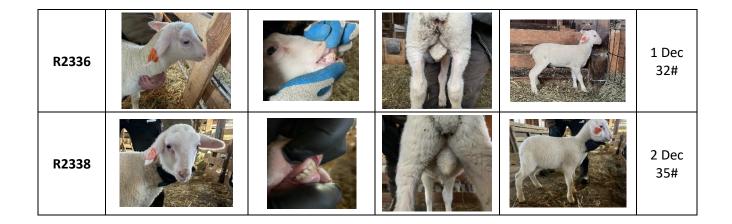
1856	Very high EBVs for yield (+264 lbs!). Steady producer with a weak udder.	1856 as a 2-yr-old	1919	Great producer with a terrible udder. Top EBVs for yield and components. You can see the udder impact of sire# MWD 2104 on her daughter 2240.	1919 as a 3-yr-old
1951	Lost one side in her 1 <sup>st</sup>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

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

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

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

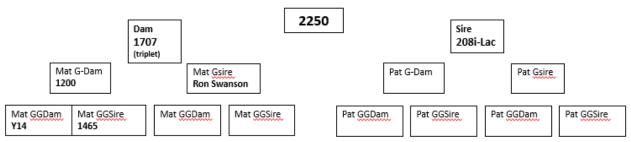
Dam production:

 $1^{st}$  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)

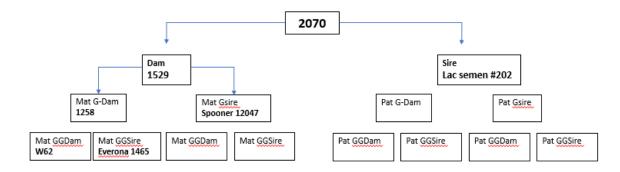
3<sup>rd</sup> lactation: 967 lbs in 185 d (avg 5.23 lb/d)

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

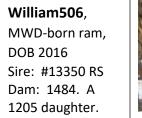


In the 2019 milking season, 1707 (dam of #2250) milked 1,400 lb milk as a two-year-old, in 267 days in milk, an average of ~ 5.25 lb/milk/d over the 267-d lactation. In 2020 she has averaged 9.9 lb milk/d in her  $1^{st}$  77 days in lactation as of June  $2^{nd}$ . Her EBV is +67 kg (+147 lb) with an 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 Tag	Large Scrapie	Sex		B W G S	DOB	EF%		Dam Flock	Lamb Sire	DAM DOB	Dam EF%	Dam LC %	2017 # MILK	2017		2016 DIM			Dam Udde r	Dam Sire	Sire East Fresian %	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 6.0 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 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.