

Hello fellow dairy sheep producers --

We are writing to you because you have expressed interest in, or have sent us a deposit for, Meadowood Farms dairy sheep breeding stock in the 2020 season.

We (Bee and Quincy) have just completed examining the 2019 production records, EBVs, and udder conformation pictures, to select the ewes from which we will keep our own replacement females and males, and from which we will offer replacement females and males for sale.

We are planning to offer the following animals for sale this year:

	Dam	Sire	DOB	Price	Deposit	Approx # available	Latest date to be picked up from MWD
½- & ¾- Lacaune ram lambs	High-perf ewes (high EBV and/or high prodn)	Imported PB Lacaune semen	Early Feb	\$800	\$200	~ 15	Aug 1
<i>Lacaune-semen-sired ram lambs born in early February. These are from ewes who held to the Laparoscopic Artificial Insemination (LAI) and were thus successfully bred with imported Lacaune semen.</i>							
¾-Assaf ram lambs	High-EBV ½-Assaf yearling ewes	Imported PB Assaf semen	Early Feb	Auction		~ 3	Aug 1
<i>Assaf-semen-sired ram lambs born in early February. These are from ewes who held to the Laparoscopic Artificial Insemination and were thus successfully bred with imported Assaf semen. These ewes have amongst the top milk production and EBVs in our entire flock. These ram lambs will be sold via internet auction in conjunction with Ms J & Co. in late May 2020. More information below.</i>							
¼- & ½- Lacaune ram lambs	Best ewes (highest EBV and/or highest prodn)	MWD ram # 2250 (one of two best of 2019 Lacaune-cross ram lambs)	Late Feb	\$800	\$200	~ 3	Aug 1
<i>Ram lambs born in late February, sired by dairy ram. These are from ewes who did not hold to the LAI, and were rebred by #2250, one of our two top Lacaune-semen-sired ram lambs from 2019. These ewes have amongst the top milk production and EBVs in our entire flock.</i>							
¼- & ½- Lacaune ewe lambs	Yearlings (1 st Parity, born in March 2019)	MWD ram # 2250 (one of two best of 2019 Lacaune-cross ram lambs)	Late March	\$300	\$75 ea	~ 23	Aug 1
<i>Ewe lambs born in late March, sired by dairy ram. These are from yearling ewes born in March-April 2019. These yearling dams are very high EBV animals, and were bred by #2250, one of our two top Lacaune-semen-sired ram lambs from 2019.</i>							
Excess ewes		Sired by MWD rams & Lacaune semen	2013-2019	Varied pricing *	25% of total	~ 40	Oct 15
<i>Excess ewes will be exposed during the month of September to one of our two top 2020 ram lambs. Please note: we are not guaranteeing that these ewes are bred, only that they will have been exposed to a top dairy ram for at least 30 days. All will have lambed in 2020, and will have milked for the 2020 season. We will identify the excess ewes for sale in late July, and will supply full production records and udder pictures of the ewes at that time. Additional info on excess ewes is below, and includes information on the pricing of our excess ewes.</i>							

As always, we require a 25% non-refundable deposit on all animals (except the ¾-Assaf ram lambs to be sold via on-line auction), and give buyers choice in the order of deposits received. Information on the individual dams of the sale ram lambs and ewe lambs will be available in late April, after the March lambings are over. (In the case of death or disability of a particular animal prior to shipping, deposit will be returned.)

Information on deposits and Meadowood farm management program

All animals purchased require a 25% non-refundable deposit. Buyers get choice of animal/s in the order of deposits received. (In the case of death or disability of a particular animal, deposit will be returned.)

Ewe lambs and excess ewes will be sold in minimum groups of five. ewe lambs must leave Meadowood Farms by August 1st, unless they are also going out with a group of excess ewes. Excess ewes must leave Meadowood by October 15th 2020. As we did in 2019, we will offer discounts on groups of 20 ewes/ewe lambs or more. We are also offering a discount on ewes going to any farm enrolled in DSANA’s Production Improvement Program, as the milking data of their future production will benefit our genetic program in the future.

Purchase of	Discount off total \$\$	Discount off total with 2020 PIP Enrollment*
10 ewes	0	\$50
15 ewes	0	\$50
20 ewes	5%	100
25 ewes	5%	100
30 ewes	10%	150
35 ewes	10%	150
40 ewes	15%	200
		* Reimbursed by MWD upon proof of enrollment

Information on Meadowood Farms management program

We monitor and assess our ewes on EBVs for milk yield and component percentages, overall production, end-of-season persistence, and udder conformation. All ewes are metered bimonthly for the first half of the milking season, and then monthly through the end of their lactation. Their year-end production is then multiplied by a factor of 1.00 to 1.44, to be able to compare final production of all ewes as if they were 4-year-old animals (i.e., at mature production level). EBFVs for production and components are derived from submitting our milk production records and monthly individual milk samples to DSANA’s Production Improvement Program.

The Meadowood dairy flock is tested annually for OPP and Johne’s, and is free of both. Additionally, in 2018 we tested all of our milking ewes for Staph Aureus during the 2018 milking season, and subsequently culled any positives, then re-tested to assure there were 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 lambs sold will have been vaccinated twice (initial at 30-d + booster) for CD/T and CL.

¾-Assaf ram lambs

For the first time, Meadowood Farms will offer ¾-Assaf ram lambs for sale – i.e., ram lambs born to ½-Assaf yearling ewes and sired by Assaf semen. The four yearling dams come from ewes that milked between 1200-1500 lbs of milk in ~ 260 days in 2019; information on the Assaf semen is below. We estimate there will be three (3) ¾-Assaf ram lambs for sale from Meadowood (based on historical lambing percentages, and after screening for conformational correctness).

Meadowood Farms' ¾-Assaf ram lambs will be sold via online auction in late May, in conjunction with Ms J & Co, who will be offering 10 proven ¾-Assaf yearling rams at the same online auction. The minimum bid for all ¾-Assaf rams and ram lambs will be \$800. ¾-Assaf ram lambs purchased from Meadowood Farms through the auction must be picked up from Meadowood Farms by August 1st. (¾-Assaf yearling rams purchased from Ms J & Co must be picked up from their farm in Wisconsin.)

Buyers of ¾-Assaf yearling rams and ram lambs from either Meadowood Farms or Ms J & Co will receive a \$50 per-head discount upon proof of progeny milk data entered into DSANA's Production Improvement Program.

For the Meadowood Farms' ¾-Assaf ram lambs, information on the dams' production and udder conformation, and photos of ram lambs' conformation (teeth, pizzle, testicles, and frame) will be sent out to all interested parties by the end of April. Please email Meadowood Farms (info@meadowoodfarms.com) or Ms J & Co (mariana@msjandco.com) to receive information on ¾-Assaf rams and ram lambs to be sold at the auction.

Assaf semen

Assaf-sired ram lambs were sired by purebred Assaf semen imported into the US by Ms J & Co (go to <http://msjandco.com/> for the full semen catalogue and a guide to interpreting the dam-side performance of the selected sires). The Assaf semen used at Meadowood Farms comes from the semen catalogue of Spain's National Association of Assaf Breeders (ASSAF.E). Their genetic improvement program is based on the selection of parents (sires and dams) with high genetic value and on a selective breeding scheme to increase the genetic gain in the next generation of animals.

From information on the Assaf breed in Spain, presented by Mariana Marques de Almeida (of Ms J & Co) at the 2018 Dairy Sheep Symposium:

The Assaf data base has 360,218 animals with their genealogies certified by DNA. Every year more than 30,000 new lambs, the replacing stock, are electronic identified and have their blood analyzed.

The 2016 data from ASSAF.E shows that in Spain, the Assaf flock population average standard production at 150d was 373kg (822lbs) in 66,001 validated lactations. The outstanding point is that the 10% best ewes of this population produced an average of 637kg (1,468lbs) of milk at 150d. The same trend is also observed with total lactation, the population average was 448kg (988lbs) in a lactation period of 198 days but the 10% best ewes produce 803kg (1,768lbs) in a lactation period of 235days. As a last note these are the mothers of the future sires.

In 2017 ASSAF.E had, in the semen collection centers, a total of 564 males genetic evaluated based on the performance of a total of 28,156 daughters. A total of 38,887 artificial inseminations (mainly fresh semen) were performed by the association technicians in the 129 farms of the association.

Impact of imported Lacaune semen on production from 2019 yearlings at Meadowood Farms

Compared to fellow yearlings sired by good performance-tested US-bred dairy ram

The tables below show the production of:

1. 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-semen-sired 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		
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	Lac	Dom
avg DIM	59	48
avg age at lambing	375	353
avg lb/d	6.0	4.1
highest lb/d	8.6	6.8
lowest lb/d	3.5	1.8

Prod'n of top 10 yearlings at ~ 45 DIM, comparing 2019 yrllgs (Lac-semen-sired & Domestically-sired) along with 2018 yearlings.

	Lb/d	avg DIM
2019 Lac	6.5	47
2019 Dom	5.6	49
2018 Yrlngs	5.0	40

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, our Lacaune-semen-sired yearlings had averaged 907 lbs of milk over an average of 211 days in lactation (we take lambs off ewes at birth, and start milking at Day1). Adjusted to 4-yr-old (mature) production, this would be an equivalent group average of 1,306 pounds in a season!

Also, in 2019, our top Lacaune-semen-sired yearling produced 1,248 in 220 days.

Information on semen and rams used to produce this year's replacements (2020 dairy lambs)

Lacaune semen: Yield, component, & conformation indices on Lacaune semen/rams imported by DSANA in 2017 & 2018

- 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 ISOL index.

Note: almost all of the semen-sired ram lambs for sale were sired by the 2018 semen whose animal ID ends in 248, 028, or 029. One possible ram lamb may come from 2017 semen #132

Also 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.

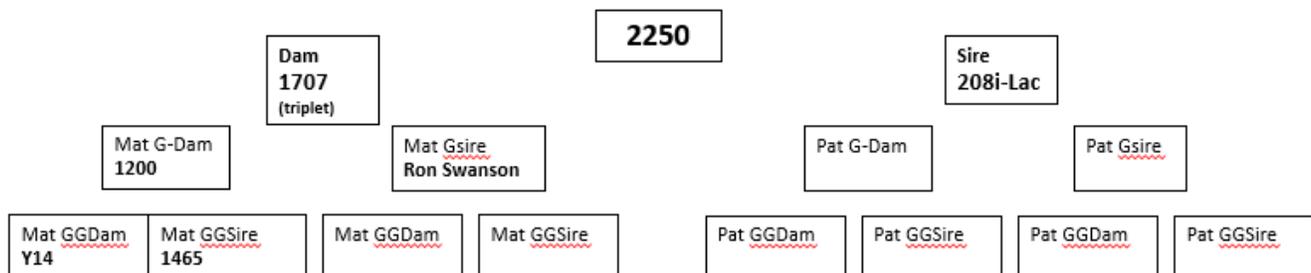
Last note: our selection of ram lambs for sale is based on dam's EBV, production history, and udder conformation. Prospective buyers will receive full lineage, EBV, conformation, and production information, on dams of lambs for sale, in late April.

PROPOSITION CATALOGUE SEMENCE DSANA _ 10/07/2018

	Animal	Nombre doses	CD lait	index lait	index production	ISOL	pere	
OVITEST	55173540241	50	89	260	350	287	16176200632	55
OVITEST	16240940256	50	97	162	92	258	16031702529	16
	16229330029	100	90	123	491	246	16051436	16
	16039840202	50	89	287	312	276	1604487	16
OVITEST	16031740133	26	93	64	140	209	16068010285	16
	16340340535	120	89	210	180	290	1610104	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	16039910230	16
CONFEDERATION	16167640005	58	87	19	150	207	16136501905	16
	16337050248	100	81	391	260	248	1603379	16
CONFEDERATION	16337150269	50	96	28	272	232	16262720332	16
	somme	804						

2017 Lacaune Semen, Tested Ram Performance for semen sent to DSANA			
Animal ID	EBV	Milk Index	ISOL
16257830095	399	492	283
16463040171	9	-21	272
16257740410	475	353	259
55233120124	33	9	227
16213930246	115	216	226
16123120208	306	431	219
16024710013	401	290	208
16258530729	551	512	207
16289040132	242	216	198
16340340524	414	290	192
55153210272	256	480	188
16329840238	139	116	164

MWD Ram# 2250:



In the 2019 milking season, 1707 (dam of #2250) milked 1,444 lb milk as a two-year-old, in 267 days in milk (age adjusted: 1,791). She averaged 5.41 lb/milk/d over the 267 days (age-adjusted: 6.71). Her EBV is +78 kg (+172 lb) with an accuracy of 76, which puts her in the 92nd percentile over all milk-recorded ewes in North America.

Excess ewe information

We will retain 40-45 replacement ewe lambs this year, and so in 2020 we will again have to move some mature ewes out of our milking string. All will be exposed to one of our top two 2020 Lacaune-sired ram lambs. (Any ewes that we don't think would be an asset to another sheep dairy – or whose lambs would not be an asset – will go to the sale barn.) What we will have for sale are those that either will be good milkers for another flock, or who have enough genetic potential that any daughters or sons from them will provide great genetic improvement to another flock. Furthermore, their sons or daughters will be at least 25% of the improved, imported Lacaune genetics, and by that token alone will greatly improve flock genetics. *To see the impact the imported Lacaune genetics are having at Meadowood, please see the table earlier in this document.*

It will be hard to determine which ewes we must sell. We have selected and culled stringently for the last few years, and our per-ewe milk production has reflected that. In 2019 we milked our first F1 daughters from the imported Lacaune semen, and we are now seeing another huge jump in production. As a result, ewes or yearlings that we would have retained a year or two ago are suddenly surplus to our needs. These are the ewes that we will offer for sale. All the sale prices include exposure to the ram. The ram will go in with the excess ewes on/around September 1st for one month. All excess ewes must be picked up from Meadowood Farms no later than October 15th 2020.

As a point of reference, we sold 39 excess ewes in 2019, all exposed to our top dairy ram lamb. Ages ranged from 1 year to 7 years, and prices ranged from \$150 to \$250, based on age and genetic merit, with an overall average of \$170/hd. In 2020, we expect to again have about 40 hd for sale, again ranging in age from 1 year to 7 years. Prices will range from \$150 to \$300, again based on age and genetic merit. As we expect that the genetic merit will be higher than in 2019, we expect that the overall average price will increase slightly.

As with all our dairy animals, we require a 25% deposit on all excess ewes. Choice of excess ewes will be made on a first-deposit-first-choice basis, beginning in late July when we distribute our breeding and sale decisions for our milking flock. If a prospective buyer wishes to place a deposit on excess ewes before late July, we suggest a deposit of \$50 per head (approximate ¼ of a \$200/hd average price). In 2019, we received deposits on all available excess ewes within 24 hours of sending out the ewes' information.

Please note: a deposit will only guarantee your position to choose and an approximate number of ewes to choose – i.e., a \$1,000 deposit will give you a position to choose five ewes, although not necessarily five \$200 ewes, depending on the number of people giving deposits before you, and the ewes they choose first. Please see our 2019 listing of excess ewes for sale for an idea of how we price these ewes – www.meadowoodfarms.com, go to “Dairy Sheep” menu, click on “2019 Excess ewes for sale”, see page 3 for the list of 2019 ewes with individual prices. More information on the 2019 excess ewes is contained on “Udder pictures” and “Production Information” under the same menu.