FINAL SALE ORDER

19th Annual
VIRGINIA TECH SHEEP CENTER PRODUCTION SALE

Saturday, September 1, 2018 10:00 a.m.
Virginia Tech Alphin-Stuart Livestock Arena
500 Plantation Road
Blacksburg, Virginia

Selling Dorset & Suffolk ram lambs and select group of ewe lambs

Sale-day Internet Bidding Available at
www.livestockbuyer.com

LIVESTOCKBUYER.COM
Online Livestock Marketing

Sale Day Phone: (540) 230-2680
Prior to Sale Call: (540) 231-9159

Videos and additional details available on Virginia Tech web site
https://www.apsc.vt.edu/facilities0/copenhaversheepcenter.html

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Virginia Tech Suffolk & Dorset Flocks

The registered Suffolk and Dorset flocks are utilized heavily in the teaching, research and outreach missions of the Department of Animal & Poultry Sciences at Virginia Tech. The flocks has been selected for sheep that excel in the traits that have made the breeds popular, while working in forage-based production systems. For the Suffolk flock this includes growth and carcass merit, along with moderate mature size, maternal performance, longevity, structural correctness and eye appeal, genetic resistance to scrapie, and spider-free genotype are also important criteria. The Dorsets are maintained as primarily a fall-lambing flock, with emphasis on early growth and carcass, maternal ability, and moderate mature size. Extensive performance records, as well as selection technologies such as EPDs and DNA genotypes, are used in the selection decisions for both flocks. In recent years, an effort has been made to document genetic differences in FEC through the use of NSIP. A complete flock health program is provided in cooperation with the VA-MD Regional College of Veterinary Medicine.

Performance Data

Codon 171 Genotype: Genotype associated with genetic resistance to scrapie. Presence of at least one *R* is associated with scrapie resistance.

LAMBPLAN Across Flock EBVs- Both flocks are enrolled in the National Sheep Improvement Program, which provides Estimated Breeding Values (EBVs) generated through LAMBPLAN in Australia. EBVs provide estimates of the genetic value of an animal as a parent (EBVs are similar to EPDs- an EPD is half the value of the EBV). Specifically, half the difference in EBVs between two individuals predict differences in performance between their future offspring when each is mated to animals of the same genetic merit. All known information on a particular animal is used to calculate its EBV, including performance data (weights, lambing records, carcass ultrasound) on the animal itself, information from its ancestors (sire and dam, grandsire, great grandsire, maternal grandsire, etc.), collateral relatives (brothers and sisters), and progeny (including progeny that are parents themselves). EBVs are reported for the following traits:

- **Weaning Wt. EBV (WWT)**: predicts genetic merit for weaning growth potential (measured in kg). A ram with a +2.0 WW EBV would be expected to produce progeny that average 1.0 kg heavier at 60 days of age when compared to a ram with a +0.0 WW EBV (ram transmits half the difference of the EBV difference to progeny)
- **Post-weaning Wt. EBV (PWWT)**: Provides indication of post-weaning growth potential, and reflects differences in progeny weight at 120 days of age (expressed in kg).
- **Fat Depth EBV (PFAT)**: EBV predicts genetic merit for fat thickness at 12-13th rib at constant live weight (expressed in mm). EBV derived from ultrasound scan data.
- **Loin Muscle Depth EBV (PEMD)**: EBV reflects genetic merit for loin muscle depth (mm) at constant live weight. Larger EBVs indicate more muscularity. EBV is derived from ultrasound scan data.
- **Fecal Egg Count EBV (PFEC)**: EBV predicts genetic merit for parasite resistance based on worm egg counts. Animals with low FEC EBVs are expected to have greater parasite resistance. EBV is expressed as percentage.
- **Maternal Lambs Weaned EBV (NLW)**: EBV indicates genetic potential for fertility and lamb survival, and is expressed as a percentage. Comparing an animal with a +10 Lambs Weaned EBV vs. an animal which is +5, the animal with +10 Lambs Weaned EBV would be expected to produce daughters which wean 2.5% more lambs (half the difference in their EBVs)
- **Maternal Milk EBV (MWWT):** Estimates genetic differences in mothering ability and milk production. EBV reflects differences in daughter's lambs weaning weight (kg) primarily due to superior milk production.
- **Carcass Plus EBV**: Terminal sire index EBV developed for Australian markets, and includes combination of post-weaning weight, loin muscle depth, and fat thickness. Reasonable assessment for terminal sires in the U.S.

Sale Information

Sale Guarantees: All rams and ewes sell as guaranteed breeders if properly managed. Breeding soundness exams (including semen evaluation) conducted on rams prior to sale. Ewe lambs sell guaranteed open.

Delivery: We can hold rams and ewes to be picked up or delivered at a later date following the sale. Visit with us for more details. We will do our best to assist with transportation as well.

Absentee Bidding: We would be happy to work with you in the event you cannot make the sale, please contact us. Internet bidding will be available through www.LivestockBuyer.com

Detailed information on sires, photos of sale sheep, and additional information available on the web at https://www.apsc.vt.edu/facilities0/copenhaversheepcenter.html

19th Annual Virginia Tech Production Sale

Saturday, September 1, 2018 10:00 a.m. Alphin-Stuart Livestock Arena, Blacksburg, VA

updated EBVs 8/15/18

								Across-Flock EBVs (as of 8/15/18)									
								BWT	WWT	PWWT	PFAT	PEMD	PFEC	NLW	MWWT	Carcass+	
Lot No.	Flock ID	Sire	Dam	Dam's Sire	Birth Date	Birth Type	Codon 171	Birth Weight, kg	Weaning Weight, kg	Post-weaning Weight, kg	Fat Depth, mm	Loin Muscle Depth, mm	Fecal Egg Count, %	Maternal Lambs Weaned, %	Maternal Milk, kg	Carcass Plus	Scrotal Cir.
	DORSET RAMS																
6	**X001**	VA Tech P026	S072	Heisdorffer 3083	10/25/2017	TW	QR	+0.3	+1.5	+3.5	-3.3	+0.5	-25	-1.1	+0.3	+135	31.5
7	**X029**	VA Tech P026	P091	Huntrods 5887	11/18/2017	TW	QR	+0.2	+2.0	+5.0	-2.7	-0.0	-14	+2.9	+0.5	+133	34.0
8	**X006**	VA Tech P026	V010	Heisdorffer 1263	10/26/2017	S	QR	+0.3	+2.1	+3.9	-2.2	+0.4	-30	-1.7	+0.2	+133	31.5
9	**X016**	Maple Hollow 15125	T006	Heisdorffer 3083	11/10/2017	TW	QR	+0.4	+2.0	+3.6	-2.4	+0.1				+128	32.0
17	**X042**	Heisdorffer 1263	W033	VA Tech P026	1/25/2018	S	QR	+0.3	+2.5	+4.9	-1.3	-0.4	-53	-3.1	+0.2	+124	33.0
18	**X082**	VA Tech P026	S045	Heisdorffer 1263	2/16/2018	S	QR	+0.4	+3.2	+6.4	-2.7	-0.0	-10	-2.4	+0.2	+141	33.0
19	**X086**	Heisdorffer 1263	P040	Huntrods 5887	2/19/2018	S	RR	-0.0	+2.3	+5.6	-1.8	+0.8	-7	-2.6	-0.3	+141	32.5
20	**X038**	Heisdorffer 6017	T103	Heisdorffer 1263	1/24/2018	S	QR	-0.0	+0.6	+0.7	+1.2	-0.7	-29			+91	28.0
	U.S Dorset Breed Avg.							***+0.1***	***+2.1***	***+4.7***	***+0.0***	***+0.0***	***+0***	***+2.3***	***+0.0***	***+129***	
	SUFFOLK RAMS																
1	**W332**	MGR 3007	S327	MacCauley 2407	3/17/2017	TR	QR	+0.0	+2.7	+4.5	-0.8	+0.8	-6	+4.1	-0.1	+134	36.0
2	**W298**	MGR 3007	T220	Bunker Hill 2896	3/1/2017	S	RR	-0.3	+1.5	+3.2	-0.2	+1.5	+1	+2.1	-0.1	+132	36.5
3	**X202**	Kimm 16061	T263	MGR 3007	2/5/2018	TW	RR	-0.5	+1.4	+4.2	-0.7	+1.7	-59			+140	31.0
4	**X203**	Kimm 16061	V298	MGR 3007	2/7/2018	TW	RR	-0.2	+1.4	+2.8	-0.4	+0.8	-58			+124	32.0
5	**X217**	MSU 3173	S213	MGR 9094	2/9/2018	TW	RR	+0.3	+3.7	+7.1	-3.3	+1.5	+37	-0.4	+0.1	+164	31.0
10	**W316**	Kimm 16061	T313	MGR 3007	3/5/2017	S	RR	-0.1	+1.6	+3.0	-0.6	+1.0	+17	-0.7		+128	32.5
11	**W293**	MGR 3007	S213	MGR 9094	2/27/2017	TW	RR	-0.2	+2.2	+3.3	-0.5	+2.0	-1	+2.9	-0.3	+141	34.0
12	**X204**	Kimm 16061	V298	MGR 3007	2/7/2018	TW	RR	-0.3	+1.0	+2.7	-0.1	+1.2	-31			+126	31.5
13	**X201**	Kimm 16061	T263	MGR 3007	2/5/2018	TW	RR	-0.3	+1.6	+4.3	-0.8	+1.0	-53			+133	33.0
14	**X208**	Kimm 16061	M247	KRM Suffolks 5211	2/7/2018	TW	QR	-0.3	+1.2	+3.0	+0.2	+0.6	-11	-2.4	+0.7	+120	29.5
15	**W311**	Suffangus 328	T255	MGR 3007	3/3/2017	TW	RR	+0.0	+1.9	+2.6	-0.3	+1.0	-14	+5.1	-0.3	+126	36.0
16	**W278**	Kimm 16061	P221	MSU 8164	2/25/2017	TR	RR	+0.1	+2.3	+4.6	-1.0	+0.3	-10	+5.4	+0.2	+128	35.0
scratch	**X262**	MSU 3173	V314	MGR 3007	2/24/2018	TW	RR	+0.1	+3.2	+7.1	-3.0	+1.3	+53	+2.0	+0.5	+160	
	U.S Suffolk Breed Avg.							***+0.1***	***+1.5***	***+2.8***	***-1.3***	***+0.3***	***+0***	***+0.0***	***+0.0***	***+125***	

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								BWT	WWT	PWWT	PFAT	PEMD	PFEC	NLW	MWWT	Carcass+	
Lot No.	Flock ID	Sire	Dam	Dam's Sire	Birth Date	Birth Type	Codon 171	Birth Weight, kg	Weaning Weight, kg	Post-weaning Weight, kg	Fat Depth, mm	Loin Muscle Depth, mm	Fecal Egg Count, %	Maternal Lambs Weaned, %	Maternal Milk, kg	Carcass Plus	Scrotal Cir.
	DORSET EWE LAMBS																
1A	**X039**	Maple Hollow 15125	R037	MSU 101	1/24/2018	TR	RR	+0.2	+2.0	+3.2	+0.1	-0.9		+1.2	+0.5	+106	
1B	**X051**	Maple Hollow 15125	W007	VA Tech P026	1/28/2018	TW	RR	+0.2	+2.1	+4.9	-2.8	+0.5	-13			+139	
1C	**X075**	VA Tech P026	S068	Huntrods 5887	2/8/2018	TR	QR	+0.4	+2.5	+5.6	-3.1	-0.4	+14	+0.1	+0.2	+134	
1D	**X080**	Maple Hollow 15125	W059	VA Tech S036	2/11/2018	S	RR	+0.2	+1.7	+4.1	-2.3	+0.3	+12			+131	
4A	**X053**	Heisdorffer 6017	P072	MSU 101	1/30/2018	S	RR	+0.1	+1.1	+2.6	+0.4	-1.3	-17	+0.3		+95	
4B	**X065**	Heisdorffer 6017	W073	VA Tech S036	2/5/2018	TW	QR	-0.1	+0.4	+2.0	-0.8	-0.0	+50			+111	
4C	**X073**	Heisdorffer 6017	W048	VA Tech P026	2/7/2018	S	QR	+0.1	-0.2	-1.1	-0.5	+0.7	-30			+106	
4D	**X084**	Heisdorffer 6017	W054	Huntrods 5887	2/18/2018	TW	RR	-0.1	-0.3	-0.2	+1.2	-0.7	-28	+2.1		+86	
4E	**X085**	Heisdorffer 6017	W054	Huntrods 5887	2/18/2018	TW	QR	-0.1	-0.5	-0.3	+1.7	-1.3	-26	+2.1		+75	
scratch	**X043**																
scratch	**X054**																
	U.S Dorset Breed Avg.							***+0.1***	***+2.1***	***+4.7***	***+0.0***	***+0.0***	***+0***	***+2.3***	***+0.0***	***+129***	
	SUFFOLK EWE LAMBS																
2A	**X209**	Kimm 16061	P204	Kimm 10131	2/8/2018	S	QR+	-0.3	+0.3	+0.8	+0.3	+0.8	-40	-1.1	+1.1	+112	
2B	**X248**	Kimm 16061	T313	MGR 3007	2/22/2018	TW	QR+	+0.0	+2.0	+3.1	-1.2	+1.3	+17	-0.7		+136	
2C	**X257**	Kimm 16061	N224	MGR 8018	2/24/2018	TW	QR+	-0.2	+0.7	+0.4	+0.8	+1.0	+27	+2.4	+0.0	+111	
3A	**X212**	MSU 3173	S228	Suffangus 328	2/8/2018	TW	QR+	+0.3	+2.4	+4.8	-2.3	+0.3	+25	+4.5	-0.0	+136	
3B	**X240**	MSU 3173	T258	MGR 3007	2/18/2018	TW	QR+	+0.3	+3.6	+6.8	-3.1	+1.1	+4	+1.5	+0.2	+157	
3C	**X251**	MSU 3173	R302	MacCauley 2407	2/23/2018	TW	QR+	+0.1	+1.8	+3.0	-1.3	+1.0	+43	+1.8	+0.4	+132	
3D	**X264**	MSU 3173	T275	VA Tech S277	2/26/2018	TW	QR+	+0.8	+4.6	+7.8	-2.6	-0.8	+12	+2.3	+0.5	+139	
5A	**X207**	Kimm 16061	M247	KRM Suffolks 5211	2/7/2018	TW	QR+	-0.3	+0.2	+0.2	+1.3	+0.5	-11	-2.4	+0.7	+102	
5B	**X228**	Kimm 16061	V266	MGR 3007	2/16/2018	TW	QR+	-0.5	+0.9	+2.8	+0.5	+0.9	+1	+0.9		+120	
5C	**X245**	Kimm 16061	S297	MacCauley 2407	2/21/2018	TW	QR+	-0.4	-0.7	-2.9	+1.6	+1.9	-25	+0.6		+103	
	U.S Suffolk Breed Avg.							***+0.1***	***+1.5***	***+2.8***	***-1.3***	***+0.3***	***+0***	***+0.0***	***+0.0***	***+125***	