22ⁿᵈ Annual
VIRGINIA TECH SHEEP CENTER PRODUCTION SALE

Our 2021 Annual Sale will be held exclusively online at
www.Livestockbuyer.com.
Sheep available for viewing on campus- call us to arrange. Sheep can be picked up following the sale, and we will work with buyers on transportation.

Sale closes at 7:00 PM EST on Tuesday, September 7, 2021
(sale will be open for bidding starting September 4)

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

Sale Internet Bidding
www.livestockbuyer.com

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

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

Department of Animal & Poultry Sciences
Litton-Reaves Hall
Blacksburg, VA 24061

Dr. Scott Greiner
Faculty Coordinator
(540) 231-9159
sgreiner@vt.edu

Emily Williams
Copenhaver Sheep Center
(540) 231-6988
wemily93@vt.edu

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: 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 anywhere in the U.S.

Absentee Bidding: We would be happy to work with you in the event you cannot participate in the sale, please contact us.

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

| | | | | | | | | EBVs as of 8/15/21 | | | | | | | | |
| | | | | | | | | 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
		DORSET RAMS														
1	B050	VA Tech Z041	V009	Heisdorffer 1263	1/30/2021	TR	RR	+0.3	+4.8	+9.6	-3.3	+0.8	-46	-0.00	+0.2	+167
2	B069	VA Tech Z041	X081	Maple Hollow 15125	2/6/2021	TW	RR	-0.1	+2.5	+6.2	-2.1	+0.9	-23	-0.04	+0.6	+146
3	B071	VA Tech Z041	A124	Maple Hollow 15125	2/7/2021	TW	RR	-0.3	+2.7	+7.6	-2.4	+1.5	-23	-0.04	+0.2	+159
	B094	----------------*SCRATCH*----------------------														
4	B095	VA Tech Z041	A171	VA Tech Z010	2/25/2021	S	RR	+0.2	+3.1	+7.2	-3.0	+0.7	+8	-0.04	+0.3	+153
5	B097	VA Tech Z010	A108	Maple Hollow 15125	3/5/2021	S	RR	+0.4	+3.1	+7.2	-3.8	+0.3	+33	-0.04	+0.3	+152
		U.S Dorset Breed Avg.						+0.0	+1.5	+3.2	-1.0	+0.0				+120
		SUFFOLK RAMS														
6	B210	VA Tech W332	W318	Kimm 16061	2/2/2021	TW	RR	-0.0	+1.1	+2.0	-1.5	+1.6	+55	+0.04	+0.4	+134
7	B212	Seasons Bounty 0030	W202	MGR 3007	2/3/2021	TW	RR	-0.1	+2.4	+5.0	-0.2	+0.1	-20	+0.03		+125
	B215	----------------*SCRATCH*----------------------														
8	B216	Seasons Bounty 0030	V281	MGR 3007	2/4/2021	TR	QR	-0.0	+3.0	+6.4	-0.7	-0.1	-51	+0.05	-0.3	+131
9	B217	Seasons Bounty 0030	V281	MGR 3007	2/4/2021	TR	RR	-0.2	+1.8	+4.0	-0.6	+1.0	-58	+0.05	-0.3	+132
10	B220	Kimm 16061	X211	MSU 3173	2/5/2021	TW	QR	+0.1	+2.4	+4.4	-2.1	+1.3	+7	+0.07	+0.5	+144
11	B221	Kimm 16061	X211	MSU 3173	2/5/2021	TW	RR	+0.2	+2.4	+3.8	-1.5	+0.8	-11	+0.07	+0.5	+134
12	B223	Seasons Bounty 0030	Z253	Kimm 16061	2/6/2021	TW	RR	+0.4	+3.3	+5.5	-2.4	+0.7	-25			+145
13	B229	Kimm 16061	W284	MGR 3007	2/9/2021	TW	RR	-0.4	+0.2	+0.3	+0.2	+1.9	+14	+0.06	+0.1	+122
14	B235	Kimm 16061	X266	MGR 3007	2/12/2021	TW	RR	-0.3	+0.7	+0.5	-0.9	+2.9	-24	+0.00	+0.5	+140
15	B236	Seasons Bounty 0030	T282	Kimm 13073	2/12/2021	S	RR	+0.0	+1.6	+3.3	-0.4	+0.0	-48	-0.03		+117
		U.S Suffolk Breed Avg.						+0.3	+3.0	+5.6	-1.9	+0.4				+137

												EBVs as of 8/15/21					
									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
		DORSET EWE LAMBS															
16	B005	Maple Hollow 15125	Z033	Heisdorffer 1263	10/21/2020	S	QR		-0.0	+1.4	+2.6	-0.6	+0.7	-56	-0.04	+0.3	+122
17	B007	VA Tech Z041	X043	Maple Hollow 15125	10/22/2020	S	QR		-0.6	+0.6	+2.3	+0.2	+1.5	+43	-0.05	+0.7	+126
18	B009	VA Tech Z041	X054	Heisdorffer 6017	10/23/2020	S	QR		-0.4	+0.8	+1.7	+0.9	+0.9	-20	-0.02	-0.0	+114
19	B026	VA Tech Z041	W066	Huntrods 5887	11/4/2020	TW	QR		-0.3	+1.3	+2.8	-0.5	+1.3	-51	-0.03	+0.5	+130
20	B034	VA Tech P026	T018	Huntrods 5887	11/8/2020	S	QR		+0.2	-0.4	-0.4	-2.2	+0.5	+14	-0.03	+0.1	+112
21	B045	VA Tech Z041	A155	VA Tech P026	1/18/2021	S	QR		-0.1	+1.1	+2.2	-1.2	+1.3	-45	-0.03	+0.2	+129
22	B049	VA Tech Z041	A146	VA Tech P026	1/28/2021	S	RR		-0.2	+1.5	+3.9	-2.1	+2.1	-18	-0.03	+0.3	+150
23	B052	VA Tech Z041	V009	Heisdorffer 1263	1/30/2021	TR	RR		-0.6	+0.5	+1.8	+0.1	+2.2	-55	-0.00	+0.2	+132
24	B054	VA Tech Z041	Z006	VA Tech P026	2/3/2021	S	RR		+0.1	+3.5	+8.3	-2.9	+0.6	-1	-0.04	+0.2	+157
25	B055	VA Tech Z010	R085	Shiflett 15	2/3/2021	S	RR		+0.2	+2.5	+5.3	-3.2	+1.4	-30	-0.03	+0.6	+153
26	B060	VA Tech Z010	W075	VA Tech S036	2/5/2021	TW	QR		+0.4	+3.1	+7.5	-3.2	-0.4	+45	-0.05	+0.4	+142
27	B067	Maple Hollow 15125	T032	Huntrods 5887	2/6/2021	TR	RR		+0.3	+4.0	+8.9	-4.7	+1.4	-30	-0.04	+0.9	+176
28	B074	VA Tech Z041	Z023	VA Tech P026	2/7/2021	S	RR		-0.3	+1.3	+4.3	-1.7	+1.3	-0	-0.05	-0.1	+139
29	B075	VA Tech Z041	Z028	Maple Hollow 15125	2/8/2021	S	RR		-0.0	+2.6	+6.4	-1.5	+0.1	+2	-0.06	+0.4	+136
30	B076	VA Tech Z041	T011	Huntrods 5887	2/9/2021	TW	RR		+0.0	+1.7	+4.1	-2.2	+1.1	-10	+0.01	+0.4	+139
31	B079	Maple Hollow 15125	S027	Huntrods 5887	2/10/2021	TW	QR		-0.2	+1.9	+5.3	-1.5	+0.8	-19	-0.03	+0.2	+138
32	B080	Maple Hollow 15125	S027	Huntrods 5887	2/10/2021	TW	QR		-0.0	+0.4	+1.2	-0.3	-0.1	-19	-0.03	+0.2	+105
33	B084	VA Tech Z010	T106	VA Tech S036	2/11/2021	TR	QR		+0.2	+1.5	+4.3	-2.9	+0.3	+78	-0.06	+0.2	+133
		U.S Dorset Breed Avg.							*+0.0*	*+1.5*	*+3.2*	*-1.0*	*+0.0*				*+120*
		SUFFOLK EWE LAMBS															
34	B225	VA Tech W332	S275	MGR 9094	2/6/2021	TW	QR		-0.5	-1.3	-2.7	+1.4	+1.9	+63	+0.03	+0.1	+104
35	B233	Kimm 16061	V203	VA Tech N221	2/11/2021	TW	RR		-0.2	-0.2	-1.1	+0.7	+1.1	-13	+0.04	+0.2	+105
36	B245	Kimm 16061	P204	Kimm 10131	2/17/2021	TW	RR		-0.3	+0.1	+0.2	+0.4	+0.9	-21	+0.01	+0.9	+110
37	B246	Kimm 16061	P204	Kimm 10131	2/17/2021	TW	RR		-0.2	-0.0	-0.5	+0.1	+1.4	-14	+0.01	+0.9	+114
38	B253	Kimm 16061	W331	Suffangus 328	2/19/2021	S	RR		-0.2	-0.5	-2.0	+0.2	+1.8	-37	+0.04	-0.5	+112
39	B258	Seasons Bounty 0030	X244	Kimm 16061	2/19/2021	TW	RR		-0.3	+0.6	-0.0	+1.7	+0.8	-56			+104
40	B263	VA Tech W332	Z273	Kimm 16061	2/20/2021	S	RR		-0.0	+0.7	+1.3	-0.4	+0.5	+200	+0.01		+114
41	B265	VA Tech W332	Z207	Kimm 16061	2/20/2021	TW	QR		-0.2	-0.4	-0.9	-0.1	+1.1	+20	+0.05	-0.0	+109
42	B268	Seasons Bounty 0030	Z210	MGR 8336	2/21/2021	TW	RR		-0.0	+1.6	+2.7	-1.2	+1.5	-40			+135
43	B276	VA Tech W332	Z224	MGR 8336	2/26/2021	TW	QR		-0.3	-0.4	-0.4	+0.1	+1.0	-16	+0.01	+0.1	+109
		U.S Suffolk Breed Avg.							*+0.3*	*+3.0*	*+5.6*	*-1.9*	*+0.4*				*+137*