

## 2019 Augusta Market Animal Show Lamb Ultrasound Carcass Data

Dress 54%

Body Wall (BW) Thickness estimated from BF

Tag #	First Name	Last Name	WT	Sh. Pl.	BF	BW	REA	YG	HCW	%BCTRC	YG Adj	RREA	REA Adj	BW ADJ	Index
457	Allen	Steven	118	7	0.16	0.72	3.66	2.02	63.72	50.28	-1.30	2.67	9.82	1.68	92.88
458	Allen	Steven	128	9	0.20	0.77	3.33	2.40	69.12	48.64	-2.24	2.78	5.44	0.51	86.49
419	Ashby	Samuel	130	11	0.22	0.80	3.69	2.59	70.20	49.26	-2.72	2.80	8.90	-0.09	88.89
420	Ashby	Samuel	117	10	0.18	0.75	3.17	2.23	63.18	48.91	-1.83	2.66	5.05	1.02	86.89
315	Aylor	Austin	110	9	0.23	0.83	2.88	2.73	59.40	48.04	-3.08	2.59	2.94	-0.55	81.90
316	Aylor	Austin	107	5	0.27	0.89	2.80	3.11	57.78	47.59	-4.01	2.56	2.40	-1.70	79.23
526	Bird	Nathan	123	7	0.12	0.66	3.83	1.65	66.42	50.85	-0.37	2.73	11.04	2.84	96.25
527	Bird	Nathan	132	1	0.16	0.71	3.06	1.97	71.28	48.23	-1.16	2.83	2.37	1.85	85.88
436	Blackwell	Mackenzie	109	3	0.20	0.78	2.61	2.44	58.86	47.71	-2.36	2.58	0.35	0.36	80.93
437	Blackwell	Mackenzie	104	2	0.15	0.69	3.00	1.87	56.16	49.44	-0.93	2.52	4.74	2.14	88.47
321	Breeden	Montana	123	12	0.14	0.68	3.47	1.76	66.42	49.84	-0.66	2.73	7.39	2.48	91.94
322	Breeden	Montana	124	10	0.13	0.66	4.13	1.68	66.96	51.49	-0.45	2.74	13.88	2.74	98.91
454	Caricofe	Ashley	142	3	0.18	0.74	3.68	2.19	76.68	49.06	-1.73	2.93	7.44	1.14	89.78
461	Caricofe	Blake	145	D5RC	0.25	0.85	3.47	2.91	78.30	47.70	-3.53	2.97	5.04	-1.09	83.39
463	Caricofe	Blake	124	GC	0.23	0.83	3.39	2.72	66.96	48.66	-3.05	2.74	6.53	-0.50	85.71
462	Caricofe	Elissa	114	3	0.28	0.89	2.76	3.17	61.56	47.12	-4.17	2.63	1.25	-1.89	77.82
528	Christian	John	103	12	0.15	0.70	2.38	1.89	55.62	47.96	-0.97	2.51	-1.34	2.09	82.30
529	Christian	John	114	11	0.12	0.66	2.12	1.65	61.56	47.05	-0.37	2.63	-5.12	2.84	79.99
533	Christian	Katie	106	10	0.10	0.63	2.22	1.44	57.24	47.88	0.16	2.54	-3.24	3.50	82.96
534	Christian	Katie	104	10	0.08	0.58	2.18	1.16	56.16	48.14	0.85	2.52	-3.44	4.36	84.29
403	Craun	Bradley	130	1	0.18	0.74	3.71	2.20	70.20	49.67	-1.76	2.80	9.05	1.11	91.20
360	Deming	Cheyenne	127	2	0.20	0.78	4.54	2.42	68.58	51.65	-2.29	2.77	17.73	0.44	98.65
362	Deming	Montana	137	7	0.28	0.90	3.53	3.21	73.98	47.91	-4.29	2.88	6.48	-2.04	83.03
348	Dyson	Camdyn	104	8	0.32	0.96	2.87	3.56	56.16	47.48	-5.14	2.52	3.51	-3.11	77.78
311	Echols	Bella	102	11	0.16	0.72	3.02	2.03	55.08	49.45	-1.31	2.50	5.21	1.66	88.06
312	Echols	Bella	97	7	0.17	0.72	2.54	2.07	52.38	48.44	-1.43	2.45	0.89	1.52	83.42
313	Echols	Jonny	106	8	0.27	0.89	2.84	3.13	57.24	47.71	-4.09	2.54	2.91	-1.79	79.58
314	Echols	Jonny	90	8	0.16	0.71	2.52	1.97	48.60	48.82	-1.16	2.37	1.47	1.85	84.53
319	Farrar	Emma	122	8	0.17	0.73	3.43	2.10	65.88	49.47	-1.49	2.72	7.15	1.44	89.81
320	Farrar	Emma	111	5	0.15	0.69	3.26	1.86	59.94	49.77	-0.90	2.60	6.57	2.18	90.45

Tag #	First Name	Last Name	WT	Sh. Pl.	BF	BW	REA	YG	HCW	%BCTRC	YG Adj	RREA	REA Adj	BW ADJ	Index
468	Gwaltney	Reagan	113	8	0.10	0.62	2.90	1.39	61.02	49.28	0.29	2.62	2.84	3.66	89.40
469	Gwaltney	Reagan	108	D1C	0.22	0.80	2.98	2.56	58.32	48.54	-2.64	2.57	4.12	0.00	84.05
364	Hadacek	Sam	111	7	0.15	0.70	3.49	1.90	59.94	50.30	-1.01	2.60	8.88	2.04	92.52
365	Hadacek	Sam	119	4	0.19	0.76	3.14	2.31	64.26	48.68	-2.02	2.69	4.55	0.78	85.99
325	Harris	Hannah	127	5	0.29	0.92	3.19	3.32	68.58	47.44	-4.55	2.77	4.18	-2.37	80.04
326	Harris	Hannah	114	4	0.25	0.85	2.84	2.87	61.56	47.61	-3.42	2.63	2.04	-0.96	80.29
301	Hinton	Mackenzie	111	6	0.20	0.77	2.84	2.37	59.94	48.24	-2.18	2.60	2.39	0.58	83.39
302	Hinton	Mackenzie	115	3	0.23	0.82	2.81	2.68	62.10	47.68	-2.96	2.64	1.69	-0.39	80.98
473	Hunter	Charles	115	10	0.20	0.78	2.90	2.44	62.10	48.15	-2.36	2.64	2.62	0.36	83.26
474	Hunter	Charles	137	11	0.21	0.79	2.38	2.52	73.98	45.79	-2.56	2.88	-4.95	0.11	75.48
455	Jones	Ethan	141	2	0.15	0.70	3.35	1.89	76.14	48.61	-0.97	2.92	4.31	2.09	88.35
421	Klein	Emily	119	2	0.23	0.83	3.46	2.74	64.26	49.05	-3.09	2.69	7.80	-0.56	86.83
422	Klein	Emily	115	RGC	0.22	0.81	3.22	2.62	62.10	48.76	-2.80	2.64	5.81	-0.19	85.46
466	Maddox	Kylee	149	9	0.23	0.82	3.46	2.67	80.46	47.73	-2.92	3.01	4.50	-0.34	84.25
467	Maddox	Kylee	113	7	0.21	0.80	3.27	2.55	61.02	49.03	-2.62	2.62	6.48	0.03	86.52
440	McCutcheon	Ashley	106	6	0.17	0.73	3.24	2.13	57.24	49.69	-1.57	2.54	6.95	1.34	89.26
441	McCutcheon	Ashley	111	11	0.11	0.64	3.04	1.52	59.94	49.59	-0.04	2.60	4.43	3.25	90.24
506	Michael	Jackson	136	10	0.15	0.70	3.78	1.89	73.44	49.89	-0.97	2.87	9.14	2.09	93.13
507	Michael	Jackson	117	11	0.11	0.64	3.25	1.54	63.18	49.78	-0.10	2.66	5.82	3.17	91.55
493	Miller	Mason	108	7	0.20	0.78	3.17	2.44	58.32	49.13	-2.36	2.57	6.08	0.36	86.65
494	Miller	Mason	128	1	0.28	0.90	3.78	3.19	69.12	48.97	-4.22	2.78	9.97	-1.96	86.57
378	Mish	Summer	100	3	0.13	0.67	2.61	1.73	54.00	48.82	-0.58	2.48	1.30	2.58	85.78
376	Mish	Trevor	120	3	0.12	0.66	2.84	1.65	64.80	48.55	-0.37	2.70	1.47	2.84	86.64
417	Mohler	Rachel	124	4	0.24	0.83	3.53	2.76	66.96	48.96	-3.15	2.74	7.90	-0.63	86.86
418	Mohler	Rachel	114	6	0.23	0.82	2.74	2.72	61.56	47.52	-3.04	2.63	1.07	-0.49	80.17
307	Morris	Landon	126	6	0.30	0.93	3.36	3.37	68.04	47.84	-4.69	2.76	6.00	-2.54	81.53
308	Morris	Landon	108	4	0.12	0.65	3.66	1.58	58.32	51.19	-0.19	2.57	10.97	3.06	96.41
488	Morris	Liam	119	5	0.21	0.79	3.18	2.48	64.26	48.60	-2.44	2.69	4.90	0.26	85.41
489	Morris	Liam	142	9	0.28	0.91	3.17	3.24	76.68	46.77	-4.35	2.93	2.32	-2.12	78.79
482	Payne	Jason	90	5	0.14	0.69	2.39	1.82	48.60	48.64	-0.80	2.37	0.15	2.30	84.01
483	Payne	Jason	109	9	0.11	0.63	3.14	1.48	58.86	49.95	0.06	2.58	5.58	3.37	91.59
475	Payne	Troy	94	6	0.11	0.64	2.72	1.54	50.76	49.54	-0.10	2.42	3.03	3.17	88.51
481	Payne	Troy	109	10	0.08	0.59	2.92	1.20	58.86	49.71	0.76	2.58	3.47	4.25	91.06

Tag #	First Name	Last Name	WT	Sh. Pl.	BF	BW	REA	YG	HCW	%BCTRC	YG Adj	RREA	REA Adj	BW ADJ	Index
433	Puffenbarger	Caden	107	6	0.12	0.65	2.19	1.62	57.78	47.56	-0.31	2.56	-3.69	2.92	81.48
435	Puffenbarger	Caden	132	8	0.25	0.85	3.95	2.87	71.28	49.52	-3.42	2.83	11.25	-0.96	89.70
431	Riley	Benjamin	141	11	0.27	0.89	3.01	3.11	76.14	46.55	-4.01	2.92	0.84	-1.70	78.04
556	Riley	Benjamin	122	9	0.12	0.65	2.63	1.62	65.88	47.96	-0.31	2.72	-0.90	2.92	84.43
368	Rohr	Wesley	120	9	0.19	0.76	3.08	2.31	64.80	48.48	-2.02	2.70	3.85	0.78	85.30
406	Schaefer	Dillon	128	11	0.17	0.73	3.54	2.10	69.12	49.46	-1.49	2.78	7.60	1.44	90.33
407	Schaefer	Dillon	124	9	0.10	0.63	3.53	1.44	66.96	50.27	0.16	2.74	7.93	3.50	94.32
381	Shiflett	Aiden	148	4	0.17	0.72	3.96	2.07	79.92	49.59	-1.43	3.00	9.61	1.52	92.69
382	Shiflett	Aiden	130	2	0.20	0.78	2.88	2.42	70.20	47.43	-2.29	2.80	0.77	0.44	81.73
388	Shiflett	Rylee	126	6	0.26	0.86	2.92	2.96	68.04	47.17	-3.65	2.76	1.56	-1.25	79.42
484	Shreckhise	Drew	130	3	0.15	0.70	3.71	1.89	70.20	49.98	-0.97	2.80	9.02	2.09	92.95
492	Shreckhise	Drew	144	7	0.18	0.74	3.15	2.20	77.76	47.67	-1.76	2.96	1.97	1.11	84.28
485	Shreckhise	Ella	120	5	0.17	0.73	2.96	2.10	64.80	48.40	-1.49	2.70	2.64	1.44	85.28
491	Shreckhise	Ella	124	5	0.17	0.73	3.52	2.10	66.96	49.58	-1.49	2.74	7.79	1.44	90.47
459	Shultz	Allison	118	5	0.13	0.66	3.32	1.68	63.72	49.79	-0.45	2.67	6.47	2.74	91.44
460	Shultz	Allison	116	6	0.14	0.67	3.56	1.75	62.64	50.39	-0.63	2.65	9.05	2.51	93.59
374	Swope	Ella	110	2	0.13	0.67	3.36	1.73	59.40	50.21	-0.58	2.59	7.74	2.58	92.34
375	Swope	Ella	118	4	0.15	0.69	2.88	1.86	63.72	48.53	-0.90	2.67	2.07	2.18	86.03
339	Talley	Bailey	115	7	0.24	0.84	3.41	2.82	62.10	49.02	-3.30	2.64	7.69	-0.82	86.21
340	Talley	Bailey	104	3	0.24	0.83	3.39	2.76	56.16	49.53	-3.15	2.52	8.67	-0.63	87.42
341	Talley	Makayla	118	1	0.23	0.83	3.43	2.74	63.72	49.01	-3.09	2.67	7.56	-0.56	86.59
342	Talley	Makayla	115	D3RC	0.19	0.76	3.00	2.31	62.10	48.52	-2.02	2.64	3.60	0.78	84.99
539	Thornton	Colton	120	1	0.14	0.69	3.40	1.85	64.80	49.72	-0.87	2.70	7.02	2.21	91.06
540	Thornton	Colton	122	6	0.11	0.64	3.29	1.53	65.88	49.68	-0.06	2.72	5.72	3.22	91.60
538	Thornton	Dylan	108	2	0.11	0.64	3.18	1.54	58.32	50.03	-0.11	2.57	6.10	3.17	91.74
546	Thornton	Dylan	103	1	0.14	0.69	3.02	1.84	55.62	49.59	-0.85	2.51	5.11	2.25	89.02
404	Traylor	Sahara	136	6	0.10	0.62	3.59	1.41	73.44	49.88	0.23	2.87	7.17	3.59	93.85
309	Wetzel	Tyler	119	10	0.27	0.89	4.18	3.13	64.26	50.42	-4.09	2.69	14.96	-1.79	91.76
310	Wetzel	Tyler	130	9	0.20	0.77	3.79	2.40	70.20	49.68	-2.24	2.80	9.84	0.51	90.91
351	Wine	Noah	122	11	0.15	0.70	3.33	1.89	65.88	49.42	-0.97	2.72	6.09	2.09	89.94
352	Wine	Noah	116	8	0.11	0.64	3.00	1.52	62.64	49.24	-0.04	2.65	3.43	3.25	89.30

Averages	WT	Num.	BF	BW	REA	YG	HCW	%BCTRC	YG Adj	RREA	REA Adj	BW ADJ	Index
<b>2019 (94 Lambs)</b>	<b>119</b>	<b>94</b>	<b>0.18</b>	<b>0.75</b>	<b>03.2</b>	<b>2.22</b>	<b>64.1</b>	<b>48.88</b>	<b>-1.80</b>	<b>4.99</b>	<b>2.68</b>	<b>1.05</b>	<b>86.92</b>
<b>2018 (98 Lambs)</b>	119	98	0.19	0.77	03.5	2.35	64.03	49.50	-2.11	2.68	8.03	0.66	86.58
<b>2017 (86 Lambs)</b>	118	86	0.19	0.75	3.23	2.27	63.57	46.09	-1.92	2.67	5.57	0.90	84.54
<b>2016 (110 Lambs)</b>	122	110	0.23	0.81	3.40	2.67	65.86	46.34	-2.81	2.72	6.81	-0.22	83.88

## Explanation of Carcass Data Column Headings

BF: Thickness of the fat from the ribeye muscle to the outer surface of the carcass measured at the midpoint of the ribeye at the 12th rib.

REA: Ribeye area or loin muscle area in inches squared at the location of the 12th and 13th rib.

YG: USDA yield grade(0.4+(10 × Backfat)). Predictor of expected yield of trimmed retail cuts. Yield grade 1=leanest 5=fattest.

HCW: Predicted Hot carcass weight with 54% dressing percentage.

BW: estimated body wall thickness using backfat

%BCTRC: Percentage of Boneless Closely-Trimmed Retail Cuts, represents the proportion of carcass that is saleable retail product.

YG ADJ: Carcass Index yield grade adjustment. For each 0.1 increase/decrease in yield grade above 1.5, 0.25 points are deducted/added.

BW ADJ: for every 0.10 inch in body wall thickness above 0.8 inches, subtract 2 points. For every 0.10 inch below 0.8 inches, add 2 points.

RREA: Required Ribeye Area, or minimum loin muscle area expected for a given lambs weight class and carcass weight.

REA Adj: For each 0.1 inch sq increase in REA for lamb's weight class, lamb receives 1 point.

Index: Final Index Score

Sh. Pl.: Show Place

Num.: Number of lambs entering contest

## Lamb Ranking System

Ultrasound data and live weight were used to calculate Percentage of Boneless, Closely Trimmed Retail Cuts (%BCTRC).

%BCTRC was used to rank lambs. The formula for %BCTRC is

$\%BCTRC = 49.936 - (0.0848 \times \text{hot carcass weight}) - (4.376 \times \text{fat depth}) - (3.530 \times \text{body wall thickness}) + (2.456 \times \text{ribeye area})$

Hot carcass weight assumed a 54% dress. Yield grades were calculated using backfat thickness.

Lamb carcass index is shown for comparison purposes only. The index starts all lambs at a base value of 80 and makes adjustments for yield grade, loin muscle area, body wall thickness and backfat.

Additional parameters were adopted from the State Fair of Virginia:

Minimum BF of 0.12 in.

Maximum BF of 0.35 in. (maximum Yield Grade of 3.9)

Minimum LMA for carcass weight using formula:  $1.4 + (0.02 \times \text{HCW})$