

2021 Augusta Market Animal Show Lamb Ultrasound Carcass Data

Dress 54%

Body Wall (BW) Thickness estimated from BF

Tag ID	First Name	Last Name	Sh. Pl.	Show WT	HCW	BF	Est. BW	REA	YG	%BCTRC	YG Adj	Base	RREA	REA Adj	BW Adj	Index
332	Samuel	Ashby	8	118	64	0.22	0.81	2.81	2.60	43.02	-2.75	80	2.67	1.33	-0.13	78.45
333	Samuel	Ashby	5	111	60	0.27	0.88	2.76	3.10	43.01	-4.00	80	2.60	1.64	-1.69	75.95
504	Garrett	Begoon	3	117	63	0.25	0.85	3.33	2.86	44.12	-3.39	80	2.66	6.64	-0.93	82.31
503	Ruebin	Begoon	6	130	70	0.28	0.90	3.97	3.17	44.30	-4.17	80	2.80	11.68	-1.90	85.61
227	Callie	Bird	1	113	61	0.19	0.75	3.06	2.27	44.39	-1.92	80	2.62	4.42	0.91	83.41
226	Callie	Bird	6	133	72	0.16	0.71	3.49	1.97	44.05	-1.17	80	2.84	6.55	1.85	87.23
239	Blake	Caricofe	5	113	61	0.25	0.86	3.62	2.94	45.09	-3.61	80	2.62	9.99	-1.20	85.18
238	Blake	Caricofe	2	139	75	0.24	0.84	3.33	2.85	42.29	-3.36	80	2.90	4.33	-0.89	80.08
237	Elissa	Caricofe	2	124	67	0.27	0.88	3.36	3.10	43.37	-4.00	80	2.74	6.19	-1.69	80.50
236	Elissa	Caricofe	3	134	72	0.34	1.00	3.85	3.84	42.99	-5.85	80	2.85	10.01	-3.99	80.18
280	John	Christian	6	116	63	0.19	0.75	3.02	2.27	44.03	-1.92	80	2.65	3.65	0.91	82.63
278	John	Christian	6	118	64	0.11	0.64	2.59	1.54	43.52	-0.10	80	2.67	-0.88	3.17	82.19
281	Katie	Christian	3	111	60	0.22	0.80	2.67	2.55	43.31	-2.64	80	2.60	0.68	0.02	78.06
336	Bradley	Craun	D4RC	140	76	0.29	0.92	3.63	3.31	42.46	-4.51	80	2.91	7.13	-2.33	80.29
459	Cheyenne	Deming	2	108	58	0.19	0.75	2.75	2.26	44.05	-1.90	80	2.57	1.81	0.94	80.85
460	Montana	Deming	2	102	55	0.18	0.74	2.77	2.17	44.71	-1.67	80	2.50	2.68	1.22	82.24
205	Elyse	Dyson	RSGC	126	68	0.24	0.84	3.16	2.82	42.98	-3.30	80	2.76	3.96	-0.82	79.84
335	Braelynn	Fitzgerald	5	120	65	0.16	0.72	2.97	2.02	43.83	-1.29	80	2.70	2.76	1.69	83.16
264	Reagan	Gwaltney	4	112	60	0.14	0.69	3.65	1.82	46.37	-0.80	80	2.61	10.42	2.30	91.92
263	Reagan	Gwaltney	4	123	66	0.19	0.75	3.86	2.26	45.52	-1.90	80	2.73	11.34	0.94	90.38
329	Harley	Hedrick	4	122	66	0.16	0.72	3.13	2.03	44.03	-1.33	80	2.72	4.11	1.64	84.43
328	Harley	Hedrick	8	139	75	0.22	0.81	2.98	2.62	41.65	-2.80	80	2.90	0.81	-0.19	77.83
373	Scott	Hickey	5	113	61	0.24	0.84	3.23	2.84	44.24	-3.35	80	2.62	6.09	-0.88	81.85
371	Scott	Hickey	1	117	63	0.25	0.85	3.34	2.90	44.12	-3.50	80	2.66	6.78	-1.06	82.23
480	Makayla	Horn	6	145	78	0.25	0.85	3.42	2.90	41.93	-3.50	80	2.97	4.51	-1.06	79.95
467	Dakota	Humphries	7	120	65	0.23	0.81	2.99	2.65	43.23	-2.89	80	2.70	2.92	-0.30	79.73
229	Charles	Hunter	5	117	63	0.22	0.81	3.19	2.60	44.03	-2.75	80	2.66	5.22	-0.13	82.34
228	Charles	Hunter	9	138	75	0.21	0.79	2.90	2.50	41.64	-2.51	80	2.89	0.11	0.17	77.77
326	Emily	Klein	D2GC	106	57	0.20	0.77	3.18	2.36	45.18	-2.14	80	2.54	6.33	0.63	84.82
327	Emily	Klein	2	122	66	0.08	0.59	3.85	1.21	46.61	0.73	80	2.72	11.33	4.21	96.28

Tag ID	First Name	Last Name	Sh. Pl.	Show WT	HCW	BF	Est. BW	REA	YG	%BCTRC	YG Adj	Base	RREA	REA Adj	BW Adj	Index
493	Alex	Lam	3	100	54	0.25	0.85	2.90	2.86	44.51	-3.39	80	2.48	4.17	-0.93	79.85
348	Landen	Lambert	9	140	76	0.25	0.85	3.54	2.90	42.66	-3.50	80	2.91	6.29	-1.06	81.74
346	Landen	Lambert	4	127	69	0.34	1.00	3.13	3.83	41.84	-5.81	80	2.77	3.61	-3.95	73.85
347	Tianna	Lambert	6	123	66	0.18	0.74	3.11	2.17	43.76	-1.67	80	2.73	3.79	1.22	83.35
349	Tianna	Lambert	8	114	62	0.23	0.81	2.82	2.65	43.32	-2.89	80	2.63	1.85	-0.30	78.67
366	Kylee	Maddox	8	108	58	0.15	0.70	2.10	1.92	42.79	-1.06	80	2.57	-4.67	1.98	76.25
367	Kylee	Maddox	8	122	66	0.21	0.79	2.37	2.52	41.68	-2.56	80	2.72	-3.48	0.11	74.07
225	Jackson	Michael	3	128	69	0.30	0.93	3.67	3.41	43.49	-4.77	80	2.78	8.90	-2.65	81.48
472	Summer	Mish	1	111	60	0.15	0.69	3.42	1.87	45.83	-0.92	80	2.60	8.18	2.16	89.42
471	Summer	Mish	3	111	60	0.11	0.63	2.82	1.48	44.74	0.06	80	2.60	2.18	3.37	85.61
474	Trevor	Mish	5	95	51	0.12	0.65	2.57	1.62	45.36	-0.31	80	2.43	1.48	2.92	84.10
473	Trevor	Mish	4	93	50	0.18	0.75	2.30	2.21	44.28	-1.78	80	2.40	-1.02	1.09	78.30
214	Lukas	Mongold	6	91	49	0.07	0.57	2.77	1.07	46.74	1.09	80	2.38	3.91	4.66	89.66
213	Lukas	Mongold	7	101	55	0.07	0.58	3.04	1.13	46.47	0.92	80	2.49	5.48	4.44	90.84
469	Landon	Morris	2	116	63	0.25	0.86	3.04	2.94	43.41	-3.61	80	2.65	3.84	-1.20	79.03
470	Landon	Morris	6	120	65	0.25	0.85	3.07	2.86	43.24	-3.39	80	2.70	3.76	-0.93	79.43
341	Liam	Morris	4	124	67	0.17	0.72	3.42	2.07	44.54	-1.41	80	2.74	6.80	1.54	86.93
342	Liam	Morris	2	128	69	0.25	0.85	3.27	2.87	43.04	-3.42	80	2.78	4.90	-0.96	80.52
345	Cameron	Moyer	4	93	50	0.12	0.65	2.74	1.58	45.97	-0.19	80	2.40	3.31	3.06	86.18
344	Cameron	Moyer	3	115	62	0.17	0.73	3.62	2.13	45.73	-1.57	80	2.64	9.78	1.34	89.55
266	Cierra	Nelson	7	98	53	0.09	0.61	2.54	1.33	45.31	0.42	80	2.46	0.82	3.83	85.07
331	Riley	Rexrode	3	126	68	0.15	0.69	3.40	1.87	44.52	-0.92	80	2.76	6.40	2.16	87.64
330	Riley	Rexrode	5	145	78	0.29	0.92	3.03	3.34	40.53	-4.61	80	2.97	0.60	-2.45	73.54
355	Benjamin	Riley	8	144	78	0.21	0.79	3.79	2.47	43.35	-2.44	80	2.96	8.38	0.26	86.20
354	Benjamin	Riley	7	125	68	0.31	0.95	2.70	3.53	41.24	-5.08	80	2.75	-0.47	-3.03	71.41
357	Bryson	Riley	7	107	58	0.16	0.71	3.07	1.97	45.21	-1.16	80	2.56	5.10	1.85	85.79
356	Bryson	Riley	8	121	65	0.21	0.79	3.32	2.49	44.12	-2.48	80	2.71	6.12	0.21	83.85
234	Hunter	Ross	4	105	57	0.20	0.77	3.02	2.37	44.86	-2.18	80	2.53	4.86	0.58	83.26
235	Hunter	Ross	2	115	62	0.21	0.78	2.77	2.45	43.33	-2.39	80	2.64	1.33	0.33	79.26
484	Aiden	Shiflett	9	128	69	0.34	0.99	3.28	3.77	42.17	-5.69	80	2.78	4.98	-3.79	75.50
485	Aiden	Shiflett	2	146	79	0.26	0.87	3.37	3.02	41.62	-3.80	80	2.98	3.97	-1.44	78.73
483	Rylee	Shiflett	5	101	55	0.11	0.63	2.37	1.48	44.48	0.06	80	2.49	-1.26	3.37	82.17
481	Rylee	Shiflett	3	144	78	0.27	0.89	4.09	3.12	43.44	-4.06	80	2.96	11.33	-1.76	85.51

Tag ID	First Name	Last Name	Sh. Pl.	Show WT	HCW	BF	Est. BW	REA	YG	%BCTRC	YG Adj	Base	RREA	REA Adj	BW Adj	Index
262	Drew	Shreckhise	7	105	57	0.10	0.63	2.75	1.44	45.11	0.16	80	2.53	2.12	3.50	85.77
261	Drew	Shreckhise	7	116	63	0.11	0.63	2.73	1.48	44.11	0.06	80	2.65	0.78	3.37	84.21
260	Ella	Shreckhise	6	95	51	0.10	0.63	2.40	1.44	45.12	0.16	80	2.43	-0.22	3.50	83.43
259	Ella	Shreckhise	7	91	49	0.07	0.58	2.49	1.13	45.97	0.92	80	2.38	1.05	4.44	86.41
368	Allison	Shultz	5	104	56	0.19	0.75	2.31	2.27	43.30	-1.92	80	2.52	-2.17	0.91	76.81
369	Allison	Shultz	7	127	69	0.27	0.88	2.63	3.08	41.35	-3.96	80	2.77	-1.37	-1.64	73.03
210	Delaney	Stogdale	7	129	70	0.31	0.95	3.70	3.55	43.34	-5.12	80	2.79	9.08	-3.09	80.88
209	Delaney	Stogdale	7	144	78	0.39	1.07	3.73	4.29	41.41	-6.96	80	2.96	7.75	-5.38	75.40
351	Ella	Swope	2	122	66	0.18	0.74	3.21	2.17	44.08	-1.67	80	2.72	4.88	1.22	84.44
350	Ella	Swope	4	148	80	0.19	0.75	3.24	2.27	41.86	-1.92	80	3.00	2.43	0.91	81.41
500	Colton	Thornton	D1RC	103	56	0.30	0.93	3.53	3.41	45.26	-4.77	80	2.51	10.15	-2.65	82.73
501	Dylan	Thornton	4	129	70	0.32	0.96	3.49	3.61	42.75	-5.27	80	2.79	6.92	-3.28	78.37
502	Dylan	Thornton	5	128	69	0.36	1.02	3.19	4.00	41.72	-6.24	80	2.78	4.05	-4.48	73.32
202	Sahara	Traylor	D1GC	100	54	0.15	0.70	3.27	1.92	46.34	-1.06	80	2.48	7.88	1.98	88.80
201	Sahara	Traylor	1	143	77	0.19	0.75	3.57	2.27	43.10	-1.92	80	2.94	6.29	0.91	85.28
340	Tyler	Wetzel	5	110	59	0.34	0.99	3.08	3.78	43.20	-5.69	80	2.59	4.93	-3.79	75.45
339	Tyler	Wetzel	5	142	77	0.41	1.11	4.07	4.52	42.18	-7.56	80	2.93	11.36	-6.12	77.68
491	Madison	Wheeler	5	106	57	0.26	0.88	2.98	3.04	44.02	-3.86	80	2.54	4.36	-1.51	78.99
492	Madison	Wheeler	5	136	73	0.20	0.77	3.71	2.35	43.96	-2.13	80	2.87	8.45	0.65	86.96
455	Noah	Wine	1	131	71	0.25	0.85	3.96	2.90	44.44	-3.50	80	2.81	11.41	-1.06	86.85
456	Noah	Wine	4	135	73	0.26	0.86	3.98	2.97	44.09	-3.69	80	2.86	11.23	-1.29	86.25
358	Daniel	Worrell	7	110	59	0.19	0.75	2.83	2.27	44.08	-1.92	80	2.59	2.42	0.91	81.40
372	Daniel	Worrell	8	108	58	0.20	0.77	2.40	2.38	43.07	-2.20	80	2.57	-1.71	0.55	76.64
334	Isabella	Zipf	8	112	60	0.09	0.61	2.92	1.33	45.06	0.41	80	2.61	3.12	3.82	87.35

Averages	WT	Num.	BF	BW	REA	YG	HCW	%BCTRC	YG Adj	RREA	REA Ad	BW ADJ	Index
2021 (87 Lambs)	119	87	0.21	0.80	3.14	2.53	64.46	43.80	-2.56	3.04	1.04	0.11	78.60
2019 (94 Lambs)	119	94	0.18	0.75	3.18	2.22	64.10	48.88	-1.80	2.68	4.99	1.05	86.92
2018 (98 Lambs)	119	98	0.19	0.77	3.48	2.35	64.03	49.50	-2.11	2.68	8.03	0.66	86.58
2017 (86 Lambs)	118	86	0.19	0.75	3.23	2.27	63.57	46.09	-1.92	2.67	5.57	0.90	84.54
2016 (110 Lambs)	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($0.4 + (10 \times \text{Backfat})$). 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: $1.4 + (0.02 \times \text{HCW})$

Minimum carcass weight of 45.0 pounds

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