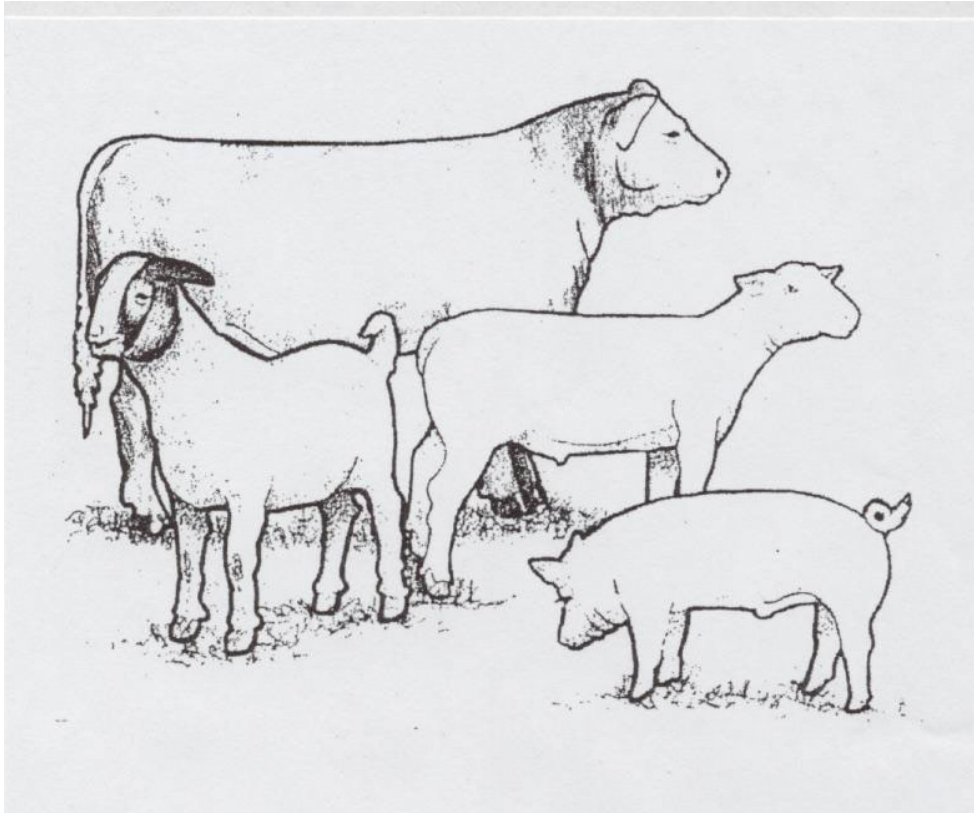


The 24th Annual
Loudoun County Fair
4-H Carcass Evaluation Results



Saturday, November 18, 2023

Special Thanks to the Following



Dr. Andy Meadows for Ultrasound Collection
On Beef, Swine, Sheep, and Goats

All 4-H Club Leaders and Volunteers for their help
with data collection
And
Throughout the Fair!

THANK YOU TO THE 2023 CONTEST SPONSORS

Loudoun 4-H Beef Club
Loudoun 4-H Swine Club
Loudoun 4-H Sheep & Goat Club

Carcass Contest Rules for 2023 Livestock Projects

All Carcass Data will be collected via ultrasound, administered by trained personnel.

SHEEP

- 1) Market lambs exhibited in the live show and eligible for the sale are eligible to participate in the carcass contest.
- 2) Carcasses will be together in one class. Premiums will be awarded to the top ten placings.
- 3) Carcasses will be evaluated and placed using a system that rewards live gain and carcass cutability (percent boneless closely trimmed retail cuts, %BCTRC).
- 4) To qualify for the premiums (top ten), carcasses must meet the following standards
 - a. Minimum fat thickness of .10 in.
 - b. Maximum fat thickness of .35 in.
 - c. Minimum REA for carcass weight using formula: $1.4 + (.02 \times \text{HCW})$
 - d. Minimum quality grade of Choice –
 - e. Minimum carcass weight of 45 lb.
- 5) As a guideline, the top carcass premium category will not have specifications more stringent than the following (subject to change):
 - a. Live gain: minimum .50 lbs./day
 - b. %BCTRC: minimum 50%

$\% \text{ Boneless Closely Trimmed Retail Cuts (\%BCTRC)} = 49.936 - (.0848 \times \text{carcass weight}) - (4.376 \times \text{fat thickness}) - (3.530 \times \text{body wall thickness}) + (2.456 \times \text{ribeye area})$
- 6) Lambs exhibiting evidence of testicular tissue will be disqualified from the carcass contest. Carcasses must be of lamb maturity.

SWINE

- 1) Market hogs exhibited in the live show and eligible for the sale are eligible for the carcass class.
- 2) All carcasses will be together in one class
- 3) Carcasses must meet certain criteria to be considered:
 - a. Must weigh (live) between 220 and 300 pounds. This is market standard.
 - b. Must have a minimum back fat of .5 inch.
 - c. Maximum back fat of 1.00 inch.
- 5) Carcasses will be ranked on a carcass estimate (estimate of retail pounds). That formula is: $\text{Live Weight} \times 0.745$. In the event of a tie, loin eye area will decide. If tie persists, Lean % will decide.

GOATS

- 1) Market goats exhibited in the live show and eligible for the sale are eligible to participate in the carcass contest.
- 2) Carcasses will be together in one class. Premiums will be awarded to the top twelve placings.
- 3) Carcasses will be evaluated and placed using a system that rewards live gain and carcass cutability (percent boneless closely trimmed retail cuts, %BCTRC).

- 4) To qualify for the premiums (top ten), carcasses must meet the following standards
 - a. Minimum fat thickness of .03in.
 - b. Maximum fat thickness of .20 in.
 - c. Minimum REA for carcass weight using formula: $1.4 + (.02 \times \text{HCW})$
 - d. Minimum quality grade of Choice –
 - e. Minimum carcass weight of 33 lb.

5) As a guideline, the top carcass premium category will not have specifications more stringent than the following (subject to change):

- f. Live gain: minimum .50 lbs./day
- g. %BCTRC: minimum 50%

$\% \text{ Boneless Closely Trimmed Retail Cuts (\%BCTRC)} = 49.936 - (.0848 \times \text{carcass weight}) - (4.376 \times \text{fat thickness}) - (3.530 \times \text{body wall thickness}) + (2.456 \times \text{ribeye area})$

BEEF

- 1) Market Beef entered in the live show and are eligible for the sale are eligible for the Contest.
- 2) Carcasses will be together in one class. Premiums will be awarded to the top ten placings.
- 3) Carcasses will be ranked with higher quality grade and superior yield grade receiving greater merit.
- 4) Carcasses must weigh between 600 and 900 pounds.
- 5) Rib-eye areas must be at least 11 inches.
- 6) To place in the top 10, the carcass must grade at least Choice minus.

The formula is as follows:

The carcasses will be ranked by carcass index; highest index in first. Considerations will be made for carcass weight, ribeye area, color and yield grade.

Data that will be collected includes: carcass weight, fat thickness, ribeye area, KPH% fat, marbling score and actual quality grade.

Yield grade will be calculated: $2.5 + (2.5 \times \text{Fat Thickness}) + (0.2 \times \text{KPH}\%) + (0.0038 \times \text{Carcass Weight}) - (0.32 \times \text{REA})$

Carcass Index will be calculated: $(6 - \text{Actual Yield Grade}) + \text{Carcass Grade Score}$.

Carcass grade scores will be: -1=Standard, 1=Select, 3=Choice-, 4=Choice Average and above.

- 7) In the event of a tie, the higher ranking will go to the animal with the higher yield grade.

Goat 2023

<u>Exhibitor</u>	<u>Live Grade</u>	<u>Tag</u>	<u>Live Weight</u>	<u>Live ADG</u>	<u>Carcass Wt.</u>	<u>Ultrasound Rib Fat</u>	<u>Ultrasound REA</u>	<u>Minimum REA</u>	<u>YG</u>	<u>% BCTRC</u>	<u>Rank</u>
Abby Schoemaker		2303	0093	1.576271	50.22	0.07	01.9	2.4044	1.1	44.986	1
Jake Ameen		25	0069	1.169492	37.26	0.07	01.2	2.1452	1.1	40.482	2
Logan Casciano		2345	0076	1.288136	41.04	0.08	02.2	2.2208	1.2	49.554	3
Rhett Wade		101	0091	1.542373	49.14	0.07	01.8	2.3828	1.1	44.194	4
ZaynaLyn Smith		36	0060	1.016949	32.4	0.03	01.1	2.048	0.7	41.218	
				0	0			1.4	0.4	37.058	
				0	0			1.4	0.4	37.058	
				0	0			1.4	0.4	37.058	
				0	0			1.4	0.4	37.058	

did not meet the minimum carcass weight of 33

Sheep 2023

Exhibitor	herd ID	Live Grade	Start Weight	Live Weight	Live ADG	Carcass Wt.	Ultrasound Rib Fat	Ultrasound REA	Minimum REA	YG	% BCTRC	Rank
Logan Casciano	2324			149	2.525424	80.46	0.4	4.5	3.0092	4.4	58.562	**
Carson Casciano	A2378			119	2.016949	64.26	0.21	3.8	2.6852	2.5	58.482	1
Tristan Kershner	2367			129	2.186441	69.66	0.19	3.8	2.7932	2.3	57.842	2
Sophia Casciano	2343			146	2.474576	78.84	0.3	4.1	2.9768	3.4	56.874	3
Carson Casciano	2336			149	2.525424	80.46	0.26	3.9	3.0092	3	55.362	4
Abby Schoemaker	22143			143	2.423729	77.22	0.35	4	2.9444	3.9	55.186	5
Abby Schoemaker	22136			130	2.20339	70.2	0.27	3.7	2.804	3.1	55.138	6
Carson Casciano	23399			136	2.305085	73.44	0.24	3.7	2.8688	2.8	55.114	7
Kristin Wagner	43			164	2.779661	88.56	0.28	3.8	3.1712	3.2	52.402	8
Jake Ameen	932			143	2.423729	77.22	0.4	3.8	2.9444	4.4	52.186	**
Colton Kersner	966			131	2.220339	70.74	0.17	3.1	2.8148	2.1	51.034	9
Carson Fletcher	2306			111	1.881356	59.94	0.1	2.7	2.5988	1.4	50.514	10
Katie McCully	138			145	2.457627	78.3	0.23	3.3	2.966	2.7	50.378	
Callen Fletcher	M1731			119	2.016949	64.26	0.2	2.8	2.6852	2.4	48.682	#
Katie McCully	137			121	2.050847	65.34	0.11	2.4	2.7068	1.5	46.274	*, #
Abby Landes	82			125	2.118644	67.5	0.39	3	2.75	4.3	46.258	** , #

**=Backfat in excess of .35
 *=Minimum REA not met
 #=did not meet 50% BCTRC

Beef 2023

Rank	ID	Exhibitor	Weight	Rib Fat	REA	%IM Fat	HCW	REA/				Points				Total			
								CWT	KPH	YG	QG	IMF Base	YG Base	QG	YG		REA	FAT	HCW
1	1312	Hailey Hendershot	1391	0.68	15.4	7.74	883	1.11	2.5	3.1	CH+	774	629	50	00	-20	-56	0	1377
2	22	Emily Stanford	1156	0.69	14.2	6.81	734	1.23	2.5	3.0	CH	681	647	25	00	0	-58	0	1295
3	1003	Valerie Greenleaf	1238	0.63	14.5	6.60	786	1.17	2.5	2.9	CH	660	653	25	00	0	-46	0	1292
4	15	Ava Hernandez	1331	0.46	14.8	5.61	845	1.11	2.5	2.6	CH-	561	687	00	00	0	-12	0	1236
5	KFE13K	Ava Hernandez	1200	0.56	15.3	5.36	762	1.28	2.5	2.4	CH-	536	712	00	25	-15	-32	0	1226
6	4099	Keegan Elder	1336	0.31	13.7	5.23	848	1.03	2.5	2.6	CH-	523	688	00	00	0	-18	0	1193
7	4	Katie McCully	1179	0.73	13.4	6.30	749	1.14	2.5	3.4	CH	630	601	25	00	0	-66	0	1190
8	3	Emily Stanford	1316	0.61	14.5	5.65	836	1.10	2.5	3.1	CH-	565	637	00	00	0	-42	0	1160
9	4048	Hailey Hendershot	1330	0.51	12.4	5.73	845	0.93	2.5	3.5	CH-	573	585	00	-25	0	-22	0	1111
10	40	Hadley Spring	1264	0.67	13.6	5.52	803	1.08	2.5	3.4	CH-	552	602	00	00	0	-54	0	1100
	11	Alexis Musselman	1091	0.43	12.6	3.98	693	1.15	2.5	2.7	SE+	398	680	-25	00	0	0	0	1053
	8	Hunter Stonesifer	1079	0.43	11.1	4.23	685	1.03	2.5	3.1	CH-	423	629	00	00	-45	0	0	1007
	1006	Valerie Greenleaf	1117	0.58	11.5	4.14	709	1.03	2.5	3.5	CH-	414	592	00	00	-25	-36	0	945
	R220	Ava Hernandez	1207	0.60	13.5	3.71	766	1.12	2.5	3.1	SE+	371	634	-25	00	0	-40	0	940
	5	Hunter Flynn	1179	0.62	12.5	3.96	749	1.06	2.5	3.4	SE+	396	598	-25	00	0	-44	0	925
	10	Scarlett Stonesifer	1197	0.75	13.2	4.09	760	1.10	2.5	3.5	CH-	409	582	00	-25	0	-70	0	896
	14	Kristin Wagner	1140	0.71	12.5	3.86	724	1.10	2.5	3.5	SE+	386	584	-25	-25	0	-62	0	858
	7	Scarlett Stonesifer	1281	0.71	12.4	4.03	813	0.97	2.5	3.9	CH-	403	541	00	-25	0	-62	0	857
	9	Juliana Stonesifer	1297	0.80	13.6	4.03	824	1.05	2.5	3.8	CH-	403	555	00	-25	0	-80	0	853
	212	Makenzie Lynch	1382	0.32	15.0	2.43	878	1.09	2.5	2.3	SE-	243	719	-125	25	0	-16	0	846
	406	Will Lutman	1330	0.32	14.2	2.43	845	1.07	2.5	2.5	SE-	243	704	-125	25	0	-16	0	831
	K02	Tristen Virts	1301	0.28	12.9	2.74	826	0.99	2.5	2.7	SE-	274	677	-125	00	0	-24	0	802
	1	Jo Myzk	1145	1.00	13.9	3.89	727	1.21	2.5	3.8	SE+	389	552	-25	-25	0	-120	0	771
	6	Hunter Flynn	1367	0.66	11.9	5.47	868	0.87	2.5	4.1	CH-	547	514	00	-250	-5	-52	0	754
	220	Addyson Lynch	1090	0.26	14.6	2.29	692	1.34	2.5	1.6	ST	229	802	-617	50	0	-28	0	436

Average	1224	0.59	13.4	5.14	799	1.12	3.0	Max	774	712
Correlation	0.03	-0.13	-0.69	-0.70	0.04	-0.54	0.46	Min	398	541
								Stdev	98	42
								Spread	376	171
								Bias		-41

adjust "scale " to get same pts spread in YG and IMF pts.

adjust "balance" to reset "Bias" to zero

*=Carcass did not meet requirement of grade CH- or higher

**= Carcass weight exceeds max of 900

Scale	01.140
Balance	416

Swine 2023

TAG NO	EXHIBITOR	Wt lb	On Test	Test Gain	BF mm	BF in	TOT DPTH	LOIN DPTH	LEA in	LEAN lb	LEAN %	Lean Gain	CARCASS EST.	RANK
44	Declan Frame	292		292	1	0.04	8.9	7.9	0.9	107.2	49.2698	143.8679	217.54	1
30	Carson Casciano	281		281	0.53	0.02	8.1	7.57	0.8	103.6	49.4649	138.9963	209.35	2
14	Hadley Spring	280		280	0.73	0.03	8.6	7.87	0.9	103.2	49.4600	138.4879	208.60	3
21	Jo Myzk	278		278	0.78	0.03	7	6.22	0.7	101.8	49.1527	136.6445	207.11	4
64	Hailey Hendershot	276		276	1	0.04	6.6	5.6	0.6	100.7	48.9746	135.1698	205.62	5
48	Carson Fletcher	275		275	0.46	0.02	8	7.54	0.8	101.5	49.5400	136.2351	204.88	6
53	Callen Fletcher	271		271	0.62	0.02	6.9	6.28	0.7	99.5	49.2800	133.5488	201.90	7
69	Hunter Flynn	271		271	0.48	0.02	7	6.52	0.7	99.7	49.3764	133.8100	201.90	8
35	Ande Erickson	267		267	0.8	0.03	10.2	9.4	1.0	99.2	49.8565	133.1169	198.92	9
6	Kristin Wagner	257		257	0.49	0.02	8.1	7.61	0.8	95.2	49.7277	127.8001	191.47	10
60	Sophia Casciano	257		257	0.71	0.03	8.3	7.59	0.8	95.0	49.6401	127.5750	191.47	
26	Abby Schoemaker	247		247	0.54	0.02	9.5	8.96	1.0	92.2	50.1062	123.7622	184.02	
34	Logan Casciano	247		247	0.5	0.02	6.9	6.4	0.7	91.2	49.5839	122.4722	184.02	
80	Scarlett Stonesifer	247		247	0.43	0.02	7.5	7.07	0.8	91.6	49.7524	122.8884	184.02	
58	Hunter Stonesifer	242		242	0.69	0.03	6.9	6.21	0.7	89.3	49.5219	119.8431	180.29	
74	Juliana Stonesifer	241		241	0.74	0.03	6.6	5.86	0.7	88.8	49.4372	119.1436	179.55	
63	Makenzie Lynch	238		238	0.54	0.02	7.1	6.56	0.7	88.1	49.7039	118.2952	177.31	
82	Zachary Lutman	233		233	0.79	0.03	6.9	6.11	0.7	86.0	49.5591	115.4726	173.59	
59	Jay Austin	232		232	0.49	0.02	6.7	6.21	0.7	85.9	49.7191	115.3483	172.84	
39	Addyson Lynch	223		223	0.29	0.01	7.1	6.81	0.8	83.2	50.0601	111.6340	166.14	
52	Amanda Everhart	220		220	0.91	0.04	5.1	4.19	0.5	80.7	49.2099	108.2617	163.90	
70	Devon Combs	220		220	0.52	0.02	7	6.48	0.7	81.8	49.9233	109.8312	163.90	
29	Will Lutman	220		220	0.44	0.02	7	6.56	0.7	81.9	49.9777	109.9508	163.90	