

COCHISE COUNTY CARCASS CONTEST

Dr. Sam Garcia



Quality Grading Beef Carcasses

Quality Grade Factors

- MATURITY
- MARBLING
- COLOR OF LEAN
- FIRMNESS OF LEAN
- TEXTURE OF LEAN

MATURITY EVALUATION

- MATURITY SCORE

- A 9 TO 30 MONTHS
- B 30 TO 42 MONTHS
- C 42 TO 72 MONTHS
- D 72 TO 96 MONTHS
- E MORE THAN 96 MONTHS

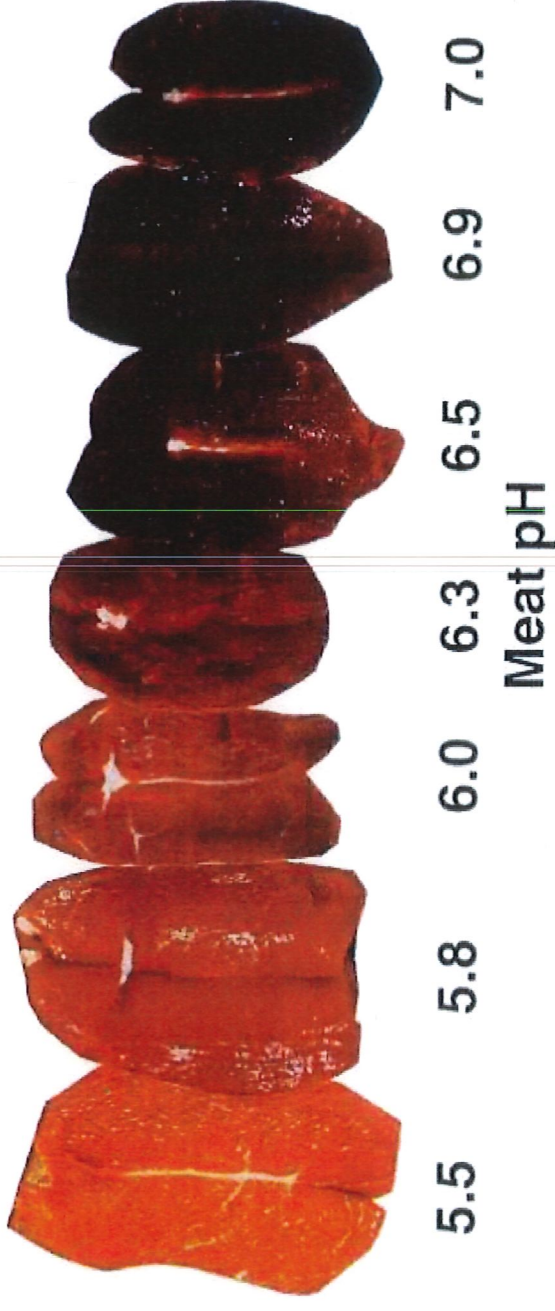
Sacral Vertebra



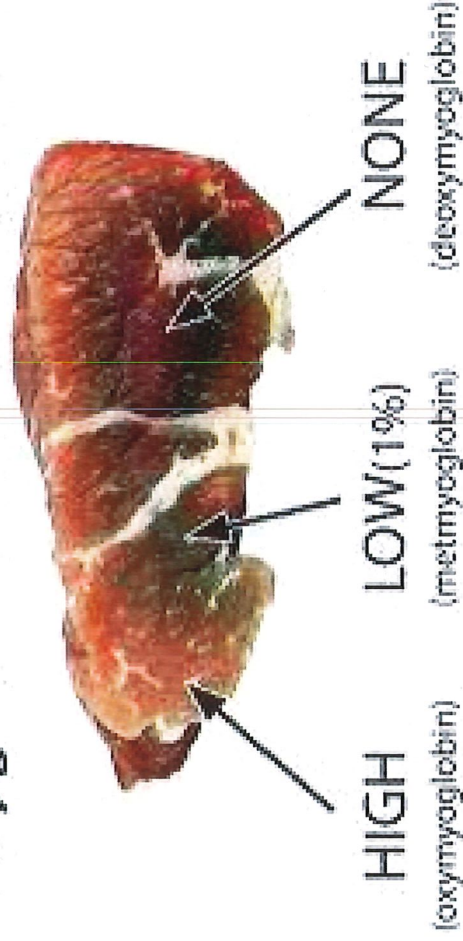
COLL

BEEF:

Example of how meat colour is affected by ultimate pH



Oxygen Level and Meat Color





MODERATELY DARK RED

SCORE = 4



DARK RED

SCORE = 3



VERY DARK RED

SCORE = 2

These color scores are considered as dark cutters

Must learn the identification of each marbling score to be able to do an effective job in quality grading beef carcasses. In A maturity:

Abundant – high Prime

Moderately abundant – average Prime

Slightly abundant– low Prime

Moderate - high Choice

Modest – average Choice

Small – low Choice

Slight – Select – will vary with percentage in yhr marbling score

Traces – high Standard

Practically Devoid – low Standard

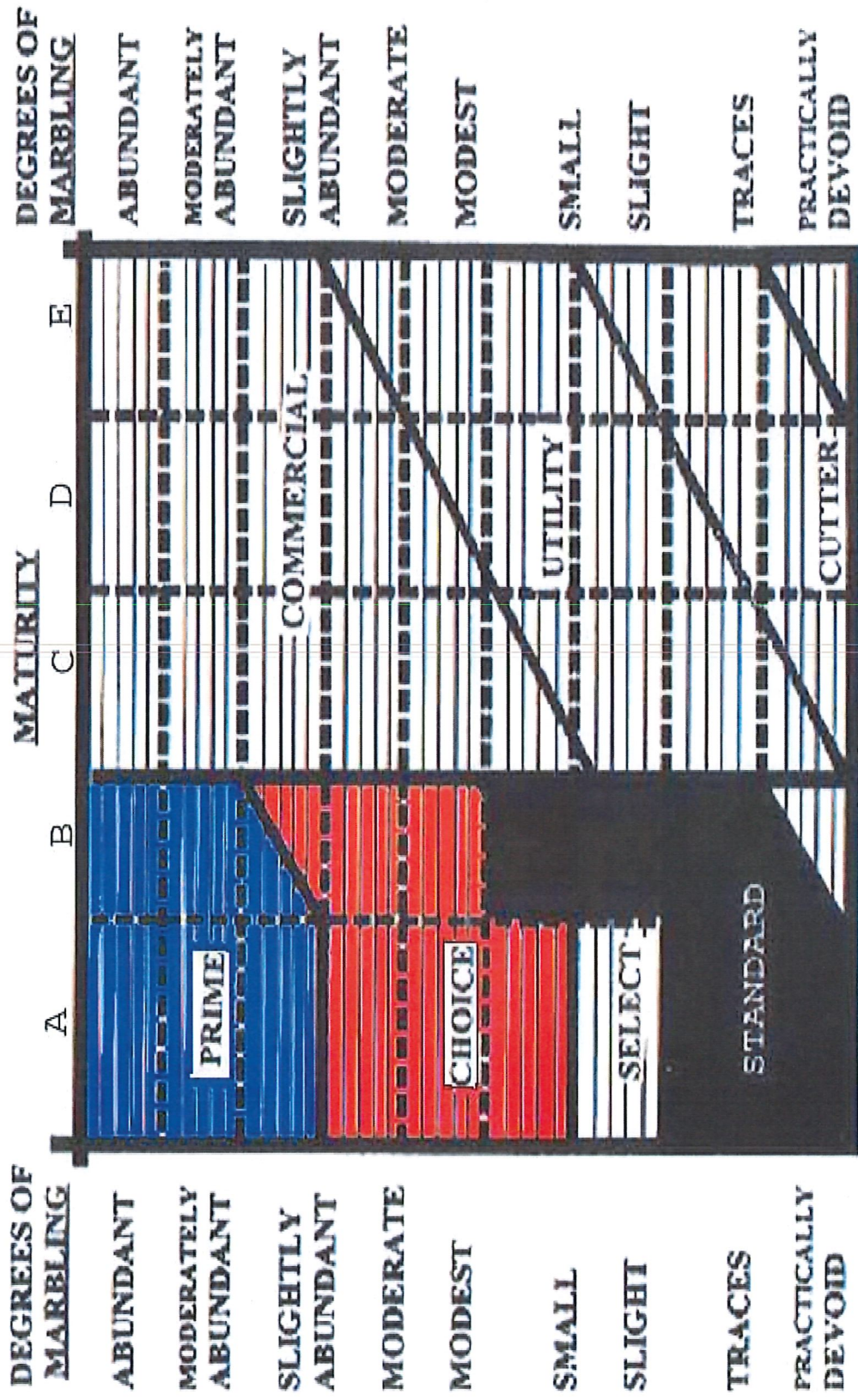
Devoid - Utility

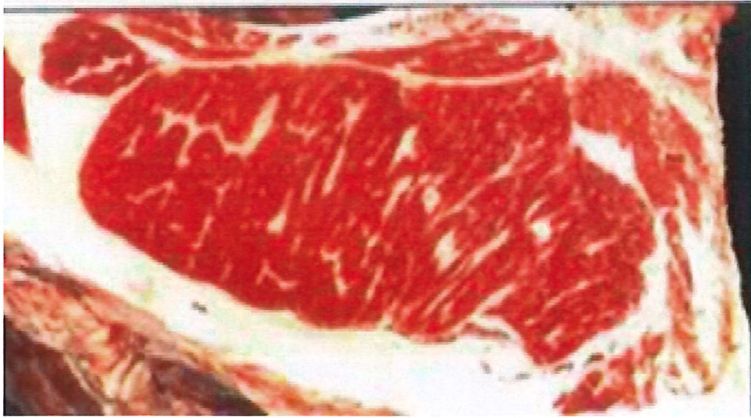


CHART

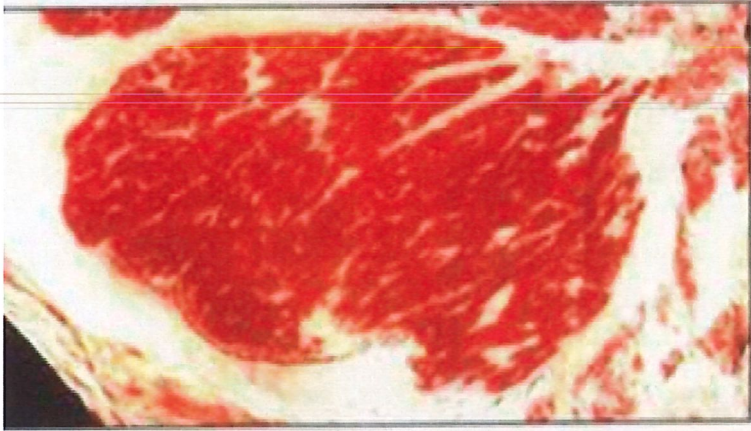
As maturity increases more marbling is required for the same grade

BEEF QUALITY GRADING CHART

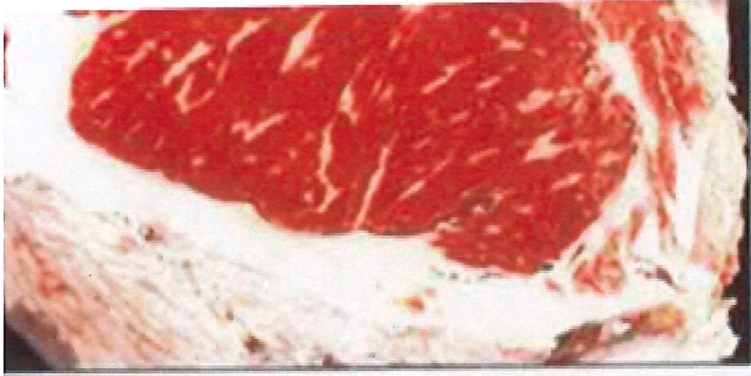




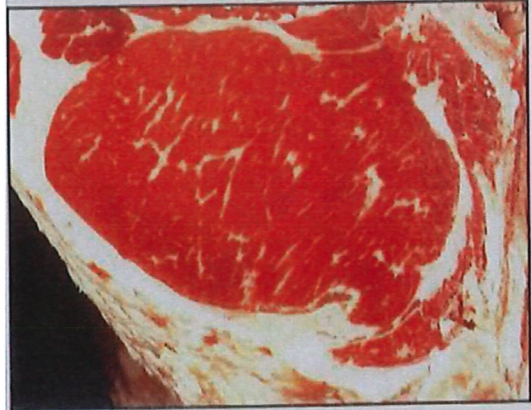
Prime +
Abundant -



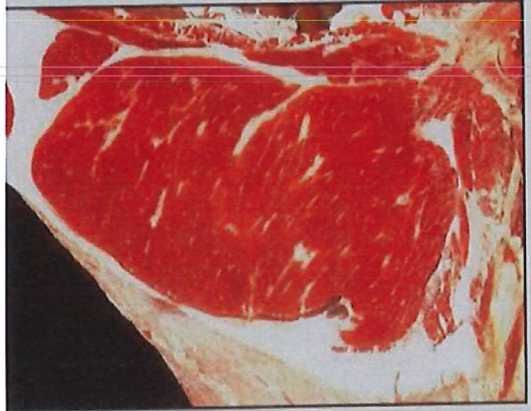
Prime or
Moderately Abundant or



Prime -
Slightly Abundant -



Choice +
Moderate or

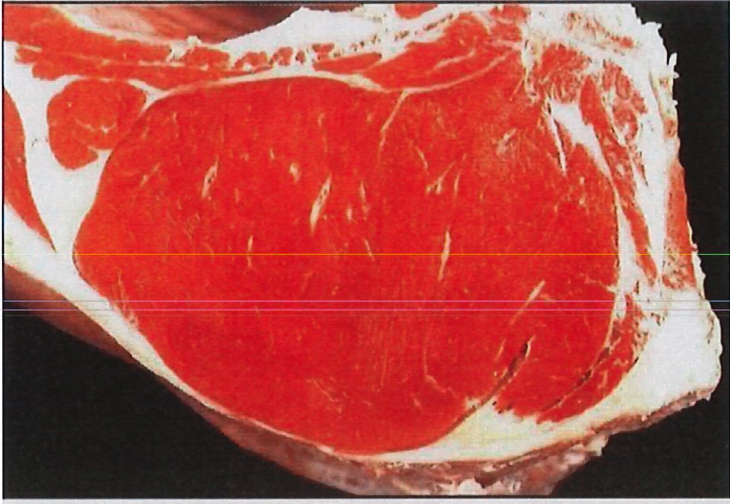


Choice or
Modest -

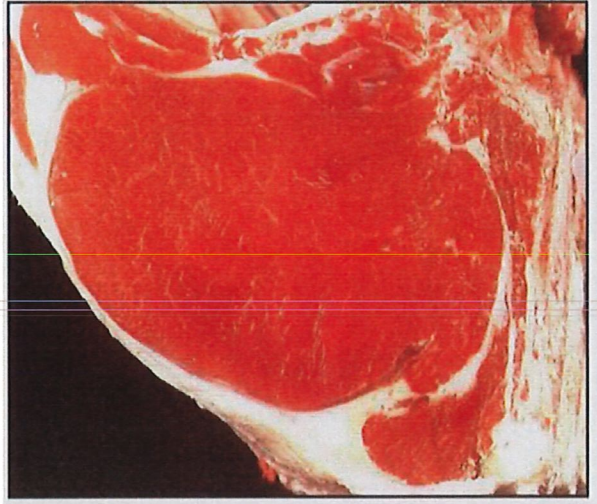


Choice -
Small -

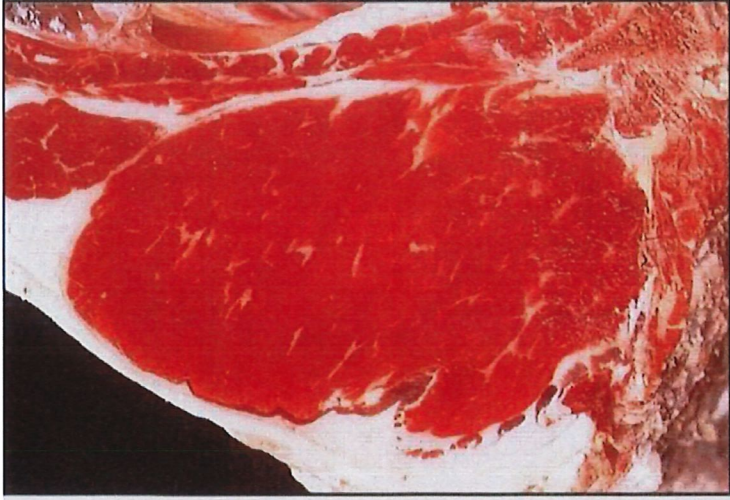




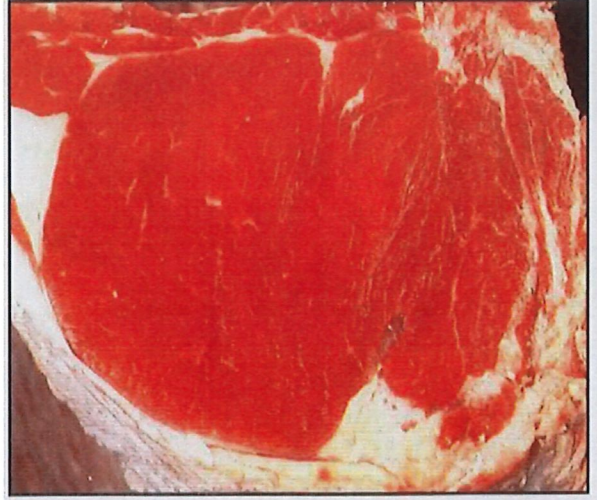
Select—
Slight—



Standard—
Practically Devoid+



Select+
Slight+



Standard+
Traces 0

Determining Yield Grade

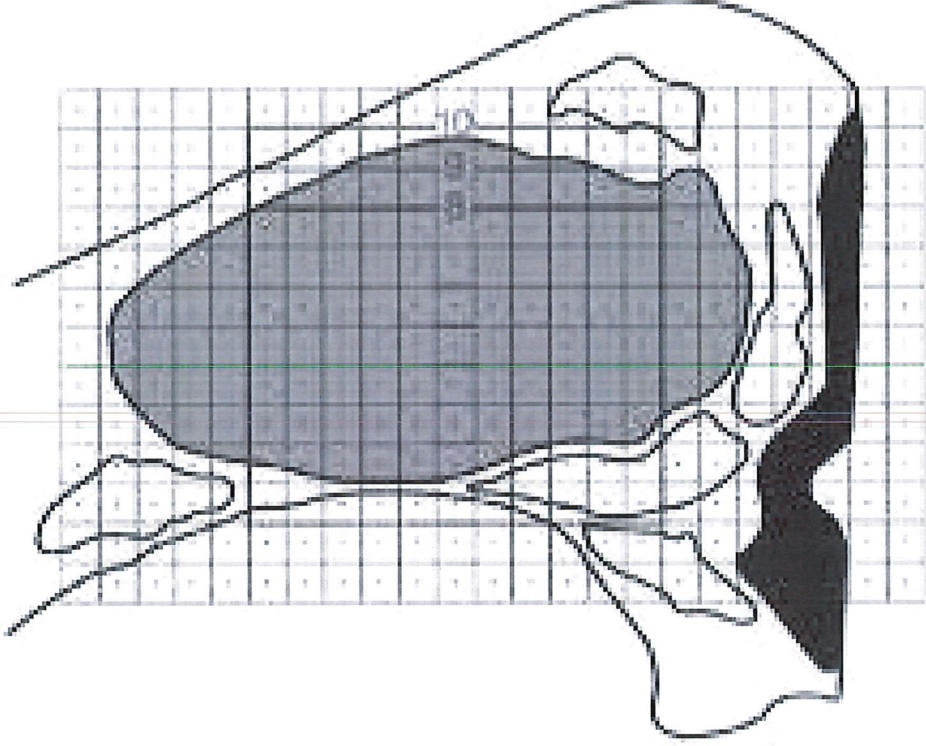
- Hot carcass weight (**HCW**), ribeye area (**REA**), fat thickness at the 12th rib (**FT**) and percent kidney, pelvic & heart fat (**KPH**) are used in a formula to determine YG.
- Formula--YG = $2.5 + \text{HCW} \times .0038 + 2.5 \times \text{FT} + .2 \times \text{KPH} - .32 \times \text{REA}$
- Example – $2.5 + (.0038 \times \underline{600}) + (.25 \times \underline{.4}) \times (.2 \times \underline{3.5}) - (.32 \times \underline{12}) = 1.68$ or 1.7





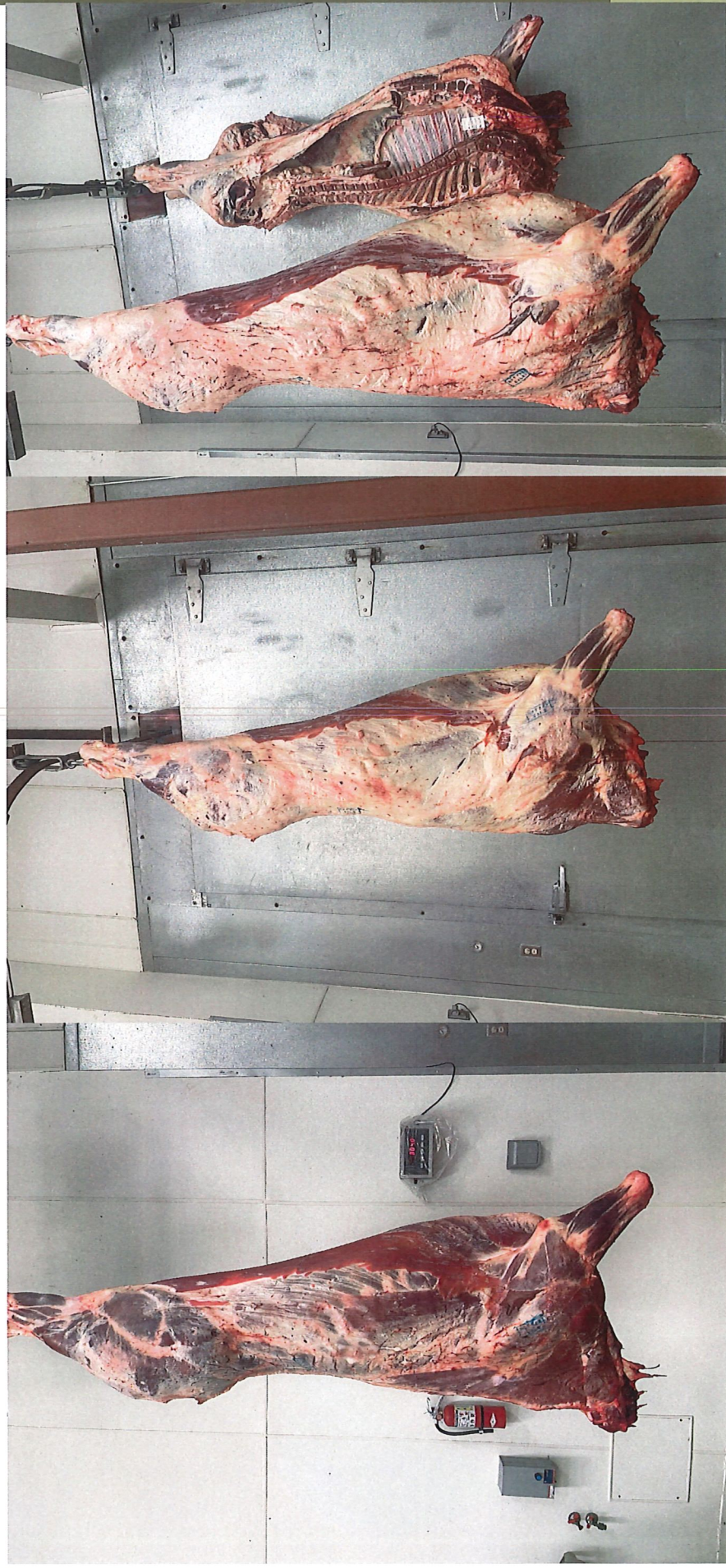
9/17/2026

FT measured as the distance from the chine bone to the end of the ribeye



Kidney & pelvic fat-average is 3.5%

Which Carcass has the most Quality?



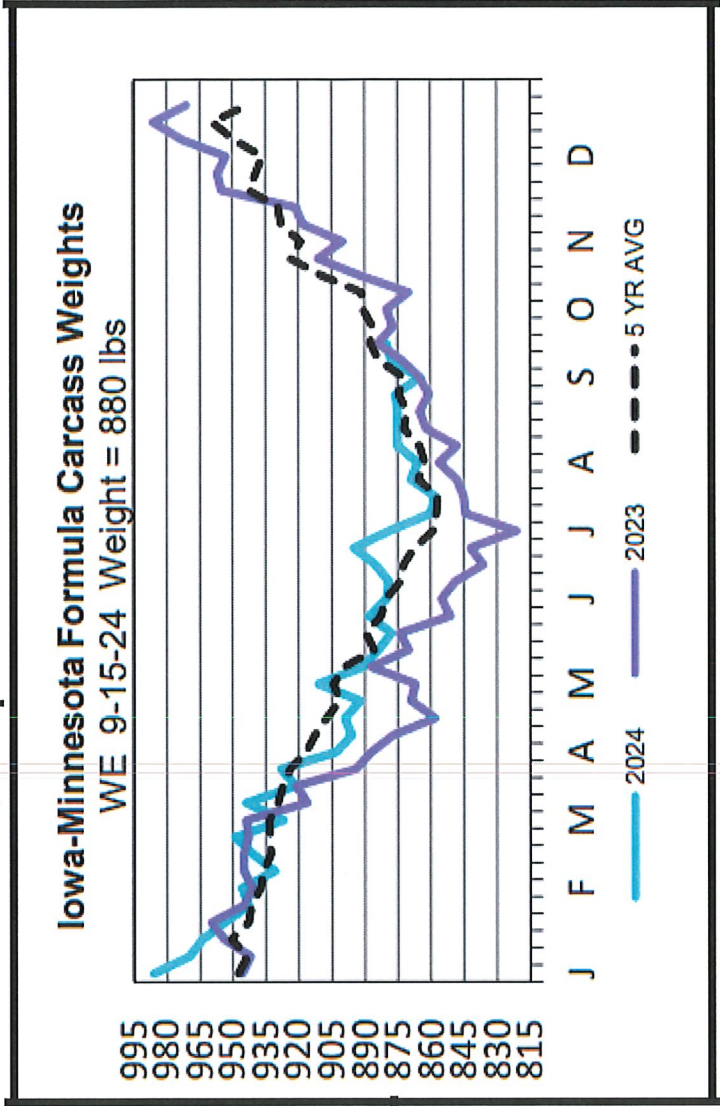
Which is a better Ribeye?





Cost of Cattle

Daily Direct Steer and Heifer Slaughter Cattle Summary			
LM CT100	5-Area	LM CT109	
Neg. Cash Volume:	148	Dressed Formula Vol:	46,448
Live Steer Avg:	\$177.97	Steer/Heifer Avg:	\$290.96
Live Heifer Avg:	\$183.00	Dressed Neg. Grid Vol:	7,393
Dressed Steer Avg:	N/A	Steer/Heifer Avg:	\$294.86
Dressed Heifer Avg:	N/A	TOTAL VOLUME:	53,989
LM CT106		TOTAL WK TO DATE VOLUME:	104,313
Committed:	48,171	Delivered:	81,203



GRID PRICING

	1.0-1.49	1.5-1.99	2.0-2.49	2.5-2.99	3.0-3.49	3.5-3.99	4	5
P70 and UP	\$320.36	\$319.59	\$318.05	\$317.63	\$26.67	\$316.59	\$302.92	\$297.92
P40 - 70	\$313.69	\$312.92	\$311.38	\$310.96	\$20.00	\$309.92	\$296.25	\$291.25
P0 - 30	\$308.69	\$307.92	\$306.38	\$305.96	\$15.00	\$304.92	\$291.25	\$286.25
CH70 and UP	\$303.69	\$302.92	\$301.38	\$300.96	\$10.00	\$299.92	\$286.25	\$281.25
CH40 - 70	\$300.36	\$299.59	\$298.05	\$297.63	\$6.67	\$296.59	\$282.92	\$277.92
CH0 - 30	\$3.69	\$2.92	\$1.38	\$0.96	\$290.00	-\$0.08	-\$13.75	-\$18.75
S70 and UP	\$282.69	\$281.92	\$280.38	\$279.96	-\$11.00	\$278.92	\$265.25	\$260.25
S0-30					9			



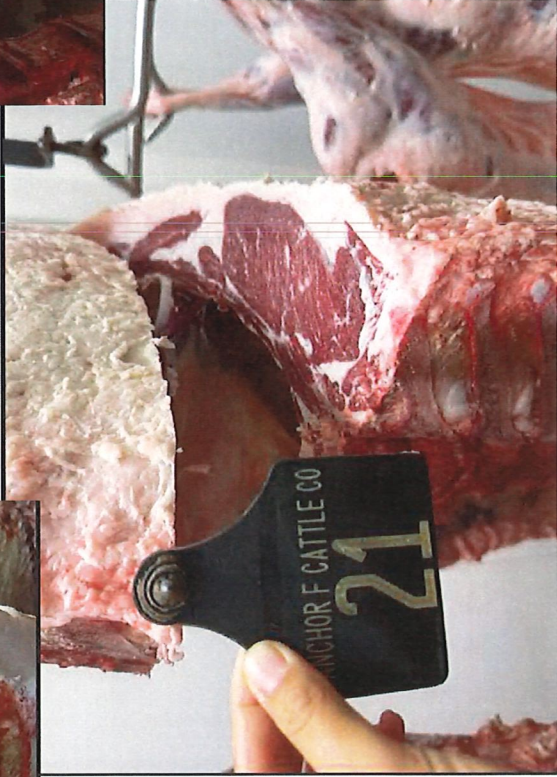
COCHISE CARCASS STEER EVALUATION 2026

NAME	TAG	LIVE WEIGHT	HOT CARCASS WEIGHT	MARBLING SCORE	QUALITY GRADE	COLOR	ENDLESSNESS	TEXTURE	ADJUSTED FAT THICKNESS	RIB EYE AREA	REA CWT	KPH	YIELD GRADE	VALUE	LIVE PLACING	CARCASS PLACING	RIBBON	Total Value
HAGEN CLEMON	5	1175	785	800	PRIME 0	6	6	6	0.4	15.6	1.99	3	2.09	\$370.00		1		\$2,904.50
WILLIAM AABYE	102	1358	871	650	CHOICE 20	6	6	6	0.7	13.7	1.57	4	3.98	\$333.00		2		\$2,900.43
EASTON ZAMUDIO	21	1268	799	550	CHOICE0	5	6	6	0.5	13	1.63	3.5	3.33	\$333.00		3		\$2,660.67

Reserve



Champion



PORK CARCASS GRADING AND EVALUATION



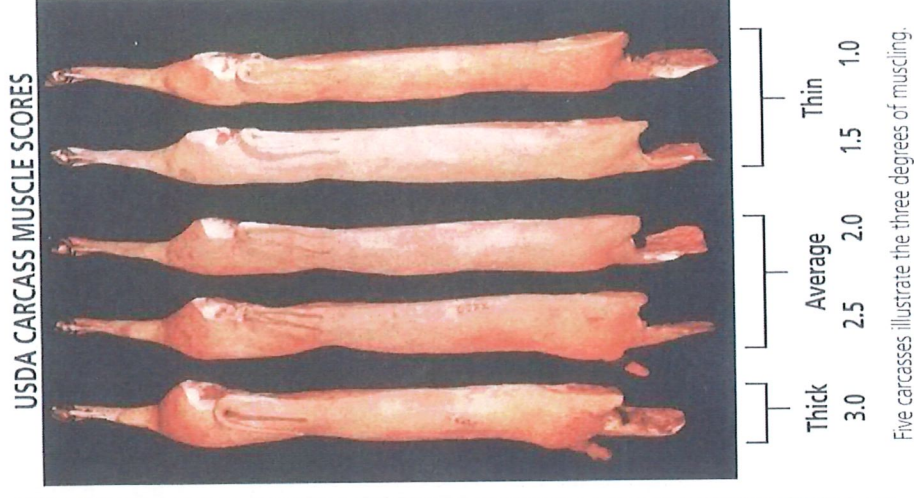
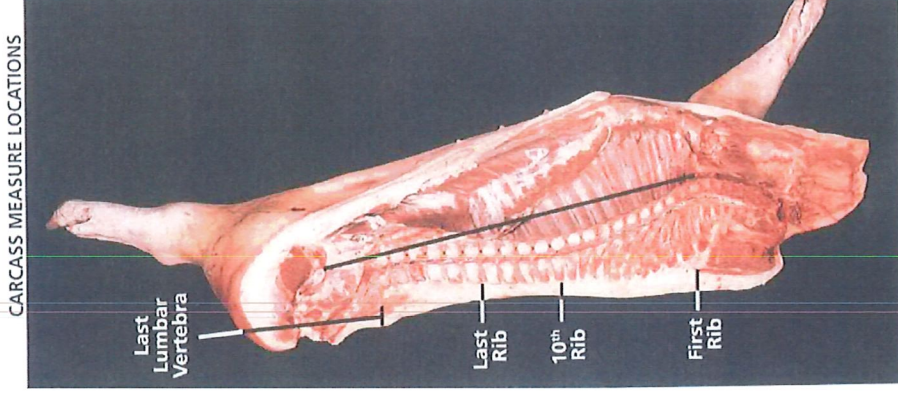
THE UNIVERSITY
OF ARIZONA

Hog Carcass Grades

- Grades are based on formula:
 - 4 x last rib fat thickness – muscle score

Hog carcass grades can be

US # __1_
 US # __2_
 US # __3_
 US # __4_
 Utility



Ribbed Pork Carcasses



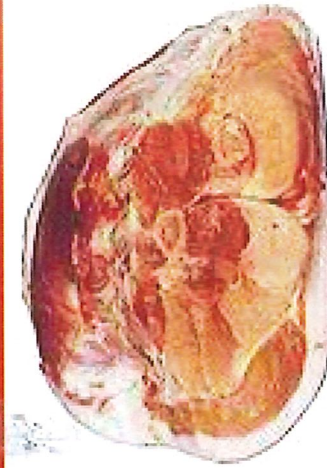
PORK QUALITY STANDARDS

The Other
White Meat

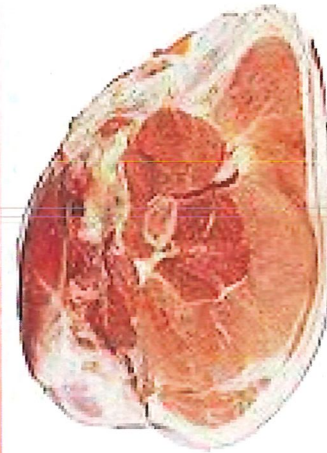
Quality of fresh pork varies greatly. The quality levels shown below will appear differently when cooked, and perform differently when converted to processed products. High quality pork has greater monetary value than low quality pork. Quality can be evaluated by simply visual appraisal, or it can be determined more accurately by scientific tests. This chart may be used to help identify variations in pork quality. Color and Marbling Standards Cards are also available.

COLOR - TEXTURE - EXUDATION

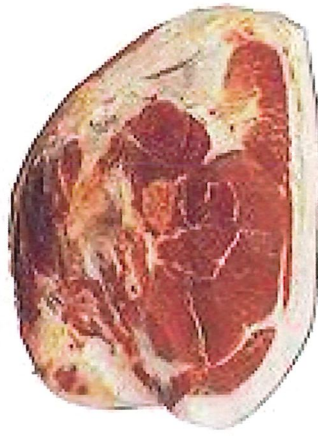
Don't let it bleed.



PSE Pale pinkish gray, very soft and exudative. Undesirable appearance and shrinks excessively.



RFN Reddish pink, firm and non-exudative. "IDEAL". Desirable color, firmness and water-holding capacity.



DFD Dark purplish red, very firm and dry. Firm and sticky surface, high water-holding capacity

COLOR STANDARDS



1.0 Pale pinkish gray to white
Minolta L* Value¹: 61



2.0 Grayish pink
55



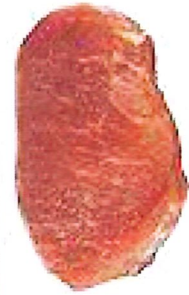
3.0 Reddish pink
49



4.0 Dark reddish pink
43



5.0 Purplish red
37



6.0 Dark purplish red
31

MARBLING STANDARDS²



1.0



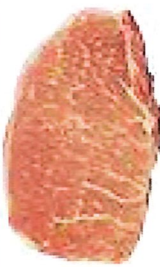
2.0



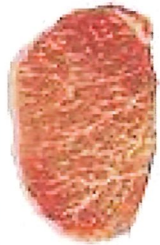
3.0



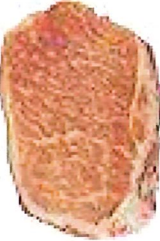
4.0



5.0



6.0



10.0

Color and marbling scores are as described in "Composition & Quality Assessment Procedures", 1999, NPPC.

¹ Minolta L* values are D50 daylight light source.

² Marbling scores correspond to intramuscular lipid content.

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pork
checkoff.

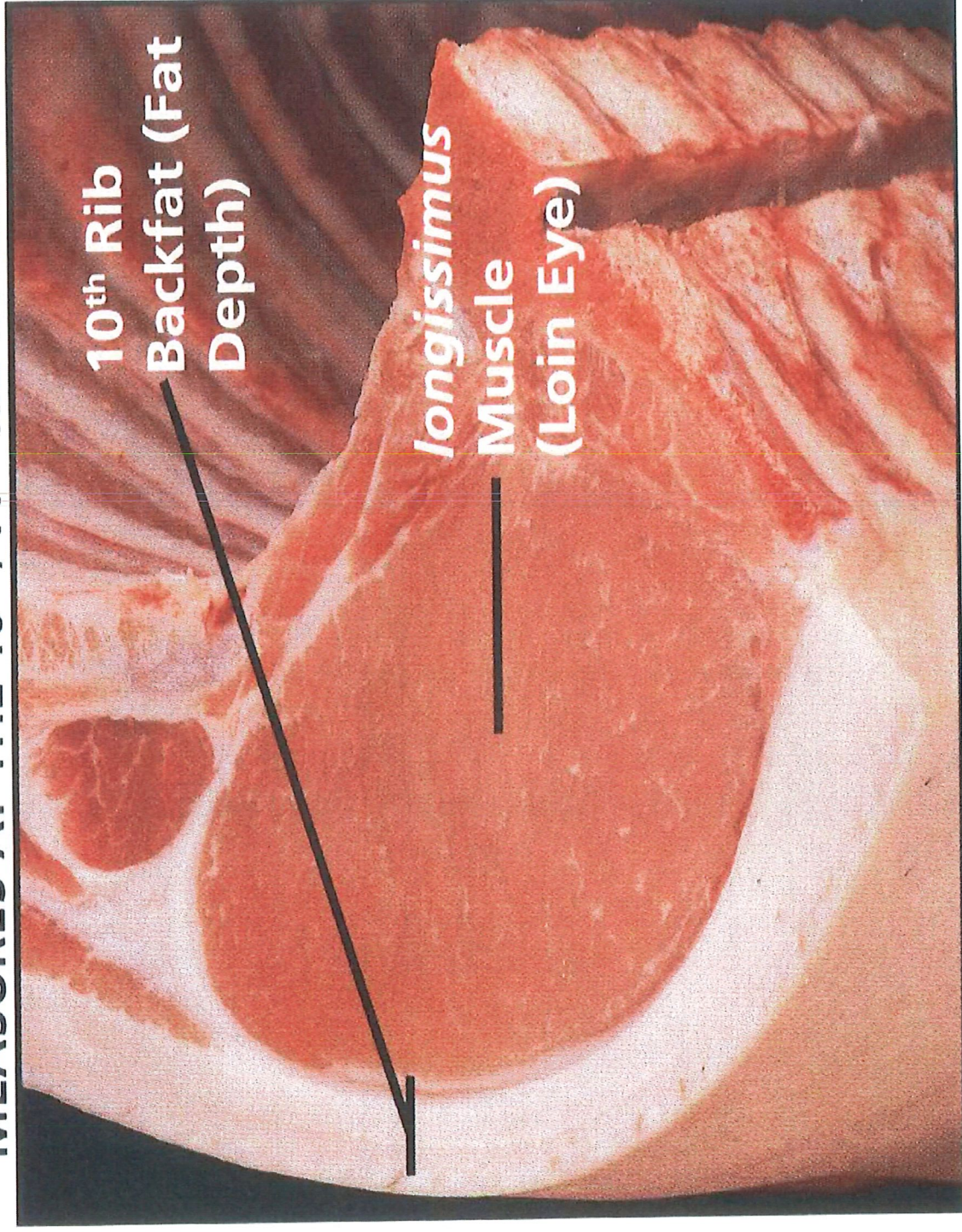
For more information contact:

National Pork Board

601 E. 17th Ave., Des Moines, Iowa 50319 • Phone: (515) 281-9931 • Fax: (515) 281-2668



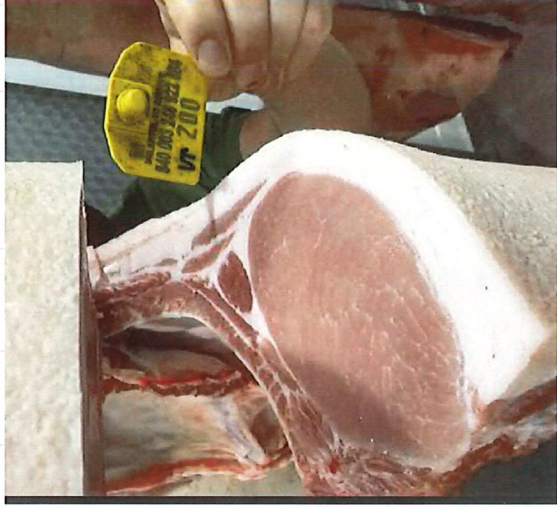
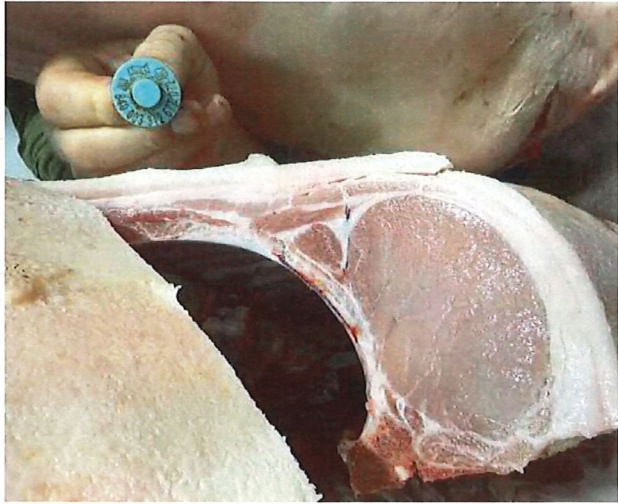
MEASURES AT THE 10TH/11TH RIB INTERFACE

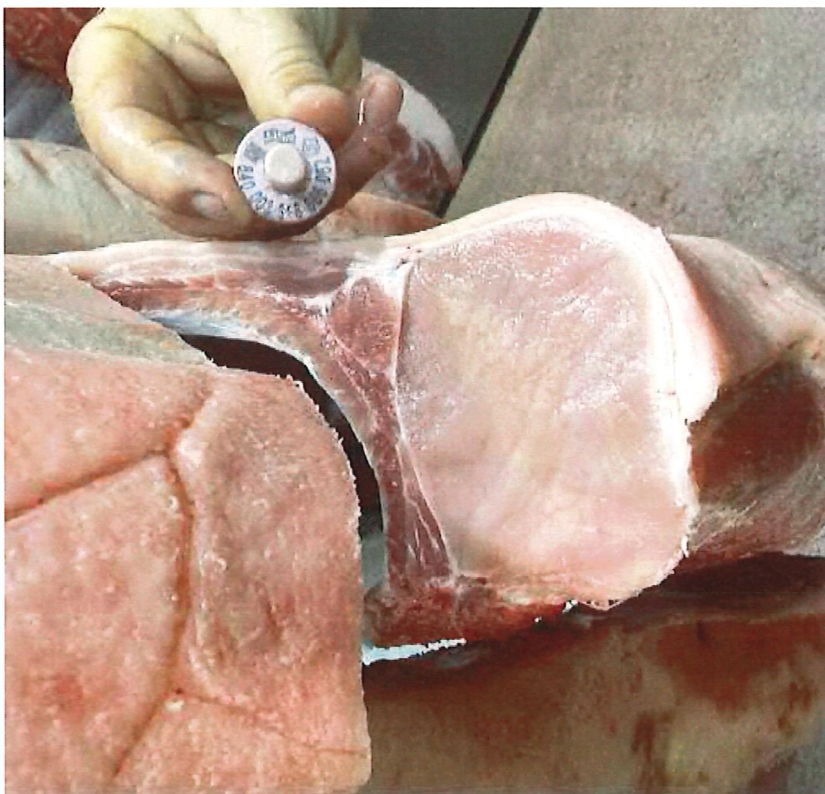
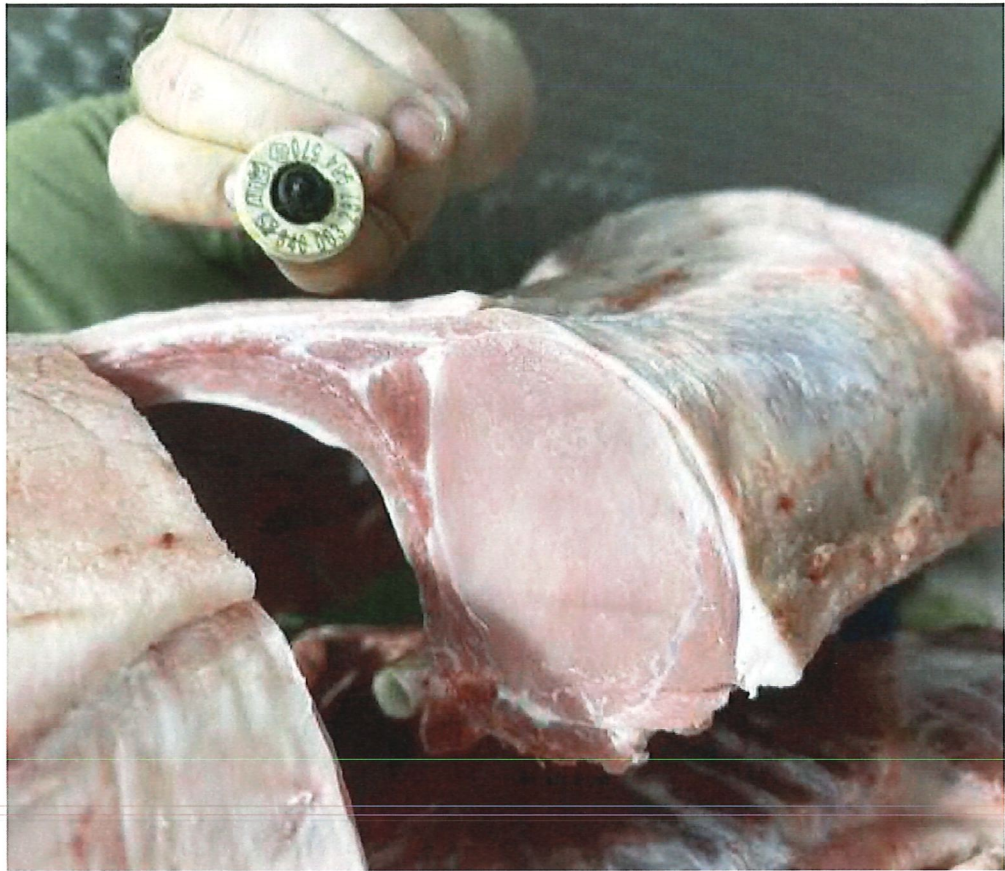


RESULTS

COCHISE CARCASS HOG EVALUATION 2025

NAME	TAG	LIVE WEIGHT	HOT CARCASS WEIGHT	Length	Belly Wall	Color Score	MARBLING SCORE	first rib	last rib	last lumbar	AVERAGE FAT THICKNESS	FAT DEPTH	RIBEYE AREA	PERCENT LEAN PORK*		LIVE PLACING	Total Value	Carcass Placing
Rhett Wade	200	285	189	29.5	1.7	3	3	1.2	0.9	0.4	0.8	0.5	10.5	65.54	0.66		\$104.06	1
Liam Lentz	74	265	181	31	1.5	2	2	1.1	0.7	0.4	0.7	0.4	8.9	63.29	0.63		\$96.23	2
Tanner Jensen	72	251	160	29.5	1.2	2	1	1.3	0.8	0.7	0.9	0.5	8.2	61.11	0.61		\$82.13	3
Jazmin Glover	62	281	195	32	1	1	1	0.7	0.4	0.3	0.5	0.2	10.6	68.91	0.69		\$87.88	4
Rece Lentz	570	251	172	30	1.5	2	1	0.5	0.4	0.3	0.4	0.2	9.2	66.33	0.66		\$83.83	5
											0.0			51.95	0.52		\$0.00	
											0.0			51.95	0.52			
											0.0			51.95				
											0.0			51.95				
Primary Qualifications		230rec - 300max	160 min 222 max			>1 <6	none	≤1.1			≥0.40	≥.30 ≤.80	≥58.9 in ²	≥55%				





LAMB CARCASS GRADING AND EVALUATION



MATURITY

- Definition:
 - Maturity is an estimation of the chronological age of the live lamb and is determined by assessing the physiological age of the bone and muscle characteristics
 - Extreme Range : A-B
 - Normal Range: A-B

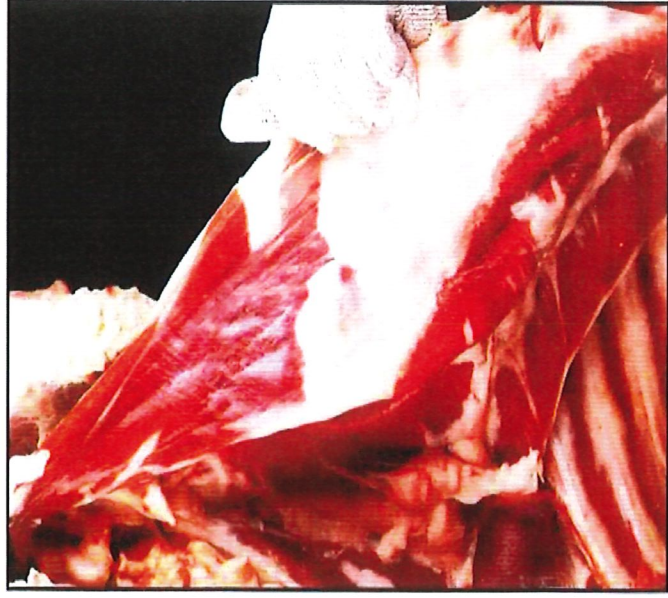
If break joints are red in color the carcass can be considered in Maturity A. If the break joints are lighter in color considered the carcass in B Maturity.

The Official United States Standards for Grades of Lamb, Yearling Mutton, and Mutton Carcasses recognize nine degrees of flank fat streakings.

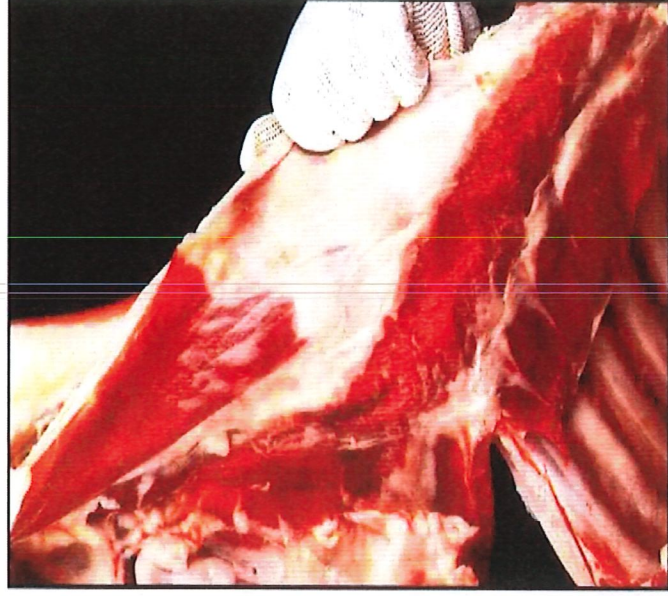
These nine degrees, in order of descending amount, are:

- Abundant
- Moderately Abundant
- Slightly Abundant
- Moderate
- Modest
- Small
- Slight
- Traces
- Practically Devoid

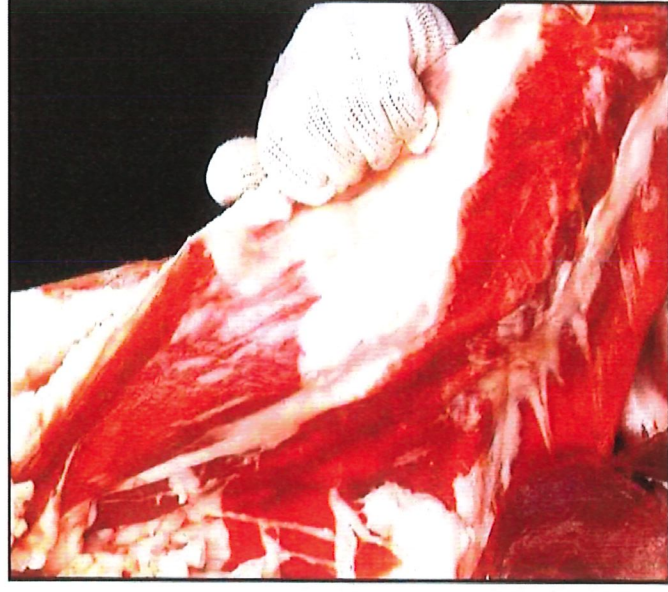
The evaluation of flank fat streakings is an overall composite of the primary and secondary flank fat streakings from both flanks (left and right sides).



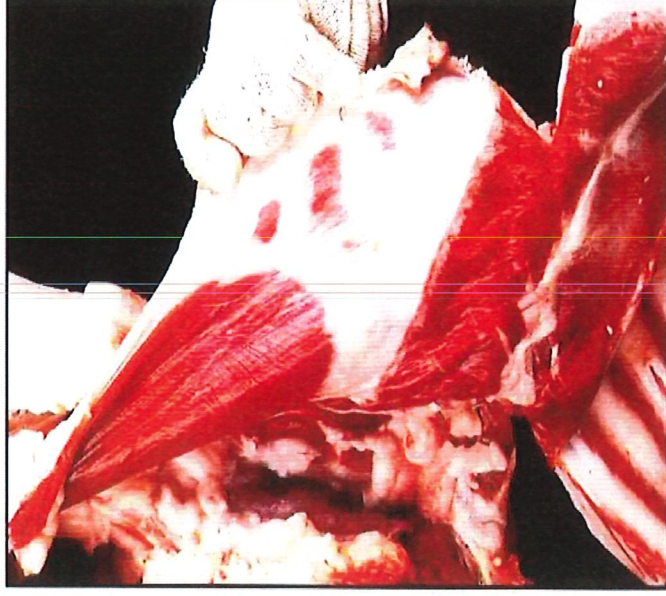
Small



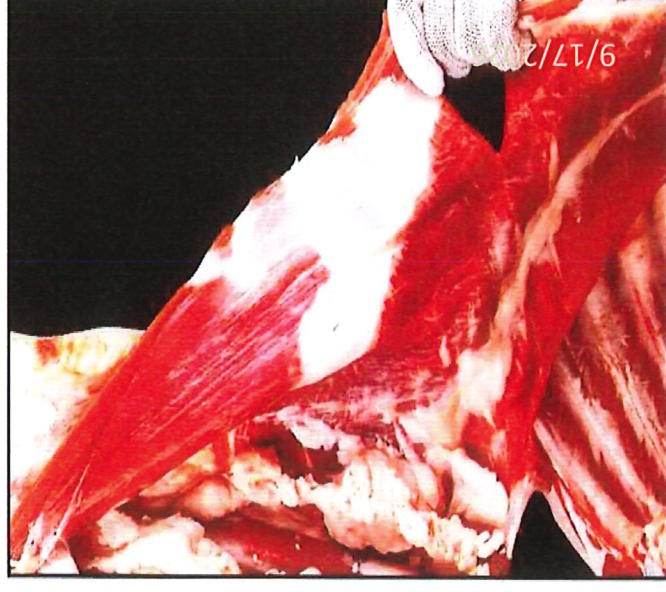
Modest



Moderate



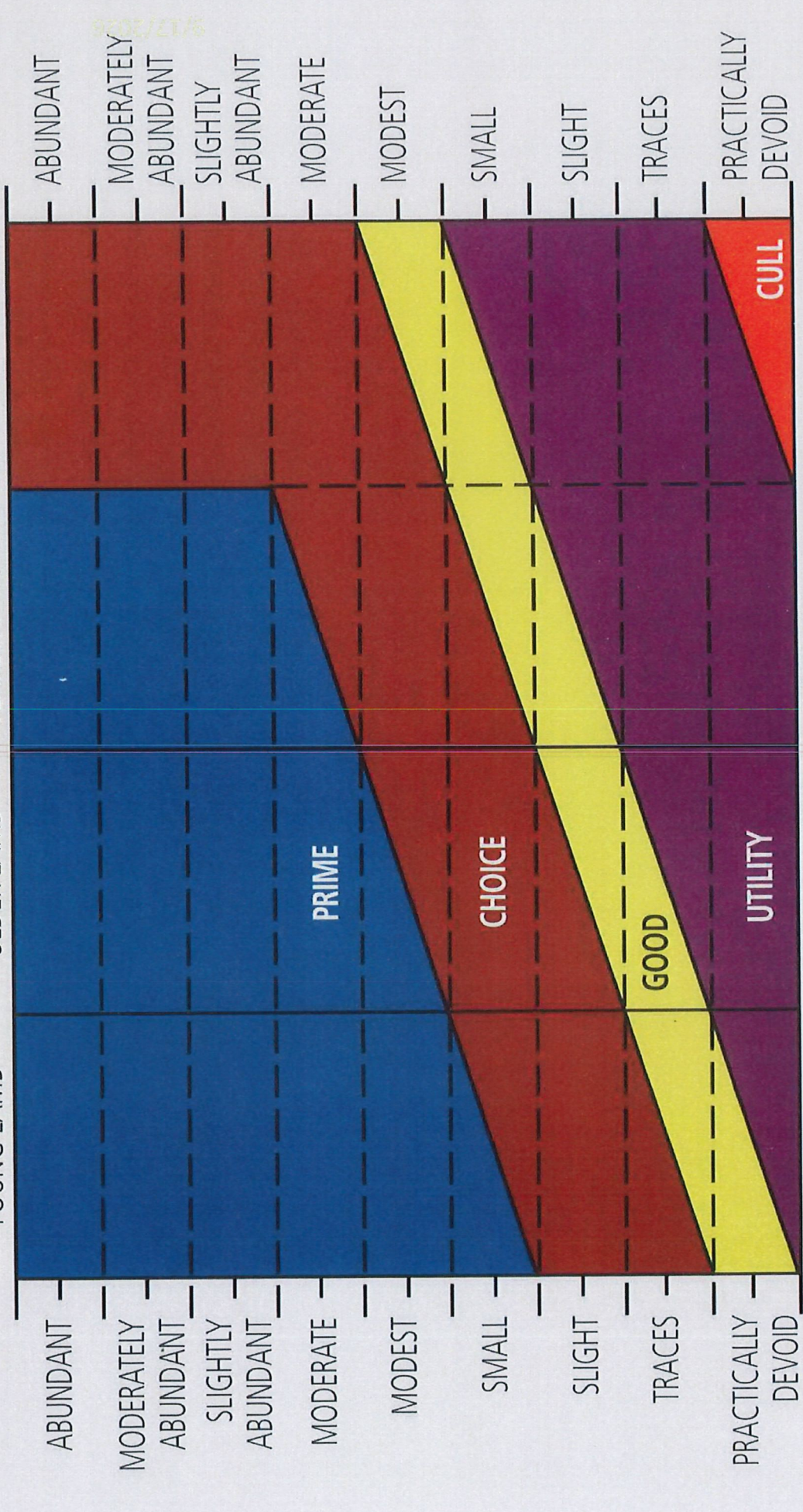
Traces

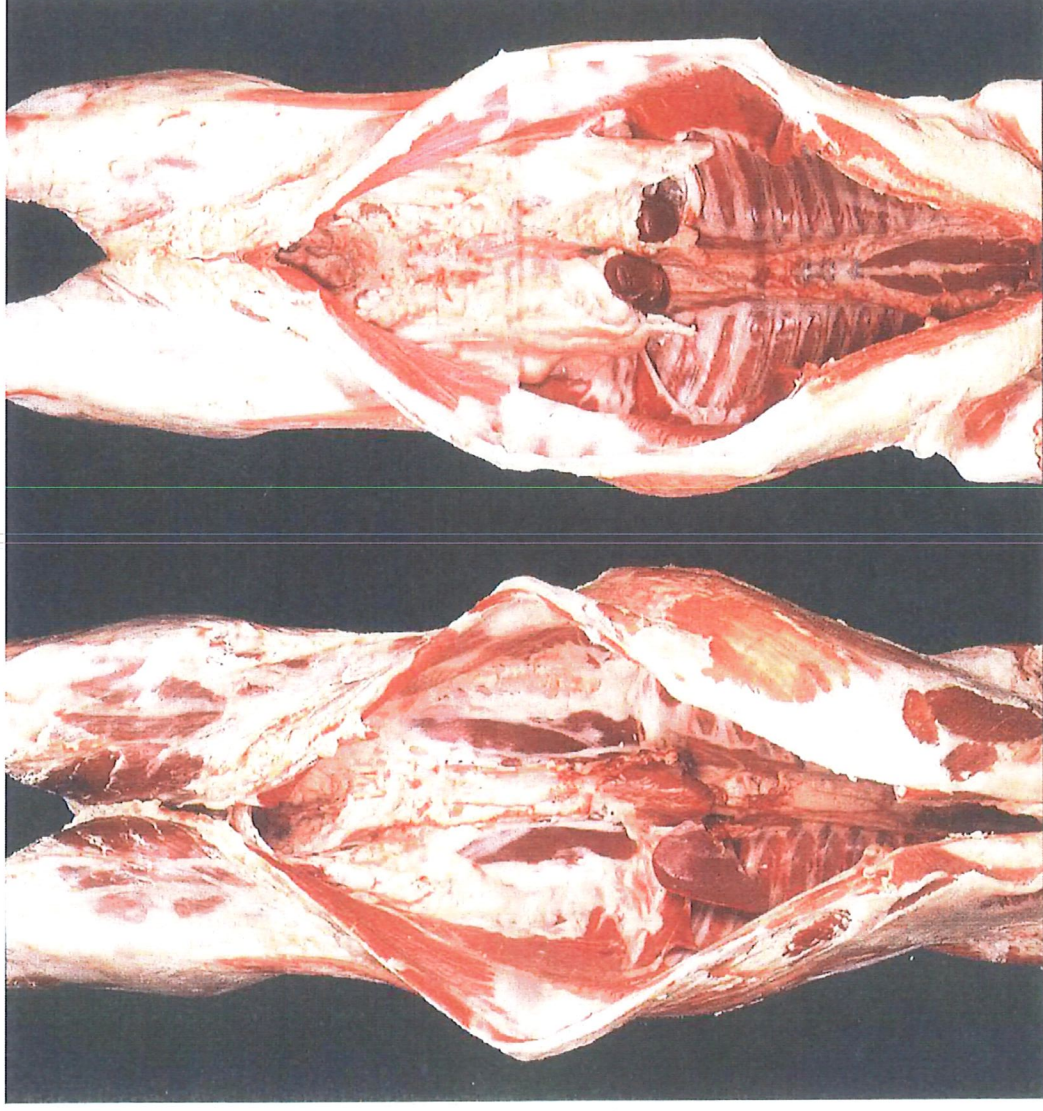


Slight

RELATIONSHIP BETWEEN FLANK FAT STREAKINGS, MATURITY AND QUALITY

<u>DEGREES OF</u>		<u>FLANK</u>		<u>FAT</u>		<u>STREAKINGS</u>	
ABUNDANT	MODERATELY ABUNDANT	SLIGHTLY ABUNDANT	MODERATE	MODEST	SMALL	SLIGHT	TRACES
ABUNDANT	MODERATELY ABUNDANT	SLIGHTLY ABUNDANT	MODERATE	MODEST	SMALL	SLIGHT	TRACES



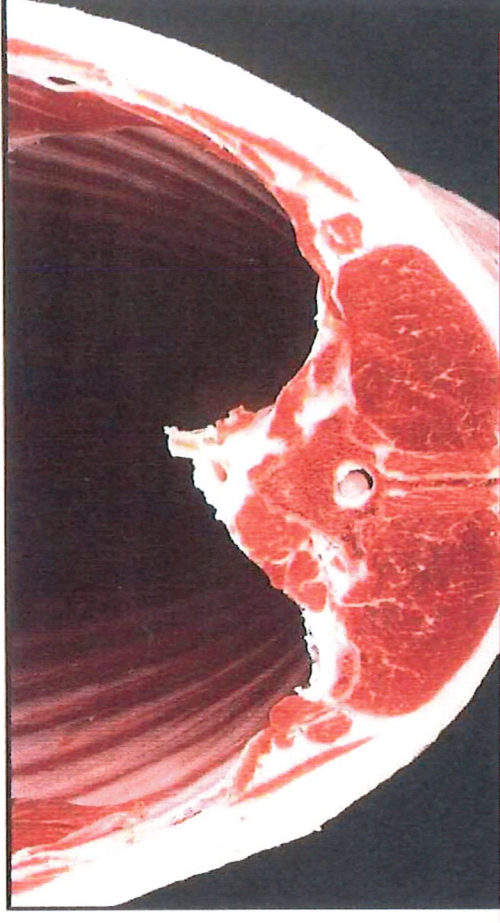
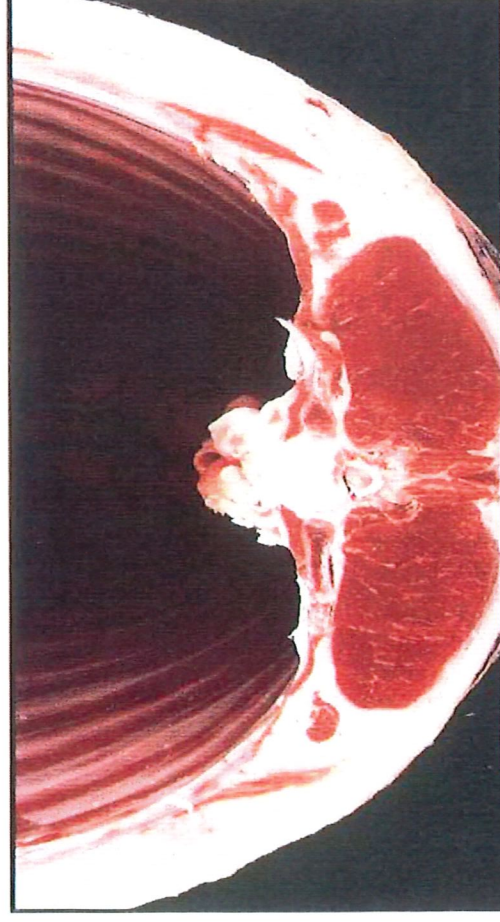
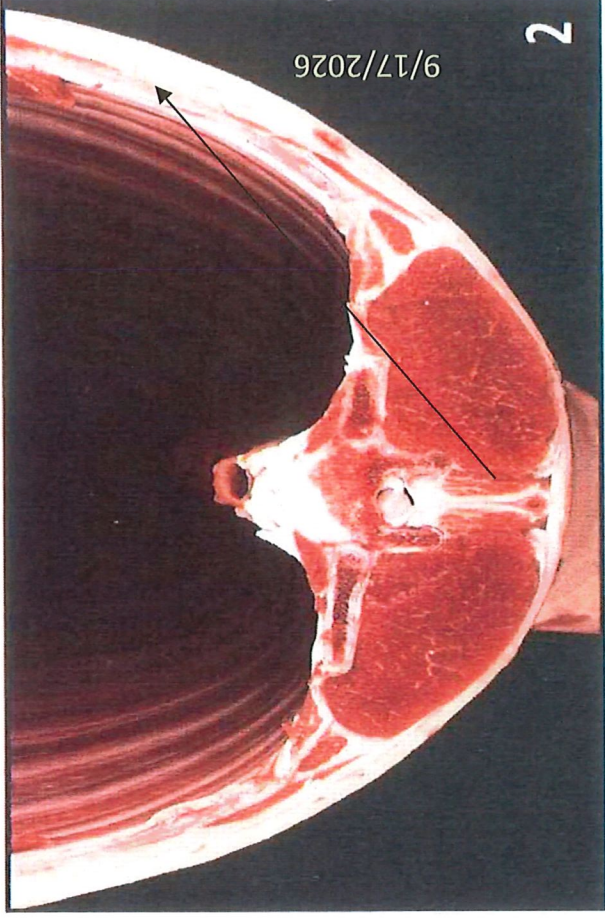
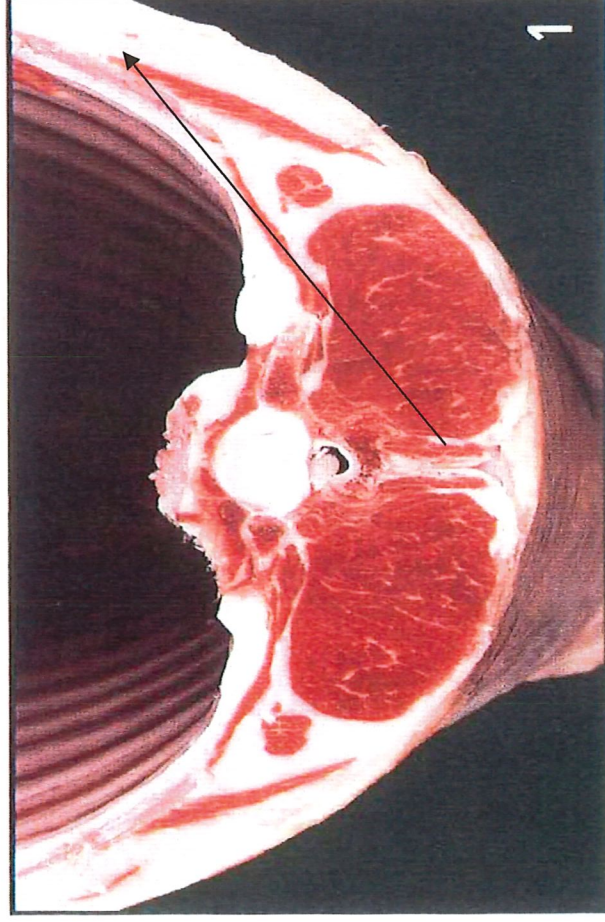


**Eligible for
Grading**

**Ineligible for
Grading**

Lamb carcasses should possess 1% kidney fat or less; therefore, in judging lamb carcasses, a carcass with more than 1% should be discounted. 

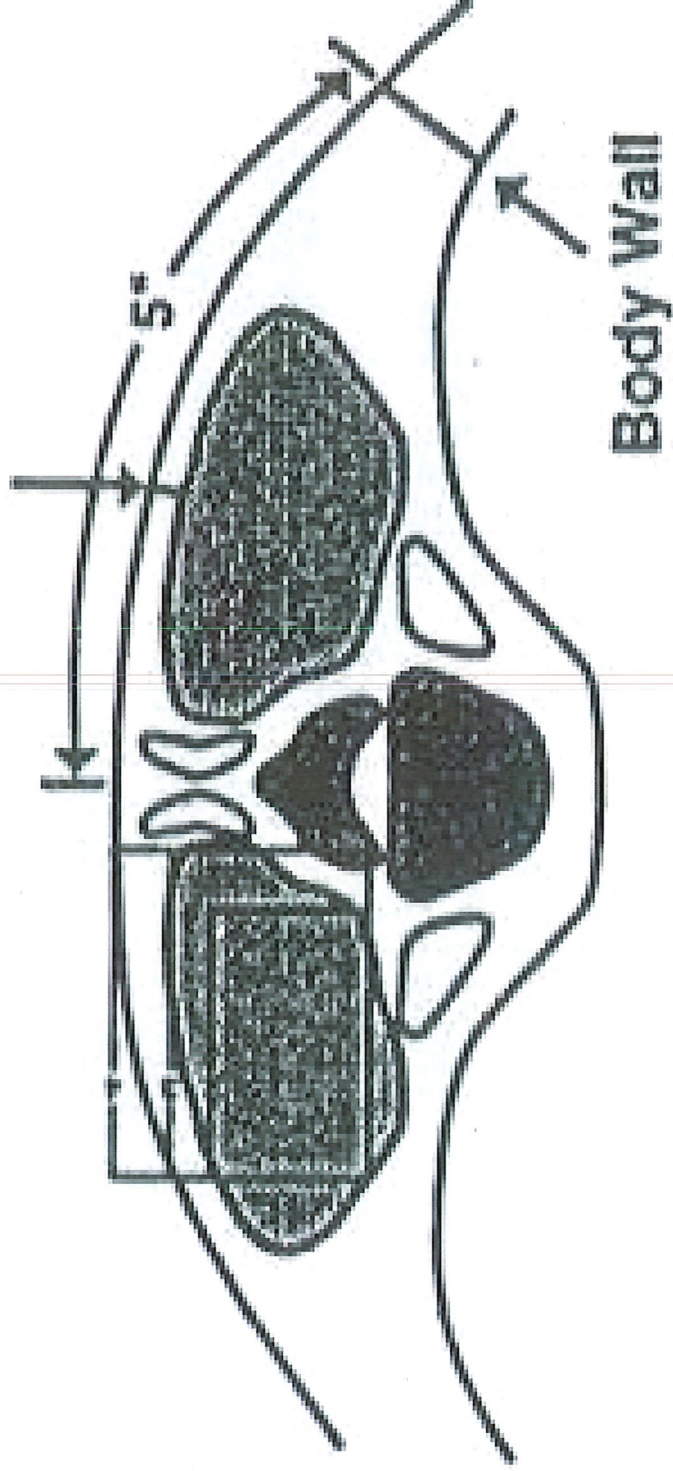
Belly wall thickness is very important to consider in placing lamb carcasses. Thinner less waste.

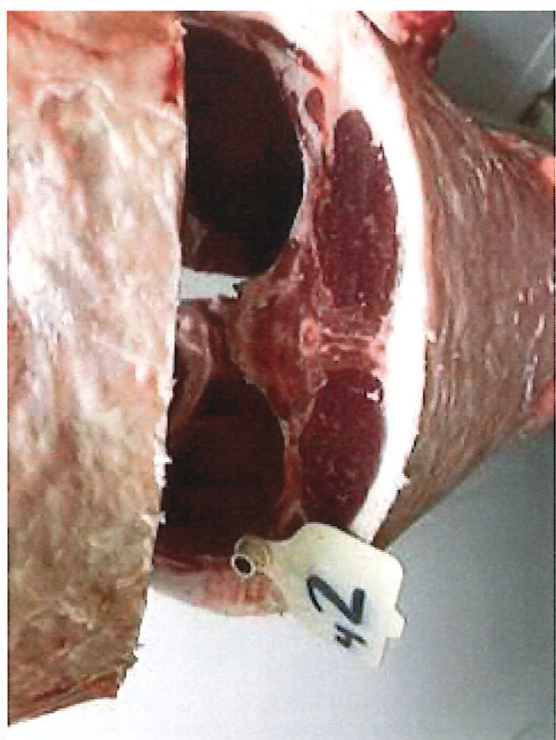
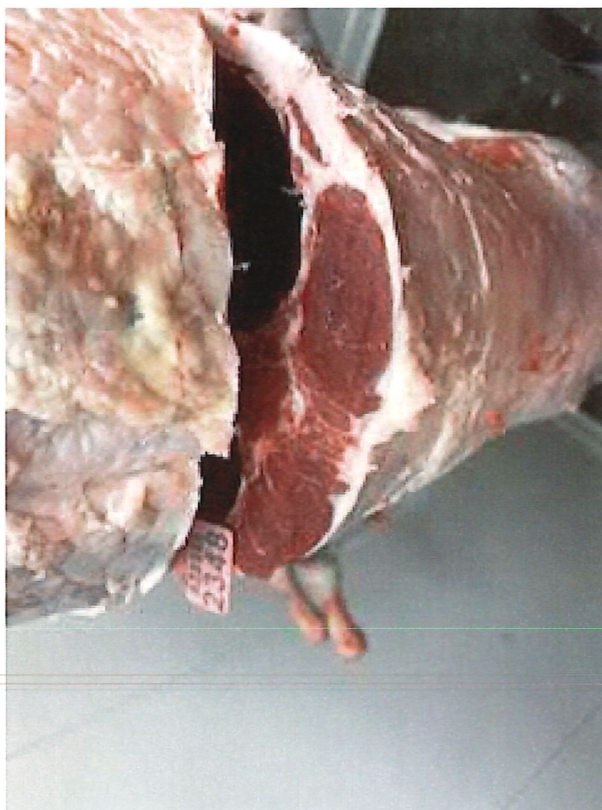
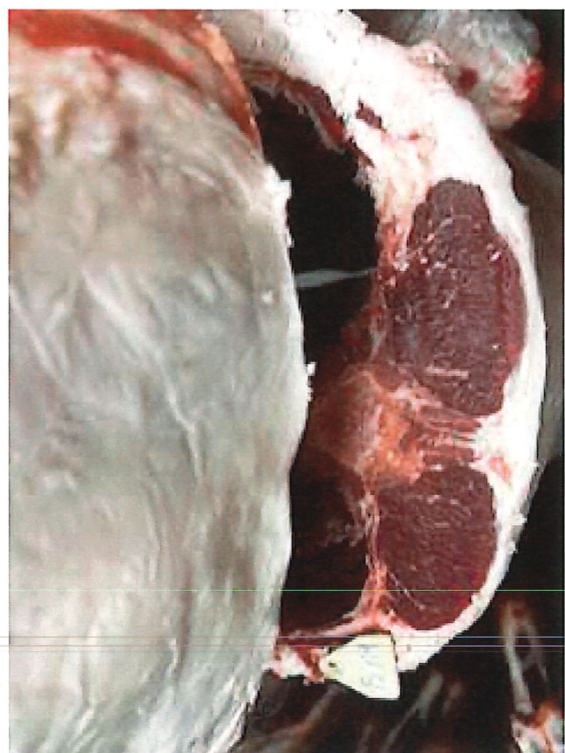


As the belly wall thickness increases, the amount to waste from the carcass increases.

Formula

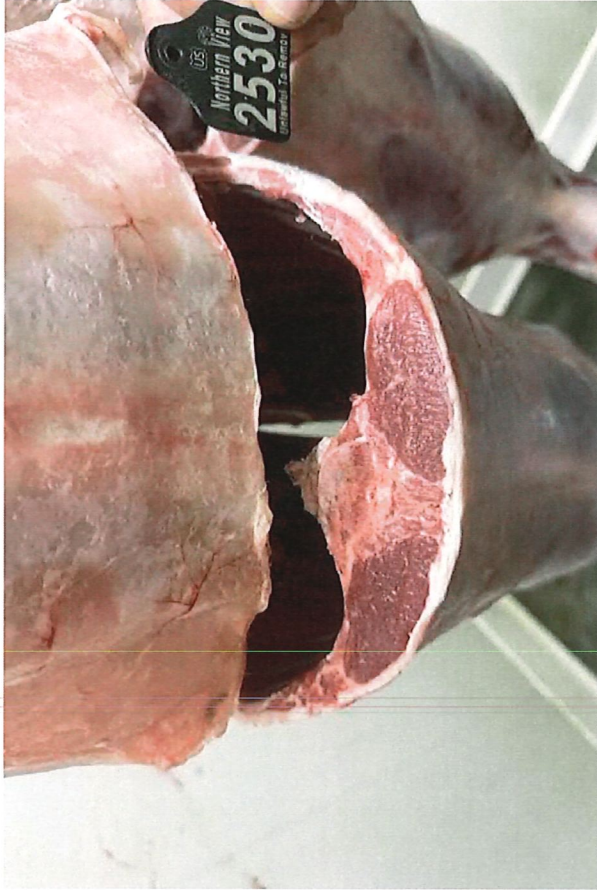
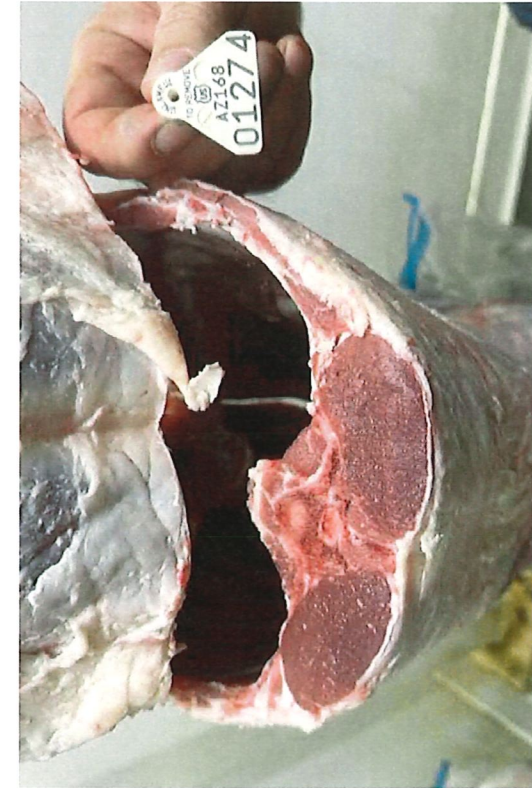
- $=49.936-(0.0848*HCW)-(4.376*AFT)-(3.53*BWT)+(2.456*REA)$



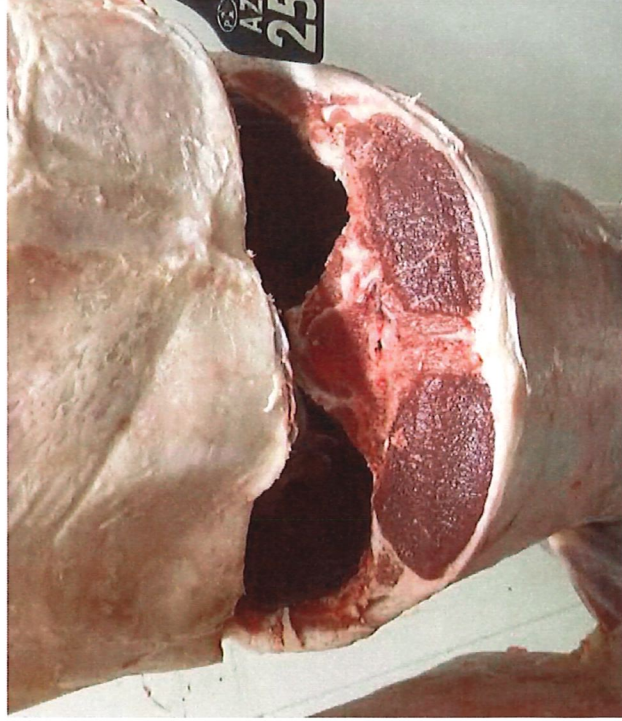


Results

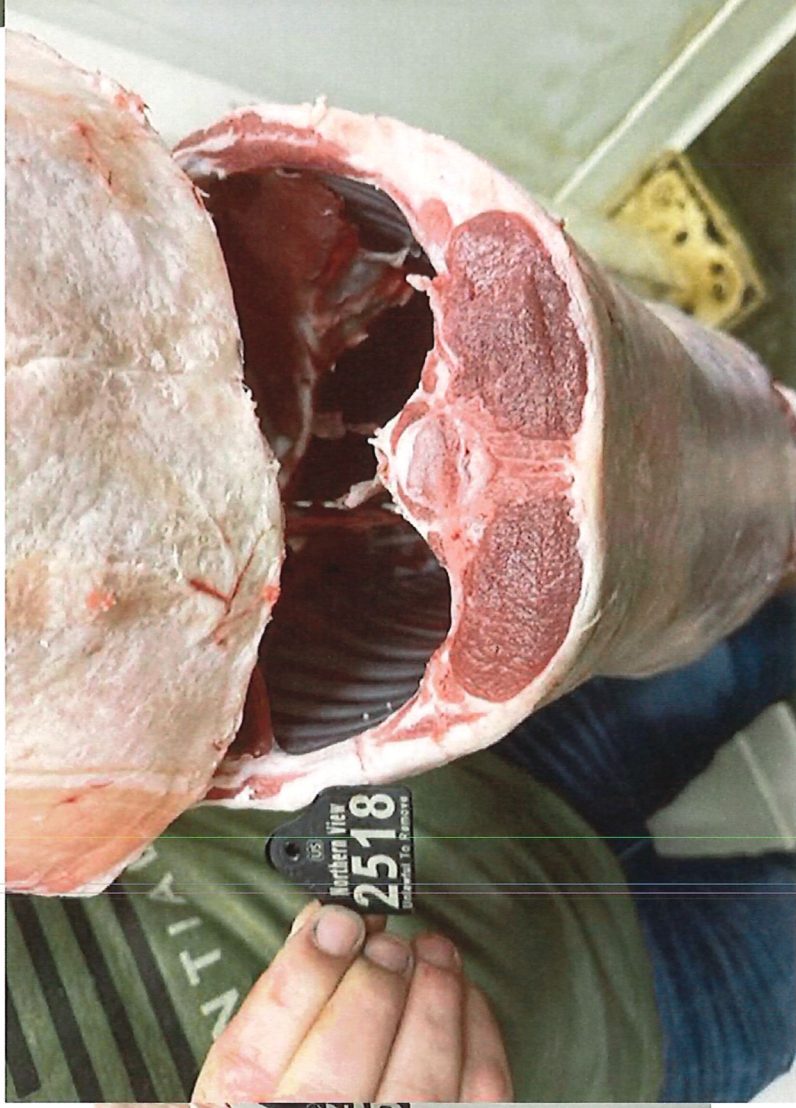
COCHISE CARCASS LAMB EVALUATION 2026													
NAME	TAG	LIVE WEIGHT	HOT CARCASS WEIGHT	FLANK STREAKING	QUALITY GRADE	ADJUSTED FAT THICKNESS	YIELD GRADE	BODY WALL THICKNESS	RIBEYE AREA	%KP	BTRC*	Total Value	CARCASS PLACING
EASTON ZAMUDIO	2518	118	74	AB	PRIME	0.3	3.4	0.8	3.5	1	48.12	\$7.57	1
JAZMYN GLOVER	2517	106	62	MD	PRIME	0.2	2.4	0.6	2.8	1	48.56	\$7.57	2
BRYLEIGH SLOAN	2530	92	53	MD	PRIME	0.5	5.4	0.5	2.4	1	47.38	\$7.57	3
LILY TERRY	1274	84	48	MO	PRIME	0.5	5.4	0.4	3.2	1	50.12	\$7.57	4



Reserve



Champion

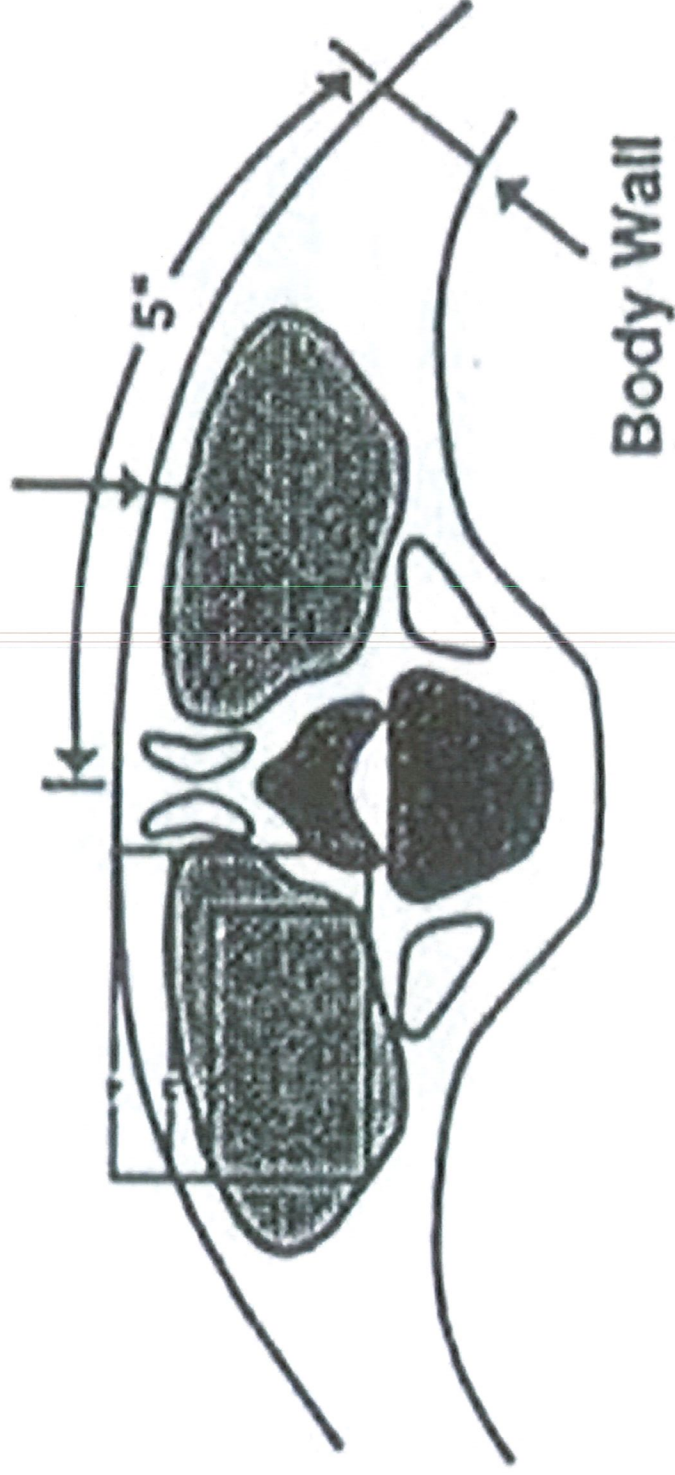


GOAT CARCASS GRADING AND EVALUATION



Formula

- $=60.6933-(0.23174*HCW)+(1.96202*REA)-(1.57832*BWT)$



Results

COCHISE CARCASS GOAT EVALUATION 2026												
NAME	CLUB	TAG	LIVE WEIGHT	HOT CARCASS WEIGHT	ADJ FAT THICKNESS	BODY WALL THICKNESS	RIBEYE AREA	%SBTP*		Total Value	LIVE PLACING	CARCASS PLACING
Kylee Gilbreth		5117	86	52	0.1	0.6	2.8	53.19	53%	165.95		
Anne Zuck		963	86	51	0.15	0.5	2.7	53.38	53%	163.35		
Saidee Humphreys		222	89	51	0.2	0.6	2.5	52.83	53%	158.67		
Allison Brown		219	89	54	0.2	0.9	2	50.68	51%	158.21		
Brian Two Moons Jr.		300	73	43	0.1	0.6	1.9	53.51	54%	138.05		
Jacob Green		309	67	40	0.1	0.6	2.2	54.79	55%	131.50		
Isabelle Urquijo		284	69	39	0.15	0.5	2.3	55.38	55%	129.59		

