Kalamazoo County 4-H
Carcass Project Guidelines

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Project Social Media: N/A

Project Objectives & Life Skills*

- The goal of the carcass project is to find the carcass that provides the highest quality meat for market sales.
- Head
    - Record Keeping
    - Goal Setting
    - Decision Making
    - Planning and Organizing
- Heart
    - Communication
    - Nurturing Relationships
    - Social Skills
    - Concern for Others
- Hands
    - Responsible Citizenship
    - Marketable Skills
    - Self-motivation
    - Leadership
- Health
    - Disease prevention
    - Self-responsibility
    - Personal Safety
    - Healthy Lifestyle Choices

note these life skills are just some examples of what 4-H members will learn in this project

Carcass Project

Guidelines:
- This program is open to all members in the beef, sheep, goat and swine projects.
- All animals must follow the tagging/ID requirements as those for live judging.
- One (1) carcass animal per species may be entered by each member.
- Members must list carcass class (Section A of each species) in the fair entry database no later than June 15th.
- No day of show entries will be accepted.
- Every participant is required to write a thank you note to Pease packing which is due on or before the second day of the contest prior to the announcement of the winner.
- As of 2023, all carcass animals will be allowed to go to auction unless disqualified during judging.
- Animals entered in the carcass class are not required to be clipped or trained. However, lambs must be slick-shorn and hogs must be free of caked on mud and/or manure.
- Each 4-H member participating in the carcass class will be required to take a written and/or oral educational evaluation associated with their respective species.
    - This evaluation will be given during one of the days of the carcass competition.
    - One winner in each species will receive an award at the fair.
    - If a member wishes to, he or she may also take the comprehensive test covering all species to be considered for Overall Winner.
    - Any 4-H member not enrolled in the carcass project may also choose to take the comprehensive educational evaluations to be considered for the overall award.
    - One overall winner will receive an award at the fair.
- Carcass animals entered in rate of gain must be weighed in by the deadline for that species.
- Kalamazoo County Fair, the Kalamazoo County 4-H program, and the cooperating packer will not be liable for any loss to the exhibitor including condemnation of the carcass.

Requirements

- Participants are required to write a thank you letter to Pease Packing which is due on or before the second day of the contest prior to the announcement of winners.
- All carcass class participants must also show at least one live animal of the same species as the carcass class animal, at the current year's fair. Exceptions may be made for those members whose animals may cause safety problems at the fair. Members must consult with both live animal and carcass superintendent.
- Mandatory attendance on BOTH designated days of the carcass competition is required or the 4-H member will be disqualified. Dates will be published in the 4-H newsletter each year.
- Participants must attend a minimum of two carcass project meetings throughout the year to participate in the carcass competition.

Beef Carcass Project

Department 4

- All Beef entries will be weighed in no later than the 1st day of the contest.
- Entries must be either a steer or heifer. Any cattle found to be stags or cryptorchids will be disqualified.
- ALL live project requirements must be met.
- The hot carcass weight must be 550 to 950 pounds.
- Fat thickness must be 0.20 inches or more, as measured between the 12th and 13th rib.
- The Rib Eye Area (REA) must be 11.0 square inches or more. If the REA is less than 11.0 square inches but Quality Grade is Choice or higher, there will be a discount, but not a disqualification.
- USDA Yield Grades over 4.5 will be disqualified.
- USDA maturities over A100 will be disqualified.
- Any animal over 30 months of age will be disqualified.
- Minimum USDA Quality Grade requirement is Select00.
- Minimum USDA marbling requirement is Slight00.
- "Dark Cutters," if severe enough, will be disqualified. (Severe dark-cutting is defined as that sufficient to result in at least one full-grade reduction in the USDA quality grade.)
- Any market steer or heifer found to be unsound or to have any blemish that might affect the desirability of the carcass shall be disqualified.

Dairy Steer Carcass Project

Department 4

- All Dairy Steer entries will be weighed in no later than the 1st day of the contest.
- Any cattle found to be stags or cryptorchids will be disqualified.
- ALL live project requirements must be met.
- Hot carcass weight must be 550 to 1100 pounds.
- Fat thickness must be 0.20 inches or more, as measured between the 12th and 13th rib.
- The Rib Eye Area must be 11.0 square inches or more.
- USDA Yield Grades over 4.5 will be disqualified.
- USDA maturities over A100 will be disqualified.
- Any animal over 30 months of age will be disqualified.
- Minimum USDA Quality Grade requirement is Select00.
- Minimum USDA marbling requirement is Slight00.
- "Dark Cutters," if severe enough, will be disqualified. (Severe dark-cutting is defined as that sufficient to result in at least one full-grade reduction in the USDA quality grade.)
- Any dairy steer found to be unsound or to have any blemish that might affect the desirability of the carcass shall be disqualified.

Lamb and Goat Carcass Project

Lamb–Department 6

Goat–Department 8

- Goats will follow lamb requirements
- All lambs and goats will be weighed and identified no later than the first day of the contest.
- Entries must be either ewes or wethers. Any lambs found to be rams, short scrotum, or cryptorchid will be disqualified.
- All lambs must weigh a minimum of 85 pounds.
- All goats must weigh a minimum of 45 pounds.
- Any market ewe or wether found to be unsound or to have any blemish that might affect the desirability of the carcass shall be disqualified.
- Fat thickness will be measured at the 12th rib and adjusted where warranted.

Lamb carcasses will be judged according to the following formula:

Hot Carcass Weight (lb.)	Base Rib-eye Area (Sq. In.)	Adjusted Fat Thickness Range (inches)
Less than 50	1.8	0.1-0.25
50-54.9	1.9	0.1-0.275
55-59.9	2.0	0.1-0.30
60-64.9	2.1	0.1-0.325
65-69.9	2.2	0.1-0.35
70-74.9	2.3	0.1-0.375
75 or more	2.4 + 0.1 per 5 lb. Hot Carcass weight (HCW) over 75 lb.	0.1-0.40

- A carcass will be disqualified for any of the following:
  - Rib-eye area less than 1.8 inches
  - Adj. fat thickness below 0.1 inch
  - Quality grade below Low Choice (10)
- Rib-eye area (REA) base score = 40 points. A carcass will receive +1 point for each 0.05 square inch above base REA or -1 point for each 0.05 square inch below base REA.
- Yield grade base score = 50 points. A carcass will receive +1 point for each 0.1 grade below the base yield of 2.8 or -2 points for each 0.1 grade above a 2.8 base yield grade.
- 10 points will be awarded if the fat thickness falls within the above fat thickness range based on the HCW. An additional 5 points will be awarded if the fat thickness is on or between 0.15-0.20 inches. -5 points will be awarded to carcasses below 0.15 inches.
- Leg score base will be CH- (12.) A carcass will receive +2 points for every 1/3 leg score above the base and -3 points for every 1/3 below the base.
- The ranking will be determined by the total accumulated points for rib-eye area, yield grade, fat thickness, and leg score. Ties will be broken by Quality Grade. Additional ties will be broken by rib-eye area, yield grade, and leg score, in that order.

Swine Carcass Project

Department 10

- All entries must be barrows or gilts.
- All swine entries will be weighed no later than the 1st day of the contest.
- Only barrows or gilts weighing 200 pounds or more are eligible.
- All entries will be weighed on the first day of the contest to determine live weight eligibility and identified by ear tag listed on the 4-H Swine Registration form on file.
- Any hogs found to be boars or cryptorchids will be disqualified.
- Any market barrow or gilt found to be unsound or to have any blemish which might affect the desirability of the carcass shall be disqualified.
- Carcasses will be measured at the 10th rib for Loin Eye Area (LEA). Any LEA measuring less than 5.0 square inches will result in disqualification.
- Carcasses will be measured for fat depth, which will be adjusted where warranted. Adjusted back-fat must be no less than 0.3 inches and no more than 1.1 inches. Any measurements outside this range will result in disqualification. If animals are measured live for back-fat (BF), adjusted BF must be no less than 0.5 inches and no more than 1.1 inches.
- The final placing will be based on percent muscle.
- Carcasses will be evaluated and ranked using the formula below.

Percentage of Muscle Formula

$$\% \text{ muscle} = \frac{(3.95 + (.308 \times \text{live weight}) - (16.44 \times \text{10th rib fat depth in inches}) + (4.693 \times \text{10th rib LEA in sq. in.}) \times 100}{\text{Live weight} \times .74}$$