

Guidelines for the Tennessee State 4-H Livestock Judging Contest

This fact sheet has been prepared for leaders and coaches of 4-H livestock judging teams. Its purpose is to describe the guidelines for classes that will be judged during the Tennessee State 4-H Livestock Judging Contest.

The Tennessee 4-H Livestock Judging Contest encourages...

- 4-Hers to learn modern livestock evaluation methods.
- 4-Hers to practice decision making and communication skills.
- 4-Hers to select livestock appropriate for a defined production purpose.

Class Divisions at the Tennessee Contest

The Tennessee State 4-H Livestock Judging Contest, as near as possible, will consist of beef, swine, goat and sheep classes, and contestants will compete in three divisions: placing classes (breeding and market), oral reasons, and questions.

Class Divisions and Point Totals for the Tennessee 4-H Livestock Judging Contest

I. *Placing Classes (400 points per 4-Her):*

Eight classes worth 50 points each will be presented. Two market classes (depending on availability) will be presented, and breeding classes will comprise the remaining classes.

II. *Oral Reasons (200 points per 4-Her):*

Four sets of oral reasons are required of contestants: Depending on the suitability of the animals in the classes, there will probably be one set of reasons on cattle, one on sheep, one on swine and one on goats. This could vary and a final decision will be made the morning of the contest.

III *Questions (50 points per 4-Her):*

Two sets of questions (5 questions per set) worth 25 points per set will be asked verbally to all contestants. Each individual question will count 5 points.

Total Points per 4-Her: 650 points

Choice of specific classes to be used for questions and reasons will be made on contest day by the livestock committee. Each placing class will have four animals, and contestants should rank the livestock from best to poorest considering all information provided about the class.

Livestock will be numbered 1, 2, 3, or 4 within a class. The animals may be presented loose in pens, haltered and shown by a volunteer, or in a rack (market lambs).

One class will have a set of performance data and a production scenario. If not, contestants will

necessarily need to assume that all animals within a given class are of equal age and place them using only visual appraisal. For those classes with evaluation data and scenarios presented, the following class descriptions may be helpful for leaders and coaches.

Description of Breeding Classes

Each breeding class, purebred or crossbred individuals, will have four animals presented. Breeding classes may consist of breeding females (heifers, gilts, does or ewes). In addition to the visual differences that exist between animals, contestants may have two additional sources of information to consider when making their selection decisions. These include the class scenario and evaluation (or performance) record.

Scenarios Defined for Breeding Classes

If possible, each breeding class will include a scenario. A scenario is intended to help contestants determine evaluation priorities. Contestants should read the scenario before judging each class, look for the important factors, and base their decisions on the need of the situation.

In beef, swine, and sheep breeding classes, a scenario may be defined using the following three factors:

- 1) **Production Environment:** “Will selected animals need to perform in a high or low stress environment?”

Examples: High Stress Environment

low feed input
adverse climate
rough grazing terrain
low labor input
confinement on cement

Low Stress Environment

plentiful feed
consistent feed available year round
moderate climate
assistance at birthing available
pasture raised

- 2) **Performance Needs:** “What types of performance does the breeder need from the selected animals?”

Examples: Maternal Performance

fleshing ability
milking ability
adaptability to the environment
early sexual maturity
maternal birthing ease

Paternal Performance

rapid growth
lean composition
muscle production
acceptable birthweight

In general, maternal traits are those in which the dam in a crossbreeding program should excel. Paternal traits contribute to the sire side of crossbreeding systems, especially terminal crosses. Certainly, functional traits (such as minimum condition, leg, mouth, mammary soundness, etc.) are essential to consider in both cases.

3) **Marketing Goals:**

Will the breeder sell stock or use the animals to generate stock replacements?

Will the selected individuals produce offspring for commercial production?

If so, are the offspring sold at weaning or retained through the finishing phase?

Will the selected individuals produce offspring that need to emphasize specific traits (i.e. carcass)?

Are the offspring sold on a grade and yield or lean value basis?

Scenarios may be simple or detailed.

“Rank these gilts as they should be kept in a herd that sells boars to terminal crossbreeders. All pigs are raised in total confinement.” – In this case, stock sales are the market goal, paternal traits are the primary production needs of the customer, and the environment is stressful on the soundness of the pig.

A more detailed scenario may read:

“Rank these heifers for use as replacements in a typical cow-calf crossbreeding program. All male offspring and cull females are to be sold at weaning as feeders.” – In this case, the production needs are primarily maternal, the market goals are commercial (the sale of feeders), and the environment is basically low stress because feed resources are usually plentiful enough in operations to support extra growth and maternal performance.

Breeding Beef Classes

Records: These evaluation records are commonly available from most major breed associations. They will be presented with the classes. Typical data will include the following:

Birth Date	Birth Weight EPD*	Weaning Weight EPD*	Yearling Weight EPD
	Maternal Milk EPD*		

*EPD stands for Expected Progeny Difference. For the above listed traits, it is expressed in pounds of calf and is a measure of what the heifer or bull will contribute genetically to their offspring.

If EPDs are not available, either no data or actual data and within contemporary group ratios will be presented instead.

Scenario Examples:

- 1) Rank the heifers as they should be kept as replacements in an operation that profits from the sale of stock to owners of rotational crossbreeding programs. A few progeny are sold to other stock producers and you produce your own replacements.
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Breeding Swine Classes

Records: These evaluation records are commonly available and promoted through application of the STAGES program by major swine breed associations. They will be presented with the classes. Typical data will include the following:

Birth Date, Number Born, 21-day Litter, Days to 250, Last Rib, Alive EPD*,
WeightEPD*, pounds EPD*, Fat EPD*

*EPD stands for Expected Progeny Difference.

In addition to incorporation and use of EPDs, potentially three different indexes may also be included in the performance data. These indexes include the SPI (sow productivity index), the MLI (maternal line index), and the TSI (terminal sire index). All indexes are reported as ratios where the theoretical average is 100. Larger values are usually considered more desirable and lower values (especially those below 100) are considered less desirable.

Items used to calculate the various indexes include the following:

Sow Productivity Index (SPI): number born alive and 21-day litter weight.

Maternal Line Index (MLI): number born alive, 21-day litter weights, and days to 250 lbs.

Terminal Sire Index (TSI): days to 250 lbs and last rib fat.

If EPDs are not available, there will either be no data presented or adjusted records and within contemporary group ratios will be presented instead.

Scenario Examples:

- 1) Rank the gilts as they should be kept in a herd that markets stock to terminal crossbreeding systems. Your customers operate farrow to finish systems and you both raise hogs in total confinement. You produce your own replacements.

Breeding Sheep Classes

Records: Evaluation records will be presented with the breeding sheep classes. EPDs are available and utilized by sheep breeds that have conducted across flock breed analyses. Typical EPD data will include the following:

% Lamb crop EPD* Maternal Milk EPD* 60-day weaning weight EPD*
120-day weight EPD* Milk and Growth EPD* Grease Fleece Weight EPD*

*EPD stands for Expected Progeny Difference.

Other data that may be used in the breeding sheep classes: within contemporary group ratios, maternal or growth indexes, type of birth, type of rearing, birth date.

If EPDs are not available, there will either be no data presented or adjusted records and within contemporary group ratios will be presented instead.

Scenario Examples:

- 1) Rank the ewes as they should be kept in a flock that provides stock to a commercial crossbreeding program (rotational or terminal may be specified). Feeder lambs are sold after weaning in the commercial operation, and wool sales contribute significantly (25%) to the commercial income.

Description of Market Placing Classes

Each of the market placing classes will have four animals of any breed, breed combination or breed cross. Live weights and average daily gains may be presented with the livestock. The officials are instructed to rank individuals in the class from first to fourth, as they would best meet the producer situation described for each class as follows:

Market Beef – Assume you produce and feed out your own market cattle to slaughter weight. Your goal is to raise fast growing efficient cattle that also appeal to a packer buyer. Rank the cattle on how they have met your goals.

Market Hogs – Assume you are a feeder to finish operator. Your goal is to raise fast growing, efficient hogs that appeal to a packer buyer. Rank these hogs on how they have met your goals.

Market Lambs – You are a farm flock producer. You feed out your own lambs. Your goal is to raise fast growing, efficient lambs that have packer appeal. Rank these lambs on how they have met your goals.

Market Goats – You are a farm herd producer. You feed out your own kids. Your goal is to raise fast growing, efficient kids that have packer appeal. Rank these kids on how they have met your goals.

Description of Oral Reasons

Four sets of oral reasons are to be given by each contestant. There will be a minimum of one set of reasons for specie and will be determined and announced by the officials before the contest. The specific classes chosen for reasons will be announced the day of the contest. However, at least one set of reasons will automatically be on a class of breeding beef that includes the use of performance information and a production scenario. 4-Hers should be trained and encouraged to take notes on reasons classes. They should bring a CLEAN notebook (no writing). Contestants may use notes they take during the contest to study, but they may NOT use them while actually delivering their oral reasons. A set of reasons should last no longer than 2 minutes, and the official, at his/her discretion, may ask the contestant questions concerning the class.

Each set of reasons will be scored from 0 to 50 points dependent upon the following factors:

1. Accuracy,
2. Organization of thoughts, completeness, and conciseness,
3. Manner of presentation (articulation, mannerisms, appearance).

Contestants are expected to dress neat and professionally. T-shirts and faded jeans, shorts, etc. should be discouraged.

Contestants are not expected to be professional speakers in order to score well, and no specific “style” of giving reasons will be preferred unless it contributes to accuracy, organization, and mannerisms. However, an organized format is often helpful to a 4-Her when giving reasons.

Description of Questions Sets

Two sets of questions will be answered by each contestant; question could come from either of the non-reason classes. If questions are asked on a breeding class, questions regarding the performance data pertinent to that class may also be asked. Each set of questions will have a maximum of 5 questions (5 points per question). Questions will be read to all contestants either directly after placing that class. Questions will be written to be answered with the number of a specific animal in the class, or with a “True” or “False” answer. Some example questions are as follows:

1. Which gilt showed the most size and scale?
2. True or False? Number 3 was a thicker made lamb than number 2.
3. Which ewe has the greatest genetic potential to transmit increased growth ability?
4. Which heifer, when mature, would be likely to have the greatest feed requirements?
5. Which market hog would “hang up” the leanest carcass?