WASHINGTON
FFA ASSOCIATION

Livestock Evaluation Career Development Event Handbook

Revised 2023

Purpose & Objectives

Purpose

Provide the opportunity to learn and apply livestock industry and production priorities through evaluation and selection of beef cattle, swine, sheep and meat goats.

Objectives

The objectives of the National FFA Livestock Evaluation Career Development Event is to:

- Measure students knowledge in the following categories:
- To make accurate observations of livestock.
- To determine the desirable traits in market and breeding livestock.
- To make logical decisions based on these observations.
- To discuss and to defend their decisions for their placing.
- To instill an understanding of desirable selection, production, management and marketing techniques for livestock.
- Understand and interpret the value of performance data based on industry standards.
- Develop the ability to select and market livestock that will satisfy consumer demands and provide increased economic returns to producers as well as meet the needs of the industry.
- Become proficient in communicating the terminology of the industry and the consumer.
- Provide an opportunity for participants to associate with professionals in the industry.
- Utilize current technology as it relates to the livestock industry.
- Develop employability skills for future agricultural career choices.

Event Rules

If there are any questions or issues, the State FFA Advisor will make the final decision.*

- Each team will be comprised of up to six members. The top four individual scores will be used to determine the total team score.
- It is highly recommended that participants wear FFA Official Dress for this event. Black jeans are acceptable.
- Participants will report to the event superintendent or designee for instructions at the time and place shown in the current year's team orientation packet.
- Any participant in possession of an electronic device in the event area is subject to disqualification.

Event Format

The Livestock Evaluation CDE consists of both individual and team components. The individual portions will include evaluation/placing classes, and oral reasons. The team activities will include 1-2 keep cull classes and questions.

Equipment

Participants must provide:

- Clean, free of notes clipboard
- Two sharpened No. 2 pencils

Team Activities

KEEP/CULL (50 POINTS EACH, 50-150 POINTS TOTAL)

There will be 1-3 selection classes that may be beef, swine, sheep or meat goats; each made up of eight breeding animals. Participants will be required to select the four best animals from the eight, using visual appraisal and performance data. Performance data will be provided. Production/performance data (including EPDs) may be used in the keep/cull classes of beef, swine, sheep or meat goats. Performance criteria, when used, shall be based on current industry standards.

KEEP/CULL QUESTIONS (50 POINTS)

Questions will be based off the keep/cull classes placed in the other portion of the team activities. The questions may or may not be a component of the team activity based on the number of keep/cull classes selected and/or the availability of officials to create the questions within the time constraints of the team activity portion of the event.

Individual Activities

LIVESTOCK EVALUATION/PLACING CLASSES (50 POINTS/CLASS, 350-400 POINTS TOTAL)

7-8 classes of four animals each will be placed using a computerized scorecard. Classes may be breeding or market animals from beef, swine, sheep, or meat goat species. At least one class will include the use of production/performance data.

ORAL REASONS (50 POINTS/CLASS, 150 POINTS TOTAL)

Three sets of oral reasons will be designated by the event superintendent at the beginning of the event. One set of reasons will be given on each species (beef, sheep, swine). Reasons will be given after all

classes have been placed. Participants will be provided paper to take notes on each reason class for preparation. Use of notes during the reason presentation is strongly discouraged.

Scoring

Activities	Individual Points	Team Points
Evaluation/Placing Classes	350-400	1400-1600
Oral Reason	150	600
Keep/Cull Team Activity		50-150
Questions Team Activity		0-50
Maximum Points	**500-550**	**2050-2400**

TIEBREAKERS

TEAM

Team tiebreakers will use the total of the four count scores.

1. Oral Reasons
2. Placing Classes
3. Keep/Cull Classes

INDIVIDUALS

1. Oral Reasons
2. Placing Classes

References

This list of references is not intended to be all-inclusive.

Other sources may be utilized and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.

- National FFA CDE Question and answers *FFA.org* past exams and team activities
- Beef Improvement Federation *www.beefimprovement.org* - resource center
- National Swine Registry *http://www.nationalswine.com/*
- Certified Pedigreed swine *http://cpsswine.com/*
- National Pork board *http://www.pork.org/*
- Gillispie, James R. Modern Livestock and Poultry Production most current edition. Albany, NY: Delmar Publishers, Inc. 2015.
- Instructional Material Services *https:www.myimsservices.com*
- Goat Handbook *www.texasgoat.com/Goat_Handbook/*
- *www.judgingconnection.com*
- *www.judging101.com*
- *www.livestockjudging.com*
- Cyber livestock judging *http://extension.usu.edu/cyberlivestock/htm/livestock-judging*
- Evaluating meat goats *https://www.four-h.purdue.edu/downloads/cde/meat%20goat%20selection2.pdf*
- *http://judgingpro.com/*
- Rayfield, John S, Smith, Kasee L, Park, Travis and Croom, D. Barry Principles of Agriculture, Food, and Natural Resources most current edition. Tinley Park, IL; Goodheart-Willcox Publisher, 2015

Animal Science Related Careers

- Agriculture teacher
- Extension agent
- Breed representative
- Nutritionist
- Sales and or marketing representative
- Producer
- Veterinarian
- Collegiate educator
- Researcher
- Attorney
- Agriculture policy professional
- Consultant
- Farm/ranch manager
- Herdsman
- Livestock auctioneer
- Geneticist
- Agricultural lender
- Livestock buyer
- Transportation logistics
- Livestock judging coach
- Commodity professional
- Commodity broker
- Animal science technician

AFNR Content Standards

Measurement Assessed	Where measured in event	Academic Content Standards Addressed
AS.01.01. Performance Indicator: Evaluate the development and implications of animal origin, domestication and distribution on production practices and the environment.		
AS.01.01.01.c. Evaluate the implications of animal adaptations on production practices and the environment.	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Exam	HS-LS4-3
AS.01.01.02.c. Predict trends and implications of future developments within different animal industries on production practices and the environment.	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Exam	HS-LS4-3
AS.01.02. Performance Indicator: Assess and select animal production methods for use in animal systems based upon their effectiveness and impacts.		
AS.01.02.01.c. Evaluate the effectiveness of different production methods and defend the use of selected methods using data and evidence.	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Exam Oral reasons	AFNR Career Cluster, Statement 1 AFNR Career Cluster – Animal Systems Pathway, Statement 3 STEM Career Cluster, Statement 1 Buying Goods and Services, Benchmarks: Grade 12, Statement 1 Buying Goods and Services, Benchmarks: Grade 12, Statement 3
AS.01.02.02.b. Calculate costs of marketing versus predicted increases in sales.	Team activity – marketing activity	AFNR Career Cluster, Statement 1 AFNR Career Cluster – Animal Systems Pathway, Statement 3 STEM Career Cluster, Statement 1 Buying Goods and Services, Benchmarks: Grade 12, Statement 1 Buying Goods and Services, Benchmarks: Grade 12, Statement 3
AS.01.02.02.c. Devise and evaluate marketing plans for an animal agriculture product or service.	Team activity – breeding activity	AFNR Career Cluster, Statement 1 AFNR Career Cluster – Animal Systems Pathway, Statement 3 STEM Career Cluster, Statement 1 Buying Goods and Services, Benchmarks: Grade 12, Statement 1 Buying Goods and Services, Benchmarks: Grade 12, Statement 3

AS.01.03. Performance Indicator: Analyze and apply laws and sustainable practices to animal agriculture from a global perspective.		
AS.01.03.01.c. Evaluate the impact of laws pertaining to animal agriculture (e.g., pros, cons, effect on individuals, effect on businesses, etc.) and assess the compliance of production practices with established regulations.	Exam	AFNR Career Cluster, Statement 2 AFNR Career Cluster – Animal Systems Pathway, Statement 1 STEM Career Cluster, Statement 1, 4 CCSS.ELA-Literacy.W.9-10.9b CCSS.ELA-Literacy.W.11-12.9b CCSS.ELA-Literacy.RI.9-10.1 CCSS.ELA-Literacy.RI.11-12.1 HS-ETS1-1
AS.02.01. Performance Indicator: Demonstrate management techniques that ensure animal welfare.		
AS.02.01.02.b. Analyze and document animal welfare procedures used to ensure safety and maintain low stress when moving and restraining animals.	Exam	HS-ETS1-2
AS.02.02. Performance Indicator: Analyze procedures to ensure that animal products are safe for consumption.		
AS.02.01.02.b. Analyze and document animal welfare procedures used to ensure safety and maintain low stress when moving and restraining animals.	Exam	HS-ETS1-2
AS.02.02.01.b. Utilize tools, technology and equipment to perform animal husbandry and welfare tasks.	Keep and cull classes	HS-ETS1-2
AS.02.02.01.c. Select, evaluate and defend the use of specific tools, technology or equipment used to perform animal husbandry and welfare tasks.	Livestock evaluation and placing Oral reasons	HS-ETS1-2
AS.02.02.02.b. Analyze consumer concerns with animal production practices relative to human health.	Team activity – marketing activity Exam	HS-ETS1-2

AS.03.01. Performance Indicator: Analyze the nutritional needs of animals.		
AS.03.01.01.c. Assess nutritional needs for an individual animal based on its growth stage and production system.	Exam	
AS.03.01.02.a. Differentiate between nutritional needs of animal species.	Exam	
AS.03.02 Performance Indicator: Analyze feed rations and assess if they meet the nutritional needs of animals.		
AS.03.02.01.a. Compare and contrast common types of feedstuffs and the roles they play in the diets of animals.	Exam	
AS.03.02.02.a. Examine the importance of a balanced ration for animals based on the animal's growth stage (e.g., maintenance, newborn, gestation, lactation, etc.).	Exam	
AS.04.01. Performance Indicator: Evaluate animals for breeding readiness and soundness.		
AS.04.01.01.c. Select breeding animals based on characteristics of the reproductive organs.	Team activity – breeding activity Team activity – marketing activity Oral reasons Livestock evaluation and placing Keep and cull classes Exam	
AS.04.01.02.c. Evaluate and select animals for reproductive readiness.	Team activity – breeding activity Team activity – marketing activity Oral reasons Livestock evaluation and placing Keep and cull classes Exam	CCSS.MATH.CONTENT.HSS.MD.A.3 HS-LS3-2 HS-LS3-3
AS.04.01.03.c. Treat or cull animals with reproductive problems.	Team activity – breeding activity Team activity – marketing activity Oral reasons Livestock evaluation and placing Keep and cull classes Exam	CCSS.MATH.CONTENT.HSS.MD.A.3 HS-LS3-2 HS-LS3-3

AS.04.02. Performance Indicator: Apply scientific principles to select and care for breeding animals.		
AS.04.02.01.c. Select and evaluate a breeding system based on the principles of genetics.	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Keep and cull classes Exam	CCSS.MATH.CONTENT.HSS.MD.A.3 HS-LS3-2 HS-LS3-3
AS.04.02.02.c. Select and evaluate breeding animals and determine the probability of a given trait in their offspring.	Team activity – breeding activity Team activity – marketing activity Oral reasons Livestock evaluation and placing Keep and cull classes Exam	CCSS.MATH.CONTENT.HSS.MD.A.3 HS-LS3-2 HS-LS3-3
AS.04.02.03.b. Analyze how DNA analysis can detect genetic defects in breeding stock	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Keep and cull classes Exam	CCSS.MATH.CONTENT.HSS.MD.A.3 HS-LS3-2 HS-LS3-3
AS.04.02.04.a. Identify and summarize different needs of breeding animals based on their growth stages (e.g., newborn, parturition, gestation, gestation lengths, etc.).	Exam	CCSS.MATH.CONTENT.HSS.MD.A.3 HS-LS3-2 HS-LS3-3
AS.04.03 Performance Indicator: Apply scientific principles to breed animals.		
AS.04.03.01.c. Select animal breeding methods based on reproductive and economic efficiency.	Team activity – breeding activity Livestock evaluation and placing Keep and cull classes	
AS.04.03.02.a. Analyze the materials, methods and processes of artificial insemination.	Team activity – breeding activity Livestock evaluation and placing Keep and cull classes	
AS.04.03.03.b. Analyze the processes of major reproductive management practices, including estrous synchronization, superovulation, flushing and embryo transfer.	Exam	
AS.04.03.04.c. Select and assess animal performance based on quantitative breeding values for specific characteristics.	Team activity – breeding activity Livestock evaluation and placing Keep and cull classes	

AS.05.01. Performance Indicator: Design animal housing, equipment and handling facilities for the major systems of animal production.		
AS.05.01.02.a. Identify and summarize equipment, technology and handling facility procedures used in modern animal production (e.g., climate control devices, sensors, automation, etc.).	Exam	AFNR Career Cluster – Animal Systems Pathway, Statement 2 STEM Career Cluster, Statement 4 STEM Career Cluster, Statement 5
AS.06.01. Performance Indicator: Classify animals according to taxonomic classification systems and use (e.g. agricultural, companion, etc.).		
AS.06.01.01.c. Assess taxonomic characteristics and classify animals according to the taxonomic classification system.	Exam	
AS.06.01.02.c. Recommend different uses for an animal species based upon an analysis of local market needs.	Team activity – breeding activity Livestock evaluation and placing Keep and cull classes	
AS.06.01.03.c. Apply knowledge of classification terms to communicate with others about animal systems in an effective and accurate manner.	Team activity – breeding activity Team activity – marketing activity	
AS.06.02. Performance Indicator: Apply principles of comparative anatomy and physiology to uses within various animal systems.		
AS.06.02.03.c. Apply knowledge of anatomical and physiological characteristics of animals to make production and management decisions.	Team activity – breeding activity Team activity – marketing activity Oral reasons Livestock evaluation and placing Keep and cull classes Exam	HS-LS1-2
AS.06.03. Performance Indicator: Select animals for specific purposes and maximum performance based on anatomy and physiology.		
AS.06.03.01.c. Evaluate and select animals to maximize performance based on anatomical and physiological characteristics that affect health, growth and reproduction.	Team activity – breeding activity Team activity – marketing activity Oral reasons Livestock evaluation and placing Keep and cull classes Exam	STEM Career Cluster, Statement 5

AS.06.03.02.a. Evaluate an animal against its optimal anatomical and physiological characteristics.	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Keep and cull classes	STEM Career Cluster, Statement 5
AS.06.03.03.c. Evaluate and select animals to produce superior animal products based on industry standards.	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Keep and cull classes	STEM Career Cluster, Statement 5
AS.07.01. Performance Indicator: Design programs to prevent animal diseases, parasites and other disorders and ensure animal welfare.		
AS.07.01.01.a. Identify and summarize specific tools and technology used in animal health management.	Exam	CCSS.MATH.CONTENT.HSN.Q.A.1 CCSS.MATH.CONTENT.HSN.Q.A.2 CCSS.MATH.CONTENT.HSN.Q.A.3
AS.07.01.02.a. Explain methods of determining animal health and disorders.	Exam	CCSS.MATH.CONTENT.HSN.Q.A.1 CCSS.MATH.CONTENT.HSN.Q.A.2 CCSS.MATH.CONTENT.HSN.Q.A.3
AS.07.01.03.a. List and summarize the characteristics of wounds, common diseases, parasites and physiological disorders that affect animals.	Exam	CCSS.MATH.CONTENT.HSN.Q.A.1 CCSS.MATH.CONTENT.HSN.Q.A.2 CCSS.MATH.CONTENT.HSN.Q.A.3
AS.07.01.04.a. Identify and summarize characteristics of causal agents and vectors of diseases and disorders in animals. E	Exam	CCSS.MATH.CONTENT.HSN.Q.A.1 CCSS.MATH.CONTENT.HSN.Q.A.2 CCSS.MATH.CONTENT.HSN.Q.A.3
AS.07.01.05.a. Explain the clinical significance of common veterinary methods and treatment (e.g., aseptic techniques, antibiotic use, wound management, etc.).	Exam	CCSS.MATH.CONTENT.HSN.Q.A.1 CCSS.MATH.CONTENT.HSN.Q.A.2 CCSS.MATH.CONTENT.HSN.Q.A.3
AS.07.02. Performance Indicator: Analyze biosecurity measures utilized to protect the welfare of animals		
AS.07.02.01.a. Summarize the importance of biosecurity to the animal industry.	Exam	
AS.07.02.02.a. Identify and describe zoonotic diseases including their historical significance and potential future implications.	Exam	

AS.08.02. Performance Indicator: Evaluate the effects of environmental conditions on animals and create plans to ensure favorable environments for animals.		
AS.08.02.01.a. Identify and summarize methods for ensuring optimal environmental conditions for animals.	Exam	HS.LS4-6
CS.01.02. Performance Indicator: Examine technologies and analyze their impact on AFNR systems.		
CS.01.02.01.c. Solve problems in AFNR workplaces or scenarios using technology.	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Keep and cull classes	
CS.02.01. Performance Indicator: Research geographic and economic data related to AFNR systems.		
CS.02.01.01.c. Evaluate geographic data and select necessary data sets to solve problems within AFNR systems.	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Keep and cull classes	
CS.02.01.02.b. Analyze a set of economic data and analyze how it impacts an AFNR system.	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Keep and cull classes	
CS.06.01. Performance Indicator: Explain foundational cycles and systems of AFNR.		
CS.06.01.02.c. Evaluate AFNR systems and predict how the systems may change or adapt in the future of food, fiber and fuel production based on current trends and data.	Entire event	
CRP.01.01. Performance Indicator: Model personal responsibility in the workplace and community.		
CRP.01.01.01.a. Define personal responsibility and distinguish how it applies in workplace and community (e.g., make educated choices, listen and follow directions, ask for help when needed, meet expected standards, etc.).	Entire event	

CRP.01.02 Performance Indicator: Evaluate and consider the near-term and long-term impacts of personal and professional decisions on employers and community before taking action.		
CRP.01.02.01.b. Assess the pros and cons of personal decisions based on their anticipated impact on self and others.	Keep and cull classes	
CRP.02.01. Performance Indicator: Use strategic thinking to connect and apply academic learning, knowledge and skills to solve problems in the workplace and community.		
CRP.02.01.01.c. Apply academic knowledge and skills to solve problems in the workplace and reflect upon the results achieved.	Entire event	
CRP.02.01.02.c. Apply academic knowledge and skills to solve problems in the community and reflect upon results achieved.	Entire event	
CRP.02.02. Performance Indicator: Use strategic thinking to connect and apply technical concepts to solve problems in the workplace and community.		
CRP.02.02.01.c. Apply technical concepts to solve problems in the workplace and reflect upon the results achieved.	Entire event	
CRP.02.02.02.c. Apply technical concepts to solve problems in the community and reflect upon results achieved.	Team activity – breeding activity	
CRP.04.01. Performance Indicator: Speak using strategies that ensure clarity, logic, purpose and professionalism in formal and informal settings.		
CRP.04.01.01.b. Analyze use of verbal and non-verbal communication strategies in workplace situations.	Team activity process Oral reasons	
CRP.04.01.02.b. Apply strategies for speaking with clarity, logic, purpose and professionalism in a variety of situations in formal and informal settings.	Team activity process Oral reasons	

CRP.05.01. Performance Indicator: Assess, identify and synthesize the information and resources needed to make decisions that positively impact the workplace and community.		
CRP.05.01.02.c. Evaluate workplace and community situations and recommend the information and resources needed to support good decisions.	Team activity – breeding activity Team activity – marketing activity Keep and cull classes	
CRP.05.01.03.c. Synthesize information and resources and apply to workplace and community situations to make positive decisions.	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Keep and cull classes	
CRP.05.02. Performance Indicator: Make, defend and evaluate decisions at work and in the community using information about the potential environmental, social and economic impacts.		
CRP.05.02.01.c. Evaluate and defend decisions applied in the workplace and community situations.	Oral reasons	
CRP.05.02.02.c. Evaluate workplace and community situations and propose decisions to be made based upon the positive impact made on environment, social and economic areas.	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Keep and cull classes	
CRP.06.01. Performance Indicator: Synthesize information, knowledge and experience to generate original ideas and challenge assumptions in the workplace and community.		
CRP.06.01.02.c. Devise strategies (e.g., ask questions, brainstorm ideas, present facts and information etc.) to challenge common assumptions in workplace and community situations.	Team activity process	
CRP.08.01. Performance Indicator: Apply reason and logic to evaluate workplace and community situations from multiple perspectives.		
CRP.08.01.01.b. Apply steps for critical thinking to a variety of workplace and community situations.	Entire event	
CRP.08.01.02.b. Assess solutions to workplace and community problems for evidence of reason, logic and consideration of multiple perspectives.	Entire event	

CRP.08.02. Performance Indicator: Investigate, prioritize and select solutions to solve problems in the workplace and community.		
CRP.08.02.01.b. Assimilate and prioritize potential solutions to solve problems in the workplace and community. TABA, TAMA, KC, P	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Keep and cull classes	
CRP.08.02.02.c. Evaluate and select solutions with greatest potential for success to solve workplace and community problems.	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Keep and cull classes	
CRP.08.03. Performance Indicator: Establish plans to solve workplace and community problems and execute them with resiliency.		
CRP.08.03.02.c. Implement and evaluate plans to solve workplace and community problems.	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Keep and cull classes	
CRP.09.03. Performance Indicator: Demonstrate behaviors that contribute to a positive morale and culture in the workplace and community (e.g., positively influencing others, effectively communicating, etc.).		
CRP.09.03.02.c. Model respectful and purposeful behaviors that contribute to positive morale and culture in the workplace and community (e.g., effectively communicating, recognizing accomplishments of others, etc.).	Team activity process	
CRP.10.03. Performance Indicator: Assimilate input and/or advice from experts (e.g., counselors, mentors, etc.) to plan career and personal goals in a chosen career area.		
CRP.10.03.01.c. Devise strategies to gather answers and information from career area experts to plan and execute goals.	Entire event	
CRP.10.03.02.c. Assimilate input and advice from experts and formulate plans to implement into career and personal goals for chosen career areas.	Entire event	

CRP.11.01. Performance Indicator: Research, select and use new technologies, tools and applications to maximize productivity in the workplace and community.		
CRP.11.01.01.b. Analyze advantages and disadvantages of new technologies, tools and applications to maximize productivity in the workplace and community.	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Keep and cull classes	
CRP.11.01.02.b. Select, apply and use new technologies, tools and applications in workplace and community situations to maximize productivity.	Team activity – breeding activity Team activity – marketing activity Livestock evaluation and placing Keep and cull classes	
CRP.12.01. Performance Indicator: Contribute to team-oriented projects and builds consensus to accomplish results using cultural global competence in the workplace and community.		
CRP.12.01.01.c. Evaluate the effectiveness of team-oriented projects at work and in the community and make recommendations for future improvements.	Team activity process	
CRP.12.01.02.c. Devise and implement methods to obtain feedback from team members on their experiences after completing workplace and community projects.	Team activity process	
CRP.12.01.03.c. Evaluate personal level of cultural and global competence and implement plans for growth and improvement in workplace and community situations.	Team activity process	
CRP.12.02. Performance Indicator: Create and implement strategies to engage team members to work toward team and organizational goals in a variety of workplace and community situations (e.g., meetings, presentations, etc.).		
CRP.12.02.01.b. Assess team dynamics and match strategies to increase team member engagement.	Team activity process	
CRP.12.02.02.c. Evaluate the effectiveness of strategies to engage team members in a variety of workplace and community situations.	Team activity process	