Tennessee FFA Association

Poultry Evaluation Handbook

2017-2021

Purpose

The Tennessee FFA Poultry Evaluation Career Development Event stimulates learning activities relative to production and management, processing, marketing and food safety and quality of poultry products.

Objectives

The Tennessee FFA Poultry Evaluation Career Development Event provides opportunities for the participant to:

- Make accurate observations and logical decisions.
- Discuss and justify decisions (orally and written).
- Communicate industry and product terminology.
- Identify USDA standards of product quality.
- Identify consumer acceptance criteria of products.
- Recognize economic importance of value-added products.
- Collaborate with others to analyze industry scenarios.
- Demonstrate the use of appropriate information technology used in the poultry industry.

Specifically, participants will:

- Evaluate and place live meat-type chickens and orally defend the selection.
- Evaluate and place live egg-type hens and orally defend the selection.
- Evaluate, grade and place ready-to-cook carcasses of chickens or turkeys and orally defend the placing.
- Evaluate and grade ready-to-cook carcasses and parts of chickens and turkeys.
- Evaluate and grade individual shell eggs for interior quality.
- Evaluate and grade individual shell eggs for exterior quality and indicate factors governing the grading.
- Evaluate pre-cooked or par-cooked further processed poultry meat products and indicate factors governing the evaluation.
- Identify poultry carcass parts.
- Complete a written examination on poultry production, management and science.

Event Rules

TEAMS

Teams will consist of four members. Team ranking is determined by combining the scores of all team members.

FFA Official Dress is NOT required for the state event

PARTICIPANTS

Participants will have ten minutes per class to complete Classes. An appropriate amount of time, as determined by the event officials, will be provided for the exam. A warning signal will inform the participants when time expires for each class. Any participant in possession of any electronic device not required by event rules is subject to disqualification.

HUMANE TREATMENT OF LIVE ANIMALS

All live animals must be treated with the utmost care and respect. Violation of this rule will automatically disqualify an offending team member from the event. The supervision, interpretation and enforcement of this rule will be the responsibility of the event superintendent and/or his/her designee.

Event Format

EQUIPMENT

MATERIALS PROVIDED BY THE PARTICIPANT

Each participant must have two clean, sharpened No. 2 pencils, a poultry evaluation scantron (purchased from judgingcard.com), a non-programmable calculator and a clear clipboard with no notes attached.

MATERIALS PROVIDED BY THE EVENT OFFICIALS

Participants will be will be provided clean sheets of paper for recording decisions made during the event.

No other materials will be permitted. Participants attempting to use unauthorized materials will be disqualified.

Individual Activity placing Classes

Each class has a value of 50 points per participant. The event superintendent obtains the "official placing" of the class and the "basis of grading" from the judge. The "basis of grading" is the numerical difference or "cut" between each of the three pairs—top, middle and bottom—in the placing class. The three "cuts" are totaled; the total cannot exceed 15 points. From the judge's information and the directions printed on the Hormel Computing Slide, the correct scores are obtained for all (24) possible placings (refer to references section for the source of the computing slide). The computer scoring system uses the Hormel Scoring format when calculating a participant's score for each placing class.

LIVE POULTRY

MARKET BROILER PLACING (50 POINTS)

Each participant will place a class of four market broilers. Each participant will be permitted to "handle" the birds, as long as the birds are inspected in a professional and humane manner. Participants may not remove the broilers from the holding unit.

EGG-TYPE HEN PLACING (50 POINTS)

Each participant will place a class of four egg-type hens. The birds will be Single-Comb White

Leghorns, or commercial strains of Leghorn-type (inbred cross). The birds may have trimmed beaks. Each participant will be permitted to "handle" the birds, as long as the birds are inspected in a professional and humane manner.

LIVE POULTRY SCORING

CRITERIA	Points
Market broilers placing	50
Egg-type hens placing	50

READY-TO-COOK POULTRY

CARCASS GRADING (50 POINTS)

Each participant will grade a class of ten ready-to-cook chicken and/or turkey carcasses and/or parts. Criteria for grading will be derived from USDA standards for chicken carcasses weighing two pounds to six pounds and for turkey carcasses weighing six to sixteen pounds or carcasses weighing greater than sixteen pounds. Four categories may be used, including the USDA quality grades A, B, C and the category NG (nongradable). Participants may not touch any carcass or part; doing so will result in disqualification. If used, the shackle holding a carcass may be rotated to show the entire carcass.

Scoring for parts and carcass grading:

	OFFICIAL GRADE							
Participant's Grade	Α	В	С	NG				
A	5	3	1	0				
В	3	5	3	0				
С	1	3	5	0				
NG	0	0	0	5				

As shown above, carcass grading is scored based on the USDA quality grades A, B, C and the category NG. Each correct grade receives a score of five points. If the item is graded one quality grade below or above the correct grade, two points will be deducted to obtain a score of three points. If the item is graded two quality grades below or above the correct grade, four points are deducted to obtain a score of one point. However, if the "NG" line is "crossed" (i.e., an

incorrect judgment), all five points are deducted to obtain a score of zero points. (Adapted from information provided by Don Sheets, Retired, Kansas Board of Agriculture, Topeka, Kansas.)

CARCASS PLACING (50 POINTS)

Each participant will place a class of four ready-to-cook chicken or turkey carcasses. Criteria for placing will be derived from USDA standards relative poultry weight classes. Participants may not touch any carcass; doing so will result in disqualification. If used, the shackle holding a carcass may be rotated to show the entire carcass.

READY-TO-COOK POULTRY SCORING

CRITERIA	Points
Carcass grading	50
Carcasses placing	50

SHELL EGGS

INTERIOR GRADING (50 POINTS)

Each participant will grade a class of ten white (or white-tint) shell eggs. Criteria for grading will be derived from USDA standards for interior quality of market eggs. The USDA quality grades will be AA, A, B and Loss. Participants must candle the eggs to determine the appropriate USDA quality grade, but improper handling of eggs will result in disqualification.

Scoring for interior egg quality grading:

	OFFICIAL GRADE								
Participant's Grade	AA	А	В	Loss					
AA	5	3	1	0					
А	3	5	3	0					
В	1	3	5	0					
Loss	0	0	0	5					

As shown above, interior egg quality grading is scored based on the USDA quality grades AA, A, B and Loss. In the case of Class 76, each correct grade receives a score of five points. If the item is graded one quality grade below or above the correct grade, two points will be deducted to obtain a score of three points. If the item is graded two quality grades below or above the correct grade, four points are deducted to obtain a score of one point. However, if the "Loss" line is "crossed" (i.e., an incorrect judgment), all five points are deducted to obtain a score of zero points.

EXTERIOR GRADING (50 POINTS)

Each participant will grade a class of ten shell eggs (white, brown or other). Criteria for grading will be derived from USDA standards for exterior quality of market eggs. The USDA quality grades will be AA/A, B and NG (nongradable). Criteria for grading may include decisions related to the following quality factors: Soundness (unbroken, check, dented check or leaker); stains (slight/moderate stain or prominent stain); adhering dirt or foreign material; egg shape (approximately normal shape, unusual or decidedly misshapen); shell texture (large calcium deposits, body check or pronounced ridges); shell thickness (pronounced thin spots); no defect.

Each participant will determine written factors for the grading of the exterior chicken eggs. The written factors will relate to the criteria used for grading exterior quality of eggs.

Scoring for exterior egg quality grading:

	OFFICIAL GRADE								
Participant's Grade	AA/A	В	NG						
AA/A	5	2	0						
В	2	5	0						
NG	0	0	5						
Loss	0	0	0						

As shown above exterior egg quality grading is scored based on the USDA quality grades AA/A, B and NG (nongradable). Each correct grade receives a score of five points. If the item is graded one quality grade below or above the correct grade, three point will be deducted to obtain a score of two points. However, if the "Loss" line is "crossed" (i.e., an incorrect judgment), all five points are deducted to obtain a score of zero points.

WRITTEN FACTORS CLASS (50 POINTS)

Written factors for exterior egg quality grading and has a value of 50 points per participant.

Exterior egg quality grading is evaluated for twelve different quality factors. Further processed poultry meat products are evaluated for seven different quality factors. Each item may be determined to have "no defect" or to have one or more defects.

For each correct match with the judge, zero points are deducted.

For each "defect" or "no defect" missed or added, two points are deducted.

No score will be less than zero.

SHELL EGGS SCORING

CLASS	Points
Interior grading	50
Exterior grading	50
Written factor for Class	50

FURTHER PROCESSED POULTRY

BONELESS FURTHER PROCESSED (50 POINTS)

Each participant will determine written quality factors for a class of ten boneless further processed poultry meat products (e.g., precooked, poultry meat patties, tenders, nuggets or other boneless products). Criteria for evaluation will include coating defects, color defects, consistency of shape/size, broken and/or incomplete products, cluster/marriages and evidence of foreign material. Participants may not touch any product; doing so will result in disqualification.

Boneless Further Processed Poultry Meat Products:

DEFECT	PRODUCT NUMBER										
	1	2	3	4	5	6	7	8	9	10	
Coating Void											
Inconsistent Color											
Inconsistent Shape/Size											

Broken/Incomplete					
Cluster/Marriages					
Foreign Material					
No Defect					

BONE-IN FURTHER PROCESSED (50 POINTS)

Each participant will determine written quality factors for a class of ten bone-in further processed poultry meat products (e.g., precooked, bone-in wings or other bone-in poultry meat products). Criteria for evaluation will include coating defects if applicable, color defects, consistency of size, broken products, miscut products, and evidence of foreign material. Participants may not touch any product; doing so will result in disqualification.

CARCASS PARTS IDENTIFICATION (50 POINTS)

Each participant will identify ten poultry parts. Poultry parts to be identified will be randomly selected and consistent with those used in the chicken processing and merchandising industries. The participant may not touch any part; doing so will result in disqualification.

The identification class consisting of ten poultry carcass parts. The class has a value of 50 points per participant. Each correct answer receives a score of five points.

FURTHER PROCESSED POULTRY SCORING

CLASS	Points
Boneless Further Processed	50
Bone-In Further Processed	50
Carcass Parts Identification	50

Written Exam (100 Points)

The written examination will be administered at the beginning of the event. Each participant will complete a 30 item written examination on poultry production, management, anatomy and physiology. Five or more items will require mathematical calculations. A test bank for the exam will be provided and updated annually on tnffa.org

Scoring

	Individual	Team					
Ten Classes	500	2,000					
Written Exam	100	400					
Total Individual Points Possible	600	2,400					
Total Team Points Possible	Total Team Points Possible						

TIEBREAKERS

If ties occur, the following classes will be used in order to determine the ranking of award recipients:

INDIVIDUALS

- 1. Total scores of placing classes
- 2. Written management exam

TEAM

- 1. Total scores of placing classes
- 2. Written management exam

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.

Written test bank of even and odd years posted and updated annually on tnffa.org.

Scantrons may be ordered from judgingcard.com

Available from Instructional Materials Service (IMS), Texas A&M University, 2588 TAMUS, College Station, TX 77843-2588 (Phone: 979-845-6601; FAX: 979-845-6608; ims@tamu.edu; http://www-ims.tamu.edu/).

Poultry Grading Manual - Agriculture Handbook Number 31 (latest USDA edition) (IMS Catalog #0414)

Egg-Grading Manual - Agriculture Handbook Number 75 (latest USDA edition) (IMS Catalog #0417)

National FFA Core Catalog

Poultry Science Manual for National FFA Career Development Events. (sixth edition) (IMS Catalog #0418-5) (or from the National FFA Core Catalog product number PSM, 06 on online at http://shop.ffa.org/poultry-science-manual-p38844.aspx). All examination items will be derived from this reference.

The Hormel Computing Slide is available through the National FFA Core Catalog, Item #HCSS, 888-332-2668 or online at http://shop.ffa.org

CDE Q & A - FFA.org

One Less Thing

Poultry Judging Handbook Lessons – www.onelessthing.net

Exterior Egg Quality Scorecard

EGG	EXTERIOR QUALITY GRADES										
NUMBER	AA/A	В	NG								
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											

Sample Scorecard

Egg Exterior Quality Written Factors

DEFECT	EGG NUMBER														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Checked															
Dented Checked															
Leaker															
Slight/Moderate Stain															
Prominent Stain															
Adhering Dirt/Foreign Material															
Decidedly Misshapen															
Large Calcium Deposits															
Body Check															
Pronounced Ridges															
Pronounced Thin Spots															
No Defect															

Bone-In Further Processed Poultry Meat Products

DEFECT	PRODUCT NUMBER									
	1	2	3	4	5	6	7	8	9	10
Coating Void										
Inconsistent Color										
Inconsistent Size										
Broken/Broken Bone										
Miscut										
Foreign Material										
No Defect										

Sample Scorecard for Identification of Parts

Directions: Darken the poultry carcass part that you consider correct for each of the ten items.

PART NO.	1	2	3	4	5	6	7	8	9	10
Half	0	0	0	0	0	0	0	0	0	0
Front Half	0	0	0	0	0	0	0	0	0	0
Rear Half	0	0	0	0	0	0	0	0	0	0
Whole breast with ribs	0	0	0	0	0	0	0	0	0	0
Bnls., skinless whole breast with rib meat	0	0	0	0	0	0	0	0	0	0
Whole breast	0	0	0	0	0	0	0	0	0	0
Bnls., skinless whole breast	0	0	0	0	0	0	0	0	0	0
Split breast with ribs	0	0	0	0	0	0	0	0	0	0
Bnls., skinless, split breast with rib meat	0	0	0	0	0	0	0	0	0	0
Split breast	0	0	0	0	0	0	0	0	0	0
Bnls., skinless split breast	0	0	0	0	0	0	0	0	0	0
Breast quarter	0	0	0	0	0	0	0	0	0	0
Breast quarter without wing	0	0	0	0	0	0	0	0	0	0
Tenderloin	0	0	0	0	0	0	0	0	0	0
Wishbone	0	0	0	0	0	0	0	0	0	0
Leg quarter	0	0	0	0	0	0	0	0	0	0
Leg	0	0	0	0	0	0	0	0	0	0
Thigh w/ back portion	0	0	0	0	0	0	0	0	0	0
Thigh	0	0	0	0	0	0	0	0	0	0
Bnls., skinless thigh	0	0	0	0	0	0	0	0	0	0
Drumstick	0	0	0	0	0	0	0	0	0	0
Bnls., skinless drum	0	0	0	0	0	0	0	0	0	0
Wing	0	0	0	0	0	0	0	0	0	0
Drumette	0	0	0	0	0	0	0	0	0	0
Wing Portion	0	0	0	0	0	0	0	0	0	0
Liver	0	0	0	0	0	0	0	0	0	0
Gizzard	0	0	0	0	0	0	0	0	0	0
Heart	0	0	0	0	0	0	0	0	0	0
Neck	0	0	0	0	0	0	0	0	0	0
Paws	0	0	0	0	0	0	0	0	0	0