



Poultry Evaluation

Purpose

The Tennessee FFA Poultry Evaluation Career Development Event simulates learning activities related 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.
- Contribute to a team practicum and oral presentation related to poultry 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 10 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. Participants will have approximately one minute to move from class to 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 or her designee.

Event Format

EQUIPMENT

Materials Provided by the Participant

- Each participant must have two clean, sharpened No. 2 pencils.
- Clipboard with no notes attached.
- 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.

Ready-to-Cook Poultry

Carcass Grading (50 points)

Each participant will grade a class of 10 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 to six pounds and for turkey carcasses weighing six to 16 pounds or carcasses weighing greater than 16 pounds. Four categories may be used, including the USDA quality grades A, B, C and the category NG (non-gradable). 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:

| Participant's Grade | OFFICIAL GRADE | | | |
|---------------------|----------------|---|---|----|
| | A | B | C | NG |
| A | 5 | 3 | 1 | 0 |
| B | 3 | 5 | 3 | 0 |
| C | 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

Shell Eggs

Interior Grading (50 points)

Each participant will grade a class of 10 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:

| Participant's Grade | Official Grade | | | |
|---------------------|----------------|---|---|------|
| | AA | A | B | Loss |
| AA | 5 | 3 | 1 | 0 |
| A | 3 | 5 | 3 | 0 |
| B | 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 10 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 (non-gradable). 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:

| Participant's Grade | OFFICIAL GRADE | | |
|---------------------|----------------|---|----|
| | AA/A | B | NG |
| AA/A | 5 | 2 | 0 |
| B | 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 (non-gradable). Each correct grade receives a score of five points. If the item is graded one quality grade below or above the correct grade, three points 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 has a value of 50 points per participant.

Exterior egg quality grading is evaluated for 12 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.

Further Processed Poultry

Boneless Further Processed (50 points)

Each participant will determine written quality factors for a class of 10 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 10 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, mis cut 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 10 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 will consist of 10 poultry carcass parts. The class has a value of 50 points per participant. Each correct answer receives a score of five points.

WRITTEN EXAM (100 POINTS)

Participants will complete a 25-item written exam on poultry production, management, anatomy and physiology. Some questions may require mathematical calculations. Examination items will be used from the last five years National FFA Poultry Evaluation Exams and will be maintained on tnffa.org by Tennessee FFA State Staff.

TIEBREAKERS

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

Individuals

1. Total scores of placing classes.

Team

1. Score of team activity practicums.

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.

- Poultry Science Manual for National FFA Career Development Events 7th Edition (2017) Instructional Material Services. Available from Instructional Materials Service (IMS), Texas A&M University, 2588 TAMUS, College Station, Texas 77843-2588 (Phone: 979-845-6601; FAX: 979-8456608; <https://www.agrilifebookstore.org/product-p/ims-0418-7.htm> . All examination items will be derived from this reference.
- Poultry-Grading Manual —Agriculture Handbook Number 31 (latest USDA edition). Agricultural Marketing Service, United States Department of Agriculture. (<https://www.ams.usda.gov/sites/default/files/PoultryGradingManual.pdf>)
- Egg-Grading Manual —Agriculture Handbook Number 75 (latest USDA edition), Agricultural Marketing Service, United States Department Agriculture. <https://www.ams.usda.gov/sites/default/files/media/Egg%20Grading%20Manual.pdf>
- CDE Q & A, [FFA.org](https://www.ffa.org)
- One Less Thing—Poultry Judging Handbook Lessons, www.onelessthing.net

Exterior Egg Quality Scorecard

| EGG NUMBER | EXTERIOR QUALITY GRADES | | |
|------------|-------------------------|---|----|
| | AA/A | B | 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

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