

# Poultry Evaluation

## Middle School Division



## Purpose and Objectives

Revised:11/24

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

The National 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.

## Eligibility

This event is open to all middle school FFA chapters and FFA members in good standing. Members that have participated in a previous national event or previous state winning teams in this area are ineligible. This event will be held during the Delaware State Fair. Each team will report to the gazebo inside the Centre for registration at the appointed time (8:30am).

## Event Procedure

1. Team Make-up: Teams are composed of up to four members.
2. 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 or his/her designee.
3. Each team will report to the team orientation meeting for instructions. No participant, coach or advisor may enter the event area before the specified time.
4. Each team will receive computer scan sheets during the Poultry Evaluation Career Development Event team registration time.
5. Participants will have ten minutes per class to complete Classes 1 through 11. 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.
6. Participants will not be allowed to possess any personal electronic devices (i.e. cell phones, smart watches, air pods, etc.) other than those approved by event officials. Participants who possess personal electronic devices without prior approval of the event officials will be disqualified from the event.
7. Team members must wear an FFA shirt, non athletic pants or jeans, and closed toed shoes.

## Event Format

### A. Equipment

1. Materials provided by the participant: Each participant must have two clean, sharpened No. 2 pencils, a clipboard and an electronic calculator. Calculators permissible for use in this event are those that are battery operated, non-programmable and silent. A calculator may have the following functions: addition, subtraction, multiplication, division, equals, percent, square root, +/- key and one memory register. Calculators that are capable of storing equations, definitions and/or terms are not permitted. Participant use of unauthorized electronic devices will result in disqualification.

2. Materials provided by the event officials: Participants will be provided a file folder for the purpose of providing storage of the scan sheet during the event. No other containers or devices will be permitted for participant use during the event.

3. NO OTHER MATERIALS will be permitted. Participants attempting to use unauthorized materials will be disqualified.

### B. Individual Activities-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

1. 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.
2. 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

Market Broiler Placing	50 points
Egg-Type Hen Placing	50 points

### Ready-to-Cook Poultry

3. ORAL REASONS (50 POINTS) Each participant will present oral reasons for the carcass placing class (class 5). The class for which participants should develop oral reasons for presentation will be clearly identified during the event. Participants will have ten minutes to prepare and two minutes to present their oral reasons. Reasons should include current USDA and poultry industry terminology and standards. The oral reasons scorecard can be used a guideline for preparing (refer to the "Presenting Oral Reasons" section of the Poultry Science Manual for National FFA Career Development Events, current edition).
4. 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 (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:

	Official's Grade			
Participant's 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.)

5. 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

Oral Reasons	50 points
Carcass grading	50 points
Carcasses placing	50 points

#### Shell Eggs

6. 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's Grade			
Participant's 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 in- correct judgment), all five points are deducted to obtain a score of zero points.

7. 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 (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:

	Official Grading		
Participant's 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 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.

8. WRITTEN FACTORS CLASS (50 POINTS) Written factors for exterior egg quality grading and has a value of 50 points per participant. 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

Interior Grading 50 points

Exterior Grading 50 points

Written Factors 50 points

### Further Processed Poultry

9. 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. 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.

Participants may not touch any product; doing so will result in disqualification.

### **Possible Defects:**

Coating Void

Inconsistent Color

Inconsistent Shape/ Size

Broken/Incomplete

Cluster/Marriages

Foreign Material

No Defect

10. 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. 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 “detect” or “no detect” missed or added, two points are deducted.
- No score will be less than zero.

11. 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 Process Poultry Scoring

Boneless Further Processed	50 points
Bone-In Further Processed	50 points
Carcass Parts Identification	50 points

### C. TEAM ACTIVITY

POULTRY MANAGEMENT WRITTEN EXAM– 100 points

Each team will complete a written examination on poultry production, management, anatomy, and physiology. Examination items will be developed from the past three years of National Poultry & Egg Evaluation CDE written exams.

## **SCORING**

1. Participants will be ranked in numerical order on the basis of the final score to be determined by each judge without consultation. The judge’s ranking of each participant then shall be added, and the winner will be that participant whose total ranking is the lowest. Other placings will be determined in the same manner (low point method of selection). Weighted rank scoring will be implemented to maintain point value emphasis between individual and team events. The criteria and points can be found on the scorecards.

<b><u>Event</u></b>	<b><u>Individual Points</u></b>	<b><u>Team Points total</u></b>
11 classes @ 50 points each	550 Points	2200 Points possible
<b>Total Individual Pts. Possible</b>	<b>550 Points</b>	<b>2200 Points possible</b>
Team Activity - Exam @ 100 points		<b>100 points</b>
<b>Total Team Possible Points</b>		<b>2300 points</b>

## Tie Breaker

1. 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 (classes 1, 2, and 5)
2. Oral reasons score (class 3)

### TEAM

- 1 Total oral reasons scores.
- 2 Test score.

## Awards

Awards will be presented to individuals and/or teams based upon their rankings at the State Fair FFA Awards Breakfast.

## References

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 Picture Series, USDA Agricultural Marketing Service,

<https://www.ams.usda.gov/book/poultry-picture-series>

- 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>
- Past CDE materials and other resources are available on FFA.org
- One Less Thing—Poultry Judging Handbook Lessons,  
<https://www.onelessting.net/collections/poultry>
- 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: 979-845-6608; <https://agrillifelearn.tamu.edu/s/product/poultry-science-manual-for-career-developments-7th-edition/01t4x000002dEvPAAU> .





