

# **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.

### **Event Rules**

#### **TEAMS**

- Teams will consist of four members. Team ranking is determined by combining the scores of all team members.
- Junior division is for 6th-8th graders. The top junior team will be recognized at the regional banquet.
- FFA official dress is NOT required for the state event.
- Any participant is possession of any electronic device not required by even rules is subject to disqualification.

### **Event Format**

#### **HUMANE TREATMENT OF LIVE ANIMALS**

All 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 designee.

#### **EQUIPMENT**

#### Materials Provided by the Participant

- Pencils
- Clipboard with no notes attached

#### Materials Provided by the Event Officials

Egg candlers

#### **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 in the placing class. The three "cuts" are totaled; the total cannot exceed 15 points. 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.

#### 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:

	Official Grade									
Participant's Grade	Α	В	С	NG						
А	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 to 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 Eaas

#### **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:

	Official Grade								
Participant's Grade	AA	A	В	Loss					
АА	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 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. 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 (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 have 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., pre-cooked, 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									
Defect	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)

Senior division articipants will complete a 30-item written exam on poultry production, management, anatomy and physiology. Test questions will be pulled from the last five years National FFA Poultry Evaluation exams and will be maintained on tnffa.org by Tennessee FFA state staff.

#### Individuals

- 1. Total scores of placing classes.
- 2. Written exam.
- 3. Shell eggs total score

#### Team

- 1. Total scores of placing classes.
- 2. Total written exam score.
- 3. Live Poultry placing totals



# **Placing Classes Scorecard**

# **Carcass/Part Grading Scorecard**

Plac	ing Cla	sses	
Mark one ar	nswer in e	ach colur	nn!
	Broilers	Hens	RTC
	1	2	3
1 1234	0		0
2 1243	0		0
3 1324	0		0
4 1342	0		0
5 1423	0		0
6 1432	0		0
7 2134	0		0
8 2143	0		0
9 2314	0		0
10 2341	0		0
11 2413	0		0
12 2431	0		0
13 3124	0		0
14 3142	0		0
15 3214	0		0
16 3241	0		0
17 3412	0		0
18 3421	0	0	0
19 4123	0		0
20 4132	0		0
21 4213	0		0
22 4231	0		0
23 4312	0		0
24 4321	0		0
	1	2	3

Carcass / Part Grading										
Carcass/ Part	Qu	ality	Gra	ade						
Number	Α	В	C	NG*						
1	A	B	C							
2	A	B	C	$\bigcirc$						
3	A	B	C	$\bigcirc$						
4	A	B	C	$\bigcirc$						
5	A	B	C	$\bigcirc$						
6	A	B	C	$\bigcirc$						
7	A	B	C	$\bigcirc$						
8	A	B	C	$\bigcirc$						
9	A	B	C	$\bigcirc$						
10	A	B	C	$\bigcirc$						

\*NG = Nongradable

# **Egg Interior Quality Scorecard**

Egg Interior Quality Grading										
Egg	Quality Grade									
Number	AA A B Loss									
1	AA A B									
2	AA A B									
3	(A) (B) (									
4	AA A B									
5	AA A B									
6	(A) (B) (									
7	(A) (B) (									
8	AA A B									
9	AA A B									
10	AA A B									



# **Egg Exterior Quality Grading and Written Factors Scorecard**

	Egg		ior Qua /ritten		rading 's						
					Egg N	umber					_0
Grade	4	2	3	4	5	6	7	8	9	10	en to
1 AA/A	AA/A	AAA	AA/A	AA/A	AA/A	AA/A	AA/A	AA/A	AA/A	AAA	r ea
2 <b>B</b>	B	В	B	B	B	B	B	B	B	B	oh eg
3 Nongradable	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	(S)
Defect	4	2	3	4	-5	6	7	8	9	10	
1 Checked	0	0	0		0	0	0		0	0	
2 Dented Checked	0		0		0		0		0	0	
3 Leaker	0		0		0		0		0		
4 Slight / Moderate Stain	0	0	0	0	0	0	0	0	0	0	
5 Prominent Stain	0	0	0	0	0	0	0	0	0	0	Mark
6 Adhering Dirt / Foreign Material	0		0		0	0	0		0	0	00
7 Decidedly Misshapen	0		0		0		0		0		that a
8 Large Calcium Deposits	0		0		0		0		0		apply
9 Body Check	0	0	0	0	0	0	0	0	0	0	
10 Pronounced Ridges	0	0	0		0	0	0		0	0	
11 Pronounced Thin Spots	0		0		0		0		0		
12 No Defect	0		0		0		0		0		
	1	2	3	4	5	6	7	8	9	10	



### **Identification of Carcass Parts Scorecard**

Ide	ntifica	tion of	Carca	ss Par	ts						
					Part N	lumber					Τ
Part	4	2	3	4	5	6	7	8	9	10	
1 Half	0		0		0		0		0	0	
2 Front Half	0		0		0		0		0	0	
3 Rear Half	0		0		0		0		0	0	
4 Whole breast with ribs	0		0		0		0		0		
5 Bnls., skinless whole breast with rib meat	0		0		0		0		0	0	
6 Whole breast	0		0		0		0		0		
7 Bnls., skinless whole breast	0		0		0		0		0	0	
8 Split breast with ribs	0		0		0		0		0		
9 Bnls., skinless split breast with rib meat	0		0		0		0		0		
10 Split breast	0		0		0		0		0	0	
11 Bnls., skinless split breast	0		0		0		0		0	0	
12 Breast quarter	0		0		0		0		0	0	Mark
13 Breast quarter without wing	0		0		0		0		0		R one
14 Tenderloin	0		0		0		0		0		e an
15 Wishbone	0		0		0		0		0	0	answer
16 Leg quarter	0	0	0	0	0		0	0	0	0	5
17 Leg	0	0	0	0	0	0	0	0	0	0	each column
18 Thigh w/ back portion	0		0	0	0		0		0	0	8
19 Thigh	0		0	0	0		0		0	0	3
20 Bnls., skinless thigh	0	0	0	0	0	0	0	0	0	0	
21 Drumstick	0	0	0	0	0	0	0	0	0	0	
22 Bnls., skinless drum	0	0	0	0	0	0	0	0	0	0	
23 Wing	0		0	0	0		0		0	0	
24 Drumette	0	0	0	0	0	0	0	0	0	0	
25 Wing portion	0	0	0		0	0	0	0	0	0	
26 Liver	0	0	0	0	0	0	0	0	0	0	
27 Gizzard	0	0	0	0	0	0	0	0	0	0	
28 Heart	0		0	0	0	0	0	0	0	0	
29 Neck	0	0	0	0	0	0	0	0	0	0	
30 Paws	0	0	0	0	0	0	0	0	0	0	
	4	2	3	4	5	6	7	8	9	10	



# **Boneless/Bone-In Further Processed Poultry Meat Products Scorecards**

Bonele	ss Fur	ther Pr	ocess	ed Pou	ıltry M	eat Pro	ducts			
					Product	Number				
Defect	4	2	3	4	5	6	7	8	9	10
1 Coating Void	0		0		0		0		0	
2 Inconsistent Color	0		0		0		0		0	
3 Inconsistent Shape / Size	0	0	0	0	0	0	0	0	0	0
4 Broken / Incomplete	0		0		0		0		0	
5 Cluster / Marriages	0	0	0	0	0		0	0	0	0
6 Foreign Material	0		0		0		0		0	
7 No Defect	0	0	0	0	0	0	0	0	0	0
	1	2	3	4	5	6	7	8	9	10

Bone-	In Furti	her Pro	ocesse	d Pou	ltry Me	at Pro	ducts				
					Product	Number					
Defect	1	2	3	4	5	6	7	8	9	10	
1 Coating Void	0		0		0		0		0		
2 Inconsistent Color	0		0		0		0		0		3
3 Inconsistent Size	0		0		0		0		0		×
4 Broken / Broken Bone	0		0		0		0		0		=
5 Miscut	0		0	0	0		0		0		i ap
6 Foreign Material	0	0	0	0	0		0		0		appry
7 No Defect	0	0	0	0	0		0		0	0	
	1	2	3	4	5	6	7	8	9	10	