



2025 Lake County Fair Poultry Skillathon Study Guide

Juniors (age 8-10 as of September 1, 2024)
Intermediates (age 11-13 as of September 1, 2024)
Seniors (age 14 and over as of September 1, 2024)

Skill-a-thon tests will be administered on March 17, 2025 between 5:00 and 8:00pm at the Lake County Fairgrounds Main Exhibit Hall located at:
2101 County Rd 452 Eustis, Fl. 32726.

All registered Lake County 4H and FFA members showing in the Lake County Fair are eligible to compete in the Skill-a-thon except for Cloverbuds (ages 5-7) who are not eligible to compete.

Exhibitors have two options:

Option one - Exhibitors can take the test for any of the divisions that they are registered in.

Option two- Exhibitors can take the test for all divisions to compete in the Overall Skill-a-thon.

Awards:

Individual area Skill-a-thon - Banners will be awarded to the top 3 scores in each age division for each animal division - only exhibitors that are showing animals in that division will be eligible to place for the banners.

Poultry Divisions:

1st Place Junior - Award

2nd Place Junior - Award

3rd Place Junior - Award

1st Place Intermediate - Award

2nd Place Intermediate - Award

3rd Place Intermediate - Award

1st Place Senior - Award

2nd Place Senior - Award

3rd Place Senior - Award

Overall Skill-a-thon - Buckles will be awarded to the top score in each age division.

Overall Skill-a-thon:

Junior: Belt Buckle

Intermediate: Belt Buckle

Senior: Belt Buckle

Skillathon Areas are as follows:

Beef Breeding

Steer

Poultry

Dairy Goat

Breeding and Market Goat

Market Lamb

Rabbit

Swine

*** Each age division will have a record book question as a tiebreaker.***

Non Market Record Book

[https://cdn.saffire.com/files.ashx?t=fg&rid=LakeCoFair&f=2025_Non_Market_Record_Book_FINAL\(3\).pdf](https://cdn.saffire.com/files.ashx?t=fg&rid=LakeCoFair&f=2025_Non_Market_Record_Book_FINAL(3).pdf)

** The following pages are from Florida State Fair Skillathon Book***

INTRODUCTION

This manual has been developed as a study guide for the Florida State Fair Poultry Skillathon which is part of the Champion Youth Program. The topic for this year's Skilathon is **Products and Marketing**.

The Florida State Fair recognizes that agricultural education instructors, 4-H agents, parents, and leaders provide the traditional and logical instructional link between youth, their livestock projects and current trends in the animal agriculture industry. **PLEASE NOTE:** This manual is provided as a **study guide** for the skillathon competition and should be used as an additional aid to ongoing educational programs.

Sections are labeled **Junior, Intermediate & Senior, Intermediate & Senior, or Senior** to help exhibitors and educators identify which materials are required for each age level.

****** Denotes additional information in the study manual for preparing for the Champion of Champions competition.

The knowledge and skills vary by age group and may include:

Juniors (age 8-10 as of September 1, 2024)

Parts of the Egg,
Poultry Production
Exterior Egg Quality

Intermediates (age 11-13 as of September 1, 2024)

all of the above plus...
Retail Parts,
Interior Egg Quality (Breakout & Candling)
Cookery

Seniors (age 14 and over as of September 1, 2024)

all of the above plus....
Carcass Grading
Skeletal Anatomy
Vertical Integration

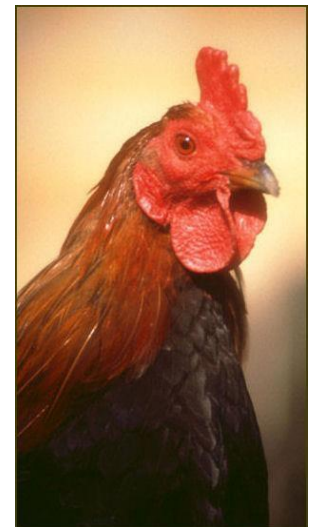
GOOD LUCK!

Poultry Products and Marketing***

Youth poultry projects focus on the selection, raising, showing and often selling of purebred or commercial birds and/or eggs. By virtue of their participation in poultry projects, youth become part of an industry that provides food for the world. The steps involved in the movement of poultry and poultry products from producer to consumer are known as *processing and marketing*. Tremendous changes have occurred over the years in the ways poultry products are harvested and marketed but the fundamentals remain the same. Price is dependent on *supply and demand*. We can impact supply through increased or decreased breeding, but demand is more difficult to affect. To maintain a stable market for poultry products, consumers must have confidence in the **wholesomeness and quality** of what they are buying. That means products must be safe, nutritious, and tasty.



In 2024 the poultry industry was the fourth largest money-generating commodity in modern agriculture (corn ranks #1). About 45% of the cash receipts from U.S. agriculture each year are generated from **animal agriculture** and 10% of animal agriculture's share is from poultry with reported annual revenue of over \$62 billion. <http://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics.aspx#27415>



The *U.S. Poultry and Egg Association* (<https://www.uspoultry.org>) is a non-profit organization made up of producers and processor of broilers, turkeys, ducks, eggs, and breeding stock as well as companies that provide goods and services. They channel funds into programs focused on promotion, education, communication, and research related to the poultry industry in America. They partner with state affiliates and other national organizations to work on common problems. They conduct the International Poultry Expo, the world's premier poultry exposition. Their mission is to increase the quality and safety of poultry products while promoting responsible practices in animal care and environmental stewardship.

The American Poultry Association (<http://www.amerpoultryassn.com/>) is made up of purebred producers. The APA strives to promote and protect the standard-bred poultry industry. It is responsible for the publication of the *American Standard of Perfection*, sanctions poultry shows, and certifies poultry judges. Their youth affiliate is known as the APA/ABA Youth Poultry Club.

TYPES OF POULTRY OPERATIONS

J,I,S

Most large poultry operations specialize in producing either eggs, broilers/meat chickens, or turkeys. Other types of poultry producers raise ducks, quail, game birds, show birds, and other poultry species.

Though youth projects are centered on purebred breeds and showing, the poultry industry as a whole consists of three major types of production enterprises.

1. Broiler production - Meat-type chickens, sometimes called fryers, comprise 71% of the total value of poultry production. Commercial broilers are crossbreeds, primarily produced by crossing White Cornish males with White Plymouth Rock females. Both the male and female broilers are raised to produce meat.
 - a. Cornish Game Hens - harvested about 4 weeks of age; 2 lbs. or less.
 - b. Broiler/Fryer – young chickens 6-10 weeks of age; over 2 lbs.
 - i. Chicken for fast food restaurants – 6 weeks of age; 4.1 lbs.
 - ii. Chicken for grocery stores – 7.5 weeks of age; 6.0 lbs.
 - iii. Deboned chicken for sandwiches, nuggets, etc. – 8.5 weeks of age; 7.5 lbs.
 - c. Roasters – 7-12 weeks of age; over 5 lbs (10.5 lbs. average)
 - d. Heavy Fowl – culled breeding hens or roosters, also called 'baking hens', usually over 10 months of age and over 4 lbs.
 - e. Light fowl – culled laying hens, usually over 10 months of age and usually about 2.5 lbs. Sometimes called 'stewing hens'.
 - f. Capon – neutered male chickens, typically less than 4 months old.
 - g. Rooster – adult males typically 10 months or older and over 6 lbs.
2. Egg production - for human consumption (not for incubation), about 20% of total production value. Commercial laying hens lay around 300 eggs/year beginning at 19 weeks of age. Older hens produce larger eggs.
3. Turkey production – About 8.5% of the total value of poultry production

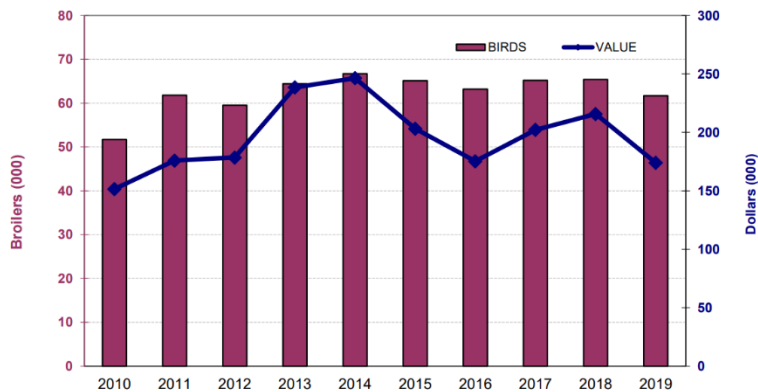


POULTRY INDUSTRY IN FLORIDA

Florida has both commercial broiler and egg operations. Florida currently ranks 17th in egg production in 2018. Florida egg farmers reported having 7.34 billion laying hens. These hens laid an average of 276 eggs each per year, producing over 2 billion eggs in 2018 on Florida farms valued at \$154 million.

Florida ranked 18th in the number of broilers and 17th in the pounds of chicken meat produced in 2023. In that year Florida farmers grew over 61 billion broiler chickens that produced 366,600,000 pounds of chicken meat, valued at \$173,939,000.00.

Broilers Produced in Florida and Value of Production, 2010 - 2019



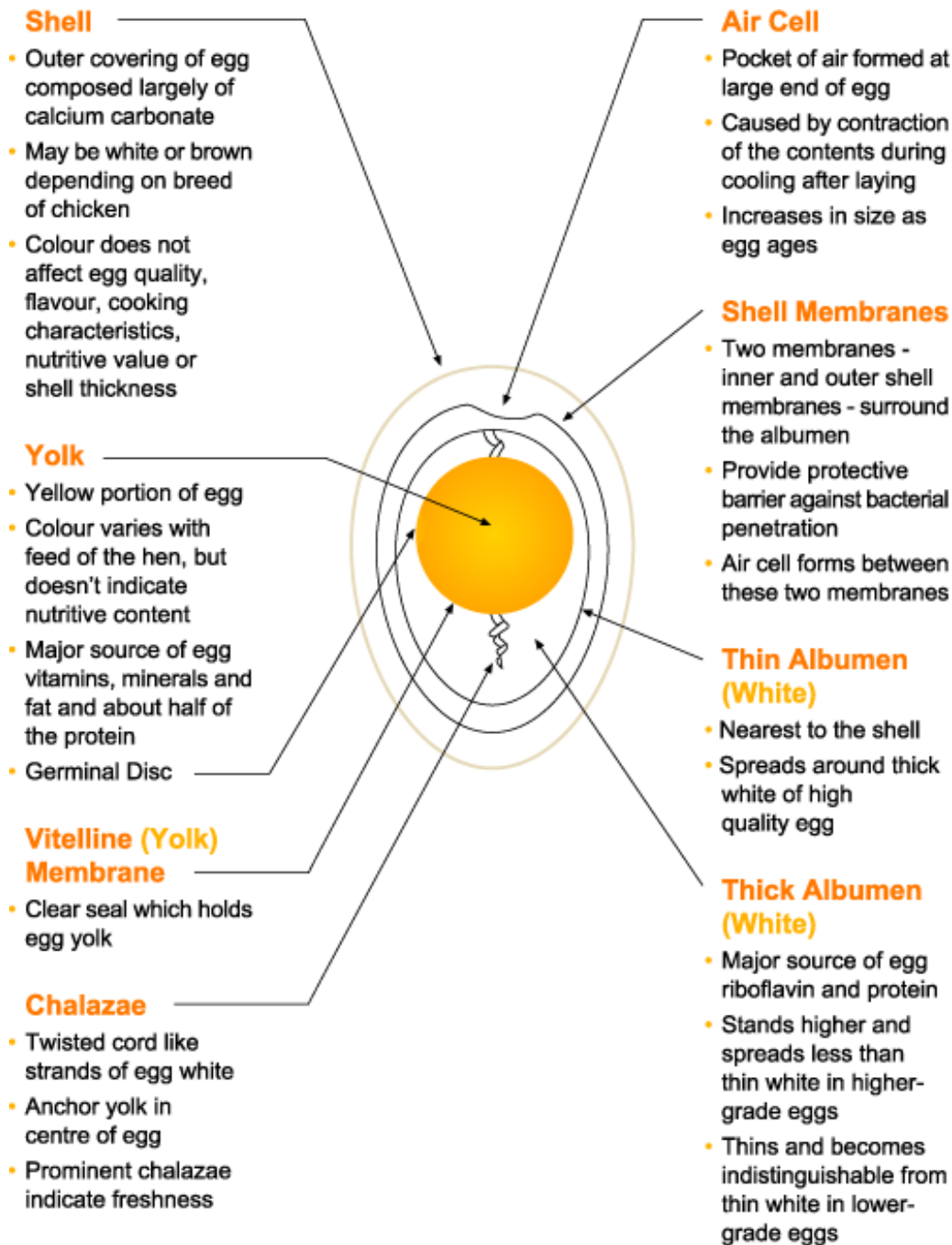
U.S. EGG INDUSTRY

The U.S. is second to China in egg production (109 billion vs. 450 billion in 2018). Most eggs are considered “table eggs” but about 25% of the eggs produced in the U.S. are taken to an egg products plant instead of being sold in the shell. The eggs are mechanically broken, the yolk can be separated from the whites if desired, the liquid egg is pasteurized and then it can be made into a variety of products such as whole egg, egg yolks, egg whites, scrambled egg mixes, etc. which can be dried, frozen or used fresh. These products are marketed to bakeries and to companies that make items like egg noodles, mayonnaise, cake mixes and items for military personnel.

PARTS OF AN EGG

J,I,S

The *American Egg Board* is the producer's link to consumers in communicating the value of the egg to increase demand for eggs and egg products (<http://www.aeb.org/>). Even though we eat eggs regularly, we don't often think about the parts of the egg. Study the illustration and web sites below to learn more about the "incredible, edible, egg™". <http://www.incredibleegg.org/> Another good source for the parts and function of an egg is the Virginia Tech 4-H Virtual Farm website: https://www.sites.ext.vt.edu/virtuallfarm/poultry/poultry_eggparts.html



EGG QUALITY

J,I,S

In commercial egg-processing plants, eggs are graded simultaneously for interior and exterior quality while they are inspected for wholesomeness. However, in the Skill-a-thon, all participants will grade eggs for exterior quality while only intermediates and seniors will grade eggs for interior quality.

Exterior Egg Quality

USDA Grades for exterior egg quality are A, B and Dirty (Grades AA and A have identical exterior quality standards). They are evaluated on the basis of texture, color, shape, soundness and cleanliness (see Table 1). The shell of each egg should be smooth, clean, and free of cracks. Some of the common defects in exterior egg quality include: stains, adhering material (yolk, manure, etc.), odd-shaped eggs, and rough shells.

Table 1. Summary of USDA grades for exterior egg quality.

Factor	Grade AA or A	Grade B	Dirty
Stain	Clean but may show small specks, stains or cage marks that do not detract from general clean appearance of the egg and may show traces of processing oil	Slight or moderate localized stains less than 1/32 of shell or scattered stains less than 1/16 of shell	Prominent stains; or slight or moderate stains covering greater than 1/32 if localized and 1/16 of the shell if scattered
Adhering dirt or foreign material	None	None	Adhering dirt or foreign material (1.0 mm in area or greater)
Egg shape	Approximately the usual shape	Unusual or decidedly misshapen (e.g., very long or distorted)	
Shell texture	May have rough areas and small calcium deposits that do not materially affect shape or strength	Extremely rough areas that may be faulty in soundness or strength; may have large calcium deposits	
Ridges	Slight ridges that do not materially affect shape or strength	May have pronounced ridges	
Shell thickness	Free from thin spots	May show pronounced thin spots	
Body checks	Free from body checks ¹	May show pronounced body checks ¹	
<p>¹ A body check is an egg which looks like the shell was cracked, but the shell is in fact still intact. Body checks result when the egg is cracked when the shell is being formed in the hen's body and then partially calcified before being laid. Body checks may appear as fracture lines which are visible to the naked eye or as ridges or bulges associated with the area of shell which was fractured.</p>			

You can watch a video explaining the exterior quality of eggs by visiting the following web site:

<https://www.youtube.com/watch?v=NzCaKdPHqPI>