

2022 4-H EGG-cellent Egg Contest Planning Guide



This contest is for 4-H members with a flock of chickens that are currently laying eggs. If you are not an active 4-H member, contact your county agent to get enrolled. Participants may submit up to 2 dozen eggs in different categories, which will be judged for uniformity, exterior and interior quality. Participants will also complete supplemental project components based on their age which is part of their final score.

How to Enter and requirements:

Register at:
go.ncsu.edu/2022eggcontestregistration

Youth must participate in the two **MANDATORY Zoom sessions on September 13th and 27th.** Youth must complete supplemental project components and submit on-line by **November 3rd.** Eggs must be submitted by **November 3rd to your Extension Office.**



SAVE THE DATES

- September 9th - Registration Deadline
- September 13th at 5:30 pm - Initial Training Zoom
- September 27th at 5:30 pm - Cloverbud and Junior EGG-citing, In Depth Egg Training Zoom
- September 27th at 6:30 pm - Intermediate and Senior EGG-citing, In Depth Egg Training Zoom
- November 3rd by 5 pm - Egg Submission Deadline to your county Extension Office. Supplemental sections must be submitted on this day too.
- November 15th at 5:30pm - Winners Announced by zoom

****ALL DATES ARE SUBJECT TO CHANGE.****

Entry Guidelines:

The Egg-cellent Egg Contest assesses the ability of 4-H members to raise chickens that produce high-quality eggs. Participants submit up to 2 dozen eggs, which are judged for uniform appearance and consistent interior quality using the same testing measures applied in commercial poultry production.

Who Can Participate:

Any enrolled North Carolina 4-H member who has a flock of chickens that are currently laying eggs. The chickens may be from a 4-H Chick Chain, Poultry Project, or other program source.



Luke Dennis,
Montgomery county
with his Easter
Egger Hen

Entry Categories:

1. Age categories (age as of January 1st):
 - Cloverbuds: ages 5-7
 - Junior : ages 8-10
 - Intermediate: ages 11-13
 - Senior: ages 14-18
2. Egg Categories - you can enter 2 dozen eggs, but they must be in different categories (ex. 1 dozen brown extra large and 1 dozen blue/green small)
 - 🥚 Eggshell color: White, Brown, or Blue/Green
 - 🥚 Egg size: Pee Wee, Small, Medium, Large, Extra Large, and Jumbo. Size is determined by the weight of one dozen eggs (any kitchen scale that shows weight in ounces can be used). The weights are shown in the chart to the left.

Entry Fee: \$15 per youth (can submit up to 2 dozen eggs in different categories).

Egg Submission Deadline:

Eggs may be hand delivered to your county Extension office by 5pm on November 3rd. Each entry should include a post card labeled with your name, address, telephone number, and the size of the eggs, and eggshell color. See training materials for post card to use.

Packing:

Eggs should be kept cool during transit. Pack the eggs in an egg carton surrounded with padding and an ice pack, and place them in a cooler. Eggs will be refrigerated until judging begins.

Prizes:

All youth who complete the project will receive a t-shirt. Cloverbuds will receive medals. Youth in age categories Junior, Intermediate and Senior are eligible for prizes in their age and egg categories (1st place: \$15, 2nd: \$10 3rd: \$5, and ribbons). Final prize categories will depend on sponsorships and number in each division. All other participants will receive a ribbon.

Egg Size	Ounces Per Dozen
Peewee	15
Small	18
Medium	21
Large	24
Extra Large	27
Jumbo	30

Egg Judging

Judging is closed door; results will be announced on Tuesday, November 15th at 5:30 pm on Zoom. Eggs will be examined for uniformity in shape, size, color, and cleanliness. Three eggs from each dozen will be randomly selected and opened, and the Haugh unit measurement will be taken.

Tips to Help You Prepare

Selecting & Preparing High-Quality Eggs for Judging

Eggs should be uniform in size and eggshell color. Deviations in eggshell color will result in a deduction. Select eggs that are free from defects, such as stains, adhering material, fly specks, and cracks. If you know that one or two of your hens consistently lay eggs with meat or blood spots, candle those eggs to find the defects and remove them from the dozen that you enter into the contest. Customers do not like to see blood or meat spots in their product, so these defects are considered downgrades.

Depending on the size of your flock, you may need to collect eggs for several days to get enough of uniform size to include in your dozen. If this is the case, be sure to store your eggs in the refrigerator until they are ready to transport.

Avoid storing eggs in containers where they may become cracked (a bucket or egg basket, for example). Use an old egg carton or egg flat if you have one available. If you are using a cardboard egg carton, do not allow the carton to come in contact with the ice pack during transport; the cardboard will transfer wet material onto the egg's surface.

The eggs you choose should be weighed as a dozen and placed in the correct size category based on the weight. A simple kitchen scale is all that is needed to perform this step.

Grading and Sizing

The United States Department of Agriculture (USDA) provides guidelines on the grading and sizing of eggs. Egg sizes are not dependent on the egg grade; rather, they are determined by the weight of the egg in ounces.



Egg grades are determined by both interior and exterior quality factors. To learn about these factors, refer to the National 4-H Avian Bowl Manual (Poultry Judging section) and the National 4-H Poultry Judging (Egg Judging section). See the Resources section at the end for information.

Maintaining Interior Egg Quality

Refrigerate your eggs as soon as possible after they have left the hen to maintain the highest possible quality. Proteins in the egg white deteriorate if exposed to room or high temperatures. An egg that is stored at room temperature ages as much in one day as an egg kept in the refrigerator for a week. This is why you should keep your eggs cool as they are transported to the contest.

Storage time also is important. If you have a large flock that will lay a dozen eggs or more daily, you likely will not need to store your eggs before delivering to the contest. If you have a smaller flock, however, you may need to collect eggs for several days to get enough of the same size and quality to use in your dozen. Be sure to refrigerate your eggs while you are storing them.

Another factor that can affect the interior quality of the egg is the age of the hen. Older hens that are close to molt (annual dropping then regrowing of their feathers) lay eggs that are slightly different from those of young hens. The same is true of hens that are in their second, third, fourth, and older years of egg production. When a hen starts her laying period for the year, she tends to be “refreshed,” and she lays eggs with higher-quality protein. This is not a factor over which you have much control.

Lastly, the diet and genetics of the hen can influence the quality of the eggs that she lays. You cannot control the hen’s genetics, but you can control the quality of the diet that she receives. A hen that is fed a balanced diet designed for laying hens is going to lay higher-quality eggs than one that is fed a diet diluted too much with treats, greens, and grains. Remember to include supplements of oyster shell if your older flock starts to lay eggs that have very thin shells. It may be a sign that their bodies need a little more calcium than what is already provided in the balanced ration for laying hens.

A hen is considered a good producer if she lays high-quality eggs and does so consistently. That is a testament not only to her genetics but to your skills as a poultry flock owner.



Factors Affecting Egg Size

Young hens tend to lay smaller eggs than do older hens. As a hen ages, she lays eggs with larger and larger yolks and albumen (egg white) but with the same amount of shell. This means that the eggs get bigger, but the shells start to get thinner. It is a balancing act for egg companies to determine when a flock should be molted so that hens can be re-freshed.

Resources

- National 4-H Avian Bowl Manual. \$15.00 plus shipping. Available through Clemson University at www.aces.edu/go/772
- National 4-H Poultry Judging. \$6.95. Available through the University of Nebraska–Lincoln at www.aces.edu/go/773.



Final Notes: All decisions by the judge are final. Direct criticism or interference with the judge or program officials before, during, or after the competitive event is prohibited. All officials shall be treated with courtesy, cooperation and respect and no person shall direct abusive or threatening conduct toward them. Potential disqualification from future events after review is possible. Any special considerations not covered in the rules will be decided by the Regional Egg-cellent Egg Project Committee.

The information on quality eggs and videos is used with permission from Alabama Cooperative Extension System from their Golden Egg Contest rules and guidelines.

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