University of Nebraska - Lincoln
DigitalCommons@University of Nebraska - Lincoln

Historical Materials from University of Nebraska-Lincoln Extension

Extension

8-1922

EC1411 Graded Eggs Bring Better Prices

F. E. Mussehl

Follow this and additional works at: http://digitalcommons.unl.edu/extensionhist

Mussehl, F. E., "EC1411 Graded Eggs Bring Better Prices" (1922). *Historical Materials from University of Nebraska-Lincoln Extension*. 2569.
http://digitalcommons.unl.edu/extensionhist/2569

This Article is brought to you for free and open access by the Extension at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Historical Materials from University of Nebraska-Lincoln Extension by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

E7
1411 c.1

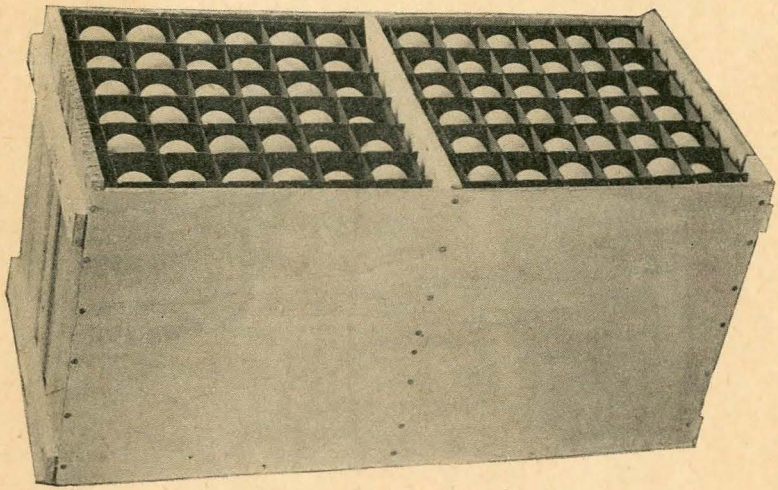
E.C. #1411

THOMPSON INSTITUTE FOR PLANT RESEARCH
LIBRARY

July, 1922

Extension Circular 1411

Graded Eggs Bring Better Prices



THE UNIVERSITY OF NEBRASKA
COLLEGE OF AGRICULTURE
EXTENSION SERVICE

GRADED EGGS BRING BETTER PRICES

F. E. MUSSEHL

Many Nebraska poultry producers are now receiving a premium of from four to five cents per dozen more than the community average price for ordinary eggs. They are able to obtain this premium because their eggs are graded and packed well, and because their eggs can be handled with a minimum loss. The dealers who buy these graded eggs find that they are not buying a "pig in the poke," and the customer who ultimately gets them is willing to pay a good fair price because the quality is definite and there is no waste. Consumers are not unwise to the fact that twelve good eggs at 35c per dozen are cheaper than twelve eggs at 25c per dozen, eight of which are good and the others bad. The improvement of our egg marketing methods is a matter therefore in which producers, dealers and consumers are equally interested.

About one-half of Nebraska's annual egg crop is marketed outside of the state. At least 2,000 cars of eggs, each containing four hundred and fifty standard cases, are shipped out of the state each season. Only ten states in the union produce more eggs than are consumed within their borders, and Nebraska is one of these states. Nebraska eggs come in competition with eggs from other sections at the world's best markets and this fact emphasizes again the reason why Nebraska producers should acquaint themselves with the essentials for the production of quality eggs and why the produce dealers must buy these eggs on a business-like graded basis.

GRADES AT THE LARGER MARKETS

Ultimately, nearly all of our surplus eggs are sold on a graded basis. Grades may be few or many, but the quality variations which result in high and low grades may easily be demonstrated. As many as twenty-five separate and distinct grades are made, for instance, at the New York City market. A

typical New York market egg report showing relative price distinctions is given herewith:

Fresh gathered, extras, per dozen	38	@39
Fresh gathered, extra firsts	35	@37
Fresh gathered, firsts	31	@34
Fresh gathered, seconds	27½	@30
Fresh gathered, inferior	20	@26
Fresh gathered, trade eggs	25	@28
Fresh gathered, dirties, regular packed, No. 1	26	@27
Fresh gathered, dirties, No. 2 and poorer	20	@25
Fresh gathered, checks, fair to choice, dry	22	@24
Checks, undergrades	16	@21
Refrigerator, special marks, fancy, charges paid to expiring dates	35½	@36
Refrigerator, firsts, charges paid to expiring dates	33	@35
Refrigerator, seconds, charges paid to expiring dates	29	@32
Refrigerator, undergrades	25	@28

NEARBY AND WHITE EGGS

State, Penn. and nearby western hennery whites, extras	50	@52
State, Penn. and nearby western hennery whites, extra firsts	46	@49
State, Penn. and nearby hennery whites, firsts	41	@45
State, Penn. and nearby, gathered whites firsts to extra firsts	41	@49
State, Penn. and nearby, undergrades	35	@40
Pacific Coast, white, extras	50	@52
Pacific Coast, whites, extra firsts	46	@49
Pacific Coast, whites, firsts	42	@45
Pacific Coast, whites, undergrades	38	@40
Pacific Coast, pullets		@
Other western and southern gathered whites	34	@44
State, Penn. and nearby western, hennery browns, extra	41	@43
State, Penn. and nearby, brown and mixed colors, gathered, graded, extras	38	@39
State, Penn. and nearby, brown and mixed colors, firsts to extra firsts	32	@37
State, Penn. and nearby, seconds	28	@31

FACTORS INFLUENCING EGG VALUES

Investigations have shown that the condition of eggs laid by healthy hens, fed normal rations, is quite consistently the same. Eggs do vary in size and in color, and these qualities influence their market value, but the other factors which have even greater market value than size and color are almost entirely within our control.

SIZE

While eggs are not bought and sold directly by the pound, still the size factor has considerable influence on the market value. The grade description for "Extras," as given in the egg rules of the New York Mercantile Exchange, lists a weight re-

quirement of 46 pounds net per case of 30 dozen, for eggs of this grade. Extras must, therefore, average a little better than 2 oz. per egg or 1.53 pounds per dozen.

"Extra Firsts," according to the New York standards, must weigh 44 lbs. or over, while the "Firsts" must average 43 lbs. net to the case. These instances indicate that size is taken into consideration in making the grade.

We may expect a larger number of good sized eggs by selecting our breeding stock for this object. It is suspected that feeding methods have some influence on the size, but this is a factor which needs more investigation. One thing, however, that is definitely established is that eggs of good size are worth more money than small sized eggs, even if we do not have the present policy of buying and selling eggs directly by weight.

CLEANLINESS

Great stress is also placed on cleanliness as a factor influencing the market value of eggs. Dirty eggs deteriorate much more quickly, they do not possess a pleasing appearance, are not fit for storage and therefore are not as desirable as are clean eggs of the same size. We may eliminate a large percentage of the dirty eggs by providing plenty of nests for our hens (at least one nest for every six hens), keeping the nests well littered with clean straw, shavings, et cetera, and gathering the eggs often. On rainy days it may be helpful to keep the hens confined until ten in the morning, by which time they will have laid most of their eggs for the day.

COLOR

It has been noted that at many of the larger markets a premium is paid for white eggs. Some markets, however, pay a premium for brown eggs. This partiality for eggs of a particular color is not due to a difference in food value, and is in fact rather hard to explain. Chemists can find no difference in the food value of white or brown eggs, but a possible explanation for the popularity of white eggs, at the New York market for instance, is that many of these eggs are produced on specialized poultry farms, where great care is taken to produce clean eggs of extraordinary quality and good size. The New York City market, the San Francisco market, and in fact nearly all western markets quote higher prices for white eggs than for brown and mixed colors. At some markets no advantage is given

either color, and the Boston market favors brown eggs. Uniformity of color is, however, always appreciated and one of the greatest advantages that can be claimed for standard bred poultry is that standard stock produces eggs of uniform color and quality.

INTERIOR QUALITY

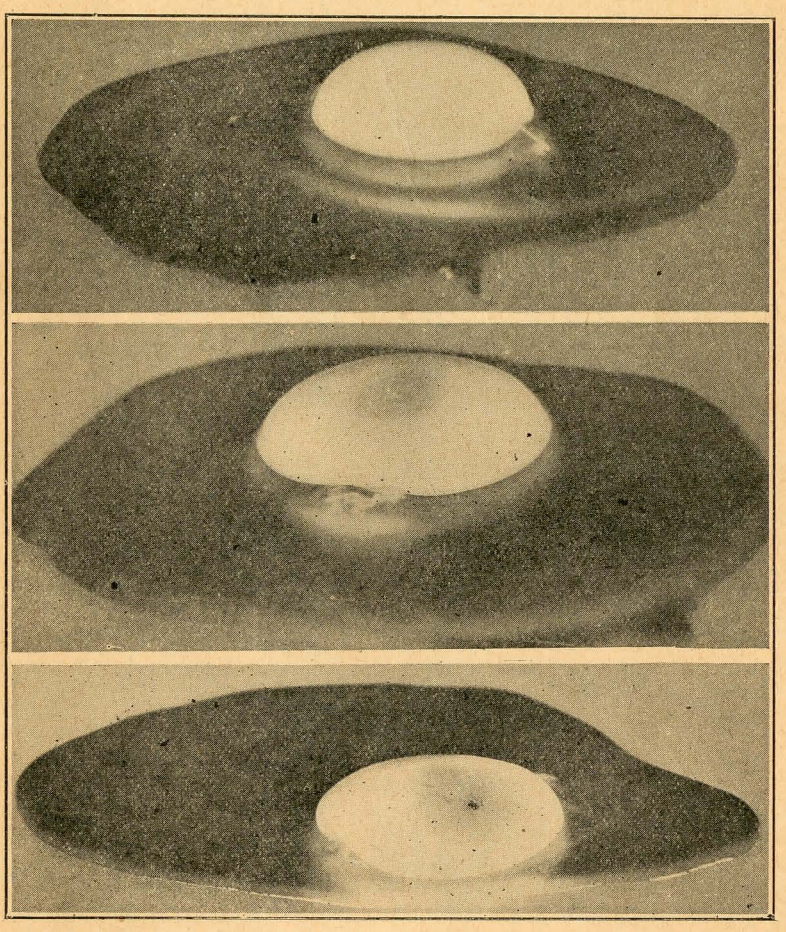
Eggs may seem to be exactly the same size, uniform in color and perfectly clean, with good sound shells and yet these eggs may vary greatly in market value, depending on the interior quality. In considering this factor the first statement that may definitely be made is that it is not possible to improve the quality of a perfectly fresh egg. There are ways and means of handling eggs so that deterioration will be very slight indeed, but no manner of handling will improve the quality of the new-laid egg. Our problem, therefore, is one of handling our eggs so that the deterioration will be kept down to the absolute minimum.

CAUSES OF EGG DETERIORATION

The chick development which takes place in fertile eggs when kept under certain temperature conditions is one of the principal causes of egg loss during the summer months. Embryonic development in fertile eggs takes place at any temperature above 68° F., and so we may readily understand why the marketing of fertile eggs is somewhat of a problem during the warm months. Blood rings develop in fertile eggs that are kept two days at a temperature of 100° F., and when chick development has taken place to this extent the egg is, of course, absolutely unfit for food. The great loss due to fertility has stimulated the infertile egg campaigns which have been waged so vigorously the past few years. Our egg losses due to chick development have some years totaled nearly one million dollars in Nebraska alone.

Even infertile eggs deteriorate if the conditions under which they are handled are not favorable. This breaking down is due to the action of certain chemical ferments which change the chemical and physical properties of eggs. This takes place more readily at body temperatures, which fact accounts for the comparatively rapid breaking down of even infertile eggs during the warm summer months. Cold temperatures keep down chemical action and this point emphasizes the advantages of refrigeration and cold storage facilities for conserving egg qual-

ity. Nebraska has an excellent climate for producing eggs and poultry products, but we do need more refrigeration and a greater appreciation of the service which refrigeration renders in helping us to market our poultry products without loss.



The three eggs shown above were all laid the same day and each was broken and photographed when 60 hours old. The difference in condition is a demonstration of the influence of conditions upon egg quality. The upper picture is of an egg kept for 60 hours at a temperature of 70 degrees. The middle picture is of an infertile egg kept for 60 hours at incubator temperature. It is still fit for food, but not of first class quality. The lower picture is of a fertile egg kept for 60 hours at incubator temperature.

ESTABLISHING A STANDARD

One of the first steps in grading is the establishment of a standard of some kind. A standard grade for Nebraska eggs is proposed with the following suggested description:

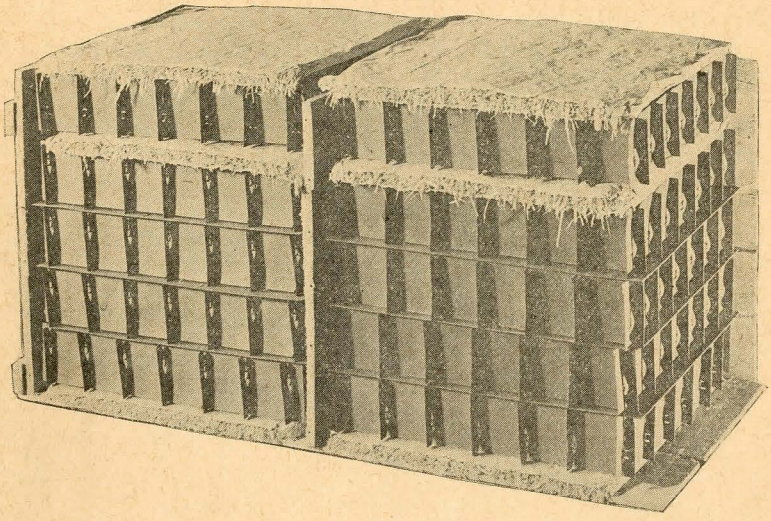
> "We believe that this case of eggs meets the requirements for
>
> NEBRASKA EXTRA FIRSTS { Brown / White
>
> Fresh eggs of uniform size (either all whites or all browns in one case), weighing 24 oz. or over to the dozen, or 45 lbs. net to the 30 doz. case. Shells sound and clean; air cell less than ~~⅜~~ 3/16 of an inch in depth; white firm, and yolk only slightly visible on candling. Only infertile eggs will qualify as Nebraska Extra Firsts from May 15th to Nov. 1st, each season.
> Package requirements,—A new clean standard egg case equipped with standard flats, fillers and six excelsior pads used in the following manner, one pad at top and bottom and one between fourth and fifth fillers in each section. Tops nailed with five nails at each end, not nailed in center of case.
>
> From.....
>
> Address.....
>
> **Good eggs are great food. Let's handle our eggs right."**

Ninety per cent of the eggs from an average well cared for flock will meet the requirements outlined if we have plenty of nests, keep the nests clean, gather the eggs often, market them promptly and use good, strong cases and equipment for shipping.

PACKING MARKET EGGS

The standard package for marketing eggs is the egg case holding thirty dozen eggs. The common egg case has been our standard package for a good many years and very few improvements have been made. Recently, however, new equipment for use with standard egg cases have been developed and great progress has been made in eliminating much of the breakage which has been a serious problem in the past.

The use of the excelsior pads in packing eggs has been a great step forward. Six of these pads are usually used for each case, one at the bottom, one between the fourth and fifth fillers and one at the top of the case on each side. No flats are used



between the pads and the fillers, but the full cushion effect is obtained by having the eggs rest against the excelsior pad. It is believed that seventy-five per cent of our egg breakage losses can be eliminated when excelsior pads are more generally used.

The importance of using good strong cases for packing carefully graded eggs is, of course, very apparent. A dirty, second-hand case will be responsible for a poor "first impression," which may lower the value of a case of excellent eggs as much as four or five cents per dozen. It will pay you to use good cases and good equipment in marketing your eggs.

DIRECT SHIPMENTS

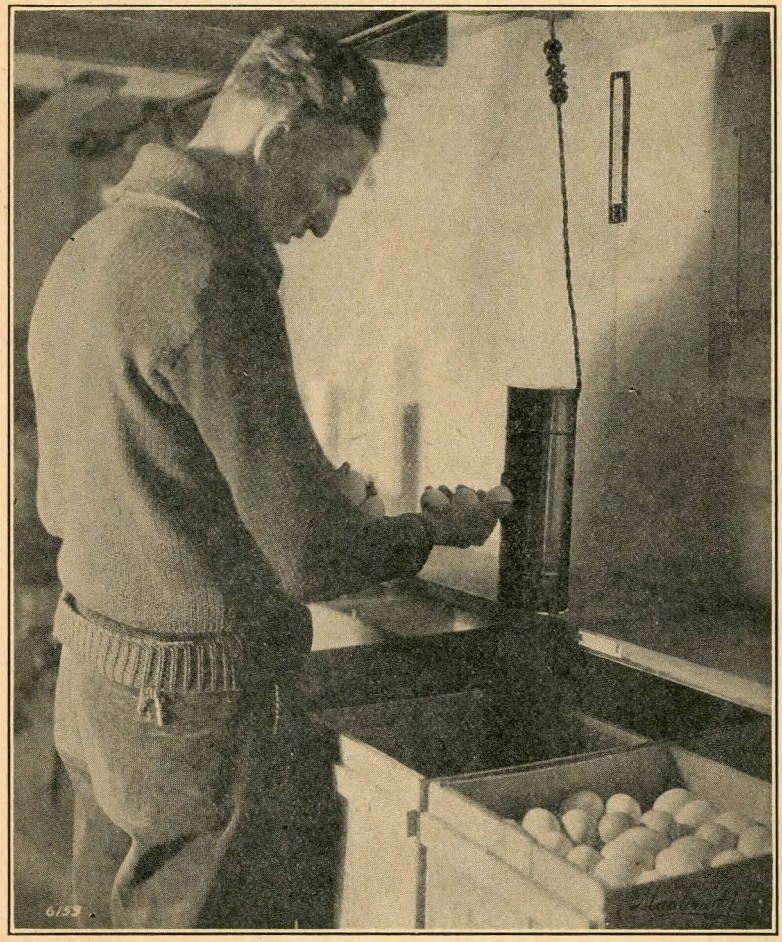
Many poultry producers are shipping eggs direct to the larger markets. The wisdom of this will, of course, depend on local prices, stability of the market, et cetera. If the local produce dealer does not have an outlet for carefully graded eggs at a price that is consistent with the market value he surely cannot complain if you are able to find such a market on your own initiative. The responsibility rests with every producer to obtain as good a price as he can for his produce. The produce dealer who does not do this very thing with the products which

he assembles and distributes does not render the greatest service to his community.

Direct shipments may be made to a commission house or some other distributing agency. Many of our Nebraska produce companies with excellent eastern distributing connections will be able to meet the net price which we can obtain for eggs that are shipped direct as soon as we have a sufficient volume of eggs of extra quality. Some of the local produce companies are limited at the present time because they do not have enough eggs of extra good quality to enable them to make regular carload shipments at certain seasons of the year. Ultimately, we believe that carefully graded Nebraska eggs will leave certain concentrating points in Nebraska in carload lots every day bound for the eastern and southern markets.

Distributed in furtherance of cooperative agricultural extension work. Acts of May 8, 1914, and June 30, 1914. Extension Service of The University of Nebraska Agricultural College and U. S. Department of Agriculture cooperating. W. H. Brokaw, Director of Agricultural Extension Service.

(10M)



By candling eggs we are able to determine their quality, but candling does not make bad eggs good. Candling will not save the eggs already spoiled, but it will help to improve the next lot if the buyer pays for the eggs on a quality basis and turns the bad eggs back to the seller.