

March 2014

EC1320 Revised no date Clean'em Properly

John L. Skinner

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

Skinner, John L., "EC1320 Revised no date Clean'em Properly" (2014). *Historical Materials from University of Nebraska-Lincoln Extension*. 2490.

<http://digitalcommons.unl.edu/extensionhist/2490>

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.

JUL 5 1961

E.C. 1320
(Revised)



CLEAN'EM properly

RECEIVED
MAY 27 1971
COLLEGE OF AGRICULTURE
LIBRARY



EXTENSION SERVICE
UNIVERSITY OF NEBRASKA COLLEGE OF AGRICULTURE
AND U. S. DEPARTMENT OF AGRICULTURE
COOPERATING
E. F. FROLIK, DEAN E. W. JANIKE, DIRECTOR

Clean'em Properly

By John L. Skinner

Extension Poultryman, University of Nebraska

There is no substitute for producing clean eggs. However, the best management and equipment do not produce 100% clean eggs. The problem is how to market a clean product.

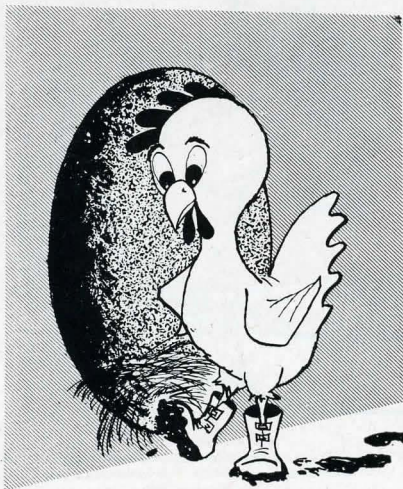
To be effective, egg cleaning must:

1. Result in a clean product.
2. Remove dirt in such a way as to cause minimum penetration of dirt and organisms into the contents of the shell.
3. Be done as soon as practical after the egg was soiled.
4. Be done so that it will not cause contamination of clean eggs by dirt from soiled ones.

How To Accomplish This

Produce eggs as nearly clean as possible. To do this you must use the best management possible.

1. Have plenty of nests (one nest or its equivalent for each four hens).
2. Maintain clean and adequate litter in the nest (brush dust and adhering dirt particles from roll-away nest floors daily).
3. Gather eggs at least three times daily (four preferred when birds are in heavy production).
4. Feed a good ration with plenty of supplemental calcium so that shells will be strong.



5. Maintain dry absorbent litter on the floors (if litter is used) so that birds do not soil eggs with their feet.

6. Use nest perches less than two inches wide so that droppings will not accumulate on them.

7. Enclose the roost area or otherwise prevent the hens from walking through accumulations of droppings and then tracking this into the nests.

8. Prevent roosting in the nests.

Follow common sense and proven practices when cleaning any and/or all eggs.

1. *Never* wash any egg in water that is cooler than the egg. This tends to draw surface contamination into the egg.



2. Use a good detergent and sanitizing agent (one that was made for washing eggs) in all egg washers.

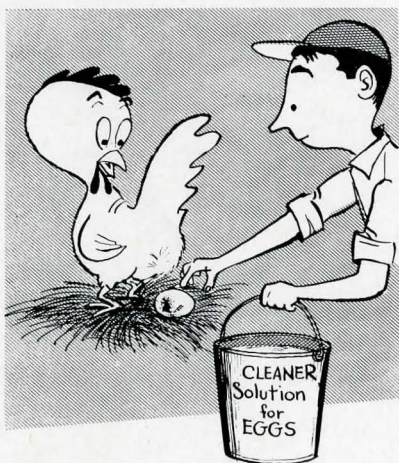
3. Replace the water (and detergent) in all immersion type washers at least once for every three baskets of eggs washed.

4. Use only washers equipped with heating elements and thermostats and allow sufficient time between baskets for solution to get back to the desired temperature. This will be 110°-120° F. Don't guess, use a dairy or liquid immersion thermometer.

5. Never fill baskets more than 2/3rds full when using immersion washers.

6. Keep abrasive surfaces in dry cleaners free from adhering dirt and replace when they show appreciable wear.

The Best Time To Clean Eggs



The best time to clean eggs is as soon after they have gotten dirty as possible. The longer the dirt remains on the egg the greater the chance of its penetrating the shell and damaging the contents. We know that not all producers will be able to clean eggs each time they should be gathered from the nests. Therefore, some eggs will be placed in the cooler to be cleaned at a later time. If the producer schedules his egg cleaning to follow the time of the largest egg collection of the day, a minimum of eggs will be held with dirt on their shells.

Should I Rinse Eggs?

The solution in your egg washer will usually contain a sanitizing agent. If this sanitizer is going to do the most good you should not rinse it off. A protective film forms as the solution dries on the egg shell.

Loosened particles of dirt are often lodged in the basket or fillers when eggs come from the washer. A good practice is to submerge the eggs in an additional vessel containing the detergent and sanitizing solution. This accomplishes the effect of rinsing. It also allows the eggs the protection of the sanitizer drying on them.

When To Case Eggs

Cool eggs may be placed in pre-cooled* cases as soon after washing as they can be handled without finger marking. Warm eggs are usually cooled after washing before they are cased. To case eggs while they are still warm delays removal of the animal heat and somewhat lowers the quality.

Brush or spray type washers, or others equipped with drying devices, render the eggs suitable for immediate casing or transfer directly to an automatic grading device.

Dry-cleaning units may also be equipped to transfer eggs directly to automatic graders and, of course, dry-cleaned eggs can also be cased immediately after cleaning if they are cool.

For any egg cleaning device: Obtain, Read and Follow exactly, the recommendations of the manufacturer.

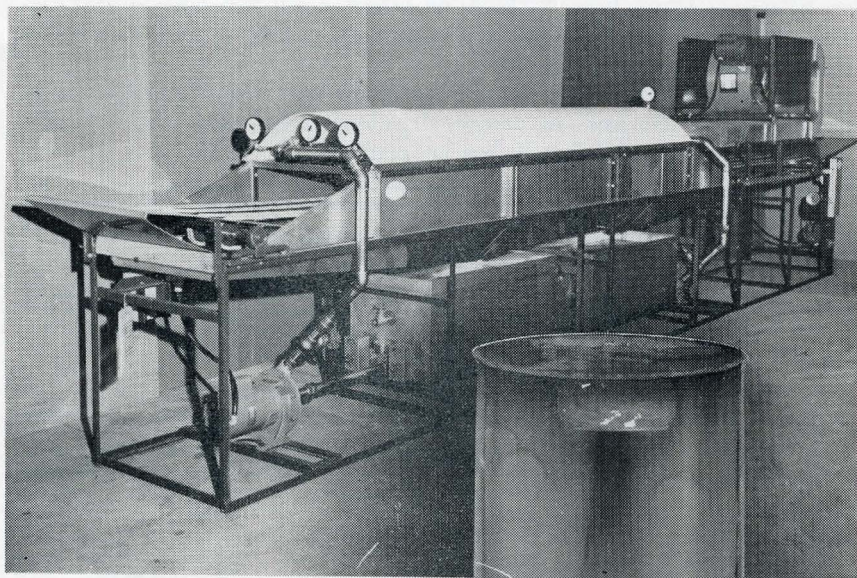
*Pre-cooled here refers to cases and component parts that have been stored in the egg cooler so that they are of proper temperature and humidity levels.

Table 1. Choices Open to the Poultryman

Choices	Advantages	Disadvantages
A. Sort your eggs (clean only the dirties)	a. may require less equipment.	a. some dirties will be missed.
	b. puts more emphasis on producing clean eggs.	b. cleaned eggs don't match the others.
B. Clean all eggs	c. offers a good opportunity to remove odd shaped and defective shells.	c. time consuming.
	d. may require additional handling.	d. may require additional handling.
	a. save the time of sorting out the dirty ones.	a. clean eggs may be contaminated by the dirty ones.
	b. results in all eggs having a uniform appearance.	b. increases the amount of detergent and water used, hence increases costs.
	c. allows all eggs to be handled and cased in a similar way.	

Table 2. Choices Open to the Poultryman

Methods of Cleaning	Advantages	Disadvantages
A. Washing		
1. immersion	a. low initial cost for equipment. b. small space requirement.	a. contamination possible. b. breakage usually a problem.
2. brush and/or spray	a. keeps contamination to the very minimum. b. easily transfers eggs to grader or sizing unit.	a. equipment costs more. b. requires considerable space for equipment.
B. Dry-Cleaning		
1. machine	a. water temperature and connections no problem (not used). b. eggs immediately ready for casing.	a. some breakage may result. b. large capacity machines are expensive.
2. hand	a. inexpensive equipment.	a. inefficient use of labor.



Large spray type egg washer. Note fan to upper right of picture. This serves to dry the eggs as they complete their trip through the washer. Courtesy of Kuhl Manufacturing Company.

Immersion type egg washer equipped with thermostatic temperature control. Courtesy of Shelley Equipment Co.

