

11-1954

EC1436 Revised 1954 Controlling Cannibalism in Poultry

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

"EC1436 Revised 1954 Controlling Cannibalism in Poultry" (1954). *Historical Materials from University of Nebraska-Lincoln Extension*. 2555.

<http://digitalcommons.unl.edu/extensionhist/2555>

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.

CONTROLLING CANNIBALISM IN POULTRY

Cannibalism in poultry is regarded as a vice which in the beginning may be caused by discomforts, by poor management and by unrest due to strange conditions and weather. Operators can learn to recognize when chickens are not comfortable and contented. Promptly removing causes that might lead to one of the various forms of cannibalism are important in preventing losses.

The different forms of cannibalism are listed below with a brief description of conditions that might be responsible for the start.

1. Toe Picking may begin with an injured toe, hungry chicks, an excess amount of light.
2. Feather Pulling is more common when chicks feather slowly, when air in the brooder house is dry or ventilation is poor, when chicks are crowded, when feeders and waterers remain empty, when weather conditions disturb chicks.
3. Flesh Picking may be an advanced stage of feather pulling. It gets started whenever blood or bare flesh is exposed.
4. Vent Picking, Pick Outs, Prolapsus in laying pullets. More severe when cannibalistic habits have developed, when a weakened condition causes the oviduct to protrude from the vents, when hens lay eggs on the floor, when hens have difficulty expelling large eggs, when nests are too well lighted, and when hens are not kept busy.
5. Egg Eating gets started as a bad habit when eggs pile up in nests and one is accidentally broken, or whenever egg shells become so thin that eggs are easily broken.

Cooperative Extension Work in Agriculture and Home Economics, University of Nebraska, College of Agriculture, and the United States Department of Agriculture Cooperating, W. V. Lambert, Director, Lincoln.

Other Causes of Cannibalism

Experiments conducted at Kansas State College and reported in May, 1952, Poultry News, verified the truthfulness of local opinions that the feeding of pellets to chickens aggravated cannibalistic habits.

In the June, 1954, quarterly report of the Utah Experiment Station, Dr. J. O. Andersen reports that pelleting high barley mashes for turkeys has increased their value more than pelleting other types of high fiber rations. Whenever pellets are fed to turkeys there is a greater tendency toward feather picking.

A Maryland Fact Sheet, Number 14, reports that poultrymen claim an increased amount of cannibalism when chickens are fed on low fiber, high energy feeds.

Michigan poultrymen reports when the cafeteria system of self feeding both mash and grains is used and hens are confined, that life evidently becomes dull to some individuals and some minor accident to one pullet starts cannibalism in the flock.

Purdue leaflet No. 265 reports that, "Observation both in the field and the trapnest breeding flocks indicates that cannibalistic tendencies are more prevalent in some families of birds than in others." This has suggested at least that a part of the viciousness may be inherited.

In his 1954 catalogue a well-known leghorn breeder in Minnesota reports, "For many years we have kept a record of every blow out in our R. O. P. candidate pullets and have discarded any family that has had a pullet or pullets showing blow outs. We put guards on our pullets at housing time. We give our pullets two square feet of floor space per bird and have never had any serious trouble. There is no excuse for having serious trouble from cannibalism and blow outs with our leghorns when the flock is well fed and the proper precautions are taken.

Knowing the different forms of cannibalism and the way it gets started greatly helps in development of preventive measures. The following is a list of things that can be done when cannibalism breaks out in a brood of chicks.

1. Victims in serious trouble should be removed as soon as found.

2. Those with minor injuries may be treated with a healing agent that is also objectionable to the chicks that do the picking. Pine tar, which is available at most drug stores in small cans serves both purposes well.

3. Change the conditions that you feel may have caused the discomforts and unrest. Brooder house conditions you may need to check are listed as follows:

A. Darken windows to subdue the light and limit the amount of artificial lighting.

B. Watch ventilation and temperatures.

C. If crowded give the chicks more room. Add a sun porch or let the chicks outdoors.

Keep the chicks busy and encourage exercise. Chopped greens or hard boiled infertile eggs from the incubators may be fed at frequent intervals. Leafy green vegetables and lawn clippings or green chopped alfalfa or cut dandelions can be fed several times a day to older chicks.

4. Provide plenty of trough room for both feed and water so all chicks can eat and drink at one time. Frequent filling of feeders is a method of stimulating all chicks to gather at the troughs.

5. Germinated oats can be fed to chicks as early as 4 days of age. Small feedings of dry whole oats can be fed with safety to chicks that are 2 weeks old. Whole oats can be self fed to 4 week old chicks when cannibalism is a problem. For adult chickens the Ohio Experiment Station reports good results substituting ground ear corn for ground corn in the mash or ground ear corn as a scratch grain when oats are not available.

6. A teaspoonful of salt added to each gallon of drinking water for one day's feeding has long been recommended as a preventive measure for cannibalism. Extra salt is harmful to chickens. This practice must not be continued. Modern commercially mixed poultry mashes usually contain all the salt that chickens need.

7. The most positive way to stop cannibalism in the brooder house is to debeak the chicks. Delaware's Extension Folder No. 38 was published in August 1954. The following is quoted from this circular.

"More than one-half of the broiler chicks sold in Delaware are now being debeaked at one day of age in the hatchery. A special attachment is used to remove one-third to one-half of both beaks. The beaks grow back, but are still blunt at market age. Cost is 1/4¢ per chick, or \$2.50 per 1,000. One person can debeak about 1,000 chicks per hour.

"Advantages

"Debeaking these birds has effectively controlled feather-picking and cannibalism, thus improving the quality and appearance of the birds when marketed (fewer "rough" birds). In some cases, this has resulted in a higher price for the birds sold.

"According to field test conducted by Delaware hatcherymen and growers during the past year, debeaked birds had better feed efficiency and more profit per bird than those not debeaked. It pays to debeak all breeds and strains, although the greatest improvement has been shown in white crosses."

The Institute of American Poultry Industries printed the following report in their weekly letter printed August 25, 1954.

"Debeaking improves quality, efficiency. Darrow and Stotts from Swift & co., carried out some field tests in Pennsylvania, Texas, and Arkansas, to see how broilers debeaked at 3 weeks of age compared with birds that had not been debeaked. They found better feed efficiency--a difference of 1/10 pound per pound of gain--in the debeaked birds (enough to offset the cost of debeaking birds). Debeaking also reduced the number of barebacks at market time from 9 to 1%. And the debeaked birds average 83% grade A, the controls 73%."

The Delaware leaflet reports that when it is necessary to debeak broilers at 3 to 6 weeks of age about one eighth inch of the upper beak is removed. Because of slower operation they report the cost from \$7.00 to \$9.00 per 1000 chicks.

Preventing Cannibalism in the Laying Flock

1. A positive and popular method of preventing cannibalism in the pullet flock is the use of the electric debeaker to burn off almost one-half of the upper beak. When trouble is expected, the pullets should be debeaked when they are moved to the laying house, just before they start to lay. Nebraska hatcherymen own electric debeakers which they usually rent to flock owners when their servicemen are unable to do the work. Because debeaked pullets have difficulties in picking up kernels of grain out of the litter their grain is usually fed in the feed troughs.

2. Anti-pick devices such as pick guards and specs are advertised in poultry journals to fasten on the beaks of adult chickens. Such equipment limits the bird's vision beyond the tip of the beak. Evidently such devices do not compete well with the debeakers.

3. Keeping the pullet layers contented and busy is regarded as part of any program to prevent cannibalism. In addition to the suggestions given for keeping chicks comfortable the poultryman can keep pullets busy by having them scratch in deep litter for grain (if they are not debeaked) and by feeding alfalfa hay in racks. The most effective control of cannibalism among laying hens obtained in Canadian experiments was secured from chopping third cutting alfalfa hay into one-half inch lengths and soaking it over night. The water was drained off before the soaked hay was fed. The hens were given all the soaked hay they would clean up once a day. No tendency to over eat was reported. Each hen consumed about 15 pounds of dry hay a year. The hens fed steeped alfalfa showed lower mortality, laid more eggs, increased in body weight and finished the year in good feather.

4. The amount and type of equipment used by some poultrymen has evidently helped them to avoid risks that cause troubles for others. These items include housing of pullets before they start to lay, providing enough feeders and waterers so that the timid pullets are not crowded, placing darkened nests in the darker portion of the building, by taking measures which discourage pullets laying on the floor and taking precautions to remove any pullet that is apparently having trouble with laying double yolk eggs or having an inverted oviduct.

Preventing Egg Eating Habits in Hens

One of the more difficult vices to control is a hen's habit of breaking and eating eggs. When such a hen is found they had best be sold. Dropping a porcelain egg onto the litter and watching to see which hen persistently attempts to pick it has been suggested one way of discouraging the egg eating habit.

Thin shelled eggs break easily. At certain stages of laying, soft shelled eggs may be caused by an insufficient amount of Vitamin D in the ration. However, we must consider that egg shells get thinner as hot weather approaches. This seasonal variation in thickness of egg shells cannot be overcome by feeding.

Conditions which help to prevent egg breakage are listed as follows:

1. Confine broody hens promptly. A broody hen is an invitation to a fight.
2. Use plenty of nesting material. Keep a basket of fresh nesting material near the nests.
3. Gather eggs frequently to prevent nest getting crowded with eggs.
4. Darken the nests so that a hen can not easily see the broken eggs.

CANNIBALISM IN TURKEYS

In general the same factors influence cannibalism in both turkeys and chickens. Cannibalism and feather-

picking just before marketing time constitutes a major source of loss to turkey growers. Picking vents or other parts of the body can cause a high mortality among poults. Feather picking alone can lower the market value of the finished birds of the dark feathered varieties. "Blue Backs" or a large dark area over the back or tail of a bronze turkey is caused by the dark pigment from broken feathers spreading through the skin. The pigment permanently discolors the skin, resulting in a lower grade carcass.

Confinement Rearing of Turkeys

It is difficult to avoid cannibalism and feather-picking when turkeys are raised in confinement.

Beak Wiping

The upper beak of the turkey has a tendency to cake up with mash. To remove such feed, turkeys use the feathers of another turkey as a beak wiper. A taut wire on the feed trough serves the same purpose and does much to eliminate this source of feather pulling.

Sexes Can be Separated

As turkey toms approach maturity they do a great deal of strutting. When the tail feathers are fanned out, the immatured feathers below the base of the tail are exposed. The hen turkeys seem to delight at picking at these feathers. This is one of the reasons why some growers separated the sexes of turkeys.

Debeaking Turkeys

Delaware leaflet No. 38 reports that poults can be debeaked at one day of age, the same as they recommend for chicks. When turkeys are to be moved to range this early debeaking evidently does not interfere with their eating of green feed and gleaning grain fields.

One Nebraska grower who starts the poults in batteries for the first week does the debeaking on the third day after hatching. Other growers wait until the turkeys are moved to range at 8 to 10 weeks of age to debeak. About two-thirds of the upper beak is removed by the electric debeakers. Debeaking at this age generally controls feather picking and cannibalism, until the turkeys are ready for market.

Rapid growth and full feathered conditions at an early age is important to the turkey growers. Debeaked turkeys need to have both mash and grain fed in hoppers to be sure to get what they need for fast growth.

Turkeys that are not debeaked can gather wasted grain from oat and wheat fields and do an excellent job harvesting grain sorghums or husking and shelling their own corn. Such procedure is often desired where crops have been damaged by dry weather or hail.



Debeaked Correctly
 $\frac{1}{2}$ to $\frac{2}{3}$ of beak removed



Not enough
Beak has grown out



Too Much
More removed than necessary

Lower Beak Too Long
Searing the tip of the lower beak
may retard excessive growth

