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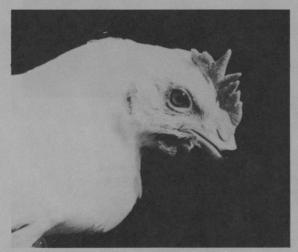
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DEBEAKING LAYING STOCK TO CONTROL CANNIBALISM

F. D. Thornberry, W. O. Cawley and W. F. Krueger*

In most commercial egg operations, debeaking is mandatory to effectively control cannibalism and feed wastage in both pullet and laying flocks. Studies have shown that poorly debeaked and undebeaked birds may waste as much as 5 pounds of feed per bird during the growing and laying periods.

The exact cause of cannibalism in a flock of pullets or layers is often unknown. Reasons such as overcrowding, lack of adequate feeder or waterer space, poor ventilation, dietary deficiencies, feather change, improper lighting, failure to remove injured or crippled birds and sheer boredom have been implicated. Most of these reasons are the direct result of mismanagement and result in major economic loss to the producer. Proper debeaking, while not offsetting poor management practices, can reduce economic loss.



1. A properly debeaked pullet.

Practically all egg producers debeak laying stock as chicks and again during the growing period. Sometimes a laying flock requires debeaking because of an earlier improper debeaking. Debeaking crews must be properly trained and closely supervised to minimize debeaking errors which can cause cull layers.

The best age to debeak chicks is 1 day or 7 to 14 days. Some producers recommend debeaking day-old chicks at the hatchery. Chicks are more easily handled at this age and hatchery debeaking is convenient. Others feel stress is minimized if debeaking is delayed until chicks are 7 to 14 days old. Debeaking of 7- to 14-day old chicks is usually more uniform and effective for a longer period. At this age, a special attachment must be used with regular debeakers to prevent removal of too much beak.

Pullets should be debeaked or "touched up" a second time between 12 and 22 weeks of age. Many producers with consistently good flocks debeak a second time between 12 and 17 weeks of age. Pullets debeaked during this stage of development achieve complete recovery prior to the onset of sexual maturity. Debeaking after 17 weeks can cause problems. Pullets generally lose body weight at debeaking. This additional stress on sexually maturing pullets can be detrimental, especially in lightweight flocks, and has been implicated as a cause of low production peaks. Pullets debeaked at housing also may have difficulty, because of beak tenderness, in adjusting to cup-type waterers. Increased mortality, excessive weight loss, smaller eggs and lower production can result.

Certain recommended management practices to minimize mortality and reductions in feed consumption and body weight after debeaking include:

- 1. Birds should be kept cool if debeaked during hot weather. Water must be available at all times.
- 2. Extra vitamin K should be fed or added to the water for 4 to 7 days prior to debeaking to minimize bleeding problems.
- 3. For the first 4 to 7 days after debeaking, fresh mash-type feed with a minimum depth of 2 inches should be kept before the birds.
- 4. Mechanical feeders should be operated frequently to stimulate feed consumption. If cart fed, birds should receive feed at least twice daily.
- 5. Birds should not be subjected to stress from housing, vaccinating or worming during the week prior to or the week after debeaking.

^{*}Extension project leader in poultry science and poultry specialist; Extension poultry specialist; head, Department of Poultry Science, The Texas A&M University System.



2. Six months after debeaking.

3. Twelve months after debeaking.



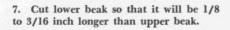
4. An electric shear-type debeaker which removes beak with a quick sharp stroke, but does not cauterize beak end.

5. Apply a special attachment to regular debeakers for chicks 1-14 days old to avoid removing too much beak.





6. For older birds, place beak on cutting bar and slice 1/8 to 3/16 in inch in front of nostril.





DEBEAKING

An electric shear-type debeaker usually is used to debeak day-old chicks. A debeaker of this type removes a portion of the beak with a quick stroke of the blade but does not cauterize the end of the beak. A debeaker that cauterizes the cut to prevent excess bleeding is used to debeak older pullets.

Three common methods of debeaking chicks are: (1) block debeaking in which one-third of both the upper and lower mandibles are removed in one operation, (2) removal of two-thirds of the upper mandible only and (3) removal of one-third of the upper mandible and the tip of the lower mandible.

The following procedures are recommended for debeaking older pullets:

- 1. A debeaking crew should consist of two or more workers.
- 2. The debeaker blade should be heated to a cherry red color by placing the thermostat on reserve heat.
- 3. Two birds at a time should be handed (feet first) to the operator.
- 4. Insert the index finger into the bird's mouth to force the beak open and the tongue down and back.
- 5. Place the top mandible on the cutting bar, lower the head to obtain a 20- to 30-degree slant back toward the roof of the mouth and cut the mandible 1/8 to 3/16 of an inch in front of the nostril. Cut slowly, allowing the blade to cauterize the tissue.
- 6. Place the lower mandible on the bar and cut so that it will be 1/8 to 3/16 inch longer than the upper. Cut the lower mandible in a straight block form.
- 7. Each mandible should be rolled against the blade to round the edges and to further cauterize it.

8. Carefully check each mandible and touch it up if improperly cut. Missed birds and those carelessly debeaked cause trouble later on.

If pullets must be debeaked at housing, debeaking should not be severe. No more than two-thirds of the upper mandible and the tip of the lower should be removed. Some poultrymen do not cut the lower mandible of mature pullets. If cannibalism necessitates the debeaking of a producing flock, the layers should be handled carefully and no more than half of the upper mandible should be removed.

Supervisory personnel should insure that the following precautions are taken during debeaking:

- 1. The debeaking blade should not be too hot, too cold or dull. An excessively hot blade causes blisters in the mouth. A cold and/or dull blade may cause the development of a fleshy, bulblike growth on the end of the mandible. Such growths are very sensitive and will cause below average performance.
- 2. The mandible should not be pulled away from the blade until it is completely severed. Incomplete severance causes torn tissue in the roof of the mouth.
- 3. The bird's tongue must be held away from the blade. Burned or severed tongues result in cull hens.
- 4. The debeaking blade and cutting bar must be in perfect alignment. The blade should fall on the highest part of the bar.
- 5. Never use a warped or bent blade. Change blades often.

Debeaking should be checked frequently to assure proper crew performance. Improperly debeaked pullets cannot reach their optimum potential in the laying house.

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