Beak-Trimming in Poultry

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Beak-trimming is also popularly known as Debeaking. In a normal poultry bird, the functions of Beak are:

- Feed particle identification
- Exploration of the environment
- Preening – Maintenance behaviour using beak to position and interlock feathers, clean plumage and keep ecto-parasites in check.
- Social defense

Beak-trimming is undertaken usually after 6 weeks of age and most often in the grower house. It can be done in the brooder house also at early age. Beak trimming is the removal of approximately one-quarter to one-third of the upper beak, or both upper and lower beak of a bird). For the majority of birds, It involves the partial removal of the upper and lower beak using an electrically heated blade. More recently, scientists have used the term 'Partial Amputation' instead of beak trimming, although the beak does re-grow and receptors are functional in the regenerated beak tissue

The common ages for birds to be beak-trimmed are:

- Day-old (Very common)
- 5–10 days old (Precision or Block Beak-Trimming)
- 4–6 weeks
- 10–12 weeks (Re-trimmed)

Many hatcheries are reluctant to carry out beak-trimming prior to delivery of chicks. Already baby chicks are exposed to pain and stress during sexing of day-old chicks, vaccination, and transportation. Therefore beak-trimming adds further pain and stress to the chicks. However, day-old trimming results in fewer birds needing to be re-trimmed and also it can avoid bird handling stress at important growing stages of life.

For birds 10 to 12 weeks of age, beaks should be trimmed 6 to 7 mm beyond the nostril with 2 seconds of cauterization

Beak-Trimming Perform due to Following Economic and Behavioural Reasons:

- Beak trimming is performed early in the life of commercial hens to decrease injuries caused by the behavioural bad habits (vices) like:

a) Pecking and eating one's own species (cannibalism)

b) Bossing over others (bullying)

c) Feather and vent pecking.

- To avoid feed wastage: -

(A) Quantitative: Birds have a natural tendency to scratch the feed and search for grains especially when feed is in the mash form. In this process, there will be spillage of feed from the feeders.

(B) Qualitative: Grower ration comes as mash (powder form). Birds do establish a peck order within the enclosure. The stronger birds eat feed first and preferentially pick and eat the grains (also a natural instinct) if beaks are not trimmed. It is well known that the grains are energy-rich and poor in all other nutrients. Hence, the stronger birds become weaker. When the weaker birds reach the feeders after the stronger ones have left, they will be left with only powdery feed which they cannot eat because of sharp beaks. Therefore, they also suffer nutrient deficiency and become weaker. Consequently, the entire flock shows a poor feed conversion ratio and farmer will be at loss. If the beaks are trimmed, the birds cannot search for grains. Instead, they have to scoop the feed and eat thereby making available all components of

the feed to all the birds ensuring uniform growth, production and reproduction.

- To avoid egg-eating vice.
- It reduces aggressive interaction among birds and trimmed laying birds are less fearful than untrimmed ones, both in multi-bird cages and in floor pens.

Methods of Beak-trimming

Different methods of beak trimming are broadly classified under four categories:

- Heat blade method
- Cold method (scissors or secateurs)
- Electrical (Bio-beaker)
- Infrared

1. Heat blade method

Consists of a hot plate / soldering iron (heated with gas / electricity) and cutting bar operated using a foot lever. Size is small and it's very easy to handle or transport. Beak is cut and cauterized simultaneously in these methods.

2. Cold method (Scissors or Secateurs)

In cold method, the beak is cut with clippers / scissors/ secateurs without cauterizing. Later cauterization is done with hot plate/iron touch.

3. Electrical (Bio-beaker)

The Bio-beaker, which uses an electric current to burn a small hole in the upper beak and is the preferred method for trimming the beaks of turkeys.

4. Infrared

The infrared method directs a strong source of heat into the inner tissue of the beak and after a few weeks, the tip of the upper and lower beak dies and drops off making the beak shorter with blunt tips. The electrical and infrared methods are relatively welfare friendly compared to hot and cold blade methods as the former methods involve only the removal of beak tip only without an open wound.

Beak-Trimming Precautions to Reduce Pain and Stress

Precautions before Beak-trimming

- You will naturally expect bleeding when beak is cut. Therefore, administering vitamin K through drinking water 2 to 3 days before trimming can reduce bleeding.
- Birds should not be subjected to stress from housing, vaccination or deworming during the week before or after trimming.
- Sick birds should not be beak-trimmed

Precautions during Beak-trimming

- You should hold the bird in such a way that it neither shakes it head nor suffocates.
- The beaks are opened with the help of index finger and the tongue is held back.
- The upper beak is cut first to the recommended level. The beak is held against the blade and circular motion is given for at least 2 seconds while holding to effect proper cauterization (blocking of cut blood vessels by heat).
- Lower beak is then cut as per the recommendation.
- Proper cauterization is once again ensured before the bird is left into the pen.
- ***Note:*** If toe nails are grown in excess, they can also be trimmed.

Precautions after Beak-trimming

- Feeders must be kept full with feed to help birds eat easily. Probably this is the only occasion when feeders are full with feed.
- Vitamins B-complex, C and K to be given through water to reduce stress.
- All the birds must be observed carefully for any bleeding, especially in the upper beak. If any bird shows bleeding, it must be separated at once and treated. Otherwise, there is a likelihood of cannibalism.

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