Infra-Red Bill Trimming

Background Information:
*American Veterinary Medical Association:*

**What is Bill Trimming?**
Beak trimming (formerly debeaking) is the removal of approximately one-quarter to one-third of the upper beak, or both upper and lower beak, of a bird. Beak trimming is performed as part of an overall strategy to reduce abnormal, injurious pecking behavior that develops in crowded, barren rearing environments. Beak trimming may be performed on many species including laying hens, turkeys, ducks, and quail.

Feather pecking, peck injury and peck mortality (cannibalism) in poultry occurs at variable rates and may unpredictably become severe and cause high rates of distress, injury and death in a flock. However, the common industry practice of beak trimming is acutely painful, as nociceptors are present in the tip of the beak.

There are several different methods of beak trimming, which can be classified into four major groups: mechanical, hot-blade, electrical and infra-red. Other approaches such as the use of lasers, freeze drying and chemical retardation have been investigated but are not in widespread use.

**Infra-red Bill Trimming:**
Infrared laser (e.g., Nova-Tech) may be used to damage the beak so that the tip is shed. The infrared method has been given qualified endorsement by the British Farm Animal Welfare Council as a preferred choice over previously used methods, in terms of animal welfare, because there is an absence of an open wound for which there might be adverse sequelae and there is consistent removal of the tip of the beak without evidence of the bird suffering lasting stress or pain. When using the Nova-Tech system chicks are restrained by their head and suspended during treatment. The period of time they are held is short (approximately 15 seconds) and the restraint is firm.

https://www.avma.org/KB/Resources/LiteratureReviews/Documents/beak_trimming_bgnd.pdf

In waterfowl species, this is most commonly practiced in Muscovy and Barbary ducks, in the United States and France.

There are alternatives to bill trimming. Since injurious feather pecking behavior is multifactorial, prevention requires a comprehensive approach, including through the use of genetic lines that are less prone to feather pecking. Producers can also provide enriched environments with more opportunities for the expression of species-typical, natural behavior, and can reduce the stocking density. Feather pecking is a consequence of industrial production systems, and reflects an unmet need of the animals. By addressing the root cause of the problem, rather than treating a symptom, the welfare of the animals can be much better addressed.
**Other Standards:**

**RSPCA:** Farmed Ducks. Bill trimming is banned. No exceptions for Infra-red or otherwise.

**EU:**

EU 98/58/EC of 20 July 1998 defers to National Legislation: (animals)

Mutilations

19. Pending the adoption of specific provisions concerning mutilations in accordance with the procedure laid down in Article 5, and without prejudice to Directive 91/630/EEC, relevant national provisions shall apply in accordance with the general rules of the Treaty.

COUNCIL DIRECTIVE 2007/43/EC, Surgical Interventions 12. (chickens)

All surgical interventions carried out for reasons other than therapeutic or diagnostic purposes which result in damage to or the loss of a sensitive part of the body or the alteration of bone structure shall be prohibited.

However, beak trimming may be authorised by Member States when other measures to prevent feather pecking and cannibalism are exhausted. In such cases, it shall be carried out only after consultation and on the advice of a veterinarian and shall be carried out by qualified staff on chickens that are less than 10 days old. In addition, Member States may authorise the castration of chickens. The castration shall only be carried out under veterinary supervision by personnel who have received a specific training.

France:

However, beak trimming may be allowed if all other measures to prevent feather pecking and cannibalism have failed. In this case, it is performed only after consultation with a veterinarian and on the advice of the latter, and this operation is performed by qualified personnel on chicks less than ten days old. The written record of the veterinarian's advice must be kept by the operator for a period of three years. Castration of male chickens under the supervision of a veterinarian by specially trained personnel is permitted.

[https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000022415200&dateTexte=&categorieLien=id#JORFARTI000022415207](https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000022415200&dateTexte=&categorieLien=id#JORFARTI000022415207)

**DEFRA (UK):**

Bill trimming should be carried out only when it is clear that more suffering would be caused in the flock if it were not done. It should be done by a skilled operator or under his supervision. If practiced, only the rim at the front of the upper bill should be removed and before the birds leave the brooder or the rearing accommodation. Normally it need be done only once in the lifetime of the stock.

**Germany:** Voluntarily banned by the German Poultry Association.
Option #1: Amend the Standard to allow the practice of Infra-red bill trimming.

- Infra-red bill trimming involves less pain than other bill trimming methods and is an effective method of preventing feather pecking or injurious pecking in domestically kept waterfowl.
- The procedure involves acute pain, but not chronic pain. There is some research into the chronic pain from this procedure and possible behavior implications.
- Feather pecking is extremely painful to the affected birds, and in some cases escalate to cannibalism.

Opinion #2: Maintain the ban of all bill trimming under the RDS as a mandatory requirement.

Ensure proper management and enrichment for the birds.

- Feather pecking and cannibalism are the results of inappropriate keeping systems. Bill trimming or beak trimming address the systems rather than the causes of feather pecking.
- Infra-red bill trimming is a painful procedure and other methods (enrichment, adequate space in housing) should be used to prevent feather pecking.
- No anesthesia or analgesic is used. Acute pain occurs with IRBT at the time of the treatment, in some cases it can last for 1-2 weeks. Chronic pain is possible.
- There are sensory receptors in the bill that are necessary for natural behaviors of ducks and geese.
- Behavioral issues are possible as a result of the practice: higher levels of fearfulness, reduction in feed intake in the initial weeks following IRBT.

References:


van Niekerk, T (2017) *Managing laying hen flocks with intact beaks* Wageningen Livestock Research, The Netherlands. [https://www.wur.nl/upload_mm/3/a/c/ebfc1b54-037f-4ded-98aa-0f244fcb11a2_Achieving%20sustainable%20production%20of%20eggs%20volume%202.pdf](https://www.wur.nl/upload_mm/3/a/c/ebfc1b54-037f-4ded-98aa-0f244fcb11a2_Achieving%20sustainable%20production%20of%20eggs%20volume%202.pdf)


